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

DATA PACKAGE

METALS

PROJECT NAME : RAYMARK SUPERFUND SITE

NOBIS GROUP

585 Middlesex Street

Lowell, MA - 01851

Phone No: 978-683-0891

ORDER ID : Q1883

ATTENTION : Adam Roy

Laboratory Certification ID # 20012

Alliance TECHNICAL GROUP

Table Of Contents for Q1883

1) METALS DATA 2

2) Signature Page 4

3) Case Narrative 5

4) Qualifier Page 7

5) Conformance/Non Conformance 8

6) QA Checklist 9

7) Chronicle 10

8) Hit Summary 12

9) Sample Data 17

- 9.1) OU4-PCS-TC-27-042325 18
- 9.2) OU4-PCS-TC-28-042325 19
- 9.3) OU4-PCS-TC-29-042325 20
- 9.4) OU4-PCS-TC-30-042325 21
- 9.5) OU4-PCS-TC-31-042325 22
- 9.6) OU4-PCS-TC-32-042325 23
- 9.7) OU4-VSL-18-042325 24
- 9.8) OU4-VSL-19-042325 25

10) METALS CALIBRATION DATA 26

- 10.1) Initial and Continuing Calibration Verification 27
- 10.2) CRDL Standard For AA & ICP 43
- 10.3) Initial and Continuing Calibration Blank Summary 45
- 10.4) Preparation Blank Summary 58
- 10.5) Interference Check Sample 60

11) METALS QC DATA 63

- 11.1) Matrix Spike Summary 64
- 11.2) Post Digest Spike Summary 68
- 11.3) Duplicate Sample Summary 69
- 11.4) Laboratory Control Sample Summary 73
- 11.5) ICP Serial Dilutions 75

12) METALS PREPARATION & INSTRUMENT DATA 77

- 12.1) ICP Interelement Correction Factors 78

13) PREPARATION & ANALYTICAL SUMMARY 83

- 13.1) Sample Preparation Summary 84
- 13.2) Analysis Run Log 86

14) METALS RAW DATA 89

14.1) METALS RAW DATA - ANALYTICAL 90
14.2) LB135614 90
14.3) LB135689 302
14.4) LB135571 468
14.5) METALS RAW DATA - PREP 470
14.5.1) PB167757 470
14.5.2) PB167755 473
15) Percent Solid 476
16) Analytical Runlogs 482
17) Standard Prep Logs 494
18) Shipping Document 710
18.1) Chain Of Custody 711
18.2) Lab Certificate 712
18.3) Internal COC 713

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Cover Page

Order ID : Q1883

Project ID : Raymark Superfund Site

Client : Nobis Group

Lab Sample Number	Client Sample Number
Q1883-01	OU4-PCS-TC-27-042325
Q1883-02	OU4-PCS-TC-27-042325
Q1883-03	OU4-PCS-TC-28-042325
Q1883-04	OU4-PCS-TC-28-042325
Q1883-05	OU4-PCS-TC-29-042325
Q1883-06	OU4-PCS-TC-29-042325
Q1883-07	OU4-PCS-TC-30-042325
Q1883-08	OU4-PCS-TC-30-042325
Q1883-09	OU4-PCS-TC-31-042325
Q1883-10	OU4-PCS-TC-31-042325
Q1883-11	OU4-PCS-TC-32-042325
Q1883-12	OU4-PCS-TC-32-042325
Q1883-13	OU4-VSL-18-042325
Q1883-14	OU4-VSL-18-042325
Q1883-15	OU4-VSL-19-042325
Q1883-16	OU4-VSL-19-042325
Q1883-17	SO-TB-01-042325

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 9:32 am, May 09, 2025

Date: 5/8/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Nobis Group
Project Name: Raymark Superfund Site
Project # N/A
Order ID # Q1883
Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:
17 Solid samples were received on 04/25/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3, VOCMS Group1 and VOCMS Group3. This data package contains results for Metals ICP-TAL,Mercury.

C. Analytical Techniques:
The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate (OU4-PCS-TC-32-042325DUP) analysis met criteria for all samples except for Arsenic, Lead due to matrix interference.
The Duplicate (OU4-PCS-TC-32-042325MSD) analysis met criteria for all samples except for Sodium due to matrix interference.
The Matrix Spike (OU4-PCS-TC-32-042325MS) analysis met criteria for all samples except for Antimony, Arsenic, Barium, Chromium, Selenium, Silver, Zinc due to matrix interference.
The Matrix Spike Duplicate (OU4-PCS-TC-32-042325MSD) analysis met criteria for all samples except for Antimony, Barium, Beryllium, Chromium, Cobalt, Zinc due to matrix interference.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution (OU4-PCS-TC-32-042325L) met criteria for all samples except for Copper, Iron due to unknown interference.

E. Additional Comments:

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

Signature_____ **APPROVED**
By Nimisha Pandya, QA/QC Supervisor at 9:32 am, May 09, 2025

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q1883 MATRIX: Solid

METHOD: 6010D,7471B

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Serial Dilution Summary (if applicable) Submitted. The Serial Dilution (OU4-PCS-TC-32-042325L) met criteria for all samples except for Copper, Iron due to unknown interference.		✓	
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Matrix Spike (OU4-PCS-TC-32-042325MS) analysis met criteria for all samples except for Antimony, Arsenic, Barium, Chromium, Selenium, Silver, Zinc due to matrix interference. The Matrix Spike Duplicate (OU4-PCS-TC-32-042325MSD) analysis met criteria for all samples except for Antimony, Barium, Beryllium, Chromium, Cobalt, Zinc due to matrix interference.		✓	
7.	Sample Duplicate Analysis Met QC Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Duplicate (OU4-PCS-TC-32-042325DUP) analysis met criteria for all samples except for Arsenic, Lead due to matrix interference. The Duplicate (OU4-PCS-TC-32-042325MSD) analysis met criteria for all samples except for Sodium due to matrix interference.		✓	
8.	Digestion Holding Time Met If not met, list number of days exceeded for each sample:			✓
9.	Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓

ADDITIONAL COMMENTS:

QA REVIEW

REVIEWED

By Sohil Jodhani, QA/QC Director at 9:01 am, May 09, 2025

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1883

	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:** 05/08/2025

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LAB CHRONICLE

OrderID:	Q1883	**OrderDate:**	4/25/2025 10:10:00 AM
Client:	Nobis Group	**Project:**	Raymark Superfund Site
Contact:	Adam Roy	**Location:**	L41,L51,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1883-01	**OU4-PCS-TC-27-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-03	**OU4-PCS-TC-28-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-05	**OU4-PCS-TC-29-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-07	**OU4-PCS-TC-30-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-09	**OU4-PCS-TC-31-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-11	**OU4-PCS-TC-32-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	
Q1883-13	**OU4-VSL-18-042325**	**SOIL**			**04/23/25**			**04/25/25**
			Mercury	7471B		04/28/25	04/28/25	
			Metals ICP-TAL	6010D		04/28/25	04/30/25	

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LAB CHRONICLE

Q1883-15	**OU4-VSL-19-042325**	**SOIL**			**04/23/25**		**04/25/25**
			Mercury	7471B		04/28/25	04/28/25
			Metals ICP-TAL	6010D		04/28/25	04/30/25

Alliance TECHNICAL GROUP
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Hit Summary Sheet
SW-846

SDG No.: Q1883 **Order ID:** Q1883

Client: Nobis Group **Project ID:** Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : OU4-PCS-TC-27-042325									
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Aluminum	8700		0.74	3.54	4.43	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Arsenic	1.69		0.17	0.71	0.89	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Barium	20.9		0.65	1.11	4.43	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Beryllium	0.28		0.022	0.066	0.27	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Cadmium	1.00		0.021	0.066	0.27	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Calcium	9370		9.83	22.1	88.6	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Chromium	1.60		0.042	0.11	0.44	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Cobalt	17.7		0.089	0.33	1.33	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Copper	41.6		0.20	0.71	0.89	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Iron	28400		3.53	3.54	4.43	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Lead	1.26		0.12	0.43	0.53	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Magnesium	6530		10.6	22.1	88.6	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Manganese	285		0.12	0.22	0.89	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Mercury	0.018		0.0070	0.010	0.013	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Nickel	9.15		0.12	0.44	1.77	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Potassium	107		24.5	70.8	88.6	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Sodium	1010		15.8	70.8	88.6	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Vanadium	78.5		0.22	0.89	1.77	mg/Kg
Q1883-01	OU4-PCS-TC-27-042325	SOIL	Zinc	30.4		0.20	0.44	1.77	mg/Kg
Client ID : OU4-PCS-TC-28-042325									
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Aluminum	8380		0.82	3.88	4.85	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Arsenic	1.45		0.18	0.78	0.97	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Barium	30.3		0.71	1.21	4.85	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Beryllium	0.29	J	0.024	0.073	0.29	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Cadmium	0.96		0.023	0.073	0.29	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Calcium	11000		10.8	24.3	97.1	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Chromium	0.84		0.046	0.12	0.49	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Cobalt	19.4		0.097	0.36	1.46	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Copper	43.7		0.21	0.78	0.97	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Iron	33400		3.87	3.88	4.85	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Lead	1.04		0.13	0.47	0.58	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Magnesium	6250		11.6	24.3	97.1	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Manganese	370		0.14	0.24	0.97	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Nickel	7.01		0.13	0.49	1.94	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Potassium	91.5	J	26.9	77.7	97.1	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Sodium	862		17.3	77.7	97.1	mg/Kg
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Vanadium	82.0		0.24	0.97	1.94	mg/Kg

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Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: Q1883 **Order ID:** Q1883

Client: Nobis Group **Project ID:** Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Q1883-03	OU4-PCS-TC-28-042325	SOIL	Zinc	40.4		0.22	0.49	1.94	mg/Kg
Client ID :	**OU4-PCS-TC-29-042325**								
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Aluminum	7870		0.86	4.08	5.10	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Arsenic	1.47		0.19	0.82	1.02	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Barium	15.0		0.74	1.27	5.10	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Beryllium	0.24	J	0.025	0.076	0.31	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Cadmium	0.55		0.024	0.076	0.31	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Calcium	8560		11.3	25.5	102	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Chromium	2.27		0.048	0.13	0.51	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Cobalt	16.5		0.10	0.38	1.53	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Copper	40.8		0.22	0.82	1.02	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Iron	26300		4.07	4.08	5.10	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Lead	1.26		0.13	0.49	0.61	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Magnesium	5660		12.2	25.5	102	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Manganese	271		0.14	0.26	1.02	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Nickel	8.54		0.13	0.51	2.04	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Potassium	116		28.2	81.6	102	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Sodium	968		18.1	81.6	102	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Vanadium	67.2		0.26	1.02	2.04	mg/Kg
Q1883-05	OU4-PCS-TC-29-042325	SOIL	Zinc	30.9		0.23	0.51	2.04	mg/Kg
Client ID :	**OU4-PCS-TC-30-042325**								
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Aluminum	7060		0.83	3.95	4.93	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Arsenic	1.31		0.19	0.79	0.99	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Barium	14.2		0.72	1.23	4.93	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Beryllium	0.21	J	0.025	0.074	0.30	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Cadmium	0.62		0.024	0.074	0.30	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Calcium	8970		10.9	24.7	98.7	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Chromium	0.86		0.046	0.12	0.49	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Cobalt	17.1		0.099	0.37	1.48	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Copper	46.0		0.22	0.79	0.99	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Iron	27000		3.94	3.95	4.93	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Lead	1.04		0.13	0.47	0.59	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Magnesium	4950		11.8	24.7	98.7	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Manganese	241		0.14	0.25	0.99	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Nickel	7.14		0.13	0.49	1.97	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Potassium	119		27.3	79.0	98.7	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Sodium	859		17.6	79.0	98.7	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Vanadium	68.9		0.25	0.99	1.97	mg/Kg
Q1883-07	OU4-PCS-TC-30-042325	SOIL	Zinc	32.6		0.23	0.49	1.97	mg/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q1883 **Order ID:** Q1883

Client: Nobis Group **Project ID:** Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : OU4-PCS-TC-31-042325									
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Aluminum	8400		0.77	3.67	4.59	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Arsenic	2.43		0.17	0.73	0.92	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Barium	27.7		0.67	1.15	4.59	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Beryllium	0.26	J	0.023	0.069	0.28	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Cadmium	0.74		0.022	0.069	0.28	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Calcium	11200		10.2	22.9	91.7	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Chromium	1.64		0.043	0.12	0.46	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Cobalt	19.4		0.092	0.34	1.38	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Copper	42.2		0.20	0.73	0.92	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Iron	33800		3.66	3.67	4.59	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Lead	1.53		0.12	0.44	0.55	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Magnesium	5920		11.0	22.9	91.7	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Manganese	284		0.13	0.23	0.92	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Nickel	8.09		0.12	0.46	1.83	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Potassium	147		25.4	73.4	91.7	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Silver	0.34	J	0.11	0.23	0.46	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Sodium	1130		16.3	73.4	91.7	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Vanadium	91.1		0.23	0.92	1.83	mg/Kg
Q1883-09	OU4-PCS-TC-31-042325	SOIL	Zinc	38.8		0.21	0.46	1.83	mg/Kg
Client ID : OU4-PCS-TC-32-042325									
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Aluminum	8150		0.80	3.82	4.78	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Arsenic	2.12		0.18	0.77	0.96	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Barium	29.3		0.70	1.20	4.78	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Beryllium	0.28	J	0.024	0.072	0.29	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Cadmium	1.33		0.023	0.072	0.29	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Calcium	11100		10.6	23.9	95.6	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Chromium	0.83		0.045	0.12	0.48	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Cobalt	19.3		0.096	0.36	1.43	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Copper	46.1		0.21	0.77	0.96	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Iron	32200		3.81	3.82	4.78	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Lead	2.06		0.12	0.46	0.57	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Magnesium	5610		11.5	23.9	95.6	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Manganese	292		0.13	0.24	0.96	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Nickel	7.08		0.12	0.48	1.91	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Potassium	123		26.5	76.5	95.6	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Sodium	951		17.0	76.5	95.6	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Vanadium	84.8		0.24	0.96	1.91	mg/Kg
Q1883-11	OU4-PCS-TC-32-042325	SOIL	Zinc	37.7		0.22	0.48	1.91	mg/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q1883 **Order ID:** Q1883

Client: Nobis Group **Project ID:** Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : OU4-VSL-18-042325									
Q1883-13	OU4-VSL-18-042325	SOIL	Aluminum	6230		0.79	3.74	4.67	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Arsenic	1.51		0.18	0.75	0.93	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Barium	4.99		0.68	1.17	4.67	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Beryllium	0.16	J	0.023	0.070	0.28	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Cadmium	0.21	J	0.022	0.070	0.28	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Calcium	5000		10.4	23.4	93.4	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Chromium	1.33		0.044	0.12	0.47	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Cobalt	12.8		0.093	0.35	1.40	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Copper	38.0		0.21	0.75	0.93	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Iron	18900		3.73	3.74	4.67	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Lead	1.33		0.12	0.45	0.56	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Magnesium	4110		11.2	23.4	93.4	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Manganese	135		0.13	0.23	0.93	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Nickel	7.79		0.12	0.47	1.87	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Potassium	84.1	J	25.9	74.8	93.4	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Silver	0.14	J	0.11	0.23	0.47	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Sodium	960		16.6	74.8	93.4	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Vanadium	63.2		0.23	0.93	1.87	mg/Kg
Q1883-13	OU4-VSL-18-042325	SOIL	Zinc	23.9		0.22	0.47	1.87	mg/Kg
Client ID : OU4-VSL-19-042325									
Q1883-15	OU4-VSL-19-042325	SOIL	Aluminum	6590		0.80	3.80	4.74	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Arsenic	0.74	J	0.18	0.76	0.95	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Barium	7.01		0.69	1.19	4.74	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Beryllium	0.19	J	0.024	0.071	0.28	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Cadmium	0.60		0.023	0.071	0.28	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Calcium	5130		10.5	23.7	94.9	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Chromium	0.94		0.045	0.12	0.47	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Cobalt	14.1		0.095	0.36	1.42	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Copper	40.0		0.21	0.76	0.95	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Iron	21500		3.79	3.80	4.74	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Lead	0.74		0.12	0.46	0.57	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Magnesium	4060		11.4	23.7	94.9	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Manganese	162		0.13	0.24	0.95	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Nickel	6.66		0.12	0.47	1.90	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Potassium	81.3	J	26.3	75.9	94.9	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Sodium	817		16.9	75.9	94.9	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Vanadium	64.6		0.24	0.95	1.90	mg/Kg
Q1883-15	OU4-VSL-19-042325	SOIL	Zinc	30.7		0.22	0.47	1.90	mg/Kg

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Hit Summary Sheet
SW-846

SDG No.:	Q1883	**Order ID:**	Q1883
Client:	Nobis Group	**Project ID:**	Raymark Superfund Site

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-27-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	94.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8700		1	0.74	3.54	4.43	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-36-0	Antimony	0.55	UN	1	0.20	0.55	2.21	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-38-2	Arsenic	1.69	N*	1	0.17	0.71	0.89	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-39-3	Barium	20.9	N	1	0.65	1.11	4.43	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-41-7	Beryllium	0.28	N	1	0.022	0.066	0.27	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-43-9	Cadmium	1.00		1	0.021	0.066	0.27	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-70-2	Calcium	9370		1	9.83	22.1	88.6	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-47-3	Chromium	1.60	N	1	0.042	0.11	0.44	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-48-4	Cobalt	17.7	N	1	0.089	0.33	1.33	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-50-8	Copper	41.6		1	0.20	0.71	0.89	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7439-89-6	Iron	28400		1	3.53	3.54	4.43	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7439-92-1	Lead	1.26	*	1	0.12	0.43	0.53	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7439-95-4	Magnesium	6530		1	10.6	22.1	88.6	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7439-96-5	Manganese	285		1	0.12	0.22	0.89	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7439-97-6	Mercury	0.018		1	0.0070	0.010	0.013	mg/Kg	04/28/25 09:05	04/28/25 10:55	SW7471B	
7440-02-0	Nickel	9.15		1	0.12	0.44	1.77	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-09-7	Potassium	107		1	24.5	70.8	88.6	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7782-49-2	Selenium	0.71	UN	1	0.23	0.71	0.89	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-22-4	Silver	0.22	UN	1	0.11	0.22	0.44	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-23-5	Sodium	1010	*	1	15.8	70.8	88.6	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-28-0	Thallium	0.89	U	1	0.20	0.89	1.77	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-62-2	Vanadium	78.5		1	0.22	0.89	1.77	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050
7440-66-6	Zinc	30.4	N	1	0.20	0.44	1.77	mg/Kg	04/28/25 10:10	04/30/25 19:00	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-28-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	94.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8380		1	0.82	3.88	4.85	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-36-0	Antimony	0.61	UN	1	0.21	0.61	2.43	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-38-2	Arsenic	1.45	N*	1	0.18	0.78	0.97	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-39-3	Barium	30.3	N	1	0.71	1.21	4.85	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-41-7	Beryllium	0.29	JN	1	0.024	0.073	0.29	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-43-9	Cadmium	0.96		1	0.023	0.073	0.29	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-70-2	Calcium	11000		1	10.8	24.3	97.1	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-47-3	Chromium	0.84	N	1	0.046	0.12	0.49	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-48-4	Cobalt	19.4	N	1	0.097	0.36	1.46	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-50-8	Copper	43.7		1	0.21	0.78	0.97	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7439-89-6	Iron	33400		1	3.87	3.88	4.85	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7439-92-1	Lead	1.04	*	1	0.13	0.47	0.58	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7439-95-4	Magnesium	6250		1	11.6	24.3	97.1	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7439-96-5	Manganese	370		1	0.14	0.24	0.97	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7439-97-6	Mercury	0.012	U	1	0.0080	0.012	0.015	mg/Kg	04/28/25 09:05	04/28/25 10:58	SW7471B	
7440-02-0	Nickel	7.01		1	0.13	0.49	1.94	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-09-7	Potassium	91.5	J	1	26.9	77.7	97.1	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7782-49-2	Selenium	0.78	UN	1	0.25	0.78	0.97	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-22-4	Silver	0.24	UN	1	0.12	0.24	0.49	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-23-5	Sodium	862	*	1	17.3	77.7	97.1	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-28-0	Thallium	0.97	U	1	0.22	0.97	1.94	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-62-2	Vanadium	82.0		1	0.24	0.97	1.94	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050
7440-66-6	Zinc	40.4	N	1	0.22	0.49	1.94	mg/Kg	04/28/25 10:10	04/30/25 19:13	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
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J = Estimated Value
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OR = Over Range
N =Spiked sample recovery not within control limits

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-29-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-05	Matrix:	SOIL
Level (low/med):	low	% Solid:	95.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	7870		1	0.86	4.08	5.10	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-36-0	Antimony	0.64	UN	1	0.22	0.64	2.55	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-38-2	Arsenic	1.47	N*	1	0.19	0.82	1.02	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-39-3	Barium	15.0	N	1	0.74	1.27	5.10	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-41-7	Beryllium	0.24	JN	1	0.025	0.076	0.31	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-43-9	Cadmium	0.55		1	0.024	0.076	0.31	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-70-2	Calcium	8560		1	11.3	25.5	102	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-47-3	Chromium	2.27	N	1	0.048	0.13	0.51	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-48-4	Cobalt	16.5	N	1	0.10	0.38	1.53	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-50-8	Copper	40.8		1	0.22	0.82	1.02	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7439-89-6	Iron	26300		1	4.07	4.08	5.10	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7439-92-1	Lead	1.26	*	1	0.13	0.49	0.61	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7439-95-4	Magnesium	5660		1	12.2	25.5	102	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7439-96-5	Manganese	271		1	0.14	0.26	1.02	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7439-97-6	Mercury	0.011	U	1	0.0070	0.011	0.013	mg/Kg	04/28/25 09:05	04/28/25 11:00	SW7471B	
7440-02-0	Nickel	8.54		1	0.13	0.51	2.04	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-09-7	Potassium	116		1	28.2	81.6	102	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7782-49-2	Selenium	0.82	UN	1	0.27	0.82	1.02	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-22-4	Silver	0.26	UN	1	0.12	0.26	0.51	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-23-5	Sodium	968	*	1	18.1	81.6	102	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-28-0	Thallium	1.02	U	1	0.23	1.02	2.04	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-62-2	Vanadium	67.2		1	0.26	1.02	2.04	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050
7440-66-6	Zinc	30.9	N	1	0.23	0.51	2.04	mg/Kg	04/28/25 10:10	04/30/25 19:17	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

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

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

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-30-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-07	Matrix:	SOIL
Level (low/med):	low	% Solid:	96.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	7060		1	0.83	3.95	4.93	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-36-0	Antimony	0.62	UN	1	0.22	0.62	2.47	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-38-2	Arsenic	1.31	N*	1	0.19	0.79	0.99	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-39-3	Barium	14.2	N	1	0.72	1.23	4.93	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-41-7	Beryllium	0.21	JN	1	0.025	0.074	0.30	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-43-9	Cadmium	0.62		1	0.024	0.074	0.30	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-70-2	Calcium	8970		1	10.9	24.7	98.7	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-47-3	Chromium	0.86	N	1	0.046	0.12	0.49	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-48-4	Cobalt	17.1	N	1	0.099	0.37	1.48	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-50-8	Copper	46.0		1	0.22	0.79	0.99	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7439-89-6	Iron	27000		1	3.94	3.95	4.93	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7439-92-1	Lead	1.04	*	1	0.13	0.47	0.59	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7439-95-4	Magnesium	4950		1	11.8	24.7	98.7	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7439-96-5	Manganese	241		1	0.14	0.25	0.99	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7439-97-6	Mercury	0.011	U	1	0.0080	0.011	0.014	mg/Kg	04/28/25 09:05	04/28/25 11:02	SW7471B	
7440-02-0	Nickel	7.14		1	0.13	0.49	1.97	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-09-7	Potassium	119		1	27.3	79.0	98.7	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7782-49-2	Selenium	0.79	UN	1	0.26	0.79	0.99	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-22-4	Silver	0.25	UN	1	0.12	0.25	0.49	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-23-5	Sodium	859	*	1	17.6	79.0	98.7	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-28-0	Thallium	0.99	U	1	0.23	0.99	1.97	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-62-2	Vanadium	68.9		1	0.25	0.99	1.97	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050
7440-66-6	Zinc	32.6	N	1	0.23	0.49	1.97	mg/Kg	04/28/25 10:10	04/30/25 19:33	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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J = Estimated Value
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E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-31-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-09	Matrix:	SOIL
Level (low/med):	low	% Solid:	96.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8400		1	0.77	3.67	4.59	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-36-0	Antimony	0.57	UN	1	0.20	0.57	2.29	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-38-2	Arsenic	2.43	N*	1	0.17	0.73	0.92	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-39-3	Barium	27.7	N	1	0.67	1.15	4.59	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-41-7	Beryllium	0.26	JN	1	0.023	0.069	0.28	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-43-9	Cadmium	0.74		1	0.022	0.069	0.28	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-70-2	Calcium	11200		1	10.2	22.9	91.7	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-47-3	Chromium	1.64	N	1	0.043	0.12	0.46	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-48-4	Cobalt	19.4	N	1	0.092	0.34	1.38	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-50-8	Copper	42.2		1	0.20	0.73	0.92	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7439-89-6	Iron	33800		1	3.66	3.67	4.59	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7439-92-1	Lead	1.53	*	1	0.12	0.44	0.55	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7439-95-4	Magnesium	5920		1	11.0	22.9	91.7	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7439-96-5	Manganese	284		1	0.13	0.23	0.92	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7439-97-6	Mercury	0.012	U	1	0.0080	0.012	0.014	mg/Kg	04/28/25 09:05	04/28/25 11:05	SW7471B	
7440-02-0	Nickel	8.09		1	0.12	0.46	1.83	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-09-7	Potassium	147		1	25.4	73.4	91.7	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7782-49-2	Selenium	0.73	UN	1	0.24	0.73	0.92	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-22-4	Silver	0.34	JN	1	0.11	0.23	0.46	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-23-5	Sodium	1130	*	1	16.3	73.4	91.7	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-28-0	Thallium	0.92	U	1	0.21	0.92	1.83	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-62-2	Vanadium	91.1		1	0.23	0.92	1.83	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050
7440-66-6	Zinc	38.8	N	1	0.21	0.46	1.83	mg/Kg	04/28/25 10:10	04/30/25 19:45	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

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* = 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

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

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-PCS-TC-32-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-11	Matrix:	SOIL
Level (low/med):	low	% Solid:	97.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8150		1	0.80	3.82	4.78	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-36-0	Antimony	0.60	UN	1	0.21	0.60	2.39	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-38-2	Arsenic	2.12	N*	1	0.18	0.77	0.96	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-39-3	Barium	29.3	N	1	0.70	1.20	4.78	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-41-7	Beryllium	0.28	JN	1	0.024	0.072	0.29	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-43-9	Cadmium	1.33		1	0.023	0.072	0.29	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-70-2	Calcium	11100		1	10.6	23.9	95.6	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-47-3	Chromium	0.83	N	1	0.045	0.12	0.48	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-48-4	Cobalt	19.3	N	1	0.096	0.36	1.43	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-50-8	Copper	46.1		1	0.21	0.77	0.96	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7439-89-6	Iron	32200		1	3.81	3.82	4.78	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7439-92-1	Lead	2.06	*	1	0.12	0.46	0.57	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7439-95-4	Magnesium	5610		1	11.5	23.9	95.6	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7439-96-5	Manganese	292		1	0.13	0.24	0.96	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7439-97-6	Mercury	0.010	U	1	0.0070	0.010	0.012	mg/Kg	04/28/25 09:05	04/28/25 11:11	SW7471B	
7440-02-0	Nickel	7.08		1	0.12	0.48	1.91	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-09-7	Potassium	123		1	26.5	76.5	95.6	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7782-49-2	Selenium	0.77	UN	1	0.25	0.77	0.96	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-22-4	Silver	0.24	UN	1	0.12	0.24	0.48	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-23-5	Sodium	951	J	1	17.0	76.5	95.6	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-28-0	Thallium	0.96	U	1	0.22	0.96	1.91	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-62-2	Vanadium	84.8		1	0.24	0.96	1.91	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050
7440-66-6	Zinc	37.7	N	1	0.22	0.48	1.91	mg/Kg	04/28/25 10:10	04/30/25 19:50	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
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J = Estimated Value
B = Analyte Found in Associated Method Blank
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Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-VSL-18-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-13	Matrix:	SOIL
Level (low/med):	low	% Solid:	94.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	6230		1	0.79	3.74	4.67	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-36-0	Antimony	0.58	UN	1	0.21	0.58	2.34	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-38-2	Arsenic	1.51	N*	1	0.18	0.75	0.93	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-39-3	Barium	4.99	N	1	0.68	1.17	4.67	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-41-7	Beryllium	0.16	JN	1	0.023	0.070	0.28	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-43-9	Cadmium	0.21	J	1	0.022	0.070	0.28	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-70-2	Calcium	5000		1	10.4	23.4	93.4	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-47-3	Chromium	1.33	N	1	0.044	0.12	0.47	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-48-4	Cobalt	12.8	N	1	0.093	0.35	1.40	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-50-8	Copper	38.0		1	0.21	0.75	0.93	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7439-89-6	Iron	18900		1	3.73	3.74	4.67	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7439-92-1	Lead	1.33	*	1	0.12	0.45	0.56	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7439-95-4	Magnesium	4110		1	11.2	23.4	93.4	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7439-96-5	Manganese	135		1	0.13	0.23	0.93	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7439-97-6	Mercury	0.011	U	1	0.0080	0.011	0.014	mg/Kg	04/28/25 09:05	04/28/25 11:14	SW7471B	
7440-02-0	Nickel	7.79		1	0.12	0.47	1.87	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-09-7	Potassium	84.1	J	1	25.9	74.8	93.4	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7782-49-2	Selenium	0.75	UN	1	0.24	0.75	0.93	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-22-4	Silver	0.14	JN	1	0.11	0.23	0.47	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-23-5	Sodium	960	*	1	16.6	74.8	93.4	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-28-0	Thallium	0.93	U	1	0.22	0.93	1.87	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-62-2	Vanadium	63.2		1	0.23	0.93	1.87	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050
7440-66-6	Zinc	23.9	N	1	0.22	0.47	1.87	mg/Kg	04/28/25 10:10	04/30/25 20:14	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

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

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

Report of Analysis

Client:	Nobis Group	Date Collected:	04/23/25
Project:	Raymark Superfund Site	Date Received:	04/25/25
Client Sample ID:	OU4-VSL-19-042325	SDG No.:	Q1883
Lab Sample ID:	Q1883-15	Matrix:	SOIL
Level (low/med):	low	% Solid:	95.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	6590		1	0.80	3.80	4.74	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-36-0	Antimony	0.59	UN	1	0.21	0.59	2.37	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-38-2	Arsenic	0.74	JN*	1	0.18	0.76	0.95	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-39-3	Barium	7.01	N	1	0.69	1.19	4.74	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-41-7	Beryllium	0.19	JN	1	0.024	0.071	0.28	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-43-9	Cadmium	0.60		1	0.023	0.071	0.28	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-70-2	Calcium	5130		1	10.5	23.7	94.9	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-47-3	Chromium	0.94	N	1	0.045	0.12	0.47	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-48-4	Cobalt	14.1	N	1	0.095	0.36	1.42	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-50-8	Copper	40.0		1	0.21	0.76	0.95	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7439-89-6	Iron	21500		1	3.79	3.80	4.74	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7439-92-1	Lead	0.74	*	1	0.12	0.46	0.57	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7439-95-4	Magnesium	4060		1	11.4	23.7	94.9	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7439-96-5	Manganese	162		1	0.13	0.24	0.95	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7439-97-6	Mercury	0.010	U	1	0.0070	0.010	0.013	mg/Kg	04/28/25 09:05	04/28/25 11:16	SW7471B	
7440-02-0	Nickel	6.66		1	0.12	0.47	1.90	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-09-7	Potassium	81.3	J	1	26.3	75.9	94.9	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7782-49-2	Selenium	0.76	UN	1	0.25	0.76	0.95	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-22-4	Silver	0.24	UN	1	0.11	0.24	0.47	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-23-5	Sodium	817	*	1	16.9	75.9	94.9	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-28-0	Thallium	0.95	U	1	0.22	0.95	1.90	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-62-2	Vanadium	64.6		1	0.24	0.95	1.90	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050
7440-66-6	Zinc	30.7	N	1	0.22	0.47	1.90	mg/Kg	04/28/25 10:10	04/30/25 20:19	SW6010	SW3050

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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J = Estimated Value
B = Analyte Found in Associated Method Blank
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E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

METAL CALIBRATION DATA

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

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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
ICV103	Mercury	3.76	4.0	94	90 - 110	CV	04/28/2025	10:35	LB135571

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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
CCV31	Mercury	5.49	5.0	110	90 - 110	CV	04/28/2025	10:39	LB135571
CCV32	Mercury	5.32	5.0	106	90 - 110	CV	04/28/2025	11:07	LB135571
CCV33	Mercury	5.39	5.0	108	90 - 110	CV	04/28/2025	11:34	LB135571
CCV34	Mercury	4.83	5.0	96	90 - 110	CV	04/28/2025	12:05	LB135571
CCV35	Mercury	5.02	5.0	100	90 - 110	CV	04/28/2025	12:32	LB135571

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	2320	2500	93	90 - 110	P	04/30/2025	16:18	LB135614
	Antimony	973	1000	97	90 - 110	P	04/30/2025	16:18	LB135614
	Arsenic	986	1000	99	90 - 110	P	04/30/2025	16:18	LB135614
	Barium	537	520	103	90 - 110	P	04/30/2025	16:18	LB135614
	Beryllium	473	510	93	90 - 110	P	04/30/2025	16:18	LB135614
	Cadmium	500	510	98	90 - 110	P	04/30/2025	16:18	LB135614
	Calcium	9270	10000	93	90 - 110	P	04/30/2025	16:18	LB135614
	Chromium	510	520	98	90 - 110	P	04/30/2025	16:18	LB135614
	Cobalt	487	520	94	90 - 110	P	04/30/2025	16:18	LB135614
	Copper	495	510	97	90 - 110	P	04/30/2025	16:18	LB135614
	Iron	9190	10000	92	90 - 110	P	04/30/2025	16:18	LB135614
	Lead	987	1000	99	90 - 110	P	04/30/2025	16:18	LB135614
	Magnesium	5510	6000	92	90 - 110	P	04/30/2025	16:18	LB135614
	Manganese	468	520	90	90 - 110	P	04/30/2025	16:18	LB135614
	Nickel	526	530	99	90 - 110	P	04/30/2025	16:18	LB135614
	Potassium	10000	9900	101	90 - 110	P	04/30/2025	16:18	LB135614
	Selenium	1010	1000	101	90 - 110	P	04/30/2025	16:18	LB135614
	Silver	262	250	105	90 - 110	P	04/30/2025	16:18	LB135614
	Sodium	9910	10000	99	90 - 110	P	04/30/2025	16:18	LB135614
	Thallium	1080	1000	108	90 - 110	P	04/30/2025	16:18	LB135614
	Vanadium	455	500	91	90 - 110	P	04/30/2025	16:18	LB135614
	Zinc	969	1000	97	90 - 110	P	04/30/2025	16:18	LB135614

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	95.4	100	95	80 - 120	P	04/30/2025	16:28	LB135614
	Antimony	55.5	50.0	111	80 - 120	P	04/30/2025	16:28	LB135614
	Arsenic	22.6	20.0	113	80 - 120	P	04/30/2025	16:28	LB135614
	Barium	93.5	100	94	80 - 120	P	04/30/2025	16:28	LB135614
	Beryllium	6.43	6.0	107	80 - 120	P	04/30/2025	16:28	LB135614
	Cadmium	6.58	6.0	110	80 - 120	P	04/30/2025	16:28	LB135614
	Calcium	2040	2000	102	80 - 120	P	04/30/2025	16:28	LB135614
	Chromium	9.76	10.0	98	80 - 120	P	04/30/2025	16:28	LB135614
	Cobalt	30.9	30.0	103	80 - 120	P	04/30/2025	16:28	LB135614
	Copper	23.3	20.0	116	80 - 120	P	04/30/2025	16:28	LB135614
	Iron	92.8	100	93	80 - 120	P	04/30/2025	16:28	LB135614
	Lead	12.4	12.0	103	80 - 120	P	04/30/2025	16:28	LB135614
	Magnesium	2180	2000	109	80 - 120	P	04/30/2025	16:28	LB135614
	Manganese	21.3	20.0	106	80 - 120	P	04/30/2025	16:28	LB135614
	Nickel	41.8	40.0	104	80 - 120	P	04/30/2025	16:28	LB135614
	Potassium	1970	2000	98	80 - 120	P	04/30/2025	16:28	LB135614
	Selenium	16.3	20.0	82	80 - 120	P	04/30/2025	16:28	LB135614
	Silver	10.7	10.0	107	80 - 120	P	04/30/2025	16:28	LB135614
	Sodium	1740	2000	87	80 - 120	P	04/30/2025	16:28	LB135614
	Thallium	45.6	40.0	114	80 - 120	P	04/30/2025	16:28	LB135614
	Vanadium	40.2	40.0	100	80 - 120	P	04/30/2025	16:28	LB135614
	Zinc	42.5	40.0	106	80 - 120	P	04/30/2025	16:28	LB135614

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9840	10000	98	90 - 110	P	04/30/2025	17:27	LB135614
	Antimony	4970	5000	100	90 - 110	P	04/30/2025	17:27	LB135614
	Arsenic	5000	5000	100	90 - 110	P	04/30/2025	17:27	LB135614
	Barium	9810	10000	98	90 - 110	P	04/30/2025	17:27	LB135614
	Beryllium	239	250	96	90 - 110	P	04/30/2025	17:27	LB135614
	Cadmium	2530	2500	101	90 - 110	P	04/30/2025	17:27	LB135614
	Calcium	24300	25000	97	90 - 110	P	04/30/2025	17:27	LB135614
	Chromium	1020	1000	102	90 - 110	P	04/30/2025	17:27	LB135614
	Cobalt	2510	2500	100	90 - 110	P	04/30/2025	17:27	LB135614
	Copper	1250	1250	100	90 - 110	P	04/30/2025	17:27	LB135614
	Iron	5130	5000	103	90 - 110	P	04/30/2025	17:27	LB135614
	Lead	5060	5000	101	90 - 110	P	04/30/2025	17:27	LB135614
	Magnesium	24100	25000	96	90 - 110	P	04/30/2025	17:27	LB135614
	Manganese	2430	2500	97	90 - 110	P	04/30/2025	17:27	LB135614
	Nickel	2520	2500	101	90 - 110	P	04/30/2025	17:27	LB135614
	Potassium	25700	25000	103	90 - 110	P	04/30/2025	17:27	LB135614
	Selenium	5010	5000	100	90 - 110	P	04/30/2025	17:27	LB135614
	Silver	1250	1250	100	90 - 110	P	04/30/2025	17:27	LB135614
	Sodium	25400	25000	102	90 - 110	P	04/30/2025	17:27	LB135614
	Thallium	5240	5000	105	90 - 110	P	04/30/2025	17:27	LB135614
	Vanadium	2450	2500	98	90 - 110	P	04/30/2025	17:27	LB135614
	Zinc	2510	2500	100	90 - 110	P	04/30/2025	17:27	LB135614
CCV02	Aluminum	10000	10000	100	90 - 110	P	04/30/2025	18:30	LB135614
	Antimony	4770	5000	95	90 - 110	P	04/30/2025	18:30	LB135614
	Arsenic	4820	5000	96	90 - 110	P	04/30/2025	18:30	LB135614
	Barium	9940	10000	99	90 - 110	P	04/30/2025	18:30	LB135614
	Beryllium	261	250	104	90 - 110	P	04/30/2025	18:30	LB135614
	Cadmium	2560	2500	102	90 - 110	P	04/30/2025	18:30	LB135614
	Calcium	25400	25000	102	90 - 110	P	04/30/2025	18:30	LB135614
	Chromium	1040	1000	104	90 - 110	P	04/30/2025	18:30	LB135614
	Cobalt	2510	2500	101	90 - 110	P	04/30/2025	18:30	LB135614
	Copper	1220	1250	97	90 - 110	P	04/30/2025	18:30	LB135614
	Iron	5020	5000	100	90 - 110	P	04/30/2025	18:30	LB135614
	Lead	5080	5000	102	90 - 110	P	04/30/2025	18:30	LB135614

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	25800	25000	103	90 - 110	P	04/30/2025	18:30	LB135614
	Manganese	2520	2500	101	90 - 110	P	04/30/2025	18:30	LB135614
	Nickel	2520	2500	101	90 - 110	P	04/30/2025	18:30	LB135614
	Potassium	24400	25000	98	90 - 110	P	04/30/2025	18:30	LB135614
	Selenium	4770	5000	95	90 - 110	P	04/30/2025	18:30	LB135614
	Silver	1250	1250	100	90 - 110	P	04/30/2025	18:30	LB135614
	Sodium	23700	25000	95	90 - 110	P	04/30/2025	18:30	LB135614
	Thallium	5180	5000	104	90 - 110	P	04/30/2025	18:30	LB135614
	Vanadium	2540	2500	102	90 - 110	P	04/30/2025	18:30	LB135614
	Zinc	2490	2500	100	90 - 110	P	04/30/2025	18:30	LB135614
CCV03	Aluminum	10100	10000	101	90 - 110	P	04/30/2025	19:37	LB135614
	Antimony	5030	5000	100	90 - 110	P	04/30/2025	19:37	LB135614
	Arsenic	5060	5000	101	90 - 110	P	04/30/2025	19:37	LB135614
	Barium	9770	10000	98	90 - 110	P	04/30/2025	19:37	LB135614
	Beryllium	264	250	106	90 - 110	P	04/30/2025	19:37	LB135614
	Cadmium	2570	2500	103	90 - 110	P	04/30/2025	19:37	LB135614
	Calcium	25100	25000	101	90 - 110	P	04/30/2025	19:37	LB135614
	Chromium	1040	1000	104	90 - 110	P	04/30/2025	19:37	LB135614
	Cobalt	2540	2500	102	90 - 110	P	04/30/2025	19:37	LB135614
	Copper	1260	1250	101	90 - 110	P	04/30/2025	19:37	LB135614
	Iron	5170	5000	103	90 - 110	P	04/30/2025	19:37	LB135614
	Lead	5110	5000	102	90 - 110	P	04/30/2025	19:37	LB135614
	Magnesium	25400	25000	102	90 - 110	P	04/30/2025	19:37	LB135614
	Manganese	2480	2500	99	90 - 110	P	04/30/2025	19:37	LB135614
	Nickel	2550	2500	102	90 - 110	P	04/30/2025	19:37	LB135614
	Potassium	24100	25000	96	90 - 110	P	04/30/2025	19:37	LB135614
	Selenium	5080	5000	102	90 - 110	P	04/30/2025	19:37	LB135614
	Silver	1270	1250	102	90 - 110	P	04/30/2025	19:37	LB135614
	Sodium	23200	25000	93	90 - 110	P	04/30/2025	19:37	LB135614
	Thallium	5240	5000	105	90 - 110	P	04/30/2025	19:37	LB135614
	Vanadium	2510	2500	100	90 - 110	P	04/30/2025	19:37	LB135614
	Zinc	2540	2500	102	90 - 110	P	04/30/2025	19:37	LB135614
CCV04	Aluminum	9940	10000	99	90 - 110	P	04/30/2025	20:23	LB135614
	Antimony	4980	5000	100	90 - 110	P	04/30/2025	20:23	LB135614

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	5000	5000	100	90 - 110	P	04/30/2025	20:23	LB135614
	Barium	9720	10000	97	90 - 110	P	04/30/2025	20:23	LB135614
	Beryllium	251	250	100	90 - 110	P	04/30/2025	20:23	LB135614
	Cadmium	2550	2500	102	90 - 110	P	04/30/2025	20:23	LB135614
	Calcium	24900	25000	100	90 - 110	P	04/30/2025	20:23	LB135614
	Chromium	1050	1000	105	90 - 110	P	04/30/2025	20:23	LB135614
	Cobalt	2520	2500	101	90 - 110	P	04/30/2025	20:23	LB135614
	Copper	1250	1250	100	90 - 110	P	04/30/2025	20:23	LB135614
	Iron	5490	5000	110	90 - 110	P	04/30/2025	20:23	LB135614
	Lead	5100	5000	102	90 - 110	P	04/30/2025	20:23	LB135614
	Magnesium	25300	25000	101	90 - 110	P	04/30/2025	20:23	LB135614
	Manganese	2430	2500	97	90 - 110	P	04/30/2025	20:23	LB135614
	Nickel	2530	2500	101	90 - 110	P	04/30/2025	20:23	LB135614
	Potassium	24600	25000	99	90 - 110	P	04/30/2025	20:23	LB135614
	Selenium	4970	5000	100	90 - 110	P	04/30/2025	20:23	LB135614
	Silver	1270	1250	101	90 - 110	P	04/30/2025	20:23	LB135614
	Sodium	23800	25000	95	90 - 110	P	04/30/2025	20:23	LB135614
	Thallium	5140	5000	103	90 - 110	P	04/30/2025	20:23	LB135614
	Vanadium	2480	2500	99	90 - 110	P	04/30/2025	20:23	LB135614
	Zinc	2520	2500	101	90 - 110	P	04/30/2025	20:23	LB135614
CCV05	Aluminum	9810	10000	98	90 - 110	P	04/30/2025	21:08	LB135614
	Antimony	4960	5000	99	90 - 110	P	04/30/2025	21:08	LB135614
	Arsenic	4970	5000	99	90 - 110	P	04/30/2025	21:08	LB135614
	Barium	9680	10000	97	90 - 110	P	04/30/2025	21:08	LB135614
	Beryllium	252	250	101	90 - 110	P	04/30/2025	21:08	LB135614
	Cadmium	2530	2500	101	90 - 110	P	04/30/2025	21:08	LB135614
	Calcium	25000	25000	100	90 - 110	P	04/30/2025	21:08	LB135614
	Chromium	1050	1000	105	90 - 110	P	04/30/2025	21:08	LB135614
	Cobalt	2510	2500	100	90 - 110	P	04/30/2025	21:08	LB135614
	Copper	1240	1250	99	90 - 110	P	04/30/2025	21:08	LB135614
	Iron	5060	5000	101	90 - 110	P	04/30/2025	21:08	LB135614
	Lead	5070	5000	101	90 - 110	P	04/30/2025	21:08	LB135614
	Magnesium	25500	25000	102	90 - 110	P	04/30/2025	21:08	LB135614
	Manganese	2440	2500	98	90 - 110	P	04/30/2025	21:08	LB135614

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	2510	2500	100	90 - 110	P	04/30/2025	21:08	LB135614
	Potassium	24100	25000	96	90 - 110	P	04/30/2025	21:08	LB135614
	Selenium	4940	5000	99	90 - 110	P	04/30/2025	21:08	LB135614
	Silver	1260	1250	100	90 - 110	P	04/30/2025	21:08	LB135614
	Sodium	23100	25000	93	90 - 110	P	04/30/2025	21:08	LB135614
	Thallium	5160	5000	103	90 - 110	P	04/30/2025	21:08	LB135614
	Vanadium	2480	2500	99	90 - 110	P	04/30/2025	21:08	LB135614
	Zinc	2500	2500	100	90 - 110	P	04/30/2025	21:08	LB135614
CCV06	Aluminum	9680	10000	97	90 - 110	P	04/30/2025	21:54	LB135614
	Antimony	5010	5000	100	90 - 110	P	04/30/2025	21:54	LB135614
	Arsenic	5030	5000	100	90 - 110	P	04/30/2025	21:54	LB135614
	Barium	9680	10000	97	90 - 110	P	04/30/2025	21:54	LB135614
	Beryllium	238	250	95	90 - 110	P	04/30/2025	21:54	LB135614
	Cadmium	2500	2500	100	90 - 110	P	04/30/2025	21:54	LB135614
	Calcium	24200	25000	97	90 - 110	P	04/30/2025	21:54	LB135614
	Chromium	1010	1000	101	90 - 110	P	04/30/2025	21:54	LB135614
	Cobalt	2490	2500	99	90 - 110	P	04/30/2025	21:54	LB135614
	Copper	1250	1250	100	90 - 110	P	04/30/2025	21:54	LB135614
	Iron	5070	5000	101	90 - 110	P	04/30/2025	21:54	LB135614
	Lead	5010	5000	100	90 - 110	P	04/30/2025	21:54	LB135614
	Magnesium	24200	25000	97	90 - 110	P	04/30/2025	21:54	LB135614
	Manganese	2400	2500	96	90 - 110	P	04/30/2025	21:54	LB135614
	Nickel	2490	2500	100	90 - 110	P	04/30/2025	21:54	LB135614
	Potassium	24600	25000	98	90 - 110	P	04/30/2025	21:54	LB135614
	Selenium	5060	5000	101	90 - 110	P	04/30/2025	21:54	LB135614
	Silver	1230	1250	98	90 - 110	P	04/30/2025	21:54	LB135614
	Sodium	24000	25000	96	90 - 110	P	04/30/2025	21:54	LB135614
	Thallium	5110	5000	102	90 - 110	P	04/30/2025	21:54	LB135614
	Vanadium	2430	2500	97	90 - 110	P	04/30/2025	21:54	LB135614
	Zinc	2450	2500	98	90 - 110	P	04/30/2025	21:54	LB135614
CCV07	Aluminum	9820	10000	98	90 - 110	P	04/30/2025	22:40	LB135614
	Antimony	5220	5000	104	90 - 110	P	04/30/2025	22:40	LB135614
	Arsenic	5170	5000	103	90 - 110	P	04/30/2025	22:40	LB135614
	Barium	9890	10000	99	90 - 110	P	04/30/2025	22:40	LB135614

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	238	250	95	90 - 110	P	04/30/2025	22:40	LB135614
	Cadmium	2440	2500	98	90 - 110	P	04/30/2025	22:40	LB135614
	Calcium	24000	25000	96	90 - 110	P	04/30/2025	22:40	LB135614
	Chromium	995	1000	100	90 - 110	P	04/30/2025	22:40	LB135614
	Cobalt	2450	2500	98	90 - 110	P	04/30/2025	22:40	LB135614
	Copper	1290	1250	103	90 - 110	P	04/30/2025	22:40	LB135614
	Iron	5110	5000	102	90 - 110	P	04/30/2025	22:40	LB135614
	Lead	4900	5000	98	90 - 110	P	04/30/2025	22:40	LB135614
	Magnesium	23900	25000	96	90 - 110	P	04/30/2025	22:40	LB135614
	Manganese	2400	2500	96	90 - 110	P	04/30/2025	22:40	LB135614
	Nickel	2460	2500	98	90 - 110	P	04/30/2025	22:40	LB135614
	Potassium	25200	25000	101	90 - 110	P	04/30/2025	22:40	LB135614
	Selenium	5260	5000	105	90 - 110	P	04/30/2025	22:40	LB135614
	Silver	1240	1250	99	90 - 110	P	04/30/2025	22:40	LB135614
	Sodium	24900	25000	100	90 - 110	P	04/30/2025	22:40	LB135614
	Thallium	5030	5000	101	90 - 110	P	04/30/2025	22:40	LB135614
	Vanadium	2440	2500	98	90 - 110	P	04/30/2025	22:40	LB135614
	Zinc	2510	2500	100	90 - 110	P	04/30/2025	22:40	LB135614
CCV08	Aluminum	9980	10000	100	90 - 110	P	04/30/2025	23:05	LB135614
	Antimony	5150	5000	103	90 - 110	P	04/30/2025	23:05	LB135614
	Arsenic	5120	5000	102	90 - 110	P	04/30/2025	23:05	LB135614
	Barium	9730	10000	97	90 - 110	P	04/30/2025	23:05	LB135614
	Beryllium	246	250	98	90 - 110	P	04/30/2025	23:05	LB135614
	Cadmium	2440	2500	98	90 - 110	P	04/30/2025	23:05	LB135614
	Calcium	24000	25000	96	90 - 110	P	04/30/2025	23:05	LB135614
	Chromium	989	1000	99	90 - 110	P	04/30/2025	23:05	LB135614
	Cobalt	2440	2500	98	90 - 110	P	04/30/2025	23:05	LB135614
	Copper	1280	1250	103	90 - 110	P	04/30/2025	23:05	LB135614
	Iron	5100	5000	102	90 - 110	P	04/30/2025	23:05	LB135614
	Lead	4880	5000	98	90 - 110	P	04/30/2025	23:05	LB135614
	Magnesium	23600	25000	94	90 - 110	P	04/30/2025	23:05	LB135614
	Manganese	2380	2500	95	90 - 110	P	04/30/2025	23:05	LB135614
	Nickel	2450	2500	98	90 - 110	P	04/30/2025	23:05	LB135614
	Potassium	25000	25000	100	90 - 110	P	04/30/2025	23:05	LB135614

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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
CCV08	Selenium	5200	5000	104	90 - 110	P	04/30/2025	23:05	LB135614
	Silver	1240	1250	100	90 - 110	P	04/30/2025	23:05	LB135614
	Sodium	24400	25000	98	90 - 110	P	04/30/2025	23:05	LB135614
	Thallium	5020	5000	100	90 - 110	P	04/30/2025	23:05	LB135614
	Vanadium	2420	2500	97	90 - 110	P	04/30/2025	23:05	LB135614
	Zinc	2510	2500	100	90 - 110	P	04/30/2025	23:05	LB135614

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	90 - 110	P	05/06/2025	14:47	LB135689
	Antimony	972	1000	97	90 - 110	P	05/06/2025	14:47	LB135689
	Arsenic	976	1000	98	90 - 110	P	05/06/2025	14:47	LB135689
	Barium	531	520	102	90 - 110	P	05/06/2025	14:47	LB135689
	Beryllium	552	510	108	90 - 110	P	05/06/2025	14:47	LB135689
	Cadmium	498	510	98	90 - 110	P	05/06/2025	14:47	LB135689
	Calcium	9500	10000	95	90 - 110	P	05/06/2025	14:47	LB135689
	Chromium	498	520	96	90 - 110	P	05/06/2025	14:47	LB135689
	Cobalt	487	520	94	90 - 110	P	05/06/2025	14:47	LB135689
	Copper	500	510	98	90 - 110	P	05/06/2025	14:47	LB135689
	Iron	10500	10000	105	90 - 110	P	05/06/2025	14:47	LB135689
	Lead	975	1000	98	90 - 110	P	05/06/2025	14:47	LB135689
	Magnesium	5640	6000	94	90 - 110	P	05/06/2025	14:47	LB135689
	Manganese	493	520	95	90 - 110	P	05/06/2025	14:47	LB135689
	Nickel	492	530	93	90 - 110	P	05/06/2025	14:47	LB135689
	Potassium	10100	9900	102	90 - 110	P	05/06/2025	14:47	LB135689
	Selenium	1000	1000	100	90 - 110	P	05/06/2025	14:47	LB135689
	Silver	232	250	93	90 - 110	P	05/06/2025	14:47	LB135689
	Sodium	10000	10000	100	90 - 110	P	05/06/2025	14:47	LB135689
	Thallium	1000	1000	100	90 - 110	P	05/06/2025	14:47	LB135689
	Vanadium	478	500	96	90 - 110	P	05/06/2025	14:47	LB135689
	Zinc	975	1000	98	90 - 110	P	05/06/2025	14:47	LB135689

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	05/06/2025	15:22	LB135689
	Antimony	50.3	50.0	101	80 - 120	P	05/06/2025	15:22	LB135689
	Arsenic	18.2	20.0	91	80 - 120	P	05/06/2025	15:22	LB135689
	Barium	91.5	100	92	80 - 120	P	05/06/2025	15:22	LB135689
	Beryllium	5.90	6.0	98	80 - 120	P	05/06/2025	15:22	LB135689
	Cadmium	5.98	6.0	100	80 - 120	P	05/06/2025	15:22	LB135689
	Calcium	1930	2000	96	80 - 120	P	05/06/2025	15:22	LB135689
	Chromium	9.31	10.0	93	80 - 120	P	05/06/2025	15:22	LB135689
	Cobalt	28.6	30.0	95	80 - 120	P	05/06/2025	15:22	LB135689
	Copper	21.1	20.0	106	80 - 120	P	05/06/2025	15:22	LB135689
	Iron	98.2	100	98	80 - 120	P	05/06/2025	15:22	LB135689
	Lead	11.1	12.0	92	80 - 120	P	05/06/2025	15:22	LB135689
	Magnesium	2030	2000	102	80 - 120	P	05/06/2025	15:22	LB135689
	Manganese	19.6	20.0	98	80 - 120	P	05/06/2025	15:22	LB135689
	Nickel	38.9	40.0	97	80 - 120	P	05/06/2025	15:22	LB135689
	Potassium	1770	2000	88	80 - 120	P	05/06/2025	15:22	LB135689
	Selenium	19.1	20.0	95	80 - 120	P	05/06/2025	15:22	LB135689
	Silver	9.80	10.0	98	80 - 120	P	05/06/2025	15:22	LB135689
	Sodium	1790	2000	89	80 - 120	P	05/06/2025	15:22	LB135689
	Thallium	39.9	40.0	100	80 - 120	P	05/06/2025	15:22	LB135689
	Vanadium	38.0	40.0	95	80 - 120	P	05/06/2025	15:22	LB135689
	Zinc	40.4	40.0	101	80 - 120	P	05/06/2025	15:22	LB135689

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	9630	10000	96	90 - 110	P	05/06/2025	16:29	LB135689
	Antimony	4790	5000	96	90 - 110	P	05/06/2025	16:29	LB135689
	Arsenic	4780	5000	96	90 - 110	P	05/06/2025	16:29	LB135689
	Barium	9340	10000	93	90 - 110	P	05/06/2025	16:29	LB135689
	Beryllium	249	250	100	90 - 110	P	05/06/2025	16:29	LB135689
	Cadmium	2390	2500	95	90 - 110	P	05/06/2025	16:29	LB135689
	Calcium	23900	25000	96	90 - 110	P	05/06/2025	16:29	LB135689
	Chromium	998	1000	100	90 - 110	P	05/06/2025	16:29	LB135689
	Cobalt	2390	2500	96	90 - 110	P	05/06/2025	16:29	LB135689
	Copper	1210	1250	97	90 - 110	P	05/06/2025	16:29	LB135689
	Iron	5040	5000	101	90 - 110	P	05/06/2025	16:29	LB135689
	Lead	5030	5000	101	90 - 110	P	05/06/2025	16:29	LB135689
	Magnesium	23900	25000	95	90 - 110	P	05/06/2025	16:29	LB135689
	Manganese	2400	2500	96	90 - 110	P	05/06/2025	16:29	LB135689
	Nickel	2400	2500	96	90 - 110	P	05/06/2025	16:29	LB135689
	Potassium	23900	25000	95	90 - 110	P	05/06/2025	16:29	LB135689
	Selenium	4800	5000	96	90 - 110	P	05/06/2025	16:29	LB135689
	Silver	1240	1250	99	90 - 110	P	05/06/2025	16:29	LB135689
	Sodium	24100	25000	96	90 - 110	P	05/06/2025	16:29	LB135689
	Thallium	4670	5000	94	90 - 110	P	05/06/2025	16:29	LB135689
	Vanadium	2400	2500	96	90 - 110	P	05/06/2025	16:29	LB135689
	Zinc	2470	2500	99	90 - 110	P	05/06/2025	16:29	LB135689
CCV02	Aluminum	9480	10000	95	90 - 110	P	05/06/2025	17:15	LB135689
	Antimony	4750	5000	95	90 - 110	P	05/06/2025	17:15	LB135689
	Arsenic	4730	5000	95	90 - 110	P	05/06/2025	17:15	LB135689
	Barium	9710	10000	97	90 - 110	P	05/06/2025	17:15	LB135689
	Beryllium	237	250	95	90 - 110	P	05/06/2025	17:15	LB135689
	Cadmium	2390	2500	96	90 - 110	P	05/06/2025	17:15	LB135689
	Calcium	24000	25000	96	90 - 110	P	05/06/2025	17:15	LB135689
	Chromium	962	1000	96	90 - 110	P	05/06/2025	17:15	LB135689
	Cobalt	2390	2500	96	90 - 110	P	05/06/2025	17:15	LB135689
	Copper	1200	1250	96	90 - 110	P	05/06/2025	17:15	LB135689
	Iron	5000	5000	100	90 - 110	P	05/06/2025	17:15	LB135689
	Lead	4890	5000	98	90 - 110	P	05/06/2025	17:15	LB135689

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	23700	25000	95	90 - 110	P	05/06/2025	17:15	LB135689
	Manganese	2410	2500	96	90 - 110	P	05/06/2025	17:15	LB135689
	Nickel	2390	2500	96	90 - 110	P	05/06/2025	17:15	LB135689
	Potassium	24100	25000	96	90 - 110	P	05/06/2025	17:15	LB135689
	Selenium	4750	5000	95	90 - 110	P	05/06/2025	17:15	LB135689
	Silver	1200	1250	96	90 - 110	P	05/06/2025	17:15	LB135689
	Sodium	24100	25000	96	90 - 110	P	05/06/2025	17:15	LB135689
	Thallium	4770	5000	96	90 - 110	P	05/06/2025	17:15	LB135689
	Vanadium	2390	2500	95	90 - 110	P	05/06/2025	17:15	LB135689
	Zinc	2410	2500	96	90 - 110	P	05/06/2025	17:15	LB135689
CCV03	Aluminum	9460	10000	95	90 - 110	P	05/06/2025	18:08	LB135689
	Antimony	4590	5000	92	90 - 110	P	05/06/2025	18:08	LB135689
	Arsenic	4570	5000	92	90 - 110	P	05/06/2025	18:08	LB135689
	Barium	9450	10000	94	90 - 110	P	05/06/2025	18:08	LB135689
	Beryllium	240	250	96	90 - 110	P	05/06/2025	18:08	LB135689
	Cadmium	2340	2500	94	90 - 110	P	05/06/2025	18:08	LB135689
	Calcium	23700	25000	95	90 - 110	P	05/06/2025	18:08	LB135689
	Chromium	954	1000	95	90 - 110	P	05/06/2025	18:08	LB135689
	Cobalt	2340	2500	94	90 - 110	P	05/06/2025	18:08	LB135689
	Copper	1170	1250	94	90 - 110	P	05/06/2025	18:08	LB135689
	Iron	4700	5000	94	90 - 110	P	05/06/2025	18:08	LB135689
	Lead	4690	5000	94	90 - 110	P	05/06/2025	18:08	LB135689
	Magnesium	23600	25000	94	90 - 110	P	05/06/2025	18:08	LB135689
	Manganese	2390	2500	95	90 - 110	P	05/06/2025	18:08	LB135689
	Nickel	2340	2500	94	90 - 110	P	05/06/2025	18:08	LB135689
	Potassium	23200	25000	93	90 - 110	P	05/06/2025	18:08	LB135689
	Selenium	4550	5000	91	90 - 110	P	05/06/2025	18:08	LB135689
	Silver	1180	1250	94	90 - 110	P	05/06/2025	18:08	LB135689
	Sodium	23300	25000	93	90 - 110	P	05/06/2025	18:08	LB135689
	Thallium	4710	5000	94	90 - 110	P	05/06/2025	18:08	LB135689
	Vanadium	2360	2500	94	90 - 110	P	05/06/2025	18:08	LB135689
	Zinc	2370	2500	95	90 - 110	P	05/06/2025	18:08	LB135689
CCV04	Aluminum	9960	10000	100	90 - 110	P	05/06/2025	19:16	LB135689
	Antimony	4840	5000	97	90 - 110	P	05/06/2025	19:16	LB135689

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	4840	5000	97	90 - 110	P	05/06/2025	19:16	LB135689
	Barium	9930	10000	99	90 - 110	P	05/06/2025	19:16	LB135689
	Beryllium	264	250	106	90 - 110	P	05/06/2025	19:16	LB135689
	Cadmium	2470	2500	99	90 - 110	P	05/06/2025	19:16	LB135689
	Calcium	25000	25000	100	90 - 110	P	05/06/2025	19:16	LB135689
	Chromium	988	1000	99	90 - 110	P	05/06/2025	19:16	LB135689
	Cobalt	2470	2500	99	90 - 110	P	05/06/2025	19:16	LB135689
	Copper	1240	1250	99	90 - 110	P	05/06/2025	19:16	LB135689
	Iron	4820	5000	96	90 - 110	P	05/06/2025	19:16	LB135689
	Lead	4970	5000	99	90 - 110	P	05/06/2025	19:16	LB135689
	Magnesium	24900	25000	100	90 - 110	P	05/06/2025	19:16	LB135689
	Manganese	2530	2500	101	90 - 110	P	05/06/2025	19:16	LB135689
	Nickel	2470	2500	99	90 - 110	P	05/06/2025	19:16	LB135689
	Potassium	23600	25000	94	90 - 110	P	05/06/2025	19:16	LB135689
	Selenium	4820	5000	96	90 - 110	P	05/06/2025	19:16	LB135689
	Silver	1240	1250	99	90 - 110	P	05/06/2025	19:16	LB135689
	Sodium	23500	25000	94	90 - 110	P	05/06/2025	19:16	LB135689
	Thallium	4760	5000	95	90 - 110	P	05/06/2025	19:16	LB135689
	Vanadium	2470	2500	99	90 - 110	P	05/06/2025	19:16	LB135689
	Zinc	2490	2500	100	90 - 110	P	05/06/2025	19:16	LB135689
CCV05	Aluminum	10000	10000	100	90 - 110	P	05/06/2025	20:01	LB135689
	Antimony	4800	5000	96	90 - 110	P	05/06/2025	20:01	LB135689
	Arsenic	4780	5000	96	90 - 110	P	05/06/2025	20:01	LB135689
	Barium	9940	10000	99	90 - 110	P	05/06/2025	20:01	LB135689
	Beryllium	260	250	104	90 - 110	P	05/06/2025	20:01	LB135689
	Cadmium	2460	2500	99	90 - 110	P	05/06/2025	20:01	LB135689
	Calcium	25000	25000	100	90 - 110	P	05/06/2025	20:01	LB135689
	Chromium	995	1000	100	90 - 110	P	05/06/2025	20:01	LB135689
	Cobalt	2450	2500	98	90 - 110	P	05/06/2025	20:01	LB135689
	Copper	1230	1250	98	90 - 110	P	05/06/2025	20:01	LB135689
	Iron	4860	5000	97	90 - 110	P	05/06/2025	20:01	LB135689
	Lead	4900	5000	98	90 - 110	P	05/06/2025	20:01	LB135689
	Magnesium	25000	25000	100	90 - 110	P	05/06/2025	20:01	LB135689
	Manganese	2520	2500	101	90 - 110	P	05/06/2025	20:01	LB135689

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	2450	2500	98	90 - 110	P	05/06/2025	20:01	LB135689
	Potassium	23700	25000	95	90 - 110	P	05/06/2025	20:01	LB135689
	Selenium	4730	5000	95	90 - 110	P	05/06/2025	20:01	LB135689
	Silver	1230	1250	99	90 - 110	P	05/06/2025	20:01	LB135689
	Sodium	23700	25000	95	90 - 110	P	05/06/2025	20:01	LB135689
	Thallium	4800	5000	96	90 - 110	P	05/06/2025	20:01	LB135689
	Vanadium	2470	2500	99	90 - 110	P	05/06/2025	20:01	LB135689
	Zinc	2480	2500	99	90 - 110	P	05/06/2025	20:01	LB135689
CCV06	Aluminum	9830	10000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Antimony	4880	5000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Arsenic	4840	5000	97	90 - 110	P	05/06/2025	20:31	LB135689
	Barium	9850	10000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Beryllium	241	250	96	90 - 110	P	05/06/2025	20:31	LB135689
	Cadmium	2440	2500	98	90 - 110	P	05/06/2025	20:31	LB135689
	Calcium	24400	25000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Chromium	975	1000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Cobalt	2430	2500	97	90 - 110	P	05/06/2025	20:31	LB135689
	Copper	1240	1250	99	90 - 110	P	05/06/2025	20:31	LB135689
	Iron	4920	5000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Lead	4870	5000	97	90 - 110	P	05/06/2025	20:31	LB135689
	Magnesium	24300	25000	97	90 - 110	P	05/06/2025	20:31	LB135689
	Manganese	2440	2500	98	90 - 110	P	05/06/2025	20:31	LB135689
	Nickel	2430	2500	97	90 - 110	P	05/06/2025	20:31	LB135689
	Potassium	24200	25000	97	90 - 110	P	05/06/2025	20:31	LB135689
	Selenium	4820	5000	96	90 - 110	P	05/06/2025	20:31	LB135689
	Silver	1210	1250	97	90 - 110	P	05/06/2025	20:31	LB135689
	Sodium	24400	25000	98	90 - 110	P	05/06/2025	20:31	LB135689
	Thallium	4750	5000	95	90 - 110	P	05/06/2025	20:31	LB135689
	Vanadium	2430	2500	97	90 - 110	P	05/06/2025	20:31	LB135689
	Zinc	2440	2500	98	90 - 110	P	05/06/2025	20:31	LB135689

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Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.23	0.2	113	40 - 160	CV	04/28/2025	10:44	LB135571
CRI01	Aluminum	97.5	100	98	40 - 160	P	04/30/2025	16:41	LB135614
	Antimony	54.6	50.0	109	40 - 160	P	04/30/2025	16:41	LB135614
	Arsenic	21.9	20.0	109	40 - 160	P	04/30/2025	16:41	LB135614
	Barium	90.6	100	91	40 - 160	P	04/30/2025	16:41	LB135614
	Beryllium	6.30	6.0	105	40 - 160	P	04/30/2025	16:41	LB135614
	Cadmium	6.34	6.0	106	40 - 160	P	04/30/2025	16:41	LB135614
	Calcium	2030	2000	101	40 - 160	P	04/30/2025	16:41	LB135614
	Chromium	9.88	10.0	99	40 - 160	P	04/30/2025	16:41	LB135614
	Cobalt	30.3	30.0	101	40 - 160	P	04/30/2025	16:41	LB135614
	Copper	23.2	20.0	116	40 - 160	P	04/30/2025	16:41	LB135614
	Iron	90.9	100	91	40 - 160	P	04/30/2025	16:41	LB135614
	Lead	13.5	12.0	112	40 - 160	P	04/30/2025	16:41	LB135614
	Magnesium	2140	2000	107	40 - 160	P	04/30/2025	16:41	LB135614
	Manganese	21.0	20.0	105	40 - 160	P	04/30/2025	16:41	LB135614
	Nickel	41.3	40.0	103	40 - 160	P	04/30/2025	16:41	LB135614
	Potassium	2030	2000	101	40 - 160	P	04/30/2025	16:41	LB135614
	Selenium	16.5	20.0	82	40 - 160	P	04/30/2025	16:41	LB135614
	Silver	10.8	10.0	108	40 - 160	P	04/30/2025	16:41	LB135614
	Sodium	1740	2000	87	40 - 160	P	04/30/2025	16:41	LB135614
	Thallium	44.9	40.0	112	40 - 160	P	04/30/2025	16:41	LB135614
	Vanadium	38.9	40.0	97	40 - 160	P	04/30/2025	16:41	LB135614
	Zinc	42.8	40.0	107	40 - 160	P	04/30/2025	16:41	LB135614
CRI01	Aluminum	102	100	102	40 - 160	P	05/06/2025	15:31	LB135689
	Antimony	50.4	50.0	101	40 - 160	P	05/06/2025	15:31	LB135689
	Arsenic	20.3	20.0	101	40 - 160	P	05/06/2025	15:31	LB135689
	Barium	89.4	100	89	40 - 160	P	05/06/2025	15:31	LB135689
	Beryllium	5.91	6.0	98	40 - 160	P	05/06/2025	15:31	LB135689
	Cadmium	5.91	6.0	98	40 - 160	P	05/06/2025	15:31	LB135689
	Calcium	1950	2000	97	40 - 160	P	05/06/2025	15:31	LB135689
	Chromium	9.54	10.0	95	40 - 160	P	05/06/2025	15:31	LB135689
	Cobalt	28.3	30.0	94	40 - 160	P	05/06/2025	15:31	LB135689
	Copper	21.6	20.0	108	40 - 160	P	05/06/2025	15:31	LB135689
	Iron	95.6	100	96	40 - 160	P	05/06/2025	15:31	LB135689
	Lead	10.0	12.0	83	40 - 160	P	05/06/2025	15:31	LB135689

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Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Magnesium	2050	2000	102	40 - 160	P	05/06/2025	15:31	LB135689
	Manganese	19.8	20.0	99	40 - 160	P	05/06/2025	15:31	LB135689
	Nickel	38.6	40.0	97	40 - 160	P	05/06/2025	15:31	LB135689
	Potassium	1730	2000	87	40 - 160	P	05/06/2025	15:31	LB135689
	Selenium	22.5	20.0	112	40 - 160	P	05/06/2025	15:31	LB135689
	Silver	9.66	10.0	97	40 - 160	P	05/06/2025	15:31	LB135689
	Sodium	1760	2000	88	40 - 160	P	05/06/2025	15:31	LB135689
	Thallium	37.5	40.0	94	40 - 160	P	05/06/2025	15:31	LB135689
	Vanadium	39.4	40.0	98	40 - 160	P	05/06/2025	15:31	LB135689
	Zinc	39.7	40.0	99	40 - 160	P	05/06/2025	15:31	LB135689

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB103	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/28/2025	10:37	LB135571

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB31	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/28/2025	10:42	LB135571
CCB32	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/28/2025	11:09	LB135571
CCB33	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/28/2025	11:36	LB135571
CCB34	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/28/2025	12:07	LB135571
CCB35	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	04/28/2025	12:34	LB135571

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	16:36	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	16:36	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	16:36	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	16:36	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	16:36	LB135614
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	16:36	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	16:36	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	16:36	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	16:36	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	16:36	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	16:36	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	16:36	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	16:36	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	16:36	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	16:36	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	16:36	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	16:36	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	16:36	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	16:36	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	16:36	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	16:36	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	16:36	LB135614

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	17:38	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	17:38	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	17:38	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	17:38	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	17:38	LB135614
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	17:38	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	17:38	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	17:38	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	17:38	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	17:38	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	17:38	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	17:38	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	17:38	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	17:38	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	17:38	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	17:38	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	17:38	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	17:38	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	17:38	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	17:38	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	17:38	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	17:38	LB135614
CCB02	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	18:35	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	18:35	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	18:35	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	18:35	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	18:35	LB135614
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	18:35	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	18:35	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	18:35	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	18:35	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	18:35	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	18:35	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	18:35	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	18:35	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	18:35	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	18:35	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	18:35	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	18:35	LB135614

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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	18:35	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	18:35	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	18:35	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	18:35	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	18:35	LB135614
CCB03	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	19:41	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	19:41	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	19:41	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	19:41	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	19:41	LB135614
	Cadmium	1.42	+/-6.00	J	1.50	6.00	P	04/30/2025	19:41	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	19:41	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	19:41	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	19:41	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	19:41	LB135614
	Iron	35.4	+/-100	J	80.0	100	P	04/30/2025	19:41	LB135614
	Lead	3.92	+/-12.0	J	9.60	12.0	P	04/30/2025	19:41	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	19:41	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	19:41	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	19:41	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	19:41	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	19:41	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	19:41	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	19:41	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	19:41	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	19:41	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	19:41	LB135614
CCB04	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	20:27	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	20:27	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	20:27	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	20:27	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	20:27	LB135614
	Cadmium	0.57	+/-6.00	J	1.50	6.00	P	04/30/2025	20:27	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	20:27	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	20:27	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	20:27	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	20:27	LB135614
	Iron	23.9	+/-100	J	80.0	100	P	04/30/2025	20:27	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	20:27	LB135614

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	20:27	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	20:27	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	20:27	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	20:27	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	20:27	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	20:27	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	20:27	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	20:27	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	20:27	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	20:27	LB135614
CCB05	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	21:13	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	21:13	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	21:13	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	21:13	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	21:13	LB135614
	Cadmium	0.94	+/-6.00	J	1.50	6.00	P	04/30/2025	21:13	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	21:13	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	21:13	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	21:13	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	21:13	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	21:13	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	21:13	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	21:13	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	21:13	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	21:13	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	21:13	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	21:13	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	21:13	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	21:13	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	21:13	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	21:13	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	21:13	LB135614
CCB06	Aluminum	19.2	+/-100	J	80.0	100	P	04/30/2025	21:58	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	21:58	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	21:58	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	21:58	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	21:58	LB135614
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	21:58	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	21:58	LB135614

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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	21:58	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	21:58	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	21:58	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	21:58	LB135614
	Lead	2.39	+/-12.0	J	9.60	12.0	P	04/30/2025	21:58	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	21:58	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	21:58	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	21:58	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	21:58	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	21:58	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	21:58	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	21:58	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	21:58	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	21:58	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	21:58	LB135614
CCB07	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	22:44	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	22:44	LB135614
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	22:44	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	22:44	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	22:44	LB135614
	Cadmium	0.88	+/-6.00	J	1.50	6.00	P	04/30/2025	22:44	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	22:44	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	22:44	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	22:44	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	22:44	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	22:44	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	22:44	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	22:44	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	22:44	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	22:44	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	22:44	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	22:44	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	22:44	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	22:44	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	22:44	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	22:44	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	22:44	LB135614
CCB08	Aluminum	100	+/-100	U	80.0	100	P	04/30/2025	23:09	LB135614
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	04/30/2025	23:09	LB135614

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	23:09	LB135614
	Barium	100	+/-100	U	25.0	100	P	04/30/2025	23:09	LB135614
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	23:09	LB135614
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	04/30/2025	23:09	LB135614
	Calcium	2000	+/-2000	U	500	2000	P	04/30/2025	23:09	LB135614
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	23:09	LB135614
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	04/30/2025	23:09	LB135614
	Copper	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	23:09	LB135614
	Iron	100	+/-100	U	80.0	100	P	04/30/2025	23:09	LB135614
	Lead	12.0	+/-12.0	U	9.60	12.0	P	04/30/2025	23:09	LB135614
	Magnesium	2000	+/-2000	U	500	2000	P	04/30/2025	23:09	LB135614
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	04/30/2025	23:09	LB135614
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	04/30/2025	23:09	LB135614
	Potassium	2000	+/-2000	U	1600	2000	P	04/30/2025	23:09	LB135614
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	04/30/2025	23:09	LB135614
	Silver	10.0	+/-10.0	U	5.00	10.0	P	04/30/2025	23:09	LB135614
	Sodium	2000	+/-2000	U	1000	2000	P	04/30/2025	23:09	LB135614
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	23:09	LB135614
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	04/30/2025	23:09	LB135614
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	04/30/2025	23:09	LB135614

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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	80.0	100	P	05/06/2025	15:27	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	15:27	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	15:27	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	15:27	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	15:27	LB135689
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	15:27	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	15:27	LB135689
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	15:27	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	15:27	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	15:27	LB135689
	Iron	100	+/-100	U	80.0	100	P	05/06/2025	15:27	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	15:27	LB135689
	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	15:27	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	15:27	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	15:27	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	15:27	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	15:27	LB135689
	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	15:27	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	15:27	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	15:27	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	15:27	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	15:27	LB135689

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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	12.8	+/-100	J	80.0	100	P	05/06/2025	16:34	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	16:34	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	16:34	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	16:34	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	16:34	LB135689
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	16:34	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	16:34	LB135689
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	16:34	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	16:34	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	16:34	LB135689
	Iron	100	+/-100	U	80.0	100	P	05/06/2025	16:34	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	16:34	LB135689
	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	16:34	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	16:34	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	16:34	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	16:34	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	16:34	LB135689
	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	16:34	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	16:34	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	16:34	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	16:34	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	16:34	LB135689
CCB02	Aluminum	14.3	+/-100	J	80.0	100	P	05/06/2025	17:20	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	17:20	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	17:20	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	17:20	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	17:20	LB135689
	Cadmium	0.60	+/-6.00	J	1.50	6.00	P	05/06/2025	17:20	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	17:20	LB135689
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	17:20	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	17:20	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	17:20	LB135689
	Iron	100	+/-100	U	80.0	100	P	05/06/2025	17:20	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	17:20	LB135689
	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	17:20	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	17:20	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	17:20	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	17:20	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	17:20	LB135689

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	17:20	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	17:20	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	17:20	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	17:20	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	17:20	LB135689
CCB03	Aluminum	15.8	+/-100	J	80.0	100	P	05/06/2025	18:13	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	18:13	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	18:13	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	18:13	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	18:13	LB135689
	Cadmium	0.59	+/-6.00	J	1.50	6.00	P	05/06/2025	18:13	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	18:13	LB135689
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	18:13	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	18:13	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	18:13	LB135689
	Iron	23.9	+/-100	J	80.0	100	P	05/06/2025	18:13	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	18:13	LB135689
	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	18:13	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	18:13	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	18:13	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	18:13	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	18:13	LB135689
	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	18:13	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	18:13	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	18:13	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	18:13	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	18:13	LB135689
CCB04	Aluminum	16.7	+/-100	J	80.0	100	P	05/06/2025	19:20	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	19:20	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	19:20	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	19:20	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	19:20	LB135689
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	19:20	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	19:20	LB135689
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	19:20	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	19:20	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	19:20	LB135689
	Iron	100	+/-100	U	80.0	100	P	05/06/2025	19:20	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	19:20	LB135689

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	19:20	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	19:20	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	19:20	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	19:20	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	19:20	LB135689
	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	19:20	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	19:20	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	19:20	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	19:20	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	19:20	LB135689
CCB05	Aluminum	100	+/-100	U	80.0	100	P	05/06/2025	20:06	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	20:06	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	20:06	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	20:06	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	20:06	LB135689
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	20:06	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	20:06	LB135689
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	20:06	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	20:06	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	20:06	LB135689
	Iron	100	+/-100	U	80.0	100	P	05/06/2025	20:06	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	20:06	LB135689
	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	20:06	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	20:06	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	20:06	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	20:06	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	20:06	LB135689
	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	20:06	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	20:06	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	20:06	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	20:06	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	20:06	LB135689
CCB06	Aluminum	100	+/-100	U	80.0	100	P	05/06/2025	20:35	LB135689
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	05/06/2025	20:35	LB135689
	Arsenic	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	20:35	LB135689
	Barium	100	+/-100	U	25.0	100	P	05/06/2025	20:35	LB135689
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	20:35	LB135689
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	05/06/2025	20:35	LB135689
	Calcium	2000	+/-2000	U	500	2000	P	05/06/2025	20:35	LB135689

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	20:35	LB135689
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	05/06/2025	20:35	LB135689
	Copper	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	20:35	LB135689
	Iron	100	+/-100	U	80.0	100	P	05/06/2025	20:35	LB135689
	Lead	12.0	+/-12.0	U	9.60	12.0	P	05/06/2025	20:35	LB135689
	Magnesium	2000	+/-2000	U	500	2000	P	05/06/2025	20:35	LB135689
	Manganese	20.0	+/-20.0	U	15.0	20.0	P	05/06/2025	20:35	LB135689
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	05/06/2025	20:35	LB135689
	Potassium	2000	+/-2000	U	1600	2000	P	05/06/2025	20:35	LB135689
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	05/06/2025	20:35	LB135689
	Silver	10.0	+/-10.0	U	5.00	10.0	P	05/06/2025	20:35	LB135689
	Sodium	2000	+/-2000	U	1000	2000	P	05/06/2025	20:35	LB135689
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	20:35	LB135689
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	05/06/2025	20:35	LB135689
	Zinc	40.0	+/-40.0	U	15.0	40.0	P	05/06/2025	20:35	LB135689

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB167755BL		**SOLID**		**Batch Number:**		**PB167755**		**Prep Date:**	**04/28/2025**	
	Mercury	0.013	<0.013	U	0.011	0.013	CV	04/28/2025	10:51	LB135571

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB167757BL		**SOLID**		**Batch Number:**		**PB167757**		**Prep Date:**	**04/28/2025**	
	Aluminum	4.85	<4.85	U	3.88	4.85	P	05/06/2025	18:41	LB135689
	Antimony	2.43	<2.43	U	0.61	2.43	P	05/06/2025	18:41	LB135689
	Arsenic	0.97	<0.97	U	0.78	0.97	P	05/06/2025	18:41	LB135689
	Barium	4.85	<4.85	U	1.21	4.85	P	05/06/2025	18:41	LB135689
	Beryllium	0.29	<0.29	U	0.073	0.29	P	05/06/2025	18:41	LB135689
	Cadmium	0.29	<0.29	U	0.073	0.29	P	05/06/2025	18:41	LB135689
	Calcium	97.1	<97.1	U	24.3	97.1	P	05/06/2025	18:41	LB135689
	Chromium	0.49	<0.49	U	0.12	0.49	P	05/06/2025	18:41	LB135689
	Cobalt	1.46	<1.46	U	0.36	1.46	P	05/06/2025	18:41	LB135689
	Copper	0.97	<0.97	U	0.78	0.97	P	05/06/2025	18:41	LB135689
	Iron	4.85	<4.85	U	3.88	4.85	P	05/06/2025	18:41	LB135689
	Lead	0.58	<0.58	U	0.47	0.58	P	05/06/2025	18:41	LB135689
	Magnesium	97.1	<97.1	U	24.3	97.1	P	05/06/2025	18:41	LB135689
	Manganese	0.97	<0.97	U	0.24	0.97	P	05/06/2025	18:41	LB135689
	Nickel	1.94	<1.94	U	0.49	1.94	P	05/06/2025	18:41	LB135689
	Potassium	97.1	<97.1	U	77.7	97.1	P	05/06/2025	18:41	LB135689
	Selenium	0.97	<0.97	U	0.78	0.97	P	05/06/2025	18:41	LB135689
	Silver	0.49	<0.49	U	0.24	0.49	P	05/06/2025	18:41	LB135689
	Sodium	97.1	<97.1	U	77.7	97.1	P	05/06/2025	18:41	LB135689
	Thallium	1.94	<1.94	U	0.97	1.94	P	05/06/2025	18:41	LB135689
	Vanadium	1.94	<1.94	U	0.97	1.94	P	05/06/2025	18:41	LB135689
	Zinc	1.94	<1.94	U	0.49	1.94	P	05/06/2025	18:41	LB135689

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	238000	255000	93	216000	294000	04/30/2025	16:46	LB135614
	Antimony	-3.45			-50	50	04/30/2025	16:46	LB135614
	Arsenic	5.92			-20	20	04/30/2025	16:46	LB135614
	Barium	2.05	6.0	34	-94	106	04/30/2025	16:46	LB135614
	Beryllium	0.57			-6	6	04/30/2025	16:46	LB135614
	Cadmium	-2.34	1.0	234	-5	7	04/30/2025	16:46	LB135614
	Calcium	229000	245000	94	208000	282000	04/30/2025	16:46	LB135614
	Chromium	56.4	52.0	108	42	62	04/30/2025	16:46	LB135614
	Cobalt	0.78			-30	30	04/30/2025	16:46	LB135614
	Copper	1.85	2.0	92	-18	22	04/30/2025	16:46	LB135614
	Iron	102000	101000	101	85600	116500	04/30/2025	16:46	LB135614
	Lead	-0.96			-12	12	04/30/2025	16:46	LB135614
	Magnesium	245000	255000	96	216000	294000	04/30/2025	16:46	LB135614
	Manganese	1.20	7.0	17	-13	27	04/30/2025	16:46	LB135614
	Nickel	1.86	2.0	93	-38	42	04/30/2025	16:46	LB135614
	Potassium	131			0	0	04/30/2025	16:46	LB135614
	Selenium	-1.87			-20	20	04/30/2025	16:46	LB135614
	Silver	1.91			-10	10	04/30/2025	16:46	LB135614
	Sodium	-8.38			0	0	04/30/2025	16:46	LB135614
	Thallium	11.1			-40	40	04/30/2025	16:46	LB135614
	Vanadium	1.35			-40	40	04/30/2025	16:46	LB135614
	Zinc	3.18			-40	40	04/30/2025	16:46	LB135614
ICSAB01	Aluminum	234000	247000	95	209000	285000	04/30/2025	17:04	LB135614
	Antimony	633	618	102	525	711	04/30/2025	17:04	LB135614
	Arsenic	117	104	112	88.4	120	04/30/2025	17:04	LB135614
	Barium	496	537	92	437	637	04/30/2025	17:04	LB135614
	Beryllium	514	495	104	420	570	04/30/2025	17:04	LB135614
	Cadmium	1090	972	112	826	1120	04/30/2025	17:04	LB135614
	Calcium	225000	235000	96	199000	271000	04/30/2025	17:04	LB135614
	Chromium	600	542	111	460	624	04/30/2025	17:04	LB135614
	Cobalt	531	476	112	404	548	04/30/2025	17:04	LB135614
	Copper	502	511	98	434	588	04/30/2025	17:04	LB135614
	Iron	97700	99300	98	84400	114500	04/30/2025	17:04	LB135614
	Lead	50.9	49.0	104	37	61	04/30/2025	17:04	LB135614
	Magnesium	242000	248000	98	210000	286000	04/30/2025	17:04	LB135614
	Manganese	496	507	98	430	584	04/30/2025	17:04	LB135614
	Nickel	1050	954	110	810	1100	04/30/2025	17:04	LB135614
	Potassium	109			0	0	04/30/2025	17:04	LB135614
	Selenium	50.9	46.0	111	26	66	04/30/2025	17:04	LB135614
	Silver	205	201	102	170	232	04/30/2025	17:04	LB135614
	Sodium	-15.6			0	0	04/30/2025	17:04	LB135614
	Thallium	118	108	109	68	148	04/30/2025	17:04	LB135614

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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	Vanadium	489	491	100	417	565	04/30/2025	17:04	LB135614
	Zinc	1090	952	114	809	1095	04/30/2025	17:04	LB135614
ICSA01	Aluminum	237000	255000	93	216000	294000	05/06/2025	15:50	LB135689
	Antimony	-1.78			-50	50	05/06/2025	15:50	LB135689
	Arsenic	4.12			-20	20	05/06/2025	15:50	LB135689
	Barium	2.93	6.0	49	-94	106	05/06/2025	15:50	LB135689
	Beryllium	1.32			-6	6	05/06/2025	15:50	LB135689
	Cadmium	-2.60	1.0	260	-5	7	05/06/2025	15:50	LB135689
	Calcium	225000	245000	92	208000	282000	05/06/2025	15:50	LB135689
	Chromium	52.9	52.0	102	42	62	05/06/2025	15:50	LB135689
	Cobalt	0.63			-30	30	05/06/2025	15:50	LB135689
	Copper	-0.0080	2.0		-18	22	05/06/2025	15:50	LB135689
	Iron	91100	101000	90	85600	116500	05/06/2025	15:50	LB135689
	Lead	0.71			-12	12	05/06/2025	15:50	LB135689
	Magnesium	240000	255000	94	216000	294000	05/06/2025	15:50	LB135689
	Manganese	1.70	7.0	24	-13	27	05/06/2025	15:50	LB135689
	Nickel	1.98	2.0	99	-38	42	05/06/2025	15:50	LB135689
	Potassium	-66.1			0	0	05/06/2025	15:50	LB135689
	Selenium	-10.5			-20	20	05/06/2025	15:50	LB135689
	Silver	0.23			-10	10	05/06/2025	15:50	LB135689
	Sodium	-51.3			0	0	05/06/2025	15:50	LB135689
	Thallium	4.79			-40	40	05/06/2025	15:50	LB135689
	Vanadium	1.20			-40	40	05/06/2025	15:50	LB135689
	Zinc	3.59			-40	40	05/06/2025	15:50	LB135689
ICSAB01	Aluminum	230000	247000	93	209000	285000	05/06/2025	15:55	LB135689
	Antimony	641	618	104	525	711	05/06/2025	15:55	LB135689
	Arsenic	114	104	110	88.4	120	05/06/2025	15:55	LB135689
	Barium	512	537	95	437	637	05/06/2025	15:55	LB135689
	Beryllium	505	495	102	420	570	05/06/2025	15:55	LB135689
	Cadmium	1060	972	109	826	1120	05/06/2025	15:55	LB135689
	Calcium	220000	235000	94	199000	271000	05/06/2025	15:55	LB135689
	Chromium	576	542	106	460	624	05/06/2025	15:55	LB135689
	Cobalt	523	476	110	404	548	05/06/2025	15:55	LB135689
	Copper	516	511	101	434	588	05/06/2025	15:55	LB135689
	Iron	94200	99300	95	84400	114500	05/06/2025	15:55	LB135689
	Lead	48.7	49.0	99	37	61	05/06/2025	15:55	LB135689
	Magnesium	232000	248000	94	210000	286000	05/06/2025	15:55	LB135689
	Manganese	507	507	100	430	584	05/06/2025	15:55	LB135689
	Nickel	1040	954	109	810	1100	05/06/2025	15:55	LB135689
	Potassium	-56.0			0	0	05/06/2025	15:55	LB135689
	Selenium	41.3	46.0	90	26	66	05/06/2025	15:55	LB135689
	Silver	195	201	97	170	232	05/06/2025	15:55	LB135689

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Sodium	-60.0			0	0	05/06/2025	15:55	LB135689
	Thallium	112	108	104	68	148	05/06/2025	15:55	LB135689
	Vanadium	498	491	101	417	565	05/06/2025	15:55	LB135689
	Zinc	1070	952	112	809	1095	05/06/2025	15:55	LB135689

METAL QC DATA

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1883

contract: NOBI03 **lab code:** CHEM **case no.:** Q1883 **sas no.:** Q1883

matrix: Solid **sample id:** Q1883-11 **client id:** OU4-PCS-TC-32-042325MS

Percent Solids for Sample: 97.3 **Spiked ID:** Q1883-11MS **Percent Solids for Spike Sample:** 97.3

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	74 - 119	9310		8150		100	1161		P
Antimony	mg/Kg	79 - 114	10.9		2.39	U	40.9	27	N	P
Arsenic	mg/Kg	82 - 111	33.6		2.12		40.9	77	N	P
Barium	mg/Kg	83 - 113	44.2		29.3		10.2	146	N	P
Beryllium	mg/Kg	83 - 113	8.71		0.28	J	10.2	83		P
Cadmium	mg/Kg	82 - 113	12.1		1.33		10.2	106		P
Calcium	mg/Kg	81 - 116	11900		11100		51.1	1641		P
Chromium	mg/Kg	85 - 113	17.4		0.83		20.5	81	N	P
Cobalt	mg/Kg	85 - 112	30.7		19.3		10.2	112		P
Copper	mg/Kg	81 - 117	60.7		46.1		15.3	96		P
Iron	mg/Kg	81 - 118	33000		32200		150	544		P
Lead	mg/Kg	81 - 112	51.4		2.06		51.1	97		P
Magnesium	mg/Kg	78 - 115	6040		5610		100	436		P
Manganese	mg/Kg	84 - 114	311		292		10.2	182		P
Nickel	mg/Kg	83 - 113	32.4		7.08		25.6	99		P
Potassium	mg/Kg	81 - 116	534		123		510	81		P
Selenium	mg/Kg	78 - 111	73.8		0.96	U	100	74	N	P
Silver	mg/Kg	82 - 112	2.97		0.48	U	3.8	78	N	P
Sodium	mg/Kg	83 - 118	1140		951		150	125		P
Thallium	mg/Kg	83 - 111	95.2		1.91	U	100	95		P
Vanadium	mg/Kg	82 - 114	110		84.8		15.3	164		P
Zinc	mg/Kg	82 - 113	52.2		37.7		10.2	141	N	P

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1883

contract: NOBI03 **lab code:** CHEM **case no.:** Q1883 **sas no.:** Q1883

matrix: Solid **sample id:** Q1883-11 **client id:** OU4-PCS-TC-32-042325MSD

Percent Solids for Sample: 97.3 **Spiked ID:** Q1883-11MSD **Percent Solids for Spike Sample:** 97.3

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	74 - 119	9810		8150		100	1659		P
Antimony	mg/Kg	79 - 114	11.2		2.39	U	41.1	27	N	P
Arsenic	mg/Kg	82 - 111	35.6		2.12		41.1	82		P
Barium	mg/Kg	83 - 113	47.0		29.3		10.3	172	N	P
Beryllium	mg/Kg	83 - 113	8.22		0.28	J	10.3	77	N	P
Cadmium	mg/Kg	82 - 113	12.2		1.33		10.3	105		P
Calcium	mg/Kg	81 - 116	12500		11100		51.4	2834		P
Chromium	mg/Kg	85 - 113	17.9		0.83		20.6	83	N	P
Cobalt	mg/Kg	85 - 112	32.7		19.3		10.3	129	N	P
Copper	mg/Kg	81 - 117	61.5		46.1		15.4	100		P
Iron	mg/Kg	81 - 118	37500		32200		150	3541		P
Lead	mg/Kg	81 - 112	53.6		2.06		51.4	100		P
Magnesium	mg/Kg	78 - 115	6280		5610		100	678		P
Manganese	mg/Kg	84 - 114	335		292		10.3	416		P
Nickel	mg/Kg	83 - 113	34.2		7.08		25.7	105		P
Potassium	mg/Kg	81 - 116	610		123		510	95		P
Selenium	mg/Kg	78 - 111	78.4		0.96	U	100	78		P
Silver	mg/Kg	82 - 112	3.64		0.48	U	3.9	93		P
Sodium	mg/Kg	83 - 118	1410		951		150	305		P
Thallium	mg/Kg	83 - 111	100		1.91	U	100	100		P
Vanadium	mg/Kg	82 - 114	116		84.8		15.4	200		P
Zinc	mg/Kg	82 - 113	53.5		37.7		10.3	153	N	P

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1883

contract: NOBI03 **lab code:** CHEM **case no.:** Q1883 **sas no.:** Q1883

matrix: Solid **sample id:** Q1883-15 **client id:** OU4-VSL-19-042325MS

Percent Solids for Sample: 95.8 **Spiked ID:** Q1883-15MS **Percent Solids for Spike Sample:** 95.8

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 124	0.23		0.013	U	0.25	92		CV

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1883

contract: NOBI03 **lab code:** CHEM **case no.:** Q1883 **sas no.:** Q1883

matrix: Solid **sample id:** Q1883-15 **client id:** OU4-VSL-19-042325MSD

Percent Solids for Sample: 95.8 **Spiked ID:** Q1883-15MSD **Percent Solids for Spike Sample:** 95.8

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 124	0.24		0.013	U	0.25	94		CV

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Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Solid **Level:** LOW **Client ID:** OU4-PCS-TC-32-042325A

Sample ID: Q1883-11 **Spiked ID:** Q1883-11A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	79 - 114	28.8		2.39	U	38.2	75		P
Arsenic	mg/Kg	82 - 111	32.1		2.12		38.2	78		P
Barium	mg/Kg	83 - 113	38.3		29.3		9.60	94		P
Beryllium	mg/Kg	83 - 113	8.16		0.28	J	9.60	82		P
Chromium	mg/Kg	85 - 113	15.7		0.83		19.1	78		P
Cobalt	mg/Kg	85 - 112	29.1		19.3		9.60	102		P
Selenium	mg/Kg	78 - 111	69.7		0.96	U	95.6	73		P
Silver	mg/Kg	82 - 112	2.63		0.48	U	3.60	73		P
Zinc	mg/Kg	82 - 113	47.6		37.7		9.60	102		P

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Solid **Sample ID:** Q1883-11 **Client ID:** OU4-PCS-TC-32-042325DUP

Percent Solids for Sample: 97.3 **Duplicate ID** Q1883-11DUP **Percent Solids for Spike Sample:** 97.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	8150		8060		1		P
Antimony	mg/Kg	20	2.39	U	2.27	U			P
Arsenic	mg/Kg	20	2.12		1.35		44	*	P
Barium	mg/Kg	20	29.3		31.3		7		P
Beryllium	mg/Kg	20	0.28	J	0.29		2		P
Cadmium	mg/Kg	20	1.33		1.61		19		P
Calcium	mg/Kg	20	11100		10900		2		P
Chromium	mg/Kg	20	0.83		0.89		7		P
Cobalt	mg/Kg	20	19.3		19.3		0		P
Copper	mg/Kg	20	46.1		46.4		1		P
Iron	mg/Kg	20	32200		30400		6		P
Lead	mg/Kg	20	2.06		1.25		49	*	P
Magnesium	mg/Kg	20	5610		5490		2		P
Manganese	mg/Kg	20	292		293		0		P
Nickel	mg/Kg	20	7.08		6.98		1		P
Potassium	mg/Kg	20	123		121		2		P
Selenium	mg/Kg	20	0.96	U	0.91	U			P
Silver	mg/Kg	20	0.48	U	0.46	U			P
Sodium	mg/Kg	20	951		902		5		P
Thallium	mg/Kg	20	1.91	U	1.82	U			P
Vanadium	mg/Kg	20	84.8		91.8		8		P
Zinc	mg/Kg	20	37.7		41.0		8		P

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

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Solid **Sample ID:** Q1883-11MS **Client ID:** OU4-PCS-TC-32-042325MSD

Percent Solids for Sample: 97.3 **Duplicate ID** Q1883-11MSD **Percent Solids for Spike Sample:** 97.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	9310		9810		5		P
Antimony	mg/Kg	20	10.9		11.2		2		P
Arsenic	mg/Kg	20	33.6		35.6		6		P
Barium	mg/Kg	20	44.2		47.0		6		P
Beryllium	mg/Kg	20	8.71		8.22		6		P
Cadmium	mg/Kg	20	12.1		12.2		1		P
Calcium	mg/Kg	20	11900		12500		5		P
Chromium	mg/Kg	20	17.4		17.9		3		P
Cobalt	mg/Kg	20	30.7		32.7		6		P
Copper	mg/Kg	20	60.7		61.5		1		P
Iron	mg/Kg	20	33000		37500		13		P
Lead	mg/Kg	20	51.4		53.6		4		P
Magnesium	mg/Kg	20	6040		6280		4		P
Manganese	mg/Kg	20	311		335		7		P
Nickel	mg/Kg	20	32.4		34.2		5		P
Potassium	mg/Kg	20	534		610		13		P
Selenium	mg/Kg	20	73.8		78.4		6		P
Silver	mg/Kg	20	2.97		3.64		20		P
Sodium	mg/Kg	20	1140		1410		21	*	P
Thallium	mg/Kg	20	95.2		100		5		P
Vanadium	mg/Kg	20	110		116		5		P
Zinc	mg/Kg	20	52.2		53.5		2		P

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

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Solid **Sample ID:** Q1883-15 **Client ID:** OU4-PCS-19-042325DUP

Percent Solids for Sample: 95.8 **Duplicate ID** Q1883-15DUP **Percent Solids for Spike Sample:** 95.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.013	U	0.013	U			CV

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

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Nobis Group **Level:** LOW **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Matrix: Solid **Sample ID:** Q1883-15MS **Client ID:** OU4-VSL-19-042325MSD

Percent Solids for Sample: 95.8 **Duplicate ID** Q1883-15MSD **Percent Solids for Spike Sample:** 95.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.23		0.24		3		CV

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167755BS							
Mercury	mg/Kg	0.25	0.26		103	80 - 124	CV

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167757BS							
Aluminum	mg/Kg	95.7	86.6		90	74 - 119	P
Antimony	mg/Kg	38.3	34.5		90	79 - 114	P
Arsenic	mg/Kg	38.3	33.8		88	82 - 111	P
Barium	mg/Kg	9.6	8.54		89	83 - 113	P
Beryllium	mg/Kg	9.6	9.07		94	83 - 113	P
Cadmium	mg/Kg	9.6	8.83		92	82 - 113	P
Calcium	mg/Kg	47.8	45.3	J	95	81 - 116	P
Chromium	mg/Kg	19.1	17.6		92	85 - 113	P
Cobalt	mg/Kg	9.6	8.57		89	85 - 112	P
Copper	mg/Kg	14.4	13.2		92	81 - 117	P
Iron	mg/Kg	140	130		93	81 - 118	P
Lead	mg/Kg	47.8	43.2		90	81 - 112	P
Magnesium	mg/Kg	95.7	86.1	J	90	78 - 115	P
Manganese	mg/Kg	9.6	9.00		94	84 - 114	P
Nickel	mg/Kg	23.9	21.6		90	83 - 113	P
Potassium	mg/Kg	480	428		89	81 - 116	P
Selenium	mg/Kg	95.7	83.8		88	78 - 111	P
Silver	mg/Kg	3.6	3.26		91	82 - 112	P
Sodium	mg/Kg	140	140		100	83 - 118	P
Thallium	mg/Kg	95.7	84.4		88	83 - 111	P
Vanadium	mg/Kg	14.4	13.0		90	82 - 114	P
Zinc	mg/Kg	9.6	8.88		92	82 - 113	P

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Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

OU4-PCS-TC-32-042325L

Lab Name: Chemtech Consulting Group **Contract:** NOBI03

Lab Code: CHEM **Lb No.:** lb135614 **Lab Sample ID :** Q1883-11L **SDG No.:** Q1883

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

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	8150		9440		16		P
Antimony	2.39	U	12.0	U			P
Arsenic	2.12		2.85	J	34		P
Barium	29.3		34.1		16		P
Beryllium	0.28	J	0.35	J	25		P
Cadmium	1.33		1.43	U	100.0		P
Calcium	11100		13200		20		P
Chromium	0.83		1.07	J	30		P
Cobalt	19.3		19.0		2		P
Copper	46.1		58.1		26		P
Iron	32200		39400		22		P
Lead	2.06		1.55	J	25		P
Magnesium	5610		6660		19		P
Manganese	292		347		19		P
Nickel	7.08		7.33	J	3		P
Potassium	123		152	J	24		P
Selenium	0.96	U	4.78	U			P
Silver	0.48	U	2.39	U			P
Sodium	951		972		2		P
Thallium	1.91	U	9.56	U			P
Vanadium	84.8		100		18		P
Zinc	37.7		44.6		18		P

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Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

OU4-PCS-19-042325L

Lab Name: Chemtech Consulting Group **Contract:** NOBI03

Lab Code: CHEM **Lb No.:** lb135571 **Lab Sample ID :** Q1883-15L **SDG No.:** Q1883

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

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Mercury	0.013	U	0.065	U			CV

METAL PREPARATION & INSTRUMENT DATA

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Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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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Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Case No.:** Q1883 **SAS No.:** Q1883

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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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Method:**

Case No.: Q1883 **SAS No.:** Q1883

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167755**						
PB167755BL	PB167755BL	MB	SOLID	04/28/2025	0.52	35.0	100.00
PB167755BS	PB167755BS	LCS	SOLID	04/28/2025	0.55	35.0	100.00
Q1883-01	OU4-PCS-TC-27-042325	SAM	SOLID	04/28/2025	0.59	35.0	94.50
Q1883-03	OU4-PCS-TC-28-042325	SAM	SOLID	04/28/2025	0.51	35.0	94.50
Q1883-05	OU4-PCS-TC-29-042325	SAM	SOLID	04/28/2025	0.55	35.0	95.70
Q1883-07	OU4-PCS-TC-30-042325	SAM	SOLID	04/28/2025	0.52	35.0	96.50
Q1883-09	OU4-PCS-TC-31-042325	SAM	SOLID	04/28/2025	0.50	35.0	96.90
Q1883-11	OU4-PCS-TC-32-042325	SAM	SOLID	04/28/2025	0.59	35.0	97.30
Q1883-13	OU4-VSL-18-042325	SAM	SOLID	04/28/2025	0.53	35.0	94.70
Q1883-15	OU4-VSL-19-042325	SAM	SOLID	04/28/2025	0.56	35.0	95.80
Q1883-15DUP	OU4-PCS-19-042325DUP	DUP	SOLID	04/28/2025	0.56	35.0	95.80
Q1883-15MS	OU4-VSL-19-042325MS	MS	SOLID	04/28/2025	0.58	35.0	95.80
Q1883-15MSD	OU4-VSL-19-042325MSD	MSD	SOLID	04/28/2025	0.58	35.0	95.80

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Nobis Group **SDG No.:** Q1883

Contract: NOBI03 **Lab Code:** CHEM **Method:**

Case No.: Q1883 **SAS No.:** Q1883

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167757**						
PB167757BL	PB167757BL	MB	SOLID	04/28/2025	2.06	100.0	100.00
PB167757BS	PB167757BS	LCS	SOLID	04/28/2025	2.09	100.0	100.00
Q1883-01	OU4-PCS-TC-27-042325	SAM	SOLID	04/28/2025	2.39	100.0	94.50
Q1883-03	OU4-PCS-TC-28-042325	SAM	SOLID	04/28/2025	2.18	100.0	94.50
Q1883-05	OU4-PCS-TC-29-042325	SAM	SOLID	04/28/2025	2.05	100.0	95.70
Q1883-07	OU4-PCS-TC-30-042325	SAM	SOLID	04/28/2025	2.10	100.0	96.50
Q1883-09	OU4-PCS-TC-31-042325	SAM	SOLID	04/28/2025	2.25	100.0	96.90
Q1883-11	OU4-PCS-TC-32-042325	SAM	SOLID	04/28/2025	2.15	100.0	97.30
Q1883-11DUP	OU4-PCS-TC-32-042325DUP	DUP	SOLID	04/28/2025	2.26	100.0	97.30
Q1883-11MS	OU4-PCS-TC-32-042325MS	MS	SOLID	04/28/2025	2.01	100.0	97.30
Q1883-11MSD	OU4-PCS-TC-32-042325MSD	MSD	SOLID	04/28/2025	2.00	100.0	97.30
Q1883-13	OU4-VSL-18-042325	SAM	SOLID	04/28/2025	2.26	100.0	94.70
Q1883-15	OU4-VSL-19-042325	SAM	SOLID	04/28/2025	2.20	100.0	95.80

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metals
- 14 -
ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** Q1883 **Sas no.:** Q1883 **Sdg no.:** Q1883

Instrument id number: **Method:** **Run number:** LB135571

Start date: 04/28/2025 **End date:** 04/28/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1018	HG
S0.2	S0.2	1	1020	HG
S2.5	S2.5	1	1023	HG
S5	S5	1	1025	HG
S7.5	S7.5	1	1027	HG
S10	S10	1	1030	HG
ICV103	ICV103	1	1035	HG
ICB103	ICB103	1	1037	HG
CCV31	CCV31	1	1039	HG
CCB31	CCB31	1	1042	HG
CRA	CRA	1	1044	HG
PB167755BL	PB167755BL	1	1051	HG
PB167755BS	PB167755BS	1	1053	HG
Q1883-01	OU4-PCS-TC-27-042325	1	1055	HG
Q1883-03	OU4-PCS-TC-28-042325	1	1058	HG
Q1883-05	OU4-PCS-TC-29-042325	1	1100	HG
Q1883-07	OU4-PCS-TC-30-042325	1	1102	HG
Q1883-09	OU4-PCS-TC-31-042325	1	1105	HG
CCV32	CCV32	1	1107	HG
CCB32	CCB32	1	1109	HG
Q1883-11	OU4-PCS-TC-32-042325	1	1111	HG
Q1883-13	OU4-VSL-18-042325	1	1114	HG
Q1883-15	OU4-VSL-19-042325	1	1116	HG
Q1883-15DUP	OU4-PCS-19-042325DUP	1	1118	HG
Q1883-15MS	OU4-VSL-19-042325MS	1	1120	HG
Q1883-15MSD	OU4-VSL-19-042325MSD	1	1123	HG
CCV33	CCV33	1	1134	HG
CCB33	CCB33	1	1136	HG
CCV34	CCV34	1	1205	HG
CCB34	CCB34	1	1207	HG
Q1883-15L	OU4-PCS-19-042325L	5	1223	HG
CCV35	CCV35	1	1232	HG
CCB35	CCB35	1	1234	HG

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metals
- 14 -
ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

Lab code: CHEM **Case no.:** Q1883 **Sas no.:** Q1883 **Sdg no.:** Q1883

Instrument id number: **Method:** **Run number:** LB135614

Start date: 04/30/2025 **End date:** 04/30/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1428	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1433	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1437	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1441	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1445	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1450	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1618	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1628	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1636	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1641	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1646	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1704	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1727	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1738	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1830	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1835	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-01	OU4-PCS-TC-27-042325	1	1900	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-03	OU4-PCS-TC-28-042325	1	1913	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-05	OU4-PCS-TC-29-042325	1	1917	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-07	OU4-PCS-TC-30-042325	1	1933	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1937	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1941	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-09	OU4-PCS-TC-31-042325	1	1945	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-11	OU4-PCS-TC-32-042325	1	1950	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-11DUP	OU4-PCS-TC-32-042325DUP	1	1954	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-11L	OU4-PCS-TC-32-042325L	5	1958	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-11MS	OU4-PCS-TC-32-042325MS	1	2002	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-11MSD	OU4-PCS-TC-32-042325MSD	1	2006	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-11A	OU4-PCS-TC-32-042325A	1	2010	Ag,As,Ba,Be,Co,Cr,Sb,Se,Zn
Q1883-13	OU4-VSL-18-042325	1	2014	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1883-15	OU4-VSL-19-042325	1	2019	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	2023	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	2027	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	2108	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	2113	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	2154	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	2158	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV07	CCV07	1	2240	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	2244	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV08	CCV08	1	2305	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	2309	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

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

metals
- 14 -
ANALYSIS RUN LOG

Client: Nobis Group **Contract:** NOBI03

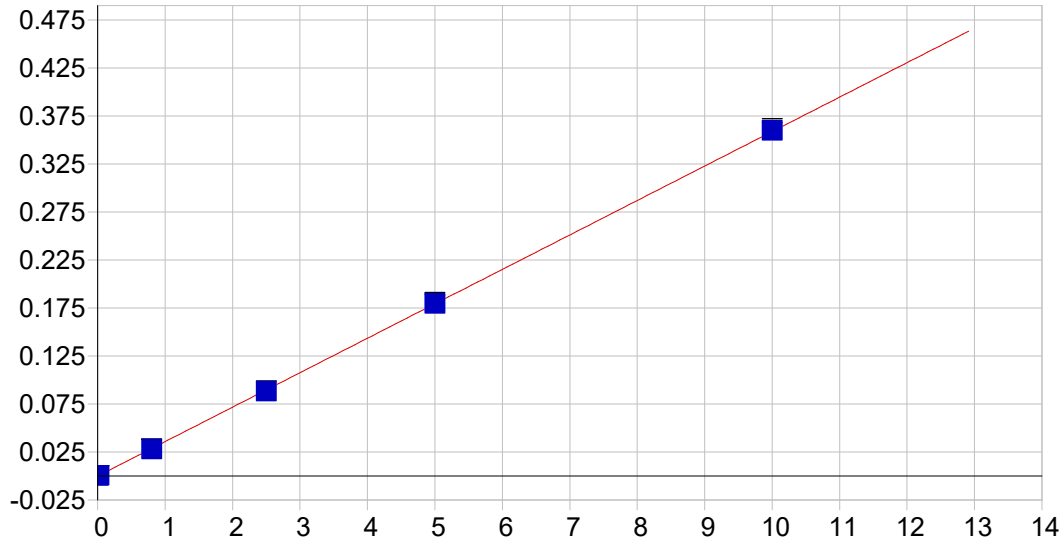
Lab code: CHEM **Case no.:** Q1883 **Sas no.:** Q1883 **Sdg no.:** Q1883

Instrument id number: **Method:** **Run number:** LB135689

Start date: 05/06/2025 **End date:** 05/06/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1343	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1348	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1352	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1356	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1401	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1405	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1447	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1522	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1527	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1531	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1550	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1555	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1629	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1634	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1715	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1720	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1808	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1813	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB167757BL	PB167757BL	1	1841	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB167757BS	PB167757BS	1	1901	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1916	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1920	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	2001	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	2006	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	2031	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	2035	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

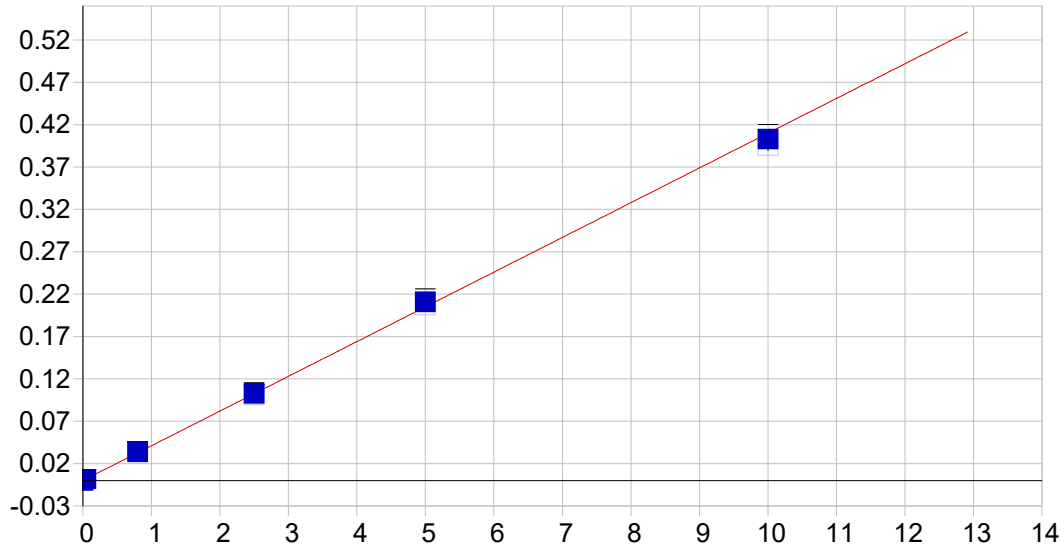


As 189.042 {479}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000119	Re-Slope:	1.000000
A1 (Gain):	0.035888	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999974	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.003503		
Predicted MQL:	0.011678		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00012	.000	1
S1	.02000	.02010	.000	.514	.00060	.000	1
S3	2.5000	2.4646	-.035	-1.42	.08824	.000	1
S4	5.0000	5.0116	.012	.231	.17954	.001	1
S5	10.000	10.038	.038	.383	.35975	.002	1
S2	.80000	.78541	-.015	-1.82	.02804	.000	1

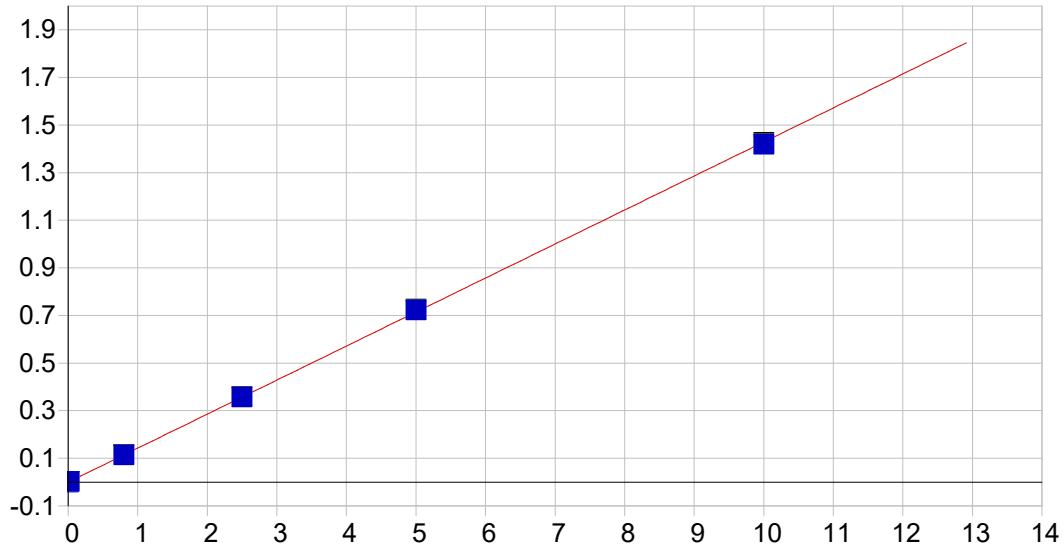


Tl 190.856 {477}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000045	Re-Slope:	1.000000
A1 (Gain):	0.040997	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999771	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.002483		
Predicted MQL:	0.008275		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00005	.000	1
S1	.04000	.04304	.003	7.60	.00161	.000	1
S3	2.5000	2.5054	.005	.214	.10078	.001	1
S4	5.0000	5.1410	.141	2.82	.20695	.004	1
S5	10.000	9.8253	-.175	-1.75	.39521	.006	1
S2	.80000	.82543	.025	3.18	.03319	.000	1

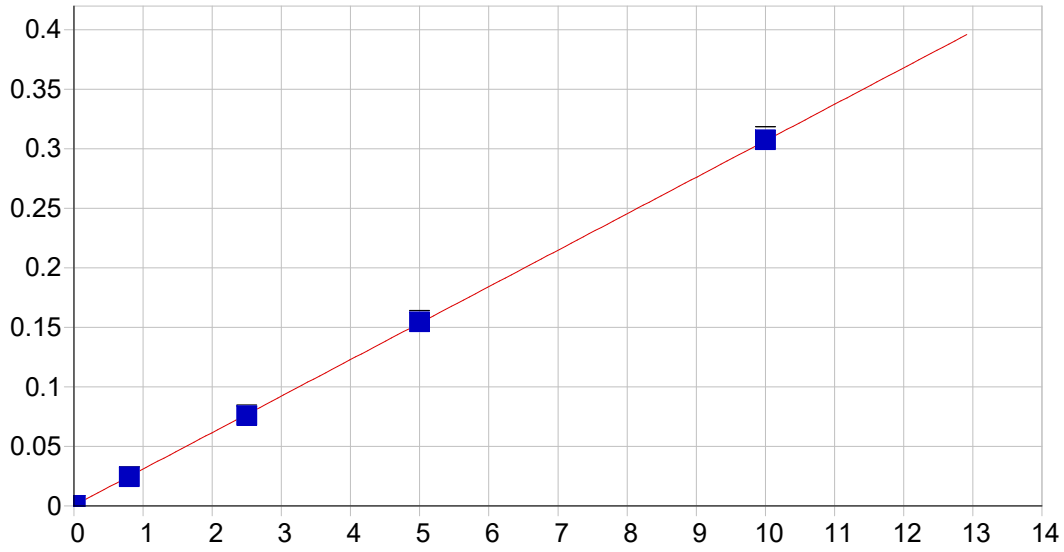


Pb 220.353 {453}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000245	Re-Slope:	1.000000
A1 (Gain):	0.142929	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.000023		
Predicted MDL:	0.001759		
Predicted MQL:	0.005863		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00025	.000	1
S1	.01200	.01364	.002	13.7	.00167	.000	1
S3	2.5000	2.5001	.000	.005	.35673	.001	1
S4	5.0000	5.0614	.061	1.23	.72244	.004	1
S5	10.000	9.9347	-.065	-.653	1.4182	.007	1
S2	.80000	.80217	.002	.271	.11429	.000	1

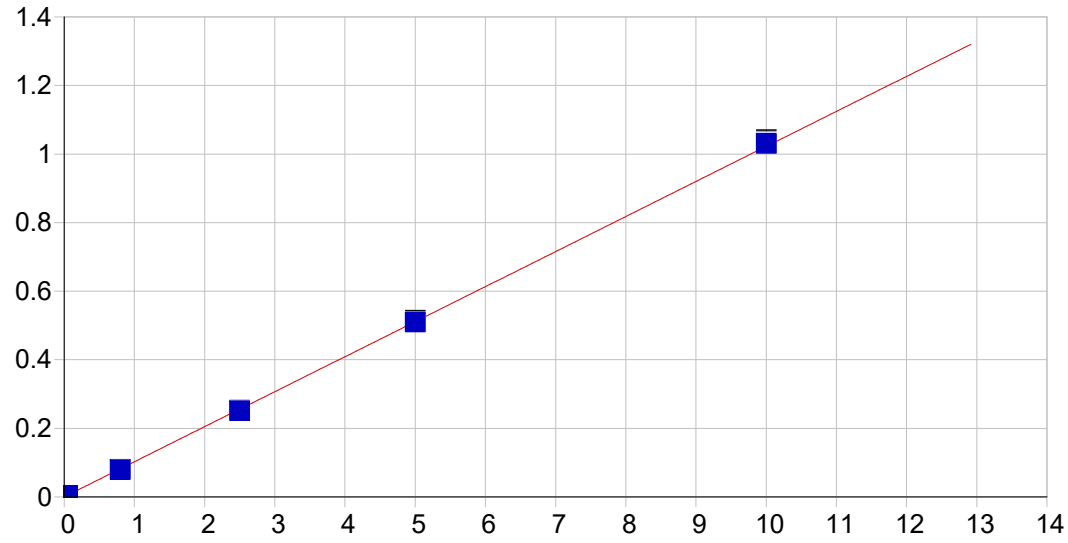


Se 196.090 {472}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000355	Re-Slope:	1.000000
A1 (Gain):	0.030642	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999929	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.004905		
Predicted MQL:	0.016350		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00036	.000	1
S1	.02000	.01458	-.005	-27.1	.00080	.000	1
S3	2.5000	2.4653	-.035	-1.39	.07585	.000	1
S4	5.0000	5.0322	.032	.645	.15445	.001	1
S5	10.000	10.025	.025	.251	.30734	.003	1
S2	.80000	.78287	-.017	-2.14	.02433	.000	1

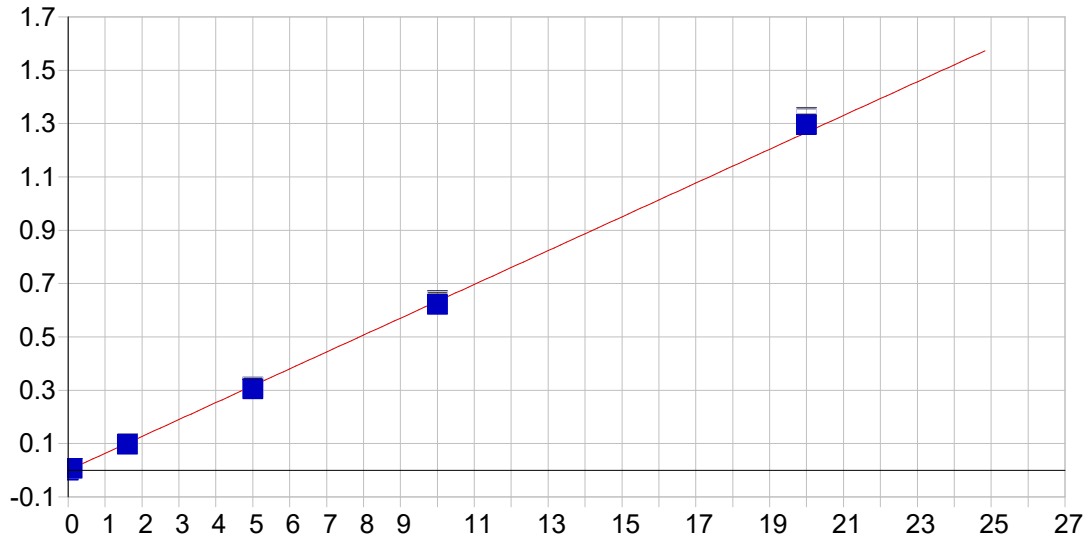


Sb 206.833 {463}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000307	Re-Slope:	1.000000
A1 (Gain):	0.102183	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.002248		
Predicted MQL:	0.007492		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00031	.000	1
S1	.05000	.05549	.005	11.0	.00599	.000	1
S3	2.5000	2.4569	-.043	-1.72	.25205	.001	1
S4	5.0000	4.9801	-.020	-.398	.51057	.004	1
S5	10.000	10.081	.081	.811	1.0332	.008	1
S2	.80000	.77644	-.024	-2.95	.07987	.000	1

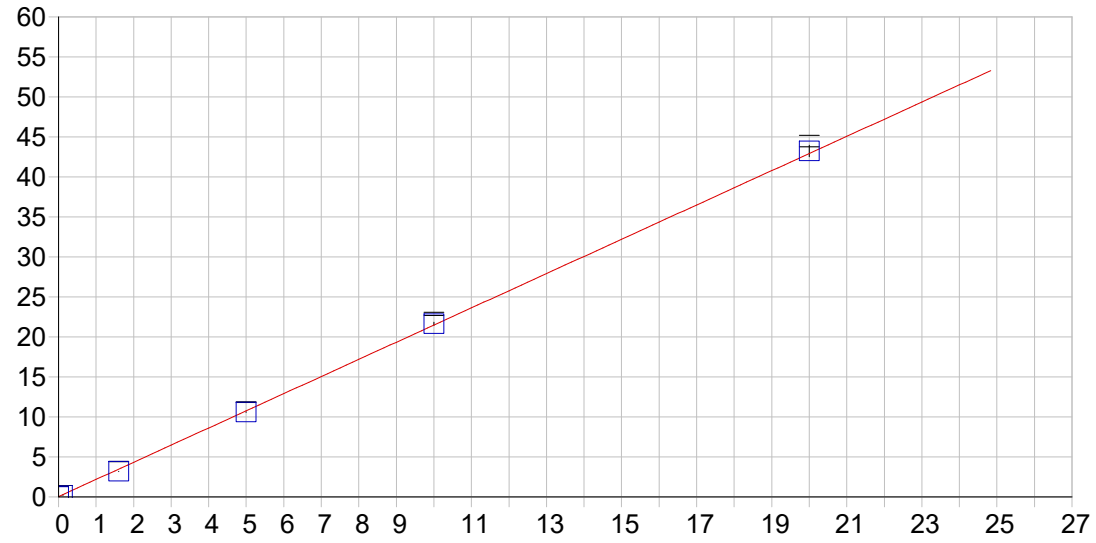


Al 396.152 { 85}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000113	Re-Slope:	1.000000
A1 (Gain):	0.063342	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999676	Status:	OK.
Std Error of Est:	0.000122		
Predicted MDL:	0.008501		
Predicted MQL:	0.028338		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00011	.000	1
S1	.10000	.10166	.002	1.66	.00704	.000	1
S3	5.0000	4.8115	-.188	-3.77	.31103	.000	1
S4	10.000	9.8009	-.199	-1.99	.63321	.002	1
S5	20.000	20.457	.457	2.28	1.3205	.002	1
S2	1.6000	1.5289	-.071	-4.45	.09892	.000	1

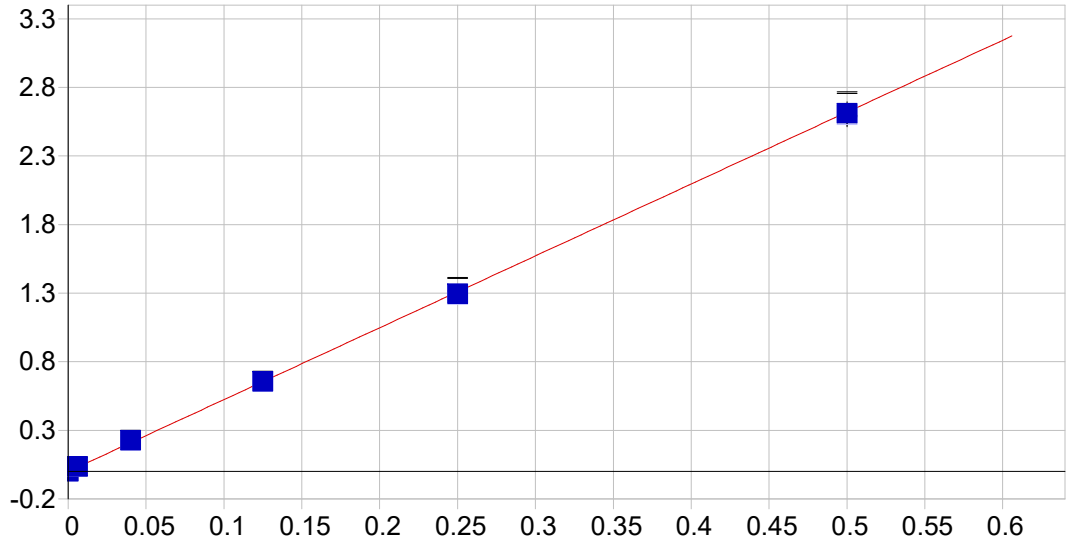


Ba 493.409 { 68}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.040523	Re-Slope:	1.000000
A1 (Gain):	2.144243	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999809	Status:	OK.
Std Error of Est:	0.003110		
Predicted MDL:	0.001090		
Predicted MQL:	0.003633		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.04055	.000	1
S1	.10000	.09390	-.006	-6.10	.24188	.003	1
S3	5.0000	4.9298	-.070	-1.40	10.611	.046	1
S4	10.000	10.070	.070	.697	21.632	.196	1
S5	20.000	20.140	.140	.702	43.227	.724	1
S2	1.6000	1.4661	-.134	-8.37	3.1842	.010	1

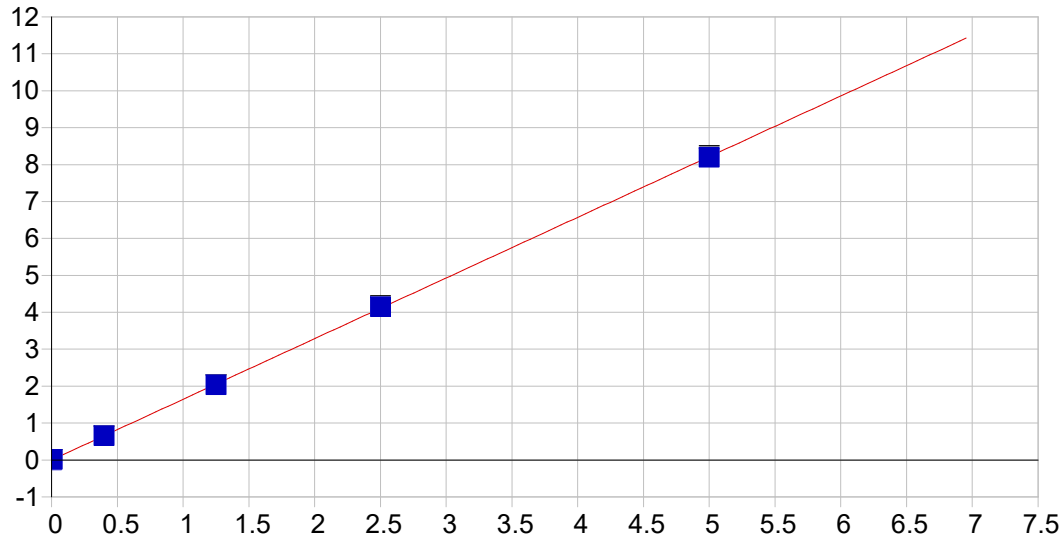


Be 234.861 {144}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000074	Re-Slope:	1.000000
A1 (Gain):	5.239752	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999745	Status:	OK.
Std Error of Est:	0.000339		
Predicted MDL:	0.000048		
Predicted MQL:	0.000161		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00008	.000	1
S1	.00600	.00693	.001	15.6	.03603	.000	1
S3	.12500	.12535	.000	.278	.65378	.003	1
S4	.25000	.24704	-.003	-1.18	1.2885	.047	1
S5	.50000	.49834	-.002	-.332	2.5994	.085	1
S2	.04000	.04334	.003	8.35	.22608	.001	1

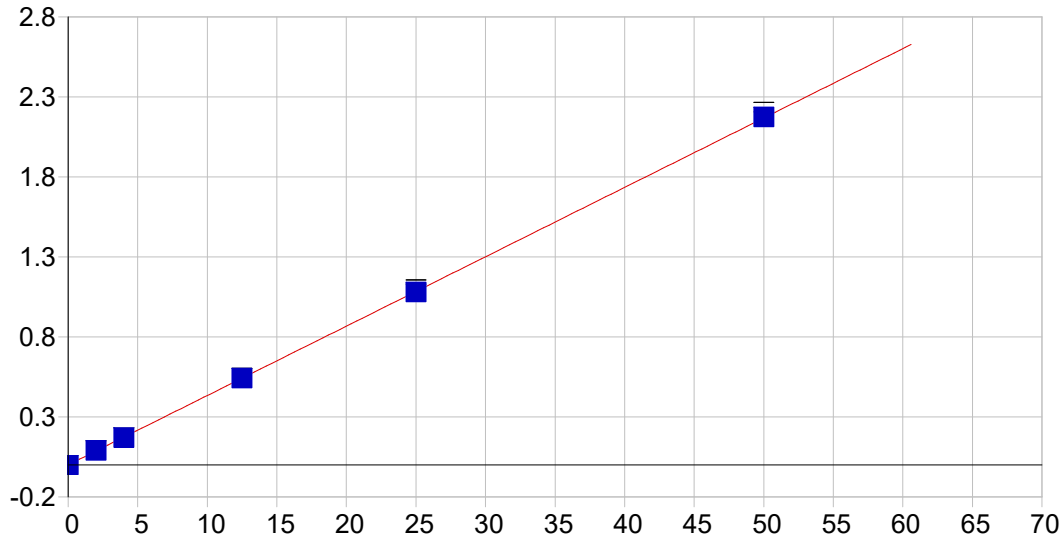


Cd 226.502 {449}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000002	Re-Slope:	1.000000
A1 (Gain):	1.643085	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999977	Status:	OK.
Std Error of Est:	0.000102		
Predicted MDL:	0.000104		
Predicted MQL:	0.000348		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00000	.000	1
S1	.00600	.00644	.000	7.35	.01064	.000	1
S3	1.2500	1.2390	-.011	-.883	2.0375	.005	1
S4	2.5000	2.5248	.025	.990	4.1520	.022	1
S5	5.0000	4.9893	-.011	-.214	8.2051	.037	1
S2	.40000	.39652	-.003	-.871	.65209	.002	1

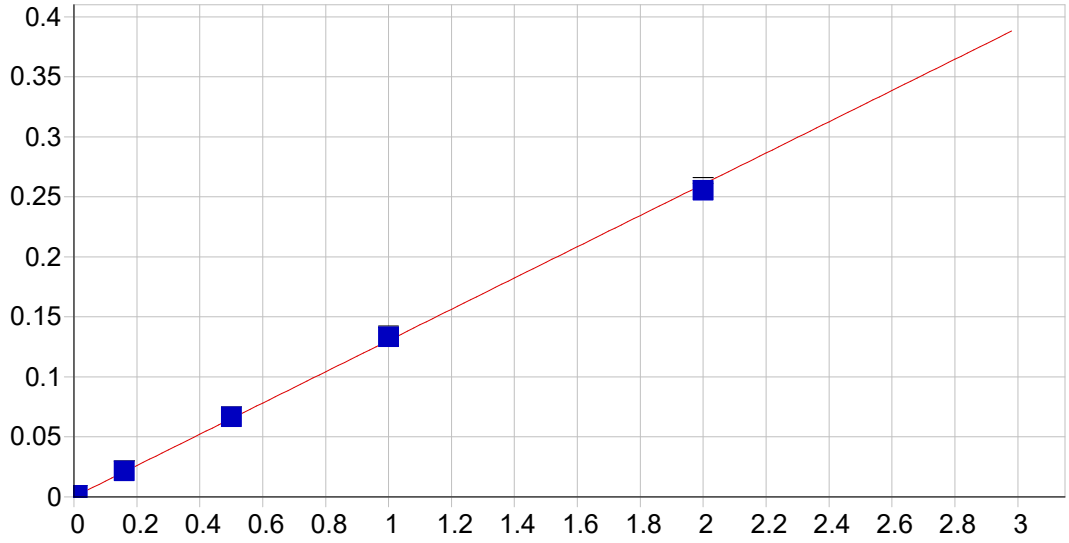


Ca 373.690 { 90}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000050	Re-Slope:	1.000000
A1 (Gain):	0.043361	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000141		
Predicted MDL:	0.011622		
Predicted MQL:	0.038740		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00005	.000	1
S2	4.0000	3.9214	-.079	-1.97	.17008	.001	1
S3	12.500	12.480	-.020	-.163	.54118	.001	1
S4	25.000	24.928	-.072	-.288	1.0809	.013	1
S5	50.000	50.116	.116	.233	2.1731	.030	1
S1	2.0000	2.0546	.055	2.73	.08914	.001	1

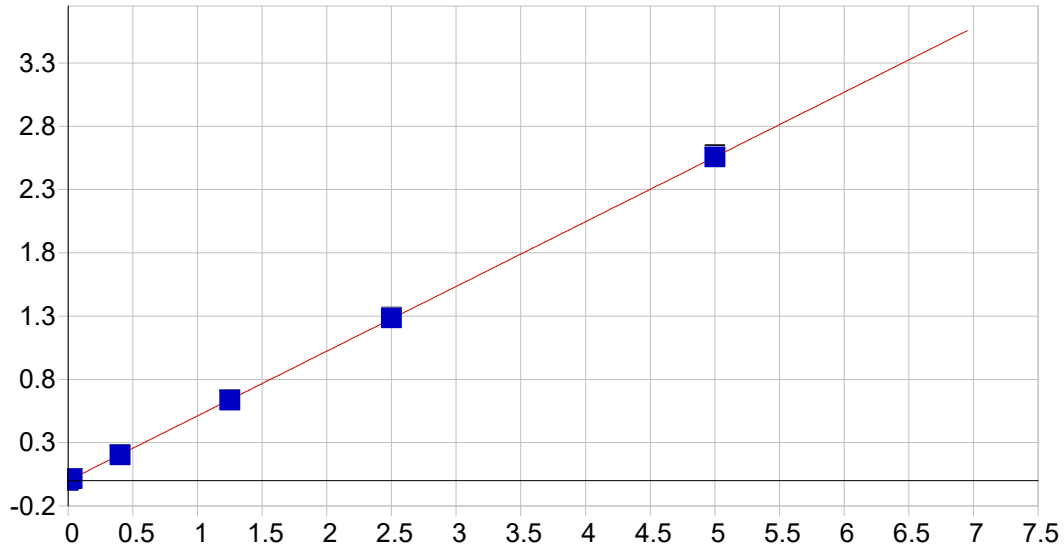


Cr 267.716 {126}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000112	Re-Slope:	1.000000
A1 (Gain):	0.130171	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999765	Status:	OK.
Std Error of Est:	0.000021		
Predicted MDL:	0.000458		
Predicted MQL:	0.001528		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00011	.000	1
S1	.01000	.00969	-.000	-3.15	.00137	.000	1
S3	.50000	.51026	.010	2.05	.06655	.000	1
S4	1.0000	1.0231	.023	2.31	.13333	.001	1
S5	2.0000	1.9611	-.039	-1.94	.25547	.002	1
S2	.16000	.16585	.006	3.66	.02171	.000	1

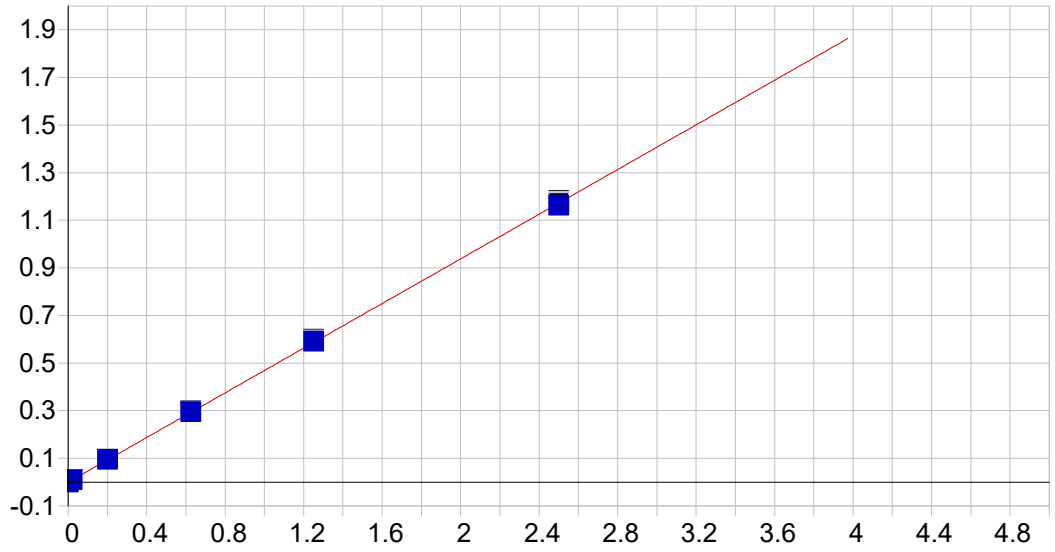


Co 228.616 {448}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000065	Re-Slope:	1.000000
A1 (Gain):	0.511444	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.000335		
Predicted MQL:	0.001116		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00006	.000	1
S1	.03000	.03036	.000	1.18	.01553	.000	1
S3	1.2500	1.2426	-.007	-.589	.63669	.002	1
S4	2.5000	2.5121	.012	.484	1.2870	.005	1
S5	5.0000	5.0002	.000	.003	2.5617	.013	1
S2	.40000	.39476	-.005	-1.31	.20231	.001	1

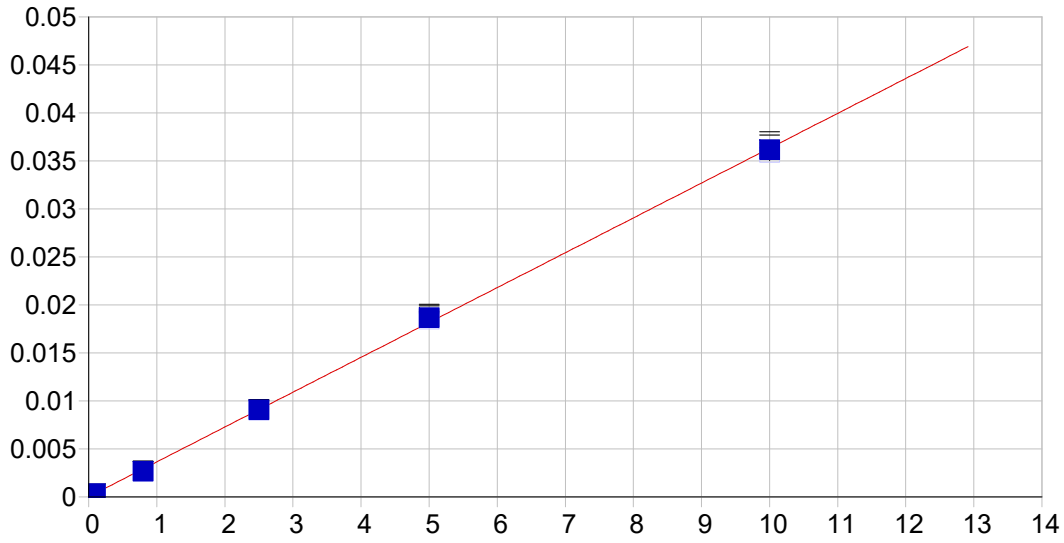


Cu 224.700 {450}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000324	Re-Slope:	1.000000
A1 (Gain):	0.469122	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999931	Status:	OK.
Std Error of Est:	0.000065		
Predicted MDL:	0.000529		
Predicted MQL:	0.001764		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00033	.000	1
S1	.02000	.02232	.002	11.6	.01027	.000	1
S3	.62500	.63114	.006	.982	.29868	.002	1
S4	1.2500	1.2601	.010	.806	.59665	.003	1
S5	2.5000	2.4784	-.022	-.864	1.1740	.008	1
S2	.20000	.20307	.003	1.54	.09588	.001	1

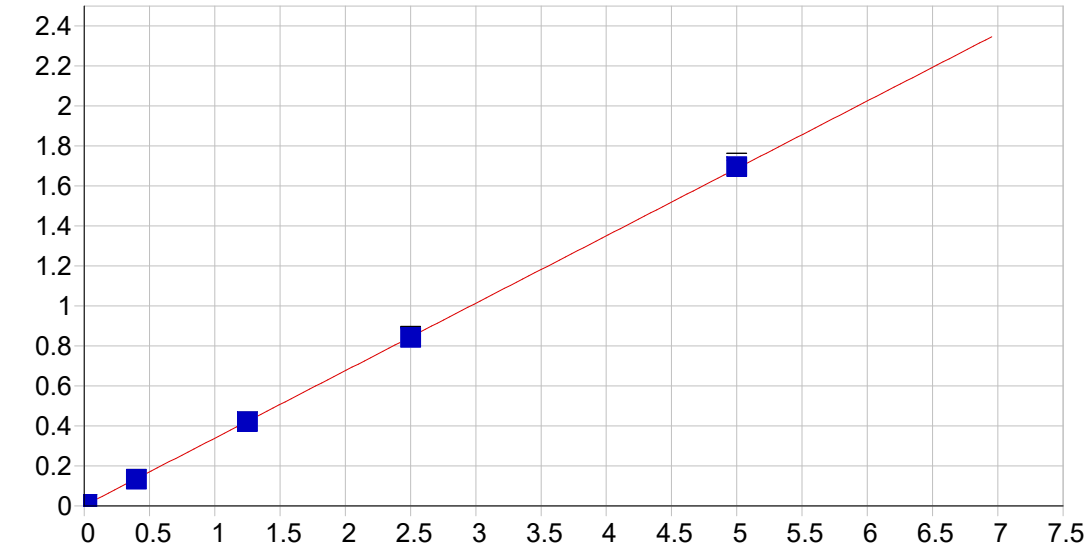


Fe 240.488 {140}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000018	Re-Slope:	1.000000
A1 (Gain):	0.003630	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999659	Status:	OK.
Std Error of Est:	0.000005		
Predicted MDL:	0.005563		
Predicted MQL:	0.018543		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00002	.000	1
S1	.10000	.08413	-.016	-15.9	.00032	.000	1
S3	2.5000	2.4931	-.007	-.275	.00899	.000	1
S4	5.0000	5.1341	.134	2.68	.01850	.000	1
S5	10.000	9.9580	-.042	-.420	.03586	.001	1
S2	.80000	.73062	-.069	-8.67	.00265	.000	1

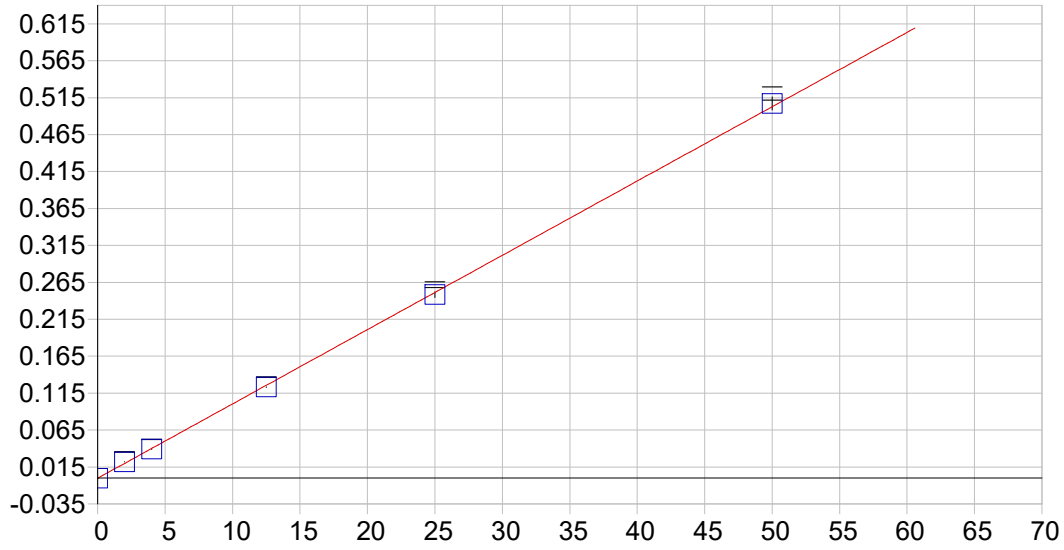


Mn 257.610 {131}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001467	Re-Slope:	1.000000
A1 (Gain):	0.337308	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000046		
Predicted MDL:	0.000532		
Predicted MQL:	0.001772		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00147	.000	1
S1	.02000	.02126	.001	6.30	.00864	.000	1
S3	1.2500	1.2450	-.005	-.404	.42148	.001	1
S4	2.5000	2.4925	-.008	-.301	.84237	.006	1
S5	5.0000	5.0237	.024	.475	1.6963	.018	1
S2	.40000	.38758	-.012	-3.11	.13223	.000	1

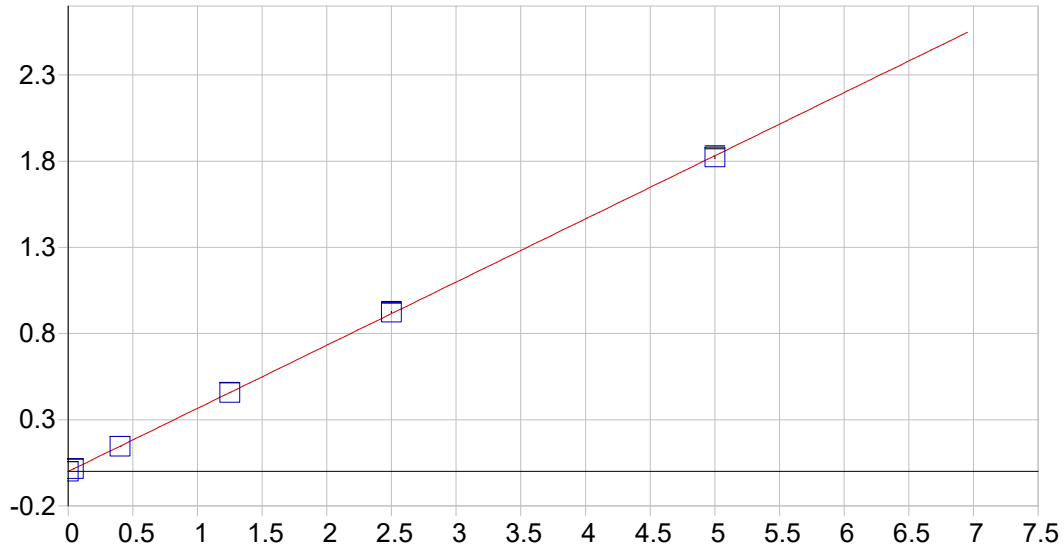


Mg 279.079 {121}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000223	Re-Slope:	1.000000
A1 (Gain):	0.010060	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999812	Status:	OK.
Std Error of Est:	0.000103		
Predicted MDL:	0.020114		
Predicted MQL:	0.067047		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00011	-.000	.000	-.00022	.000	1
S2	4.0000	3.8966	-.103	-2.59	.03897	.000	1
S3	12.500	12.256	-.244	-1.95	.12307	.001	1
S4	25.000	24.710	-.290	-1.16	.24835	.004	1
S5	50.000	50.435	.435	.870	.50713	.009	1
S1	2.0000	2.2024	.202	10.1	.02193	.000	1

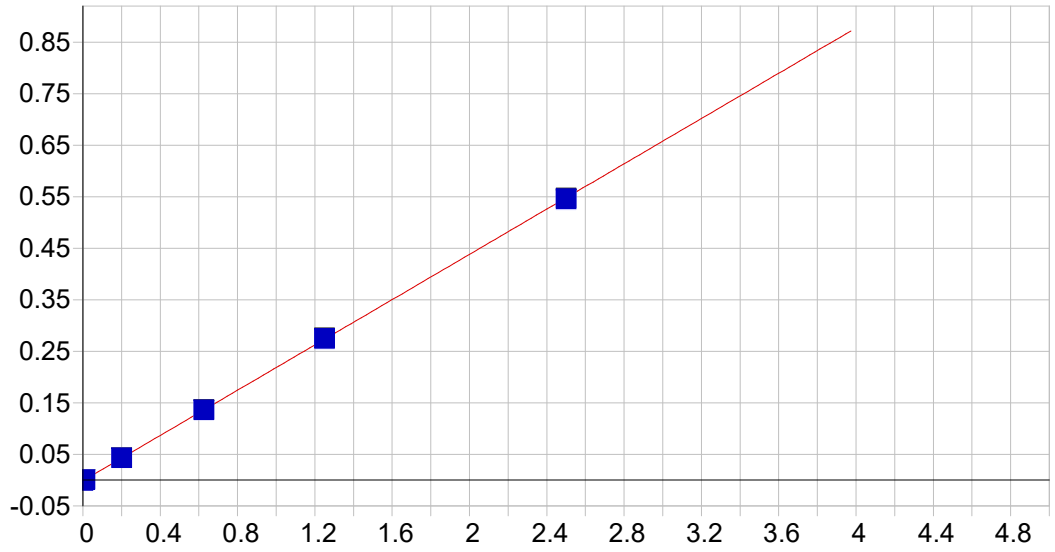


Ni 231.604 {446}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000344	Re-Slope:	1.000000
A1 (Gain):	0.366395	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.000426		
Predicted MQL:	0.001419		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00034	.000	1
S1	.04000	.04082	.001	2.05	.01461	.000	1
S3	1.2500	1.2513	.001	.107	.45814	.001	1
S4	2.5000	2.5216	.022	.864	.92356	.005	1
S5	5.0000	4.9778	-.022	-.444	1.8235	.008	1
S2	.40000	.39844	-.002	-.390	.14564	.001	1

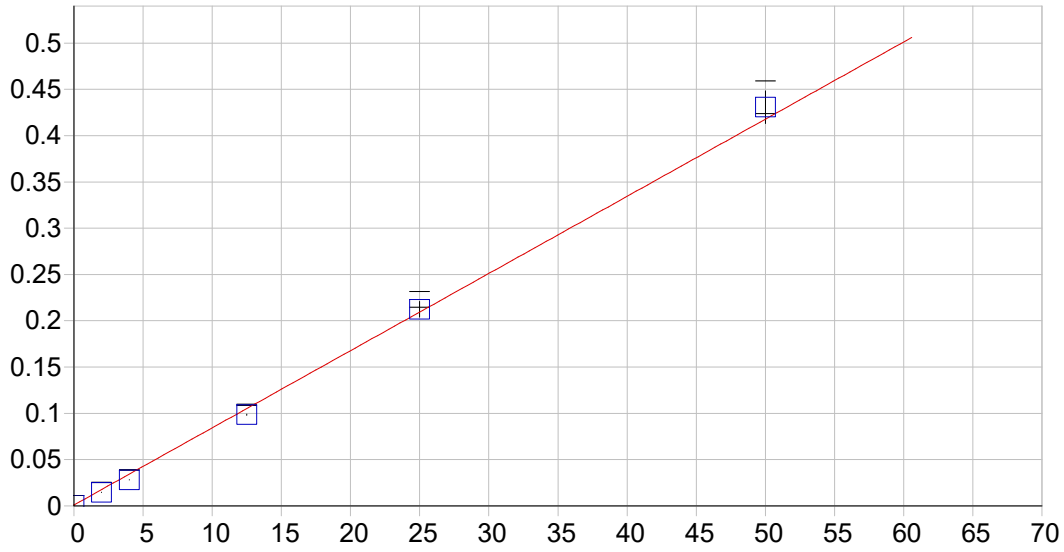


Ag 328.068 {103}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001196	Re-Slope:	1.000000
A1 (Gain):	0.219671	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.000387		
Predicted MQL:	0.001290		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00120	.000	1
S1	.01000	.01055	.001	5.51	.00111	.000	1
S3	.62500	.62554	.001	.087	.13567	.000	1
S4	1.2500	1.2550	.005	.403	.27341	.002	1
S5	2.5000	2.4910	-.009	-.361	.54382	.001	1
S2	.20000	.20289	.003	1.44	.04320	.000	1

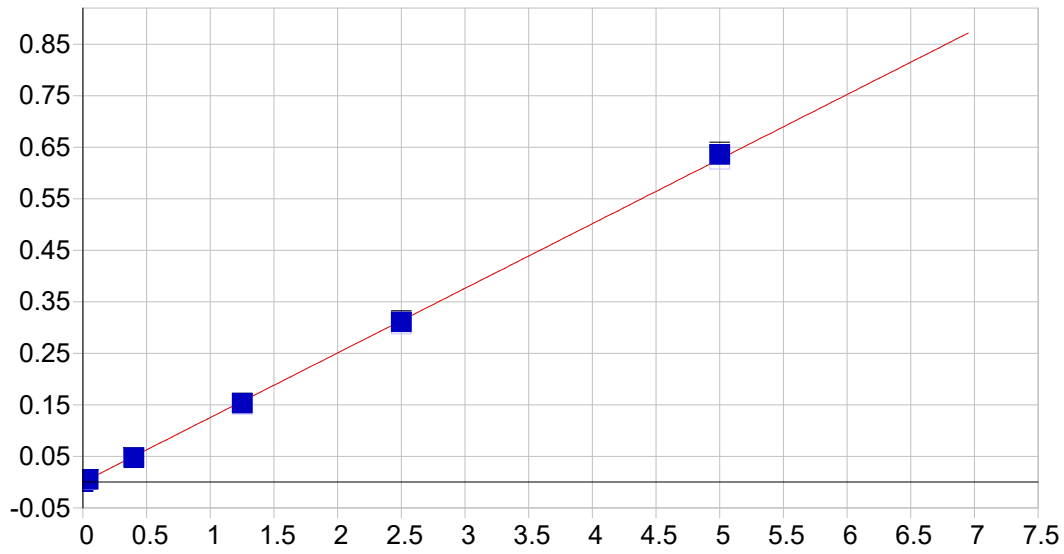


Na 589.592 { 57}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000997	Re-Slope:	1.000000
A1 (Gain):	0.008336	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998372	Status:	OK.
Std Error of Est:	0.000252		
Predicted MDL:	0.020950		
Predicted MQL:	0.069834		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00077	.001	.000	.00100	.000	1
S2	4.0000	3.2598	-.740	-18.5	.02817	.000	1
S3	12.500	11.701	-.799	-6.39	.09854	.001	1
S4	25.000	25.347	.347	1.39	.21230	.008	1
S5	50.000	51.550	1.55	3.10	.43074	.018	1
S1	2.0000	1.6426	-.357	-17.9	.01469	.000	1

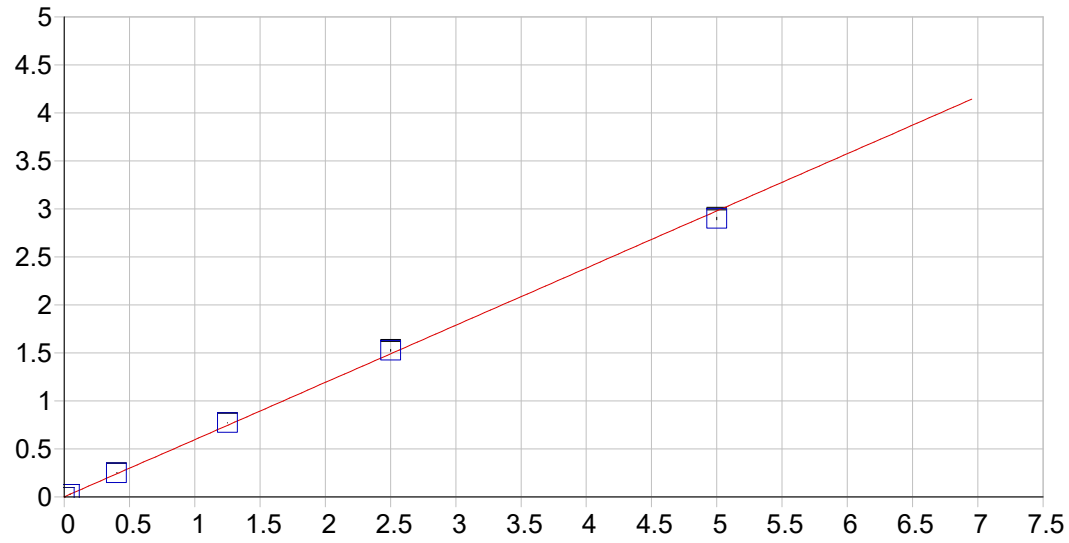


V 292.402 {115}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000027	Re-Slope:	1.000000
A1 (Gain):	0.125372	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999841	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.001825		
Predicted MQL:	0.006084		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00003	.000	1
S1	.04000	.04079	.001	1.96	.00495	.000	1
S3	1.2500	1.2211	-.029	-2.31	.15084	.000	1
S4	2.5000	2.4807	-.019	-.772	.30647	.002	1
S5	5.0000	5.0682	.068	1.36	.62630	.005	1
S2	.40000	.37920	-.021	-5.20	.04684	.000	1

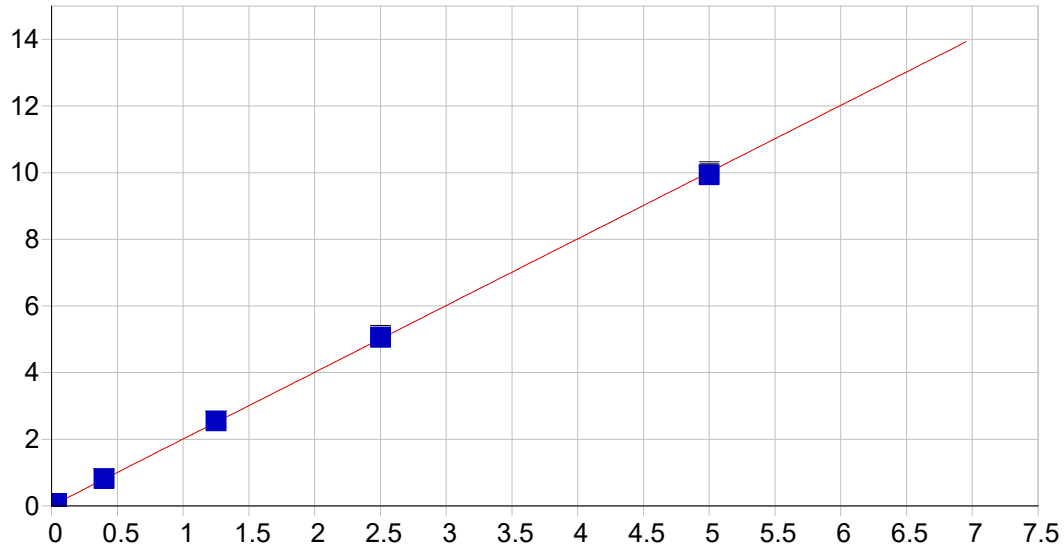


Zn 206.200 {464}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000711	Re-Slope:	1.000000
A1 (Gain):	0.595737	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999564	Status:	OK.
Std Error of Est:	0.000413		
Predicted MDL:	0.000272		
Predicted MQL:	0.000905		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00071	.000	1
S1	.04000	.04415	.004	10.4	.02701	.000	1
S3	1.2500	1.2962	.046	3.70	.77290	.001	1
S4	2.5000	2.5613	.061	2.45	1.5265	.009	1
S5	5.0000	4.8690	-.131	-2.62	2.9013	.013	1
S2	.40000	.41944	.019	4.86	.25058	.000	1

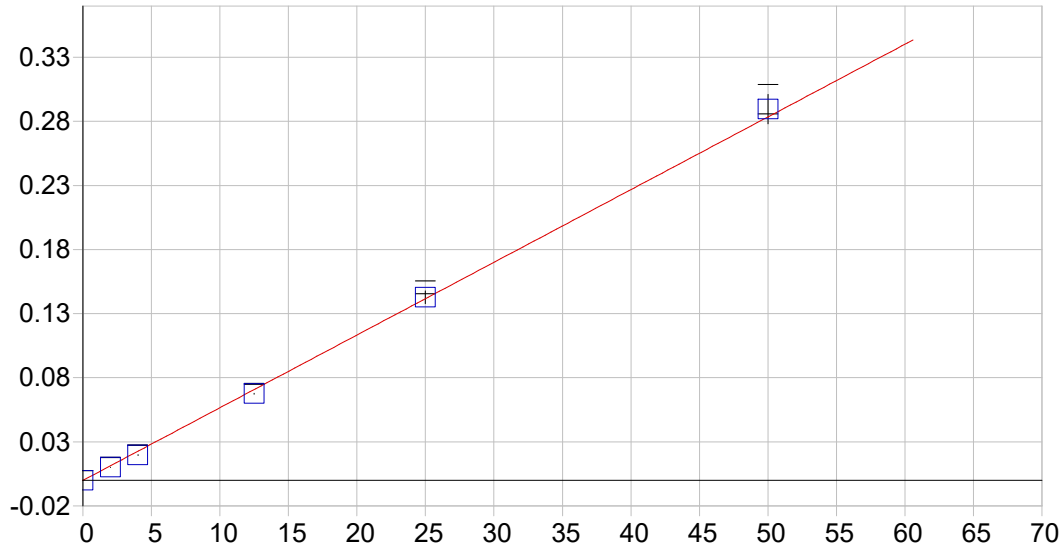


Zn 213.856 {158}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003708	Re-Slope:	1.000000
A1 (Gain):	2.002937	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999945	Status:	OK.
Std Error of Est:	0.000496		
Predicted MDL:	0.000391		
Predicted MQL:	0.001303		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00370	.001	1
S1	.04000	.04275	.003	6.88	.08990	.001	1
S3	1.2500	1.2685	.019	1.48	2.5619	.003	1
S4	2.5000	2.5188	.019	.754	5.0836	.038	1
S5	5.0000	4.9562	-.044	-.875	10.000	.026	1
S2	.40000	.40363	.004	.906	.81772	.004	1

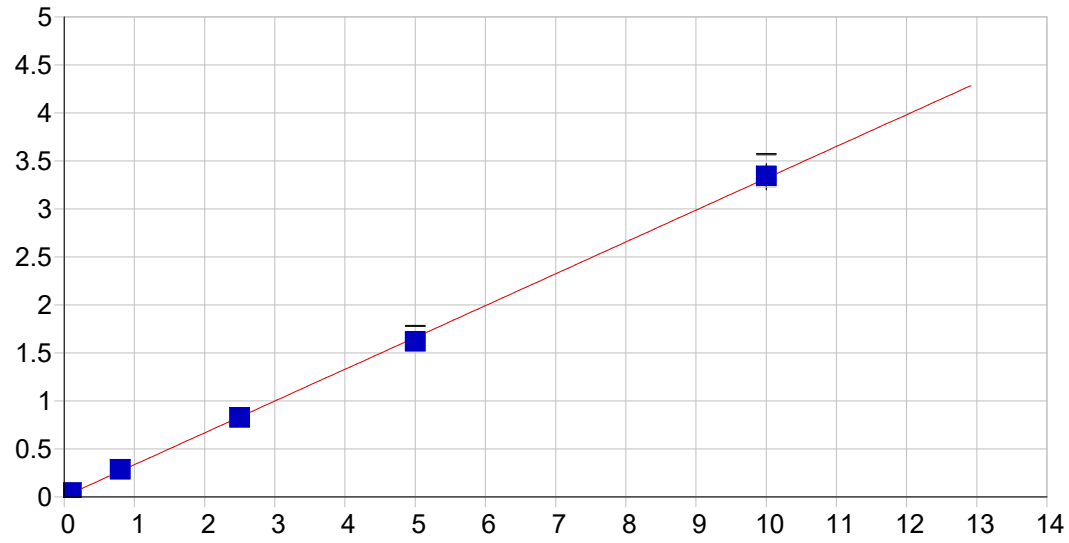


K 766.490 { 44}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000114	Re-Slope:	1.000000
A1 (Gain):	0.005672	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999293	Status:	OK.
Std Error of Est:	0.000113		
Predicted MDL:	0.033536		
Predicted MQL:	0.111787		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00047	.000	.000	-.00011	.000	1
S2	4.0000	3.4912	-.509	-12.7	.01969	.000	1
S3	12.500	11.925	-.575	-4.60	.06752	.000	1
S4	25.000	25.194	.194	.775	.14279	.005	1
S5	50.000	51.072	1.07	2.14	.28957	.012	1
S1	2.0000	1.8187	-.181	-9.06	.01020	.000	1

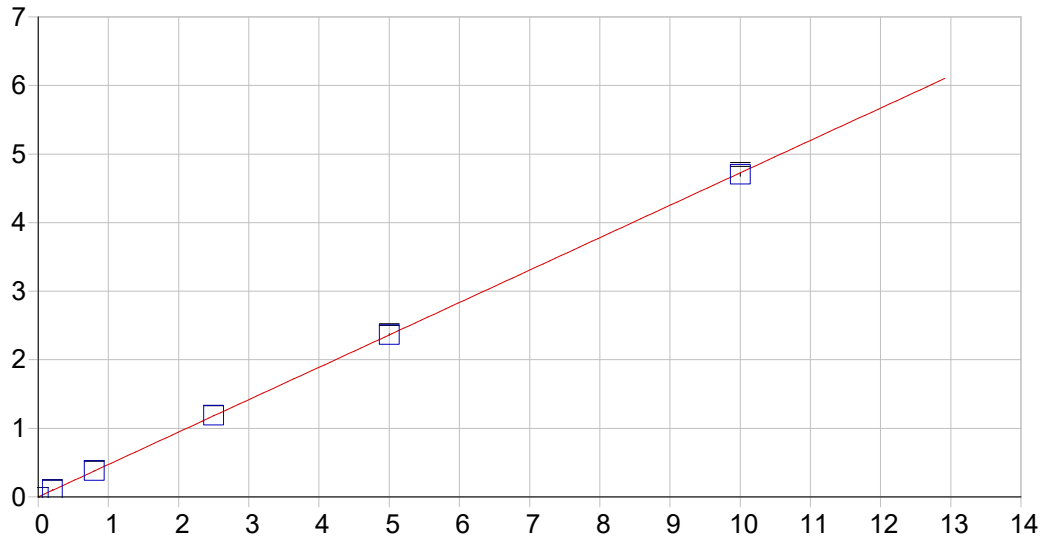


B 249.678 {135}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003958	Re-Slope:	1.000000
A1 (Gain):	0.331446	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999730	Status:	OK.
Std Error of Est:	0.000403		
Predicted MDL:	0.000841		
Predicted MQL:	0.002804		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00395	.000	1
S1	.10000	.11823	.018	18.2	.04291	.000	1
S3	2.5000	2.4801	-.020	-.796	.82213	.000	1
S4	5.0000	4.8795	-.120	-2.41	1.6136	.061	1
S5	10.000	10.074	.074	.740	3.3276	.132	1
S2	.80000	.84826	.048	6.03	.28388	.001	1

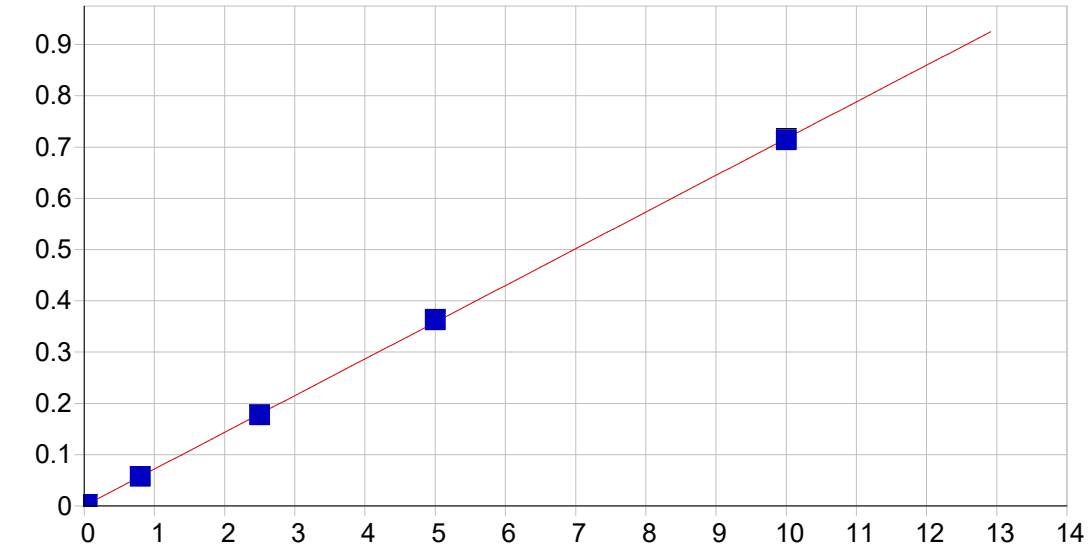


Mo 202.030 {467}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000230	Re-Slope:	1.000000
A1 (Gain):	0.472493	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999958	Status:	OK.
Std Error of Est:	0.000321		
Predicted MDL:	0.000357		
Predicted MQL:	0.001191		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00022	.000	1
S1	.20000	.21526	.015	7.63	.10194	.000	1
S3	2.5000	2.5156	.016	.623	1.1888	.003	1
S4	5.0000	5.0103	.010	.207	2.3676	.011	1
S5	10.000	9.9535	-.047	-.465	4.7032	.027	1
S2	.80000	.80538	.005	.673	.38077	.001	1

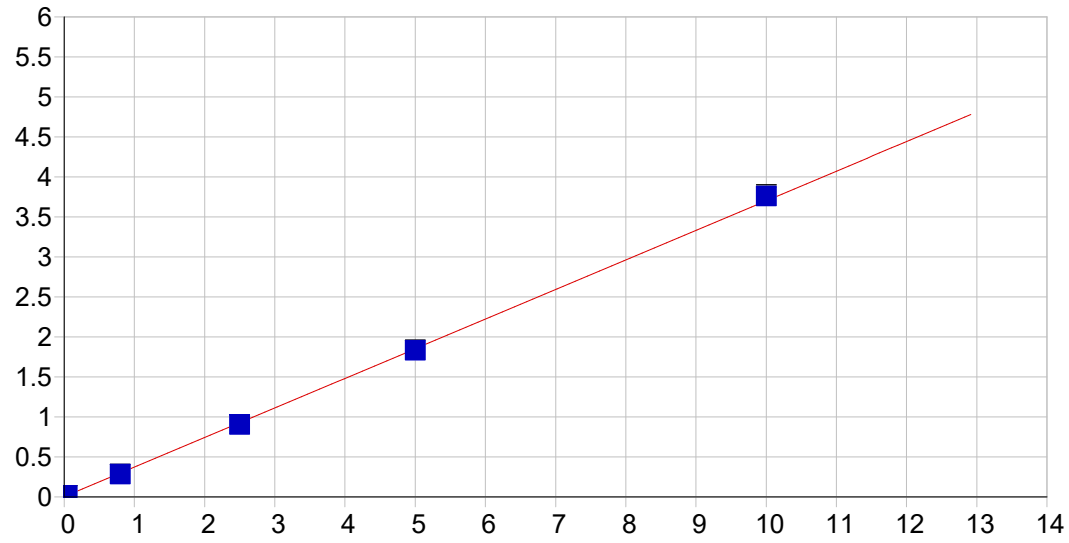


Sn 189.989 {478}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000177	Re-Slope:	1.000000
A1 (Gain):	0.071627	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999970	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.001094		
Predicted MQL:	0.003648		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00018	.000	1
S1	.04000	.03981	-.000	-.475	.00303	.000	1
S3	2.5000	2.4752	-.025	-.992	.17728	.001	1
S4	5.0000	5.0593	.059	1.19	.36219	.002	1
S5	10.000	9.9637	-.036	-.363	.71311	.003	1
S2	.80000	.80197	.002	.246	.05756	.000	1

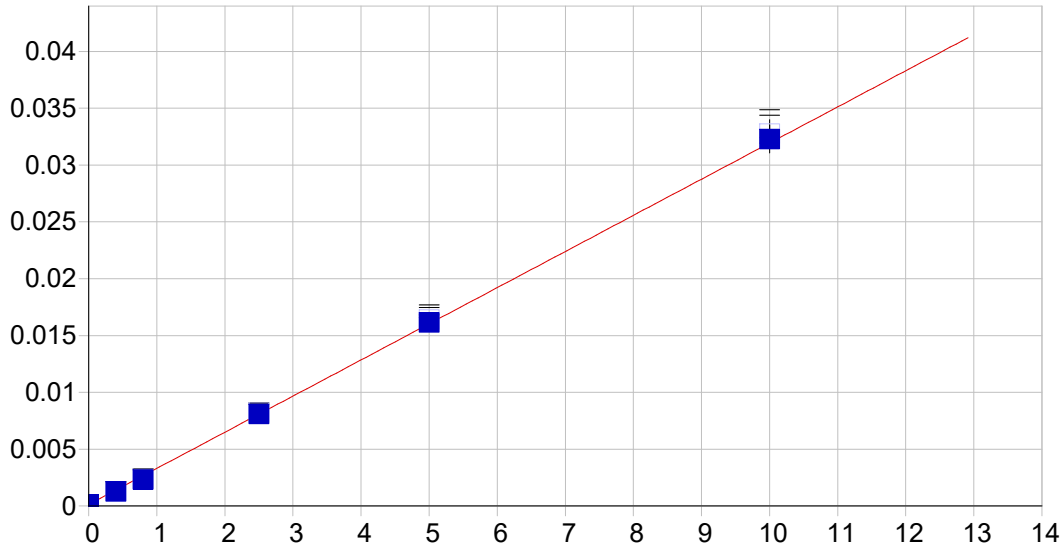


Ti 336.121 {100}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002922	Re-Slope:	1.000000
A1 (Gain):	0.369849	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999805	Status:	OK.
Std Error of Est:	0.000242		
Predicted MDL:	0.000887		
Predicted MQL:	0.002957		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00292	.000	1
S1	.04000	.03994	-.000	-.149	.01768	.000	1
S3	2.5000	2.4343	-.066	-2.63	.90292	.002	1
S4	5.0000	4.9487	-.051	-1.03	1.8325	.003	1
S5	10.000	10.160	.160	1.60	3.7593	.015	1
S2	.80000	.75682	-.043	-5.40	.28272	.002	1

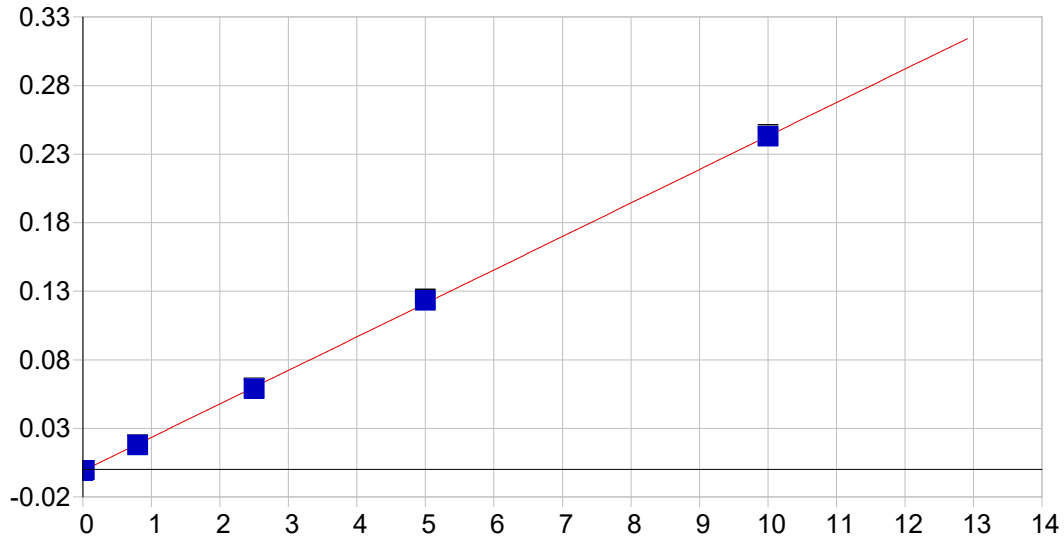


Si 288.158 {117}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000119	Re-Slope:	1.000000
A1 (Gain):	0.003182	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999466	Status:	OK.
Std Error of Est:	0.000011		
Predicted MDL:	0.010868		
Predicted MQL:	0.036226		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00009	.000	.000	.00012	.000	1
S1	.40000	.35802	-.042	-10.5	.00126	.000	1
S3	2.5000	2.5018	.002	.070	.00820	.000	1
S4	5.0000	5.0367	.037	.733	.01639	.000	1
S5	10.000	10.111	.111	1.11	.03277	.001	1
S2	.80000	.69179	-.108	-13.5	.00236	.000	1

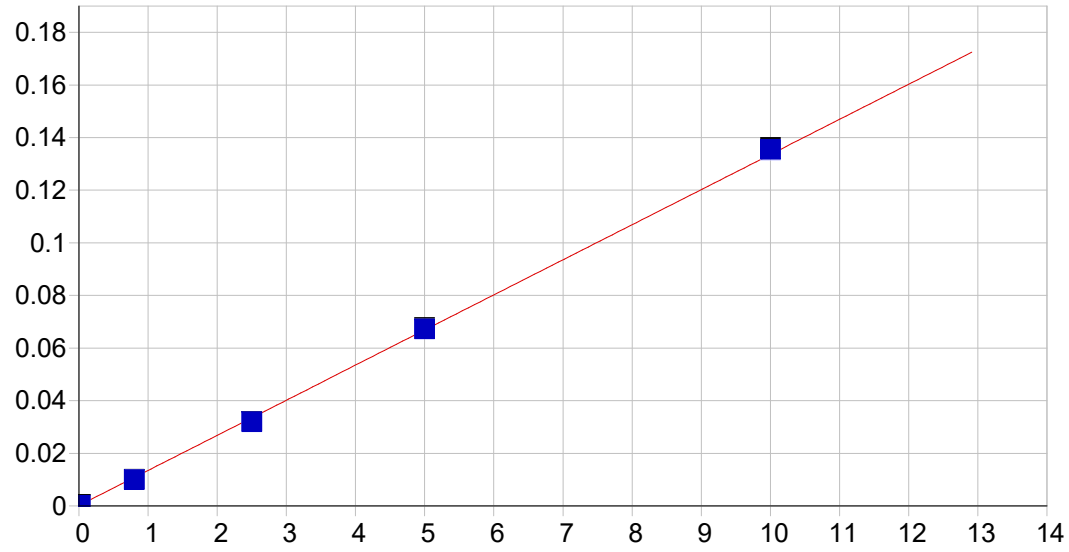


P 177.495 {490}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000971	Re-Slope:	1.000000
A1 (Gain):	0.024414	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999864	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.003564		
Predicted MQL:	0.011880		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00097	.000	1
S1	.02000	.02516	.005	25.8	-.00036	.000	1
S3	2.5000	2.4497	-.050	-2.01	.05883	.001	1
S4	5.0000	5.0862	.086	1.72	.12319	.001	1
S5	10.000	9.9892	-.011	-.108	.24287	.001	1
S2	.80000	.76967	-.030	-3.79	.01782	.000	1

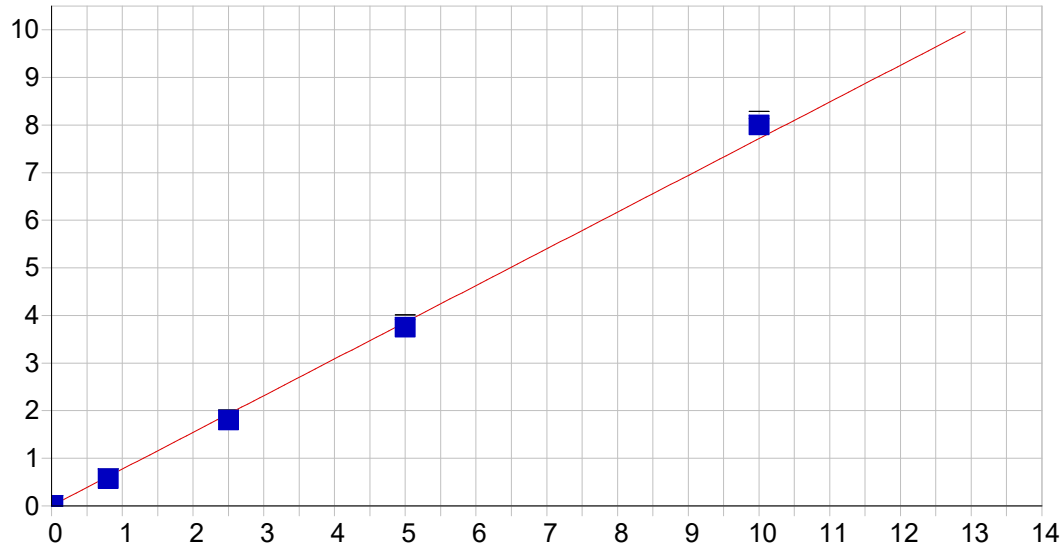


S 182.034 {485}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000151	Re-Slope:	1.000000
A1 (Gain):	0.013342	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999653	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.005182		
Predicted MQL:	0.017273		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00015	.000	1
S1	.02000	.01590	-.004	-20.5	.00035	.000	1
S3	2.5000	2.3875	-.112	-4.50	.03192	.000	1
S4	5.0000	5.0321	.032	.643	.06712	.001	1
S5	10.000	10.144	.144	1.44	.13515	.001	1
S2	.80000	.74020	-.060	-7.48	.01000	.000	1

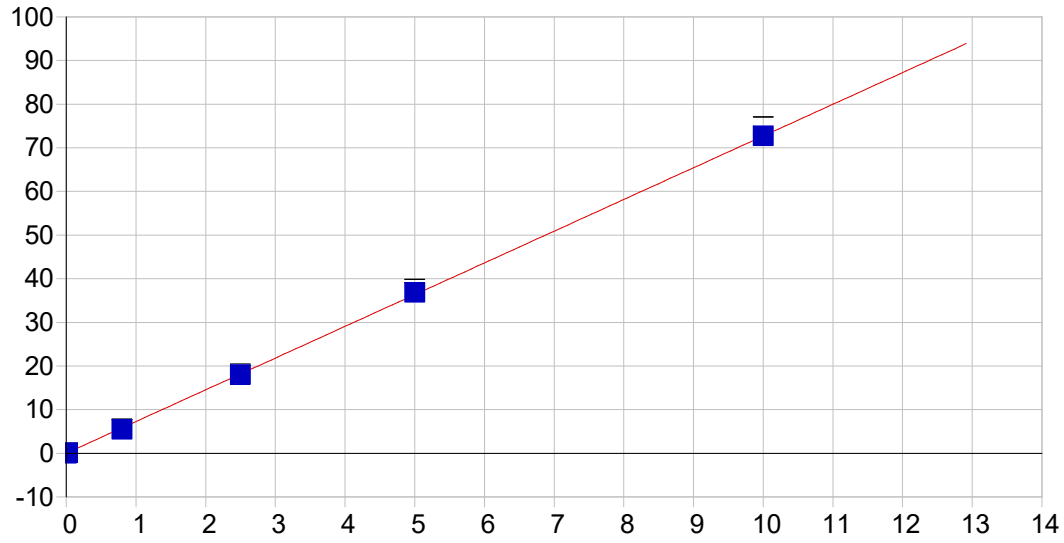


Li 670.784 { 50}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001794	Re-Slope:	1.000000
A1 (Gain):	0.771224	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999056	Status:	OK.
Std Error of Est:	0.000786		
Predicted MDL:	0.001331		
Predicted MQL:	0.004438		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00180	.001	1
S5	10.000	10.372	.372	3.72	8.0049	.077	1
S4	5.0000	4.8651	-.135	-2.70	3.7558	.051	1
S3	2.5000	2.3310	-.169	-6.76	1.8005	.010	1
S1	.02000	.01704	-.003	-14.8	.01518	.001	1
S2	.80000	.73472	-.065	-8.16	.56874	.001	1

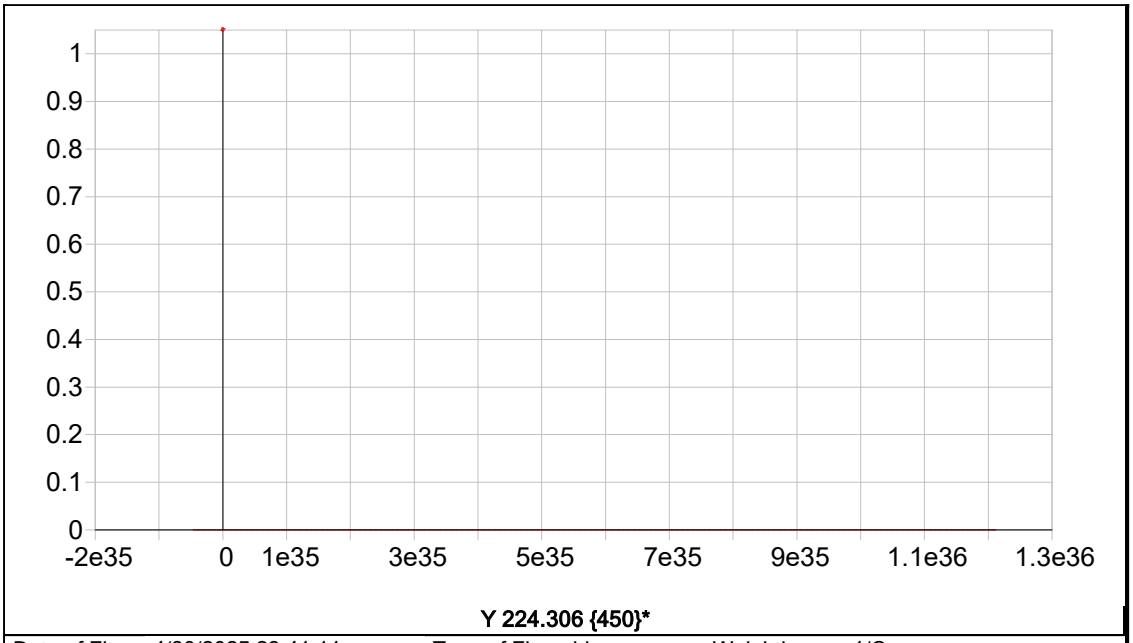


Sr 407.771 { 83}

Date of Fit:	4/30/2025 23:41:11	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000186	Re-Slope:	1.000000
A1 (Gain):	7.269873	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999901	Status:	OK.
Std Error of Est:	0.002394		
Predicted MDL:	0.000090		
Predicted MQL:	0.000298		

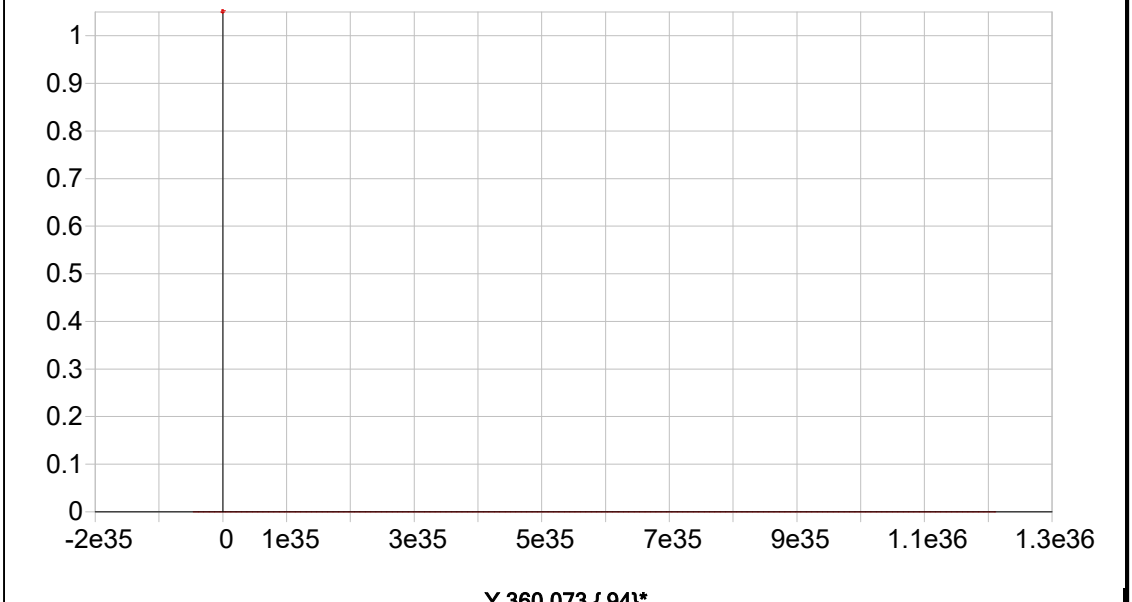
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00020	.001	1
S1	.02000	.01944	-.001	-2.80	.14221	.000	1
S3	2.5000	2.4732	-.027	-1.07	17.998	.143	1
S4	5.0000	5.0685	.069	1.37	36.883	.717	1
S5	10.000	10.002	.002	.024	72.786	2.07	1
S2	.80000	.75641	-.044	-5.45	5.5048	.018	1



Y 224.306 {450}*

Date of Fit:	4/30/2025 23:41:11	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

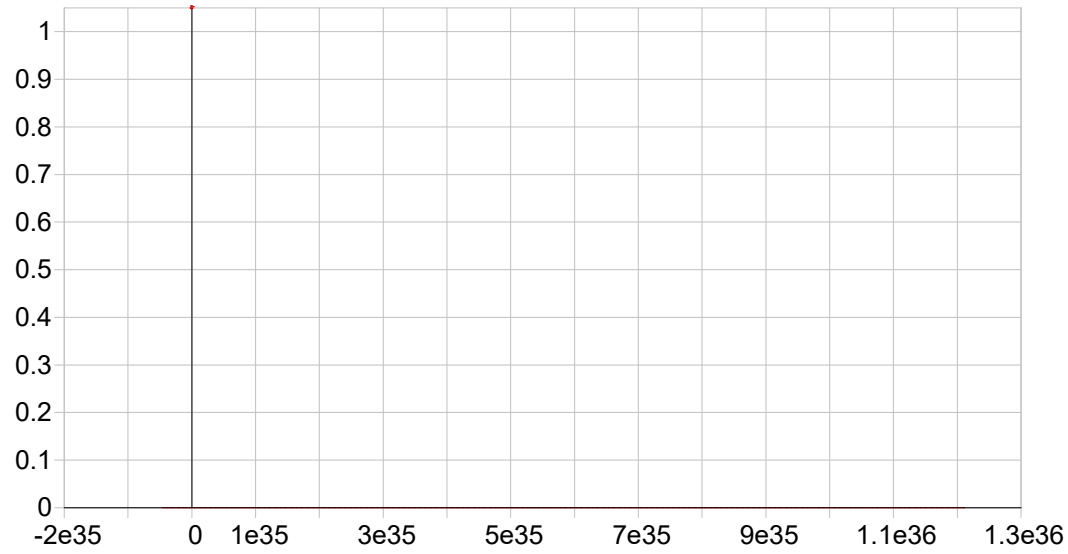


Y 360.073 { 94}*

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					

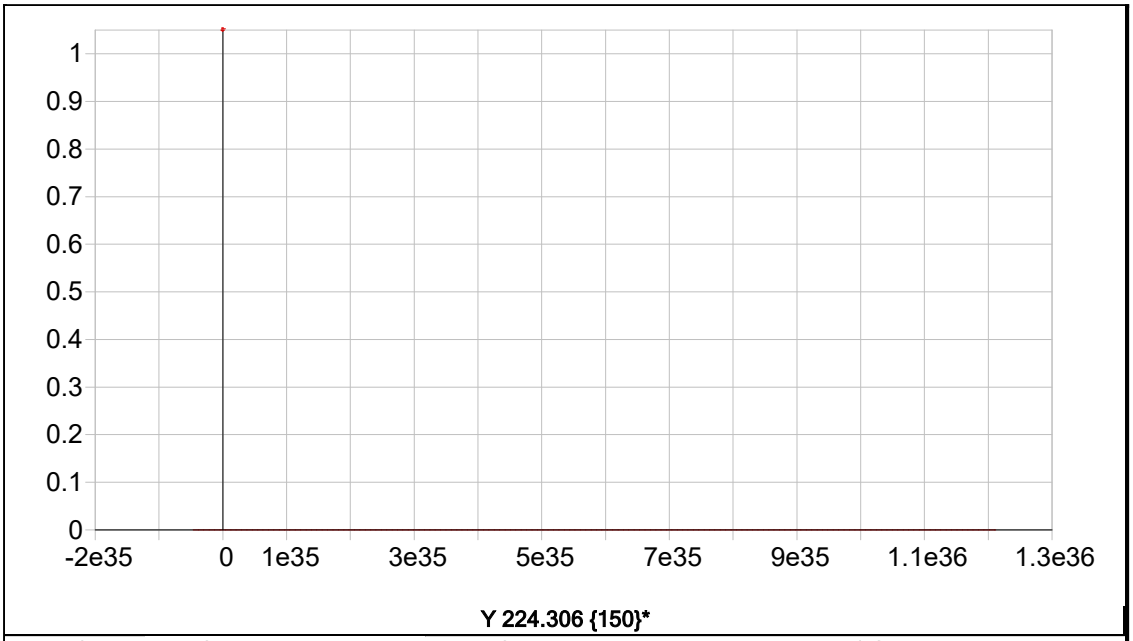
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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				

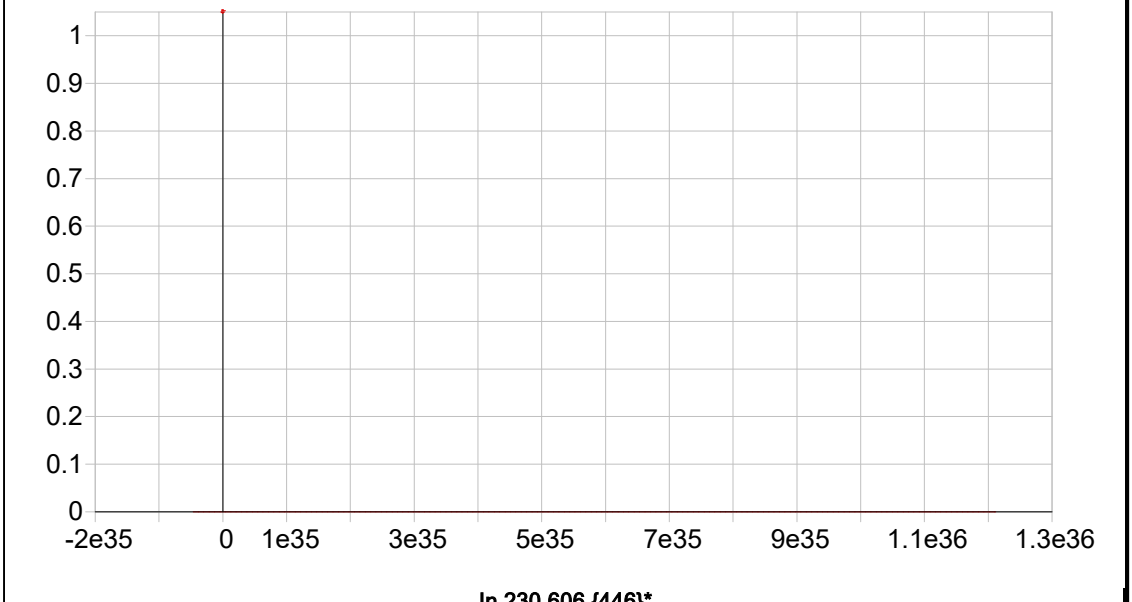
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S0 Acquired: 4/30/2025 14:28:55 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.00012	-.00005	-.00025	.00036	.00031	.00011	.04055	-.00008
Stddev	.00009	.00003	.00012	.00009	.00014	.00023	.00028	.00004
%RSD	73.584	71.671	47.698	25.709	46.453	201.07	.68896	49.221
#1	-.00017	-.00007	-.00019	.00030	.00047	.00012	.04034	-.00004
#2	-.00002	-.00001	-.00038	.00046	.00022	.00034	.04087	-.00010
#3	-.00017	-.00006	-.00016	.00031	.00023	-.00012	.04046	-.00011

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	.00000	.00005	.00011	.00006	-.00033	.00002	.00147	-.00022
Stddev	.00012	.00024	.00005	.00017	.00017	.00001	.00014	.00022
%RSD	10061.	490.20	48.362	259.75	52.995	80.976	9.6213	98.363
#1	.00012	.00030	.00015	-.00011	-.00051	.00003	.00131	.00002
#2	-.00012	.00003	.00005	.00009	-.00017	.00000	.00159	-.00030
#3	-.00000	-.00018	.00013	.00022	-.00029	.00002	.00150	-.00040

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	-.00034	-.00120	.00100	.00003	.00370	-.00011	.00395	.00022
Stddev	.00011	.00005	.00020	.00005	.00075	.00015	.00009	.00008
%RSD	31.477	3.8856	20.291	182.02	20.264	134.23	2.2557	35.010
#1	-.00047	-.00116	.00079	-.00001	.00288	.00006	.00402	.00023
#2	-.00031	-.00117	.00102	.00001	.00387	-.00023	.00385	.00030
#3	-.00026	-.00125	.00120	.00008	.00435	-.00016	.00399	.00014

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	.00018	.00292	.00012	-.00097	.00015	.00180	.00020
Stddev	.00004	.00027	.00001	.00001	.00003	.00097	.00075
%RSD	22.383	9.1297	11.863	1.4284	22.892	53.738	376.46
#1	.00019	.00308	.00013	-.00096	.00014	.00231	.00029
#2	.00013	.00307	.00010	-.00099	.00019	.00068	.00089
#3	.00021	.00262	.00013	-.00097	.00012	.00240	-.00059

Sample Name: S0 Acquired: 4/30/2025 14:28:55 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3215.7	77201.	11196.	2115.4	5273.7
Stddev	4.5	258.	60.	3.2	12.6
%RSD	.14139	.33363	.53338	.15200	.23879
#1	3213.8	77324.	11155.	2118.9	5270.5
#2	3220.9	77375.	11169.	2112.6	5287.6
#3	3212.4	76905.	11265.	2114.7	5263.0

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S1 Acquired: 4/30/2025 14:33:17 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.00060	.00161	.00167	.00080	.00599	.00704	.24188	.03603
Stddev	.00002	.00005	.00010	.00001	.00005	.00028	.00306	.00047
%RSD	3.0076	2.8716	6.0639	1.3501	.89105	4.0230	1.2638	1.2936
#1	.00061	.00167	.00177	.00079	.00594	.00736	.24524	.03583
#2	.00061	.00159	.00156	.00080	.00604	.00682	.24110	.03656
#3	.00058	.00158	.00169	.00081	.00598	.00695	.23928	.03569

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	.01064	.08914	.00137	.01553	.01027	.00032	.00864	.02193
Stddev	.00006	.00056	.00001	.00013	.00015	.00001	.00014	.00011
%RSD	.57966	.62712	.82261	.81593	1.4520	2.0160	1.6130	.49488
#1	.01056	.08974	.00137	.01541	.01036	.00032	.00880	.02189
#2	.01067	.08903	.00139	.01551	.01036	.00031	.00858	.02185
#3	.01067	.08864	.00136	.01566	.01010	.00032	.00855	.02205

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	.01461	.00111	.01469	.00495	.08990	.01020	.04291	.10194
Stddev	.00010	.00008	.00009	.00017	.00123	.00012	.00046	.00032
%RSD	.66690	6.7936	.58176	3.4759	1.3736	1.1652	1.0655	.31832
#1	.01460	.00115	.01476	.00482	.09122	.01033	.04241	.10188
#2	.01452	.00102	.01460	.00515	.08972	.01009	.04331	.10165
#3	.01471	.00114	.01472	.00489	.08877	.01018	.04302	.10229

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	.00303	.01768	.00126	-.00036	.00035	.01518	.14221
Stddev	.00015	.00018	.00002	.00002	.00010	.00054	.00015
%RSD	4.9127	1.0378	1.3513	4.8903	28.065	3.5556	.10696
#1	.00319	.01786	.00127	-.00038	.00028	.01580	.14239
#2	.00292	.01749	.00124	-.00035	.00031	.01479	.14213
#3	.00297	.01770	.00127	-.00034	.00046	.01495	.14212

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S1 Acquired: 4/30/2025 14:33:17 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3196.6	76422.	10749.	2106.9	5173.0
Stddev	3.1	472.	5.	14.9	7.0
%RSD	.09644	.61782	.04501	.70953	.13521
#1	3199.9	76180.	10743.	2093.2	5181.1
#2	3193.8	76966.	10752.	2122.8	5169.7
#3	3196.0	76120.	10751.	2104.8	5168.4

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S2 Acquired: 4/30/2025 14:37:36 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.02804	.03319	.11429	.02433	.07987	.09892	3.1842	.22608
Stddev	.00017	.00029	.00032	.00008	.00037	.00034	.0098	.00062
%RSD	.60687	.87899	.28412	.33091	.46353	.34353	.30695	.27627
#1	.02823	.03346	.11396	.02441	.07977	.09899	3.1948	.22665
#2	.02797	.03288	.11430	.02425	.07956	.09855	3.1823	.22541
#3	.02791	.03323	.11461	.02432	.08028	.09922	3.1755	.22618

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	.65209	.17008	.02171	.20231	.09588	.00265	.13223	.03897
Stddev	.00174	.00081	.00009	.00071	.00051	.00002	.00044	.00022
%RSD	.26734	.47637	.42817	.35017	.53157	.61884	.33536	.57660
#1	.65053	.17079	.02169	.20180	.09547	.00263	.13250	.03877
#2	.65178	.16920	.02162	.20201	.09571	.00265	.13172	.03895
#3	.65397	.17027	.02181	.20312	.09645	.00266	.13247	.03921

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	.14564	.04320	.02817	.04684	.81772	.01969	.28388	.38077
Stddev	.00053	.00015	.00010	.00005	.00415	.00005	.00100	.00054
%RSD	.36517	.34436	.35544	.10011	.50691	.23970	.35203	.14193
#1	.14538	.04309	.02806	.04684	.81386	.01964	.28490	.38072
#2	.14530	.04314	.02825	.04688	.81718	.01973	.28290	.38025
#3	.14625	.04337	.02821	.04679	.82210	.01969	.28384	.38133

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	.05756	.28272	.00236	.01782	.01000	.56874	5.5048
Stddev	.00004	.00163	.00005	.00007	.00006	.00134	.0181
%RSD	.07480	.57779	2.0922	.41598	.60436	.23570	.32841
#1	.05753	.28433	.00231	.01786	.00993	.57014	5.5255
#2	.05761	.28106	.00237	.01773	.01004	.56860	5.4924
#3	.05754	.28279	.00240	.01786	.01003	.56747	5.4964

Sample Name: S2 Acquired: 4/30/2025 14:37:36 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3127.4	74750.	10641.	2067.9	4977.7
Stddev	3.6	280.	60.	3.8	11.7
%RSD	.11604	.37507	.56836	.18432	.23444
#1	3128.3	74592.	10577.	2066.2	4983.7
#2	3130.6	75073.	10697.	2065.3	4985.2
#3	3123.5	74584.	10651.	2072.3	4964.3

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S3 Acquired: 4/30/2025 14:41:41 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.08824	.10078	.35673	.07585	.25205	.31103	10.611	.65378
Stddev	.00032	.00123	.00133	.00048	.00090	.00034	.046	.00279
%RSD	.36816	1.2224	.37361	.63011	.35766	.10995	.43415	.42725
#1	.08839	.10194	.35736	.07573	.25236	.31071	10.601	.65662
#2	.08786	.09949	.35519	.07543	.25104	.31100	10.662	.65104
#3	.08845	.10091	.35762	.07637	.25276	.31139	10.571	.65367

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	2.0375	.54118	.06655	.63669	.29868	.00899	.42148	.12307
Stddev	.0052	.00086	.00031	.00240	.00157	.00002	.00086	.00057
%RSD	.25723	.15845	.46816	.37692	.52689	.17830	.20495	.46464
#1	2.0362	.54161	.06691	.63547	.29794	.00898	.42239	.12371
#2	2.0331	.54173	.06633	.63515	.29761	.00901	.42067	.12289
#3	2.0433	.54019	.06642	.63946	.30049	.00898	.42140	.12261

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	.45814	.13567	.09854	.15084	2.5619	.06752	.82213	1.1888
Stddev	.00064	.00005	.00063	.00022	.0031	.00030	.00011	.0032
%RSD	.14001	.03325	.63431	.14706	.12268	.43932	.01370	.26911
#1	.45845	.13563	.09840	.15102	2.5594	.06722	.82214	1.1876
#2	.45740	.13572	.09922	.15089	2.5654	.06781	.82224	1.1864
#3	.45857	.13566	.09799	.15059	2.5609	.06754	.82201	1.1925

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	.17728	.90292	.00820	.05883	.03192	1.8005	17.998
Stddev	.00051	.00246	.00004	.00050	.00015	.0095	.143
%RSD	.28523	.27290	.43497	.85751	.45927	.52952	.79639
#1	.17714	.90420	.00816	.05883	.03196	1.7990	17.845
#2	.17687	.90448	.00822	.05832	.03176	1.8107	18.129
#3	.17785	.90008	.00822	.05933	.03204	1.7918	18.018

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S3 Acquired: 4/30/2025 14:41:41 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3140.3	77083.	11817.	2100.7	4925.2
Stddev	10.5	343.	77.	9.7	18.7
%RSD	.33580	.44481	.65581	.46411	.37882
#1	3145.5	76709.	11735.	2111.4	4929.1
#2	3147.3	77382.	11889.	2098.5	4941.7
#3	3128.2	77159.	11827.	2092.2	4905.0

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S4 Acquired: 4/30/2025 14:45:49 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.17954	.20695	.72244	.15445	.51057	.63321	21.632	1.2885
Stddev	.00128	.00371	.00365	.00133	.00424	.00231	.196	.0470
%RSD	.71237	1.7934	.50480	.86117	.83113	.36435	.90481	3.6495
#1	.17948	.20473	.71927	.15468	.51351	.63568	21.633	1.2361
#2	.17830	.20488	.72163	.15302	.50571	.63285	21.828	1.3023
#3	.18085	.21123	.72643	.15565	.51250	.63111	21.436	1.3271

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	4.1520	1.0809	.13333	1.2870	.59665	.01850	.84237	.24835
Stddev	.0218	.0127	.00066	.0053	.00336	.00037	.00618	.00387
%RSD	.52513	1.1792	.49623	.41578	.56297	1.9926	.73393	1.5583
#1	4.1288	1.0681	.13275	1.2831	.59681	.01892	.83564	.24418
#2	4.1552	1.0812	.13405	1.2849	.59321	.01837	.84368	.24903
#3	4.1720	1.0936	.13318	1.2931	.59993	.01822	.84779	.25183

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	.92356	.27341	.21230	.30647	5.0836	.14279	1.6136	2.3676
Stddev	.00460	.00154	.00846	.00214	.0381	.00504	.0612	.0105
%RSD	.49771	.56173	3.9836	.69697	.74847	3.5278	3.7904	.44401
#1	.91891	.27168	.22162	.30450	5.0401	.14833	1.5455	2.3676
#2	.92365	.27463	.21016	.30615	5.1000	.14156	1.6312	2.3570
#3	.92810	.27392	.20512	.30874	5.1108	.13848	1.6640	2.3781

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	.36219	1.8325	.01639	.12319	.06712	3.7558	36.883
Stddev	.00156	.0029	.00044	.00108	.00052	.0505	.717
%RSD	.43116	.15622	2.7069	.87645	.76782	1.3455	1.9428
#1	.36048	1.8357	.01690	.12289	.06699	3.8112	36.948
#2	.36255	1.8315	.01617	.12229	.06668	3.7441	37.564
#3	.36354	1.8303	.01609	.12438	.06769	3.7122	36.136

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S4 Acquired: 4/30/2025 14:45:49 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3066.0	74746.	11782.	2045.5	4708.0
Stddev	9.9	186.	411.	18.7	24.7
%RSD	.32364	.24894	3.4878	.91634	.52535
#1	3073.5	74785.	12223.	2059.1	4735.4
#2	3069.7	74910.	11713.	2053.3	4701.5
#3	3054.8	74544.	11410.	2024.1	4687.2

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S5 Acquired: 4/30/2025 14:50:02 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.35975	.39521	1.4182	.30734	1.0332	1.3205	43.227	2.5994
Stddev	.00197	.00595	.0070	.00287	.0082	.0024	.724	.0853
%RSD	.54865	1.5055	.49140	.93334	.79463	.17825	1.6758	3.2803
#1	.35749	.38994	1.4107	.30403	1.0237	1.3178	44.045	2.6813
#2	.36112	.39404	1.4195	.30911	1.0380	1.3212	42.965	2.6056
#3	.36065	.40166	1.4245	.30888	1.0379	1.3224	42.669	2.5111

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	8.2051	2.1731	.25547	2.5617	1.1740	.03586	1.6963	.50713
Stddev	.0366	.0300	.00236	.0133	.0082	.00082	.0177	.00900
%RSD	.44621	1.3816	.92508	.52007	.70227	2.2938	1.0462	1.7745
#1	8.1696	2.1971	.25335	2.5476	1.1651	.03503	1.7094	.51552
#2	8.2030	2.1828	.25504	2.5635	1.1813	.03587	1.7035	.50825
#3	8.2428	2.1395	.25802	2.5740	1.1758	.03668	1.6762	.49763

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	1.8235	.54382	.43074	.62630	10.000	.28957	3.3276	4.7032
Stddev	.0084	.00113	.01770	.00485	.026	.01156	.1318	.0271
%RSD	.46009	.20740	4.1085	.77480	.26202	3.9937	3.9606	.57651
#1	1.8143	.54324	.41323	.63018	10.024	.27857	3.4572	4.6721
#2	1.8254	.54310	.43038	.62785	10.005	.28853	3.3318	4.7153
#3	1.8308	.54512	.44862	.62086	9.9720	.30162	3.1937	4.7221

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	.71311	3.7593	.03277	.24287	.13515	8.0049	72.786
Stddev	.00299	.0149	.00123	.00126	.00077	.0774	2.074
%RSD	.41949	.39501	3.7563	.51826	.57243	.96700	2.8500
#1	.71004	3.7634	.03159	.24152	.13427	7.9239	74.672
#2	.71329	3.7718	.03268	.24309	.13547	8.0127	70.564
#3	.71601	3.7429	.03405	.24400	.13571	8.0781	73.123

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: S5 Acquired: 4/30/2025 14:50:02 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3015.5	75298.	11436.	1966.6	4582.3
Stddev	12.9	778.	341.	8.0	16.3
%RSD	.42918	1.0332	2.9834	.40559	.35586
#1	3030.4	75928.	11095.	1957.8	4599.1
#2	3008.9	75538.	11435.	1968.5	4581.1
#3	3007.2	74429.	11777.	1973.4	4566.5

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICV01 Acquired: 4/30/2025 16:18:54 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.9858427	1.079147	.9871370	1.012976	.9728841	2.318964
Stddev	.0054513	.004719	.0037739	.001815	.0020042	.005038
%RSD	.5529614	.4372617	.3823108	.1791661	.2060048	.2172363
#1	.9799292	1.079363	.9847539	1.012223	.9745892	2.317066
#2	.9906675	1.083755	.9851691	1.011658	.9733866	2.324675
#3	.9869313	1.074325	.9914882	1.015046	.9706765	2.315151

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5365448	.4725846	.4999578	9.270722	.5097931	.4870486
Stddev	.0005259	.0022715	.0004554	.003706	.0006341	.0012391
%RSD	.0980067	.4806585	.0910839	.0399699	.1243916	.2544055
#1	.5359439	.4727187	.4995353	9.269979	.5098203	.4862881
#2	.5367692	.4702490	.4998980	9.267445	.5091458	.4863791
#3	.5369211	.4747861	.5004402	9.274743	.5104132	.4884784

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4949556	9.188708	.4681124	5.514722	.5261351	.2619556
Stddev	.0003583	.016864	.0012971	.025605	.0009023	.0007921
%RSD	.0723836	.1835251	.2770852	.4643023	.1714990	.3023946
#1	.4951548	9.193229	.4668978	5.485232	.5250983	.2613759
#2	.4951699	9.202850	.4679610	5.531305	.5265640	.2628582
#3	.4945420	9.170045	.4694786	5.527629	.5267429	.2616328

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.914151	.4554735	.9688831	10.01864	2.566328	2.498126
Stddev	.037057	.0026275	.0024136	.05036	.014190	.002377
%RSD	.3737751	.5768805	.2491072	.5026885	.5529490	.0951493
#1	9.930076	.4581644	.9682764	10.02996	2.562501	2.495844
#2	9.940583	.4553419	.9668308	10.06237	2.554444	2.500588
#3	9.871794	.4529143	.9715421	9.96358	2.582040	2.497947

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICV01 Acquired: 4/30/2025 16:18:54 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	2.449665	2.331460	F 2.056221	F .0028410	F -.013092	F -.001641
Stddev	.003840	.001808	.007222	.0016092	.001462	.001113
%RSD	.1567756	.0775674	.3512456	56.64187	11.16505	67.81339
#1	2.445465	2.332687	2.063170	.0043666	-.013739	-.000461
#2	2.450533	2.332311	2.056741	.0011596	-.014119	-.001790
#3	2.452997	2.329383	2.048753	.0029966	-.011419	-.002673

Elem	Sr4077
Units	ppm
Avg	F -.007668
Stddev	.000066
%RSD	.8601482
#1	-.007683
#2	-.007724
#3	-.007595

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3100.679	76044.53	11736.76	2035.954	4934.639
Stddev	5.953	187.73	42.28	1.784	9.165
%RSD	.1919893	.2468751	.3602780	.0876436	.1857263
#1	3103.105	75828.06	11716.99	2037.954	4943.411
#2	3093.896	76142.83	11785.31	2034.524	4925.126
#3	3105.035	76162.70	11707.98	2035.385	4935.381

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: LLICV01 Acquired: 4/30/2025 16:28:50 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225522	.0455533	.0123914	.0163427	.0555490	.0953553
Stddev	.0004162	.0009132	.0016559	.0032580	.0025184	.0025331
%RSD	1.845332	2.004745	13.36307	19.93531	4.533703	2.656458
#1	.0227670	.0454620	.0110551	.0132869	.0531697	.0934495
#2	.0220725	.0446893	.0118751	.0197708	.0581867	.0943868
#3	.0228171	.0465088	.0142438	.0159704	.0552907	.0982298

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0935272	.0064289	.0065832	2.041176	.0097621	.0309319
Stddev	.0010061	.0000803	.0001044	.016162	.0002198	.0003057
%RSD	1.075765	1.248393	1.585200	.7917781	2.251559	.9882852
#1	.0943791	.0064866	.0067018	2.043308	.0097237	.0311088
#2	.0937852	.0063373	.0065053	2.056165	.0099986	.0305789
#3	.0924171	.0064629	.0065426	2.024054	.0095641	.0311080

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0232570	.0928421	.0212723	2.182481	.0417586	.0107385
Stddev	.0003096	.0022821	.0001013	.032231	.0002016	.0000688
%RSD	1.331406	2.458068	.4760200	1.476808	.4828611	.6405225
#1	.0229629	.0948319	.0213861	2.217624	.0415905	.0108098
#2	.0235802	.0933435	.0211921	2.154300	.0417033	.0107332
#3	.0232278	.0903510	.0212386	2.175518	.0419822	.0106725

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.740418	.0401842	.0425256	1.969281	.1046311	.2197566
Stddev	.022505	.0017801	.0003670	.010743	.0014562	.0003496
%RSD	1.293070	4.429861	.8629467	.5455535	1.391719	.1590617
#1	1.720057	.0421504	.0428318	1.963405	.1059164	.2200701
#2	1.764582	.0397199	.0426263	1.981681	.1030496	.2198201
#3	1.736615	.0386822	.0421188	1.962758	.1049274	.2193797

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: LLICV01 Acquired: 4/30/2025 16:28:50 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0410845	.0407745	.3875188	F .0251636	.0191848	F .0153533
Stddev	.0004585	.0002625	.0161484	.0059152	.0016541	.0012425
%RSD	1.115875	.6438301	4.167135	23.50701	8.621951	8.092445
#1	.0405583	.0410142	.3885309	.0190995	.0175900	.0139205
#2	.0413979	.0408154	.4031373	.0254738	.0190720	.0160060
#3	.0412973	.0404939	.3708881	.0309177	.0208924	.0161334

Elem	Sr4077
Units	ppm
Avg	.0202255
Stddev	.0000856
%RSD	.4230124
#1	.0202192
#2	.0201433
#3	.0203140

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3147.042	78332.96	11682.00	2101.502	5113.267
Stddev	9.869	469.76	112.19	26.398	9.811
%RSD	.3136054	.5996941	.9603797	1.256161	.1918777
#1	3157.841	78578.37	11556.66	2099.748	5115.913
#2	3144.795	77791.32	11716.33	2076.024	5121.484
#3	3138.490	78629.19	11773.02	2128.733	5102.405

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICB01 Acquired: 4/30/2025 16:36:09 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0008624	.0001460	.0015700	-.004577	-.000255	.0002393	-.003787
Stddev	.0007681	.0020284	.0009278	.001170	.001431	.0047498	.001385
%RSD	89.06167	1388.883	59.09793	25.55265	560.6366	1984.678	36.58347
#1	.0001469	-.000298	.0017167	-.003230	-.001789	-.005244	-.005361
#2	.0016741	.002360	.0005775	-.005162	.001043	.003099	-.002752
#3	.0007662	-.001624	.0024156	-.005339	-.000019	.002862	-.003247

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000082	-.000032	.0160992	-.000563	-.000137	.0001447	-.006342
Stddev	.0000344	.000038	.0056536	.000596	.000050	.0001438	.002348
%RSD	419.0605	119.2319	35.11731	105.8124	36.91579	99.35454	37.02224
#1	-.000024	-.000067	.0133863	.000074	-.000181	.0001058	-.003701
#2	.000045	.000008	.0225979	-.000658	-.000082	.0000244	-.008194
#3	.000004	-.000037	.0123133	-.001105	-.000147	.0003039	-.007131

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014240	-.003489	-.000188	.0000489	-.023092	.0000441	-.000439
Stddev	.0006730	.015301	.000349	.0000424	.024004	.0008799	.000433
%RSD	47.26228	438.5434	185.9023	86.52621	103.9472	1995.744	98.50672
#1	.0007029	-.007591	-.000562	.0000228	-.045182	.0005722	-.000636
#2	.0020355	.013445	.000127	.0000978	.002451	.0005318	-.000739
#3	.0015337	-.016321	-.000128	.0000263	-.026545	-.000972	.000057

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0874616	-.008193	-.000069	-.000837	-.000075	-.000554	-.003567
Stddev	.0296932	.000646	.000182	.000677	.000489	.007791	.004343
%RSD	33.94992	7.889721	262.8997	80.85117	652.5625	1406.099	121.7566
#1	.0673520	-.008940	-.000210	-.001375	-.000584	-.009306	-.006462
#2	.0734667	-.007832	.000136	-.000077	-.000031	.005626	.001427
#3	.1215661	-.007809	-.000133	-.001058	.000391	.002018	-.005666

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICB01 Acquired: 4/30/2025 16:36:09 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.003033	-.003902	.0000111
Stddev	.006399	.000338	.0000229
%RSD	210.9732	8.662440	206.5803
#1	.001835	-.004237	.0000130
#2	-.010282	-.003561	-.000013
#3	-.000653	-.003907	.000033

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3143.815	76678.93	11850.81	2098.657	5133.764
Stddev	3.244	346.47	64.77	10.673	11.587
%RSD	.1031803	.4518488	.5465495	.5085581	.2256978
#1	3146.751	76963.13	11845.74	2110.517	5146.676
#2	3144.361	76292.97	11917.97	2089.825	5124.272
#3	3140.333	76780.68	11788.73	2095.630	5130.345

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CRI01 Acquired: 4/30/2025 16:41:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0218802	.0449091	.0134511	.0164952	.0545742	.0974516
Stddev	.0033429	.0011949	.0002373	.0041016	.0011670	.0059608
%RSD	15.27808	2.660677	1.764496	24.86523	2.138433	6.116662
#1	.0189160	.0437987	.0136855	.0152263	.0532292	.0961818
#2	.0255036	.0447551	.0134568	.0210813	.0553192	.1039449
#3	.0212209	.0461736	.0132109	.0131781	.0551742	.0922280

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0905673	.0062955	.0063362	2.028819	.0098818	.0303487
Stddev	.0021612	.0000187	.0000371	.003206	.0004009	.0001603
%RSD	2.386305	.2975577	.5857944	.1580159	4.056904	.5283400
#1	.0919075	.0062764	.0063078	2.029962	.0095993	.0302693
#2	.0917204	.0062963	.0063782	2.025198	.0103407	.0302436
#3	.0880741	.0063139	.0063226	2.031297	.0097055	.0305333

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0232433	.0909186	.0210433	2.139305	.0413383	.0107813
Stddev	.0001678	.0038623	.0001504	.023740	.0002488	.0000059
%RSD	.7220162	4.248084	.7145281	1.109694	.6017868	.0552315
#1	.0231674	.0938388	.0209393	2.112324	.0411326	.0107744
#2	.0231268	.0923776	.0209750	2.156986	.0412674	.0107847
#3	.0234357	.0865393	.0212157	2.148607	.0416148	.0107848

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.744331	.0388726	.0428166	2.028686	.1021693	.2196601
Stddev	.011013	.0014966	.0009207	.012352	.0008714	.0001167
%RSD	.6313584	3.849922	2.150409	.6088766	.8529173	.0531253
#1	1.753387	.0371735	.0436961	2.031922	.1015862	.2196086
#2	1.732071	.0394490	.0428942	2.015038	.1017507	.2195780
#3	1.747535	.0399952	.0418595	2.039098	.1031710	.2197937

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CRI01 Acquired: 4/30/2025 16:41:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0408105	.0403889	.3886708	F .0272852	.0169071	.0148486
Stddev	.0009002	.0006881	.0027745	.0017699	.0034258	.0001423
%RSD	2.205856	1.703704	.7138437	6.486733	20.26252	.9584651
#1	.0406979	.0402727	.3873450	.0254604	.0167125	.0149891
#2	.0417617	.0411278	.3868080	.0289946	.0135828	.0147045
#3	.0399718	.0397664	.3918595	.0274008	.0204261	.0148522

Elem	Sr4077
Units	ppm
Avg	.0200630
Stddev	.0001051
%RSD	.5239392
#1	.0199816
#2	.0200256
#3	.0201817

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3189.276	78075.48	11742.41	2092.646	5216.563
Stddev	6.480	373.64	68.44	3.278	12.716
%RSD	.2031732	.4785639	.5828249	.1566500	.2437550
#1	3196.368	77720.18	11780.86	2088.869	5229.890
#2	3187.795	78041.16	11663.39	2094.743	5215.237
#3	3183.665	78465.09	11782.97	2094.327	5204.563

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSA01 Acquired: 4/30/2025 16:46:12 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0059164	.0110522	-.000962	-.001869	-.003454	237.6148	.0020476
Stddev	.0004693	.0032530	.001164	.006704	.000863	.4509	.0011783
%RSD	7.931961	29.43261	120.9658	358.7136	24.98095	.1897450	57.54230
#1	.0063992	.0110098	-.001564	-.006755	-.002638	238.0892	.0007795
#2	.0054619	.0143262	.000379	-.004626	-.003367	237.5633	.0022550
#3	.0058881	.0078207	-.001702	.005774	-.004357	237.1919	.0031085

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005709	-.002342	229.3593	.0564373	.0007787	.0018482	101.9302
Stddev	.0000220	.000058	.7657	.0007301	.0005867	.0008761	.1224
%RSD	3.849936	2.473555	.3338238	1.293705	75.34953	47.40527	.1201126
#1	.0005522	-.002351	229.6982	.0572436	.0001973	.0012657	102.0607
#2	.0005654	-.002281	229.8970	.0558210	.0007681	.0014231	101.8179
#3	.0005951	-.002395	228.4827	.0562472	.0013707	.0028558	101.9118

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011952	244.8210	.0018576	.0019131	-.008384	.0013511	.0031825
Stddev	.0002838	.8885	.0007026	.0000837	.015176	.0021471	.0003099
%RSD	23.74225	.3628988	37.82159	4.374169	181.0138	158.9106	9.736398
#1	.0015005	244.9569	.0014483	.0018599	-.020048	.0025189	.0029025
#2	.0011454	245.6336	.0014557	.0020096	.008774	-.001127	.0035154
#3	.0009396	243.8724	.0026689	.0018699	-.013878	.002661	.0031296

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1306737	.0313725	-.000055	-.006065	-.002349	.0075868	.0015966
Stddev	.0050864	.0056881	.000400	.002715	.000589	.0048922	.0032248
%RSD	3.892474	18.13095	731.5204	44.77408	25.08214	64.48265	201.9850
#1	.1350378	.0307277	-.000013	-.003193	-.002883	.0129171	.0053202
#2	.1250876	.0260342	-.000474	-.006411	-.002448	.0065418	-.000291
#3	.1318958	.0373555	.000323	-.008591	-.001717	.0033016	-.000240

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSA01 Acquired: 4/30/2025 16:46:12 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.019221	.0011094	-.001473
Stddev	.009999	.0009625	.000220
%RSD	52.02111	86.75660	14.91881
#1	-.011986	.0009491	-.001480
#2	-.015046	.0021420	-.001250
#3	-.030632	.0002372	-.001690

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2840.157	68216.12	11854.27	1881.825	4190.127
Stddev	20.967	427.59	88.92	11.986	18.797
%RSD	.7382467	.6268238	.7501080	.6369559	.4486088
#1	2818.463	67731.97	11775.12	1870.149	4168.934
#2	2841.696	68374.35	11837.22	1881.226	4196.666
#3	2860.313	68542.05	11950.48	1894.100	4204.782

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSAB01 Acquired: 4/30/2025 17:04:57 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.1169093	.1178450	.0508644	.0509079	.6327813	233.6859
Stddev	.0069987	.0019541	.0051073	.0036945	.0010134	.3228
%RSD	5.986463	1.658217	10.04101	7.257200	.1601533	.1381488
#1	.1241088	.1174139	.0483134	.0468647	.6316524	233.5124
#2	.1164888	.1161425	.0475352	.0517511	.6330787	233.4870
#3	.1101303	.1199787	.0567447	.0541078	.6336127	234.0584

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4957781	.5136703	1.086534	225.3288	.5999509	.5309263
Stddev	.0013267	.0038155	.000970	.3200	.0021993	.0003667
%RSD	.2675920	.7427841	.0892562	.1419963	.3665857	.0690715
#1	.4957445	.5104469	1.085636	224.9628	.6023356	.5311179
#2	.4971213	.5126810	1.087562	225.4677	.5980022	.5311575
#3	.4944686	.5178830	1.086404	225.5558	.5995150	.5305035

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5019567	97.71409	.4958196	242.1280	1.049807	.2054144
Stddev	.0017174	.85594	.0008610	.5976	.001820	.0003974
%RSD	.3421410	.8759599	.1736474	.2468323	.1733759	.1934484
#1	.4999947	98.67210	.4948301	241.5406	1.048536	.2057879
#2	.5031872	97.44557	.4963982	242.1080	1.051892	.2049968
#3	.5026884	97.02461	.4962304	242.7354	1.048994	.2054585

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.015600	.4891611	1.085078	.1094865	.8694651	.9990055
Stddev	.018194	.0015349	.004927	.0234077	.0134366	.0210814
%RSD	116.6242	.3137895	.4540762	21.37955	1.545392	2.110235
#1	-.033311	.4874009	1.079429	.0834216	.8574764	.9762644
#2	.003040	.4898617	1.087316	.1287148	.8669303	1.002856
#3	-.016529	.4902207	1.088490	.1163231	.8839886	1.017896

Sample Name: ICSAB01 Acquired: 4/30/2025 17:04:57 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.023630	F .8450858	F .8485745	F .0008334	F -.013569	F -.000304
Stddev	.020297	.0057957	.0121376	.0036045	.007671	.001700
%RSD	1.982807	.6858144	1.430352	432.5083	56.53199	559.3069
#1	1.002484	.8398666	.8623208	-.000807	-.007584	.001636
#2	1.025452	.8440677	.8393349	-.001659	-.022216	-.001015
#3	1.042955	.8513231	.8440677	.004966	-.010907	-.001533

Elem	Sr4077
Units	ppm
Avg	F -.000170
Stddev	.000666
%RSD	392.1270
#1	-.000935
#2	.000146
#3	.000279

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2856.564	67631.42	11508.81	1862.466	4218.491
Stddev	6.150	444.31	55.03	4.703	3.871
%RSD	.2152829	.6569551	.4781625	.2525377	.0917692
#1	2863.330	67124.89	11547.13	1865.354	4222.784
#2	2855.047	67955.27	11533.55	1865.006	4217.424
#3	2851.314	67814.10	11445.75	1857.039	4215.265

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSADLX20 Acquired: 4/30/2025 17:09:07 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011871	.0007684	.0009395	-.003917	.0002270	11.49748	.0003514
Stddev	.0020630	.0020349	.0020796	.003092	.0007466	.02361	.0008123
%RSD	173.7863	264.8297	221.3480	78.94275	328.9241	.2053689	231.1556
#1	.0035492	-.000805	.0000238	-.000796	-.000629	11.47692	-.000565
#2	.0002741	.000043	.0033199	-.003975	.000746	11.52327	.000637
#3	-.000262	.003066	-.000525	-.006980	.000564	11.49226	.000982

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001297	-.000180	11.63770	.0020087	.0001550	.0003584	4.919524
Stddev	.0000234	.000067	.05640	.0002373	.0001698	.0003535	.045529
%RSD	18.00950	37.07844	.4846363	11.81399	109.5295	98.65832	.9254661
#1	.0001251	-.000174	11.58058	.0018004	.0003509	.0003788	4.965806
#2	.0001551	-.000250	11.69335	.0022671	.0000630	.0007012	4.874788
#3	.0001090	-.000117	11.63918	.0019586	.0000511	-.000005	4.917979

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002986	11.96619	.0002271	-.000085	-.077995	-.001401	-.000395
Stddev	.0002572	.07740	.0003551	.000144	.013304	.001962	.000244
%RSD	86.12783	.6468104	156.3489	170.4024	17.05687	140.0392	61.73279
#1	.0000810	11.88475	.0002130	-.000251	-.066985	-.003130	-.000222
#2	.0002324	12.03878	-.000121	-.000015	-.074222	-.001803	-.000674
#3	.0005825	11.97504	.000589	.000012	-.092778	.000731	-.000289

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0642101	-.007529	-.000194	-.002762	-.000094	-.004882	.0023886
Stddev	.0292153	.000939	.000310	.000163	.000314	.007388	.0009969
%RSD	45.49948	12.47280	159.4175	5.905690	334.2187	151.3350	41.73541
#1	.0864314	-.006523	-.000510	-.002574	-.000052	-.012194	.0028604
#2	.0311178	-.007681	.000110	-.002863	.000197	.002579	.0012434
#3	.0750811	-.008383	-.000183	-.002850	-.000427	-.005030	.0030619

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSADLX20 Acquired: 4/30/2025 17:09:07 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002352	-.005505	.0000243
Stddev	.002967	.001026	.0000528
%RSD	126.1651	18.63993	216.7402
#1	-.003232	-.004560	.0000829
#2	-.004779	-.006596	-.000020
#3	.000956	-.005357	.000010

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3145.647	75115.37	12156.91	2067.000	5004.474
Stddev	2.082	91.41	106.92	17.252	6.948
%RSD	.0661839	.1216944	.8795254	.8346306	.1388265
#1	3148.051	75051.95	12270.31	2047.699	5010.752
#2	3144.455	75074.01	12057.92	2072.379	5005.661
#3	3144.435	75220.15	12142.51	2080.921	4997.010

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSABDLX20 Acquired: 4/30/2025 17:13:52 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043409	.0053210	.0021443	-.001408	.0316000	11.16640	.0239125
Stddev	.0006479	.0013069	.0011258	.002900	.0022788	.06379	.0015337
%RSD	14.92432	24.56011	52.50040	206.0174	7.211498	.5712550	6.413653
#1	.0040290	.0061693	.0033346	-.004717	.0293632	11.12170	.0236153
#2	.0050857	.0059778	.0010967	-.000199	.0315182	11.13806	.0225492
#3	.0039079	.0038161	.0020015	.000692	.0339187	11.23945	.0255730

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0259671	.0538927	11.33669	.0306572	.0257468	.0271026	4.688285
Stddev	.0001255	.0003646	.08872	.0001545	.0000369	.0001934	.031358
%RSD	.4831823	.6765961	.7825754	.5038782	.1434386	.7135019	.6688574
#1	.0258324	.0536023	11.28272	.0306889	.0257512	.0272445	4.658650
#2	.0259882	.0543019	11.28827	.0304893	.0257079	.0271810	4.685084
#3	.0260807	.0537738	11.43908	.0307933	.0257814	.0268823	4.721120

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0238557	11.61952	.0530314	.0092938	-.024545	.0246897	.0528129
Stddev	.0003698	.11433	.0003704	.0001318	.009074	.0004862	.0002250
%RSD	1.550197	.9839063	.6984781	1.417736	36.97116	1.969065	.4260782
#1	.0235142	11.55256	.0526344	.0092793	-.019105	.0244951	.0528210
#2	.0238044	11.55447	.0533678	.0091699	-.019508	.0252430	.0530338
#3	.0242485	11.75153	.0530919	.0094322	-.035020	.0243310	.0525840

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1155348	.0402823	.0532337	.0698735	.0498957	.0463442	.0045197
Stddev	.0118950	.0008950	.0006823	.0006582	.0011474	.0049739	.0042228
%RSD	10.29556	2.221769	1.281668	.9419475	2.299520	10.73251	93.43046
#1	.1118476	.0396313	.0526330	.0698111	.0488832	.0512021	.0039278
#2	.1288367	.0399127	.0539755	.0705606	.0511419	.0465685	.0006241
#3	.1059200	.0413029	.0530926	.0692487	.0496620	.0412619	.0090072

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: ICSABDLX20 Acquired: 4/30/2025 17:13:52 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0162007	-.003130	.0003853
Stddev	.0022129	.000234	.0001175
%RSD	13.65944	7.489886	30.48494
#1	.0164485	-.002981	.0005187
#2	.0182793	-.003401	.0003393
#3	.0138743	-.003009	.0002977

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3150.493	75465.84	12014.70	2057.657	4990.776
Stddev	14.354	286.52	30.26	3.751	16.953
%RSD	.4555981	.3796651	.2518724	.1822850	.3396844
#1	3140.152	75337.18	12031.00	2060.354	4983.122
#2	3166.881	75266.21	12033.31	2053.373	5010.206
#3	3144.447	75794.14	11979.78	2059.242	4979.000

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV01 Acquired: 4/30/2025 17:27:38 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.997317	5.238501	5.061511	5.010407	4.974855	9.837529	9.809652
Stddev	.012677	.008630	.016218	.008105	.003730	.036609	.086178
%RSD	.2536747	.1647381	.3204196	.1617688	.0749705	.3721388	.8785046
#1	5.011559	5.248463	5.076832	5.016761	4.973108	9.879791	9.879270
#2	4.987266	5.233735	5.063178	5.001279	4.972320	9.817237	9.713267
#3	4.993126	5.233306	5.044524	5.013182	4.979138	9.815559	9.836420

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2391591	2.528108	24.27469	1.019738	2.510098	1.254908	5.128783
Stddev	.0015572	.016447	.09835	.001729	.010259	.003319	.019911
%RSD	.6511181	.6505673	.4051434	.1695897	.4087187	.2644595	.3882254
#1	.2405652	2.546232	24.38029	1.018348	2.521639	1.257732	5.109096
#2	.2394265	2.523960	24.25807	1.021675	2.506643	1.255739	5.128342
#3	.2374854	2.514131	24.18572	1.019192	2.502012	1.251253	5.148911

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.429048	24.10463	2.516198	1.245530	25.41261	2.454782	2.505368
Stddev	.007593	.12567	.011975	.002986	.21780	.007211	.005747
%RSD	.3125973	.5213660	.4759054	.2397680	.8570437	.2937617	.2293761
#1	2.437621	24.23777	2.528168	1.245987	25.18854	2.461572	2.506261
#2	2.426350	24.08804	2.516209	1.248262	25.42576	2.455560	2.510616
#3	2.423172	23.98807	2.504218	1.242342	25.62354	2.447213	2.499227

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.67301	4.704640	5.047596	5.067570	4.915216	5.113063	4.874497
Stddev	.21467	.038141	.004339	.025173	.009166	.032297	.017726
%RSD	.8361546	.8107057	.0859526	.4967495	.1864837	.6316566	.3636512
#1	25.44214	4.740123	5.052572	5.094614	4.925495	5.077818	4.892957
#2	25.71032	4.709492	5.044610	5.063276	4.907890	5.120130	4.872923
#3	25.86659	4.664306	5.045605	5.044821	4.912264	5.141242	4.857610

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV01 Acquired: 4/30/2025 17:27:38 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.953110	4.839831	4.915972
Stddev	.025995	.013343	.081349
%RSD	.5248290	.2756892	1.654797
#1	4.978948	4.846346	4.837180
#2	4.953423	4.824482	4.999657
#3	4.926960	4.848664	4.911077

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3085.681	76325.76	12323.76	2037.097	4749.285
Stddev	7.404	164.99	116.00	5.230	22.033
%RSD	.2399388	.2161614	.9412811	.2567227	.4639300
#1	3078.608	76285.09	12208.07	2034.101	4724.726
#2	3085.058	76184.92	12323.15	2034.055	4755.810
#3	3093.376	76507.29	12440.07	2043.136	4767.319

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB01 Acquired: 4/30/2025 17:38:27 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001991	-.000491	.0007135	-.003757	.0002464	-.009020	.0049998
Stddev	.002655	.000360	.0007305	.005312	.0001675	.005965	.0012723
%RSD	133.3513	73.39128	102.3912	141.4059	67.97816	66.12919	25.44619
#1	.001069	-.000840	.0005172	-.000364	.0001781	-.013046	.0063175
#2	-.003677	-.000121	.0015221	-.009879	.0004373	-.002167	.0037784
#3	-.003365	-.000510	.0001011	-.001028	.0001239	-.011845	.0049035

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000519	.0000370	.0040588	-.001069	-.000010	.0000386	-.006917
Stddev	.0000830	.0000832	.0160420	.000147	.000084	.0002779	.003350
%RSD	159.8306	224.5451	395.2434	13.73261	835.6409	719.6841	48.43235
#1	.0000613	.0000961	-.013005	-.001097	.000073	-.000270	-.008069
#2	-.000035	-.000058	.018833	-.000911	-.000096	.000270	-.003143
#3	.000130	.000073	.006348	-.001201	-.000007	.000116	-.009539

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001796	-.012594	.0000144	-.000310	-.076572	-.000037	-.000528
Stddev	.0005112	.004272	.0002833	.000172	.007453	.001830	.000053
%RSD	284.7138	33.91911	1968.088	55.50661	9.733505	4967.440	10.06730
#1	-.000290	-.010806	-.000183	-.000341	-.068731	-.002060	-.000590
#2	.000105	-.017470	.000339	-.000124	-.083565	.000448	-.000500
#3	.000724	-.009507	-.000113	-.000464	-.077420	.001502	-.000495

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0635860	-.002996	-.000157	-.001700	.0007556	.0011355	.0003068
Stddev	.0160470	.000578	.000128	.000320	.0003292	.0089751	.0023074
%RSD	25.23673	19.30897	81.47993	18.83204	43.56437	790.3868	752.0615
#1	.0516655	-.003023	-.000013	-.002053	.0004531	.0096541	-.002338
#2	.0572608	-.002404	-.000201	-.001616	.0007075	.0019878	.001353
#3	.0818318	-.003560	-.000256	-.001430	.0011062	-.008235	.001906

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB01 Acquired: 4/30/2025 17:38:27 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.004789	-.004891	.0000539
Stddev	.003458	.000768	.0000736
%RSD	72.21143	15.69309	136.5749
#1	-.005275	-.005730	.0000154
#2	-.001114	-.004718	.0001387
#3	-.007979	-.004224	.0000075

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3184.283	76020.46	11144.07	2087.714	5116.869
Stddev	9.179	356.18	30.32	6.421	22.378
%RSD	.2882474	.4685361	.2720304	.3075800	.4373316
#1	3194.695	75801.39	11143.32	2081.978	5141.710
#2	3180.788	75828.54	11174.76	2086.513	5098.289
#3	3177.365	76431.44	11114.15	2094.651	5110.607

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167758BL Acquired: 4/30/2025 17:43:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0010369	-.000793	.0011620	-.005094	.0011259	-.006722	.0034815
Stddev	.0015898	.002634	.0002175	.001736	.0019448	.007793	.0014067
%RSD	153.3288	332.1777	18.71885	34.08435	172.7241	115.9260	40.40380
#1	.0023838	-.003785	.0009130	-.003139	.0030263	-.000438	.0045143
#2	.0014436	.001181	.0012576	-.005687	-.000860	-.004287	.0018794
#3	-.000717	.000225	.0013152	-.006456	.001212	-.015442	.0040509

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000052	-.000066	.0070808	-.000375	-.000184	-.000256	.0027676
Stddev	.0000269	.000112	.0073101	.000218	.000305	.000301	.0032429
%RSD	513.2796	171.1126	103.2378	58.00682	166.2380	117.7926	117.1709
#1	-.000016	.000024	.0112746	-.000126	-.000206	-.000543	.0003096
#2	-.000004	-.000030	.0113279	-.000472	-.000477	.000057	.0015503
#3	.000036	-.000192	-.001360	-.000527	.000132	-.000281	.0064430

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003200	.0049816	.0001162	-.000256	-.067935	.0003522	-.000938
Stddev	.0004438	.0042006	.0001598	.000179	.014480	.0007176	.000199
%RSD	138.6711	84.32266	137.5016	70.13988	21.31382	203.7337	21.26130
#1	.0008196	.0072138	.0001412	-.000243	-.057226	-.000399	-.000820
#2	.0001691	.0001361	.0002620	-.000083	-.084409	.001030	-.000826
#3	-.000029	.0075948	-.000055	-.000441	-.062170	.000426	-.001168

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0429992	-.005038	-.000227	-.002294	.0004513	-.001911	.0017860
Stddev	.0099112	.000458	.000093	.000411	.0008450	.012851	.0014165
%RSD	23.04968	9.084867	40.87056	17.89357	187.2422	672.3231	79.31222
#1	.0463081	-.004518	-.000152	-.002166	.0004572	.011698	.0031620
#2	.0508325	-.005382	-.000198	-.001964	.0012934	-.003596	.0003322
#3	.0318568	-.005214	-.000330	-.002754	-.000397	-.013837	.0018638

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167758BL Acquired: 4/30/2025 17:43:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.003447	-.005039	-.000082
Stddev	.003231	.000319	.000076
%RSD	93.72697	6.338649	92.33040
#1	-.000409	-.005097	-.000165
#2	-.003092	-.005326	-.000017
#3	-.006841	-.004695	-.000064

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3175.136	75004.02	11493.90	2096.344	5094.719
Stddev	7.910	19.44	58.66	7.827	12.287
%RSD	.2491155	.0259142	.5103780	.3733779	.2411662
#1	3169.478	74988.37	11447.27	2103.830	5087.213
#2	3184.174	75025.78	11474.67	2088.215	5108.898
#3	3171.755	74997.92	11559.77	2096.988	5088.045

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167758BS Acquired: 4/30/2025 17:47:40 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7905304	2.118412	1.011173	1.973581	.8088441	1.876484
Stddev	.0016260	.006780	.004390	.007902	.0029626	.010064
%RSD	.2056841	.3200355	.4341264	.4003747	.3662729	.5363339
#1	.7895376	2.113819	1.006176	1.981890	.8122304	1.887044
#2	.7896468	2.115219	1.012936	1.966162	.8075714	1.875404
#3	.7924069	2.126199	1.014408	1.972691	.8067307	1.867002

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1847159	.2096765	.2058778	1.006868	.4126433	.1968060
Stddev	.0006015	.0001818	.0003781	.008585	.0017256	.0003173
%RSD	.3256078	.0867125	.1836392	.8526417	.4181822	.1612195
#1	.1854088	.2098388	.2054587	1.016708	.4109206	.1965683
#2	.1844106	.2094801	.2061931	1.000906	.4143718	.1971663
#3	.1843283	.2097108	.2059817	1.002990	.4126376	.1966832

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2977850	2.845593	.1957928	1.940559	.4994762	.0754667
Stddev	.0004889	.021873	.0010768	.019851	.0018685	.0002225
%RSD	.1641678	.7686733	.5499601	1.022945	.3740972	.2948211
#1	.2975104	2.828898	.1969822	1.961833	.4973419	.0755850
#2	.2974952	2.870354	.1948842	1.922531	.5008169	.0752101
#3	.2983494	2.837527	.1955121	1.937313	.5002698	.0756051

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.430504	.2857401	.2228427	9.051442	.3007470	.4086499
Stddev	.008839	.0016435	.0011639	.052150	.0003084	.0005425
%RSD	.3636621	.5751649	.5223150	.5761551	.1025623	.1327453
#1	2.420384	.2876345	.2232865	8.999311	.3010868	.4088640
#2	2.436709	.2846953	.2215221	9.103612	.3006696	.4080331
#3	2.434419	.2848906	.2237194	9.051403	.3004846	.4090527

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167758BS Acquired: 4/30/2025 17:47:40 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7289604	.1942723	F .7922737	6.187447	F -.010906	.1847546
Stddev	.0009869	.0009824	.0072594	.010168	.006656	.0008251
%RSD	.1353783	.5056832	.9162739	.1643269	61.03018	.4466085
#1	.7281168	.1936807	.7852117	6.195806	-.012595	.1852774
#2	.7300457	.1937299	.7997156	6.190405	-.003568	.1838034
#3	.7287189	.1954063	.7918938	6.176128	-.016554	.1851829

Elem	Sr4077
Units	ppm
Avg	.1865917
Stddev	.0003211
%RSD	.1720941
#1	.1866117
#2	.1869023
#3	.1862610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3128.755	74815.29	11098.65	2086.107	4900.563
Stddev	6.460	200.49	22.50	9.809	14.707
%RSD	.2064844	.2679748	.2027712	.4702012	.3001007
#1	3125.185	75024.86	11073.86	2097.429	4908.698
#2	3124.868	74625.32	11104.30	2080.190	4883.586
#3	3136.213	74795.70	11117.80	2080.701	4909.405

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1833-02 Acquired: 4/30/2025 17:51:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001867	-.006462	.0044076	-.000069	.0033543	.0707011	.0091981
Stddev	.003463	.001877	.0006339	.001640	.0015174	.0045159	.0008975
%RSD	185.4541	29.04720	14.38270	2364.355	45.23672	6.387295	9.756947
#1	-.001029	-.004295	.0044921	.001450	.0046850	.0743221	.0098589
#2	-.005673	-.007508	.0049951	.000149	.0017019	.0721402	.0095592
#3	.001100	-.007583	.0037357	-.001807	.0036760	.0656411	.0081764

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000126	-.000027	8.337216	-.000384	-.000167	.4041420	.2317862
Stddev	.000004	.000048	.027205	.000625	.000244	.0009470	.0010747
%RSD	3.151990	178.6402	.3263054	162.8677	145.9342	.2343207	.4636689
#1	-.000122	-.000059	8.350191	-.001099	-.000340	.4050803	.2306096
#2	-.000125	.000028	8.355504	-.000109	-.000272	.4041590	.2320329
#3	-.000130	-.000049	8.305953	.000057	.000112	.4031866	.2327161

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0183919	2.675606	.0006980	-.000521	24.61513	-.001174	.1630234
Stddev	.0003083	.014516	.0003988	.000106	.21180	.001839	.0012688
%RSD	1.676494	.5425492	57.13849	20.28102	.8604640	156.6836	.7782948
#1	.0187344	2.692165	.0005087	-.000557	24.57229	.000702	.1616021
#2	.0181365	2.665073	.0004290	-.000402	24.42802	-.002974	.1634260
#3	.0183049	2.669579	.0011562	-.000604	24.84508	-.001250	.1640420

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.67896	.0023565	-.000016	-.000541	.0010523	1.925815	1.106257
Stddev	.13099	.0009770	.000231	.001045	.0001757	.015361	.011857
%RSD	.6334627	41.46093	1476.599	192.9752	16.69455	.7976337	1.071823
#1	20.57143	.0020807	-.000278	-.001523	.0012210	1.935973	1.118666
#2	20.64059	.0034417	.000076	.000557	.0008704	1.908143	1.105061
#3	20.82485	.0015470	.000156	-.000658	.0010656	1.933328	1.095042

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1833-02 Acquired: 4/30/2025 17:51:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3.588278	-.008549	.0228255
Stddev	.019856	.000730	.0001410
%RSD	.5533612	8.542115	.6175250
#1	3.589240	-.008358	.0228969
#2	3.607635	-.009356	.0229164
#3	3.567958	-.007934	.0226631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3079.923	74683.80	10567.78	2025.735	4854.605
Stddev	10.894	251.99	53.62	4.735	23.824
%RSD	.3536955	.3374077	.5073742	.2337504	.4907534
#1	3074.506	74700.64	10543.95	2022.945	4843.493
#2	3072.800	74926.94	10530.21	2031.202	4838.368
#3	3092.463	74423.81	10629.18	2023.058	4881.956

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-01 Acquired: 4/30/2025 17:56:01 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.000151	-.004983	.0027200	.0057543	.0023696	.0100466	.0250432
Stddev	.002460	.002026	.0021424	.0034246	.0009874	.0051456	.0012656
%RSD	1630.628	40.66656	78.76541	59.51295	41.66710	51.21706	5.053477
#1	.002592	-.002693	.0051060	.0073960	.0031673	.0111136	.0238984
#2	-.002161	-.005710	.0020931	.0018180	.0012653	.0145750	.0248291
#3	-.000884	-.006546	.0009610	.0080489	.0026763	.0044512	.0264022

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000100	-.000081	12.37675	-.000271	-.000427	.0820993	.0442924
Stddev	.000067	.000137	.02125	.000360	.000158	.0001571	.0074224
%RSD	66.56667	168.1736	.1716537	132.6081	36.96292	.1913391	16.75774
#1	-.000097	-.000010	12.37547	-.000450	-.000259	.0822521	.0520333
#2	-.000169	-.000239	12.39860	-.000507	-.000451	.0819382	.0372359
#3	-.000035	.000005	12.35617	.000143	-.000572	.0821076	.0436080

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0740093	3.630924	.0055324	.0014173	21.36254	-.000748	.0303078
Stddev	.0003517	.014238	.0002636	.0000284	.19494	.000466	.0005399
%RSD	.4751423	.3921214	4.763901	1.999991	.9125444	62.26000	1.781511
#1	.0736064	3.620002	.0055665	.0014500	21.35863	-.001085	.0298666
#2	.0742544	3.625744	.0057773	.0014029	21.55941	-.000942	.0309099
#3	.0741671	3.647027	.0052535	.0013992	21.16958	-.000217	.0301470

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.309797	.0007253	.0000968	-.001526	.0003514	1.319547	.6469763
Stddev	.047551	.0005387	.0000628	.000969	.0005202	.010693	.0055295
%RSD	3.630395	74.27710	64.81649	63.46911	148.0435	.8103756	.8546667
#1	1.356006	.0002207	.0001026	-.001863	.0005971	1.321534	.6467215
#2	1.261009	.0006625	.0000314	-.000434	.0007031	1.329107	.6526287
#3	1.312377	.0012926	.0001565	-.002281	-.000246	1.308000	.6415785

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-01 Acquired: 4/30/2025 17:56:01 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.006318	-.008203	.0407864
Stddev	.006448	.000566	.0000911
%RSD	.1609433	6.897491	.2232969
#1	4.011146	-.007673	.0406860
#2	3.998995	-.008137	.0408638
#3	4.008812	-.008799	.0408092

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3153.067	75107.17	11324.32	2070.993	4987.434
Stddev	8.166	692.59	23.11	22.188	16.454
%RSD	.2589769	.9221412	.2041036	1.071358	.3299100
#1	3149.374	75127.90	11333.53	2075.201	4974.203
#2	3162.426	74404.44	11298.02	2047.002	5005.858
#3	3147.399	75789.17	11341.40	2090.775	4982.240

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-02 Acquired: 4/30/2025 18:00:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.003080	-.005811	.0037249	-.001597	.0037572	.0737374	.0218088
Stddev	.001550	.000470	.0017939	.002680	.0001644	.0033916	.0009306
%RSD	50.32518	8.080868	48.15836	167.7663	4.375498	4.599579	4.267204
#1	-.002099	-.006025	.0016777	-.000540	.0039445	.0749450	.0219605
#2	-.002275	-.005273	.0044754	-.004645	.0036368	.0763600	.0226542
#3	-.004868	-.006136	.0050217	.000393	.0036903	.0699073	.0208116

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000143	-.000045	12.08451	.0007830	.0019668	.2187103	.1118079
Stddev	.000036	.000059	.02378	.0003737	.0003164	.0011823	.0026198
%RSD	25.40130	133.3192	.1968109	47.72477	16.08804	.5405776	2.343107
#1	-.000133	-.000064	12.05889	.0004428	.0022580	.2173881	.1146866
#2	-.000183	.000022	12.10589	.0011830	.0020123	.2196657	.1111735
#3	-.000113	-.000092	12.08874	.0007232	.0016301	.2190773	.1095635

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0396279	3.458679	.0143901	.0084370	22.23352	-.000217	.1048917
Stddev	.0002890	.026335	.0002652	.0003074	.25641	.001379	.0009121
%RSD	.7292543	.7614241	1.842764	3.643925	1.153253	635.7348	.8695839
#1	.0396250	3.429253	.0144849	.0087759	22.38639	-.000061	.1044844
#2	.0399184	3.480036	.0145949	.0083592	22.37668	-.001667	.1042542
#3	.0393404	3.466749	.0140906	.0081760	21.93750	.001077	.1059365

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.717713	.0007867	.0004563	.0038050	.0008286	1.511705	1.394902
Stddev	.011020	.0000944	.0001313	.0005217	.0007271	.021167	.004885
%RSD	.6415470	11.99771	28.78183	13.71043	87.74624	1.400198	.3501924
#1	1.729110	.0006874	.0003502	.0033831	.0004532	1.531106	1.397309
#2	1.707113	.0007973	.0004154	.0043883	.0016667	1.514879	1.389281
#3	1.716916	.0008753	.0006032	.0036435	.0003660	1.489131	1.398116

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-02 Acquired: 4/30/2025 18:00:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.018698	-.008319	.0400815
Stddev	.017464	.000860	.0002045
%RSD	.4345684	10.33967	.5101348
#1	4.010422	-.008545	.0403120
#2	4.006909	-.009043	.0399220
#3	4.038761	-.007368	.0400104

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3068.587	73654.17	11184.81	2030.270	4829.947
Stddev	6.331	284.44	35.48	9.053	14.289
%RSD	.2063281	.3861874	.3172557	.4458775	.2958317
#1	3075.223	73628.09	11220.99	2038.379	4845.944
#2	3067.927	73383.67	11183.39	2031.929	4825.443
#3	3062.612	73950.76	11150.07	2020.503	4818.453

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-03 Acquired: 4/30/2025 18:04:37 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.002002	-.003326	.0021228	-.004615	.0030505	.0220724	.0239082
Stddev	.001347	.000738	.0012108	.004468	.0007384	.0066886	.0012458
%RSD	67.26515	22.19273	57.03986	96.81098	24.20426	30.30316	5.210913
#1	-.000451	-.003362	.0008722	-.008439	.0023088	.0284389	.0224867
#2	-.002875	-.002571	.0022067	-.005702	.0030573	.0151025	.0244275
#3	-.002681	-.004046	.0032894	.000296	.0037855	.0226759	.0248103

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000103	-.000042	11.16474	-.000848	.0000898	.1058090	.1482195
Stddev	.000022	.000125	.02216	.000156	.0002029	.0005273	.0019410
%RSD	21.56749	296.0617	.1984599	18.39405	225.9473	.4983726	1.309518
#1	-.000127	-.000185	11.15259	-.000850	.0002155	.1052117	.1459783
#2	-.000097	.000044	11.15132	-.000691	.0001981	.1060054	.1493570
#3	-.000084	.000015	11.19032	-.001004	-.000144	.1062100	.1493231

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0251313	3.179909	.0091122	.0016041	17.92583	-.000606	.0505885
Stddev	.0003439	.028245	.0002066	.0001906	.24608	.001437	.0003080
%RSD	1.368573	.8882281	2.267543	11.88200	1.372783	237.1194	.6089065
#1	.0247377	3.164063	.0091565	.0014800	17.79633	-.002094	.0502790
#2	.0253741	3.212520	.0092930	.0015088	17.77154	-.000498	.0505915
#3	.0252822	3.163146	.0088870	.0018236	18.20962	.000774	.0508950

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.222054	-.000433	.0003000	.0009355	.0008574	1.260428	.7372185
Stddev	.030276	.000651	.0001593	.0007902	.0003196	.015153	.0043297
%RSD	2.477498	150.3621	53.10833	84.46312	37.27450	1.202249	.5873025
#1	1.196818	-.001184	.0003876	.0002359	.0009243	1.247083	.7413640
#2	1.213719	-.000020	.0001161	.0007780	.0011382	1.257298	.7327255
#3	1.255625	-.000095	.0003963	.0017925	.0005096	1.276902	.7375660

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-03 Acquired: 4/30/2025 18:04:37 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3.333867	-.008610	.0366094
Stddev	.011564	.001012	.0002476
%RSD	.3468636	11.75815	.6763511
#1	3.345999	-.009003	.0368355
#2	3.332632	-.009367	.0363448
#3	3.322970	-.007460	.0366478

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3159.497	76027.26	10947.41	2109.814	4980.517
Stddev	2.989	1202.50	61.09	34.249	3.805
%RSD	.0946129	1.581664	.5580419	1.623299	.0763877
#1	3158.813	77262.38	11016.57	2139.464	4982.978
#2	3162.769	75959.10	10900.78	2117.651	4982.437
#3	3156.910	74860.29	10924.90	2072.325	4976.135

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04 Acquired: 4/30/2025 18:08:55 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001688	-.004507	.0084643	-.008418	.0007184	.0423339	.0387725
Stddev	.003950	.002768	.0002611	.002306	.0018637	.0013586	.0008467
%RSD	234.0341	61.41760	3.084488	27.39819	259.4267	3.209246	2.183760
#1	-.005180	-.005232	.0083410	-.005771	.0002065	.0407683	.0395613
#2	.002600	-.006841	.0087642	-.009485	-.000836	.0430297	.0388784
#3	-.002484	-.001449	.0082878	-.009997	.002785	.0432036	.0378779

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000054	-.000054	20.79318	.0001767	-.000266	.1588967	.2064992
Stddev	.000029	.000016	.08908	.0000826	.000162	.0006838	.0022148
%RSD	54.16606	30.37795	.4284177	46.74851	60.79234	.4303763	1.072553
#1	-.000082	-.000035	20.86017	.0001703	-.000112	.1589759	.2052434
#2	-.000058	-.000061	20.82729	.0002622	-.000251	.1581766	.2090565
#3	-.000023	-.000065	20.69209	.0000974	-.000435	.1595374	.2051976

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0409996	5.956019	.0088537	.0039371	35.95026	.0004314	.0704049
Stddev	.0004275	.070048	.0002428	.0002502	.47547	.0010455	.0007339
%RSD	1.042705	1.176091	2.742573	6.355377	1.322589	242.3437	1.042365
#1	.0409355	6.028827	.0087778	.0039369	35.73067	.0005996	.0698752
#2	.0414555	5.950127	.0086578	.0041874	36.49584	-.000688	.0712426
#3	.0406078	5.889103	.0091254	.0036869	35.62426	.001383	.0700968

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.992461	.0043572	.0006057	-.000118	.0019996	2.435439	1.323269
Stddev	.003862	.0001835	.0001390	.000675	.0008112	.028257	.004388
%RSD	.1938428	4.211182	22.94566	569.8188	40.56717	1.160245	.3315678
#1	1.995387	.0041671	.0007306	.000646	.0029273	2.408959	1.325198
#2	1.993913	.0045333	.0006305	-.000369	.0016472	2.465188	1.326363
#3	1.988083	.0043712	.0004560	-.000632	.0014242	2.432169	1.318248

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04 Acquired: 4/30/2025 18:08:55 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	6.701135	-.009114	.0687835
Stddev	.020655	.000462	.0003405
%RSD	.3082365	5.069574	.4949588
#1	6.683014	-.009165	.0687558
#2	6.696764	-.009548	.0691369
#3	6.723625	-.008628	.0684577

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3064.245	73468.83	11145.24	2042.642	4744.359
Stddev	5.984	233.95	55.08	7.047	8.830
%RSD	.1952882	.3184363	.4942432	.3450078	.1861102
#1	3057.828	73536.28	11098.15	2048.220	4736.010
#2	3065.234	73208.56	11205.82	2034.722	4743.466
#3	3069.673	73661.64	11131.76	2044.984	4753.602

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04DUP Acquired: 4/30/2025 18:13:12 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.004174	-.003685	.0054056	.0013896	.0018748	.0453685	.0395102
Stddev	.000485	.002601	.0013472	.0062806	.0015132	.0052183	.0001065
%RSD	11.61113	70.58068	24.92244	451.9692	80.71048	11.50211	.2694412
#1	-.003815	-.004101	.0042007	.0002408	.0036158	.0513933	.0394975
#2	-.003981	-.000901	.0068602	.0081653	.0011319	.0424425	.0396225
#3	-.004725	-.006052	.0051559	-.004237	.0008767	.0422698	.0394107

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000778	.0001859	21.34491	.0018175	.0000084	.1667205	.2217752
Stddev	.0000428	.0001159	.02921	.0003176	.0001480	.0005202	.0009270
%RSD	55.01485	62.37108	.1368554	17.47340	1760.932	.3120291	.4179713
#1	.0000587	.0000629	21.33833	.0016392	-.000146	.1672750	.2214753
#2	.0000479	.0002017	21.31955	.0016292	.000022	.1662432	.2210354
#3	.0001269	.0002931	21.37685	.0021842	.000149	.1666434	.2228150

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0423410	6.065123	.0113463	.0047818	36.88441	.0012999	.0720343
Stddev	.0002866	.026163	.0002911	.0000322	.28483	.0008980	.0005607
%RSD	.6768603	.4313665	2.565787	.6740524	.7722357	69.08071	.7783427
#1	.0423036	6.041027	.0116743	.0048006	37.18535	.0023365	.0714023
#2	.0420750	6.092952	.0112460	.0048002	36.61901	.0008033	.0724718
#3	.0426445	6.061389	.0111185	.0047446	36.84886	.0007599	.0722290

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.072193	.0044141	.0008320	.0004807	.0014076	2.498406	1.368331
Stddev	.029257	.0005789	.0001093	.0010946	.0006166	.015501	.007553
%RSD	1.411864	13.11410	13.14020	227.7042	43.80338	.6204528	.5520185
#1	2.105700	.0048910	.0008864	.0017437	.0017996	2.515643	1.373004
#2	2.059174	.0045813	.0009034	-.000193	.0017263	2.485608	1.359617
#3	2.051706	.0037700	.0007061	-.000109	.0006969	2.493968	1.372373

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04DUP Acquired: 4/30/2025 18:13:12 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	6.839383	-.008560	.0706184
Stddev	.010304	.001826	.0004198
%RSD	.1506640	21.32969	.5944887
#1	6.844033	-.007302	.0710717
#2	6.827573	-.007725	.0702430
#3	6.846544	-.010654	.0705406

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3048.884	73397.66	11141.68	2041.560	4728.907
Stddev	14.036	159.02	60.76	3.872	24.535
%RSD	.4603515	.2166575	.5453161	.1896604	.5188320
#1	3033.966	73559.02	11211.71	2046.019	4702.646
#2	3061.828	73241.08	11103.02	2039.615	4751.242
#3	3050.858	73392.87	11110.30	2039.046	4732.832

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04LX5 Acquired: 4/30/2025 18:17:29 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0013303	-.002734	.0033679	-.004066	.0039697	.0014410	.0124494
Stddev	.0034488	.001227	.0011216	.002601	.0007058	.0021353	.0011147
%RSD	259.2419	44.88688	33.30274	63.97228	17.78029	148.1815	8.953562
#1	.0028143	-.002296	.0026609	-.003242	.0043445	.0038890	.0114096
#2	.0037888	-.001786	.0046611	-.006980	.0031556	.0004715	.0123125
#3	-.002612	-.004120	.0027817	-.001977	.0044091	-.000038	.0136262

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000920	.0001063	4.332993	-.000191	-.000077	.0342252	.0746979
Stddev	.0000097	.0000318	.021265	.000062	.000200	.0004629	.0033634
%RSD	10.53578	29.89053	.4907738	32.26072	260.5080	1.352350	4.502599
#1	.0000823	.0000698	4.347456	-.000191	-.000308	.0344373	.0785604
#2	.0000918	.0001278	4.342946	-.000253	.000044	.0336944	.0731173
#3	.0001017	.0001212	4.308576	-.000129	.000033	.0345441	.0724160

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091977	1.245139	.0020949	.0010782	6.524473	-.000628	.0173579
Stddev	.0001113	.013001	.0002616	.0004352	.052566	.000947	.0004756
%RSD	1.210445	1.044170	12.48757	40.36251	.8056693	150.6622	2.740056
#1	.0091075	1.259651	.0022964	.0015336	6.512740	-.000199	.0170487
#2	.0091635	1.234554	.0021891	.0010345	6.581914	-.001714	.0171195
#3	.0093221	1.241213	.0017992	.0006665	6.478766	.000028	.0179056

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5119433	-.005110	.0004553	-.000098	.0013623	.4788677	.3022283
Stddev	.0255452	.000103	.0004104	.000581	.0002705	.0092806	.0064833
%RSD	4.989847	2.009615	90.13868	589.9982	19.85770	1.938030	2.145155
#1	.4864762	-.005029	.0005278	.000299	.0011880	.4817609	.3089416
#2	.5375659	-.005077	.0000135	-.000765	.0012249	.4684851	.3017407
#3	.5117877	-.005226	.0008247	.000171	.0016739	.4863571	.2960026

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04LX5 Acquired: 4/30/2025 18:17:29 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.367195	-.005252	.0140131
Stddev	.011128	.001965	.0001947
%RSD	.8139491	37.42218	1.389517
#1	1.378606	-.004962	.0141893
#2	1.366606	-.003447	.0140460
#3	1.356373	-.007346	.0138041

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3202.656	75015.95	10809.87	2101.624	5021.100
Stddev	4.462	277.97	8.47	2.719	18.271
%RSD	.1393240	.3705420	.0783909	.1293811	.3638797
#1	3198.533	75298.08	10800.09	2099.964	5007.889
#2	3207.393	74742.34	10814.37	2100.147	5041.951
#3	3202.042	75007.44	10815.14	2104.762	5013.460

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV02 Acquired: 4/30/2025 18:30:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.819340	5.180175	5.075729	4.771478	4.768432	10.04937	9.940937
Stddev	.021458	.049565	.040665	.029133	.039717	.24839	.150971
%RSD	.4452485	.9568226	.8011663	.6105590	.8329155	2.471741	1.518677
#1	4.794804	5.123088	5.031263	4.739282	4.722625	9.91739	9.806802
#2	4.828612	5.205175	5.084897	4.796019	4.793269	10.33589	10.10443
#3	4.834602	5.212261	5.111028	4.779134	4.789402	9.89481	9.91158

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2613175	2.563408	25.40968	1.039487	2.513971	1.215793	5.015525
Stddev	.0057553	.020675	.66461	.003987	.018167	.010205	.025282
%RSD	2.202419	.8065340	2.615568	.3835751	.7226427	.8393745	.5040773
#1	.2572128	2.541472	25.09100	1.041487	2.494030	1.205050	5.031910
#2	.2678961	2.566216	26.17361	1.042079	2.518302	1.216970	5.028257
#3	.2588437	2.582535	24.96442	1.034896	2.529581	1.225358	4.986408

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.519312	25.75175	2.520061	1.253076	23.67208	2.538782	2.492345
Stddev	.058526	.66323	.020925	.005014	.16486	.064038	.005527
%RSD	2.323076	2.575465	.8303535	.4001698	.6964312	2.522376	.2217390
#1	2.491345	25.48619	2.497477	1.253030	23.78801	2.513564	2.488969
#2	2.586575	26.50661	2.523913	1.258113	23.74489	2.611589	2.498723
#3	2.480017	25.26246	2.538793	1.248085	23.48335	2.491192	2.489343

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.44098	5.072988	4.996845	5.119118	5.017071	4.912492	4.984734
Stddev	.17913	.112015	.029713	.039352	.117885	.048646	.053295
%RSD	.7328899	2.208065	.5946427	.7687297	2.349676	.9902532	1.069170
#1	24.58454	4.983374	4.963590	5.075680	4.958646	4.915620	4.926213
#2	24.49816	5.198568	5.006160	5.129285	5.152758	4.959498	4.997505
#3	24.24025	5.037020	5.020785	5.152389	4.939810	4.862357	5.030483

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV02 Acquired: 4/30/2025 18:30:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.838824	4.803030	5.003540
Stddev	.044960	.112971	.066089
%RSD	.9291597	2.352082	1.320845
#1	4.789656	4.743962	4.927449
#2	4.848974	4.933290	5.036550
#3	4.877841	4.731838	5.046622

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3176.267	75540.13	11341.44	2056.425	4803.305
Stddev	20.016	342.13	238.18	8.192	36.425
%RSD	.6301811	.4529067	2.100080	.3983372	.7583371
#1	3196.366	75321.93	11495.84	2051.221	4839.632
#2	3176.100	75364.03	11067.14	2052.188	4803.501
#3	3156.334	75934.44	11461.36	2065.868	4766.782

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB02 Acquired: 4/30/2025 18:35:46 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.000421	-.000194	.0016941	-.002937	.0017750	-.010519	.0051226
Stddev	.003392	.001745	.0004066	.001389	.0016983	.007090	.0004813
%RSD	804.7933	897.4043	24.00047	47.27993	95.68029	67.40710	9.395654
#1	-.003971	-.001794	.0014192	-.001894	.0016208	-.006709	.0052797
#2	.002787	.001666	.0015021	-.002403	.0001590	-.018699	.0055057
#3	-.000080	-.000456	.0021612	-.004513	.0035451	-.006147	.0045823

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000470	.0002924	.0068994	.0001956	.0001566	.0004585	-.004136
Stddev	.0000278	.0000954	.0028711	.0002503	.0001015	.0004150	.002828
%RSD	59.05179	32.62316	41.61429	127.9824	64.80848	90.52378	68.38156
#1	.0000467	.0003991	.0036692	.0000491	.0000459	.0001092	-.003105
#2	.0000194	.0002625	.0078683	.0000531	.0002453	.0009173	-.007335
#3	.0000750	.0002155	.0091608	.0004846	.0001786	.0003489	-.001968

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002622	-.009166	.0002736	-.000409	-.046054	.0008479	-.000218
Stddev	.000550	.012179	.0005290	.000219	.010265	.0009402	.000351
%RSD	20.98540	132.8632	193.3367	53.49454	22.28986	110.8848	160.9021
#1	-.002159	-.018123	-.000267	-.000573	-.047973	-.000176	-.000571
#2	-.003230	-.014078	.000790	-.000495	-.055225	.001046	-.000216
#3	-.002476	.004701	.000298	-.000161	-.034965	.001673	.000132

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1035947	.0037773	.0007423	.0199750	.0007035	-.001250	.0011919
Stddev	.0289786	.0009581	.0002197	.0004378	.0009024	.009522	.0027880
%RSD	27.97309	25.36438	29.59581	2.191755	128.2822	761.9304	233.9240
#1	.1102645	.0048739	.0008259	.0194805	-.000338	-.003424	-.001470
#2	.0718627	.0031025	.0004931	.0201312	.001196	.009171	.000954
#3	.1286569	.0033555	.0009080	.0203132	.001253	-.009496	.004091

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB02 Acquired: 4/30/2025 18:35:46 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0000250	-.003648	.0006154
Stddev	.0018542	.000797	.0000803
%RSD	7401.236	21.83918	13.04974
#1	.0006029	-.003230	.0006148
#2	.0015215	-.003147	.0006960
#3	-.002049	-.004567	.0005354

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3177.948	75942.04	11206.47	2095.955	5067.547
Stddev	7.596	130.51	18.57	5.499	16.573
%RSD	.2390072	.1718574	.1656922	.2623557	.3270425
#1	3173.777	75986.76	11216.04	2090.511	5060.799
#2	3186.715	75795.04	11218.31	2095.847	5086.430
#3	3173.352	76044.31	11185.07	2101.507	5055.413

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04MS Acquired: 4/30/2025 18:40:07 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.8301208	2.169322	1.066800	1.935594	.8378677	2.146013	.2474767
Stddev	.0010281	.018435	.001950	.007456	.0025574	.012090	.0010321
%RSD	.1238488	.8498234	.1828186	.3851883	.3052255	.5633879	.4170658
#1	.8295285	2.158310	1.064688	1.933974	.8364824	2.135832	.2465194
#2	.8313080	2.190605	1.068533	1.943726	.8408188	2.159376	.2485702
#3	.8295261	2.159052	1.067178	1.929082	.8363018	2.142831	.2473406

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2172018	.2209652	23.38903	.4673173	.2151868	.4830117	3.542120
Stddev	.0011125	.0006121	.04555	.0016895	.0011546	.0005102	.034351
%RSD	.5122044	.2769975	.1947456	.3615235	.5365667	.1056295	.9697940
#1	.2165293	.2212834	23.34629	.4653920	.2148500	.4835697	3.518609
#2	.2184860	.2213526	23.43695	.4685525	.2164723	.4828964	3.581542
#3	.2165902	.2202596	23.38386	.4680073	.2142379	.4825690	3.526209

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3198849	8.467897	.5472696	.0345858	42.92471	.3291335	.2898091
Stddev	.0012658	.045388	.0020927	.0003328	.25317	.0032557	.0002793
%RSD	.3957017	.5359993	.3823965	.9621145	.5897968	.9891607	.0963606
#1	.3184262	8.455790	.5478445	.0343300	42.63981	.3253970	.2894942
#2	.3205345	8.518111	.5490148	.0349620	43.12389	.3306432	.2899062
#3	.3206940	8.429791	.5449495	.0344655	43.01045	.3313602	.2900268

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.66827	.3119218	.4705664	.7930256	.2237183	3.587010	7.752421
Stddev	.09162	.0019143	.0011906	.0029029	.0016660	.029559	.041451
%RSD	.7232549	.6137037	.2530180	.3660550	.7446957	.8240626	.5346849
#1	12.57656	.3098038	.4706365	.7932725	.2219306	3.561592	7.758360
#2	12.75980	.3135285	.4717204	.7957971	.2239968	3.619447	7.790583
#3	12.66845	.3124331	.4693423	.7900071	.2252276	3.579991	7.708321

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04MS Acquired: 4/30/2025 18:40:07 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	6.772848	.2014971	.2885866
Stddev	.027294	.0006394	.0012707
%RSD	.4029951	.3173264	.4403030
#1	6.776289	.2009163	.2876989
#2	6.798257	.2021823	.2900422
#3	6.743995	.2013927	.2880188

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3106.341	73053.76	11209.10	2015.080	4837.631
Stddev	2.389	250.77	41.51	9.341	10.395
%RSD	.0769231	.3432742	.3703084	.4635363	.2148777
#1	3103.621	73315.68	11230.54	2023.468	4827.450
#2	3108.101	72815.86	11161.25	2016.759	4837.215
#3	3107.302	73029.75	11235.49	2005.014	4848.228

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04MSD Acquired: 4/30/2025 18:44:09 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7694061	2.007211	.9883924	1.775991	.7689402	1.995343	.2230466
Stddev	.0060099	.021250	.0021536	.004523	.0003887	.010647	.0009915
%RSD	.7811067	1.058705	.2178851	.2546839	.0505514	.5335999	.4445485
#1	.7708337	2.028911	.9895510	1.780860	.7693272	1.983049	.2221586
#2	.7745737	2.006281	.9897186	1.775193	.7685498	2.001539	.2228648
#3	.7628110	1.986441	.9859076	1.771920	.7689438	2.001441	.2241165

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2145020	.2061298	21.60165	.4500759	.2000147	.4702538	3.084330
Stddev	.0017724	.0007421	.07963	.0026871	.0011587	.0010960	.013380
%RSD	.8262780	.3600200	.3686078	.5970266	.5792884	.2330570	.4338124
#1	.2142131	.2062247	21.52271	.4473731	.1999975	.4707471	3.076881
#2	.2128918	.2068199	21.60029	.4501078	.2011819	.4710163	3.099777
#3	.2164011	.2053448	21.68195	.4527469	.1988647	.4689978	3.076332

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.645194	7.922033	.5383708	.0391871	36.09858	.2998715	.2713700
Stddev	.005834	.076445	.0017314	.0002311	.08728	.0003613	.0021403
%RSD	.3545934	.9649656	.3215904	.5897863	.2417912	.1204671	.7886915
#1	1.643234	7.895132	.5372847	.0389357	36.05932	.3000189	.2696818
#2	1.640592	7.862675	.5403674	.0393903	36.19860	.2994599	.2737772
#3	1.651755	8.008292	.5374602	.0392352	36.03782	.3001358	.2706511

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.93502	.3069697	.4054467	.7246310	.2017859	3.119704	7.356610
Stddev	.01214	.0008371	.0005415	.0009168	.0007332	.010977	.029853
%RSD	.1109898	.2726872	.1335457	.1265195	.3633778	.3518509	.4057970
#1	10.92671	.3066332	.4059388	.7236193	.2011086	3.119903	7.373915
#2	10.94894	.3063533	.4055347	.7248668	.2016846	3.130581	7.373776
#3	10.92939	.3079227	.4048667	.7254069	.2025645	3.108630	7.322139

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04MSD Acquired: 4/30/2025 18:44:09 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	6.572625	.1854711	.2604090
Stddev	.021444	.0001944	.0005222
%RSD	.3262592	.1047952	.2005207
#1	6.590045	.1854797	.2601667
#2	6.579154	.1852726	.2600520
#3	6.548676	.1856611	.2610083

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3073.740	73934.34	10547.73	2050.286	4751.335
Stddev	14.403	252.94	54.60	15.858	20.655
%RSD	.4685814	.3421131	.5176543	.7734540	.4347285
#1	3068.088	74226.32	10587.49	2065.906	4750.871
#2	3063.021	73782.37	10570.21	2034.200	4730.916
#3	3090.112	73794.32	10485.48	2050.752	4772.218

Sample Name: Q1836-04A Acquired: 4/30/2025 18:48:11 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7466975	1.972851	.9675601	1.746773	.7764362	1.964247	.2236889
Stddev	.0047679	.012014	.0021113	.009422	.0038662	.004760	.0003887
%RSD	.6385315	.6089919	.2182041	.5393677	.4979424	.2423408	.1737519
#1	.7498670	1.976980	.9694424	1.749076	.7788152	1.967748	.2234818
#2	.7490112	1.982257	.9652773	1.754829	.7785183	1.958827	.2234477
#3	.7412142	1.959316	.9679606	1.736413	.7719752	1.966167	.2241373

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2020283	.1990750	22.02861	.4192831	.1938994	.4404387	3.205608
Stddev	.0005435	.0004238	.02003	.0008099	.0000121	.0019076	.025769
%RSD	.2690257	.2128626	.0909194	.1931663	.0062369	.4331107	.8038727
#1	.2016833	.1993755	22.01990	.4201541	.1938955	.4406396	3.203655
#2	.2017468	.1992592	22.01440	.4191426	.1938898	.4422379	3.232298
#3	.2026548	.1985903	22.05151	.4185527	.1939130	.4384386	3.180872

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2398396	7.997802	.4937350	.0756651	38.26360	.2967698	.2728296
Stddev	.0007716	.028796	.0010624	.0006860	.15626	.0026246	.0005803
%RSD	.3217310	.3600503	.2151687	.9066738	.4083899	.8843889	.2126834
#1	.2400374	8.013914	.4948505	.0751391	38.42373	.2947364	.2734847
#2	.2389883	7.964556	.4927353	.0754150	38.11151	.2958404	.2723801
#3	.2404930	8.014935	.4936193	.0764410	38.25555	.2997327	.2726241

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.19527	.2876085	.4300331	.7240661	.2040716	3.257358	7.183736
Stddev	.02366	.0012752	.0020690	.0026347	.0012076	.011076	.033121
%RSD	.2113110	.4433872	.4811276	.3638738	.5917726	.3400196	.4610576
#1	11.18077	.2887864	.4319185	.7259170	.2030615	3.268030	7.209897
#2	11.18248	.2862543	.4303613	.7252316	.2037441	3.258126	7.194816
#3	11.22257	.2877848	.4278197	.7210496	.2054092	3.245918	7.146495

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1836-04A Acquired: 4/30/2025 18:48:11 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	6.396783	.1805219	.2609260
Stddev	.036996	.0015651	.0005686
%RSD	.5783504	.8669920	.2178971
#1	6.407044	.1812429	.2612999
#2	6.427565	.1787262	.2602717
#3	6.355740	.1815966	.2612063

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3128.815	74033.77	10912.04	2050.044	4870.095
Stddev	7.913	319.82	22.84	13.072	9.486
%RSD	.2528973	.4319987	.2093175	.6376466	.1947773
#1	3125.934	73718.90	10886.08	2036.012	4865.420
#2	3122.746	74024.09	10929.07	2052.240	4863.854
#3	3137.764	74358.33	10920.96	2061.878	4881.011

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167757BL Acquired: 4/30/2025 18:52:14 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0021798	-.001347	.0003822	-.006821	.0004501	-.001825	.0061325
Stddev	.0012362	.000449	.0013545	.002968	.0017901	.004578	.0008687
%RSD	56.71200	33.30621	354.3726	43.51172	397.6906	250.8301	14.16569
#1	.0011359	-.001847	.0001035	-.004195	.0008188	-.006012	.0051347
#2	.0035449	-.000981	.0018544	-.006227	.0020272	.003062	.0067210
#3	.0018587	-.001212	-.000811	-.010041	-.001496	-.002525	.0065417

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000509	.0000173	.0062067	-.000639	-.000117	.0001340	-.004767
Stddev	.0000551	.0001008	.0068869	.000212	.000200	.0002206	.004701
%RSD	108.0965	583.8438	110.9579	33.11884	171.2057	164.6442	98.62264
#1	.0000034	.0001094	.0138671	-.000395	-.000222	-.000087	.000268
#2	.0000382	-.000090	.0042255	-.000768	.000114	.000355	-.005527
#3	.0001113	.000033	.0005276	-.000754	-.000243	.000134	-.009042

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007914	-.007793	.0000919	-.000404	-.076470	-.000185	-.000679
Stddev	.0004624	.007235	.0002285	.000334	.015108	.000464	.000230
%RSD	58.42512	92.84172	248.5471	82.63929	19.75717	250.4549	33.94181
#1	.0008166	-.004067	-.000168	-.000528	-.081089	.000132	-.000595
#2	.0012406	-.003180	.000181	-.000026	-.059591	.000030	-.000939
#3	.0003169	-.016131	.000263	-.000658	-.088729	-.000718	-.000502

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0552375	-.004501	-.000232	-.001658	.0006798	-.003709	.0043004
Stddev	.0266964	.000815	.000156	.000870	.0006478	.011374	.0019813
%RSD	48.33015	18.10024	67.12228	52.48080	95.30501	306.6269	46.07246
#1	.0800019	-.004625	-.000359	-.001169	.0001316	.005434	.0023721
#2	.0269576	-.003632	-.000058	-.002663	.0005131	-.000116	.0063307
#3	.0587530	-.005247	-.000281	-.001143	.0013946	-.016446	.0041983

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167757BL Acquired: 4/30/2025 18:52:14 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.000121	-.005219	.0000595
Stddev	.001095	.000291	.0000120
%RSD	903.0481	5.569943	20.11658
#1	.000387	-.005305	.0000514
#2	.000628	-.004895	.0000538
#3	-.001378	-.005458	.0000733

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3272.625	75842.07	11550.18	2124.550	5237.561
Stddev	10.481	555.30	36.15	3.783	10.880
%RSD	.3202608	.7321762	.3130213	.1780842	.2077390
#1	3284.727	76464.53	11545.77	2127.610	5249.610
#2	3266.484	75397.55	11516.44	2120.320	5228.453
#3	3266.664	75664.12	11588.34	2125.719	5234.621

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-01 Acquired: 4/30/2025 19:00:32 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0381335	-.022207	.0283559	-.040834	-.010774	196.4430	.4713415
Stddev	.0020075	.008167	.0035827	.004872	.000784	.5125	.0025357
%RSD	5.264334	36.77639	12.63460	11.93016	7.279984	.2608922	.5379649
#1	.0364303	-.014395	.0242368	-.035247	-.011007	196.5958	.4696357
#2	.0376233	-.030688	.0307476	-.044195	-.011416	195.8715	.4701335
#3	.0403468	-.021538	.0300833	-.043060	-.009900	196.8617	.4742552

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063199	.0225604	211.6701	.0361197	.3996577	.9395327	641.4539
Stddev	.0000654	.0006759	1.0266	.0002887	.0011112	.0048366	2.7177
%RSD	1.034012	2.996067	.4849775	.7994050	.2780387	.5147927	.4236819
#1	.0062859	.0218738	211.6088	.0360046	.4009377	.9350414	644.3568
#2	.0062785	.0225824	210.6755	.0364483	.3990958	.9389036	641.0347
#3	.0063952	.0232252	212.7259	.0359064	.3989397	.9446532	638.9701

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.442779	147.4230	.2066610	-.008191	22.78049	1.773495	.6865063
Stddev	.030346	.9764	.0013706	.000121	.04210	.005778	.0015320
%RSD	.4710028	.6622822	.6631906	1.482353	.1848216	.3258206	.2231645
#1	6.427294	147.9460	.2064380	-.008317	22.75086	1.773447	.6873639
#2	6.423299	146.2966	.2081293	-.008075	22.82868	1.767741	.6874175
#3	6.477743	148.0265	.2054156	-.008180	22.76193	1.779298	.6847375

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.421440	4.617863	.0028602	-.012029	10.44106	2.590831	12.12376
Stddev	.010376	.014233	.0002807	.002376	.03940	.025654	.02717
%RSD	.4284876	.3082107	9.814966	19.74927	.3773646	.9901720	.2241406
#1	2.415742	4.632518	.0031666	-.009286	10.43443	2.617442	12.15498
#2	2.433416	4.604094	.0027985	-.013410	10.40540	2.588795	12.11085
#3	2.415162	4.616976	.0026154	-.013392	10.48336	2.566256	12.10545

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-01 Acquired: 4/30/2025 19:00:32 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	13.05288	.3483835	-.040337
Stddev	.01376	.0017155	.005096
%RSD	.1053969	.4924319	12.63291
#1	13.04462	.3501117	-.045588
#2	13.06876	.3483579	-.040012
#3	13.04527	.3466808	-.035412

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3493.133	84247.93	12966.31	2335.993	4091.132
Stddev	10.430	162.74	70.84	6.262	8.459
%RSD	.2985784	.1931712	.5463216	.2680823	.2067583
#1	3499.480	84060.21	12995.96	2332.201	4091.580
#2	3498.823	84349.36	13017.50	2343.221	4099.359
#3	3481.096	84334.21	12885.46	2332.556	4082.459

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-03 Acquired: 4/30/2025 19:13:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0298898	-.014299	.0213631	-.020830	-.011666	172.5846	.6244265
Stddev	.0017920	.004184	.0033302	.006756	.001620	.1785	.0038402
%RSD	5.995495	29.25822	15.58831	32.43601	13.88962	.1034245	.6149986
#1	.0283498	-.011174	.0226079	-.027037	-.011781	172.7341	.6279719
#2	.0294628	-.012671	.0175899	-.021819	-.013226	172.6327	.6249603
#3	.0318568	-.019052	.0238915	-.013633	-.009992	172.3870	.6203473

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059573	.0197888	227.6323	.0173869	.4004438	.9009824	688.3225
Stddev	.0000156	.0005342	.6675	.0001231	.0013395	.0010646	2.5755
%RSD	.2612095	2.699402	.2932215	.7079933	.3345033	.1181586	.3741658
#1	.0059410	.0191819	228.3988	.0174013	.4019262	.9001792	691.2882
#2	.0059590	.0201878	227.3184	.0175022	.4000847	.9021899	687.0306
#3	.0059719	.0199967	227.1796	.0172573	.3993205	.9005782	686.6487

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.628412	128.7359	.1444903	-.004789	17.76594	1.690256	.8318404
Stddev	.030914	.2866	.0008106	.001281	.16483	.003459	.0036712
%RSD	.4052440	.2225967	.5610114	26.73684	.9277976	.2046436	.4413382
#1	7.664095	129.0364	.1445789	-.003604	17.81842	1.694186	.8305100
#2	7.611407	128.4657	.1452529	-.006148	17.89815	1.687674	.8359914
#3	7.609734	128.7057	.1436390	-.004616	17.58126	1.688907	.8290199

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.884361	3.130870	.0042467	-.009209	9.855000	3.009324	12.31856
Stddev	.014801	.008370	.0002336	.002814	.032023	.018383	.07447
%RSD	.7854464	.2673515	5.500555	30.56016	.3249396	.6108555	.6045290
#1	1.871918	3.140418	.0042543	-.006332	9.891937	3.018241	12.40239
#2	1.900728	3.127395	.0044764	-.009339	9.835052	3.021547	12.29327
#3	1.880437	3.124797	.0040094	-.011956	9.838011	2.988184	12.26004

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-03 Acquired: 4/30/2025 19:13:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	10.77051	.3441979	-.098774
Stddev	.01430	.0012595	.001710
%RSD	.1327316	.3659362	1.731035
#1	10.78137	.3456435	-.100380
#2	10.77585	.3436138	-.096976
#3	10.75432	.3433364	-.098965

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3550.038	83660.38	13441.00	2308.319	4103.930
Stddev	2.534	226.96	36.55	4.125	11.585
%RSD	.0713672	.2712858	.2719131	.1787193	.2822890
#1	3547.517	83760.68	13436.48	2310.011	4090.664
#2	3552.584	83400.55	13479.60	2303.616	4109.072
#3	3550.011	83819.91	13406.92	2311.329	4112.054

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-05 Acquired: 4/30/2025 19:17:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0288835	-.015476	.0248169	-.022028	-.012805	154.3211	.2937426
Stddev	.0038993	.002682	.0013142	.003753	.002336	.1664	.0003792
%RSD	13.50023	17.33274	5.295456	17.03882	18.24140	.1078319	.1290980
#1	.0243907	-.017055	.0254016	-.022753	-.010271	154.4961	.2939923
#2	.0313865	-.012379	.0233118	-.025366	-.013271	154.3023	.2933062
#3	.0308733	-.016994	.0257372	-.017965	-.014872	154.1649	.2939293

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047040	.0107904	167.8842	.0445205	.3241336	.7997577	515.6989
Stddev	.0002129	.0007939	.6586	.0006018	.0004344	.0053076	2.8381
%RSD	4.524907	7.357867	.3923034	1.351804	.1340025	.6636572	.5503474
#1	.0048252	.0111893	168.4479	.0438339	.3243395	.8045081	513.6202
#2	.0048285	.0113058	168.0446	.0447708	.3244268	.8007360	514.5441
#3	.0044582	.0098761	167.1603	.0449568	.3236346	.7940289	518.9324

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.323097	111.1123	.1675129	-.004004	18.99320	1.318012	.6071685
Stddev	.012516	.7688	.0007787	.000468	.16966	.005247	.0013243
%RSD	.2351276	.6918694	.4648475	11.69659	.8932525	.3981089	.2181052
#1	5.336042	111.7704	.1681795	-.004533	18.86011	1.319261	.6058799
#2	5.322189	111.2990	.1677022	-.003835	18.93524	1.322521	.6070997
#3	5.311059	110.2673	.1666570	-.003644	19.18424	1.312253	.6085258

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.275238	3.472944	.0029568	-.009399	8.202395	2.808817	11.03423
Stddev	.030621	.009638	.0004873	.001718	.010670	.016973	.03226
%RSD	1.345827	.2775179	16.48001	18.27704	.1300878	.6042841	.2923631
#1	2.274923	3.462057	.0034415	-.009829	8.208198	2.793494	11.06440
#2	2.244776	3.476389	.0029618	-.007507	8.208905	2.805896	11.03807
#3	2.306015	3.480386	.0024670	-.010860	8.190080	2.827061	11.00022

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-05 Acquired: 4/30/2025 19:17:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	6.947912	.2933055	-.054768
Stddev	.024407	.0028478	.002265
%RSD	.3512849	.9709353	4.135251
#1	6.971327	.2911499	-.053057
#2	6.949789	.2922326	-.053910
#3	6.922622	.2965339	-.057337

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3444.576	83653.41	12875.73	2312.438	4150.202
Stddev	1.492	225.67	92.44	5.927	2.804
%RSD	.0433142	.2697691	.7179192	.2563261	.0675532
#1	3444.820	83719.72	12788.45	2307.203	4152.194
#2	3442.977	83838.50	12866.15	2311.238	4146.996
#3	3445.930	83402.02	12972.58	2318.874	4151.417

Sample Name: PB167757BS Acquired: 4/30/2025 19:28:58 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7716962	2.075270	.9958596	1.917021	.7759167	1.948063
Stddev	.0020868	.015630	.0008366	.009118	.0015063	.013982
%RSD	.2704194	.7531482	.0840132	.4756320	.1941305	.7177506
#1	.7732187	2.074229	.9956667	1.906507	.7747735	1.960950
#2	.7725525	2.060187	.9951363	1.921814	.7753532	1.933197
#3	.7693175	2.091394	.9967759	1.922744	.7776235	1.950043

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1792537	.2012073	.2003913	1.022164	.4148771	.1928460
Stddev	.0004628	.0006347	.0002014	.002203	.0011201	.0002065
%RSD	.2581597	.3154365	.1005299	.2155638	.2699934	.1070861
#1	.1788609	.2018335	.2006238	1.020374	.4136914	.1930242
#2	.1791364	.2012240	.2002682	1.021493	.4150222	.1926197
#3	.1797638	.2005644	.2002819	1.024625	.4159176	.1928942

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3100453	2.935079	.1869162	1.958151	.4931740	.0732630
Stddev	.0007016	.013730	.0012972	.004215	.0007849	.0001969
%RSD	.2262943	.4677737	.6940057	.2152781	.1591635	.2687853
#1	.3106312	2.940262	.1878525	1.962425	.4937856	.0730862
#2	.3092678	2.919512	.1874606	1.953996	.4922889	.0732275
#3	.3102370	2.945462	.1854355	1.958031	.4934475	.0734752

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.413830	.2857929	.2047690	8.868415	.2974830	.4066998
Stddev	.015579	.0005133	.0008671	.031456	.0022276	.0003184
%RSD	.6454150	.1796032	.4234692	.3546985	.7488020	.0782932
#1	2.423465	.2863840	.2047656	8.844000	.2997631	.4068560
#2	2.395856	.2854597	.2039036	8.857332	.2973739	.4069101
#3	2.422169	.2855350	.2056379	8.903913	.2953120	.4063335

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167757BS Acquired: 4/30/2025 19:28:58 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7216160	.1929450	.8034710	5.750717	F -.013335	.1805992
Stddev	.0012550	.0010735	.0039423	.020071	.003203	.0010014
%RSD	.1739124	.5563529	.4906539	.3490127	24.02114	.5544781
#1	.7224918	.1940524	.7990127	5.771507	-.015481	.1815889
#2	.7201782	.1919091	.8064963	5.731452	-.009653	.1806221
#3	.7221779	.1928736	.8049040	5.749191	-.014871	.1795866

Elem	Sr4077
Units	ppm
Avg	.1846853
Stddev	.0006142
%RSD	.3325718
#1	.1853726
#2	.1844933
#3	.1841901

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3201.368	75417.58	11413.89	2030.023	5113.826
Stddev	8.131	294.41	26.89	7.567	14.575
%RSD	.2539797	.3903714	.2356005	.3727404	.2850096
#1	3192.596	75642.25	11384.60	2036.641	5097.550
#2	3208.652	75526.19	11419.60	2031.655	5125.671
#3	3202.855	75084.29	11437.46	2021.774	5118.258

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-07 Acquired: 4/30/2025 19:33:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0266052	-.018581	.0209949	-.008025	-.006819	142.9788	.2875253
Stddev	.0029516	.003418	.0038437	.007477	.002453	.2689	.0015789
%RSD	11.09395	18.39356	18.30805	93.16825	35.97668	.1880611	.5491378
#1	.0296712	-.014635	.0252849	-.015841	-.008865	143.1257	.2862236
#2	.0237832	-.020583	.0198355	-.007292	-.007493	142.6684	.2870708
#3	.0263612	-.020526	.0178643	-.000941	-.004099	143.1421	.2892817

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043414	.0125171	181.8507	.0174943	.3466181	.9314637	547.5820
Stddev	.0000717	.0008092	.3436	.0005132	.0001460	.0038004	4.0014
%RSD	1.652560	6.464988	.1889632	2.933689	.0421206	.4080052	.7307355
#1	.0043893	.0119739	181.8272	.0178458	.3466008	.9277097	550.6054
#2	.0043760	.0134471	181.5194	.0169053	.3464815	.9353089	543.0445
#3	.0042589	.0121302	182.2055	.0177316	.3467719	.9313723	549.0962

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.889176	100.2649	.1447709	.0021587	17.41587	1.396758	.6598245
Stddev	.011813	.0706	.0006962	.0011069	.05789	.002250	.0034321
%RSD	.2416231	.0704425	.4809124	51.27672	.3323866	.1610738	.5201516
#1	4.889015	100.1946	.1439683	.0032173	17.41371	1.397668	.6564869
#2	4.877444	100.2644	.1451323	.0010091	17.35909	1.394196	.6596428
#3	4.901069	100.3359	.1452121	.0022498	17.47480	1.398411	.6633438

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.401453	2.992176	.0036882	-.009158	9.304616	2.508651	11.09383
Stddev	.017263	.004723	.0002645	.001514	.030387	.003490	.00435
%RSD	.7188525	.1578453	7.171955	16.53566	.3265755	.1391186	.0392366
#1	2.382713	2.995130	.0039682	-.010871	9.320639	2.512549	11.09719
#2	2.416706	2.986728	.0036538	-.008001	9.269571	2.507591	11.08891
#3	2.404941	2.994669	.0034425	-.008601	9.323638	2.505815	11.09538

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-07 Acquired: 4/30/2025 19:33:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	7.522562	.3012346	-.053246
Stddev	.033347	.0018737	.002059
%RSD	.4432898	.6220066	3.866681
#1	7.497018	.3029819	-.055524
#2	7.510382	.2992559	-.051517
#3	7.560287	.3014658	-.052698

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3497.579	83784.53	13950.98	2228.926	4235.532
Stddev	5.609	97.89	17.73	5.012	10.311
%RSD	.1603767	.1168389	.1270919	.2248504	.2434437
#1	3504.056	83889.44	13934.55	2231.342	4247.409
#2	3494.284	83695.63	13969.78	2232.272	4230.313
#3	3494.398	83768.50	13948.60	2223.164	4228.874

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV03 Acquired: 4/30/2025 19:37:16 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.060138	5.236901	5.114150	5.080210	5.025379	10.08895	9.772398
Stddev	.049105	.071118	.017233	.048620	.057985	.03367	.043616
%RSD	.9704249	1.358024	.3369666	.9570495	1.153848	.3337657	.4463233
#1	5.115809	5.158687	5.102277	5.133667	5.088804	10.06338	9.803735
#2	5.041625	5.254334	5.106258	5.068338	5.012246	10.12710	9.790875
#3	5.022982	5.297681	5.133916	5.038625	4.975086	10.07636	9.722584

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2642396	2.568668	25.13962	1.038159	2.539474	1.258844	5.168916
Stddev	.0045494	.009413	.11177	.001644	.004490	.011662	.076286
%RSD	1.721705	.3664533	.4446044	.1583549	.1767961	.9263664	1.475852
#1	.2680631	2.560257	25.21760	1.039120	2.537035	1.272016	5.095539
#2	.2654477	2.566911	25.18969	1.039097	2.536731	1.254678	5.163399
#3	.2592081	2.578835	25.01157	1.036261	2.544655	1.249837	5.247810

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.481001	25.39214	2.546747	1.268207	23.16766	2.505145	2.538765
Stddev	.007378	.20852	.004280	.000893	.51632	.005640	.007565
%RSD	.2973733	.8211958	.1680430	.0704413	2.228620	.2251333	.2979787
#1	2.488739	25.54638	2.543398	1.267725	22.74847	2.501302	2.530045
#2	2.480217	25.47514	2.545274	1.267658	23.01010	2.511620	2.542666
#3	2.474046	25.15490	2.551568	1.269238	23.74440	2.502512	2.543583

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.08876	5.214775	5.101570	5.132843	4.968898	4.869318	4.931793
Stddev	.43593	.090453	.024058	.019418	.003238	.065449	.013708
%RSD	1.809672	1.734552	.4715739	.3783165	.0651701	1.344108	.2779514
#1	23.71539	5.292896	5.129345	5.115314	4.971885	4.812496	4.926978
#2	23.98307	5.235753	5.087296	5.129498	4.969353	4.854578	4.921142
#3	24.56781	5.115676	5.088067	5.153716	4.965456	4.940880	4.947259

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV03 Acquired: 4/30/2025 19:37:16 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.991855	4.791847	4.989459
Stddev	.008298	.022711	.010740
%RSD	.1662330	.4739532	.2152458
#1	4.997461	4.770645	4.978230
#2	4.995782	4.789081	4.999631
#3	4.982322	4.815814	4.990517

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3133.368	76237.59	11395.34	2027.066	4800.447
Stddev	12.763	195.25	199.32	7.711	17.854
%RSD	.4073156	.2561008	1.749116	.3803808	.3719261
#1	3119.519	76378.82	11240.53	2035.695	4810.404
#2	3144.656	76319.17	11325.26	2024.651	4811.103
#3	3135.929	76014.79	11620.24	2020.852	4779.835

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB03 Acquired: 4/30/2025 19:41:26 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0041756	.0031590	.0039212	-.001665	.0042538	-.001357	.0028986
Stddev	.0038411	.0023694	.0032478	.001458	.0029835	.002308	.0007362
%RSD	91.99049	75.00384	82.82580	87.57098	70.13766	170.0444	25.39774
#1	.0006095	.0011447	.0012035	-.000683	.0033686	-.001125	.0029083
#2	.0082425	.0057695	.0075181	-.000971	.0075797	-.003772	.0021576
#3	.0036747	.0025628	.0030421	-.003340	.0018130	.000826	.0036299

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000738	.0014188	.0147751	-.000272	.0012548	.0006069	.0353742
Stddev	.0000226	.0007425	.0018811	.000210	.0003187	.0005056	.0046555
%RSD	30.60205	52.33662	12.73124	77.15964	25.39833	83.29849	13.16074
#1	.0000947	.0006842	.0166767	-.000034	.0009351	.0002581	.0328872
#2	.0000768	.0021690	.0129153	-.000429	.0015725	.0011867	.0407450
#3	.0000499	.0014031	.0147332	-.000354	.0012567	.0003759	.0324903

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012261	.0085465	.0014071	-.000130	-.106401	.0009874	-.000104
Stddev	.0005643	.0067406	.0006459	.000453	.010274	.0002887	.000289
%RSD	46.01939	78.86960	45.90226	348.2702	9.655701	29.23552	277.8383
#1	.0007048	.0025973	.0010228	-.000653	-.117636	.0007442	.000121
#2	.0011483	.0158674	.0021528	.000120	-.097485	.0009116	-.000003
#3	.0018253	.0071747	.0010457	.000142	-.104082	.0013064	-.000431

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0930411	.0091790	.0030657	.0018784	.0011477	-.002985	.0048108
Stddev	.0029445	.0005532	.0013705	.0016072	.0006377	.004679	.0004605
%RSD	3.164704	6.026876	44.70401	85.56464	55.56335	156.7574	9.571892
#1	.0898760	.0098178	.0018930	.0001819	.0013340	-.007965	.0043348
#2	.0956991	.0088565	.0045723	.0033782	.0016715	-.002309	.0048436
#3	.0935483	.0088628	.0027318	.0020750	.0004376	.001319	.0052540

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB03 Acquired: 4/30/2025 19:41:26 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0000899	-.003713	.0010143
Stddev	.0047926	.000971	.0000774
%RSD	5330.657	26.15707	7.634292
#1	-.005156	-.004776	.0010991
#2	.001186	-.002871	.0009474
#3	.004239	-.003494	.0009963

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3263.657	77468.12	11743.31	2150.672	5255.155
Stddev	5.668	551.74	31.32	10.956	17.778
%RSD	.1736620	.7122219	.2666777	.5094196	.3382912
#1	3268.367	78104.52	11769.53	2162.858	5275.145
#2	3265.238	77175.72	11751.77	2141.636	5241.116
#3	3257.367	77124.11	11708.63	2147.521	5249.205

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-09 Acquired: 4/30/2025 19:45:47 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0528893	-.028358	.0334590	.0009942	-.011815	183.1101	.6049185
Stddev	.0054356	.008780	.0016717	.0043707	.000908	.3696	.0021318
%RSD	10.27737	30.96244	4.996138	439.6256	7.684764	.2018208	.3524072
#1	.0582994	-.020554	.0326719	.0046692	-.012696	183.4037	.6062685
#2	.0529402	-.037866	.0353789	.0021523	-.010882	183.2315	.6060260
#3	.0474284	-.026655	.0323261	-.003839	-.011866	182.6951	.6024609

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057380	.0162060	244.9505	.0357964	.4224717	.9195783	736.3045
Stddev	.0000614	.0010116	1.1426	.0008846	.0010394	.0067399	6.0248
%RSD	1.070116	6.242368	.4664594	2.471255	.2460165	.7329292	.8182419
#1	.0057956	.0151285	245.1053	.0368121	.4236703	.9167823	741.9515
#2	.0057451	.0163541	246.0079	.0351944	.4218199	.9146864	736.9999
#3	.0056734	.0171354	243.7385	.0353827	.4219249	.9272662	729.9623

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.190021	129.0121	.1764886	.0073129	24.60357	1.985141	.8458587
Stddev	.028184	.3947	.0012819	.0006216	.22302	.007458	.0039566
%RSD	.4553062	.3059139	.7263261	8.500688	.9064457	.3756833	.4677589
#1	6.194120	129.1359	.1766371	.0074915	24.86022	1.988887	.8415940
#2	6.215931	129.3300	.1776897	.0078258	24.45697	1.989983	.8494101
#3	6.160013	128.5703	.1751389	.0066215	24.49351	1.976553	.8465720

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.201427	4.406688	.0064427	-.014207	12.83434	2.769875	12.60515
Stddev	.025922	.025698	.0005542	.001684	.04425	.018806	.02885
%RSD	.8096881	.5831611	8.601487	11.85129	.3447898	.6789642	.2288379
#1	3.231338	4.431868	.0063803	-.016020	12.83969	2.787974	12.62716
#2	3.187442	4.407694	.0059224	-.012692	12.87567	2.750434	12.61579
#3	3.185502	4.380501	.0070255	-.013909	12.78765	2.771217	12.57249

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-09 Acquired: 4/30/2025 19:45:47 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	19.74943	.3949685	-.008428
Stddev	.03968	.0019205	.004210
%RSD	.2009248	.4862334	49.95280
#1	19.78406	.3968677	-.013127
#2	19.75809	.3950104	-.007156
#3	19.70613	.3930274	-.005001

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3508.095	84606.96	14418.57	2334.660	4078.865
Stddev	7.753	654.64	64.26	9.454	4.757
%RSD	.2209926	.7737391	.4456556	.4049364	.1166141
#1	3500.075	83851.72	14415.82	2328.883	4073.635
#2	3515.550	85012.26	14355.73	2329.527	4082.931
#3	3508.658	84956.89	14484.15	2345.570	4080.030

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11 Acquired: 4/30/2025 19:50:00 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0443230	-.030690	.0430814	-.030023	-.010418	170.4508
Stddev	.0028434	.001934	.0051292	.011665	.003332	.2065
%RSD	6.415106	6.302216	11.90581	38.85364	31.98368	.1211478
#1	.0473810	-.028612	.0418215	-.036364	-.006744	170.5557
#2	.0438291	-.032438	.0386996	-.037144	-.011267	170.5838
#3	.0417590	-.031019	.0487232	-.016561	-.013244	170.2129

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6129894	.0059399	.0277299	231.6951	.0172644	.4047562
Stddev	.0016840	.0001304	.0003857	.4040	.0004372	.0013262
%RSD	.2747186	2.194495	1.390922	.1743882	2.532175	.3276597
#1	.6147904	.0060086	.0281737	231.8016	.0167629	.4032248
#2	.6114540	.0060215	.0274750	232.0351	.0174652	.4055145
#3	.6127238	.0057896	.0275411	231.2484	.0175651	.4055292

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9642391	672.9698	6.113272	117.2624	.1481876	-.000286
Stddev	.0007682	.9062	.009581	.3129	.0003843	.000542
%RSD	.0796638	.1346542	.1567253	.2668087	.2593061	189.2954
#1	.9644817	672.8482	6.106083	117.1387	.1477467	-.000142
#2	.9633789	672.1306	6.124149	117.6182	.1483650	-.000886
#3	.9648566	673.9307	6.109585	117.0302	.1484511	.000169

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.88525	1.773509	.7894503	2.570845	3.788566	.0040993
Stddev	.08714	.001354	.0011770	.018415	.006257	.0004638
%RSD	.4381900	.0763193	.1490848	.7163138	.1651435	11.31430
#1	19.87930	1.774640	.7908065	2.587978	3.788311	.0037838
#2	19.80125	1.772009	.7888478	2.551371	3.794946	.0046318
#3	19.97521	1.773877	.7886965	2.573185	3.782441	.0038822

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11 Acquired: 4/30/2025 19:50:00 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.012656	12.36639	2.931576	12.95107	F 23.79480	.3596959
Stddev	.000944	.01184	.003341	.02132	.02114	.0008042
%RSD	7.458972	.0957384	.1139597	.1646386	.0888517	.2235720
#1	-.013711	12.37948	2.932311	12.94591	23.79459	.3595442
#2	-.012364	12.36328	2.927929	12.97451	23.77376	.3589785
#3	-.011892	12.35642	2.934489	12.93281	23.81604	.3605652

Elem	Sr4077
Units	ppm
Avg	.0607098
Stddev	.0006541
%RSD	1.077494
#1	.0614431
#2	.0601862
#3	.0605002

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3546.952	87326.33	13842.56	2358.764	4096.800
Stddev	5.379	320.19	29.37	1.302	4.638
%RSD	.1516423	.3666591	.2121862	.0551977	.1132138
#1	3541.004	87694.61	13860.77	2357.266	4097.116
#2	3548.375	87113.91	13808.68	2359.622	4092.012
#3	3551.475	87170.47	13858.23	2359.404	4101.272

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11DUP Acquired: 4/30/2025 19:54:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0295958	-.046191	.0275681	-.046566	-.011538	177.2640	.6887891
Stddev	.0053417	.002545	.0037097	.003026	.002251	.3402	.0013907
%RSD	18.04889	5.509771	13.45649	6.497981	19.51212	.1919071	.2019040
#1	.0317515	-.043772	.0298668	-.049996	-.012510	176.8713	.6873428
#2	.0335228	-.048846	.0232884	-.044277	-.013141	177.4501	.6901166
#3	.0235131	-.045954	.0295491	-.045424	-.008964	177.4705	.6889078

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063847	.0352981	240.4460	.0195190	.4236332	1.019859	668.9301
Stddev	.0000220	.0014575	.8259	.0003292	.0013857	.010769	6.4410
%RSD	.3446031	4.129253	.3434855	1.686449	.3270907	1.055890	.9628811
#1	.0063600	.0342390	239.4931	.0192036	.4232346	1.011678	673.2252
#2	.0064022	.0346949	240.8906	.0198604	.4224905	1.015839	672.0409
#3	.0063919	.0369604	240.9544	.0194929	.4251745	1.032059	661.5242

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.448076	120.8332	.1535547	-.007242	19.83172	2.019467	.9018948
Stddev	.018282	.3442	.0004750	.000417	.14856	.001515	.0006300
%RSD	.2835245	.2848815	.3093587	5.752942	.7490831	.0750076	.0698509
#1	6.427626	120.4583	.1541027	-.007051	20.00323	2.017807	.9024462
#2	6.462834	120.9065	.1532589	-.006955	19.74327	2.019818	.9020300
#3	6.453770	121.1349	.1533027	-.007720	19.74866	2.020775	.9012082

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.657452	4.015276	.0047868	-.015513	13.80189	4.403112	13.10314
Stddev	.035438	.036235	.0004595	.002915	.03462	.027805	.01133
%RSD	1.333515	.9024368	9.600193	18.78994	.2508033	.6314857	.0864345
#1	2.696955	4.031292	.0052325	-.014275	13.76221	4.431089	13.09468
#2	2.628457	4.040744	.0043146	-.013422	13.82592	4.402764	13.09873
#3	2.646945	3.973793	.0048135	-.018843	13.81755	4.375483	13.11601

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11DUP Acquired: 4/30/2025 19:54:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	11.09523	.3576666	.0677150
Stddev	.01792	.0030873	.0068694
%RSD	.1614948	.8631687	10.14452
#1	11.07806	.3595711	.0619274
#2	11.09381	.3593241	.0659113
#3	11.11382	.3541045	.0753062

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3586.853	85651.68	13169.32	2327.302	4111.566
Stddev	12.413	465.07	78.13	11.916	15.785
%RSD	.3460716	.5429767	.5932510	.5120212	.3839289
#1	3593.584	85151.91	13246.16	2313.964	4119.889
#2	3594.448	85731.40	13089.97	2331.044	4121.449
#3	3572.529	86071.74	13171.82	2336.899	4093.361

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11LX5 Acquired: 4/30/2025 19:58:24 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0119137	-.003193	.0064743	.0022849	-.004890	39.50533	.1425413
Stddev	.0023580	.003631	.0002666	.0062576	.001056	.04368	.0005028
%RSD	19.79263	113.7003	4.117397	273.8735	21.60051	.1105592	.3527434
#1	.0094369	-.002051	.0067366	.0062990	-.005255	39.50583	.1428755
#2	.0121727	-.000271	.0062037	-.004925	-.003700	39.46141	.1419630
#3	.0141315	-.007258	.0064826	.005481	-.005715	39.54876	.1427854

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014810	-.003591	55.39022	.0044907	.0795135	.2430930	164.6532
Stddev	.0000386	.000412	.02411	.0007657	.0003036	.0017898	.0864
%RSD	2.608435	11.48064	.0435347	17.05036	.3818734	.7362571	.0524889
#1	.0014453	-.003793	55.36601	.0053734	.0795587	.2427991	164.7506
#2	.0015220	-.003863	55.39040	.0040928	.0791898	.2414683	164.6233
#3	.0014756	-.003117	55.41424	.0040058	.0797920	.2450115	164.5856

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.450499	27.85271	.0306629	.0015411	4.064729	.4192944	.1866306
Stddev	.003108	.05671	.0002612	.0002046	.008145	.0009811	.0008043
%RSD	.2142787	.2036108	.8517485	13.27546	.2003894	.2339811	.4309400
#1	1.450781	27.78994	.0307700	.0013310	4.057298	.4199694	.1868608
#2	1.447260	27.90027	.0303652	.0015525	4.063451	.4181690	.1872946
#3	1.453457	27.86791	.0308535	.0017397	4.073438	.4197448	.1857363

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6352773	1.015623	.0005610	.0086151	2.998766	1.125098	2.577486
Stddev	.0113590	.001914	.0003130	.0008997	.003221	.017745	.015814
%RSD	1.788037	.1884582	55.79175	10.44368	.1074259	1.577162	.6135441
#1	.6441268	1.013413	.0005812	.0095970	3.001136	1.132655	2.595706
#2	.6392366	1.016750	.0008633	.0084181	2.995098	1.104825	2.569435
#3	.6224686	1.016707	.0002383	.0078301	3.000064	1.137812	2.567318

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11LX5 Acquired: 4/30/2025 19:58:24 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.636060	.0806218	.0015174
Stddev	.005000	.0004337	.0001321
%RSD	.1078487	.5379795	8.704751
#1	4.641122	.0809836	.0014483
#2	4.631125	.0807407	.0014342
#3	4.635932	.0801410	.0016697

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3150.115	75352.29	11711.75	2061.385	4553.186
Stddev	12.363	113.78	29.85	10.777	7.625
%RSD	.3924509	.1509942	.2548597	.5227815	.1674632
#1	3153.782	75242.53	11705.02	2050.461	4553.746
#2	3160.229	75469.70	11744.39	2072.007	4560.516
#3	3136.333	75344.65	11685.84	2061.687	4545.297

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11MS Acquired: 4/30/2025 20:02:35 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.6574064	1.862822	1.004863	1.444067	.2142339	182.0587
Stddev	.0024745	.023581	.003659	.001477	.0030310	.3028
%RSD	.3763961	1.265853	.3641319	.1022856	1.414811	.1663426
#1	.6550158	1.861103	1.000650	1.442364	.2170265	182.1530
#2	.6572463	1.840148	1.006703	1.444849	.2110106	181.7199
#3	.6599570	1.887215	1.007238	1.444989	.2146645	182.3032

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8635304	.1704337	.2368056	233.0034	.3393875	.6009087
Stddev	.0025584	.0007025	.0004082	.5155	.0007725	.0007074
%RSD	.2962743	.4121929	.1723647	.2212258	.2276051	.1177129
#1	.8654681	.1704431	.2363827	232.7340	.3394481	.6006089
#2	.8606303	.1697265	.2368368	232.6784	.3385865	.6017166
#3	.8644927	.1711314	.2371973	233.5977	.3401279	.6004007

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.187452	645.0945	6.078007	118.1536	.6334683	.0580179
Stddev	.004856	3.1819	.016272	.2504	.0008344	.0008875
%RSD	.4089835	.4932380	.2677117	.2118864	.1317203	1.529742
#1	1.182162	648.7668	6.075840	117.9129	.6327159	.0582166
#2	1.188484	643.1600	6.062927	118.1351	.6343657	.0570478
#3	1.191709	643.3566	6.095253	118.4126	.6333234	.0587892

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.26344	2.149525	1.020234	10.44901	4.339896	.3228388
Stddev	.11631	.007333	.000796	.01570	.022112	.0011050
%RSD	.5224053	.3411246	.0780161	.1502678	.5094962	.3422805
#1	22.33221	2.142611	1.020744	10.43102	4.362610	.3219343
#2	22.12915	2.148751	1.019317	10.45603	4.318441	.3225116
#3	22.32895	2.157215	1.020642	10.45997	4.338636	.3240704

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11MS Acquired: 4/30/2025 20:02:35 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.6717260	13.91438	6.368852	F 18.68535	11.73421	.5046767
Stddev	.0008525	.03945	.024778	.03795	.03464	.0007992
%RSD	.1269106	.2834879	.3890571	.2030790	.2951705	.1583643
#1	.6720917	13.93071	6.385878	18.72356	11.70265	.5055996
#2	.6707517	13.86939	6.340425	18.64768	11.72872	.5042137
#3	.6723346	13.94304	6.380252	18.68480	11.77126	.5042169

Elem	Sr4077
Units	ppm
Avg	.2335061
Stddev	.0030465
%RSD	1.304667
#1	.2317752
#2	.2317193
#3	.2370237

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3467.712	84232.37	12891.68	2252.670	4041.837
Stddev	4.568	214.36	36.41	6.873	2.671
%RSD	.1317258	.2544895	.2824173	.3051008	.0660817
#1	3462.473	84477.50	12922.24	2257.944	4038.821
#2	3470.865	84139.53	12901.41	2244.897	4043.903
#3	3469.797	84080.07	12851.40	2255.169	4042.788

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11MSD Acquired: 4/30/2025 20:06:43 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.6934449	1.946700	1.042552	1.525108	.2171076	190.8348
Stddev	.0029208	.014637	.004568	.013734	.0023731	.5481
%RSD	.4212029	.7519006	.4381317	.9004952	1.093044	.2871941
#1	.6943078	1.961568	1.043421	1.509769	.2198386	191.0672
#2	.6958370	1.932305	1.037612	1.529290	.2159363	191.2284
#3	.6901898	1.946228	1.046623	1.536264	.2155479	190.2088

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9145620	.1599641	.2371319	243.8819	.3487431	.6356902
Stddev	.0029077	.0004945	.0007018	.7088	.0012312	.0007617
%RSD	.3179307	.3091381	.2959368	.2906163	.3530435	.1198146
#1	.9112506	.1595951	.2375292	243.6466	.3482795	.6358244
#2	.9166978	.1605260	.2375450	244.6785	.3478109	.6348704
#3	.9157376	.1597712	.2363217	243.3208	.3501388	.6363759

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.197576	729.3741	6.521128	122.2678	.6654315	.0707926
Stddev	.005503	4.8042	.023131	.3608	.0014645	.0005043
%RSD	.4595505	.6586775	.3547161	.2950603	.2200875	.7123529
#1	1.195192	728.1083	6.497401	122.3438	.6670658	.0713633
#2	1.203870	725.3296	6.543614	122.5845	.6642381	.0704073
#3	1.193666	734.6845	6.522371	121.8751	.6649904	.0706071

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.39388	2.249821	1.040148	11.86131	4.838057	.3280379
Stddev	.14671	.010285	.004359	.07699	.021032	.0002224
%RSD	.5355583	.4571669	.4191039	.6490867	.4347127	.0677888
#1	27.26235	2.258584	1.038395	11.80218	4.822618	.3281505
#2	27.36717	2.252382	1.045110	11.83339	4.829542	.3281814
#3	27.55210	2.238497	1.036937	11.94836	4.862011	.3277817

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11MSD Acquired: 4/30/2025 20:06:43 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.6995524	14.88996	6.994189	F 19.91467	11.29473	.5480249
Stddev	.0053392	.03357	.017406	.05343	.02434	.0021892
%RSD	.7632310	.2254218	.2488676	.2682786	.2155332	.3994741
#1	.6983758	14.87488	6.990165	19.96442	11.31508	.5461249
#2	.6948997	14.92842	6.979147	19.85821	11.26777	.5475309
#3	.7053818	14.86659	7.013255	19.92138	11.30136	.5504189

Elem	Sr4077
Units	ppm
Avg	.1969718
Stddev	.0059629
%RSD	3.027300
#1	.1968811
#2	.2029796
#3	.1910548

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3447.216	85292.16	14332.12	2302.482	3968.065
Stddev	12.674	256.97	24.65	4.788	8.920
%RSD	.3676573	.3012805	.1720047	.2079344	.2247871
#1	3458.784	85330.30	14350.33	2298.257	3978.328
#2	3433.669	85527.93	14304.07	2301.506	3962.176
#3	3449.196	85018.26	14341.96	2307.682	3963.691

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-11A Acquired: 4/30/2025 20:10:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.6705938	1.853625	.9978905	1.458333	.6033048	178.9119
Stddev	.0029772	.005285	.0041023	.006050	.0037551	.2054
%RSD	.4439666	.2850897	.4110971	.4148316	.6224240	.1147828
#1	.6673054	1.849557	.9938803	1.457058	.6047941	179.0513
#2	.6731061	1.851720	1.002079	1.464918	.6060867	178.6761
#3	.6713699	1.859598	.997712	1.453022	.5990334	179.0083

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8010152	.1706439	.2381611	237.4662	.3275892	.6093545
Stddev	.0017684	.0005681	.0007027	.2954	.0008651	.0014363
%RSD	.2207703	.3328958	.2950378	.1244125	.2640836	.2357098
#1	.8030548	.1705920	.2380452	237.7960	.3272481	.6078303
#2	.8000822	.1712362	.2375237	237.3771	.3285729	.6095505
#3	.7999088	.1701036	.2389146	237.2256	.3269467	.6106827

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.241942	646.4610	6.404362	120.2713	.6360204	.0549752
Stddev	.006220	4.2209	.019172	.1236	.0003976	.0004726
%RSD	.5008591	.6529280	.2993647	.1027282	.0625123	.8597401
#1	1.239465	647.9510	6.425853	120.2164	.6355894	.0551937
#2	1.237341	649.7349	6.398218	120.4128	.6360992	.0552991
#3	1.249019	641.6972	6.389014	120.1848	.6363728	.0544329

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.59875	2.112033	.9951515	10.32276	4.111189	.3103004
Stddev	.10166	.003638	.0015091	.04375	.025415	.0001977
%RSD	.4706650	.1722636	.1516499	.4238268	.6181810	.0637034
#1	21.65709	2.114392	.9936073	10.30331	4.108248	.3102913
#2	21.48136	2.113863	.9952243	10.29210	4.137947	.3105024
#3	21.65778	2.107843	.9966230	10.37286	4.087374	.3101074

Sample Name: Q1883-11A Acquired: 4/30/2025 20:10:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.6741726	13.76144	6.503223	F 19.48664	17.88018	.5109437
Stddev	.0021891	.03006	.028774	.02762	.03907	.0025802
%RSD	.3247036	.2184216	.4424518	.1417268	.2184949	.5049916
#1	.6753692	13.79517	6.502670	19.45517	17.84010	.5126699
#2	.6755025	13.73750	6.474730	19.49785	17.91814	.5121836
#3	.6716461	13.75164	6.532269	19.50688	17.88229	.5079776

Elem	Sr4077
Units	ppm
Avg	.2389535
Stddev	.0051526
%RSD	2.156303
#1	.2401632
#2	.2333037
#3	.2433936

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3467.784	86025.96	12901.93	2334.383	4007.965
Stddev	2.562	466.39	23.00	1.987	7.739
%RSD	.0738932	.5421463	.1782323	.0851309	.1930850
#1	3469.565	86501.54	12925.66	2333.829	4016.182
#2	3468.940	86006.99	12879.74	2336.588	4006.897
#3	3464.847	85569.34	12900.40	2332.731	4000.816

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-13 Acquired: 4/30/2025 20:14:59 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0323657	-.025332	.0284303	-.005824	-.008258	133.4350	.1067448
Stddev	.0040838	.003499	.0005669	.004166	.002483	.1234	.0003917
%RSD	12.61774	13.81360	1.994152	71.53580	30.06282	.0924773	.3669249
#1	.0297543	-.022023	.0280122	-.002956	-.006698	133.5180	.1063910
#2	.0302710	-.024977	.0290756	-.003913	-.006955	133.4938	.1066778
#3	.0370719	-.028995	.0282030	-.010602	-.011121	133.2932	.1071657

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033845	.0044864	106.9772	.0283793	.2741863	.8129472	403.4934
Stddev	.0000260	.0001544	.1255	.0005339	.0009151	.0020147	1.9150
%RSD	.7673590	3.440673	.1173167	1.881205	.3337365	.2478224	.4745954
#1	.0033832	.0046432	106.8340	.0283830	.2731963	.8142582	401.4723
#2	.0034111	.0044813	107.0299	.0289112	.2743616	.8106274	403.7272
#3	.0033592	.0043346	107.0678	.0278435	.2750010	.8139560	405.2807

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.896971	87.88493	.1667744	.0028978	20.55212	1.351656	.5111616
Stddev	.009436	.08015	.0003621	.0004175	.08174	.005776	.0028603
%RSD	.3257298	.0912044	.2171427	14.40889	.3977411	.4273503	.5595762
#1	2.891492	87.80895	.1663984	.0024236	20.49154	1.345676	.5100387
#2	2.891553	87.96869	.1668040	.0032102	20.51971	1.357204	.5090331
#3	2.907867	87.87714	.1671208	.0030597	20.64509	1.352089	.5144130

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.800099	.4018613	.0049845	-.011716	9.591352	2.220279	9.495011
Stddev	.037030	.0025732	.0005222	.002438	.016220	.015029	.024090
%RSD	2.057129	.6403204	10.47613	20.80566	.1691057	.6769178	.2537106
#1	1.778424	.3991186	.0050282	-.009878	9.577959	2.227614	9.509327
#2	1.779016	.4042223	.0044418	-.014481	9.586710	2.230232	9.467198
#3	1.842856	.4022429	.0054834	-.010788	9.609386	2.202990	9.508507

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-13 Acquired: 4/30/2025 20:14:59 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	18.81756	.2285087	-.093974
Stddev	.05421	.0023177	.001148
%RSD	.2880588	1.014257	1.221540
#1	18.78402	.2267159	-.092651
#2	18.78857	.2276843	-.094708
#3	18.88010	.2311258	-.094562

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3469.547	83023.44	12916.00	2270.228	4439.954
Stddev	7.413	165.36	9.63	7.860	13.204
%RSD	.2136532	.1991748	.0745401	.3462312	.2974003
#1	3474.779	83201.97	12923.71	2277.137	4450.967
#2	3472.799	82992.81	12919.08	2271.872	4443.579
#3	3461.065	82875.53	12905.21	2261.676	4425.315

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-15 Acquired: 4/30/2025 20:19:04 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0155122	-.025656	.0155851	-.017643	-.005258	138.8702	.1478172
Stddev	.0008549	.001403	.0023490	.003665	.002460	.0788	.0013417
%RSD	5.511182	5.469899	15.07218	20.77395	46.77438	.0567609	.9076731
#1	.0149764	-.025196	.0179962	-.013412	-.008093	138.9256	.1476338
#2	.0164982	-.027231	.0133036	-.019674	-.003689	138.7800	.1465766
#3	.0150621	-.024539	.0154556	-.019844	-.003994	138.9051	.1492411

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039687	.0125754	108.1685	.0197430	.2974166	.8430927	452.5548
Stddev	.0000652	.0004061	.0396	.0006219	.0007152	.0014089	1.2897
%RSD	1.642770	3.229722	.0365713	3.150090	.2404826	.1671157	.2849743
#1	.0040424	.0123542	108.1615	.0191225	.2968229	.8415225	453.5175
#2	.0039187	.0123279	108.1329	.0203663	.2972161	.8442465	451.0895
#3	.0039450	.0130441	108.2111	.0197402	.2982106	.8435090	453.0575

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.420185	85.60209	.1402610	-.000711	17.20890	1.361638	.6463952
Stddev	.008575	.12382	.0002813	.000073	.07212	.001037	.0025936
%RSD	.2507220	.1446427	.2005556	10.22871	.4190783	.0761659	.4012418
#1	3.418289	85.47744	.1399782	-.000634	17.20315	1.360582	.6474255
#2	3.412717	85.72506	.1402642	-.000778	17.13983	1.362655	.6434447
#3	3.429550	85.60378	.1405407	-.000721	17.28372	1.361678	.6483153

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.712886	.2342415	.0031993	-.012093	10.31390	2.489659	11.57185
Stddev	.009473	.0122216	.0002667	.003312	.02103	.013758	.04159
%RSD	.5530240	5.217513	8.336543	27.38937	.2039048	.5525928	.3594320
#1	1.702215	.2439555	.0030560	-.008469	10.31862	2.493236	11.61031
#2	1.716137	.2205191	.0030348	-.014964	10.29091	2.501274	11.57752
#3	1.720305	.2382499	.0035070	-.012845	10.33217	2.474466	11.52771

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1883-15 Acquired: 4/30/2025 20:19:04 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.362332	.2534062	-.133871
Stddev	.012869	.0008693	.001134
%RSD	.2399859	.3430278	.8470720
#1	5.362397	.2525278	-.135132
#2	5.349431	.2534246	-.132935
#3	5.375169	.2542660	-.133546

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3570.258	85259.60	12960.80	2312.450	4423.378
Stddev	7.692	54.13	37.94	11.317	6.706
%RSD	.2154345	.0634830	.2927097	.4893993	.1516076
#1	3579.101	85246.04	12994.34	2306.983	4429.299
#2	3566.551	85213.55	12919.63	2325.462	4424.738
#3	3565.123	85319.22	12968.42	2304.904	4416.096

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV04 Acquired: 4/30/2025 20:23:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.001429	5.140140	5.098006	4.972820	4.981724	9.943365	9.718861
Stddev	.026566	.064096	.015719	.014042	.029104	.075097	.110988
%RSD	.5311676	1.246979	.3083301	.2823806	.5842190	.7552459	1.141980
#1	4.985773	5.086507	5.088130	4.973161	4.971251	10.02386	9.808596
#2	4.986411	5.122786	5.089757	4.958611	4.959305	9.93105	9.594754
#3	5.032102	5.211126	5.116132	4.986689	5.014615	9.87519	9.753234

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2509077	2.546013	24.92836	1.051794	2.523588	1.249193	5.485363
Stddev	.0009906	.008165	.03645	.001814	.009499	.004292	.233228
%RSD	.3948083	.3207133	.1462069	.1724379	.3764028	.3435614	4.251816
#1	.2519808	2.542417	24.94981	1.052699	2.519851	1.245941	5.742328
#2	.2507142	2.540262	24.88627	1.049706	2.516526	1.247581	5.426678
#3	.2500281	2.555359	24.94899	1.052978	2.534387	1.254057	5.287082

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.433560	25.29188	2.526792	1.267631	23.76294	2.481370	2.519957
Stddev	.006668	.08170	.008750	.000828	.17786	.000768	.008757
%RSD	.2739913	.3230413	.3463043	.0653268	.7484918	.0309502	.3475055
#1	2.427578	25.32469	2.521905	1.268380	23.58924	2.480723	2.510490
#2	2.440749	25.19888	2.521577	1.266741	23.94469	2.481168	2.521614
#3	2.432354	25.35208	2.536894	1.267772	23.75490	2.482218	2.527767

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.63879	4.885753	5.055366	5.099220	4.892196	5.077602	5.031589
Stddev	.13770	.022160	.013012	.017771	.003707	.024687	.019030
%RSD	.5588760	.4535617	.2573805	.3484967	.0757743	.4861957	.3782096
#1	24.49008	4.911340	5.052284	5.086180	4.891408	5.054658	5.025800
#2	24.76188	4.873169	5.044173	5.092020	4.896234	5.103724	5.016127
#3	24.66442	4.872751	5.069642	5.119461	4.888946	5.074423	5.052842

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV04 Acquired: 4/30/2025 20:23:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.906062	4.594406	4.868509
Stddev	.027377	.016477	.021438
%RSD	.5580255	.3586308	.4403480
#1	4.883805	4.589571	4.889258
#2	4.897748	4.612760	4.846442
#3	4.936632	4.580887	4.869827

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3117.589	74538.89	11800.01	1989.216	4802.075
Stddev	10.651	285.24	52.85	13.159	20.147
%RSD	.3416569	.3826754	.4478577	.6615205	.4195539
#1	3128.295	74650.81	11767.50	1999.460	4819.749
#2	3117.477	74751.20	11860.99	1993.813	4806.339
#3	3106.993	74214.66	11771.54	1974.375	4780.137

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB04 Acquired: 4/30/2025 20:27:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.000172	.0003688	.0021186	-.001278	.0023937	.0101780	.0049199
Stddev	.002455	.0007596	.0012969	.004926	.0011116	.0047023	.0009107
%RSD	1428.266	205.9588	61.21376	385.4407	46.43783	46.20029	18.51028
#1	-.001543	-.000270	.0027607	-.000782	.0022288	.0152461	.0042098
#2	-.001636	.001209	.0006259	-.006433	.0013738	.0093314	.0059466
#3	.002663	.000167	.0029691	.003381	.0035785	.0059566	.0046033

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000799	.0005705	.0188187	-.000058	.0002838	.0008878	.0239236
Stddev	.0000418	.0001137	.0058661	.000165	.0000781	.0002325	.0088812
%RSD	52.37597	19.92126	31.17168	283.7441	27.50929	26.19087	37.12307
#1	.0000357	.0007009	.0127374	-.000238	.0002930	.0011284	.0139107
#2	.0000850	.0004930	.0244428	-.000023	.0002015	.0006643	.0308487
#3	.0001189	.0005174	.0192758	.000086	.0003569	.0008707	.0270114

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012742	.0097730	.0005646	.0000582	-.082449	-.000094	.0006267
Stddev	.0004575	.0099706	.0003451	.0001224	.019148	.000281	.0001359
%RSD	35.90427	102.0216	61.12531	210.3014	23.22424	299.3051	21.67554
#1	.0016180	.0192037	.0007057	-.000031	-.086471	-.000118	.0005734
#2	.0007550	-.000662	.0001713	.000007	-.061609	-.000362	.0007811
#3	.0014497	.010777	.0008169	.000198	-.099266	.000198	.0005256

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0977564	.0140100	.0014328	-.000122	.0041002	.0014210	.0020120
Stddev	.0286939	.0013234	.0001869	.000651	.0005272	.0056351	.0015284
%RSD	29.35243	9.446306	13.04331	532.2565	12.85895	396.5576	75.96550
#1	.0646632	.0153618	.0015962	-.000823	.0037163	.0021117	.0010201
#2	.1157070	.0127168	.0014733	-.000009	.0047014	-.004528	.0037722
#3	.1128989	.0139514	.0012290	.000464	.0038829	.006679	.0012437

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB04 Acquired: 4/30/2025 20:27:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001482	-.003235	.0019000
Stddev	.002089	.000719	.0002209
%RSD	141.0032	22.22782	11.62503
#1	-.002798	-.004003	.0021347
#2	-.002574	-.002578	.0018691
#3	.000927	-.003123	.0016962

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3189.139	74877.66	10835.64	2045.864	5185.189
Stddev	11.262	455.23	12.77	6.390	22.464
%RSD	.3531273	.6079621	.1178353	.3123578	.4332277
#1	3192.722	75343.11	10823.05	2052.993	5195.866
#2	3198.174	74433.40	10835.30	2043.951	5200.323
#3	3176.522	74856.47	10848.58	2040.649	5159.378

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1889-01 Acquired: 4/30/2025 20:31:42 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0835674	.0108657	.1641209	.0029490	-.008186	159.4415	.5226660
Stddev	.0020708	.0016146	.0020180	.0065782	.001179	.3069	.0021340
%RSD	2.477990	14.85994	1.229569	223.0672	14.40499	.1924946	.4082850
#1	.0859582	.0127254	.1650999	.0041644	-.007129	159.6675	.5225429
#2	.0823377	.0100506	.1618001	.0088348	-.007971	159.5649	.5248589
#3	.0824062	.0098210	.1654625	-.004152	-.009458	159.0921	.5205962

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087140	-.003294	18.73037	.3269146	.0863872	.1592710	308.2246
Stddev	.0000941	.000402	.04912	.0003193	.0007250	.0013859	.8732
%RSD	1.079399	12.18995	.2622298	.0976746	.8392499	.8701384	.2832950
#1	.0088183	-.002847	18.72034	.3272580	.0871701	.1608496	307.6661
#2	.0086884	-.003625	18.78372	.3268591	.0857391	.1587091	309.2308
#3	.0086355	-.003411	18.68703	.3266267	.0862523	.1582543	307.7769

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.648410	16.98989	.1318581	.0015331	.9040836	.4199325	.3186648
Stddev	.007051	.04627	.0007036	.0001687	.0030011	.0022245	.0012768
%RSD	.4277500	.2723572	.5335926	11.00412	.3319504	.5297207	.4006783
#1	1.649770	16.93659	.1326093	.0015922	.9040725	.4204517	.3172036
#2	1.654681	17.01328	.1317503	.0016643	.9010880	.4218515	.3192251
#3	1.640777	17.01981	.1312146	.0013428	.9070902	.4174944	.3195656

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.100061	-.013334	.0072929	.0126516	2.351112	2.825549	3.546728
Stddev	.054871	.007698	.0002398	.0012913	.004794	.010005	.003410
%RSD	.7728287	57.73514	3.287874	10.20705	.2039170	.3540819	.0961469
#1	7.059833	-.021657	.0075697	.0115359	2.350398	2.814151	3.548870
#2	7.162568	-.006469	.0071616	.0140662	2.356223	2.829622	3.542795
#3	7.077782	-.011876	.0071476	.0123526	2.346714	2.832876	3.548518

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1889-01 Acquired: 4/30/2025 20:31:42 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.2530897	.2162674	-.164749
Stddev	.0046322	.0012305	.000374
%RSD	1.830268	.5689846	.2267544
#1	.2571762	.2174788	-.164340
#2	.2480577	.2163048	-.165071
#3	.2540354	.2150186	-.164838

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3525.715	82371.66	12916.09	2265.811	4724.440
Stddev	6.528	126.92	12.44	4.648	12.569
%RSD	.1851579	.1540868	.0963211	.2051556	.2660376
#1	3519.737	82477.76	12904.52	2270.018	4711.431
#2	3524.726	82406.17	12929.25	2266.594	4725.371
#3	3532.681	82231.05	12914.50	2260.820	4736.517

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1889-02 Acquired: 4/30/2025 20:35:48 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0824610	.0084528	.1438647	-.008013	-.005439	161.3903	.7268599
Stddev	.0012202	.0043568	.0014857	.005284	.002587	.2355	.0031958
%RSD	1.479677	51.54294	1.032706	65.94077	47.56272	.1459077	.4396746
#1	.0810526	.0034225	.1453055	-.013132	-.008382	161.6433	.7297001
#2	.0831354	.0110327	.1439508	-.008329	-.003526	161.3501	.7274803
#3	.0831952	.0109033	.1423379	-.002578	-.004410	161.1775	.7233994

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0119170	.0012025	18.20596	.3671032	.1199723	.1887204	313.7130
Stddev	.0000581	.0002877	.03668	.0003581	.0005021	.0025085	.4912
%RSD	.4874704	23.92843	.2014742	.0975418	.4185080	1.329219	.1565866
#1	.0119567	.0014496	18.20194	.3675150	.1194027	.1897280	313.2027
#2	.0119439	.0008866	18.24448	.3668654	.1201638	.1858648	314.1826
#3	.0118503	.0012712	18.17145	.3669291	.1203505	.1905685	313.7537

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.268222	27.63165	.1707576	-.001450	.2576846	.5341722	.3880502
Stddev	.004008	.07189	.0005981	.000092	.0040902	.0009850	.0010049
%RSD	.1767233	.2601755	.3502496	6.350458	1.587289	.1843975	.2589680
#1	2.271371	27.63495	.1710899	-.001391	.2535836	.5330357	.3888180
#2	2.269585	27.70184	.1700672	-.001556	.2577063	.5347787	.3884198
#3	2.263710	27.55817	.1711157	-.001402	.2617639	.5347023	.3869128

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.779399	-.139996	.0033502	.0048255	2.981620	5.250705	3.728755
Stddev	.019653	.009416	.0003040	.0006976	.011438	.014354	.022396
%RSD	.2238507	6.725880	9.075040	14.45578	.3836099	.2733817	.6006238
#1	8.783687	-.150824	.0034256	.0056309	2.990120	5.243751	3.744436
#2	8.757957	-.133732	.0036094	.0044116	2.986125	5.241153	3.703106
#3	8.796554	-.135432	.0030156	.0044341	2.968616	5.267213	3.738723

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1889-02 Acquired: 4/30/2025 20:35:48 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7466519	.2516711	-.196553
Stddev	.0033268	.0008020	.000900
%RSD	.4455651	.3186560	.4576466
#1	.7488502	.2513897	-.195514
#2	.7482809	.2525759	-.197092
#3	.7428245	.2510478	-.197052

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3523.024	82832.71	12408.96	2301.631	4653.129
Stddev	2.889	238.77	14.81	14.365	9.313
%RSD	.0819954	.2882582	.1193527	.6241274	.2001497
#1	3523.560	83099.76	12425.98	2318.193	4649.564
#2	3525.607	82758.55	12399.03	2294.141	4663.698
#3	3519.904	82639.82	12401.87	2292.559	4646.125

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1889-03 Acquired: 4/30/2025 20:39:53 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0654064	-.005365	.1321653	.0002615	-.007866	141.0203	.7928196
Stddev	.0010549	.002645	.0029321	.0018491	.002076	.5541	.0036665
%RSD	1.612804	49.29957	2.218530	707.1608	26.39134	.3929285	.4624627
#1	.0665477	-.008401	.1305404	-.001211	-.010121	140.4500	.7898850
#2	.0652041	-.004137	.1355502	-.000341	-.006035	141.0541	.7916443
#3	.0644673	-.003558	.1304054	.002337	-.007442	141.5567	.7969297

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0121266	.0038442	20.60536	.3751719	.1402539	.1841969	285.1062
Stddev	.0001384	.0000709	.07983	.0015785	.0004380	.0011021	.6829
%RSD	1.141470	1.842989	.3874136	.4207345	.3122920	.5983515	.2395372
#1	.0119670	.0039250	20.51671	.3769946	.1398303	.1832248	285.8945
#2	.0122138	.0037930	20.62782	.3742673	.1407050	.1853943	284.7307
#3	.0121990	.0038145	20.67155	.3742539	.1402263	.1839716	284.6934

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.938432	35.00296	.2365265	.0012491	.3536950	.4611064	.4947852
Stddev	.009159	.15554	.0007589	.0002426	.0205244	.0027698	.0013637
%RSD	.4724729	.4443499	.3208530	19.42568	5.802860	.6006875	.2756055
#1	1.929817	34.84455	.2368532	.0010614	.3318323	.4583293	.4963597
#2	1.937429	35.00887	.2370673	.0015231	.3567036	.4611211	.4940165
#3	1.948051	35.15546	.2356589	.0011629	.3725490	.4638689	.4939795

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.54675	-.011850	.0031559	.0006206	5.603854	5.127057	5.273784
Stddev	.05641	.010896	.0004433	.0026824	.019004	.017143	.030126
%RSD	.4885426	91.95358	14.04720	432.2003	.3391290	.3343659	.5712490
#1	11.60571	.000146	.0026519	.0036021	5.585473	5.146723	5.306764
#2	11.49330	-.014561	.0034853	-.001597	5.602663	5.119183	5.266877
#3	11.54125	-.021135	.0033306	-.000143	5.623425	5.115266	5.247710

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1889-03 Acquired: 4/30/2025 20:39:53 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.2294119	.2397057	-.136573
Stddev	.0052335	.0002705	.001344
%RSD	2.281255	.1128621	.9838573
#1	.2353194	.2394973	-.137899
#2	.2253555	.2396083	-.136607
#3	.2275610	.2400114	-.135212

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3779.136	89163.19	13965.04	2465.900	4619.888
Stddev	4.536	498.99	48.53	21.533	13.496
%RSD	.1200298	.5596328	.3475365	.8732359	.2921327
#1	3775.158	88774.96	14009.20	2462.476	4607.868
#2	3778.173	88988.59	13913.08	2446.284	4617.308
#3	3784.076	89726.01	13972.86	2488.940	4634.488

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1891-01 Acquired: 4/30/2025 20:44:00 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0350769	.0098754	.1861527	-.001420	-.006968	157.0026	1.218604
Stddev	.0043990	.0045620	.0015131	.006142	.002702	.3600	.005600
%RSD	12.54091	46.19576	.8128220	432.5236	38.78216	.2293238	.4595431
#1	.0390669	.0099383	.1874266	-.004032	-.007188	157.4141	1.225056
#2	.0303596	.0052823	.1865513	.005597	-.009554	156.7456	1.215755
#3	.0358041	.0144057	.1844802	-.005825	-.004163	156.8480	1.215003

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0109113	.0030368	15.83303	.2773249	.1513747	.4355725	307.8732
Stddev	.0001179	.0004463	.02539	.0004763	.0002261	.0035959	2.0055
%RSD	1.080337	14.69543	.1603446	.1717342	.1493612	.8255472	.6514126
#1	.0108622	.0026635	15.85434	.2775872	.1514720	.4317612	310.1698
#2	.0108260	.0035311	15.83981	.2776123	.1515359	.4360514	306.9819
#3	.0110458	.0029157	15.80494	.2767751	.1511163	.4389050	306.4678

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.965115	65.36072	.3291639	.0005674	5.423210	.3665627	.6559096
Stddev	.011083	.12259	.0008819	.0002207	.050109	.0016070	.0015696
%RSD	.1391494	.1875591	.2679225	38.89853	.9239759	.4383876	.2392945
#1	7.975767	65.38462	.3300911	.0007278	5.477696	.3683541	.6557862
#2	7.953646	65.22795	.3290650	.0006588	5.412830	.3652480	.6544053
#3	7.965934	65.46961	.3283356	.0003157	5.379104	.3660861	.6575371

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.95289	-.073539	.0036226	.0016194	4.085008	2.372300	4.818477
Stddev	.19846	.015962	.0004034	.0003782	.014922	.030333	.011093
%RSD	1.105461	21.70541	11.13515	23.35268	.3652849	1.278622	.2302152
#1	18.16303	-.057146	.0032782	.0016904	4.101773	2.398953	4.831248
#2	17.92699	-.074441	.0035233	.0012107	4.080069	2.339294	4.811244
#3	17.76865	-.089031	.0040664	.0019570	4.073182	2.378652	4.812938

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1891-01 Acquired: 4/30/2025 20:44:00 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.036384	.4285781	-.186225
Stddev	.003900	.0022048	.001346
%RSD	.3763159	.5144338	.7225615
#1	1.038089	.4311117	-.187766
#2	1.031922	.4270954	-.185625
#3	1.039141	.4275271	-.185284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3467.280	85012.24	12752.54	2254.382	4590.266
Stddev	3.059	257.05	34.71	8.253	6.802
%RSD	.0882214	.3023697	.2721674	.3660807	.1481838
#1	3470.349	84716.27	12779.16	2256.991	4586.395
#2	3464.232	85140.91	12765.19	2245.140	4586.284
#3	3467.260	85179.55	12713.29	2261.015	4598.121

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1891-05 Acquired: 4/30/2025 20:48:06 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0572472	.0053988	.2153339	.0086385	-.004922	164.5908	1.095955
Stddev	.0011652	.0042338	.0026877	.0020199	.001494	.5051	.002576
%RSD	2.035308	78.42160	1.248170	23.38232	30.35122	.3068748	.2350853
#1	.0565952	.0060119	.2164140	.0063921	-.005315	165.1162	1.098914
#2	.0585924	.0092926	.2122742	.0103049	-.006180	164.5475	1.094208
#3	.0565539	.0008918	.2173136	.0092186	-.003271	164.1088	1.094743

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0121662	.0039186	14.96623	.2070468	.1231941	.2331558	230.7133
Stddev	.0001590	.0002645	.06895	.0004374	.0002936	.0014385	1.0260
%RSD	1.306735	6.748432	.4607295	.2112429	.2383345	.6169705	.4447221
#1	.0122194	.0040255	15.04289	.2072997	.1228618	.2337730	230.4108
#2	.0119875	.0036175	14.90928	.2072989	.1234186	.2315117	231.8565
#3	.0122918	.0041129	14.94652	.2065418	.1233019	.2341827	229.8725

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.469161	42.82901	.2559852	.0033175	4.467045	.2737494	.5390535
Stddev	.013425	.11685	.0009010	.0003187	.049063	.0016251	.0027915
%RSD	.3004020	.2728202	.3519669	9.607333	1.098341	.5936476	.5178592
#1	4.484197	42.93747	.2551031	.0033379	4.423671	.2745933	.5359110
#2	4.464915	42.70528	.2559484	.0036256	4.520295	.2718759	.5412462
#3	4.458373	42.84427	.2569040	.0029891	4.457170	.2747788	.5400033

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.298209	.0920723	.0033806	.0157666	2.263154	4.362595	10.10162
Stddev	.071460	.0134884	.0002214	.0008362	.004665	.023483	.02201
%RSD	.7685310	14.64984	6.548524	5.303382	.2061060	.5382714	.2178964
#1	9.253128	.0859215	.0036289	.0158258	2.268336	4.336317	10.12679
#2	9.380601	.1075397	.0033090	.0149024	2.259291	4.381524	10.08598
#3	9.260897	.0827555	.0032039	.0165716	2.261837	4.369945	10.09209

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1891-05 Acquired: 4/30/2025 20:48:06 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	3.984865	.2646872	-.093556
Stddev	.019774	.0011794	.001009
%RSD	.4962367	.4455972	1.078447
#1	3.996778	.2659609	-.092831
#2	3.995779	.2644678	-.094708
#3	3.962039	.2636328	-.093128

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3909.741	90438.34	15280.52	2486.655	4566.981
Stddev	4.267	366.59	60.30	12.551	7.118
%RSD	.1091359	.4053514	.3946302	.5047382	.1558594
#1	3905.283	90436.95	15212.25	2486.878	4561.262
#2	3910.154	90072.43	15326.53	2473.994	4564.729
#3	3913.786	90805.62	15302.77	2499.093	4574.953

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1892-01 Acquired: 4/30/2025 20:52:12 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0391801	.0060421	.1171033	-.002251	-.005789	40.71084	.7042146
Stddev	.0030342	.0040200	.0032262	.000196	.001071	.14216	.0022310
%RSD	7.744269	66.53401	2.754965	8.698362	18.49214	.3491958	.3168009
#1	.0389446	.0100677	.1207164	-.002155	-.006915	40.86958	.7059137
#2	.0362705	.0060308	.1145111	-.002477	-.004784	40.66768	.7050421
#3	.0423253	.0020277	.1160825	-.002122	-.005669	40.59527	.7016882

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106092	.0021653	14.68722	.1941930	.1349360	.2262672	186.7618
Stddev	.0000466	.0000585	.07657	.0003866	.0010722	.0012549	1.5910
%RSD	.4393290	2.701052	.5213279	.1990814	.7945641	.5546197	.8518998
#1	.0106577	.0021528	14.76244	.1945202	.1354128	.2272286	187.2748
#2	.0105648	.0021141	14.68986	.1942924	.1356871	.2248475	188.0329
#3	.0106050	.0022290	14.60937	.1937664	.1337082	.2267253	184.9775

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.378586	17.69277	.1798275	.0001270	.9346906	.3398965	.4052173
Stddev	.015446	.08566	.0007562	.0003336	.0086634	.0005395	.0028125
%RSD	.4571754	.4841558	.4204835	262.6557	.9268727	.1587113	.6940662
#1	3.390326	17.78454	.1799926	.0004189	.9257295	.3397491	.4066866
#2	3.384345	17.67885	.1804875	.0001987	.9353202	.3404944	.4069908
#3	3.361089	17.61493	.1790025	-.000237	.9430219	.3394461	.4019745

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.268887	-.050779	.0093179	.0133242	1.069613	5.248079	3.090875
Stddev	.040192	.008283	.0002151	.0006972	.006468	.052748	.017461
%RSD	.9415081	16.31167	2.308416	5.232880	.6047399	1.005089	.5649063
#1	4.300447	-.052081	.0092289	.0138661	1.076284	5.267994	3.105960
#2	4.282575	-.041923	.0095632	.0135689	1.069186	5.287971	3.094918
#3	4.223639	-.058335	.0091615	.0125376	1.063369	5.188273	3.071748

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1892-01 Acquired: 4/30/2025 20:52:12 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.616744	.1533321	-.093626
Stddev	.011377	.0016107	.001070
%RSD	.7037054	1.050490	1.142710
#1	1.628744	.1545847	-.093726
#2	1.615374	.1538965	-.094643
#3	1.606114	.1515151	-.092510

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3844.765	90572.00	13758.63	2468.184	4892.105
Stddev	12.441	508.81	68.30	22.272	15.203
%RSD	.3235778	.5617731	.4964177	.9023613	.3107688
#1	3830.409	90202.57	13682.90	2458.583	4879.238
#2	3852.380	90361.07	13815.55	2452.322	4888.196
#3	3851.508	91152.35	13777.44	2493.646	4908.881

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1892-05 Acquired: 4/30/2025 20:56:18 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0448860	.0068045	.2218929	-.016101	-.004372	113.8991	1.222845
Stddev	.0002952	.0026609	.0019939	.003499	.002269	.2310	.002977
%RSD	.6576250	39.10423	.8985728	21.73181	51.88640	.2028046	.2434189
#1	.0446549	.0040794	.2204198	-.015602	-.006986	113.6740	1.220973
#2	.0452186	.0069381	.2210972	-.019823	-.003216	114.1355	1.221284
#3	.0447847	.0093961	.2241618	-.012878	-.002915	113.8877	1.226277

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0146053	.0059756	146.9643	.2358629	.1438433	.3838728	267.3348
Stddev	.0001274	.0004605	.4884	.0008650	.0001316	.0017043	1.5874
%RSD	.8725432	7.706372	.3323568	.3667336	.0915089	.4439847	.5937791
#1	.0145687	.0063472	146.5509	.2363181	.1436929	.3834196	266.9672
#2	.0147471	.0061192	147.5033	.2364053	.1439375	.3857579	265.9635
#3	.0145002	.0054604	146.8386	.2348654	.1438995	.3824408	269.0738

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.226650	78.17353	.2629361	-.001673	1.092775	.3452740	.5650135
Stddev	.016126	.46499	.0006827	.000418	.017757	.0019951	.0012202
%RSD	.3085285	.5948151	.2596328	24.95763	1.624921	.5778223	.2159573
#1	5.208078	77.92509	.2635659	-.001773	1.077486	.3429927	.5648659
#2	5.237096	78.70997	.2630319	-.002031	1.088588	.3461369	.5663007
#3	5.234776	77.88553	.2622106	-.001215	1.112251	.3466924	.5638737

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.86285	-.093852	.0028960	.0009651	3.150878	7.093956	6.099830
Stddev	.06412	.016449	.0002213	.0020600	.010127	.055963	.021774
%RSD	.5404938	17.52665	7.640509	213.4479	.3213937	.7888803	.3569559
#1	11.86223	-.093993	.0028400	-.000342	3.139279	7.051341	6.074698
#2	11.79904	-.110229	.0027081	.003340	3.155395	7.073194	6.111797
#3	11.92727	-.077332	.0031399	-.000102	3.157961	7.157332	6.112996

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1892-05 Acquired: 4/30/2025 20:56:18 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	2.755189	.2630744	-.027668
Stddev	.013370	.0012694	.000942
%RSD	.4852650	.4825365	3.405561
#1	2.750094	.2624298	-.027890
#2	2.745115	.2622566	-.026635
#3	2.770357	.2645368	-.028480

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3562.208	84457.55	12731.26	2302.512	4471.845
Stddev	5.254	188.58	74.84	14.863	10.336
%RSD	.1475016	.2232848	.5878673	.6455057	.2311257
#1	3565.289	84553.78	12772.10	2298.479	4479.892
#2	3565.194	84578.60	12644.88	2318.975	4475.455
#3	3556.141	84240.27	12776.80	2290.082	4460.189

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1892-09 Acquired: 4/30/2025 21:00:25 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.1167425	.0219098	.1907724	-.004259	-.010806	77.63626	1.154580
Stddev	.0038968	.0021947	.0059694	.007088	.001637	.16429	.001624
%RSD	3.337928	10.01703	3.129083	166.4256	15.14464	.2116098	.1406597
#1	.1159799	.0244435	.1856119	.003920	-.009809	77.52898	1.153159
#2	.1132833	.0206858	.1973101	-.008078	-.012695	77.55441	1.154231
#3	.1209642	.0206000	.1893953	-.008618	-.009915	77.82539	1.156350

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0191875	.0115605	30.84377	.4944353	.2042683	.3043120	404.0932
Stddev	.0001932	.0012761	.05139	.0009797	.0008507	.0045586	3.7851
%RSD	1.006774	11.03867	.1666014	.1981447	.4164467	1.497999	.9367018
#1	.0189671	.0103231	30.85598	.4946689	.2034522	.2993432	408.0697
#2	.0192673	.0128721	30.88796	.4952771	.2051497	.3083011	400.5340
#3	.0193279	.0114864	30.78738	.4933599	.2042031	.3052918	403.6760

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.594809	33.94381	.3492473	.0019685	2.514237	.4024860	.6722978
Stddev	.006018	.02108	.0017546	.0005310	.013970	.0012535	.0007168
%RSD	.1674066	.0621111	.5023920	26.97653	.5556228	.3114294	.1066155
#1	3.591214	33.96592	.3479171	.0024685	2.530073	.4020738	.6717466
#2	3.601757	33.92394	.3512359	.0014111	2.508981	.4014906	.6720386
#3	3.591457	33.94157	.3485890	.0020260	2.503658	.4038937	.6731081

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.110097	.0454472	.0059161	.0045087	1.677583	4.017071	11.44483
Stddev	.027899	.0200525	.0001364	.0012926	.000842	.003982	.02975
%RSD	.3440002	44.12274	2.304658	28.66812	.0502022	.0991264	.2599233
#1	8.139271	.0681607	.0060205	.0030771	1.677243	4.018155	11.41127
#2	8.083678	.0301947	.0059661	.0048592	1.678542	4.012660	11.45530
#3	8.107342	.0379862	.0057619	.0055899	1.676964	4.020399	11.46793

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1892-09 Acquired: 4/30/2025 21:00:25 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7509975	.3269864	-.235267
Stddev	.0032324	.0010536	.003575
%RSD	.4304132	.3222241	1.519430
#1	.7546523	.3275611	-.239005
#2	.7498259	.3257704	-.231882
#3	.7485143	.3276277	-.234914

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4060.249	97583.18	15669.45	2666.354	4632.605
Stddev	3.875	88.56	65.53	8.747	7.012
%RSD	.0954281	.0907582	.4181963	.3280478	.1513709
#1	4064.437	97529.28	15742.69	2656.312	4640.678
#2	4056.792	97534.86	15616.36	2670.446	4628.027
#3	4059.519	97685.39	15649.29	2672.305	4629.110

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167781BL Acquired: 4/30/2025 21:04:35 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.000018	-.000557	-.000050	-.003335	.0003667	F .0536712
Stddev	.000623	.001138	.000982	.002891	.0013070	.0038286
%RSD	3495.866	204.1180	1943.903	86.68244	356.4237	7.133345
#1	-.000705	.000745	-.001105	-.000092	.0014030	.0564093
#2	.000511	-.001358	.000836	-.004273	-.001102	.0553079
#3	.000141	-.001059	.000118	-.005640	.000799	.0492963

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030252	.0000564	.0000222	.0296324	-.000302	-.000248
Stddev	.0002633	.0000205	.0000580	.0091727	.000172	.000487
%RSD	8.704712	36.41053	262.0133	30.95498	57.01144	196.0708
#1	.0027231	.0000774	-.000005	.0246200	-.000343	.000302
#2	.0032062	.0000555	.000089	.0402192	-.000451	-.000423
#3	.0031463	.0000364	-.000017	.0240581	-.000113	-.000624

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001415	F .2944497	.0031959	.0171957	.0000765	-.000222
Stddev	.0002728	.0101739	.0001134	.0135632	.0003142	.000181
%RSD	192.8732	3.455223	3.547906	78.87527	410.6267	81.48044
#1	-.000150	.3059229	.0033255	.0146936	-.000108	-.000374
#2	.000391	.2909000	.0031148	.0050578	.000439	-.000270
#3	.000183	.2865262	.0031474	.0318358	-.000102	-.000022

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.096890	-.001584	-.000069	.0613430	-.004736	-.000218
Stddev	.003367	.000907	.000419	.0226860	.000435	.000199
%RSD	3.474999	57.28882	610.6284	36.98220	9.189660	91.04618
#1	-.100766	-.002116	.000030	.0778989	-.004652	-.000415
#2	-.094687	-.002099	-.000528	.0706458	-.004349	-.000017
#3	-.095218	-.000536	.000293	.0354843	-.005207	-.000223

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167781BL Acquired: 4/30/2025 21:04:35 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001730	.0019300	-.002541	.0061762	-.002334	-.004019
Stddev	.000104	.0004100	.016265	.0044366	.004407	.001583
%RSD	5.991540	21.24483	640.1452	71.83330	188.8174	39.38573
#1	-.001829	.0023809	-.008143	.0091604	-.007286	-.003144
#2	-.001622	.0018294	.015785	.0082902	.001159	-.003067
#3	-.001740	.0015796	-.015264	.0010780	-.000876	-.005846

Elem	Sr4077
Units	ppm
Avg	-.000221
Stddev	.000058
%RSD	26.40688
#1	-.000208
#2	-.000286
#3	-.000171

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3243.552	76166.40	11578.30	2089.082	5270.153
Stddev	6.003	337.48	21.05	12.768	14.599
%RSD	.1850700	.4430815	.1817948	.6111923	.2770136
#1	3242.561	76207.07	11602.18	2074.573	5258.903
#2	3238.107	76481.71	11562.46	2098.607	5264.904
#3	3249.989	75810.44	11570.25	2094.066	5286.650

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV05 Acquired: 4/30/2025 21:08:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.965494	5.156098	5.069930	4.942938	4.957703	9.805029	9.679688
Stddev	.025061	.018071	.005393	.027023	.022972	.013944	.013971
%RSD	.5046959	.3504760	.1063635	.5467047	.4633670	.1422091	.1443331
#1	4.941559	5.176861	5.073907	4.914096	4.940969	9.802571	9.689627
#2	4.963378	5.143918	5.072090	4.947045	4.948245	9.792477	9.685722
#3	4.991546	5.147515	5.063792	4.967672	4.983894	9.820038	9.663714

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2516309	2.530114	25.00235	1.052715	2.507539	1.238332	5.061379
Stddev	.0020855	.003734	.10141	.003464	.002349	.003662	.013073
%RSD	.8287805	.1475953	.4056038	.3290601	.0936961	.2957391	.2582930
#1	.2539413	2.531888	25.11750	1.056675	2.509240	1.235465	5.064300
#2	.2510638	2.532632	24.96319	1.051220	2.504858	1.237075	5.072743
#3	.2498876	2.525824	24.92636	1.050249	2.508518	1.242458	5.047092

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.436581	25.51546	2.510609	1.255980	23.13868	2.475236	2.504461
Stddev	.006907	.09166	.000036	.004394	.09265	.009437	.002180
%RSD	.2834904	.3592509	.0014157	.3498497	.4004156	.3812417	.0870429
#1	2.444540	25.60571	2.510627	1.260949	23.03260	2.485538	2.506945
#2	2.432142	25.51824	2.510631	1.254380	23.17977	2.473159	2.503569
#3	2.433063	25.42244	2.510568	1.252610	23.20369	2.467011	2.502868

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.08313	4.892468	5.041101	5.069448	4.878424	4.998064	4.977516
Stddev	.12585	.030093	.012627	.011172	.009169	.023250	.014251
%RSD	.5225722	.6150972	.2504711	.2203709	.1879560	.4651855	.2863132
#1	23.94455	4.927205	5.027272	5.076202	4.878697	4.981267	4.988766
#2	24.11454	4.875889	5.044017	5.075589	4.869121	4.988326	4.961491
#3	24.19030	4.874311	5.052015	5.056553	4.887454	5.024600	4.982292

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV05 Acquired: 4/30/2025 21:08:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.864656	4.552199	4.902327
Stddev	.020665	.006234	.051569
%RSD	.4247964	.1369461	1.051920
#1	4.852462	4.547025	4.843584
#2	4.852989	4.550452	4.923260
#3	4.888515	4.559121	4.940137

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3141.099	74833.85	11654.40	1991.922	4847.592
Stddev	9.755	261.12	94.34	8.142	12.301
%RSD	.3105484	.3489392	.8094459	.4087601	.2537568
#1	3148.385	74581.02	11549.32	1990.815	4848.098
#2	3130.017	74817.99	11682.09	1984.391	4835.045
#3	3144.895	75102.55	11731.80	2000.562	4859.632

Sample Name: CCB05 Acquired: 4/30/2025 21:13:09 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0030139	.0006991	.0016564	-.004753	.0033323	.0087001	.0030852
Stddev	.0015841	.0035996	.0013589	.002231	.0011585	.0012839	.0002617
%RSD	52.56091	514.9270	82.03749	46.94287	34.76669	14.75749	8.482559
#1	.0020252	.0042884	.0001011	-.006480	.0022701	.0091290	.0029066
#2	.0048410	.0007195	.0026140	-.005546	.0045676	.0097147	.0033856
#3	.0021755	-.002911	.0022541	-.002234	.0031592	.0072566	.0029634

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001116	.0009352	.0206130	.0001792	.0007649	.0003995	.0111233
Stddev	.0000392	.0000623	.0112455	.0001957	.0000603	.0002397	.0037812
%RSD	35.07793	6.663055	54.55525	109.2281	7.884076	59.99227	33.99329
#1	.0001367	.0009497	.0255121	-.000035	.0007065	.0003304	.0068334
#2	.0001316	.0009890	.0077491	.000223	.0008269	.0002020	.0125651
#3	.0000665	.0008670	.0285780	.000349	.0007614	.0006662	.0139715

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014253	.0134063	.0008718	.0003826	-.074652	.0012236	.0005032
Stddev	.0003747	.0139206	.0004518	.0003670	.013690	.0004710	.0003910
%RSD	26.28664	103.8366	51.82028	95.94122	18.33857	38.49769	77.69840
#1	.0013627	.0021298	.0004500	.0002843	-.089319	.0006801	.0008964
#2	.0018273	.0289650	.0008169	.0000747	-.072425	.0014767	.0001145
#3	.0010859	.0091241	.0013485	.0007887	-.062212	.0015140	.0004987

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0638401	.0023906	.0019316	.0001959	.0031824	.0015192	.0046662
Stddev	.0118758	.0008969	.0002573	.0006156	.0001503	.0004215	.0031512
%RSD	18.60244	37.51705	13.32180	314.2541	4.723705	27.74751	67.53270
#1	.0643252	.0032487	.0021713	.0008254	.0030692	.0011328	.0060487
#2	.0754659	.0024636	.0019637	.0001673	.0033529	.0019688	.0068899
#3	.0517291	.0014594	.0016597	-.000405	.0031250	.0014560	.0010601

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB05 Acquired: 4/30/2025 21:13:09 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001902	-.002123	.0023096
Stddev	.001037	.001214	.0005603
%RSD	54.53129	57.18688	24.26106
#1	-.001226	-.002458	.0016631
#2	-.003097	-.003135	.0026556
#3	-.001384	-.000777	.0026100

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3276.836	79906.84	12073.90	2141.613	5381.058
Stddev	8.585	221.22	57.94	19.208	4.558
%RSD	.2619908	.2768488	.4799071	.8968869	.0847052
#1	3266.956	80143.08	12013.62	2159.542	5375.951
#2	3281.069	79872.88	12078.88	2143.956	5382.510
#3	3282.482	79704.57	12129.18	2121.342	5384.713

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167781BS Acquired: 4/30/2025 21:17:29 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7717809	2.043511	.9735628	1.920392	.7746536	1.977151
Stddev	.0066186	.001735	.0019587	.008085	.0028562	.158326
%RSD	.8575751	.0848898	.2011846	.4209905	.3687098	8.007771
#1	.7792565	2.045071	.9758244	1.928040	.7779510	1.886751
#2	.7666676	2.043818	.9724492	1.921204	.7730634	2.159966
#3	.7694186	2.041643	.9724148	1.911932	.7729463	1.884735

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1862455	.2098449	.1969742	1.058750	.3991175	.1910007
Stddev	.0154271	.0130698	.0004041	.077938	.0023274	.0003861
%RSD	8.283223	6.228312	.2051776	7.361338	.5831252	.2021345
#1	.1786007	.2035593	.1973390	1.022313	.4018046	.1914245
#2	.2040022	.2248699	.1970438	1.148233	.3978084	.1909086
#3	.1761336	.2011054	.1965398	1.005704	.3977395	.1906689

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2974087	2.927606	.1978396	1.987964	.4834400	.0728885
Stddev	.0009298	.051512	.0163189	.173608	.0008954	.0006446
%RSD	.3126275	1.759540	8.248575	8.732974	.1852163	.8843641
#1	.2984369	2.910439	.1883462	1.914804	.4840138	.0731397
#2	.2971622	2.985509	.2166830	2.186178	.4838980	.0733696
#3	.2966270	2.886868	.1884898	1.862910	.4824083	.0721561

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.424084	.2944329	.1943718	8.776085	.3131220	.3992421
Stddev	.047407	.0225879	.0017468	.136315	.0206660	.0004831
%RSD	1.955668	7.671667	.8986728	1.553257	6.599985	.1209975
#1	2.408022	.2835974	.1948794	8.657381	.3034650	.3997917
#2	2.477435	.3203971	.1958085	8.924957	.3368487	.3990498
#3	2.386794	.2793041	.1924274	8.745916	.2990524	.3988848

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: PB167781BS Acquired: 4/30/2025 21:17:29 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7061980	.1997025	.7897957	5.791065	F -.014872	.1932129
Stddev	.0040022	.0142352	.0177477	.016573	.002213	.0161121
%RSD	.5667259	7.128222	2.247127	.2861895	14.87787	8.339038
#1	.7082281	.1928916	.7753122	5.809055	-.012412	.1839207
#2	.7087784	.2160637	.8095934	5.787725	-.016700	.2118176
#3	.7015876	.1901522	.7844815	5.776416	-.015503	.1839006

Elem	Sr4077
Units	ppm
Avg	.1950982
Stddev	.0154476
%RSD	7.917863
#1	.1869808
#2	.2129123
#3	.1854016

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3232.912	78273.64	11124.27	2129.472	5157.032
Stddev	7.026	318.30	653.79	9.057	10.963
%RSD	.2173301	.4066496	5.877149	.4253157	.2125817
#1	3225.768	77919.90	11413.51	2123.508	5145.493
#2	3239.814	78364.13	10375.75	2125.014	5167.309
#3	3233.155	78536.90	11583.55	2139.894	5158.292

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02 Acquired: 4/30/2025 21:21:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0546834	.0053188	9.138428	-.006553	.0036686	67.13212	1.689339
Stddev	.0058309	.0019320	.014271	.002284	.0016940	.13356	.002475
%RSD	10.66295	36.32456	.1561647	34.85099	46.17478	.1989456	.1465154
#1	.0479622	.0031767	9.152615	-.005357	.0034625	67.11182	1.688306
#2	.0576999	.0058501	9.138595	-.005116	.0054562	67.00987	1.687548
#3	.0583881	.0069296	9.124075	-.009187	.0020871	67.27466	1.692164

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055744	.0001605	122.9484	.2475066	.0667186	.5426105	182.1688
Stddev	.0000721	.0001725	.3777	.0008412	.0001708	.0012871	.5613
%RSD	1.293818	107.4523	.3072246	.3398877	.2559642	.2372116	.3081160
#1	.0056304	.0002156	122.7942	.2465401	.0667668	.5413139	181.8857
#2	.0054931	.0002988	122.6721	.2480741	.0668601	.5438879	181.8054
#3	.0055999	-.000033	123.3788	.2479056	.0665289	.5426297	182.8153

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.262200	30.07222	.2123404	.0103107	1.868347	.2397418	1.300379
Stddev	.009709	.16858	.0014343	.0005761	.020175	.0004189	.002688
%RSD	.4291735	.5605890	.6754659	5.587019	1.079829	.1747209	.2067474
#1	2.255517	30.01186	.2123683	.0099669	1.849260	.2395092	1.302711
#2	2.257746	29.94212	.2137605	.0099895	1.866322	.2402253	1.300988
#3	2.273337	30.26267	.2108924	.0109758	1.889458	.2394908	1.297438

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.04721	.0256784	.0057613	.1207322	2.263785	4.571035	6.613137
Stddev	.03745	.0035152	.0003732	.0016228	.003673	.011420	.021252
%RSD	.3389934	13.68922	6.478628	1.344145	.1622465	.2498447	.3213632
#1	11.08001	.0218209	.0061515	.1193838	2.263645	4.574291	6.632556
#2	11.05522	.0287009	.0057246	.1202794	2.260185	4.580473	6.590434
#3	11.00641	.0265135	.0054078	.1225333	2.267527	4.558339	6.616420

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02 Acquired: 4/30/2025 21:21:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.866404	.1381705	.1816116
Stddev	.003776	.0009346	.0001526
%RSD	.2023077	.6763833	.0840495
#1	1.870005	.1374274	.1817844
#2	1.862475	.1378644	.1815552
#3	1.866732	.1392197	.1814951

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3338.174	79842.54	12518.32	2170.466	4723.208
Stddev	9.542	129.57	41.89	10.671	7.050
%RSD	.2858585	.1622757	.3346555	.4916444	.1492525
#1	3347.141	79833.94	12515.11	2161.606	4730.376
#2	3328.145	79976.19	12561.73	2182.312	4716.283
#3	3339.238	79717.49	12478.12	2167.481	4722.966

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1901-03 Acquired: 4/30/2025 21:25:39 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0376146	-.005933	2.230878	-.008228	-.003609	98.51777	1.014120
Stddev	.0069171	.002334	.005287	.000639	.002276	.24384	.002764
%RSD	18.38928	39.34778	.2369703	7.765310	63.07287	.2475090	.2725600
#1	.0433140	-.007843	2.234376	-.008571	-.002566	98.38661	1.014064
#2	.0299190	-.006625	2.233462	-.008623	-.006220	98.36759	1.011384
#3	.0396109	-.003331	2.224797	-.007491	-.002041	98.79912	1.016911

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055415	-.000947	240.0204	.2254717	.1021749	.8337361	207.4030
Stddev	.0000562	.000239	.7260	.0005969	.0005965	.0037386	.9498
%RSD	1.014511	25.23356	.3024728	.2647097	.5837812	.4484138	.4579587
#1	.0054781	-.000720	239.5687	.2256119	.1027833	.8361880	207.7940
#2	.0055610	-.001196	239.6346	.2259860	.1021503	.8355871	208.0949
#3	.0055854	-.000926	240.8578	.2248173	.1015912	.8294331	206.3201

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.197009	58.64140	.2568720	.0041341	3.437180	.2552903	1.072469
Stddev	.006103	.16815	.0011529	.0003221	.002200	.0012560	.001566
%RSD	.1909113	.2867437	.4488168	7.791640	.0640028	.4920014	.1459990
#1	3.197522	58.46950	.2568812	.0045005	3.439239	.2539904	1.074015
#2	3.190665	58.64918	.2580202	.0040062	3.437439	.2564973	1.072509
#3	3.202840	58.80554	.2557145	.0038955	3.434862	.2553831	1.070884

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.20098	.1113499	.0121283	.1839616	6.504866	5.409383	10.88025
Stddev	.09532	.0081622	.0009527	.0022691	.017455	.013586	.07174
%RSD	.2960094	7.330245	7.855478	1.233480	.2683346	.2511599	.6593865
#1	32.22200	.1166687	.0124480	.1842265	6.502605	5.402786	10.95195
#2	32.28403	.1154287	.0110568	.1860867	6.488652	5.425008	10.88035
#3	32.09690	.1019522	.0128800	.1815717	6.523341	5.400355	10.80846

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1901-03 Acquired: 4/30/2025 21:25:39 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.827139	.2174784	.5287454
Stddev	.030986	.0001660	.0039351
%RSD	.5317450	.0763320	.7442388
#1	5.848800	.2176300	.5286846
#2	5.840969	.2175042	.5248410
#3	5.791646	.2173010	.5327106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3182.405	77035.72	12715.40	2063.488	4444.366
Stddev	8.944	457.47	25.52	6.137	15.382
%RSD	.2810419	.5938437	.2007034	.2974002	.3461059
#1	3176.932	77111.36	12743.81	2061.060	4438.781
#2	3177.558	76545.15	12707.96	2058.936	4432.556
#3	3192.727	77450.66	12694.42	2070.467	4461.760

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1901-04 Acquired: 4/30/2025 21:29:43 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.1043251	.0135364	.2041655	-.009033	-.009902	131.4282
Stddev	.0015969	.0011770	.0037419	.009646	.001464	.1966
%RSD	1.530680	8.694746	1.832767	106.7840	14.78236	.1496132
#1	.1037505	.0137640	.1998815	-.004567	-.008615	131.5537
#2	.1061298	.0122623	.2058200	-.002430	-.009596	131.5293
#3	.1030950	.0145830	.2067949	-.020103	-.011494	131.2016

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2396434	.0104882	.0081710	17.84607	.3404984	.1352672
Stddev	.0010162	.0000585	.0021628	.03619	.0003884	.0040327
%RSD	.4240616	.5576084	26.46979	.2028086	.1140588	2.981254
#1	.2390583	.0104498	.0070916	17.82217	.3403839	.1332137
#2	.2408169	.0105555	.0067603	17.88771	.3409312	.1326745
#3	.2390551	.0104593	.0106611	17.82833	.3401802	.1399132

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1949404	332.0431	2.305300	57.83289	.2896647	.0009767
Stddev	.0119008	1.5084	.005317	.06253	.0072086	.0003105
%RSD	6.104845	.4542834	.2306456	.1081231	2.488612	31.79241
#1	.1877838	332.3094	2.299211	57.90442	.2855740	.0006182
#2	.1883591	333.4007	2.309027	57.78864	.2854320	.0011503
#3	.2086782	330.4193	2.307662	57.80560	.2979881	.0011617

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.40643	.4104735	.7312916	22.09159	-.065204	.0074190
Stddev	.07958	.0003719	.0048121	.09835	.008196	.0002060
%RSD	.5935623	.0906057	.6580246	.4451785	12.56984	2.776621
#1	13.39679	.4100585	.7332241	22.08478	-.066324	.0073467
#2	13.49039	.4107767	.7258137	22.19316	-.056506	.0072588
#3	13.33212	.4105854	.7348370	21.99682	-.072782	.0076514

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1901-04 Acquired: 4/30/2025 21:29:43 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0025377	2.601951	6.391372	6.500697	F 204.4201	.3896586
Stddev	.0009333	.007219	.034819	.132018	5.0742	.0023837
%RSD	36.77537	.2774645	.5447751	2.030831	2.482217	.6117329
#1	.0026330	2.601300	6.383528	6.429666	201.5885	.3883424
#2	.0034196	2.609474	6.429443	6.419401	201.3937	.3924102
#3	.0015604	2.595079	6.361144	6.653023	210.2782	.3882233

Elem	Sr4077
Units	ppm
Avg	-.100431
Stddev	.001162
%RSD	1.157511
#1	-.100612
#2	-.101493
#3	-.099189

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3492.229	86266.40	13191.74	2286.837	4496.522
Stddev	54.576	240.32	8.86	7.151	90.057
%RSD	1.562772	.2785838	.0671705	.3127109	2.002805
#1	3526.030	86101.57	13191.66	2278.975	4544.152
#2	3521.390	86155.48	13200.64	2292.955	4552.762
#3	3429.268	86542.15	13182.91	2288.580	4392.653

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1901-05 Acquired: 4/30/2025 21:33:48 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0194259	-.000952	.0672216	.0069715	-.003487	154.4163
Stddev	.0028159	.003606	.0016999	.0064631	.002229	.4090
%RSD	14.49585	378.8581	2.528771	92.70865	63.91463	.2648711
#1	.0226618	.003208	.0661730	.0134841	-.005056	154.8886
#2	.0175325	-.002884	.0663088	.0068712	-.004469	154.1829
#3	.0180833	-.003180	.0691828	.0005590	-.000936	154.1776

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0735825	.0033221	-.003045	17.42747	.1609824	.0367700
Stddev	.0011126	.0000481	.000236	.06027	.0008987	.0006332
%RSD	1.512025	1.446801	7.755511	.3458570	.5582446	1.721933
#1	.0743917	.0032767	-.002782	17.43826	.1600042	.0372511
#2	.0740420	.0033170	-.003113	17.48162	.1611717	.0370062
#3	.0723137	.0033725	-.003240	17.36253	.1617714	.0360527

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0493020	116.2278	.7562495	25.37630	.1122944	.0017797
Stddev	.0020380	.4199	.0020014	.11445	.0003500	.0001573
%RSD	4.133599	.3612606	.2646465	.4509936	.3117085	8.836629
#1	.0511120	115.7905	.7585363	25.29460	.1122660	.0018274
#2	.0496994	116.2651	.7548173	25.50710	.1126577	.0016041
#3	.0470946	116.6278	.7553949	25.32720	.1119594	.0019076

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.530309	.1965673	.1751559	6.637342	.1326647	.0034043
Stddev	.048270	.0019183	.0002853	.029109	.0037704	.0002091
%RSD	.5658686	.9759223	.1628783	.4385612	2.842045	6.142430
#1	8.551584	.1983222	.1753622	6.619224	.1321768	.0033249
#2	8.475055	.1945192	.1752751	6.621883	.1291620	.0036415
#3	8.564286	.1968604	.1748303	6.670919	.1366553	.0032466

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1901-05 Acquired: 4/30/2025 21:33:48 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0004923	2.622644	F 16.90483	3.308289	F 47.94661	.1600577
Stddev	.0007460	.008995	.06037	.035191	.30606	.0004991
%RSD	151.5558	.3429629	.3571007	1.063714	.6383295	.3118219
#1	-.000278	2.630564	16.87164	3.343827	48.19888	.1601265
#2	.000544	2.612865	16.86833	3.307584	48.03482	.1605188
#3	.001211	2.624503	16.97451	3.273456	47.60614	.1595278

Elem	Sr4077
Units	ppm
Avg	.1086270
Stddev	.0013571
%RSD	1.249341
#1	.1101586
#2	.1075741
#3	.1081483

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3215.869	76621.67	12328.22	2082.909	4769.529
Stddev	6.013	488.56	72.67	8.764	13.748
%RSD	.1869827	.6376283	.5894638	.4207538	.2882363
#1	3209.583	77151.46	12356.15	2089.637	4753.844
#2	3216.458	76188.88	12245.73	2072.999	4775.256
#3	3221.566	76524.67	12382.78	2086.092	4779.488

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02 Acquired: 4/30/2025 21:37:57 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0625106	.0051157	.6762636	.0053005	-.005216	126.4256	.9281052
Stddev	.0031361	.0010259	.0023866	.0083453	.001999	.2264	.0045524
%RSD	5.016981	20.05405	.3529135	157.4434	38.31983	.1791138	.4905039
#1	.0598104	.0050446	.6735802	.0140005	-.006770	126.4908	.9233746
#2	.0659504	.0041271	.6770617	-.002638	-.002961	126.1737	.9324555
#3	.0617709	.0061752	.6781489	.004539	-.005918	126.6123	.9284854

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083513	-.000948	17.19319	.2227470	.1053466	.2344837	241.5300
Stddev	.0000369	.000629	.02390	.0005647	.0004101	.0021309	1.4746
%RSD	.4422503	66.36306	.1390305	.2535130	.3893100	.9087454	.6105105
#1	.0083810	-.001518	17.16654	.2222917	.1051116	.2336328	240.8856
#2	.0083100	-.001053	17.21275	.2233789	.1058202	.2329097	243.2171
#3	.0083631	-.000273	17.20027	.2225705	.1051081	.2369085	240.4874

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.841364	34.74717	.1998350	.0039645	2.764034	.3056137	.9980874
Stddev	.016321	.09098	.0008866	.0004595	.032565	.0014745	.0021800
%RSD	.2793982	.2618316	.4436837	11.59001	1.178179	.4824770	.2184157
#1	5.823819	34.70340	.1988366	.0041868	2.744487	.3048121	.9974855
#2	5.856094	34.68635	.2005305	.0042707	2.801627	.3047137	.9962716
#3	5.844181	34.85177	.2001379	.0034362	2.745989	.3073154	1.000505

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.18388	.0913134	.0014680	.1733727	3.849534	7.784825	7.032226
Stddev	.05726	.0099823	.0002970	.0018183	.004229	.035063	.043167
%RSD	.4343148	10.93192	20.23029	1.048754	.1098584	.4503959	.6138385
#1	13.14094	.0888819	.0016298	.1716268	3.845798	7.779600	6.984657
#2	13.24889	.1022868	.0011252	.1752556	3.848680	7.822207	7.068903
#3	13.16180	.0827714	.0016489	.1732358	3.854125	7.752668	7.043120

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02 Acquired: 4/30/2025 21:37:57 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.027201	.2356912	-.118808
Stddev	.008301	.0016073	.001164
%RSD	.8081035	.6819376	.9794747
#1	1.022406	.2350851	-.118462
#2	1.036787	.2375134	-.120105
#3	1.022412	.2344751	-.117856

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3477.332	83604.34	13707.17	2309.407	4719.178
Stddev	15.305	121.43	46.16	3.107	27.256
%RSD	.4401222	.1452422	.3367646	.1345502	.5775517
#1	3493.518	83555.97	13730.78	2309.993	4750.320
#2	3475.382	83514.55	13736.75	2312.179	4707.542
#3	3463.096	83742.50	13653.98	2306.048	4699.672

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02DUP Acquired: 4/30/2025 21:42:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0592864	.0070585	.6869162	.0047177	-.002871	120.1017	.8844671
Stddev	.0028847	.0026159	.0050592	.0015638	.001740	.4349	.0006848
%RSD	4.865730	37.05982	.7365071	33.14759	60.60499	.3620999	.0774241
#1	.0623876	.0094284	.6923911	.0038455	-.000869	120.5575	.8852116
#2	.0587888	.0074954	.6859435	.0065231	-.003723	120.0563	.8838640
#3	.0566829	.0042517	.6824140	.0037845	-.004020	119.6913	.8843258

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082859	-.000310	17.20739	.2207482	.0960268	.2221845	222.6638
Stddev	.0001072	.000158	.05697	.0020908	.0003657	.0009649	1.5975
%RSD	1.294176	50.92909	.3310752	.9471363	.3807819	.4342715	.7174670
#1	.0082225	-.000274	17.26880	.2210616	.0964425	.2231132	223.3771
#2	.0084098	-.000483	17.19710	.2226645	.0958830	.2211871	223.7805
#3	.0082256	-.000173	17.15626	.2185183	.0957549	.2222533	220.8339

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.349693	32.54845	.1828630	.0024460	2.452909	.2994491	.9521645
Stddev	.025546	.25595	.0014141	.0001394	.021262	.0033746	.0112240
%RSD	.4775201	.7863541	.7732834	5.700347	.8668145	1.126949	1.178784
#1	5.378117	32.82165	.1840417	.0025077	2.441497	.3032843	.9533913
#2	5.342312	32.50947	.1832522	.0025438	2.477441	.2981283	.9627247
#3	5.328650	32.31424	.1812951	.0022863	2.439789	.2969346	.9403776

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.02640	.0269492	.0014710	.0116897	3.699123	8.635863	7.030906
Stddev	.06335	.0030170	.0002538	.0020943	.018917	.067022	.043576
%RSD	.5267605	11.19521	17.25235	17.91532	.5113917	.7760907	.6197728
#1	12.01321	.0303678	.0013602	.0131798	3.720936	8.693328	7.079023
#2	12.09531	.0246594	.0012915	.0125941	3.689219	8.652024	7.019591
#3	11.97069	.0258202	.0017614	.0092952	3.687215	8.562238	6.994103

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02DUP Acquired: 4/30/2025 21:42:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.055394	.2191058	-.107327
Stddev	.004692	.0015368	.001521
%RSD	.4445891	.7014145	1.417123
#1	1.055337	.2202284	-.107781
#2	1.060114	.2197347	-.108570
#3	1.050731	.2173543	-.105631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3566.118	84973.99	13276.27	2333.759	4896.724
Stddev	9.008	670.62	28.68	12.681	20.075
%RSD	.2525932	.7892031	.2160189	.5433844	.4099687
#1	3562.336	85190.38	13269.69	2332.599	4883.119
#2	3559.619	84221.89	13251.45	2321.697	4887.273
#3	3576.401	85509.70	13307.66	2346.980	4919.780

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02LX5 Acquired: 4/30/2025 21:46:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0111671	.0016423	.1360434	-.002792	-.001551	26.23877	.1857928
Stddev	.0032945	.0016559	.0010921	.003108	.001813	.03378	.0007534
%RSD	29.50165	100.8278	.8027266	111.3335	116.8513	.1287253	.4055106
#1	.0076603	-.000104	.1354354	.000621	-.003552	26.27490	.1849473
#2	.0141974	.001841	.1353907	-.005461	-.001084	26.23344	.1860384
#3	.0116436	.003190	.1373042	-.003536	-.000018	26.20798	.1863928

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018711	-.000807	3.690832	.0479147	.0199798	.0549382	47.48177
Stddev	.0000697	.000123	.006625	.0004155	.0002646	.0000895	.27388
%RSD	3.725984	15.27527	.1794959	.8671677	1.324271	.1629912	.5768094
#1	.0019379	-.000807	3.694502	.0478974	.0199725	.0550083	47.44248
#2	.0017988	-.000684	3.694811	.0475081	.0197189	.0549691	47.22965
#3	.0018768	-.000930	3.683185	.0483385	.0202479	.0548373	47.77317

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.202637	7.296200	.0379521	.0001965	.4500588	.0626155	.2096707
Stddev	.002653	.016062	.0004069	.0002706	.0103758	.0012015	.0009654
%RSD	.2205828	.2201477	1.072242	137.7007	2.305422	1.918908	.4604529
#1	1.199645	7.284146	.0378099	-.000095	.4605118	.0639675	.2102224
#2	1.203564	7.290019	.0384111	.000439	.4499026	.0616699	.2085560
#3	1.204702	7.314434	.0376355	.000246	.4397621	.0622091	.2102338

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.526082	-.009299	.0001756	.0346517	.8054431	1.668090	1.377995
Stddev	.017645	.001603	.0001406	.0007701	.0016576	.017430	.005815
%RSD	.6985315	17.23630	80.05087	2.222351	.2058039	1.044897	.4220237
#1	2.531195	-.009294	.0003278	.0350911	.8038062	1.678648	1.383613
#2	2.506445	-.010905	.0001485	.0351014	.8071207	1.647972	1.378373
#3	2.540607	-.007699	.0000506	.0337625	.8054023	1.677649	1.372000

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02LX5 Acquired: 4/30/2025 21:46:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.1930970	.0437482	-.022357
Stddev	.0021501	.0007101	.000273
%RSD	1.113485	1.623218	1.220225
#1	.1932481	.0439789	-.022392
#2	.1908754	.0429514	-.022069
#3	.1951677	.0443142	-.022611

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3318.665	79329.46	12105.78	2175.638	5122.434
Stddev	7.403	633.64	14.25	13.130	15.167
%RSD	.2230652	.7987452	.1176932	.6034795	.2960969
#1	3310.285	79069.20	12099.41	2174.284	5117.282
#2	3321.397	80051.79	12122.10	2189.392	5110.515
#3	3324.314	78867.39	12095.83	2163.238	5139.507

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02MS Acquired: 4/30/2025 21:50:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7541252	1.963843	1.782445	1.614977	.2843318	156.9581	1.116182
Stddev	.0051451	.008265	.012298	.003506	.0017547	.3372	.003090
%RSD	.6822624	.4208424	.6899260	.2170936	.6171300	.2148330	.2768814
#1	.7504024	1.956065	1.792005	1.617316	.2846889	157.0995	1.116622
#2	.7599963	1.962943	1.786758	1.610945	.2858805	157.2017	1.119029
#3	.7519768	1.972521	1.768571	1.616668	.2824260	156.5733	1.112895

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1968698	.2087435	20.92164	.6284796	.3162044	.5334205	244.6539
Stddev	.0004318	.0022053	.07810	.0076943	.0013866	.0074871	1.9930
%RSD	.2193239	1.056454	.3732814	1.224279	.4385104	1.403597	.8146395
#1	.1973124	.2104703	20.92561	.6238099	.3170935	.5392698	243.0994
#2	.1964497	.2095008	20.99767	.6242685	.3169130	.5360091	243.9616
#3	.1968473	.2062593	20.84163	.6373603	.3146067	.5249826	246.9008

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.831212	44.18678	.7324404	.0678591	4.861044	.5953758	1.358103
Stddev	.021835	.13720	.0042820	.0006801	.049303	.0063664	.020362
%RSD	.3744467	.3105099	.5846152	1.002161	1.014256	1.069305	1.499314
#1	5.831968	44.22129	.7355129	.0676809	4.804183	.5948088	1.340596
#2	5.852659	44.30344	.7342589	.0672860	4.887036	.6020068	1.353265
#3	5.809009	44.03562	.7275493	.0686106	4.891914	.5893119	1.380449

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.50238	.1149939	.3503628	.6905168	4.318181	8.515013	13.67990
Stddev	.24477	.0094874	.0021343	.0030791	.019641	.087007	.07576
%RSD	1.087770	8.250379	.6091638	.4459072	.4548486	1.021807	.5538211
#1	22.29130	.1096999	.3514545	.6936183	4.323411	8.476457	13.73424
#2	22.44515	.1093348	.3517304	.6904714	4.334677	8.453945	13.71211
#3	22.77070	.1259470	.3479035	.6874607	4.296453	8.614635	13.59336

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02MS Acquired: 4/30/2025 21:50:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.194544	.4476676	.0589091
Stddev	.008893	.0005515	.0025642
%RSD	.7444592	.1231991	4.352836
#1	1.201791	.4471543	.0606699
#2	1.197221	.4482507	.0600903
#3	1.184620	.4475980	.0559672

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3502.249	83216.85	12416.10	2250.555	4704.298
Stddev	11.567	885.37	41.50	28.583	17.642
%RSD	.3302812	1.063935	.3342482	1.270054	.3750273
#1	3495.613	83674.48	12368.52	2272.067	4691.040
#2	3495.529	83779.76	12434.97	2261.476	4697.534
#3	3515.606	82196.32	12444.81	2218.121	4724.322

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV06 Acquired: 4/30/2025 21:54:22 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.027031	5.109525	5.007122	5.060017	5.005493	9.678002	9.680824
Stddev	.020348	.081901	.014846	.013434	.008519	.033680	.045279
%RSD	.4047789	1.602904	.2965061	.2654974	.1701900	.3480074	.4677205
#1	5.004426	5.196454	5.022072	5.048155	4.995878	9.697561	9.649731
#2	5.043883	5.098311	5.006914	5.074605	5.012100	9.697334	9.732773
#3	5.032785	5.033809	4.992381	5.057290	5.008500	9.639112	9.659967

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2380873	2.500268	24.15756	1.008221	2.485644	1.247449	5.066011
Stddev	.0009580	.009049	.10603	.006244	.006995	.003296	.014558
%RSD	.4023556	.3619209	.4389162	.6192993	.2814241	.2642533	.2873678
#1	.2385569	2.507829	24.15116	1.011795	2.491780	1.243750	5.056335
#2	.2387199	2.502734	24.26664	1.011856	2.487124	1.250075	5.082753
#3	.2369852	2.490242	24.05487	1.001011	2.478027	1.248522	5.058944

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.395440	24.16600	2.491928	1.227418	24.00444	2.428141	2.454284
Stddev	.014798	.11068	.007529	.008057	.20106	.012047	.016872
%RSD	.6177609	.4579791	.3021453	.6564404	.8376105	.4961433	.6874351
#1	2.389785	24.18133	2.499191	1.231979	23.93743	2.432879	2.456589
#2	2.412232	24.26821	2.492436	1.232160	24.23045	2.437099	2.469884
#3	2.384304	24.04846	2.484158	1.218115	23.84544	2.414445	2.436378

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.55430	4.696047	4.998321	5.012436	4.842049	5.070245	4.931647
Stddev	.17296	.028099	.006339	.025185	.013943	.055884	.031192
%RSD	.7043958	.5983550	.1268231	.5024500	.2879651	1.102201	.6324951
#1	24.51927	4.719115	5.001176	5.037046	4.841685	5.096602	4.960862
#2	24.74210	4.704274	5.002731	5.013548	4.856171	5.108077	4.935282
#3	24.40154	4.664753	4.991057	4.986713	4.828292	5.006057	4.898796

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV06 Acquired: 4/30/2025 21:54:22 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.958102	4.618111	4.886229
Stddev	.013679	.013005	.043482
%RSD	.2758977	.2816011	.8898885
#1	4.967284	4.618903	4.895789
#2	4.964643	4.630702	4.924136
#3	4.942381	4.604729	4.838763

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3141.307	78107.85	12427.24	2057.157	4851.171
Stddev	8.074	546.88	62.09	12.173	18.442
%RSD	.2570243	.7001589	.4996095	.5917184	.3801474
#1	3144.701	77877.06	12386.29	2054.109	4843.219
#2	3132.090	77714.21	12396.75	2046.798	4838.039
#3	3147.130	78732.30	12498.68	2070.564	4872.254

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB06 Acquired: 4/30/2025 21:58:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0012784	-.000349	.0023946	-.002949	.0017554	.0191877	-.002419
Stddev	.0041568	.000877	.0008278	.004782	.0010731	.0033613	.001001
%RSD	325.1667	251.4020	34.56896	162.1423	61.13174	17.51770	41.39610
#1	.0041456	-.000487	.0025773	-.001978	.0026070	.0189258	-.002961
#2	-.003489	.000589	.0031158	-.008143	.0021091	.0226723	-.003033
#3	.003178	-.001148	.0014908	.001273	.0005501	.0159652	-.001264

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000446	.0002979	.0288358	-.000551	-.000103	.0003066	.0162712
Stddev	.0000207	.0000213	.0047241	.000568	.000109	.0001463	.0019917
%RSD	46.36981	7.137597	16.38273	103.0837	105.4126	47.72801	12.24053
#1	.0000659	.0002734	.0313753	-.000458	-.000222	.0003178	.0144667
#2	.0000433	.0003118	.0233851	-.000035	-.000077	.0004469	.0184082
#3	.0000246	.0003085	.0317470	-.001159	-.000010	.0001549	.0159387

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049222	.0109808	.0008070	.0001491	-.085527	.0003027	.0030675
Stddev	.0001922	.0100337	.0001512	.0000906	.009399	.0007326	.0001504
%RSD	3.905633	91.37484	18.73061	60.73160	10.99008	242.0340	4.904278
#1	.0047139	.0070098	.0009675	.0002394	-.087378	.0010276	.0029677
#2	.0050929	.0035404	.0006673	.0000583	-.075340	-.000437	.0032405
#3	.0049596	.0223922	.0007863	.0001496	-.093863	.000318	.0029942

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0874220	-.001558	.0009617	.0022110	.0009244	-.004831	.0032903
Stddev	.0174988	.000960	.0002644	.0008739	.0004438	.010987	.0016167
%RSD	20.01642	61.60230	27.49444	39.52453	48.01192	227.4349	49.13351
#1	.1057406	-.000539	.0012430	.0022685	.0006853	.002789	.0043347
#2	.0856470	-.001690	.0009237	.0030547	.0006513	.000144	.0041081
#3	.0708784	-.002444	.0007183	.0013098	.0014365	-.017426	.0014282

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB06 Acquired: 4/30/2025 21:58:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0019201	-.002407	.0009760
Stddev	.0040260	.000975	.0000443
%RSD	209.6704	40.48808	4.535903
#1	-.002630	-.001770	.0009689
#2	.005019	-.003529	.0010234
#3	.003371	-.001923	.0009357

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3276.918	80503.19	12195.17	2178.758	5322.926
Stddev	9.719	96.37	67.72	7.083	8.483
%RSD	.2966022	.1197094	.5553110	.3251140	.1593711
#1	3271.486	80580.58	12250.92	2186.306	5316.905
#2	3288.139	80395.25	12214.78	2172.255	5332.628
#3	3271.129	80533.75	12119.81	2177.714	5319.244

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02MSD Acquired: 4/30/2025 22:02:55 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7605519	1.969759	1.627224	1.644504	.3041931	135.5472	1.203952
Stddev	.0060466	.026577	.006369	.005235	.0034960	.2804	.002227
%RSD	.7950250	1.349261	.3913933	.3183059	1.149280	.2068331	.1849727
#1	.7571954	1.998247	1.632577	1.644493	.3001689	135.2308	1.202050
#2	.7675322	1.945632	1.628915	1.649744	.3064823	135.7647	1.206402
#3	.7569281	1.965398	1.620181	1.639274	.3059280	135.6461	1.203405

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1821953	.2033691	20.54953	.6039101	.3092247	.4729438	244.9208
Stddev	.0004198	.0008117	.04876	.0004217	.0007158	.0017066	1.1289
%RSD	.2304061	.3991205	.2372806	.0698223	.2314781	.3608393	.4609379
#1	.1824904	.2041613	20.56281	.6041887	.3100481	.4743364	244.4167
#2	.1823808	.2034066	20.59027	.6041166	.3088756	.4734549	246.2139
#3	.1817147	.2025392	20.49550	.6034250	.3087505	.4710401	244.1318

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.213440	40.39328	.7218332	.0709966	5.231075	.5636770	1.168561
Stddev	.020308	.11527	.0016994	.0003223	.033982	.0023275	.003529
%RSD	.2815275	.2853692	.2354309	.4540162	.6496193	.4129228	.3020339
#1	7.217592	40.45343	.7225560	.0707856	5.193874	.5616256	1.166626
#2	7.231351	40.46604	.7230517	.0713677	5.260484	.5662064	1.172634
#3	7.191377	40.26038	.7198919	.0708366	5.238868	.5631989	1.166422

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.79398	.2951987	.3571518	.6852262	4.316363	5.635928	12.80502
Stddev	.16310	.0078105	.0016345	.0011850	.010561	.030625	.05842
%RSD	.6578332	2.645848	.4576437	.1729318	.2446668	.5433841	.4562220
#1	24.64351	.2900052	.3581028	.6855954	4.308799	5.606919	12.86804
#2	24.96731	.3041809	.3580882	.6861827	4.328428	5.667947	12.79436
#3	24.77112	.2914099	.3552645	.6839006	4.311862	5.632918	12.75267

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02MSD Acquired: 4/30/2025 22:02:55 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.9784585	.4433430	.0628785
Stddev	.0053119	.0013072	.0010167
%RSD	.5428805	.2948505	1.616964
#1	.9778228	.4418352	.0622954
#2	.9840596	.4440372	.0622876
#3	.9734931	.4441566	.0640525

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3486.919	83997.46	13579.64	2286.640	4739.772
Stddev	14.323	233.79	15.12	7.053	16.369
%RSD	.4107638	.2783344	.1113157	.3084612	.3453613
#1	3487.846	84183.51	13570.33	2291.506	4732.208
#2	3472.156	83735.03	13571.50	2278.551	4728.553
#3	3500.757	84073.84	13597.08	2289.864	4758.556

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02A Acquired: 4/30/2025 22:06:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7416335	1.875919	1.579844	1.639708	.6969469	126.9275	1.028750
Stddev	.0036986	.016142	.007131	.008349	.0047960	.3976	.003450
%RSD	.4987110	.8604802	.4514015	.5091888	.6881411	.3132220	.3353500
#1	.7381138	1.858195	1.582672	1.630216	.7002769	126.7600	1.025308
#2	.7412984	1.879787	1.571732	1.642994	.6914498	127.3814	1.032208
#3	.7454882	1.889776	1.585128	1.645915	.6991139	126.6411	1.028735

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1791289	.1935386	17.49173	.5606548	.2871206	.4913192	217.3740
Stddev	.0011972	.0003296	.06515	.0009715	.0003835	.0026294	.9900
%RSD	.6683326	.1703210	.3724860	.1732866	.1335752	.5351765	.4554555
#1	.1795864	.1932759	17.53634	.5607932	.2868733	.4903063	216.6076
#2	.1800298	.1934314	17.52189	.5596215	.2869262	.4893468	217.0225
#3	.1777704	.1939085	17.41696	.5615497	.2875625	.4943044	218.4918

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.633853	34.78113	.6540470	.0648565	4.635973	.5377406	1.136349
Stddev	.024141	.20073	.0006234	.0003193	.043549	.0007913	.003361
%RSD	.4284948	.5771274	.0953087	.4922636	.9393655	.1471451	.2957487
#1	5.626953	34.90516	.6539805	.0651141	4.598824	.5374653	1.133657
#2	5.660693	34.88868	.6534595	.0644993	4.625197	.5386327	1.135274
#3	5.613914	34.54953	.6547009	.0649561	4.683898	.5371237	1.140116

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.08480	.2034847	.3654859	.8057105	3.881972	9.192017	12.48848
Stddev	.16368	.0065820	.0017789	.0019633	.008234	.060802	.01962
%RSD	.8149514	3.234625	.4867282	.2436727	.2121140	.6614607	.1571004
#1	19.93763	.1967590	.3637988	.8055990	3.880152	9.196537	12.50153
#2	20.05567	.2037822	.3653147	.8038053	3.890964	9.129082	12.49800
#3	20.26109	.2099129	.3673443	.8077272	3.874801	9.250433	12.46592

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1902-02A Acquired: 4/30/2025 22:06:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.004029	.3916221	.0629829
Stddev	.003614	.0025273	.0013070
%RSD	.3599518	.6453427	2.075097
#1	1.005678	.3887043	.0628413
#2	.999885	.3930342	.0643549
#3	1.006525	.3931277	.0617526

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3440.591	84848.72	13029.42	2271.718	4764.963
Stddev	12.034	307.36	51.25	11.507	7.973
%RSD	.3497575	.3622493	.3933784	.5065420	.1673210
#1	3443.955	84886.63	12986.73	2280.121	4765.043
#2	3450.585	85135.37	13015.25	2276.430	4772.895
#3	3427.233	84524.16	13086.26	2258.602	4756.950

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1903-01 Acquired: 4/30/2025 22:10:58 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0600385	.0053274	.1371148	.0103601	-.006010	140.4333	.6453752
Stddev	.0015650	.0013458	.0027376	.0025962	.001323	.0937	.0009164
%RSD	2.606744	25.26162	1.996560	25.05968	22.01796	.0666978	.1419998
#1	.0584703	.0056145	.1344825	.0073986	-.006050	140.3379	.6451405
#2	.0600448	.0038612	.1399467	.0114381	-.007312	140.5252	.6445989
#3	.0616004	.0065065	.1369152	.0122437	-.004666	140.4368	.6463861

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070580	-.003855	10.07233	.3410744	.0709626	.1110071	214.9342
Stddev	.0000349	.000145	.03942	.0013405	.0003871	.0000415	.7024
%RSD	.4940821	3.759174	.3913815	.3930260	.5455116	.0373555	.3268006
#1	.0070717	-.004021	10.11294	.3425394	.0712930	.1110508	215.5055
#2	.0070839	-.003752	10.06983	.3407747	.0705367	.1109683	214.1500
#3	.0070183	-.003792	10.03422	.3399092	.0710581	.1110021	215.1472

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.070018	25.80305	.1329124	.0052244	.6368073	.3642716	.3259357
Stddev	.005420	.10955	.0004221	.0005383	.0103716	.0013557	.0009613
%RSD	.5065770	.4245545	.3175999	10.30301	1.628684	.3721782	.2949367
#1	1.074960	25.88611	.1326275	.0055845	.6471359	.3627403	.3270343
#2	1.070874	25.84413	.1327125	.0046056	.6263933	.3647557	.3255239
#3	1.064221	25.67889	.1333974	.0054831	.6368926	.3653188	.3252489

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.936180	.1157034	.0018706	.0037900	2.409332	5.245732	2.754170
Stddev	.046838	.0038713	.0004134	.0010210	.004748	.036308	.011090
%RSD	.5901793	3.345892	22.09899	26.94004	.1970702	.6921391	.4026733
#1	7.899437	.1181462	.0018647	.0042154	2.414811	5.204633	2.750937
#2	7.920183	.1112398	.0014603	.0026250	2.406407	5.259110	2.745056
#3	7.988920	.1177240	.0022870	.0045295	2.406779	5.273453	2.766518

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1903-01 Acquired: 4/30/2025 22:10:58 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.7494921	.1985189	-.103390
Stddev	.0061829	.0006257	.000701
%RSD	.8249457	.3151761	.6782033
#1	.7501830	.1986918	-.103883
#2	.7429928	.1978250	-.102587
#3	.7553005	.1990400	-.103699

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3535.388	86036.57	15114.63	2273.217	4847.126
Stddev	9.016	63.87	65.12	10.709	7.985
%RSD	.2550327	.0742373	.4308585	.4710842	.1647296
#1	3532.435	86050.95	15077.23	2276.475	4839.970
#2	3545.511	86092.03	15076.84	2281.917	4855.739
#3	3528.219	85966.74	15189.83	2261.257	4845.668

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1903-02 Acquired: 4/30/2025 22:15:06 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0921202	.0117160	.3859457	.0141711	-.005520	113.2520	.6609051
Stddev	.0026638	.0026028	.0008003	.0091484	.001049	.3301	.0006571
%RSD	2.891648	22.21584	.2073574	64.55668	19.00492	.2914986	.0994274
#1	.0945793	.0087368	.3864842	.0074746	-.004578	113.6323	.6610063
#2	.0892905	.0128622	.3850261	.0104439	-.005330	113.0384	.6602033
#3	.0924908	.0135489	.3863268	.0245946	-.006651	113.0854	.6615057

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098861	-.001403	14.70978	.3118528	.1089264	.2327392	303.8888
Stddev	.0001141	.000434	.04161	.0007523	.0007853	.0009344	1.5837
%RSD	1.153877	30.91311	.2828875	.2412276	.7209672	.4014948	.5211583
#1	.0099948	-.000911	14.71863	.3119175	.1081932	.2337465	302.1895
#2	.0097673	-.001568	14.66445	.3110702	.1088307	.2319006	304.1533
#3	.0098962	-.001729	14.74625	.3125706	.1097551	.2325705	305.3237

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.544491	21.62104	.1746837	.0061211	.3221125	.4164119	.4552340
Stddev	.007105	.04116	.0003806	.0002579	.0091626	.0002175	.0041885
%RSD	.4600518	.1903873	.2179016	4.213263	2.844523	.0522296	.9200813
#1	1.545179	21.62142	.1744911	.0058398	.3211602	.4163330	.4580416
#2	1.537066	21.57969	.1744378	.0063465	.3134632	.4166578	.4504197
#3	1.551227	21.66201	.1751221	.0061771	.3317140	.4162448	.4572408

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.096176	.1490606	.0142909	.0094696	2.412193	2.415490	3.881642
Stddev	.025046	.0077761	.0005158	.0018677	.005188	.014874	.007562
%RSD	.4108429	5.216766	3.609295	19.72270	.2150569	.6157936	.1948213
#1	6.077962	.1400829	.0142222	.0075993	2.418027	2.401924	3.873592
#2	6.085829	.1536881	.0138128	.0113347	2.408099	2.413149	3.888597
#3	6.124737	.1534108	.0148375	.0094749	2.410453	2.431396	3.882737

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1903-02 Acquired: 4/30/2025 22:15:06 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.381452	.2553611	-.184133
Stddev	.006967	.0012295	.001444
%RSD	.5043184	.4814791	.7840659
#1	1.377323	.2563153	-.182531
#2	1.377537	.2539736	-.184534
#3	1.389495	.2557945	-.185333

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3728.297	91728.87	15989.53	2409.011	4847.130
Stddev	11.803	248.00	64.87	19.982	14.418
%RSD	.3165664	.2703593	.4056934	.8294680	.2974597
#1	3740.895	91940.17	15941.96	2401.815	4857.568
#2	3726.499	91790.59	16063.43	2431.594	4853.144
#3	3717.496	91455.84	15963.22	2393.623	4830.678

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1903-03 Acquired: 4/30/2025 22:19:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0883944	.0137825	.2207143	.0072895	-.007873	198.4123	.7516063
Stddev	.0023569	.0046337	.0019737	.0009041	.001783	.1944	.0004352
%RSD	2.666288	33.61999	.8942380	12.40328	22.64607	.0979751	.0579093
#1	.0861576	.0088327	.2184715	.0069497	-.006059	198.4978	.7511199
#2	.0908553	.0144980	.2221862	.0083142	-.009623	198.5494	.7519590
#3	.0881702	.0180169	.2214853	.0066044	-.007937	198.1899	.7517401

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0117897	-.001485	23.29721	.4294840	.1844240	.2667786	402.5656
Stddev	.0001186	.000153	.03250	.0018639	.0002487	.0006351	.8391
%RSD	1.005899	10.33275	.1394987	.4339736	.1348724	.2380735	.2084487
#1	.0117621	-.001413	23.30352	.4278679	.1842424	.2660559	401.7702
#2	.0119196	-.001661	23.26202	.4315230	.1843221	.2670322	402.4840
#3	.0116873	-.001381	23.32609	.4290612	.1847075	.2672478	403.4426

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.359859	29.70264	.2014727	.0048402	.7783482	.5907074	.4726987
Stddev	.003013	.09855	.0001671	.0002847	.0121074	.0025159	.0009827
%RSD	.1276639	.3318051	.0829249	5.881011	1.555520	.4259081	.2078938
#1	2.358934	29.80527	.2015965	.0046797	.7644602	.5896475	.4733756
#2	2.357418	29.60874	.2012827	.0046720	.7866822	.5935798	.4715715
#3	2.363226	29.69391	.2015390	.0051688	.7839020	.5888949	.4731489

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.02611	.0638829	.0076593	.0053323	4.873872	2.956419	5.261594
Stddev	.03449	.0042287	.0000806	.0009858	.002618	.011112	.027913
%RSD	.1812738	6.619496	1.052363	18.48796	.0537137	.3758712	.5304986
#1	18.98805	.0591701	.0076158	.0042548	4.876824	2.948824	5.233065
#2	19.05530	.0651326	.0076098	.0055529	4.872964	2.969173	5.288847
#3	19.03497	.0673458	.0077523	.0061890	4.871830	2.951260	5.262871

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1903-03 Acquired: 4/30/2025 22:19:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	2.887404	.2775329	-.271567
Stddev	.007867	.0008509	.000915
%RSD	.2724429	.3065981	.3367578
#1	2.879479	.2770325	-.270697
#2	2.895210	.2770507	-.271485
#3	2.887523	.2785153	-.272520

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3570.775	86953.59	14353.93	2304.409	4790.321
Stddev	9.084	328.17	27.17	7.776	2.502
%RSD	.2543847	.3774121	.1892819	.3374190	.0522321
#1	3561.133	87332.04	14384.93	2311.895	4790.323
#2	3579.172	86747.62	14334.22	2304.960	4792.822
#3	3572.019	86781.12	14342.66	2296.373	4787.818

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1904-01 Acquired: 4/30/2025 22:23:20 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0629435	.0189117	.5579515	-.026539	-.009094	178.0925	1.882684
Stddev	.0069634	.0022002	.0020565	.001075	.001578	.1934	.012604
%RSD	11.06287	11.63400	.3685807	4.049513	17.34763	.1086092	.6694521
#1	.0707926	.0180252	.5566261	-.026690	-.009507	178.3156	1.889353
#2	.0575082	.0172930	.5569078	-.025397	-.007350	177.9916	1.890552
#3	.0605296	.0214168	.5603205	-.027530	-.010423	177.9705	1.868147

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0178842	.0217079	119.8390	.4169901	.3015958	.3509797	445.9841
Stddev	.0001379	.0004882	.2624	.0010699	.0007936	.0015745	2.0393
%RSD	.7711271	2.249097	.2189701	.2565682	.2631343	.4485892	.4572594
#1	.0180428	.0212620	119.8867	.4178613	.3017666	.3494853	447.8370
#2	.0178174	.0216321	120.0743	.4173130	.3022901	.3526236	446.3161
#3	.0177924	.0222296	119.5560	.4157960	.3007307	.3508303	443.7992

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.63859	112.7344	.6200414	-.003227	3.847267	.4586396	2.025530
Stddev	.06033	.1395	.0032163	.000631	.024257	.0014784	.008711
%RSD	.3857567	.1237127	.5187274	19.55764	.6305056	.3223399	.4300783
#1	15.68323	112.6310	.6205331	-.002627	3.865771	.4578864	2.026682
#2	15.66259	112.6792	.6229836	-.003168	3.856225	.4576896	2.016300
#3	15.56996	112.8930	.6166076	-.003885	3.819805	.4603429	2.033608

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.28511	-.067136	.0065435	.0062753	6.181949	2.015014	10.49589
Stddev	.12871	.005802	.0001703	.0012802	.018435	.009148	.04223
%RSD	.3866810	8.642329	2.603068	20.40127	.2982129	.4540140	.4023605
#1	33.31146	-.063121	.0066974	.0067184	6.197917	2.004617	10.52775
#2	33.39860	-.064499	.0065727	.0072751	6.186156	2.018595	10.51192
#3	33.14527	-.073788	.0063605	.0048324	6.161773	2.021831	10.44798

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1904-01 Acquired: 4/30/2025 22:23:20 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.062179	1.089623	-.095647
Stddev	.003837	.007236	.000427
%RSD	.3612292	.6641124	.4463576
#1	1.065517	1.094890	-.096090
#2	1.057987	1.092607	-.095238
#3	1.063032	1.081372	-.095614

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3581.019	89968.33	14007.75	2346.673	4452.265
Stddev	4.276	283.21	18.89	19.126	9.291
%RSD	.1194013	.3147936	.1348512	.8150332	.2086783
#1	3576.124	90221.99	14019.82	2352.837	4442.402
#2	3582.907	90020.25	14017.46	2361.958	4453.539
#3	3584.026	89662.74	13985.98	2325.225	4460.852

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1905-01 Acquired: 4/30/2025 22:27:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0407277	.0048704	.1577628	.0013212	-.004451	121.1341	.5594407
Stddev	.0031704	.0010607	.0007328	.0028144	.002964	.0685	.0014353
%RSD	7.784330	21.77823	.4645122	213.0119	66.58043	.0565712	.2565539
#1	.0426991	.0036995	.1577833	-.001905	-.001398	121.2131	.5579478
#2	.0424133	.0051448	.1584851	.002597	-.004640	121.0988	.5608104
#3	.0370705	.0057669	.1570199	.003272	-.007316	121.0905	.5595639

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073910	-.000973	9.421762	.1939498	.1091390	.2609285	226.3053
Stddev	.0000357	.000214	.020427	.0007730	.0005349	.0020124	.6275
%RSD	.4828042	22.02895	.2168083	.3985595	.4900738	.7712363	.2772816
#1	.0073507	-.001011	9.400600	.1948375	.1089545	.2615450	225.9640
#2	.0074035	-.000742	9.441365	.1934248	.1097418	.2625605	225.9223
#3	.0074187	-.001166	9.423320	.1935872	.1087209	.2586800	227.0295

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.204028	37.01438	.1951687	.0016844	4.269808	.2802231	.4500898
Stddev	.017048	.05280	.0006654	.0000771	.021245	.0014406	.0010030
%RSD	.3275998	.1426534	.3409388	4.578105	.4975662	.5140982	.2228418
#1	5.189023	37.03206	.1959290	.0015974	4.249674	.2797357	.4505657
#2	5.200493	36.95501	.1948848	.0017112	4.292013	.2818443	.4507663
#3	5.222566	37.05608	.1946923	.0017445	4.267736	.2790895	.4489375

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.548872	.0192347	.0019950	.0033949	3.128793	2.904863	4.460375
Stddev	.022004	.0023942	.0003418	.0004626	.000586	.006639	.024224
%RSD	.2304352	12.44727	17.13253	13.62674	.0187188	.2285340	.5430827
#1	9.527280	.0198612	.0016018	.0030394	3.128119	2.898549	4.486493
#2	9.571266	.0165895	.0021627	.0039180	3.129171	2.911784	4.455988
#3	9.548069	.0212533	.0022207	.0032274	3.129090	2.904254	4.438646

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1905-01 Acquired: 4/30/2025 22:27:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.9208907	.2535381	-.146261
Stddev	.0102852	.0015866	.000551
%RSD	1.116871	.6257829	.3767809
#1	.9315161	.2517063	-.146110
#2	.9109835	.2544799	-.145801
#3	.9201726	.2544280	-.146872

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3516.111	85977.54	13708.20	2287.819	4845.894
Stddev	8.902	233.35	15.99	3.412	15.090
%RSD	.2531846	.2714036	.1166699	.1491465	.3114002
#1	3512.924	85822.30	13694.86	2290.207	4841.595
#2	3509.240	86245.88	13725.93	2289.337	4833.420
#3	3526.168	85864.43	13703.80	2283.911	4862.667

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1905-05 Acquired: 4/30/2025 22:31:39 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0252600	.0029458	.1336786	-.000089	-.002907	71.56457	.4211816
Stddev	.0007782	.0005124	.0009327	.001787	.001646	.06621	.0007931
%RSD	3.080880	17.39390	.6977200	2006.946	56.61225	.0925239	.1883078
#1	.0261539	.0023637	.1337216	-.002152	-.001124	71.52779	.4214444
#2	.0247338	.0033286	.1345890	.000971	-.004369	71.64101	.4202904
#3	.0248922	.0031451	.1327251	.000913	-.003228	71.52490	.4218099

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048168	-.002454	10.08930	.1405638	.0627995	.1384773	156.1310
Stddev	.0000542	.000029	.01548	.0005347	.0004291	.0006962	.4364
%RSD	1.124237	1.178396	.1534308	.3803587	.6832496	.5027608	.2795113
#1	.0048021	-.002436	10.07222	.1411194	.0632305	.1380433	156.4463
#2	.0048767	-.002487	10.10242	.1400529	.0627956	.1392803	155.6329
#3	.0047715	-.002439	10.09325	.1405191	.0623724	.1381082	156.3138

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.532490	21.35165	.1170518	.0019209	2.762975	.1931472	.2921020
Stddev	.004359	.08574	.0004285	.0005268	.014893	.0005545	.0004669
%RSD	.1721299	.4015420	.3660715	27.42354	.5390302	.2870897	.1598461
#1	2.531507	21.38256	.1173992	.0015963	2.778760	.1926067	.2923669
#2	2.537257	21.41765	.1171831	.0016377	2.749173	.1937147	.2923762
#3	2.528707	21.25474	.1165729	.0025287	2.760992	.1931201	.2915629

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.777590	.0252242	.0016774	.0036385	2.167920	7.095112	4.053777
Stddev	.015921	.0032234	.0000831	.0010127	.005330	.009328	.010375
%RSD	.2349040	12.77914	4.953929	27.83350	.2458445	.1314757	.2559239
#1	6.792777	.0274320	.0017333	.0045026	2.165684	7.092890	4.063946
#2	6.761025	.0215252	.0017169	.0038890	2.174004	7.087094	4.054178
#3	6.778967	.0267155	.0015819	.0025241	2.164073	7.105350	4.043208

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1905-05 Acquired: 4/30/2025 22:31:39 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.5650701	.1606851	-.063454
Stddev	.0090001	.0005885	.000383
%RSD	1.592735	.3662623	.6031476
#1	.5604539	.1603466	-.063712
#2	.5593147	.1603440	-.063014
#3	.5754416	.1613646	-.063636

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3310.010	82377.43	13376.56	2158.826	4864.283
Stddev	7.280	171.39	40.90	7.267	8.231
%RSD	.2199328	.2080547	.3057379	.3366148	.1692094
#1	3306.328	82231.31	13386.58	2159.655	4855.509
#2	3318.395	82566.08	13331.58	2151.179	4871.833
#3	3305.306	82334.91	13411.51	2165.642	4865.508

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-01 Acquired: 4/30/2025 22:35:49 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0042835	-.003577	.0444165	-.003950	.0019189	3.188227	.0421330
Stddev	.0015247	.001098	.0013292	.003283	.0017064	.010961	.0009096
%RSD	35.59378	30.70839	2.992647	83.12025	88.92555	.3438065	2.158800
#1	.0060430	-.004515	.0431583	-.006987	.0025778	3.180018	.0411176
#2	.0034538	-.003848	.0442844	-.004398	.0031976	3.200675	.0424081
#3	.0033536	-.002368	.0458069	-.000466	-.000019	3.183988	.0428732

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002719	.0028001	.8040963	.0589360	.0013097	.1273049	28.25212
Stddev	.0000678	.0001049	.0078639	.0001700	.0001900	.0001027	.14722
%RSD	24.91922	3.747762	.9779771	.2885129	14.50462	.0807005	.5210826
#1	.0002415	.0029096	.8063066	.0591291	.0014016	.1272346	28.08230
#2	.0003496	.0027004	.8106184	.0588085	.0010912	.1272572	28.34364
#3	.0002247	.0027902	.7953637	.0588706	.0014362	.1274228	28.33043

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0247135	.1928973	.0032371	.0010095	.1839836	.0496266	.1801163
Stddev	.0004585	.0165897	.0003467	.0004066	.0056545	.0027747	.0001287
%RSD	1.855150	8.600286	10.71120	40.27560	3.073394	5.591080	.0714564
#1	.0244579	.2110736	.0036212	.0005595	.1891814	.0527536	.1801261
#2	.0252428	.1785712	.0029472	.0011187	.1848069	.0486678	.1802399
#3	.0244398	.1890472	.0031430	.0013504	.1779625	.0474586	.1799830

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2882868	-.021543	.0035233	-.000548	.8411589	1.080390	.3484258
Stddev	.0088021	.000745	.0001094	.000451	.0019920	.019429	.0029509
%RSD	3.053252	3.457717	3.104956	82.39948	.2368098	1.798375	.8469200
#1	.2893281	-.022380	.0034990	-.000956	.8418539	1.059368	.3471734
#2	.2790104	-.020954	.0036428	-.000063	.8427103	1.084116	.3517963
#3	.2965220	-.021296	.0034281	-.000624	.8389126	1.097687	.3463076

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-01 Acquired: 4/30/2025 22:35:49 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.1662398	.0082067	-.019911
Stddev	.0008831	.0006246	.000126
%RSD	.5312021	7.611134	.6348174
#1	.1666992	.0081802	-.019765
#2	.1652218	.0088441	-.019988
#3	.1667985	.0075957	-.019981

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3242.518	81246.94	12493.00	2096.507	5323.112
Stddev	1.383	384.06	27.40	16.664	4.030
%RSD	.0426412	.4727060	.2193027	.7948286	.0757045
#1	3243.359	81617.61	12461.79	2114.625	5324.191
#2	3243.274	81272.43	12504.15	2093.057	5318.653
#3	3240.923	80850.76	12513.07	2081.838	5326.493

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV07 Acquired: 4/30/2025 22:40:04 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.167941	5.031714	4.900188	5.258249	5.217703	9.815388	9.889684
Stddev	.033244	.065016	.008804	.077260	.048769	.030028	.143383
%RSD	.6432827	1.292125	.1796687	1.469302	.9346781	.3059305	1.449820
#1	5.135982	4.956688	4.909878	5.170187	5.165501	9.846257	10.02819
#2	5.165505	5.071535	4.898003	5.289922	5.225510	9.786278	9.89898
#3	5.202337	5.066921	4.892682	5.314640	5.262097	9.813630	9.74188

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2383604	2.441341	24.00082	.9951478	2.452774	1.286156	5.109683
Stddev	.0017896	.006176	.14208	.0005771	.002718	.008048	.015810
%RSD	.7507973	.2529771	.5919823	.0579889	.1108103	.6257471	.3094192
#1	.2388917	2.448294	24.01886	.9945019	2.455314	1.277267	5.096235
#2	.2398243	2.439239	24.13302	.9953290	2.449908	1.288253	5.127099
#3	.2363654	2.436491	23.85058	.9956126	2.453099	1.292948	5.105716

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.398830	23.86523	2.457806	1.242481	24.88591	2.439626	2.506502
Stddev	.009905	.19942	.002467	.001012	.17681	.007914	.005026
%RSD	.4129106	.8355980	.1003668	.0814299	.7104657	.3244120	.2005362
#1	2.399074	23.86808	2.460219	1.242908	24.91940	2.443735	2.500807
#2	2.408612	24.06321	2.455288	1.241325	24.69475	2.444642	2.510319
#3	2.388806	23.66440	2.457911	1.243208	25.04358	2.430502	2.508381

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.23935	4.767817	5.094192	4.875324	4.893954	5.139175	4.793396
Stddev	.19926	.034398	.033986	.006661	.011384	.029440	.016728
%RSD	.7894645	.7214727	.6671523	.1366284	.2326151	.5728514	.3489719
#1	25.27058	4.774805	5.059876	4.882210	4.897218	5.120848	4.803087
#2	25.02633	4.798186	5.094861	4.868913	4.903350	5.123543	4.803020
#3	25.42115	4.730462	5.127838	4.874850	4.881295	5.173133	4.774081

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV07 Acquired: 4/30/2025 22:40:04 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.951643	4.791820	4.950934
Stddev	.029760	.016149	.049388
%RSD	.6010179	.3370176	.9975451
#1	4.921272	4.802971	5.005288
#2	4.980753	4.773301	4.908811
#3	4.952903	4.799188	4.938702

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3091.220	78555.11	12635.45	2042.345	4883.508
Stddev	13.953	159.16	114.59	7.562	2.872
%RSD	.4513654	.2026035	.9068611	.3702396	.0588069
#1	3105.816	78606.07	12633.30	2046.690	4885.571
#2	3089.827	78376.71	12521.96	2033.613	4880.228
#3	3078.015	78682.54	12751.10	2046.731	4884.725

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB07 Acquired: 4/30/2025 22:44:16 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025670	.0022370	.0021791	-.000727	.0006229	.0058865	-.005280
Stddev	.0015856	.0020471	.0005238	.001618	.0010680	.0020016	.000141
%RSD	61.76955	91.51150	24.03800	222.4970	171.4467	34.00372	2.674004
#1	.0031913	.0040471	.0024239	-.001531	.0002874	.0072889	-.005392
#2	.0037454	.0000154	.0025357	-.001786	.0018184	.0067763	-.005122
#3	.0007642	.0026486	.0015777	.001135	-.000237	.0035942	-.005328

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002667	.0008777	.0118268	-.000137	.0007906	.0005169	.0179381
Stddev	.0000084	.0001490	.0012353	.000143	.0003309	.0007656	.0040702
%RSD	3.135134	16.97492	10.44500	104.5616	41.85719	148.1017	22.69016
#1	.0002722	.0010362	.0106163	-.000085	.0010221	.0013687	.0225314
#2	.0002710	.0008566	.0117787	-.000299	.0004116	-.000114	.0147800
#3	.0002571	.0007404	.0130855	-.000027	.0009381	.000296	.0165027

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011101	.0186120	.0007504	.0006221	-.075947	-.000916	.0006861
Stddev	.0002544	.0074545	.0003795	.0000691	.006662	.001199	.0001186
%RSD	22.91851	40.05188	50.57570	11.10330	8.771499	130.8810	17.29038
#1	.0013334	.0267851	.0011731	.0006980	-.074833	-.001685	.0005704
#2	.0008331	.0121867	.0006391	.0005629	-.069913	-.001529	.0006804
#3	.0011636	.0168643	.0004390	.0006055	-.083096	.000465	.0008075

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0567959	-.002303	.0015629	-.000493	.0007638	-.006132	.0054827
Stddev	.0219446	.000632	.0004418	.000687	.0005738	.006322	.0014611
%RSD	38.63770	27.44713	28.27150	139.2745	75.12024	103.0977	26.64885
#1	.0651071	-.002350	.0020706	-.000072	.0012641	-.012455	.0069530
#2	.0733708	-.001649	.0012653	-.000121	.0001375	-.006130	.0054639
#3	.0319096	-.002911	.0013527	-.001286	.0008898	.000189	.0040311

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB07 Acquired: 4/30/2025 22:44:16 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.003414	-.002537	.0009814
Stddev	.002847	.000544	.0002560
%RSD	83.38668	21.46314	26.08516
#1	-.001845	-.003144	.0007441
#2	-.001698	-.002092	.0009474
#3	-.006701	-.002375	.0012527

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3291.265	81412.88	12960.48	2171.831	5405.768
Stddev	9.670	155.33	73.87	15.248	19.850
%RSD	.2938048	.1907981	.5699384	.7020915	.3672056
#1	3282.350	81460.93	12968.04	2188.906	5385.127
#2	3289.901	81239.20	12883.13	2167.015	5407.456
#3	3301.545	81538.52	13030.28	2159.573	5424.720

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-05 Acquired: 4/30/2025 22:48:36 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0563916	-.013936	2.175294	.0075523	.0008067	134.3966	1.006005
Stddev	.0047612	.003634	.006024	.0024260	.0012901	.3675	.003735
%RSD	8.443146	26.08034	.2769275	32.12267	159.9196	.2734283	.3713101
#1	.0617112	-.013094	2.171911	.0097500	.0017052	134.3979	1.010319
#2	.0549342	-.010796	2.171722	.0049491	-.000672	134.7635	1.003865
#3	.0525295	-.017917	2.182249	.0079579	.001386	134.0286	1.003832

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0103029	.0123107	18.27988	.2493522	.1045680	.4691035	187.2567
Stddev	.0000172	.0002821	.04325	.0008681	.0002125	.0034858	1.1934
%RSD	.1669154	2.291486	.2366104	.3481299	.2032209	.7430742	.6372879
#1	.0102965	.0119895	18.30219	.2489686	.1045950	.4679040	188.5620
#2	.0103223	.0124247	18.30743	.2503460	.1043433	.4663758	186.9862
#3	.0102898	.0125180	18.23003	.2487420	.1047658	.4730306	186.2217

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.507894	34.69437	.1985408	.0089017	6.010854	.4102601	4.647089
Stddev	.018840	.16519	.0001677	.0001323	.034714	.0017237	.026974
%RSD	.4179281	.4761238	.0844464	1.486413	.5775251	.4201537	.5804431
#1	4.529647	34.87867	.1986578	.0089377	6.040878	.4105572	4.638657
#2	4.497259	34.64476	.1983487	.0087551	6.018842	.4118160	4.677271
#3	4.496777	34.55966	.1986160	.0090122	5.972842	.4084072	4.625339

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.492239	.0680799	.0079859	.0466060	6.224288	5.386941	4.425936
Stddev	.009456	.0052745	.0000316	.0010820	.017895	.013050	.007938
%RSD	.1721689	7.747444	.3952938	2.321566	.2875079	.2422517	.1793542
#1	5.494747	.0741539	.0079498	.0468931	6.240477	5.399369	4.428390
#2	5.500188	.0654293	.0080082	.0454094	6.227314	5.388106	4.432358
#3	5.481782	.0646564	.0079998	.0475154	6.205072	5.373347	4.417061

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-05 Acquired: 4/30/2025 22:48:36 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	1.534643	.2210165	-.039511
Stddev	.002544	.0003301	.000808
%RSD	.1657839	.1493568	2.044849
#1	1.535744	.2209190	-.040441
#2	1.531733	.2213843	-.039114
#3	1.536450	.2207460	-.038979

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3652.493	88880.05	14961.57	2389.583	4763.214
Stddev	10.242	408.26	57.85	11.721	12.138
%RSD	.2804123	.4593397	.3866746	.4904886	.2548341
#1	3651.638	89064.51	15011.75	2390.411	4763.322
#2	3663.135	88412.11	14898.29	2377.470	4775.297
#3	3642.705	89163.52	14974.68	2400.867	4751.022

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-09 Acquired: 4/30/2025 22:52:42 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0611920	-.013223	.9545582	.0155495	-.000995	190.0090	1.120198
Stddev	.0061723	.000843	.0017673	.0058219	.002832	1.1784	.000878
%RSD	10.08677	6.378795	.1851456	37.44082	284.7106	.6201888	.0784111
#1	.0542715	-.013797	.9550438	.0088342	.002130	189.5308	1.119540
#2	.0631765	-.013617	.9525989	.0191766	-.003391	191.3513	1.119859
#3	.0661279	-.012255	.9560320	.0186377	-.001724	189.1448	1.121195

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0158525	.0073087	17.84812	.2508216	.1150929	.2246365	192.9390
Stddev	.0001427	.0001689	.07073	.0010768	.0005204	.0013254	1.0719
%RSD	.9002190	2.311400	.3962686	.4293136	.4521676	.5900190	.5555641
#1	.0157801	.0073921	17.77763	.2502656	.1153040	.2235699	192.0617
#2	.0157605	.0071143	17.84765	.2520628	.1154746	.2242194	194.1338
#3	.0160169	.0074198	17.91908	.2501365	.1145001	.2261203	192.6216

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.863513	41.11305	.2062597	.0054491	13.36638	.3445233	1.154259
Stddev	.013383	.23456	.0006256	.0002814	.09278	.0015114	.005906
%RSD	.4673727	.5705320	.3033325	5.163564	.6941074	.4386822	.5116551
#1	2.851564	40.96013	.2055482	.0054773	13.32917	.3437516	1.160737
#2	2.861001	40.99592	.2065070	.0057154	13.47198	.3435536	1.149175
#3	2.877975	41.38311	.2067239	.0051547	13.29798	.3462647	1.152864

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.723157	.1283068	.0042847	.0227080	6.197025	9.383116	12.02425
Stddev	.030541	.0078775	.0003307	.0022441	.021178	.060583	.02975
%RSD	.5336391	6.139580	7.718553	9.882466	.3417481	.6456610	.2473863
#1	5.734933	.1255309	.0044552	.0216170	6.179707	9.332033	12.01919
#2	5.746056	.1371964	.0044953	.0212181	6.190731	9.450048	12.05620
#3	5.688480	.1221930	.0039035	.0252891	6.220636	9.367268	11.99736

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-09 Acquired: 4/30/2025 22:52:42 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	2.975111	.3544528	-.045429
Stddev	.010205	.0014655	.001209
%RSD	.3430241	.4134562	2.661102
#1	2.972253	.3528419	-.044712
#2	2.986441	.3548096	-.046825
#3	2.966640	.3557070	-.044750

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3949.178	96583.24	17024.96	2556.540	4698.039
Stddev	9.363	444.14	60.87	13.017	3.017
%RSD	.2370964	.4598476	.3575435	.5091822	.0642265
#1	3954.643	96621.20	17040.25	2546.599	4698.725
#2	3954.524	96121.34	17076.73	2551.745	4700.655
#3	3938.366	97007.18	16957.90	2571.274	4694.738

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-13 Acquired: 4/30/2025 22:56:55 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0469287	.0045345	.2394008	.0019674	-.004547	153.3433	.5684725
Stddev	.0017183	.0003197	.0011718	.0043262	.002771	.8111	.0021417
%RSD	3.661543	7.049516	.4894543	219.8958	60.95434	.5289609	.3767373
#1	.0487378	.0041654	.2382392	-.000836	-.006077	154.2792	.5704287
#2	.0467297	.0047219	.2405825	-.000212	-.001348	152.9074	.5661842
#3	.0453185	.0047162	.2393807	.006950	-.006215	152.8434	.5688047

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067769	-.002274	14.46564	.2238371	.0832370	.1734569	226.9107
Stddev	.0000852	.000350	.05623	.0005997	.0006405	.0012844	1.4891
%RSD	1.257930	15.39034	.3887209	.2679186	.7694838	.7404704	.6562419
#1	.0068394	-.001870	14.51908	.2231479	.0825861	.1746600	225.4588
#2	.0068116	-.002459	14.40698	.2241230	.0838666	.1736063	226.8387
#3	.0066798	-.002493	14.47086	.2242403	.0832581	.1721043	228.4344

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.370496	29.20962	.1459637	.0027763	4.653265	.3142196	.5331977
Stddev	.019613	.10865	.0007423	.0001690	.029969	.0021607	.0021441
%RSD	.5819171	.3719770	.5085517	6.087053	.6440467	.6876342	.4021293
#1	3.384530	29.28702	.1460544	.0026249	4.620817	.3150360	.5312629
#2	3.348085	29.08540	.1466566	.0029586	4.659076	.3117697	.5328274
#3	3.378874	29.25643	.1451803	.0027455	4.679904	.3158531	.5355029

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.814805	-.000426	.0033635	.0105219	3.889958	6.633778	3.469575
Stddev	.055673	.009180	.0000288	.0006236	.015514	.031324	.021504
%RSD	.5672311	2155.879	.8565227	5.926925	.3988247	.4721945	.6197919
#1	9.758255	-.007879	.0033415	.0106267	3.905641	6.603790	3.483686
#2	9.816603	-.003226	.0033962	.0098526	3.874618	6.631258	3.480215
#3	9.869557	.009828	.0033529	.0110866	3.889616	6.666286	3.444826

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1906-13 Acquired: 4/30/2025 22:56:55 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.4096535	.2198199	-.088570
Stddev	.0091070	.0006303	.001939
%RSD	2.223097	.2867384	2.189772
#1	.4034793	.2200496	-.086428
#2	.4201126	.2191069	-.089074
#3	.4053686	.2203031	-.090207

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3296.100	82254.72	13376.83	2139.398	4827.916
Stddev	8.767	636.75	73.89	15.072	11.491
%RSD	.2659870	.7741255	.5523510	.7044842	.2380213
#1	3295.297	82865.47	13333.00	2147.130	4828.483
#2	3287.762	82303.88	13462.13	2149.036	4816.152
#3	3305.242	81594.81	13335.35	2122.030	4839.114

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1907-01 Acquired: 4/30/2025 23:01:02 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0979741	-.003404	8.495625	-.030086	.0043457	104.1163
Stddev	.0050965	.002941	.026023	.002883	.0010813	.1407
%RSD	5.201856	86.40041	.3063071	9.581564	24.88115	.1351683
#1	.1018825	-.000008	8.513787	-.028798	.0031115	103.9551
#2	.0922097	-.005121	8.507276	-.028072	.0051260	104.2147
#3	.0998299	-.005084	8.465813	-.033388	.0047996	104.1791

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.904339	.0297158	.0212741	825.2141	.4290302	.1895544
Stddev	.009510	.0002031	.0004020	5.8570	.0024087	.0004527
%RSD	.2435742	.6834833	1.889875	.7097541	.5614279	.2388432
#1	3.893409	.0295256	.0214860	820.3813	.4266530	.1900772
#2	3.908893	.0296922	.0208104	823.5332	.4289684	.1892923
#3	3.910716	.0299297	.0215259	831.7277	.4314692	.1892937

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.826262	320.3416	5.264563	61.86841	.6229957	.0081862
Stddev	.006536	1.4432	.027639	.30271	.0015348	.0005477
%RSD	.1354196	.4505201	.5249984	.4892783	.2463563	6.691001
#1	4.833765	319.8122	5.237715	61.56703	.6235916	.0080843
#2	4.823213	321.9748	5.292930	62.17243	.6241431	.0087777
#3	4.821807	319.2380	5.263044	61.86575	.6212523	.0076965

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.773872	.3327904	16.46691	20.16112	.5463398	.0871157
Stddev	.012457	.0018494	.07027	.02442	.0060595	.0005630
%RSD	.2609350	.5557129	.4267390	.1211287	1.109104	.6462422
#1	4.762410	.3319207	16.44052	20.16977	.5435105	.0865868
#2	4.787129	.3349143	16.41365	20.18003	.5532964	.0870529
#3	4.772077	.3315362	16.54655	20.13355	.5422125	.0877075

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: Q1907-01 Acquired: 4/30/2025 23:01:02 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	2.398322	4.712601	F 18.19278	10.31510	F 22.68852	.1330639
Stddev	.004593	.010453	.01492	.03511	.03219	.0011115
%RSD	.1915056	.2218184	.0820202	.3403475	.1418950	.8353230
#1	2.400193	4.700948	18.20023	10.31927	22.65389	.1336274
#2	2.401683	4.715703	18.20252	10.34794	22.71753	.1337808
#3	2.393088	4.721152	18.17561	10.27810	22.69414	.1317835

Elem	Sr4077
Units	ppm
Avg	1.575858
Stddev	.006815
%RSD	.4324321
#1	1.574098
#2	1.570096
#3	1.583379

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3114.035	79707.40	13602.57	2028.591	3967.523
Stddev	9.721	284.86	8.29	13.730	13.644
%RSD	.3121575	.3573835	.0609672	.6768190	.3438896
#1	3103.659	79411.07	13607.97	2013.628	3953.742
#2	3115.517	79731.94	13593.02	2031.537	3967.803
#3	3122.930	79979.20	13606.72	2040.610	3981.026

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCV08 Acquired: 4/30/2025 23:05:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	5.116424	5.016760	4.875392	5.200865	5.149214	9.979774	9.728171
Stddev	.016858	.100626	.028321	.014452	.015081	.033932	.068817
%RSD	.3294841	2.005788	.5808917	.2778783	.2928872	.3400052	.7073980
#1	5.107744	5.122434	4.899184	5.200676	5.137574	9.999803	9.803647
#2	5.135853	5.005761	4.882925	5.215410	5.166251	9.998922	9.668908
#3	5.105675	4.922087	4.844066	5.186508	5.143816	9.940596	9.711959

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2462424	2.436481	23.99424	.9888534	2.444331	1.281938	5.104569
Stddev	.0021440	.017609	.33457	.0079214	.015579	.003778	.049628
%RSD	.8706819	.7227301	1.394367	.8010657	.6373442	.2947004	.9722274
#1	.2470496	2.451332	24.25116	.9817633	2.455909	1.278192	5.117698
#2	.2478656	2.441083	24.11563	.9974030	2.450465	1.285747	5.146312
#3	.2438120	2.417027	23.61592	.9873937	2.426619	1.281876	5.049696

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.382679	23.57636	2.449107	1.244667	24.41089	2.419941	2.506956
Stddev	.021156	.26352	.015652	.005556	.21160	.011981	.009507
%RSD	.8879114	1.117727	.6391003	.4463662	.8668364	.4950973	.3792327
#1	2.398348	23.72513	2.459319	1.241639	24.17150	2.421764	2.499316
#2	2.391076	23.73185	2.456915	1.251079	24.57295	2.430907	2.517603
#3	2.358614	23.27210	2.431087	1.241283	24.48823	2.407153	2.503949

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.96694	4.919576	5.059712	4.859013	4.856877	5.060738	4.835876
Stddev	.15493	.045556	.013994	.039837	.025338	.039805	.061309
%RSD	.6205310	.9260164	.2765846	.8198540	.5217001	.7865549	1.267799
#1	24.79295	4.948030	5.065449	4.897555	4.871285	5.016698	4.891537
#2	25.08995	4.943665	5.069926	4.861489	4.871727	5.094152	4.845930
#3	25.01794	4.867033	5.043761	4.817997	4.827620	5.071364	4.770162

Sample Name: CCV08 Acquired: 4/30/2025 23:05:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	4.945710	4.943438	4.908013
Stddev	.032759	.022169	.020751
%RSD	.6623770	.4484538	.4227901
#1	4.972807	4.919457	4.924346
#2	4.955020	4.963184	4.915029
#3	4.909304	4.947672	4.884664

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3157.689	79854.30	12540.30	2077.295	4973.571
Stddev	9.463	481.46	89.56	4.692	8.204
%RSD	.2996673	.6029259	.7142140	.2258855	.1649561
#1	3168.493	80311.84	12493.83	2076.228	4972.835
#2	3153.699	79352.04	12483.52	2073.228	4965.759
#3	3150.875	79899.02	12643.55	2082.429	4982.118

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB08 Acquired: 4/30/2025 23:09:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	.0013352	-.001073	.0012711	-.004320	.0009470	.0015771	-.010571
Stddev	.0029552	.000222	.0012744	.000724	.0003104	.0073351	.000316
%RSD	221.3271	20.70051	100.2600	16.74898	32.78108	465.1036	2.984949
#1	-.001803	-.000888	.0022778	-.003496	.0011360	-.006227	-.010358
#2	.001744	-.001012	-.000162	-.004851	.0005887	.002629	-.010934
#3	.004065	-.001320	.001697	-.004613	.0011163	.008329	-.010422

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000355	.0001762	.0278464	-.000110	.0000418	.0003301	.0122872
Stddev	.0000120	.0000565	.0061196	.000252	.0000667	.0002934	.0025830
%RSD	33.81559	32.07121	21.97640	228.7092	159.6906	88.89059	21.02199
#1	.0000220	.0002208	.0212405	.000036	.0001187	.0000444	.0134046
#2	.0000396	.0001950	.0289767	-.000402	.0000079	.0006307	.0141233
#3	.0000449	.0001126	.0333222	.000035	-.000001	.0003152	.0093336

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002687	.0042368	.0005351	.0001622	-.061774	-.000452	-.000069
Stddev	.000127	.0116621	.0003156	.0002977	.011081	.000953	.000399
%RSD	4.719711	275.2584	58.97319	183.5173	17.93811	210.9819	580.3751
#1	-.002542	.0027582	.0002004	-.000096	-.072265	-.001393	-.000497
#2	-.002739	-.006616	.0008273	.000095	-.062872	.000513	-.000000
#3	-.002779	.016568	.0005776	.000488	-.050185	-.000475	.000291

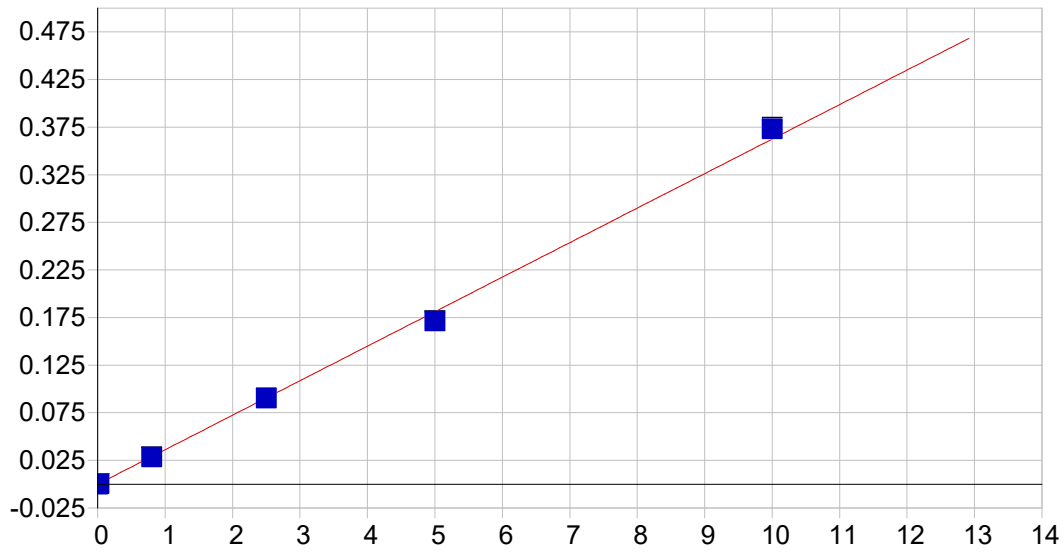
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0793558	-.002759	.0010103	.0188418	.0003397	.0074692	.0029098
Stddev	.0152375	.000775	.0001325	.0007472	.0001797	.0028635	.0009579
%RSD	19.20151	28.10647	13.11335	3.965365	52.89636	38.33763	32.92075
#1	.0921419	-.001969	.0011473	.0187534	.0002361	.0078535	.0018257
#2	.0834302	-.003519	.0008829	.0196292	.0005471	.0044329	.0032618
#3	.0624953	-.002788	.0010008	.0181428	.0002358	.0101211	.0036420

Reviewed By:jaswal
On:5/7/2025 3:37:15 PM
Inst Id :P4
LB :LB135614

Sample Name: CCB08 Acquired: 4/30/2025 23:09:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v24) 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	-.001036	-.002379	.0005993
Stddev	.003107	.000526	.0000381
%RSD	299.8244	22.11822	6.363754
#1	.002190	-.002837	.0006383
#2	-.001289	-.001804	.0005621
#3	-.004009	-.002496	.0005976

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3247.703	81861.83	12764.92	2150.435	5309.990
Stddev	11.011	267.71	107.54	8.051	10.757
%RSD	.3390394	.3270215	.8424857	.3744046	.2025760
#1	3235.330	81836.04	12645.22	2159.731	5297.831
#2	3256.426	81607.95	12853.40	2145.861	5318.267
#3	3251.352	82141.50	12796.12	2145.712	5313.872

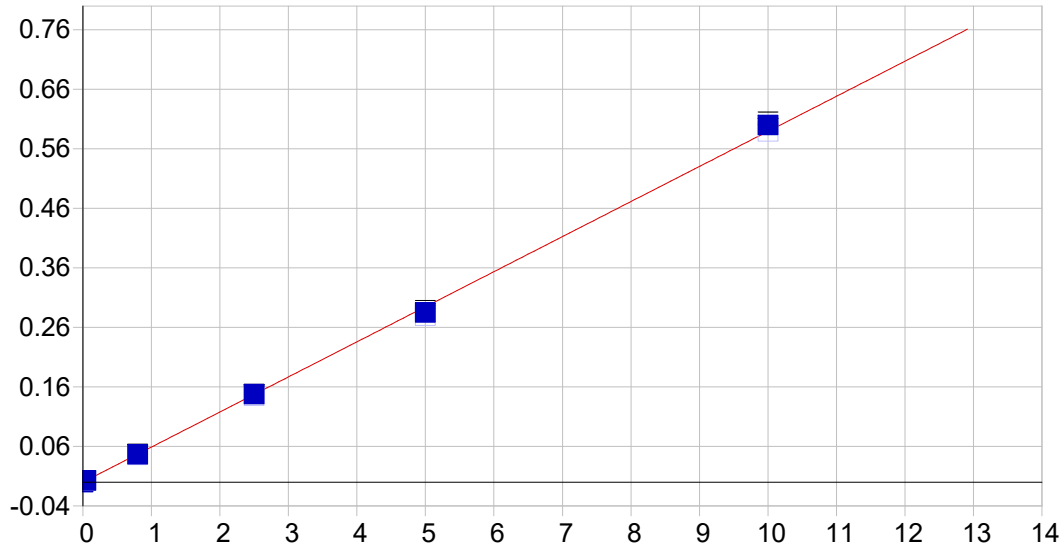


As 189.042 {479}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000051	Re-Slope:	1.000000
A1 (Gain):	0.036253	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999350	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.003849		
Predicted MQL:	0.012831		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00005	.000	1
S1	.02000	.01948	-.001	-2.61	.00065	.000	1
S3	2.5000	2.4938	-.006	-.248	.09026	.000	1
S4	5.0000	4.7270	-.273	-5.46	.17112	.001	1
S5	10.000	10.294	.294	2.94	.37273	.002	1
S2	.80000	.78609	-.014	-1.74	.02842	.000	1

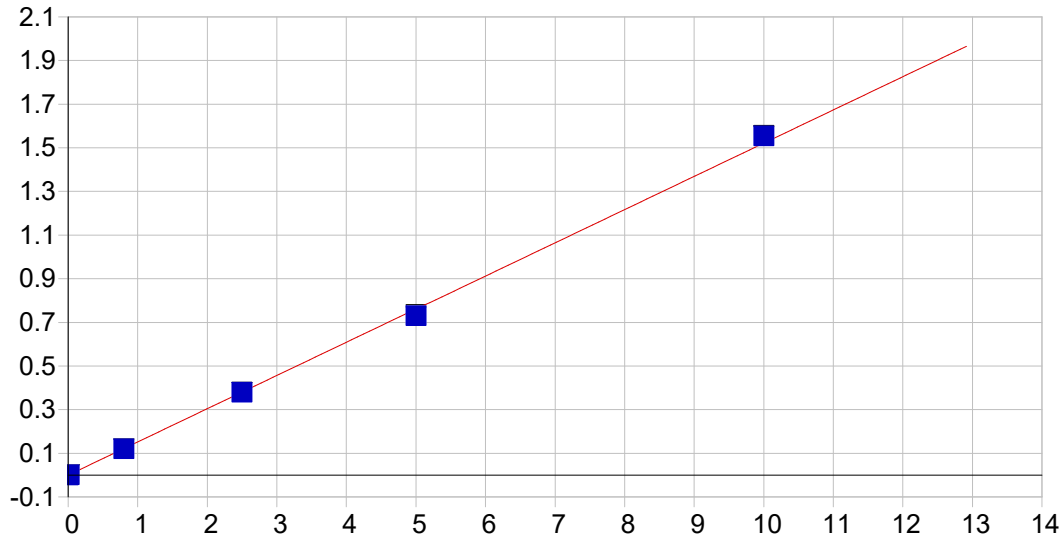


Tl 190.856 {477}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000022	Re-Slope:	1.000000
A1 (Gain):	0.058954	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999739	Status:	OK.
Std Error of Est:	0.000044		
Predicted MDL:	0.002226		
Predicted MQL:	0.007419		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00002	.000	1
S1	.04000	.03967	-.000	-.822	.00217	.000	1
S3	2.5000	2.5018	.002	.074	.14476	.000	1
S4	5.0000	4.8281	-.172	-3.44	.27919	.004	1
S5	10.000	10.179	.179	1.79	.58922	.005	1
S2	.80000	.79139	-.009	-1.08	.04577	.001	1

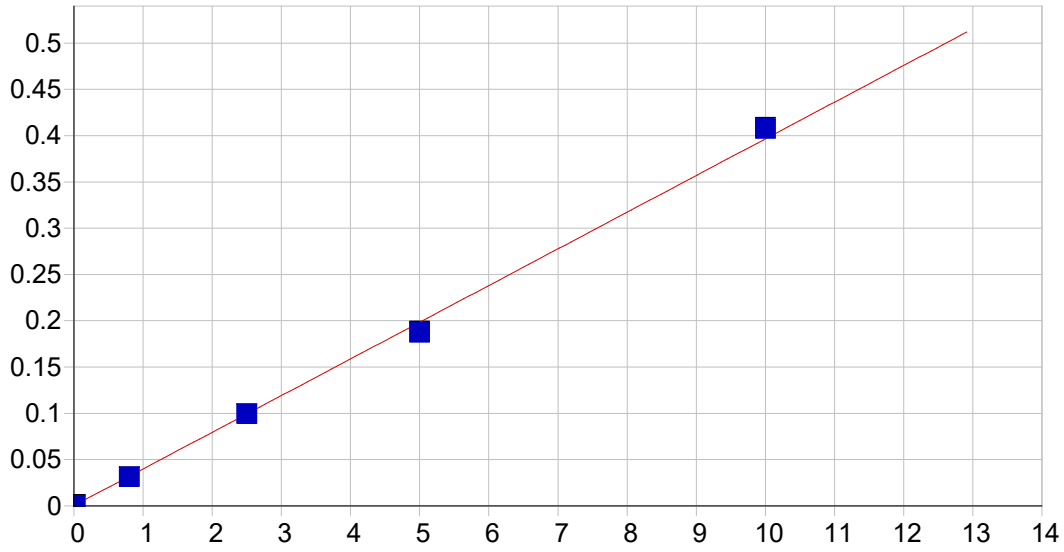


Pb 220.353 {453}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000079	Re-Slope:	1.000000
A1 (Gain):	0.152128	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999641	Status:	OK.
Std Error of Est:	0.000074		
Predicted MDL:	0.001949		
Predicted MQL:	0.006496		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00008	.000	1
S1	.01200	.01069	-.001	-10.9	.00151	.000	1
S3	2.5000	2.4915	-.009	-.341	.37855	.001	1
S4	5.0000	4.8006	-.199	-3.99	.72945	.005	1
S5	10.000	10.220	.220	2.20	1.5532	.002	1
S2	.80000	.78868	-.011	-1.42	.11978	.000	1

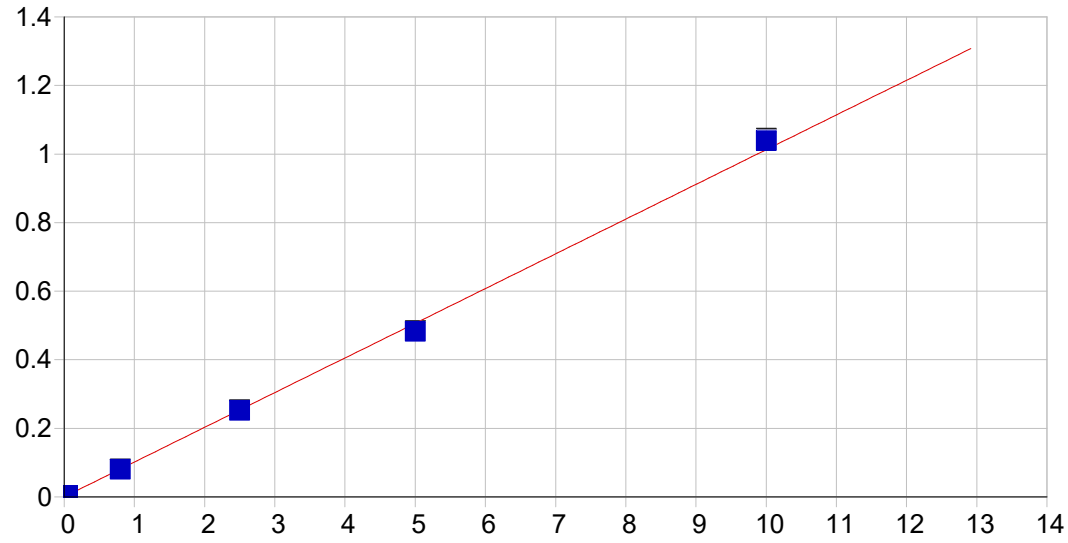


Se 196.090 {472}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000300	Re-Slope:	1.000000
A1 (Gain):	0.039626	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999365	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.004565		
Predicted MQL:	0.015217		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00030	.000	1
S1	.02000	.02062	.001	3.10	.00112	.000	1
S3	2.5000	2.5062	.006	.247	.09957	.000	1
S4	5.0000	4.7245	-.276	-5.51	.18744	.001	1
S5	10.000	10.280	.280	2.80	.40753	.001	1
S2	.80000	.78824	-.012	-1.47	.03152	.000	1

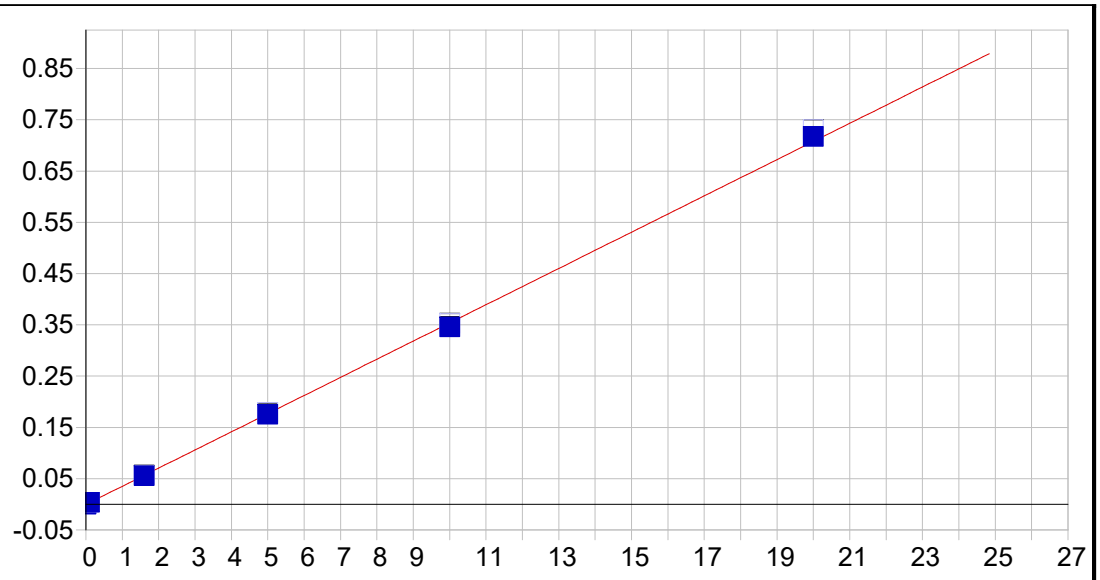


Sb 206.833 {463}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000320	Re-Slope:	1.000000
A1 (Gain):	0.101239	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999509	Status:	OK.
Std Error of Est:	0.000118		
Predicted MDL:	0.002553		
Predicted MQL:	0.008511		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00032	.000	1
S1	.05000	.05088	.001	1.75	.00548	.000	1
S3	2.5000	2.4903	-.010	-.389	.25312	.000	1
S4	5.0000	4.7601	-.240	-4.80	.48360	.002	1
S5	10.000	10.255	.255	2.55	1.0413	.005	1
S2	.80000	.79344	-.007	-.821	.08087	.000	1

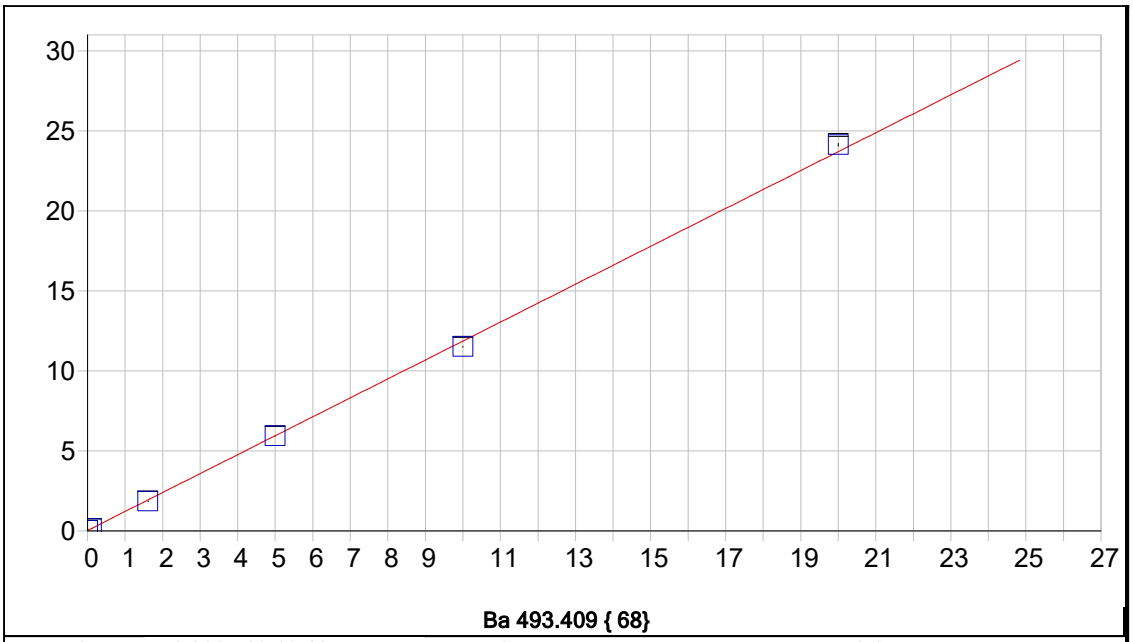


Al 396.152 { 85}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000240	Re-Slope:	1.000000
A1 (Gain):	0.035399	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999879	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.009629		
Predicted MQL:	0.032095		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00024	.000	1
S1	.10000	.10606	.006	6.06	.00379	.000	1
S3	5.0000	4.9657	-.034	-.687	.17897	.000	1
S4	10.000	9.7805	-.219	-2.19	.35285	.000	1
S5	20.000	20.267	.267	1.34	.73093	.000	1
S2	1.6000	1.5803	-.020	-1.23	.05680	.000	1

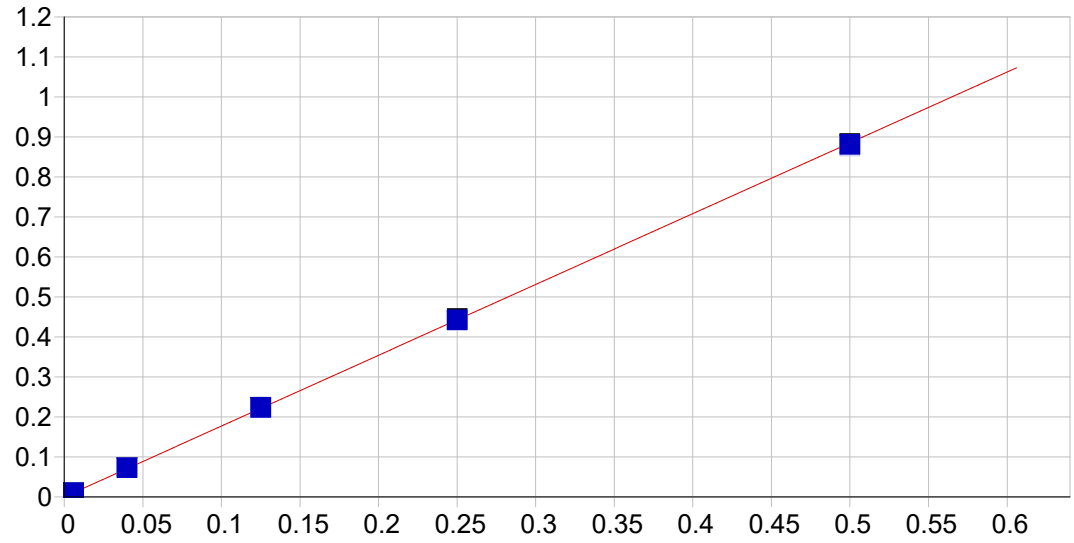


Ba 493.409 { 68}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.031072	Re-Slope:	1.000000
A1 (Gain):	1.183577	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999767	Status:	OK.
Std Error of Est:	0.001894		
Predicted MDL:	0.001202		
Predicted MQL:	0.004006		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.03109	.001	1
S1	.10000	.09336	-.007	-6.64	.14158	.001	1
S3	5.0000	4.9875	-.013	-.251	5.9341	.011	1
S4	10.000	9.7064	-.294	-2.94	11.519	.031	1
S5	20.000	20.361	.361	1.81	24.130	.090	1
S2	1.6000	1.5515	-.049	-3.03	1.8674	.002	1

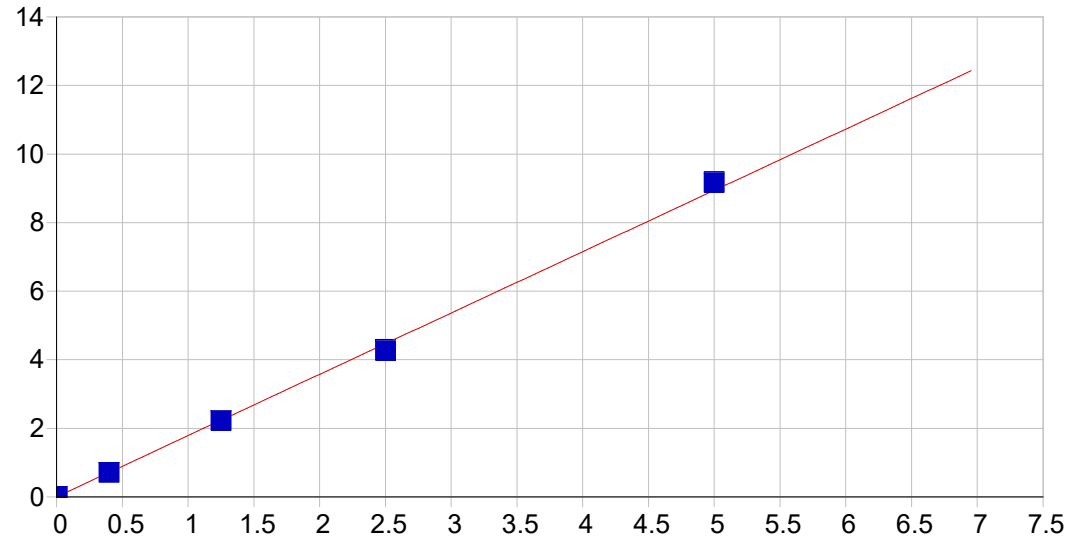


Be 234.861 {144}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000074	Re-Slope:	1.000000
A1 (Gain):	1.769767	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999968	Status:	OK.
Std Error of Est:	0.000041		
Predicted MDL:	0.000074		
Predicted MQL:	0.000245		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00007	.000	1
S1	.00600	.00600	-.000	-.029	.01061	.000	1
S3	.12500	.12617	.001	.936	.22237	.001	1
S4	.25000	.25014	.000	.054	.44077	.003	1
S5	.50000	.49751	-.002	-.498	.87659	.003	1
S2	.04000	.04118	.001	2.96	.07264	.000	1

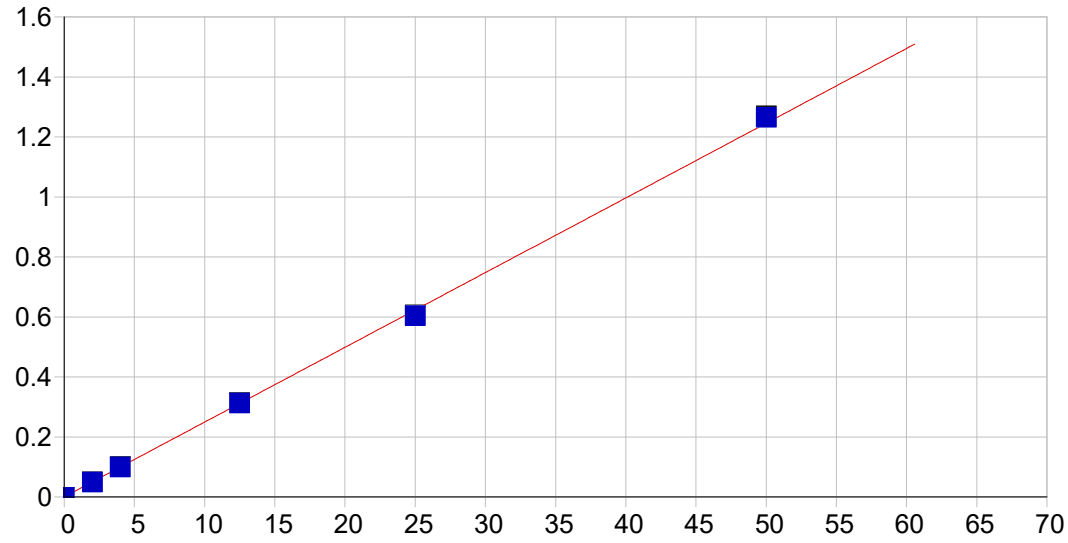


Cd 226.502 {449}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000072	Re-Slope:	1.000000
A1 (Gain):	1.788087	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999545	Status:	OK.
Std Error of Est:	0.000490		
Predicted MDL:	0.000114		
Predicted MQL:	0.000378		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00007	.000	1
S1	.00600	.00598	-.000	-.338	.01082	.000	1
S3	1.2500	1.2419	-.008	-.651	2.2226	.002	1
S4	2.5000	2.3874	-.113	-4.51	4.2728	.029	1
S5	5.0000	5.1258	.126	2.52	9.1732	.019	1
S2	.40000	.39504	-.005	-1.24	.70707	.001	1

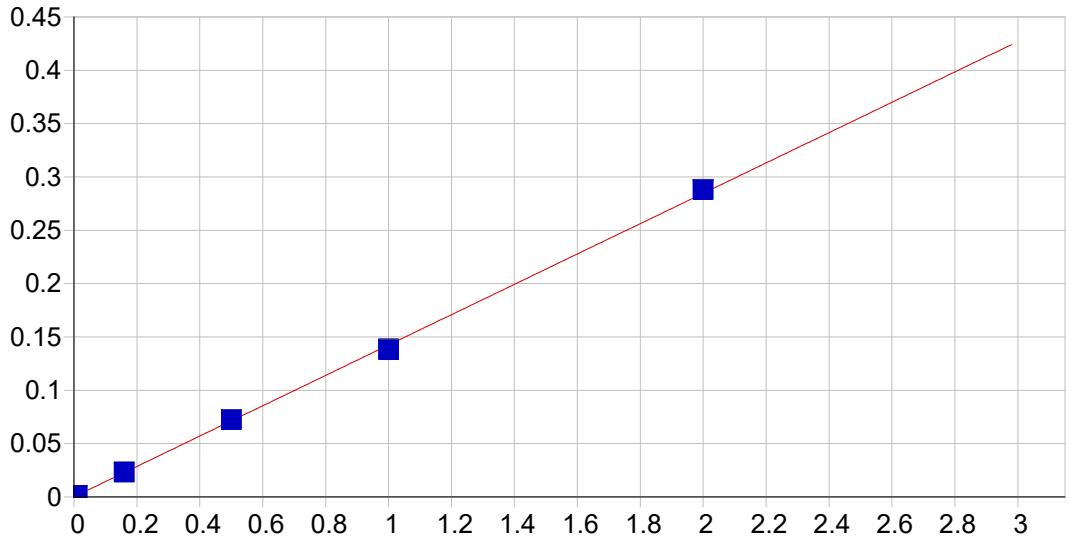


Ca 373.690 { 90}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000180	Re-Slope:	1.000000
A1 (Gain):	0.024913	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999814	Status:	OK.
Std Error of Est:	0.000254		
Predicted MDL:	0.012802		
Predicted MQL:	0.042674		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00006	.000	.000	.00018	.000	1
S2	4.0000	3.9814	-.019	-.466	.09937	.000	1
S3	12.500	12.541	.041	.326	.31260	.001	1
S4	25.000	24.248	-.752	-3.01	.60425	.002	1
S5	50.000	50.759	.759	1.52	1.2647	.004	1
S1	2.0000	1.9709	-.029	-1.46	.04928	.000	1

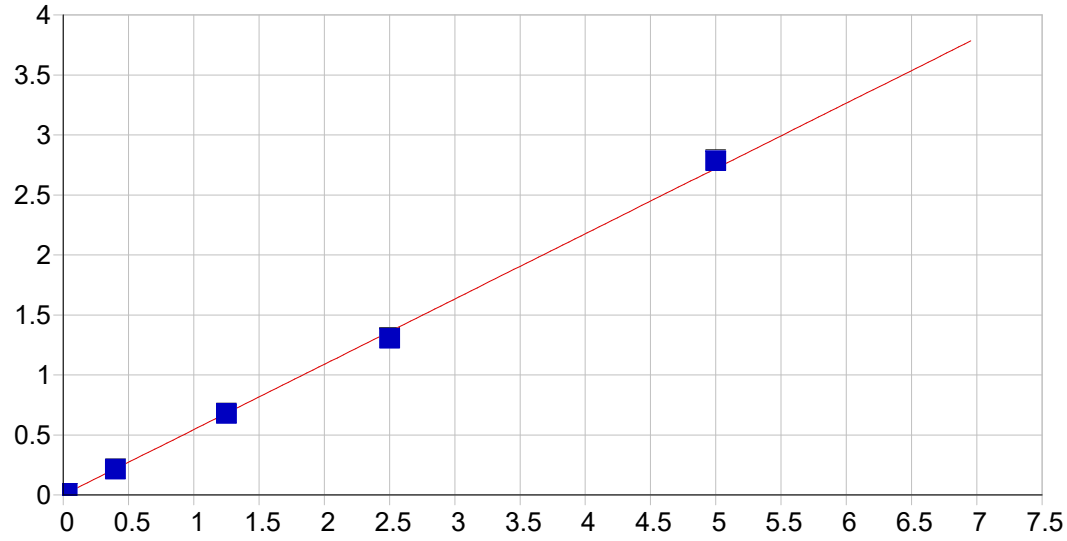


Cr 267.716 {126}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000146	Re-Slope:	1.000000
A1 (Gain):	0.142245	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999825	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.000467		
Predicted MQL:	0.001558		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00015	.000	1
S1	.01000	.00951	-.000	-4.88	.00150	.000	1
S3	.50000	.50623	.006	1.25	.07218	.000	1
S4	1.0000	.96984	-.030	-3.02	.13814	.000	1
S5	2.0000	2.0231	.023	1.15	.28800	.000	1
S2	.16000	.16134	.001	.839	.02310	.000	1

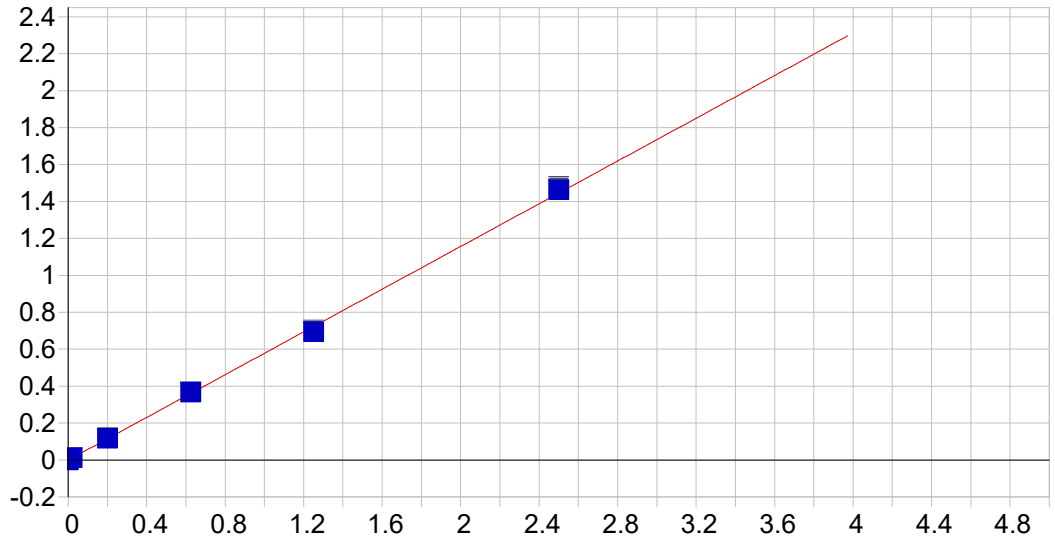


Co 228.616 {448}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000181	Re-Slope:	1.000000
A1 (Gain):	0.544027	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999612	Status:	OK.
Std Error of Est:	0.000309		
Predicted MDL:	0.000372		
Predicted MQL:	0.001239		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00018	.000	1
S1	.03000	.02870	-.001	-4.32	.01573	.000	1
S3	1.2500	1.2469	-.003	-.250	.67967	.001	1
S4	2.5000	2.3955	-.104	-4.18	1.3057	.006	1
S5	5.0000	5.1149	.115	2.30	2.7874	.005	1
S2	.40000	.39397	-.006	-1.51	.21488	.000	1

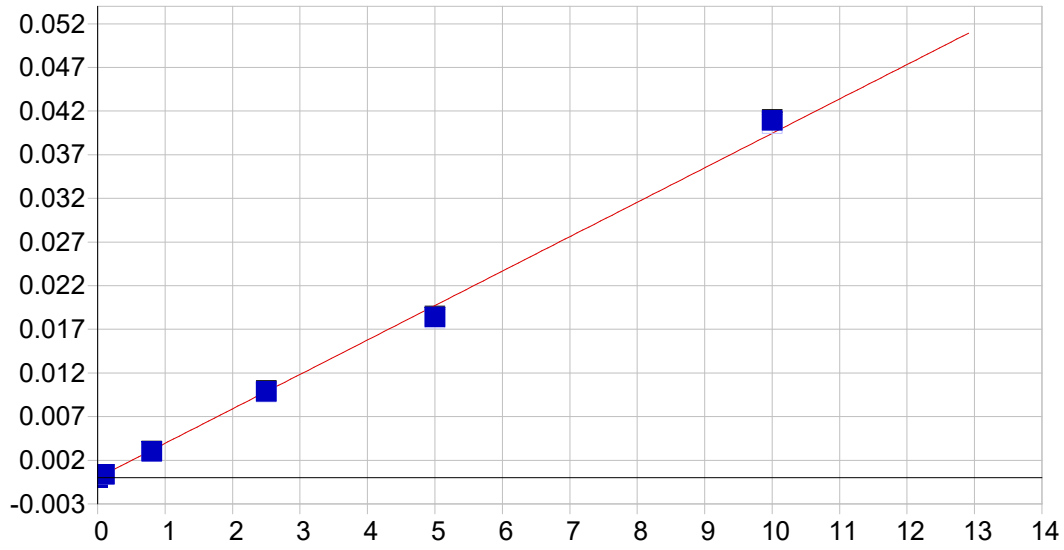


Cu 224.700 {450}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000798	Re-Slope:	1.000000
A1 (Gain):	0.578575	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999711	Status:	OK.
Std Error of Est:	0.000164		
Predicted MDL:	0.000523		
Predicted MQL:	0.001744		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00080	.000	1
S1	.02000	.02155	.002	7.77	.01179	.000	1
S3	.62500	.63636	.011	1.82	.37002	.000	1
S4	1.2500	1.2014	-.049	-3.89	.69958	.003	1
S5	2.5000	2.5318	.032	1.27	1.4746	.004	1
S2	.20000	.20391	.004	1.95	.11802	.000	1

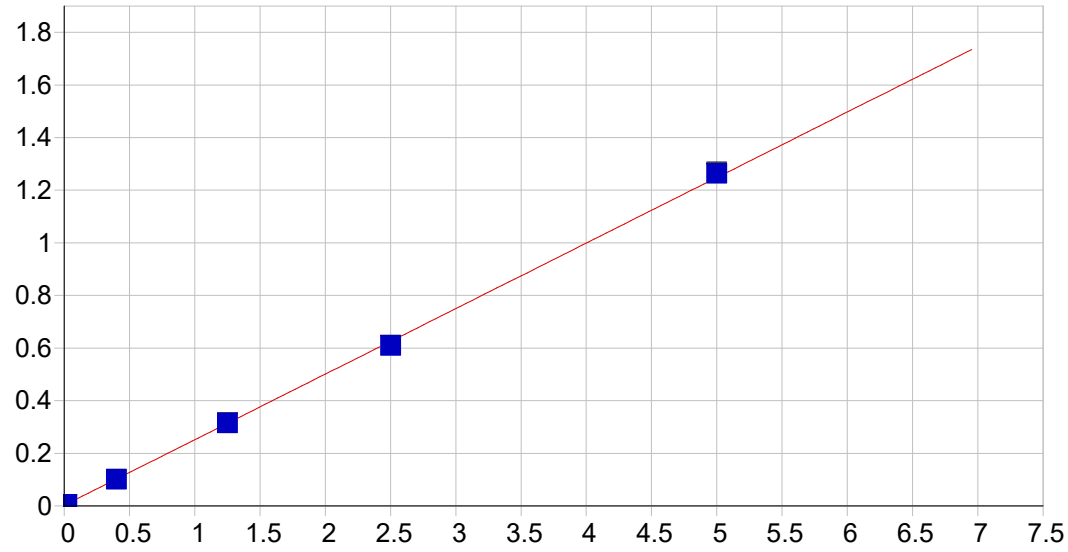


Fe 240.488 {140}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000004	Re-Slope:	1.000000
A1 (Gain):	0.003945	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998961	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.005840		
Predicted MQL:	0.019467		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00000	.000	1
S1	.10000	.09334	-.007	-6.66	.00036	.000	1
S3	2.5000	2.5052	.005	.208	.00979	.000	1
S4	5.0000	4.6695	-.330	-6.61	.01825	.000	1
S5	10.000	10.369	.369	3.69	.04056	.000	1
S2	.80000	.76288	-.037	-4.64	.00298	.000	1

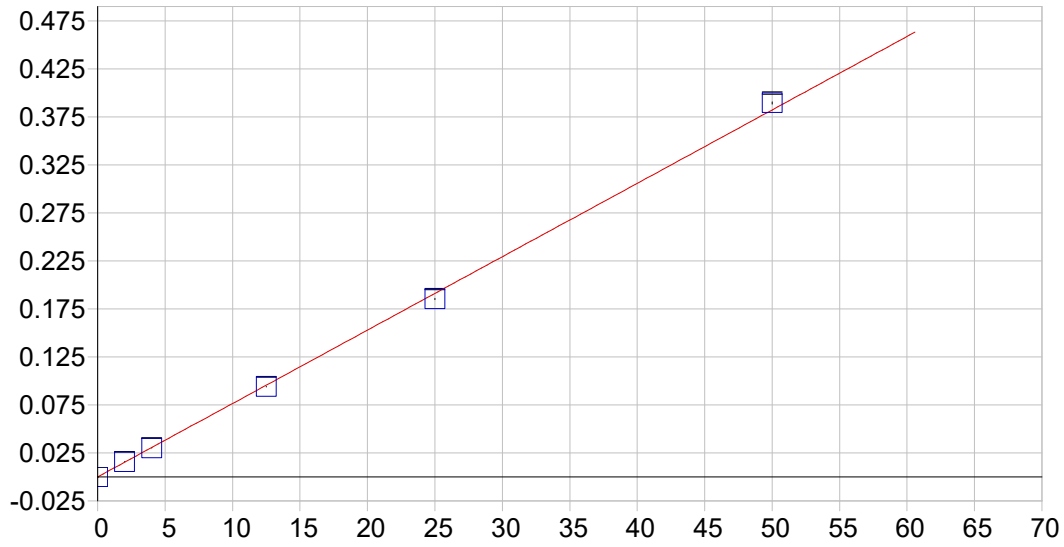


Mn 257.610 {131}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002545	Re-Slope:	1.000000
A1 (Gain):	0.249132	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999856	Status:	OK.
Std Error of Est:	0.000070		
Predicted MDL:	0.000477		
Predicted MQL:	0.001591		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00254	.000	1
S1	.02000	.02007	.000	.344	.00755	.000	1
S3	1.2500	1.2555	.006	.442	.31540	.000	1
S4	2.5000	2.4347	-.065	-2.61	.60924	.001	1
S5	5.0000	5.0649	.065	1.30	1.2646	.004	1
S2	.40000	.39475	-.005	-1.31	.10091	.000	1

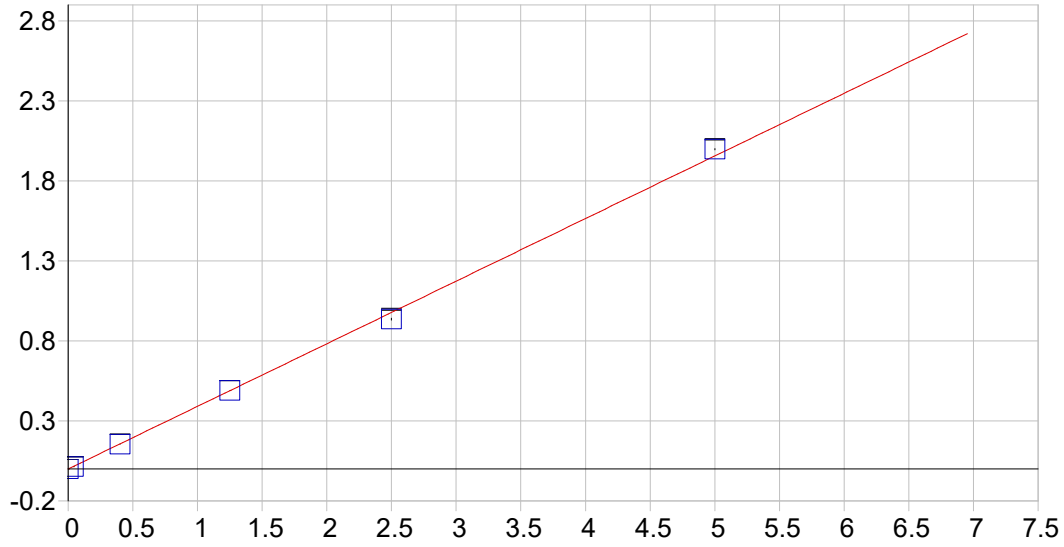


Mg 279.079 {121}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000026	Re-Slope:	1.000000
A1 (Gain):	0.007646	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999749	Status:	OK.
Std Error of Est:	0.000091		
Predicted MDL:	0.017816		
Predicted MQL:	0.059387		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	-.00003	.000	1
S2	4.0000	3.9418	-.058	-1.45	.03011	.000	1
S3	12.500	12.300	-.200	-1.60	.09402	.000	1
S4	25.000	24.246	-.754	-3.02	.18536	.001	1
S5	50.000	50.946	.946	1.89	.38952	.001	1
S1	2.0000	2.0665	.067	3.33	.01578	.000	1

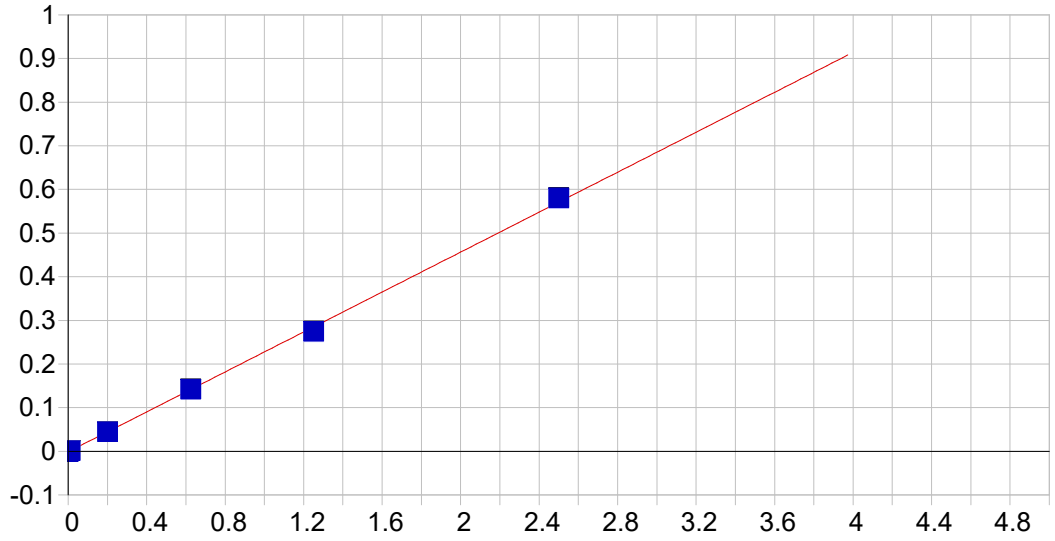


Ni 231.604 {446}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000357	Re-Slope:	1.000000
A1 (Gain):	0.391279	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999618	Status:	OK.
Std Error of Est:	0.000254		
Predicted MDL:	0.000470		
Predicted MQL:	0.001567		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00036	.000	1
S1	.04000	.03875	-.001	-3.12	.01480	.000	1
S3	1.2500	1.2555	.005	.440	.49089	.000	1
S4	2.5000	2.3922	-.108	-4.31	.93565	.006	1
S5	5.0000	5.1068	.107	2.14	1.9978	.003	1
S2	.40000	.39682	-.003	-.794	.15491	.000	1

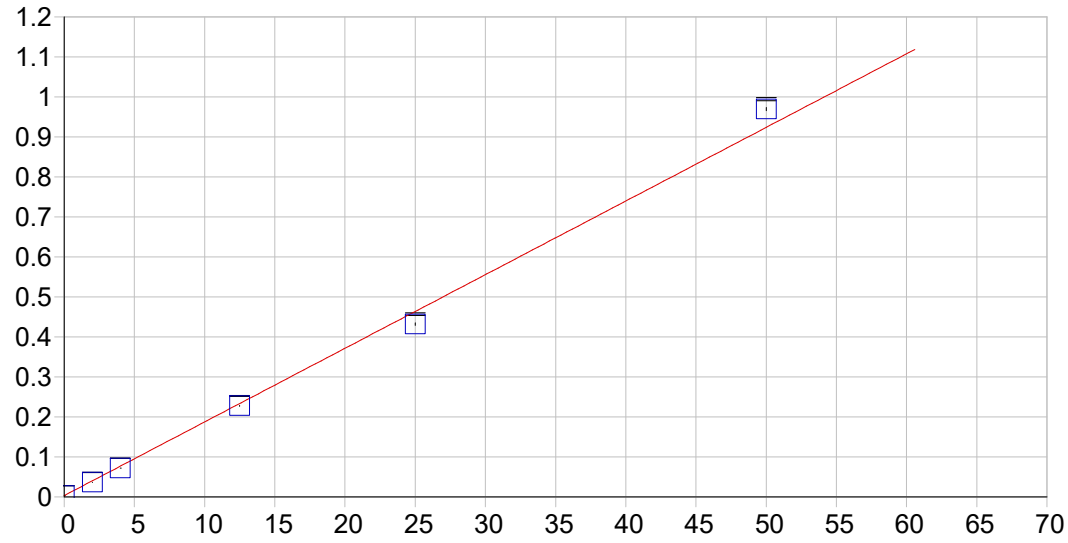


Ag 328.068 {103}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001273	Re-Slope:	1.000000
A1 (Gain):	0.228869	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999749	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.000414		
Predicted MQL:	0.001380		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00127	.000	1
S1	.01000	.00978	-.000	-2.23	.00095	.000	1
S3	.62500	.62728	.002	.365	.14172	.000	1
S4	1.2500	1.2057	-.044	-3.54	.27355	.001	1
S5	2.5000	2.5421	.042	1.68	.57825	.001	1
S2	.20000	.20014	.000	.071	.04435	.000	1

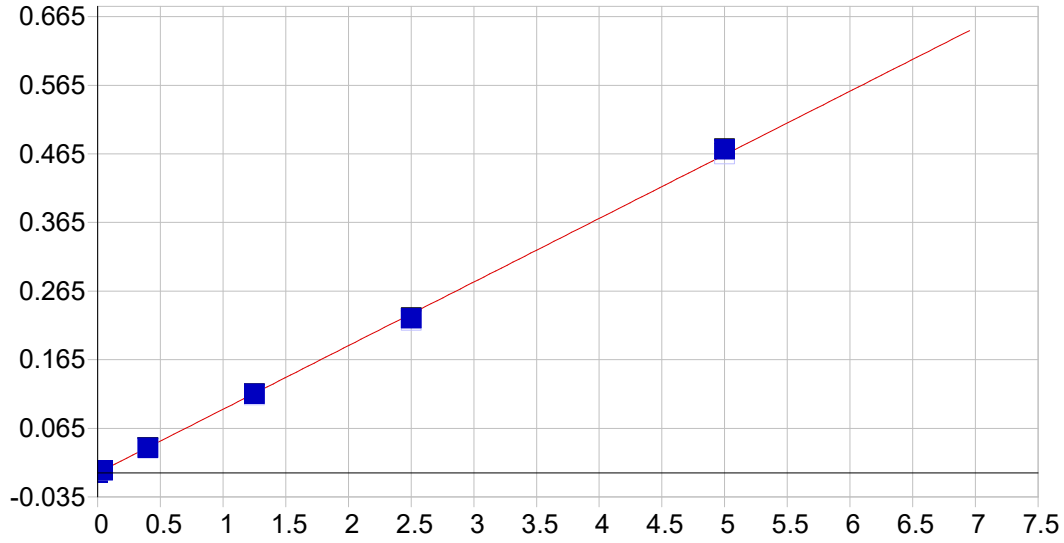


Na 589.592 { 57}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003370	Re-Slope:	1.000000
A1 (Gain):	0.018408	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998457	Status:	OK.
Std Error of Est:	0.000542		
Predicted MDL:	0.011457		
Predicted MQL:	0.038192		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00043	.000	.000	.00338	.000	1
S2	4.0000	3.7238	-.276	-6.91	.07192	.000	1
S3	12.500	12.199	-.301	-2.41	.22792	.001	1
S4	25.000	23.289	-1.71	-6.85	.43206	.003	1
S5	50.000	52.494	2.49	4.99	.96966	.004	1
S1	2.0000	1.7947	-.205	-10.3	.03641	.000	1

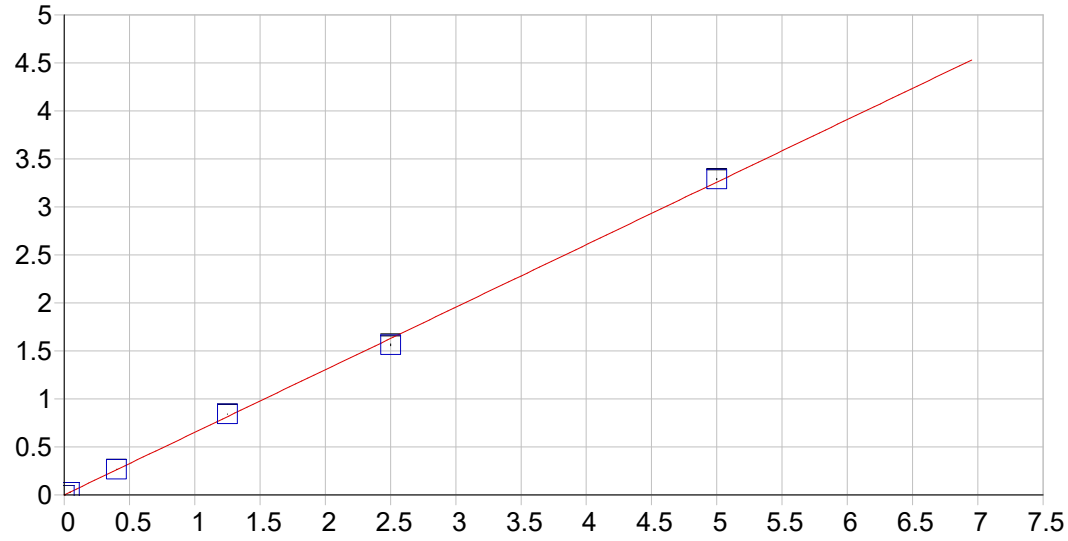


V 292.402 {115}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000003	Re-Slope:	1.000000
A1 (Gain):	0.092723	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999802	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.001778		
Predicted MQL:	0.005927		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00000	.000	1
S1	.04000	.04052	.001	1.30	.00362	.000	1
S3	1.2500	1.2406	-.009	-.754	.11334	.000	1
S4	2.5000	2.4313	-.069	-2.75	.22206	.001	1
S5	5.0000	5.0847	.085	1.69	.46471	.001	1
S2	.40000	.39291	-.007	-1.77	.03589	.000	1

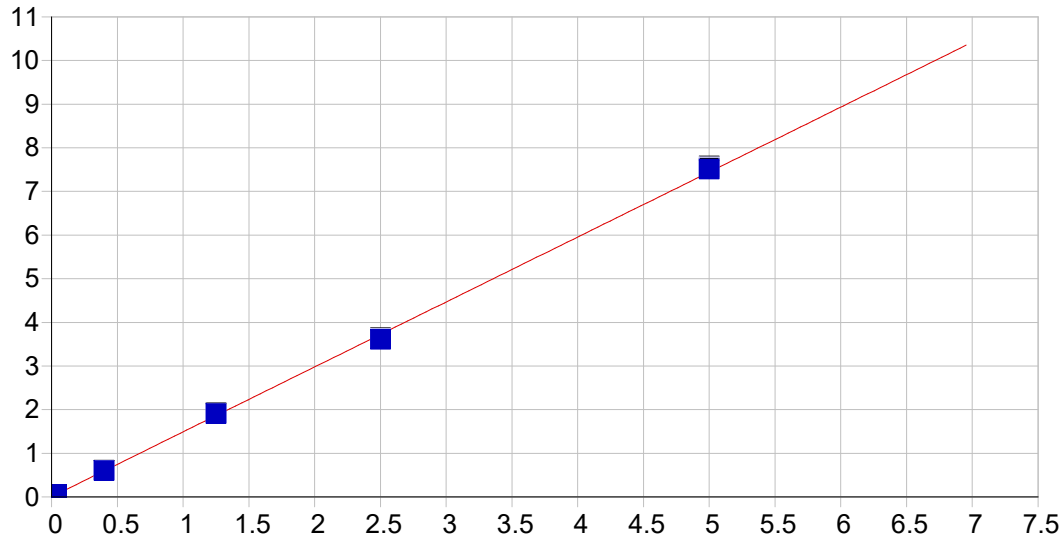


Zn 206.200 {464}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000435	Re-Slope:	1.000000
A1 (Gain):	0.651565	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999657	Status:	OK.
Std Error of Est:	0.000401		
Predicted MDL:	0.000279		
Predicted MQL:	0.000929		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00043	.000	1
S1	.04000	.04074	.001	1.86	.02698	.000	1
S3	1.2500	1.2923	.042	3.39	.84248	.001	1
S4	2.5000	2.3984	-.102	-4.07	1.5631	.011	1
S5	5.0000	5.0483	.048	.965	3.2897	.007	1
S2	.40000	.41027	.010	2.57	.26775	.000	1

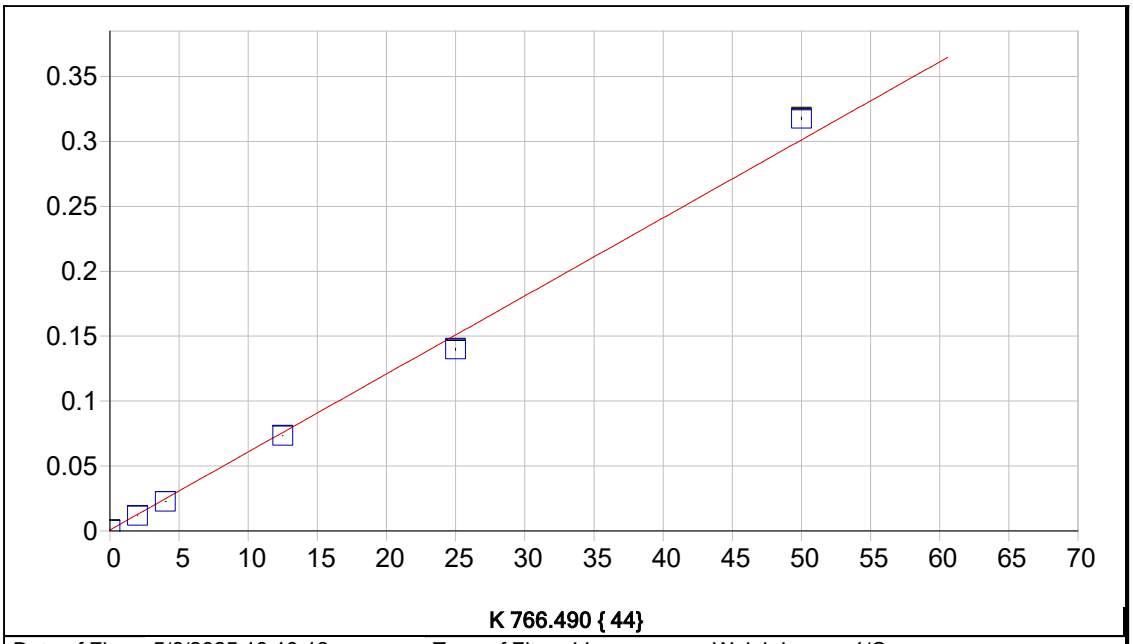


Zn 213.856 {158}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001993	Re-Slope:	1.000000
A1 (Gain):	1.488390	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999798	Status:	OK.
Std Error of Est:	0.000708		
Predicted MDL:	0.000413		
Predicted MQL:	0.001375		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00199	.000	1
S1	.04000	.04012	.000	.310	.06213	.000	1
S3	1.2500	1.2818	.032	2.54	1.9228	.005	1
S4	2.5000	2.4204	-.080	-3.18	3.6304	.013	1
S5	5.0000	5.0427	.043	.855	7.5593	.024	1
S2	.40000	.40493	.005	1.23	.60882	.003	1

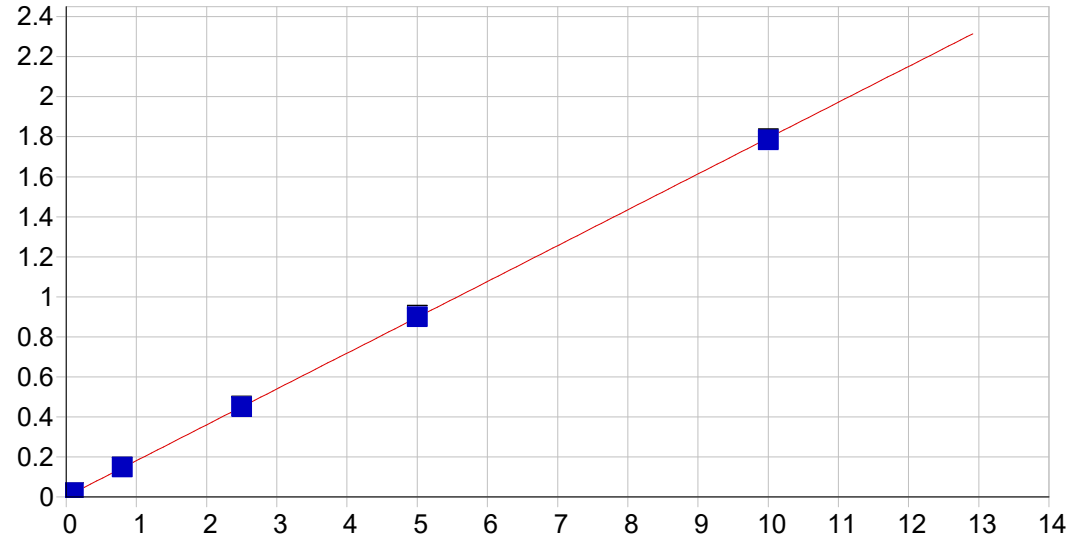


K 766.490 { 44}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000739	Re-Slope:	1.000000
A1 (Gain):	0.006009	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998170	Status:	OK.
Std Error of Est:	0.000193		
Predicted MDL:	0.036908		
Predicted MQL:	0.123028		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00045	.000	.000	.00074	.000	1
S2	4.0000	3.6443	-.356	-8.89	.02264	.000	1
S3	12.500	12.108	-.392	-3.14	.07349	.000	1
S4	25.000	23.173	-1.83	-7.31	.13998	.001	1
S5	50.000	52.746	2.75	5.49	.31768	.001	1
S1	2.0000	1.8292	-.171	-8.54	.01173	.000	1

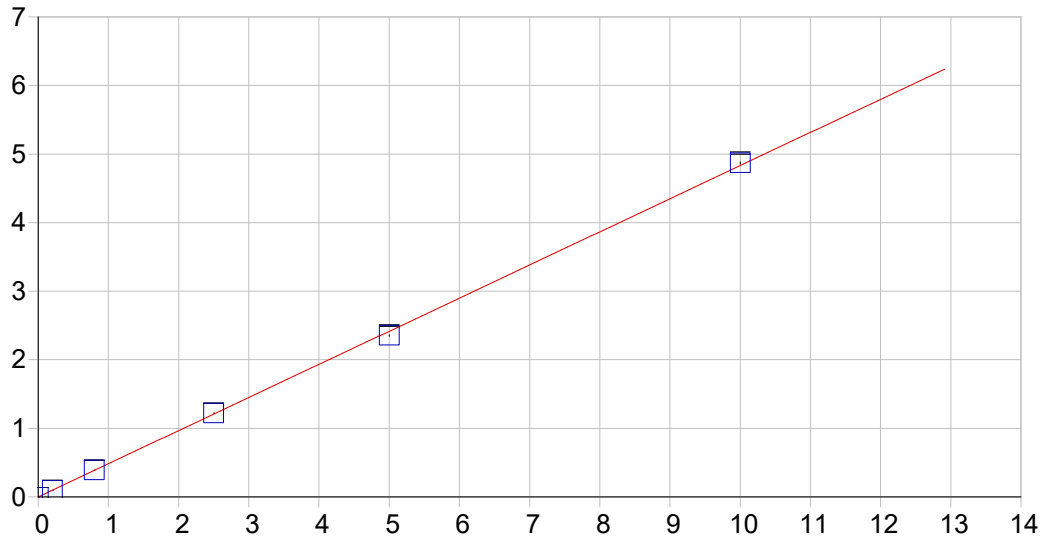


B 249.678 {135}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001802	Re-Slope:	1.000000
A1 (Gain):	0.179114	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.000070		
Predicted MDL:	0.000924		
Predicted MQL:	0.003079		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00180	.000	1
S1	.10000	.10468	.005	4.68	.02048	.000	1
S3	2.5000	2.5054	.005	.215	.44978	.003	1
S4	5.0000	5.0202	.020	.404	.89946	.007	1
S5	10.000	9.9504	-.050	-.496	1.7810	.006	1
S2	.80000	.81934	.019	2.42	.14831	.001	1

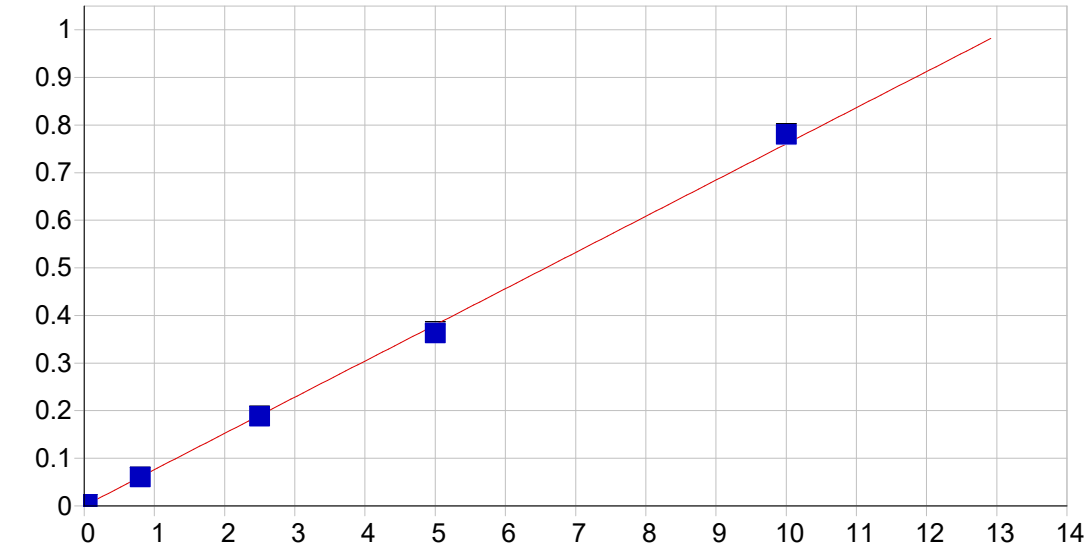


Mo 202.030 {467}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000327	Re-Slope:	1.000000
A1 (Gain):	0.483106	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999878	Status:	OK.
Std Error of Est:	0.000562		
Predicted MDL:	0.000392		
Predicted MQL:	0.001307		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00032	.000	1
S1	.20000	.20597	.006	2.99	.09983	.000	1
S3	2.5000	2.5290	.029	1.16	1.2221	.000	1
S4	5.0000	4.8736	-.126	-2.53	2.3548	.010	1
S5	10.000	10.080	.080	.799	4.8700	.015	1
S2	.80000	.81146	.011	1.43	.39235	.001	1

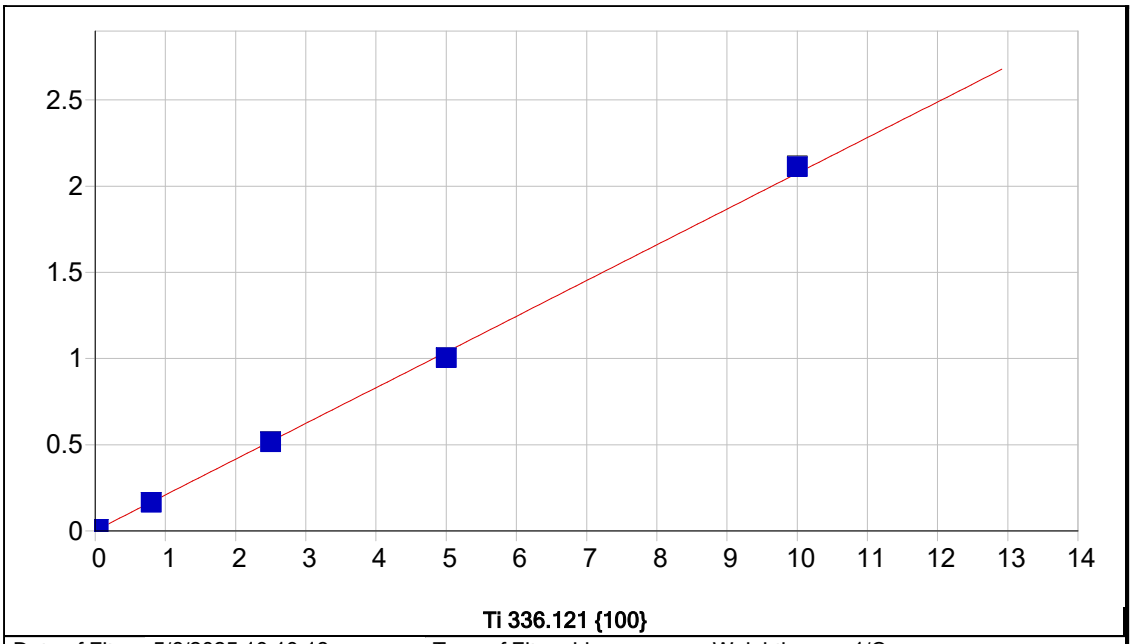


Sn 189.989 {478}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000197	Re-Slope:	1.000000
A1 (Gain):	0.076023	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999527	Status:	OK.
Std Error of Est:	0.000077		
Predicted MDL:	0.001213		
Predicted MQL:	0.004044		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00020	.000	1
S1	.04000	.03980	-.000	-.493	.00322	.000	1
S3	2.5000	2.4758	-.024	-.967	.18822	.000	1
S4	5.0000	4.7733	-.227	-4.53	.36269	.003	1
S5	10.000	10.259	.259	2.59	.77937	.002	1
S2	.80000	.79159	-.008	-1.05	.06031	.000	1

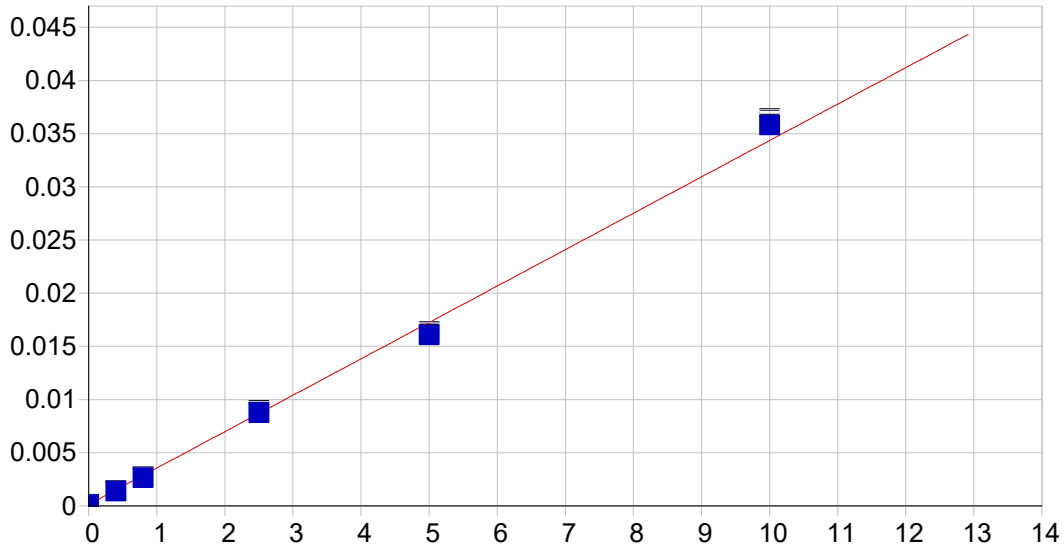


Ti 336.121 {100}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001621	Re-Slope:	1.000000
A1 (Gain):	0.207272	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999748	Status:	OK.
Std Error of Est:	0.000154		
Predicted MDL:	0.001000		
Predicted MQL:	0.003335		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00162	.000	1
S1	.04000	.04077	.001	1.92	.01006	.000	1
S3	2.5000	2.4839	-.016	-.642	.51628	.001	1
S4	5.0000	4.8358	-.164	-3.28	1.0036	.001	1
S5	10.000	10.190	.190	1.90	2.1129	.003	1
S2	.80000	.78999	-.010	-1.25	.16530	.000	1

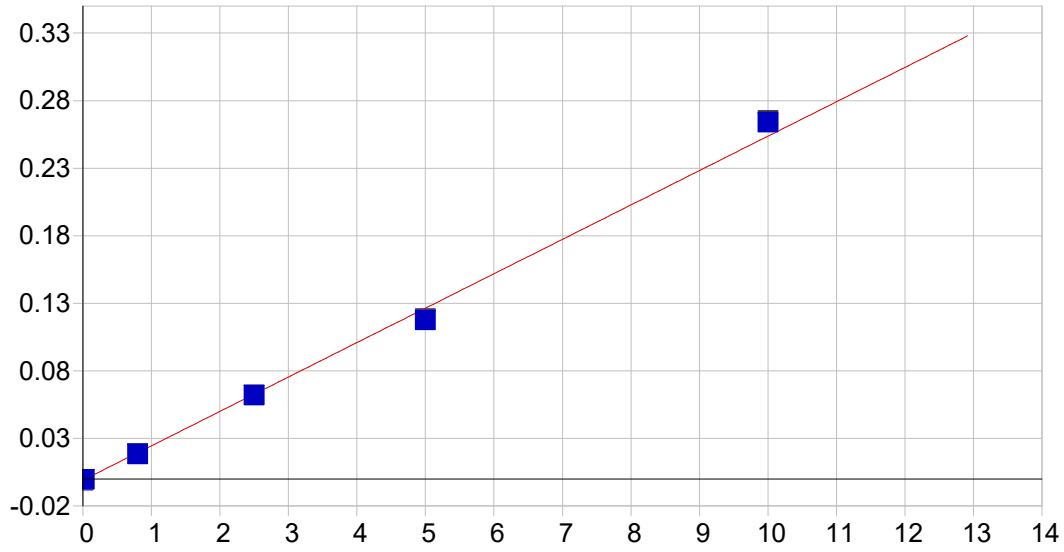


Si 288.158 {117}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000137	Re-Slope:	1.000000
A1 (Gain):	0.003422	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998702	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.011692		
Predicted MQL:	0.038974		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00008	.000	.000	.00014	.000	1
S1	.40000	.36332	-.037	-9.17	.00138	.000	1
S3	2.5000	2.5164	.016	.655	.00888	.000	1
S4	5.0000	4.6585	-.342	-6.83	.01634	.000	1
S5	10.000	10.425	.425	4.25	.03633	.000	1
S2	.80000	.73586	-.064	-8.02	.00270	.000	1

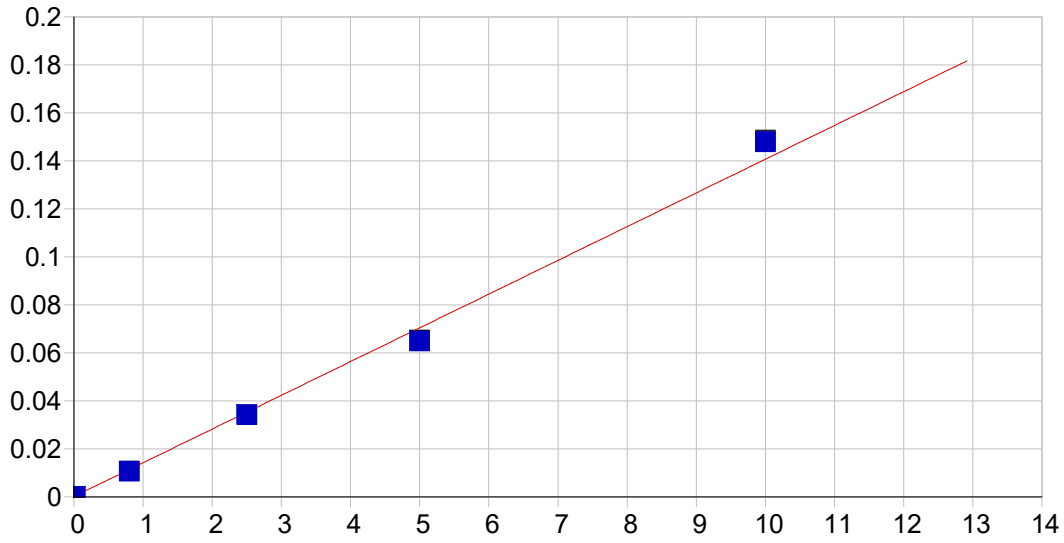


P 177.495 {490}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000971	Re-Slope:	1.000000
A1 (Gain):	0.025466	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998849	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.003955		
Predicted MQL:	0.013182		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00097	.000	1
S1	.02000	.02325	.003	16.2	-.00038	.000	1
S3	2.5000	2.4690	-.031	-1.24	.06189	.000	1
S4	5.0000	4.6616	-.338	-6.77	.11772	.001	1
S5	10.000	10.406	.406	4.06	.26398	.001	1
S2	.80000	.76046	-.040	-4.94	.01839	.000	1

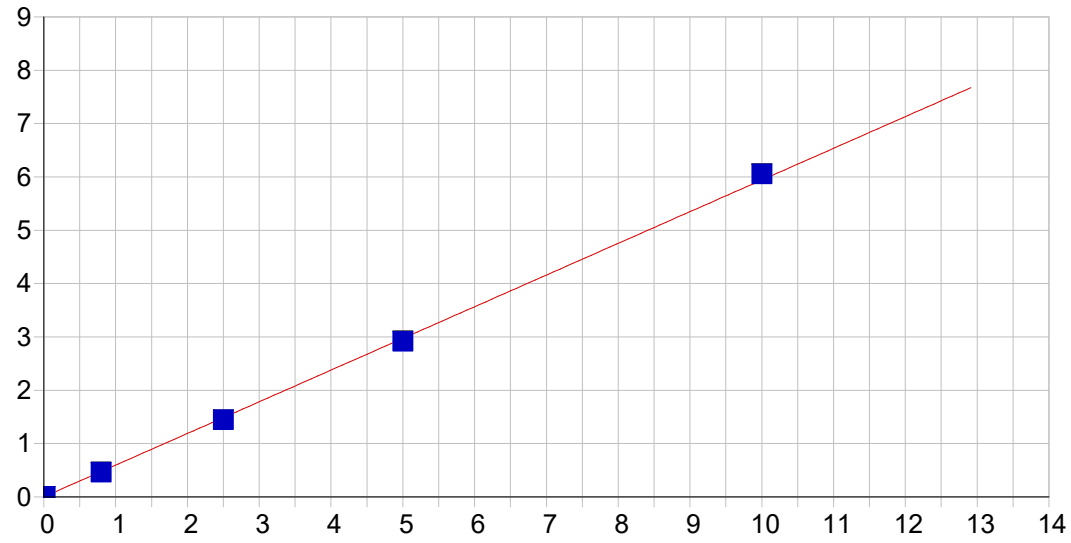


S 182.034 {485}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000169	Re-Slope:	1.000000
A1 (Gain):	0.014055	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998250	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.005769		
Predicted MQL:	0.019230		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00017	.000	1
S1	.02000	.01746	-.003	-12.7	.00040	.000	1
S3	2.5000	2.4284	-.072	-2.86	.03421	.000	1
S4	5.0000	4.6080	-.392	-7.84	.06475	.000	1
S5	10.000	10.521	.521	5.21	.14767	.001	1
S2	.80000	.74535	-.055	-6.83	.01062	.000	1

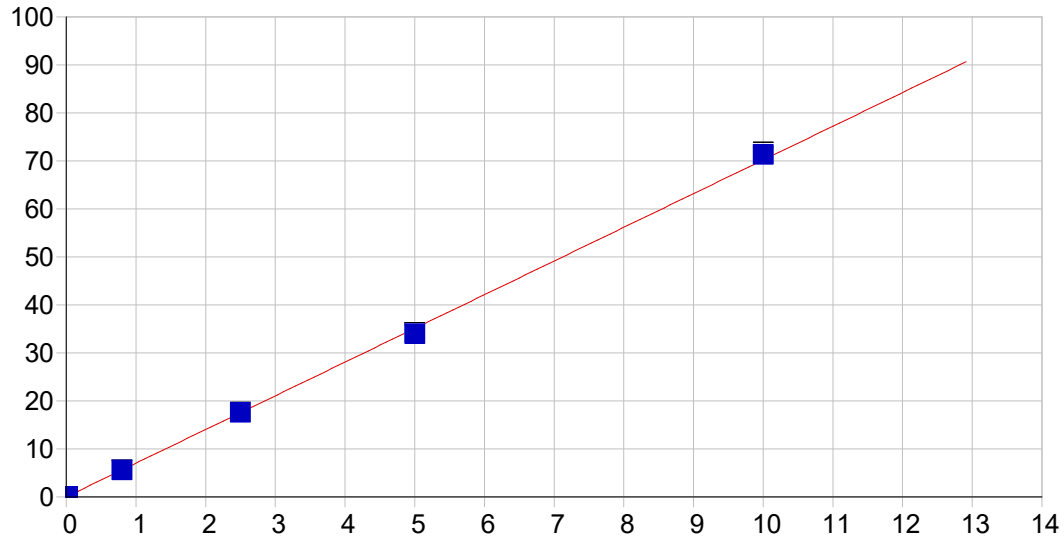


Li 670.784 { 50}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001269	Re-Slope:	1.000000
A1 (Gain):	0.594097	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.000289		
Predicted MDL:	0.001339		
Predicted MQL:	0.004463		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00127	.000	1
S5	10.000	10.187	.187	1.87	6.0563	.005	1
S4	5.0000	4.9066	-.093	-1.87	2.9177	.003	1
S3	2.5000	2.4311	-.069	-2.76	1.4463	.003	1
S1	.02000	.01847	-.002	-7.64	.01243	.001	1
S2	.80000	.77698	-.023	-2.88	.46311	.001	1

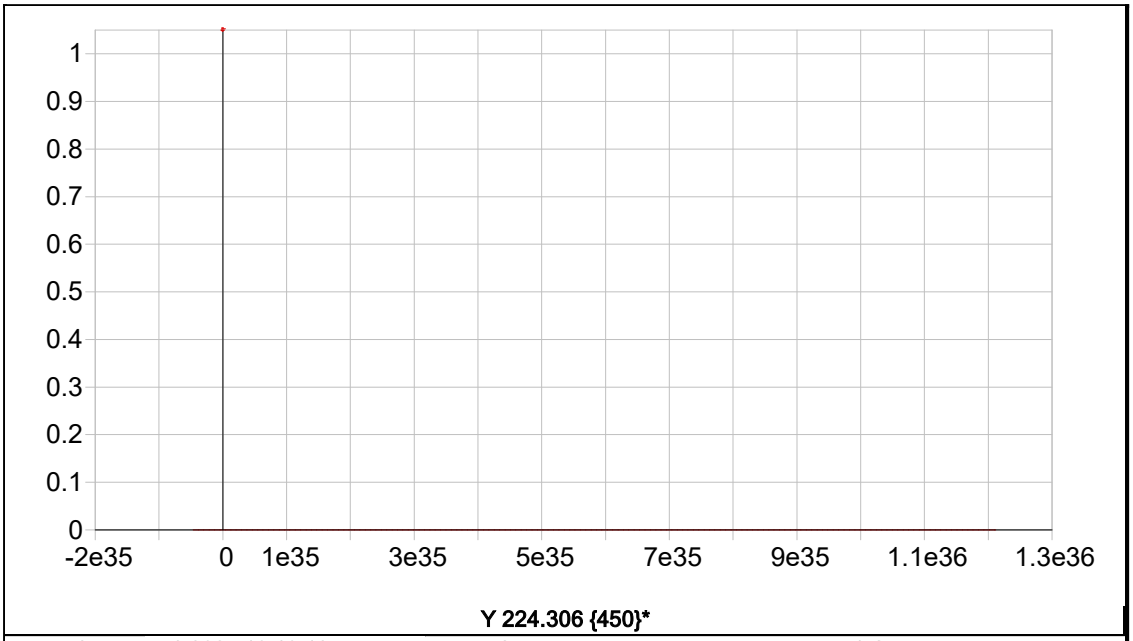


Sr 407.771 { 83}

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001672	Re-Slope:	1.000000
A1 (Gain):	7.019803	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999789	Status:	OK.
Std Error of Est:	0.003387		
Predicted MDL:	0.000068		
Predicted MQL:	0.000228		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00168	.000	1
S1	.02000	.01944	-.001	-2.81	.13880	.000	1
S3	2.5000	2.5103	.010	.410	17.640	.055	1
S4	5.0000	4.8394	-.161	-3.21	34.007	.262	1
S5	10.000	10.158	.158	1.58	71.375	.483	1
S2	.80000	.79310	-.007	-.863	5.5744	.002	1

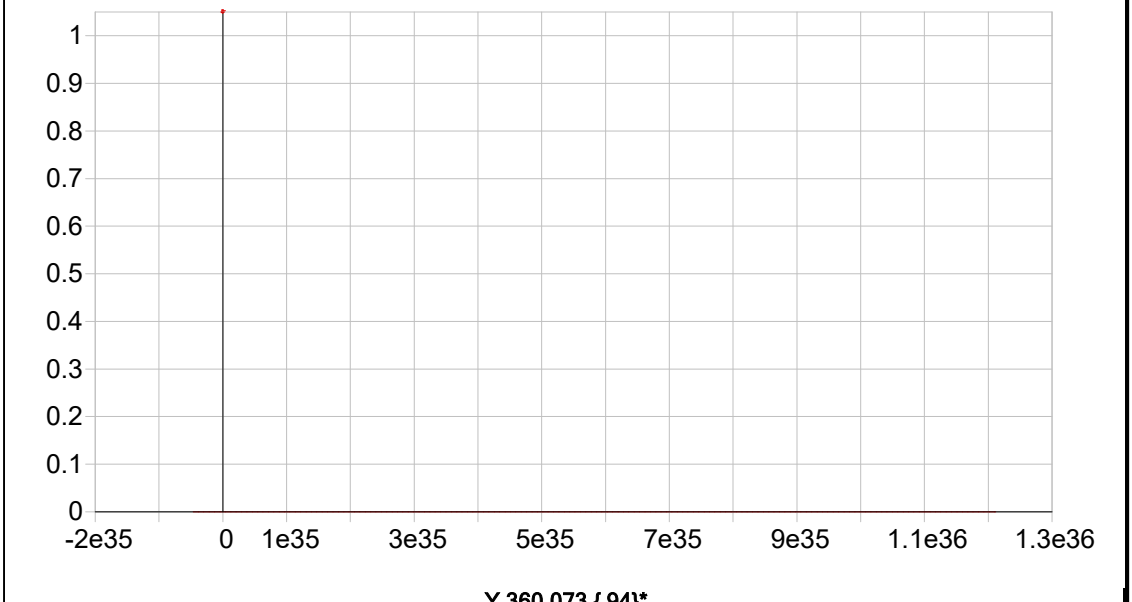


Y 224.306 {450}*

Date of Fit:	5/6/2025 19:19:18	Type of Fit:	Linear	Weighting:	1/Conc

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

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



Y 360.073 { 94}*

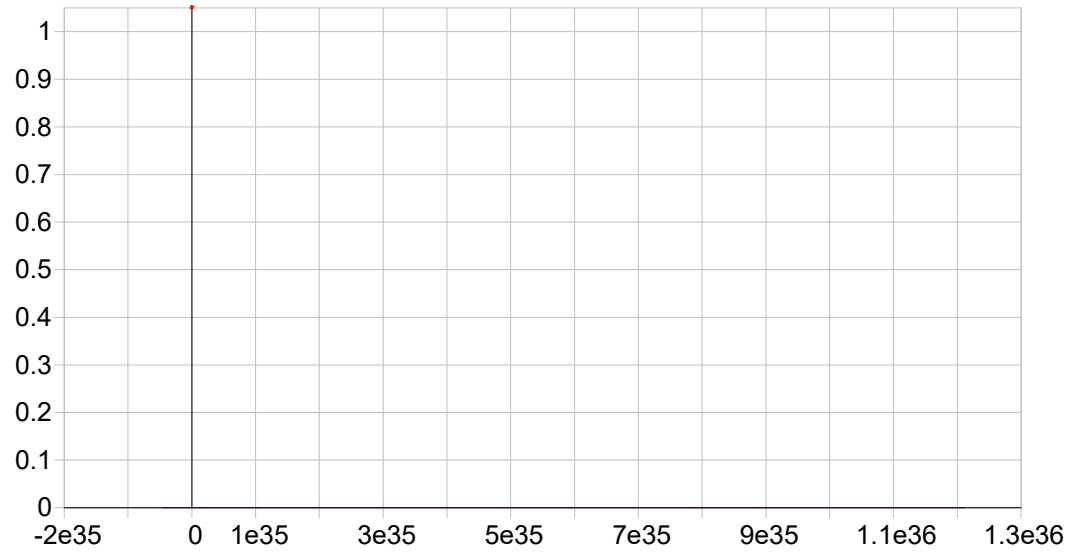
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

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					

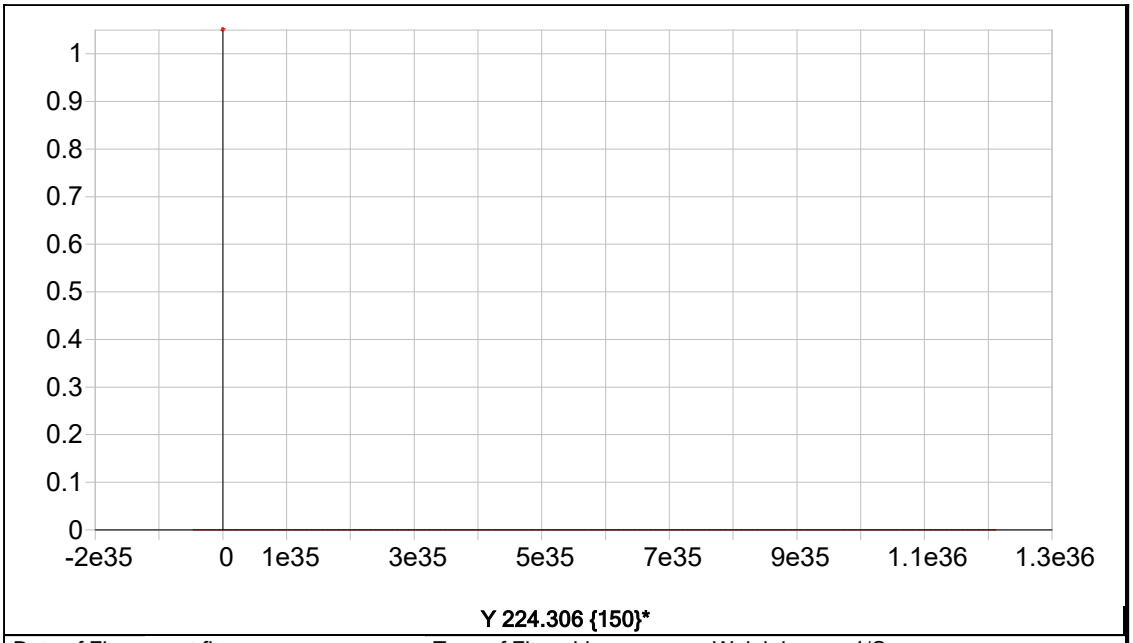
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



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

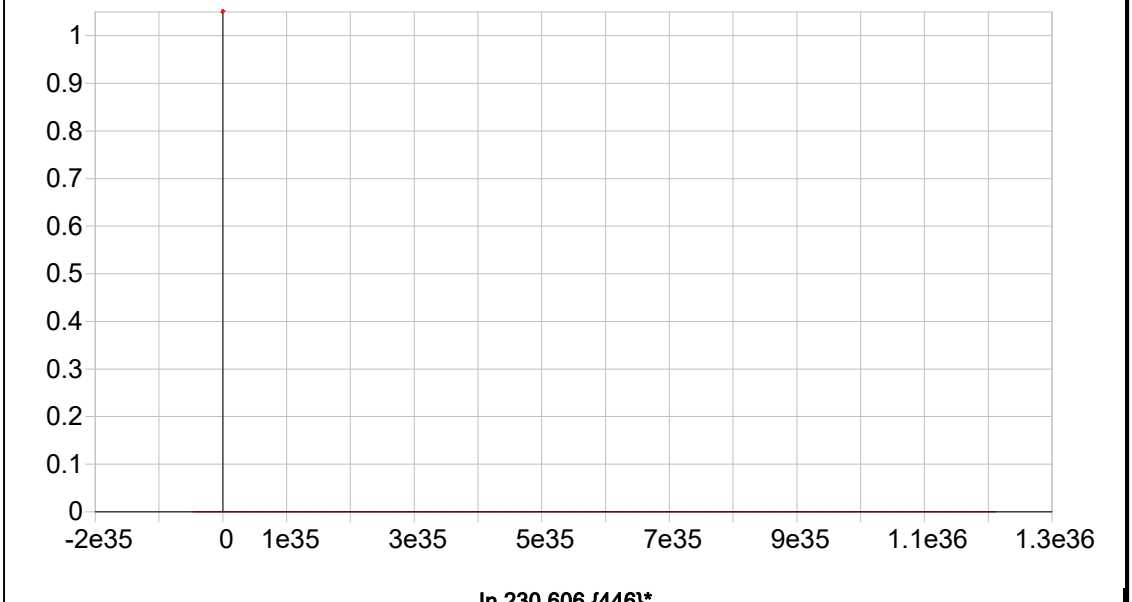


Y 224.306 {150}*

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:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S0 Acquired: 5/6/2025 13:43:57 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.00005	-.00002	-.00008	.00030	.00032	-.00024	.03109	.00007
Stddev	.00011	.00008	.00028	.00011	.00008	.00021	.00106	.00002
%RSD	207.55	385.13	364.20	35.142	25.931	86.310	3.3945	25.128
#1	-.00012	.00007	-.00037	.00041	.00036	-.00001	.03014	.00009
#2	-.00011	-.00007	-.00006	.00028	.00022	-.00042	.03089	.00005
#3	.00007	-.00007	.00020	.00020	.00038	-.00029	.03222	.00008

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	.00007	.00018	.00015	.00018	-.00080	-.00000	.00254	-.00003
Stddev	.00007	.00017	.00003	.00010	.00014	.00003	.00015	.00005
%RSD	98.872	95.088	21.792	55.317	17.779	774.87	5.8718	207.88
#1	.00010	.00010	.00017	.00014	-.00086	.00002	.00239	.00002
#2	.00013	.00038	.00016	.00011	-.00064	.00000	.00255	-.00001
#3	-.00001	.00007	.00011	.00030	-.00090	-.00003	.00269	-.00008

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	-.00036	-.00127	.00338	.00000	.00199	.00074	.00180	.00032
Stddev	.00000	.00004	.00010	.00007	.00038	.00019	.00004	.00012
%RSD	.80210	3.3589	2.8802	2552.3	19.186	25.536	1.9873	36.425
#1	-.00035	-.00125	.00327	-.00004	.00155	.00067	.00181	.00030
#2	-.00036	-.00125	.00345	-.00004	.00216	.00096	.00176	.00045
#3	-.00036	-.00132	.00341	.00009	.00226	.00060	.00183	.00022

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	.00020	.00162	.00014	-.00097	.00017	.00127	.00168
Stddev	.00006	.00007	.00004	.00001	.00007	.00019	.00033
%RSD	32.941	4.1574	32.257	1.2357	38.563	15.032	19.371
#1	.00012	.00157	.00017	-.00097	.00024	.00148	.00185
#2	.00023	.00159	.00009	-.00099	.00012	.00121	.00130
#3	.00024	.00170	.00016	-.00096	.00015	.00112	.00188

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S0 Acquired: 5/6/2025 13:43:57 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2875.4	70131.	19359.	2698.0	4492.6
Stddev	25.2	102.	80.	2.4	40.2
%RSD	.87476	.14524	.41296	.09050	.89393
#1	2846.6	70111.	19269.	2700.8	4446.3
#2	2886.6	70241.	19422.	2696.1	4514.6
#3	2893.1	70040.	19386.	2697.3	4517.0

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S1 Acquired: 5/6/2025 13:48:22 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.00065	.00217	.00151	.00112	.00548	.00379	.14158	.01061
Stddev	.00006	.00005	.00011	.00019	.00020	.00016	.00072	.00002
%RSD	9.5080	2.2110	7.4927	16.622	3.7343	4.1012	.50594	.23011
#1	.00060	.00221	.00140	.00133	.00542	.00383	.14240	.01062
#2	.00072	.00211	.00162	.00102	.00531	.00392	.14112	.01063
#3	.00063	.00217	.00152	.00100	.00571	.00362	.14121	.01058

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	.01082	.04928	.00150	.01573	.01179	.00036	.00755	.01578
Stddev	.00006	.00022	.00002	.00014	.00018	.00002	.00013	.00025
%RSD	.55339	.43908	1.3686	.91381	1.5619	5.8573	1.7486	1.5831
#1	.01080	.04911	.00152	.01583	.01177	.00038	.00758	.01549
#2	.01077	.04952	.00148	.01556	.01161	.00036	.00766	.01592
#3	.01089	.04921	.00150	.01580	.01198	.00034	.00740	.01592

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	.01480	.00095	.03641	.00362	.06213	.01173	.02048	.09983
Stddev	.00011	.00004	.00023	.00013	.00035	.00010	.00026	.00025
%RSD	.70991	4.2557	.62900	3.5593	.56654	.86032	1.2912	.25467
#1	.01477	.00091	.03623	.00354	.06244	.01161	.02068	.10009
#2	.01473	.00099	.03666	.00377	.06220	.01180	.02018	.09983
#3	.01492	.00095	.03633	.00356	.06175	.01178	.02058	.09958

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	.00322	.01006	.00138	-.00038	.00040	.01243	.13880
Stddev	.00004	.00005	.00002	.00010	.00003	.00079	.00028
%RSD	1.2793	.47400	1.4737	26.555	7.7932	6.3732	.19995
#1	.00324	.01007	.00136	-.00042	.00042	.01178	.13909
#2	.00317	.01001	.00140	-.00026	.00037	.01220	.13877
#3	.00325	.01011	.00139	-.00045	.00042	.01332	.13854

Sample Name: S1 Acquired: 5/6/2025 13:48:22 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2890.7	69634.	19113.	2676.3	4507.4
Stddev	4.2	256.	40.	13.0	6.8
%RSD	.14667	.36750	.21187	.48599	.15165
#1	2886.4	69869.	19067.	2674.9	4507.5
#2	2894.9	69361.	19146.	2664.0	4514.2
#3	2890.7	69673.	19125.	2689.9	4500.5

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S2 Acquired: 5/6/2025 13:52:44 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.02842	.04577	.11978	.03152	.08087	.05680	1.8674	.07264
Stddev	.00005	.00051	.00027	.00004	.00027	.00018	.0017	.00023
%RSD	.17151	1.1203	.22305	.14040	.33145	.30987	.09225	.31625
#1	.02844	.04621	.11951	.03157	.08073	.05681	1.8682	.07274
#2	.02836	.04588	.12005	.03151	.08069	.05662	1.8654	.07238
#3	.02845	.04521	.11977	.03149	.08117	.05697	1.8685	.07280

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	.70707	.09937	.02310	.21488	.11802	.00298	.10091	.03011
Stddev	.00075	.00040	.00003	.00048	.00028	.00003	.00018	.00014
%RSD	.10618	.40433	.14528	.22405	.23800	1.1667	.17470	.44900
#1	.70793	.09937	.02314	.21540	.11799	.00294	.10101	.03000
#2	.70675	.09896	.02310	.21445	.11832	.00299	.10071	.03007
#3	.70653	.09976	.02307	.21479	.11776	.00301	.10101	.03027

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	.15491	.04435	.07192	.03589	.60882	.02264	.14831	.39235
Stddev	.00033	.00009	.00024	.00025	.00281	.00005	.00086	.00096
%RSD	.21113	.21409	.32986	.69143	.46184	.21660	.57782	.24512
#1	.15522	.04445	.07164	.03595	.60962	.02269	.14929	.39230
#2	.15457	.04434	.07208	.03562	.60570	.02262	.14768	.39142
#3	.15495	.04426	.07202	.03611	.61114	.02260	.14796	.39334

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	.06031	.16530	.00270	.01839	.01062	.46311	5.5744
Stddev	.00042	.00023	.00006	.00010	.00003	.00101	.0019
%RSD	.69405	.14138	2.0506	.53362	.27840	.21874	.03311
#1	.06074	.16550	.00263	.01848	.01065	.46239	5.5750
#2	.05990	.16504	.00272	.01829	.01061	.46267	5.5759
#3	.06030	.16537	.00273	.01840	.01059	.46426	5.5724

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S2 Acquired: 5/6/2025 13:52:44 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2857.8	68138.	18957.	2646.5	4415.6
Stddev	4.6	109.	43.	11.0	8.7
%RSD	.16046	.15935	.22626	.41480	.19726
#1	2860.8	68244.	18920.	2647.5	4411.0
#2	2860.1	68144.	19004.	2656.9	4425.7
#3	2852.5	68027.	18948.	2635.0	4410.2

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S3 Acquired: 5/6/2025 13:56:50 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.09026	.14476	.37855	.09957	.25312	.17897	5.9341	.22237
Stddev	.00007	.00026	.00061	.00014	.00042	.00034	.0113	.00060
%RSD	.08189	.17869	.16083	.14172	.16692	.18821	.19091	.26890
#1	.09026	.14446	.37886	.09971	.25296	.17904	5.9435	.22205
#2	.09018	.14486	.37785	.09943	.25280	.17861	5.9215	.22200
#3	.09033	.14495	.37895	.09958	.25360	.17927	5.9373	.22306

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	2.2226	.31260	.07218	.67967	.37002	.00979	.31540	.09402
Stddev	.0022	.00086	.00024	.00087	.00022	.00010	.00043	.00032
%RSD	.09828	.27454	.33688	.12800	.05920	.98964	.13534	.33839
#1	2.2248	.31253	.07190	.68067	.37006	.00985	.31586	.09422
#2	2.2204	.31178	.07228	.67909	.36979	.00985	.31503	.09419
#3	2.2225	.31350	.07235	.67925	.37022	.00968	.31531	.09365

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	.49089	.14172	.22792	.11334	1.9228	.07349	.44978	1.2221
Stddev	.00005	.00008	.00121	.00023	.0052	.00022	.00298	.0001
%RSD	.01073	.05874	.53257	.20072	.27137	.30593	.66160	.01056
#1	.49083	.14177	.22880	.11358	1.9253	.07361	.44897	1.2222
#2	.49091	.14178	.22842	.11313	1.9168	.07363	.44730	1.2220
#3	.49094	.14163	.22654	.11332	1.9262	.07323	.45308	1.2221

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	.18822	.51628	.00888	.06189	.03421	1.4463	17.640
Stddev	.00024	.00098	.00008	.00009	.00003	.0032	.055
%RSD	.12738	.18895	.88142	.13809	.07734	.22064	.31411
#1	.18805	.51635	.00892	.06199	.03422	1.4491	17.699
#2	.18850	.51527	.00893	.06185	.03423	1.4428	17.632
#3	.18812	.51722	.00879	.06184	.03418	1.4470	17.589

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S3 Acquired: 5/6/2025 13:56:50 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2837.7	67713.	19586.	2617.1	4314.1
Stddev	4.7	27.	115.	1.2	4.7
%RSD	.16474	.03938	.58704	.04524	.11007
#1	2836.6	67721.	19649.	2615.8	4309.4
#2	2842.8	67683.	19655.	2618.2	4318.9
#3	2833.6	67735.	19453.	2617.3	4314.0

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S4 Acquired: 5/6/2025 14:01:00 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.17112	.27919	.72945	.18744	.48360	.35285	11.519	.44077
Stddev	.00072	.00415	.00455	.00124	.00188	.00046	.031	.00291
%RSD	.41896	1.4871	.62411	.66363	.38872	.12898	.26546	.66040
#1	.17050	.27515	.72759	.18658	.48144	.35308	11.516	.43924
#2	.17096	.27896	.72612	.18688	.48461	.35314	11.551	.43895
#3	.17190	.28345	.73463	.18887	.48477	.35232	11.491	.44413

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	4.2728	.60425	.13814	1.3057	.69958	.01825	.60924	.18536
Stddev	.0294	.00159	.00038	.0065	.00279	.00009	.00140	.00070
%RSD	.68906	.26343	.27777	.49360	.39830	.47768	.22917	.37766
#1	4.2616	.60292	.13818	1.3043	.69697	.01835	.60922	.18461
#2	4.2506	.60382	.13774	1.3001	.69926	.01819	.60785	.18600
#3	4.3062	.60602	.13851	1.3128	.70252	.01820	.61064	.18548

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	.93565	.27355	.43206	.22206	3.6304	.13998	.89946	2.3548
Stddev	.00561	.00051	.00286	.00077	.0134	.00086	.00679	.0100
%RSD	.59939	.18564	.66305	.34527	.36883	.61766	.75493	.42239
#1	.93344	.27374	.43493	.22127	3.6158	.14098	.89351	2.3452
#2	.93147	.27297	.43205	.22280	3.6332	.13952	.89800	2.3542
#3	.94202	.27393	.42920	.22211	3.6421	.13944	.90686	2.3651

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	.36269	1.0036	.01634	.11772	.06475	2.9177	34.007
Stddev	.00328	.0009	.00005	.00063	.00039	.0028	.262
%RSD	.90300	.08810	.31577	.53236	.59667	.09547	.77140
#1	.36138	1.0026	.01634	.11742	.06445	2.9209	33.780
#2	.36027	1.0038	.01638	.11730	.06461	2.9162	33.947
#3	.36642	1.0043	.01628	.11844	.06519	2.9160	34.294

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S4 Acquired: 5/6/2025 14:01:00 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2873.0	67265.	18720.	2581.9	4323.5
Stddev	8.3	173.	68.	6.3	5.4
%RSD	.28893	.25704	.36574	.24241	.12452
#1	2873.2	67120.	18794.	2585.3	4317.3
#2	2864.6	67219.	18708.	2574.7	4325.8
#3	2881.2	67457.	18659.	2585.8	4327.3

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S5 Acquired: 5/6/2025 14:05:12 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.37273	.58922	1.5532	.40753	1.0413	.73093	24.130	.87659
Stddev	.00175	.00529	.0020	.00137	.0050	.00012	.090	.00257
%RSD	.47027	.89700	.12866	.33680	.48208	.01621	.37256	.29374
#1	.37224	.59281	1.5539	.40739	1.0407	.73081	24.216	.87951
#2	.37127	.58315	1.5509	.40623	1.0366	.73104	24.138	.87466
#3	.37467	.59168	1.5547	.40897	1.0466	.73095	24.037	.87559

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	9.1732	1.2647	.28800	2.7874	1.4746	.04056	1.2646	.38952
Stddev	.0187	.0045	.00043	.0048	.0042	.00012	.0045	.00131
%RSD	.20355	.35351	.14945	.17232	.28455	.30067	.35436	.33680
#1	9.1829	1.2698	.28837	2.7877	1.4734	.04062	1.2697	.39091
#2	9.1517	1.2613	.28811	2.7825	1.4711	.04064	1.2613	.38831
#3	9.1851	1.2631	.28753	2.7921	1.4792	.04042	1.2628	.38933

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	1.9978	.57825	.96966	.46471	7.5593	.31768	1.7810	4.8700
Stddev	.0032	.00073	.00391	.00079	.0244	.00096	.0061	.0152
%RSD	.15991	.12578	.40366	.17088	.32241	.30371	.34476	.31301
#1	1.9983	.57786	.96559	.46554	7.5801	.31667	1.7881	4.8679
#2	1.9944	.57909	.97339	.46396	7.5325	.31860	1.7773	4.8559
#3	2.0008	.57780	.97000	.46463	7.5654	.31776	1.7776	4.8862

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	.77937	2.1129	.03633	.26398	.14767	6.0563	71.375
Stddev	.00224	.0031	.00008	.00098	.00066	.0047	.483
%RSD	.28721	.14448	.21733	.37029	.44406	.07822	.67736
#1	.78082	2.1162	.03625	.26462	.14767	6.0516	71.922
#2	.77679	2.1103	.03634	.26286	.14701	6.0562	71.198
#3	.78050	2.1121	.03640	.26447	.14833	6.0610	71.005

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: S5 Acquired: 5/6/2025 14:05:12 Type: Cal
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2748.7	65615.	19573.	2534.4	4030.0
Stddev	4.1	216.	78.	7.3	8.0
%RSD	.14900	.32883	.39945	.28785	.19771
#1	2746.2	65608.	19496.	2527.7	4021.3
#2	2753.5	65403.	19571.	2542.2	4036.8
#3	2746.5	65834.	19652.	2533.4	4031.9

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICV01 Acquired: 5/6/2025 14:47:04 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.9758308	1.002304	.9745772	1.002974	.9717035	2.404106
Stddev	.0068272	.006781	.0028076	.010244	.0032164	.003409
%RSD	.6996294	.6765355	.2880802	1.021344	.3310083	.1418100
#1	.9709520	1.009330	.9775377	1.008948	.9683887	2.400719
#2	.9836329	1.001784	.9719529	1.008828	.9748115	2.404062
#3	.9729076	.995798	.9742409	.991146	.9719104	2.407537

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5307870	.5516015	.4984781	9.499513	.4984393	.4865486
Stddev	.0012240	.0014632	.0019883	.015701	.0007740	.0020719
%RSD	.2306063	.2652639	.3988832	.1652812	.1552856	.4258332
#1	.5298065	.5529842	.5007048	9.505458	.4993270	.4886476
#2	.5321588	.5517509	.4968802	9.511373	.4980850	.4845050
#3	.5303956	.5500693	.4978493	9.481708	.4979059	.4864932

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4998268	10.46638	.4929679	5.638236	.4915122	.2321527
Stddev	.0011168	.05035	.0018902	.036951	.0019308	.0009028
%RSD	.2234395	.4811072	.3834244	.6553660	.3928199	.3888761
#1	.5006329	10.43476	.4931763	5.658117	.4936024	.2321427
#2	.4985520	10.43992	.4909823	5.660989	.4897954	.2312549
#3	.5002954	10.52444	.4947453	5.595600	.4911389	.2330604

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.00424	.4781304	.9747114	10.10251	2.411299	2.444708
Stddev	.03588	.0018777	.0024960	.01557	.003454	.002740
%RSD	.3586166	.3927185	.2560746	.1541218	.1432527	.1120987
#1	9.98760	.4800435	.9767239	10.10213	2.414620	2.447554
#2	9.97970	.4762903	.9754918	10.08714	2.411551	2.442087
#3	10.04542	.4780574	.9719184	10.11827	2.407726	2.444482

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICV01 Acquired: 5/6/2025 14:47:04 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2.374650	2.393157	F 2.075144	F .0071739	F -.005741	F .0009471
Stddev	.011469	.001725	.014095	.0031501	.001952	.0008964
%RSD	.4829619	.0720620	.6792267	43.91076	33.99280	94.64754
#1	2.387828	2.391674	2.069136	.0086479	-.006610	-.000088
#2	2.366929	2.395050	2.065048	.0035570	-.007107	.001464
#3	2.369193	2.392748	2.091247	.0093168	-.003506	.001466

Elem	Sr4077
Units	ppm
Avg	F -.009081
Stddev	.000034
%RSD	.3711470
#1	-.009043
#2	-.009094
#3	-.009107

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2886.298	68447.16	19565.71	2658.792	4427.462
Stddev	3.138	69.27	43.89	3.395	13.509
%RSD	.1087367	.1012074	.2243179	.1276985	.3051208
#1	2886.833	68438.91	19550.30	2655.792	4412.723
#2	2882.926	68520.19	19531.61	2658.105	4430.409
#3	2889.134	68382.38	19615.23	2662.478	4439.255

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: LLICV01 Acquired: 5/6/2025 15:22:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0181890	.0399326	.0110931	.0190624	.0503349	.1052569
Stddev	.0028004	.0009670	.0007681	.0016041	.0030645	.0028077
%RSD	15.39629	2.421558	6.924023	8.414730	6.088306	2.667432
#1	.0199782	.0396977	.0106766	.0206387	.0536059	.1032749
#2	.0196270	.0409954	.0119795	.0174319	.0498685	.1084698
#3	.0149617	.0391046	.0106232	.0191167	.0475303	.1040261

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0915022	.0058970	.0059767	1.925651	.0093104	.0286264
Stddev	.0004897	.0000299	.0001055	.022000	.0005337	.0002876
%RSD	.5351230	.5063375	1.765534	1.142490	5.732560	1.004735
#1	.0912386	.0059310	.0058886	1.903048	.0087778	.0289585
#2	.0920671	.0058850	.0059479	1.926912	.0093081	.0284621
#3	.0912007	.0058750	.0060936	1.946994	.0098452	.0284587

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0211030	.0982087	.0196156	2.034143	.0388626	.0098042
Stddev	.0003272	.0014791	.0001487	.012532	.0002169	.0003631
%RSD	1.550621	1.506086	.7578559	.6160650	.5580540	3.702976
#1	.0214604	.0968716	.0194653	2.022171	.0391124	.0093934
#2	.0210306	.0979570	.0196190	2.033090	.0387227	.0100819
#3	.0208180	.0997975	.0197626	2.047168	.0387526	.0099373

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.786830	.0379569	.0404142	1.768031	.0999072	.2015043
Stddev	.011529	.0011993	.0002549	.038317	.0009129	.0009493
%RSD	.6452419	3.159623	.6307198	2.167190	.9137144	.4710815
#1	1.800051	.0388762	.0405435	1.810894	.0988800	.2010949
#2	1.778866	.0366003	.0405786	1.756102	.1002161	.2025896
#3	1.781573	.0383941	.0401206	1.737099	.1006256	.2008285

Sample Name: LLICV01 Acquired: 5/6/2025 15:22:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0390875	.0393115	.3665390	.0227381	F .0158602	.0162342
Stddev	.0013486	.0006425	.0126443	.0058247	.0029032	.0013653
%RSD	3.450111	1.634319	3.449644	25.61664	18.30493	8.410046
#1	.0375335	.0389838	.3520527	.0188582	.0147070	.0173576
#2	.0399510	.0400518	.3753595	.0199201	.0191628	.0147146
#3	.0397779	.0388990	.3722047	.0294359	.0137108	.0166305

Elem	Sr4077
Units	ppm
Avg	.0189297
Stddev	.0000414
%RSD	.2184199
#1	.0189755
#2	.0189183
#3	.0188952

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2962.765	69859.48	19688.98	2717.973	4591.400
Stddev	3.802	216.04	10.49	10.646	9.356
%RSD	.1283349	.3092449	.0532680	.3916771	.2037668
#1	2958.449	69611.54	19695.42	2719.830	4583.550
#2	2964.227	69959.63	19676.88	2706.520	4601.753
#3	2965.619	70007.27	19694.64	2727.567	4588.898

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICB01 Acquired: 5/6/2025 15:27:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000149	-.001366	-.000902	-.004154	.0001777	.0069073	-.000104
Stddev	.003189	.001042	.000536	.001289	.0003434	.0090159	.002234
%RSD	2141.676	76.27295	59.46837	31.03106	193.2997	130.5278	2148.854
#1	-.003713	-.002135	-.000885	-.002666	-.000200	.0085530	-.002574
#2	.002433	-.001784	-.001446	-.004932	.000472	-.002818	.000484
#3	.000833	-.000180	-.000374	-.004864	.000261	.014987	.001777

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000093	.0000083	.0056286	-.000235	-.000152	.0003984	.0044202
Stddev	.0000185	.0000461	.0038050	.000235	.000035	.0001006	.0039608
%RSD	199.3118	555.1035	67.60164	100.1348	22.75432	25.26419	89.60777
#1	-.000007	.0000104	.0075322	-.000054	-.000190	.0004480	.0080251
#2	.000006	-.000039	.0081061	-.000501	-.000121	.0002825	.0001802
#3	.000029	.000053	.0012475	-.000150	-.000147	.0004645	.0050553

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007423	-.005357	.0005111	-.000008	-.047160	-.000775	.0000800
Stddev	.000432	.020926	.0003297	.000277	.009851	.001653	.0001916
%RSD	5.818184	390.5927	64.50966	3405.086	20.88892	213.3704	239.5773
#1	-.007655	.013655	.0005398	-.000148	-.035927	-.002683	-.000134
#2	-.007689	-.001949	.0001680	-.000187	-.051226	.000206	.000138
#3	-.006924	-.027778	.0008255	.000311	-.054328	.000153	.000236

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.051835	-.004959	-.000266	.0029502	.0000041	-.010245	.0014445
Stddev	.020373	.000388	.000172	.0005996	.0006970	.007998	.0036090
%RSD	39.30420	7.828990	64.45145	20.32445	17160.68	78.06934	249.8494
#1	-.070077	-.004629	-.000159	.0036132	-.000132	-.018884	.0051337
#2	-.055578	-.005386	-.000175	.0027916	.000759	-.003098	-.002079
#3	-.029850	-.004861	-.000464	.0024459	-.000615	-.008753	.001278

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICB01 Acquired: 5/6/2025 15:27:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.005247	-.001688	-.000036
Stddev	.001531	.000348	.000018
%RSD	29.18294	20.61235	49.41590
#1	-.006155	-.001370	-.000019
#2	-.003479	-.001635	-.000035
#3	-.006107	-.002060	-.000054

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2985.800	70196.15	19835.65	2735.596	4644.275
Stddev	3.957	201.77	375.50	10.808	6.012
%RSD	.1325266	.2874355	1.893047	.3950834	.1294569
#1	2990.334	70137.43	20269.24	2735.972	4648.972
#2	2983.046	70420.76	19618.66	2746.211	4637.499
#3	2984.019	70030.24	19619.06	2724.605	4646.354

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CRI01 Acquired: 5/6/2025 15:31:23 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0202601	.0374943	.0100078	.0225000	.0503741	.1024742	.0894080
Stddev	.0028921	.0020834	.0007258	.0027113	.0021864	.0043298	.0006376
%RSD	14.27463	5.556473	7.252102	12.05013	4.340335	4.225276	.7131479
#1	.0235288	.0376571	.0101441	.0255548	.0507515	.0974991	.0898846
#2	.0192178	.0394914	.0106557	.0215662	.0480236	.1045332	.0896556
#3	.0180336	.0353343	.0092235	.0203790	.0523472	.1053902	.0886837

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059081	.0059100	1.945949	.0095421	.0282903	.0215513	.0955761
Stddev	.0000458	.0000694	.013433	.0003626	.0004075	.0002968	.0018276
%RSD	.7756663	1.174797	.6903033	3.800295	1.440513	1.377152	1.912235
#1	.0059490	.0059402	1.956676	.0098616	.0279696	.0212502	.0947822
#2	.0059166	.0059591	1.930883	.0096166	.0281523	.0215602	.0976665
#3	.0058586	.0058305	1.950290	.0091480	.0287489	.0218436	.0942797

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197901	2.048729	.0386317	.0096553	1.755489	.0394153	.0396974
Stddev	.0002951	.014914	.0005901	.0001824	.020182	.0003880	.0002299
%RSD	1.491195	.7279842	1.527611	1.889201	1.149659	.9843807	.5790638
#1	.0196011	2.054101	.0382548	.0096255	1.778383	.0398388	.0399097
#2	.0201301	2.031873	.0383284	.0094897	1.740270	.0393301	.0397292
#3	.0196390	2.060213	.0393118	.0098508	1.747815	.0390769	.0394532

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.732982	.0995451	.2033604	.0391961	.0391634	.3656833	.0211219
Stddev	.031134	.0003149	.0005200	.0002494	.0007184	.0091480	.0026778
%RSD	1.796576	.3163816	.2557174	.6363048	1.834276	2.501632	12.67768
#1	1.727597	.0991966	.2027707	.0389206	.0392320	.3761191	.0224601
#2	1.704891	.0998094	.2035572	.0392610	.0384132	.3618825	.0180388
#3	1.766458	.0996294	.2037533	.0394066	.0398450	.3590483	.0228667

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CRI01 Acquired: 5/6/2025 15:31:23 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0189366	.0169005	.0188534
Stddev	.0034047	.0002850	.0000232
%RSD	17.97951	1.686104	.1230098
#1	.0152506	.0169934	.0188323
#2	.0219637	.0171273	.0188496
#3	.0195955	.0165806	.0188782

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2988.228	70916.18	19640.60	2731.816	4672.177
Stddev	7.818	260.81	18.39	14.975	10.447
%RSD	.2616399	.3677789	.0936277	.5481849	.2236108
#1	2994.162	70637.55	19640.47	2714.995	4673.021
#2	2991.153	70956.52	19622.28	2743.699	4682.177
#3	2979.369	71154.48	19659.06	2736.753	4661.333

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSA01 Acquired: 5/6/2025 15:50:34 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0041187	.0047868	.0007095	-.010517	-.001778	237.4367	.0029294
Stddev	.0020074	.0013142	.0026996	.002728	.005019	.2393	.0008500
%RSD	48.73960	27.45558	380.4623	25.94168	282.2038	.1007656	29.01752
#1	.0035984	.0058661	.0034239	-.009955	.001481	237.7099	.0038732
#2	.0024227	.0051709	-.001975	-.008113	.000741	237.2643	.0022240
#3	.0063351	.0033233	.000680	-.013483	-.007558	237.3359	.0026912

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013215	-.002601	224.5864	.0528766	.0006269	-.000008	91.05287
Stddev	.0001668	.000165	.1866	.0002699	.0001815	.000841	.46004
%RSD	12.62408	6.352773	.0830889	.5103793	28.95865	11026.09	.5052443
#1	.0011741	-.002556	224.6139	.0530908	.0006477	-.000303	91.16907
#2	.0015026	-.002463	224.7577	.0529654	.0007971	.000941	90.54587
#3	.0012877	-.002784	224.3876	.0525735	.0004358	-.000661	91.44367

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016972	239.8979	.0019750	.0002297	-.051334	.0011993	.0035880
Stddev	.0003518	.1277	.0005498	.0001437	.004871	.0006775	.0000853
%RSD	20.72744	.0532139	27.83804	62.53224	9.488511	56.49103	2.377356
#1	.0013818	240.0291	.0025746	.0001475	-.047009	.0013146	.0034965
#2	.0016332	239.8904	.0014945	.0001461	-.056610	.0004716	.0036653
#3	.0020766	239.7741	.0018560	.0003956	-.050384	.0018117	.0036021

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.066054	.0102943	.0001078	-.006120	-.002121	.0088335	.0026616
Stddev	.029979	.0014211	.0005596	.002155	.000337	.0094358	.0037971
%RSD	45.38559	13.80460	519.0512	35.20706	15.89368	106.8175	142.6623
#1	-.097949	.0117643	-.000456	-.008283	-.002118	.0094015	.0017609
#2	-.038456	.0089278	.000664	-.003974	-.001785	-.000873	.0068280
#3	-.061756	.0101908	.000116	-.006102	-.002459	.017972	-.000604

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSA01 Acquired: 5/6/2025 15:50:34 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.014927	.0009129	.0067057
Stddev	.002472	.0010076	.0001998
%RSD	16.55819	110.3818	2.979536
#1	-.012283	.0008709	.0067979
#2	-.017179	.0019409	.0068427
#3	-.015319	-.000073	.0064764

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2671.660	63399.40	19061.65	2459.096	3894.468
Stddev	1.967	127.31	39.81	6.573	3.910
%RSD	.0736143	.2008016	.2088510	.2672788	.1004044
#1	2673.035	63428.12	19087.37	2464.736	3890.981
#2	2672.537	63509.88	19015.79	2460.674	3898.696
#3	2669.407	63260.18	19081.78	2451.878	3893.726

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSAB01 Acquired: 5/6/2025 15:55:15 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1143711	.1117595	.0486870	.0413214	.6406544	230.3644
Stddev	.0028303	.0017515	.0015093	.0041686	.0017746	.2836
%RSD	2.474651	1.567212	3.100093	10.08824	.2770040	.1230931
#1	.1169753	.1126797	.0482963	.0452820	.6402082	230.6135
#2	.1147790	.1128591	.0474113	.0369720	.6391455	230.4239
#3	.1113590	.1097397	.0503532	.0417102	.6426096	230.0558

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5124524	.5046685	1.059822	220.4488	.5755587	.5227828
Stddev	.0009006	.0005025	.000662	.2702	.0021826	.0003304
%RSD	.1757513	.0995631	.0624826	.1225723	.3792134	.0631916
#1	.5134596	.5043126	1.059445	220.6661	.5779983	.5224271
#2	.5121729	.5044497	1.059435	220.5341	.5748865	.5230800
#3	.5117246	.5052433	1.060587	220.1462	.5737912	.5228414

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5158280	94.15679	.5067980	232.4695	1.035486	.1952577
Stddev	.0015822	.32420	.0011330	.1711	.000916	.0003151
%RSD	.3067344	.3443225	.2235515	.0735820	.0885065	.1613889
#1	.5142123	94.27118	.5071692	232.6659	1.035336	.1952986
#2	.5158972	94.40829	.5076988	232.3527	1.036469	.1949241
#3	.5173745	93.79090	.5055260	232.3901	1.034655	.1955504

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.060038	.4978558	1.073909	-.055950	.8589539	.9464599
Stddev	.007083	.0008689	.001462	.012692	.0064265	.0262467
%RSD	11.79774	.1745374	.1360973	22.68516	.7481800	2.773150
#1	-.065034	.4988155	1.074338	-.068709	.8521828	.9231564
#2	-.051932	.4971223	1.072281	-.055816	.8597097	.9413306
#3	-.063147	.4976297	1.075108	-.043326	.8649690	.9748927

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSAB01 Acquired: 5/6/2025 15:55:15 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9350346	.8588084	F .8397765	F .0073371	F -.010829	F .0015184
Stddev	.0231664	.0070667	.0110392	.0044380	.004175	.0007854
%RSD	2.477600	.8228522	1.314543	60.48664	38.55386	51.72691
#1	.9125373	.8510798	.8509938	.0099705	-.009131	.0024250
#2	.9337499	.8604056	.8289244	.0098276	-.007770	.0010886
#3	.9588167	.8649398	.8394112	.0022132	-.015585	.0010417

Elem	Sr4077
Units	ppm
Avg	F .0034325
Stddev	.0000878
%RSD	2.556445
#1	.0034587
#2	.0033347
#3	.0035043

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2663.781	63278.97	20108.49	2468.664	3890.593
Stddev	8.713	129.23	20.25	5.825	5.475
%RSD	.3270868	.2042305	.1007022	.2359436	.1407269
#1	2671.329	63140.98	20091.41	2464.918	3896.777
#2	2665.768	63298.76	20130.86	2475.375	3888.636
#3	2654.246	63397.17	20103.20	2465.700	3886.365

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSADLX20 Acquired: 5/6/2025 15:59:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008872	-.001962	-.001485	-.000694	.0004501	11.59810	-.002784
Stddev	.0004397	.002852	.001256	.003204	.0012558	.01021	.000463
%RSD	49.55973	145.3742	84.57365	461.8698	279.0316	.0880197	16.65052
#1	.0013899	-.005117	-.000566	-.003574	-.000244	11.58642	-.003067
#2	.0005738	.000431	-.002916	.002757	-.000305	11.60532	-.003035
#3	.0006980	-.001199	-.000972	-.001263	.001900	11.60257	-.002249

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000849	-.000235	11.67080	.0025254	-.000235	.0004911	4.738986
Stddev	.0000502	.000025	.04807	.0003012	.000133	.0001967	.029830
%RSD	59.18909	10.67593	.4118886	11.92848	56.48097	40.05043	.6294607
#1	.0000361	-.000263	11.61936	.0022034	-.000335	.0003502	4.708429
#2	.0001364	-.000225	11.71458	.0028003	-.000286	.0004072	4.768032
#3	.0000821	-.000217	11.67847	.0025726	-.000084	.0007158	4.740499

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007603	11.75526	.0005856	.0000113	-.099346	-.000340	.0003550
Stddev	.000351	.04773	.0001534	.0001130	.003994	.001144	.0002329
%RSD	4.616077	.4060429	26.19650	1001.776	4.020703	336.6961	65.61045
#1	-.007912	11.76258	.0004837	.0001327	-.099275	-.001635	.0004133
#2	-.007676	11.79891	.0005111	-.000091	-.095387	.000086	.0005532
#3	-.007221	11.70429	.0007620	-.000008	-.103375	.000530	.0000985

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.102340	-.004778	-.000375	-.000167	-.001132	.0024865	-.001306
Stddev	.011555	.000646	.000058	.001818	.000240	.0085038	.000975
%RSD	11.29115	13.51958	15.52143	1088.355	21.22294	342.0032	74.62817
#1	-.115168	-.005136	-.000384	.000118	-.001403	-.003833	-.000533
#2	-.099108	-.004033	-.000429	.001492	-.001049	.012155	-.000984
#3	-.092745	-.005167	-.000313	-.002111	-.000945	-.000863	-.002401

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSADLX20 Acquired: 5/6/2025 15:59:19 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002964	-.001886	.0001847
Stddev	.004755	.000487	.0000569
%RSD	160.4387	25.85325	30.81604
#1	.002400	-.002052	.0002035
#2	-.006661	-.001337	.0001208
#3	-.004631	-.002268	.0002299

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2949.979	70591.18	20812.45	2731.087	4551.944
Stddev	4.247	222.79	34.32	9.568	1.961
%RSD	.1439527	.3156003	.1648773	.3503221	.0430711
#1	2953.995	70466.62	20819.10	2720.749	4553.800
#2	2945.534	70458.54	20775.29	2732.881	4549.894
#3	2950.407	70848.39	20842.95	2739.630	4552.137

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSABDLX20 Acquired: 5/6/2025 16:03:35 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027730	.0024789	.0017043	.0002263	.0313915	11.29827	.0223708
Stddev	.0015447	.0020628	.0004057	.0036613	.0012676	.03548	.0012605
%RSD	55.70493	83.21244	23.80409	1617.783	4.037939	.3140159	5.634505
#1	.0039028	.0043206	.0021134	.0044309	.0307722	11.28990	.0237026
#2	.0034032	.0028663	.0016973	-.001493	.0305527	11.26773	.0222135
#3	.0010128	.0002499	.0013021	-.002259	.0328497	11.33719	.0211964

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0254407	.0516045	11.27063	.0286515	.0246445	.0261033	4.568174
Stddev	.0001077	.0001696	.03764	.0004385	.0003519	.0002211	.005677
%RSD	.4233104	.3286116	.3339788	1.530373	1.427814	.8471663	.1242831
#1	.0253636	.0515464	11.27632	.0281460	.0244255	.0258494	4.571972
#2	.0253947	.0514716	11.23047	.0289289	.0244576	.0262535	4.570902
#3	.0255637	.0517955	11.30511	.0288796	.0250504	.0262072	4.561647

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0181782	11.43041	.0509166	.0091741	-.099222	.0252168	.0516186
Stddev	.0005062	.01376	.0000637	.0001122	.007975	.0019335	.0011500
%RSD	2.784509	.1203905	.1250162	1.222878	8.037870	7.667474	2.227870
#1	.0187446	11.41492	.0509029	.0090452	-.091860	.0244724	.0504755
#2	.0177700	11.43505	.0508609	.0092499	-.098112	.0237661	.0516049
#3	.0180200	11.44124	.0509860	.0092272	-.107695	.0274118	.0527754

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.095818	-.004704	-.000331	-.000614	-.000144	-.008813	-.002133
Stddev	.025027	.000590	.000381	.001202	.000634	.005750	.002879
%RSD	26.11969	12.54507	115.1504	195.8173	439.6997	65.24536	135.0051
#1	-.115025	-.004853	-.000524	-.000885	-.000853	-.012657	.000719
#2	-.104914	-.004054	.000108	-.001657	.000051	-.002203	-.005039
#3	-.067514	-.005206	-.000577	.000701	.000369	-.011577	-.002079

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: ICSABDLX20 Acquired: 5/6/2025 16:03:35 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001614	-.002818	.0000553
Stddev	.003308	.000355	.0000480
%RSD	204.8960	12.61073	86.70747
#1	.000844	-.003177	.0001089
#2	-.005375	-.002466	.0000410
#3	-.000313	-.002812	.0000162

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2946.354	69944.39	20588.43	2715.049	4539.488
Stddev	4.472	267.56	65.71	13.511	10.633
%RSD	.1517800	.3825348	.3191652	.4976175	.2342323
#1	2944.517	69846.60	20580.25	2722.278	4541.208
#2	2951.452	70247.09	20657.85	2723.407	4549.157
#3	2943.094	69739.47	20527.19	2699.462	4528.100

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV01 Acquired: 5/6/2025 16:29:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.783721	4.674313	5.031003	4.798661	4.785613	9.631583	9.344598
Stddev	.006995	.064198	.016276	.007477	.004105	.014903	.067136
%RSD	.1462276	1.373413	.3235111	.1558138	.0857786	.1547316	.7184464
#1	4.791776	4.712875	5.013303	4.797096	4.790347	9.617204	9.323096
#2	4.780211	4.709860	5.034380	4.806797	4.783465	9.646960	9.419850
#3	4.779176	4.600205	5.045325	4.792091	4.783029	9.630584	9.290846

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2494669	2.386169	23.91526	.9984508	2.391156	1.208744	5.039244
Stddev	.0029453	.001291	.10077	.0534903	.003697	.000803	.235053
%RSD	1.180643	.0541228	.4213797	5.357325	.1546113	.0664584	4.664456
#1	.2474493	2.384681	23.85752	.9674003	2.387736	1.208979	4.878152
#2	.2528467	2.387003	24.03163	1.060216	2.390654	1.207849	5.308965
#3	.2481045	2.386822	23.85665	.967736	2.395079	1.209404	4.930615

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.399499	23.86029	2.395330	1.238821	24.12930	2.397108	2.473388
Stddev	.010362	.13952	.002721	.063029	1.00849	.006597	.122818
%RSD	.4318571	.5847200	.1135991	5.087846	4.179541	.2752120	4.965567
#1	2.388475	23.73880	2.392593	1.202780	23.53925	2.392723	2.409240
#2	2.409039	24.01265	2.395364	1.311600	25.29377	2.404695	2.614997
#3	2.400983	23.82941	2.398035	1.202084	23.55487	2.393906	2.395927

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.85179	4.980154	4.803938	4.763544	4.773439	4.789129	4.819490
Stddev	.97126	.059966	.004558	.002817	.016346	.200284	.010934
%RSD	4.072065	1.204102	.0948735	.0591399	.3424407	4.182063	.2268633
#1	23.26637	4.943311	4.808943	4.766743	4.761143	4.643737	4.813589
#2	24.97294	5.049349	4.802845	4.761436	4.791989	5.017580	4.832106
#3	23.31607	4.947804	4.800027	4.762452	4.767186	4.706068	4.812774

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV01 Acquired: 5/6/2025 16:29:33 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.722473	4.867232	4.731329
Stddev	.010638	.006167	.044706
%RSD	.2252632	.1266950	.9448904
#1	4.726472	4.863029	4.679888
#2	4.730531	4.864357	4.753309
#3	4.710415	4.874312	4.760790

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2873.354	66432.71	19334.76	2599.572	4314.898
Stddev	11.024	2829.53	61.62	112.379	17.022
%RSD	.3836517	4.259243	.3186757	4.322992	.3944977
#1	2881.428	68026.62	19362.37	2651.780	4329.346
#2	2877.839	63165.77	19264.17	2470.585	4319.214
#3	2860.794	68105.74	19377.75	2676.351	4296.133

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB01 Acquired: 5/6/2025 16:34:24 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0014906	-.000638	.0003074	-.000811	.0016541	.0128213	.0001117
Stddev	.0032511	.000822	.0005398	.004186	.0003236	.0040008	.0002929
%RSD	218.1067	128.7506	175.5986	516.3201	19.56578	31.20473	262.1604
#1	.0047154	-.001044	.0000128	-.000442	.0014846	.0095515	-.000064
#2	-.001786	-.001177	-.000021	-.005168	.0020273	.0172825	-.000051
#3	.001543	.000307	.000930	.003178	.0014505	.0116298	.000450

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000003	.0004974	.0121301	-.000135	.0001295	.0007204	.0199400
Stddev	.0000252	.0001025	.0054207	.000148	.0001348	.0004306	.0044276
%RSD	7509.298	20.61031	44.68801	109.6199	104.1038	59.76508	22.20440
#1	-.000003	.0004801	.0145380	.000036	-.000016	.0005713	.0183493
#2	.000027	.0004047	.0159297	-.000231	.000156	.0012058	.0249431
#3	-.000023	.0006075	.0059226	-.000211	.000249	.0003843	.0165275

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005605	-.022547	.0006562	.0006986	-.100689	.0016058	.0020671
Stddev	.000187	.002873	.0001811	.0001781	.005785	.0008189	.0001628
%RSD	3.332755	12.74348	27.60528	25.49111	5.745891	50.99810	7.873305
#1	-.005495	-.020361	.0008647	.0005883	-.107008	.0022266	.0019711
#2	-.005499	-.025802	.0005377	.0009041	-.095652	.0019131	.0022550
#3	-.005821	-.021480	.0005662	.0006036	-.099408	.0006777	.0019752

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.085214	.0037222	.0008870	.0052216	.0013834	-.007374	-.001195
Stddev	.018306	.0003337	.0002344	.0002741	.0004582	.005586	.004644
%RSD	21.48208	8.966290	26.42583	5.250205	33.12207	75.75408	388.4519
#1	-.094476	.0039414	.0011504	.0055275	.0013162	-.001735	.001075
#2	-.097037	.0038871	.0007013	.0051391	.0009625	-.007481	-.006538
#3	-.064128	.0033381	.0008093	.0049981	.0018716	-.012907	.001876

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB01 Acquired: 5/6/2025 16:34:24 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.003187	-.001246	.0009034
Stddev	.002829	.000116	.0000249
%RSD	88.75999	9.318128	2.754871
#1	-.006395	-.001275	.0008823
#2	-.002119	-.001119	.0009309
#3	-.001048	-.001346	.0008971

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3003.258	71273.81	20512.83	2765.762	4711.641
Stddev	3.807	52.08	53.44	9.248	4.439
%RSD	.1267693	.0730635	.2604981	.3343647	.0942155
#1	3003.608	71213.97	20477.02	2775.984	4716.692
#2	3006.878	71298.58	20574.25	2763.327	4709.872
#3	2999.288	71308.87	20487.22	2757.976	4708.359

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1948-01 Acquired: 5/6/2025 16:38:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.001951	-.002748	.0152442	-.005081	.0017948	.8365645
Stddev	.004382	.000422	.0007299	.002044	.0007356	.0087011
%RSD	224.5828	15.36110	4.788272	40.22586	40.98477	1.040096
#1	-.000908	-.002636	.0159712	-.007321	.0010328	.8331066
#2	-.006760	-.003215	.0152500	-.004602	.0018509	.8301239
#3	.001815	-.002393	.0145113	-.003319	.0025007	.8464629

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0415863	.0000349	-.000721	112.3587	.0047292	.0028536
Stddev	.0007926	.0000272	.000047	.0664	.0002887	.0003504
%RSD	1.905854	77.90726	6.492887	.0590878	6.104131	12.28042
#1	.0419537	.0000347	-.000734	112.4135	.0047729	.0024813
#2	.0406767	.0000622	-.000669	112.3776	.0049936	.0029025
#3	.0421285	.0000078	-.000760	112.2849	.0044212	.0031770

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0155315	13.43110	.4205933	17.24447	.0180489	.0009394
Stddev	.0005165	.03692	.0013246	.03523	.0003769	.0001253
%RSD	3.325651	.2748978	.3149337	.2043002	2.088276	13.33922
#1	.0159953	13.40980	.4220845	17.22881	.0176835	.0010805
#2	.0156245	13.47373	.4195533	17.21979	.0184363	.0008411
#3	.0149749	13.40977	.4201421	17.28482	.0180268	.0008966

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	138.5184	.0034339	.1712818	16.83810	.0779907	.0024077
Stddev	.3344	.0008636	.0002694	.03282	.0007887	.0002305
%RSD	.2414215	25.14806	.1572613	.1948964	1.011232	9.572848
#1	138.3455	.0031457	.1709924	16.80637	.0784809	.0025257
#2	138.9039	.0027513	.1713278	16.87190	.0770810	.0021421
#3	138.3058	.0044047	.1715252	16.83604	.0784104	.0025552

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1948-01 Acquired: 5/6/2025 16:38:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000221	.0413914	F 13.84090	2.629306	7.632178	-.000842
Stddev	.001079	.0010885	.03763	.008218	.008513	.000207
%RSD	487.7127	2.629750	.2718744	.3125663	.1115356	24.58418
#1	-.001370	.0405806	13.81440	2.628579	7.622438	-.000774
#2	.000771	.0426285	13.88397	2.621475	7.635902	-.001074
#3	-.000065	.0409652	13.82432	2.637864	7.638194	-.000677

Elem	Sr4077
Units	ppm
Avg	.4245922
Stddev	.0002471
%RSD	.0581981
#1	.4247691
#2	.4243098
#3	.4246976

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2781.836	66999.50	20432.96	2562.715	4202.707
Stddev	5.616	93.67	17.75	5.715	7.740
%RSD	.2018906	.1398009	.0868738	.2230027	.1841593
#1	2777.971	67061.01	20414.61	2568.953	4198.142
#2	2788.278	66891.70	20450.04	2557.732	4211.643
#3	2779.259	67045.80	20434.22	2561.459	4198.335

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1948-02 Acquired: 5/6/2025 16:42:58 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.001294	-.003587	.0163725	-.002792	.0031666	.9668112
Stddev	.004250	.002268	.0024535	.001820	.0012950	.0115383
%RSD	328.5369	63.20617	14.98537	65.18681	40.89411	1.193433
#1	-.003182	-.000982	.0145091	-.004443	.0016772	.9764156
#2	-.004273	-.004662	.0154561	-.003094	.0037967	.9700058
#3	.003574	-.005118	.0191522	-.000840	.0040260	.9540123

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0469008	.0000648	-.000857	121.5694	.0051807	.0029736
Stddev	.0006105	.0000523	.000036	.2914	.0001332	.0000678
%RSD	1.301700	80.59715	4.142829	.2397303	2.571261	2.279172
#1	.0465997	.0001231	-.000888	121.8461	.0051327	.0028987
#2	.0476034	.0000493	-.000866	121.5968	.0050782	.0029911
#3	.0464994	.0000221	-.000818	121.2652	.0053313	.0030308

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0155339	15.20754	.4768681	16.96736	.0183469	.0004685
Stddev	.0002172	.09881	.0019157	.02620	.0002432	.0001323
%RSD	1.398466	.6497576	.4017302	.1544398	1.325305	28.24687
#1	.0156415	15.21502	.4790784	16.93771	.0184565	.0006198
#2	.0156763	15.30239	.4758415	16.98740	.0180683	.0004109
#3	.0152838	15.10520	.4756845	16.97696	.0185160	.0003747

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	140.0611	.0036121	.1991699	18.76873	.0800690	.0024015
Stddev	.9022	.0015756	.0016112	.09425	.0003150	.0000196
%RSD	.6441384	43.61924	.8089669	.5021493	.3934734	.8154907
#1	140.0051	.0053862	.2001519	18.73233	.0801540	.0023911
#2	140.9900	.0030739	.2000473	18.87575	.0797201	.0024241
#3	139.1883	.0023761	.1973104	18.69811	.0803328	.0023893

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1948-02 Acquired: 5/6/2025 16:42:58 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0033036	.0471327	F 14.22146	2.858469	7.417802	.0006275
Stddev	.0005279	.0002494	.07837	.011437	.015340	.0010291
%RSD	15.98027	.5291938	.5510936	.4001111	.2067979	163.9953
#1	.0036514	.0471821	14.19149	2.855205	7.410889	.0010381
#2	.0026961	.0473537	14.31040	2.849019	7.435382	-.000543
#3	.0035632	.0468622	14.16250	2.871183	7.407134	.001388

Elem	Sr4077
Units	ppm
Avg	.4528204
Stddev	.0010468
%RSD	.2311814
#1	.4539246
#2	.4526943
#3	.4518424

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2794.714	66954.09	20664.81	2565.619	4224.855
Stddev	2.310	247.32	57.90	14.152	2.600
%RSD	.0826595	.3693911	.2801753	.5516205	.0615510
#1	2793.940	66932.74	20609.04	2556.833	4222.833
#2	2797.311	66718.13	20724.62	2558.079	4223.945
#3	2792.890	67211.39	20660.79	2581.945	4227.789

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-01 Acquired: 5/6/2025 16:47:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0289186	.0043815	.0723102	-.037619	-.004948	116.2282	.5045065
Stddev	.0021962	.0015610	.0031647	.005519	.003535	.2218	.0024344
%RSD	7.594287	35.62772	4.376555	14.66964	71.44461	.1908497	.4825395
#1	.0264843	.0025892	.0759525	-.033425	-.002246	116.3990	.5071865
#2	.0295203	.0054438	.0702332	-.035561	-.008948	116.3081	.5039010
#3	.0307511	.0051114	.0707448	-.043871	-.003648	115.9775	.5024319

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072800	-.007798	37.97597	.2402819	.1545675	.3721824	261.6600
Stddev	.0001118	.000754	.15025	.0047905	.0008710	.0029848	4.3620
%RSD	1.536223	9.662375	.3956427	1.993705	.5634858	.8019683	1.667039
#1	.0072740	-.007178	38.14770	.2364801	.1537946	.3753061	257.8166
#2	.0073948	-.007580	37.91148	.2387029	.1555112	.3718818	260.7626
#3	.0071714	-.008637	37.86873	.2456625	.1543966	.3693593	266.4009

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.592203	49.38697	.2392594	.0045188	2.613629	.4222834	.9202601
Stddev	.022778	.25963	.0005521	.0001286	.051636	.0020952	.0223835
%RSD	.4960214	.5257130	.2307635	2.845514	1.975651	.4961482	2.432306
#1	4.616748	49.67200	.2398864	.0044549	2.563696	.4246870	.9029394
#2	4.588116	49.32494	.2388460	.0046668	2.610377	.4213202	.9123066
#3	4.571744	49.16396	.2390457	.0044346	2.666815	.4208431	.9455342

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.404897	.0738895	.0033020	-.006104	6.537805	3.813586	5.910874
Stddev	.110536	.0044304	.0002947	.000948	.022323	.070232	.013020
%RSD	1.725802	5.995982	8.924425	15.53457	.3414470	1.841630	.2202641
#1	6.303901	.0690233	.0030119	-.006043	6.559911	3.743835	5.921044
#2	6.387809	.0749555	.0032932	-.007081	6.538234	3.812635	5.896201
#3	6.522982	.0776896	.0036011	-.005187	6.515271	3.884289	5.915378

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-01 Acquired: 5/6/2025 16:47:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	6.851800	.2114436	-.146035
Stddev	.008097	.0005922	.004621
%RSD	.1181664	.2800744	3.164344
#1	6.842578	.2109241	-.141990
#2	6.857743	.2113183	-.145045
#3	6.855080	.2120885	-.151072

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3274.527	76018.74	23274.05	2987.705	4354.989
Stddev	1.367	1409.02	110.02	56.191	2.844
%RSD	.0417602	1.853514	.4727107	1.880748	.0652977
#1	3274.268	77148.28	23153.96	3026.387	4353.468
#2	3273.307	76468.07	23369.98	3013.477	4353.229
#3	3276.005	74439.85	23298.22	2923.250	4358.270

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-03 Acquired: 5/6/2025 16:51:18 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0300883	-.002317	.0738055	-.046256	-.006085	128.8936	.5273664
Stddev	.0049845	.002487	.0012335	.004400	.002442	.7816	.0034432
%RSD	16.56627	107.3249	1.671332	9.512217	40.13566	.6064158	.6529065
#1	.0358394	.000161	.0730553	-.050936	-.008892	128.4195	.5255491
#2	.0270156	-.002299	.0731320	-.045628	-.004449	128.4656	.5252125
#3	.0274099	-.004813	.0752291	-.042203	-.004914	129.7958	.5313375

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075949	-.004467	99.68764	.2850494	.1708219	.6960302	293.8621
Stddev	.0000458	.000351	.83489	.0022355	.0006033	.0011152	2.4869
%RSD	.6032654	7.866933	.8375105	.7842621	.3531907	.1602202	.8462876
#1	.0076219	-.004581	99.08804	.2853339	.1715112	.6950464	294.1168
#2	.0075420	-.004073	99.33368	.2826853	.1705643	.6972417	291.2577
#3	.0076207	-.004748	100.6412	.2871292	.1703901	.6958026	296.2119

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.168575	58.85506	.2823639	.0054634	2.547572	.5226239	.8171653
Stddev	.043395	.48161	.0001136	.0001746	.019508	.0015844	.0063846
%RSD	.8395892	.8182926	.0402163	3.196778	.7657542	.3031577	.7813085
#1	5.137306	58.48669	.2822498	.0056219	2.562076	.5218017	.8173013
#2	5.150302	58.67845	.2823650	.0054922	2.525394	.5216196	.8107138
#3	5.218118	59.40004	.2824769	.0052762	2.555247	.5244503	.8234808

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.470999	.0912791	.0031869	-.010266	8.980238	4.563323	6.663420
Stddev	.053614	.0025485	.0003446	.001053	.067142	.049749	.005347
%RSD	.7176253	2.791937	10.81328	10.25949	.7476621	1.090203	.0802458
#1	7.477762	.0942174	.0034171	-.010848	8.940427	4.583690	6.665419
#2	7.414325	.0896704	.0027907	-.010899	8.942530	4.506622	6.657362
#3	7.520911	.0899495	.0033529	-.009050	9.057758	4.599658	6.667481

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-03 Acquired: 5/6/2025 16:51:18 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	5.390691	.2323649	-.159171
Stddev	.021271	.0009022	.001696
%RSD	.3945805	.3882727	1.065337
#1	5.407953	.2322603	-.159803
#2	5.397191	.2315195	-.157250
#3	5.366928	.2333148	-.160460

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3374.222	79331.08	24612.37	3106.979	4183.981
Stddev	2.079	573.70	189.42	15.238	5.872
%RSD	.0616088	.7231687	.7695995	.4904309	.1403391
#1	3376.441	79195.06	24752.42	3110.229	4187.113
#2	3373.907	79960.56	24687.84	3120.330	4187.623
#3	3372.319	78837.61	24396.85	3090.379	4177.207

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-05 Acquired: 5/6/2025 16:55:23 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0251698	.0001552	.0622277	-.041396	-.006474	111.1309	.6156050
Stddev	.0027901	.0038571	.0015987	.004331	.003429	.1075	.0021857
%RSD	11.08505	2485.517	2.569079	10.46335	52.97218	.0966919	.3550444
#1	.0281571	.0030335	.0604219	-.038243	-.002935	111.2365	.6179777
#2	.0226312	-.004227	.0634625	-.039609	-.006705	111.1345	.6136737
#3	.0247212	.001659	.0627986	-.046334	-.009782	111.0217	.6151636

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073697	-.005545	35.78886	.3073525	.1464756	.4143115	259.1638
Stddev	.0000900	.000192	.05934	.0005036	.0005799	.0008473	1.8199
%RSD	1.221822	3.463309	.1658011	.1638447	.3959094	.2044978	.7022281
#1	.0073380	-.005663	35.81699	.3070440	.1471378	.4134817	261.2470
#2	.0072997	-.005648	35.72069	.3079336	.1460586	.4151752	258.3623
#3	.0074713	-.005323	35.82891	.3070799	.1462303	.4142776	257.8823

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.387121	48.65304	.2330310	.0034953	4.649993	.5100191	3.191081
Stddev	.023297	.05075	.0005802	.0002991	.024819	.0026968	.004961
%RSD	.4324485	.1043040	.2489763	8.558208	.5337521	.5287595	.1554760
#1	5.409345	48.59492	.2336926	.0034595	4.663425	.5099740	3.196559
#2	5.362883	48.67562	.2326086	.0032157	4.665203	.5073452	3.186890
#3	5.389135	48.68857	.2327920	.0038107	4.621353	.5127382	3.189792

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.459349	.0725286	.0008837	-.005417	6.218098	2.912327	6.978966
Stddev	.022814	.0022824	.0002961	.001276	.017034	.007292	.015876
%RSD	.4178894	3.146879	33.50903	23.55257	.2739411	.2503853	.2274780
#1	5.484844	.0750448	.0012251	-.005296	6.235268	2.919734	6.997218
#2	5.440858	.0719495	.0007302	-.006749	6.201204	2.905155	6.971322
#3	5.452347	.0705916	.0006959	-.004206	6.217821	2.912092	6.968360

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-05 Acquired: 5/6/2025 16:55:23 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.8121445	.2315264	-.148214
Stddev	.0030179	.0016250	.001432
%RSD	.3715982	.7018749	.9663468
#1	.8098671	.2331467	-.149849
#2	.8109991	.2315359	-.147611
#3	.8155675	.2298967	-.147181

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3310.021	77192.50	23016.70	3016.759	4297.271
Stddev	2.559	201.29	56.20	9.622	4.625
%RSD	.0773233	.2607620	.2441509	.3189667	.1076351
#1	3309.133	76961.34	23042.90	3005.899	4292.289
#2	3308.023	77287.11	23055.00	3024.222	4298.096
#3	3312.906	77329.06	22952.19	3020.156	4301.429

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-07 Acquired: 5/6/2025 16:59:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0361338	.0063811	.0909071	-.036709	-.004862	97.86071	.7152993
Stddev	.0007316	.0008103	.0014959	.000599	.002092	.25352	.0008682
%RSD	2.024727	12.69780	1.645523	1.632169	43.02135	.2590595	.1213790
#1	.0364110	.0067276	.0925868	-.037300	-.007270	98.09193	.7162369
#2	.0366862	.0054553	.0897185	-.036102	-.003491	97.58962	.7151377
#3	.0353040	.0069606	.0904159	-.036726	-.003827	97.90058	.7145232

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077364	-.005728	47.96637	.1981376	.1106903	.3094230	221.1188
Stddev	.0001424	.000185	.08742	.0007233	.0003053	.0009062	.2512
%RSD	1.840371	3.231279	.1822570	.3650288	.2758073	.2928676	.1135986
#1	.0077800	-.005719	48.02625	.1974657	.1105060	.3085138	221.1350
#2	.0078518	-.005917	48.00682	.1980440	.1110427	.3094290	220.8599
#3	.0075773	-.005547	47.86605	.1989031	.1105223	.3103262	221.3615

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.908658	46.36676	.1873386	.0027684	1.588683	.3755149	.8666441
Stddev	.002684	.07912	.0004155	.0001889	.005445	.0024051	.0027564
%RSD	.0686595	.1706306	.2218033	6.821623	.3427174	.6404803	.3180553
#1	3.909912	46.31546	.1877538	.0025565	1.588389	.3776681	.8656405
#2	3.910485	46.32696	.1869227	.0028300	1.583391	.3729193	.8697617
#3	3.905577	46.45788	.1873392	.0029188	1.594268	.3759573	.8645302

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.401514	.0856744	.0034639	.0014993	4.165361	4.960605	5.731086
Stddev	.046457	.0018193	.0002201	.0006865	.005145	.024356	.028286
%RSD	.7257155	2.123457	6.354057	45.78830	.1235071	.4909807	.4935536
#1	6.385474	.0876304	.0034467	.0007175	4.171258	4.953022	5.753521
#2	6.365202	.0840329	.0036921	.0020038	4.163034	4.940943	5.699311
#3	6.453865	.0853600	.0032529	.0017767	4.161791	4.987850	5.740426

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1932-07 Acquired: 5/6/2025 16:59:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	1.370050	.1925662	-.093223
Stddev	.005847	.0011970	.000340
%RSD	.4267958	.6215953	.3649421
#1	1.371044	.1921272	-.092978
#2	1.363770	.1939207	-.093079
#3	1.375337	.1916506	-.093611

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3234.399	76297.56	23007.49	2980.433	4306.485
Stddev	4.090	51.62	28.03	10.464	4.144
%RSD	.1264647	.0676558	.1218276	.3511032	.0962182
#1	3238.560	76324.60	23012.72	2986.663	4301.714
#2	3230.383	76330.04	22977.21	2986.284	4308.561
#3	3234.256	76238.04	23032.53	2968.352	4309.181

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01 Acquired: 5/6/2025 17:03:34 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0311417	.0038279	.1123495	-.044149	-.007455	103.5895	.5371510
Stddev	.0031862	.0017727	.0026475	.003346	.002314	.2008	.0019016
%RSD	10.23131	46.31082	2.356475	7.580006	31.03638	.1938308	.3540239
#1	.0297796	.0058418	.1151069	-.044639	-.006599	103.5080	.5386757
#2	.0288629	.0031380	.1098277	-.047223	-.010075	103.4424	.5350201
#3	.0347826	.0025038	.1121139	-.040584	-.005692	103.8183	.5377570

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0066267	-.004241	56.55677	.3249249	.1610425	.8629392	260.5300
Stddev	.0000644	.000255	.11858	.0014683	.0013156	.0037441	.3247
%RSD	.9711879	6.020733	.2096599	.4518816	.8169020	.4338790	.1246476
#1	.0066062	-.004003	56.61410	.3257125	.1615864	.8651880	260.3710
#2	.0066988	-.004209	56.42043	.3232308	.1619989	.8650125	260.9036
#3	.0065751	-.004511	56.63580	.3258313	.1595422	.8586170	260.3154

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.440986	66.88415	.2929450	.0022711	2.440610	.3983728	.4296556
Stddev	.011408	.24097	.0011915	.0003158	.016327	.0004129	.0008828
%RSD	.3315271	.3602742	.4067415	13.90318	.6689862	.1036541	.2054604
#1	3.451838	66.92880	.2939058	.0019177	2.424145	.3988410	.4306607
#2	3.429093	66.62398	.2933176	.0025255	2.456796	.3980606	.4290062
#3	3.442026	67.09966	.2916117	.0023699	2.440889	.3982168	.4292998

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.43082	.0421412	.0266643	-.006668	8.151291	5.549894	12.74716
Stddev	.09508	.0009235	.0000990	.000628	.003499	.014058	.09981
%RSD	.3344088	2.191319	.3711279	9.418313	.0429261	.2532975	.7829720
#1	28.35757	.0424559	.0267685	-.007389	8.153059	5.535319	12.82191
#2	28.53826	.0428662	.0266530	-.006246	8.147260	5.563370	12.78575
#3	28.39663	.0411016	.0265716	-.006367	8.153553	5.550991	12.63382

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01 Acquired: 5/6/2025 17:03:34 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	21.43531	.2565057	-.132631
Stddev	.10912	.0001171	.000287
%RSD	.5090856	.0456667	.2160344
#1	21.49070	.2565253	-.132415
#2	21.50563	.2563800	-.132956
#3	21.30960	.2566118	-.132521

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3322.162	78580.97	22781.08	3068.873	4272.143
Stddev	9.729	207.81	39.25	15.675	15.146
%RSD	.2928537	.2644493	.1722732	.5107725	.3545288
#1	3315.716	78780.49	22751.60	3083.064	4261.073
#2	3317.417	78365.77	22825.63	3052.048	4265.952
#3	3333.353	78596.66	22766.02	3071.508	4289.404

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01DUP Acquired: 5/6/2025 17:07:38 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0422849	-.000866	.0808542	-.042334	-.007516	104.1307	.6984989
Stddev	.0019480	.001049	.0006136	.001745	.002554	3.3701	.0236391
%RSD	4.606868	121.0790	.7589230	4.121272	33.97651	3.236378	3.384266
#1	.0437426	.000201	.0812437	-.043899	-.004654	108.0195	.7257185
#2	.0430396	-.001895	.0811719	-.040453	-.008334	102.0638	.6866576
#3	.0400725	-.000905	.0801468	-.042650	-.009561	102.3087	.6831207

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059307	-.005455	54.15078	.3493822	.1333832	.5180245	248.3945
Stddev	.0001736	.000554	1.65741	.0001167	.0015173	.0012376	2.0913
%RSD	2.926527	10.15490	3.060734	.0333868	1.137519	.2389079	.8419345
#1	.0061217	-.006076	56.06440	.3492754	.1316724	.5167595	250.6300
#2	.0057826	-.005275	53.21728	.3495067	.1345657	.5192328	248.0676
#3	.0058880	-.005013	53.17066	.3493644	.1339116	.5180811	246.4859

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.967220	67.93215	.2489514	.0045040	2.678145	.4340790	.4153753
Stddev	.091901	2.15511	.0009101	.0005812	.024976	.0139016	.0008654
%RSD	3.097199	3.172449	.3655844	12.90458	.9325732	3.202551	.2083473
#1	3.073329	70.42061	.2492257	.0051491	2.706978	.4500480	.4148430
#2	2.915318	66.67439	.2479356	.0043419	2.664276	.4246811	.4149090
#3	2.913012	66.70145	.2496927	.0040210	2.663182	.4275078	.4163739

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.18350	.0629023	.0062385	-.001542	9.894970	5.622659	13.77369
Stddev	.24332	.0038837	.0001276	.000459	.313635	.047966	.01735
%RSD	.6915788	6.174241	2.044520	29.74473	3.169643	.8530867	.1259519
#1	35.45920	.0598384	.0060970	-.001163	10.25713	5.673673	13.79303
#2	35.09256	.0672702	.0063445	-.001410	9.71383	5.615832	13.75950
#3	34.99875	.0615982	.0062741	-.002051	9.71396	5.578472	13.76853

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01DUP Acquired: 5/6/2025 17:07:38 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	11.03802	.2525175	-.148962
Stddev	.01515	.0059881	.001213
%RSD	.1372129	2.371350	.8141352
#1	11.02399	.2593328	-.147813
#2	11.03599	.2501204	-.150230
#3	11.05408	.2480994	-.148842

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3337.973	79509.97	23980.48	3079.019	4302.808
Stddev	3.573	130.51	545.92	7.363	6.042
%RSD	.1070506	.1641374	2.276537	.2391306	.1404201
#1	3339.023	79566.29	23351.19	3083.117	4300.371
#2	3333.993	79360.76	24327.27	3070.518	4298.364
#3	3340.904	79602.86	24262.98	3083.420	4309.688

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01LX5 Acquired: 5/6/2025 17:11:43 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0070228	-.000565	.0204528	-.010911	-.001778	22.00204	.1147863
Stddev	.0043973	.002133	.0008056	.000869	.000909	.03483	.0007952
%RSD	62.61511	377.3223	3.938599	7.961237	51.11142	.1583122	.6927632
#1	.0055931	-.001399	.0195272	-.011886	-.002597	22.02521	.1155953
#2	.0035182	.001858	.0208357	-.010629	-.000800	21.96198	.1147578
#3	.0119570	-.002155	.0209955	-.010219	-.001938	22.01892	.1140057

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014812	-.003072	12.40515	.0719618	.0309715	.1944639	58.95196
Stddev	.0000778	.000123	.05437	.0005408	.0001664	.0008732	.34861
%RSD	5.251821	4.004156	.4382487	.7514786	.5372576	.4490306	.5913434
#1	.0015692	-.002934	12.44732	.0724226	.0307869	.1934787	59.02863
#2	.0014216	-.003112	12.34380	.0713664	.0310177	.1947709	58.57139
#3	.0014527	-.003169	12.42435	.0720962	.0311099	.1951422	59.25584

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7517144	14.17553	.0575856	.0008901	.4449111	.0879937	.0933902
Stddev	.0015240	.05054	.0001829	.0004386	.0070881	.0018752	.0002784
%RSD	.2027420	.3565152	.3175807	49.27469	1.593158	2.131069	.2980918
#1	.7534624	14.22962	.0574617	.0004097	.4437277	.0900907	.0935551
#2	.7510170	14.16745	.0577956	.0009915	.4525165	.0864779	.0930688
#3	.7506639	14.12952	.0574994	.0012690	.4384892	.0874126	.0935467

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.992866	.0093833	.0055845	-.002143	1.789964	1.262851	2.486011
Stddev	.023635	.0010761	.0002709	.000277	.006112	.001668	.005465
%RSD	.3943898	11.46784	4.851548	12.90949	.3414842	.1320529	.2198383
#1	5.983574	.0104817	.0053337	-.002454	1.790810	1.263877	2.481243
#2	5.975289	.0083310	.0058718	-.002049	1.783472	1.260927	2.484815
#3	6.019735	.0093372	.0055478	-.001925	1.795609	1.263749	2.491975

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01LX5 Acquired: 5/6/2025 17:11:43 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.055022	.0529169	-.030684
Stddev	.010569	.0012623	.000052
%RSD	.2606447	2.385412	.1702305
#1	4.052701	.0514632	-.030656
#2	4.045806	.0535521	-.030652
#3	4.066559	.0537355	-.030744

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3072.735	72370.54	21762.28	2821.104	4545.429
Stddev	5.662	184.72	24.09	2.066	6.711
%RSD	.1842670	.2552488	.1107185	.0732257	.1476504
#1	3077.355	72518.39	21767.37	2822.393	4551.918
#2	3066.419	72429.77	21736.04	2822.198	4538.516
#3	3074.433	72163.47	21783.41	2818.721	4545.852

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV02 Acquired: 5/6/2025 17:15:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.733091	4.773729	4.894921	4.751399	4.748186	9.484323	9.708594
Stddev	.016394	.038821	.007430	.008474	.008685	.015526	.123384
%RSD	.3463763	.8132270	.1517852	.1783460	.1829148	.1637068	1.270870
#1	4.716055	4.811274	4.888637	4.760585	4.758155	9.479515	9.605392
#2	4.748758	4.776165	4.893005	4.743887	4.744149	9.501685	9.675132
#3	4.734460	4.733747	4.903121	4.749726	4.742255	9.471769	9.845257

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2370906	2.390316	23.95043	.9618530	2.390169	1.204571	5.002374
Stddev	.0021404	.004049	.04305	.0012770	.004660	.000931	.039714
%RSD	.9027647	.1694092	.1797299	.1327644	.1949593	.0772841	.7938949
#1	.2373154	2.385708	23.90523	.9611224	2.384815	1.203828	4.991114
#2	.2391097	2.391929	23.99094	.9633275	2.392381	1.204269	4.969507
#3	.2348467	2.393310	23.95510	.9611090	2.393311	1.205615	5.046502

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.405967	23.66836	2.391858	1.202012	24.10381	2.385189	2.412598
Stddev	.002644	.07395	.002364	.001295	.21217	.001626	.006488
%RSD	.1099138	.3124570	.0988380	.1077352	.8802163	.0681884	.2689108
#1	2.403809	23.60142	2.389132	1.200771	24.00052	2.383317	2.417444
#2	2.405174	23.74775	2.393090	1.203355	23.96306	2.385996	2.415123
#3	2.408917	23.65590	2.393351	1.201912	24.34784	2.386255	2.405227

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.11128	4.751780	4.808287	4.778036	4.796558	4.794135	4.815200
Stddev	.25620	.044363	.001777	.004006	.006951	.035237	.004699
%RSD	1.062572	.9336178	.0369610	.0838482	.1449210	.7349924	.0975833
#1	24.00167	4.750920	4.809137	4.774812	4.794961	4.762379	4.817266
#2	23.92812	4.796567	4.806245	4.776775	4.790544	4.787985	4.818511
#3	24.40406	4.707853	4.809480	4.782521	4.804169	4.832042	4.809822

Sample Name: CCV02 Acquired: 5/6/2025 17:15:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.696059	4.764867	4.831603
Stddev	.002413	.013308	.045492
%RSD	.0513908	.2792840	.9415522
#1	4.698803	4.759876	4.805038
#2	4.694268	4.754777	4.805639
#3	4.695105	4.779949	4.884131

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2904.540	68418.50	20272.52	2662.477	4346.619
Stddev	5.594	105.79	130.87	9.660	12.072
%RSD	.1925904	.1546168	.6455626	.3628354	.2777223
#1	2910.948	68526.60	20260.17	2652.240	4360.478
#2	2902.038	68413.70	20148.26	2671.433	4338.402
#3	2900.634	68315.19	20409.13	2663.759	4340.975

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB02 Acquired: 5/6/2025 17:20:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000856	.0005670	-.000417	-.000633	.0014179	.0143455	-.001602
Stddev	.001076	.0009311	.001409	.001038	.0021658	.0059981	.001301
%RSD	125.7345	164.2210	337.8577	164.0465	152.7530	41.81141	81.20599
#1	-.001913	.0014001	-.001490	-.001753	.0006022	.0091096	-.000892
#2	-.000893	-.000438	-.000940	.000295	-.000222	.0208897	-.003103
#3	.000238	.000739	.001179	-.000439	.003873	.0130372	-.000811

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000010	.0006027	.0197572	-.000290	.0001890	.0004276	.0199417
Stddev	.000026	.0000928	.0087836	.000431	.0001308	.0004788	.0030856
%RSD	253.5614	15.39543	44.45757	148.7588	69.24576	111.9756	15.47322
#1	-.000031	.0005219	.0113433	-.000581	.0002078	.0001181	.0212594
#2	.000019	.0007041	.0288688	-.000494	.0000497	.0001856	.0221497
#3	-.000019	.0005821	.0190594	.000205	.0003093	.0009790	.0164160

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005825	-.013618	.0008127	.0000457	-.099156	.0004297	.0022407
Stddev	.000241	.007046	.0002625	.0001683	.018305	.0015451	.0003125
%RSD	4.132535	51.74098	32.30010	368.2900	18.46039	359.5561	13.94890
#1	-.005549	-.007632	.0009395	-.000120	-.119466	-.001339	.0021361
#2	-.005935	-.021383	.0009878	.000040	-.083932	.001517	.0019939
#3	-.005991	-.011840	.0005109	.000217	-.094071	.001111	.0025921

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.095098	.0024007	.0013020	.0049244	.0010678	.0046201	.0039669
Stddev	.013763	.0004824	.0002298	.0007875	.0001904	.0089328	.0041678
%RSD	14.47263	20.09461	17.64828	15.99119	17.82838	193.3464	105.0654
#1	-.082450	.0023302	.0015601	.0052136	.0009689	.0001698	-.000798
#2	-.093088	.0019574	.0011195	.0055264	.0009472	-.001213	.005765
#3	-.109755	.0029145	.0012265	.0040332	.0012872	.014904	.006934

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB02 Acquired: 5/6/2025 17:20:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.001980	-.001648	.0009476
Stddev	.000991	.001399	.0000081
%RSD	50.04430	84.86396	.8509401
#1	-.000900	-.000471	.0009391
#2	-.002194	-.001279	.0009552
#3	-.002846	-.003194	.0009485

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2957.888	70538.92	20907.39	2760.276	4568.571
Stddev	9.244	61.07	49.46	8.985	20.842
%RSD	.3125287	.0865761	.2365900	.3255257	.4562115
#1	2957.715	70576.04	20881.21	2750.668	4578.811
#2	2967.217	70572.28	20876.52	2761.688	4582.313
#3	2948.731	70468.43	20964.45	2768.471	4544.590

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01MS Acquired: 5/6/2025 17:24:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6838511	1.850845	1.026455	1.551516	.2916907	108.2209
Stddev	.0047471	.009107	.000816	.005264	.0024718	.2774
%RSD	.6941728	.4920316	.0794803	.3393115	.8473908	.2563230
#1	.6832377	1.841643	1.025793	1.556924	.2925060	108.1168
#2	.6794405	1.851037	1.027367	1.546407	.2936518	108.5353
#3	.6888751	1.859853	1.026206	1.551216	.2889143	108.0106

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7059057	.1728977	.1890631	52.51069	.6573764	.3470758
Stddev	.0020104	.0012293	.0004620	.18312	.0023347	.0002634
%RSD	.2848000	.7109714	.2443731	.3487371	.3551547	.0758825
#1	.7070949	.1716772	.1888316	52.49127	.6598920	.3468116
#2	.7070378	.1741356	.1895951	52.70276	.6552791	.3470775
#3	.7035845	.1728802	.1887626	52.33806	.6569582	.3473384

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.057684	248.2520	2.904433	67.05892	.8034692	.0648152
Stddev	.001015	1.5631	.016331	.12338	.0006791	.0004815
%RSD	.0959402	.6296325	.5622880	.1839908	.0845224	.7428186
#1	1.058823	249.7581	2.908226	66.98154	.8040807	.0651280
#2	1.057352	246.6376	2.918534	67.20121	.8035886	.0642608
#3	1.056876	248.3604	2.886539	66.99402	.8027383	.0650569

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.755152	.6462794	.5644764	35.37011	.2697112	.3464741
Stddev	.030410	.0026229	.0045749	.23524	.0020728	.0006930
%RSD	.6395182	.4058494	.8104750	.6650945	.7685321	.2000217
#1	4.773095	.6437399	.5694480	35.63414	.2702608	.3458209
#2	4.720040	.6489785	.5604437	35.18279	.2674189	.3464004
#3	4.772321	.6461199	.5635376	35.29341	.2714538	.3472010

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01MS Acquired: 5/6/2025 17:24:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6669077	8.233435	5.655573	F 18.03987	21.54468	.4288426
Stddev	.0011091	.030396	.033209	.03636	.00801	.0011343
%RSD	.1663026	.3691790	.5871822	.2015746	.0371989	.2645028
#1	.6679191	8.235804	5.677425	18.00894	21.55057	.4301394
#2	.6670824	8.262577	5.617358	18.03074	21.54792	.4280348
#3	.6657217	8.201924	5.671935	18.07993	21.53556	.4283537

Elem	Sr4077
Units	ppm
Avg	.0105754
Stddev	.0019912
%RSD	18.82868
#1	.0095187
#2	.0128722
#3	.0093352

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3329.732	80296.98	22904.04	3095.920	4261.272
Stddev	5.363	369.73	97.24	24.055	3.701
%RSD	.1610540	.4604498	.4245340	.7769883	.0868605
#1	3332.499	79955.38	22929.47	3068.589	4262.443
#2	3333.146	80689.54	22796.62	3113.876	4264.246
#3	3323.551	80246.03	22986.03	3105.295	4257.127

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01MSD Acquired: 5/6/2025 17:28:27 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6820686	1.834063	1.034979	1.543610	.2635506	104.3958
Stddev	.0035833	.020064	.002924	.003397	.0008794	.2912
%RSD	.5253612	1.093986	.2825614	.2200793	.3336743	.2789408
#1	.6801083	1.826889	1.033432	1.540748	.2636018	104.6489
#2	.6798931	1.818571	1.033154	1.542718	.2644033	104.0775
#3	.6862044	1.856728	1.038353	1.547364	.2626467	104.4610

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7034528	.1625237	.1861923	56.14125	.6385526	.3301509
Stddev	.0033202	.0012903	.0003013	.19892	.0042612	.0002948
%RSD	.4719935	.7939340	.1618272	.3543273	.6673262	.0892974
#1	.7067310	.1640032	.1861156	56.36887	.6414333	.3298884
#2	.7000920	.1616314	.1865245	56.00078	.6336576	.3304699
#3	.7035353	.1619366	.1859367	56.05409	.6405669	.3300945

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7933551	254.3128	3.045807	66.18826	.7095117	.0663951
Stddev	.0007024	.9710	.016130	.24835	.0011339	.0002586
%RSD	.0885353	.3818291	.5295934	.3752108	.1598118	.3894821
#1	.7933991	255.1806	3.063961	66.46524	.7106362	.0663136
#2	.7926318	253.2640	3.040338	66.11408	.7083687	.0661871
#3	.7940345	254.4939	3.033123	65.98546	.7095303	.0666846

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.517190	.6296594	.5865755	38.35377	.2781081	.4036304
Stddev	.030896	.0037512	.0056527	.14930	.0020592	.0005774
%RSD	.5599926	.5957564	.9636725	.3892670	.7404205	.1430442
#1	5.516014	.6335611	.5913164	38.37356	.2802196	.4042425
#2	5.486899	.6293378	.5803198	38.19556	.2761056	.4030956
#3	5.548657	.6260793	.5880904	38.49218	.2779991	.4035531

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01MSD Acquired: 5/6/2025 17:28:27 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6585231	8.302636	5.531370	F 19.27694	12.05050	.4256362
Stddev	.0015788	.024719	.011317	.04120	.01929	.0014238
%RSD	.2397437	.2977247	.2045975	.2137513	.1600606	.3344988
#1	.6567031	8.327251	5.533670	19.24892	12.03576	.4266800
#2	.6595245	8.277814	5.519080	19.25764	12.04342	.4240143
#3	.6593416	8.302842	5.541360	19.32425	12.07233	.4262143

Elem	Sr4077
Units	ppm
Avg	.0212910
Stddev	.0001620
%RSD	.7610838
#1	.0212985
#2	.0214493
#3	.0211254

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3355.486	78864.60	24413.19	3073.205	4242.923
Stddev	1.066	355.25	131.88	16.892	3.846
%RSD	.0317715	.4504604	.5402028	.5496502	.0906408
#1	3356.495	78570.42	24262.06	3062.276	4245.259
#2	3355.591	79259.28	24504.94	3092.661	4238.484
#3	3354.371	78764.11	24472.58	3064.678	4245.026

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01A Acquired: 5/6/2025 17:32:27 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6885796	1.828758	1.033760	1.585792	.6672636	103.4228
Stddev	.0035461	.014304	.000894	.006354	.0025159	.0909
%RSD	.5149827	.7821813	.0864391	.4006613	.3770425	.0878633
#1	.6879823	1.822938	1.034761	1.590152	.6654264	103.4833
#2	.6853701	1.818282	1.033476	1.578502	.6662333	103.4669
#3	.6923863	1.845055	1.033043	1.588723	.6701310	103.3183

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6932591	.1665889	.1842505	56.02636	.6411672	.3439460
Stddev	.0016713	.0011084	.0003044	.16562	.0001233	.0011914
%RSD	.2410810	.6653428	.1652102	.2956196	.0192239	.3463846
#1	.6946984	.1675915	.1839433	56.19937	.6412610	.3427430
#2	.6914261	.1667766	.1842561	56.01044	.6412129	.3439697
#3	.6936528	.1653987	.1845520	55.86927	.6410276	.3451254

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.094335	263.2161	3.509637	66.72060	.7484634	.0660314
Stddev	.001856	.8332	.014613	.17492	.0011130	.0002944
%RSD	.1696154	.3165405	.4163735	.2621745	.1487086	.4458021
#1	1.095355	262.8214	3.526509	66.88895	.7473694	.0662372
#2	1.092193	262.6535	3.501416	66.73307	.7484265	.0656942
#3	1.095458	264.1732	3.500986	66.53977	.7495945	.0661627

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.032861	.6313347	.5875225	37.01256	.2940169	.3674076
Stddev	.017971	.0014074	.0031903	.15083	.0018474	.0003984
%RSD	.3570763	.2229294	.5430026	.4075138	.6283180	.1084284
#1	5.013285	.6328224	.5911952	36.90810	.2936686	.3678612
#2	5.036688	.6300243	.5854381	36.94409	.2960137	.3671146
#3	5.048611	.6311574	.5859344	37.18548	.2923685	.3672469

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1933-01A Acquired: 5/6/2025 17:32:27 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6627478	8.220697	6.518356	F 18.24811	21.21958	.4311924
Stddev	.0009187	.017270	.020821	.07420	.07207	.0005444
%RSD	.1386140	.2100807	.3194171	.4066153	.3396475	.1262448
#1	.6624036	8.239802	6.510779	18.20543	21.19960	.4312178
#2	.6620510	8.216098	6.502384	18.20511	21.15961	.4306358
#3	.6637889	8.206193	6.541904	18.33379	21.29954	.4317236

Elem	Sr4077
Units	ppm
Avg	.0312271
Stddev	.0009722
%RSD	3.113228
#1	.0322005
#2	.0312245
#3	.0302562

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3292.069	79018.67	23592.37	3034.909	4255.664
Stddev	2.040	116.04	146.32	12.298	2.616
%RSD	.0619609	.1468539	.6202069	.4052097	.0614726
#1	3289.923	78892.94	23436.59	3023.123	4258.645
#2	3293.982	79121.65	23613.59	3047.661	4254.597
#3	3292.303	79041.43	23726.91	3033.942	4253.750

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03 Acquired: 5/6/2025 17:43:07 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.003553	-.001353	-.000698	-.002576	.0002149	.0288225	.2333683
Stddev	.001703	.000616	.001387	.000902	.0008057	.0023040	.0006888
%RSD	47.93797	45.49161	198.6814	35.02140	374.8909	7.993782	.2951445
#1	-.005466	-.000642	-.000582	-.002175	-.000641	.0286485	.2325863
#2	-.002200	-.001717	.000627	-.001943	.000328	.0312087	.2338848
#3	-.002994	-.001700	-.002140	-.003608	.000958	.0266105	.2336338

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001071	-.000856	23.51255	.0008306	.0036241	-.002965	14.77435
Stddev	.0000702	.000081	.05133	.0000174	.0001793	.000100	.08938
%RSD	65.55943	9.466297	.2182986	2.093020	4.947733	3.382748	.6049849
#1	.0000974	-.000764	23.45329	.0008172	.0035436	-.002849	14.72881
#2	.0001816	-.000918	23.54244	.0008502	.0038296	-.003026	14.87733
#3	.0000422	-.000886	23.54194	.0008244	.0034991	-.003020	14.71690

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6268564	2.572908	.0047005	.0001340	221.6356	.0009564	.0754112
Stddev	.0022591	.006202	.0003097	.0002167	1.9084	.0012918	.0009313
%RSD	.3603788	.2410594	6.588861	161.6848	.8610497	135.0619	1.234941
#1	.6243614	2.574584	.0049928	.0003665	219.9084	.0006062	.0751926
#2	.6287630	2.566040	.0043759	-.000062	223.6843	.0023873	.0746087
#3	.6274449	2.578100	.0047328	.000098	221.3139	-.000124	.0764324

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9993623	.0812173	.0000313	-.002691	-.000161	.2810166	.0254775
Stddev	.0241003	.0006567	.0001106	.001363	.000950	.0064605	.0025905
%RSD	2.411569	.8085725	353.0246	50.67229	589.4422	2.298992	10.16781
#1	.9715821	.0816722	.0000280	-.002821	-.001178	.2798611	.0228104
#2	1.014674	.0804645	-.000078	-.003984	.000704	.2879769	.0256380
#3	1.011830	.0815153	.000144	-.001267	-.000009	.2752117	.0279840

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03 Acquired: 5/6/2025 17:43:07 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6596940	-.000826	.0603003
Stddev	.0012460	.001829	.0001235
%RSD	.1888724	221.3903	.2047350
#1	.6587919	-.000155	.0601660
#2	.6611157	.000572	.0603260
#3	.6591744	-.002896	.0604088

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2875.947	69196.20	19365.09	2669.004	4325.437
Stddev	1.402	217.14	32.19	1.951	5.709
%RSD	.0487611	.3138070	.1662126	.0731034	.1319910
#1	2877.553	69196.41	19368.35	2666.993	4319.749
#2	2875.317	68978.95	19395.52	2670.889	4325.397
#3	2874.970	69413.23	19331.40	2669.131	4331.167

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03DUP Acquired: 5/6/2025 17:47:30 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.003342	-.002879	.0004648	-.001208	.0014075	.0247563	.1803812
Stddev	.004165	.001174	.0009707	.004514	.0005074	.0083696	.0009598
%RSD	124.6321	40.76811	208.8182	373.7747	36.04648	33.80790	.5320904
#1	.001349	-.001544	-.000649	.003954	.0019486	.0338094	.1814231
#2	-.006608	-.003749	.001131	-.003162	.0009425	.0173004	.1795331
#3	-.004767	-.003344	.000912	-.004415	.0013314	.0231592	.1801873

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000179	-.000786	17.94233	.0002212	.0026582	-.003423	11.92697
Stddev	.0000506	.000047	.05321	.0003693	.0000910	.000332	.08157
%RSD	282.4672	6.037459	.2965670	166.9880	3.424157	9.691667	.6839002
#1	-.000010	-.000804	18.00210	.0004583	.0027614	-.003136	11.84730
#2	-.000012	-.000732	17.90009	.0004095	.0026239	-.003786	12.01032
#3	.000076	-.000822	17.92481	-.000204	.0025893	-.003348	11.92331

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4764537	1.919106	.0039104	.0001704	174.7847	.0010530	.0583762
Stddev	.0013451	.017523	.0001967	.0003786	1.1575	.0013248	.0005180
%RSD	.2823224	.9131041	5.029357	222.1769	.6622644	125.8119	.8874106
#1	.4780060	1.939066	.0041319	-.000252	174.1237	.0001231	.0580340
#2	.4757217	1.912001	.0037562	.000478	176.1213	.0004660	.0589722
#3	.4756333	1.906250	.0038432	.000286	174.1091	.0025698	.0581224

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7892402	.0618733	-.000604	-.002353	-.000269	.2243704	.0202266
Stddev	.0257608	.0002136	.000159	.001388	.000416	.0037548	.0041902
%RSD	3.263999	.3452139	26.27157	58.97260	154.3909	1.673471	20.71643
#1	.7688095	.0616271	-.000483	-.002896	-.000187	.2216278	.0239884
#2	.7807325	.0619847	-.000545	-.003387	.000099	.2286497	.0209811
#3	.8181787	.0620082	-.000784	-.000776	-.000720	.2228336	.0157104

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03DUP Acquired: 5/6/2025 17:47:30 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.4999354	-.002343	.0457867
Stddev	.0044905	.000669	.0001768
%RSD	.8982107	28.53374	.3862427
#1	.4998301	-.002022	.0459752
#2	.5044776	-.003112	.0456245
#3	.4954985	-.001896	.0457604

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2889.387	69160.08	20509.67	2690.196	4350.699
Stddev	8.223	254.94	79.72	23.597	12.338
%RSD	.2845885	.3686244	.3886855	.8771637	.2835850
#1	2891.658	69426.99	20420.88	2712.298	4357.275
#2	2896.236	68919.09	20575.10	2665.344	4358.355
#3	2880.267	69134.14	20533.02	2692.947	4336.466

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03LX5 Acquired: 5/6/2025 17:51:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.001900	-.001757	-.000108	-.002268	-.001143	.0047431	.0588343
Stddev	.002853	.000979	.000334	.000870	.002416	.0116521	.0007017
%RSD	150.1473	55.72302	310.5092	38.34596	211.2944	245.6651	1.192645
#1	.000431	-.002501	-.000258	-.003005	-.000780	.0021295	.0596361
#2	-.005081	-.002121	.000275	-.001309	.001070	-.005380	.0585341
#3	-.001050	-.000648	-.000340	-.002490	-.003720	.017480	.0583327

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000232	-.000307	6.153510	-.000103	.0005964	-.000662	3.935481
Stddev	.0000507	.000077	.067845	.000305	.0000595	.000307	.027946
%RSD	218.3387	25.07652	1.102534	295.2308	9.980066	46.44675	.7100994
#1	-.000003	-.000334	6.224910	.000151	.0006544	-.000413	3.931061
#2	-.000009	-.000221	6.145727	-.000019	.0005354	-.001005	3.910009
#3	.000082	-.000368	6.089892	-.000442	.0005994	-.000567	3.965373

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1568521	.6553091	.0015862	-.000046	57.42523	.0000471	.0185677
Stddev	.0008679	.0167033	.0001779	.000056	.33957	.0003248	.0002388
%RSD	.5533042	2.548925	11.21293	122.1118	.5913278	689.7374	1.285925
#1	.1575864	.6689099	.0017420	-.000109	57.38875	-.000010	.0188116
#2	.1570755	.6366653	.0013924	-.000028	57.10538	-.000245	.0183344
#3	.1558943	.6603522	.0016242	-.000001	57.78157	.000397	.0185570

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1950348	.0168032	-.000401	-.000943	-.000521	.0672669	.0043370
Stddev	.0445448	.0007029	.000469	.000596	.000020	.0073290	.0017069
%RSD	22.83941	4.183391	116.7646	63.21398	3.825341	10.89543	39.35706
#1	.2360367	.0175687	-.000196	-.001015	-.000506	.0615566	.0048004
#2	.2014293	.0161866	-.000938	-.000314	-.000544	.0647129	.0024462
#3	.1476383	.0166544	-.000070	-.001501	-.000514	.0755312	.0057643

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03LX5 Acquired: 5/6/2025 17:51:56 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.1659406	.0011907	.0159472
Stddev	.0027806	.0004249	.0001583
%RSD	1.675682	35.68638	.9929155
#1	.1663320	.0014622	.0161169
#2	.1629850	.0007010	.0159213
#3	.1685048	.0014088	.0158034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2972.847	72918.76	21117.67	2781.911	4531.825
Stddev	3.423	61.73	240.81	4.999	6.896
%RSD	.1151282	.0846591	1.140343	.1797046	.1521675
#1	2975.105	72854.87	20903.58	2776.241	4539.278
#2	2968.909	72978.08	21071.04	2783.809	4530.528
#3	2974.528	72923.33	21378.39	2785.684	4525.670

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03MS Acquired: 5/6/2025 17:56:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6862948	1.626509	.8333265	1.678689	.7020506	1.703367	.3832949
Stddev	.0043532	.005023	.0005671	.009043	.0026239	.011368	.0018947
%RSD	.6343033	.3087984	.0680578	.5387173	.3737424	.6674105	.4943149
#1	.6829762	1.624172	.8335168	1.668538	.6991464	1.690242	.3811134
#2	.6912238	1.623080	.8326886	1.681640	.7027549	1.710154	.3845299
#3	.6846845	1.632274	.8337740	1.685888	.7042503	1.709704	.3842413

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1674571	.1728549	22.31464	.3484854	.1735936	.2465795	16.97241
Stddev	.0002889	.0002626	.09244	.0004867	.0004353	.0004254	.00534
%RSD	.1725366	.1519283	.4142455	.1396736	.2507547	.1725235	.0314540
#1	.1671430	.1725856	22.21374	.3487807	.1733233	.2460905	16.96629
#2	.1677115	.1728689	22.33496	.3479236	.1733618	.2468643	16.97614
#3	.1675169	.1731103	22.39524	.3487518	.1740958	.2467838	16.97479

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7428172	3.937289	.4327270	.0642081	214.7796	.2585247	.2440744
Stddev	.0009754	.030284	.0011780	.0001513	.6649	.0015011	.0007029
%RSD	.1313091	.7691551	.2722176	.2357055	.3095511	.5806465	.2879816
#1	.7418870	3.903919	.4318187	.0642965	214.7715	.2578699	.2436021
#2	.7427322	3.944922	.4323044	.0640334	215.4485	.2574622	.2437389
#3	.7438323	3.963026	.4340580	.0642945	214.1188	.2602420	.2448821

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.06652	.3277992	.3717575	.6159910	.1803947	1.035715	5.346060
Stddev	.03554	.0015601	.0007994	.0014884	.0017934	.007372	.016551
%RSD	.3530762	.4759212	.2150256	.2416187	.9941296	.7118122	.3095929
#1	10.09593	.3260364	.3708853	.6146359	.1787255	1.030665	5.341742
#2	10.07659	.3290019	.3719321	.6175840	.1801680	1.032305	5.332095
#3	10.02702	.3283593	.3724551	.6157531	.1822907	1.044175	5.364342

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03MS Acquired: 5/6/2025 17:56:13 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.5872074	.1834407	.2264294
Stddev	.0073783	.0014267	.0006917
%RSD	1.256515	.7777262	.3054889
#1	.5838734	.1818177	.2257328
#2	.5820845	.1840081	.2264393
#3	.5956644	.1844964	.2271161

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2890.820	68143.59	20308.43	2642.586	4328.911
Stddev	5.492	214.41	47.54	13.583	.673
%RSD	.1899683	.3146444	.2341065	.5140172	.0155464
#1	2890.360	67910.77	20332.54	2638.534	4328.297
#2	2885.573	68332.93	20339.09	2657.735	4329.630
#3	2896.528	68187.08	20253.66	2631.490	4328.805

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03MSD Acquired: 5/6/2025 18:00:25 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7228314	1.706581	.8713867	1.769432	.7294694	1.776660	.4213434
Stddev	.0016304	.003961	.0018592	.005430	.0013357	.008905	.0015179
%RSD	.2255545	.2321242	.2133564	.3069044	.1831113	.5012018	.3602624
#1	.7241008	1.708797	.8731299	1.764895	.7309875	1.785728	.4197328
#2	.7209927	1.708939	.8694300	1.767951	.7289465	1.776323	.4215499
#3	.7234006	1.702008	.8716003	1.775449	.7284742	1.767928	.4227476

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1718595	.1814794	25.43142	.3562894	.1814909	.2564049	19.23017
Stddev	.0006293	.0005755	.02735	.0005983	.0005389	.0011941	.07854
%RSD	.3661442	.3171416	.1075360	.1679224	.2969067	.4657248	.4084284
#1	.1719411	.1815476	25.45613	.3564631	.1816860	.2554098	19.22439
#2	.1724440	.1808727	25.43609	.3556234	.1808817	.2560758	19.15468
#3	.1711935	.1820177	25.40204	.3567815	.1819051	.2577291	19.31144

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8320834	4.336843	.4578372	.0663003	244.0775	.2661504	.2601673
Stddev	.0018106	.015600	.0005097	.0002662	1.7653	.0006599	.0010014
%RSD	.2175921	.3597141	.1113275	.4014932	.7232737	.2479571	.3848897
#1	.8305236	4.322150	.4572495	.0659974	243.7065	.2666837	.2600326
#2	.8340688	4.353215	.4581589	.0664972	242.5272	.2654123	.2612292
#3	.8316577	4.335166	.4581031	.0664062	245.9989	.2663550	.2592401

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.58172	.3459941	.3816057	.6446825	.1830545	1.108645	5.724588
Stddev	.04637	.0015869	.0007259	.0024569	.0009780	.016478	.003795
%RSD	.4382464	.4586623	.1902255	.3810962	.5342720	1.486325	.0662865
#1	10.60904	.3447505	.3816812	.6462220	.1819255	1.119165	5.728177
#2	10.52817	.3477815	.3808450	.6418491	.1836399	1.089655	5.720617
#3	10.60794	.3454504	.3822909	.6459764	.1835983	1.117116	5.724970

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03MSD Acquired: 5/6/2025 18:00:25 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7087897	.1879474	.2401318
Stddev	.0028905	.0006401	.0003255
%RSD	.4078032	.3405861	.1355469
#1	.7071657	.1886630	.2401615
#2	.7070765	.1874292	.2404414
#3	.7121270	.1877501	.2397924

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2798.382	67411.11	20191.86	2625.326	4151.435
Stddev	7.180	156.03	68.27	5.191	5.045
%RSD	.2565826	.2314601	.3381123	.1977180	.1215236
#1	2806.294	67375.36	20189.04	2624.390	4157.181
#2	2796.570	67581.91	20125.05	2630.921	4149.387
#3	2792.281	67276.05	20261.50	2620.667	4147.735

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03A Acquired: 5/6/2025 18:04:36 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7473773	1.774057	.9060794	1.822213	.7374392	1.885918	.4652748
Stddev	.0031892	.008296	.0030045	.007124	.0028787	.011509	.0010987
%RSD	.4267242	.4676174	.3315882	.3909534	.3903705	.6102415	.2361324
#1	.7467271	1.769282	.9068949	1.823830	.7398455	1.896315	.4646787
#2	.7445633	1.769253	.9027514	1.814420	.7342500	1.873552	.4646030
#3	.7508416	1.783636	.9085919	1.828390	.7382223	1.887887	.4665426

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1849988	.1885563	29.04560	.3711569	.1894572	.2658152	20.71012
Stddev	.0002843	.0008429	.01008	.0012244	.0002645	.0007511	.08616
%RSD	.1536595	.4470374	.0347010	.3298888	.1396052	.2825535	.4160085
#1	.1851473	.1885362	29.05380	.3722993	.1897466	.2663538	20.74291
#2	.1851780	.1877237	29.04866	.3713072	.1892279	.2649572	20.77507
#3	.1846710	.1894091	29.03435	.3698643	.1893973	.2661344	20.61239

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9395091	4.822076	.4665851	.0682218	267.0740	.2821832	.2744841
Stddev	.0013951	.021985	.0011106	.0002930	2.5381	.0015543	.0012737
%RSD	.1484980	.4559182	.2380230	.4295026	.9503394	.5508180	.4640538
#1	.9383563	4.840978	.4666762	.0679366	269.9674	.2804445	.2730518
#2	.9391110	4.827300	.4654317	.0685221	266.0311	.2834380	.2754899
#3	.9410601	4.797950	.4676473	.0682066	265.2234	.2826670	.2749106

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.85423	.3746385	.3902623	.6533793	.1886636	1.113344	5.907341
Stddev	.04535	.0020373	.0016986	.0015542	.0002232	.015892	.000494
%RSD	.4177880	.5438014	.4352357	.2378647	.1183127	1.427418	.0083539
#1	10.80771	.3740723	.3888859	.6540204	.1886055	1.105032	5.907503
#2	10.89830	.3768990	.3897405	.6516071	.1889101	1.131669	5.906787
#3	10.85669	.3729442	.3921606	.6545103	.1884751	1.103332	5.907733

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1913-03A Acquired: 5/6/2025 18:04:36 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7683905	.2013020	.2602280
Stddev	.0084254	.0003827	.0007859
%RSD	1.096497	.1901034	.3020089
#1	.7777622	.2017069	.2596596
#2	.7659664	.2009463	.2598995
#3	.7614429	.2012529	.2611249

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2878.731	69443.26	19715.00	2669.809	4264.798
Stddev	3.806	435.88	94.51	13.040	6.143
%RSD	.1322052	.6276822	.4793991	.4884311	.1440507
#1	2877.853	69164.74	19636.00	2659.488	4264.164
#2	2882.899	69219.46	19689.29	2665.474	4271.233
#3	2875.441	69945.58	19819.71	2684.464	4258.995

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV03 Acquired: 5/6/2025 18:08:48 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.574181	4.714686	4.691732	4.551196	4.587126	9.455980	9.449343
Stddev	.019812	.039349	.010089	.014169	.021470	.007669	.078532
%RSD	.4331262	.8346039	.2150278	.3113343	.4680554	.0811046	.8310800
#1	4.566378	4.758326	4.680919	4.539037	4.574837	9.449034	9.536563
#2	4.559460	4.703820	4.693384	4.547795	4.574624	9.454695	9.427218
#3	4.596707	4.681911	4.700892	4.566757	4.611918	9.464210	9.384246

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2404971	2.341120	23.69226	.9536184	2.338678	1.173105	4.702642
Stddev	.0005690	.006202	.00674	.0018887	.006963	.005702	.007139
%RSD	.2365737	.2649132	.0284639	.1980572	.2977453	.4860794	.1518050
#1	.2410506	2.336081	23.69623	.9536984	2.334149	1.168132	4.694836
#2	.2405270	2.339233	23.69608	.9516910	2.335189	1.171853	4.704253
#3	.2399139	2.348046	23.68447	.9554659	2.346696	1.179329	4.708838

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.385119	23.59389	2.337243	1.181280	23.29903	2.356096	2.369290
Stddev	.005488	.06107	.007022	.001073	.10880	.007680	.005595
%RSD	.2300940	.2588494	.3004320	.0907981	.4669928	.3259759	.2361279
#1	2.385567	23.61951	2.331920	1.181521	23.18033	2.353024	2.367609
#2	2.390369	23.63797	2.334607	1.180107	23.32274	2.364837	2.364728
#3	2.379421	23.52418	2.345201	1.182211	23.39403	2.350427	2.375532

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.21381	4.782999	4.723315	4.675660	4.741617	4.625400	4.706691
Stddev	.06386	.020267	.014310	.013873	.014233	.030683	.011560
%RSD	.2751156	.4237386	.3029573	.2966999	.3001613	.6633530	.2456167
#1	23.14241	4.800687	4.713070	4.671233	4.739120	4.607989	4.699933
#2	23.23354	4.787427	4.717211	4.664542	4.756933	4.607384	4.700100
#3	23.26549	4.760884	4.739665	4.691206	4.728799	4.660828	4.720039

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV03 Acquired: 5/6/2025 18:08:48 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.526205	4.742853	4.745320
Stddev	.017773	.016141	.016256
%RSD	.3926602	.3403304	.3425618
#1	4.530567	4.748050	4.753809
#2	4.506658	4.755755	4.755573
#3	4.541391	4.724753	4.726577

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2968.413	68779.99	19700.14	2675.634	4437.584
Stddev	6.985	71.85	89.02	10.807	6.562
%RSD	.2353250	.1044607	.4519003	.4039147	.1478757
#1	2975.964	68771.61	19614.22	2682.768	4445.046
#2	2967.096	68855.66	19694.23	2680.933	4434.993
#3	2962.181	68712.71	19791.97	2663.199	4432.713

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB03 Acquired: 5/6/2025 18:13:01 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0009523	.0001154	.0013779	.0011714	.0023968	.0157986	.0009828
Stddev	.0011748	.0009583	.0010161	.0020962	.0010703	.0035670	.0002448
%RSD	123.3695	830.5773	73.74117	178.9450	44.65538	22.57813	24.90895
#1	.0001822	-.000957	.0020436	.0028986	.0036165	.0198803	.0007130
#2	.0023045	.000887	.0018816	-.001161	.0019597	.0132793	.0011907
#3	.0003701	.000416	.0002084	.001777	.0016142	.0142364	.0010448

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000320	.0005890	.0059083	-.000178	.0001752	.0005697	.0239355
Stddev	.0000566	.0000647	.0066525	.000241	.0002169	.0003158	.0034520
%RSD	176.8214	10.98772	112.5953	135.9979	123.7959	55.44118	14.42189
#1	.0000968	.0005397	.0075911	-.000384	.0001577	.0003828	.0260609
#2	-.000007	.0005650	-.001424	.000088	-.000032	.0009343	.0257930
#3	.000006	.0006623	.011558	-.000236	.000400	.0003919	.0199525

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006021	-.007423	.0005777	.0001479	-.038224	.0007533	.0018290
Stddev	.000241	.005630	.0002144	.0001729	.007595	.0007734	.0002738
%RSD	4.002789	75.84579	37.11617	116.8532	19.86879	102.6638	14.97008
#1	-.006296	-.012857	.0007910	.0003428	-.043893	.0016433	.0016718
#2	-.005921	-.007798	.0003622	.0000131	-.041183	.0003726	.0021452
#3	-.005846	-.001615	.0005799	.0000879	-.029595	.0002441	.0016701

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.037309	.0027933	.0009589	.0055083	.0012280	-.004238	.0019687
Stddev	.024860	.0003218	.0001800	.0002686	.0006296	.004832	.0014158
%RSD	66.63091	11.52079	18.77193	4.875532	51.27047	114.0095	71.91297
#1	-.062293	.0031649	.0008581	.0055813	.0008743	-.003989	.0008792
#2	-.012576	.0026062	.0011667	.0052108	.0019549	-.009190	.0014580
#3	-.037058	.0026088	.0008519	.0057329	.0008548	.000465	.0035690

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB03 Acquired: 5/6/2025 18:13:01 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0029584	.0006584	.0009028
Stddev	.0020811	.0013137	.0000348
%RSD	70.34697	199.5285	3.856070
#1	.0016140	-.000524	.0009094
#2	.0053555	.002072	.0009339
#3	.0019056	.000427	.0008652

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3013.853	71787.56	20220.94	2785.301	4655.106
Stddev	7.147	234.16	51.83	6.927	8.244
%RSD	.2371341	.3261863	.2563299	.2486857	.1770877
#1	3018.768	72038.66	20185.10	2793.217	4657.889
#2	3017.137	71575.16	20197.35	2780.350	4661.598
#3	3005.655	71748.87	20280.37	2782.338	4645.831

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167860BL Acquired: 5/6/2025 18:17:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000673	-.000292	-.000836	-.000505	.0003021	.0136012	-.000088
Stddev	.000447	.001340	.000182	.002951	.0002641	.0074252	.000541
%RSD	66.43734	458.9483	21.73997	584.7803	87.43847	54.59222	613.4230
#1	-.000853	.000627	-.000903	.000359	-.000002	.0059345	-.000332
#2	-.001002	-.001830	-.000630	.001919	.000435	.0141104	.000532
#3	-.000164	.000327	-.000975	-.003792	.000474	.0207586	-.000464

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000141	.0000380	-.002561	-.000231	-.000209	.0002791	.0078748
Stddev	.0000444	.0000729	.005158	.000183	.000226	.0001475	.0024209
%RSD	314.9092	191.8162	201.3642	79.36905	108.1482	52.84186	30.74179
#1	.0000654	.0000571	.002062	-.000033	-.000435	.0001136	.0100748
#2	-.000011	.0000995	-.008124	-.000265	.000017	.0003967	.0082684
#3	-.000012	-.000043	-.001622	-.000395	-.000209	.0003271	.0052813

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007539	-.009863	.0005395	-.000163	-.071179	-.000866	.0008824
Stddev	.000671	.006543	.0001737	.000307	.002217	.001514	.0002592
%RSD	8.894276	66.34148	32.18996	188.4752	3.114196	174.8041	29.37317
#1	-.006826	-.017101	.0007398	.000191	-.072457	.000309	.0011789
#2	-.008158	-.008123	.0004476	-.000336	-.068619	-.002575	.0007692
#3	-.007633	-.004366	.0004312	-.000343	-.072460	-.000332	.0006991

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.072018	-.002149	.0000394	.0097688	.0001050	-.012321	.0042574
Stddev	.032370	.000670	.0002242	.0005836	.0008607	.002630	.0005634
%RSD	44.94677	31.15941	568.6231	5.973972	819.8727	21.34204	13.23342
#1	-.048340	-.001528	-.000169	.0097025	.0010987	-.011213	.0047493
#2	-.108903	-.002062	.000277	.0092213	-.000409	-.010428	.0043802
#3	-.058810	-.002859	.000011	.0103828	-.000374	-.015324	.0036427

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167860BL Acquired: 5/6/2025 18:17:21 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.003266	-.000652	-.000051
Stddev	.000824	.000714	.000035
%RSD	25.23579	109.5201	68.92993
#1	-.002703	-.001349	-.000032
#2	-.004212	.000077	-.000029
#3	-.002882	-.000683	-.000092

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3050.065	72994.50	19135.97	2800.063	4757.666
Stddev	9.983	354.39	44.15	5.239	8.838
%RSD	.3273065	.4855067	.2306939	.1871008	.1857703
#1	3047.287	72617.80	19185.04	2794.197	4756.696
#2	3061.142	73321.30	19099.49	2801.715	4766.949
#3	3041.764	73044.40	19123.38	2804.277	4749.352

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167860BS Acquired: 5/6/2025 18:21:41 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7114877	1.819816	.9011759	1.768333	.7225203	1.778006
Stddev	.0019467	.012203	.0037097	.001592	.0044630	.007904
%RSD	.2736167	.6705605	.4116484	.0900522	.6176971	.4445151
#1	.7107891	1.824898	.8986529	1.766998	.7189893	1.786883
#2	.7136874	1.828656	.8994396	1.767905	.7210352	1.771732
#3	.7099866	1.805893	.9054353	1.770095	.7275365	1.775404

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1739246	.1835780	.1839713	.9185864	.3651673	.1785656
Stddev	.0016248	.0002419	.0007084	.0040683	.0009500	.0004622
%RSD	.9342042	.1317467	.3850532	.4428884	.2601446	.2588419
#1	.1736381	.1833329	.1837130	.9195933	.3662642	.1781311
#2	.1724621	.1835846	.1834284	.9220567	.3646234	.1785144
#3	.1756736	.1838165	.1847726	.9141092	.3646143	.1790513

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2762478	2.648321	.1835077	1.779900	.4503194	.0668105
Stddev	.0010557	.002791	.0012146	.011460	.0019428	.0003174
%RSD	.3821481	.1053733	.6618660	.6438603	.4314309	.4751531
#1	.2752813	2.645154	.1835387	1.767636	.4498320	.0669293
#2	.2760877	2.649388	.1822780	1.790336	.4486667	.0664508
#3	.2773744	2.650420	.1847066	1.781728	.4524595	.0670515

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.481179	.2671717	.1812633	F 8.306758	.2825535	.3755901
Stddev	.014529	.0011996	.0014333	.034333	.0014633	.0008872
%RSD	.5855766	.4490161	.7907205	.4133164	.5178796	.2362054
#1	2.496105	.2669185	.1828946	8.332737	.2822699	.3749569
#2	2.467082	.2684777	.1802058	8.267834	.2812528	.3752093
#3	2.480348	.2661189	.1806895	8.319703	.2841378	.3766041

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167860BS Acquired: 5/6/2025 18:21:41 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6404321	.1845756	F .7416118	5.458490	F -.013832	.1853274
Stddev	.0023853	.0010190	.0088899	.006911	.003843	.0015605
%RSD	.3724500	.5520782	1.198733	.1266176	27.78073	.8420240
#1	.6388997	.1845447	.7318140	5.461176	-.017606	.1869250
#2	.6392161	.1835723	.7491626	5.450639	-.013966	.1838068
#3	.6431803	.1856096	.7438588	5.463655	-.009924	.1852505

Elem	Sr4077
Units	ppm
Avg	.1800309
Stddev	.0004280
%RSD	.2377618
#1	.1803044
#2	.1795376
#3	.1802507

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3007.066	70989.58	19954.05	2761.908	4631.517
Stddev	8.390	104.16	24.91	11.156	12.234
%RSD	.2790052	.1467260	.1248383	.4039412	.2641419
#1	3015.274	70879.17	19981.28	2754.614	4634.172
#2	3007.419	71086.10	19948.45	2774.751	4642.206
#3	2998.505	71003.45	19932.41	2756.359	4618.175

Sample Name: PB167781BL Acquired: 5/6/2025 18:25:47 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000407	-.000297	-.001362	.0005938	.0020916	.0054333	-.000755
Stddev	.001011	.000716	.000812	.0023692	.0027593	.0050853	.000422
%RSD	248.3233	240.7114	59.60920	399.0148	131.9226	93.59456	55.87546
#1	-.001512	-.000150	-.001895	.0032903	.0042122	-.000428	-.000309
#2	-.000178	-.001075	-.001764	-.000355	-.001028	.008677	-.001147
#3	.000470	.000334	-.000428	-.001154	.003091	.008051	-.000810

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000149	-.000081	.0010404	-.000068	-.000327	-.000025	-.001673
Stddev	.0001233	.000029	.0097697	.000391	.000176	.000203	.001996
%RSD	827.0979	36.56022	939.0258	576.1041	53.66228	810.9561	119.2922
#1	-.000086	-.000068	-.008065	.000279	-.000455	.000120	-.000091
#2	.000152	-.000114	.011361	.000008	-.000400	-.000258	-.003915
#3	-.000022	-.000060	-.000174	-.000491	-.000127	.000062	-.001012

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007859	-.001324	.0002209	-.000103	-.100110	.0003653	-.000448
Stddev	.000503	.008320	.0004910	.000240	.005692	.0010320	.000238
%RSD	6.394733	628.2150	222.2676	232.9013	5.685938	282.5545	53.15346
#1	-.007414	.005657	-.000330	-.000358	-.094520	.0010632	-.000403
#2	-.007759	-.010530	.000382	.000120	-.105899	.0008528	-.000236
#3	-.008405	.000900	.000611	-.000071	-.099913	-.000820	-.000705

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.065696	-.004090	-.000394	.0011085	.0005969	-.002653	-.000563
Stddev	.004177	.001000	.000194	.0006397	.0007404	.008049	.000837
%RSD	6.357407	24.44496	49.21028	57.70956	124.0406	303.4376	148.5941
#1	-.062282	-.003122	-.000255	.0004797	.0013951	-.000472	-.000861
#2	-.064453	-.004030	-.000312	.0017586	.0004630	-.011568	.000382
#3	-.070353	-.005119	-.000615	.0010873	-.000067	.004082	-.001210

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167781BL Acquired: 5/6/2025 18:25:47 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.005598	-.002182	-.000247
Stddev	.001789	.001019	.000027
%RSD	31.95123	46.71509	11.00973
#1	-.007651	-.002735	-.000225
#2	-.004765	-.002806	-.000278
#3	-.004378	-.001006	-.000240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3009.334	70695.54	19659.22	2733.629	4644.169
Stddev	26.870	226.14	91.35	3.870	43.513
%RSD	.8928747	.3198855	.4646638	.1415783	.9369317
#1	3018.308	70435.77	19553.78	2731.079	4665.635
#2	3030.568	70848.49	19714.31	2731.725	4672.778
#3	2979.126	70802.36	19709.58	2738.082	4594.094

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167781BS Acquired: 5/6/2025 18:37:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7145607	1.824359	.9028633	1.774616	.7239114	1.781697
Stddev	.0017041	.015568	.0035793	.009944	.0054130	.003765
%RSD	.2384840	.8533394	.3964399	.5603200	.7477400	.2113097
#1	.7125930	1.832413	.9057002	1.768207	.7177064	1.783024
#2	.7155568	1.834250	.8988418	1.769570	.7263631	1.777448
#3	.7155323	1.806414	.9040478	1.786071	.7276647	1.784618

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1751353	.1854610	.1849162	.9171521	.3680903	.1788528
Stddev	.0021125	.0006616	.0007609	.0138851	.0006938	.0007486
%RSD	1.206179	.3567221	.4114992	1.513937	.1884875	.4185549
#1	.1737713	.1861511	.1848235	.9123465	.3673833	.1792543
#2	.1775686	.1848322	.1842059	.9328017	.3681173	.1779892
#3	.1740660	.1853996	.1857192	.9063083	.3687702	.1793151

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2769936	2.679332	.1839043	1.781903	.4513126	.0674958
Stddev	.0011654	.006827	.0012724	.006148	.0015519	.0002672
%RSD	.4207435	.2548012	.6918576	.3450098	.3438668	.3959319
#1	.2756596	2.672531	.1849788	1.774819	.4510259	.0677304
#2	.2775071	2.679281	.1824993	1.785833	.4499240	.0675522
#3	.2778141	2.686184	.1842349	1.785059	.4529879	.0672049

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.906262	.2682266	.1834657	8.347787	.2839001	.3735031
Stddev	.003454	.0015479	.0006023	.031362	.0021101	.0016486
%RSD	.1188477	.5770958	.3283191	.3756923	.7432619	.4413985
#1	2.909104	.2681538	.1833120	8.383684	.2860461	.3723969
#2	2.907264	.2698097	.1841300	8.325695	.2818278	.3727145
#3	2.902418	.2667164	.1829551	8.333983	.2838264	.3753979

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167781BS Acquired: 5/6/2025 18:37:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6440808	.1834705	.7476655	5.538916	F -.015424	.1842976
Stddev	.0026009	.0006662	.0098696	.009861	.006849	.0003759
%RSD	.4038122	.3630888	1.320051	.1780265	44.40741	.2039502
#1	.6430885	.1828954	.7406434	5.530344	-.007866	.1840591
#2	.6421223	.1842004	.7589499	5.536711	-.021221	.1841028
#3	.6470318	.1833155	.7434030	5.549692	-.017185	.1847309

Elem	Sr4077
Units	ppm
Avg	.1801323
Stddev	.0003396
%RSD	.1885338
#1	.1802658
#2	.1803849
#3	.1797462

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2983.783	69878.81	19780.45	2741.027	4572.150
Stddev	7.781	45.54	14.38	7.921	6.012
%RSD	.2607822	.0651640	.0726884	.2889880	.1315021
#1	2990.360	69826.52	19765.16	2740.797	4574.451
#2	2985.795	69900.14	19782.50	2733.224	4576.673
#3	2975.193	69909.77	19793.69	2749.061	4565.327

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167757BL Acquired: 5/6/2025 18:41:15 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000207	-.000292	-.000889	.0004000	.0020380	.0122588	-.001353
Stddev	.002962	.000757	.001607	.0029598	.0014471	.0067414	.000532
%RSD	1428.366	259.6636	180.7538	739.8945	71.00418	54.99217	39.31386
#1	.000373	.000397	-.001076	-.000854	.0004027	.0187843	-.000981
#2	-.003416	-.001103	.000803	-.001726	.0031528	.0126715	-.001963
#3	.002421	-.000170	-.002395	.003780	.0025585	.0053206	-.001117

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000045	-.000033	.0037270	-.000205	-.000526	.0019646	-.000855
Stddev	.000133	.000074	.0118654	.000539	.000569	.0003487	.006417
%RSD	293.2180	223.0451	318.3636	262.7109	108.1931	17.75159	750.4809
#1	.000051	.000045	-.008867	-.000794	-.000720	.0016049	.005926
#2	.000010	-.000102	.005352	.000263	-.000973	.0019877	-.001659
#3	-.000196	-.000042	.014696	-.000084	.000115	.0023012	-.006832

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003699	.0020451	.0005453	-.000410	-.105934	-.001040	.0000830
Stddev	.0000983	.0003721	.0003038	.000229	.008386	.002165	.0002690
%RSD	26.55938	18.19315	55.71352	55.73944	7.916169	208.1337	324.0104
#1	.0002609	.0016525	.0006044	-.000673	-.105573	.001248	-.000189
#2	.0004515	.0023925	.0008153	-.000252	-.114495	-.003056	.000348
#3	.0003975	.0020903	.0002163	-.000307	-.097735	-.001312	.000090

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.076700	-.005036	-.000524	.0002261	-.000292	-.002641	-.001826
Stddev	.022932	.000441	.000147	.0003779	.000475	.010074	.000894
%RSD	29.89784	8.753335	28.01683	167.1378	162.3550	381.5003	48.94113
#1	-.052538	-.004954	-.000574	-.000200	.000057	-.009940	-.002399
#2	-.098163	-.004642	-.000638	.000521	-.000102	.008852	-.002282
#3	-.079400	-.005512	-.000358	.000358	-.000833	-.006833	-.000796

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167757BL Acquired: 5/6/2025 18:41:15 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.005521	-.002479	-.000176
Stddev	.008705	.000494	.000025
%RSD	157.6621	19.90845	14.37465
#1	.004525	-.002955	-.000147
#2	-.010840	-.001970	-.000187
#3	-.010248	-.002513	-.000193

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2937.710	69623.04	19741.74	2747.592	4491.422
Stddev	11.654	215.23	65.60	18.985	14.171
%RSD	.3967058	.3091323	.3322891	.6909749	.3155096
#1	2935.031	69575.41	19815.91	2747.438	4487.450
#2	2950.471	69435.63	19691.33	2728.684	4507.156
#3	2927.629	69858.10	19717.97	2766.653	4479.662

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167757BS Acquired: 5/6/2025 19:01:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7062620	1.764747	.9036602	1.751654	.7209004	1.810287
Stddev	.0049268	.003090	.0042795	.011939	.0068947	.003045
%RSD	.6975886	.1750948	.4735734	.6815811	.9564050	.1681970
#1	.7046172	1.768267	.9068025	1.755444	.7272429	1.808336
#2	.7118008	1.763492	.9053917	1.761238	.7218964	1.813795
#3	.7023680	1.762482	.8987862	1.738280	.7135618	1.808729

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1784588	.1896082	.1846277	.9460245	.3682684	.1791299
Stddev	.0012744	.0006882	.0011858	.0138822	.0015925	.0018683
%RSD	.7141034	.3629368	.6422522	1.467427	.4324290	1.043001
#1	.1769996	.1888146	.1854192	.9336003	.3696739	.1802273
#2	.1793527	.1900405	.1851994	.9434647	.3665388	.1801898
#3	.1790242	.1899694	.1832643	.9610084	.3685925	.1769727

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2761560	2.717794	.1881310	1.800339	.4523358	.0680822
Stddev	.0011148	.014886	.0004930	.001982	.0030763	.0001154
%RSD	.4036845	.5477081	.2620602	.1100673	.6800858	.1695471
#1	.2761525	2.734770	.1886875	1.802434	.4541344	.0681922
#2	.2772725	2.706974	.1879567	1.800089	.4540892	.0679620
#3	.2750429	2.711638	.1877487	1.798494	.4487837	.0680924

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.923796	.2710145	.1855054	8.937386	.2895090	.3744261
Stddev	.023167	.0015265	.0003330	.051988	.0020126	.0022718
%RSD	.7923734	.5632457	.1795162	.5816868	.6951676	.6067466
#1	2.950009	.2710430	.1858881	8.996438	.2874305	.3750591
#2	2.906065	.2725265	.1852816	8.898515	.2896480	.3763143
#3	2.915313	.2694740	.1853466	8.917204	.2914485	.3719049

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: PB167757BS Acquired: 5/6/2025 19:01:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6418136	.1877136	.7515984	5.396154	F -.016013	.1899000
Stddev	.0048404	.0008128	.0125883	.041855	.001151	.0011974
%RSD	.7541709	.4329761	1.674874	.7756433	7.189387	.6305255
#1	.6465508	.1867751	.7660865	5.439156	-.017030	.1895984
#2	.6420137	.1881826	.7433359	5.393757	-.016246	.1912193
#3	.6368763	.1881830	.7453728	5.355550	-.014763	.1888822

Elem	Sr4077
Units	ppm
Avg	.1840312
Stddev	.0005226
%RSD	.2839891
#1	.1834281
#2	.1843140
#3	.1843515

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3030.207	70653.58	19645.79	2786.616	4654.910
Stddev	13.935	194.83	103.25	5.881	23.869
%RSD	.4598835	.2757490	.5255466	.2110287	.5127776
#1	3022.242	70477.95	19731.91	2788.106	4640.782
#2	3022.080	70619.64	19531.33	2791.609	4641.479
#3	3046.297	70863.14	19674.13	2780.134	4682.469

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-01 Acquired: 5/6/2025 19:05:14 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000416	-.002807	.0282517	-.006137	.0033805	1.631913
Stddev	.001297	.001365	.0007415	.004711	.0012639	.002766
%RSD	311.6047	48.60503	2.624673	76.76732	37.38952	.1695132
#1	-.001014	-.003121	.0277131	-.001775	.0047170	1.634651
#2	.001072	-.003988	.0279445	-.011134	.0032200	1.629119
#3	-.001307	-.001313	.0290974	-.005503	.0022044	1.631968

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0831578	.0002367	-.001215	175.7292	.0086939	.0056778
Stddev	.0002700	.0000082	.000123	.2329	.0008420	.0003153
%RSD	.3246527	3.477286	10.11783	.1325337	9.684823	5.553919
#1	.0829708	.0002358	-.001312	175.4606	.0079521	.0057661
#2	.0830353	.0002454	-.001077	175.8753	.0096091	.0053277
#3	.0834673	.0002290	-.001255	175.8517	.0085203	.0059396

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0103260	25.01607	.7859477	13.16843	.0160650	.0003299
Stddev	.0005887	.01230	.0026016	.03648	.0003304	.0001135
%RSD	5.700729	.0491627	.3310099	.2770505	2.056644	34.41195
#1	.0101914	25.02815	.7831801	13.13229	.0157550	.0003346
#2	.0109703	25.00357	.7883431	13.20525	.0160275	.0002141
#3	.0098163	25.01651	.7863198	13.16774	.0164126	.0004410

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	121.6358	.0062402	.2961606	27.56393	.1745118	.0039387
Stddev	.2626	.0010942	.0014788	.10710	.0012155	.0000885
%RSD	.2158873	17.53487	.4993097	.3885656	.6965378	2.246577
#1	121.3550	.0075037	.2973211	27.46994	.1759152	.0039038
#2	121.8753	.0056123	.2966652	27.68053	.1737867	.0038730
#3	121.6770	.0056046	.2944956	27.54132	.1738337	.0040393

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-01 Acquired: 5/6/2025 19:05:14 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.005753	.0786326	F 14.24095	4.464377	8.976906	.0060530
Stddev	.001432	.0019938	.05379	.019142	.020325	.0007010
%RSD	24.89110	2.535581	.3776967	.4287703	.2264116	11.58059
#1	-.004113	.0780890	14.18375	4.473897	8.954894	.0061772
#2	-.006388	.0808418	14.24860	4.476893	8.994963	.0066837
#3	-.006758	.0769670	14.29050	4.442342	8.980860	.0052983

Elem	Sr4077
Units	ppm
Avg	.6015976
Stddev	.0009712
%RSD	.1614402
#1	.6007501
#2	.6026575
#3	.6013853

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2806.217	66462.15	20021.51	2568.664	4197.290
Stddev	9.713	147.36	37.01	10.176	5.695
%RSD	.3461330	.2217243	.1848643	.3961521	.1356864
#1	2808.465	66342.92	19981.72	2558.097	4196.870
#2	2814.610	66416.62	20027.90	2569.496	4203.184
#3	2795.577	66626.90	20054.91	2578.397	4191.817

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV04 Acquired: 5/6/2025 19:16:17 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.836973	4.763162	4.970993	4.818677	4.838178	9.964208	9.930117
Stddev	.014323	.050348	.006359	.012335	.010324	.005231	.225839
%RSD	.2961232	1.057038	.1279244	.2559791	.2133787	.0524939	2.274278
#1	4.820653	4.802926	4.963735	4.814722	4.826727	9.959179	10.02797
#2	4.842811	4.706550	4.973657	4.808804	4.846772	9.963826	10.09053
#3	4.847456	4.780009	4.975587	4.832504	4.841036	9.969619	9.67185

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2644265	2.473783	24.97130	.9877670	2.466080	1.241523	4.818020
Stddev	.0011750	.003953	.06258	.0032763	.004766	.001970	.018869
%RSD	.4443429	.1597777	.2506204	.3316875	.1932819	.1586661	.3916406
#1	.2648221	2.469219	24.90240	.9913137	2.460755	1.240645	4.802654
#2	.2631049	2.476064	24.98688	.9848535	2.467537	1.240144	4.839080
#3	.2653527	2.476066	25.02462	.9871338	2.469948	1.243779	4.812325

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.531272	24.92679	2.468060	1.239564	23.50814	2.468732	2.493117
Stddev	.002900	.06837	.008564	.000848	.10055	.009452	.006956
%RSD	.1145519	.2742741	.3469796	.0684288	.4277140	.3828589	.2790155
#1	2.530392	24.88037	2.458325	1.240336	23.44156	2.458403	2.486252
#2	2.528915	24.89470	2.471425	1.238656	23.62381	2.470846	2.492937
#3	2.534510	25.00530	2.474429	1.239700	23.45907	2.476948	2.500161

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.56928	5.308110	4.922441	4.910876	5.001118	4.691508	4.833400
Stddev	.08188	.017666	.007137	.007771	.007095	.022019	.021407
%RSD	.3474133	.3328191	.1449857	.1582423	.1418746	.4693464	.4429053
#1	23.47763	5.312368	4.922113	4.909766	4.992970	4.666220	4.818058
#2	23.63522	5.288704	4.915474	4.903720	5.004452	4.706441	4.824286
#3	23.59499	5.323259	4.929736	4.919143	5.005932	4.701863	4.857857

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV04 Acquired: 5/6/2025 19:16:17 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.817530	5.066548	5.022970
Stddev	.018192	.008499	.025928
%RSD	.3776208	.1677376	.5161864
#1	4.799036	5.059420	5.009010
#2	4.818149	5.064271	5.007013
#3	4.835404	5.075953	5.052887

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3007.570	70129.27	19202.23	2756.068	4464.557
Stddev	5.590	28.57	80.10	16.851	3.171
%RSD	.1858652	.0407441	.4171289	.6114218	.0710292
#1	3001.375	70114.35	19187.95	2771.396	4461.308
#2	3012.237	70162.22	19288.51	2758.785	4464.718
#3	3009.097	70111.25	19130.23	2738.024	4467.644

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB04 Acquired: 5/6/2025 19:20:31 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.001197	.0001767	-.000763	-.001033	.0001910	.0167219	.0007395
Stddev	.001351	.0007612	.001617	.001837	.0008781	.0043781	.0011220
%RSD	112.8730	430.7234	211.8889	177.8158	459.7055	26.18192	151.7277
#1	-.002514	-.000605	-.002379	-.003105	-.000555	.0144406	.0001849
#2	-.001261	.000220	-.000766	-.000391	-.000031	.0139557	.0020308
#3	.000185	.000915	.000856	.000397	.001159	.0217696	.0000028

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000298	.0002561	.0024472	.0000252	.0001521	.0001624	.0183348
Stddev	.0000248	.0000341	.0026525	.0003461	.0001001	.0005103	.0027664
%RSD	83.16663	13.32882	108.3886	1372.283	65.86713	314.2195	15.08823
#1	.0000021	.0002542	.0054711	-.000200	.0002260	.0006356	.0158670
#2	.0000373	.0002229	.0013566	.000424	.0000381	.0002300	.0178121
#3	.0000500	.0002911	.0005139	-.000148	.0001921	-.000378	.0213253

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006203	-.005450	.0003740	.0000085	-.114566	.0012253	.0008139
Stddev	.000167	.004748	.0002620	.0001195	.005793	.0011779	.0002541
%RSD	2.689148	87.11292	70.07006	1403.162	5.056502	96.13508	31.22165
#1	-.006199	-.007861	.0000872	-.000123	-.115210	.0003077	.0007560
#2	-.006038	-.008508	.0006010	.000037	-.120010	.0008146	.0010919
#3	-.006372	.000019	.0004337	.000111	-.108478	.0025536	.0005937

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.081217	.0059099	.0007042	.0010746	.0004944	-.000086	.0019204
Stddev	.023585	.0004183	.0002529	.0000302	.0007313	.004965	.0015498
%RSD	29.03973	7.078356	35.90898	2.811249	147.8971	5746.439	80.70033
#1	-.084957	.0060644	.0009791	.0010442	-.000268	-.003899	.0019272
#2	-.102709	.0062289	.0006518	.0010749	.001190	.005528	.0034668
#3	-.055985	.0054363	.0004816	.0011046	.000562	-.001889	.0003673

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB04 Acquired: 5/6/2025 19:20:31 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000219	-.000808	.0004435
Stddev	.003959	.000884	.0000169
%RSD	1805.617	109.3956	3.805010
#1	-.002470	-.001813	.0004324
#2	.004353	-.000151	.0004629
#3	-.002541	-.000460	.0004351

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3115.466	73153.86	20220.96	2844.327	4837.787
Stddev	36.062	133.97	80.17	4.827	58.254
%RSD	1.157504	.1831336	.3964528	.1697176	1.204143
#1	3130.951	73301.45	20310.49	2847.677	4864.115
#2	3141.198	73120.23	20155.83	2838.794	4878.229
#3	3074.248	73039.92	20196.55	2846.510	4771.017

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04 Acquired: 5/6/2025 19:24:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.001887	-.003351	.0278145	-.002813	.0035868	1.435629	.0816518
Stddev	.000525	.002369	.0026429	.005127	.0005781	.008213	.0004644
%RSD	27.82768	70.68790	9.501771	182.2467	16.11681	.5721113	.5687235
#1	-.002490	-.005766	.0252703	-.008391	.0037561	1.444397	.0817667
#2	-.001529	-.001031	.0305460	-.001739	.0040614	1.434378	.0811407
#3	-.001642	-.003257	.0276272	.001692	.0029430	1.428114	.0820479

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002581	-.000971	176.4505	.0080023	.0053986	.0061384	24.21751
Stddev	.0000705	.000104	.2527	.0004300	.0001752	.0004422	.08231
%RSD	27.33430	10.67008	.1432227	5.373626	3.244339	7.204257	.3398666
#1	.0002690	-.000897	176.2062	.0084615	.0054907	.0057214	24.14199
#2	.0001827	-.000926	176.7108	.0076091	.0051966	.0060915	24.30524
#3	.0003225	-.001089	176.4345	.0079364	.0055085	.0066022	24.20531

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7966603	13.17381	.0159139	.0000361	119.0904	.0065019	.2973705
Stddev	.0035221	.06367	.0001345	.0003403	.4125	.0007560	.0013193
%RSD	.4421149	.4833257	.8449138	942.3419	.3463516	11.62776	.4436530
#1	.7977099	13.11141	.0157591	.0002867	118.8882	.0056327	.2987616
#2	.7995384	13.17136	.0160021	.0001729	119.5650	.0070061	.2972127
#3	.7927327	13.23868	.0159804	-.000351	118.8181	.0068671	.2961373

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.98080	.1814603	.0034464	-.005524	.0615693	13.19398	4.305499
Stddev	.19330	.0014758	.0007042	.000318	.0007293	.04170	.010133
%RSD	.7164480	.8133051	20.43166	5.747626	1.184589	.3160891	.2353475
#1	26.87393	.1808956	.0041484	-.005886	.0622996	13.16915	4.308459
#2	27.20394	.1831351	.0034508	-.005290	.0608409	13.24212	4.294215
#3	26.86453	.1803502	.0027401	-.005398	.0615674	13.17065	4.313821

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04 Acquired: 5/6/2025 19:24:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	9.049172	.0061679	.6108559
Stddev	.011650	.0017179	.0015898
%RSD	.1287415	27.85156	.2602588
#1	9.037727	.0048937	.6110165
#2	9.048771	.0054885	.6123593
#3	9.061017	.0081216	.6091919

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2843.638	68025.47	19735.86	2587.857	4246.486
Stddev	6.548	167.53	17.47	5.569	5.690
%RSD	.2302768	.2462737	.0885174	.2151930	.1339951
#1	2849.242	68117.96	19755.61	2587.660	4252.484
#2	2845.232	67832.08	19722.43	2582.389	4245.809
#3	2836.440	68126.36	19729.55	2593.521	4241.164

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04DUP Acquired: 5/6/2025 19:29:02 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000006	-.003126	.0265433	-.010399	.0026379	1.525150
Stddev	.001715	.001484	.0004846	.002764	.0012990	.007720
%RSD	28738.60	47.47038	1.825616	26.58495	49.24306	.5061556
#1	.000011	-.003399	.0267353	-.012275	.0015409	1.516275
#2	.001701	-.004455	.0259922	-.011697	.0023004	1.528871
#3	-.001730	-.001525	.0269025	-.007224	.0040722	1.530304

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0808065	.0002298	-.001169	174.8842	.0087008	.0055603
Stddev	.0003147	.0000186	.000114	.2981	.0000804	.0003877
%RSD	.3894471	8.081731	9.776487	.1704466	.9240695	6.972508
#1	.0804841	.0002119	-.001224	174.7555	.0086197	.0054019
#2	.0811128	.0002490	-.001245	174.6720	.0087805	.0052768
#3	.0808225	.0002286	-.001037	175.2250	.0087023	.0060021

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084413	24.78756	.7730581	13.10420	.0160511	.0000832
Stddev	.0000453	.11275	.0013276	.03504	.0003157	.0000334
%RSD	.5364398	.4548604	.1717346	.2674301	1.966537	40.11284
#1	.0084818	24.91556	.7727873	13.10418	.0164015	.0000459
#2	.0083924	24.74419	.7718867	13.06917	.0157890	.0001102
#3	.0084498	24.70294	.7745002	13.13926	.0159628	.0000934

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	123.1569	.0051728	.2974341	27.63958	.1767226	.0038475
Stddev	.4576	.0004606	.0012049	.13283	.0006620	.0006369
%RSD	.3715361	8.903777	.4051133	.4805757	.3746272	16.55247
#1	123.6593	.0052214	.2987559	27.76385	.1766624	.0045522
#2	123.0476	.0046899	.2971494	27.65529	.1760926	.0033132
#3	122.7639	.0056072	.2963970	27.49959	.1774126	.0036769

Sample Name: Q1949-04DUP Acquired: 5/6/2025 19:29:02 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.005047	.0664801	F 14.01881	4.346665	9.005744	.0068185
Stddev	.001254	.0009964	.04233	.036067	.034131	.0004011
%RSD	24.84798	1.498829	.3019454	.8297552	.3789953	5.882434
#1	-.005425	.0661958	14.05725	4.384877	9.043338	.0071506
#2	-.006068	.0656567	14.02574	4.341900	8.997191	.0069319
#3	-.003647	.0675878	13.97345	4.313217	8.976702	.0063729

Elem	Sr4077
Units	ppm
Avg	.6003377
Stddev	.0017447
%RSD	.2906157
#1	.5992683
#2	.5993937
#3	.6023509

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2832.413	67543.97	20586.83	2548.020	4261.104
Stddev	17.230	173.87	75.89	5.191	20.343
%RSD	.6083030	.2574114	.3686260	.2037123	.4774181
#1	2813.436	67343.28	20611.61	2542.945	4237.753
#2	2836.728	67639.76	20647.23	2553.319	4270.570
#3	2847.075	67648.88	20501.65	2547.795	4274.990

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04LX5 Acquired: 5/6/2025 19:33:11 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000476	-.002022	.0045176	-.001517	.0000351	.3605940	.0162917
Stddev	.003526	.001128	.0004500	.003305	.0010153	.0123012	.0003728
%RSD	740.2579	55.80722	9.960454	217.8253	2894.658	3.411377	2.288457
#1	.003305	-.000801	.0049253	.002290	-.001118	.3676183	.0158614
#2	-.003674	-.002239	.0045928	-.003641	.000793	.3677736	.0165184
#3	-.001061	-.003026	.0040348	-.003201	.000430	.3463900	.0164952

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000490	-.000262	34.26744	.0011367	.0008733	.0014384	4.566882
Stddev	.0000489	.000042	.10393	.0001793	.0000313	.0002426	.031102
%RSD	99.95541	16.16210	.3032876	15.77303	3.587798	16.86418	.6810320
#1	.0000194	-.000302	34.31812	.0009861	.0008384	.0011583	4.565680
#2	.0001055	-.000217	34.33631	.0013351	.0008990	.0015765	4.598567
#3	.0000220	-.000267	34.14789	.0010890	.0008826	.0015805	4.536398

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1550499	2.645878	.0034322	-.000100	21.55260	.0013515	.0572840
Stddev	.0004713	.011197	.0000875	.000308	.03386	.0001853	.0005093
%RSD	.3039391	.4231838	2.548744	307.9611	.1570971	13.71027	.8891590
#1	.1555897	2.634597	.0035037	-.000433	21.53687	.0014577	.0567650
#2	.1548398	2.656989	.0033347	-.000041	21.59147	.0014592	.0573041
#3	.1547203	2.646048	.0034583	.000175	21.52948	.0011375	.0577831

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.709560	.0344243	.0004181	-.002126	.0254749	2.733643	.7962440
Stddev	.013677	.0008123	.0001735	.000500	.0007934	.029888	.0081323
%RSD	.2904098	2.359684	41.50155	23.53483	3.114358	1.093333	1.021330
#1	4.693795	.0352688	.0006111	-.001762	.0252080	2.723139	.8002499
#2	4.716633	.0343556	.0003681	-.001919	.0248494	2.767365	.7868859
#3	4.718253	.0336486	.0002750	-.002696	.0263673	2.710425	.8015962

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04LX5 Acquired: 5/6/2025 19:33:11 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	1.690072	.0004267	.1135747
Stddev	.013028	.0012560	.0005517
%RSD	.7708698	294.3237	.4857668
#1	1.700140	-.000861	.1141869
#2	1.675358	.000492	.1134212
#3	1.694719	.001649	.1131160

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3029.110	69177.40	19200.68	2674.058	4633.292
Stddev	15.942	122.60	53.54	4.999	25.822
%RSD	.5262855	.1772231	.2788258	.1869285	.5573234
#1	3012.353	69273.67	19138.96	2676.201	4608.731
#2	3044.087	69039.38	19234.64	2668.345	4660.214
#3	3030.889	69219.15	19228.43	2677.627	4630.932

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04MS Acquired: 5/6/2025 19:37:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7857192	1.795145	.9615683	1.519780	.7882360	3.596429
Stddev	.0042155	.010876	.0053379	.007131	.0046892	.042543
%RSD	.5365117	.6058514	.5551219	.4692298	.5948931	1.182919
#1	.7847210	1.806894	.9631425	1.524736	.7830742	3.599575
#2	.7820924	1.793112	.9556204	1.522997	.7922329	3.552401
#3	.7903442	1.785429	.9659421	1.511607	.7894010	3.637312

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2690113	.1903779	.1931182	175.2313	.3940545	.1966444
Stddev	.0026269	.0016970	.0004497	1.7148	.0013087	.0006171
%RSD	.9765008	.8913649	.2328662	.9785792	.3321125	.3138261
#1	.2692844	.1900936	.1932358	175.1187	.3934627	.1961787
#2	.2662585	.1888411	.1926214	173.5756	.3955546	.1964101
#3	.2714910	.1921991	.1934974	176.9996	.3931463	.1973443

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2950141	27.80271	.9671513	14.85089	.4907211	.0576365
Stddev	.0002904	.10087	.0104197	.12252	.0014617	.0001657
%RSD	.0984265	.3628142	1.077356	.8249732	.2978584	.2875736
#1	.2953341	27.69540	.9659082	14.86554	.4922073	.0574453
#2	.2947674	27.81713	.9574090	14.72171	.4892853	.0577400
#3	.2949408	27.89559	.9781368	14.96542	.4906707	.0577242

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	124.5538	.2893134	.4934828	37.79462	.4562070	.4172941
Stddev	.5429	.0040016	.0008421	.08726	.0038015	.0010524
%RSD	.4358642	1.383147	.1706483	.2308882	.8332751	.2521847
#1	124.0132	.2905554	.4930941	37.71974	.4545032	.4174491
#2	124.5492	.2848380	.4929052	37.77368	.4535556	.4161729
#3	125.0990	.2925467	.4944491	37.89045	.4605624	.4182604

Sample Name: Q1949-04MS Acquired: 5/6/2025 19:37:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6247166	.2719673	F 15.08351	10.22585	9.128109	.2122403
Stddev	.0009340	.0033695	.06454	.02189	.022511	.0021107
%RSD	.1495045	1.238940	.4278563	.2140628	.2466158	.9945072
#1	.6239507	.2711790	15.01131	10.22883	9.139834	.2109552
#2	.6244420	.2690618	15.13558	10.20263	9.102155	.2110893
#3	.6257571	.2756611	15.10363	10.24611	9.142337	.2146763

Elem	Sr4077
Units	ppm
Avg	.8006092
Stddev	.0092845
%RSD	1.159684
#1	.7990351
#2	.7922124
#3	.8105802

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2825.141	67400.51	20389.53	2583.162	4204.886
Stddev	4.075	79.28	200.37	8.532	5.757
%RSD	.1442399	.1176319	.9827064	.3302993	.1369225
#1	2826.521	67413.96	20344.61	2579.515	4205.296
#2	2828.347	67472.21	20608.55	2592.911	4210.428
#3	2820.555	67315.36	20215.44	2577.059	4198.935

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04MSD Acquired: 5/6/2025 19:41:30 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.8057845	1.843828	.9855684	1.487704	.7982821	3.728535
Stddev	.0061166	.022148	.0055292	.008521	.0036816	.008556
%RSD	.7590816	1.201216	.5610139	.5727309	.4611964	.2294616
#1	.8069628	1.820629	.9806417	1.478399	.7946723	3.734137
#2	.7991645	1.846104	.9845151	1.489591	.7981424	3.718687
#3	.8112262	1.864750	.9915485	1.495123	.8020316	3.732780

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2772321	.1915935	.1978993	178.6116	.4008252	.2007553
Stddev	.0014117	.0007151	.0006603	.6242	.0006558	.0004724
%RSD	.5092197	.3732191	.3336466	.3494459	.1636144	.2353077
#1	.2756557	.1907707	.1972690	177.9097	.4000832	.2007111
#2	.2783797	.1920643	.1978430	178.8211	.4013274	.2003066
#3	.2776608	.1919457	.1985859	179.1041	.4010648	.2012483

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3028397	28.64379	1.010895	15.06109	.5039965	.0563189
Stddev	.0017124	.14794	.004369	.06060	.0023991	.0002910
%RSD	.5654523	.5164771	.4322117	.4023926	.4760074	.5166260
#1	.3008625	28.50890	1.008633	14.99201	.5025872	.0559888
#2	.3038475	28.62047	1.008120	15.10532	.5026358	.0564301
#3	.3038091	28.80200	1.015931	15.08595	.5067666	.0565379

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	127.4182	.2916317	.5043479	38.86814	.4612587	.4226075
Stddev	.0983	.0010549	.0016483	.01501	.0042071	.0011712
%RSD	.0771427	.3617148	.3268093	.0386187	.9120965	.2771440
#1	127.5314	.2918669	.5024451	38.86105	.4587395	.4212622
#2	127.3542	.2904791	.5053342	38.85800	.4661155	.4231604
#3	127.3691	.2925491	.5052645	38.88538	.4589210	.4234000

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04MSD Acquired: 5/6/2025 19:41:30 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6423258	.2805208	F 15.50660	10.66206	9.491405	.2158167
Stddev	.0027201	.0022873	.02495	.06244	.041008	.0008854
%RSD	.4234804	.8153789	.1609121	.5856310	.4320524	.4102312
#1	.6396390	.2794343	15.49662	10.60059	9.444055	.2148092
#2	.6422604	.2831489	15.48819	10.66015	9.514749	.2164707
#3	.6450780	.2789792	15.53500	10.72543	9.515411	.2161701

Elem	Sr4077
Units	ppm
Avg	.8239912
Stddev	.0009896
%RSD	.1200942
#1	.8241308
#2	.8249035
#3	.8229392

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2796.999	67146.37	20439.08	2569.154	4133.065
Stddev	6.652	194.96	47.02	11.199	5.409
%RSD	.2378153	.2903486	.2300282	.4358882	.1308706
#1	2804.353	67272.31	20493.15	2570.742	4138.389
#2	2791.402	67244.99	20416.21	2579.473	4133.232
#3	2795.242	66921.81	20407.87	2557.246	4127.575

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04A Acquired: 5/6/2025 19:45:31 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.7347607	1.702742	.9088260	1.749157	.7339047	3.710267
Stddev	.0088329	.004913	.0023687	.002521	.0039390	.004359
%RSD	1.202143	.2885148	.2606372	.1441522	.5367146	.1174725
#1	.7248634	1.698056	.9084895	1.746628	.7301848	3.715291
#2	.7375760	1.707853	.9066435	1.751671	.7380312	3.707504
#3	.7418429	1.702318	.9113450	1.749171	.7334981	3.708005

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2568312	.1893955	.1824348	174.6813	.3745587	.1850267
Stddev	.0009983	.0004802	.0002361	.2725	.0009596	.0005393
%RSD	.3886897	.2535269	.1294209	.1560269	.2561941	.2914875
#1	.2570558	.1892794	.1827049	174.7813	.3740068	.1852444
#2	.2576979	.1899231	.1822676	174.8898	.3740025	.1854232
#3	.2557397	.1889840	.1823320	174.3729	.3756667	.1844126

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2769256	26.27303	.9539760	14.90054	.4624825	.0603927
Stddev	.0002661	.03851	.0024408	.07781	.0018331	.0001501
%RSD	.0960748	.1465860	.2558598	.5221780	.3963683	.2485131
#1	.2770445	26.29509	.9549482	14.92903	.4642333	.0604534
#2	.2771115	26.29545	.9557810	14.96009	.4626373	.0605028
#3	.2766208	26.22856	.9511989	14.81250	.4605768	.0602217

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	119.0815	.2725295	.4819311	35.59019	.4537196	.3898536
Stddev	.0909	.0024920	.0035184	.04449	.0002281	.0004219
%RSD	.0762948	.9143855	.7300536	.1250080	.0502729	.1082306
#1	119.0256	.2710158	.4851424	35.63928	.4534564	.3903164
#2	119.1863	.2711672	.4781704	35.57878	.4538446	.3894904
#3	119.0325	.2754057	.4824807	35.55252	.4538580	.3897539

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1949-04A Acquired: 5/6/2025 19:45:31 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.6400020	.3128807	F 15.25432	9.863094	8.898644	.2036752
Stddev	.0016543	.0062574	.03933	.004229	.015127	.0007846
%RSD	.2584849	1.999939	.2578193	.0428722	.1699871	.3852267
#1	.6417700	.3131695	15.27447	9.864303	8.885121	.2036212
#2	.6384916	.3064838	15.27950	9.858393	8.895830	.2044854
#3	.6397443	.3189887	15.20900	9.866587	8.914979	.2029190

Elem	Sr4077
Units	ppm
Avg	.7840030
Stddev	.0017299
%RSD	.2206524
#1	.7854487
#2	.7844739
#3	.7820864

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2843.233	67208.04	19286.27	2557.381	4230.417
Stddev	4.320	91.81	46.63	13.740	17.298
%RSD	.1519373	.1366044	.2417749	.5372745	.4089065
#1	2839.923	67129.55	19239.58	2547.564	4213.257
#2	2841.656	67185.57	19286.41	2573.084	4230.145
#3	2848.119	67309.00	19332.83	2551.496	4247.851

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1939-05 Acquired: 5/6/2025 19:49:31 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	25.73634	.0455993	81.39450	-.121693	.7886885	72.88469
Stddev	.10273	.0013211	.51412	.007558	.0069608	.02270
%RSD	.3991478	2.897254	.6316410	6.210534	.8825795	.0311479
#1	25.80471	.0447036	81.72033	-.130052	.7957580	72.85887
#2	25.61821	.0471166	80.80182	-.115341	.7818417	72.90154
#3	25.78610	.0449777	81.66135	-.119687	.7884659	72.89365

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.698853	.0150637	.0928965	71.50682	1.230908	.1292223
Stddev	.002662	.0001912	.0017518	.09609	.009849	.0012330
%RSD	.1566786	1.269288	1.885752	.1343764	.8001647	.9541638
#1	1.696155	.0152206	.0938707	71.44223	1.230262	.1300822
#2	1.698927	.0151197	.0908742	71.61724	1.241065	.1278097
#3	1.701477	.0148507	.0939447	71.46099	1.221398	.1297751

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.566313	601.5511	3.827914	23.58876	.3262672	.0064994
Stddev	.018613	2.1742	.008237	.00745	.0028601	.0005539
%RSD	.7252675	.3614286	.2151919	.0315993	.8766022	8.521593
#1	2.579137	600.3400	3.825353	23.58150	.3282395	.0067171
#2	2.544965	604.0611	3.837128	23.58839	.3229870	.0058697
#3	2.574837	600.2521	3.821262	23.59639	.3275750	.0069113

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8191961	.2890014	F 20.54955	8.550537	1.823527	.2592391
Stddev	.0050404	.0016515	.06295	.053314	.006443	.0013240
%RSD	.6152863	.5714494	.3063215	.6235178	.3532991	.5107414
#1	.8190406	.2871970	20.51290	8.489365	1.816616	.2602217
#2	.8142352	.2904378	20.62224	8.587112	1.829367	.2577334
#3	.8243125	.2893696	20.51352	8.575134	1.824597	.2597621

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1939-05 Acquired: 5/6/2025 19:49:31 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	F 51.50937	2.003358	9.256571	9.603655	7.014576	.3769758
Stddev	.36179	.001663	.040832	.050343	.051598	.0010979
%RSD	.7023736	.0830175	.4411121	.5242064	.7355798	.2912430
#1	51.79079	2.003825	9.216982	9.634276	7.037965	.3758615
#2	51.10128	2.004739	9.298541	9.545552	6.955425	.3780566
#3	51.63604	2.001512	9.254191	9.631136	7.050337	.3770092

Elem	Sr4077
Units	ppm
Avg	.1305666
Stddev	.0023981
%RSD	1.836707
#1	.1307629
#2	.1280763
#3	.1328605

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2970.891	70955.59	19274.85	2711.050	4196.366
Stddev	7.853	395.55	145.31	10.999	15.276
%RSD	.2643385	.5574673	.7538767	.4057054	.3640339
#1	2968.101	71052.74	19167.63	2715.756	4190.516
#2	2979.759	70520.51	19216.70	2698.481	4213.703
#3	2964.814	71293.51	19440.23	2718.913	4184.880

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1935-01 Acquired: 5/6/2025 19:53:38 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0458970	.0140451	.1710174	-.051363	-.006362	147.9736	.8421164
Stddev	.0041590	.0034663	.0010095	.004336	.000818	.0572	.0008324
%RSD	9.061570	24.67948	.5903101	8.441791	12.84994	.0386411	.0988488
#1	.0410974	.0141247	.1702431	-.047047	-.006355	147.9434	.8426702
#2	.0484393	.0174709	.1706499	-.055718	-.005548	148.0396	.8425199
#3	.0481542	.0105398	.1721592	-.051325	-.007183	147.9379	.8411591

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0123103	-.007206	13.54241	.2382587	.1231718	.0281797	277.3599
Stddev	.0000296	.001060	.06596	.0053376	.0008601	.0050612	4.9912
%RSD	.2404095	14.71666	.4870646	2.240254	.6983152	17.96039	1.799534
#1	.0122932	-.006758	13.46908	.2347931	.1221823	.0313553	274.5249
#2	.0122931	-.006442	13.59691	.2355777	.1237406	.0308406	274.4318
#3	.0123444	-.008417	13.56124	.2444054	.1235925	.0223431	283.1230

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.272197	46.88943	.2384122	-.001285	14.58244	.3346261	.5530499
Stddev	.008694	.19412	.0002894	.000426	.27276	.0019250	.0112120
%RSD	.2035024	.4139947	.1214049	33.18412	1.870475	.5752607	2.027297
#1	4.271760	46.70235	.2387123	-.001190	14.45314	.3360203	.5459259
#2	4.281101	47.08989	.2381347	-.000913	14.39837	.3324298	.5472500
#3	4.263729	46.87605	.2383897	-.001750	14.89580	.3354283	.5659737

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.59311	.8950749	.0034620	.0034152	3.582017	4.704420	3.886428
Stddev	.23706	.0194902	.0000850	.0005363	.003210	.095373	.005119
%RSD	1.882470	2.177493	2.456070	15.70193	.0896162	2.027301	.1317075
#1	12.41488	.8839946	.0033703	.0036028	3.578640	4.645450	3.886062
#2	12.50229	.8836507	.0034775	.0038324	3.585028	4.653357	3.881502
#3	12.86215	.9175794	.0035383	.0028103	3.582384	4.814452	3.891719

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1935-01 Acquired: 5/6/2025 19:53:38 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	1.355556	.3717756	-.154125
Stddev	.005108	.0018443	.004790
%RSD	.3768267	.4960862	3.108036
#1	1.356570	.3708026	-.151418
#2	1.350017	.3706215	-.151302
#3	1.360081	.3739027	-.159656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3245.635	74469.28	21231.22	2885.407	4365.856
Stddev	5.743	1255.00	110.42	48.493	3.704
%RSD	.1769335	1.685264	.5200905	1.680617	.0848427
#1	3240.889	75433.75	21304.05	2924.402	4363.433
#2	3243.998	74923.72	21104.17	2900.710	4364.015
#3	3252.019	73050.36	21285.43	2831.109	4370.120

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1935-05 Acquired: 5/6/2025 19:57:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0464866	.0144277	.2015265	-.054776	-.008051	150.4677	1.338666
Stddev	.0012736	.0026977	.0035708	.003716	.001300	1.0037	.012647
%RSD	2.739717	18.69807	1.771875	6.783803	16.14394	.6670227	.9447381
#1	.0459721	.0137992	.2014906	-.054584	-.007677	150.8773	1.348764
#2	.0479369	.0173842	.1979737	-.058585	-.006980	151.2019	1.342751
#3	.0455506	.0120997	.2051151	-.051160	-.009498	149.3241	1.324481

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0139774	-.004927	20.68344	.2676341	.1620390	.0006731	324.3940
Stddev	.0001728	.000878	.14863	.0011619	.0017786	.0053875	1.6542
%RSD	1.236429	17.82900	.7185781	.4341318	1.097603	800.4461	.5099395
#1	.0140147	-.005566	20.74323	.2676069	.1619371	-.002304	325.8217
#2	.0141286	-.005290	20.79285	.2688094	.1603136	-.002569	324.7790
#3	.0137890	-.003925	20.51423	.2664861	.1638663	.006892	322.5812

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.931836	66.78076	.3264977	-.000422	6.446489	.3659384	.6935484
Stddev	.070259	.62828	.0040235	.000482	.034459	.0018155	.0038675
%RSD	1.013564	.9408167	1.232314	114.2611	.5345359	.4961123	.5576330
#1	6.970670	66.93510	.3247710	.000133	6.466595	.3662421	.6894039
#2	6.974106	67.31750	.3236258	-.000739	6.466172	.3675829	.6970610
#3	6.850733	66.08969	.3310964	-.000661	6.406700	.3639903	.6941804

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.93957	1.079560	.0034203	.0041208	4.200005	3.584433	5.737973
Stddev	.04887	.005340	.0003783	.0008127	.030939	.014945	.076797
%RSD	.2724407	.4946498	11.06043	19.72261	.7366466	.4169306	1.338404
#1	17.96996	1.084745	.0037511	.0033995	4.215070	3.598918	5.716579
#2	17.96556	1.079858	.0030078	.0039616	4.220527	3.585314	5.674141
#3	17.88319	1.074077	.0035019	.0050014	4.164419	3.569068	5.823199

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1935-05 Acquired: 5/6/2025 19:57:45 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.5416197	.4914185	-.152152
Stddev	.0131314	.0030091	.000513
%RSD	2.424472	.6123239	.3374309
#1	.5340164	.4930621	-.152738
#2	.5340601	.4932478	-.151942
#3	.5567825	.4879456	-.151778

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3519.291	81475.56	23810.62	3170.695	4353.099
Stddev	21.536	209.37	173.52	12.207	32.145
%RSD	.6119309	.2569701	.7287445	.3849881	.7384420
#1	3527.115	81442.29	23806.15	3171.056	4359.680
#2	3535.821	81284.82	23639.37	3158.312	4381.445
#3	3494.937	81699.57	23986.33	3182.717	4318.173

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV05 Acquired: 5/6/2025 20:01:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.776340	4.796180	4.901751	4.733610	4.797312	10.02356	9.943199
Stddev	.014208	.056652	.010546	.030109	.017127	.00525	.051384
%RSD	.2974642	1.181194	.2151387	.6360631	.3570164	.0524241	.5167779
#1	4.768813	4.838403	4.890862	4.728811	4.789194	10.01899	9.989723
#2	4.767479	4.731797	4.902475	4.706189	4.785753	10.02238	9.888047
#3	4.792728	4.818340	4.911915	4.765830	4.816989	10.02930	9.951827

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2598096	2.464554	25.00902	.9945944	2.453936	1.230445	4.860014
Stddev	.0011139	.002187	.06480	.0037903	.004933	.004606	.027566
%RSD	.4287255	.0887307	.2590874	.3810914	.2010380	.3743627	.5672089
#1	.2610492	2.464247	25.07238	.9980533	2.449359	1.228915	4.885031
#2	.2594870	2.462538	24.94288	.9951872	2.453288	1.226799	4.830461
#3	.2588927	2.466879	25.01180	.9905426	2.459162	1.235622	4.864549

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.516043	25.03539	2.451961	1.233216	23.70435	2.466880	2.482301
Stddev	.011148	.05207	.004402	.003222	.02572	.005338	.016139
%RSD	.4430953	.2080050	.1795280	.2612802	.1085236	.2163678	.6501659
#1	2.527888	25.09280	2.448712	1.235507	23.69595	2.472658	2.497203
#2	2.505755	24.99120	2.450201	1.234609	23.68387	2.462133	2.484541
#3	2.514486	25.02218	2.456971	1.229532	23.73322	2.465849	2.465159

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.66635	5.212554	4.941717	4.885439	5.007405	4.719693	4.713209
Stddev	.07791	.015339	.015485	.006670	.016544	.040678	.020179
%RSD	.3291856	.2942652	.3133512	.1365312	.3303872	.8618724	.4281268
#1	23.64999	5.225588	4.933776	4.887022	5.025119	4.685144	4.705599
#2	23.59792	5.216423	4.931814	4.878120	4.992355	4.709410	4.697943
#3	23.75114	5.195651	4.959562	4.891175	5.004740	4.764525	4.736086

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV05 Acquired: 5/6/2025 20:01:51 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.689633	5.027194	5.026499
Stddev	.017277	.008322	.049069
%RSD	.3683981	.1655437	.9761998
#1	4.692974	5.034596	5.008013
#2	4.670930	5.018186	4.989358
#3	4.704995	5.028802	5.082125

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3073.644	71532.37	19703.92	2750.305	4576.442
Stddev	3.249	224.69	91.32	24.097	4.055
%RSD	.1056963	.3141057	.4634664	.8761425	.0886158
#1	3077.358	71275.25	19599.15	2729.004	4581.078
#2	3072.246	71630.96	19746.00	2745.453	4573.552
#3	3071.328	71690.91	19766.62	2776.459	4574.696

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB05 Acquired: 5/6/2025 20:06:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0011375	-.000934	-.000221	-.001756	.0014644	.0108467	-.002817
Stddev	.0010792	.001805	.001421	.005619	.0013346	.0021626	.000474
%RSD	94.87078	193.2207	643.8279	320.0444	91.13989	19.93785	16.83317
#1	.0001691	.000515	-.000491	-.008238	.0008219	.0103458	-.002979
#2	.0023009	-.002956	-.001487	.001236	.0029987	.0089785	-.003189
#3	.0009425	-.000362	.001316	.001735	.0005725	.0132157	-.002283

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000038	.0000178	.0030895	-.000153	-.000168	.0001134	.0043583
Stddev	.000008	.0000300	.0086487	.000252	.000202	.0004593	.0026752
%RSD	22.56757	168.9991	279.9418	165.0806	120.1497	405.2015	61.38180
#1	-.000044	.0000050	-.002017	-.000394	-.000014	-.000180	.0072790
#2	-.000041	-.000004	.013075	-.000172	-.000396	.000643	.0037690
#3	-.000028	.000052	-.001789	.000109	-.000093	-.000123	.0020269

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001374	-.011356	.0001631	-.000087	-.095834	.0006300	.0001798
Stddev	.000327	.009818	.0002447	.000150	.005391	.0017083	.0002090
%RSD	23.80043	86.45937	150.0663	172.6260	5.625606	271.1437	116.2930
#1	-.001042	-.001450	-.000096	-.000249	-.089653	-.001243	.0003017
#2	-.001695	-.021085	.000194	.000046	-.099565	.002103	-.000062
#3	-.001384	-.011533	.000391	-.000057	-.098284	.001030	.000299

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.076525	.0018493	.0002004	-.000061	.0003323	.0109080	.0045772
Stddev	.014547	.0008962	.0002293	.000843	.0002892	.0065268	.0012540
%RSD	19.01006	48.46128	114.4256	1381.170	87.03588	59.83499	27.39669
#1	-.077845	.0027784	.0004576	.000344	.0006567	.0035526	.0059619
#2	-.061362	.0017793	.0001259	.000503	.0002390	.0160080	.0035181
#3	-.090367	.0009901	.0000176	-.001030	.0001013	.0131633	.0042517

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB05 Acquired: 5/6/2025 20:06:03 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.003823	-.001092	-.000122
Stddev	.001130	.000705	.000111
%RSD	29.56173	64.56553	90.42297
#1	-.003420	-.001720	-.000219
#2	-.005100	-.001226	-.000147
#3	-.002950	-.000329	-.000001

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3088.619	72816.84	20705.20	2779.636	4777.615
Stddev	1.808	77.54	585.15	24.030	7.238
%RSD	.0585345	.1064844	2.826123	.8645115	.1515081
#1	3090.677	72762.00	20419.54	2751.888	4780.703
#2	3087.898	72782.97	21378.32	2793.420	4782.797
#3	3087.284	72905.55	20317.75	2793.599	4769.344

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1939-01 Acquired: 5/6/2025 20:10:22 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	2.545539	.0058745	4.833292	-.030473	.0168936	150.1998
Stddev	.016050	.0017801	.012235	.003484	.0022476	2.2653
%RSD	.6305206	30.30243	.2531316	11.43405	13.30418	1.508195
#1	2.532231	.0072652	4.832169	-.033172	.0193174	151.3886
#2	2.563364	.0038683	4.846050	-.026539	.0164848	151.6232
#3	2.541023	.0064900	4.821658	-.031707	.0148784	147.5876

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.994870	.0124495	.0071377	49.43821	1.395482	.1115112
Stddev	.033322	.0000505	.0001326	.69826	.003414	.0003705
%RSD	1.670409	.4058941	1.858193	1.412394	.2446523	.3322938
#1	2.011149	.0124995	.0070297	49.74822	1.399106	.1111323
#2	2.016924	.0124507	.0070977	49.92778	1.392327	.1118728
#3	1.956537	.0123984	.0072857	48.63861	1.395012	.1115287

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.128482	196.3717	2.277252	38.76316	.5157105	.0060909
Stddev	.000970	1.8650	.032935	.63522	.0009702	.0004791
%RSD	.0859464	.9497480	1.446271	1.638720	.1881260	7.865204
#1	1.128717	196.5990	2.295680	39.07208	.5155862	.0058993
#2	1.129312	198.1127	2.296849	39.18483	.5167369	.0066361
#3	1.127416	194.4034	2.239228	38.03256	.5148085	.0057372

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.422968	.3071500	5.159599	8.864675	.6721555	.0130226
Stddev	.016656	.0031174	.011242	.090234	.0066613	.0001270
%RSD	1.170518	1.014939	.2178780	1.017906	.9910318	.9750908
#1	1.420998	.3082177	5.172094	8.848814	.6742868	.0128824
#2	1.440522	.3095932	5.156397	8.961787	.6774903	.0131300
#3	1.407385	.3036390	5.150306	8.783423	.6646894	.0130553

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1939-01 Acquired: 5/6/2025 20:10:22 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.5283706	2.231373	9.354902	F 19.23222	21.73989	.4874352
Stddev	.0018447	.037680	.081546	.05582	.05672	.0077993
%RSD	.3491351	1.688635	.8716977	.2902227	.2609211	1.600073
#1	.5269808	2.254491	9.390305	19.25728	21.71913	.4918942
#2	.5304635	2.251734	9.412764	19.27111	21.80407	.4919819
#3	.5276675	2.187893	9.261637	19.16826	21.69647	.4784294

Elem	Sr4077
Units	ppm
Avg	.3781992
Stddev	.0074844
%RSD	1.978966
#1	.3827590
#2	.3822771
#3	.3695614

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3353.940	82181.92	22656.06	3104.040	4310.272
Stddev	6.580	212.61	158.03	7.682	9.832
%RSD	.1961899	.2587008	.6975086	.2474946	.2281171
#1	3361.433	82388.10	22568.73	3111.291	4319.866
#2	3349.103	81963.43	22560.96	3095.989	4300.217
#3	3351.284	82194.24	22838.47	3104.839	4310.734

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1939-03 Acquired: 5/6/2025 20:14:26 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.5707496	.0068983	.2558788	-.022784	-.002051	96.82260	1.587280
Stddev	.0074534	.0025546	.0010846	.004925	.001000	.30471	.006973
%RSD	1.305893	37.03220	.4238628	21.61483	48.76029	.3147050	.4393303
#1	.5631793	.0051620	.2546357	-.020198	-.003191	97.17256	1.592667
#2	.5709892	.0098316	.2563684	-.028463	-.001634	96.67909	1.589769
#3	.5780803	.0057012	.2566323	-.019691	-.001326	96.61615	1.579404

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080235	-.004559	29.58026	.3875993	.0635916	.0235083	145.5866
Stddev	.0000896	.000515	.08733	.0004324	.0004877	.0021599	1.2486
%RSD	1.117054	11.29218	.2952451	.1115628	.7668995	9.187595	.8576016
#1	.0080711	-.005058	29.67171	.3879200	.0630322	.0220824	146.4699
#2	.0080793	-.004590	29.57136	.3877702	.0638150	.0224492	146.1317
#3	.0079202	-.004030	29.49772	.3871075	.0639275	.0259933	144.1582

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7166404	21.12976	.1395775	.0008034	.9463847	.3548097	.4276094
Stddev	.0018084	.08341	.0007757	.0006574	.0034001	.0013641	.0005661
%RSD	.2523414	.3947700	.5557562	81.82645	.3592680	.3844659	.1323908
#1	.7187187	21.21867	.1393336	.0012056	.9429836	.3544773	.4278606
#2	.7157775	21.11738	.1389532	.0011598	.9497837	.3536424	.4280064
#3	.7154251	21.05322	.1404459	.0000448	.9463866	.3563093	.4269611

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.275917	.4691668	.0069786	.0065219	.8429210	8.933918	2.966649
Stddev	.050053	.0054606	.0004399	.0016799	.0028094	.085959	.018047
%RSD	.7975356	1.163884	6.303487	25.75730	.3332907	.9621621	.6083140
#1	6.295508	.4721315	.0074455	.0083236	.8460470	8.970825	2.959170
#2	6.313211	.4725037	.0065720	.0049987	.8406072	8.995260	2.953543
#3	6.219032	.4628651	.0069182	.0062435	.8421088	8.835669	2.987232

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1939-03 Acquired: 5/6/2025 20:14:26 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	10.30684	.1744678	.0641227
Stddev	.04619	.0011764	.0004994
%RSD	.4481467	.6742995	.7788811
#1	10.25750	.1755713	.0640488
#2	10.31397	.1746021	.0636644
#3	10.34905	.1732299	.0646550

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3468.815	81719.30	24349.28	3121.330	4593.724
Stddev	12.419	283.77	75.35	15.404	18.573
%RSD	.3580202	.3472514	.3094436	.4934957	.4043142
#1	3482.350	81624.77	24338.27	3116.976	4612.924
#2	3466.150	81494.86	24429.53	3108.571	4592.400
#3	3457.944	82038.27	24280.05	3138.442	4575.848

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1945-01DLX10 Acquired: 5/6/2025 20:18:34 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0752323	.0002776	.4040724	-.006324	.0033450	6.922860	.4107466
Stddev	.0013587	.0007640	.0012775	.002376	.0015126	.092045	.0054557
%RSD	1.805978	275.2006	.3161536	37.57434	45.22176	1.329576	1.328236
#1	.0764058	.0010649	.4051971	-.007080	.0026086	7.008095	.4162284
#2	.0755472	-.000461	.4026835	-.008231	.0023415	6.825256	.4053174
#3	.0737438	.000229	.4043366	-.003662	.0050848	6.935229	.4106942

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006168	.0012870	17.52800	.1649692	.0039924	.5111890	18.14760
Stddev	.0000594	.0000592	.18774	.0001715	.0000145	.0004045	.06519
%RSD	9.633234	4.599501	1.071074	.1039554	.3630429	.0791374	.3592151
#1	.0006464	.0012382	17.67303	.1651381	.0040047	.5115043	18.18367
#2	.0006555	.0013529	17.31595	.1647953	.0039764	.5113298	18.07235
#3	.0005483	.0012699	17.59502	.1649743	.0039960	.5107329	18.18678

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1873865	2.853862	.0515275	.0003017	7.243974	.0164348	5.501337
Stddev	.0020889	.020902	.0001539	.0003132	.025965	.0003103	.021311
%RSD	1.114740	.7324255	.2987498	103.8225	.3584307	1.887922	.3873818
#1	.1895407	2.870401	.0516544	.0000359	7.236843	.0166939	5.518625
#2	.1853698	2.830369	.0513562	.0002221	7.222321	.0165194	5.507859
#3	.1872491	2.860815	.0515716	.0006470	7.272760	.0160909	5.477527

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.416378	.0754573	.0024663	.0033450	.1336501	9.260895	.5129994
Stddev	.046285	.0002839	.0001110	.0002112	.0006383	.036428	.0011622
%RSD	1.915476	.3762260	4.500311	6.314810	.4776167	.3933507	.2265503
#1	2.394057	.0756814	.0023696	.0031068	.1341128	9.257462	.5128382
#2	2.469594	.0755526	.0024419	.0034185	.1329219	9.226305	.5119263
#3	2.385484	.0751381	.0025875	.0035096	.1339156	9.298917	.5142338

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1945-01DLX10 Acquired: 5/6/2025 20:18:34 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.137148	.0183614	.1053507
Stddev	.009650	.0001744	.0013793
%RSD	.2332463	.9496445	1.309229
#1	4.146785	.0184806	.1066429
#2	4.137174	.0184424	.1038983
#3	4.127486	.0181613	.1055108

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3138.033	72698.90	22019.54	2787.821	4754.610
Stddev	5.097	60.53	203.36	3.317	6.793
%RSD	.1624407	.0832615	.9235543	.1189899	.1428634
#1	3132.472	72746.41	21830.33	2791.010	4746.774
#2	3139.146	72719.56	22234.58	2784.389	4758.224
#3	3142.483	72630.75	21993.70	2788.064	4758.830

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1946-01 Acquired: 5/6/2025 20:22:47 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0340607	-.039556	.1099221	-.059017	.0004631	170.5352
Stddev	.0084568	.000294	.0018858	.004628	.0033160	.0006
%RSD	24.82859	.7440659	1.715572	7.842398	716.0495	.0003760
#1	.0435346	-.039712	.1103979	-.063294	.0041283	170.5346
#2	.0313734	-.039216	.1078440	-.059653	-.002329	170.5351
#3	.0272741	-.039738	.1115244	-.054103	-.000410	170.5359

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5547044	.0092120	.0042208	1172.882	.1613946	.1519148
Stddev	.0014838	.0000908	.0000165	5.986	.0006919	.0004554
%RSD	.2674917	.9856040	.3915298	.5103275	.4286744	.2997471
#1	.5564169	.0091938	.0042298	1173.258	.1609656	.1524385
#2	.5538029	.0093105	.0042309	1166.717	.1610255	.1516121
#3	.5538933	.0091316	.0042017	1178.671	.1621928	.1516939

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7357096	247.0578	3.218887	173.7613	.3636800	.0025695
Stddev	.0031901	.8206	.003723	.4197	.0016807	.0002402
%RSD	.4336099	.3321502	.1156624	.2415450	.4621406	9.346566
#1	.7335314	247.9216	3.220640	173.8371	.3652383	.0023058
#2	.7393713	246.9634	3.221409	174.1380	.3639026	.0027756
#3	.7342260	246.2885	3.214611	173.3089	.3618991	.0026272

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.47861	.5715073	.5142174	9.548994	1.015905	.0060110
Stddev	.03485	.0002032	.0018877	.047003	.004879	.0001060
%RSD	.1622579	.0355564	.3670933	.4922322	.4802333	1.763907
#1	21.51817	.5712750	.5145606	9.603103	1.021425	.0060394
#2	21.46525	.5715950	.5159100	9.525608	1.014119	.0060999
#3	21.45242	.5716520	.5121817	9.518270	1.012171	.0058937

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1946-01 Acquired: 5/6/2025 20:22:47 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.028313	F 26.49927	4.681194	7.590905	F 41.58140	.0259845
Stddev	.000562	.03305	.007595	.042574	.16056	.0013387
%RSD	1.985406	.1247070	.1622492	.5608562	.3861328	5.151794
#1	-.028509	26.51852	4.684803	7.627493	41.73515	.0265699
#2	-.027679	26.51817	4.672467	7.601045	41.59423	.0269308
#3	-.028752	26.46111	4.686312	7.544176	41.41480	.0244529

Elem	Sr4077
Units	ppm
Avg	7.580102
Stddev	.118607
%RSD	1.564712
#1	7.443951
#2	7.661019
#3	7.635334

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2930.803	69195.10	20846.91	2649.482	3631.274
Stddev	6.614	18.24	33.02	12.988	10.706
%RSD	.2256802	.0263548	.1584057	.4902119	.2948363
#1	2932.751	69174.07	20884.05	2638.396	3620.386
#2	2923.433	69206.50	20835.83	2646.277	3631.647
#3	2936.224	69204.73	20820.85	2663.773	3641.789

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1961-01 Acquired: 5/6/2025 20:27:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0387939	.0023937	.3914426	-.036606	-.005125	95.60436	.5718890
Stddev	.0046825	.0016065	.0022833	.003663	.002658	.58818	.0053845
%RSD	12.07018	67.11090	.5833057	10.00626	51.85930	.6152267	.9415304
#1	.0417420	.0042093	.3899792	-.038283	-.008171	94.95052	.5656757
#2	.0333946	.0011566	.3902749	-.032405	-.003275	95.77210	.5747978
#3	.0412451	.0018153	.3940736	-.039130	-.003930	96.09045	.5751935

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078868	-.006592	81.76906	.1907750	.0905112	.1331055	211.4327
Stddev	.0001422	.000480	.44578	.0005592	.0015150	.0037293	.9265
%RSD	1.803200	7.275590	.5451748	.2930995	1.673795	2.801747	.4382239
#1	.0077437	-.006797	81.25591	.1905518	.0894126	.1318229	211.0795
#2	.0080281	-.006935	81.99055	.1914112	.0898814	.1301868	212.4839
#3	.0078885	-.006044	82.06071	.1903618	.0922395	.1373068	210.7347

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.762498	26.85898	.1648368	.0013606	8.298454	.2944463	.4726512
Stddev	.028664	.21774	.0016437	.0002845	.027925	.0005091	.0011001
%RSD	.7618331	.8106910	.9971642	20.91228	.3365027	.1729004	.2327511
#1	3.729547	26.62275	.1637111	.0012542	8.277411	.2946796	.4725601
#2	3.776274	26.90252	.1640763	.0016829	8.330134	.2938623	.4737940
#3	3.781674	27.05166	.1667230	.0011445	8.287818	.2947969	.4715994

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.742855	.7068528	.0017037	.0111427	3.654878	8.593952	4.963874
Stddev	.059456	.0034184	.0004180	.0006842	.015203	.106039	.054100
%RSD	.6102512	.4836071	24.53447	6.140488	.4159682	1.233883	1.089879
#1	9.738318	.7065528	.0013642	.0114040	3.637658	8.581031	4.932840
#2	9.804449	.7104113	.0021706	.0116578	3.666445	8.705861	4.932438
#3	9.685797	.7035942	.0015764	.0103664	3.660530	8.494966	5.026343

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: Q1961-01 Acquired: 5/6/2025 20:27:08 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	3.261646	.1627696	.4036039
Stddev	.035253	.0015852	.0037068
%RSD	1.080836	.9738978	.9184279
#1	3.235464	.1612287	.3997592
#2	3.247744	.1643957	.4038972
#3	3.301731	.1626843	.4071553

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3233.302	77209.47	23690.97	2959.288	4322.007
Stddev	31.824	365.53	72.88	13.522	41.592
%RSD	.9842482	.4734230	.3076292	.4569208	.9623195
#1	3251.844	77021.55	23769.84	2957.688	4347.591
#2	3251.507	76976.13	23676.94	2946.637	4344.413
#3	3196.556	77630.73	23626.12	2973.538	4274.016

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV06 Acquired: 5/6/2025 20:31:15 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.839260	4.753574	4.871216	4.816727	4.875271	9.834183	9.848237
Stddev	.023763	.008809	.006391	.009747	.011381	.039030	.114837
%RSD	.4910360	.1853136	.1311990	.2023591	.2334422	.3968776	1.166072
#1	4.825061	4.744387	4.864773	4.807407	4.867758	9.866785	9.965619
#2	4.826026	4.761948	4.877554	4.815921	4.869689	9.790935	9.842967
#3	4.866693	4.754387	4.871321	4.826852	4.888365	9.844829	9.736125

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2407684	2.439949	24.40668	.9750318	2.434662	1.236478	4.919336
Stddev	.0023072	.002177	.16319	.0252434	.003582	.004127	.120395
%RSD	.9582641	.0892363	.6686473	2.588985	.1471353	.3337346	2.447388
#1	.2431914	2.438166	24.59501	.9938716	2.431197	1.233068	5.034180
#2	.2405162	2.439305	24.31812	.9848740	2.434439	1.235301	4.929762
#3	.2385977	2.442376	24.30691	.9463498	2.438351	1.241065	4.794067

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.436787	24.27488	2.433398	1.207919	24.36605	2.425253	2.437939
Stddev	.019106	.14325	.003141	.028789	.48062	.006405	.067115
%RSD	.7840453	.5901282	.1290950	2.383392	1.972493	.2640937	2.752939
#1	2.458324	24.43967	2.432390	1.229045	24.69232	2.432403	2.494480
#2	2.421877	24.20482	2.430885	1.219585	24.59172	2.423315	2.455569
#3	2.430160	24.18013	2.436920	1.175128	23.81413	2.420040	2.363769

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.18727	4.832143	4.949648	4.848196	4.917381	4.853893	4.667891
Stddev	.46900	.043427	.012919	.001706	.020403	.098982	.005608
%RSD	1.939042	.8987154	.2610164	.0351913	.4149117	2.039225	.1201329
#1	24.53290	4.879119	4.941117	4.846516	4.940119	4.925390	4.674312
#2	24.37552	4.823846	4.943316	4.849927	4.900672	4.895369	4.665410
#3	23.65339	4.793462	4.964512	4.848145	4.911352	4.740921	4.663953

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCV06 Acquired: 5/6/2025 20:31:15 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	4.708946	4.868434	4.954924
Stddev	.012143	.014806	.013772
%RSD	.2578773	.3041326	.2779488
#1	4.717058	4.884325	4.970375
#2	4.694985	4.855026	4.950457
#3	4.714794	4.865950	4.943940

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3054.187	73022.37	21181.47	2743.816	4594.809
Stddev	5.879	1698.72	166.67	64.263	1.995
%RSD	.1924870	2.326305	.7868739	2.342111	.0434099
#1	3058.380	71673.43	20989.56	2688.912	4597.093
#2	3056.714	72463.58	21264.90	2728.038	4593.411
#3	3047.467	74930.10	21289.94	2814.499	4593.922

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB06 Acquired: 5/6/2025 20:35:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	.0017954	-.002132	-.001927	.0011987	.0002455	.0054136	-.005198
Stddev	.0014910	.001289	.000277	.0021456	.0007841	.0044746	.000037
%RSD	83.04149	60.44872	14.35990	179.0009	319.3854	82.65368	.7154708
#1	.0034983	-.002301	-.001625	.0029775	.0006644	.0003238	-.005191
#2	.0011631	-.000767	-.001988	-.001184	.0007312	.0071890	-.005238
#3	.0007249	-.003328	-.002168	.001803	-.000659	.0087281	-.005164

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000021	-.000035	-.002039	-.000041	-.000118	.0003901	.0135964
Stddev	.000022	.000093	.009766	.000284	.000369	.0004037	.0020889
%RSD	107.5137	268.9014	479.0523	688.7775	312.4091	103.4924	15.36343
#1	-.000044	-.000008	-.009503	-.000111	-.000535	.0000329	.0160081
#2	.000001	-.000138	-.005627	.000271	.000169	.0003092	.0123543
#3	-.000019	.000042	.009014	-.000284	.000011	.0008282	.0124268

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000527	-.006977	.0000598	-.000087	-.103959	-.000708	.0011375
Stddev	.000349	.007349	.0002948	.000098	.005795	.000355	.0000803
%RSD	66.30387	105.3263	493.2348	112.0007	5.574070	50.14475	7.061293
#1	-.000800	-.015107	-.000070	.000026	-.097269	-.000681	.0011635
#2	-.000647	-.005016	.000397	-.000142	-.107420	-.000368	.0012015
#3	-.000133	-.000808	-.000148	-.000145	-.107187	-.001077	.0010474

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.107881	.0016133	-.000205	-.000327	.0003045	.0069943	.0028998
Stddev	.041725	.0004290	.000180	.000556	.0004318	.0089570	.0005846
%RSD	38.67703	26.58965	87.90710	169.9103	141.8228	128.0611	20.15894
#1	-.145204	.0020150	-.000413	-.000965	-.000156	.0173329	.0022588
#2	-.115606	.0011615	-.000114	.000056	.000700	.0015737	.0030370
#3	-.062833	.0016634	-.000089	-.000073	.000369	.0020763	.0034035

Reviewed By:jaswal
On:5/7/2025 11:23:43 AM
Inst Id :P4
LB :LB135689

Sample Name: CCB06 Acquired: 5/6/2025 20:35:28 Type: Unk
Method: NON EPA-6010-200.7 NEW LR(v30) 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	-.000623	-.002146	-.000168
Stddev	.006321	.000893	.000014
%RSD	1013.984	41.61650	8.567870
#1	-.006476	-.001115	-.000161
#2	.006080	-.002637	-.000184
#3	-.001474	-.002684	-.000159

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3091.759	73964.23	20613.78	2799.531	4799.742
Stddev	3.755	245.38	96.67	8.026	5.999
%RSD	.1214561	.3317589	.4689461	.2866962	.1249806
#1	3094.740	74235.30	20717.36	2808.761	4805.887
#2	3092.996	73900.13	20525.96	2795.633	4799.437
#3	3087.541	73757.26	20598.01	2794.197	4793.902

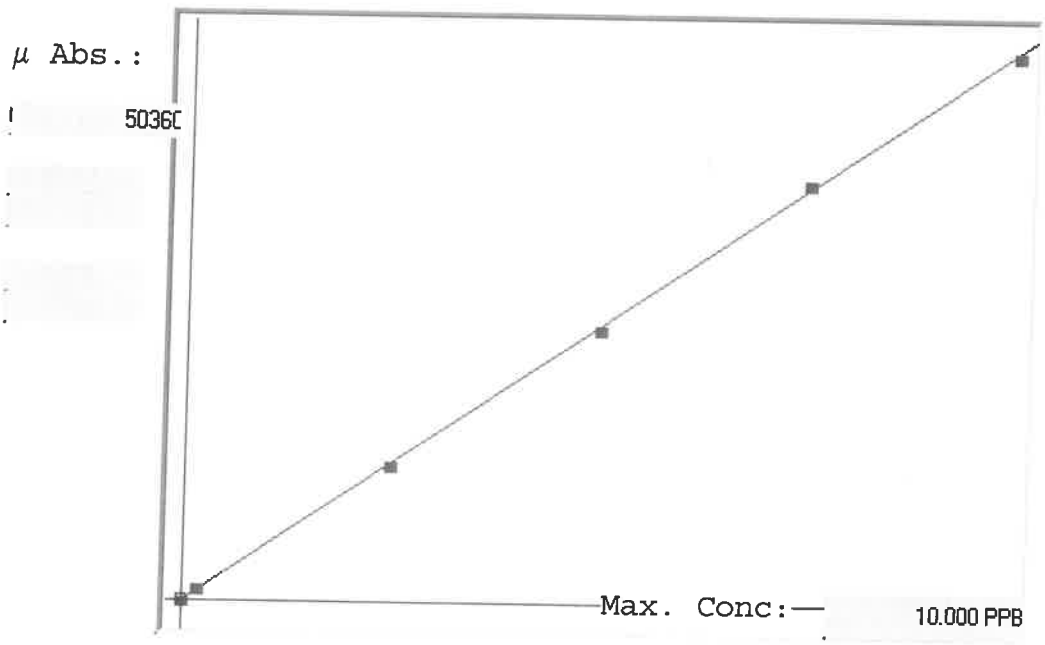
Reviewed By:jaswal
On:4/30/2025 11:09:41 PM
Inst Id :CV1
LB :LB135571

LB135571

7471B

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 1.9745e-004

C= 7.4483e-003

Rho= 0.9998996

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0	0.000	-0.001	-0.001	-43	0.000	-43				
0.2	0.200	0.219	0.019	1073	0.0 %	1073				
2.5	2.500	2.477	-0.023	12507	0.0 %	12507				
5.0	5.000	4.950	-0.050	25034	0.0 %	25034				
7.5	7.500	7.603	0.103	38469	0.0 %	38469				
10.0	10.000	9.951	-0.049	50360	0.0 %	50360				

6/6))

Reviewed By:jaswal
On:4/30/2025 11:09:41 PM
Inst Id :CV1
LB :LB135571

LB135571 INSTRUMENT ID : CV1

Method: 7471B Operator: Admin Date of Analysis: 28 Apr 2025 09:57:58

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	>0	-43	-	0.00000	7471B	PPB	28 Apr 2025 10:18:35	S	Std
0.2 - 1	50.2	1073	-	0.20000	7471B	PPB	28 Apr 2025 10:20:53	S	Std
2.5 - 1	52.5	12507	-	2.50000	7471B	PPB	28 Apr 2025 10:23:10	S	Std
5.0 - 1	55	25034	-	5.00000	7471B	PPB	28 Apr 2025 10:25:27	S	Std
7.5 - 1	57.5	38469	-	7.50000	7471B	PPB	28 Apr 2025 10:27:46	S	Std
10.0 - 1	510	50360	-	10.00000	7471B	PPB	28 Apr 2025 10:30:05	S	Std
ICV103 - 1	ICV103	19007	3.7604		-7471B	PPB	28 Apr 2025 10:35:14	U	SMPL
ICB103 - 1	ICB103	-235	-0.0390		-7471B	PPB	28 Apr 2025 10:37:29	U	SMPL
CCV31 - 1	CCV31	27781	5.4928		-7471B	PPB	28 Apr 2025 10:39:47	U	SMPL
CCB31 - 1	CCB31	-391	-0.0698		-7471B	PPB	28 Apr 2025 10:42:02	U	SMPL
CRA - 1	CRA	1111	0.2268		-7471B	PPB	28 Apr 2025 10:44:21	U	SMPL
HighStd - 1	HighStd	52387	10.3513		-7471B	PPB	28 Apr 2025 10:46:36	U	SMPL
ChkStd - 1	ChkStd	36628	7.2397		-7471B	PPB	28 Apr 2025 10:48:51	U	SMPL
PB167755BL - 1	PBS	-424	-0.0763		-7471B	PPB	28 Apr 2025 10:51:15	U	SMPL
PB167755BS - 1	LCSS	20450	4.0453		-7471B	PPB	28 Apr 2025 10:53:37	U	SMPL
Q1883-01 - 1	OU4-PCS-TC-27-042325	1382	0.2803		-7471B	PPB	28 Apr 2025 10:55:54	U	SMPL
Q1883-03 - 1	OU4-PCS-TC-28-042325	385	0.0835		-7471B	PPB	28 Apr 2025 10:58:13	U	SMPL
Q1883-05 - 1	OU4-PCS-TC-29-042325	169	0.0408		-7471B	PPB	28 Apr 2025 11:00:31	U	SMPL
Q1883-07 - 1	OU4-PCS-TC-30-042325	188	0.0446		-7471B	PPB	28 Apr 2025 11:02:48	U	SMPL
Q1883-09 - 1	OU4-PCS-TC-31-042325	99	0.0270		-7471B	PPB	28 Apr 2025 11:05:04	U	SMPL
CCV32 - 1	CCV32	26889	5.3167		-7471B	PPB	28 Apr 2025 11:07:19	U	SMPL
CCB32 - 1	CCB32	-383	-0.0682		-7471B	PPB	28 Apr 2025 11:09:34	U	SMPL
Q1883-11 - 1	OU4-PCS-TC-32-042325	267	0.0602		-7471B	PPB	28 Apr 2025 11:11:53	U	SMPL
Q1883-13 - 1	OU4-PCS-18-042325	8	0.0090		-7471B	PPB	28 Apr 2025 11:14:08	U	SMPL
Q1883-15 - 1	OU4-PCS-19-042325	61	0.0195		-7471B	PPB	28 Apr 2025 11:16:23	U	SMPL
Q1883-15DUP - 1	OU4-PCS-19-042325DUP	-269	-0.0457		-7471B	PPB	28 Apr 2025 11:18:39	U	SMPL
Q1883-15MS - 1	OU4-PCS-19-042325MS	18389	3.6384		-7471B	PPB	28 Apr 2025 11:20:55	U	SMPL
Q1883-15MSD - 1	OU4-PCS-19-042325MSD	18870	3.7334		-7471B	PPB	28 Apr 2025 11:23:11	U	SMPL
Q1889-01 - 1	COMP-1	1291	0.2624		-7471B	PPB	28 Apr 2025 11:25:30	U	SMPL
Q1889-02 - 1	COMP-2	591	0.1241		-7471B	PPB	28 Apr 2025 11:27:50	U	SMPL
Q1889-03 - 1	COMP-3	421	0.0906		-7471B	PPB	28 Apr 2025 11:30:07	U	SMPL
PB167756BL - 1	PBS	-19	0.0037		-7471B	PPB	28 Apr 2025 11:32:23	U	SMPL
CCV33 - 1	CCV33	27254	5.3888		-7471B	PPB	28 Apr 2025 11:34:38	U	SMPL
CCB33 - 1	CCB33	-260	-0.0439		-7471B	PPB	28 Apr 2025 11:36:54	U	SMPL
PB167756BS - 1	LCSS	21210	4.1954		-7471B	PPB	28 Apr 2025 11:39:12	U	SMPL
Q1891-01 - 1	MH-C	457	0.0977		-7471B	PPB	28 Apr 2025 11:41:28	U	SMPL
Q1891-01DUP - 1	MH-CDUP	695	0.1447		-7471B	PPB	28 Apr 2025 11:43:47	U	SMPL
Q1891-01MS - 1	MH-CMS	18876	3.7345		-7471B	PPB	28 Apr 2025 11:46:02	U	SMPL
Q1891-01MSD - 1	MH-CMSD	18659	3.6917		-7471B	PPB	28 Apr 2025 11:51:34	U	SMPL
Q1891-05 - 1	MH-D	1278	0.2598		-7471B	PPB	28 Apr 2025 11:53:50	U	SMPL
Q1892-01 - 1	MH-G	1521	0.3078		-7471B	PPB	28 Apr 2025 11:56:10	U	SMPL
Q1892-05 - 1	MH-H	429	0.0922		-7471B	PPB	28 Apr 2025 11:58:27	U	SMPL
Q1892-09 - 1	MH-U2	765	0.1585		-7471B	PPB	28 Apr 2025 12:00:44	U	SMPL
Q1895-01 - 1	COMP-1	639	0.1336		-7471B	PPB	28 Apr 2025 12:02:59	U	SMPL
CCV34 - 1	CCV34	24404	4.8261		-7471B	PPB	28 Apr 2025 12:05:15	U	SMPL
CCB34 - 1	CCB34	-324	-0.0565		-7471B	PPB	28 Apr 2025 12:07:30	U	SMPL
Q1895-03 - 1	COMP-2	1023	0.2094		-7471B	PPB	28 Apr 2025 12:09:49	U	SMPL
Q1895-05 - 1	COMP-3	839	0.1731		-7471B	PPB	28 Apr 2025 12:12:04	U	SMPL
Q1896-01 - 1	295-BERGEN-RO	2006	0.4035		-7471B	PPB	28 Apr 2025 12:14:20	U	SMPL
Q1900-01 - 1	WC-1	6018	1.1957		-7471B	PPB	28 Apr 2025 12:16:36	U	SMPL
Q1900-05 - 1	WC-2	4188	0.8344		-7471B	PPB	28 Apr 2025 12:18:52	U	SMPL
Q1900-09 - 1	WC-3	6403	1.2717		-7471B	PPB	28 Apr 2025 12:21:10	U	SMPL
Q1883-15LX5 - 1		-130	-0.0182		-7471B	PPB	28 Apr 2025 12:23:28	U	SMPL
Q1883-15A - 1		18487	3.6577		-7471B	PPB	28 Apr 2025 12:25:47	U	SMPL
Q1891-01LX5 - 1		10	0.0094		-7471B	PPB	28 Apr 2025 12:28:04	U	SMPL
Q1891-01A - 1		18176	3.5963		-7471B	PPB	28 Apr 2025 12:30:23	U	SMPL
CCV35 - 1	CCV35	25395	5.0217		-7471B	PPB	28 Apr 2025 12:32:38	U	SMPL
CCB35 - 1	CCB35	-315	-0.0547		-7471B	PPB	28 Apr 2025 12:34:57	U	SMPL

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB167757

SOP ID : M3050B-Digestion-20

SDG No : N/A

Matrix : SOIL

Pippete ID: ICP A

Balance ID : M SC-2

Filter paper ID : N/A

pH Strip ID : N/A

Hood ID : #3

Block ID: 1. HOT BLOCK #2 2. N/A

Start Digest Date: 04/28/2025 **Time :** 10:10 **Temp :** 96 °C

End Digest Date: 04/28/2025 **Time :** 12:20 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. #2

Dig Technician Signature: SPS.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	1.00	M6005
LFS-2	1.00	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	10.00	MP84041
Conc. HNO3	5.00	M6158
30% H2O2	3.00	M6125
Conc. HCL	10.00	M6151
PTFE Boiling Stones	N/A	M5581
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 # 2 CELL 35 Temp :96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/28/25 13:20	SPS-met. 286	SG (Initial Only)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB167757

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
PB167757BL	PBS757	N/A	2.06	100	Colorless	Colorless	Fine	N/A	N/A	1
PB167757BS	LCS757	N/A	2.09	100	Colorless	Colorless	Fine	N/A	M6005,M6012	2
Q1883-01	OU4-PCS-TC-27-042325	N/A	2.39	100	Gray	Yellow	Medium	N/A	N/A	3
Q1883-03	OU4-PCS-TC-28-042325	N/A	2.18	100	Gray	Yellow	Medium	N/A	N/A	4
Q1883-05	OU4-PCS-TC-29-042325	N/A	2.05	100	Gray	Yellow	Medium	N/A	N/A	5
Q1883-07	OU4-PCS-TC-30-042325	N/A	2.10	100	Gray	Yellow	Medium	N/A	N/A	6
Q1883-09	OU4-PCS-TC-31-042325	N/A	2.25	100	Gray	Yellow	Medium	N/A	N/A	7
Q1883-11	OU4-PCS-TC-32-042325	N/A	2.15	100	Gray	Yellow	Medium	N/A	N/A	8
Q1883-11MS	OU4-PCS-TC-32-042325MS	N/A	2.01	100	Gray	Yellow	Medium	N/A	M6005,M6012	10
Q1883-11MSD	OU4-PCS-TC-32-042325MSD	N/A	2.00	100	Gray	Yellow	Medium	N/A	M6005,M6012	11
Q1883-11DUP	OU4-PCS-TC-32-042325DUP	N/A	2.26	100	Gray	Yellow	Medium	N/A	N/A	9
Q1883-13	OU4-PCS-18-042325	N/A	2.26	100	Gray	Yellow	Medium	N/A	N/A	12
Q1883-15	OU4-PCS-19-042325	N/A	2.20	100	Gray	Yellow	Medium	N/A	N/A	13
Q1889-01	COMP-1	N/A	2.22	100	Brown	Yellow	Medium	N/A	N/A	14
Q1889-02	COMP-2	N/A	2.23	100	Brown	Yellow	Medium	N/A	N/A	15
Q1889-03	COMP-3	N/A	2.25	100	Brown	Yellow	Medium	N/A	N/A	16
Q1891-01	MH-C	N/A	2.18	100	Brown	Yellow	Medium	N/A	N/A	17
Q1891-05	MH-D	N/A	2.38	100	Brown	Yellow	Medium	N/A	N/A	18
Q1892-01	MH-G	N/A	2.10	100	Brown	Yellow	Medium	N/A	N/A	19
Q1892-05	MH-H	N/A	2.25	100	Brown	Yellow	Medium	N/A	N/A	20
Q1892-09	MH-U2	N/A	2.11	100	Brown	Yellow	Medium	N/A	N/A	21

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB167757 **WorkList ID :** 189174 **Department :** Digestion **Date :** 04-28-2025 09:34:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1883-01	OU4-PCS-TC-27-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-03	OU4-PCS-TC-28-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-05	OU4-PCS-TC-29-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-07	OU4-PCS-TC-30-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-09	OU4-PCS-TC-31-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-11	OU4-PCS-TC-32-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-13	OU4-PCS-18-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1883-15	OU4-PCS-19-042325	Solid	Metals ICP-TAL	Cool 4 deg C	NOBI03	L51	04/23/2025	6010D
Q1889-01	COMP-1	Solid	Metals ICP-Group1	Cool 4 deg C	POWE02	L51	04/24/2025	6010D
Q1889-02	COMP-2	Solid	Metals ICP-Group1	Cool 4 deg C	POWE02	L51	04/24/2025	6010D
Q1889-03	COMP-3	Solid	Metals ICP-Group1	Cool 4 deg C	POWE02	L51	04/24/2025	6010D
Q1891-01	MH-C	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	L41	04/25/2025	6010D
Q1891-05	MH-D	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	L41	04/25/2025	6010D
Q1892-01	MH-G	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	L51	04/24/2025	6010D
Q1892-05	MH-H	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	L51	04/24/2025	6010D
Q1892-09	MH-U2	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	L51	04/25/2025	6010D

Date/Time 04/28/2025 9:50
Raw Sample Received by: SLG.MET.DIG
Raw Sample Relinquished by: CP S

Date/Time 04/28/25 10:50
Raw Sample Received by: CP S
Raw Sample Relinquished by: SLG.MET.DIG

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB167755

SOP ID : M7471B-Mercury-18

SDG No : NA

Matrix : SOIL

Pippete ID: HG A

Balance ID : M SC-3

Filter paper ID : NA

pH Strip ID : NA

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 04/28/2025 **Time :** 09:05 **Temp :** 94 °C

End Digest Date: 04/28/2025 **Time :** 09:35 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: JL

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP85469
CCV	30mL	MP85471
CRA	30mL	MP85473
Blank Spike	0.48mL	MP85462
Matrix Spike	0.48mL	MP85462

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	1.5mL	MP85475
KMnO4 (5%)	4.5mL	MP85241
Hydroxylamine HCL (12%)	2.0mL	MP85243
PTFE Boiling Stones	----------	M4583
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	MP85463
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP85464
2.5 ppb	S2.5	30mL	MP85465
5.0 ppb	S5.0	30mL	MP85466
7.5 ppb	S7.5	30mL	MP85467
10.0 ppb	S10.0	30mL	MP85468
ICV	ICV	30mL	MP85469
ICB	ICB	30mL	MP85470
CCV	CCV	30mL	MP85471
CCB	CCB	30mL	MP85472
CRI	CRI	30mL	MP85473
CHK STD	CHK STD	30mL	MP85474

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
4/28/25 @ 10:05	MB - Dig 1 Lab	MB - Metal Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB167755

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB167755BL	PBS755	0.52	35	NA	N/A	3-1
PB167755BS	LCS755	0.55	35	NA	MP85462	2
Q1883-01	OU4-PCS-TC-27-042325	0.59	35	NA	N/A	3
Q1883-03	OU4-PCS-TC-28-042325	0.51	35	NA	N/A	4
Q1883-05	OU4-PCS-TC-29-042325	0.55	35	NA	N/A	5
Q1883-07	OU4-PCS-TC-30-042325	0.52	35	NA	N/A	6
Q1883-09	OU4-PCS-TC-31-042325	0.50	35	NA	N/A	7
Q1883-11	OU4-PCS-TC-32-042325	0.59	35	NA	N/A	8
Q1883-13	OU4-PCS-18-042325	0.53	35	NA	N/A	9
Q1883-15	OU4-PCS-19-042325	0.56	35	NA	N/A	10
Q1883-15DUP	OU4-PCS-19-042325DUP	0.56	35	NA	N/A	11
Q1883-15MS	OU4-PCS-19-042325MS	0.58	35	NA	MP85462	12
Q1883-15MSD	OU4-PCS-19-042325MSD	0.58	35	NA	MP85462	13
Q1889-01	COMP-1	0.53	35	NA	N/A	14
Q1889-02	COMP-2	0.57	35	NA	N/A	15
Q1889-03	COMP-3	0.53	35	NA	N/A	16

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 042825_7471 **WorkList ID :** 189162 **Department :** Digestion **Date :** 04-28-2025 08:13:32

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1883-01	OU4-PCS-TC-27-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-03	OU4-PCS-TC-28-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-05	OU4-PCS-TC-29-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-07	OU4-PCS-TC-30-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-09	OU4-PCS-TC-31-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-11	OU4-PCS-TC-32-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-13	OU4-PCS-18-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1883-15	OU4-PCS-19-042325	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1889-01	COMP-1	Solid	Mercury	Cool 4 deg C	NOBI03	L51	04/23/2025	7471B
Q1889-02	COMP-2	Solid	Mercury	Cool 4 deg C	POWE02	L51	04/24/2025	7471B
Q1889-03	COMP-3	Solid	Mercury	Cool 4 deg C	POWE02	L51	04/24/2025	7471B

Date/Time 4/28/25 8:35

Raw Sample Received by: MB-DTG LAS

Raw Sample Relinquished by: MB-DTG LAS

Date/Time 4/28/25 9:25

Raw Sample Received by: MB-DTG LAS

Raw Sample Relinquished by: MB-DTG LAS

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/28/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/25/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135558

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1883-01	OU4-PCS-TC-27-042325	1	1.18	10.04	11.22	10.67	94.5	
Q1883-03	OU4-PCS-TC-28-042325	2	1.14	9.97	11.11	10.56	94.5	
Q1883-05	OU4-PCS-TC-29-042325	3	1.19	10.54	11.73	11.28	95.7	
Q1883-07	OU4-PCS-TC-30-042325	4	1.17	10.15	11.32	10.96	96.5	
Q1883-09	OU4-PCS-TC-31-042325	5	1.18	10.48	11.66	11.34	96.9	
Q1883-11	OU4-PCS-TC-32-042325	6	1.18	9.96	11.14	10.87	97.3	
Q1883-13	OU4-PCS-18-042325	7	1.15	10.25	11.4	10.86	94.7	
Q1883-15	OU4-PCS-19-042325	8	1.19	10.54	11.73	11.29	95.8	
Q1884-01	P001-SS037-01	9	1.17	10.30	11.47	10.87	94.2	
Q1884-02	P001-SS038-01	10	1.17	10.32	11.49	11.22	97.4	
Q1888-05	SVOC-GPC-BLANK	11	1.00	1.00	2.00	2.00	100.0	
Q1888-06	PEST-GPC-BLANK	12	1.00	1.00	2.00	2.00	100.0	
Q1888-07	PEST-GPC-BLANK-SPIKE	13	1.00	1.00	2.00	2.00	100.0	
Q1888-08	PCB-GPC-BLANK	14	1.00	1.00	2.00	2.00	100.0	
Q1888-09	PCB-GPC-BLANK-SPIKE	15	1.00	1.00	2.00	2.00	100.0	
Q1888-10	SVOC-GPC2-BLANK	16	1.00	1.00	2.00	2.00	100.0	
Q1888-11	PEST-GPC2-BLANK	17	1.00	1.00	2.00	2.00	100.0	
Q1888-12	PEST-GPC2-BLANK-SPIKE	18	1.00	1.00	2.00	2.00	100.0	
Q1888-13	PCB-GPC2-BLANK	19	1.00	1.00	2.00	2.00	100.0	
Q1888-14	PCB-GCP2-BLANK-SPIKE	20	1.00	1.00	2.00	2.00	100.0	
Q1889-01	COMP-1	21	1.19	10.07	11.26	9.5	82.5	
Q1889-02	COMP-2	22	1.16	10.50	11.66	9.61	80.5	
Q1889-03	COMP-3	23	1.11	10.73	11.84	9.77	80.7	
Q1891-01	MH-C	24	1.15	9.48	10.63	9.8	91.2	
Q1891-02	MH-C-EPH	25	1.16	9.82	10.98	10.15	91.5	
Q1891-03	MH-C-VOC	26	1.19	9.94	11.13	10.2	90.6	
Q1891-05	MH-D	27	1.15	10.17	11.32	9.64	83.5	
Q1891-06	MH-D-EPH	28	1.15	9.97	11.12	8.74	76.1	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/28/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/25/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135558

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1891-07	MH-D-VOC	29	1.18	9.46	10.64	8.83	80.9	
Q1892-01	MH-G	30	1.13	9.61	10.74	9.35	85.5	
Q1892-02	MH-G-EPH	31	1.15	10.29	11.44	9.98	85.8	
Q1892-03	MH-G-VOC	32	1.18	10.45	11.63	9.82	82.7	
Q1892-05	MH-H	33	1.14	9.66	10.8	9.92	90.9	
Q1892-06	MH-H-EPH	34	1.12	10.66	11.78	10.68	89.7	
Q1892-07	MH-H-VOC	35	1.18	10.19	11.37	10.28	89.3	
Q1892-09	MH-U2	36	1.18	10.04	11.22	9.96	87.5	
Q1892-10	MH-U2-EPH	37	1.19	10.34	11.53	10.04	85.6	
Q1892-11	MH-U2-VOC	38	1.18	10.22	11.4	10.14	87.7	
Q1893-01	UGGP-1	39	1.00	1.00	2.00	2.00	100.0	TAR SAMPLE
Q1893-02	UGGP-2	40	1.00	1.00	2.00	2.00	100.0	TAR SAMPLE
Q1893-03	INTERIOR-1	41	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1893-04	INTERIOR-2	42	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1893-05	INTERIOR-3	43	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1893-06	INTERIOR-4	44	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1893-07	EXTERIOR-1	45	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1895-01	COMP-1	55	1.14	10.58	11.72	10.97	92.9	
Q1895-03	COMP-2	56	1.14	10.77	11.91	10.96	91.2	
Q1895-05	COMP-3	57	1.18	10.06	11.24	10.56	93.2	
Q1896-01	295-BERGEN-RO	58	1.14	11.31	12.45	10.91	86.4	
Q1896-02	295-BERGEN-RO	59	1.18	10.01	11.19	9.9	87.1	
Q1898-01	41525A	60	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1898-02	41525B	61	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1898-03	42525A	62	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1898-04	42525B	63	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1900-01	WC-1	46	1.14	9.98	11.12	9.56	84.4	
Q1900-02	WC-1-EPH	47	1.14	10.35	11.49	10.19	87.4	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/28/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/25/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135558

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1900-03	WC-1-VOC	48	1.14	10.01	11.15	9.73	85.8	
Q1900-05	WC-2	49	1.19	8.82	10.01	8.76	85.8	
Q1900-06	WC-2-EPH	50	1.19	10.08	11.27	9.76	85.0	
Q1900-07	WC-2-VOC	51	1.17	10.79	11.96	10.33	84.9	
Q1900-09	WC-3	52	1.14	9.61	10.75	9.32	85.1	
Q1900-10	WC-3-EPH	53	1.12	10.38	11.5	9.11	77.0	
Q1900-11	WC-3-VOC	54	1.19	10.71	11.9	10.39	85.9	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

LB135558

WorkList Name : %1-042525 **WorkList ID :** 189135 **Department :** Wet-Chemistry **Date :** 04-25-2025 08:09:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1883-01	OU4-PCS-TC-27-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-03	OU4-PCS-TC-28-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-05	OU4-PCS-TC-29-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-07	OU4-PCS-TC-30-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-09	OU4-PCS-TC-31-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-11	OU4-PCS-TC-32-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-13	OU4-PCS-18-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1883-15	OU4-PCS-19-042325	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	04/23/2025	Chemtech -SO
Q1884-01	P001-SS037-01	Solid	Percent Solids	Cool 4 deg C	ROYF02	L51	04/24/2025	Chemtech -SO
Q1884-02	P001-SS038-01	Solid	Percent Solids	Cool 4 deg C	ROYF02	L51	04/24/2025	Chemtech -SO
Q1888-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1888-14	PCB-GCP2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L31	04/18/2025	Chemtech -SO
Q1889-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/24/2025	Chemtech -SO

Date/Time 04/25/25 15:20

Raw Sample Received by: JD (WC)

Raw Sample Relinquished by: JD (SM)

Date/Time 04/25/25 17:30

Raw Sample Received by: JD (SM)

Raw Sample Relinquished by: JD (WC)

WORKLIST(Hardcopy Internal Chain)

LB 135558

WorkList Name : %1-042525 **WorkList ID :** 189135 **Department :** Wet-Chemistry **Date :** 04-25-2025 08:09:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1889-02	COMP-2	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/24/2025	Chemtech -SO
Q1889-03	COMP-3	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/24/2025	Chemtech -SO
Q1891-01	MH-C	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1891-02	MH-C-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1891-03	MH-C-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1891-05	MH-D	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1891-06	MH-D-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1891-07	MH-D-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1892-01	MH-G	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1892-02	MH-G-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1892-03	MH-G-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1892-05	MH-H	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1892-06	MH-H-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1892-07	MH-H-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1892-09	MH-U2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/24/2025	Chemtech -SO
Q1892-10	MH-U2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/25/2025	Chemtech -SO
Q1892-11	MH-U2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/25/2025	Chemtech -SO
Q1893-01	UGGP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/25/2025	Chemtech -SO
Q1893-02	UGGP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1893-03	INTERIOR-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1893-04	INTERIOR-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO

Date/Time 04/25/25 1520

Raw Sample Received by: JD (wl U)

Raw Sample Relinquished by: JD CSM

Date/Time 04/25/25 1730

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JD (wl C)

Q1883-METALS

WORKLIST(Hardcopy Internal Chain)

VR 135558

WorkList Name : %1-042525 **WorkList ID :** 189135 **Department :** Wet-Chemistry **Date :** 04-25-2025 08:09:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1893-05	INTERIOR-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1893-06	INTERIOR-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1893-07	EXTERIOR-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1895-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1895-03	COMP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1895-05	COMP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1896-01	295-BERGEN-RO	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1896-02	295-BERGEN-RO	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/25/2025	Chemtech -SO
Q1898-01	41525A	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	04/25/2025	Chemtech -SO
Q1898-02	41525B	Solid	Percent Solids	Cool 4 deg C	PSEG03	L12	04/25/2025	Chemtech -SO
Q1898-03	42525A	Solid	Percent Solids	Cool 4 deg C	PSEG03	L12	04/25/2025	Chemtech -SO
Q1898-04	42525B	Solid	Percent Solids	Cool 4 deg C	PSEG03	L12	04/25/2025	Chemtech -SO
Q1900-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L12	04/25/2025	Chemtech -SO
Q1900-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-05	WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-06	WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-07	WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-09	WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-10	WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO
Q1900-11	WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/25/2025	Chemtech -SO

Date/Time 04/25/25 13:20

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JD CSM

Date/Time 04/25/25 17:30

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JD CSM

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135571

Review By	mohan	Review On	4/30/2025 1:48:15 PM
Supervise By	jaswal	Supervise On	4/30/2025 11:09:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP85463,MP85464,MP85465,MP85466,MP85467,MP85468
ICV Standard	MP85469
CCV Standard	MP85471
ICSA Standard	
CRI Standard	MP85473
LCS Standard	
Chk Standard	MP85470,MP85472,MP85474,MP85476

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/28/25 10:18		mohan	OK
2	S0.2	S0.2	CAL2	04/28/25 10:20		mohan	OK
3	S2.5	S2.5	CAL3	04/28/25 10:23		mohan	OK
4	S5	S5	CAL4	04/28/25 10:25		mohan	OK
5	S7.5	S7.5	CAL5	04/28/25 10:27		mohan	OK
6	S10	S10	CAL6	04/28/25 10:30		mohan	OK
7	ICV103	ICV103	ICV	04/28/25 10:35		mohan	OK
8	ICB103	ICB103	ICB	04/28/25 10:37		mohan	OK
9	CCV31	CCV31	CCV	04/28/25 10:39		mohan	OK
10	CCB31	CCB31	CCB	04/28/25 10:42		mohan	OK
11	CRA	CRA	CRDL	04/28/25 10:44		mohan	OK
12	HighStd	HighStd	HIGH STD	04/28/25 10:46		mohan	OK
13	ChkStd	ChkStd	SAM	04/28/25 10:48		mohan	OK
14	PB167755BL	PB167755BL	MB	04/28/25 10:51		mohan	OK
15	PB167755BS	PB167755BS	LCS	04/28/25 10:53		mohan	OK
16	Q1883-01	OU4-PCS-TC-27-042	SAM	04/28/25 10:55		mohan	OK
17	Q1883-03	OU4-PCS-TC-28-042	SAM	04/28/25 10:58		mohan	OK
18	Q1883-05	OU4-PCS-TC-29-042	SAM	04/28/25 11:00		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135571

Review By	mohan	Review On	4/30/2025 1:48:15 PM
Supervise By	jaswal	Supervise On	4/30/2025 11:09:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP85463,MP85464,MP85465,MP85466,MP85467,MP85468
ICV Standard	MP85469
CCV Standard	MP85471
ICSA Standard	
CRI Standard	MP85473
LCS Standard	
Chk Standard	MP85470,MP85472,MP85474,MP85476

19	Q1883-07	OU4-PCS-TC-30-042	SAM	04/28/25 11:02		mohan	OK
20	Q1883-09	OU4-PCS-TC-31-042	SAM	04/28/25 11:05		mohan	OK
21	CCV32	CCV32	CCV	04/28/25 11:07		mohan	OK
22	CCB32	CCB32	CCB	04/28/25 11:09		mohan	OK
23	Q1883-11	OU4-PCS-TC-32-042	SAM	04/28/25 11:11		mohan	OK
24	Q1883-13	OU4-VSL-18-042325	SAM	04/28/25 11:14		mohan	OK
25	Q1883-15	OU4-VSL-19-042325	SAM	04/28/25 11:16		mohan	OK
26	Q1883-15DUP	OU4-VSL-19-042325	DUP	04/28/25 11:18		mohan	OK
27	Q1883-15MS	OU4-VSL-19-042325M	MS	04/28/25 11:20		mohan	OK
28	Q1883-15MSD	OU4-VSL-19-042325M	MSD	04/28/25 11:23		mohan	OK
29	Q1889-01	COMP-1	SAM	04/28/25 11:25		mohan	OK
30	Q1889-02	COMP-2	SAM	04/28/25 11:27		mohan	OK
31	Q1889-03	COMP-3	SAM	04/28/25 11:30		mohan	OK
32	PB167756BL	PB167756BL	MB	04/28/25 11:32		mohan	OK
33	CCV33	CCV33	CCV	04/28/25 11:34		mohan	OK
34	CCB33	CCB33	CCB	04/28/25 11:36		mohan	OK
35	PB167756BS	PB167756BS	LCS	04/28/25 11:39		mohan	OK
36	Q1891-01	MH-C	SAM	04/28/25 11:41		mohan	OK
37	Q1891-01DUP	MH-CDUP	DUP	04/28/25 11:43		mohan	OK
38	Q1891-01MS	MH-CMS	MS	04/28/25 11:46		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135571

Review By	mohan	Review On	4/30/2025 1:48:15 PM
Supervise By	jaswal	Supervise On	4/30/2025 11:09:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP85463,MP85464,MP85465,MP85466,MP85467,MP85468
ICV Standard	MP85469
CCV Standard	MP85471
ICSA Standard	
CRI Standard	MP85473
LCS Standard	
Chk Standard	MP85470,MP85472,MP85474,MP85476

39	Q1891-01MSD	MH-CMSD	MSD	04/28/25 11:51		mohan	OK
40	Q1891-05	MH-D	SAM	04/28/25 11:53		mohan	OK
41	Q1892-01	MH-G	SAM	04/28/25 11:56		mohan	OK
42	Q1892-05	MH-H	SAM	04/28/25 11:58		mohan	OK
43	Q1892-09	MH-U2	SAM	04/28/25 12:00		mohan	OK
44	Q1895-01	COMP-1	SAM	04/28/25 12:02		mohan	OK
45	CCV34	CCV34	CCV	04/28/25 12:05		mohan	OK
46	CCB34	CCB34	CCB	04/28/25 12:07		mohan	OK
47	Q1895-03	COMP-2	SAM	04/28/25 12:09		mohan	OK
48	Q1895-05	COMP-3	SAM	04/28/25 12:12		mohan	OK
49	Q1896-01	295-BERGEN-RO	SAM	04/28/25 12:14		mohan	OK
50	Q1900-01	WC-1	SAM	04/28/25 12:16		mohan	OK
51	Q1900-05	WC-2	SAM	04/28/25 12:18		mohan	OK
52	Q1900-09	WC-3	SAM	04/28/25 12:21		mohan	OK
53	Q1883-15L	OU4-VSL-19-042325	SD	04/28/25 12:23		mohan	OK
54	Q1883-15A	OU4-VSL-19-042325	PS	04/28/25 12:25		mohan	OK
55	Q1891-01L	MH-CL	SD	04/28/25 12:28		mohan	OK
56	Q1891-01A	MH-CA	PS	04/28/25 12:30		mohan	OK
57	CCV35	CCV35	CCV	04/28/25 12:32		mohan	OK
58	CCB35	CCB35	CCB	04/28/25 12:34		mohan	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135614

Review By	JANVI	Review On	5/7/2025 3:31:29 PM
Supervise By	jaswal	Supervise On	5/7/2025 3:37:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85026
LCS Standard	
Chk Standard	MP85030,MP85031

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/30/25 14:28		Kareem	OK
2	S1	S1	CAL2	04/30/25 14:33		Kareem	OK
3	S2	S2	CAL3	04/30/25 14:37		Kareem	OK
4	S3	S3	CAL4	04/30/25 14:41		Kareem	OK
5	S4	S4	CAL5	04/30/25 14:45		Kareem	OK
6	S5	S5	CAL6	04/30/25 14:50		Kareem	OK
7	ICV01	ICV01	ICV	04/30/25 16:18	ICV fail for Al,Be,Ca,Co,Fe,Mg,Mn,Tl, V(95-105)%	Kareem	OK
8	LLICV01	LLICV01	LLICV	04/30/25 16:28		Kareem	OK
9	ICB01	ICB01	ICB	04/30/25 16:36		Kareem	OK
10	CRI01	CRI01	CRDL	04/30/25 16:41		Kareem	OK
11	ICSA01	ICSA01	ICSA	04/30/25 16:46		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	04/30/25 17:04		Kareem	OK
13	ICSADL	ICSADL	ICSA	04/30/25 17:09		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	04/30/25 17:13		Kareem	OK
15	CCV01	CCV01	CCV	04/30/25 17:27		Kareem	OK
16	CCB01	CCB01	CCB	04/30/25 17:38		Kareem	OK
17	PB167758BL	PB167758BL	MB	04/30/25 17:43		Kareem	OK
18	PB167758BS	PB167758BS	LCS	04/30/25 17:47		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135614

Review By	JANVI	Review On	5/7/2025 3:31:29 PM
Supervise By	jaswal	Supervise On	5/7/2025 3:37:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85026
LCS Standard	
Chk Standard	MP85030,MP85031

19	Q1833-02	EFF-WASTE-WATER	SAM	04/30/25 17:51		Kareem	OK
20	Q1836-01	METALS-DAY-1	SAM	04/30/25 17:56		Kareem	OK
21	Q1836-02	METALS-DAY-2	SAM	04/30/25 18:00		Kareem	OK
22	Q1836-03	METALS-DAY-3	SAM	04/30/25 18:04		Kareem	OK
23	Q1836-04	METALS-DAY-4	SAM	04/30/25 18:08		Kareem	OK
24	Q1836-04DUP	METALS-DAY-4DUP	DUP	04/30/25 18:13		Kareem	OK
25	Q1836-04L	METALS-DAY-4L	SD	04/30/25 18:17		Kareem	OK
26	CCV02	CCV02	CCV	04/30/25 18:30		Kareem	OK
27	CCB02	CCB02	CCB	04/30/25 18:35		Kareem	OK
28	Q1836-04MS	METALS-DAY-4MS	MS	04/30/25 18:40		Kareem	OK
29	Q1836-04MSD	METALS-DAY-4MSD	MSD	04/30/25 18:44		Kareem	OK
30	Q1836-04A	METALS-DAY-4A	PS	04/30/25 18:48		Kareem	OK
31	Q1883-01	OU4-PCS-TC-27-042	SAM	04/30/25 19:00		Kareem	OK
32	Q1883-03	OU4-PCS-TC-28-042	SAM	04/30/25 19:13		Kareem	OK
33	Q1883-05	OU4-PCS-TC-29-042	SAM	04/30/25 19:17		Kareem	OK
34	Q1883-07	OU4-PCS-TC-30-042	SAM	04/30/25 19:33		Kareem	OK
35	CCV03	CCV03	CCV	04/30/25 19:37		Kareem	OK
36	CCB03	CCB03	CCB	04/30/25 19:41		Kareem	OK
37	Q1883-09	OU4-PCS-TC-31-042	SAM	04/30/25 19:45		Kareem	OK
38	Q1883-11	OU4-PCS-TC-32-042	SAM	04/30/25 19:50		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135614

Review By	JANVI	Review On	5/7/2025 3:31:29 PM
Supervise By	jaswal	Supervise On	5/7/2025 3:37:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85026
LCS Standard	
Chk Standard	MP85030,MP85031

39	Q1883-11DUP	OU4-PCS-TC-32-042	DUP	04/30/25 19:54		Kareem	OK
40	Q1883-11L	OU4-PCS-TC-32-042	SD	04/30/25 19:58		Kareem	OK
41	Q1883-11MS	OU4-PCS-TC-32-042	MS	04/30/25 20:02		Kareem	OK
42	Q1883-11MSD	OU4-PCS-TC-32-042	MSD	04/30/25 20:06		Kareem	OK
43	Q1883-11A	OU4-PCS-TC-32-042	PS	04/30/25 20:10		Kareem	OK
44	Q1883-13	OU4-VSL-18-042325	SAM	04/30/25 20:14		Kareem	OK
45	Q1883-15	OU4-VSL-19-042325	SAM	04/30/25 20:19		Kareem	OK
46	CCV04	CCV04	CCV	04/30/25 20:23		Kareem	OK
47	CCB04	CCB04	CCB	04/30/25 20:27		Kareem	OK
48	Q1889-01	COMP-1	SAM	04/30/25 20:31		Kareem	OK
49	Q1889-02	COMP-2	SAM	04/30/25 20:35		Kareem	OK
50	Q1889-03	COMP-3	SAM	04/30/25 20:39		Kareem	OK
51	Q1891-01	MH-C	SAM	04/30/25 20:44		Kareem	OK
52	Q1891-05	MH-D	SAM	04/30/25 20:48		Kareem	OK
53	Q1892-01	MH-G	SAM	04/30/25 20:52		Kareem	OK
54	Q1892-05	MH-H	SAM	04/30/25 20:56		Kareem	OK
55	Q1892-09	MH-U2	SAM	04/30/25 21:00		Kareem	OK
56	CCV05	CCV05	CCV	04/30/25 21:08		Kareem	OK
57	CCB05	CCB05	CCB	04/30/25 21:13		Kareem	OK
58	Q1901-02	B-167-SB01	SAM	04/30/25 21:21		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135614

Review By	JANVI	Review On	5/7/2025 3:31:29 PM
Supervise By	jaswal	Supervise On	5/7/2025 3:37:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85026
LCS Standard	
Chk Standard	MP85030,MP85031

59	Q1901-03	B-170-SB01	SAM	04/30/25 21:25		Kareem	OK
60	Q1901-04	B-167-SB02	SAM	04/30/25 21:29		Kareem	OK
61	Q1901-05	B-170-SB02	SAM	04/30/25 21:33		Kareem	OK
62	Q1902-02	343	SAM	04/30/25 21:37		Kareem	OK
63	Q1902-02DUP	343DUP	DUP	04/30/25 21:42		Kareem	OK
64	Q1902-02L	343L	SD	04/30/25 21:46		Kareem	OK
65	Q1902-02MS	343MS	MS	04/30/25 21:50		Kareem	OK
66	CCV06	CCV06	CCV	04/30/25 21:54		Kareem	OK
67	CCB06	CCB06	CCB	04/30/25 21:58		Kareem	OK
68	Q1902-02MSD	343MSD	MSD	04/30/25 22:02		Kareem	OK
69	Q1902-02A	343A	PS	04/30/25 22:06		Kareem	OK
70	Q1903-01	COMP-4	SAM	04/30/25 22:10		Kareem	OK
71	Q1903-02	COMP-5	SAM	04/30/25 22:15		Kareem	OK
72	Q1903-03	COMP-6	SAM	04/30/25 22:19		Kareem	OK
73	Q1904-01	VNJ-210	SAM	04/30/25 22:23		Kareem	OK
74	Q1905-01	MH-G	SAM	04/30/25 22:27		Kareem	OK
75	Q1905-05	MH-H	SAM	04/30/25 22:31		Kareem	OK
76	Q1906-01	WC-4	SAM	04/30/25 22:35		Kareem	OK
77	CCV07	CCV07	CCV	04/30/25 22:40		Kareem	OK
78	CCB07	CCB07	CCB	04/30/25 22:44		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135614

Review By	JANVI	Review On	5/7/2025 3:31:29 PM
Supervise By	jaswal	Supervise On	5/7/2025 3:37:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85026
LCS Standard	
Chk Standard	MP85030,MP85031

79	Q1906-05	WC-5	SAM	04/30/25 22:48		Kareem	OK
80	Q1906-09	WC-6	SAM	04/30/25 22:52		Kareem	OK
81	Q1906-13	WC-7	SAM	04/30/25 22:56		Kareem	OK
82	Q1907-01	CO-8R-WC	SAM	04/30/25 23:01		Kareem	OK
83	CCV08	CCV08	CCV	04/30/25 23:05		Kareem	OK
84	CCB08	CCB08	CCB	04/30/25 23:09		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135689

Review By	JANVI	Review On	5/7/2025 11:23:01 AM
Supervise By	jaswal	Supervise On	5/7/2025 11:23:43 AM

STD. NAME	STD REF.#
ICAL Standard	MP85545,MP85552,MP85549,MP85548,MP85547,MP85546
ICV Standard	MP85553
CCV Standard	MP85556
ICSA Standard	MP85554,MP85555
CRI Standard	MP85552
LCS Standard	
Chk Standard	MP85557,MP85558

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	05/06/25 13:43		Kareem	OK
2	S1	S1	CAL2	05/06/25 13:48		Kareem	OK
3	S2	S2	CAL3	05/06/25 13:52		Kareem	OK
4	S3	S3	CAL4	05/06/25 13:56		Kareem	OK
5	S4	S4	CAL5	05/06/25 14:01		Kareem	OK
6	S5	S5	CAL6	05/06/25 14:05		Kareem	OK
7	ICV01	ICV01	ICV	05/06/25 14:47		Kareem	OK
8	LLICV01	LLICV01	LLICV	05/06/25 15:22		Kareem	OK
9	ICB01	ICB01	ICB	05/06/25 15:27		Kareem	OK
10	CRI01	CRI01	CRDL	05/06/25 15:31		Kareem	OK
11	ICSA01	ICSA01	ICSA	05/06/25 15:50		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	05/06/25 15:55		Kareem	OK
13	ICSADL	ICSADL	ICSA	05/06/25 15:59		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	05/06/25 16:03		Kareem	OK
15	CCV01	CCV01	CCV	05/06/25 16:29		Kareem	OK
16	CCB01	CCB01	CCB	05/06/25 16:34		Kareem	OK
17	Q1948-01	001-WILLETS-PT-BL	SAM	05/06/25 16:38		Kareem	OK
18	Q1948-02	002-35TH-AVE(APR)	SAM	05/06/25 16:42		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135689

Review By	JANVI	Review On	5/7/2025 11:23:01 AM
Supervise By	jaswal	Supervise On	5/7/2025 11:23:43 AM

STD. NAME	STD REF.#
ICAL Standard	MP85545,MP85552,MP85549,MP85548,MP85547,MP85546
ICV Standard	MP85553
CCV Standard	MP85556
ICSA Standard	MP85554,MP85555
CRI Standard	MP85552
LCS Standard	
Chk Standard	MP85557,MP85558

19	Q1932-01	COMP-4	SAM	05/06/25 16:47		Kareem	OK
20	Q1932-03	COMP-5	SAM	05/06/25 16:51		Kareem	OK
21	Q1932-05	COMP-6	SAM	05/06/25 16:55		Kareem	OK
22	Q1932-07	COMP-7	SAM	05/06/25 16:59		Kareem	OK
23	Q1933-01	OK-01-050125	SAM	05/06/25 17:03		Kareem	OK
24	Q1933-01DUP	OK-01-050125DUP	DUP	05/06/25 17:07		Kareem	OK
25	Q1933-01L	OK-01-050125L	SD	05/06/25 17:11		Kareem	OK
26	CCV02	CCV02	CCV	05/06/25 17:15		Kareem	OK
27	CCB02	CCB02	CCB	05/06/25 17:20		Kareem	OK
28	Q1933-01MS	OK-01-050125MS	MS	05/06/25 17:24		Kareem	OK
29	Q1933-01MSD	OK-01-050125MSD	MSD	05/06/25 17:28		Kareem	OK
30	Q1933-01A	OK-01-050125A	PS	05/06/25 17:32		Kareem	OK
31	Q1913-03	WC-13-S-202504	SAM	05/06/25 17:43		Kareem	OK
32	Q1913-03DUP	WC-13-S-202504DUP	DUP	05/06/25 17:47		Kareem	OK
33	Q1913-03L	WC-13-S-202504L	SD	05/06/25 17:51		Kareem	OK
34	Q1913-03MS	WC-13-S-202504MS	MS	05/06/25 17:56		Kareem	OK
35	Q1913-03MSD	WC-13-S-202504MSD	MSD	05/06/25 18:00		Kareem	OK
36	Q1913-03A	WC-13-S-202504A	PS	05/06/25 18:04		Kareem	OK
37	CCV03	CCV03	CCV	05/06/25 18:08		Kareem	OK
38	CCB03	CCB03	CCB	05/06/25 18:13		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135689

Review By	JANVI	Review On	5/7/2025 11:23:01 AM
Supervise By	jaswal	Supervise On	5/7/2025 11:23:43 AM

STD. NAME	STD REF.#
ICAL Standard	MP85545,MP85552,MP85549,MP85548,MP85547,MP85546
ICV Standard	MP85553
CCV Standard	MP85556
ICSA Standard	MP85554,MP85555
CRI Standard	MP85552
LCS Standard	
Chk Standard	MP85557,MP85558

39	PB167860BL	PB167860BL	MB	05/06/25 18:17		Kareem	OK
40	PB167860BS	PB167860BS	LCS	05/06/25 18:21		Kareem	OK
41	PB167781BL	PB167781BL	MB	05/06/25 18:25		Kareem	OK
42	PB167781BS	PB167781BS	LCS	05/06/25 18:37		Kareem	OK
43	PB167757BL	PB167757BL	MB	05/06/25 18:41		Kareem	OK
44	PB167757BS	PB167757BS	LCS	05/06/25 19:01		Kareem	OK
45	Q1949-01	001-WILLETS-PT-BL	SAM	05/06/25 19:05		Kareem	OK
46	CCV04	CCV04	CCV	05/06/25 19:16		Kareem	OK
47	CCB04	CCB04	CCB	05/06/25 19:20		Kareem	OK
48	Q1949-04	002-35TH-AVE(MAY)	SAM	05/06/25 19:24		Kareem	OK
49	Q1949-04DUP	002-35TH-AVE(MAY)[	DUP	05/06/25 19:29		Kareem	OK
50	Q1949-04L	002-35TH-AVE(MAY)[	SD	05/06/25 19:33		Kareem	OK
51	Q1949-04MS	002-35TH-AVE(MAY)[	MS	05/06/25 19:37		Kareem	OK
52	Q1949-04MSD	002-35TH-AVE(MAY)[	MSD	05/06/25 19:41		Kareem	OK
53	Q1949-04A	002-35TH-AVE(MAY)A	PS	05/06/25 19:45		Kareem	OK
54	Q1939-05	GB3	SAM	05/06/25 19:49	Zn high	Kareem	Dilution
55	Q1935-01	MH-NN	SAM	05/06/25 19:53		Kareem	OK
56	Q1935-05	MH-MM	SAM	05/06/25 19:57		Kareem	OK
57	CCV05	CCV05	CCV	05/06/25 20:01		Kareem	OK
58	CCB05	CCB05	CCB	05/06/25 20:06		Kareem	OK

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Review By	JANVI	Review On	5/7/2025 11:23:01 AM
Supervise By	jaswal	Supervise On	5/7/2025 11:23:43 AM

STD. NAME	STD REF.#
ICAL Standard	MP85545,MP85552,MP85549,MP85548,MP85547,MP85546
ICV Standard	MP85553
CCV Standard	MP85556
ICSA Standard	MP85554,MP85555
CRI Standard	MP85552
LCS Standard	
Chk Standard	MP85557,MP85558

59	Q1939-01	GB1	SAM	05/06/25 20:10		Kareem	OK
60	Q1939-03	GB2	SAM	05/06/25 20:14		Kareem	OK
61	Q1945-01DL	GB1WDL	SAM	05/06/25 20:18	10x for Zn	Kareem	Confirms
62	Q1946-01	BB-CONCRETE	SAM	05/06/25 20:22		Kareem	OK
63	Q1961-01	EO-01-050525	SAM	05/06/25 20:27		Kareem	OK
64	CCV06	CCV06	CCV	05/06/25 20:31		Kareem	OK
65	CCB06	CCB06	CCB	05/06/25 20:35		Kareem	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1883

Test : Mercury,Metals ICP-TAL

Prepbatch ID : PB167755,PB167757,

Sequence ID/Qc Batch ID: LB135571,LB135614,LB135614,LB135689,

Standard ID :
MP84041,MP85016,MP85017,MP85018,MP85019,MP85020,MP85021,MP85022,MP85023,MP85024,MP85025,MP85026,MP85030,MP85031,MP85241,MP85243,MP85462,MP85463,MP85464,MP85465,MP85466,MP85467,MP85468,MP85469,MP85470,MP85471,MP85472,MP85473,MP85474,MP85475,MP85476,MP85545,MP85546,MP85547,MP85548,MP85549,MP85551,MP85552,MP85553,MP85554,MP85555,MP85556,MP85557,MP85558,

Chemical ID :
M4251,M4583,M4883,M4891,M4916,M5020,M5062,M5288,M5387,M5395,M5429,M5466,M5467,M5470,M5471,M5472,M5496,M5497,M5516,M5521,M5532,M5581,M5658,M5747,M5748,M5751,M5768,M5789,M5798,M5799,M5800,M5801,M5811,M5814,M5815,M5816,M5817,M5820,M5875,M5882,M5884,M5942,M5959,M5962,M5970,M5978,M5985,M5997,M6005,M6012,M6021,M6023,M6028,M6030,M6032,M6058,M6076,M6077,M6125,M6126,M6127,M6128,M6137,M6138,M6142,M6144,M6145,M6146,M6150,M6151,M6152,M6155,M6156,M6158,M6159,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
902	ICP AES CAL BLK (SO/ICB/CCB)	MP85016	03/26/2025	05/02/2025	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

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP85017	03/26/2025	05/02/2025	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP85018	03/26/2025	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 50.00000ml of MP85016 + 50.00000ml of MP85017 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP85019	03/26/2025	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of MP85017 + 75.00000ml of MP85016 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP85020	03/26/2025	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 16.00000ml of MP85017 + 184.00000ml of MP85016 = Final Quantity: 200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP85021	03/26/2025	05/02/2025	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

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	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 2.00000ml of MP85021 + 98.00000ml 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
912	ICP AES ICV SOLN	MP85023	03/26/2025	05/02/2025	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP85024	03/26/2025	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP85016 = 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
3494	ICP AES ICSAB SOLN-1	MP85025	03/26/2025	05/02/2025	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP85026	03/26/2025	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 50.00000ml of MP85016 + 50.00000ml of MP85017 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP85030	03/26/2025	05/02/2025	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
513	RINSE SOLN	MP85031	03/26/2025	05/02/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 200.00000ml of M5789 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP85241	04/16/2025	10/16/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

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
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP85243	04/16/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4251 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP85462	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 1.00000ml of M6158 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP85463	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

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
1341	Hg 0.2 PPB STD	MP85464	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85462 = 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	MP85465	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 245.00000ml of W3112 + 2.50000ml of MP85462 = 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	MP85466	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 242.50000ml of W3112 + 5.00000ml of MP85462 = 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	MP85467	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 240.00000ml of W3112 + 7.50000ml of MP85462 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP85468	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 237.50000ml of W3112 + 10.00000ml of MP85462 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP85469	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6158 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP85470	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

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
1358	CCV (Hg 5.0 PPB SOLUTION)	MP85471	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6158 + 10.00000ml of MP85462 = Final Quantity: 500.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP85472	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6158 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP85473	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85462 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP85474	04/28/2025	04/29/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 240.50000ml of W3112 + 7.00000ml of MP85462 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
887	AQUA REGIA FOR HG ON 7471A	MP85475	04/28/2025	04/29/2025	Mohan Bera	None	None	Sarabjit Jaswal 04/29/2025

FROM 150.00000ml of M6151 + 50.00000ml of M6158 = Final Quantity: 200.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP85476	04/28/2025	04/29/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

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
902	ICP AES CAL BLK (SO/ICB/CCB)	MP85545	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M6158 = Final Quantity: 2500.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP85546	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 5.00000ml of M5466 + 5.00000ml of M5471 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M5997 + 5.00000ml of M6076 + 5.00000ml of M6146 + 455.00000ml of MP85545 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP85547	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 50.00000ml of MP85545 + 50.00000ml of MP85546 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP85548	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 25.00000ml of MP85546 + 75.00000ml of MP85545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP85549	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 16.00000ml of MP85546 + 184.00000ml of MP85545 = Final Quantity: 200.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP85551	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_2 (M SC-2)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.04000ml of M6137 + 0.05000ml of M5658 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.05000ml of M6159 + 0.06000ml of M5747 + 0.10000ml of M5471 + 0.10000ml of M5751 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6145 + 0.25000ml of M5466 + 0.25000ml of M6146 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M5942 + 1.00000ml of M6127 + 1.00000ml of M6138 + 1.00000ml of M6142 + 1.00000ml of M6144 + 2.00000ml of M5816 + 89.29000ml of MP85545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP85552	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 2.00000ml of MP85551 + 98.00000ml of MP85545 = 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
912	ICP AES ICV SOLN	MP85553	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.10000ml of M5467 + 0.25000ml of M5470 + 0.25000ml of M6058 + 10.00000ml of M6150 + 89.32500ml of MP85545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP85554	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP85545 = 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
3494	ICP AES ICSAB SOLN-1	MP85555	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 0.01000ml of M5815 + 0.01000ml of M5817 + 0.10000ml of M5470 + 0.10000ml of M5970 + 0.10000ml of M6077 + 10.00000ml of M6152 + 10.00000ml of M6155 + 79.68000ml of MP85545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP85556	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 50.00000ml of MP85545 + 50.00000ml of MP85546 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP85557	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6158 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP85558	05/02/2025	06/02/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 05/07/2025

FROM 200.00000ml of M6158 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	12/19/2018 / mohan	12/05/2018 / mohan	M4251

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Labpure	0919120 / Boiling Stones	26275770	07/07/2025	07/03/2020 / mohan	05/07/2020 / mohan	M4583

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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CHEMICAL RECEIPT LOG BOOK

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.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5470

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	03/20/2026	03/20/2025 / jaswal	06/12/2023 / jaswal	M5581

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	02/20/2029	07/01/2024 / Jaswal	06/14/2024 / Jaswal	M5959

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB727800	12/21/2027	02/03/2025 / JANVI	02/22/2024 / kareem	M5997

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/30/2026	04/15/2025 / JANVI	05/14/2024 / Jaswal	M6005

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

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	V2-MEB746173	01/29/2026	01/29/2025 / JANVI	08/22/2024 / Jaswal	M6058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	01/01/2026	01/01/2025 / kareem	09/19/2024 / kareem	M6076

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	09/06/2029	01/23/2025 / kareem	09/19/2024 / kareem	M6077

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1403 / Hydrogen Peroxide, 30% 1 gal	820803	05/25/2025	11/26/2024 / Eman	11/22/2024 / Eman	M6125

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	121824	12/18/2027	04/17/2025 / Janvi	01/13/2025 / Jaswal	M6138

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	103024	10/30/2027	05/06/2025 / JANVI	01/13/2025 / Jaswal	M6142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	01/31/2025 / kareem	10/18/2024 / kareem	M6146

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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.	58113 / Al, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	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

M6032

R: 8/5/24

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

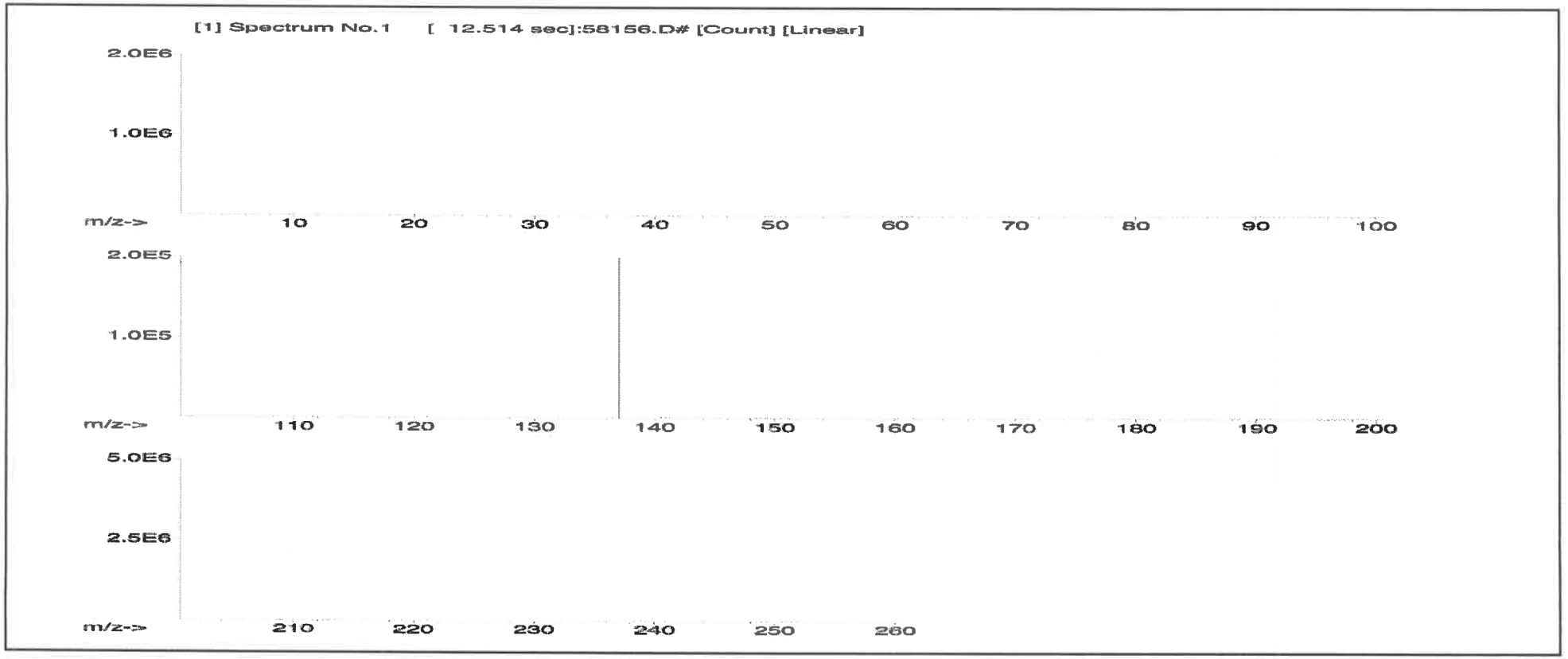
Giovanni Esposito

Formulated By:	Giovanni Esposito	010924

Pedro Rentas

Reviewed By:	Pedro L. Rentas	010924

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



531 of 714
Q1883-METALS

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Certified Reference Material CRM

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https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
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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

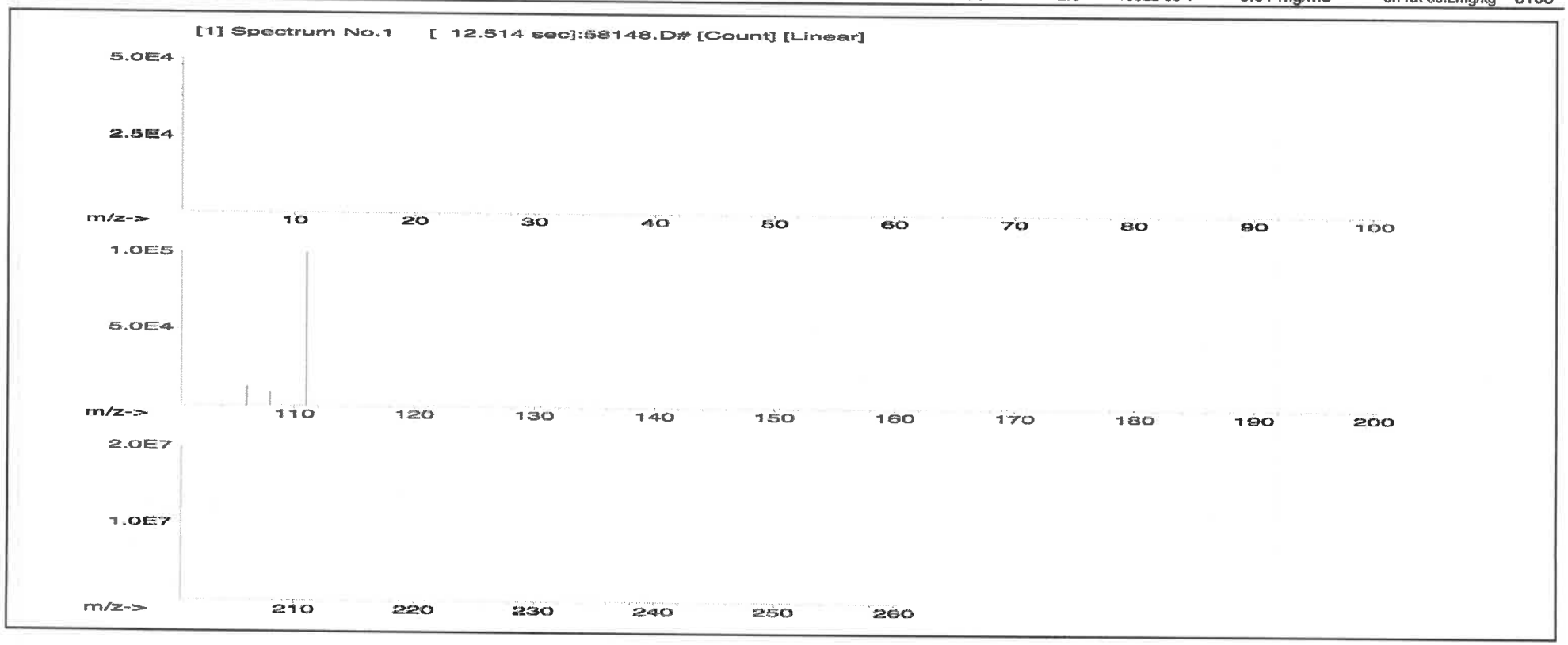
Weight shown below was diluted to (mL): 2000.07 ± 0.100 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	± 5E-05 Balance Uncertainty

Aleah O'Brady
Formulated By: Aleah O'Brady 070124

Pedro Rentas
Reviewed By: Pedro L. Rentas 070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



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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

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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-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 250 µg/mL ea: Silver, Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.00 ± 0.26 µg/mL	Calcium, Ca	5 000 ± 22 µg/mL
Chromium, Cr	200.0 ± 1.0 µg/mL	Cobalt, Co	500.0 ± 2.4 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 20 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Potassium, K	5 000 ± 19 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 18 µg/mL
Vanadium, V	499.7 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.118 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

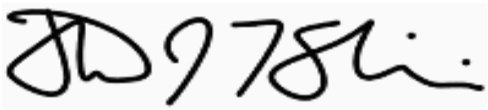
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

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

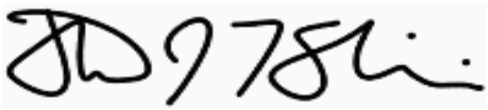
- Sealed TCT Bag Open Date: _____

- 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:

				Lot #	
Part Number:	**58126**		**Solvent:**	21110221	Nitric Acid
Lot Number:	**051523**				
Description:	**Iron (Fe)**		5.0%	250.0 (mL)	Nitric Acid
Expiration Date:	051526				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	5000.1	0.12	Flask Uncertainty		

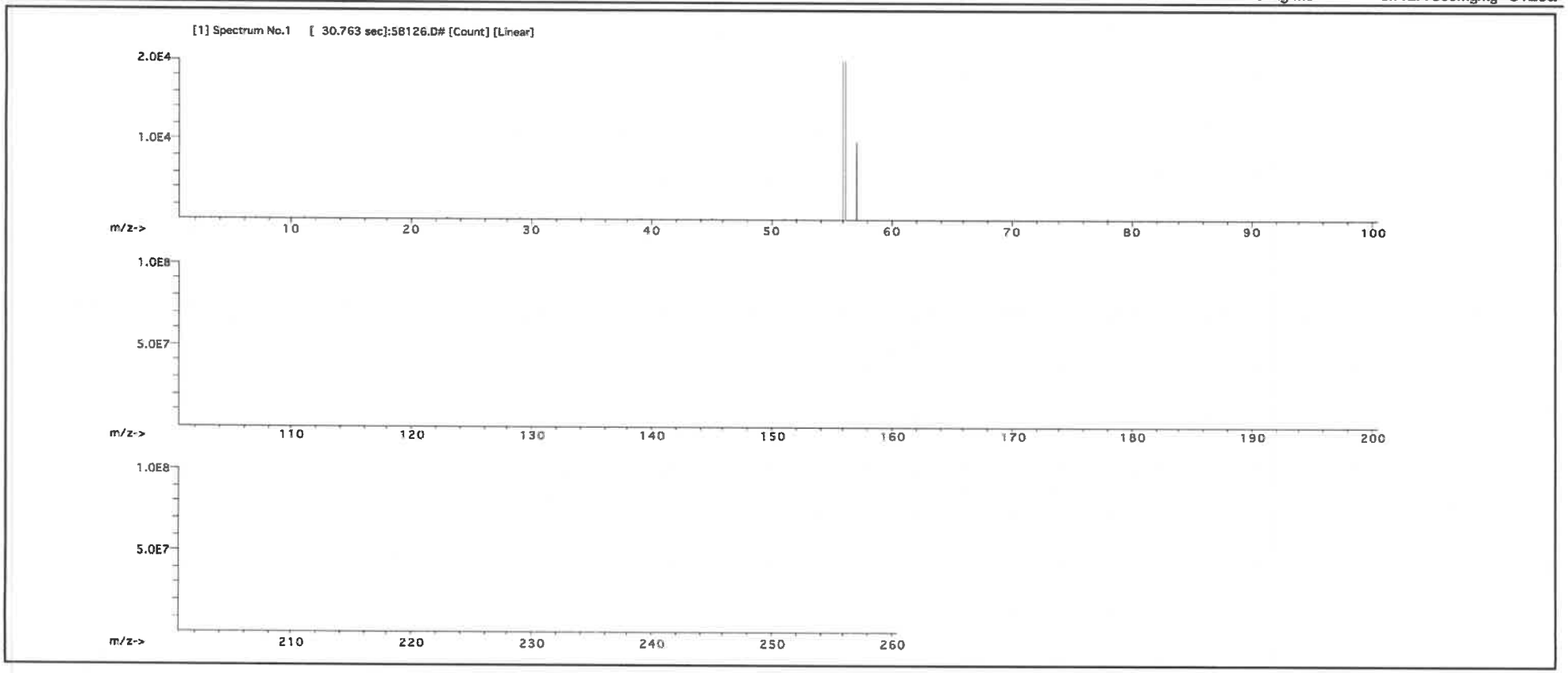
Giovanni Esposito

Formulated By:	Giovanni Esposito	051523

Pedro Rentas

Reviewed By:	Pedro L. Rentas	051523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2302010-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



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	<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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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES

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Certificate of Analysis

RD:05/14/2024

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Christiansburg, VA 24073 USA
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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

M4251
JB

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

M45 P3
Exp Dt. 5 '24
MB

SAINT-GOBAIN

Manufacturer:
Saint-Gobain Performance Plastics
11 Sicho Drive
Poestenkill, NY 12140

Certificate of Conformance

Part Number/ Revision:	D1069103 0	**Customer Part Number/ Revision:**	1069103 N/A
Description:	*PTFE BOILING STONES-450 GRAMS		
Lot Number:	26275770	**Lot Quantity:**	10 EA
Date of Manufacture (MM/DD/YY)	03/23/20	**Expiration Date: (MM/DD/YY)**	N/A
Post Processing Run Number: (Refer to the attached Certificate for Additional Detail)		N/A	

We certify the material listed above confirms in full with the following specifications:

All items have been manufactured, inspected, tested, and accepted in accordance with our Quality Management system, ISO 9001-2015. Documentation substantiating this certification is kept on record per the Company's retention policy and is available for review.
All materials and processes used in manufacturing conform to the materials and/or manufacturing specifications and notes indicated on the purchase order, drawing, specifications, quality assurance requirements, or other applicable documents effective on the date of manufacture.
Saint-Gobain does not warrant the product for any particular application and it is the responsibility of the user to conduct tests that are deemed necessary to determine the suitability of the product for any particular use. Saint-Gobain's sole responsibility shall be for failure to manufacture the product in accordance with specifications and requirements of the buyer, and from defects in material and workmanship. This warranty is expressly made in lieu of any and all other warranties and Saint-Gobain's sole liability shall be to replace any product not in conformance with the specification and requirements of the buyer.

Quality Approval:	Jonathan Kimble	**Date:**	05/13/20

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	20370011	Nitric Acid	
Lot Number:	**070221**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	070224			
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	

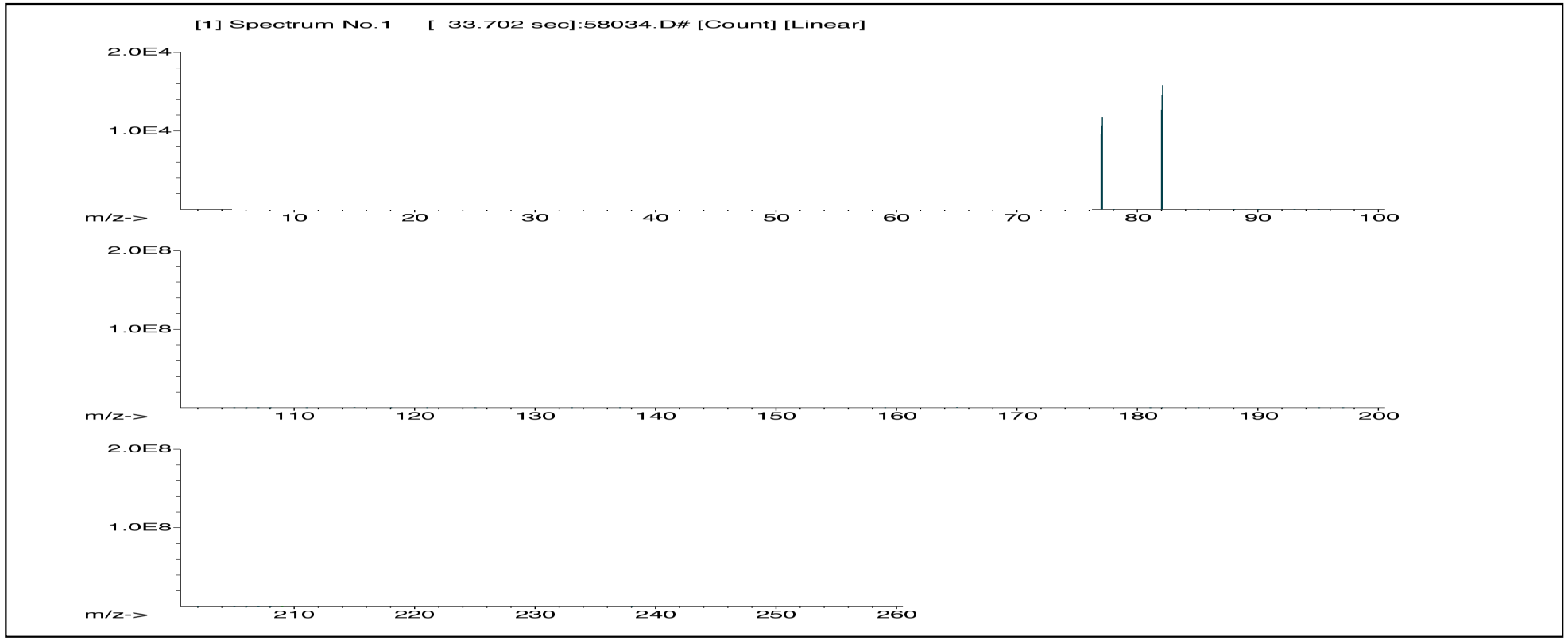
Giovanni Esposito

Formulated By:	Giovanni Esposito	070221

Pedro Rentas

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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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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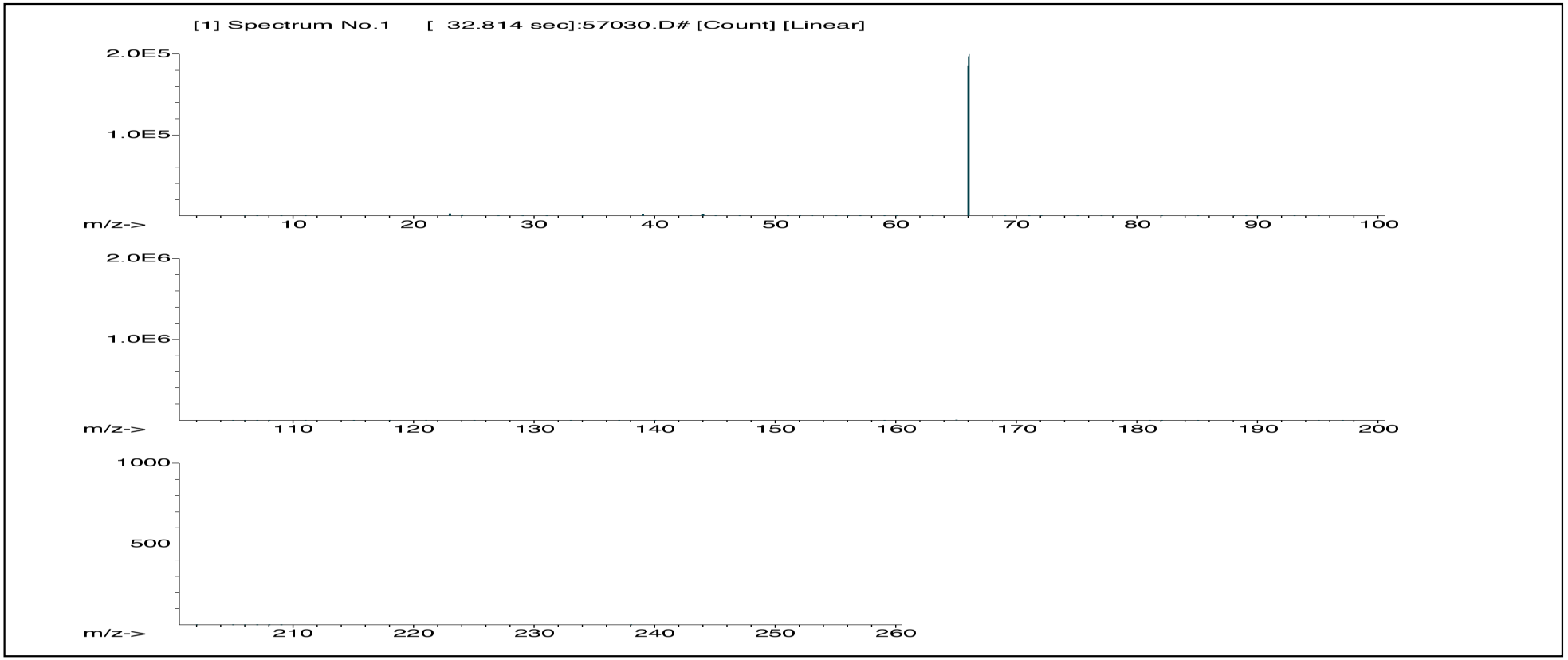
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58030**	20370011	Nitric Acid	
Lot Number:	**031921**			
Description:	**Zinc (Zn)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	031924			
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	031921
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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ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	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).

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.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

BA M5020 R: 12/09/21

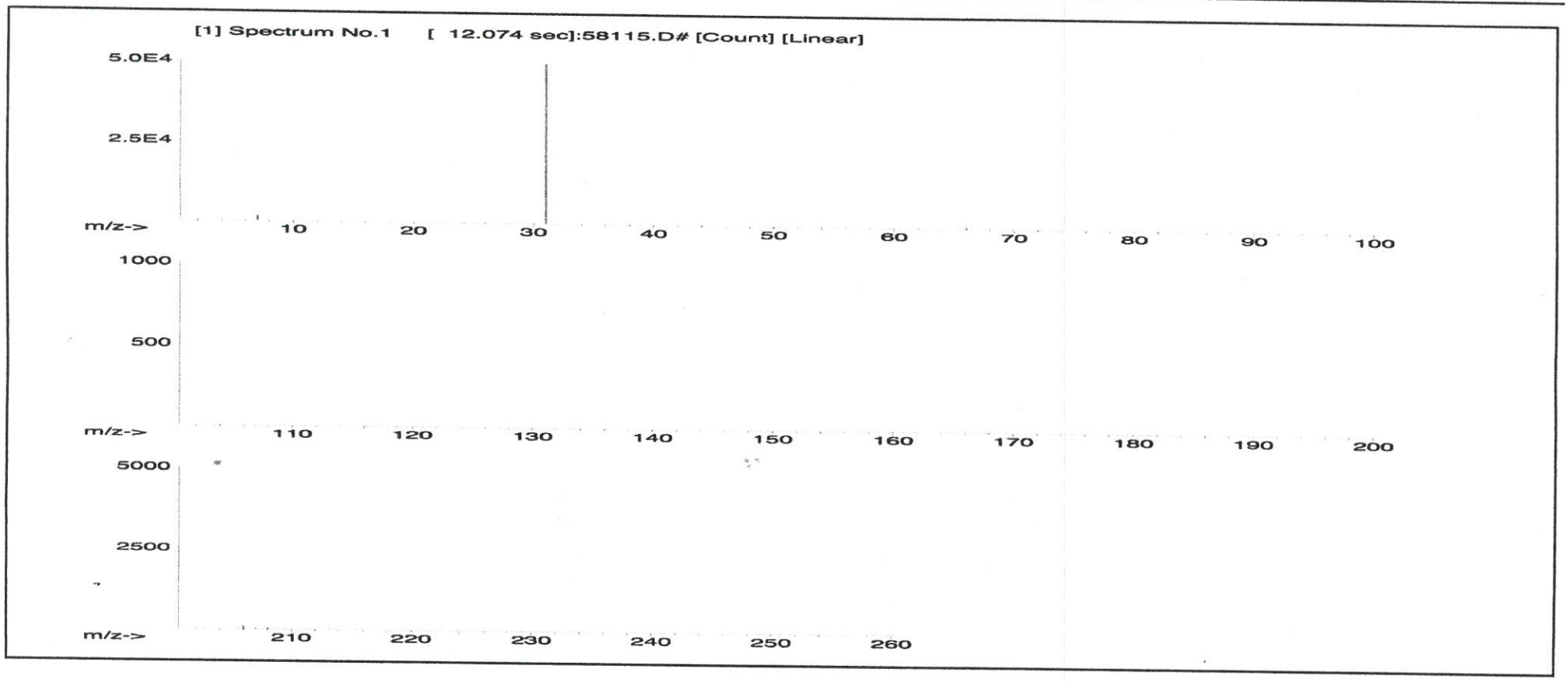
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	**57115**	**Solvent:**	20370011	Nitric Acid
Lot Number:	**032921**			
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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Certified Reference Material CRM

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AR-1539 Certificate Number
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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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are 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).

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$$

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 HNO3. 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% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); 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:

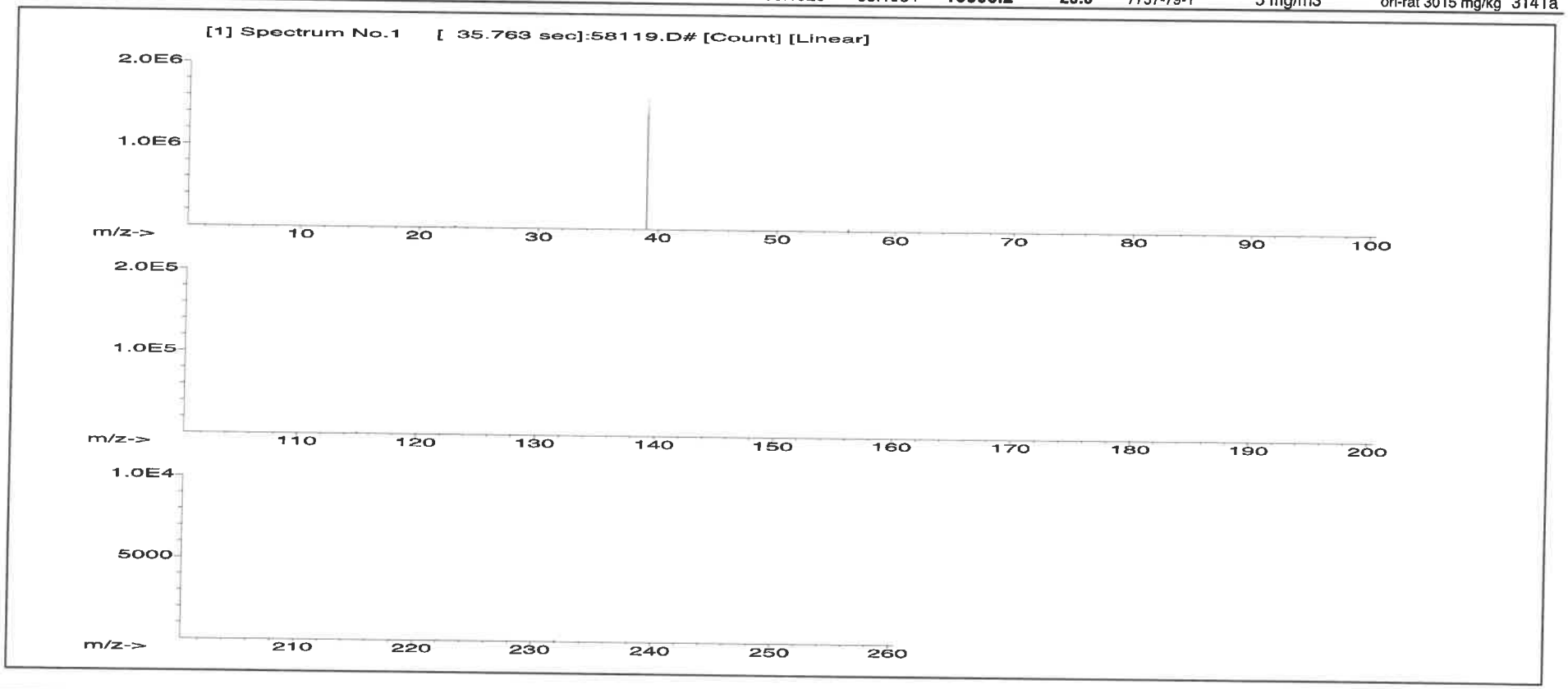
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

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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R: 09/08/22 (BA)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

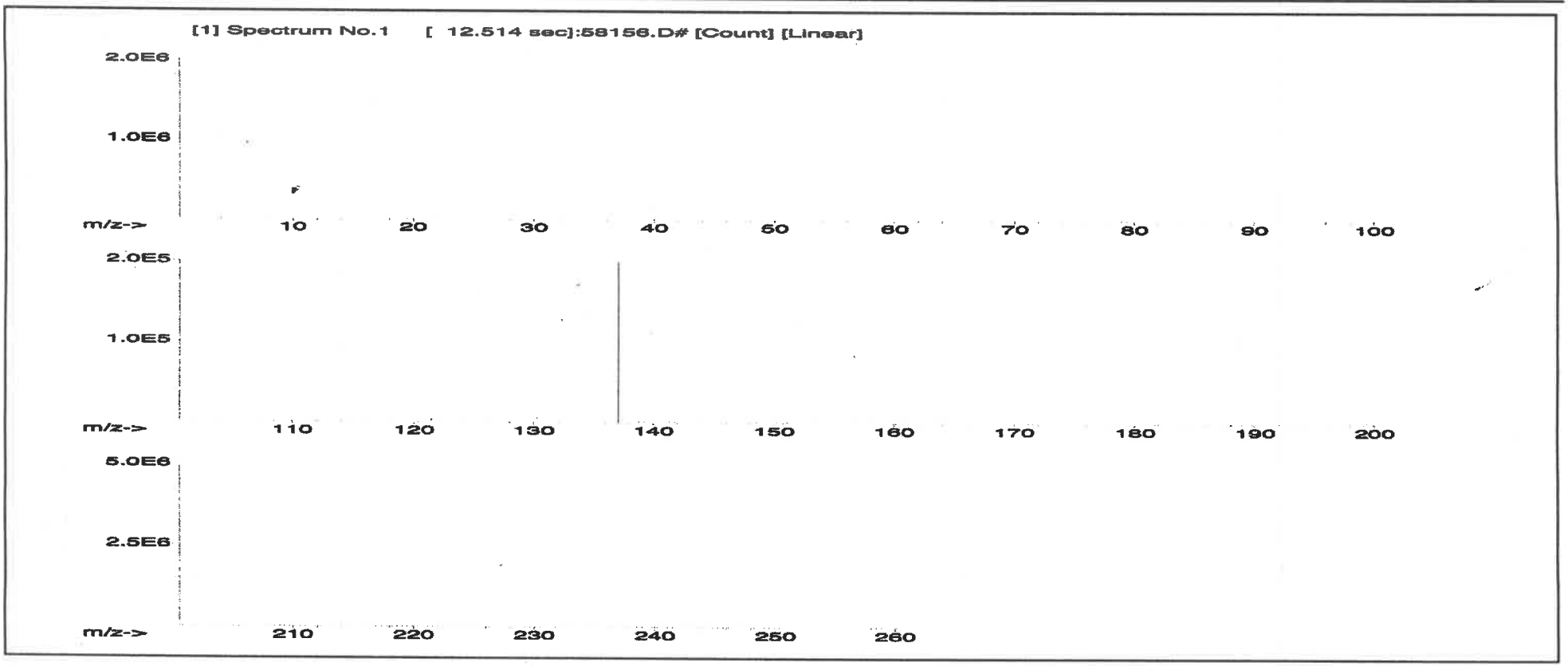
CERTIFIED WEIGHT REPORT:

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



01883-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

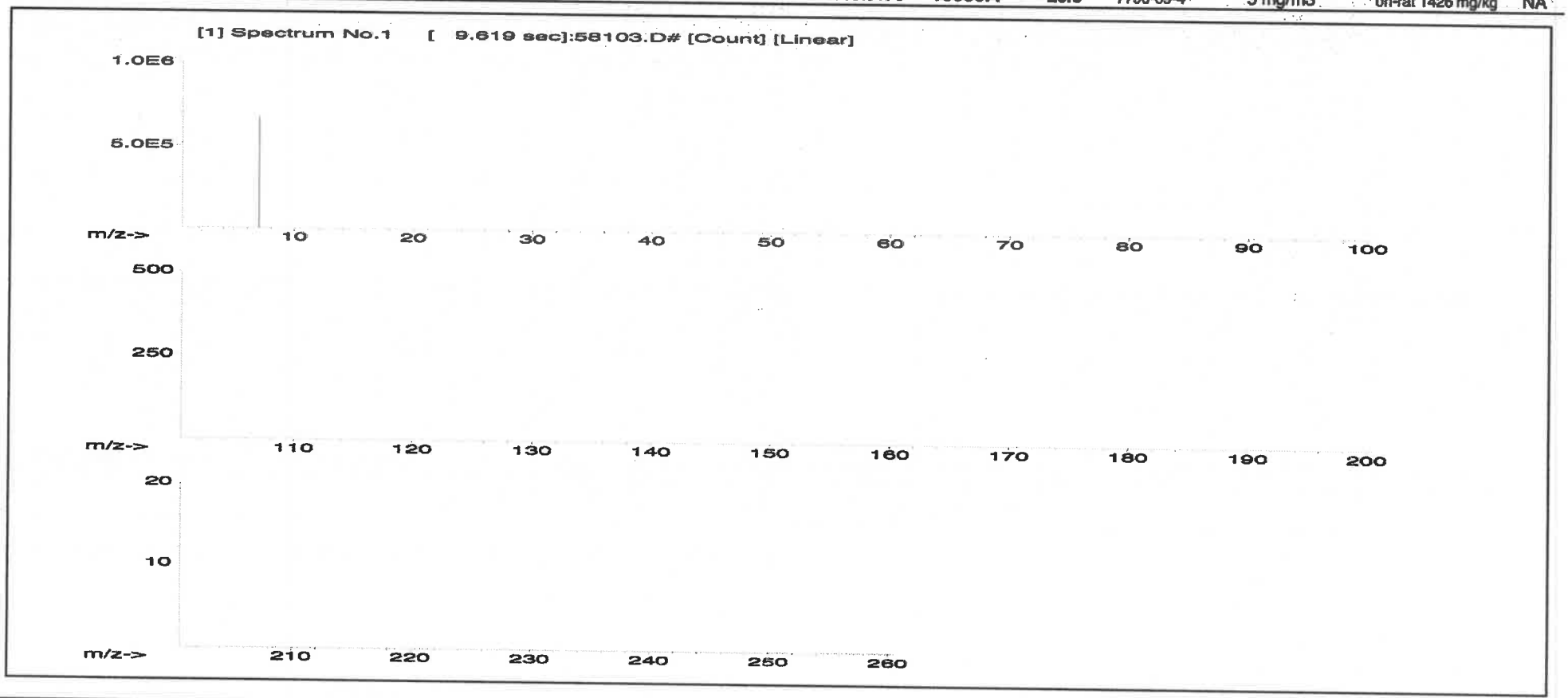
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	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



QUALITY-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.

* 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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M 5466

Certified Reference Material CRM

R: 03/01/23 BH

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CERTIFIED WEIGHT REPORT:

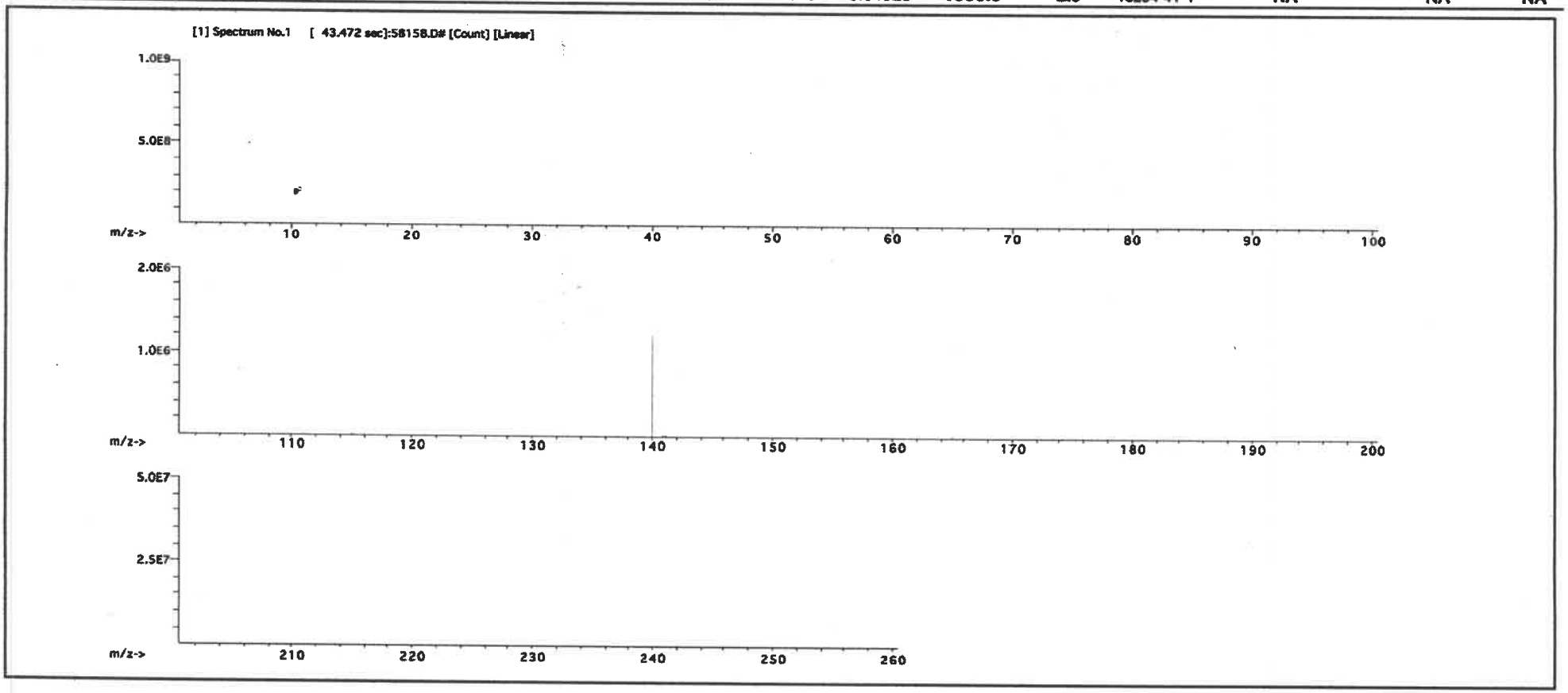
Part Number: 57058
Lot Number: 061322
Description: Cerium (Ce)

Expiration Date: 061325
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

Formulated By:	Lawrence Barry	061322
Reviewed By:	Pedro L. Rentas	061322

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04923	1000.0	2.0	10294-41-4	NA	NA	NA



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Certified Reference Material CRM

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AR-1539 Certificate Number
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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.

* 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).

CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 020623
Description: Cerium (Ce)

Expiration Date: 020626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

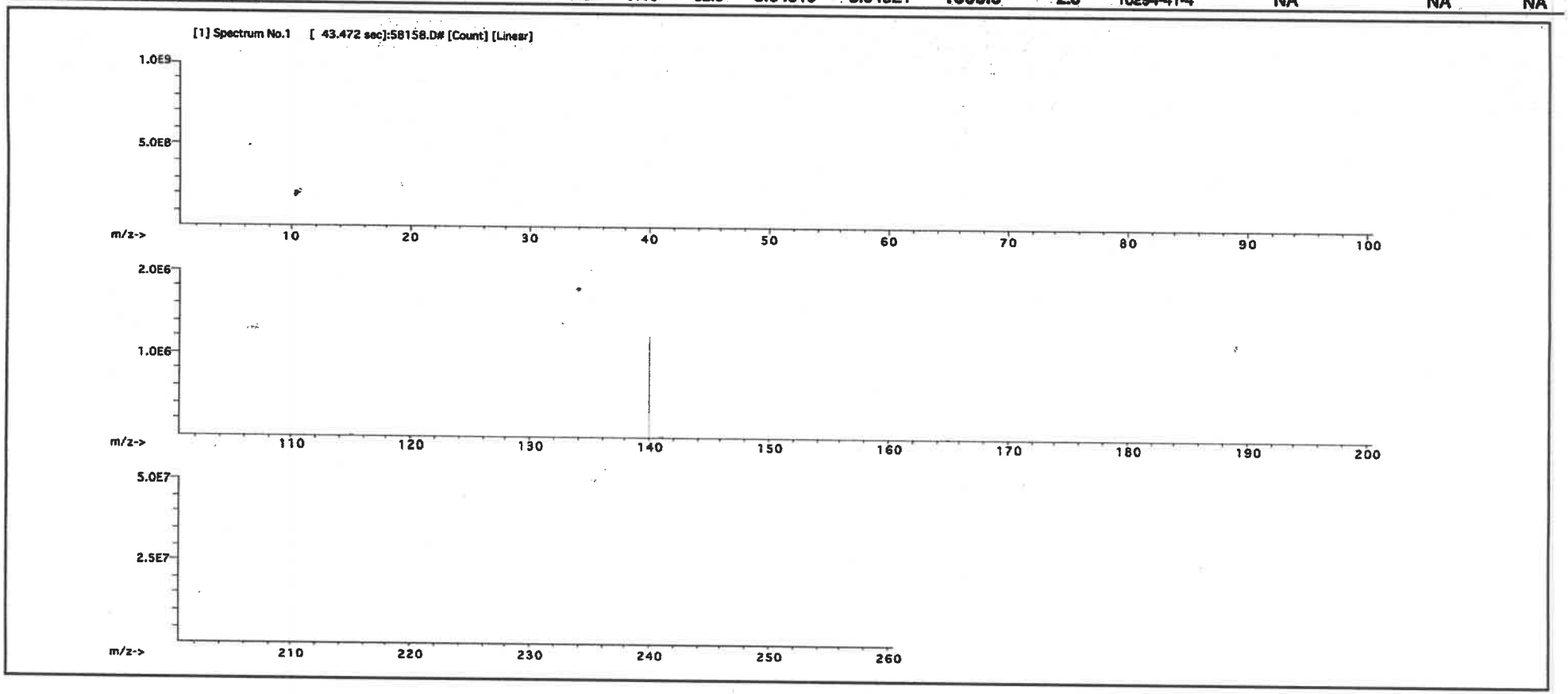
Weight shown below was diluted to (mL): 1000.12 ± 0.058 Flask Uncertainty

		Lot #	
Solvent:	2%	21110221	Nitric Acid
		20.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	020623
Reviewed By:	Pedro L. Rentas	020623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04921	**1000.0**	**2.0**	10294-41-4	NA	NA	NA



21883-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

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		

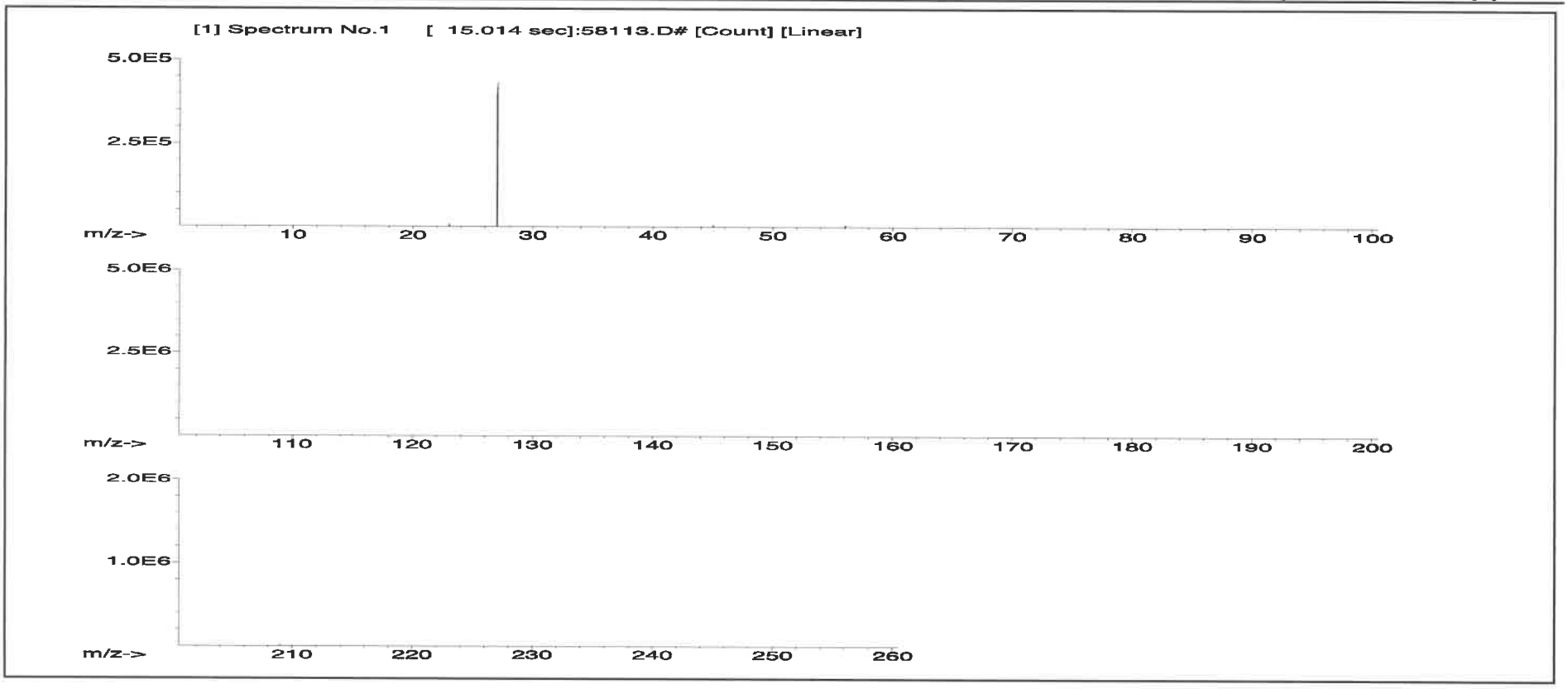
Giovanni Esposito

Formulated By:	Giovanni Esposito	011623

Pedro Rentas

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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Certified Reference Material CRM

M5497 - M5498 R: 03/17/23 (BA)

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

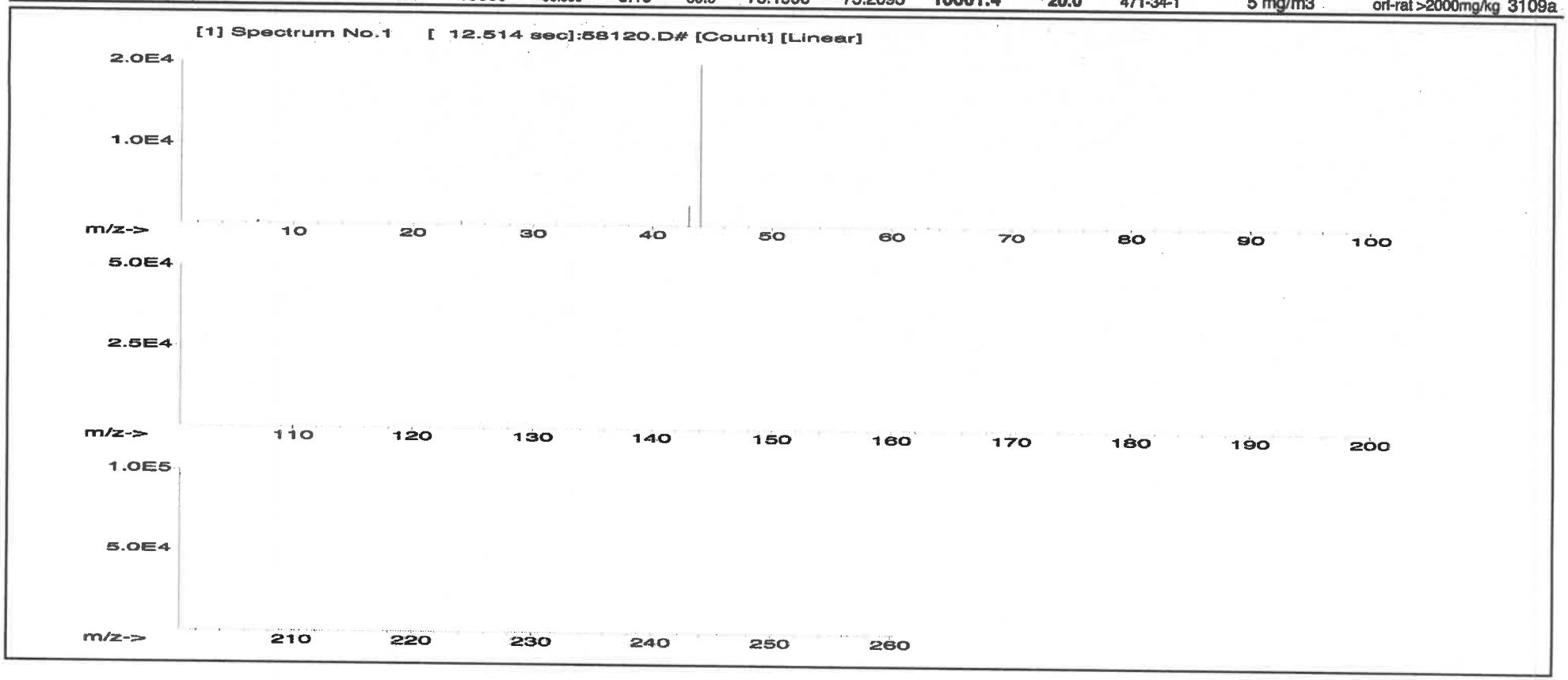
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	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

Pedro Rentas
Reviewed By: Pedro L. Rentas 031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

M546 M517 R: 03/17/22 BH

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Q1883-METALS

CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 022123
Description: Sodium (Na)

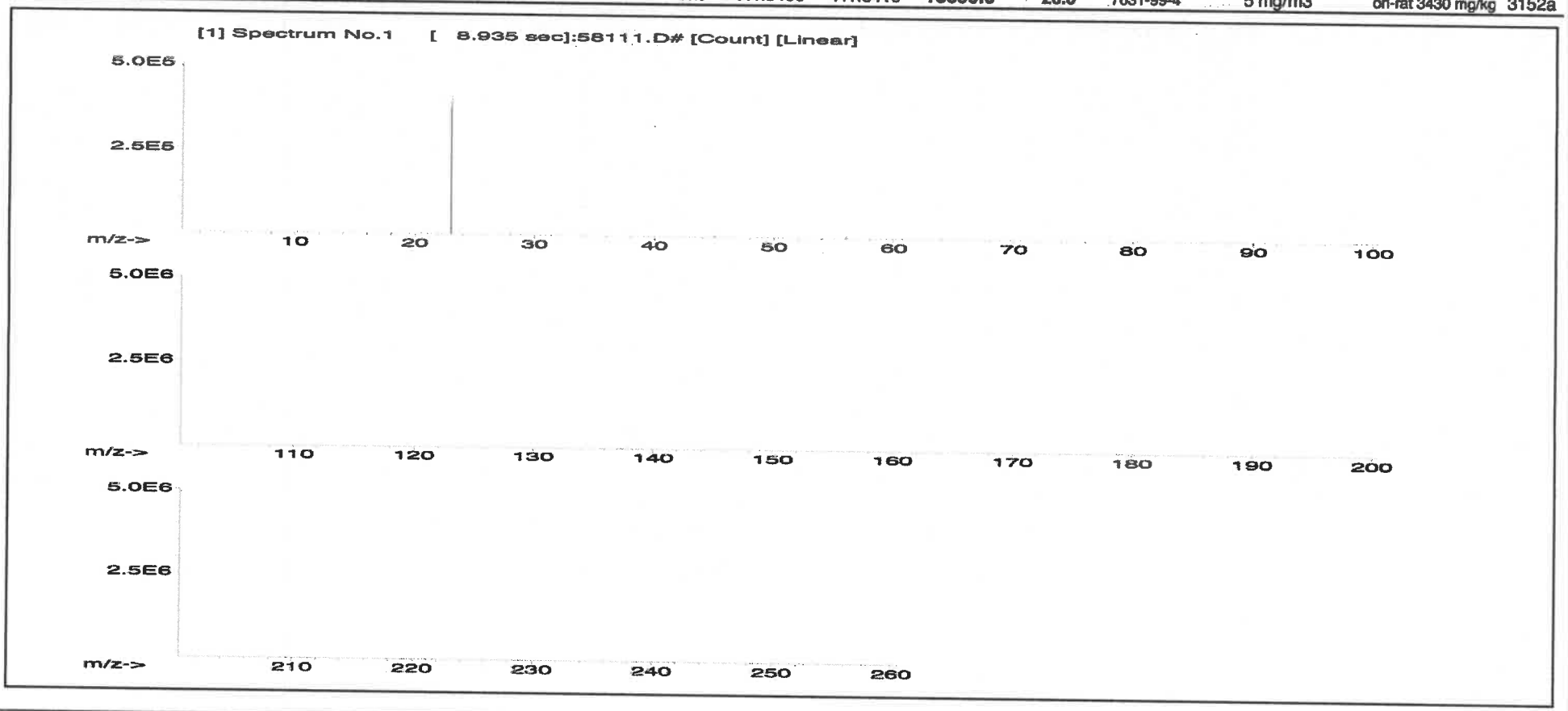
Expiration Date: 022126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

Lot #		
Solvent:	21110221	Nitric Acid
2%	60.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty
0.06 Flask Uncertainty

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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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	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:

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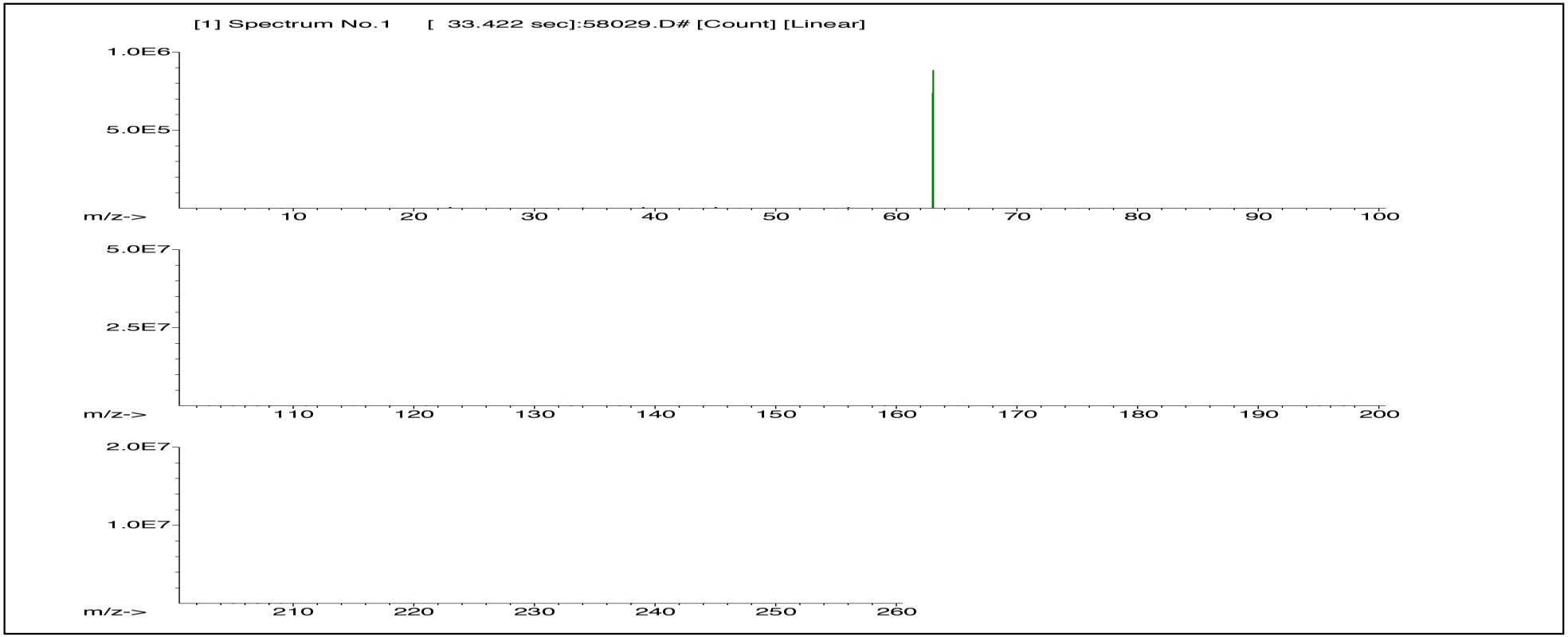
CERTIFIED WEIGHT REPORT:

		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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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
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Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	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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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

JENSEN INERT PRODUCTS

MATERIAL CERTIFICATE OF COMPLIANCE

DATE: JUNE 12, 2023

CUSTOMER:	PCI SCIENTIFIC SUPPLY, INC
PURCHASE ORDER NO.	6054931
CATALOG NO.	BOI5021-450L
PRODUCT DESCRIPTION:	BOILING STONES, TFE, 454GMS
QUANTITY:	10 EACH
LOT NO.	W126678
SPECIFICATION (S):	Made from Virgin PTFE Resin

We certify that we have complied with the terms and conditions of the above Purchase Order and the Part Specifications in the manufacturing of the above product.

Laura Valencia

Laura Valencia
Quality Assurance Inspector

F:U:J:CF:PCISCI:COC-58118-BOI5021-061223

3773 NW 126th Avenue • Coral Springs, Florida 33065 • Fax (954) 344-2008 • 1-800 446-3781
Email: jensen@jenseninert.com Visit our Web Site at www.jenseninert.com

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Certified Reference Material CRM

M5658 R ! 8/25/23

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AR-1539 Certificate Number
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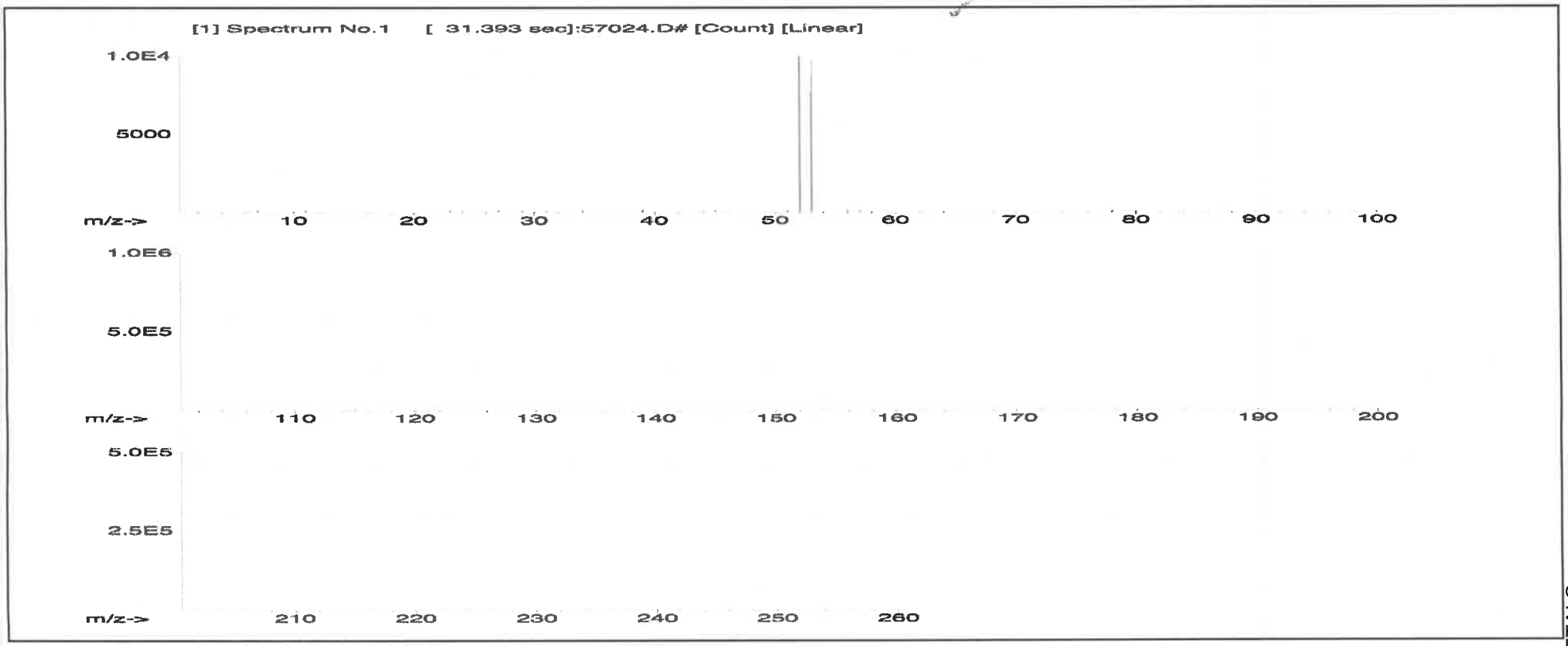
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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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

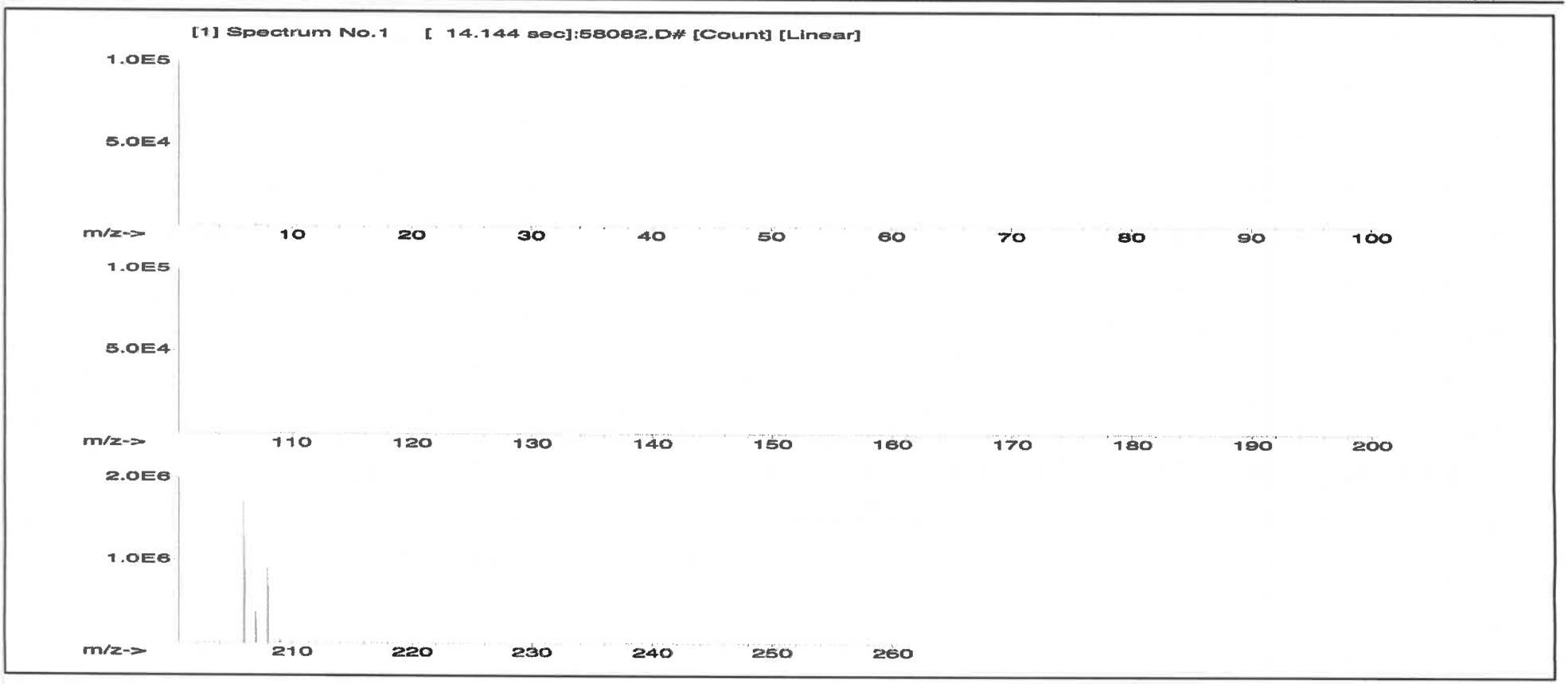
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	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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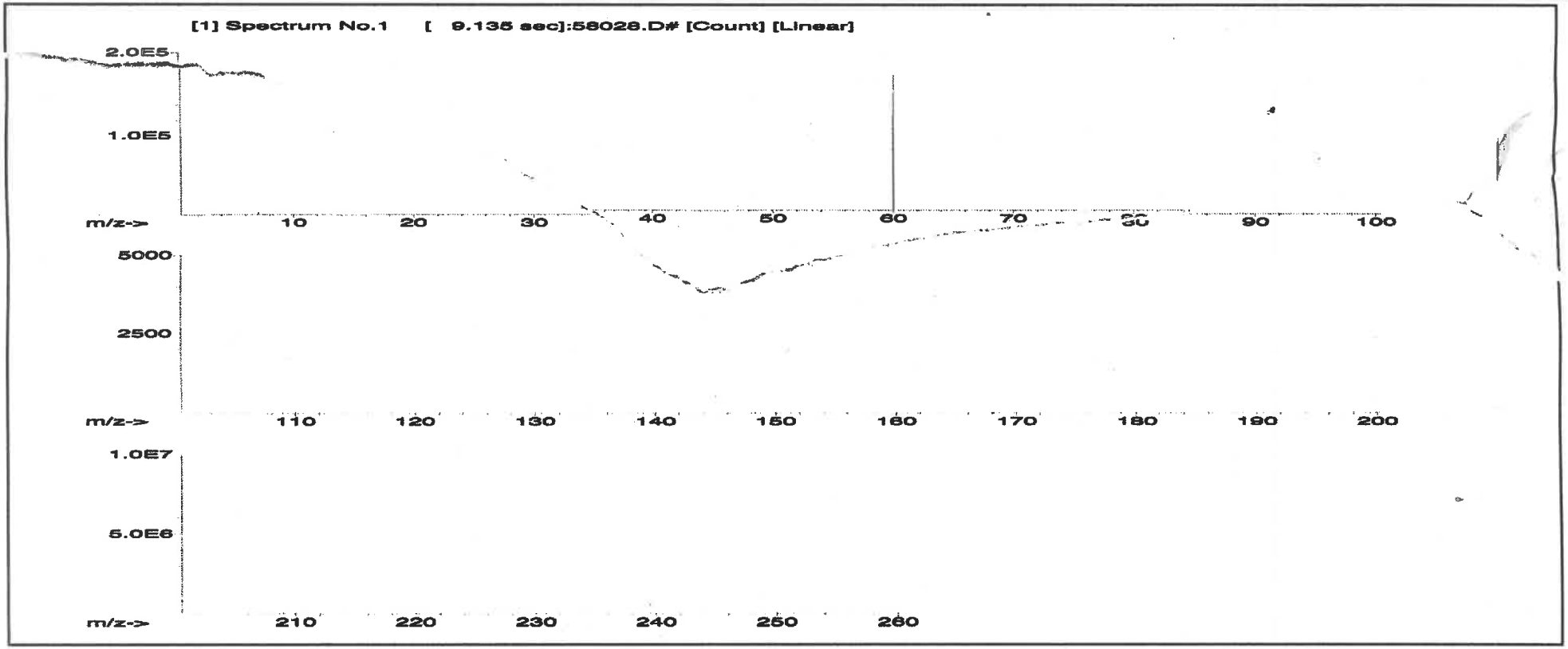
CERTIFIED WEIGHT REPORT:

		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.

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Certified Reference Material CRM

R: 8/25/23 M5751

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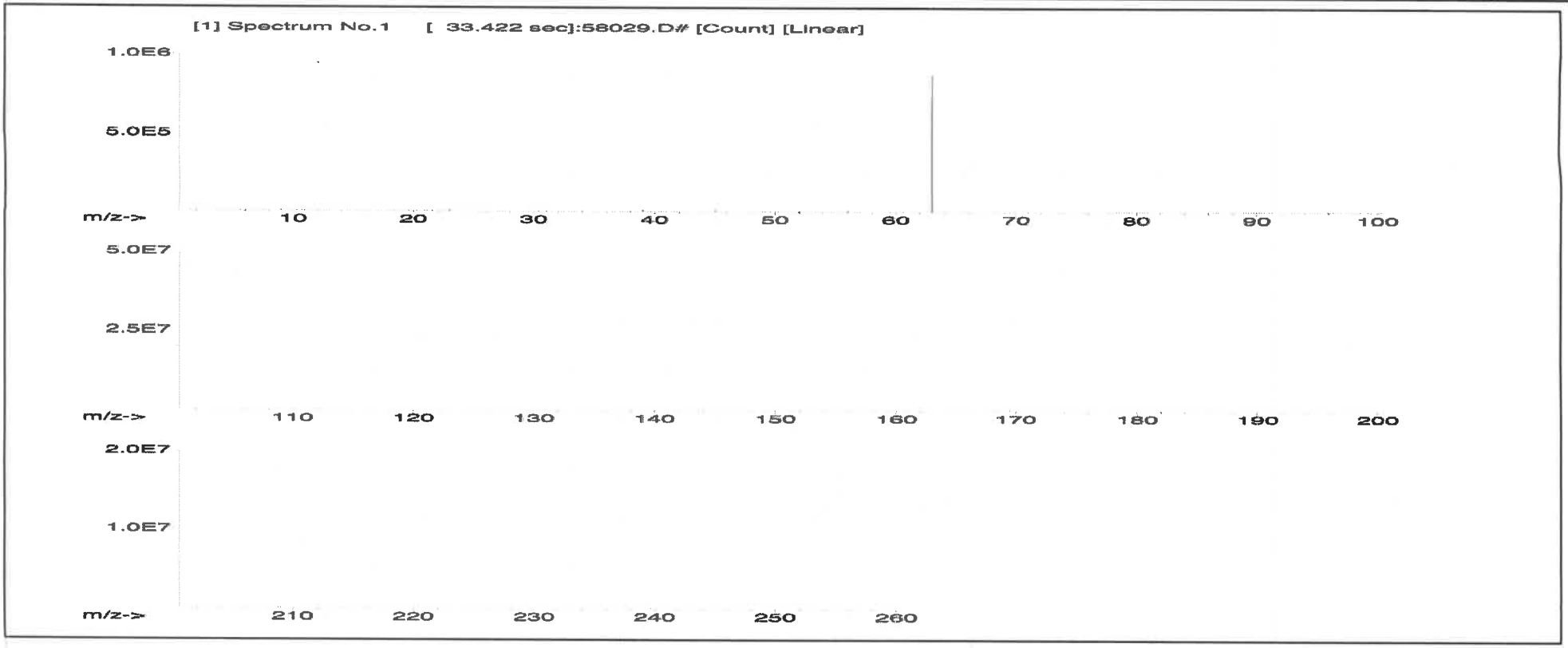
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	022723	0.1000	200.0	0.084	1000	10000.5	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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M5768 M5769 BP R:1/3/24

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AR-1539 Certificate Number
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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
Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

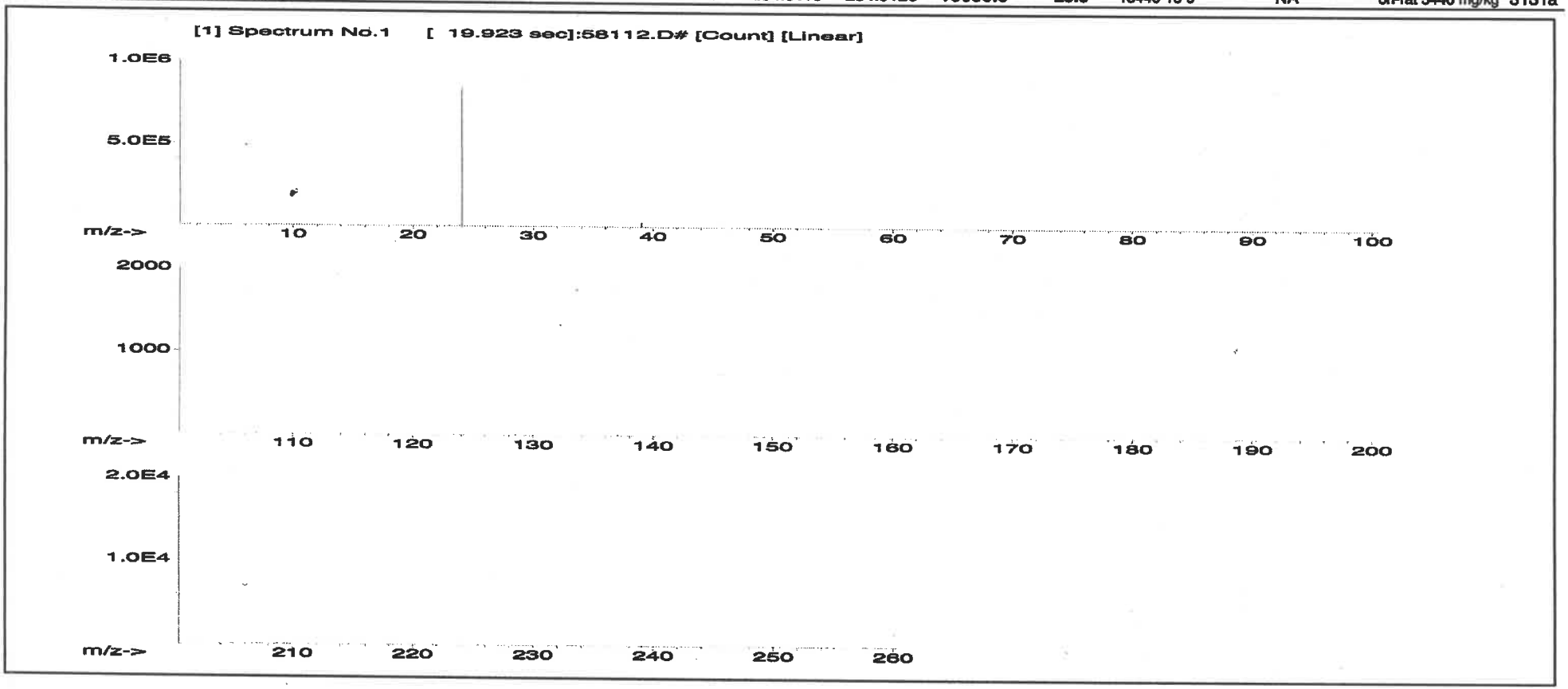
		Lot #		
Solvent:		24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid	

M5768, M5769 BP R: 1/3/24

5E-05 Balance Uncertainty

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.

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R: 02/09/24 M5798

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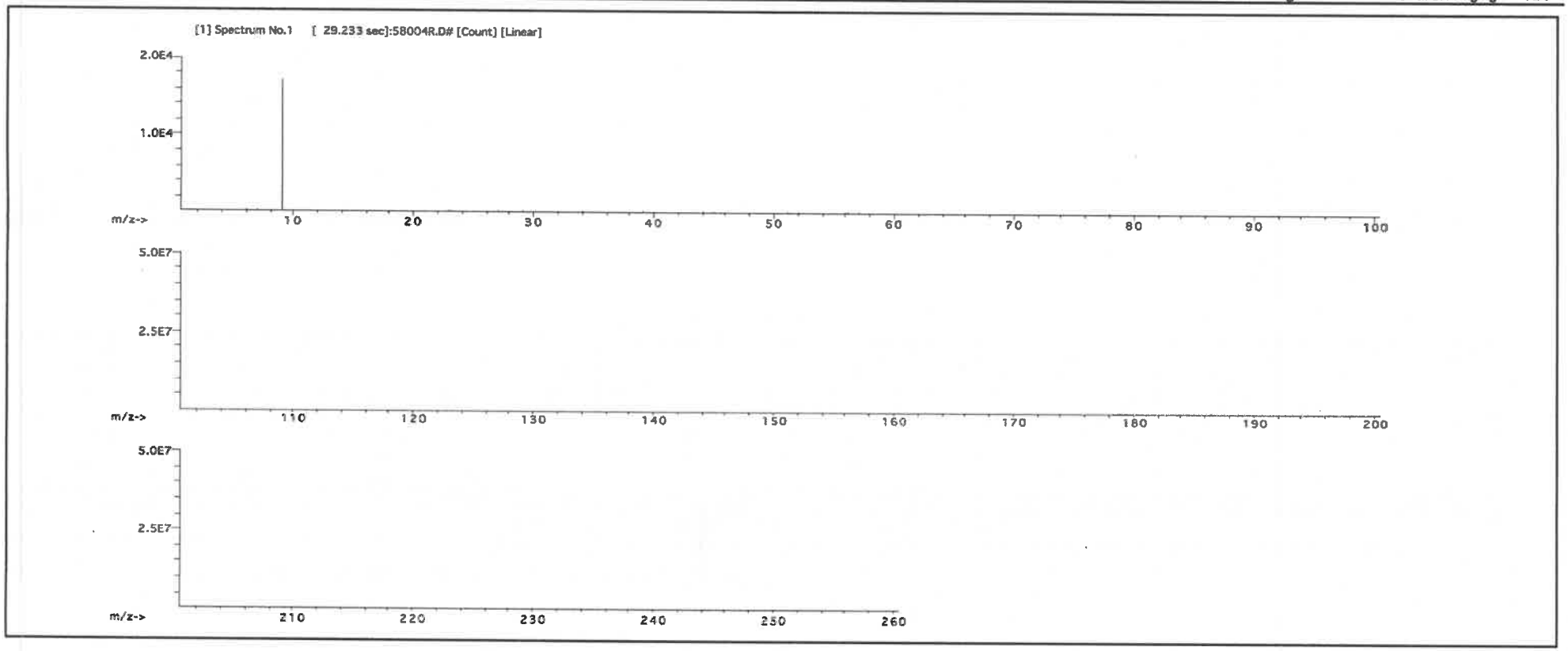
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57004**	24002546	Nitric Acid		
Lot Number:	**102523**				
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	102526				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



Q1883-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

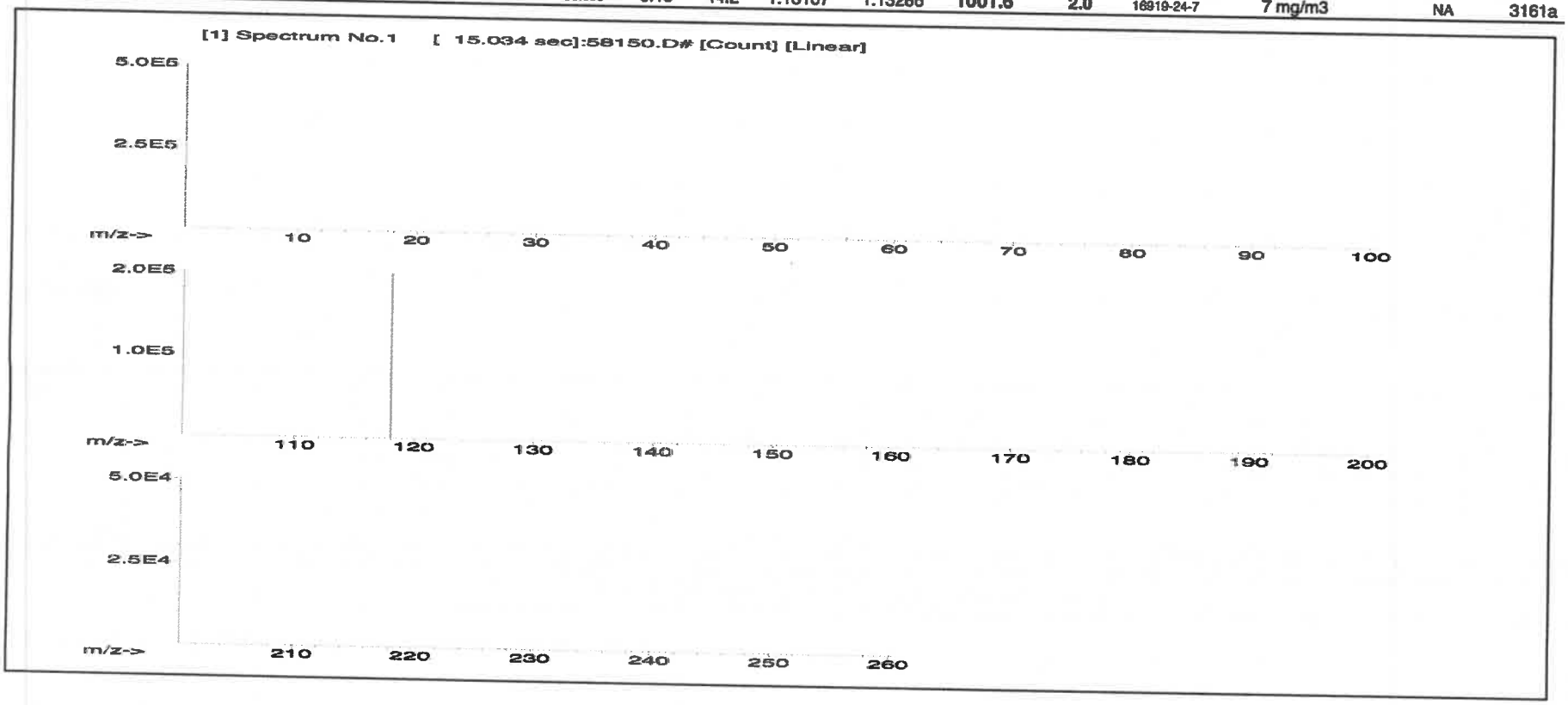
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

Solvents:	Lot #	
	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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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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R: 02/09/24 IM5800 BH

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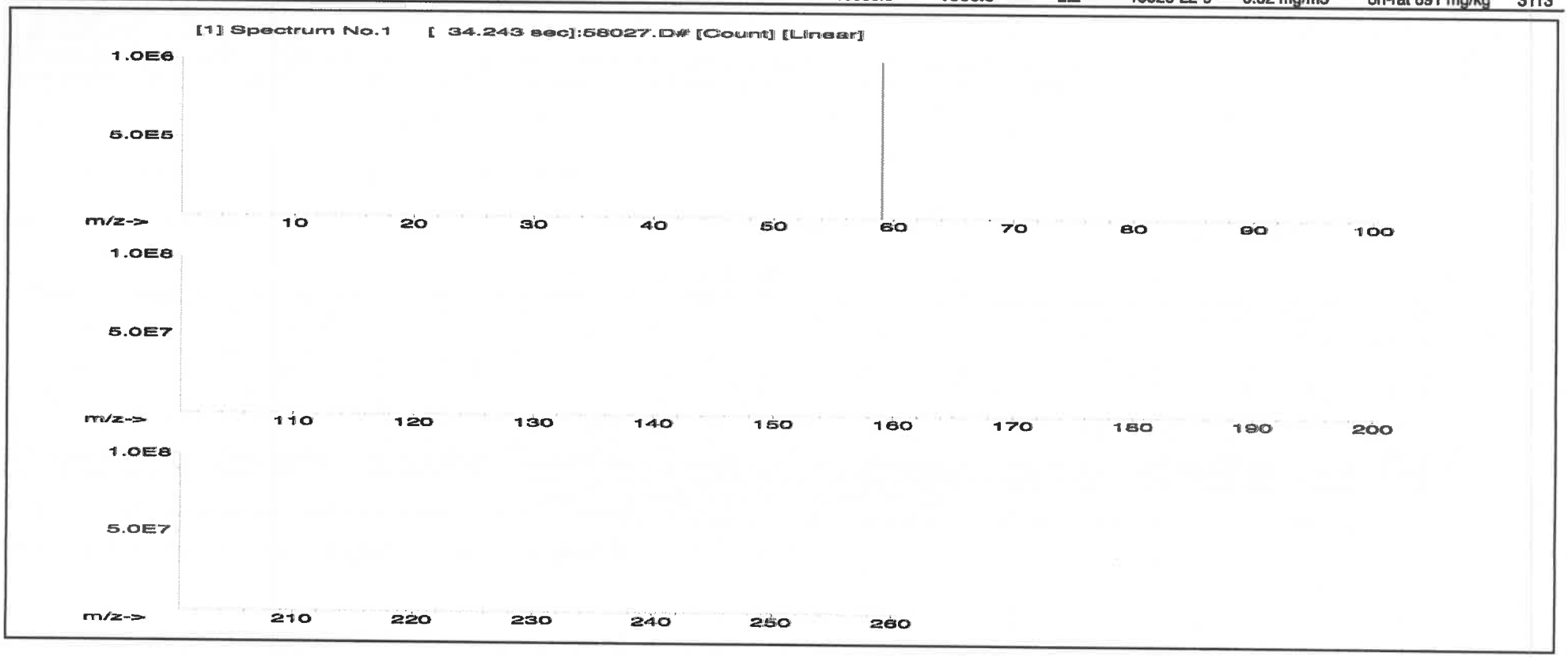
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By: Lawrence Barry 091923

Reviewed By: Pedro L. Rentas 091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	2.2	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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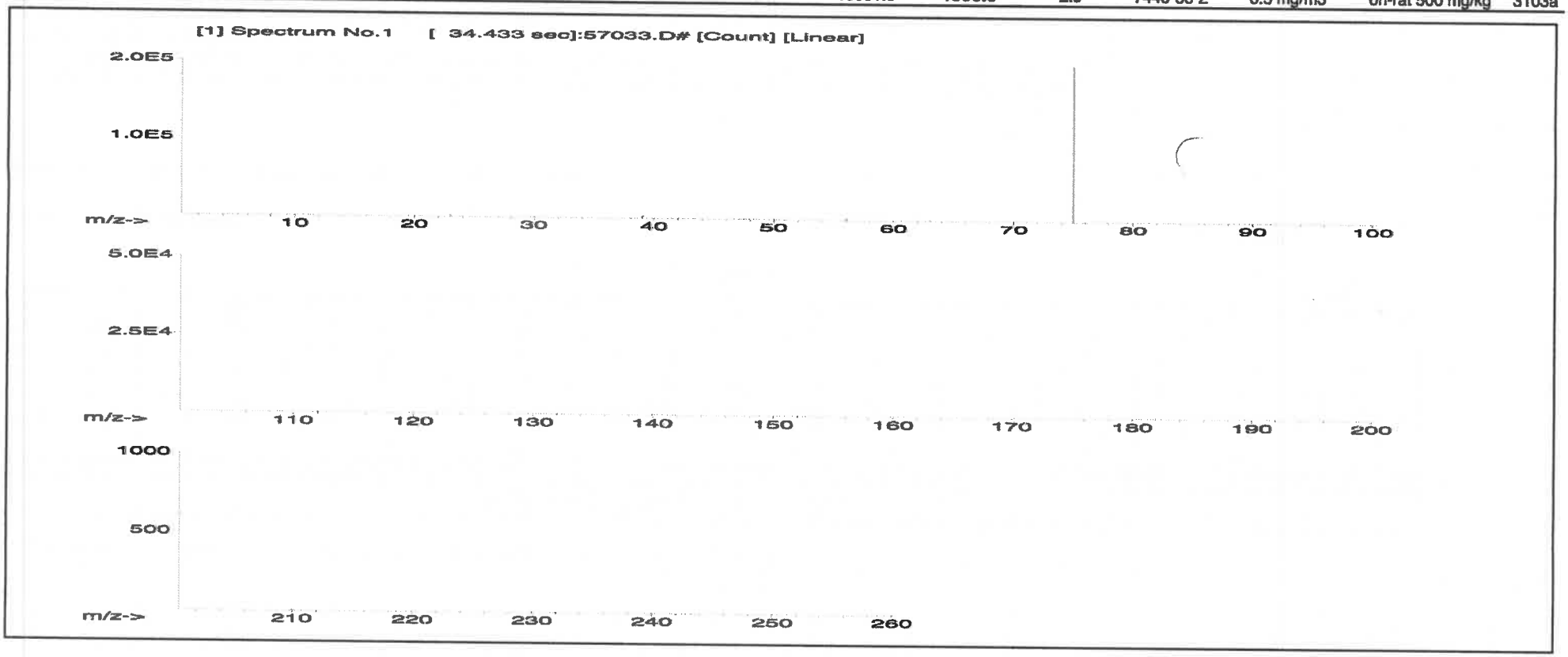
CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**				
Lot Number:	**111323**	24002546	Nitric Acid		
Description:	**Arsenic (As)**				
		2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	2.0	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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A: 02/09/24 M.5814

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CERTIFIED WEIGHT REPORT:

Part Number: 57005
Lot Number: 071123
Description: Boron (B)

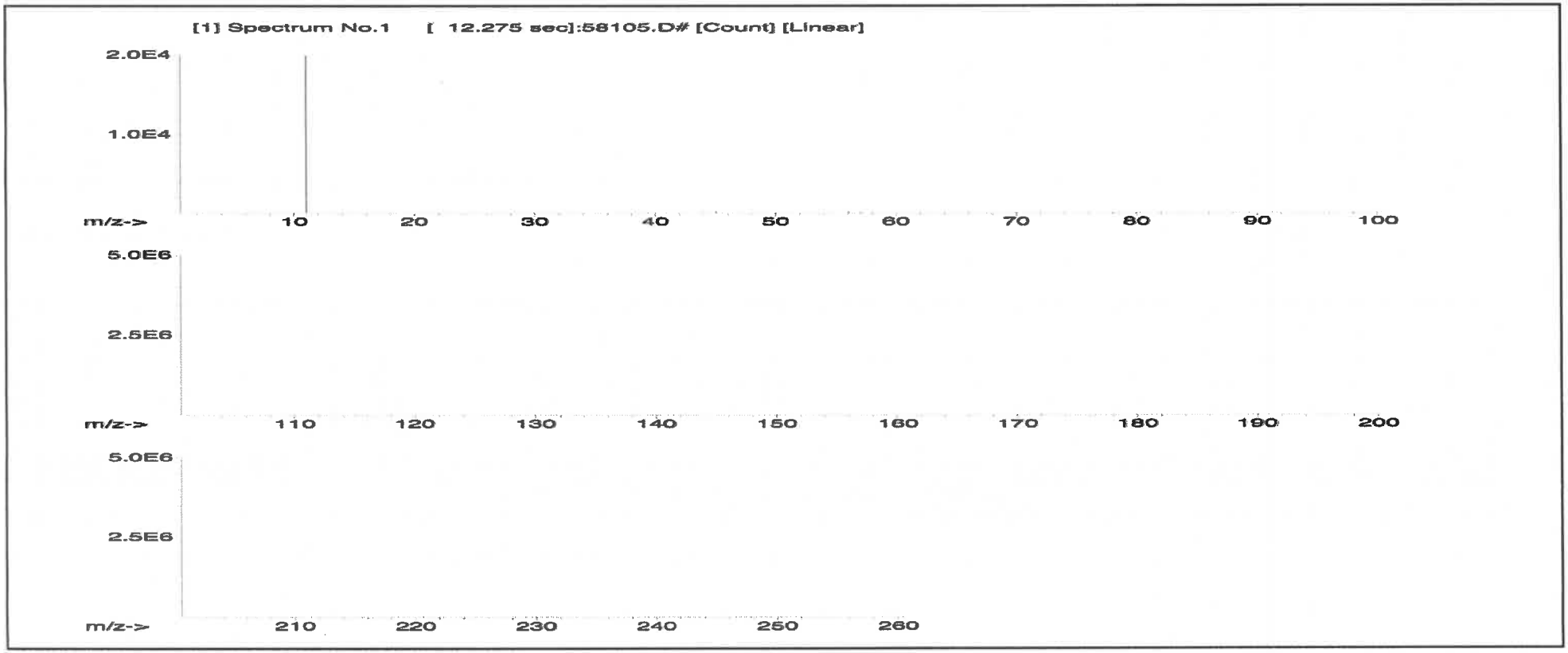
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

	Lot #			
Solvent:	MKBQ8597V	Ammonium hydroxide		
	2.0%	40.0 (mL)	Ammonium hydroxide	
		5E-05	Balance Uncertainty	

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Boric acid (B)	IN018	BV092016A1	1000	99.9999	0.10	17.3	11.55772	11.56201	**1000.4**	**2.0**	10043-35-3	2 mg/m3	orl-rat 2660 mg/kg	3107



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	T	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R1 02/09/24. M58165

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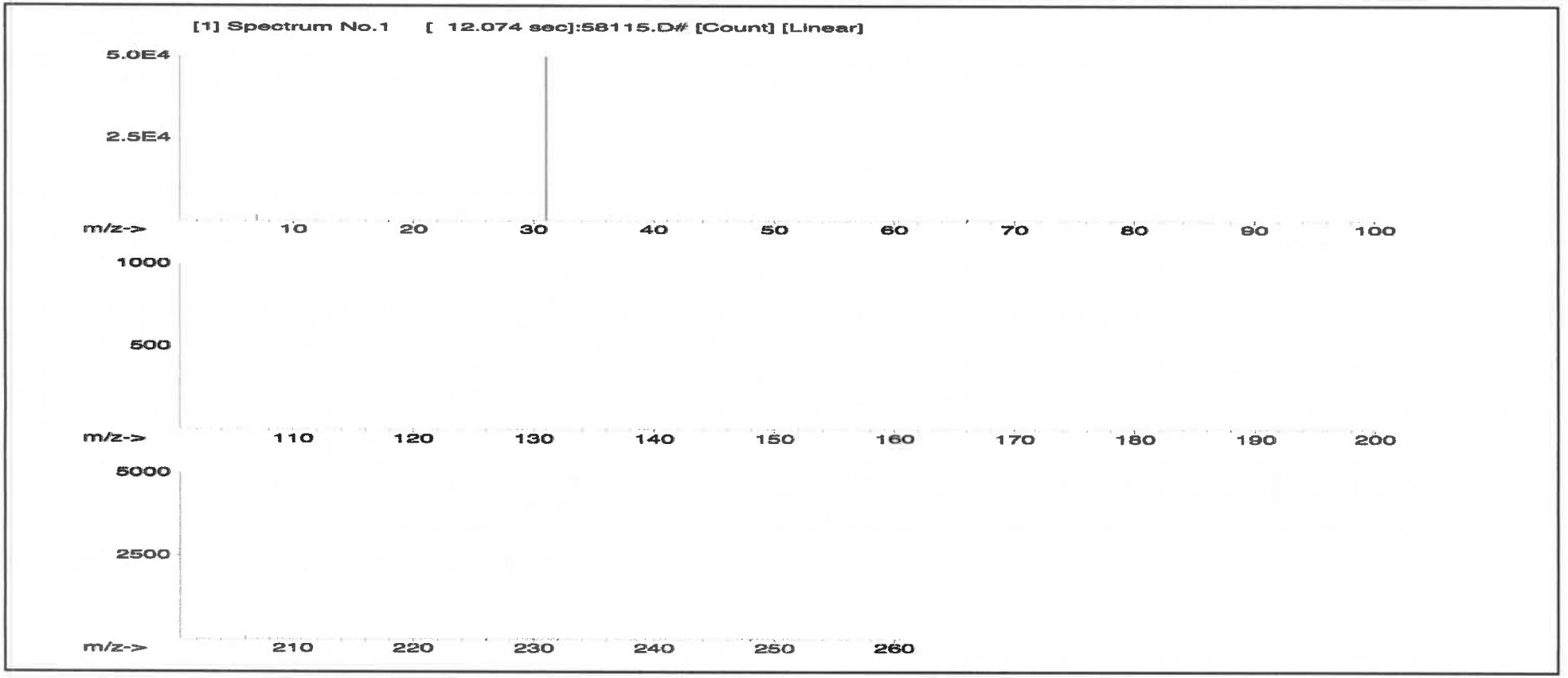
CERTIFIED WEIGHT REPORT:

Part Number:	**57115**			**Lot #**	
Lot Number:	**041723**		**Solvent:**	21110221	Nitric Acid
Description:	**Phosphorous (P)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

R: 02/09/24 M5816

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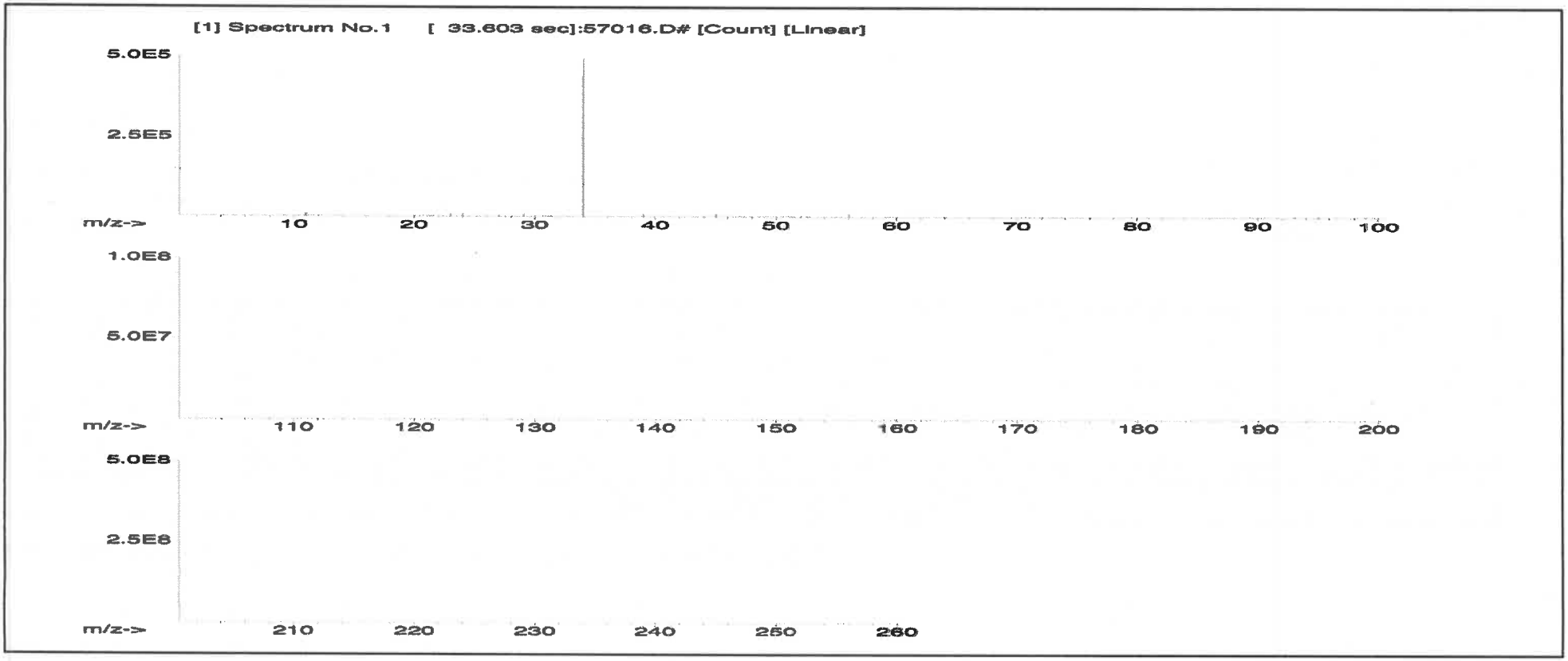
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	**Lot #** 122923	ASTM Type 1 Water
Lot Number:	**122923**			
Description:	**Sulfur (S)**			
Expiration Date:	122926			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Q1883-METALS

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 M5817

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CERTIFIED WEIGHT REPORT:

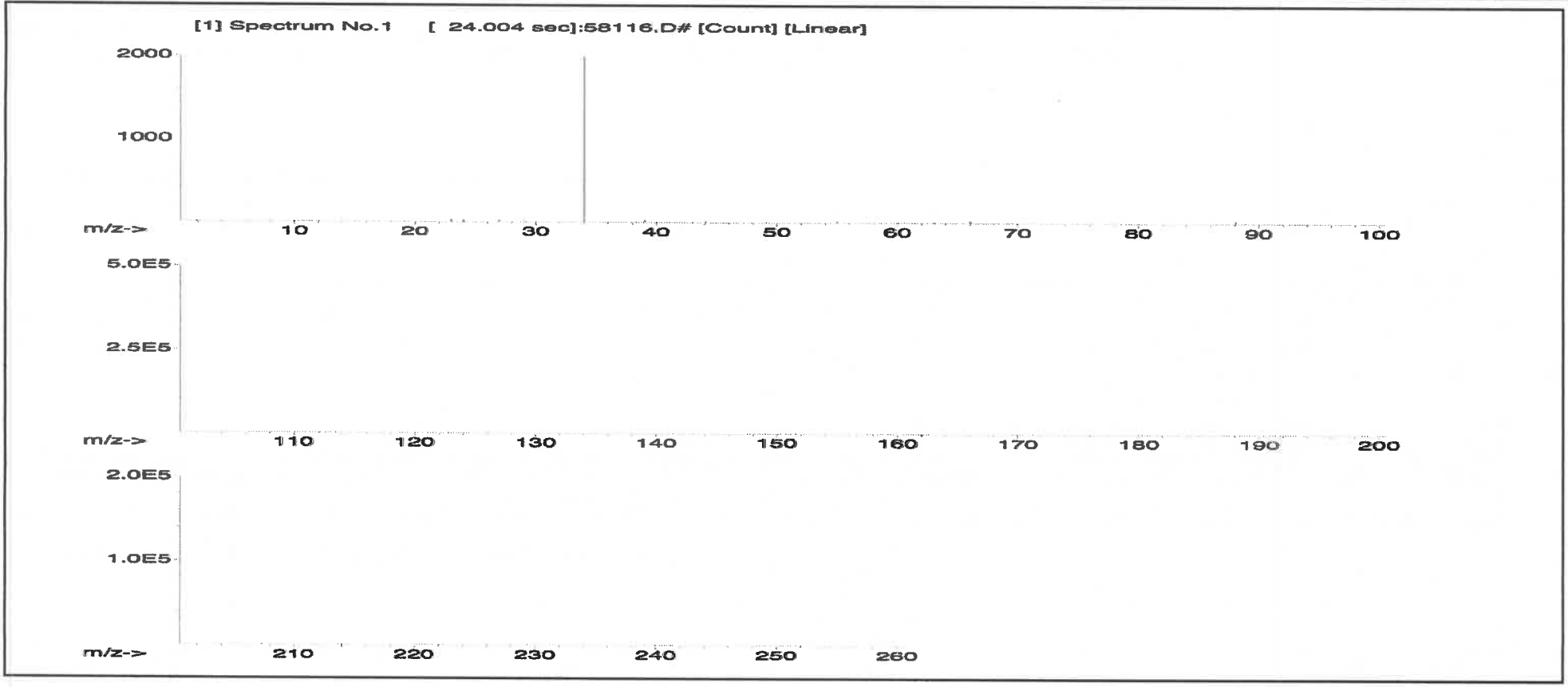
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

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	ori-rat 4250mg/kg	3181



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
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Certified Reference Material CRM

R: 02/09/24 M5820

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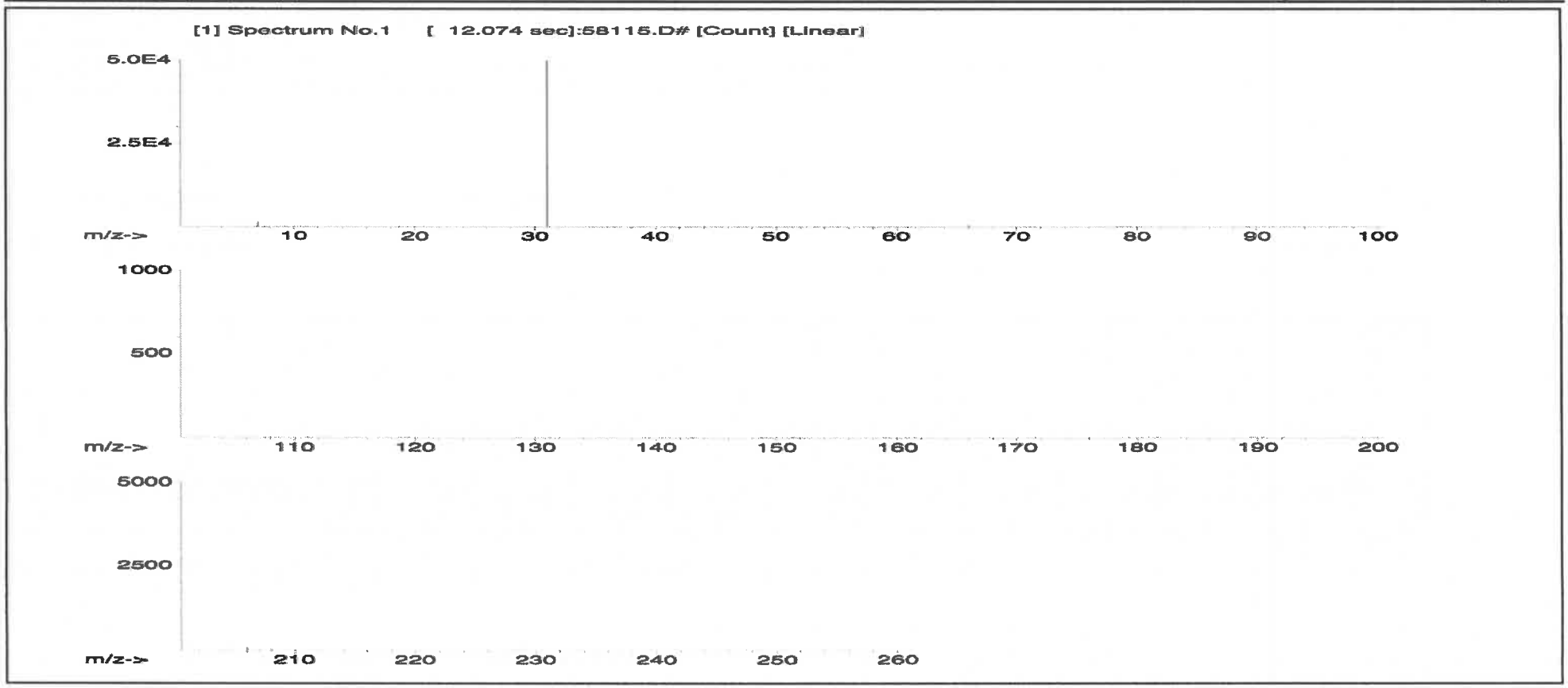
CERTIFIED WEIGHT REPORT:

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

(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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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

R: 02/22/24 M5942

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 17, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

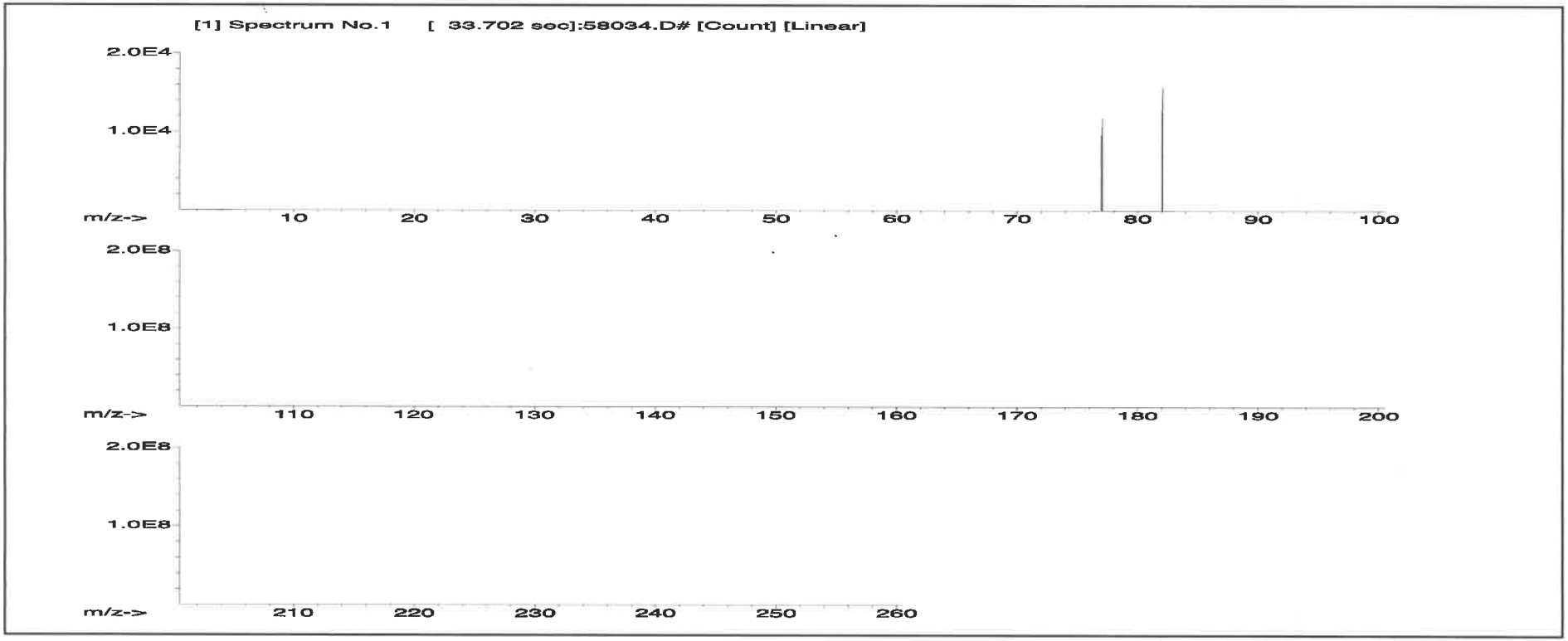
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



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800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

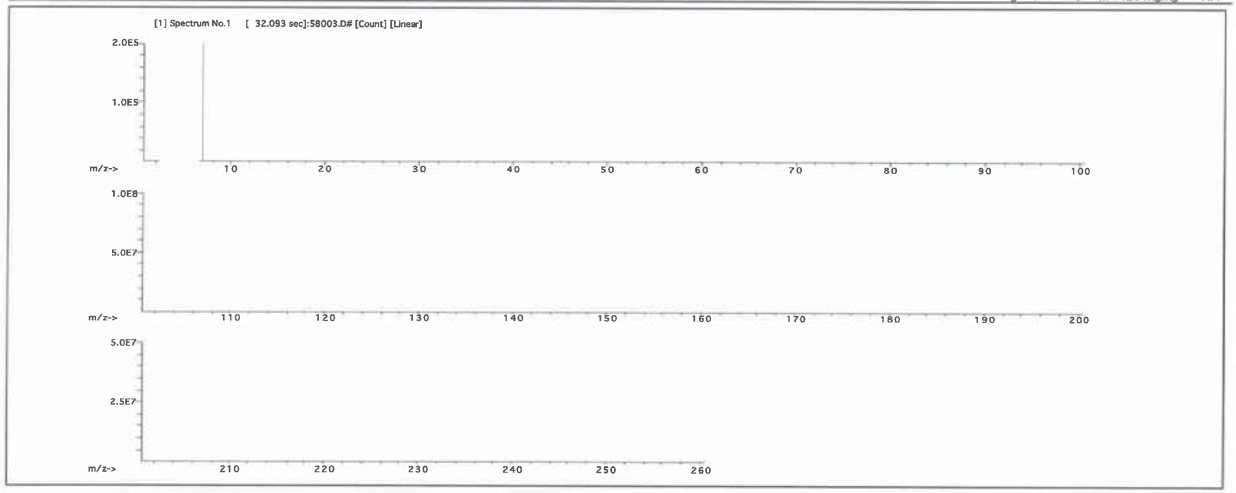
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.016 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	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

Certificate of Analysis

INORGANIC VENTURES™

Refine your results. Redefine your industry.

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R: 2/22/24

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 865.01

ACCREDITED Reference Material Producer Certificate 865.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGT11
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	TI Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**1002 ± 4 µg/mL**
	ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(x_i)$$

x_i = mean of Assay Method i with standard uncertainty $u_{Char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{Char\ i})^2 \,/\, (\Sigma(1/u_{Char\ i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form In Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 for months in 1% 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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R: 2/22/24
MS-997

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-3
Lot Number:	T2-MEB727800
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 500 µg/mL ea: Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	1 000 ± 7 µg/mL	Cadmium, Cd	500.0 ± 2.2 µg/mL
Lead, Pb	1 000 ± 4 µg/mL	Selenium, Se	1 000 ± 6 µg/mL
Thallium, Tl	1 000 ± 7 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i}^2) / (\Sigma(1/(u_{char\ i}^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i}^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

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10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 21, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- December 21, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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R! 08/22/24 M6058, M6059

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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:	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

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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

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EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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u_{ts} = transport stability standard uncertainty

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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

M6125 Receive -> 11/22/24

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

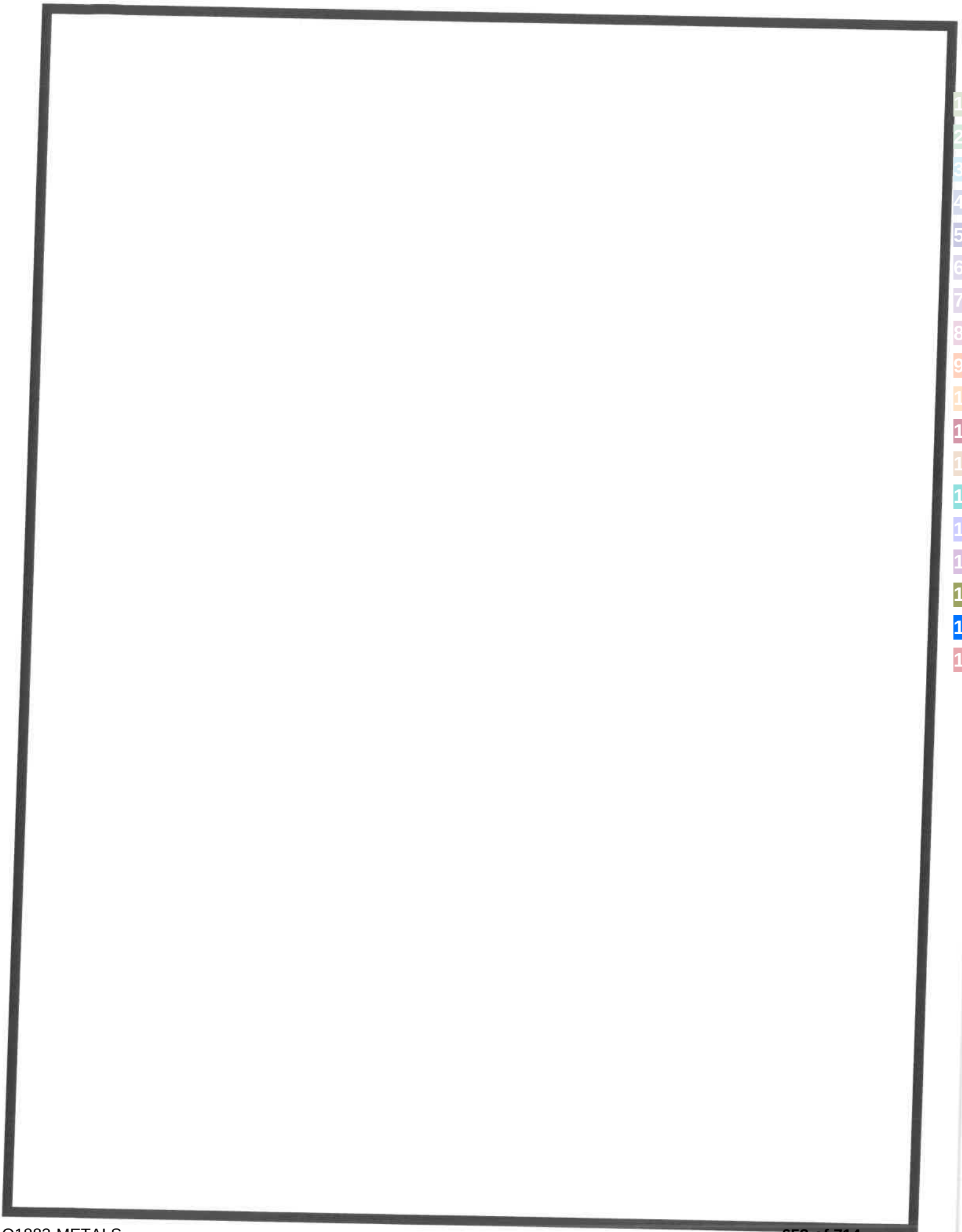
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

Phone: 215-295-5006
Fax: 215-295-0781

Hydrogen Peroxide 30%, ACS

Reagent Grade

SPECIFICATION	MAXIMUM LIMITS
Appearance	Colorless and free from suspended matter or sediment
Assay	29-32%
Color (APHA)	10
Residue after Evaporation	0.002%
Titratable Acid	0.0006 meq/g
Chloride (Cl)	3 ppm
Nitrate (NO_3)	2 ppm
Phosphate	2 ppm
Sulfate (SO_4)	5 ppm
Ammonium (NH_4)	5 ppm
Heavy Metals (as Pb)	1 ppm
Iron (Fe)	0.5 ppm



Nitric Acid 69%
CMOS

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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:

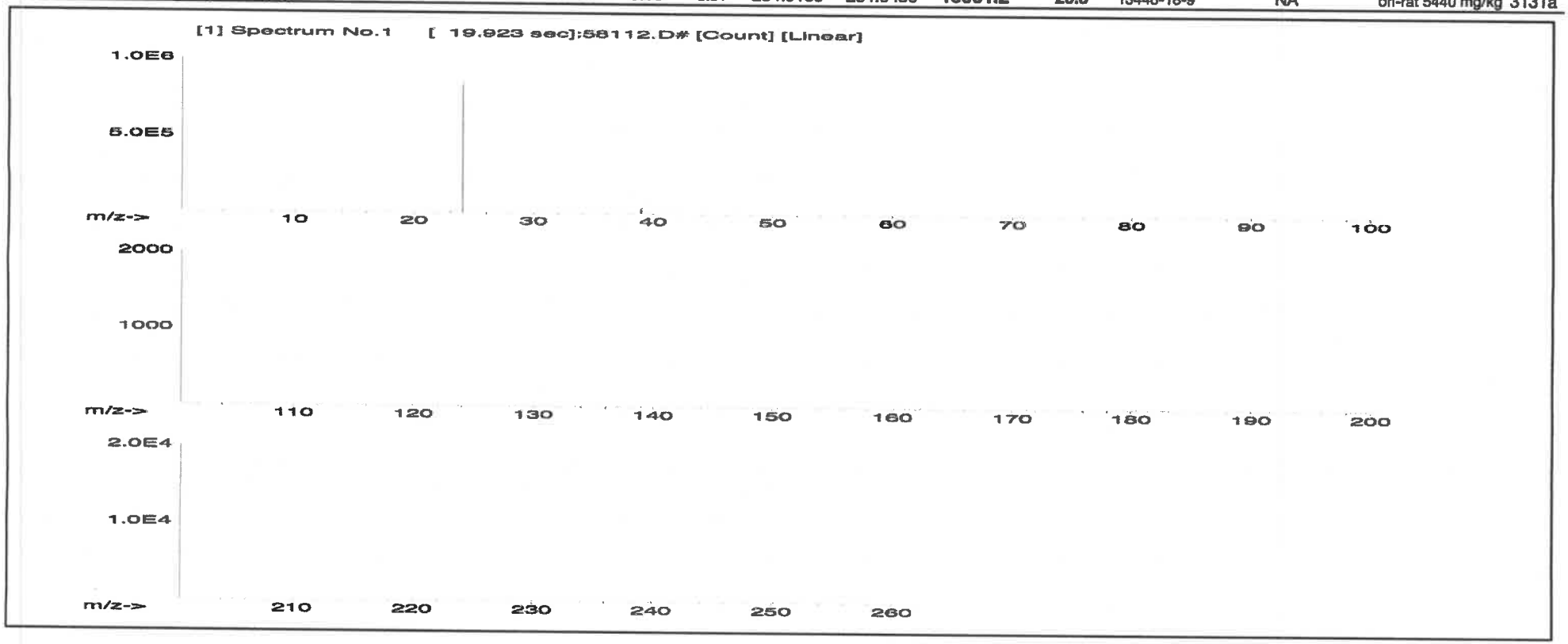
R -> 1/13/25
M 6127

Part Number:	**58112**		**Solvent:**	**Lot #** 24012496	Nitric Acid
Lot Number:	**112124**				
Description:	**Magnesium (Mg)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	112127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	112124
Reviewed By:	Pedro L. Rentas	112124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9183	234.9459	**10001.2**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

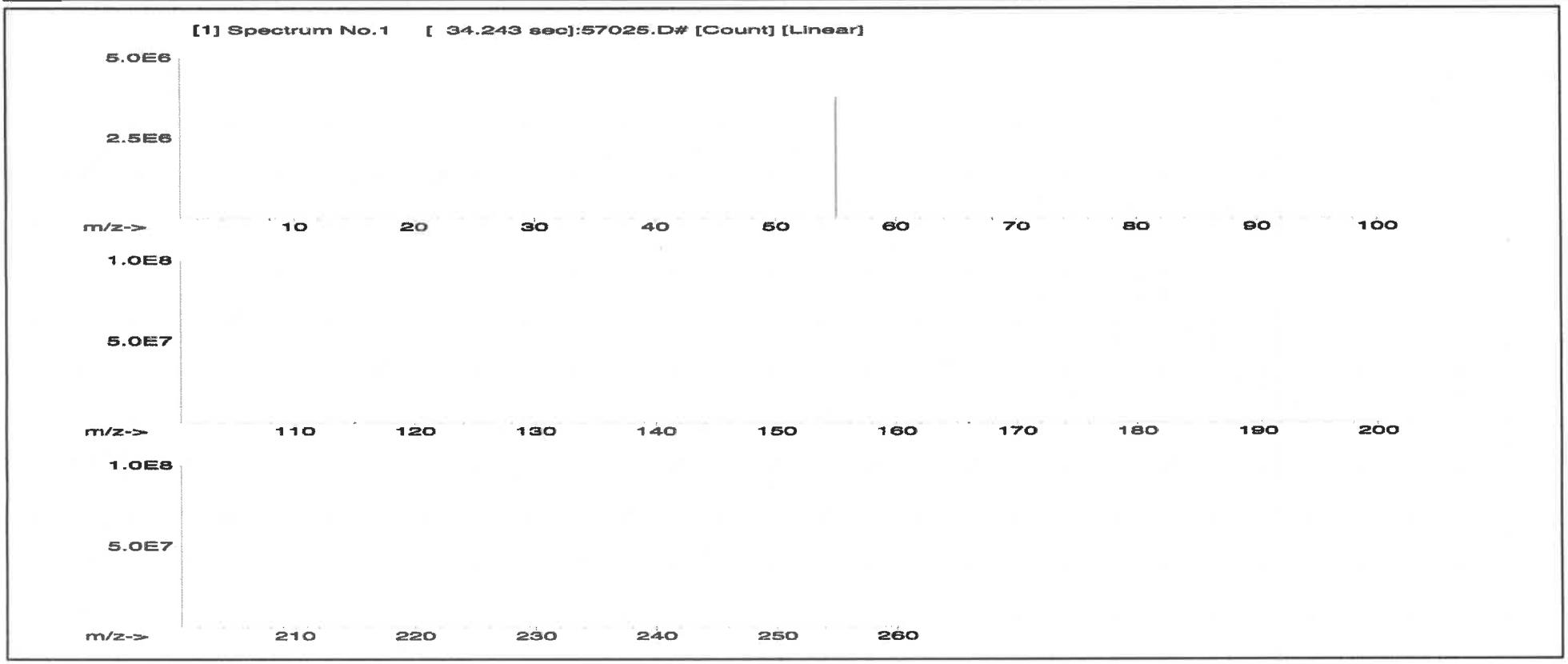
R->1/13/25
M6128

Part Number: 58025
Lot Number: 101124
Description: Manganese (Mn)
Expiration Date: 101127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.2 ± 0.10 Flask Uncertainty

		Lot #	
Solvent:	24002546	Nitric Acid	
	2%	80.0 (mL)	Nitric Acid
		5E-05	Balance Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 101124
Pedro Rentas
Reviewed By: Pedro L. Rentas 101124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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Certified Reference Material CRM

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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	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certificate of Analysis

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info@inorganicventures.com

M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **999 ± 5 µg/mL**
ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546

Assay Method #2 **1000 ± 7 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 10, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

M6138
R->1/13/25

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 121824
Description: Calcium (Ca)
Expiration Date: 121827
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1 ± 0.15 Flask Uncertainty

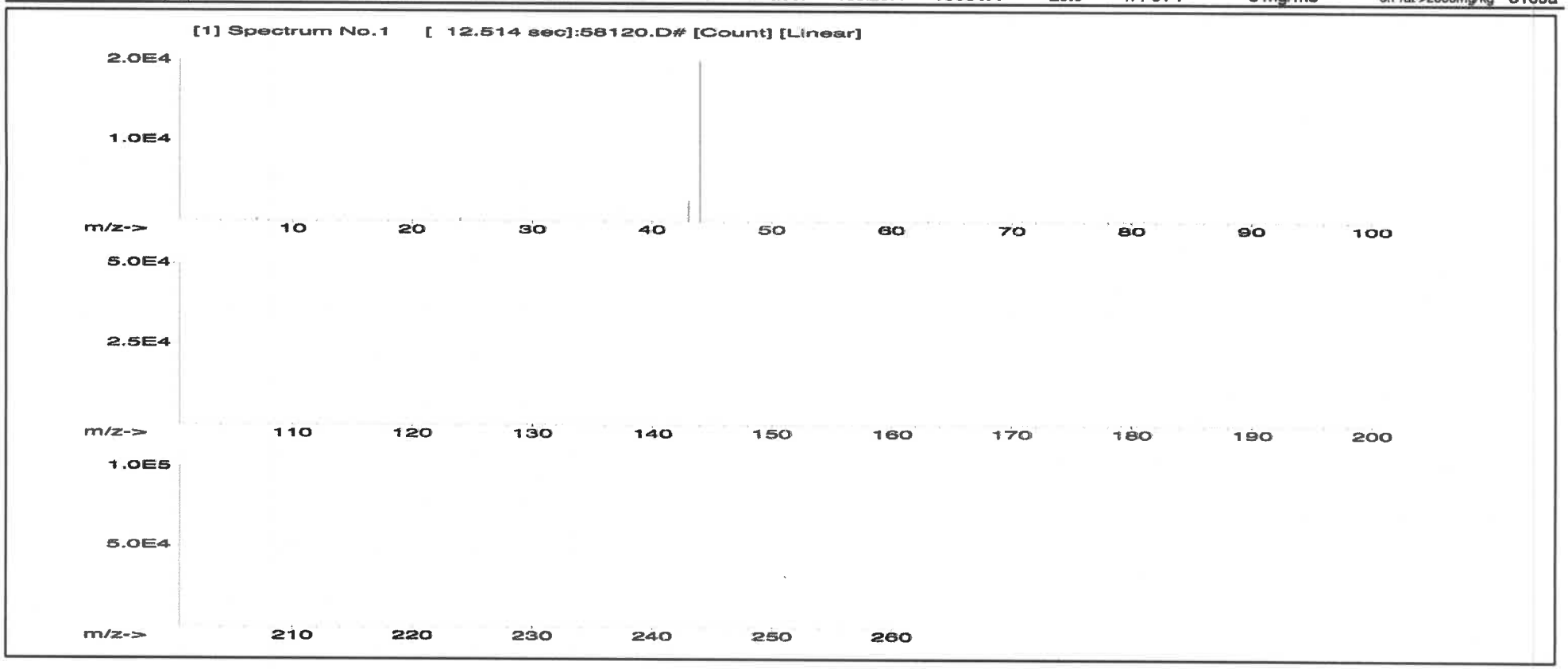
		Lot #	
Solvent:	24012496	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	121824
Reviewed By:	Pedro L. Rentas	121824

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2677	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Part # **58120** Lot # **121824**

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CERTIFIED WEIGHT REPORT:

R-> 1/13/25

Part Number:	**57119**		**Lot #**		
Lot Number:	**103024**		**Solvent:**	24002546	Nitric Acid
Description:	**Potassium (K)**	M6141 M6142 M6143	2%	80.0 (mL)	Nitric Acid
Expiration Date:	103027				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05 Balance Uncertainty			
Weight shown below was diluted to (mL):	4000.1	0.15 Flask Uncertainty			

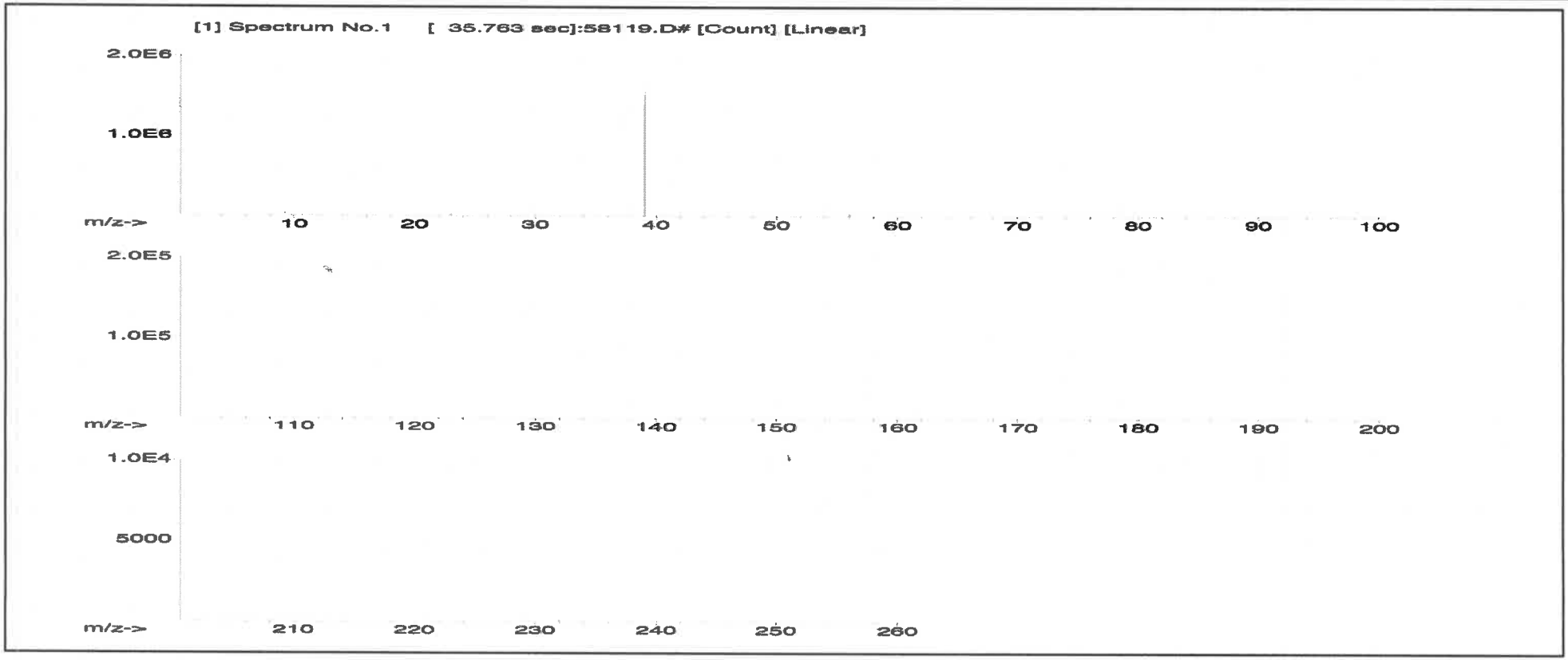
Giovanni Esposito

Formulated By:	Giovanni Esposito	103024

Pedro Rentas

Reviewed By:	Pedro L. Rentas	103024

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD062022A1	10000	99.999	0.10	37.7	106.1040	######	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3750 mg/kg	3141a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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CERTIFIED WEIGHT REPORT:

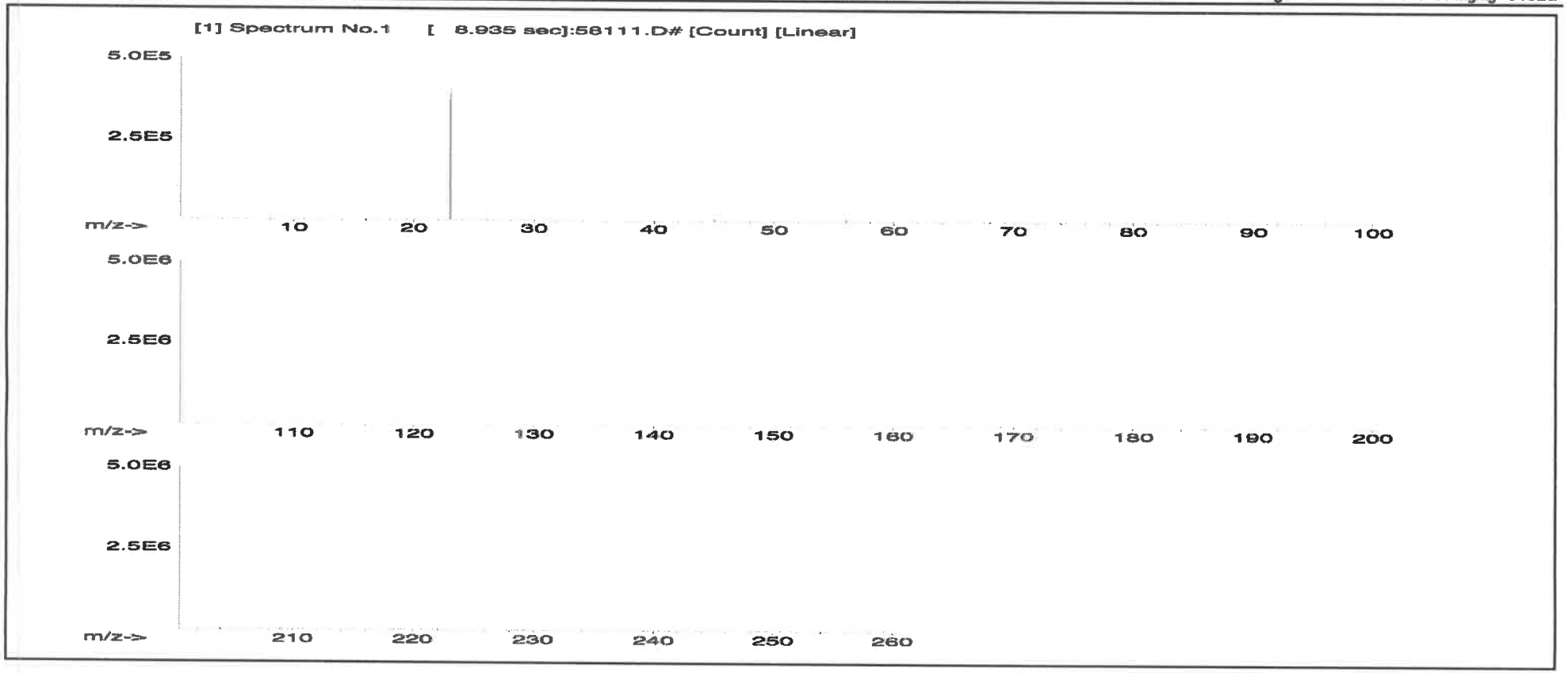
R->1/13/25

MG144

Part Number:	**58111**			**Lot #**	
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		2%	80.0 (mL)	Nitric Acid	
Expiration Date:	072427				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty		

Formulated By:	Benson Chan 072424
Reviewed By:	Pedro L. Rentas 072424

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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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	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 121724
Description: Zinc (Zn)
R → 1/13/25
M6145
Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

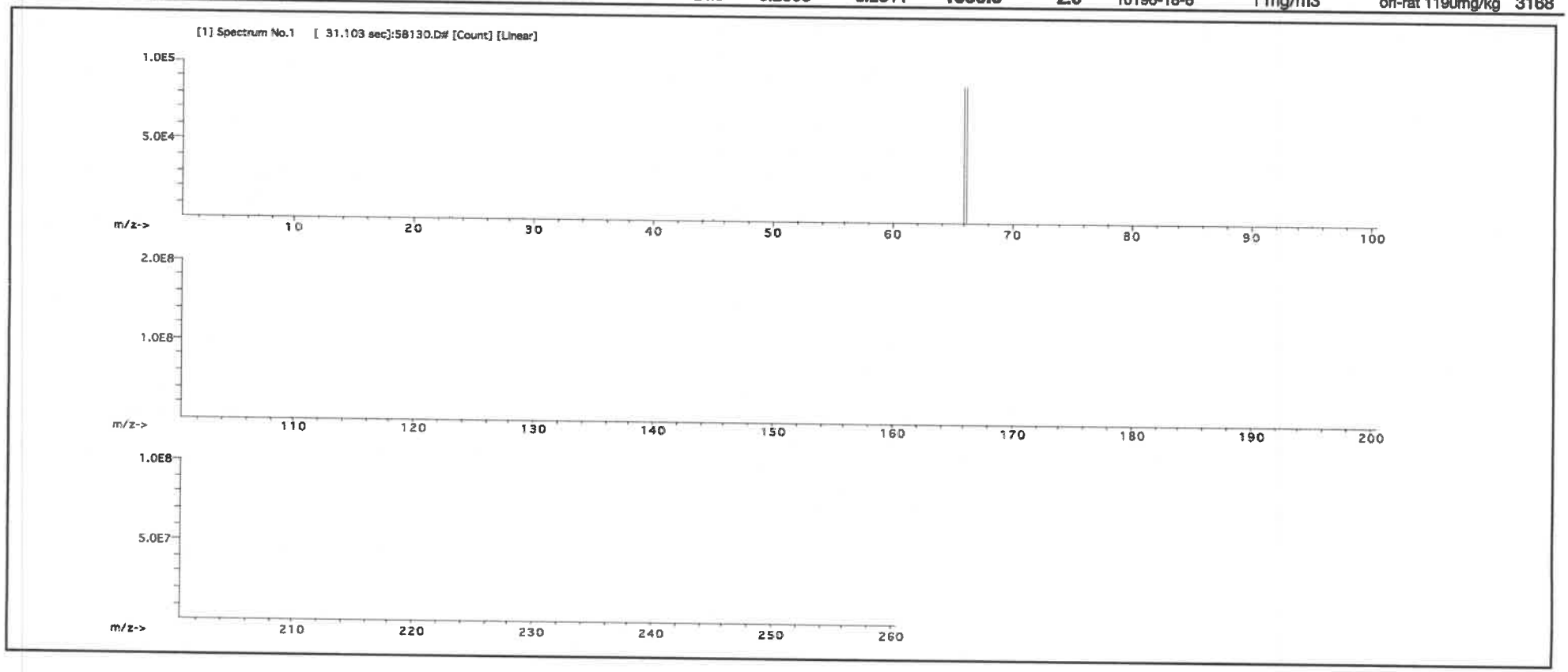
			Lot #	
Solvent:	24012496	Nitric Acid		
	2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 2000.1 0.10 Flask Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	121724
Reviewed By:	Pedro L. Rentas	121724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	8.2308	8.2311	**1000.0**	**2.0**	10196-18-6	1 mg/m3	ori-rat 1190mg/kg	3168



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AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

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R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) ***CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS***

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	CN^-	99

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

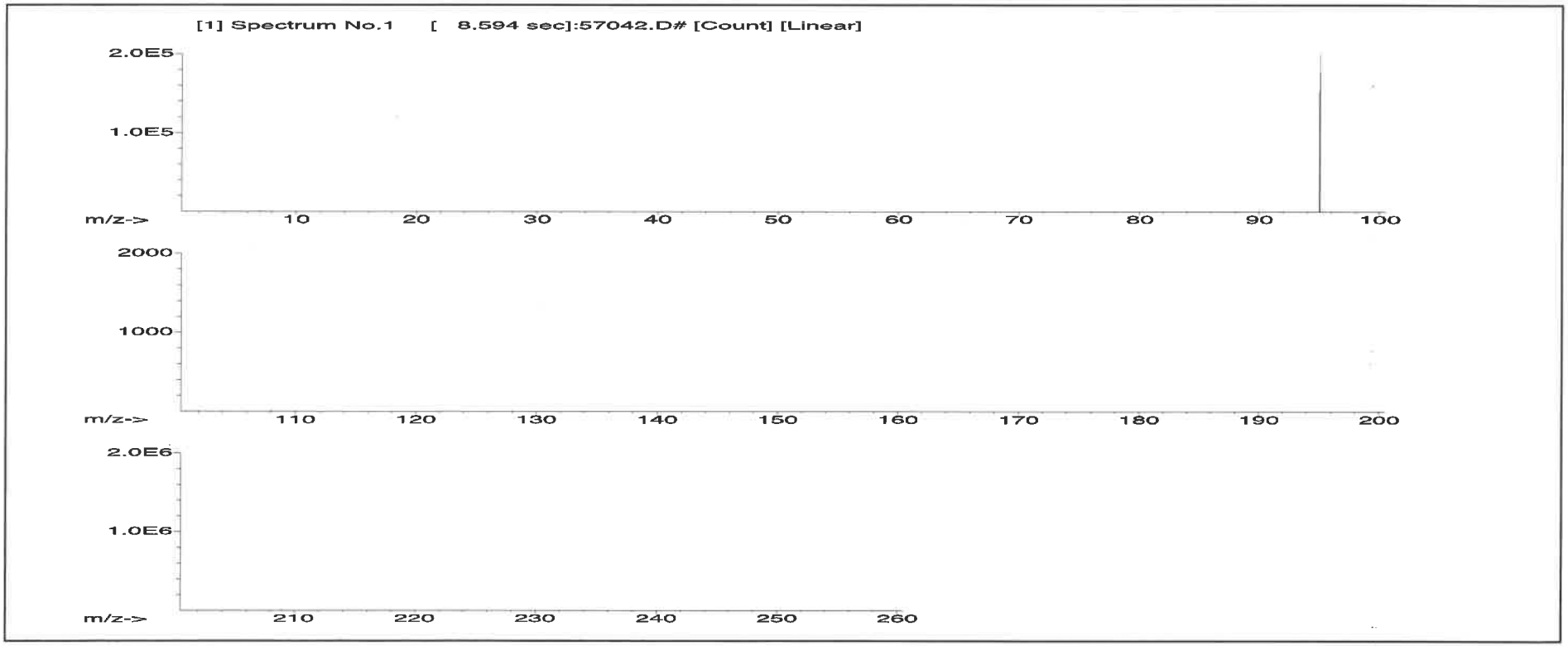
CERTIFIED WEIGHT REPORT:

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

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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Certified Reference Material CRM

M6030

R: 8/5/24

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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

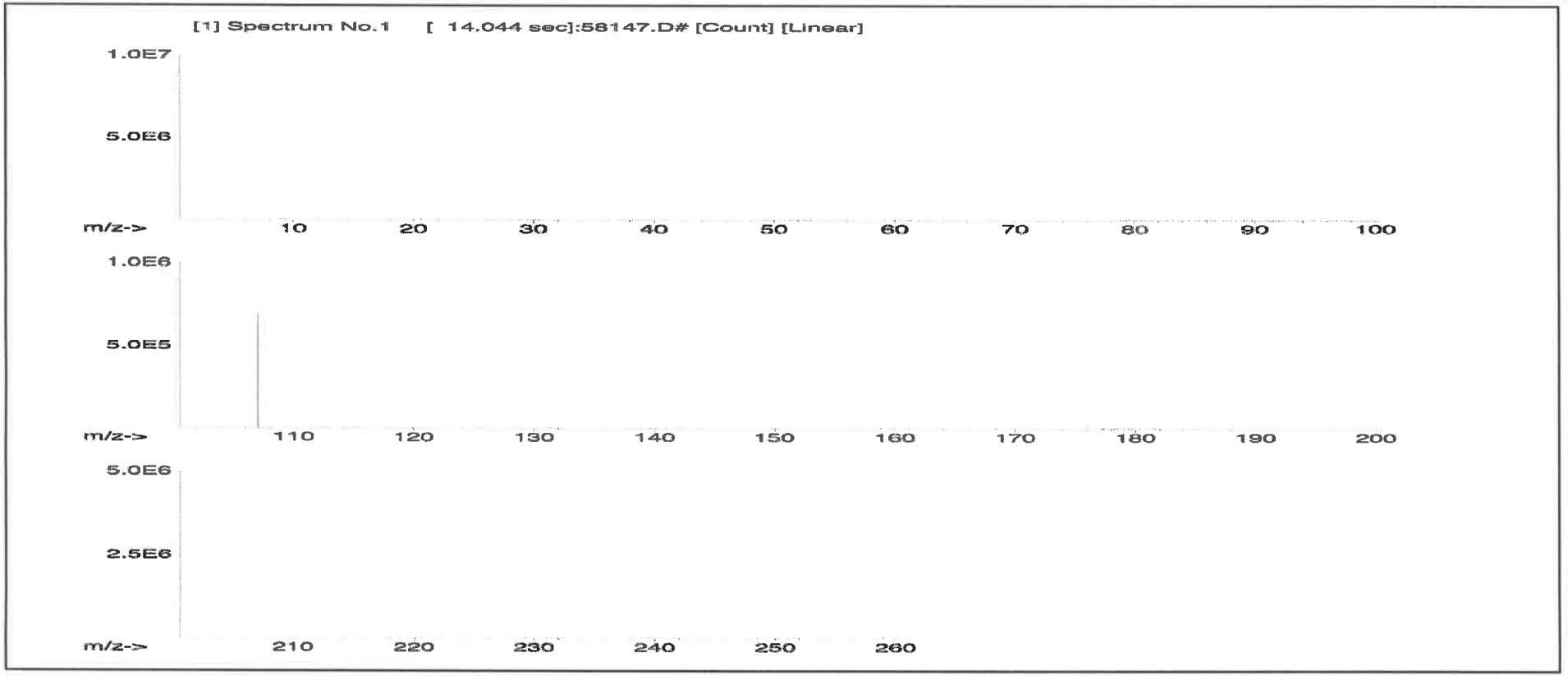
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

		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).

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R: 10/18/24

ANAB ISO 17034 Accredited
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CERTIFIED WEIGHT REPORT:

MG146

Part Number: 57051
Lot Number: 071724
Description: Antimony (Sb)
Expiration Date: 071727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.26 ± 0.058 Flask Uncertainty

Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

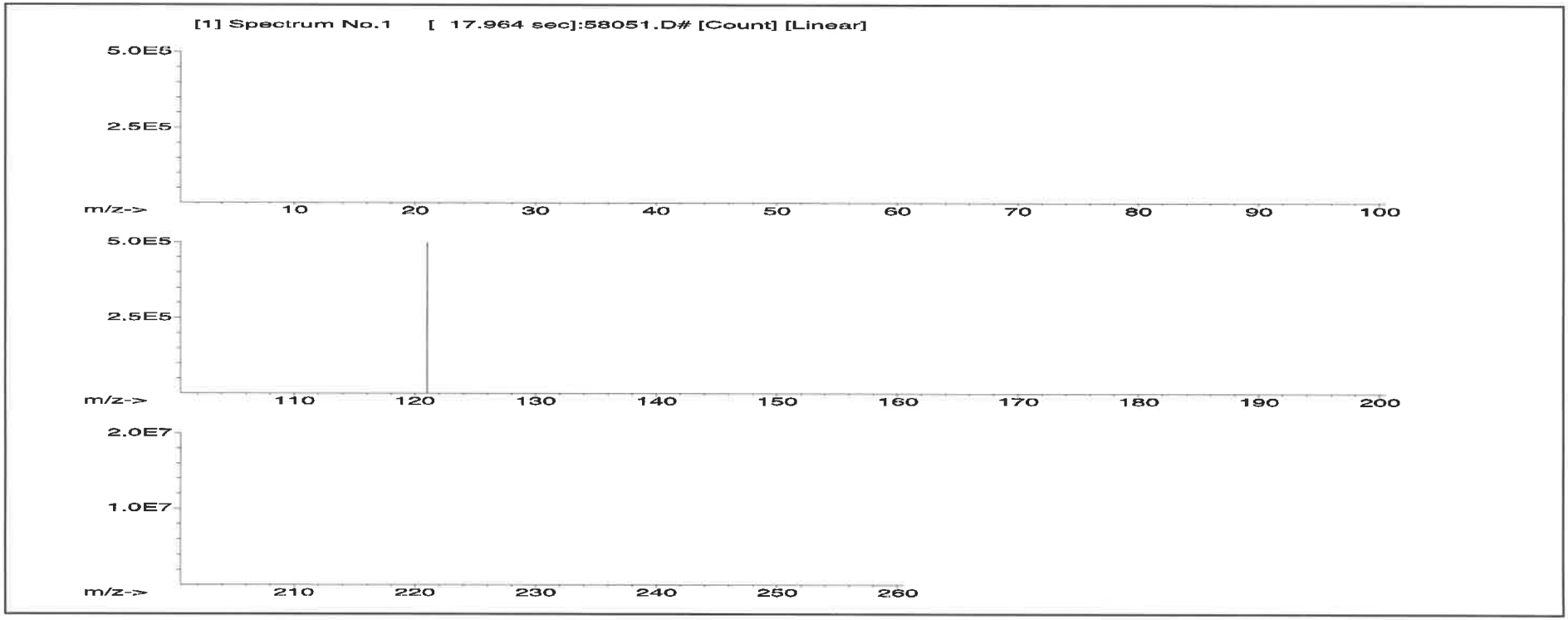
Giovanni Esposito

Formulated By:	Giovanni Esposito	071724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	071724

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Antimony (Sb)	58151	060324	0.1000	200.0	0.084	1000	10001.4	**1000.0**	**2.2**	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 04/20/21

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.

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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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

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: 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

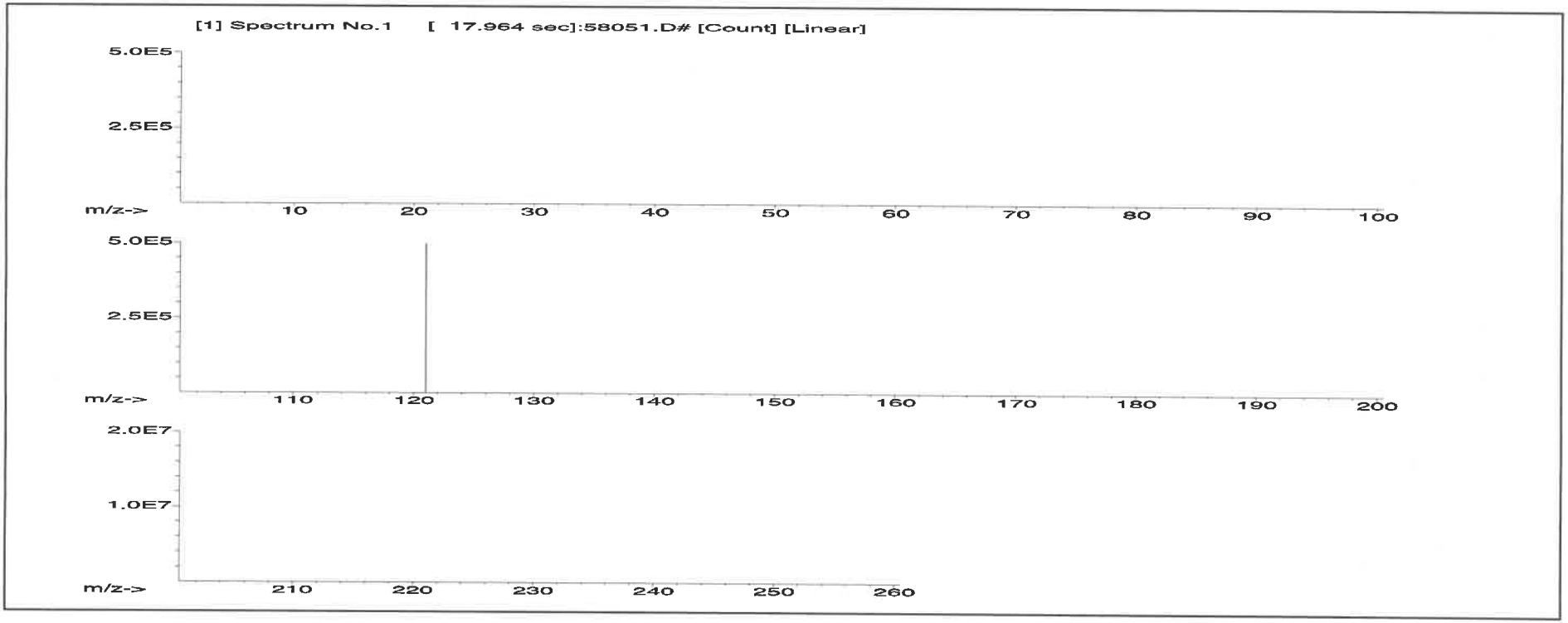
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

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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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 888.01 ACCREDITED Reference Material Producer Certificate 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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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 888.01
ACCREDITED Reference Material Producer Certificate 888.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
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Certificate of Analysis

R: 8/5/24 M6019

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 885.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSR1
Lot Number:	U2-SR730227
Matrix:	0.1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Strontium
Starting Material:	SrCO3
Starting Material Lot#:	M2-2192
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **1001 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 2 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na		0.000200	M	Se	<	0.013862	O	Zn		0.000143
O	Al		0.000370	O	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990				
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495				
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724				
O	Ca		0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd		0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495				
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495				
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980				
M	Cu		0.000099	O	Mg		0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn		0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

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- Store between approximately 4° - 30° C while in sealed TCT bag.

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- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 03, 2028**

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11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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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		

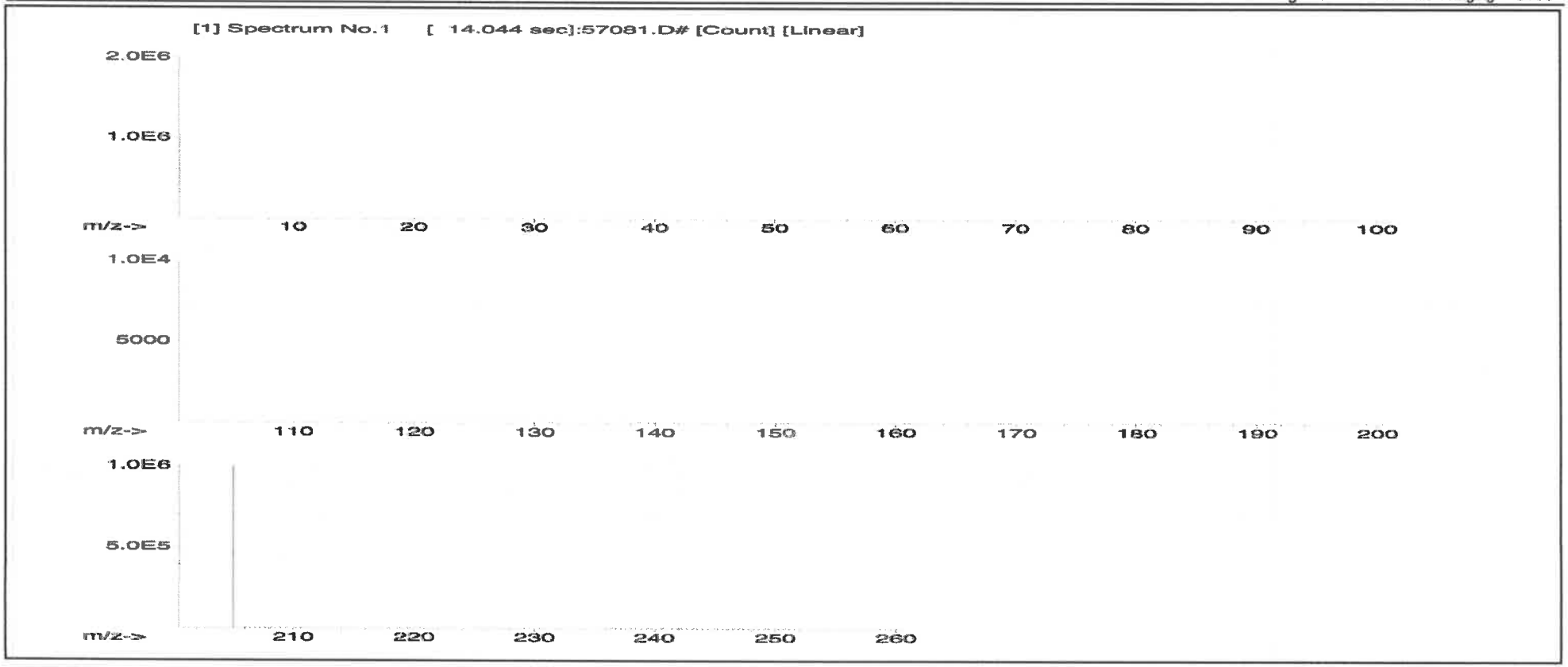
Aleah O'Brady

Formulated By:	Aleah O'Brady	062724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



706 of 714
Q1883-METALS

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**	24002546	Nitric Acid	
Lot Number:	**062424**			
Description:	**Vanadium (V)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

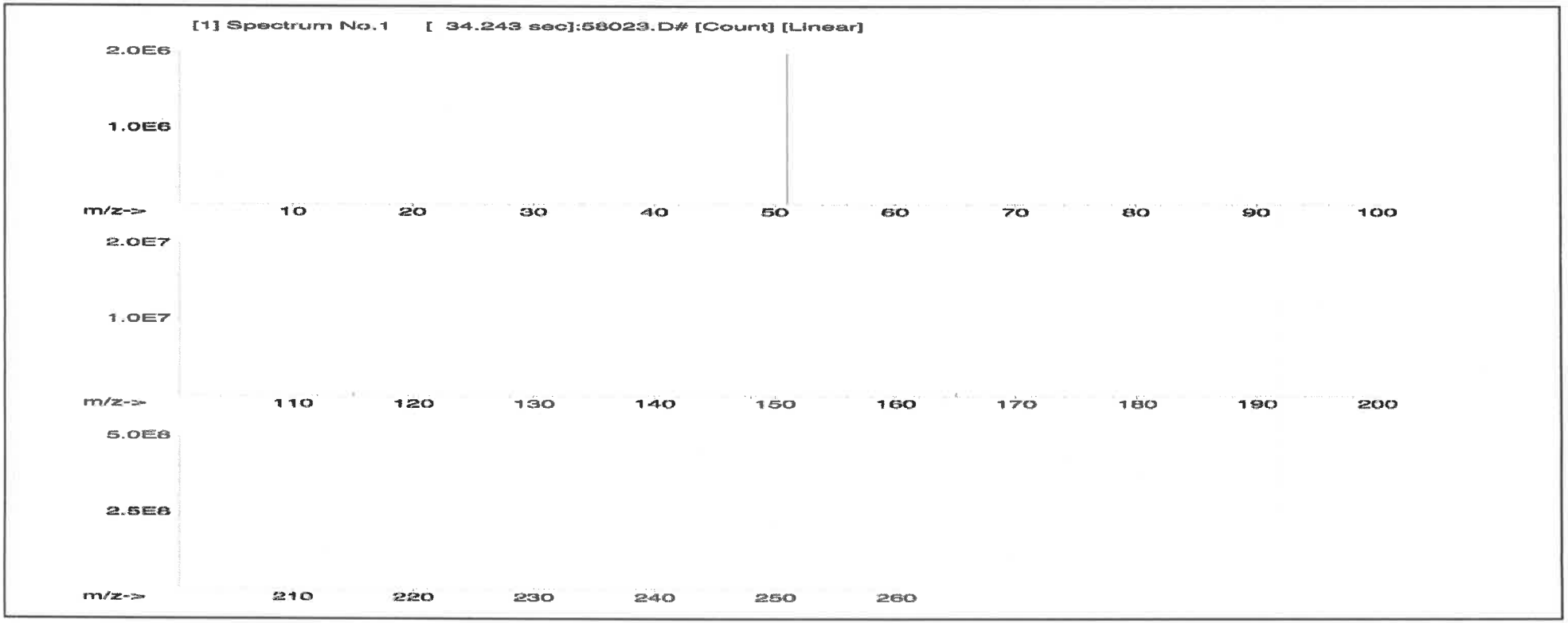
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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Certified Reference Material CRM

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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	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

SHIPPING DOCUMENTS

Chemtech

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

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 4_01/08/2020

Q1883

Company Name:	Nobis Group
Address:	55 Technology Dr Suite 101, Lowell, MA 01851
Phone:	978-703-6014
Project Name:	Raymark
Project Location:	Stratford, CT
Project Number:	95700
Project Manager:	Adam Roy
Con-Test Quote Name/Number:	
Invoice Recipient:	
Sampled By:	S. Stone

Requested Turnaround Time
5-Day ☐ 10-Day ☑
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other: Equis edd
CLP Like Data Pkg Required: ☐ No
Email To: aroy@nobis-group.com
Fax To #:

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

PCB ONLY
SOXHLET ☑
NON SOXHLET ☐

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	M/O	RCP VOCs	% Solids	PAHs	Herbicides	Pesticides	PCBs	Metals ICP + Hg - 6010	Cyanide	SPLP RCP Metals - 6020
	OU4-PCS-TC-27-042325	4/23/25	12:45	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-28-042326	4/23/25	12:50	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-29-042327	4/23/25	13:00	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-30-042328	4/23/25	13:15	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-31-042329	4/23/25	13:20	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-PCS-TC-32-042330	4/23/25	13:30	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-VSL-18-042325	4/23/25	11:20	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	OU4-VSL-19-042326	4/23/25	11:50	C	SO		3	2	1				X	X	X	X	X	X	X	X	X
	SO-TB-01-042325	4/23/25	800		SO		3						X								

Total Number Of:
VIALS_____
GLASS_____
PLASTIC_____
BACTERIA_____
ENCORE_____

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N

*Contest is not responsible for missing samples from prepacked coolers

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time: 4/24/25 1310
Received by: (signature)	Date/Time: 4/25/25 0930
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: Other preservative is DI water. DI preserved VOCs were frozen on 4/24/25 @ 0600. Freeze upon receiving.

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☑ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

Lab Comments: 3.6°C Adjust Factor +1 IR Run #1

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1883 NOBI03
Client Name : Nobis Group
Client Contact : Adam Roy
Invoice Name : Nobis Group
Invoice Contact : Adam Roy

Order Date : 4/25/2025 10:10:00 AM
Project Name : Raymark Superfund Site
Receive DateTime : 4/25/2025 9:30:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1883-01	OU4-PCS-TC-27-042325	Solid	04/23/2025	12:45					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-03	OU4-PCS-TC-28-042325	Solid	04/23/2025	12:50					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-05	OU4-PCS-TC-29-042325	Solid	04/23/2025	13:00					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-07	OU4-PCS-TC-30-042325	Solid	04/23/2025	13:15					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-09	OU4-PCS-TC-31-042325	Solid	04/23/2025	13:20					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-11	OU4-PCS-TC-32-042325	Solid	04/23/2025	13:30					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-13	OU4-PCS-18-042325 VSL	Solid	04/23/2025	11:20					
					VOCMS Group3		8260D		10 Bus. Days
Q1883-15	OU4-PCS-19-042325 VSL	Solid	04/23/2025	11:50					

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1883 NOBI03
Client Name : Nobis Group
Client Contact : Adam Roy
Invoice Name : Nobis Group
Invoice Contact : Adam Roy

Order Date : 4/25/2025 10:10:00 AM
Project Name : Raymark Superfund Site
Receive DateTime : 4/25/2025 9:30:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOCMS Group3		8260D		10 Bus. Days
Q1883-17	SO-TB-01-042325	Solid	04/23/2025	08:00					
					VOCMS Group3		8260D		10 Bus. Days

Relinguished By : [signature]
Date / Time : 4/25/25 1120

Received By : Sam
Date / Time : 04/25/25 11:20
Storage Area : VOA Refridgerator Room

02 46
F22