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

Cover Page

Order ID : Q1486

Project ID : NYSDOT Two Bronx River Parkway Bridges

Client : JPCL Engineering

Lab Sample Number	Client Sample Number
Q1486-01	DN-B-40

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 : _____

Date: 3/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

JPCL Engineering
Project Name: NYSDOT Two Bronx River Parkway Bridges
Project # N/A
Chemtech Project # Q1486
Test Name: Metals ICP-RCRA,Mercury

A. Number of Samples and Date of Receipt:
1 Solid sample was received on 03/04/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Mercury, Metals ICP-RCRA, METALS RCRA, PCB, Pesticide-TCL and SVOC-TCL BNA -20. This data package contains results for Metals ICP-RCRA,Mercury.

C. Analytical Techniques:
The analysis of Metals ICP-RCRA 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 analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:

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

Signature_____

Alliance TECHNICAL GROUP

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1486**

	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:** **03/17/2025**

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

LAB CHRONICLE

OrderID:	Q1486	**OrderDate:**	3/4/2025 3:32:00 PM
Client:	JPCL Engineering	**Project:**	NYSDOT Two Bronx River Parkway Bridges
Contact:	Paul Rotondi	**Location:**	I11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1486-01	**DN-B-40**	**SOIL**			**03/04/25**			**03/04/25**
			Mercury	7471B		03/05/25	03/05/25	
			Metals ICP-RCRA	6010D		03/05/25	03/13/25	

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

Hit Summary Sheet
SW-846

SDG No.: Q1486 **Order ID:** Q1486

Client: JPCL Engineering **Project ID:** NYSDOT Two Bronx River Parkway Bridg

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : DN-B-40								
Q1486-01	DN-B-40	SOIL	Arsenic	0.86	J	0.29	0.99	mg/Kg
Q1486-01	DN-B-40	SOIL	Barium	42.8		0.64	4.97	mg/Kg
Q1486-01	DN-B-40	SOIL	Chromium	14.5		0.054	0.50	mg/Kg
Q1486-01	DN-B-40	SOIL	Lead	27.9		0.15	0.60	mg/Kg
Q1486-01	DN-B-40	SOIL	Mercury	0.017		0.0070	0.015	mg/Kg



SAMPLE DATA

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

Report of Analysis

Client:	JPCL Engineering	Date Collected:	03/04/25
Project:	NYSDOT Two Bronx River Parkway Bridges	Date Received:	03/04/25
Client Sample ID:	DN-B-40	SDG No.:	Q1486
Lab Sample ID:	Q1486-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	93.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	0.86	J	1	0.29	0.99	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050
7440-39-3	Barium	42.8		1	0.64	4.97	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050
7440-43-9	Cadmium	0.30	U	1	0.016	0.30	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050
7440-47-3	Chromium	14.5		1	0.054	0.50	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050
7439-92-1	Lead	27.9		1	0.15	0.60	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050
7439-97-6	Mercury	0.017		1	0.0070	0.015	mg/Kg	03/05/25 09:50	03/05/25 15:03	SW7471B	
7782-49-2	Selenium	0.99	U	1	0.33	0.99	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050
7440-22-4	Silver	0.50	U	1	0.052	0.50	mg/Kg	03/05/25 10:05	03/13/25 13:23	SW6010	SW3050

Color Before:	Brown	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	
Comments:	METALS RCRA				

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

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

METAL CALIBRATION DATA

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
ICV32	Mercury	3.65	4.0	91	90 - 110	CV	03/05/2025	13:59	LB134903

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
CCV65	Mercury	5.02	5.0	100	90 - 110	CV	03/05/2025	14:03	LB134903
CCV66	Mercury	4.92	5.0	98	90 - 110	CV	03/05/2025	14:40	LB134903
CCV67	Mercury	4.97	5.0	99	90 - 110	CV	03/05/2025	15:08	LB134903
CCV68	Mercury	4.93	5.0	98	90 - 110	CV	03/05/2025	15:29	LB134903

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	1050	1000	105	90 - 110	P	03/06/2025	10:50	LB134928
	Barium	527	520	101	90 - 110	P	03/06/2025	10:50	LB134928
	Cadmium	503	510	99	90 - 110	P	03/06/2025	10:50	LB134928
	Chromium	529	520	102	90 - 110	P	03/06/2025	10:50	LB134928
	Lead	1010	1000	100	90 - 110	P	03/06/2025	10:50	LB134928
	Selenium	1050	1000	105	90 - 110	P	03/06/2025	10:50	LB134928
	Silver	258	250	103	90 - 110	P	03/06/2025	10:50	LB134928

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	19.2	20.0	96	80 - 120	P	03/06/2025	11:38	LB134928
	Barium	94.2	100	94	80 - 120	P	03/06/2025	11:38	LB134928
	Cadmium	5.70	6.0	95	80 - 120	P	03/06/2025	11:38	LB134928
	Chromium	10.4	10.0	104	80 - 120	P	03/06/2025	11:38	LB134928
	Lead	11.9	12.0	99	80 - 120	P	03/06/2025	11:38	LB134928
	Selenium	20.3	20.0	101	80 - 120	P	03/06/2025	11:38	LB134928
	Silver	10.1	10.0	101	80 - 120	P	03/06/2025	11:38	LB134928

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

Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	5170	5000	103	90 - 110	P	03/06/2025	12:19	LB134928
	Barium	9900	10000	99	90 - 110	P	03/06/2025	12:19	LB134928
	Cadmium	2500	2500	100	90 - 110	P	03/06/2025	12:19	LB134928
	Chromium	1020	1000	102	90 - 110	P	03/06/2025	12:19	LB134928
	Lead	5010	5000	100	90 - 110	P	03/06/2025	12:19	LB134928
	Selenium	5210	5000	104	90 - 110	P	03/06/2025	12:19	LB134928
	Silver	1280	1250	102	90 - 110	P	03/06/2025	12:19	LB134928
CCV02	Arsenic	5010	5000	100	90 - 110	P	03/06/2025	13:10	LB134928
	Barium	10100	10000	101	90 - 110	P	03/06/2025	13:10	LB134928
	Cadmium	2420	2500	97	90 - 110	P	03/06/2025	13:10	LB134928
	Chromium	985	1000	98	90 - 110	P	03/06/2025	13:10	LB134928
	Lead	4830	5000	97	90 - 110	P	03/06/2025	13:10	LB134928
	Selenium	5030	5000	100	90 - 110	P	03/06/2025	13:10	LB134928
	Silver	1240	1250	100	90 - 110	P	03/06/2025	13:10	LB134928
CCV03	Arsenic	5050	5000	101	90 - 110	P	03/06/2025	14:00	LB134928
	Barium	9680	10000	97	90 - 110	P	03/06/2025	14:00	LB134928
	Cadmium	2430	2500	97	90 - 110	P	03/06/2025	14:00	LB134928
	Chromium	993	1000	99	90 - 110	P	03/06/2025	14:00	LB134928
	Lead	4830	5000	97	90 - 110	P	03/06/2025	14:00	LB134928
	Selenium	5040	5000	101	90 - 110	P	03/06/2025	14:00	LB134928
	Silver	1230	1250	98	90 - 110	P	03/06/2025	14:00	LB134928
CCV04	Arsenic	4960	5000	99	90 - 110	P	03/06/2025	14:50	LB134928
	Barium	9740	10000	97	90 - 110	P	03/06/2025	14:50	LB134928
	Cadmium	2460	2500	98	90 - 110	P	03/06/2025	14:50	LB134928
	Chromium	1010	1000	101	90 - 110	P	03/06/2025	14:50	LB134928
	Lead	4910	5000	98	90 - 110	P	03/06/2025	14:50	LB134928
	Selenium	4970	5000	99	90 - 110	P	03/06/2025	14:50	LB134928
	Silver	1250	1250	100	90 - 110	P	03/06/2025	14:50	LB134928
CCV05	Arsenic	4960	5000	99	90 - 110	P	03/06/2025	15:53	LB134928
	Barium	9790	10000	98	90 - 110	P	03/06/2025	15:53	LB134928
	Cadmium	2480	2500	99	90 - 110	P	03/06/2025	15:53	LB134928
	Chromium	1010	1000	101	90 - 110	P	03/06/2025	15:53	LB134928
	Lead	4940	5000	99	90 - 110	P	03/06/2025	15:53	LB134928
	Selenium	4960	5000	99	90 - 110	P	03/06/2025	15:53	LB134928

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Silver	1240	1250	99	90 - 110	P	03/06/2025	15:53	LB134928

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	1050	1000	105	90 - 110	P	03/12/2025	10:52	LB135011
	Barium	537	520	103	90 - 110	P	03/12/2025	10:52	LB135011
	Cadmium	506	510	99	90 - 110	P	03/12/2025	10:52	LB135011
	Chromium	541	520	104	90 - 110	P	03/12/2025	10:52	LB135011
	Lead	1020	1000	102	90 - 110	P	03/12/2025	10:52	LB135011
	Selenium	1050	1000	105	90 - 110	P	03/12/2025	10:52	LB135011
	Silver	262	250	105	90 - 110	P	03/12/2025	10:52	LB135011

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	22.2	20.0	111	80 - 120	P	03/12/2025	10:56	LB135011
	Barium	89.2	100	89	80 - 120	P	03/12/2025	10:56	LB135011
	Cadmium	5.83	6.0	97	80 - 120	P	03/12/2025	10:56	LB135011
	Chromium	10.6	10.0	106	80 - 120	P	03/12/2025	10:56	LB135011
	Lead	11.7	12.0	97	80 - 120	P	03/12/2025	10:56	LB135011
	Selenium	17.5	20.0	87	80 - 120	P	03/12/2025	10:56	LB135011
	Silver	11.0	10.0	110	80 - 120	P	03/12/2025	10:56	LB135011

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

Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	5210	5000	104	90 - 110	P	03/12/2025	11:29	LB135011
	Barium	9300	10000	93	90 - 110	P	03/12/2025	11:29	LB135011
	Cadmium	2470	2500	99	90 - 110	P	03/12/2025	11:29	LB135011
	Chromium	1050	1000	105	90 - 110	P	03/12/2025	11:29	LB135011
	Lead	5060	5000	101	90 - 110	P	03/12/2025	11:29	LB135011
	Selenium	5000	5000	100	90 - 110	P	03/12/2025	11:29	LB135011
	Silver	1260	1250	101	90 - 110	P	03/12/2025	11:29	LB135011
CCV02	Arsenic	5150	5000	103	90 - 110	P	03/12/2025	12:20	LB135011
	Barium	9180	10000	92	90 - 110	P	03/12/2025	12:20	LB135011
	Cadmium	2480	2500	99	90 - 110	P	03/12/2025	12:20	LB135011
	Chromium	1070	1000	107	90 - 110	P	03/12/2025	12:20	LB135011
	Lead	5010	5000	100	90 - 110	P	03/12/2025	12:20	LB135011
	Selenium	5180	5000	104	90 - 110	P	03/12/2025	12:20	LB135011
	Silver	1280	1250	103	90 - 110	P	03/12/2025	12:20	LB135011
CCV03	Arsenic	5100	5000	102	90 - 110	P	03/12/2025	13:10	LB135011
	Barium	9270	10000	93	90 - 110	P	03/12/2025	13:10	LB135011
	Cadmium	2480	2500	99	90 - 110	P	03/12/2025	13:10	LB135011
	Chromium	1060	1000	106	90 - 110	P	03/12/2025	13:10	LB135011
	Lead	5000	5000	100	90 - 110	P	03/12/2025	13:10	LB135011
	Selenium	5090	5000	102	90 - 110	P	03/12/2025	13:10	LB135011
	Silver	1290	1250	103	90 - 110	P	03/12/2025	13:10	LB135011
CCV04	Arsenic	5330	5000	107	90 - 110	P	03/12/2025	14:24	LB135011
	Barium	9270	10000	93	90 - 110	P	03/12/2025	14:24	LB135011
	Cadmium	2500	2500	100	90 - 110	P	03/12/2025	14:24	LB135011
	Chromium	1060	1000	106	90 - 110	P	03/12/2025	14:24	LB135011
	Lead	5090	5000	102	90 - 110	P	03/12/2025	14:24	LB135011
	Selenium	5140	5000	103	90 - 110	P	03/12/2025	14:24	LB135011
	Silver	1280	1250	103	90 - 110	P	03/12/2025	14:24	LB135011
CCV05	Arsenic	5210	5000	104	90 - 110	P	03/12/2025	15:25	LB135011
	Barium	9220	10000	92	90 - 110	P	03/12/2025	15:25	LB135011
	Cadmium	2460	2500	98	90 - 110	P	03/12/2025	15:25	LB135011
	Chromium	1050	1000	105	90 - 110	P	03/12/2025	15:25	LB135011
	Lead	5010	5000	100	90 - 110	P	03/12/2025	15:25	LB135011
	Selenium	5000	5000	100	90 - 110	P	03/12/2025	15:25	LB135011

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

Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Silver	1250	1250	100	90 - 110	P	03/12/2025	15:25	LB135011
CCV06	Arsenic	5190	5000	104	90 - 110	P	03/12/2025	16:25	LB135011
	Barium	9100	10000	91	90 - 110	P	03/12/2025	16:25	LB135011
	Cadmium	2450	2500	98	90 - 110	P	03/12/2025	16:25	LB135011
	Chromium	1050	1000	105	90 - 110	P	03/12/2025	16:25	LB135011
	Lead	4990	5000	100	90 - 110	P	03/12/2025	16:25	LB135011
	Selenium	4960	5000	99	90 - 110	P	03/12/2025	16:25	LB135011
	Silver	1260	1250	100	90 - 110	P	03/12/2025	16:25	LB135011
CCV07	Arsenic	5300	5000	106	90 - 110	P	03/12/2025	17:25	LB135011
	Barium	9240	10000	92	90 - 110	P	03/12/2025	17:25	LB135011
	Cadmium	2460	2500	98	90 - 110	P	03/12/2025	17:25	LB135011
	Chromium	1050	1000	105	90 - 110	P	03/12/2025	17:25	LB135011
	Lead	5030	5000	101	90 - 110	P	03/12/2025	17:25	LB135011
	Selenium	5120	5000	102	90 - 110	P	03/12/2025	17:25	LB135011
	Silver	1270	1250	102	90 - 110	P	03/12/2025	17:25	LB135011
CCV08	Arsenic	5240	5000	105	90 - 110	P	03/12/2025	18:23	LB135011
	Barium	9130	10000	91	90 - 110	P	03/12/2025	18:23	LB135011
	Cadmium	2490	2500	99	90 - 110	P	03/12/2025	18:23	LB135011
	Chromium	1070	1000	107	90 - 110	P	03/12/2025	18:23	LB135011
	Lead	5060	5000	101	90 - 110	P	03/12/2025	18:23	LB135011
	Selenium	5010	5000	100	90 - 110	P	03/12/2025	18:23	LB135011
	Silver	1280	1250	102	90 - 110	P	03/12/2025	18:23	LB135011
CCV09	Arsenic	5290	5000	106	90 - 110	P	03/12/2025	18:49	LB135011
	Barium	9220	10000	92	90 - 110	P	03/12/2025	18:49	LB135011
	Cadmium	2500	2500	100	90 - 110	P	03/12/2025	18:49	LB135011
	Chromium	1050	1000	105	90 - 110	P	03/12/2025	18:49	LB135011
	Lead	5060	5000	101	90 - 110	P	03/12/2025	18:49	LB135011
	Selenium	5060	5000	101	90 - 110	P	03/12/2025	18:49	LB135011
	Silver	1270	1250	102	90 - 110	P	03/12/2025	18:49	LB135011

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	1020	1000	102	90 - 110	P	03/13/2025	12:07	LB135035
	Barium	533	520	102	90 - 110	P	03/13/2025	12:07	LB135035
	Cadmium	503	510	99	90 - 110	P	03/13/2025	12:07	LB135035
	Chromium	525	520	101	90 - 110	P	03/13/2025	12:07	LB135035
	Lead	1000	1000	100	90 - 110	P	03/13/2025	12:07	LB135035
	Selenium	1040	1000	104	90 - 110	P	03/13/2025	12:07	LB135035
	Silver	252	250	101	90 - 110	P	03/13/2025	12:07	LB135035

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	17.3	20.0	86	80 - 120	P	03/13/2025	12:13	LB135035
	Barium	92.2	100	92	80 - 120	P	03/13/2025	12:13	LB135035
	Cadmium	5.95	6.0	99	80 - 120	P	03/13/2025	12:13	LB135035
	Chromium	10.1	10.0	101	80 - 120	P	03/13/2025	12:13	LB135035
	Lead	12.6	12.0	105	80 - 120	P	03/13/2025	12:13	LB135035
	Selenium	19.2	20.0	96	80 - 120	P	03/13/2025	12:13	LB135035
	Silver	10.6	10.0	106	80 - 120	P	03/13/2025	12:13	LB135035

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

Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	5160	5000	103	90 - 110	P	03/13/2025	12:53	LB135035
	Barium	9860	10000	99	90 - 110	P	03/13/2025	12:53	LB135035
	Cadmium	2570	2500	103	90 - 110	P	03/13/2025	12:53	LB135035
	Chromium	1050	1000	105	90 - 110	P	03/13/2025	12:53	LB135035
	Lead	5190	5000	104	90 - 110	P	03/13/2025	12:53	LB135035
	Selenium	5070	5000	101	90 - 110	P	03/13/2025	12:53	LB135035
	Silver	1300	1250	104	90 - 110	P	03/13/2025	12:53	LB135035
CCV02	Arsenic	5290	5000	106	90 - 110	P	03/13/2025	13:49	LB135035
	Barium	10100	10000	101	90 - 110	P	03/13/2025	13:49	LB135035
	Cadmium	2630	2500	105	90 - 110	P	03/13/2025	13:49	LB135035
	Chromium	1100	1000	110	90 - 110	P	03/13/2025	13:49	LB135035
	Lead	5330	5000	107	90 - 110	P	03/13/2025	13:49	LB135035
	Selenium	5180	5000	104	90 - 110	P	03/13/2025	13:49	LB135035
	Silver	1310	1250	105	90 - 110	P	03/13/2025	13:49	LB135035
CCV03	Arsenic	5130	5000	102	90 - 110	P	03/13/2025	14:40	LB135035
	Barium	9830	10000	98	90 - 110	P	03/13/2025	14:40	LB135035
	Cadmium	2540	2500	102	90 - 110	P	03/13/2025	14:40	LB135035
	Chromium	1050	1000	106	90 - 110	P	03/13/2025	14:40	LB135035
	Lead	5150	5000	103	90 - 110	P	03/13/2025	14:40	LB135035
	Selenium	5060	5000	101	90 - 110	P	03/13/2025	14:40	LB135035
	Silver	1280	1250	103	90 - 110	P	03/13/2025	14:40	LB135035
CCV04	Arsenic	4950	5000	99	90 - 110	P	03/13/2025	15:38	LB135035
	Barium	9580	10000	96	90 - 110	P	03/13/2025	15:38	LB135035
	Cadmium	2510	2500	100	90 - 110	P	03/13/2025	15:38	LB135035
	Chromium	1030	1000	103	90 - 110	P	03/13/2025	15:38	LB135035
	Lead	5050	5000	101	90 - 110	P	03/13/2025	15:38	LB135035
	Selenium	4830	5000	97	90 - 110	P	03/13/2025	15:38	LB135035
	Silver	1240	1250	99	90 - 110	P	03/13/2025	15:38	LB135035
CCV05	Arsenic	5250	5000	105	90 - 110	P	03/13/2025	16:28	LB135035
	Barium	9880	10000	99	90 - 110	P	03/13/2025	16:28	LB135035
	Cadmium	2630	2500	105	90 - 110	P	03/13/2025	16:28	LB135035
	Chromium	1070	1000	107	90 - 110	P	03/13/2025	16:28	LB135035
	Lead	5300	5000	106	90 - 110	P	03/13/2025	16:28	LB135035
	Selenium	5150	5000	103	90 - 110	P	03/13/2025	16:28	LB135035

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Silver	1300	1250	104	90 - 110	P	03/13/2025	16:28	LB135035
CCV06	Arsenic	5070	5000	101	90 - 110	P	03/13/2025	17:21	LB135035
	Barium	9980	10000	100	90 - 110	P	03/13/2025	17:21	LB135035
	Cadmium	2570	2500	103	90 - 110	P	03/13/2025	17:21	LB135035
	Chromium	1060	1000	106	90 - 110	P	03/13/2025	17:21	LB135035
	Lead	5180	5000	104	90 - 110	P	03/13/2025	17:21	LB135035
	Selenium	4970	5000	100	90 - 110	P	03/13/2025	17:21	LB135035
	Silver	1290	1250	103	90 - 110	P	03/13/2025	17:21	LB135035
CCV07	Arsenic	5250	5000	105	90 - 110	P	03/13/2025	18:12	LB135035
	Barium	9960	10000	100	90 - 110	P	03/13/2025	18:12	LB135035
	Cadmium	2640	2500	106	90 - 110	P	03/13/2025	18:12	LB135035
	Chromium	1090	1000	109	90 - 110	P	03/13/2025	18:12	LB135035
	Lead	5330	5000	107	90 - 110	P	03/13/2025	18:12	LB135035
	Selenium	5180	5000	104	90 - 110	P	03/13/2025	18:12	LB135035
	Silver	1310	1250	105	90 - 110	P	03/13/2025	18:12	LB135035
CCV08	Arsenic	4950	5000	99	90 - 110	P	03/13/2025	18:53	LB135035
	Barium	9390	10000	94	90 - 110	P	03/13/2025	18:53	LB135035
	Cadmium	2510	2500	100	90 - 110	P	03/13/2025	18:53	LB135035
	Chromium	1040	1000	104	90 - 110	P	03/13/2025	18:53	LB135035
	Lead	5060	5000	101	90 - 110	P	03/13/2025	18:53	LB135035
	Selenium	4840	5000	97	90 - 110	P	03/13/2025	18:53	LB135035
	Silver	1250	1250	100	90 - 110	P	03/13/2025	18:53	LB135035
CCV09	Arsenic	5280	5000	106	90 - 110	P	03/13/2025	19:12	LB135035
	Barium	9620	10000	96	90 - 110	P	03/13/2025	19:12	LB135035
	Cadmium	2550	2500	102	90 - 110	P	03/13/2025	19:12	LB135035
	Chromium	1070	1000	107	90 - 110	P	03/13/2025	19:12	LB135035
	Lead	5120	5000	102	90 - 110	P	03/13/2025	19:12	LB135035
	Selenium	5440	5000	109	90 - 110	P	03/13/2025	19:12	LB135035
	Silver	1290	1250	104	90 - 110	P	03/13/2025	19:12	LB135035

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

Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	0.21	0.2	103	40 - 160	CV	03/05/2025	14:08	LB134903
CRI01	Arsenic	22.6	20.0	113	40 - 160	P	03/06/2025	11:47	LB134928
	Barium	92.7	100	93	40 - 160	P	03/06/2025	11:47	LB134928
	Cadmium	5.78	6.0	96	40 - 160	P	03/06/2025	11:47	LB134928
	Chromium	10.1	10.0	101	40 - 160	P	03/06/2025	11:47	LB134928
	Lead	12.6	12.0	105	40 - 160	P	03/06/2025	11:47	LB134928
	Selenium	22.0	20.0	110	40 - 160	P	03/06/2025	11:47	LB134928
	Silver	10.2	10.0	102	40 - 160	P	03/06/2025	11:47	LB134928
CRI01	Arsenic	20.1	20.0	100	40 - 160	P	03/12/2025	11:05	LB135011
	Barium	88.8	100	89	40 - 160	P	03/12/2025	11:05	LB135011
	Cadmium	5.85	6.0	98	40 - 160	P	03/12/2025	11:05	LB135011
	Chromium	10.3	10.0	103	40 - 160	P	03/12/2025	11:05	LB135011
	Lead	10.9	12.0	91	40 - 160	P	03/12/2025	11:05	LB135011
	Selenium	18.3	20.0	92	40 - 160	P	03/12/2025	11:05	LB135011
	Silver	11.1	10.0	111	40 - 160	P	03/12/2025	11:05	LB135011
CRI01	Arsenic	21.2	20.0	106	40 - 160	P	03/13/2025	12:21	LB135035
	Barium	94.0	100	94	40 - 160	P	03/13/2025	12:21	LB135035
	Cadmium	5.90	6.0	98	40 - 160	P	03/13/2025	12:21	LB135035
	Chromium	10.4	10.0	104	40 - 160	P	03/13/2025	12:21	LB135035
	Lead	11.7	12.0	98	40 - 160	P	03/13/2025	12:21	LB135035
	Selenium	21.3	20.0	107	40 - 160	P	03/13/2025	12:21	LB135035
	Silver	10.6	10.0	106	40 - 160	P	03/13/2025	12:21	LB135035

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB32	Mercury	0.20	+/-0.20	U	0.20	CV	03/05/2025	14:01	LB134903

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB65	Mercury	0.20	+/-0.20	U	0.20	CV	03/05/2025	14:06	LB134903
CCB66	Mercury	0.20	+/-0.20	U	0.20	CV	03/05/2025	14:43	LB134903
CCB67	Mercury	0.20	+/-0.20	U	0.20	CV	03/05/2025	15:10	LB134903
CCB68	Mercury	0.20	+/-0.20	U	0.20	CV	03/05/2025	15:31	LB134903

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	03/06/2025	11:43	LB134928
	Barium	100	+/-100	U	100	P	03/06/2025	11:43	LB134928
	Cadmium	6.00	+/-6.00	U	6.00	P	03/06/2025	11:43	LB134928
	Chromium	10.0	+/-10.0	U	10.0	P	03/06/2025	11:43	LB134928
	Lead	12.0	+/-12.0	U	12.0	P	03/06/2025	11:43	LB134928
	Selenium	20.0	+/-20.0	U	20.0	P	03/06/2025	11:43	LB134928
	Silver	10.0	+/-10.0	U	10.0	P	03/06/2025	11:43	LB134928

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	03/06/2025	12:23	LB134928
	Barium	100	+/-100	U	100	P	03/06/2025	12:23	LB134928
	Cadmium	6.00	+/-6.00	U	6.00	P	03/06/2025	12:23	LB134928
	Chromium	10.0	+/-10.0	U	10.0	P	03/06/2025	12:23	LB134928
	Lead	12.0	+/-12.0	U	12.0	P	03/06/2025	12:23	LB134928
	Selenium	20.0	+/-20.0	U	20.0	P	03/06/2025	12:23	LB134928
	Silver	10.0	+/-10.0	U	10.0	P	03/06/2025	12:23	LB134928
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	03/06/2025	13:14	LB134928
	Barium	100	+/-100	U	100	P	03/06/2025	13:14	LB134928
	Cadmium	6.00	+/-6.00	U	6.00	P	03/06/2025	13:14	LB134928
	Chromium	10.0	+/-10.0	U	10.0	P	03/06/2025	13:14	LB134928
	Lead	12.0	+/-12.0	U	12.0	P	03/06/2025	13:14	LB134928
	Selenium	20.0	+/-20.0	U	20.0	P	03/06/2025	13:14	LB134928
	Silver	10.0	+/-10.0	U	10.0	P	03/06/2025	13:14	LB134928
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	03/06/2025	14:05	LB134928
	Barium	100	+/-100	U	100	P	03/06/2025	14:05	LB134928
	Cadmium	6.00	+/-6.00	U	6.00	P	03/06/2025	14:05	LB134928
	Chromium	10.0	+/-10.0	U	10.0	P	03/06/2025	14:05	LB134928
	Lead	12.0	+/-12.0	U	12.0	P	03/06/2025	14:05	LB134928
	Selenium	20.0	+/-20.0	U	20.0	P	03/06/2025	14:05	LB134928
	Silver	10.0	+/-10.0	U	10.0	P	03/06/2025	14:05	LB134928
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	03/06/2025	14:54	LB134928
	Barium	100	+/-100	U	100	P	03/06/2025	14:54	LB134928
	Cadmium	6.00	+/-6.00	U	6.00	P	03/06/2025	14:54	LB134928
	Chromium	10.0	+/-10.0	U	10.0	P	03/06/2025	14:54	LB134928
	Lead	12.0	+/-12.0	U	12.0	P	03/06/2025	14:54	LB134928
	Selenium	20.0	+/-20.0	U	20.0	P	03/06/2025	14:54	LB134928
	Silver	10.0	+/-10.0	U	10.0	P	03/06/2025	14:54	LB134928
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	03/06/2025	15:57	LB134928
	Barium	100	+/-100	U	100	P	03/06/2025	15:57	LB134928
	Cadmium	6.00	+/-6.00	U	6.00	P	03/06/2025	15:57	LB134928
	Chromium	10.0	+/-10.0	U	10.0	P	03/06/2025	15:57	LB134928
	Lead	12.0	+/-12.0	U	12.0	P	03/06/2025	15:57	LB134928
	Selenium	20.0	+/-20.0	U	20.0	P	03/06/2025	15:57	LB134928
	Silver	10.0	+/-10.0	U	10.0	P	03/06/2025	15:57	LB134928

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	11:01	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	11:01	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	11:01	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	11:01	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	11:01	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	11:01	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	11:01	LB135011

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	11:34	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	11:34	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	11:34	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	11:34	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	11:34	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	11:34	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	11:34	LB135011
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	12:24	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	12:24	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	12:24	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	12:24	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	12:24	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	12:24	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	12:24	LB135011
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	13:14	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	13:14	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	13:14	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	13:14	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	13:14	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	13:14	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	13:14	LB135011
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	14:28	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	14:28	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	14:28	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	14:28	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	14:28	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	14:28	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	14:28	LB135011
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	15:29	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	15:29	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	15:29	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	15:29	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	15:29	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	15:29	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	15:29	LB135011
CCB06	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	16:30	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	16:30	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	16:30	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	16:30	LB135011

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	16:30	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	16:30	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	16:30	LB135011
CCB07	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	17:30	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	17:30	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	17:30	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	17:30	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	17:30	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	17:30	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	17:30	LB135011
CCB08	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	18:27	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	18:27	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	18:27	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	18:27	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	18:27	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	18:27	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	18:27	LB135011
CCB09	Arsenic	20.0	+/-20.0	U	20.0	P	03/12/2025	18:53	LB135011
	Barium	100	+/-100	U	100	P	03/12/2025	18:53	LB135011
	Cadmium	6.00	+/-6.00	U	6.00	P	03/12/2025	18:53	LB135011
	Chromium	10.0	+/-10.0	U	10.0	P	03/12/2025	18:53	LB135011
	Lead	12.0	+/-12.0	U	12.0	P	03/12/2025	18:53	LB135011
	Selenium	20.0	+/-20.0	U	20.0	P	03/12/2025	18:53	LB135011
	Silver	10.0	+/-10.0	U	10.0	P	03/12/2025	18:53	LB135011

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	12:17	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	12:17	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	12:17	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	12:17	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	12:17	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	12:17	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	12:17	LB135035

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	12:58	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	12:58	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	12:58	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	12:58	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	12:58	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	12:58	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	12:58	LB135035
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	13:54	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	13:54	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	13:54	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	13:54	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	13:54	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	13:54	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	13:54	LB135035
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	14:48	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	14:48	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	14:48	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	14:48	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	14:48	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	14:48	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	14:48	LB135035
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	15:42	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	15:42	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	15:42	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	15:42	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	15:42	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	15:42	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	15:42	LB135035
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	16:32	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	16:32	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	16:32	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	16:32	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	16:32	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	16:32	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	16:32	LB135035
CCB06	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	17:25	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	17:25	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	17:25	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	17:25	LB135035

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	17:25	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	17:25	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	17:25	LB135035
CCB07	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	18:35	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	18:35	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	18:35	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	18:35	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	18:35	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	18:35	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	18:35	LB135035
CCB08	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	19:03	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	19:03	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	19:03	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	19:03	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	19:03	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	19:03	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	19:03	LB135035
CCB09	Arsenic	20.0	+/-20.0	U	20.0	P	03/13/2025	19:21	LB135035
	Barium	100	+/-100	U	100	P	03/13/2025	19:21	LB135035
	Cadmium	6.00	+/-6.00	U	6.00	P	03/13/2025	19:21	LB135035
	Chromium	10.0	+/-10.0	U	10.0	P	03/13/2025	19:21	LB135035
	Lead	12.0	+/-12.0	U	12.0	P	03/13/2025	19:21	LB135035
	Selenium	20.0	+/-20.0	U	20.0	P	03/13/2025	19:21	LB135035
	Silver	10.0	+/-10.0	U	10.0	P	03/13/2025	19:21	LB135035

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

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB166988BL		**SOLID**		**Batch Number:**	**PB166988**		**Prep Date:**	**03/05/2025**	
	Mercury	0.013	<0.013	U	0.013	CV	03/05/2025	14:19	LB134903

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

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB166977BL		**SOLID**		**Batch Number:**	**PB166977**		**Prep Date:**	**03/05/2025**	
	Arsenic	0.98	<0.98	U	0.98	P	03/12/2025	12:28	LB135011
	Barium	4.90	<4.90	U	4.90	P	03/12/2025	12:28	LB135011
	Cadmium	0.29	<0.29	U	0.29	P	03/12/2025	12:28	LB135011
	Chromium	0.49	<0.49	U	0.49	P	03/12/2025	12:28	LB135011
	Lead	0.59	<0.59	U	0.59	P	03/12/2025	12:28	LB135011
	Selenium	0.98	<0.98	U	0.98	P	03/12/2025	12:28	LB135011
	Silver	0.49	<0.49	U	0.49	P	03/12/2025	12:28	LB135011

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

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Arsenic	12.0			-20	20	03/06/2025	11:51	LB134928
	Barium	2.98	6.0	50	-94	106	03/06/2025	11:51	LB134928
	Cadmium	-4.02	1.0	402	-5	7	03/06/2025	11:51	LB134928
	Chromium	55.3	52.0	106	42	62	03/06/2025	11:51	LB134928
	Lead	6.40			-12	12	03/06/2025	11:51	LB134928
	Selenium	2.15			-20	20	03/06/2025	11:51	LB134928
	Silver	0.89			-10	10	03/06/2025	11:51	LB134928
ICSAB01	Arsenic	98.3	104	94	88.4	120	03/06/2025	12:04	LB134928
	Barium	498	537	93	437	637	03/06/2025	12:04	LB134928
	Cadmium	1010	972	104	826	1120	03/06/2025	12:04	LB134928
	Chromium	567	542	105	460	624	03/06/2025	12:04	LB134928
	Lead	55.0	49.0	112	37	61	03/06/2025	12:04	LB134928
	Selenium	47.8	46.0	104	26	66	03/06/2025	12:04	LB134928
	Silver	190	201	94	170	232	03/06/2025	12:04	LB134928
ICSA01	Arsenic	5.78			-20	20	03/12/2025	11:09	LB135011
	Barium	1.43	6.0	24	-94	106	03/12/2025	11:09	LB135011
	Cadmium	-3.50	1.0	350	-5	7	03/12/2025	11:09	LB135011
	Chromium	60.0	52.0	115	42	62	03/12/2025	11:09	LB135011
	Lead	5.99			-12	12	03/12/2025	11:09	LB135011
	Selenium	-15.8			-20	20	03/12/2025	11:09	LB135011
	Silver	0.57			-10	10	03/12/2025	11:09	LB135011
ICSAB01	Arsenic	116	104	112	88.4	120	03/12/2025	11:14	LB135011
	Barium	454	537	84	437	637	03/12/2025	11:14	LB135011
	Cadmium	1000	972	103	826	1120	03/12/2025	11:14	LB135011
	Chromium	595	542	110	460	624	03/12/2025	11:14	LB135011
	Lead	52.3	49.0	107	37	61	03/12/2025	11:14	LB135011
	Selenium	34.2	46.0	74	26	66	03/12/2025	11:14	LB135011
	Silver	226	201	112	170	232	03/12/2025	11:14	LB135011
ICSA01	Arsenic	4.32			-20	20	03/13/2025	12:25	LB135035
	Barium	4.72	6.0	79	-94	106	03/13/2025	12:25	LB135035
	Cadmium	-3.11	1.0	311	-5	7	03/13/2025	12:25	LB135035
	Chromium	60.0	52.0	115	42	62	03/13/2025	12:25	LB135035
	Lead	4.72			-12	12	03/13/2025	12:25	LB135035
	Selenium	-15.2			-20	20	03/13/2025	12:25	LB135035
	Silver	-0.88			-10	10	03/13/2025	12:25	LB135035
ICSAB01	Arsenic	113	104	109	88.4	120	03/13/2025	12:30	LB135035
	Barium	485	537	90	437	637	03/13/2025	12:30	LB135035
	Cadmium	1000	972	103	826	1120	03/13/2025	12:30	LB135035
	Chromium	564	542	104	460	624	03/13/2025	12:30	LB135035
	Lead	54.2	49.0	111	37	61	03/13/2025	12:30	LB135035
	Selenium	43.0	46.0	94	26	66	03/13/2025	12:30	LB135035

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

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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	Silver	218	201	108	170	232	03/13/2025	12:30	LB135035

METAL
QC
DATA

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

metals
- 5a -
MATRIX SPIKE SUMMARY

client: JPCL Engineering **level:** low **sdg no.:** Q1486

contract: JPCL01 **lab code:** CHEM **case no.:** Q1486 **sas no.:** Q1486

matrix: Solid **sample id:** Q1474-01 **client id:** BU-03-02282025MS

Percent Solids for Sample: 93.3 **Spiked ID:** Q1474-01MS **Percent Solids for Spike Sample:** 93.3

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.30		0.023		0.28	98		CV

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

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JPCL Engineering **level:** low **sdg no.:** Q1486

contract: JPCL01 **lab code:** CHEM **case no.:** Q1486 **sas no.:** Q1486

matrix: Solid **sample id:** Q1474-01 **client id:** BU-03-02282025MSD

Percent Solids for Sample: 93.3 **Spiked ID:** Q1474-01MSD **Percent Solids for Spike Sample:** 93.3

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.32		0.023		0.27	109		CV

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

metals
- 5a -
MATRIX SPIKE SUMMARY

client: JPCL Engineering **level:** low **sdg no.:** Q1486

contract: JPCL01 **lab code:** CHEM **case no.:** Q1486 **sas no.:** Q1486

matrix: Solid **sample id:** Q1482-01 **client id:** OR-03-030425MS

Percent Solids for Sample: 90.8 **Spiked ID:** Q1482-01MS **Percent Solids for Spike Sample:** 90.8

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	75 - 125	35.2		2.23		38.8	85		P
Barium	mg/Kg	75 - 125	40.0		28.9		9.7	115		P
Cadmium	mg/Kg	75 - 125	8.89		0.29	U	9.7	92		P
Chromium	mg/Kg	75 - 125	27.2		9.62		19.4	91		P
Lead	mg/Kg	75 - 125	57.1		9.00		48.5	99		P
Selenium	mg/Kg	75 - 125	76.5		0.42	J	97.0	78		P
Silver	mg/Kg	75 - 125	4.47		1.44		3.6	84		P

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

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JPCL Engineering **level:** low **sdg no.:** Q1486

contract: JPCL01 **lab code:** CHEM **case no.:** Q1486 **sas no.:** Q1486

matrix: Solid **sample id:** Q1482-01 **client id:** OR-03-030425MSD

Percent Solids for Sample: 90.8 **Spiked ID:** Q1482-01MSD **Percent Solids for Spike Sample:** 90.8

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	75 - 125	35.7		2.23		38.5	87		P
Barium	mg/Kg	75 - 125	39.3		28.9		9.6	109		P
Cadmium	mg/Kg	75 - 125	8.98		0.29	U	9.6	94		P
Chromium	mg/Kg	75 - 125	26.9		9.62		19.2	90		P
Lead	mg/Kg	75 - 125	57.5		9.00		48.1	101		P
Selenium	mg/Kg	75 - 125	77.5		0.42	J	96.2	80		P
Silver	mg/Kg	75 - 125	4.38		1.44		3.6	82		P

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

Metals
- 5b -

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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

Sample ID: **Spiked ID:**

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

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

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JPCL Engineering **Level:** LOW **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Matrix: Solid **Sample ID:** Q1474-01 **Client ID:** BU-03-02282025DUP

Percent Solids for Sample: 93.3 **Duplicate ID** Q1474-01DUP **Percent Solids for Spike Sample:** 93.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.023		0.022		4		CV

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

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

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JPCL Engineering **Level:** LOW **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Matrix: Solid **Sample ID:** Q1474-01MS **Client ID:** BU-03-02282025MSD

Percent Solids for Sample: 93.3 **Duplicate ID** Q1474-01MSD **Percent Solids for Spike Sample:** 93.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.30		0.32		7		CV

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

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

Metals

- 6 -
DUPLICATE SAMPLE SUMMARY

Client: JPCL Engineering **Level:** LOW **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Matrix: Solid **Sample ID:** Q1482-01 **Client ID:** OR-03-030425DUP

Percent Solids for Sample: 90.8 **Duplicate ID** Q1482-01DUP **Percent Solids for Spike Sample:** 90.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/Kg	20	2.23		2.11		6		P
Barium	mg/Kg	20	28.9		30.8		6		P
Cadmium	mg/Kg	20	0.29	U	0.31	U			P
Chromium	mg/Kg	20	9.62		10.3		7		P
Lead	mg/Kg	20	9.00		9.71		8		P
Selenium	mg/Kg	20	0.42	J	1.03	U	200.0		P
Silver	mg/Kg	20	1.44		1.54		7		P

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

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

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JPCL Engineering **Level:** LOW **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Matrix: Solid **Sample ID:** Q1482-01MS **Client ID:** OR-03-030425MSD

Percent Solids for Sample: 90.8 **Duplicate ID** Q1482-01MSD **Percent Solids for Spike Sample:** 90.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/Kg	20	35.2		35.7		1		P
Barium	mg/Kg	20	40.0		39.3		2		P
Cadmium	mg/Kg	20	8.89		8.98		1		P
Chromium	mg/Kg	20	27.2		26.9		1		P
Lead	mg/Kg	20	57.1		57.5		1		P
Selenium	mg/Kg	20	76.5		77.5		1		P
Silver	mg/Kg	20	4.47		4.38		2		P

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

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

LABORATORY CONTROL SAMPLE SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166977BS							
Arsenic	mg/Kg	39.8	39.2		98	80 - 120	P
Barium	mg/Kg	10.0	8.73		87	80 - 120	P
Cadmium	mg/Kg	10.0	9.17		92	80 - 120	P
Chromium	mg/Kg	19.9	21.0		106	80 - 120	P
Lead	mg/Kg	49.8	47.0		94	80 - 120	P
Selenium	mg/Kg	99.5	95.1		96	80 - 120	P
Silver	mg/Kg	3.7	3.85		104	80 - 120	P

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

LABORATORY CONTROL SAMPLE SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166988BS							
Mercury	mg/Kg	0.25	0.25		100	80 - 120	CV

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

Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

BU-03-02282025L

Lab Name: Chemtech Consulting Group **Contract:** JPCL01

Lab Code: CHEM **Lb No.:** lb134903 **Lab Sample ID :** Q1474-01L **SDG No.:** Q1486

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	0.023		0.066	U	100.0		CV

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

Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

OR-03-030425L

Lab Name: Chemtech Consulting Group **Contract:** JPCL01

Lab Code: CHEM **Lb No.:** lb134928 **Lab Sample ID :** Q1482-01L **SDG No.:** Q1486

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
Arsenic	2.23		2.89	J	30		P
Barium	28.9		31.9		11		P
Cadmium	0.29	U	1.44	U			P
Chromium	9.62		10.8		13		P
Lead	9.00		9.93		10		P
Selenium	0.42	J	4.79	U	100.0		P
Silver	1.44		1.55	J	8		P

METAL PREPARATION & INSTRUMENT DATA

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	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

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0003170	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

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
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

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
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

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

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Case No.:** Q1486 **SAS No.:** Q1486

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
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
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Lead	220.353	0.0000000	-0.0003610	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

METAL PREPARATION & ANALYICAL SUMMARY

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

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Method:**

Case No.: Q1486 **SAS No.:** Q1486

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB166977**						
PB166977BL	PB166977BL	MB	SOLID	03/05/2025	2.04	100.0	100.00
PB166977BS	PB166977BS	LCS	SOLID	03/05/2025	2.01	100.0	100.00
Q1482-01DUP	OR-03-030425DUP	DUP	SOLID	03/05/2025	2.14	100.0	90.80
Q1482-01MS	OR-03-030425MS	MS	SOLID	03/05/2025	2.27	100.0	90.80
Q1482-01MSD	OR-03-030425MSD	MSD	SOLID	03/05/2025	2.29	100.0	90.80
Q1486-01	DN-B-40	SAM	SOLID	03/05/2025	2.15	100.0	93.60

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

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: JPCL Engineering **SDG No.:** Q1486

Contract: JPCL01 **Lab Code:** CHEM **Method:**

Case No.: Q1486 **SAS No.:** Q1486

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB166988**						
PB166988BL	PB166988BL	MB	SOLID	03/05/2025	0.52	35.0	100.00
PB166988BS	PB166988BS	LCS	SOLID	03/05/2025	0.55	35.0	100.00
Q1474-01DUP	BU-03-02282025DUP	DUP	SOLID	03/05/2025	0.55	35.0	93.30
Q1474-01MS	BU-03-02282025MS	MS	SOLID	03/05/2025	0.53	35.0	93.30
Q1474-01MSD	BU-03-02282025MSD	MSD	SOLID	03/05/2025	0.56	35.0	93.30
Q1486-01	DN-B-40	SAM	SOLID	03/05/2025	0.50	35.0	93.60

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

metals
- 14 -
ANALYSIS RUN LOG

Client: JPCL Engineering **Contract:** JPCL01

Lab code: CHEM **Case no.:** Q1486 **Sas no.:** Q1486 **Sdg no.:** Q1486

Instrument id number: **Method:** **Run number:** LB134903

Start date: 03/05/2025 **End date:** 03/05/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1342	HG
S0.2	S0.2	1	1344	HG
S2.5	S2.5	1	1346	HG
S5	S5	1	1349	HG
S7.5	S7.5	1	1351	HG
S10	S10	1	1356	HG
ICV32	ICV32	1	1359	HG
ICB32	ICB32	1	1401	HG
CCV65	CCV65	1	1403	HG
CCB65	CCB65	1	1406	HG
CRA	CRA	1	1408	HG
PB166988BL	PB166988BL	1	1419	HG
PB166988BS	PB166988BS	1	1421	HG
Q1474-01DUP	BU-03-02282025DUP	1	1431	HG
Q1474-01MS	BU-03-02282025MS	1	1434	HG
Q1474-01MSD	BU-03-02282025MSD	1	1436	HG
CCV66	CCV66	1	1440	HG
CCB66	CCB66	1	1443	HG
Q1486-01	DN-B-40	1	1503	HG
CCV67	CCV67	1	1508	HG
CCB67	CCB67	1	1510	HG
Q1474-01L	BU-03-02282025L	5	1522	HG
CCV68	CCV68	1	1529	HG
CCB68	CCB68	1	1531	HG

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

metals
- 14 -
ANALYSIS RUN LOG

Client: JPCL Engineering **Contract:** JPCL01

Lab code: CHEM **Case no.:** Q1486 **Sas no.:** Q1486 **Sdg no.:** Q1486

Instrument id number: **Method:** **Run number:** LB134928

Start date: 03/06/2025 **End date:** 03/06/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1019	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1024	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1028	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1032	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1037	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1041	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1050	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1138	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1143	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1147	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1151	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1204	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1219	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1223	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1310	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1314	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1400	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1405	Ag,As,Ba,Cd,Cr,Pb,Se
Q1482-01DUP	OR-03-030425DUP	1	1426	Ag,As,Ba,Cd,Cr,Pb,Se
Q1482-01L	OR-03-030425L	5	1430	Ag,As,Ba,Cd,Cr,Pb,Se
Q1482-01MS	OR-03-030425MS	1	1434	Ag,As,Ba,Cd,Cr,Pb,Se
Q1482-01MSD	OR-03-030425MSD	1	1438	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1450	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1454	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1553	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1557	Ag,As,Ba,Cd,Cr,Pb,Se

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

metals
- 14 -
ANALYSIS RUN LOG

Client: JPCL Engineering **Contract:** JPCL01

Lab code: CHEM **Case no.:** Q1486 **Sas no.:** Q1486 **Sdg no.:** Q1486

Instrument id number: **Method:** **Run number:** LB135011

Start date: 03/12/2025 **End date:** 03/12/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1027	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1031	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1035	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1039	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1044	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1048	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1052	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1056	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1101	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1105	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1109	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1114	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1129	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1134	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1220	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1224	Ag,As,Ba,Cd,Cr,Pb,Se
PB166977BL	PB166977BL	1	1228	Ag,As,Ba,Cd,Cr,Pb,Se
PB166977BS	PB166977BS	1	1233	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1310	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1314	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1424	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1428	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1525	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1529	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	1625	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1630	Ag,As,Ba,Cd,Cr,Pb,Se
CCV07	CCV07	1	1725	Ag,As,Ba,Cd,Cr,Pb,Se
CCB07	CCB07	1	1730	Ag,As,Ba,Cd,Cr,Pb,Se
CCV08	CCV08	1	1823	Ag,As,Ba,Cd,Cr,Pb,Se
CCB08	CCB08	1	1827	Ag,As,Ba,Cd,Cr,Pb,Se
CCV09	CCV09	1	1849	Ag,As,Ba,Cd,Cr,Pb,Se
CCB09	CCB09	1	1853	Ag,As,Ba,Cd,Cr,Pb,Se

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

metals
- 14 -
ANALYSIS RUN LOG

Client: JPCL Engineering **Contract:** JPCL01

Lab code: CHEM **Case no.:** Q1486 **Sas no.:** Q1486 **Sdg no.:** Q1486

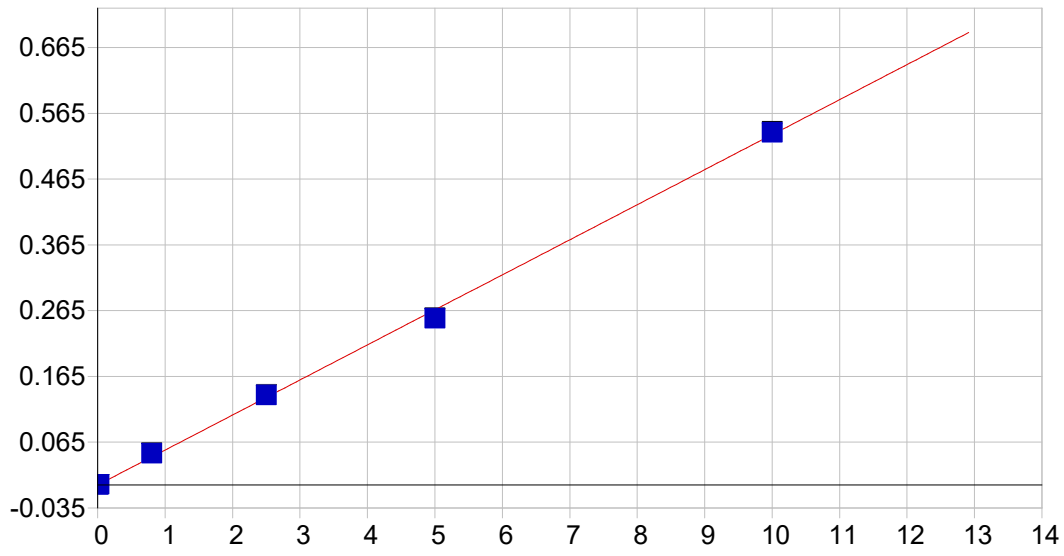
Instrument id number: **Method:** **Run number:** LB135035

Start date: 03/13/2025 **End date:** 03/13/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1142	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1146	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1150	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1154	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1159	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1203	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1207	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1213	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1217	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1221	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1225	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1230	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1253	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1258	Ag,As,Ba,Cd,Cr,Pb,Se
Q1486-01	DN-B-40	1	1323	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1349	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1354	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1440	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1448	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1538	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1542	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1628	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1632	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	1721	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1725	Ag,As,Ba,Cd,Cr,Pb,Se
CCV07	CCV07	1	1812	Ag,As,Ba,Cd,Cr,Pb,Se
CCB07	CCB07	1	1835	Ag,As,Ba,Cd,Cr,Pb,Se
CCV08	CCV08	1	1853	Ag,As,Ba,Cd,Cr,Pb,Se
CCB08	CCB08	1	1903	Ag,As,Ba,Cd,Cr,Pb,Se
CCV09	CCV09	1	1912	Ag,As,Ba,Cd,Cr,Pb,Se
CCB09	CCB09	1	1921	Ag,As,Ba,Cd,Cr,Pb,Se

METAL
RAW DATA

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



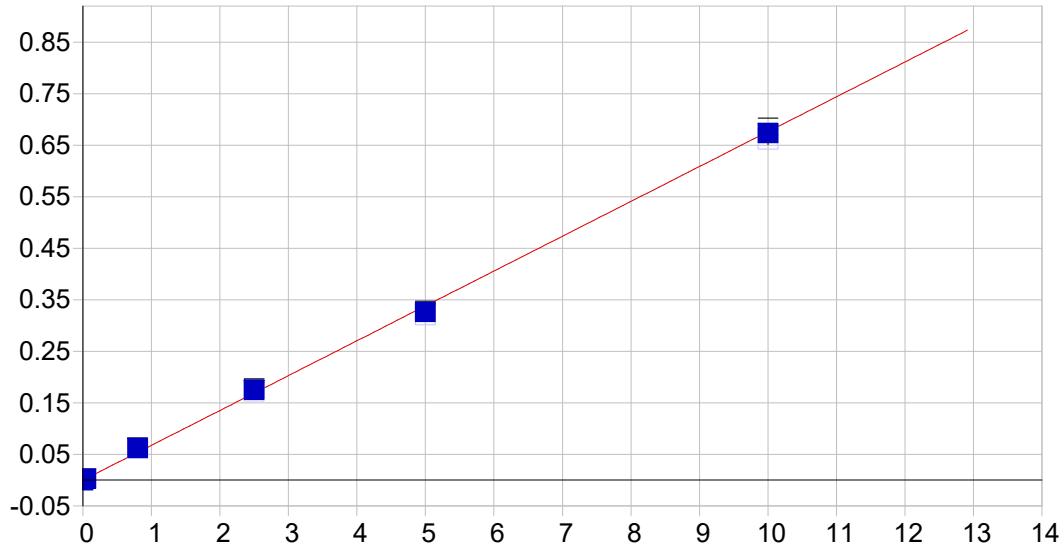
As 189.042 {479}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000157	Re-Slope:	1.000000
A1 (Gain):	0.053280	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999226	Status:	OK.
Std Error of Est:	0.000049		
Predicted MDL:	0.002845		
Predicted MQL:	0.009485		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00016	.000	1
S1	.02000	.02163	.002	8.16	.00099	.000	1
S3	2.5000	2.5707	.071	2.83	.13667	.001	1
S4	5.0000	4.7570	-.243	-4.86	.25301	.001	1
S5	10.000	10.065	.065	.650	.53553	.001	1
S2	.80000	.90564	.106	13.2	.04805	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



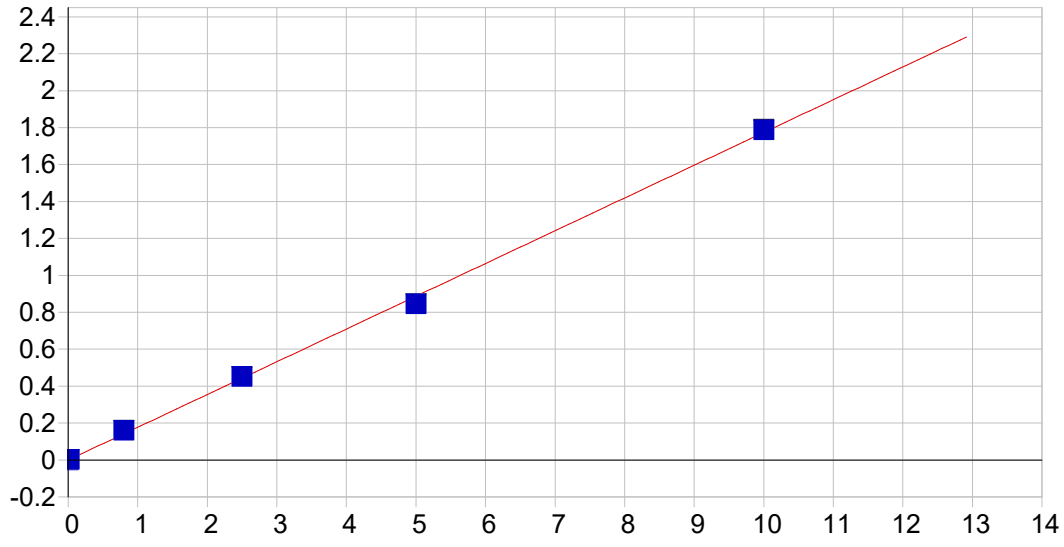
Tl 190.856 {477}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000068	Re-Slope:	1.000000
A1 (Gain):	0.067630	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999201	Status:	OK.
Std Error of Est:	0.000088		
Predicted MDL:	0.001703		
Predicted MQL:	0.005676		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00007	.000	1
S1	.04000	.04052	.001	1.30	.00250	.000	1
S3	2.5000	2.5966	.097	3.87	.17243	.002	1
S4	5.0000	4.8250	-.175	-3.50	.32002	.002	1
S5	10.000	9.9571	-.043	-.429	.66088	.010	1
S2	.80000	.92076	.121	15.1	.06121	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



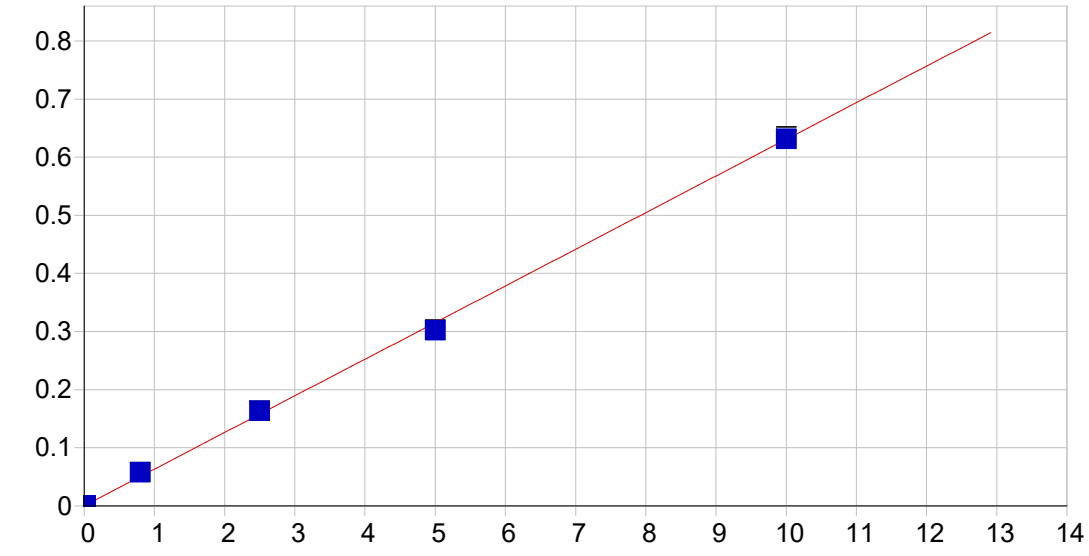
Pb 220.353 {453}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000334	Re-Slope:	1.000000
A1 (Gain):	0.177417	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999294	Status:	OK.
Std Error of Est:	0.000121		
Predicted MDL:	0.001590		
Predicted MQL:	0.005299		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00033	.000	1
S1	.01200	.01317	.001	9.73	.00196	.000	1
S3	2.5000	2.5429	.043	1.72	.45034	.000	1
S4	5.0000	4.7695	-.230	-4.61	.84489	.001	1
S5	10.000	10.082	.082	.818	1.7864	.003	1
S2	.80000	.90458	.105	13.1	.16000	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



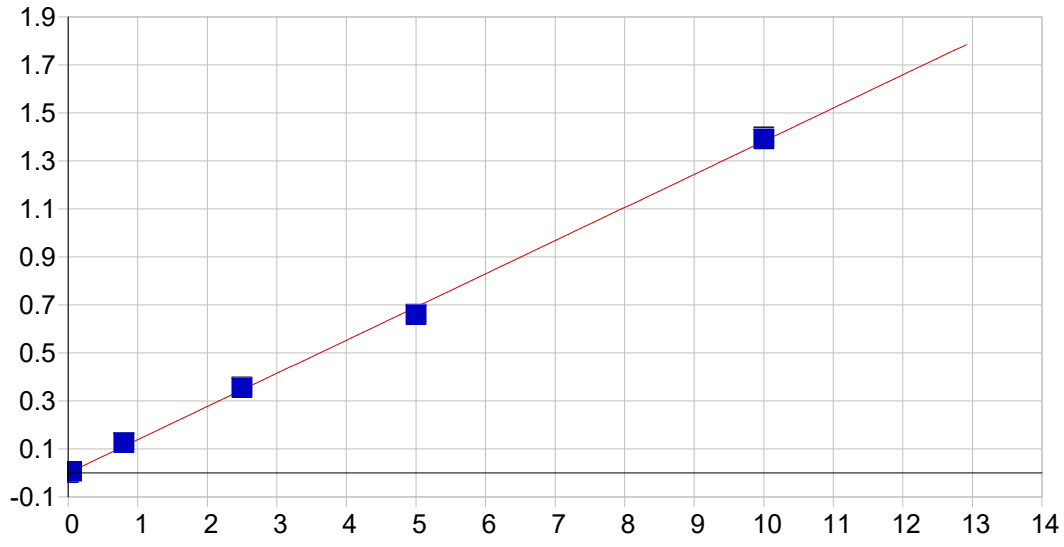
Se 196.090 {472}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000202	Re-Slope:	1.000000
A1 (Gain):	0.063045	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999235	Status:	OK.
Std Error of Est:	0.000058		
Predicted MDL:	0.002988		
Predicted MQL:	0.009959		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00020	.000	1
S1	.02000	.01940	-.001	-2.98	.00143	.000	1
S3	2.5000	2.5903	.090	3.61	.16345	.001	1
S4	5.0000	4.7873	-.213	-4.25	.30191	.001	1
S5	10.000	10.011	.011	.109	.63112	.004	1
S2	.80000	.91208	.112	14.0	.05769	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



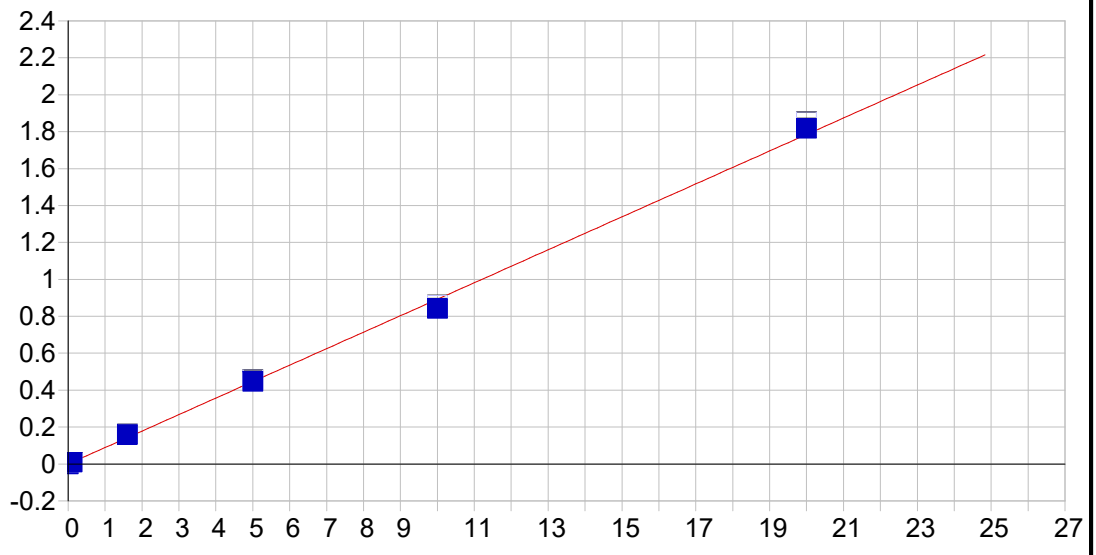
Sb 206.833 {463}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000249	Re-Slope:	1.000000
A1 (Gain):	0.138181	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999251	Status:	OK.
Std Error of Est:	0.000199		
Predicted MDL:	0.001992		
Predicted MQL:	0.006640		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00025	.000	1
S1	.05000	.05049	.000	.989	.00724	.000	1
S3	2.5000	2.5686	.069	2.74	.35612	.002	1
S4	5.0000	4.7651	-.235	-4.70	.66058	.001	1
S5	10.000	10.058	.058	.585	1.3939	.005	1
S2	.80000	.90731	.107	13.4	.12592	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



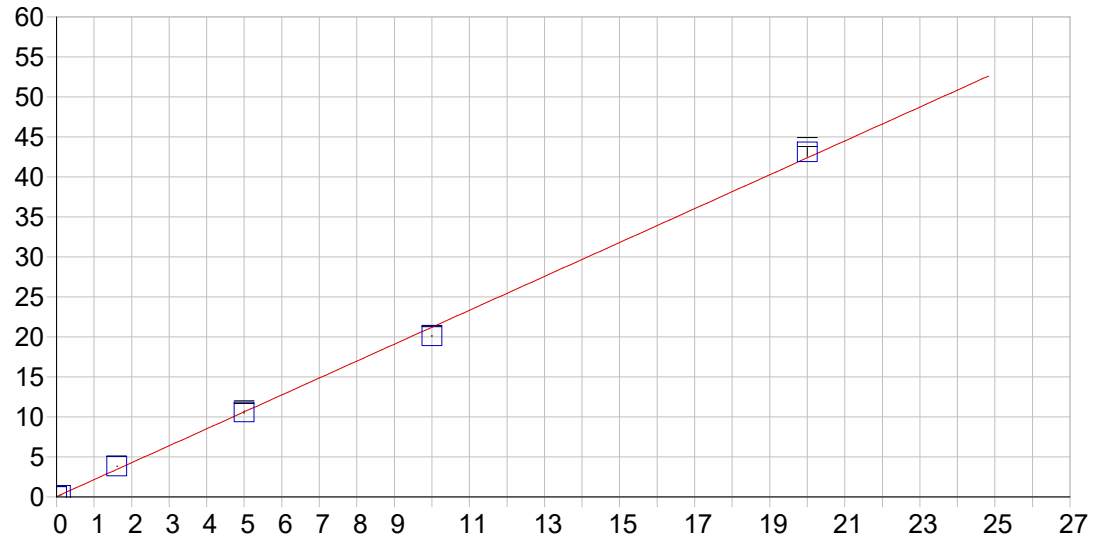
Al 396.152 { 85}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000067	Re-Slope:	1.000000
A1 (Gain):	0.089246	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999213	Status:	OK.
Std Error of Est:	0.000268		
Predicted MDL:	0.005821		
Predicted MQL:	0.019404		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00007	.001	1
S1	.10000	.10193	.002	1.93	.00972	.000	1
S3	5.0000	5.0004	.000	.008	.45485	.002	1
S4	10.000	9.4379	-.562	-5.62	.85953	.001	1
S5	20.000	20.374	.374	1.87	1.8529	.002	1
S2	1.6000	1.7853	.185	11.6	.16204	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



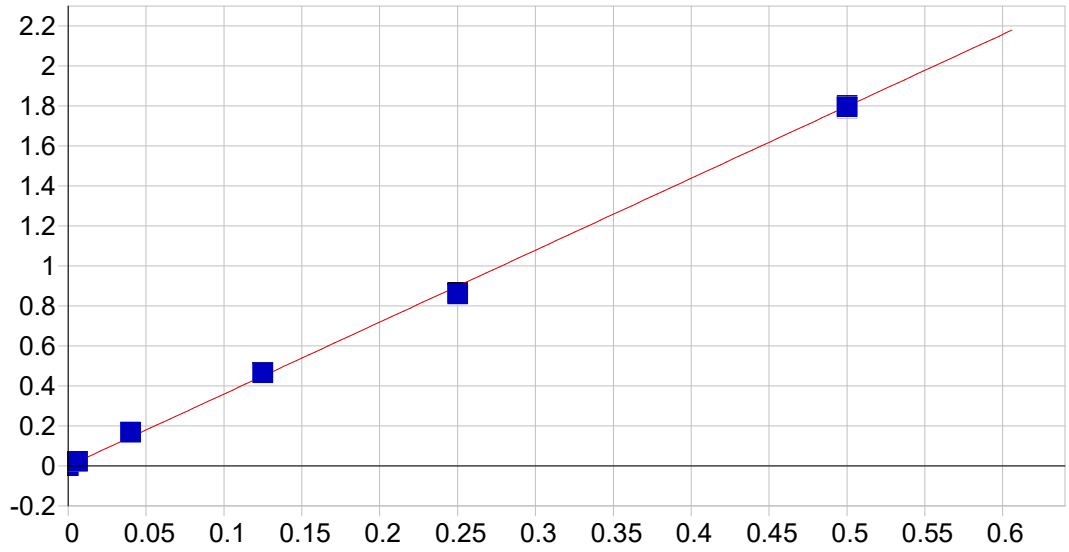
Ba 493.409 { 68}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.042436	Re-Slope:	1.000000
A1 (Gain):	2.116957	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999218	Status:	OK.
Std Error of Est:	0.006212		
Predicted MDL:	0.000854		
Predicted MQL:	0.002847		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.04243	.002	1
S1	.10000	.09654	-.003	-3.46	.24680	.001	1
S3	5.0000	4.9835	-.016	-.329	10.592	.149	1
S4	10.000	9.4766	-.523	-5.23	20.104	.084	1
S5	20.000	20.348	.348	1.74	43.118	.546	1
S2	1.6000	1.7953	.195	12.2	3.8430	.002	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



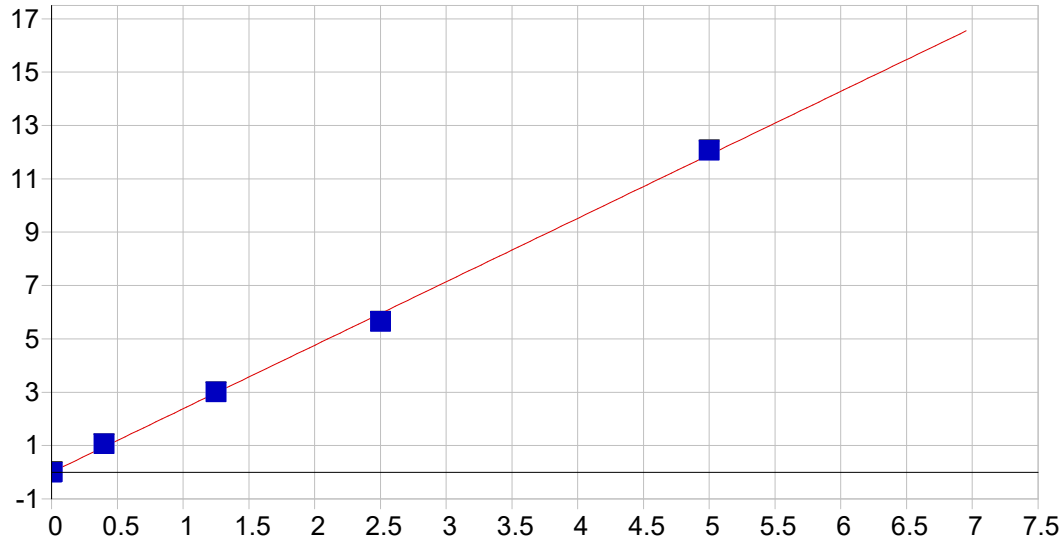
Be 234.861 {144}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000214	Re-Slope:	1.000000
A1 (Gain):	3.597292	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999049	Status:	OK.
Std Error of Est:	0.000450		
Predicted MDL:	0.000052		
Predicted MQL:	0.000174		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00022	.000	1
S1	.00600	.00617	.000	2.88	.02183	.000	1
S3	.12500	.12974	.005	3.79	.46449	.001	1
S4	.25000	.23939	-.011	-4.24	.85691	.006	1
S5	.50000	.49906	-.001	-.188	1.7870	.007	1
S2	.04000	.04663	.007	16.6	.16690	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



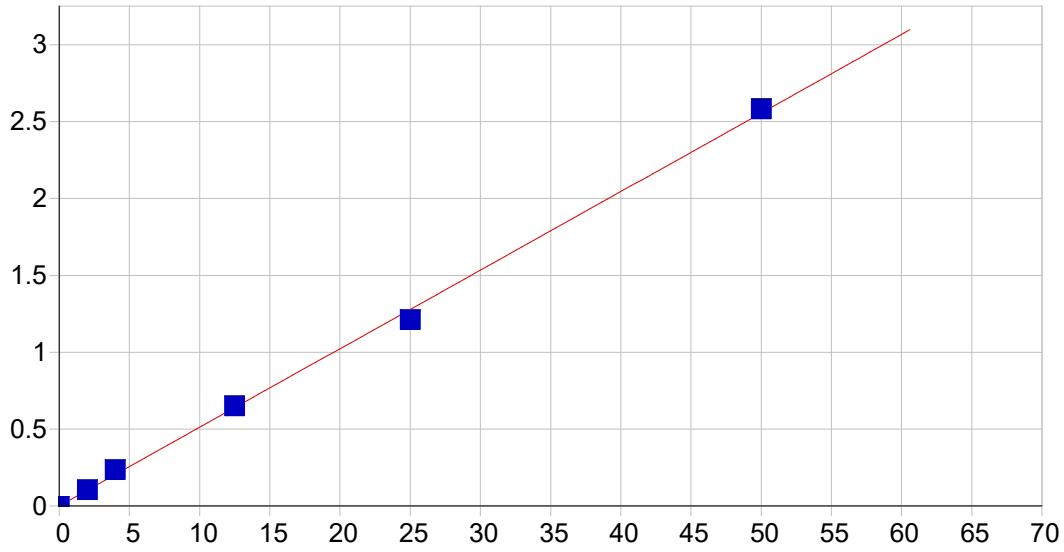
Cd 226.502 {449}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000080	Re-Slope:	1.000000
A1 (Gain):	2.379918	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999320	Status:	OK.
Std Error of Est:	0.000798		
Predicted MDL:	0.000081		
Predicted MQL:	0.000271		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00008	.000	1
S1	.00600	.00578	-.000	-3.65	.01375	.000	1
S3	1.2500	1.2624	.012	.991	3.0069	.004	1
S4	2.5000	2.3743	-.126	-5.03	5.6557	.007	1
S5	5.0000	5.0684	.068	1.37	12.073	.017	1
S2	.40000	.44517	.045	11.3	1.0602	.004	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



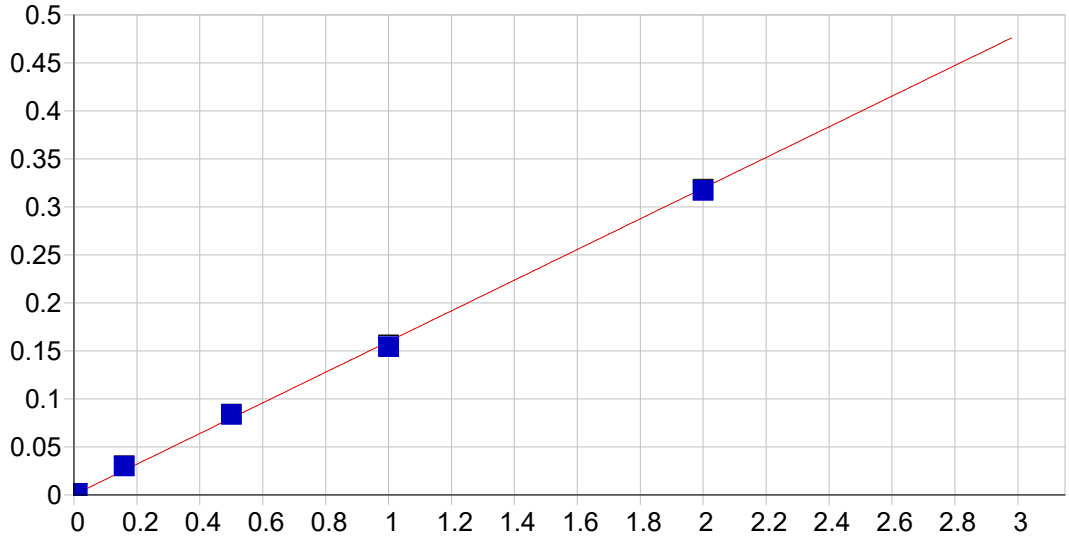
Ca 373.690 { 90}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000762	Re-Slope:	1.000000
A1 (Gain):	0.051105	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999149	Status:	OK.
Std Error of Est:	0.001116		
Predicted MDL:	0.008166		
Predicted MQL:	0.027219		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00026	-.000	.000	.00075	.000	1
S2	4.0000	4.5763	.576	14.4	.23463	.000	1
S3	12.500	12.688	.188	1.50	.64917	.000	1
S4	25.000	23.699	-1.30	-5.20	1.2119	.000	1
S5	50.000	50.509	.509	1.02	2.5820	.004	1
S1	2.0000	2.0286	.029	1.43	.10444	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



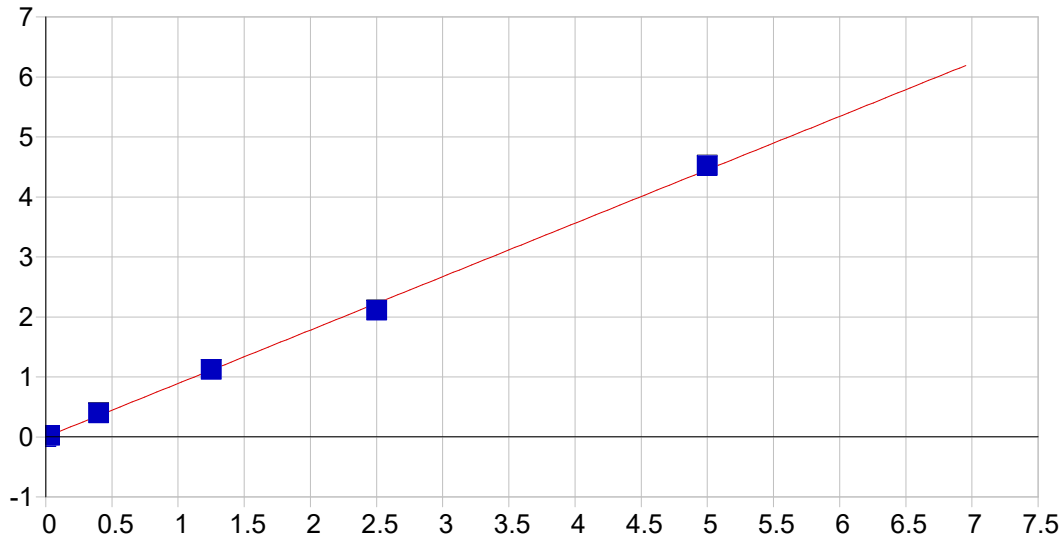
Cr 267.716 {126}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000077	Re-Slope:	1.000000
A1 (Gain):	0.159729	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999041	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.000401		
Predicted MQL:	0.001336		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00008	.000	1
S1	.01000	.00988	-.000	-1.24	.00166	.000	1
S3	.50000	.52303	.023	4.61	.08364	.000	1
S4	1.0000	.96482	-.035	-3.52	.15423	.002	1
S5	2.0000	1.9850	-.015	-.749	.31724	.001	1
S2	.16000	.18725	.027	17.0	.02999	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



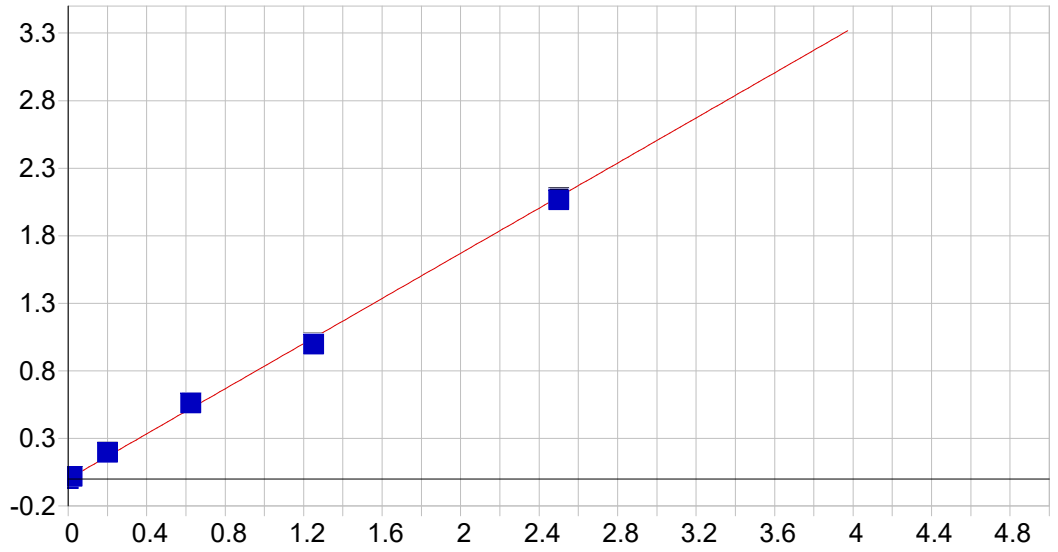
Co 228.616 {448}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000033	Re-Slope:	1.000000
A1 (Gain):	0.890325	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999268	Status:	OK.
Std Error of Est:	0.000694		
Predicted MDL:	0.000231		
Predicted MQL:	0.000772		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00004	.000	1
S1	.03000	.02941	-.001	-1.96	.02604	.000	1
S3	1.2500	1.2593	.009	.740	1.1230	.001	1
S4	2.5000	2.3701	-.130	-5.19	2.1139	.003	1
S5	5.0000	5.0740	.074	1.48	4.5250	.005	1
S2	.40000	.44724	.047	11.8	.39876	.002	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



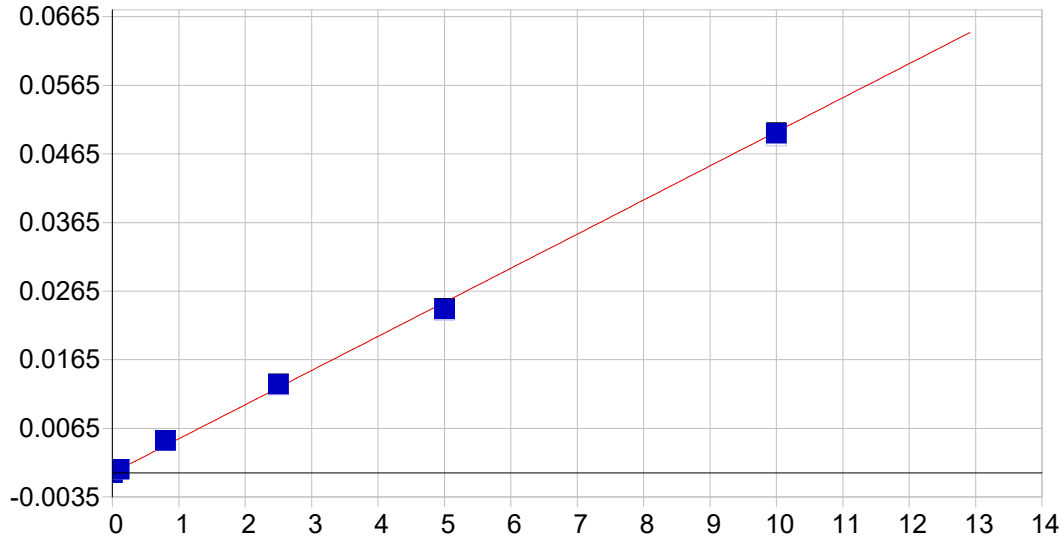
Cu 224.700 {450}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000613	Re-Slope:	1.000000
A1 (Gain):	0.835177	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998622	Status:	OK.
Std Error of Est:	0.000519		
Predicted MDL:	0.000393		
Predicted MQL:	0.001311		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00062	.000	1
S1	.02000	.02223	.002	11.2	.01812	.000	1
S3	.62500	.67203	.047	7.52	.56435	.001	1
S4	1.2500	1.1926	-.057	-4.59	1.0028	.003	1
S5	2.5000	2.4731	-.027	-1.08	2.0796	.005	1
S2	.20000	.23507	.035	17.5	.19690	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



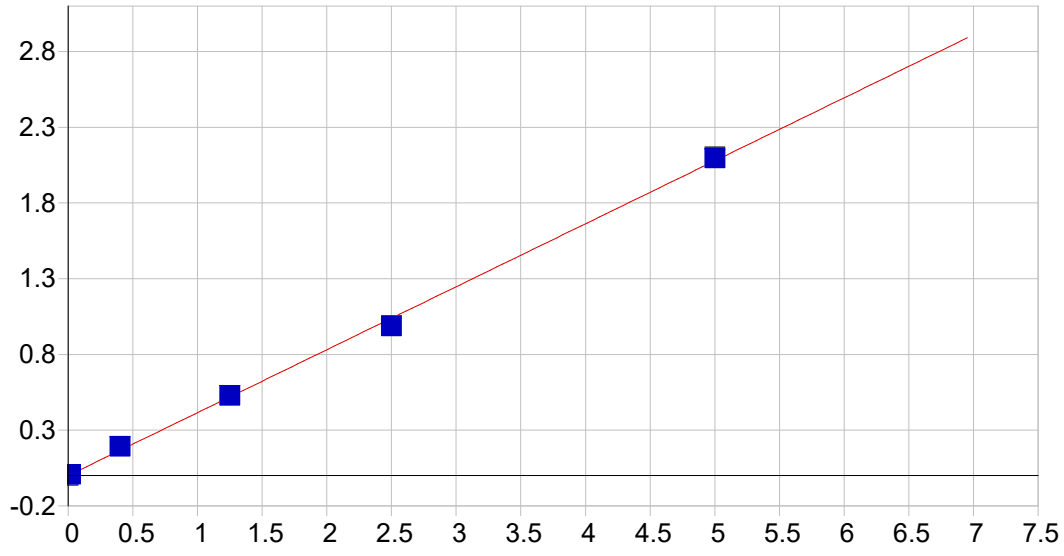
Fe 240.488 {140}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000002	Re-Slope:	1.000000
A1 (Gain):	0.004971	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998950	Status:	OK.
Std Error of Est:	0.000012		
Predicted MDL:	0.004420		
Predicted MQL:	0.014733		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00000	.000	1
S1	.10000	.10301	.003	3.01	.00051	.000	1
S3	2.5000	2.5961	.096	3.84	.01280	.000	1
S4	5.0000	4.8032	-.197	-3.94	.02367	.000	1
S5	10.000	9.9527	-.047	-.473	.04906	.000	1
S2	.80000	.94496	.145	18.1	.00467	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



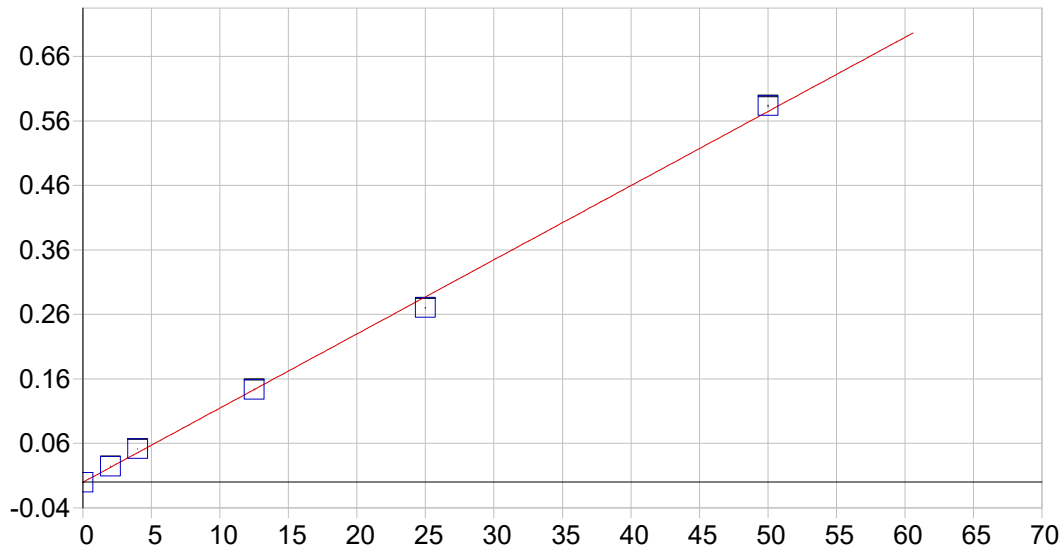
Mn 257.610 {131}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000012	Re-Slope:	1.000000
A1 (Gain):	0.415683	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999074	Status:	OK.
Std Error of Est:	0.000297		
Predicted MDL:	0.000364		
Predicted MQL:	0.001214		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.02000	.02062	.001	3.12	.00856	.000	1
S3	1.2500	1.2717	.022	1.74	.52873	.000	1
S4	2.5000	2.3731	-.127	-5.08	.98665	.003	1
S5	5.0000	5.0419	.042	.837	2.0962	.007	1
S2	.40000	.46270	.063	15.7	.19236	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



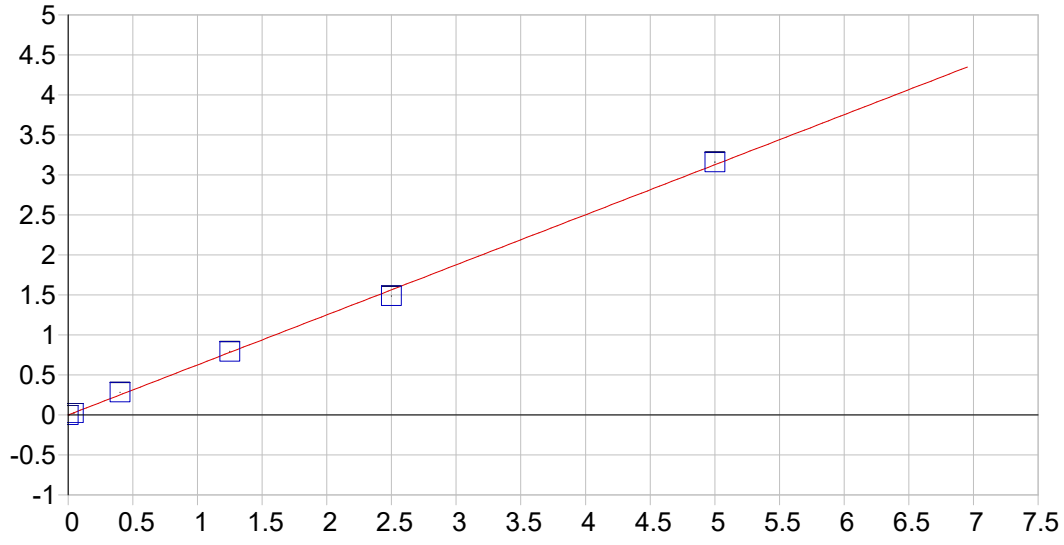
Mg 279.079 {121}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000202	Re-Slope:	1.000000
A1 (Gain):	0.011497	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999063	Status:	OK.
Std Error of Est:	0.000263		
Predicted MDL:	0.014890		
Predicted MQL:	0.049632		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00033	-.000	.000	-.00021	.000	1
S2	4.0000	4.5085	.509	12.7	.05163	.000	1
S3	12.500	12.525	.025	.201	.14379	.001	1
S4	25.000	23.534	-1.47	-5.87	.27035	.001	1
S5	50.000	50.774	.774	1.55	.58353	.001	1
S1	2.0000	2.1591	.159	7.95	.02462	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



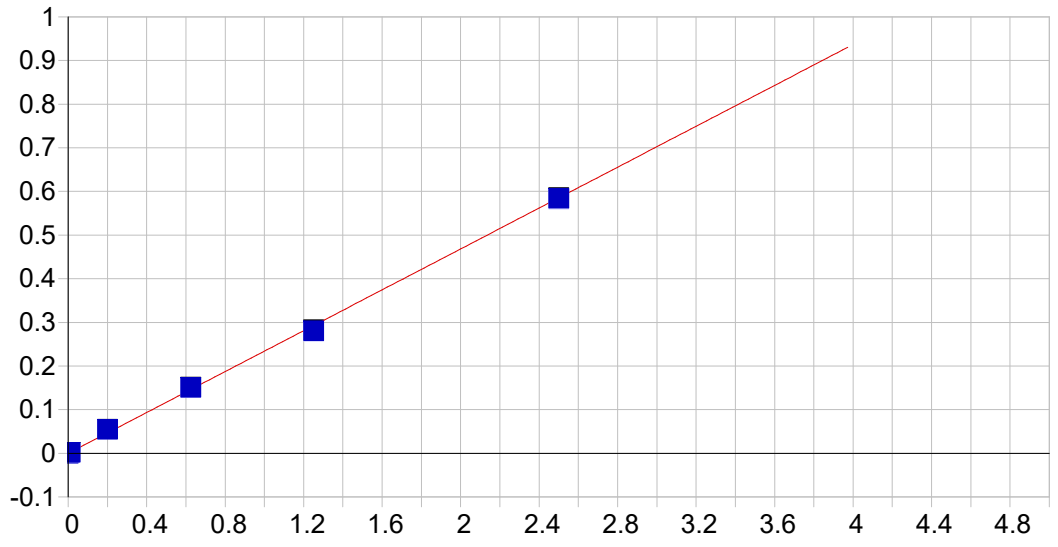
Ni 231.604 {446}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000280	Re-Slope:	1.000000
A1 (Gain):	0.625480	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999261	Status:	OK.
Std Error of Est:	0.000565		
Predicted MDL:	0.000309		
Predicted MQL:	0.001030		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00028	.000	1
S1	.04000	.03962	-.000	-.945	.02450	.000	1
S3	1.2500	1.2687	.019	1.50	.79329	.001	1
S4	2.5000	2.3769	-.123	-4.93	1.4864	.002	1
S5	5.0000	5.0531	.053	1.06	3.1603	.004	1
S2	.40000	.45169	.052	12.9	.28225	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



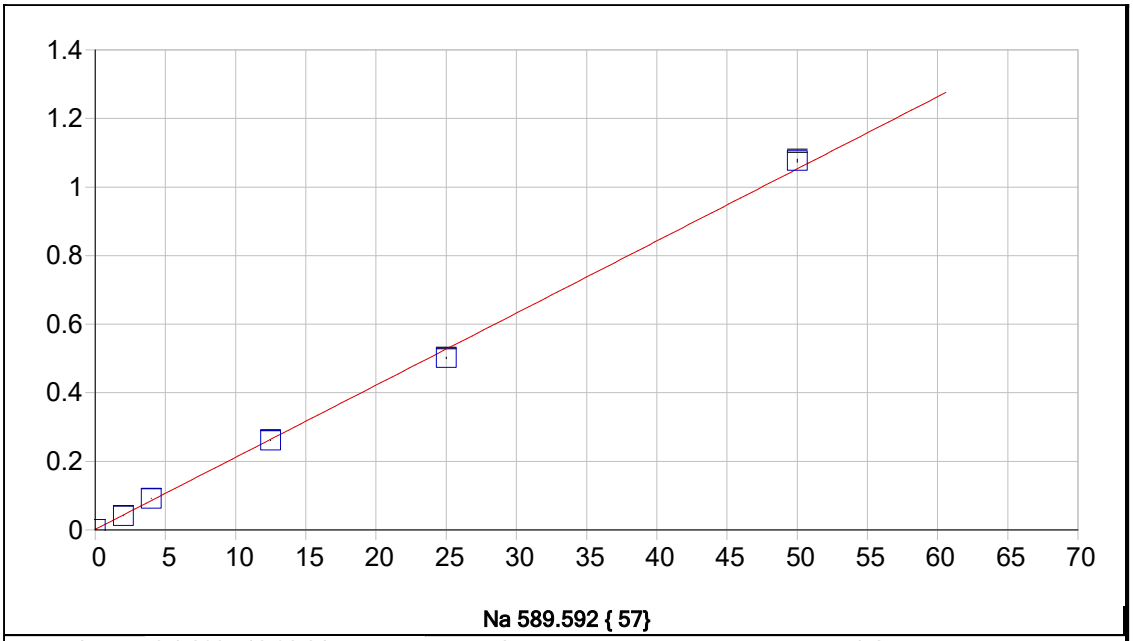
Ag 328.068 {103}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000228	Re-Slope:	1.000000
A1 (Gain):	0.234237	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999038	Status:	OK.
Std Error of Est:	0.000085		
Predicted MDL:	0.000374		
Predicted MQL:	0.001247		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00023	.000	1
S1	.01000	.01016	.000	1.57	.00214	.000	1
S3	.62500	.64514	.020	3.22	.15031	.000	1
S4	1.2500	1.1991	-.051	-4.07	.27949	.002	1
S5	2.5000	2.4959	-.004	-.166	.58207	.001	1
S2	.20000	.23473	.035	17.4	.05457	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



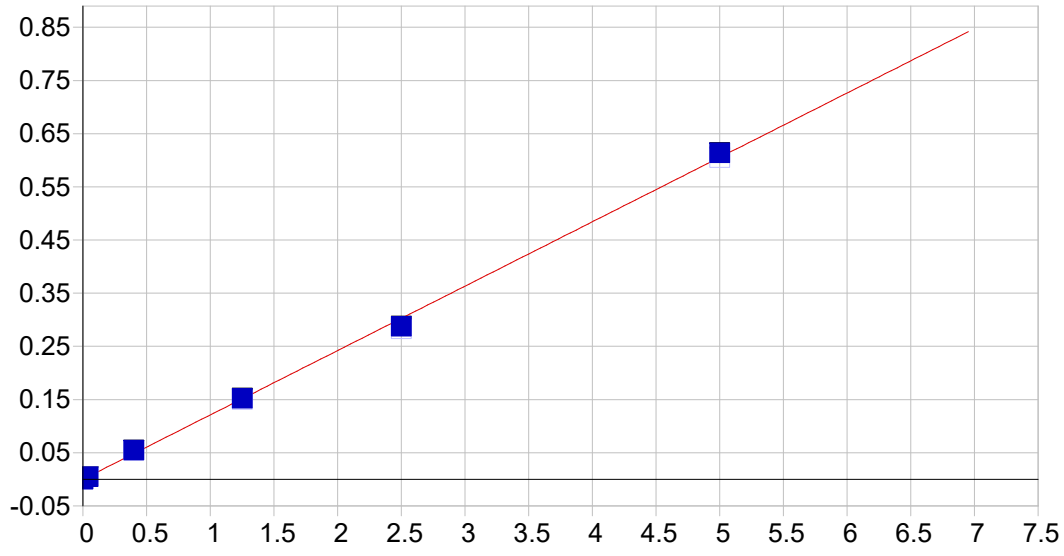
Na 589.592 { 57}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001483	Re-Slope:	1.000000
A1 (Gain):	0.021029	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999396	Status:	OK.
Std Error of Est:	0.000387		
Predicted MDL:	0.014798		
Predicted MQL:	0.049327		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00148	.000	1
S2	4.0000	4.2906	.291	7.27	.09171	.001	1
S3	12.500	12.378	-.122	-.980	.26177	.001	1
S4	25.000	23.793	-1.21	-4.83	.50184	.003	1
S5	50.000	51.148	1.15	2.30	1.0771	.004	1
S1	2.0000	1.8905	-.109	-5.47	.04124	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



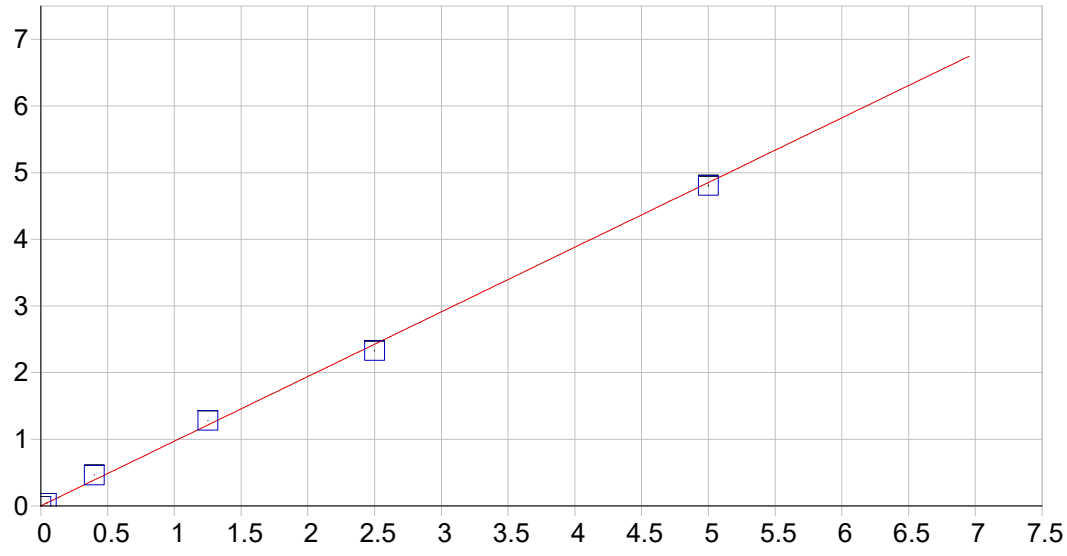
V 292.402 {115}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000025	Re-Slope:	1.000000
A1 (Gain):	0.121075	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999228	Status:	OK.
Std Error of Est:	0.000110		
Predicted MDL:	0.001560		
Predicted MQL:	0.005200		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00003	.000	1
S1	.04000	.03925	-.001	-1.87	.00460	.000	1
S3	1.2500	1.2576	.008	.606	.15008	.000	1
S4	2.5000	2.3737	-.126	-5.05	.28300	.001	1
S5	5.0000	5.0689	.069	1.38	.60491	.001	1
S2	.40000	.45060	.051	12.6	.05388	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



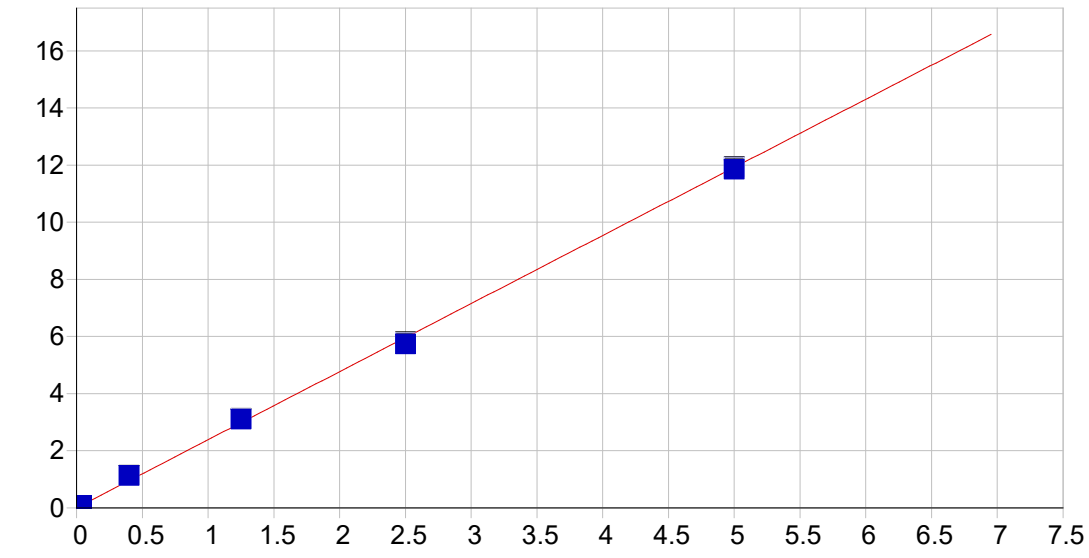
Zn 206.200 {464}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000420	Re-Slope:	1.000000
A1 (Gain):	0.970356	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998763	Status:	OK.
Std Error of Est:	0.001134		
Predicted MDL:	0.000208		
Predicted MQL:	0.000692		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00041	.000	1
S1	.04000	.04285	.003	7.12	.04200	.000	1
S3	1.2500	1.3184	.068	5.47	1.2797	.003	1
S4	2.5000	2.3989	-.101	-4.04	2.3282	.005	1
S5	5.0000	4.9542	-.046	-.917	4.8077	.010	1
S2	.40000	.47567	.076	18.9	.46199	.003	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



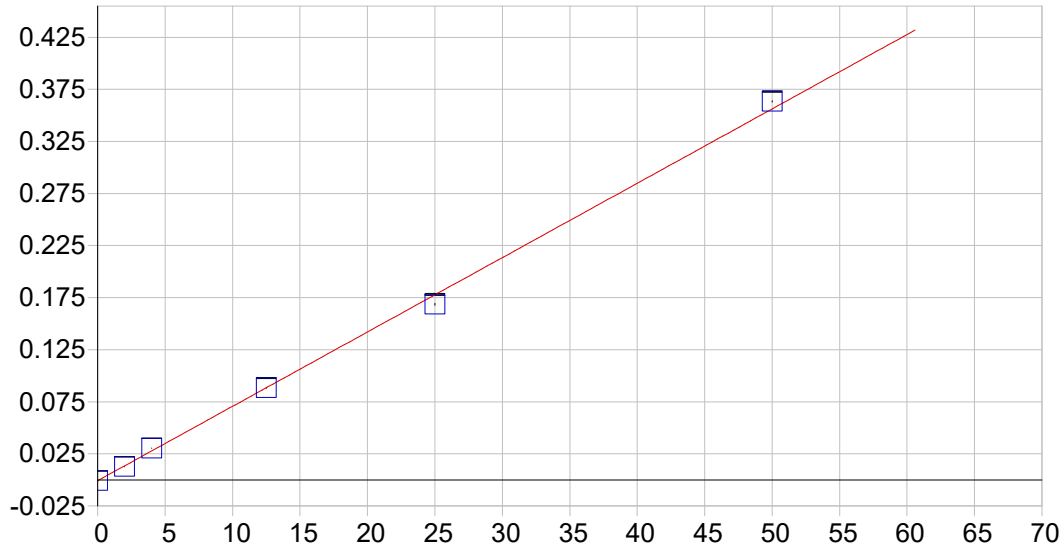
Zn 213.856 {158}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002577	Re-Slope:	1.000000
A1 (Gain):	2.384037	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998971	Status:	OK.
Std Error of Est:	0.002558		
Predicted MDL:	0.000324		
Predicted MQL:	0.001081		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00256	.001	1
S1	.04000	.04213	.002	5.31	.10367	.001	1
S3	1.2500	1.3003	.050	4.02	3.1232	.011	1
S4	2.5000	2.4054	-.095	-3.78	5.7787	.036	1
S5	5.0000	4.9692	-.031	-.616	11.932	.017	1
S2	.40000	.47296	.073	18.2	1.1368	.003	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



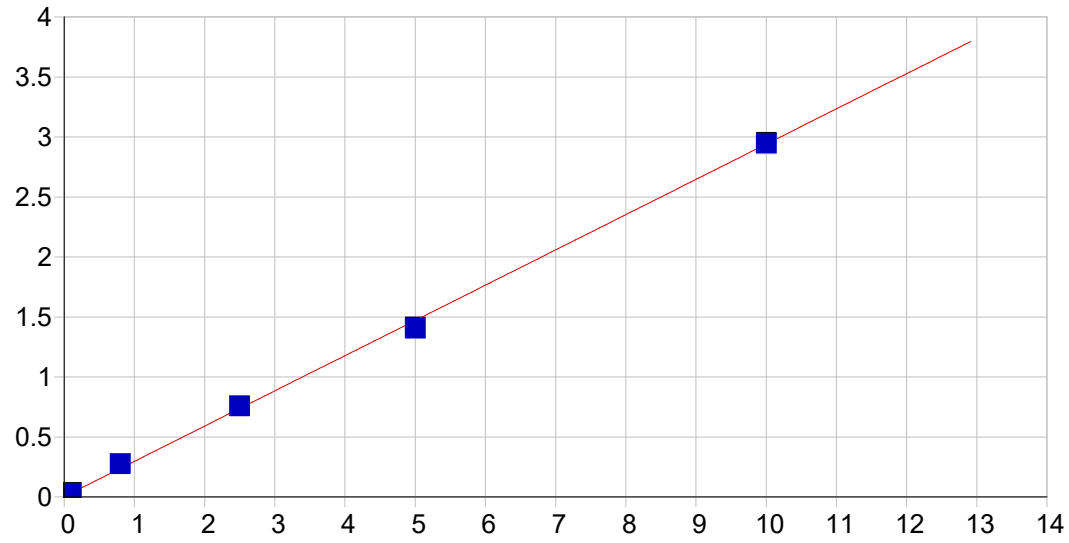
K 766.490 { 44}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000810	Re-Slope:	1.000000
A1 (Gain):	0.007141	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999331	Status:	OK.
Std Error of Est:	0.000138		
Predicted MDL:	0.028529		
Predicted MQL:	0.095097		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	-.00081	.000	1
S2	4.0000	4.3705	.370	9.26	.03040	.000	1
S3	12.500	12.489	-.011	-.090	.08837	.000	1
S4	25.000	23.721	-1.28	-5.12	.16858	.001	1
S5	50.000	51.017	1.02	2.03	.36350	.001	1
S1	2.0000	1.9030	-.097	-4.85	.01278	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



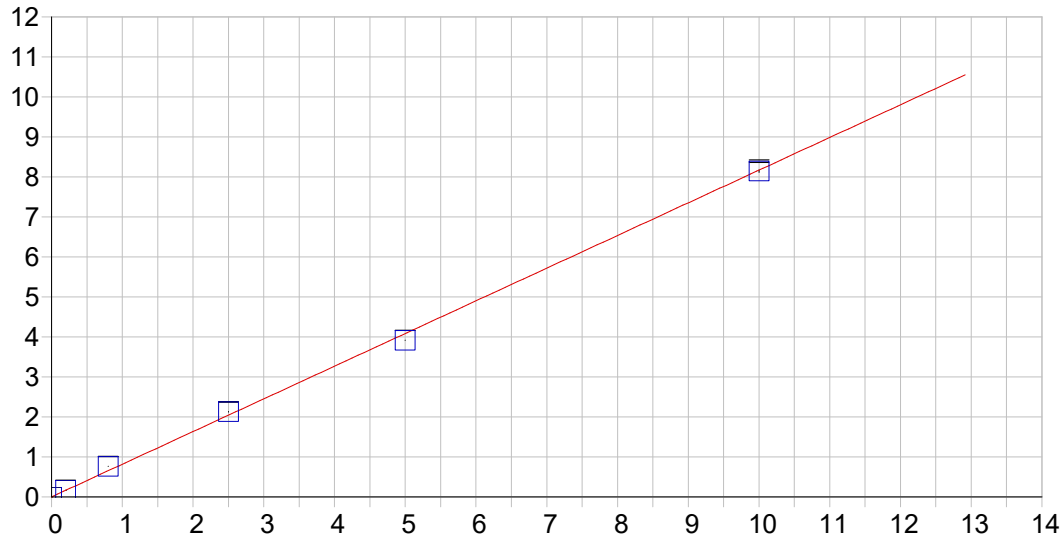
B 249.678 {135}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002357	Re-Slope:	1.000000
A1 (Gain):	0.293725	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999112	Status:	OK.
Std Error of Est:	0.000648		
Predicted MDL:	0.000751		
Predicted MQL:	0.002505		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00235	.000	1
S1	.10000	.10545	.005	5.45	.03317	.000	1
S3	2.5000	2.5659	.066	2.64	.75386	.002	1
S4	5.0000	4.7759	-.224	-4.48	1.4008	.010	1
S5	10.000	10.025	.025	.251	2.9383	.008	1
S2	.80000	.92767	.128	16.0	.27414	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



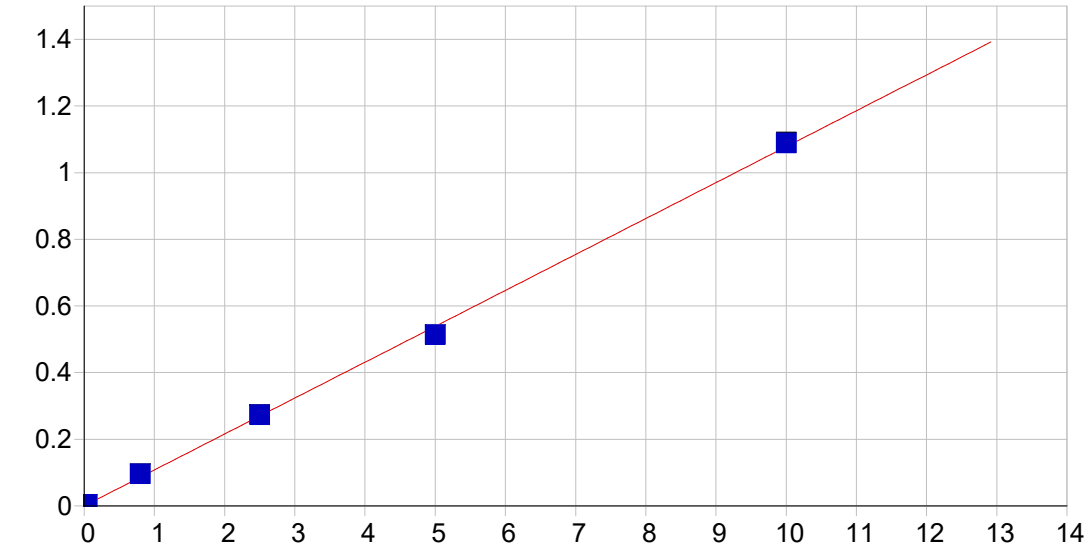
Mo 202.030 {467}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000279	Re-Slope:	1.000000
A1 (Gain):	0.816884	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999056	Status:	OK.
Std Error of Est:	0.002644		
Predicted MDL:	0.000257		
Predicted MQL:	0.000858		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00004	-.000	.000	.00025	.000	1
S1	.20000	.20392	.004	1.96	.16686	.001	1
S3	2.5000	2.6004	.100	4.02	2.1245	.008	1
S4	5.0000	4.7927	-.207	-4.15	3.9154	.007	1
S5	10.000	9.9699	-.030	-.301	8.1445	.032	1
S2	.80000	.93313	.133	16.6	.76254	.004	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



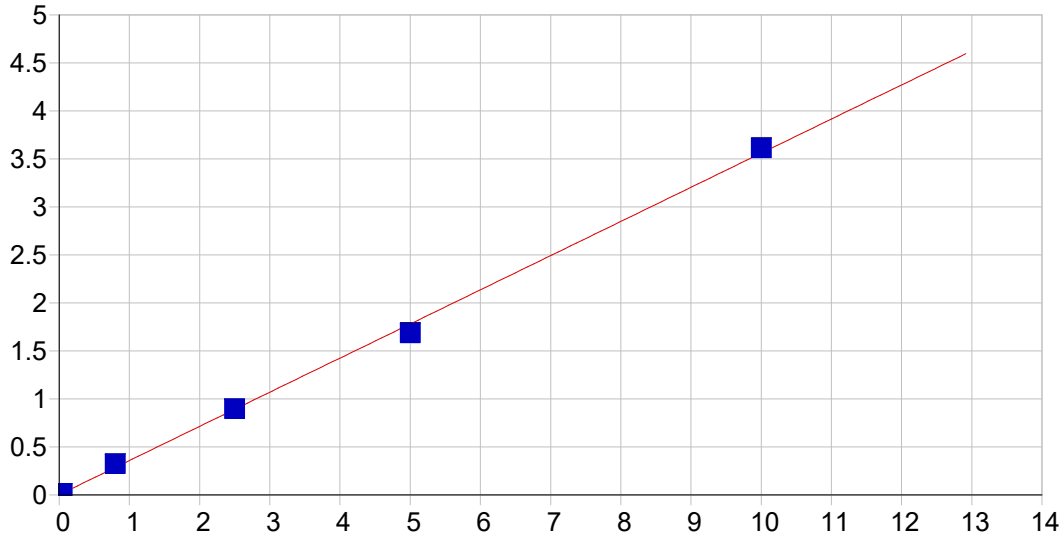
Sn 189.989 {478}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000117	Re-Slope:	1.000000
A1 (Gain):	0.107784	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999365	Status:	OK.
Std Error of Est:	0.000127		
Predicted MDL:	0.000812		
Predicted MQL:	0.002708		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00012	.000	1
S1	.04000	.03940	-.001	-1.49	.00436	.000	1
S3	2.5000	2.5360	.036	1.44	.27318	.000	1
S4	5.0000	4.7666	-.233	-4.67	.51333	.001	1
S5	10.000	10.105	.105	1.05	1.0882	.003	1
S2	.80000	.89270	.093	11.6	.09625	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



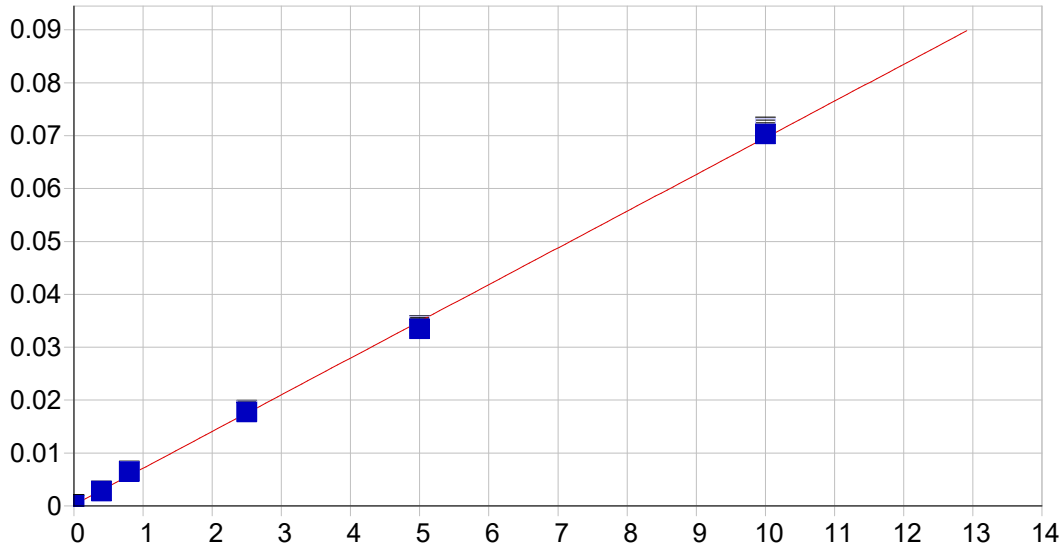
Ti 336.121 {100}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002147	Re-Slope:	1.000000
A1 (Gain):	0.355721	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999175	Status:	OK.
Std Error of Est:	0.000479		
Predicted MDL:	0.000730		
Predicted MQL:	0.002433		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00215	.000	1
S1	.04000	.03846	-.002	-3.84	.01582	.000	1
S3	2.5000	2.5142	.014	.567	.89617	.002	1
S4	5.0000	4.7314	-.269	-5.37	1.6846	.005	1
S5	10.000	10.153	.153	1.53	3.6123	.006	1
S2	.80000	.90342	.103	12.9	.32341	.001	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



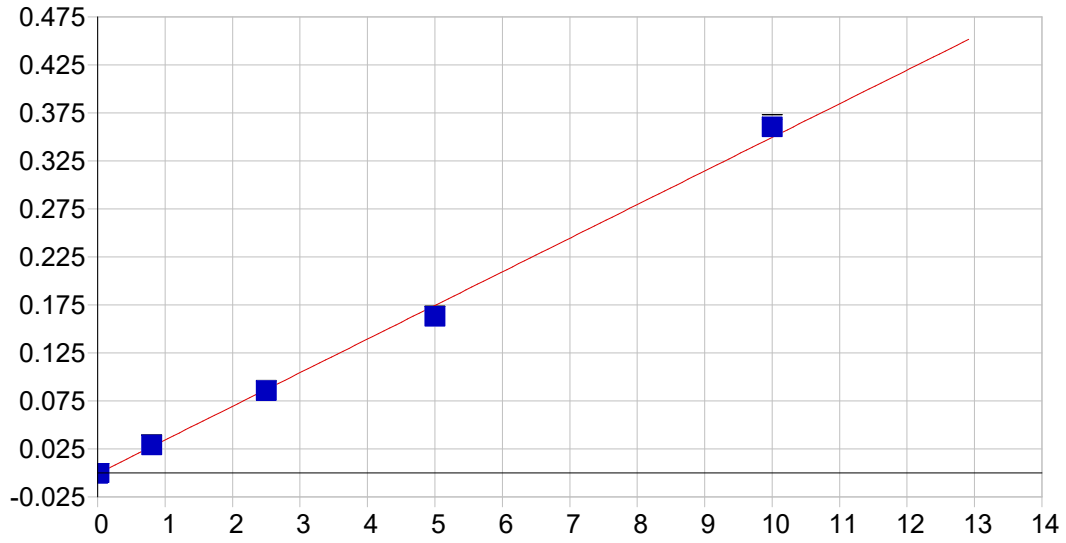
Si 288.158 {117}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000191	Re-Slope:	1.000000
A1 (Gain):	0.006940	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999333	Status:	OK.
Std Error of Est:	0.000027		
Predicted MDL:	0.006579		
Predicted MQL:	0.021931		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00019	.000	1
S1	.40000	.37066	-.029	-7.33	.00277	.000	1
S3	2.5000	2.5273	.027	1.09	.01799	.000	1
S4	5.0000	4.7937	-.206	-4.13	.03398	.000	1
S5	10.000	10.103	.103	1.03	.07136	.000	1
S2	.80000	.90464	.105	13.1	.00655	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



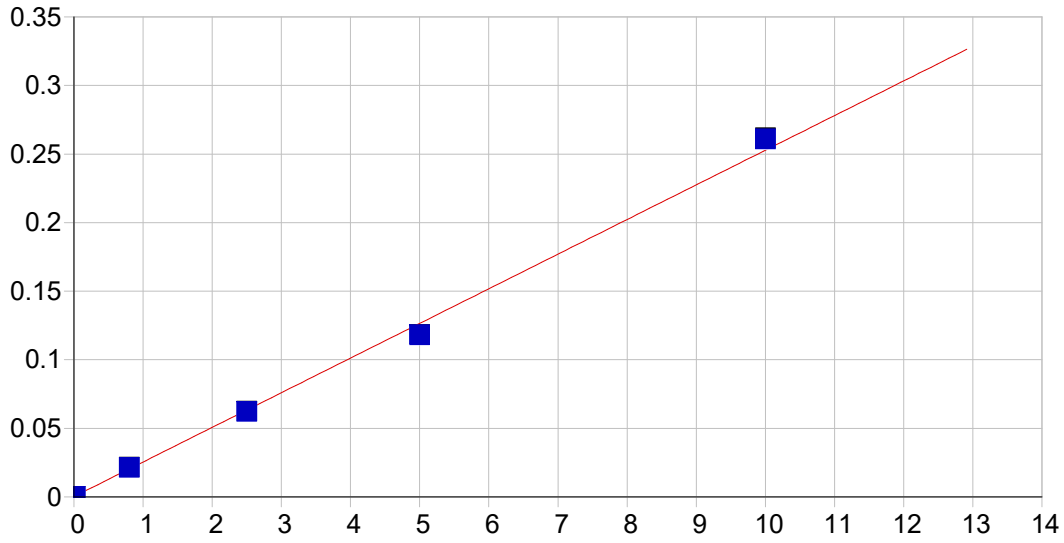
P 177.495 {490}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000690	Re-Slope:	1.000000
A1 (Gain):	0.035021	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999066	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.002650		
Predicted MQL:	0.008835		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00069	.000	1
S1	.02000	.01709	-.003	-14.6	-.00009	.000	1
S3	2.5000	2.4647	-.035	-1.41	.08561	.000	1
S4	5.0000	4.6784	-.322	-6.43	.16312	.000	1
S5	10.000	10.311	.311	3.11	.36036	.002	1
S2	.80000	.84868	.049	6.09	.02903	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



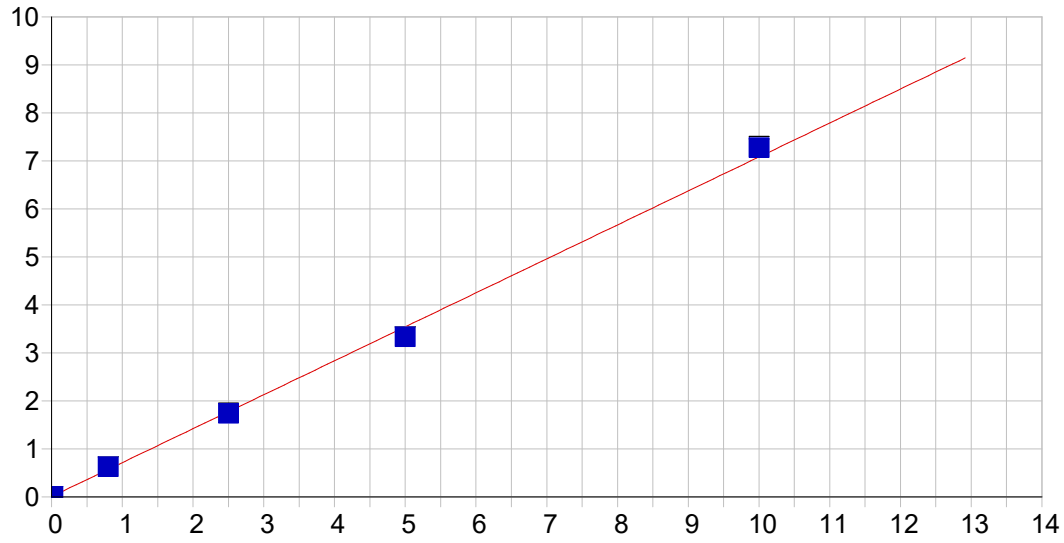
S 182.034 {485}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000208	Re-Slope:	1.000000
A1 (Gain):	0.025258	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999027	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.003282		
Predicted MQL:	0.010941		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00021	.000	1
S1	.02000	.01888	-.001	-5.59	.00066	.000	1
S3	2.5000	2.4585	-.041	-1.66	.06214	.000	1
S4	5.0000	4.6710	-.329	-6.58	.11786	.000	1
S5	10.000	10.328	.328	3.28	.26042	.001	1
S2	.80000	.84318	.043	5.40	.02145	.000	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



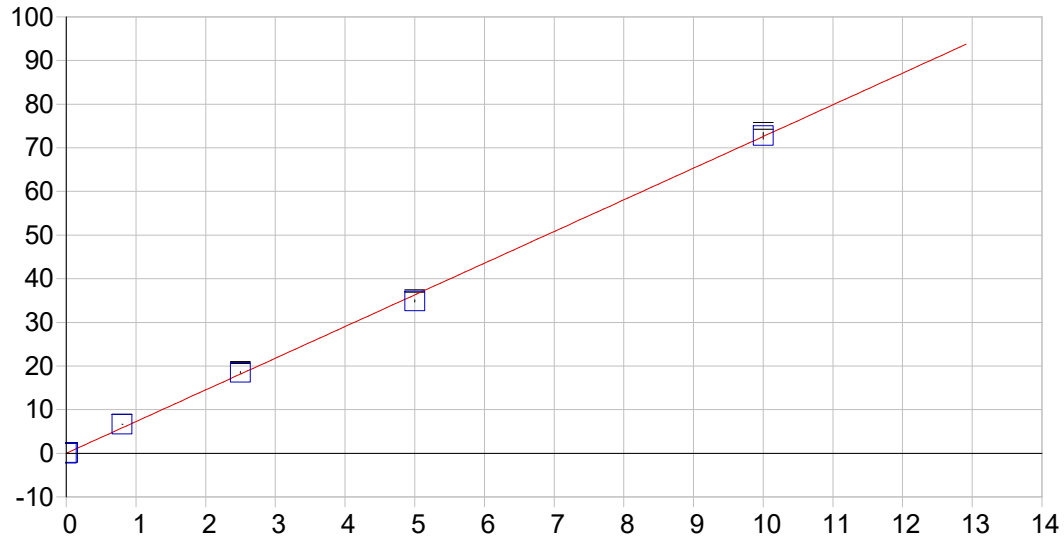
Li 670.784 { 50}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006211	Re-Slope:	1.000000
A1 (Gain):	0.707602	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999087	Status:	OK.
Std Error of Est:	0.000709		
Predicted MDL:	0.001137		
Predicted MQL:	0.003790		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00621	.000	1
S5	10.000	10.273	.273	2.73	7.2791	.027	1
S4	5.0000	4.7028	-.297	-5.94	3.3357	.004	1
S3	2.5000	2.4473	-.053	-2.11	1.7388	.006	1
S1	.02000	.02025	.000	1.27	.02077	.001	1
S2	.80000	.87644	.076	9.55	.62666	.002	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



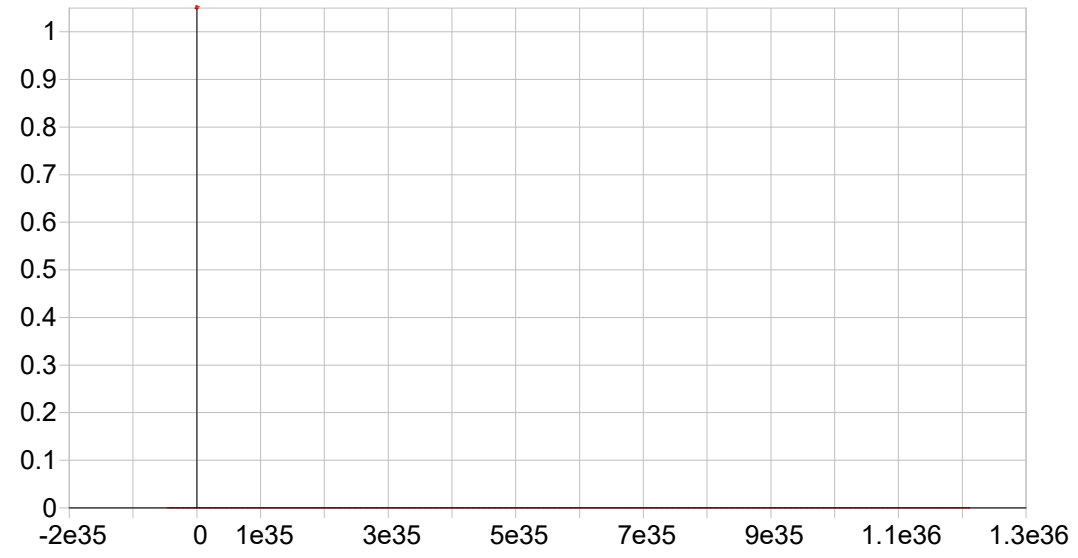
Sr 407.771 { 83}

Date of Fit:	3/6/2025 12:06:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000913	Re-Slope:	1.000000
A1 (Gain):	7.259413	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999317	Status:	OK.
Std Error of Est:	0.006290		
Predicted MDL:	0.000072		
Predicted MQL:	0.000240		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00093	.000	1
S1	.02000	.01970	-.000	-1.51	.14208	.001	1
S3	2.5000	2.5515	.051	2.06	18.521	.192	1
S4	5.0000	4.8099	-.190	-3.80	34.916	.268	1
S5	10.000	10.023	.023	.233	72.762	.763	1
S2	.80000	.91561	.116	14.5	6.6459	.007	1

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928

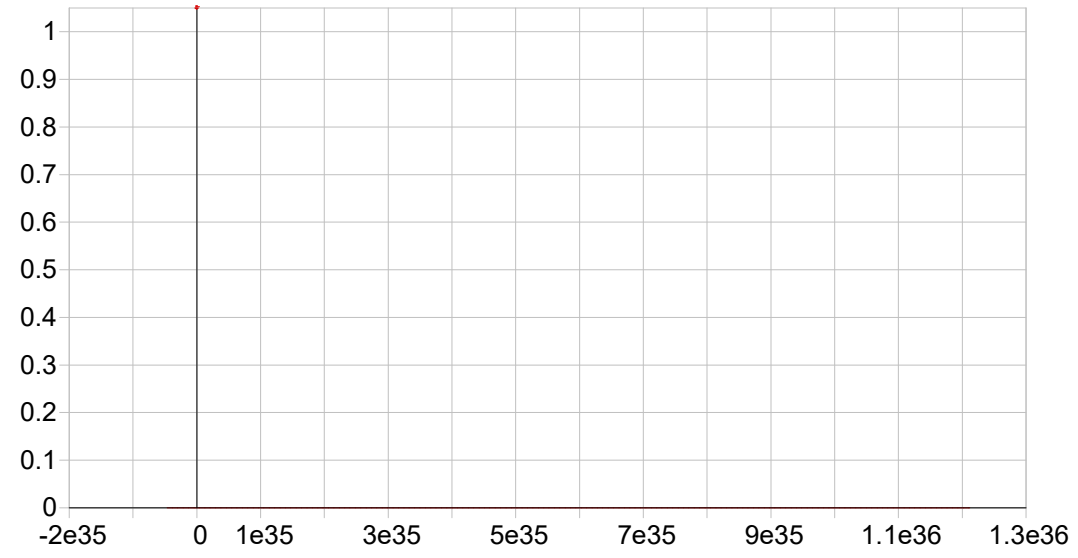


Y 224.306 {450}*

Date of Fit:	3/6/2025 12:06:24	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}*

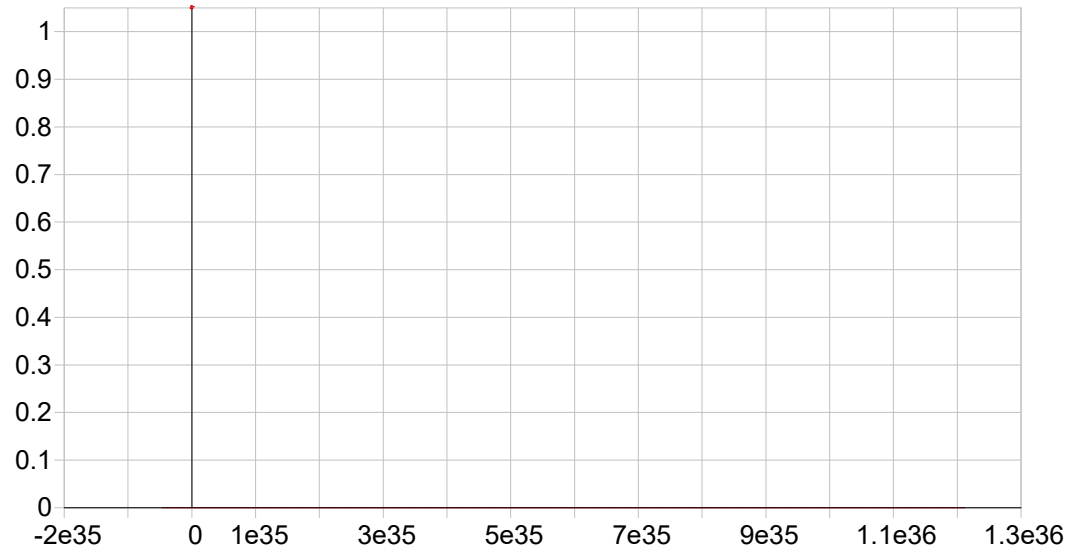
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928

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



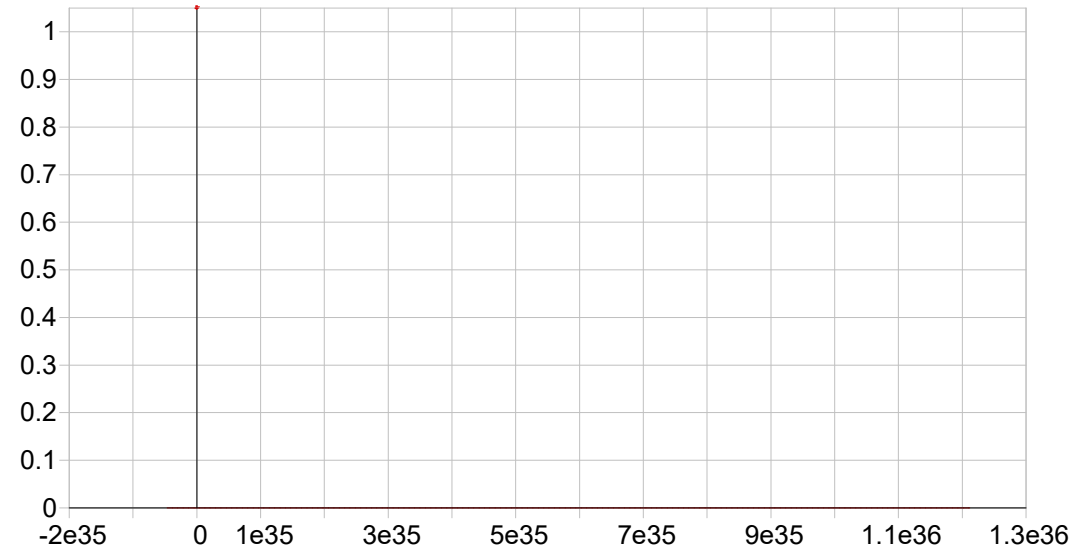
Y 371.030 { 91}*

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

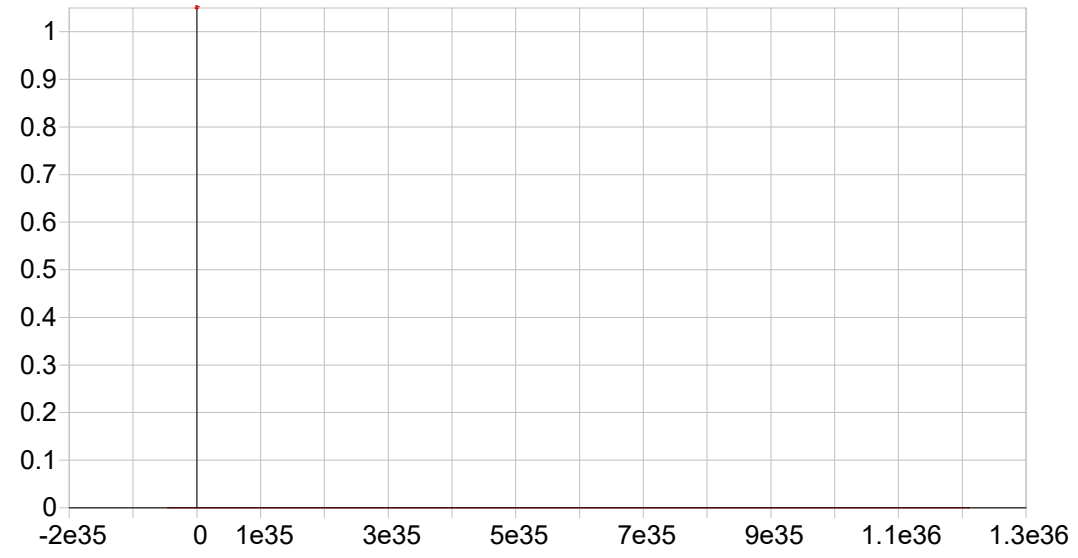
Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928



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



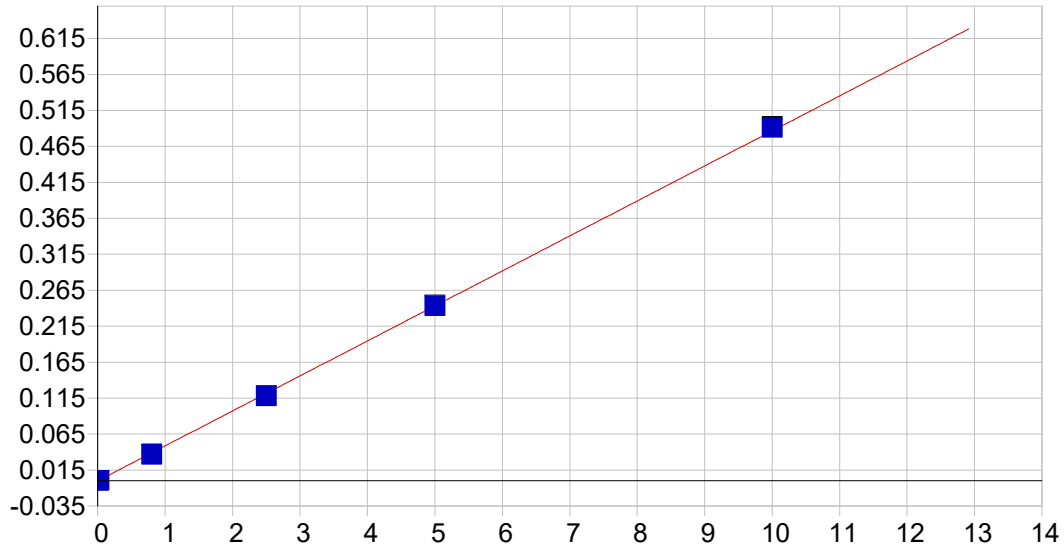
In 230.606 {446}*

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	

Reviewed By:Janvi
On:3/12/2025 10:18:22 AM
Inst Id :P4
LB :LB134928

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:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



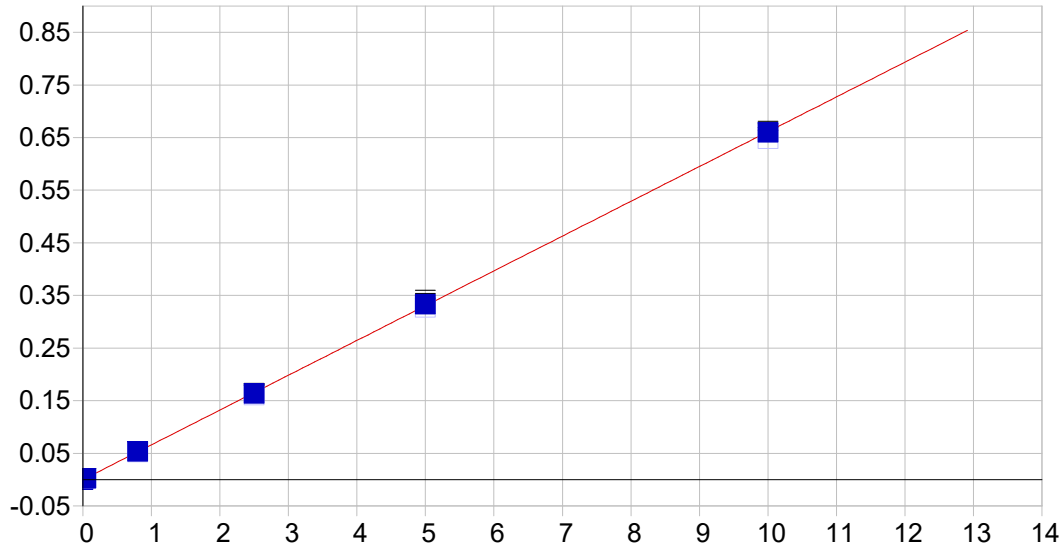
As 189.042 {479}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000140	Re-Slope:	1.000000
A1 (Gain):	0.048662	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999851	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.002458		
Predicted MQL:	0.008194		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00014	.000	1
S1	.02000	.01956	-.000	-2.18	.00081	.000	1
S3	2.5000	2.4264	-.074	-2.94	.11780	.000	1
S4	5.0000	5.0119	.012	.238	.24349	.000	1
S5	10.000	10.104	.104	1.04	.49101	.001	1
S2	.80000	.75822	-.042	-5.22	.03671	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



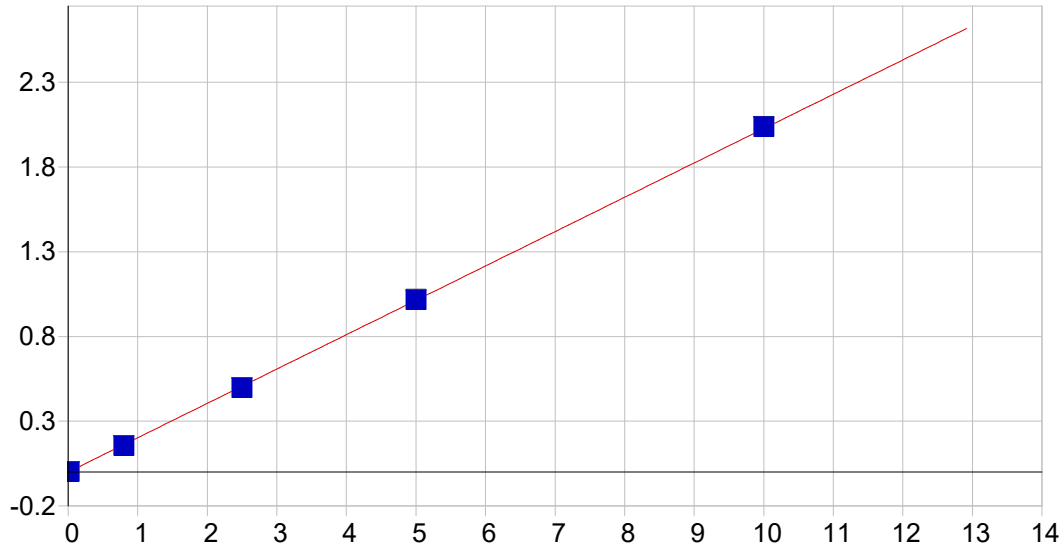
Tl 190.856 {477}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000030	Re-Slope:	1.000000
A1 (Gain):	0.066119	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999978	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.001709		
Predicted MQL:	0.005697		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00003	.000	1
S1	.04000	.03935	-.001	-1.62	.00240	.000	1
S3	2.5000	2.4710	-.029	-1.16	.16031	.000	1
S4	5.0000	5.0418	.042	.837	.32724	.008	1
S5	10.000	9.9811	-.019	-.189	.64773	.003	1
S2	.80000	.80665	.007	.831	.05233	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



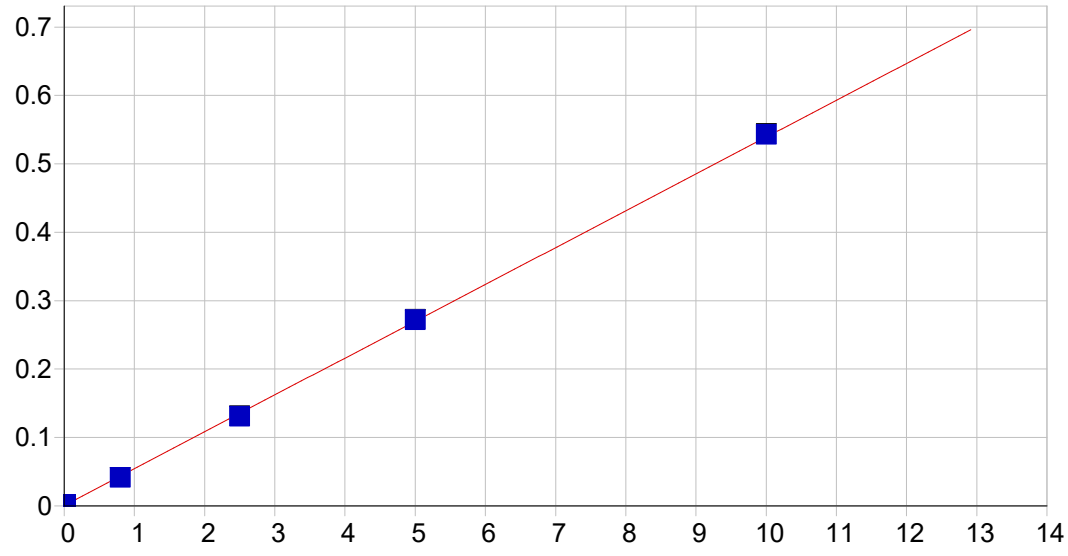
Pb 220.353 {453}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000181	Re-Slope:	1.000000
A1 (Gain):	0.202692	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999931	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.001374		
Predicted MQL:	0.004580		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00018	.000	1
S1	.01200	.01184	-.000	-1.35	.00217	.000	1
S3	2.5000	2.4541	-.046	-1.84	.49669	.001	1
S4	5.0000	5.0183	.018	.366	1.0159	.002	1
S5	10.000	10.060	.060	.595	2.0366	.000	1
S2	.80000	.76823	-.032	-3.97	.15535	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



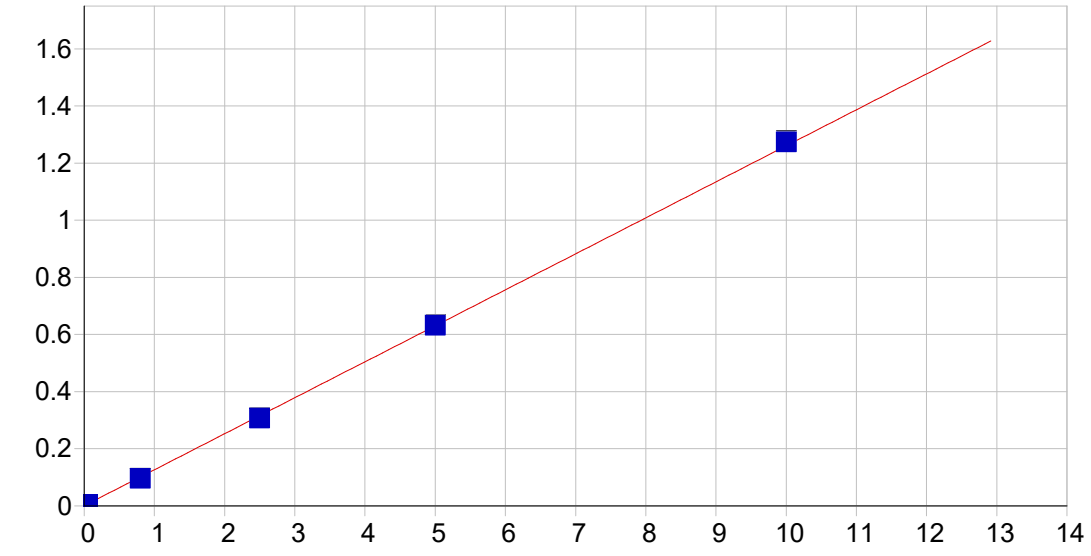
Se 196.090 {472}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000720	Re-Slope:	1.000000
A1 (Gain):	0.053836	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999844	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.002723		
Predicted MQL:	0.009077		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00072	.000	1
S1	.02000	.02130	.001	6.51	.00187	.000	1
S3	2.5000	2.4227	-.077	-3.09	.13110	.000	1
S4	5.0000	5.0398	.040	.797	.27195	.001	1
S5	10.000	10.079	.079	.790	.54315	.001	1
S2	.80000	.75714	-.043	-5.36	.04147	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



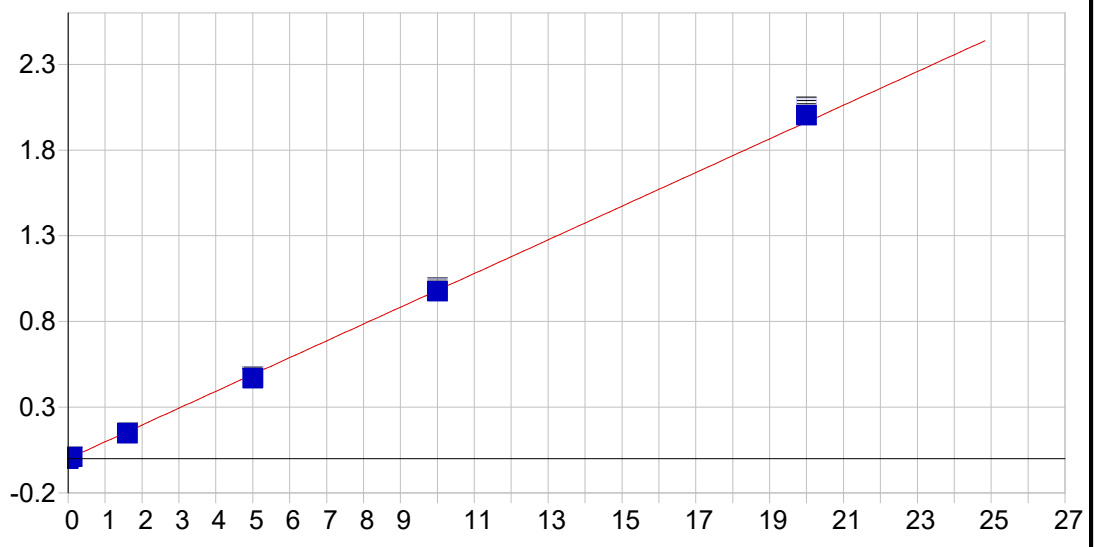
Sb 206.833 {463}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000589	Re-Slope:	1.000000
A1 (Gain):	0.125995	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999857	Status:	OK.
Std Error of Est:	0.000079		
Predicted MDL:	0.001737		
Predicted MQL:	0.005790		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00059	.000	1
S1	.05000	.04738	-.003	-5.25	.00657	.000	1
S3	2.5000	2.4304	-.070	-2.78	.30766	.001	1
S4	5.0000	5.0105	.011	.210	.63360	.002	1
S5	10.000	10.103	.103	1.03	1.2769	.002	1
S2	.80000	.75867	-.041	-5.17	.09645	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



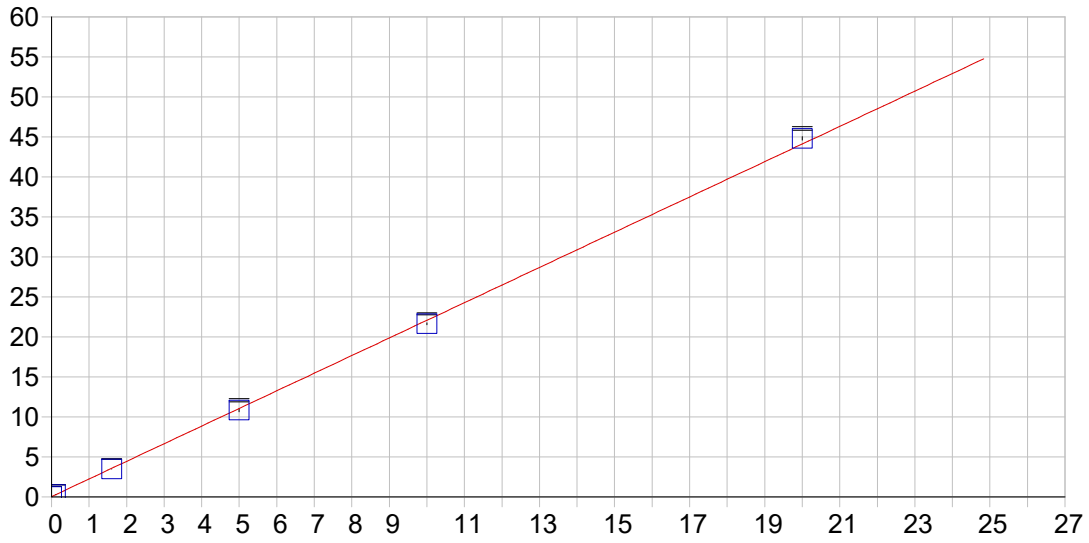
Al 396.152 { 85}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000136	Re-Slope:	1.000000
A1 (Gain):	0.098175	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999668	Status:	OK.
Std Error of Est:	0.000191		
Predicted MDL:	0.005464		
Predicted MQL:	0.018213		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00013	.000	1
S1	.10000	.09763	-.002	-2.37	.01021	.000	1
S3	5.0000	4.7624	-.238	-4.75	.47694	.001	1
S4	10.000	9.9367	-.063	-.633	.99444	.003	1
S5	20.000	20.398	.398	1.99	2.0406	.010	1
S2	1.6000	1.5050	-.095	-5.93	.15067	.001	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



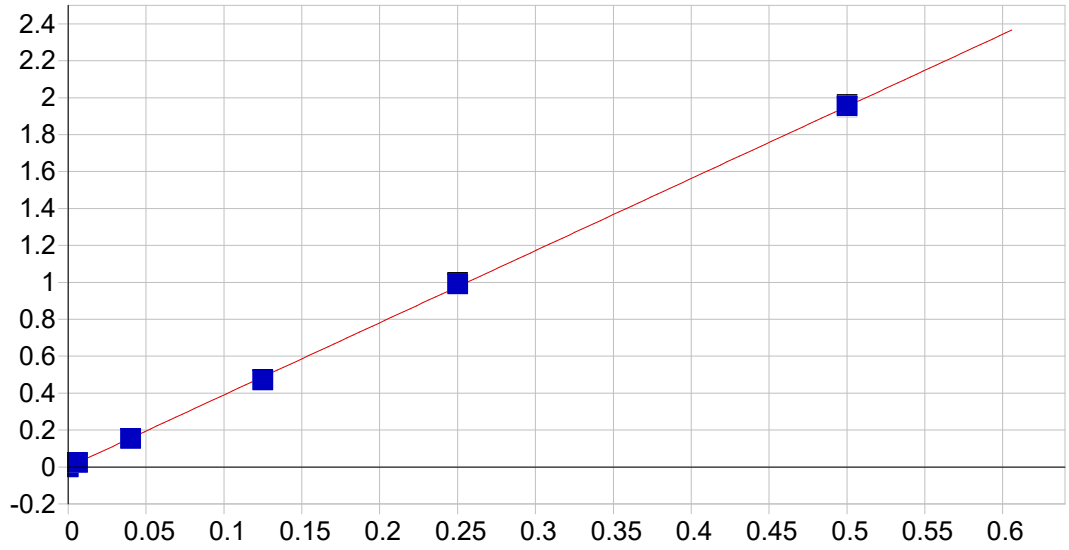
Ba 493.409 { 68}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.040661	Re-Slope:	1.000000
A1 (Gain):	2.203401	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999843	Status:	OK.
Std Error of Est:	0.002894		
Predicted MDL:	0.000792		
Predicted MQL:	0.002639		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.04067	.002	1
S1	.10000	.10037	.000	.373	.26182	.001	1
S3	5.0000	4.8998	-.100	-2.00	10.837	.187	1
S4	10.000	9.8111	-.189	-1.89	21.659	.119	1
S5	20.000	20.323	.323	1.61	44.820	.213	1
S2	1.6000	1.5659	-.034	-2.13	3.4909	.017	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



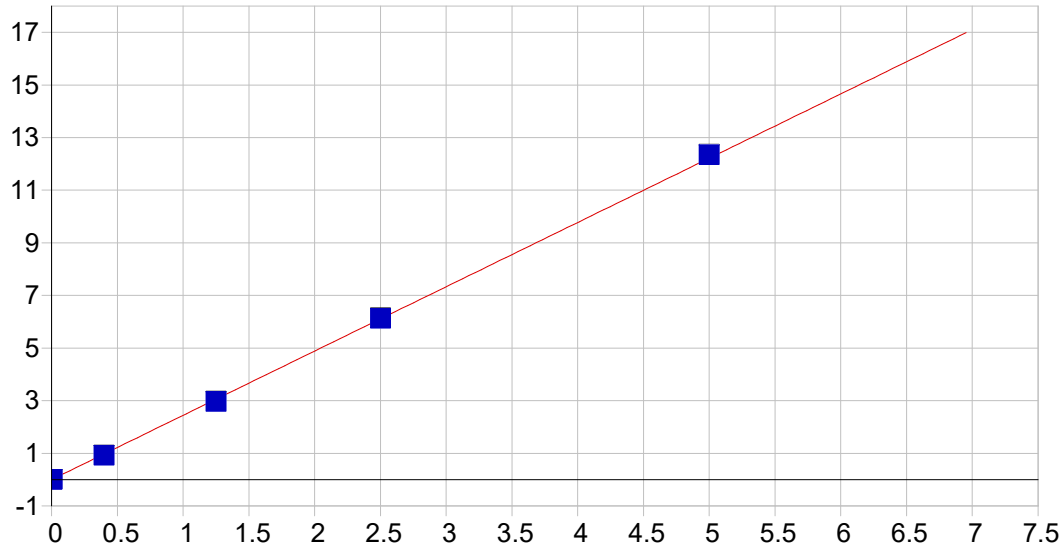
Be 234.861 {144}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000164	Re-Slope:	1.000000
A1 (Gain):	3.905745	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.000177		
Predicted MDL:	0.000053		
Predicted MQL:	0.000176		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00016	.000	1
S1	.00600	.00617	.000	2.86	.02377	.000	1
S3	.12500	.12068	-.004	-3.45	.46900	.002	1
S4	.25000	.25404	.004	1.62	.98767	.008	1
S5	.50000	.50071	.001	.142	1.9467	.007	1
S2	.04000	.03940	-.001	-1.50	.15302	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



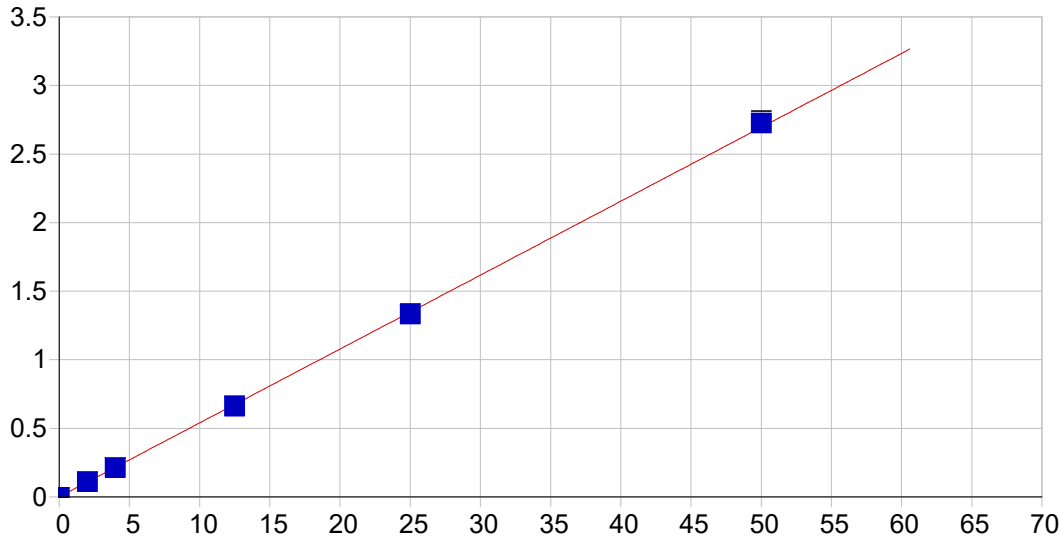
Cd 226.502 {449}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000128	Re-Slope:	1.000000
A1 (Gain):	2.443679	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999843	Status:	OK.
Std Error of Est:	0.000393		
Predicted MDL:	0.000079		
Predicted MQL:	0.000263		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00013	.000	1
S1	.00600	.00572	-.000	-4.71	.01392	.000	1
S3	1.2500	1.2134	-.037	-2.93	2.9677	.007	1
S4	2.5000	2.5063	.006	.251	6.1298	.013	1
S5	5.0000	5.0527	.053	1.05	12.358	.011	1
S2	.40000	.37792	-.022	-5.52	.92424	.002	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



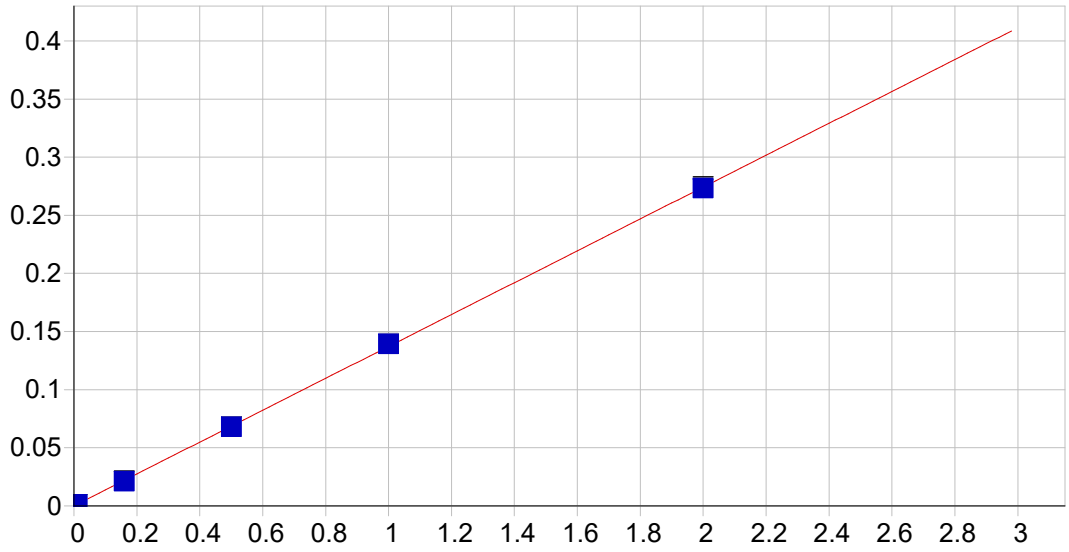
Ca 373.690 { 90}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000842	Re-Slope:	1.000000
A1 (Gain):	0.053880	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999912	Status:	OK.
Std Error of Est:	0.000379		
Predicted MDL:	0.008130		
Predicted MQL:	0.027099		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00004	.000	.000	.00084	.000	1
S2	4.0000	3.9361	-.064	-1.60	.21292	.001	1
S3	12.500	12.254	-.246	-1.97	.66110	.002	1
S4	25.000	24.703	-.297	-1.19	1.3318	.002	1
S5	50.000	50.575	.575	1.15	2.7258	.015	1
S1	2.0000	2.0320	.032	1.60	.11033	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



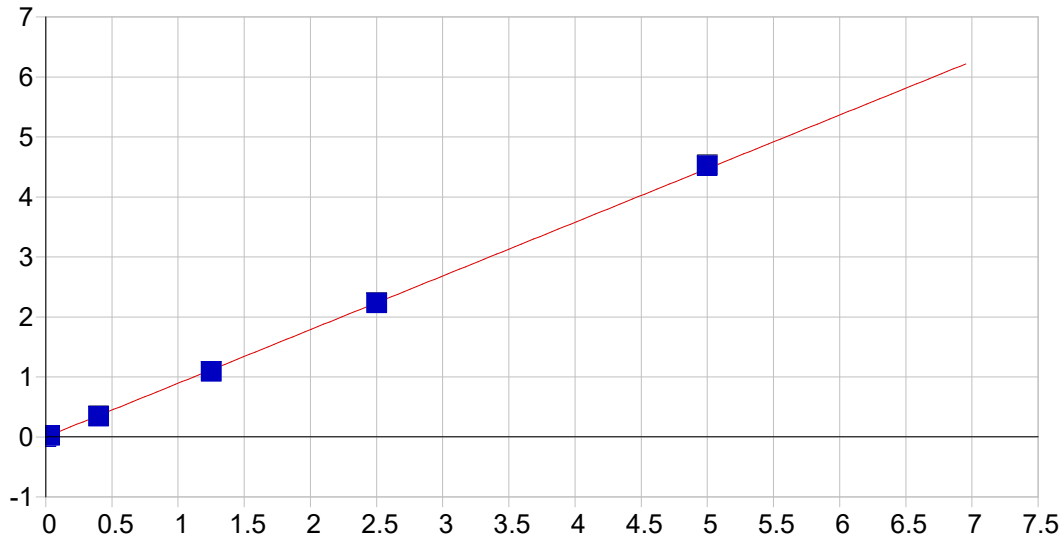
Cr 267.716 {126}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000066	Re-Slope:	1.000000
A1 (Gain):	0.137105	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.000440		
Predicted MQL:	0.001466		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00007	.000	1
S1	.01000	.00900	-.001	-10.0	.00130	.000	1
S3	.50000	.49580	-.004	-.840	.06806	.000	1
S4	1.0000	1.0165	.016	1.65	.13947	.000	1
S5	2.0000	1.9937	-.006	-.314	.27350	.001	1
S2	.16000	.15501	-.005	-3.12	.02132	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



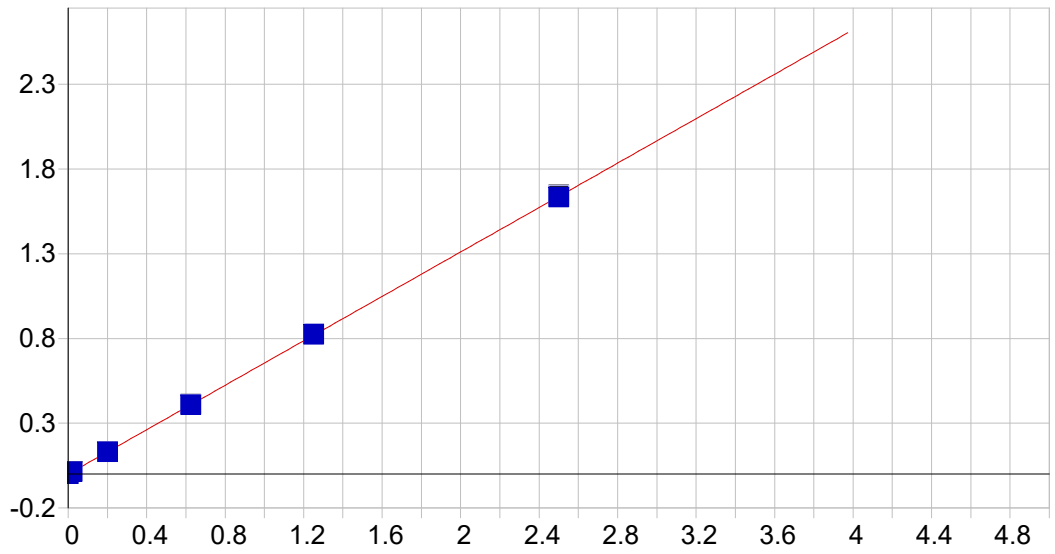
Co 228.616 {448}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000038	Re-Slope:	1.000000
A1 (Gain):	0.894081	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999877	Status:	OK.
Std Error of Est:	0.000286		
Predicted MDL:	0.000228		
Predicted MQL:	0.000762		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00004	.000	1
S1	.03000	.02895	-.001	-3.50	.02573	.000	1
S3	1.2500	1.2178	-.032	-2.58	1.0906	.001	1
S4	2.5000	2.4936	-.006	-.257	2.2332	.004	1
S5	5.0000	5.0569	.057	1.14	4.5288	.006	1
S2	.40000	.38281	-.017	-4.30	.34283	.001	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



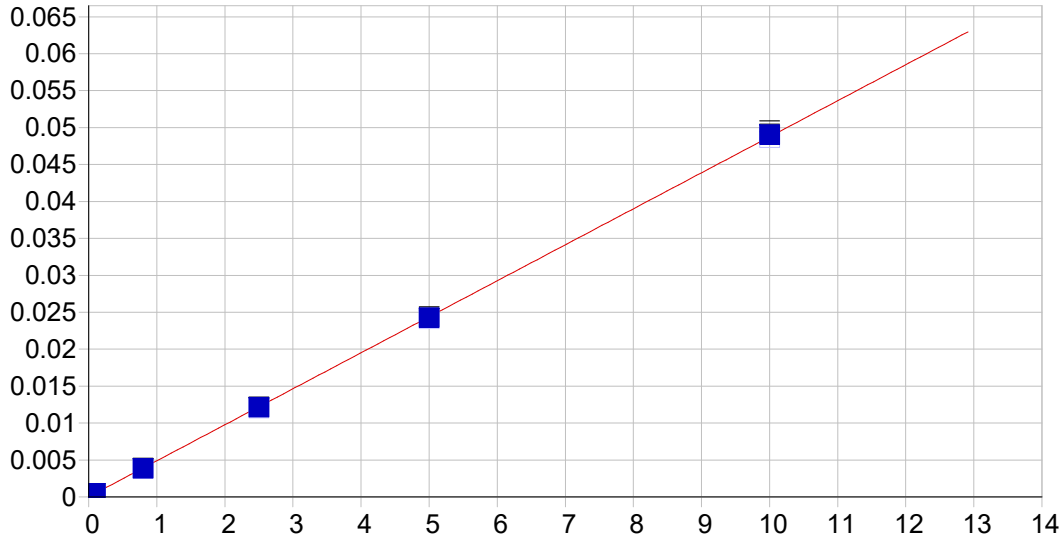
Cu 224.700 {450}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000677	Re-Slope:	1.000000
A1 (Gain):	0.655603	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.000058		
Predicted MDL:	0.000395		
Predicted MQL:	0.001317		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00068	.000	1
S1	.02000	.02195	.002	9.75	.01384	.000	1
S3	.62500	.62360	-.001	-.224	.41106	.001	1
S4	1.2500	1.2575	.007	.598	.82953	.001	1
S5	2.5000	2.4918	-.008	-.329	1.6446	.003	1
S2	.20000	.20019	.000	.095	.13150	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



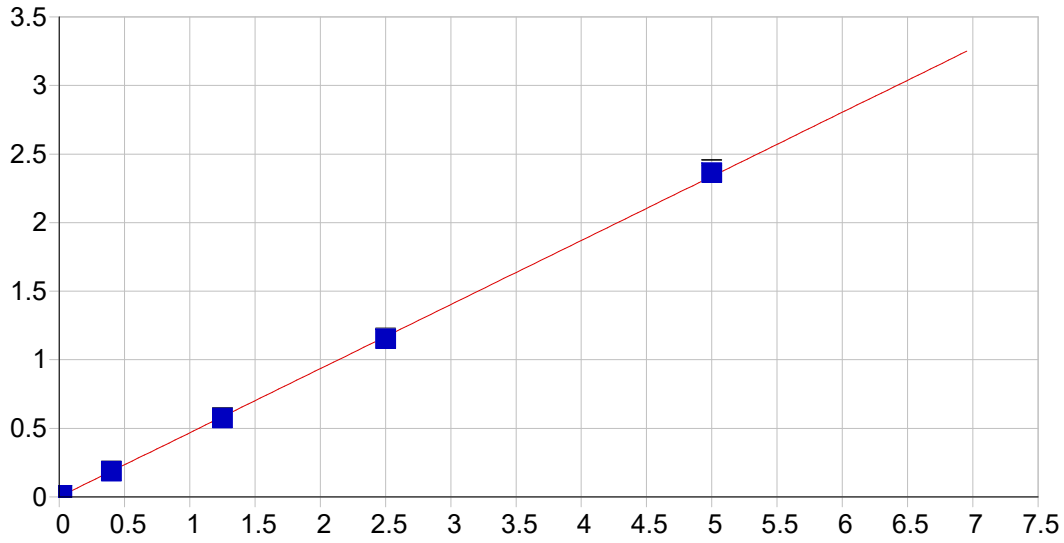
Fe 240.488 {140}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000018	Re-Slope:	1.000000
A1 (Gain):	0.004874	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000002		
Predicted MDL:	0.004209		
Predicted MQL:	0.014028		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00002	.000	1
S1	.10000	.10099	.001	.986	.00050	.000	1
S3	2.5000	2.4836	-.016	-.658	.01202	.000	1
S4	5.0000	4.9773	-.023	-.454	.02407	.000	1
S5	10.000	10.055	.055	.547	.04861	.001	1
S2	.80000	.78348	-.017	-2.07	.00380	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



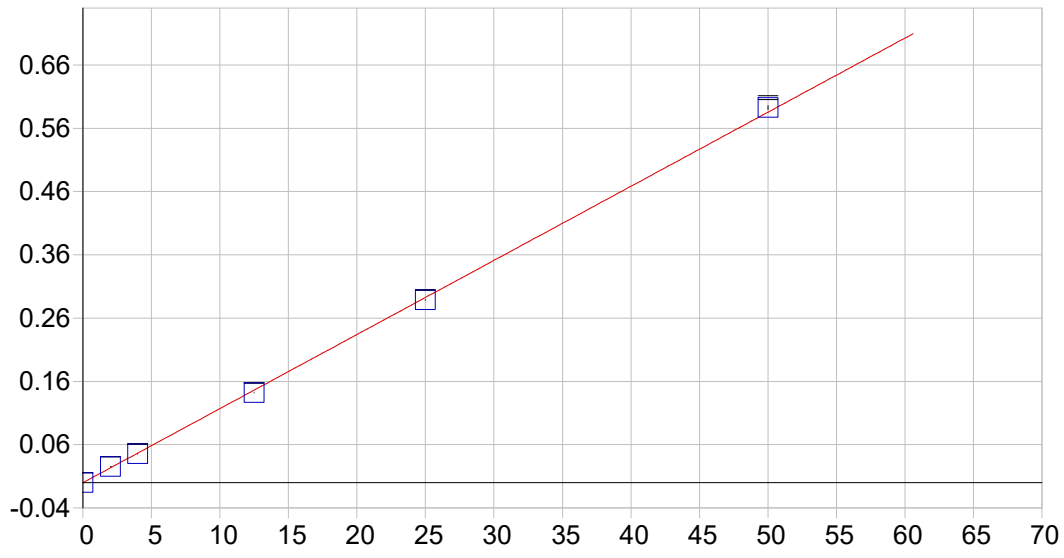
Mn 257.610 {131}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000432	Re-Slope:	1.000000
A1 (Gain):	0.467349	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999916	Status:	OK.
Std Error of Est:	0.000101		
Predicted MDL:	0.000354		
Predicted MQL:	0.001180		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00043	.000	1
S1	.02000	.02087	.001	4.33	.01019	.000	1
S3	1.2500	1.2276	-.022	-1.79	.57427	.002	1
S4	2.5000	2.4661	-.034	-1.35	1.1532	.003	1
S5	5.0000	5.0568	.057	1.14	2.3642	.021	1
S2	.40000	.39857	-.001	-.358	.18674	.001	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



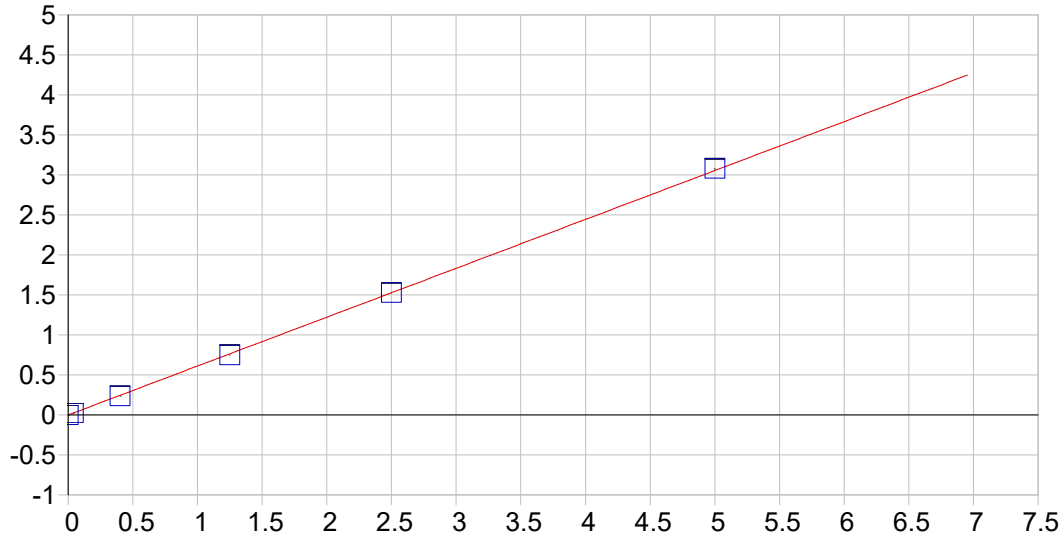
Mg 279.079 {121}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000212	Re-Slope:	1.000000
A1 (Gain):	0.011713	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999785	Status:	OK.
Std Error of Est:	0.000129		
Predicted MDL:	0.015444		
Predicted MQL:	0.051480		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00007	-.000	.000	-.00021	.000	1
S2	4.0000	3.9150	-.085	-2.12	.04564	.000	1
S3	12.500	12.130	-.370	-2.96	.14186	.000	1
S4	25.000	24.660	-.340	-1.36	.28862	.000	1
S5	50.000	50.620	.620	1.24	.59268	.003	1
S1	2.0000	2.1744	.174	8.72	.02526	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



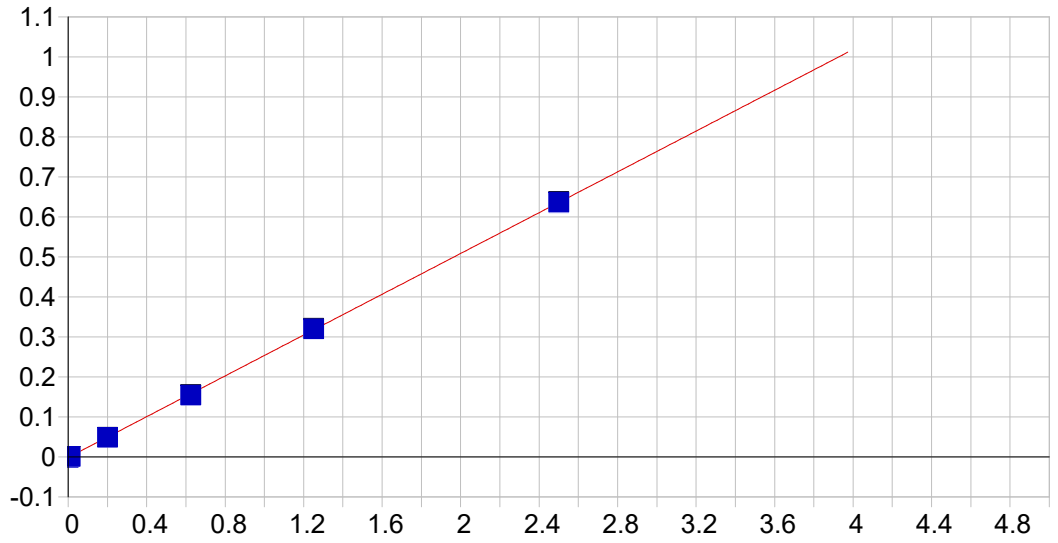
Ni 231.604 {446}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000132	Re-Slope:	1.000000
A1 (Gain):	0.610929	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.000164		
Predicted MDL:	0.000314		
Predicted MQL:	0.001046		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00013	.000	1
S1	.04000	.03906	-.001	-2.35	.02373	.000	1
S3	1.2500	1.2271	-.023	-1.83	.74953	.001	1
S4	2.5000	2.4987	-.001	-.051	1.5264	.003	1
S5	5.0000	5.0386	.039	.772	3.0781	.005	1
S2	.40000	.38649	-.014	-3.38	.23599	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



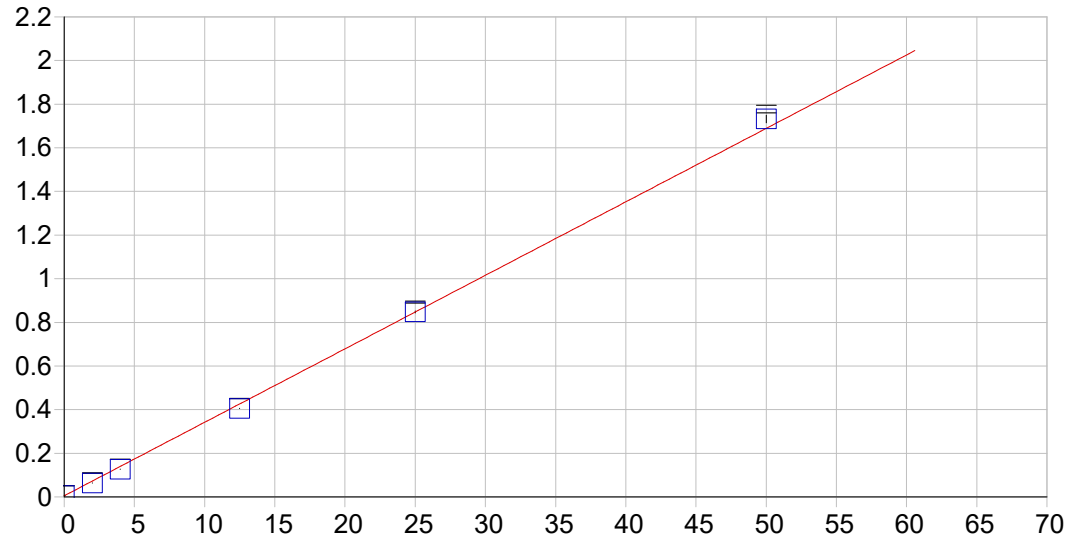
Ag 328.068 {103}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001462	Re-Slope:	1.000000
A1 (Gain):	0.254995	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999952	Status:	OK.
Std Error of Est:	0.000021		
Predicted MDL:	0.000344		
Predicted MQL:	0.001145		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00146	.000	1
S1	.01000	.01022	.000	2.20	.00113	.000	1
S3	.62500	.61214	-.013	-2.06	.15400	.000	1
S4	1.2500	1.2619	.012	.953	.31905	.001	1
S5	2.5000	2.5037	.004	.149	.63445	.002	1
S2	.20000	.19698	-.003	-1.51	.04857	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



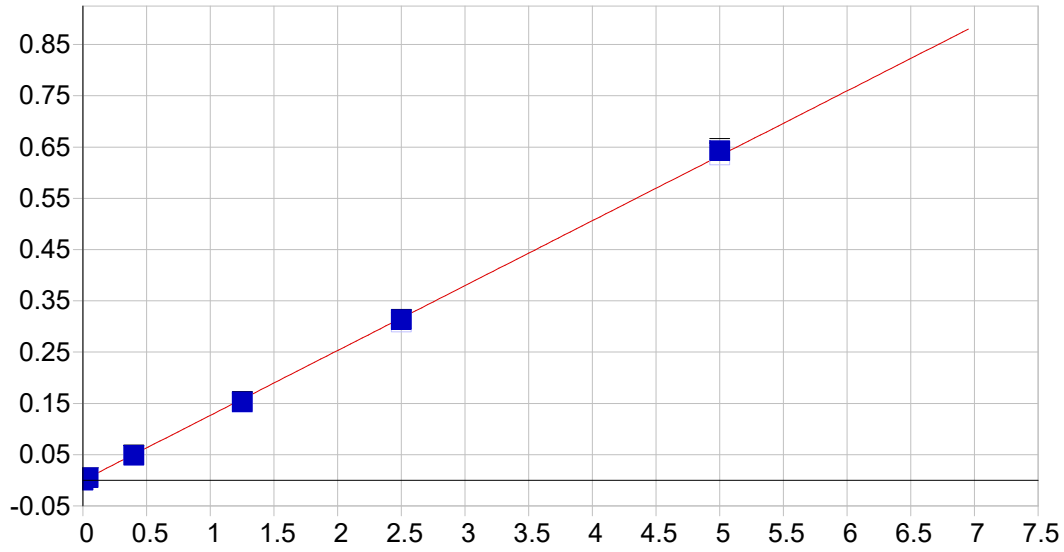
Na 589.592 { 57}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005462	Re-Slope:	1.000000
A1 (Gain):	0.033668	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999244	Status:	OK.
Std Error of Est:	0.000693		
Predicted MDL:	0.008410		
Predicted MQL:	0.028032		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00052	.001	.000	.00548	.000	1
S2	4.0000	3.6033	-.397	-9.92	.12678	.001	1
S3	12.500	11.865	-.635	-5.08	.40495	.001	1
S4	25.000	25.025	.025	.102	.84802	.004	1
S5	50.000	51.278	1.28	2.56	1.7319	.017	1
S1	2.0000	1.7278	-.272	-13.6	.06363	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



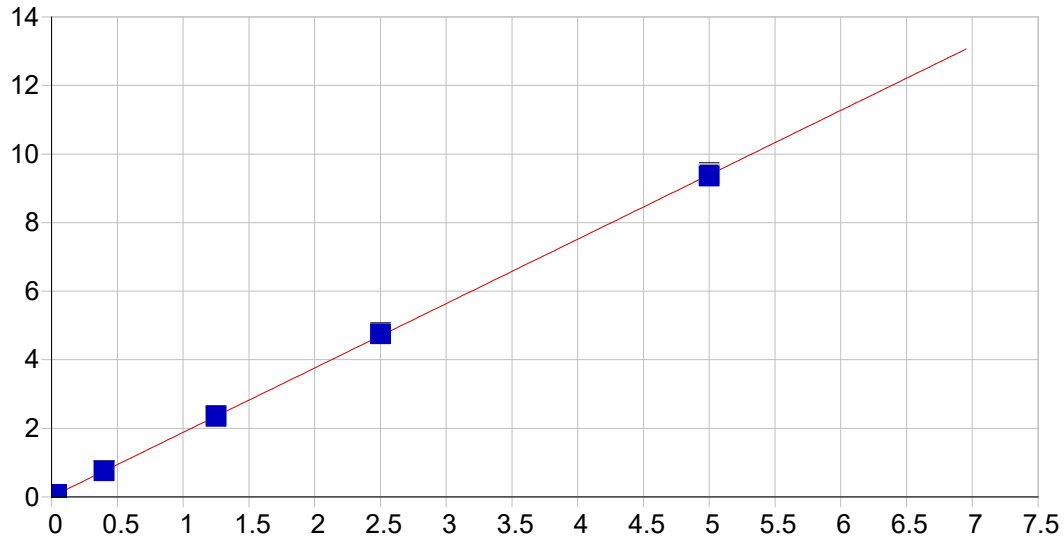
V 292.402 {115}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000078	Re-Slope:	1.000000
A1 (Gain):	0.126602	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999811	Status:	OK.
Std Error of Est:	0.000057		
Predicted MDL:	0.001584		
Predicted MQL:	0.005280		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00008	.000	1
S1	.04000	.03985	-.000	-.376	.00478	.000	1
S3	1.2500	1.2098	-.040	-3.22	.15077	.000	1
S4	2.5000	2.4741	-.026	-1.04	.30853	.000	1
S5	5.0000	5.0805	.081	1.61	.63389	.004	1
S2	.40000	.38576	-.014	-3.56	.04802	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



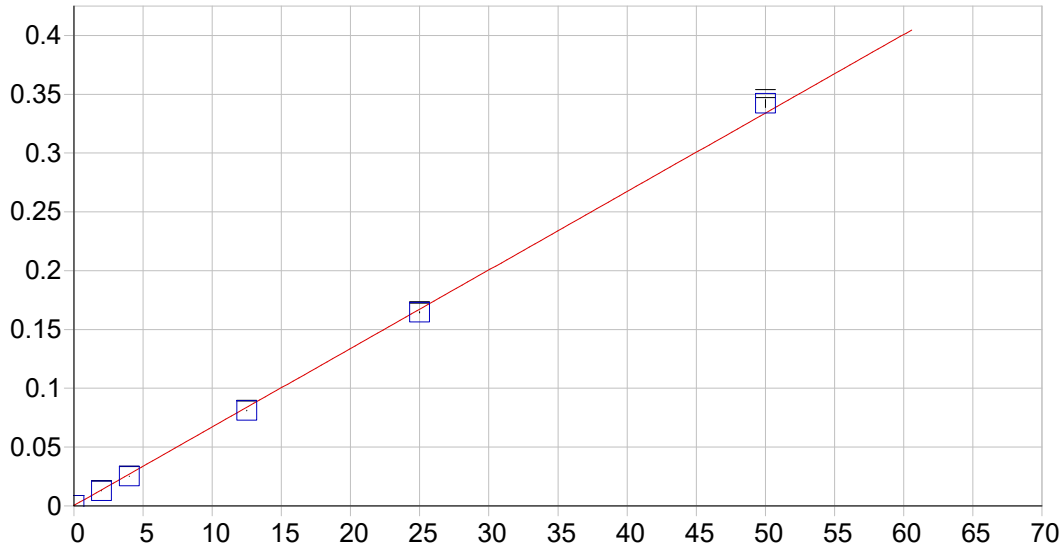
Zn 213.856 {158}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003476	Re-Slope:	1.000000
A1 (Gain):	1.878350	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999970	Status:	OK.
Std Error of Est:	0.000341		
Predicted MDL:	0.000366		
Predicted MQL:	0.001221		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00347	.000	1
S1	.04000	.04242	.002	6.05	.08368	.000	1
S3	1.2500	1.2434	-.007	-.524	2.3554	.013	1
S4	2.5000	2.5261	.026	1.04	4.7810	.018	1
S5	5.0000	4.9779	-.022	-.441	9.4191	.034	1
S2	.40000	.40013	.000	.033	.76029	.003	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



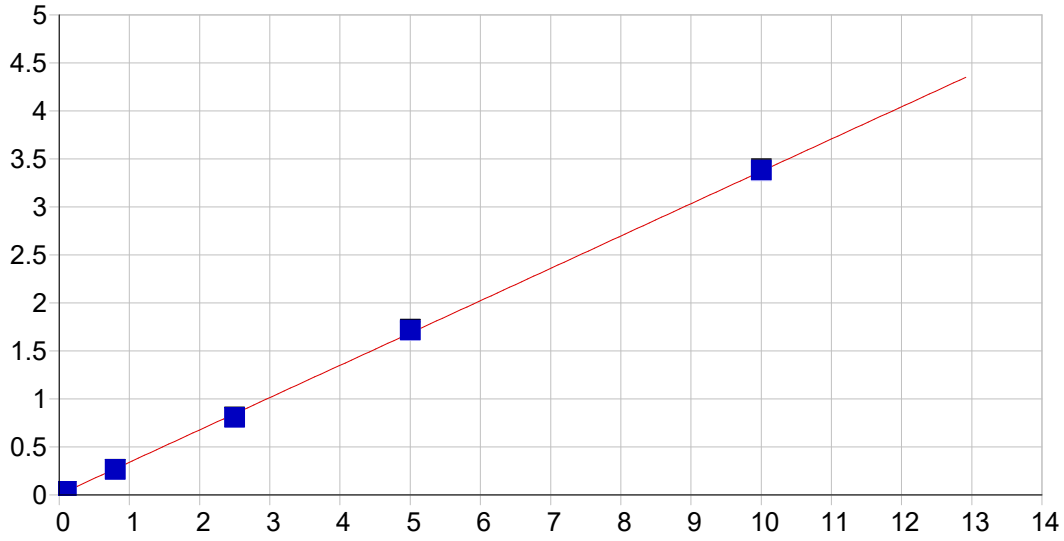
K 766.490 { 44}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000416	Re-Slope:	1.000000
A1 (Gain):	0.006672	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999585	Status:	OK.
Std Error of Est:	0.000102		
Predicted MDL:	0.027093		
Predicted MQL:	0.090311		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00032	.000	.000	.00042	.000	1
S2	4.0000	3.7169	-.283	-7.08	.02522	.000	1
S3	12.500	12.094	-.406	-3.25	.08111	.000	1
S4	25.000	24.602	-.398	-1.59	.16457	.000	1
S5	50.000	51.217	1.22	2.43	.34216	.003	1
S1	2.0000	1.8708	-.129	-6.46	.01290	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



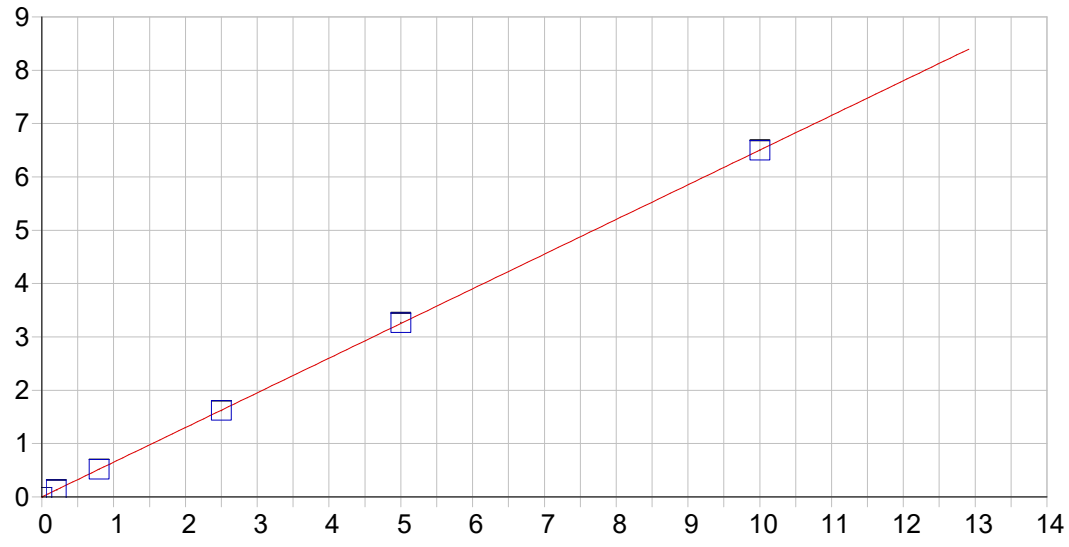
B 249.678 {135}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003386	Re-Slope:	1.000000
A1 (Gain):	0.336642	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999801	Status:	OK.
Std Error of Est:	0.000352		
Predicted MDL:	0.000736		
Predicted MQL:	0.002453		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00339	.000	1
S1	.10000	.10264	.003	2.64	.03776	.000	1
S3	2.5000	2.3904	-.110	-4.38	.80562	.003	1
S4	5.0000	5.0864	.086	1.73	1.7107	.013	1
S5	10.000	10.045	.045	.447	3.3749	.013	1
S2	.80000	.77581	-.024	-3.02	.26376	.001	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



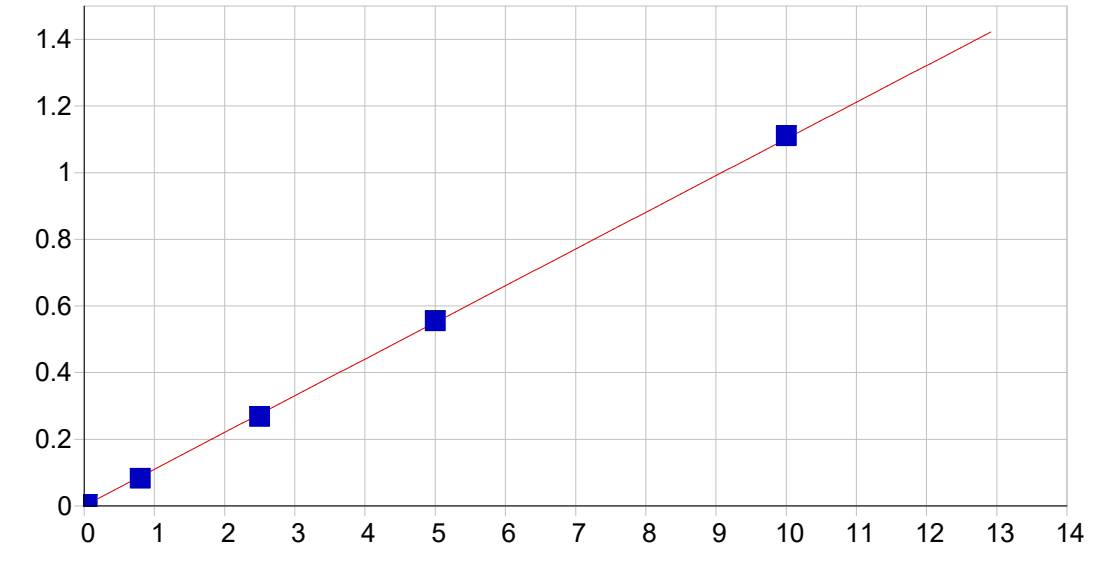
Mo 202.030 {467}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000276	Re-Slope:	1.000000
A1 (Gain):	0.650230	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999996	Status:	OK.
Std Error of Est:	0.000139		
Predicted MDL:	0.000252		
Predicted MQL:	0.000841		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00028	.000	1
S1	.20000	.19921	-.001	-.394	.12981	.001	1
S3	2.5000	2.4887	-.011	-.453	1.6185	.003	1
S4	5.0000	5.0208	.021	.415	3.2649	.008	1
S5	10.000	9.9938	-.006	-.062	6.4986	.009	1
S2	.80000	.79750	-.003	-.313	.51883	.001	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



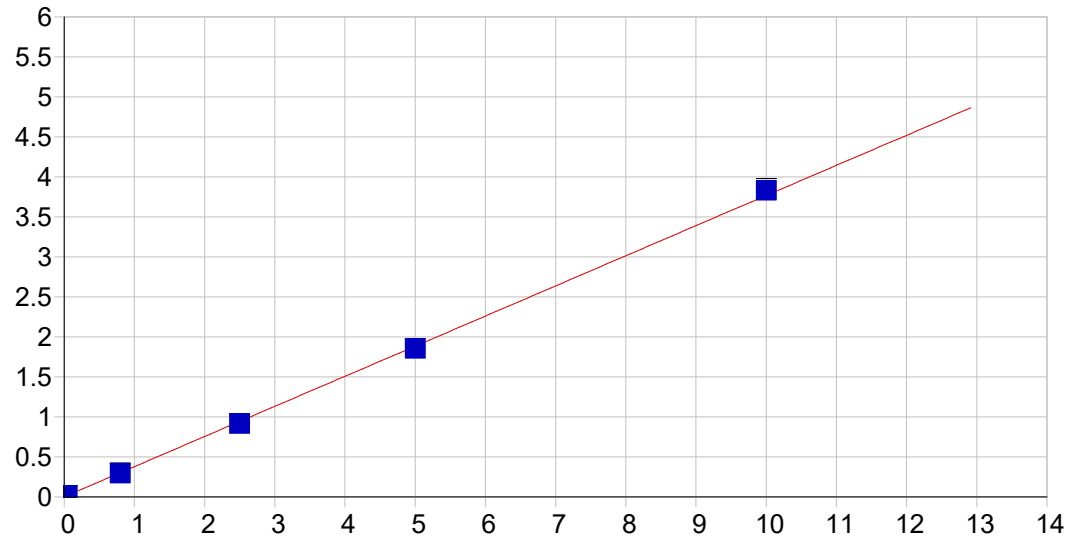
Sn 189.989 {478}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000158	Re-Slope:	1.000000
A1 (Gain):	0.110111	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999831	Status:	OK.
Std Error of Est:	0.000067		
Predicted MDL:	0.000794		
Predicted MQL:	0.002648		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00016	.000	1
S1	.04000	.03709	-.003	-7.28	.00424	.000	1
S3	2.5000	2.4324	-.068	-2.70	.26771	.000	1
S4	5.0000	5.0358	.036	.717	.55410	.001	1
S5	10.000	10.085	.085	.849	1.1095	.001	1
S2	.80000	.74978	-.050	-6.28	.08263	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



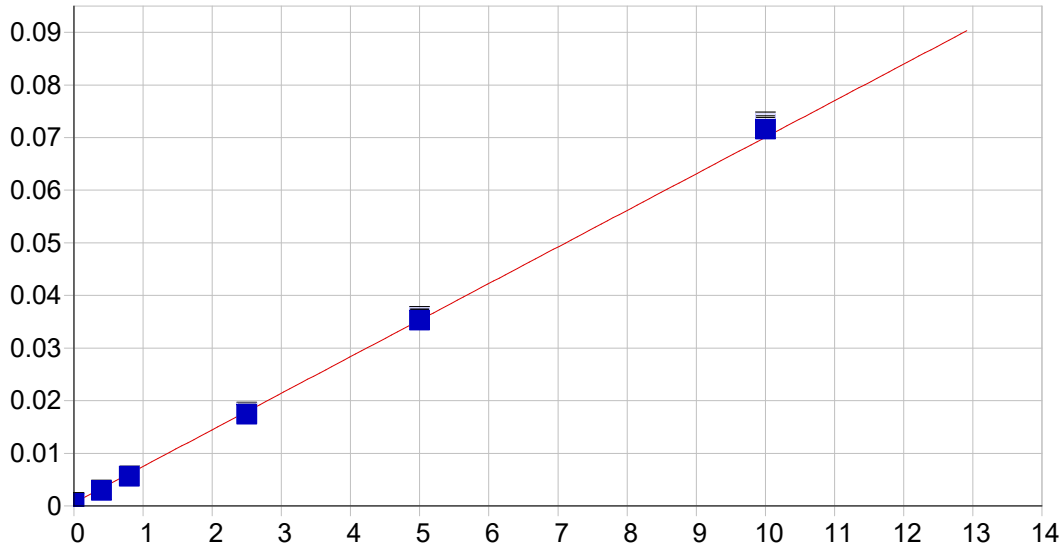
Ti 336.121 {100}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001758	Re-Slope:	1.000000
A1 (Gain):	0.376539	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999813	Status:	OK.
Std Error of Est:	0.000241		
Predicted MDL:	0.000733		
Predicted MQL:	0.002444		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00176	.000	1
S1	.04000	.03912	-.001	-2.20	.01648	.000	1
S3	2.5000	2.4285	-.072	-2.86	.91583	.002	1
S4	5.0000	4.9203	-.080	-1.59	1.8537	.001	1
S5	10.000	10.173	.173	1.73	3.8308	.026	1
S2	.80000	.77943	-.021	-2.57	.29513	.001	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



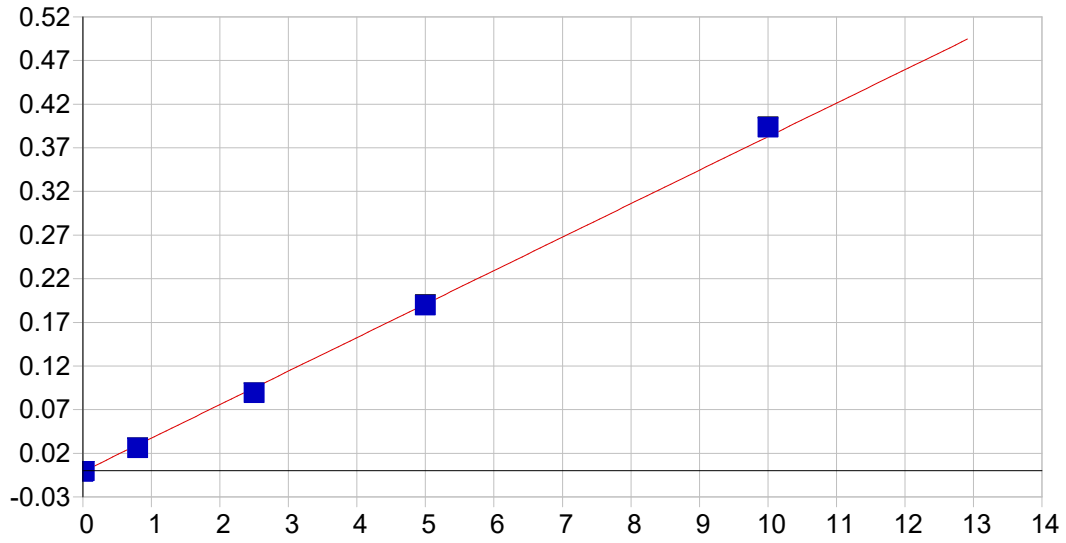
Si 288.158 {117}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000565	Re-Slope:	1.000000
A1 (Gain):	0.006950	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999405	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.005963		
Predicted MQL:	0.019876		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00010	.000	.000	.00057	.000	1
S1	.40000	.34129	-.059	-14.7	.00294	.000	1
S3	2.5000	2.4217	-.078	-3.13	.01766	.000	1
S4	5.0000	4.9923	-.008	-.154	.03578	.000	1
S5	10.000	10.219	.219	2.19	.07263	.000	1
S2	.80000	.72514	-.075	-9.36	.00569	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



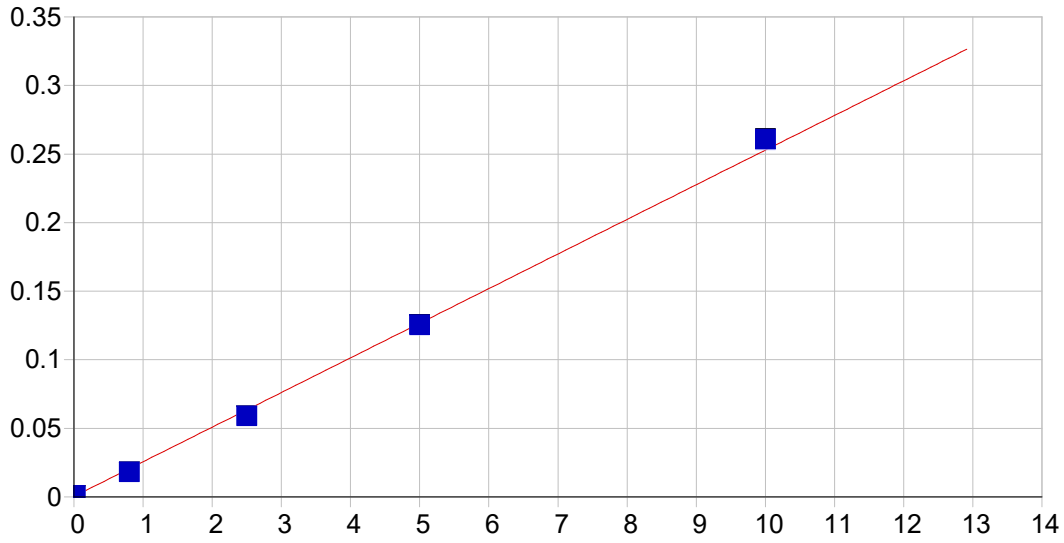
P 177.495 {490}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000975	Re-Slope:	1.000000
A1 (Gain):	0.038374	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999223	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.002412		
Predicted MQL:	0.008040		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00097	.000	1
S1	.02000	.01704	-.003	-14.8	-.00032	.000	1
S3	2.5000	2.3488	-.151	-6.05	.08914	.000	1
S4	5.0000	4.9707	-.029	-.587	.18974	.000	1
S5	10.000	10.278	.278	2.78	.39336	.001	1
S2	.80000	.70599	-.094	-11.8	.02611	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



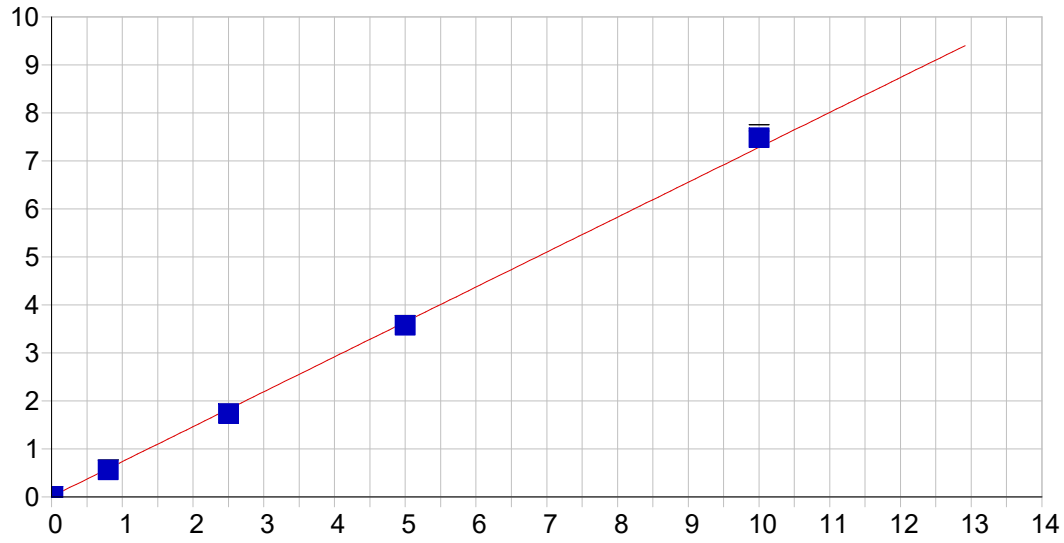
S 182.034 {485}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000373	Re-Slope:	1.000000
A1 (Gain):	0.025251	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999080	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.003223		
Predicted MQL:	0.010745		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00037	.000	1
S1	.02000	.01810	-.002	-9.51	.00081	.000	1
S3	2.5000	2.3275	-.173	-6.90	.05898	.000	1
S4	5.0000	4.9532	-.047	-.936	.12512	.000	1
S5	10.000	10.315	.315	3.15	.26019	.000	1
S2	.80000	.70581	-.094	-11.8	.01814	.000	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



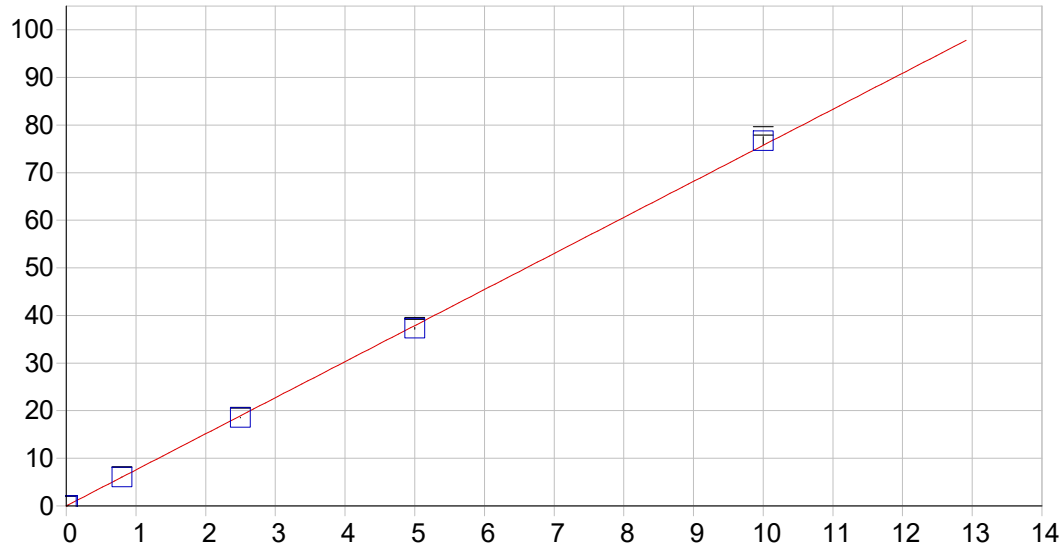
Li 670.784 { 50}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008048	Re-Slope:	1.000000
A1 (Gain):	0.727464	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999516	Status:	OK.
Std Error of Est:	0.000531		
Predicted MDL:	0.001143		
Predicted MQL:	0.003810		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00805	.001	1
S5	10.000	10.270	.270	2.70	7.4825	.065	1
S4	5.0000	4.8972	-.103	-2.06	3.5724	.001	1
S3	2.5000	2.3747	-.125	-5.01	1.7364	.002	1
S1	.02000	.01874	-.001	-6.30	.02191	.000	1
S2	.80000	.75975	-.040	-5.03	.56103	.003	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



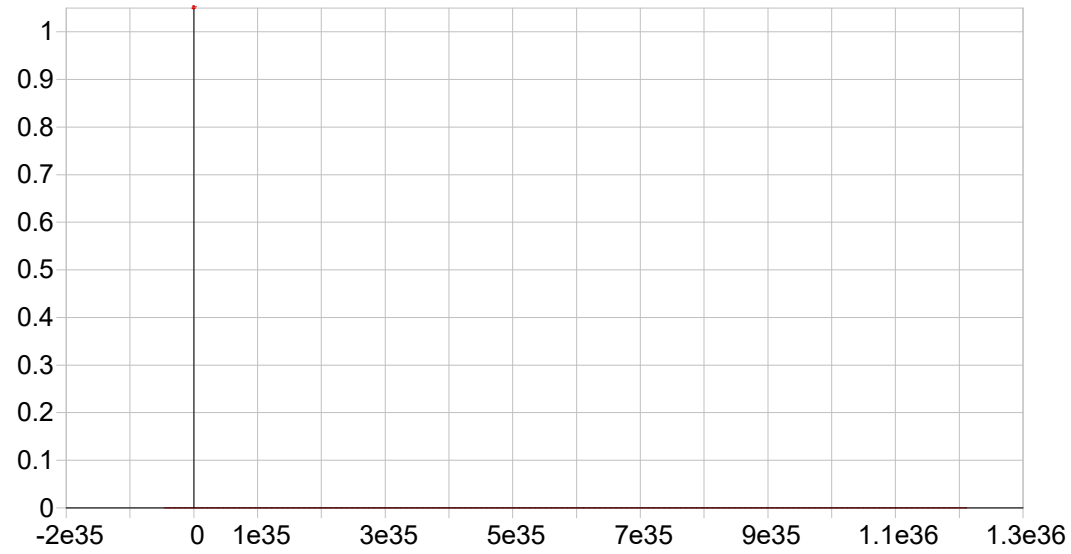
Sr 407.771 { 83}

Date of Fit:	3/12/2025 10:50:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000343	Re-Slope:	1.000000
A1 (Gain):	7.574531	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999901	Status:	OK.
Std Error of Est:	0.002502		
Predicted MDL:	0.000073		
Predicted MQL:	0.000242		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00035	.000	1
S1	.02000	.02013	.000	.674	.15286	.001	1
S3	2.5000	2.4495	-.050	-2.02	18.554	.088	1
S4	5.0000	4.9267	-.073	-1.47	37.318	.206	1
S5	10.000	10.124	.124	1.24	76.687	.892	1
S2	.80000	.79940	-.001	-.076	6.0554	.033	1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

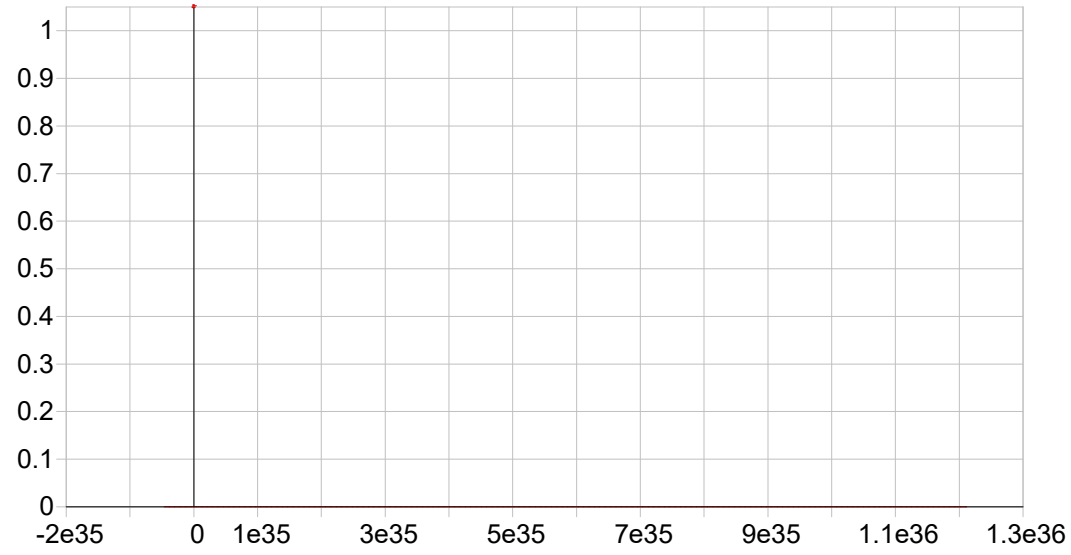


Y 224.306 {450}*

Date of Fit:	3/12/2025 10:50:38	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}*

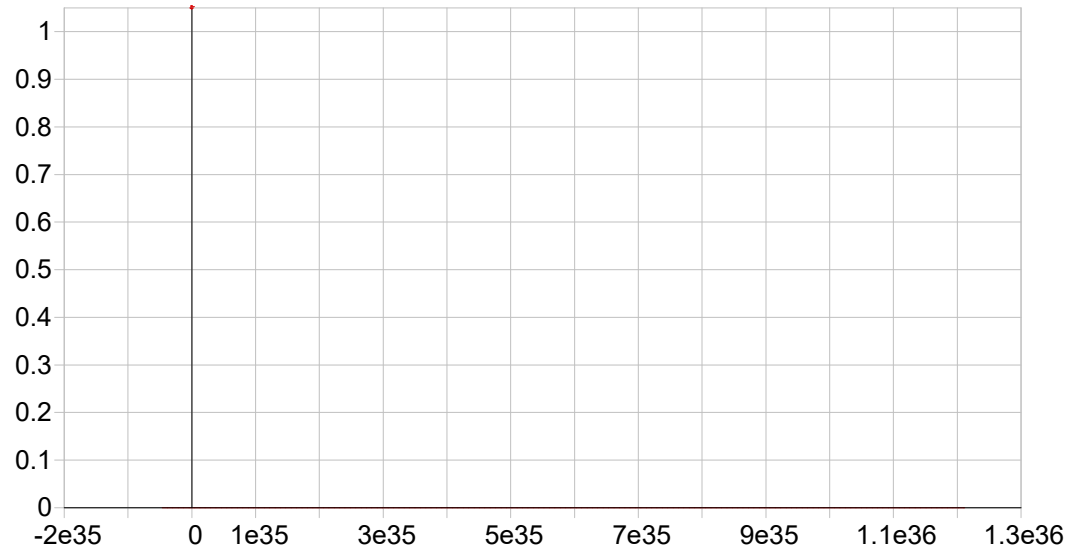
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

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



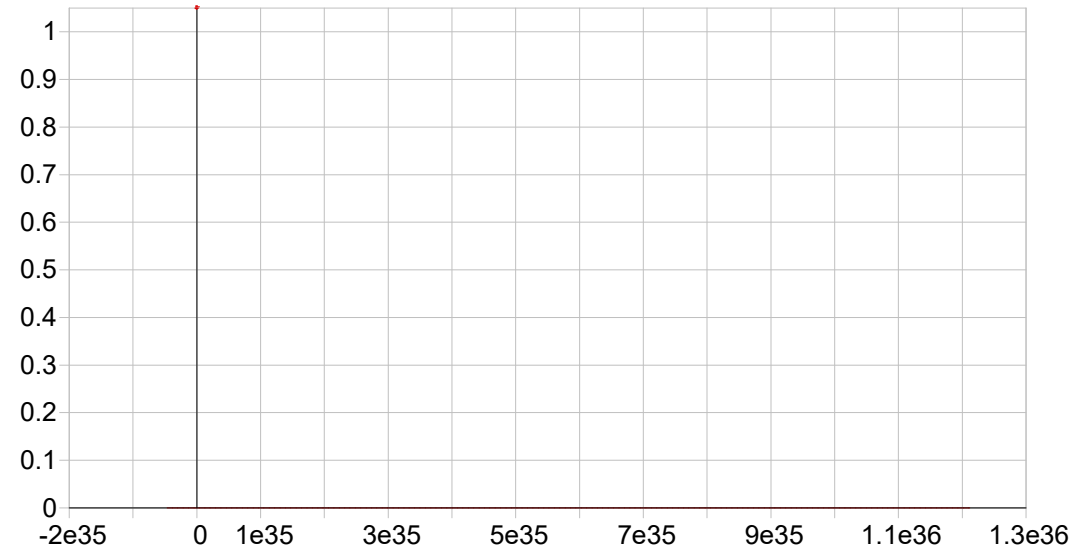
Y 371.030 { 91}*

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

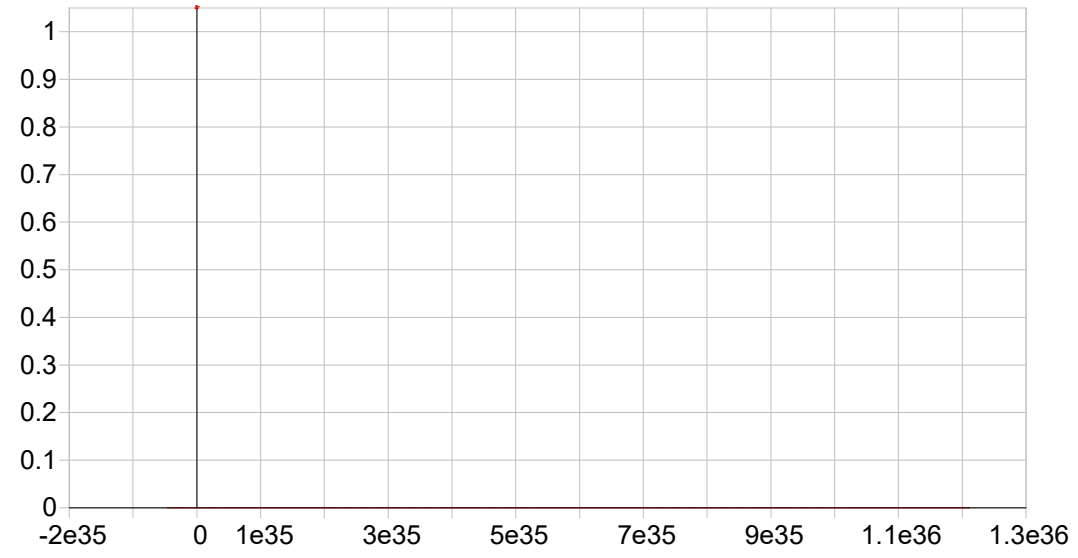
Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011



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	

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

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:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S0 Acquired: 3/12/2025 10:27:06 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	-.00014	-.00003	-.00018	.00072	.00059	-.00013	.04067	-.00016
Stddev	.00007	.00003	.00021	.00006	.00003	.00049	.00189	.00026
%RSD	49.677	95.212	117.59	8.7942	5.9175	362.29	4.6588	156.87
#1	-.00011	.00000	.00002	.00071	.00059	.00023	.04236	-.00046
#2	-.00022	-.00005	-.00016	.00066	.00062	.00006	.03862	.00003
#3	-.00009	-.00004	-.00040	.00079	.00055	-.00069	.04102	-.00007

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	-.00013	.00084	.00007	-.00004	-.00068	.00002	.00043	-.00021
Stddev	.00013	.00030	.00004	.00010	.00014	.00001	.00019	.00008
%RSD	100.41	36.079	60.371	268.47	20.672	78.110	44.673	38.908
#1	-.00019	.00064	.00006	.00003	-.00070	.00003	.00050	-.00013
#2	.00002	.00070	.00003	.00001	-.00053	.00001	.00022	-.00030
#3	-.00021	.00119	.00011	-.00015	-.00081	.00001	.00058	-.00021

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	-.00013	-.00146	.00548	-.00008	.00347	.00042	.00339	.00028
Stddev	.00008	.00008	.00017	.00017	.00018	.00009	.00015	.00012
%RSD	59.269	5.4601	3.0682	218.47	5.2947	21.132	4.4848	42.364
#1	-.00013	-.00138	.00555	.00007	.00353	.00048	.00324	.00036
#2	-.00005	-.00154	.00560	-.00005	.00362	.00046	.00337	.00032
#3	-.00021	-.00147	.00529	-.00026	.00327	.00032	.00355	.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	.00016	.00176	.00057	-.00097	.00037	.00805	.00035
Stddev	.00007	.00025	.00003	.00002	.00002	.00058	.00014
%RSD	42.946	14.181	4.9221	2.5455	4.7808	7.2454	41.444
#1	.00015	.00156	.00056	-.00095	.00037	.00788	.00046
#2	.00023	.00167	.00054	-.00100	.00039	.00870	.00039
#3	.00010	.00204	.00059	-.00097	.00036	.00757	.00019

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S0 Acquired: 3/12/2025 10:27:06 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	3656.9	82611.	14330.	2687.9	5126.3
Stddev	.7	290.	80.	3.8	7.5
%RSD	.01865	.35094	.55842	.14152	.14608
#1	3656.3	82935.	14259.	2688.2	5118.1
#2	3657.6	82377.	14417.	2691.6	5132.9
#3	3656.8	82519.	14316.	2684.0	5127.8

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S1 Acquired: 3/12/2025 10:31:31 Type: Cal
Method: NON EPA-6010-200.7(v2798) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00081	.00240	.00217	.00187	.00657	.01021	.26182	.02377
Stddev	.00016	.00007	.00005	.00006	.00013	.00014	.00081	.00007
%RSD	19.599	2.7288	2.3232	3.4593	1.9078	1.3568	.31096	.28175
#1	.00075	.00246	.00220	.00194	.00672	.01016	.26218	.02369
#2	.00069	.00242	.00220	.00184	.00650	.01010	.26240	.02381
#3	.00099	.00233	.00211	.00182	.00650	.01037	.26089	.02379

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	.01392	.11033	.00130	.02573	.01384	.00050	.01019	.02526
Stddev	.00015	.00037	.00006	.00017	.00020	.00002	.00010	.00021
%RSD	1.0511	.33982	4.3907	.64854	1.4542	4.0412	.94435	.84879
#1	.01376	.10989	.00134	.02590	.01407	.00050	.01023	.02506
#2	.01403	.11054	.00124	.02557	.01370	.00049	.01025	.02522
#3	.01397	.11055	.00132	.02572	.01375	.00053	.01008	.02548

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	.02373	.00113	.06363	.00478	.08368	.01290	.03776	.12981
Stddev	.00028	.00002	.00037	.00014	.00045	.00023	.00042	.00068
%RSD	1.1625	1.4215	.57655	2.9847	.53437	1.8068	1.1118	.52659
#1	.02405	.00112	.06406	.00494	.08324	.01276	.03747	.13043
#2	.02355	.00111	.06342	.00468	.08413	.01276	.03824	.12992
#3	.02359	.00114	.06343	.00471	.08368	.01317	.03756	.12908

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	.00424	.01648	.00294	-.00032	.00081	.02191	.15286
Stddev	.00002	.00002	.00004	.00008	.00010	.00025	.00060
%RSD	.40168	.11026	1.2371	25.152	12.194	1.1243	.39395
#1	.00425	.01648	.00298	-.00023	.00091	.02163	.15240
#2	.00422	.01646	.00294	-.00037	.00071	.02210	.15263
#3	.00424	.01649	.00290	-.00036	.00081	.02200	.15354

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S1 Acquired: 3/12/2025 10:31:31 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	3613.4	79630.	14258.	2604.8	5038.1
Stddev	8.7	246.	72.	11.2	16.7
%RSD	.24191	.30949	.50305	.43031	.33221
#1	3603.8	79631.	14328.	2605.6	5021.7
#2	3615.2	79877.	14263.	2615.6	5037.5
#3	3621.0	79384.	14185.	2593.2	5055.1

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S2 Acquired: 3/12/2025 10:35:52 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	.03671	.05233	.15535	.04147	.09645	.15067	3.4909	.15302
Stddev	.00037	.00020	.00043	.00037	.00025	.00141	.0166	.00015
%RSD	1.0183	.37977	.27432	.90289	.25558	.93408	.47628	.09504
#1	.03628	.05211	.15508	.04120	.09617	.14969	3.4761	.15317
#2	.03693	.05239	.15585	.04189	.09659	.15003	3.4877	.15300
#3	.03693	.05249	.15514	.04130	.09660	.15228	3.5089	.15289

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	.92424	.21292	.02132	.34283	.13150	.00380	.18674	.04564
Stddev	.00221	.00057	.00005	.00061	.00006	.00004	.00108	.00043
%RSD	.23893	.26693	.22640	.17747	.04386	1.1383	.57820	.94740
#1	.92406	.21234	.02131	.34290	.13156	.00377	.18561	.04520
#2	.92653	.21295	.02128	.34340	.13148	.00379	.18685	.04606
#3	.92213	.21347	.02138	.34219	.13145	.00385	.18776	.04567

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	.23599	.04857	.12678	.04802	.76029	.02522	.26376	.51883
Stddev	.00048	.00014	.00057	.00024	.00283	.00015	.00111	.00128
%RSD	.20533	.29512	.45246	.50638	.37214	.57878	.42183	.24753
#1	.23621	.04846	.12655	.04786	.75760	.02509	.26255	.51768
#2	.23632	.04850	.12635	.04790	.76002	.02518	.26474	.52021
#3	.23543	.04873	.12743	.04830	.76324	.02538	.26399	.51861

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	.08263	.29513	.00569	.02611	.01814	.56103	6.0554
Stddev	.00012	.00107	.00003	.00016	.00011	.00315	.0326
%RSD	.13922	.36096	.58973	.60426	.58911	.56095	.53906
#1	.08252	.29403	.00569	.02602	.01812	.55841	6.0306
#2	.08262	.29522	.00572	.02629	.01805	.56016	6.0432
#3	.08275	.29615	.00566	.02602	.01826	.56452	6.0924

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S2 Acquired: 3/12/2025 10:35:52 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	3522.4	79517.	14549.	2502.5	4884.0
Stddev	13.8	122.	39.	6.3	12.7
%RSD	.39090	.15384	.26671	.25037	.26100
#1	3537.9	79657.	14590.	2504.1	4898.5
#2	3511.5	79433.	14514.	2507.9	4874.4
#3	3517.9	79460.	14543.	2495.7	4879.2

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S3 Acquired: 3/12/2025 10:39:57 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	.11780	.16031	.49669	.13110	.30766	.47694	10.837	.46900
Stddev	.00029	.00047	.00129	.00028	.00056	.00145	.187	.00227
%RSD	.24725	.29536	.25963	.21343	.18126	.30354	1.7286	.48465
#1	.11765	.16083	.49522	.13078	.30766	.47527	11.053	.47079
#2	.11814	.15990	.49722	.13130	.30822	.47782	10.738	.46978
#3	.11762	.16019	.49763	.13122	.30711	.47773	10.719	.46644

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	2.9677	.66110	.06806	1.0906	.41106	.01202	.57427	.14186
Stddev	.0066	.00198	.00031	.0014	.00117	.00003	.00215	.00028
%RSD	.22320	.30007	.45058	.13317	.28348	.26579	.37422	.19859
#1	2.9600	.66053	.06842	1.0890	.41014	.01200	.57501	.14185
#2	2.9710	.66331	.06790	1.0918	.41237	.01206	.57595	.14215
#3	2.9719	.65947	.06788	1.0911	.41067	.01200	.57185	.14159

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	.74953	.15400	.40495	.15077	2.3554	.08111	.80562	1.6185
Stddev	.00109	.00042	.00080	.00032	.0129	.00026	.00319	.0031
%RSD	.14487	.26970	.19691	.21436	.54797	.32464	.39630	.19129
#1	.74856	.15447	.40570	.15074	2.3679	.08111	.80780	1.6166
#2	.75070	.15368	.40503	.15111	2.3421	.08085	.80709	1.6221
#3	.74934	.15385	.40411	.15047	2.3563	.08138	.80195	1.6168

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	.26771	.91583	.01766	.08914	.05898	1.7364	18.554
Stddev	.00022	.00173	.00015	.00014	.00005	.0021	.088
%RSD	.08117	.18880	.83085	.15510	.08601	.12088	.47495
#1	.26746	.91732	.01755	.08909	.05892	1.7389	18.502
#2	.26782	.91623	.01759	.08904	.05899	1.7352	18.656
#3	.26785	.91393	.01782	.08930	.05902	1.7352	18.505

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S3 Acquired: 3/12/2025 10:39:57 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	3409.4	77550.	14690.	2378.8	4607.1
Stddev	9.4	103.	54.	8.9	7.8
%RSD	.27531	.13230	.36597	.37567	.16985
#1	3413.5	77432.	14648.	2375.1	4614.4
#2	3398.6	77603.	14671.	2389.0	4598.8
#3	3416.0	77615.	14750.	2372.3	4608.0

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S4 Acquired: 3/12/2025 10:44:12 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	.24349	.32724	1.0159	.27195	.63360	.99444	21.659	.98767
Stddev	.00046	.00787	.0023	.00071	.00209	.00271	.119	.00794
%RSD	.18806	2.4052	.22430	.25925	.33000	.27208	.54729	.80426
#1	.24311	.31834	1.0161	.27124	.63300	.99732	21.791	.98207
#2	.24335	.33012	1.0135	.27197	.63188	.99405	21.622	.99677
#3	.24400	.33327	1.0180	.27265	.63593	.99196	21.562	.98419

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	6.1298	1.3318	.13947	2.2332	.82953	.02407	1.1532	.28862
Stddev	.0125	.0019	.00040	.0040	.00067	.00012	.0035	.00041
%RSD	.20462	.14592	.28944	.17830	.08135	.48939	.30102	.14337
#1	6.1325	1.3319	.13909	2.2357	.83009	.02395	1.1493	.28831
#2	6.1161	1.3337	.13990	2.2286	.82878	.02407	1.1545	.28909
#3	6.1407	1.3298	.13942	2.2352	.82972	.02419	1.1559	.28847

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	1.5264	.31905	.84802	.30853	4.7810	.16457	1.7107	3.2649
Stddev	.0026	.00139	.00448	.00049	.0177	.00049	.0126	.0082
%RSD	.17123	.43649	.52873	.16018	.36990	.29575	.73661	.25167
#1	1.5280	.31753	.85009	.30910	4.7660	.16465	1.7003	3.2604
#2	1.5234	.32025	.84288	.30828	4.8005	.16404	1.7247	3.2600
#3	1.5279	.31939	.85110	.30821	4.7765	.16501	1.7071	3.2744

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	.55410	1.8537	.03578	.18974	.12512	3.5724	37.318
Stddev	.00101	.0007	.00021	.00044	.00031	.0013	.206
%RSD	.18242	.03944	.58489	.22978	.25062	.03714	.55198
#1	.55323	1.8530	.03570	.18935	.12479	3.5715	37.095
#2	.55384	1.8544	.03563	.18966	.12514	3.5718	37.502
#3	.55521	1.8539	.03602	.19021	.12542	3.5739	37.356

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S4 Acquired: 3/12/2025 10:44:12 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	3317.9	74069.	13931.	2270.0	4383.3
Stddev	7.0	93.	58.	1.9	9.3
%RSD	.21242	.12545	.41398	.08428	.21330
#1	3316.7	74159.	13974.	2272.2	4381.1
#2	3325.5	73973.	13865.	2268.7	4393.6
#3	3311.5	74076.	13952.	2269.0	4375.3

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S5 Acquired: 3/12/2025 10:48:23 Type: Cal
Method: NON EPA-6010-200.7(v2798) 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	.49101	.64773	2.0366	.54315	1.2769	2.0406	44.820	1.9467
Stddev	.00126	.00251	.0004	.00070	.0020	.0097	.213	.0071
%RSD	.25656	.38741	.01837	.12851	.15943	.47720	.47589	.36406
#1	.48972	.64901	2.0367	.54253	1.2746	2.0412	44.954	1.9399
#2	.49109	.64484	2.0369	.54301	1.2784	2.0500	44.932	1.9540
#3	.49224	.64935	2.0362	.54391	1.2778	2.0305	44.574	1.9462

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	12.358	2.7258	.27350	4.5288	1.6446	.04861	2.3642	.59268
Stddev	.011	.0150	.00097	.0056	.0030	.00052	.0212	.00286
%RSD	.09108	.55155	.35637	.12442	.18466	1.0673	.89813	.48295
#1	12.352	2.7252	.27450	4.5242	1.6418	.04907	2.3749	.59159
#2	12.371	2.7412	.27344	4.5351	1.6478	.04872	2.3779	.59592
#3	12.350	2.7111	.27256	4.5272	1.6441	.04805	2.3397	.59052

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.0781	.63445	1.7319	.63389	9.4191	.34216	3.3749	6.4986
Stddev	.0047	.00164	.0173	.00385	.0336	.00334	.0132	.0086
%RSD	.15314	.25804	.99998	.60728	.35615	.97587	.39100	.13157
#1	3.0758	.63551	1.7463	.63415	9.4578	.34525	3.3597	6.4899
#2	3.0835	.63526	1.7367	.63761	9.3996	.34261	3.3822	6.5070
#3	3.0750	.63256	1.7127	.62992	9.3998	.33862	3.3829	6.4988

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.1095	3.8308	.07263	.39336	.26019	7.4825	76.687
Stddev	.0009	.0257	.00035	.00054	.00049	.0647	.892
%RSD	.08439	.66976	.48039	.13801	.19014	.86418	1.1626
#1	1.1092	3.8458	.07269	.39273	.25968	7.5213	76.619
#2	1.1087	3.8454	.07294	.39362	.26021	7.5184	77.610
#3	1.1105	3.8012	.07225	.39372	.26067	7.4079	75.831

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: S5 Acquired: 3/12/2025 10:48:23 Type: Cal
Method: NON EPA-6010-200.7(v2798) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3227.1	73657.	13727.	2219.6	4167.6
Stddev	5.8	382.	74.	12.1	3.6
%RSD	.17920	.51895	.54237	.54549	.08683
#1	3232.2	73484.	13772.	2212.4	4170.6
#2	3220.8	73393.	13641.	2212.9	4163.5
#3	3228.3	74095.	13768.	2233.6	4168.5

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICV01 Acquired: 3/12/2025 10:52:41 Type: Unk
Method: NON EPA-6010-200.7(v2798) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.050717	1.086847	1.021092	1.047570	1.017833	2.549211	.5372257
Stddev	.008258	.004072	.005068	.004883	.006094	.004529	.0013904
%RSD	.7859653	.3747036	.4963462	.4660909	.5986771	.1776738	.2588046
#1	1.053653	1.085276	1.018407	1.050492	1.016842	2.547288	.5379388
#2	1.041392	1.083795	1.017931	1.041934	1.012296	2.545961	.5356234
#3	1.057106	1.091471	1.026938	1.050286	1.024361	2.554385	.5381147

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5368993	.5058636	10.00277	.5412939	.5139749	.5321012	10.37472
Stddev	.0041049	.0020765	.02507	.0026080	.0019146	.0031397	.09194
%RSD	.7645546	.4104820	.2505990	.4818103	.3725058	.5900621	.8862068
#1	.5359653	.5055386	10.00683	.5393438	.5138621	.5321577	10.36912
#2	.5333419	.5039687	9.97592	.5442563	.5121192	.5289335	10.46933
#3	.5413908	.5080834	10.02556	.5402817	.5159434	.5352122	10.28570

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5081810	5.903405	.5169687	.2623008	10.29813	.5185340	1.050992
Stddev	.0020023	.048197	.0021024	.0010087	.07517	.0014833	.005547
%RSD	.3940197	.8164221	.4066840	.3845486	.7299064	.2860513	.5277434
#1	.5078952	5.866629	.5170116	.2620277	10.27271	.5184813	1.052454
#2	.5063369	5.885619	.5148451	.2634179	10.38271	.5170778	1.055662
#3	.5103109	5.957967	.5190494	.2614568	10.23897	.5200430	1.044861

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.19338	2.517320	2.484198	2.515332	2.543406	2.427134	2.376847
Stddev	.08701	.017874	.011528	.014275	.007721	.014829	.009267
%RSD	.8535826	.7100225	.4640430	.5675178	.3035523	.6109850	.3898709
#1	10.20488	2.521211	2.483343	2.513196	2.543470	2.417276	2.376805
#2	10.27407	2.497822	2.473122	2.502245	2.535654	2.444188	2.367601
#3	10.10119	2.532928	2.496130	2.530554	2.551095	2.419938	2.386134

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICV01 Acquired: 3/12/2025 10:52:41 Type: Unk
Method: NON EPA-6010-200.7(v2798) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.397953	2.572529	2.683548
Stddev	.014968	.009061	.044283
%RSD	.6241880	.3522158	1.650163
#1	2.396155	2.575492	2.646621
#2	2.383965	2.562357	2.671379
#3	2.413738	2.579737	2.732643

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3423.347	75754.29	15040.05	2301.813	4699.829
Stddev	16.614	354.24	119.31	10.842	20.118
%RSD	.4853111	.4676139	.7932626	.4710094	.4280555
#1	3426.537	75951.16	15053.73	2305.420	4703.833
#2	3438.136	75345.35	15151.93	2289.628	4717.644
#3	3405.370	75966.37	14914.50	2310.392	4678.011

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: LLICV01 Acquired: 3/12/2025 10:56:50 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	.0221884	.0416108	.0116638	.0174763	.0506743	.1097194
Stddev	.0014384	.0013138	.0010988	.0020094	.0021405	.0004329
%RSD	6.482676	3.157287	9.420543	11.49796	4.224030	.3945721
#1	.0209858	.0418437	.0119371	.0172435	.0494458	.1092202
#2	.0237818	.0427925	.0126001	.0155935	.0531459	.1099468
#3	.0217976	.0401961	.0104541	.0195920	.0494312	.1099913

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0891569	.0057984	.0058286	1.960534	.0106088	.0292835
Stddev	.0005123	.0000602	.0000508	.001127	.0001667	.0002034
%RSD	.5745622	1.038561	.8716006	.0574683	1.571528	.6944095
#1	.0895090	.0058644	.0058846	1.959549	.0107055	.0293790
#2	.0893925	.0057465	.0058155	1.961763	.0107046	.0294216
#3	.0885692	.0057843	.0057856	1.960292	.0104163	.0290500

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0228666	.1136299	.0195068	2.063991	.0386873	.0109869
Stddev	.0005707	.0014030	.0001309	.006839	.0001085	.0003985
%RSD	2.495623	1.234669	.6708753	.3313643	.2803408	3.627257
#1	.0223921	.1120386	.0196055	2.063851	.0388123	.0107126
#2	.0234998	.1141628	.0193584	2.070899	.0386313	.0108040
#3	.0227080	.1146884	.0195566	2.057223	.0386183	.0114440

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.048697	.0400044	.0425837	1.929463	.1112076	.2105049
Stddev	.011173	.0006172	.0007254	.032178	.0011091	.0010273
%RSD	.5453756	1.542735	1.703554	1.667694	.9973586	.4880096
#1	2.049056	.0394662	.0417470	1.900991	.1124453	.2093579
#2	2.037348	.0406780	.0429681	1.964373	.1108736	.2108166
#3	2.059686	.0398689	.0430361	1.923026	.1103038	.2113402

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: LLICV01 Acquired: 3/12/2025 10:56:50 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	.0399947	.0393072	.3563862	F .0148717	F .0139653	.0165698
Stddev	.0001666	.0009563	.0057968	.0011651	.0014519	.0002883
%RSD	.4166649	2.432846	1.626562	7.834516	10.39656	1.739943
#1	.0398179	.0400934	.3535160	.0136747	.0140694	.0168957
#2	.0401488	.0395857	.3525845	.0149385	.0124641	.0164658
#3	.0400173	.0382426	.3630582	.0160021	.0153623	.0163479

Elem	Sr4077
Units	ppm
Avg	.0194086
Stddev	.0001163
%RSD	.5993408
#1	.0195267
#2	.0194049
#3	.0192942

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3419.685	76509.48	15027.34	2283.828	4887.924
Stddev	4.101	211.29	6.20	1.233	7.891
%RSD	.1199228	.2761650	.0412663	.0539770	.1614307
#1	3422.682	76577.39	15034.00	2282.505	4885.744
#2	3415.011	76678.46	15026.30	2284.033	4881.353
#3	3421.362	76272.58	15021.73	2284.945	4896.676

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICB01 Acquired: 3/12/2025 11:01:08 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	.0013099	-.001491	.0002479	-.001787	-.001663	.0075258	-.005002
Stddev	.0006524	.000877	.0005180	.001016	.000216	.0047694	.000552
%RSD	49.80345	58.82666	208.9466	56.85254	12.98751	63.37346	11.03215
#1	.0015721	-.002472	-.000161	-.000627	-.001449	.0024687	-.005534
#2	.0005672	-.001216	.000074	-.002213	-.001881	.0081659	-.005041
#3	.0017904	-.000784	.000831	-.002520	-.001659	.0119429	-.004432

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000370	.0000577	.0038459	-.000177	.0001968	.0000317	-.001262
Stddev	.0000510	.0000450	.0039280	.000127	.0001398	.0004370	.001722
%RSD	138.0529	77.99120	102.1354	71.42467	71.01692	1378.233	136.4336
#1	.0000931	.0000673	.0077791	-.000303	.0003575	.0000845	-.003048
#2	-.000007	.0000972	-.000077	-.000050	.0001040	.0004400	.000389
#3	.000025	.0000087	.003835	-.000179	.0001289	-.000429	-.001129

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000643	.0081910	-.000049	.0005991	-.033913	.0004477	.0004602
Stddev	.000212	.0080649	.000126	.0001862	.001006	.0001899	.0001256
%RSD	32.93744	98.46072	260.3042	31.08448	2.965983	42.42225	27.29143
#1	-.000847	.0174170	.000059	.0007203	-.032790	.0003379	.0006046
#2	-.000655	.0046751	-.000017	.0003847	-.034217	.0006669	.0003760
#3	-.000425	.0024809	-.000188	.0006924	-.034731	.0003381	.0004002

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.068048	.0026263	-.000042	-.000555	.0007784	-.044698	-.002907
Stddev	.003458	.0005634	.000062	.000347	.0002360	.004582	.000944
%RSD	5.081161	21.45051	148.2478	62.61474	30.31933	10.25205	32.45743
#1	-.065245	.0027422	-.000039	-.000837	.0007591	-.049304	-.002037
#2	-.066987	.0020140	-.000105	-.000167	.0010234	-.040139	-.002775
#3	-.071912	.0031228	.000019	-.000660	.0005526	-.044650	-.003910

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICB01 Acquired: 3/12/2025 11:01:08 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	-.005042	-.003628	-.000023
Stddev	.001649	.000654	.000072
%RSD	32.71469	18.02868	308.4517
#1	-.004623	-.003914	-.000083
#2	-.003642	-.004091	-.000044
#3	-.006861	-.002880	.000057

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3413.036	78581.61	14877.70	2278.089	4946.488
Stddev	7.047	181.97	43.57	12.099	6.018
%RSD	.2064651	.2315728	.2928638	.5311177	.1216698
#1	3405.635	78778.87	14828.08	2290.412	4939.560
#2	3413.809	78545.67	14909.74	2266.226	4950.420
#3	3419.665	78420.28	14895.27	2277.630	4949.485

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CRI01 Acquired: 3/12/2025 11:05:28 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	.0200801	.0421270	.0108879	.0183255	.0518728	.1065205
Stddev	.0017712	.0005735	.0015416	.0008933	.0009290	.0012875
%RSD	8.820895	1.361326	14.15845	4.874653	1.790835	1.208645
#1	.0184090	.0425740	.0125630	.0173014	.0510133	.1074694
#2	.0198945	.0414804	.0105721	.0189438	.0517468	.1050550
#3	.0219368	.0423266	.0095288	.0187315	.0528583	.1070370

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0888259	.0055338	.0058487	1.938138	.0103366	.0292939
Stddev	.0003788	.0000159	.0000515	.005662	.0001874	.0001287
%RSD	.4264144	.2880465	.8798664	.2921153	1.812676	.4391748
#1	.0891979	.0055188	.0058770	1.937618	.0101324	.0294259
#2	.0888390	.0055321	.0058798	1.944042	.0105006	.0292869
#3	.0884407	.0055506	.0057893	1.932755	.0103769	.0291689

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226358	.0986921	.0191818	2.032646	.0388859	.0110873
Stddev	.0001899	.0009373	.0002886	.003515	.0002732	.0002919
%RSD	.8391098	.9496786	1.504527	.1729491	.7025463	2.632658
#1	.0224968	.0995077	.0190182	2.032279	.0385761	.0113196
#2	.0225583	.0976682	.0195150	2.036330	.0390923	.0111825
#3	.0228522	.0989003	.0190122	2.029328	.0389894	.0107597

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.099453	.0393630	.0423058	1.966018	.0932869	.2093583
Stddev	.017198	.0006705	.0002964	.029198	.0001408	.0003537
%RSD	.8191434	1.703361	.7005198	1.485146	.1509214	.1689269
#1	2.119311	.0398067	.0419724	1.996742	.0931254	.2097618
#2	2.089588	.0396906	.0424057	1.938633	.0933521	.2092110
#3	2.089459	.0385917	.0425393	1.962680	.0933833	.2091021

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CRI01 Acquired: 3/12/2025 11:05:28 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	.0396780	.0385341	.3572147	F .0140194	F .0156726	F .0144498
Stddev	.0005452	.0005144	.0033334	.0018703	.0016777	.0011116
%RSD	1.374137	1.335003	.9331540	13.34053	10.70458	7.692831
#1	.0403073	.0379449	.3563145	.0140103	.0152027	.0140940
#2	.0393478	.0388942	.3609058	.0121537	.0175351	.0156958
#3	.0393789	.0387632	.3544239	.0158942	.0142799	.0135597

Elem	Sr4077
Units	ppm
Avg	.0191457
Stddev	.0000117
%RSD	.0608881
#1	.0191398
#2	.0191591
#3	.0191382

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3360.614	75985.13	15395.09	2238.678	4778.125
Stddev	10.688	388.67	101.61	4.308	9.213
%RSD	.3180318	.5115093	.6599865	.1924211	.1928066
#1	3348.566	75548.96	15496.54	2233.817	4767.926
#2	3364.323	76111.68	15293.33	2240.192	4780.607
#3	3368.953	76294.76	15395.39	2242.023	4785.843

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSA01 Acquired: 3/12/2025 11:09:46 Type: Unk
Method: NON EPA-6010-200.7(v2798) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057795	.0075553	.0059908	-.015801	-.005276	249.0658
Stddev	.0028562	.0025486	.0007074	.004289	.003402	1.5879
%RSD	49.41993	33.73254	11.80877	27.14313	64.47987	.6375466
#1	.0090732	.0102924	.0065072	-.011188	-.001591	250.2063
#2	.0039867	.0071232	.0062808	-.019667	-.008297	247.2522
#3	.0042784	.0052505	.0051845	-.016549	-.005938	249.7389

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014253	.0012199	-.003496	231.6802	.0600039	.0017853
Stddev	.0003061	.0000465	.000074	.9358	.0005390	.0001855
%RSD	21.47563	3.808933	2.128183	.4039272	.8983232	10.39073
#1	.0015603	.0012734	-.003549	232.4506	.0602487	.0018298
#2	.0016408	.0011961	-.003529	230.6388	.0593859	.0015816
#3	.0010750	.0011901	-.003411	231.9512	.0603771	.0019445

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072552	104.2142	.0027988	248.7386	.0016202	.0005751
Stddev	.0003115	.6907	.0005714	.8985	.0004300	.0003715
%RSD	4.293946	.6627787	20.41497	.3612362	26.53852	64.59829
#1	.0069328	104.9739	.0021802	248.6600	.0019631	.0006386
#2	.0075546	103.6240	.0029097	247.8819	.0017597	.0009107
#3	.0072781	104.0449	.0033067	249.6738	.0011378	.0001759

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0413736	.0040468	.0069513	-.008244	F -.112072	.0001234
Stddev	.0147870	.0003979	.0002312	.011951	.002961	.0002979
%RSD	35.74017	9.831458	3.326321	144.9627	2.641947	241.3176
#1	.0397745	.0037566	.0067825	-.020886	-.108816	-.000090
#2	.0274511	.0038835	.0072148	-.006717	-.112795	-.000004
#3	.0568951	.0045003	.0068565	.002870	-.114604	.000464

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSA01 Acquired: 3/12/2025 11:09:46 Type: Unk
Method: NON EPA-6010-200.7(v2798) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002340	-.001218	-.023635	-.002748	F -.021775	.0013627
Stddev	.001524	.000149	.000449	.002516	.002578	.0009252
%RSD	65.14064	12.22588	1.901696	91.54040	11.83876	67.89789
#1	-.003165	-.001364	-.023286	-.001624	-.024403	.0020550
#2	-.003272	-.001066	-.023477	-.000991	-.021673	.0003118
#3	-.000581	-.001225	-.024142	-.005630	-.019250	.0017211

Elem	Sr4077
Units	ppm
Avg	F .0962691
Stddev	.0006149
%RSD	.6386766
#1	.0969030
#2	.0956752
#3	.0962291

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3016.275	66635.65	14617.59	2010.268	3857.253
Stddev	4.357	144.48	57.87	3.650	7.803
%RSD	.1444558	.2168212	.3958872	.1815833	.2022891
#1	3011.641	66548.49	14592.18	2012.926	3851.484
#2	3020.290	66802.42	14683.81	2006.106	3866.131
#3	3016.894	66556.03	14576.77	2011.773	3854.144

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSAB01 Acquired: 3/12/2025 11:14:11 Type: Unk
Method: NON EPA-6010-200.7(v2798) 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	.1162459	.1076940	.0523380	.0341979	.6300756	239.2544
Stddev	.0052503	.0029950	.0019501	.0010796	.0043504	14.1175
%RSD	4.516536	2.781008	3.725956	3.156983	.6904512	5.900622
#1	.1199751	.1079458	.0543874	.0353992	.6252382	249.6676
#2	.1185208	.1045810	.0505053	.0333087	.6336672	223.1860
#3	.1102418	.1105551	.0521214	.0338857	.6313214	244.9094

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4543256	.4669305	1.004118	220.2602	.5945447	.5109850
Stddev	.0297941	.0253370	.001596	13.9551	.0039085	.0009383
%RSD	6.557867	5.426292	.1589679	6.335728	.6573889	.1836233
#1	.4761375	.4866314	1.002306	230.4127	.5908130	.5111445
#2	.4203791	.4383485	1.004730	204.3470	.5986087	.5099772
#3	.4664602	.4758115	1.005317	226.0209	.5942125	.5118333

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5092420	101.5188	.4508260	236.5746	1.002963	.2257953
Stddev	.0010840	.8489	.0299778	14.8679	.000523	.0019329
%RSD	.2128741	.8361690	6.649531	6.284668	.0521119	.8560429
#1	.5083430	101.2454	.4723234	247.5490	1.003307	.2235736
#2	.5089372	100.8403	.4165812	219.6538	1.003220	.2270914
#3	.5104458	102.4707	.4635733	242.5210	1.002361	.2267209

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0436195	.4565547	1.077794	-.044719	F .8347094	1.111830
Stddev	.0085472	.0263889	.010424	.032805	.0353070	.003008
%RSD	19.59500	5.780006	.9671620	73.35883	4.229859	.2705706
#1	.0380322	.4773375	1.066156	-.080624	.8588161	1.108357
#2	.0393674	.4268649	1.080951	-.037221	.7941826	1.113493
#3	.0534588	.4654619	1.086275	-.016312	.8511294	1.113640

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSAB01 Acquired: 3/12/2025 11:14:11 Type: Unk
Method: NON EPA-6010-200.7(v2798) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.101800	.9789385	1.021118	F .0001176	F -.024810	F .0026799
Stddev	.002545	.0622752	.002091	.0017427	.001466	.0019086
%RSD	.2309699	6.361503	.2047376	1481.856	5.909820	71.21707
#1	1.102112	1.023609	1.019590	.0011515	-.025855	.0004765
#2	1.104174	.907802	1.020264	-.001894	-.023134	.0038159
#3	1.099113	1.005405	1.023501	.001096	-.025441	.0037475

Elem	Sr4077
Units	ppm
Avg	F .0914073
Stddev	.0059081
%RSD	6.463465
#1	.0955711
#2	.0846454
#3	.0940054

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2995.150	66529.82	14995.93	1990.957	3851.091
Stddev	8.787	408.57	838.84	19.629	5.027
%RSD	.2933886	.6141096	5.593759	.9858950	.1305429
#1	3002.872	66989.47	14367.11	2012.430	3854.594
#2	2996.990	66207.98	15948.37	1986.500	3853.348
#3	2985.588	66392.00	14672.31	1973.939	3845.331

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSADLX20 Acquired: 3/12/2025 11:21:21 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012719	-.001021	.0002573	-.005631	-.000721	12.66479	-.006144
Stddev	.0024672	.002206	.0012295	.001993	.000831	.02143	.000944
%RSD	193.9820	215.9496	477.8223	35.38573	115.3333	.1692131	15.36744
#1	.0040842	-.000641	.0010668	-.004162	-.001069	12.67195	-.005247
#2	-.000529	.000970	-.001157	-.004833	-.001321	12.64069	-.006057
#3	.000260	-.003392	.000863	-.007899	.000228	12.68171	-.007129

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001566	-.000154	11.90569	.0031714	.0002149	.0005272	4.979147
Stddev	.0000204	.000061	.02229	.0001842	.0001912	.0003435	.012860
%RSD	13.00388	39.72162	.1872577	5.809045	88.92941	65.14657	.2582849
#1	.0001450	-.000205	11.88871	.0029882	.0000506	.0004598	4.976021
#2	.0001448	-.000086	11.89743	.0031695	.0001695	.0002225	4.968137
#3	.0001802	-.000171	11.93094	.0033567	.0004247	.0008994	4.993282

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000381	12.25489	.0000025	.0008363	-.021700	.0011640	.0008001
Stddev	.000256	.02732	.0001676	.0001777	.002078	.0012919	.0004084
%RSD	67.27655	.2229630	6738.150	21.24263	9.574475	110.9889	51.03891
#1	-.000376	12.26115	-.000170	.0006691	-.019319	.0026552	.0004414
#2	-.000127	12.22497	.000164	.0010228	-.022638	.0004533	.0012445
#3	-.000639	12.27853	.000013	.0008170	-.023144	.0003834	.0007144

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.117526	-.013428	.0000094	-.000693	.0009346	-.047788	-.005689
Stddev	.010420	.000374	.0001803	.000214	.0008720	.002694	.002254
%RSD	8.866429	2.782695	1907.225	30.88084	93.30557	5.637681	39.61241
#1	-.125089	-.013534	.0001822	-.000862	.0012555	-.047745	-.004924
#2	-.105640	-.013012	.0000236	-.000766	-.000052	-.050504	-.008226
#3	-.121849	-.013737	-.000177	-.000452	.001601	-.045116	-.003918

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSADLX20 Acquired: 3/12/2025 11:21:21 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.005519	-.004907	.0047947
Stddev	.001715	.001009	.0000776
%RSD	31.08080	20.55822	1.618870
#1	-.004472	-.004629	.0048687
#2	-.004586	-.006026	.0047139
#3	-.007499	-.004066	.0048015

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3316.113	73462.50	14663.63	2145.467	4684.828
Stddev	6.438	44.93	32.82	13.305	5.063
%RSD	.1941365	.0611664	.2238227	.6201614	.1080778
#1	3309.391	73413.87	14634.09	2134.311	4680.257
#2	3322.223	73502.48	14698.96	2160.193	4683.956
#3	3316.723	73471.15	14657.83	2141.897	4690.271

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSABDLX20 Acquired: 3/12/2025 11:25:38 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0031210	.0050915	.0019708	-.003818	.0297654	12.73115	.0178418
Stddev	.0031434	.0005185	.0017116	.000630	.0006093	.02366	.0009651
%RSD	100.7156	10.18296	86.84758	16.51324	2.046920	.1858094	5.409282
#1	.0032770	.0050901	.0026563	-.004476	.0301885	12.73358	.0173005
#2	-.000097	.0045737	.0000227	-.003758	.0300406	12.70638	.0189560
#3	.006184	.0056106	.0032333	-.003219	.0290671	12.75350	.0172688

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0252962	.0514410	12.00660	.0309137	.0259038	.0276460	5.054236
Stddev	.0002144	.0001183	.04091	.0007443	.0000689	.0005984	.022857
%RSD	.8475227	.2300526	.3407488	2.407557	.2661343	2.164381	.4522278
#1	.0254310	.0513185	12.03842	.0315650	.0259307	.0275937	5.076452
#2	.0250490	.0515548	11.96045	.0310738	.0259552	.0270755	5.055466
#3	.0254087	.0514496	12.02093	.0301025	.0258254	.0282688	5.030788

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0242190	12.32777	.0515415	.0118074	-.030711	.0255350	.0562076
Stddev	.0001498	.04370	.0003544	.0002390	.006593	.0009507	.0006858
%RSD	.6184210	.3544999	.6876635	2.023745	21.46780	3.723293	1.220072
#1	.0243902	12.28373	.0513750	.0120819	-.025414	.0251547	.0568723
#2	.0241118	12.32846	.0513011	.0116945	-.038095	.0266170	.0555025
#3	.0241551	12.37112	.0519486	.0116458	-.028625	.0248333	.0562482

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.105756	.0389198	.0584498	.0564518	.0533356	.0039099	-.006234
Stddev	.010839	.0013606	.0004358	.0008619	.0001747	.0039217	.001101
%RSD	10.24890	3.496015	.7456581	1.526760	.3276331	100.3037	17.66038
#1	-.118154	.0399427	.0582791	.0559112	.0532209	.0083082	-.007228
#2	-.098077	.0373756	.0581251	.0574458	.0535367	.0026443	-.005051
#3	-.101036	.0394411	.0589451	.0559986	.0532492	.0007772	-.006424

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: ICSABDLX20 Acquired: 3/12/2025 11:25:38 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.003600	-.004129	.0047801
Stddev	.004852	.000553	.0000337
%RSD	134.7955	13.39272	.7055797
#1	-.000040	-.003547	.0047940
#2	-.001632	-.004647	.0047416
#3	-.009127	-.004191	.0048046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3264.925	73964.14	14864.17	2159.656	4582.541
Stddev	7.340	299.22	24.91	7.022	9.119
%RSD	.2248149	.4045527	.1676171	.3251624	.1989932
#1	3273.143	73697.61	14852.22	2155.370	4593.070
#2	3259.021	73907.01	14892.81	2155.837	4577.368
#3	3262.611	74287.82	14847.48	2167.760	4577.186

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV01 Acquired: 3/12/2025 11:29:51 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.211991	5.015481	5.062300	4.997678	5.041986	10.03519	9.300786
Stddev	.005706	.057166	.008647	.017756	.014094	.01226	.088918
%RSD	.1094838	1.139796	.1708116	.3552817	.2795366	.1221873	.9560309
#1	5.206852	5.079118	5.060152	4.996120	5.036242	10.04791	9.344004
#2	5.210989	4.998851	5.054930	4.980752	5.031670	10.03420	9.198520
#3	5.218132	4.968473	5.071819	5.016161	5.058045	10.02345	9.359835

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2442363	2.465015	23.81095	1.052485	2.459061	1.259754	4.786042
Stddev	.0010176	.006725	.09101	.003939	.007950	.004174	.023243
%RSD	.4166252	.2728019	.3822230	.3742260	.3232819	.3313059	.4856385
#1	.2430762	2.464919	23.71233	1.054818	2.456151	1.257272	4.812879
#2	.2446551	2.458338	23.82880	1.054699	2.452977	1.257417	4.772880
#3	.2449776	2.471786	23.89171	1.047937	2.468056	1.264572	4.772367

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.350109	23.78453	2.449253	1.256965	26.20896	2.432009	2.534750
Stddev	.005528	.10881	.009531	.004910	.26527	.004869	.012296
%RSD	.2352430	.4574639	.3891426	.3905927	1.012142	.2001929	.4850902
#1	2.349847	23.67182	2.446393	1.260740	26.47815	2.426478	2.547765
#2	2.344717	23.79282	2.441479	1.258740	26.20095	2.433903	2.533158
#3	2.355764	23.88896	2.459886	1.251414	25.94778	2.435646	2.523328

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.12724	4.874880	5.064826	5.025773	4.751765	5.217918	4.895639
Stddev	.19660	.029196	.010226	.018792	.007995	.015325	.013298
%RSD	.8148578	.5989055	.2019038	.3739042	.1682479	.2936987	.2716198
#1	24.34029	4.841952	5.060145	5.034492	4.752720	5.235423	4.885398
#2	24.08859	4.885081	5.057778	5.004206	4.743336	5.211408	4.890851
#3	23.95282	4.897607	5.076555	5.038622	4.759240	5.206923	4.910667

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV01 Acquired: 3/12/2025 11:29:51 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	4.796329	4.743881	4.768053
Stddev	.020052	.012043	.007958
%RSD	.4180676	.2538612	.1668974
#1	4.801466	4.757787	4.761613
#2	4.774209	4.736946	4.776949
#3	4.813313	4.736911	4.765597

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3209.006	71967.68	13849.26	2119.839	4307.122
Stddev	3.458	262.44	58.61	11.554	6.230
%RSD	.1077464	.3646676	.4231900	.5450650	.1446417
#1	3211.911	71715.62	13912.61	2106.872	4308.211
#2	3209.925	71948.04	13838.19	2123.603	4312.735
#3	3205.182	72239.40	13796.97	2129.042	4300.419

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB01 Acquired: 3/12/2025 11:34:02 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0017913	-.002097	-.001192	-.005564	.0002742	.0063387	-.004102
Stddev	.0010339	.001085	.001742	.001782	.0011055	.0025990	.000293
%RSD	57.71878	51.73825	146.1855	32.01859	403.1912	41.00242	7.149025
#1	.0016385	-.001051	-.000274	-.007585	-.000943	.0093370	-.003787
#2	.0008422	-.002022	-.000100	-.004221	.000550	.0049538	-.004149
#3	.0028930	-.003218	-.003201	-.004887	.001215	.0047255	-.004368

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000221	.0000509	.0023603	-.000141	.0000671	.0001342	.0104766
Stddev	.0000322	.0000769	.0052563	.000271	.0002061	.0003051	.0015795
%RSD	145.8598	151.1294	222.7015	191.5810	307.3416	227.3301	15.07673
#1	.0000573	.0001230	.0082463	.000169	.0002749	.0004142	.0123002
#2	-.000006	-.000030	-.001865	-.000266	-.000137	-.000191	.0095346
#3	.000015	.000060	.000700	-.000327	.000064	.000179	.0095950

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000472	-.000488	-.000048	.0002972	-.034534	-.000402	.0002547
Stddev	.000237	.002748	.000132	.0000721	.008518	.000525	.0004594
%RSD	50.21848	562.9727	274.7492	24.25217	24.66639	130.8143	180.3939
#1	-.000254	.000004	.000100	.0002314	-.040738	-.000073	-.000270
#2	-.000437	.001981	-.000089	.0003743	-.038042	-.001008	.000452
#3	-.000724	-.003448	-.000155	.0002861	-.024822	-.000124	.000583

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.122611	.0051111	.0001344	-.000137	.0015550	-.044021	-.004907
Stddev	.002465	.0006658	.0001944	.000218	.0005840	.002381	.001640
%RSD	2.010502	13.02607	144.6711	159.8905	37.55791	5.409846	33.42940
#1	-.122905	.0057825	.0003574	-.000384	.0011234	-.041284	-.003038
#2	-.120012	.0044511	.0000448	-.000057	.0022195	-.045618	-.006107
#3	-.124916	.0050996	.0000009	.000031	.0013220	-.045161	-.005576

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB01 Acquired: 3/12/2025 11:34:02 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.008308	-.003708	.0003751
Stddev	.001627	.000428	.0000132
%RSD	19.58748	11.54889	3.519802
#1	-.007459	-.003825	.0003895
#2	-.010184	-.004066	.0003635
#3	-.007281	-.003234	.0003724

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3351.531	76450.97	14850.95	2245.221	4829.815
Stddev	8.736	242.07	49.37	5.891	14.210
%RSD	.2606471	.3166322	.3324157	.2623901	.2942226
#1	3361.508	76632.99	14815.50	2251.877	4845.422
#2	3347.831	76543.67	14830.00	2243.111	4826.400
#3	3345.255	76176.25	14907.33	2240.676	4817.623

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167037BL Acquired: 3/12/2025 11:38:21 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.000595	-.001491	.0002883	-.008058	-.001139	.0056455	-.006957
Stddev	.001776	.001817	.0021736	.000478	.001382	.0029570	.000194
%RSD	298.6082	121.8572	753.8521	5.928059	121.3677	52.37769	2.782246
#1	-.001824	-.000425	.0022860	-.007794	-.001348	.0087413	-.006898
#2	-.001401	-.003590	.0006053	-.007771	-.002405	.0028503	-.007173
#3	.001441	-.000460	-.002026	-.008609	.000336	.0053449	-.006800

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000417	.0000071	.0015952	-.000347	.0000871	.0000718	-.001960
Stddev	.0000330	.0001155	.0059957	.000359	.0001061	.0002728	.003740
%RSD	79.16347	1626.808	375.8657	103.5221	121.7897	380.0759	190.8201
#1	.0000397	.0000435	-.003173	-.000296	.0002034	-.000068	-.004039
#2	.0000097	.0001000	.008326	-.000728	.0000625	-.000102	.002358
#3	.0000757	-.000122	-.000368	-.000016	-.000005	.000386	-.004198

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000484	.0151366	-.000374	.0006824	-.039767	.0003913	-.000043
Stddev	.000188	.0144686	.000071	.0002127	.003602	.0009464	.000342
%RSD	38.77291	95.58661	19.05179	31.16299	9.057665	241.8647	796.2171
#1	-.000534	.0040203	-.000307	.0005428	-.036536	.0010499	-.000315
#2	-.000276	.0314957	-.000449	.0005773	-.043651	-.000693	.000340
#3	-.000641	.0098939	-.000367	.0009272	-.039115	.000817	-.000154

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.168798	-.003796	.0000597	.0000257	.0005718	-.045200	-.004409
Stddev	.016654	.000611	.0000494	.0004359	.0006182	.004541	.002041
%RSD	9.866286	16.09152	82.79294	1696.328	108.1167	10.04666	46.27595
#1	-.185488	-.004417	.0001155	-.000475	.0012142	-.049941	-.005585
#2	-.152180	-.003195	.0000218	.000318	-.000019	-.044768	-.005590
#3	-.168727	-.003777	.0000417	.000235	.000520	-.040890	-.002053

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167037BL Acquired: 3/12/2025 11:38:21 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.006585	-.005201	-.000068
Stddev	.002669	.000813	.000032
%RSD	40.53721	15.63387	46.17196
#1	-.009424	-.004450	-.000032
#2	-.004127	-.005087	-.000081
#3	-.006203	-.006065	-.000091

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3324.453	75347.58	15117.56	2190.643	4810.936
Stddev	4.905	208.72	41.52	7.483	2.531
%RSD	.1475292	.2770084	.2746475	.3416066	.0526107
#1	3327.988	75109.59	15100.70	2186.292	4811.227
#2	3326.517	75433.65	15087.12	2186.353	4813.310
#3	3318.854	75499.50	15164.86	2199.284	4808.273

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167037BS Acquired: 3/12/2025 11:42:41 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8233577	2.008873	.9774475	1.990975	.8256929	1.963676
Stddev	.0041464	.011012	.0031780	.004244	.0031958	.006838
%RSD	.5035978	.5481502	.3251325	.2131706	.3870404	.3482125
#1	.8210239	1.996208	.9770997	1.990853	.8230480	1.967797
#2	.8209041	2.016178	.9744576	1.986794	.8247867	1.955783
#3	.8281451	2.014234	.9807851	1.995279	.8292439	1.967448

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1763484	.1843368	.1909032	.9677100	.4276409	.1939617
Stddev	.0005258	.0005425	.0008253	.0061926	.0019231	.0008668
%RSD	.2981448	.2943189	.4323212	.6399194	.4497088	.4469121
#1	.1769375	.1838516	.1905979	.9733024	.4298040	.1930628
#2	.1759268	.1849226	.1902740	.9610548	.4269947	.1940301
#3	.1761809	.1842363	.1918376	.9687727	.4261242	.1947924

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3138106	2.966757	.1853022	1.846428	.4834428	.0768172
Stddev	.0010278	.010048	.0001062	.014256	.0018181	.0002363
%RSD	.3275082	.3386769	.0572872	.7720637	.3760625	.3076477
#1	.3135632	2.978235	.1853469	1.842490	.4820476	.0770875
#2	.3129291	2.962480	.1853787	1.862238	.4827820	.0767144
#3	.3149394	2.959555	.1851810	1.834555	.4854988	.0766497

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.156191	.2864989	.2068381	9.637316	.2632788	.4138307
Stddev	.026879	.0025562	.0004972	.062605	.0013183	.0014967
%RSD	.8516298	.8922045	.2403861	.6496052	.5007102	.3616647
#1	3.180772	.2858589	.2065544	9.699466	.2627371	.4128323
#2	3.127489	.2843235	.2074122	9.638215	.2647815	.4131082
#3	3.160311	.2893142	.2065477	9.574267	.2623175	.4155515

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167037BS Acquired: 3/12/2025 11:42:41 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6985020	.1875626	.8049966	5.587026	F -.016263	.1876214
Stddev	.0029186	.0004749	.0107007	.025275	.000693	.0006078
%RSD	.4178351	.2532044	1.329289	.4523956	4.260674	.3239722
#1	.6989777	.1871207	.8161694	5.560277	-.016387	.1883194
#2	.6953747	.1875023	.8039800	5.590290	-.015517	.1873364
#3	.7011534	.1880648	.7948405	5.610510	-.016886	.1872084

Elem	Sr4077
Units	ppm
Avg	.1879061
Stddev	.0004404
%RSD	.2343655
#1	.1884135
#2	.1876236
#3	.1876811

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3260.084	73979.15	14943.11	2148.795	4628.885
Stddev	10.667	183.85	43.02	4.816	16.089
%RSD	.3272088	.2485106	.2878691	.2241168	.3475823
#1	3262.073	73773.37	14975.26	2150.477	4633.974
#2	3269.616	74127.21	14894.25	2143.364	4641.814
#3	3248.561	74036.86	14959.82	2152.544	4610.866

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166981BL Acquired: 3/12/2025 11:46:43 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0008618	-.002373	.0006679	-.007013	-.000757	.0043759	-.007596
Stddev	.0010451	.001390	.0014878	.003175	.000996	.0015829	.000485
%RSD	121.2654	58.60319	222.7476	45.26614	131.5944	36.17371	6.380190
#1	.0020681	-.003665	-.000698	-.003803	-.000434	.0045564	-.007044
#2	.0002295	-.000901	.000449	-.010151	-.001874	.0058609	-.007950
#3	.0002878	-.002552	.002253	-.007085	.000038	.0027105	-.007795

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000094	.0000032	.0011813	.0000622	.0000887	-.000043	-.002636
Stddev	.0000620	.0000373	.0080101	.0002910	.0000596	.000105	.003957
%RSD	656.2753	1180.549	678.0960	467.4179	67.19959	244.9048	150.1221
#1	.0000769	-.000037	-.006941	.0003658	.0000533	.000072	-.003269
#2	-.000045	.000011	.001411	-.000214	.0000553	-.000135	-.006238
#3	-.000003	.000036	.009074	.000035	.0001576	-.000066	.001600

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000691	.0029147	.0001398	.0010479	-.045049	.0005807	.0000512
Stddev	.000035	.0165513	.0002113	.0001142	.006204	.0007392	.0003150
%RSD	5.108276	567.8666	151.1431	10.89566	13.77193	127.2933	615.4939
#1	-.000675	.0185046	.0002704	.0009594	-.052114	.0000090	.0000798
#2	-.000667	.0046936	-.000104	.0011768	-.040490	.0003176	.0003510
#3	-.000732	-.014454	.000253	.0010076	-.042543	.0014154	-.000277

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.148899	-.005250	.0000072	-.000195	.0001477	-.051492	-.003339
Stddev	.015573	.000585	.0000606	.000272	.0002245	.000692	.000772
%RSD	10.45869	11.13467	847.3430	139.7763	151.9870	1.343236	23.10935
#1	-.158229	-.005752	-.000050	-.000049	.0001831	-.051299	-.002465
#2	-.130921	-.004608	.000001	-.000509	.0003525	-.050917	-.003626
#3	-.157546	-.005388	.000071	-.000027	-.000092	-.052259	-.003926

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166981BL Acquired: 3/12/2025 11:46:43 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.005029	-.004901	-.000040
Stddev	.002439	.000522	.000033
%RSD	48.49026	10.64665	81.70881
#1	-.003134	-.005391	-.000023
#2	-.007780	-.004352	-.000020
#3	-.004173	-.004959	-.000078

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3291.490	75134.05	14967.04	2172.840	4768.940
Stddev	8.076	288.78	42.65	6.214	12.362
%RSD	.2453674	.3843516	.2849358	.2859705	.2592144
#1	3284.238	75365.17	15011.86	2172.912	4756.520
#2	3290.040	75226.64	14926.96	2179.017	4769.057
#3	3300.194	74810.33	14962.32	2166.590	4781.243

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166981BS Acquired: 3/12/2025 11:51:03 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8155722	1.993249	.9738332	1.966081	.8167610	1.969288
Stddev	.0044193	.027853	.0019637	.004980	.0022709	.010484
%RSD	.5418625	1.397365	.2016418	.2532967	.2780377	.5323793
#1	.8205890	1.983036	.9722903	1.971832	.8161978	1.964616
#2	.8122553	1.971944	.9731657	1.963240	.8148246	1.981296
#3	.8138722	2.024767	.9760436	1.963172	.8192605	1.961952

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1716938	.1941025	.1900735	.9681129	.4197032	.1937184
Stddev	.0006618	.0010151	.0001205	.0098743	.0002910	.0001911
%RSD	.3854419	.5229524	.0633969	1.019950	.0693281	.0986485
#1	.1713692	.1937675	.1899932	.9774128	.4199229	.1936984
#2	.1724552	.1952427	.1900153	.9691758	.4193732	.1935380
#3	.1712570	.1932972	.1902121	.9577503	.4198134	.1939186

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3122311	2.826677	.1863327	1.854201	.4831998	.0761320
Stddev	.0005561	.010889	.0010355	.024320	.0002696	.0001148
%RSD	.1780929	.3852288	.5557267	1.311624	.0557895	.1507698
#1	.3120594	2.838064	.1869086	1.855839	.4829135	.0760000
#2	.3117811	2.825600	.1869522	1.877660	.4832370	.0762086
#3	.3128527	2.816366	.1851373	1.829102	.4834488	.0761873

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.995561	.2872074	.2059089	9.046157	.2745798	.4106299
Stddev	.016265	.0021736	.0010819	.019073	.0011125	.0018534
%RSD	.5429843	.7568167	.5254511	.2108426	.4051698	.4513530
#1	3.002099	.2847555	.2062906	9.041142	.2742918	.4113777
#2	2.977044	.2888980	.2067483	9.030092	.2758080	.4085194
#3	3.007540	.2879686	.2046878	9.067236	.2736396	.4119925

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166981BS Acquired: 3/12/2025 11:51:03 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6939950	.1862557	F .7529862	5.597950	F -.015376	.1870878
Stddev	.0015932	.0009952	.0082169	.008513	.001013	.0006235
%RSD	.2295757	.5343046	1.091242	.1520718	6.586043	.3332765
#1	.6935284	.1873880	.7556644	5.593151	-.016403	.1875526
#2	.6926872	.1858592	.7437644	5.592921	-.014379	.1873316
#3	.6957695	.1855199	.7595299	5.607779	-.015345	.1863792

Elem	Sr4077
Units	ppm
Avg	.1854332
Stddev	.0009659
%RSD	.5208786
#1	.1858559
#2	.1861156
#3	.1843280

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3290.076	74930.79	14251.90	2192.186	4660.722
Stddev	4.976	96.15	84.80	12.471	4.658
%RSD	.1512426	.1283130	.5950167	.5688806	.0999456
#1	3286.995	74819.84	14274.48	2188.388	4665.101
#2	3295.817	74989.60	14158.10	2182.055	4661.237
#3	3287.417	74982.93	14323.13	2206.114	4655.827

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167038BL Acquired: 3/12/2025 11:55:05 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.001459	-.001622	.0001260	-.007175	-.001639	.0061712	-.006188
Stddev	.001283	.001663	.0014798	.000671	.000416	.0016124	.000608
%RSD	87.98145	102.5436	1174.273	9.354020	25.36178	26.12790	9.832310
#1	-.001139	.000295	-.000093	-.007924	-.001163	.0079226	-.005714
#2	-.002872	-.002473	.001703	-.006629	-.001929	.0058427	-.006874
#3	-.000365	-.002688	-.001232	-.006971	-.001826	.0047484	-.005976

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000304	-.000036	.0004664	.0001678	-.000005	.0001396	.0218663
Stddev	.0000093	.000022	.0010534	.0001603	.000022	.0003918	.0017419
%RSD	30.61216	61.71864	225.8247	95.53881	445.2493	280.7313	7.966088
#1	.0000208	-.000048	.0004941	.0003405	-.000013	-.000310	.0206453
#2	.0000393	-.000010	-.000600	.0001392	.000020	.000409	.0238610
#3	.0000311	-.000050	.001506	.0000237	-.000022	.000320	.0210926

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000292	-.005111	-.000169	.0007520	-.057417	.0008562	.0000708
Stddev	.000159	.008201	.000491	.0001024	.004332	.0006423	.0004525
%RSD	54.36314	160.4471	291.0070	13.62072	7.544877	75.01172	639.2789
#1	-.000127	-.012033	-.000428	.0008692	-.062400	.0015093	-.000444
#2	-.000445	-.007248	.000398	.0007071	-.054542	.0008340	.000407
#3	-.000305	.003946	-.000477	.0006797	-.055309	.0002254	.000249

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.163211	-.006410	-.000030	-.000306	.0007255	-.051690	-.006196
Stddev	.008231	.000564	.000062	.000490	.0004421	.004660	.000943
%RSD	5.043220	8.799810	207.9564	159.9034	60.94076	9.016283	15.21440
#1	-.172395	-.006292	-.000007	-.000691	.0002245	-.048285	-.005933
#2	-.156498	-.005915	.000018	.000245	.0008908	-.057001	-.005412
#3	-.160740	-.007025	-.000099	-.000473	.0010610	-.049783	-.007242

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167038BL Acquired: 3/12/2025 11:55:05 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.009127	-.004628	-.000048
Stddev	.002991	.000239	.000012
%RSD	32.77519	5.173747	24.95978
#1	-.008345	-.004390	-.000041
#2	-.012431	-.004627	-.000061
#3	-.006603	-.004869	-.000040

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3376.256	76615.47	14498.87	2225.130	4908.782
Stddev	6.120	304.22	52.10	12.656	7.239
%RSD	.1812675	.3970750	.3593134	.5687691	.1474729
#1	3380.611	76707.85	14445.33	2218.568	4916.079
#2	3369.259	76862.78	14501.88	2239.719	4901.602
#3	3378.898	76275.76	14549.40	2217.102	4908.665

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167038BS Acquired: 3/12/2025 11:59:25 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7930344	1.932349	.9505510	1.917055	.7972995	2.032594
Stddev	.0016833	.008295	.0020575	.011494	.0036545	.000831
%RSD	.2122579	.4292552	.2164573	.5995504	.4583577	.0408747
#1	.7935964	1.924386	.9501373	1.912882	.7939212	2.033195
#2	.7911421	1.931721	.9487317	1.908230	.7967990	2.032941
#3	.7943649	1.940940	.9527839	1.930052	.8011785	2.031646

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1721208	.1853853	.1847678	1.026402	.4171125	.1886750
Stddev	.0005955	.0005231	.0005551	.011337	.0021609	.0006256
%RSD	.3459577	.2821765	.3004356	1.104565	.5180661	.3315669
#1	.1720934	.1859806	.1844519	1.039396	.4167237	.1883245
#2	.1715396	.1851759	.1844428	1.018527	.4151724	.1883032
#3	.1727295	.1849992	.1854088	1.021282	.4194414	.1893972

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3046700	2.896225	.1847016	1.839498	.4696946	.0757565
Stddev	.0012689	.021705	.0006768	.014745	.0012968	.0000386
%RSD	.4164733	.7494093	.3664387	.8015998	.2760898	.0509558
#1	.3041196	2.892854	.1839646	1.838790	.4691320	.0757360
#2	.3037692	2.876404	.1848451	1.825120	.4687742	.0757324
#3	.3061211	2.919418	.1852952	1.854586	.4711777	.0758010

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.042405	.2825828	.2104607	9.261050	.2628815	.4054361
Stddev	.038628	.0014186	.0013422	.085859	.0013438	.0015278
%RSD	1.269664	.5020026	.6377688	.9270967	.5111684	.3768209
#1	3.002995	.2813374	.2094249	9.219285	.2643679	.4039071
#2	3.044019	.2841269	.2099801	9.204065	.2625236	.4054385
#3	3.080201	.2822840	.2119771	9.359801	.2617528	.4069626

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167038BS Acquired: 3/12/2025 11:59:25 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6746370	.1837968	.7801640	5.372749	F -.013812	.1843153
Stddev	.0029580	.0002709	.0014982	.021254	.001551	.0007547
%RSD	.4384658	.1473673	.1920411	.3955917	11.22852	.4094347
#1	.6721667	.1835017	.7809848	5.357164	-.013900	.1837774
#2	.6738294	.1838547	.7810724	5.364123	-.015317	.1851780
#3	.6779150	.1840340	.7784347	5.396960	-.012219	.1839907

Elem	Sr4077
Units	ppm
Avg	.1843976
Stddev	.0004031
%RSD	.2185930
#1	.1839433
#2	.1845371
#3	.1847124

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3320.270	74015.73	14653.70	2155.312	4743.232
Stddev	11.217	208.00	28.68	9.391	16.007
%RSD	.3378359	.2810160	.1957035	.4357025	.3374704
#1	3325.292	74130.64	14624.99	2163.248	4753.620
#2	3328.098	74140.91	14653.78	2157.744	4751.278
#3	3307.419	73775.63	14682.34	2144.945	4724.799

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167024BL Acquired: 3/12/2025 12:03:27 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0007086	-.000970	-.000486	-.006202	-.001141	.0065622	-.007259
Stddev	.0005919	.000164	.001091	.001896	.001320	.0019330	.000632
%RSD	83.52941	16.86505	224.5492	30.57703	115.6518	29.45678	8.708553
#1	.0001742	-.001157	-.000716	-.007473	-.001313	.0053318	-.007659
#2	.0006067	-.000901	-.001442	-.004022	.000256	.0087902	-.006530
#3	.0013448	-.000853	.000702	-.007111	-.002367	.0055646	-.007588

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000313	-.000016	-.000835	.0000238	.0000455	.0002385	-.001246
Stddev	.0000378	.000060	.007350	.0002660	.0003982	.0000844	.003656
%RSD	120.5082	362.5546	880.6884	1118.252	874.6234	35.37318	293.5007
#1	.0000142	.000046	.001570	.0002511	.0002268	.0003309	.002954
#2	.0000052	-.000022	-.009085	-.000269	-.000411	.0001656	-.003725
#3	.0000746	-.000073	.005011	.000089	.000321	.0002189	-.002966

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000635	-.000647	-.000315	.0008736	-.057029	.0016966	-.000017
Stddev	.000222	.003583	.000247	.0001849	.009939	.0003656	.000084
%RSD	34.98439	553.5991	78.52166	21.16190	17.42742	21.54943	506.8854
#1	-.000453	.000783	-.000432	.0006707	-.057411	.0020800	-.000042
#2	-.000571	.001999	-.000482	.0010325	-.066772	.0016580	-.000085
#3	-.000883	-.004724	-.000031	.0009175	-.046905	.0013518	.000077

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.171959	-.006960	-.000046	-.000116	.0006043	-.053636	-.005644
Stddev	.030507	.000735	.000104	.000169	.0002610	.003951	.001015
%RSD	17.74096	10.56625	227.2674	145.9280	43.19182	7.366637	17.97929
#1	-.204091	-.007627	-.000100	.000074	.0006483	-.053225	-.006633
#2	-.143390	-.007083	.000074	-.000250	.0008406	-.049906	-.004605
#3	-.168395	-.006171	-.000111	-.000170	.0003241	-.057777	-.005694

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167024BL Acquired: 3/12/2025 12:03:27 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.008729	-.005405	-.000062
Stddev	.000928	.000796	.000021
%RSD	10.63039	14.73158	33.63237
#1	-.008150	-.005125	-.000038
#2	-.008238	-.004786	-.000069
#3	-.009799	-.006303	-.000078

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3392.810	74650.20	14649.88	2162.476	4943.815
Stddev	128.618	241.50	54.76	5.496	197.717
%RSD	3.790904	.3235138	.3737634	.2541338	3.999277
#1	3322.906	74419.86	14711.32	2156.131	4836.966
#2	3314.281	74901.50	14606.22	2165.711	4822.513
#3	3541.241	74629.24	14632.11	2165.586	5171.967

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167024BS Acquired: 3/12/2025 12:07:47 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8163786	1.987846	.9682583	1.971099	.8174182	2.019176
Stddev	.0044910	.026808	.0069968	.010788	.0022507	.005794
%RSD	.5501116	1.348592	.7226161	.5472892	.2753401	.2869620
#1	.8114299	1.976889	.9697586	1.972359	.8174292	2.019305
#2	.8175105	1.968252	.9606331	1.959737	.8151620	2.024904
#3	.8201953	2.018397	.9743833	1.981201	.8196634	2.013318

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1712682	.1879312	.1889368	.9668149	.4215878	.1922111
Stddev	.0013330	.0008220	.0007038	.0038326	.0014605	.0011085
%RSD	.7783378	.4374022	.3724853	.3964148	.3464266	.5767057
#1	.1722680	.1872641	.1886601	.9684042	.4200876	.1915786
#2	.1717818	.1888495	.1884134	.9624434	.4216706	.1915636
#3	.1697547	.1876800	.1897368	.9695972	.4230051	.1934910

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3116252	2.849663	.1842085	1.818969	.4782306	.0751718
Stddev	.0008009	.023376	.0003939	.024162	.0021602	.0001970
%RSD	.2570212	.8203073	.2138414	1.328312	.4517011	.2620455
#1	.3116903	2.859433	.1846620	1.839679	.4779232	.0753698
#2	.3107936	2.822986	.1839522	1.824803	.4762406	.0751698
#3	.3123916	2.866568	.1840111	1.792425	.4805280	.0749758

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.030907	.2842163	.2081305	9.114790	.2682407	.4111331
Stddev	.015169	.0030354	.0005338	.053025	.0020563	.0017935
%RSD	.5004834	1.067972	.2564938	.5817455	.7665864	.4362409
#1	3.045182	.2870538	.2081196	9.111514	.2661131	.4115000
#2	3.014979	.2845793	.2086697	9.063479	.2702173	.4091845
#3	3.032562	.2810157	.2076022	9.169377	.2683917	.4127148

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167024BS Acquired: 3/12/2025 12:07:47 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6915435	.1843091	.7609704	5.522597	F -.014091	.1854955
Stddev	.0019816	.0013923	.0052816	.031881	.002820	.0003850
%RSD	.2865464	.7553889	.6940593	.5772816	20.01347	.2075543
#1	.6924719	.1837872	.7665045	5.510517	-.011710	.1858377
#2	.6892682	.1858869	.7559840	5.498522	-.013358	.1850786
#3	.6928905	.1832533	.7604227	5.558753	-.017205	.1855701

Elem	Sr4077
Units	ppm
Avg	.1847422
Stddev	.0004137
%RSD	.2239184
#1	.1848959
#2	.1850570
#3	.1842737

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3277.217	75055.74	14590.97	2180.111	4661.728
Stddev	8.691	213.31	28.37	6.958	18.140
%RSD	.2652071	.2842011	.1944031	.3191357	.3891279
#1	3283.207	74954.03	14611.68	2174.380	4669.737
#2	3281.195	75300.87	14558.64	2178.100	4674.486
#3	3267.248	74912.32	14602.60	2187.852	4640.962

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167100BL Acquired: 3/12/2025 12:11:49 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0001089	-.002177	.0002770	-.006721	-.002114	.0081696	-.005900
Stddev	.0009644	.000311	.0005772	.002320	.000941	.0012440	.000554
%RSD	885.3719	14.29837	208.3236	34.52269	44.54044	15.22700	9.394642
#1	-.000810	-.001856	-.000074	-.004095	-.001722	.0082889	-.006012
#2	.001113	-.002197	.000943	-.008493	-.001432	.0093496	-.005298
#3	.000023	-.002477	-.000038	-.007576	-.003188	.0068702	-.006389

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000078	.0000649	-.001649	-.000088	-.000010	-.000271	.0058615
Stddev	.0000240	.0000393	.003363	.000246	.000149	.000197	.0021733
%RSD	306.5081	60.51191	203.9252	279.4599	1554.111	72.46908	37.07713
#1	-.000014	.0000330	-.001552	-.000077	.000162	-.000462	.0060252
#2	.000004	.0000528	-.005060	.000152	-.000081	-.000069	.0079483
#3	.000034	.0001088	.001664	-.000339	-.000110	-.000282	.0036110

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000639	.0189005	-.000121	.0008462	-.046615	.0011306	.0002336
Stddev	.000339	.0064720	.000209	.0003371	.003112	.0018082	.0001569
%RSD	53.05246	34.24224	172.5441	39.83745	6.675444	159.9287	67.18815
#1	-.000810	.0127320	.000014	.0009167	-.047979	.0020101	.0002859
#2	-.000859	.0256383	-.000362	.0004794	-.048811	-.000949	.0000572
#3	-.000249	.0183313	-.000015	.0011424	-.043054	.002331	.0003577

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.149983	-.007482	.0000222	-.000462	.0005208	-.050137	-.003963
Stddev	.016268	.000333	.0003122	.000727	.0006726	.000238	.001011
%RSD	10.84666	4.447022	1403.065	157.3396	129.1630	.4738515	25.51313
#1	-.155268	-.007706	.0003528	.000236	.0012022	-.050315	-.004601
#2	-.162952	-.007641	-.000267	-.001216	-.000143	-.050228	-.002797
#3	-.131730	-.007100	-.000019	-.000408	.000503	-.049867	-.004491

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167100BL Acquired: 3/12/2025 12:11:49 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.006086	-.005631	-.000049
Stddev	.003086	.000545	.000028
%RSD	50.70566	9.686152	57.60781
#1	-.009341	-.005117	-.000021
#2	-.003202	-.006204	-.000078
#3	-.005716	-.005573	-.000048

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3381.540	75469.00	14822.51	2231.045	4934.275
Stddev	.320	115.44	42.84	3.305	3.958
%RSD	.0094632	.1529624	.2890018	.1481418	.0802108
#1	3381.623	75337.31	14818.11	2227.229	4929.711
#2	3381.810	75516.95	14782.03	2232.876	4936.764
#3	3381.186	75552.74	14867.37	2233.029	4936.350

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167100BS Acquired: 3/12/2025 12:16:09 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8139288	2.041022	.9656800	1.959344	.8102365	1.933682
Stddev	.0037236	.012763	.0050319	.017166	.0079924	.001231
%RSD	.4574801	.6253236	.5210698	.8761274	.9864268	.0636507
#1	.8097520	2.026316	.9609892	1.940084	.8010077	1.932369
#2	.8169008	2.047539	.9650562	1.973034	.8148334	1.934810
#3	.8151337	2.049211	.9709948	1.964914	.8148683	1.933869

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1759747	.1856637	.1886728	.9699093	.4158661	.1920389
Stddev	.0010895	.0003637	.0008532	.0044865	.0014545	.0005855
%RSD	.6191226	.1959086	.4522093	.4625641	.3497449	.3048957
#1	.1753088	.1860115	.1879754	.9712022	.4142614	.1915620
#2	.1772320	.1852859	.1884189	.9736073	.4162395	.1918623
#3	.1753832	.1856938	.1896241	.9649184	.4170975	.1926924

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3117894	2.919648	.1854806	1.844615	.4788293	.0758773
Stddev	.0015521	.013342	.0008426	.014377	.0011808	.0002074
%RSD	.4978049	.4569851	.4543018	.7793980	.2466023	.2733531
#1	.3100004	2.920311	.1845102	1.860209	.4778570	.0760159
#2	.3125908	2.905986	.1860277	1.831888	.4784878	.0756388
#3	.3127769	2.932646	.1859038	1.841748	.4801433	.0759771

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.011748	.2833805	.2039260	9.401898	.2627073	.4092558
Stddev	.030345	.0017492	.0001893	.048983	.0014512	.0020092
%RSD	1.007567	.6172782	.0928080	.5209856	.5523862	.4909435
#1	2.978334	.2828896	.2038365	9.349829	.2643791	.4069372
#2	3.019319	.2853228	.2037980	9.447061	.2617738	.4104856
#3	3.037591	.2819292	.2041434	9.408805	.2619688	.4103446

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167100BS Acquired: 3/12/2025 12:16:09 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6862001	.1849005	F .7687722	5.534785	F -.013931	.1866749
Stddev	.0034984	.0005706	.0055466	.019299	.003464	.0003291
%RSD	.5098164	.3085935	.7214930	.3486804	24.86257	.1762961
#1	.6824995	.1847865	.7646396	5.513071	-.017313	.1864638
#2	.6866475	.1855195	.7750760	5.541305	-.010391	.1865069
#3	.6894532	.1843956	.7666009	5.549979	-.014089	.1870541

Elem	Sr4077
Units	ppm
Avg	.1865059
Stddev	.0004388
%RSD	.2352537
#1	.1861999
#2	.1870085
#3	.1863091

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3276.500	74677.65	14791.73	2194.860	4649.362
Stddev	15.424	184.68	22.93	9.609	19.574
%RSD	.4707396	.2473030	.1550456	.4378147	.4210070
#1	3293.620	74834.14	14767.22	2200.500	4664.170
#2	3272.194	74724.87	14812.66	2200.315	4656.745
#3	3263.687	74473.95	14795.31	2183.764	4627.170

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV02 Acquired: 3/12/2025 12:20:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.147470	5.229271	5.009847	5.183221	5.234664	10.14425	9.178384
Stddev	.019388	.025472	.012562	.012095	.019954	.01769	.083118
%RSD	.3766416	.4870987	.2507536	.2333544	.3811931	.1743418	.9055873
#1	5.130596	5.225052	5.002774	5.173286	5.221257	10.15602	9.094924
#2	5.143165	5.206172	5.002415	5.179687	5.225140	10.15281	9.261156
#3	5.168648	5.256589	5.024351	5.196689	5.257596	10.12391	9.179070

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2453522	2.479648	23.77916	1.070981	2.469946	1.276717	4.889016
Stddev	.0017367	.007996	.05943	.001143	.007441	.003659	.018172
%RSD	.7078552	.3224704	.2499354	.1066942	.3012433	.2865909	.3716818
#1	.2454472	2.476398	23.81199	1.069787	2.465676	1.273342	4.905215
#2	.2470396	2.473788	23.81494	1.072065	2.465625	1.276205	4.869367
#3	.2435700	2.488757	23.71055	1.071091	2.478538	1.280606	4.892465

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.323050	23.86934	2.458288	1.282168	26.85309	2.433731	2.603233
Stddev	.008876	.02318	.006338	.002907	.15973	.007010	.002513
%RSD	.3820906	.0971273	.2578305	.2267444	.5948381	.2880354	.0965276
#1	2.327382	23.87401	2.456052	1.279169	26.88369	2.436808	2.602758
#2	2.328929	23.88984	2.453371	1.282361	26.68028	2.438677	2.600992
#3	2.312840	23.84418	2.465441	1.284974	26.99532	2.425709	2.605950

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.67712	4.888971	5.167458	5.125917	4.771747	5.130513	4.970545
Stddev	.16270	.030251	.019650	.017479	.015540	.050065	.013274
%RSD	.6593000	.6187497	.3802555	.3409842	.3256732	.9758377	.2670557
#1	24.72237	4.883427	5.155189	5.116188	4.783486	5.089246	4.967680
#2	24.49659	4.921610	5.157062	5.115469	4.777631	5.116083	4.958937
#3	24.81241	4.861876	5.190121	5.146095	4.754124	5.186208	4.985018

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV02 Acquired: 3/12/2025 12:20:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	4.896776	4.759937	4.783456
Stddev	.014339	.015517	.008874
%RSD	.2928264	.3259981	.1855156
#1	4.884811	4.776030	4.791139
#2	4.892848	4.758712	4.785486
#3	4.912670	4.745068	4.773743

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3200.253	70919.11	14005.53	2062.144	4321.243
Stddev	10.666	165.52	66.36	5.629	11.305
%RSD	.3332752	.2333947	.4738417	.2729503	.2616068
#1	3207.618	70929.71	13989.31	2066.489	4329.288
#2	3205.120	71079.08	13948.77	2064.158	4326.124
#3	3188.022	70748.55	14078.50	2055.786	4308.318

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB02 Acquired: 3/12/2025 12:24:22 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0003676	-.000587	.0002223	-.007239	-.001966	.0039951	-.006779
Stddev	.0020547	.000917	.0004934	.000885	.000479	.0015771	.001247
%RSD	558.9470	156.1728	221.9697	12.21982	24.33960	39.47659	18.39309
#1	-.000847	-.000736	-.000219	-.006228	-.001476	.0058148	-.008183
#2	-.000790	.000395	.000130	-.007623	-.001990	.0031477	-.005801
#3	.002740	-.001422	.000755	-.007867	-.002432	.0030228	-.006354

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000312	.0000112	.0057545	-.000159	.0000285	.0002112	-.004860
Stddev	.0000548	.0000436	.0015646	.000238	.0001602	.0002299	.001741
%RSD	175.7313	389.2623	27.18849	149.6689	562.5759	108.8641	35.82754
#1	.0000446	-.000014	.0067600	-.000122	.0001779	-.000047	-.002852
#2	-.000029	-.000013	.0065517	.000058	.0000483	.000286	-.005783
#3	.000078	.000062	.0039519	-.000413	-.000141	.000394	-.005946

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000465	-.000530	-.000043	.0006742	-.046376	.0004442	.0001435
Stddev	.000108	.009061	.000151	.0000823	.005136	.0011293	.0002988
%RSD	23.22549	1711.168	347.9497	12.20979	11.07503	254.2191	208.2334
#1	-.000345	.009913	-.000168	.0005934	-.052078	.0013773	-.000053
#2	-.000554	-.006311	-.000086	.0007579	-.044938	.0007665	.000487
#3	-.000496	-.005190	.000124	.0006713	-.042113	-.000811	-.000004

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.130265	.0036471	.0002093	-.000220	.0009159	-.044504	-.003428
Stddev	.011287	.0010222	.0000738	.000318	.0010622	.002351	.001054
%RSD	8.664762	28.02701	35.27404	144.5331	115.9655	5.282040	30.75426
#1	-.130019	.0047404	.0001443	-.000148	-.000307	-.046952	-.004584
#2	-.141674	.0034856	.0001940	.000056	.001610	-.044296	-.003181
#3	-.119104	.0027153	.0002896	-.000568	.001445	-.042264	-.002519

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB02 Acquired: 3/12/2025 12:24:22 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.007591	-.003828	.0000680
Stddev	.000233	.000599	.0000124
%RSD	3.065980	15.65117	18.25388
#1	-.007515	-.004518	.0000577
#2	-.007405	-.003438	.0000646
#3	-.007852	-.003529	.0000818

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3327.320	74517.09	14735.01	2139.400	4855.765
Stddev	2.833	113.23	57.77	3.077	4.095
%RSD	.0851305	.1519493	.3920461	.1438202	.0843381
#1	3330.576	74640.51	14740.47	2138.653	4858.609
#2	3325.962	74418.01	14789.85	2136.765	4851.072
#3	3325.423	74492.76	14674.70	2142.782	4857.616

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166977BL Acquired: 3/12/2025 12:28:41 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0011590	-.001668	-.000124	-.008628	-.001475	.0118674	-.004121
Stddev	.0009156	.000226	.000257	.001639	.001069	.0008887	.000951
%RSD	79.00561	13.54238	206.9739	18.99069	72.50314	7.488343	23.07508
#1	.0009903	-.001878	.000071	-.009890	-.002631	.0109050	-.005213
#2	.0021472	-.001429	-.000028	-.009218	-.000520	.0120402	-.003473
#3	.0003394	-.001697	-.000415	-.006776	-.001274	.0126570	-.003677

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000809	.0000772	-.001201	.0000888	.0001280	.0003101	.0046459
Stddev	.0000015	.0000694	.004435	.0004884	.0001788	.0003472	.0014188
%RSD	1.799304	89.91012	369.2622	549.7265	139.6633	111.9554	30.53998
#1	.0000802	.0001015	-.002371	.0004109	.0001159	.0006254	.0042082
#2	.0000799	.0001312	.003702	-.000473	.0003125	.0003669	.0034974
#3	.0000826	-.000001	-.004934	.000329	-.000044	-.000062	.0062320

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000472	.0139921	.0000281	.0006389	-.058988	-.000235	.0003613
Stddev	.000160	.0089181	.0002119	.0002422	.001399	.001001	.0003669
%RSD	33.90515	63.73640	755.1851	37.91186	2.372444	426.1304	101.5305
#1	-.000583	.0107919	-.000035	.0007358	-.059100	-.000365	.0000758
#2	-.000543	.0240687	-.000145	.0008177	-.060328	-.001165	.0007751
#3	-.000289	.0071157	.000264	.0003633	-.057535	.000825	.0002331

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.143126	-.002100	-.000003	.0004539	.0009455	-.047011	-.002817
Stddev	.010718	.000563	.000287	.0005688	.0001863	.006311	.000509
%RSD	7.488782	26.80637	9046.768	125.3051	19.70390	13.42418	18.08552
#1	-.130831	-.001738	-.000335	.0005956	.0008302	-.051151	-.002677
#2	-.150505	-.001813	.000174	.0009385	.0008459	-.050135	-.002392
#3	-.148041	-.002749	.000151	-.000172	.0011604	-.039748	-.003382

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166977BL Acquired: 3/12/2025 12:28:41 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.007896	-.003881	-.000008
Stddev	.001877	.000759	.000033
%RSD	23.76864	19.54590	437.3379
#1	-.006193	-.003063	-.000032
#2	-.009908	-.004561	-.000021
#3	-.007587	-.004020	.000030

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3361.611	74908.51	14975.11	2186.335	4909.179
Stddev	8.134	434.82	53.85	9.986	12.608
%RSD	.2419618	.5804706	.3596104	.4567587	.2568233
#1	3355.509	75120.83	15035.02	2194.048	4896.979
#2	3370.845	74408.31	14959.60	2175.055	4922.159
#3	3358.478	75196.37	14930.72	2189.902	4908.399

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166977BS Acquired: 3/12/2025 12:33:00 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7887548	2.032166	.9445980	1.910604	.7895351	1.957822
Stddev	.0271560	.059380	.0337088	.059052	.0287141	.003457
%RSD	3.442900	2.922024	3.568587	3.090738	3.636835	.1765581
#1	.8072595	2.068075	.9667790	1.946090	.8055144	1.953886
#2	.7575792	1.963626	.9058076	1.842436	.7563860	1.959216
#3	.8014258	2.064799	.9612075	1.943286	.8067048	1.960365

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1754876	.1913484	.1842732	.9721801	.4213778	.1882717
Stddev	.0004646	.0004529	.0067355	.0056662	.0016322	.0070303
%RSD	.2647501	.2366829	3.655171	.5828329	.3873395	3.734136
#1	.1752663	.1910351	.1883984	.9727585	.4205028	.1925681
#2	.1760215	.1911425	.1765006	.9662469	.4203698	.1801585
#3	.1751750	.1918677	.1879206	.9775349	.4232609	.1920884

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3044442	2.933468	.1863606	1.886984	.4699095	.0773136
Stddev	.0109821	.016873	.0008904	.005151	.0171987	.0001296
%RSD	3.607249	.5751894	.4777784	.2729907	3.660002	.1675928
#1	.3105696	2.922730	.1860538	1.892406	.4803030	.0774478
#2	.2917656	2.952916	.1873638	1.886391	.4500575	.0771892
#3	.3109975	2.924758	.1856642	1.882155	.4793680	.0773039

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.057817	.2874931	.2093770	9.381013	.2725935	.4042851
Stddev	.008448	.0025215	.0004148	.045729	.0012944	.0142643
%RSD	.2762672	.8770558	.1980914	.4874657	.4748599	3.528268
#1	3.064897	.2848197	.2098288	9.418810	.2711273	.4129987
#2	3.060088	.2878310	.2092886	9.394047	.2730749	.3878236
#3	3.048466	.2898286	.2090135	9.330182	.2735782	.4120331

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166977BS Acquired: 3/12/2025 12:33:00 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6661542	.1870326	.7813716	5.328256	F -.014771	.1885261
Stddev	.0258278	.0008737	.0081537	.196371	.002496	.0012769
%RSD	3.877158	.4671503	1.043512	3.685461	16.90010	.6773255
#1	.6832194	.1861305	.7816751	5.433568	-.012748	.1891715
#2	.6364400	.1870924	.7893693	5.101693	-.014005	.1893515
#3	.6788032	.1878749	.7730704	5.449507	-.017561	.1870553

Elem	Sr4077
Units	ppm
Avg	.1875561
Stddev	.0002804
%RSD	.1494845
#1	.1878388
#2	.1875516
#3	.1872781

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3413.811	74393.37	14665.96	2186.762	4874.351
Stddev	105.184	236.06	57.30	8.280	156.389
%RSD	3.081129	.3173177	.3907120	.3786262	3.208406
#1	3349.130	74329.41	14699.12	2185.837	4777.724
#2	3535.179	74654.82	14698.95	2195.466	5054.781
#3	3357.124	74195.87	14599.79	2178.985	4790.546

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166963BL Acquired: 3/12/2025 12:37:02 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0022709	-.001821	-.000121	-.007547	-.001437	.0034332	-.005097
Stddev	.0021090	.001759	.000240	.001197	.000973	.0033459	.000900
%RSD	92.86965	96.59636	199.3313	15.86709	67.70127	97.45821	17.66571
#1	.0000408	-.003305	-.000377	-.006188	-.002553	.0072236	-.004298
#2	.0025389	.000122	.000100	-.008005	-.000770	.0021859	-.004920
#3	.0042332	-.002279	-.000084	-.008448	-.000987	.0008900	-.006073

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000198	.0000023	-.002455	-.000099	-.000116	.0001766	.0061132
Stddev	.0000212	.0001106	.002913	.000657	.000140	.0002080	.0019466
%RSD	106.7832	4885.874	118.6414	667.1632	120.6979	117.8095	31.84194
#1	-.000001	.0000373	-.005666	.000461	-.000196	-.000063	.0077066
#2	.000041	-.000122	.000019	.000065	-.000198	.000282	.0066894
#3	.000019	.000091	-.001720	-.000822	.000046	.000311	.0039436

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000337	.0106143	-.000169	.0006981	-.055377	.0007405	-.000003
Stddev	.000181	.0106798	.000335	.0000790	.002651	.0008544	.000377
%RSD	53.80246	100.6170	198.5737	11.32169	4.786676	115.3825	12786.08
#1	-.000163	.0149859	.000195	.0006151	-.057958	-.000114	-.000017
#2	-.000324	.0184146	-.000464	.0007725	-.052662	.001595	-.000373
#3	-.000524	-.001558	-.000237	.0007068	-.055512	.000740	.000381

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.137224	-.005813	-.000237	-.000358	.0009551	-.052820	-.005437
Stddev	.014959	.000374	.000139	.000360	.0005026	.006202	.001291
%RSD	10.90114	6.426755	58.42085	100.7336	52.61689	11.74223	23.74975
#1	-.134654	-.006223	-.000355	-.000265	.0012668	-.059655	-.003954
#2	-.123716	-.005721	-.000085	-.000756	.0003754	-.051255	-.006311
#3	-.153301	-.005493	-.000272	-.000053	.0012233	-.047550	-.006048

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166963BL Acquired: 3/12/2025 12:37:02 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.007386	-.003880	-.000047
Stddev	.001776	.000862	.000033
%RSD	24.05086	22.23048	70.35719
#1	-.007061	-.004669	-.000013
#2	-.005795	-.002959	-.000048
#3	-.009302	-.004011	-.000079

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3353.363	75420.37	14987.24	2200.296	4877.948
Stddev	10.924	133.58	34.63	14.601	15.492
%RSD	.3257723	.1771156	.2310913	.6635920	.3175850
#1	3365.958	75569.47	14948.95	2198.342	4895.615
#2	3347.671	75311.61	14996.40	2186.770	4871.540
#3	3346.461	75380.01	15016.38	2215.776	4866.688

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166963BS Acquired: 3/12/2025 12:41:22 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8203145	2.071613	.9668928	1.980814	.8243271	1.963400
Stddev	.0027441	.010389	.0010519	.005436	.0034699	.005162
%RSD	.3345180	.5015097	.1087868	.2744211	.4209317	.2629240
#1	.8174111	2.069531	.9659734	1.976749	.8206200	1.969195
#2	.8228652	2.082886	.9666652	1.978704	.8248642	1.961715
#3	.8206671	2.062423	.9680398	1.986989	.8274971	1.959292

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1728208	.1853729	.1890412	.9614104	.4203306	.1921711
Stddev	.0014272	.0004701	.0005571	.0039950	.0008004	.0004773
%RSD	.8258025	.2535815	.2947200	.4155368	.1904189	.2483512
#1	.1715380	.1854159	.1884458	.9568580	.4203812	.1916737
#2	.1743581	.1848828	.1891278	.9643326	.4195061	.1922146
#3	.1725664	.1858200	.1895500	.9630405	.4211044	.1926252

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3117466	2.924196	.1825513	1.852551	.4803000	.0764679
Stddev	.0011793	.015038	.0009457	.039567	.0001667	.0004064
%RSD	.3782770	.5142596	.5180652	2.135796	.0346968	.5314539
#1	.3117462	2.912307	.1816140	1.852244	.4802709	.0760291
#2	.3105675	2.941101	.1835053	1.813139	.4804792	.0765432
#3	.3129261	2.919180	.1825344	1.892271	.4801498	.0768313

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.073309	.2842146	.2090374	9.373162	.2633121	.4160038
Stddev	.025520	.0007160	.0005483	.037089	.0001426	.0005765
%RSD	.8303626	.2519131	.2623146	.3956936	.0541661	.1385802
#1	3.045765	.2838381	.2092508	9.343506	.2633208	.4153485
#2	3.096150	.2837655	.2084145	9.414748	.2631653	.4162299
#3	3.078011	.2850403	.2094470	9.361232	.2634501	.4164329

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB166963BS Acquired: 3/12/2025 12:41:22 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6901050	.1850228	.7861539	5.459214	F -.015026	.1844648
Stddev	.0010674	.0002564	.0059790	.025568	.000599	.0005686
%RSD	.1546749	.1385932	.7605445	.4683374	3.989474	.3082445
#1	.6894580	.1848596	.7828353	5.430892	-.015105	.1840043
#2	.6895200	.1853184	.7930562	5.466158	-.015582	.1842898
#3	.6913370	.1848905	.7825703	5.480593	-.014391	.1851004

Elem	Sr4077
Units	ppm
Avg	.1849173
Stddev	.0006807
%RSD	.3681115
#1	.1844443
#2	.1856975
#3	.1846102

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3285.735	73942.74	14880.35	2153.964	4684.393
Stddev	3.707	31.96	35.38	8.107	9.047
%RSD	.1128147	.0432160	.2377305	.3763907	.1931309
#1	3289.788	73946.34	14851.11	2149.499	4694.797
#2	3282.517	73972.74	14919.67	2163.322	4680.003
#3	3284.899	73909.13	14870.28	2149.070	4678.379

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05 Acquired: 3/12/2025 12:49:41 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.000360	-.003084	.0005840	-.007220	-.002308	.0106582
Stddev	.002258	.001422	.0011857	.000854	.000710	.0016686
%RSD	626.7572	46.10692	203.0351	11.82618	30.77671	15.65579
#1	-.000229	-.003768	-.000781	-.008205	-.002906	.0105081
#2	-.002682	-.001450	.001359	-.006769	-.002495	.0123969
#3	.001829	-.004035	.001174	-.006686	-.001523	.0090698

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0141114	.0000746	.0001235	44.07170	.0003211	-.000244
Stddev	.0005010	.0000341	.0000131	.19279	.0002965	.000290
%RSD	3.550602	45.63723	10.60000	.4374564	92.35082	118.5005
#1	.0142697	.0000356	.0001362	44.28986	.0001876	-.000388
#2	.0135503	.0000983	.0001244	43.92424	.0006609	-.000434
#3	.0145141	.0000899	.0001100	44.00099	.0001148	.000089

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2016225	.0301582	.0030330	22.54207	.0023217	.0006544
Stddev	.0008064	.0019189	.0002073	.15742	.0002714	.0002024
%RSD	.3999332	6.362823	6.835733	.6983270	11.69050	30.92827
#1	.2007364	.0299570	.0028459	22.72203	.0022951	.0006264
#2	.2023131	.0283479	.0032559	22.42990	.0020646	.0004675
#3	.2018180	.0321698	.0029972	22.47429	.0026055	.0008694

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.50952	.0006087	.0180752	1.475249	-.001412	.0005083
Stddev	.06765	.0008633	.0001694	.033079	.000386	.0000279
%RSD	.3467598	141.8281	.9373338	2.242236	27.35359	5.483209
#1	19.47703	.0011537	.0181024	1.512348	-.000986	.0005405
#2	19.58728	-.000387	.0178939	1.464571	-.001511	.0004911
#3	19.46423	.001059	.0182294	1.448829	-.001738	.0004933

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05 Acquired: 3/12/2025 12:49:41 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.001735	-.000540	F 16.05657	.0272479	1.776651	-.011012
Stddev	.000412	.000320	.05029	.0007924	.002422	.000111
%RSD	23.74209	59.26168	.3132171	2.908314	.1363288	1.004867
#1	-.001992	-.000570	16.07542	.0276598	1.779315	-.010894
#2	-.001260	-.000843	16.09471	.0277496	1.774582	-.011113
#3	-.001955	-.000206	15.99957	.0263343	1.776057	-.011028

Elem	Sr4077
Units	ppm
Avg	.0785429
Stddev	.0001824
%RSD	.2322542
#1	.0787045
#2	.0783451
#3	.0785792

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3295.972	73617.16	15119.22	2151.826	4624.796
Stddev	9.581	223.21	56.87	11.612	6.422
%RSD	.2906852	.3032044	.3761562	.5396136	.1388548
#1	3306.855	73423.31	15057.70	2142.019	4626.677
#2	3292.253	73566.98	15169.88	2148.811	4630.068
#3	3288.808	73861.19	15130.08	2164.647	4617.644

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05DUP Acquired: 3/12/2025 12:53:55 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.000245	-.001562	.0002442	-.010078	-.003321	.0121815
Stddev	.001782	.001255	.0011279	.001219	.000428	.0011203
%RSD	728.7534	80.35303	461.8659	12.10061	12.89711	9.196995
#1	-.000198	-.000152	.0015346	-.008675	-.002853	.0131679
#2	-.002049	-.001976	-.000554	-.010887	-.003693	.0124133
#3	.001514	-.002558	-.000248	-.010670	-.003416	.0109635

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0133744	.0000579	.0000729	43.96576	.0004773	-.000307
Stddev	.0005251	.0000422	.0000305	.12474	.0002081	.000172
%RSD	3.925912	72.80581	41.80974	.2837258	43.59401	55.95264
#1	.0127757	.0000240	.0000927	43.88258	.0007150	-.000500
#2	.0137566	.0001052	.0000881	43.90552	.0003282	-.000172
#3	.0135910	.0000446	.0000378	44.10919	.0003887	-.000249

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2003073	.0299629	.0032801	22.59649	.0021182	.0009533
Stddev	.0004962	.0012585	.0001603	.08049	.0003912	.0001823
%RSD	.2477416	4.200315	4.886803	.3562009	18.46762	19.12436
#1	.2004759	.0304239	.0034638	22.51167	.0020625	.0007742
#2	.2006972	.0309260	.0031689	22.60600	.0025343	.0009471
#3	.1997487	.0285389	.0032076	22.67180	.0017579	.0011387

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.98652	.0011245	.0181363	1.422677	-.001276	.0003819
Stddev	.03791	.0012492	.0002557	.006569	.000450	.0001856
%RSD	.1996599	111.0864	1.409735	.4617317	35.24213	48.61115
#1	18.94740	.0000609	.0178573	1.415683	-.000757	.0005960
#2	18.98909	.0008125	.0183594	1.423631	-.001554	.0002671
#3	19.02308	.0025001	.0181924	1.428716	-.001517	.0002824

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05DUP Acquired: 3/12/2025 12:53:55 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.001451	-.000085	F 15.59900	.0261526	1.767195	-.010798
Stddev	.000799	.000282	.00532	.0023188	.005647	.001000
%RSD	55.07504	332.2956	.0341122	8.866382	.3195271	9.263585
#1	-.001438	-.000396	15.59973	.0234769	1.763169	-.009709
#2	-.002256	-.000013	15.59335	.0275754	1.764765	-.011675
#3	-.000658	.000155	15.60392	.0274056	1.773650	-.011011

Elem	Sr4077
Units	ppm
Avg	.0780071
Stddev	.0003597
%RSD	.4611548
#1	.0781293
#2	.0776022
#3	.0782899

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3299.575	74077.31	14778.43	2178.050	4630.556
Stddev	4.221	17.00	45.86	4.331	7.946
%RSD	.1279352	.0229472	.3103122	.1988323	.1715954
#1	3301.069	74064.62	14811.46	2176.242	4638.343
#2	3302.847	74096.62	14797.77	2174.917	4630.865
#3	3294.810	74070.68	14726.07	2182.992	4622.460

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05LX5 Acquired: 3/12/2025 12:58:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.000585	-.001206	-.000672	-.007849	-.002128	.0089024	-.001753
Stddev	.000778	.000662	.000357	.001976	.000987	.0043489	.000302
%RSD	133.0810	54.88432	53.20992	25.17074	46.36659	48.85107	17.21361
#1	.000290	-.000532	-.000290	-.007053	-.001330	.0074767	-.001408
#2	-.001201	-.001231	-.000998	-.010099	-.001824	.0054452	-.001969
#3	-.000844	-.001855	-.000727	-.006396	-.003232	.0137851	-.001882

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000953	.0000511	9.045013	-.000311	-.000221	.0412776	.0199898
Stddev	.0000190	.0000343	.026528	.000163	.000056	.0003877	.0022361
%RSD	19.94807	67.10736	.2932941	52.52599	25.26124	.9391474	11.18631
#1	.0000745	.0000771	9.056190	-.000498	-.000165	.0414690	.0179854
#2	.0001117	.0000639	9.014725	-.000196	-.000277	.0408314	.0224016
#3	.0000996	.0000122	9.064125	-.000239	-.000221	.0415322	.0195824

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001488	4.500082	.0004145	.0006423	3.884359	.0002582	.0036579
Stddev	.0001486	.028688	.0001889	.0001136	.017105	.0009443	.0002334
%RSD	99.90811	.6375069	45.57338	17.67935	.4403513	365.7446	6.379958
#1	.0000589	4.520988	.0002827	.0007251	3.865501	-.000493	.0038554
#2	.0003203	4.467375	.0006309	.0006888	3.898873	.001318	.0034004
#3	.0000671	4.511882	.0003299	.0005128	3.888703	-.000050	.0037179

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1359972	-.006725	-.000056	-.000253	.0009691	3.168945	.0020153
Stddev	.0156089	.000924	.000337	.000287	.0001985	.007154	.0017457
%RSD	11.47737	13.73425	603.8805	113.4252	20.47768	.2257413	86.62421
#1	.1206331	-.007246	-.000089	-.000497	.0010295	3.161635	.0035784
#2	.1518399	-.007271	-.000375	.000063	.0011304	3.169270	.0023360
#3	.1355186	-.005659	.000296	-.000325	.0007475	3.175931	.0001314

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05LX5 Acquired: 3/12/2025 12:58:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.3412155	-.005678	.0161796
Stddev	.0027337	.000403	.0000488
%RSD	.8011740	7.100181	.3013893
#1	.3384952	-.005444	.0161741
#2	.3411886	-.006143	.0162309
#3	.3439625	-.005446	.0161339

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3285.568	73909.22	15256.93	2144.277	4720.425
Stddev	10.693	97.13	64.59	6.060	10.606
%RSD	.3254607	.1314120	.4233743	.2826252	.2246735
#1	3285.954	73798.17	15213.88	2149.142	4726.486
#2	3296.063	73978.36	15331.20	2137.488	4726.611
#3	3274.687	73951.12	15225.71	2146.200	4708.179

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05MS Acquired: 3/12/2025 13:02:28 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8331447	2.023659	.9520777	1.989929	.8498134	1.947745
Stddev	.0058096	.011440	.0017219	.012218	.0059999	.001921
%RSD	.6973095	.5653016	.1808526	.6139767	.7060193	.0986121
#1	.8287480	2.036502	.9539258	1.991957	.8506720	1.949642
#2	.8309553	2.014560	.9505187	1.976824	.8434305	1.947792
#3	.8397309	2.019916	.9517888	2.001006	.8553377	1.945801

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1893113	.1854511	.1885129	45.07709	.4160950	.1894514
Stddev	.0003322	.0013028	.0005716	.14810	.0012759	.0007793
%RSD	.1754792	.7025069	.3032229	.3285443	.3066462	.4113282
#1	.1895085	.1839753	.1888409	45.00246	.4172445	.1897051
#2	.1894976	.1864417	.1878528	45.24766	.4147221	.1885769
#3	.1889277	.1859362	.1888449	44.98116	.4163184	.1900722

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5044931	2.920439	.1789957	24.27016	.4751581	.0762577
Stddev	.0021334	.012429	.0005380	.12109	.0015466	.0008722
%RSD	.4228762	.4255813	.3005549	.4989458	.3254818	1.143758
#1	.5036823	2.929938	.1784082	24.15885	.4758755	.0758262
#2	.5028840	2.925007	.1794642	24.39911	.4733831	.0772616
#3	.5069130	2.906373	.1791147	24.25253	.4762156	.0756854

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.71801	.2805778	.2262438	11.39768	.2595651	.4226416
Stddev	.13894	.0016219	.0011100	.05689	.0027617	.0026255
%RSD	.6115699	.5780632	.4906102	.4991556	1.063976	.6212086
#1	22.87816	.2788015	.2272097	11.45551	.2564465	.4225379
#2	22.64609	.2819799	.2250313	11.39575	.2617013	.4200696
#3	22.62977	.2809519	.2264904	11.34177	.2605475	.4253175

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05MS Acquired: 3/12/2025 13:02:28 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7054441	.1862184	F 16.85246	5.639713	1.768791	.1776116
Stddev	.0017484	.0015390	.07540	.018492	.005954	.0007796
%RSD	.2478408	.8264254	.4473964	.3278808	.3366290	.4389564
#1	.7074447	.1869407	16.93384	5.656376	1.772082	.1779244
#2	.7042094	.1872633	16.83854	5.619818	1.761918	.1781863
#3	.7046781	.1844511	16.78499	5.642944	1.772373	.1767242

Elem	Sr4077
Units	ppm
Avg	.2622325
Stddev	.0008506
%RSD	.3243713
#1	.2626169
#2	.2628231
#3	.2612576

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3218.229	73784.04	15030.26	2122.074	4497.615
Stddev	16.913	107.51	97.74	3.724	14.497
%RSD	.5255384	.1457134	.6502759	.1754908	.3223268
#1	3225.530	73855.20	15142.54	2117.910	4501.834
#2	3230.266	73836.57	14964.18	2125.085	4509.535
#3	3198.892	73660.37	14984.08	2123.227	4481.477

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05MSD Acquired: 3/12/2025 13:06:29 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8291369	1.988016	.9493105	1.975950	.8411123	1.923451
Stddev	.0038512	.023940	.0006156	.002294	.0003654	.003760
%RSD	.4644877	1.204208	.0648487	.1161004	.0434439	.1954874
#1	.8314382	2.009593	.9493495	1.973642	.8409803	1.919616
#2	.8312818	1.992192	.9499056	1.978230	.8415254	1.927132
#3	.8246908	1.962263	.9486763	1.975979	.8408312	1.923607

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1891658	.1823693	.1887644	44.80322	.4109363	.1885991
Stddev	.0012808	.0003997	.0004561	.10646	.0016892	.0004202
%RSD	.6771003	.2191978	.2416334	.2376181	.4110569	.2227905
#1	.1900866	.1821773	.1882626	44.92266	.4102141	.1881386
#2	.1877030	.1821018	.1888769	44.71830	.4097283	.1886970
#3	.1897076	.1828288	.1891538	44.76870	.4128665	.1889616

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5028196	2.928509	.1772850	24.11938	.4749778	.0760628
Stddev	.0008125	.020432	.0003288	.02567	.0011492	.0003233
%RSD	.1615849	.6976878	.1854700	.1064226	.2419531	.4250473
#1	.5019326	2.931205	.1775763	24.14691	.4738859	.0757222
#2	.5029985	2.906862	.1769284	24.09610	.4748706	.0763654
#3	.5035278	2.947458	.1773501	24.11513	.4761768	.0761008

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.66909	.2818446	.2237884	11.48236	.2557017	.4181063
Stddev	.06043	.0015902	.0012647	.04154	.0008855	.0007441
%RSD	.2665576	.5641952	.5651477	.3617581	.3462989	.1779728
#1	22.70066	.2834567	.2247166	11.50948	.2563378	.4172497
#2	22.59942	.2802773	.2243009	11.43454	.2560770	.4185926
#3	22.70720	.2817998	.2223479	11.50306	.2546904	.4184765

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05MSD Acquired: 3/12/2025 13:06:29 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7007907	.1845227	F 16.91016	5.684197	1.766757	.1762813
Stddev	.0026245	.0001419	.03973	.033464	.006471	.0003858
%RSD	.3745039	.0768992	.2349327	.5887263	.3662397	.2188441
#1	.7036703	.1846279	16.94037	5.647858	1.774124	.1764034
#2	.7001688	.1843613	16.86516	5.690987	1.761992	.1758493
#3	.6985330	.1845790	16.92494	5.713746	1.764156	.1765913

Elem	Sr4077
Units	ppm
Avg	.2614645
Stddev	.0004234
%RSD	.1619290
#1	.2617442
#2	.2609774
#3	.2616719

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3209.669	73546.30	15176.79	2122.973	4463.187
Stddev	5.264	89.96	26.77	3.439	9.321
%RSD	.1640160	.1223119	.1763706	.1620036	.2088322
#1	3214.951	73480.61	15156.14	2126.431	4473.356
#2	3209.635	73648.82	15167.21	2119.552	4461.154
#3	3204.422	73509.46	15207.04	2122.937	4455.050

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV03 Acquired: 3/12/2025 13:10:28 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	5.099729	5.214965	5.000505	5.092677	5.189863	10.22549	9.270958
Stddev	.006770	.073860	.003082	.017717	.009569	.00955	.034051
%RSD	.1327595	1.416318	.0616414	.3478913	.1843754	.0934325	.3672904
#1	5.093668	5.161388	4.997035	5.078429	5.186119	10.21483	9.249514
#2	5.107036	5.184285	5.001555	5.087086	5.182733	10.23329	9.310222
#3	5.098483	5.299221	5.002925	5.112515	5.200738	10.22836	9.253139

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2551485	2.481154	23.81536	1.058022	2.482544	1.279474	4.743802
Stddev	.0006227	.004790	.05608	.001734	.004105	.001565	.011042
%RSD	.2440434	.1930602	.2354748	.1639269	.1653686	.1223459	.2327642
#1	.2549975	2.479050	23.79182	1.059961	2.480329	1.277667	4.755862
#2	.2546151	2.477776	23.77489	1.057488	2.480023	1.280332	4.741358
#3	.2558327	2.486636	23.87937	1.056618	2.487281	1.280423	4.734187

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.336551	24.00798	2.475279	1.285482	26.24501	2.444636	2.601070
Stddev	.004114	.10464	.005906	.003423	.18592	.001643	.011839
%RSD	.1760567	.4358384	.2385997	.2663136	.7084013	.0672009	.4551447
#1	2.338409	23.97091	2.471740	1.286147	26.36628	2.443998	2.602064
#2	2.331836	23.92692	2.472001	1.288524	26.33779	2.443407	2.612381
#3	2.339407	24.12610	2.482097	1.281775	26.03095	2.446502	2.588766

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.93335	5.068481	5.183780	5.082004	4.788635	5.009236	5.007841
Stddev	.11075	.012560	.014286	.002197	.006827	.026358	.013579
%RSD	.4627489	.2477982	.2755940	.0432257	.1425598	.5261980	.2711637
#1	24.04219	5.060981	5.170029	5.080227	4.796326	4.991946	5.008663
#2	23.93710	5.061481	5.182764	5.081325	4.783292	5.039573	5.020990
#3	23.82078	5.082980	5.198547	5.084460	4.786288	4.996188	4.993869

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV03 Acquired: 3/12/2025 13:10:28 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	4.887935	4.803399	4.765801
Stddev	.013974	.005870	.017016
%RSD	.2858948	.1222006	.3570484
#1	4.871803	4.809477	4.746548
#2	4.895681	4.802958	4.772031
#3	4.896321	4.797762	4.778824

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3212.141	71376.12	13560.77	2084.767	4330.608
Stddev	2.243	309.77	21.41	15.640	3.289
%RSD	.0698275	.4339965	.1578752	.7501910	.0759409
#1	3209.564	71135.82	13541.51	2070.822	4328.023
#2	3213.653	71266.81	13583.82	2081.804	4334.309
#3	3213.206	71725.72	13556.99	2101.677	4329.490

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB03 Acquired: 3/12/2025 13:14:40 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0005110	-.000910	.0001054	-.008598	-.001564	.0089370	-.005113
Stddev	.0007273	.001096	.0011219	.004938	.001256	.0033201	.000404
%RSD	142.3372	120.4550	1064.164	57.43017	80.32350	37.14984	7.895649
#1	-.000046	-.000141	.0012268	-.010033	-.002968	.0051033	-.004933
#2	.000244	-.002165	.0001065	-.003101	-.000548	.0108502	-.005575
#3	.001334	-.000423	-.001017	-.012659	-.001175	.0108574	-.004830

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000761	.0001590	.0062808	-.000118	.0001986	-.000099	.0010480
Stddev	.0000301	.0000363	.0076981	.000064	.0002018	.000164	.0029219
%RSD	39.54968	22.82034	122.5661	54.07147	101.6170	164.9115	278.8185
#1	.0001083	.0001579	.0120997	-.000106	.0000810	-.000056	.0042476
#2	.0000487	.0001958	-.002448	-.000061	.0004317	.000039	-.001479
#3	.0000712	.0001233	.009191	-.000188	.0000832	-.000280	.000375

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000188	.0051467	-.000139	.0008796	-.049304	.0006571	.0001582
Stddev	.000298	.0069119	.000351	.0000773	.007093	.0020221	.0006272
%RSD	158.4759	134.2962	252.5651	8.790960	14.38721	307.7272	396.4299
#1	-.000497	.0130631	-.000285	.0008807	-.056711	.0012931	-.000547
#2	-.000164	.0020677	.000261	.0008018	-.048627	-.001607	.000369
#3	.000097	.0003094	-.000394	.0009565	-.042573	.002285	.000653

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.136860	.0041907	.0004875	.0000464	.0017172	-.045094	-.002993
Stddev	.033806	.0006220	.0001186	.0001881	.0001649	.002828	.001286
%RSD	24.70128	14.84275	24.31991	405.3620	9.601134	6.270272	42.97750
#1	-.168546	.0046965	.0004466	.0002276	.0018747	-.043919	-.001911
#2	-.140763	.0043795	.0003948	.0000595	.0017309	-.043044	-.004415
#3	-.101272	.0034962	.0006211	-.000148	.0015459	-.048320	-.002653

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB03 Acquired: 3/12/2025 13:14:40 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.005249	-.003284	.0004494
Stddev	.000503	.000807	.0000665
%RSD	9.588754	24.56189	14.79444
#1	-.005688	-.002356	.0003727
#2	-.005361	-.003815	.0004901
#3	-.004700	-.003682	.0004854

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3343.216	76383.85	14789.56	2199.019	4875.207
Stddev	6.320	344.82	27.96	5.114	9.941
%RSD	.1890436	.4514252	.1890540	.2325533	.2039149
#1	3340.059	76780.60	14817.30	2204.608	4870.288
#2	3350.492	76156.47	14761.39	2197.876	4886.649
#3	3339.095	76214.48	14789.99	2194.574	4868.685

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05A Acquired: 3/12/2025 13:18:59 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8396012	2.064372	.9564386	1.997899	.8539153	1.927339
Stddev	.0043592	.001481	.0012748	.008522	.0042510	.005397
%RSD	.5191968	.0717461	.1332857	.4265605	.4978231	.2800021
#1	.8348519	2.064340	.9560303	1.988967	.8553526	1.926650
#2	.8434200	2.062907	.9554181	1.998787	.8491320	1.933048
#3	.8405317	2.065869	.9578676	2.005942	.8572614	1.922321

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1862040	.1872034	.1896716	44.72263	.4160926	.1895537
Stddev	.0006702	.0005242	.0005355	.04569	.0006728	.0004647
%RSD	.3599236	.2800401	.2823310	.1021543	.1616868	.2451662
#1	.1866178	.1866465	.1893889	44.74830	.4153256	.1897503
#2	.1854308	.1876874	.1893367	44.74972	.4163689	.1890230
#3	.1865635	.1872763	.1902892	44.66989	.4165832	.1898878

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5058029	2.876691	.1774623	24.28820	.4761767	.0765319
Stddev	.0016606	.029121	.0002002	.08927	.0017022	.0001904
%RSD	.3283134	1.012294	.1128278	.3675470	.3574688	.2488138
#1	.5052851	2.910286	.1774015	24.18859	.4759651	.0767433
#2	.5044628	2.861137	.1772995	24.36097	.4745902	.0764787
#3	.5076607	2.858650	.1776859	24.31504	.4779748	.0763738

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.48600	.2800125	.2242406	11.18825	.2658545	.4223875
Stddev	.09775	.0038482	.0005390	.04772	.0013169	.0005565
%RSD	.4347183	1.374289	.2403620	.4264884	.4953513	.1317594
#1	22.59508	.2790079	.2238768	11.24287	.2644540	.4220982
#2	22.45660	.2842633	.2239853	11.15465	.2670677	.4230292
#3	22.40632	.2767662	.2248599	11.16723	.2660419	.4220353

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1466-05A Acquired: 3/12/2025 13:18:59 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7110905	.1832153	F 16.72674	5.703212	1.784676	.1759134
Stddev	.0041605	.0008141	.06875	.010939	.006194	.0020950
%RSD	.5850941	.4443412	.4110053	.1917957	.3470724	1.190914
#1	.7081851	.1824451	16.80603	5.692274	1.779520	.1773359
#2	.7092296	.1840671	16.68388	5.703210	1.791547	.1768966
#3	.7158566	.1831337	16.69029	5.714151	1.782961	.1735077

Elem	Sr4077
Units	ppm
Avg	.2590581
Stddev	.0010945
%RSD	.4224721
#1	.2599253
#2	.2594206
#3	.2578284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3201.659	73665.71	14938.13	2126.209	4461.557
Stddev	11.331	112.04	57.13	.407	12.810
%RSD	.3539197	.1520910	.3824684	.0191403	.2871109
#1	3213.308	73729.03	15003.94	2126.579	4475.100
#2	3200.996	73731.75	14901.20	2126.273	4459.935
#3	3190.674	73536.35	14909.24	2125.773	4449.635

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1507-01 Acquired: 3/12/2025 13:22:59 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.3692046	.0120752	6.499597	-.064883	.1723842	140.6571
Stddev	.0052091	.0026141	.006007	.000145	.0019912	.3451
%RSD	1.410904	21.64803	.0924268	.2229070	1.155067	.2453825
#1	.3745000	.0091663	6.502175	-.064964	.1741954	141.0511
#2	.3640862	.0142275	6.503886	-.064716	.1727051	140.4081
#3	.3690277	.0128319	6.492731	-.064970	.1702521	140.5122

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.182334	.0354918	.0198127	98.64166	.8460684	.3838271
Stddev	.002300	.0002616	.0007296	.46417	.0029341	.0015095
%RSD	.1053734	.7369658	3.682635	.4705590	.3467889	.3932720
#1	2.184673	.0357565	.0202090	99.17724	.8444295	.3849417
#2	2.182254	.0354853	.0202584	98.39154	.8443199	.3844303
#3	2.180076	.0352335	.0189707	98.35619	.8494557	.3821093

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.248299	436.3522	6.779901	65.59542	1.403553	.0186277
Stddev	.010223	1.3175	.021398	.22237	.003472	.0002713
%RSD	.1410385	.3019364	.3156095	.3389969	.2474067	1.456380
#1	7.257634	435.0421	6.803241	65.85064	1.406418	.0187648
#2	7.249889	436.3375	6.775252	65.44342	1.404551	.0183152
#3	7.237375	437.6770	6.761209	65.49220	1.399691	.0188031

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.224205	.5383457	17.62314	20.51086	.1069734	.0704991
Stddev	.042277	.0038899	.03464	.10999	.0076570	.0004832
%RSD	.5140497	.7225643	.1965683	.5362630	7.157868	.6853353
#1	8.187142	.5427939	17.61581	20.38445	.1005011	.0710221
#2	8.215222	.5366611	17.59275	20.56337	.1049931	.0700694
#3	8.270251	.5355820	17.66086	20.58475	.1154261	.0704058

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1507-01 Acquired: 3/12/2025 13:22:59 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.075403	5.318804	F 11.54772	9.463100	8.546176	.3545607
Stddev	.001984	.011692	.03743	.038839	.035371	.0007232
%RSD	.1845231	.2198242	.3241578	.4104245	.4138802	.2039798
#1	1.074046	5.331986	11.52356	9.448935	8.556038	.3537381
#2	1.077680	5.314740	11.52876	9.507033	8.575568	.3550968
#3	1.074482	5.309686	11.59084	9.433331	8.506920	.3548473

Elem	Sr4077
Units	ppm
Avg	.3690060
Stddev	.0005379
%RSD	.1457769
#1	.3696120
#2	.3685847
#3	.3688215

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3385.245	76861.85	17068.67	2189.611	3975.557
Stddev	9.186	135.92	97.79	13.110	11.501
%RSD	.2713496	.1768419	.5728950	.5987387	.2892881
#1	3374.639	76893.62	16956.18	2196.501	3962.766
#2	3390.654	76979.07	17133.32	2197.839	3978.862
#3	3390.442	76712.85	17116.51	2174.492	3985.043

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1508-01 Acquired: 3/12/2025 13:27:08 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.1650892	.0030644	.9070598	-.058682	-.004943	134.0228
Stddev	.0019938	.0021046	.0037859	.003143	.000563	.2899
%RSD	1.207704	68.67815	.4173854	5.355846	11.39815	.2162915
#1	.1628269	.0043916	.9077021	-.060601	-.004884	134.3039
#2	.1665900	.0006378	.9029938	-.055055	-.005533	134.0395
#3	.1658507	.0041639	.9104835	-.060391	-.004411	133.7249

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.039580	.0121045	.0022068	32.76405	.3679740	.1649609
Stddev	.003617	.0000623	.0004135	.11713	.0006501	.0005902
%RSD	.3479203	.5143619	18.73908	.3574991	.1766786	.3577721
#1	1.043662	.0120935	.0022452	32.89845	.3686412	.1642794
#2	1.038303	.0120485	.0017753	32.70994	.3679384	.1653017
#3	1.036775	.0121716	.0025997	32.68375	.3673424	.1653015

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6383224	313.2428	6.018648	50.56637	.3109948	-.000588
Stddev	.0018804	1.4307	.032598	.21285	.0013151	.000480
%RSD	.2945765	.4567461	.5416204	.4209274	.4228729	81.64624
#1	.6369259	312.2794	6.055826	50.80539	.3108528	-.000125
#2	.6375808	314.8868	5.994960	50.49642	.3097565	-.000555
#3	.6404604	312.5622	6.005157	50.39730	.3123752	-.001083

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.539202	.4719024	2.146031	13.27559	-.257840	.0075625
Stddev	.038161	.0045910	.006649	.08364	.010777	.0003378
%RSD	.6889296	.9728787	.3098238	.6300566	4.179579	4.466721
#1	5.499068	.4746236	2.141870	13.20664	-.268533	.0072273
#2	5.575024	.4744818	2.153700	13.36863	-.246982	.0075573
#3	5.543514	.4666017	2.142524	13.25149	-.258006	.0079029

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1508-01 Acquired: 3/12/2025 13:27:08 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0248675	4.230095	F 14.95688	9.327788	5.441281	.4004216
Stddev	.0002050	.011842	.11726	.033461	.011331	.0010122
%RSD	.8242705	.2799405	.7839548	.3587225	.2082421	.2527747
#1	.0250881	4.243287	14.85358	9.294103	5.440791	.4003001
#2	.0246829	4.226614	15.08433	9.328241	5.430204	.4014891
#3	.0248315	4.220384	14.93271	9.361020	5.452850	.3994757

Elem	Sr4077
Units	ppm
Avg	.1884435
Stddev	.0005556
%RSD	.2948166
#1	.1890842
#2	.1881509
#3	.1880953

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3649.131	83296.86	17489.24	2392.775	4169.596
Stddev	6.496	105.10	144.97	5.894	7.556
%RSD	.1780054	.1261744	.8289293	.2463426	.1812167
#1	3656.239	83404.27	17352.52	2399.354	4178.010
#2	3643.502	83292.07	17641.25	2387.974	4167.385
#3	3647.653	83194.24	17473.97	2390.997	4163.391

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1510-01 Acquired: 3/12/2025 13:31:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0145378	-.003543	.0002268	-.003660	-.001105	.0412435	.1170552
Stddev	.0026991	.002199	.0003537	.001156	.002139	.0080372	.0002943
%RSD	18.56599	62.07735	155.9586	31.57798	193.4727	19.48723	.2514542
#1	.0165528	-.002304	.0001220	-.004328	-.003265	.0385354	.1169689
#2	.0114712	-.002242	.0006210	-.004326	.001011	.0502850	.1168137
#3	.0155894	-.006082	-.000063	-.002325	-.001062	.0349102	.1173831

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000059	.0007842	26.32099	-.000064	.0016739	.0015474	.9966582
Stddev	.000031	.0000246	.08133	.000206	.0001836	.0001424	.0072873
%RSD	52.34188	3.142356	.3089812	319.7412	10.96643	9.204303	.7311694
#1	-.000043	.0007784	26.31411	-.000069	.0017972	.0017025	1.005046
#2	-.000039	.0007630	26.24332	.000144	.0014629	.0014225	.993052
#3	-.000094	.0008112	26.40554	-.000267	.0017614	.0015173	.991877

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0962208	3.314046	.0107845	.0004026	357.2041	.0008992	.9850660
Stddev	.0005018	.004047	.0003889	.0000620	.2457	.0006808	.0028756
%RSD	.5214580	.1221162	3.606454	15.40792	.0687844	75.72013	.2919238
#1	.0966049	3.313897	.0105353	.0003687	357.4876	.0003919	.9851045
#2	.0956531	3.318166	.0105856	.0004742	357.0709	.0016729	.9821713
#3	.0964044	3.310076	.0112327	.0003648	357.0537	.0006327	.9879222

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.24506	.2328455	.3196568	-.000557	.0013925	3.290867	.4537779
Stddev	.05849	.0010465	.0013390	.000821	.0004250	.021254	.0025122
%RSD	.4776848	.4494182	.4188928	147.3978	30.52044	.6458413	.5536239
#1	12.30901	.2320817	.3186243	-.001138	.0018820	3.314791	.4536521
#2	12.23189	.2324166	.3191764	.000383	.0011174	3.283645	.4563506
#3	12.19427	.2340383	.3211698	-.000917	.0011781	3.274166	.4513309

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1510-01 Acquired: 3/12/2025 13:31:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	9.911512	.0087548	.3380080
Stddev	.028284	.0003285	.0004640
%RSD	.2853651	3.752040	.1372864
#1	9.890509	.0083761	.3383703
#2	9.900355	.0089261	.3374849
#3	9.943673	.0089622	.3381686

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3032.756	68877.26	15134.19	2000.749	4110.681
Stddev	5.795	178.77	45.60	3.601	6.461
%RSD	.1910889	.2595543	.3012733	.1799762	.1571812
#1	3039.027	68728.45	15125.35	2000.303	4118.141
#2	3031.644	69075.57	15183.56	2004.552	4107.015
#3	3027.597	68827.76	15093.66	1997.392	4106.887

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167098BL Acquired: 3/12/2025 13:59:29 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0007095	-.001844	.0000973	-.010869	-.002384	.0054751	-.007887
Stddev	.0019733	.000402	.0004611	.001439	.000565	.0015596	.002650
%RSD	278.1027	21.79978	474.1083	13.23852	23.71651	28.48473	33.59491
#1	-.001404	-.002295	-.000397	-.012522	-.001819	.0046500	-.007093
#2	.002503	-.001714	.000517	-.010195	-.002384	.0045014	-.010842
#3	.001029	-.001524	.000172	-.009891	-.002950	.0072738	-.005724

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000465	.0000058	-.001971	.0001920	.0001721	.0002652	-.004372
Stddev	.0000633	.0000325	.005978	.0001765	.0000945	.0001536	.001602
%RSD	136.0138	555.8986	303.3099	91.93219	54.90645	57.93479	36.63897
#1	-.000019	.0000010	.004004	.0003949	.0002785	.0001671	-.005602
#2	.000107	-.000024	-.007952	.0001075	.0001394	.0001863	-.004954
#3	.000052	.000041	-.001965	.0000737	.0000983	.0004423	-.002561

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000930	-.000376	-.000222	.0008018	-.054123	.0000935	-.000470
Stddev	.000150	.011431	.000172	.0000774	.006493	.0005535	.000430
%RSD	16.12505	3041.066	77.71807	9.653352	11.99701	591.8189	91.44628
#1	-.000910	.004444	-.000420	.0007872	-.061492	.0002253	.000016
#2	-.001089	-.013428	-.000140	.0007327	-.051638	.0005693	-.000799
#3	-.000791	.007856	-.000106	.0008855	-.049240	-.000514	-.000628

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.147799	-.008174	-.000132	-.000442	.0007209	-.051723	-.002747
Stddev	.017630	.000537	.000126	.000647	.0002909	.006530	.001748
%RSD	11.92801	6.573428	95.44925	146.4544	40.35310	12.62560	63.61986
#1	-.145845	-.007839	-.000231	-.000243	.0010568	-.048049	-.000896
#2	-.166325	-.007889	-.000173	-.001165	.0005606	-.059263	-.002976
#3	-.131228	-.008794	.000010	.000083	.0005454	-.047858	-.004370

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167098BL Acquired: 3/12/2025 13:59:29 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.006892	-.003870	.0000016
Stddev	.000419	.000954	.0000642
%RSD	6.074187	24.64176	3929.237
#1	-.007374	-.004941	.0000740
#2	-.006686	-.003555	-.000049
#3	-.006616	-.003113	-.000020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3282.579	73569.52	14474.24	2098.272	4811.534
Stddev	1.902	45.96	199.42	.687	2.399
%RSD	.0579573	.0624683	1.377771	.0327398	.0498498
#1	3284.680	73607.17	14612.51	2098.052	4811.747
#2	3280.973	73583.07	14245.63	2097.721	4813.819
#3	3282.084	73518.31	14564.57	2099.042	4809.036

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167098BS Acquired: 3/12/2025 14:03:48 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7880750	1.999070	.9395248	1.938894	.8000097	1.882178
Stddev	.0017538	.027527	.0007752	.007425	.0008840	.005832
%RSD	.2225384	1.376971	.0825133	.3829715	.1104998	.3098687
#1	.7862683	1.994221	.9404004	1.944092	.7989893	1.880092
#2	.7881862	1.974289	.9392481	1.930390	.8005416	1.877676
#3	.7897705	2.028698	.9389259	1.942200	.8004984	1.888767

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1674792	.1805687	.1842151	.9253365	.4104288	.1870729
Stddev	.0006352	.0006959	.0002414	.0031918	.0020205	.0005031
%RSD	.3792613	.3853956	.1310669	.3449325	.4922867	.2689305
#1	.1667830	.1805088	.1839417	.9240926	.4081007	.1865050
#2	.1676277	.1799046	.1843992	.9229539	.4114609	.1874625
#3	.1680271	.1812926	.1843045	.9289629	.4117247	.1872514

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3040994	2.819172	.1768201	1.791189	.4684428	.0747968
Stddev	.0008038	.013242	.0006325	.008549	.0003704	.0001576
%RSD	.2643194	.4696965	.3577313	.4772649	.0790652	.2107091
#1	.3031732	2.804197	.1764359	1.800938	.4684116	.0747840
#2	.3046145	2.823988	.1764744	1.784974	.4688278	.0746460
#3	.3045106	2.829332	.1775502	1.787655	.4680890	.0749604

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.014157	.2746786	.2023322	9.193211	.2540839	.4043357
Stddev	.003760	.0020492	.0003369	.003322	.0003873	.0007390
%RSD	.1247398	.7460478	.1665147	.0361408	.1524419	.1827701
#1	3.009866	.2763640	.2024929	9.196711	.2545236	.4039615
#2	3.016874	.2723975	.2025587	9.190101	.2539353	.4038586
#3	3.015730	.2752743	.2019450	9.192820	.2537930	.4051869

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167098BS Acquired: 3/12/2025 14:03:48 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6674293	.1811970	.7790501	5.145365	F -.016817	.1798806
Stddev	.0008875	.0006634	.0042763	.009513	.001431	.0007535
%RSD	.1329705	.3661136	.5489156	.1848909	8.506969	.4189036
#1	.6674438	.1818764	.7747226	5.156350	-.017740	.1806124
#2	.6683094	.1811637	.7832733	5.139839	-.017542	.1791071
#3	.6665347	.1805509	.7791543	5.139905	-.015169	.1799224

Elem	Sr4077
Units	ppm
Avg	.1794758
Stddev	.0002744
%RSD	.1529009
#1	.1797894
#2	.1792797
#3	.1793582

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3306.848	74027.92	14946.38	2120.090	4733.131
Stddev	3.269	279.21	55.60	6.124	4.116
%RSD	.0988691	.3771689	.3719788	.2888636	.0869532
#1	3303.075	74312.45	14980.15	2126.825	4728.763
#2	3308.848	74016.96	14976.77	2118.590	4733.694
#3	3308.622	73754.35	14882.21	2114.855	4736.936

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167099BL Acquired: 3/12/2025 14:07:50 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0009897	-.000699	-.001059	-.008771	-.001001	.0009279	-.004729
Stddev	.0026529	.000894	.000647	.001446	.000823	.0056900	.000430
%RSD	268.0422	127.8691	61.13911	16.48983	82.29118	613.2433	9.088619
#1	-.001213	-.001125	-.001313	-.009720	-.000341	-.003513	-.004945
#2	.000248	-.001300	-.000323	-.009487	-.001923	.007342	-.004234
#3	.003934	.000328	-.001540	-.007106	-.000737	-.001045	-.005008

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000670	.0000052	-.003382	.0001284	-.000151	.0001991	-.002562
Stddev	.0000413	.0000419	.004795	.0004332	.000027	.0000944	.002117
%RSD	61.57666	800.6974	141.7679	337.3849	18.00662	47.40096	82.66179
#1	.0001143	.0000437	-.004826	-.000349	-.000171	.0001115	-.004804
#2	.0000382	.0000114	-.007289	.000496	-.000120	.0001868	-.000597
#3	.0000486	-.000039	.001969	.000238	-.000162	.0002990	-.002284

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001033	.0134770	-.000122	.0009425	-.041181	.0008589	-.000215
Stddev	.000254	.0046921	.000250	.0001833	.000889	.0010821	.000086
%RSD	24.60112	34.81591	205.5494	19.45062	2.159606	125.9881	40.08320
#1	-.001031	.0114673	-.000196	.0009088	-.041924	-.000390	-.000138
#2	-.001288	.0101244	.000157	.0011403	-.040196	.001515	-.000199
#3	-.000780	.0188392	-.000327	.0007783	-.041425	.001452	-.000308

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.096471	-.007926	-.000234	-.000473	.0011148	-.044268	-.003136
Stddev	.011457	.000538	.000204	.000607	.0005120	.006967	.002225
%RSD	11.87609	6.793475	87.07763	128.1157	45.92460	15.73826	70.92669
#1	-.109700	-.008175	-.000428	-.001091	.0006024	-.040134	-.002991
#2	-.089897	-.007308	-.000252	.000121	.0016264	-.052311	-.000988
#3	-.089816	-.008295	-.000022	-.000450	.0011156	-.040358	-.005430

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167099BL Acquired: 3/12/2025 14:07:50 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.006898	-.004361	-.000043
Stddev	.002711	.000667	.000015
%RSD	39.30890	15.29757	34.47116
#1	-.005446	-.004894	-.000026
#2	-.010026	-.004577	-.000049
#3	-.005221	-.003613	-.000054

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3348.307	74614.42	14899.48	2149.959	4896.114
Stddev	4.395	161.88	48.38	4.475	9.852
%RSD	.1312511	.2169522	.3246766	.2081315	.2012178
#1	3347.639	74429.83	14895.50	2152.272	4894.597
#2	3344.284	74681.23	14949.71	2144.801	4887.109
#3	3352.997	74732.20	14853.21	2152.803	4906.637

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167099BS Acquired: 3/12/2025 14:12:09 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7924867	2.011958	.9396507	1.922712	.7857326	1.877987
Stddev	.0035646	.004627	.0033740	.009219	.0057554	.004459
%RSD	.4497959	.2299565	.3590704	.4794608	.7324936	.2374407
#1	.7883708	2.007511	.9373691	1.915250	.7818577	1.878311
#2	.7945153	2.016746	.9380565	1.919869	.7829942	1.873375
#3	.7945740	2.011617	.9435264	1.933017	.7923459	1.882275

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1601053	.1968399	.1844161	.9161496	.4088076	.1878015
Stddev	.0011439	.0013736	.0008111	.0033422	.0003683	.0008784
%RSD	.7144712	.6978338	.4398502	.3648059	.0901003	.4677297
#1	.1594584	.1975342	.1840233	.9164958	.4090279	.1870533
#2	.1594314	.1952577	.1838761	.9126478	.4083824	.1875824
#3	.1614261	.1977278	.1853489	.9193052	.4090126	.1887687

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3052309	2.647205	.1742986	1.802266	.4700441	.0751490
Stddev	.0013689	.011640	.0010117	.006289	.0016449	.0002708
%RSD	.4484761	.4396982	.5804495	.3489517	.3499439	.3603983
#1	.3045128	2.649697	.1751732	1.808191	.4696237	.0749086
#2	.3043704	2.657396	.1731906	1.795667	.4686503	.0754424
#3	.3068094	2.634520	.1745320	1.802941	.4718584	.0750961

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.820851	.2698868	.2024777	8.485920	.2743951	.3996524
Stddev	.010671	.0029291	.0010895	.050251	.0023901	.0023330
%RSD	.3782933	1.085292	.5380696	.5921726	.8710425	.5837681
#1	2.810328	.2711062	.2037321	8.465260	.2747930	.3979154
#2	2.831664	.2665450	.2017677	8.543208	.2718310	.3987376
#3	2.820561	.2720091	.2019334	8.449292	.2765612	.4023042

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167099BS Acquired: 3/12/2025 14:12:09 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6555380	.1753737	F .7102842	5.183466	F -.016367	.1764032
Stddev	.0008024	.0007467	.0117720	.028018	.002925	.0016315
%RSD	.1224083	.4257542	1.657366	.5405192	17.86943	.9248567
#1	.6552217	.1759924	.6971501	5.153588	-.018473	.1767635
#2	.6549420	.1755845	.7198847	5.187661	-.013028	.1746217
#3	.6564504	.1745444	.7138180	5.209150	-.017600	.1778244

Elem	Sr4077
Units	ppm
Avg	.1728040
Stddev	.0006328
%RSD	.3662112
#1	.1731911
#2	.1720738
#3	.1731473

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3345.327	74016.09	13987.19	2152.586	4788.963
Stddev	14.599	27.88	99.05	5.182	15.148
%RSD	.4363848	.0376660	.7081744	.2407179	.3163091
#1	3356.100	74029.32	13932.75	2148.297	4799.907
#2	3351.170	73984.06	14101.52	2151.119	4795.307
#3	3328.713	74034.90	13927.29	2158.343	4771.674

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01 Acquired: 3/12/2025 14:16:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.3059206	.0103205	.4467325	-.052494	-.011711	99.61750
Stddev	.0022791	.0016659	.0013788	.000662	.001131	.13695
%RSD	.7449929	16.14177	.3086505	1.260497	9.658263	.1374806
#1	.3069165	.0112421	.4460163	-.052313	-.011894	99.74005
#2	.3033131	.0083974	.4483220	-.053228	-.010499	99.46967
#3	.3075323	.0113220	.4458591	-.051943	-.012739	99.64280

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5655907	.0141303	-.000668	79.95263	.6861330	.0732074
Stddev	.0023301	.0001360	.000423	.06545	.0015078	.0002702
%RSD	.4119792	.9624048	63.29198	.0818624	.2197523	.3690312
#1	.5674463	.0140240	-.001155	80.01154	.6877119	.0731649
#2	.5629756	.0140832	-.000451	79.96419	.6847081	.0729610
#3	.5663501	.0142835	-.000397	79.88217	.6859790	.0734962

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1547664	310.1008	.9389353	22.94212	.1630588	-.001702
Stddev	.0014142	1.9143	.0019183	.07795	.0006041	.000319
%RSD	.9137368	.6173071	.2043057	.3397703	.3704624	18.76563
#1	.1531745	312.0168	.9409049	22.85624	.1634386	-.001363
#2	.1552473	308.1882	.9370728	23.00839	.1623623	-.001746
#3	.1558774	310.0973	.9388280	22.96174	.1633756	-.001997

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.079915	.4278909	.6613374	19.50687	-.294199	.0214957
Stddev	.022445	.0020188	.0050895	.18652	.004150	.0002571
%RSD	1.079110	.4717931	.7695705	.9561749	1.410679	1.195994
#1	2.090880	.4282738	.6592510	19.69497	-.290111	.0215702
#2	2.054095	.4296908	.6576227	19.32197	-.298409	.0212096
#3	2.094768	.4257081	.6671385	19.50368	-.294077	.0217073

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01 Acquired: 3/12/2025 14:16:11 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0150553	.9807245	F 17.83307	9.464099	F 17.04763	.1826265
Stddev	.0002999	.0013505	.11208	.022007	.03611	.0006904
%RSD	1.991802	.1377038	.6285153	.2325302	.2118375	.3780186
#1	.0151768	.9813034	17.93706	9.489083	17.06718	.1833035
#2	.0152754	.9791811	17.71435	9.447584	17.00596	.1819235
#3	.0147138	.9816891	17.84779	9.455631	17.06975	.1826525

Elem	Sr4077
Units	ppm
Avg	.4144868
Stddev	.0015559
%RSD	.3753885
#1	.4161137
#2	.4130131
#3	.4143336

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3760.086	84597.01	18161.66	2412.148	4133.477
Stddev	3.565	181.90	70.58	15.455	2.311
%RSD	.0948221	.2150197	.3886054	.6406975	.0559188
#1	3756.311	84396.82	18213.88	2421.275	4130.923
#2	3763.397	84752.15	18081.37	2420.864	4135.426
#3	3760.549	84642.05	18189.75	2394.304	4134.082

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01DUP Acquired: 3/12/2025 14:20:14 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.3081941	.0094888	.4521592	-.050696	-.010871	99.35451
Stddev	.0015279	.0034247	.0016076	.003705	.002020	.18780
%RSD	.4957428	36.09200	.3555402	7.309189	18.58477	.1890232
#1	.3097909	.0074781	.4525777	-.054926	-.010922	99.50217
#2	.3067462	.0134431	.4535161	-.049135	-.012866	99.41823
#3	.3080451	.0075452	.4503837	-.048026	-.008826	99.14314

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5761605	.0138317	-.000948	80.30127	.6755620	.0736606
Stddev	.0020291	.0000300	.000179	.26509	.0011366	.0003828
%RSD	.3521770	.2169675	18.93131	.3301227	.1682404	.5197255
#1	.5773603	.0137972	-.000919	80.59182	.6744279	.0739270
#2	.5773036	.0138459	-.001140	80.23942	.6767010	.0738329
#3	.5738178	.0138520	-.000785	80.07257	.6755572	.0732219

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1541714	312.1992	.9431970	22.89523	.1632662	-.001441
Stddev	.0006894	.6141	.0038883	.07922	.0009056	.000170
%RSD	.4471845	.1966961	.4122511	.3459946	.5546819	11.81249
#1	.1549671	311.6425	.9473019	22.98627	.1625974	-.001538
#2	.1537970	312.8579	.9427197	22.85740	.1629044	-.001244
#3	.1537503	312.0972	.9395693	22.84202	.1642967	-.001539

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.073026	.4299105	.6560133	19.76832	-.270863	.0217678
Stddev	.009431	.0013895	.0003247	.11177	.005712	.0002111
%RSD	.4549378	.3232069	.0494908	.5653752	2.108675	.9698854
#1	2.063388	.4314128	.6557302	19.64421	-.276764	.0215679
#2	2.082235	.4296474	.6559420	19.86102	-.265362	.0219886
#3	2.073453	.4286714	.6563677	19.79973	-.270463	.0217470

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01DUP Acquired: 3/12/2025 14:20:14 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0147325	.9896087	F 17.89929	9.451112	F 17.18180	.1833264
Stddev	.0002651	.0025192	.06786	.018071	.02995	.0003011
%RSD	1.799693	.2545667	.3791468	.1912089	.1743354	.1642132
#1	.0144319	.9914223	17.82352	9.432113	17.15145	.1836681
#2	.0149331	.9906716	17.95450	9.468085	17.21134	.1831000
#3	.0148324	.9867322	17.91986	9.453139	17.18263	.1832112

Elem	Sr4077
Units	ppm
Avg	.4199038
Stddev	.0013714
%RSD	.3265997
#1	.4210320
#2	.4203019
#3	.4183773

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3737.676	85997.76	18534.67	2435.941	4104.068
Stddev	5.385	109.97	118.51	7.726	2.193
%RSD	.1440723	.1278793	.6394098	.3171527	.0534339
#1	3732.983	85964.74	18400.55	2433.425	4106.582
#2	3743.555	85908.08	18578.19	2429.787	4102.549
#3	3736.489	86120.46	18625.27	2444.611	4103.074

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV04 Acquired: 3/12/2025 14:24:17 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.332463	5.305029	5.093486	5.136947	5.182722	9.983089
Stddev	.017141	.010789	.021149	.014888	.017499	.014192
%RSD	.3214488	.2033646	.4152140	.2898239	.3376357	.1421625
#1	5.318270	5.308929	5.082026	5.134507	5.165328	9.990343
#2	5.327611	5.292833	5.080539	5.123429	5.182515	9.966736
#3	5.351507	5.313325	5.117891	5.152904	5.200323	9.992188

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.273639	.2404612	2.495867	23.75246	1.058201	2.493751
Stddev	.053586	.0009633	.006925	.02696	.001337	.007181
%RSD	.5778362	.4005970	.2774728	.1135066	.1263243	.2879586
#1	9.221997	.2405938	2.491265	23.78356	1.058844	2.487729
#2	9.269940	.2394385	2.492504	23.73560	1.059094	2.491825
#3	9.328978	.2413513	2.503831	23.73822	1.056664	2.501698

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.286753	4.974084	2.306782	24.03709	2.491619	1.282527
Stddev	.004957	.009517	.005354	.03694	.004784	.001497
%RSD	.3852644	.1913223	.2321041	.1536984	.1919900	.1167600
#1	1.283424	4.968168	2.309904	24.05247	2.489219	1.281043
#2	1.284384	4.985061	2.300599	24.06387	2.488511	1.284038
#3	1.292450	4.969022	2.309842	23.99494	2.497128	1.282500

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.73764	2.431301	2.585421	25.19602	4.731709	5.199103
Stddev	.06618	.005552	.005894	.08619	.017350	.016042
%RSD	.2475060	.2283476	.2279570	.3420617	.3666698	.3085551
#1	26.67422	2.432206	2.578622	25.09785	4.738174	5.185704
#2	26.80627	2.425352	2.589067	25.25925	4.712055	5.194727
#3	26.73244	2.436344	2.588575	25.23097	4.744899	5.216880

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV04 Acquired: 3/12/2025 14:24:17 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.048723	4.739959	F 5.565412	4.775220	4.859101	4.689802
Stddev	.021104	.010771	.036117	.015637	.006843	.006489
%RSD	.4180061	.2272462	.6489559	.3274516	.1408295	.1383747
#1	5.035846	4.747333	5.527233	4.757200	4.860575	4.692661
#2	5.037244	4.727598	5.599035	4.783247	4.851641	4.682374
#3	5.073078	4.744946	5.569969	4.785214	4.865087	4.694371

Elem	Sr4077
Units	ppm
Avg	4.770995
Stddev	.025037
%RSD	.5247764
#1	4.790262
#2	4.742695
#3	4.780028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3193.717	71163.73	14406.40	2059.360	4316.659
Stddev	8.389	172.41	26.45	9.415	10.206
%RSD	.2626693	.2422735	.1835971	.4572012	.2364328
#1	3202.475	71265.63	14379.40	2067.617	4325.922
#2	3192.920	70964.66	14432.26	2049.107	4318.338
#3	3185.754	71260.89	14407.54	2061.357	4305.718

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB04 Acquired: 3/12/2025 14:28:28 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.000159	-.001132	.0008469	-.008791	-.000515	.0046863	-.003216
Stddev	.001313	.000920	.0009018	.001798	.000791	.0035046	.000749
%RSD	823.8605	81.24300	106.4778	20.45522	153.4393	74.78431	23.27776
#1	.001140	-.000071	.0018464	-.010851	-.001278	.0015342	-.003404
#2	-.001486	-.001703	.0006004	-.007987	-.000568	.0084603	-.002391
#3	-.000131	-.001623	.0000941	-.007535	.000301	.0040645	-.003853

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000160	.0000880	-.003564	-.000212	.0001083	.0001023	.0020865
Stddev	.0000096	.0000540	.004508	.000208	.0000117	.0001669	.0012305
%RSD	60.29407	61.34837	126.4788	97.93969	10.81017	163.2721	58.97339
#1	.0000191	.0000276	-.008292	-.000076	.0000949	.0002896	.0015424
#2	.0000052	.0001315	.000686	-.000451	.0001164	-.000031	.0034953
#3	.0000237	.0001051	-.003088	-.000109	.0001136	.000048	.0012219

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000136	-.001257	-.000096	.0004927	-.051884	.0008472	.0002866
Stddev	.000107	.007585	.000211	.0002020	.008114	.0004520	.0003075
%RSD	78.83737	603.2965	220.1575	41.00202	15.63790	53.34864	107.2782
#1	-.000256	.005453	-.000336	.0006820	-.061222	.0013442	.0005494
#2	-.000052	-.009486	.000057	.0002800	-.046556	.0007363	.0003620
#3	-.000099	.000262	-.000007	.0005159	-.047875	.0004610	-.000052

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.115302	.0025175	-.000013	.0002852	.0008981	-.044523	-.003153
Stddev	.020514	.0000871	.000211	.0000422	.0006361	.002148	.001340
%RSD	17.79132	3.461127	1638.233	14.78721	70.82795	4.823810	42.51113
#1	-.120053	.0025957	.000168	.0002585	.0015708	-.044962	-.001845
#2	-.133023	.0025331	.000037	.0003338	.0003063	-.046417	-.004523
#3	-.092829	.0024236	-.000244	.0002633	.0008173	-.042190	-.003091

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB04 Acquired: 3/12/2025 14:28:28 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.006553	-.003731	.0000821
Stddev	.001421	.000862	.0000494
%RSD	21.68460	23.10263	60.22677
#1	-.008170	-.004351	.0001384
#2	-.005991	-.002747	.0000459
#3	-.005500	-.004096	.0000619

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3337.594	76325.74	14911.51	2201.728	4838.970
Stddev	5.659	90.19	67.79	2.176	7.094
%RSD	.1695428	.1181709	.4546395	.0988210	.1465940
#1	3332.537	76399.79	14837.92	2202.531	4844.275
#2	3336.540	76225.29	14925.16	2199.265	4830.912
#3	3343.706	76352.15	14971.43	2203.389	4841.722

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01 Acquired: 3/12/2025 14:32:48 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0020037	.0084683	.0046330	-.034485	-.004138	23.56963
Stddev	.0014691	.0007693	.0011276	.002636	.002148	.06422
%RSD	73.31716	9.084775	24.33835	7.642743	51.90807	.2724837
#1	.0011960	.0086307	.0035238	-.032962	-.002443	23.51399
#2	.0011158	.0091436	.0057782	-.037529	-.006553	23.55499
#3	.0036994	.0076308	.0045972	-.032965	-.003417	23.63991

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1040480	.0013060	-.001419	398.5865	.0033464	.2202121
Stddev	.0005693	.0000216	.000127	2.2590	.0004074	.0002866
%RSD	.5471463	1.656823	8.923603	.5667600	12.17547	.1301419
#1	.1034476	.0012819	-.001283	400.9759	.0029131	.2198954
#2	.1045800	.0013120	-.001440	398.2983	.0034043	.2202874
#3	.1041166	.0013239	-.001533	396.4855	.0037218	.2204535

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3056875	103.7057	10.29917	32.48848	.0621263	-.001505
Stddev	.0005756	.5307	.02404	.04929	.0006351	.000334
%RSD	.1883089	.5117643	.2334287	.1517160	1.022288	22.19157
#1	.3056143	103.0944	10.27853	32.54267	.0627152	-.001121
#2	.3051519	103.9737	10.29341	32.44632	.0614533	-.001727
#3	.3062962	104.0490	10.32557	32.47645	.0622104	-.001667

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	84.74576	.0113953	.9953076	3.649968	3.963321	-.001794
Stddev	.83539	.0005123	.0018509	.016507	.013288	.000446
%RSD	.9857641	4.495744	.1859613	.4522461	.3352649	24.85839
#1	83.80111	.0109892	.9974354	3.632554	3.965097	-.001882
#2	85.04894	.0119709	.9944170	3.665387	3.949235	-.002188
#3	85.38723	.0112258	.9940703	3.651964	3.975631	-.001310

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01 Acquired: 3/12/2025 14:32:48 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.004035	-.006529	F 52.14693	.0251920	F 410.4737	.0236340
Stddev	.000617	.000247	.31852	.0039078	1.3386	.0010614
%RSD	15.28834	3.783317	.6108184	15.51207	.3261086	4.490825
#1	-.003429	-.006253	51.79019	.0297042	409.3243	.0226440
#2	-.004662	-.006604	52.24778	.0229687	410.1534	.0235033
#3	-.004015	-.006729	52.40281	.0229031	411.9434	.0247547

Elem	Sr4077
Units	ppm
Avg	.8681389
Stddev	.0023203
%RSD	.2672749
#1	.8665536
#2	.8670609
#3	.8708021

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3258.218	74144.13	15777.75	2132.993	3939.271
Stddev	7.685	401.68	25.29	3.626	11.914
%RSD	.2358672	.5417498	.1602773	.1699909	.3024400
#1	3265.582	74607.71	15801.57	2135.901	3951.492
#2	3258.825	73925.21	15780.47	2128.930	3938.629
#3	3250.247	73899.47	15751.21	2134.149	3927.690

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01DUP Acquired: 3/12/2025 14:37:06 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0016395	.0079743	.0056167	-.032648	-.006235	23.66077
Stddev	.0006053	.0021737	.0025473	.001195	.000966	.01965
%RSD	36.91815	27.25824	45.35230	3.661681	15.49159	.0830675
#1	.0012452	.0056938	.0029739	-.031278	-.007229	23.66441
#2	.0013369	.0100225	.0058199	-.033479	-.005300	23.63956
#3	.0023364	.0082066	.0080563	-.033187	-.006176	23.67836

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1083603	.0012420	-.002177	401.6482	.0031683	.2204295
Stddev	.0020333	.0000275	.000179	.9931	.0003337	.0007308
%RSD	1.876435	2.215503	8.226977	.2472474	10.53114	.3315270
#1	.1071518	.0012532	-.002115	401.6221	.0027847	.2210133
#2	.1072212	.0012622	-.002037	400.6685	.0033916	.2196099
#3	.1107078	.0012107	-.002379	402.6541	.0033284	.2206653

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3078065	108.9738	10.35783	32.29622	.0617828	-.000638
Stddev	.0002233	.6720	.03182	.13613	.0002847	.000078
%RSD	.0725538	.6166190	.3071775	.4214911	.4607511	12.30011
#1	.3077627	108.4428	10.37222	32.44242	.0616157	-.000640
#2	.3080485	108.7495	10.32135	32.27312	.0616212	-.000715
#3	.3076083	109.7293	10.37990	32.17313	.0621115	-.000558

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	89.63891	.0100901	1.003456	3.911613	3.809397	-.001895
Stddev	.76772	.0000906	.005571	.048545	.026489	.000427
%RSD	.8564638	.8980310	.5551425	1.241041	.6953578	22.52766
#1	88.89864	.0101438	1.009713	3.871156	3.839963	-.002151
#2	89.58669	.0101410	1.001619	3.898241	3.795089	-.001402
#3	90.43142	.0099855	.999035	3.965443	3.793140	-.002131

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01DUP Acquired: 3/12/2025 14:37:06 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.004557	-.006599	F 54.86903	.0252825	F 413.7104	.0259863
Stddev	.001630	.000075	.33217	.0009566	.9142	.0001755
%RSD	35.76490	1.141263	.6053849	3.783571	.2209783	.6754678
#1	-.005486	-.006671	54.51362	.0245398	413.9697	.0257991
#2	-.005510	-.006520	54.92183	.0249458	412.6946	.0260126
#3	-.002675	-.006605	55.17163	.0263619	414.4671	.0261472

Elem	Sr4077
Units	ppm
Avg	.8879428
Stddev	.0030149
%RSD	.3395383
#1	.8863922
#2	.8860188
#3	.8914175

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3205.857	73466.52	16439.86	2070.849	3898.617
Stddev	9.193	29.84	100.99	7.004	3.166
%RSD	.2867434	.0406137	.6142848	.3382003	.0812044
#1	3216.133	73487.70	16325.96	2066.471	3899.997
#2	3198.416	73479.46	16475.15	2067.149	3900.858
#3	3203.022	73432.39	16518.47	2078.926	3894.995

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01LX5 Acquired: 3/12/2025 14:41:23 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0015629	.0013045	.0006465	-.013060	-.004581	5.132588
Stddev	.0003661	.0014379	.0006104	.002000	.001911	.021556
%RSD	23.42214	110.2255	94.40810	15.31624	41.70520	.4199822
#1	.0016118	.0027957	.0009715	-.015255	-.004467	5.126945
#2	.0019020	.0011910	-.000058	-.012583	-.006546	5.156404
#3	.0011748	-.000073	.001026	-.011341	-.002730	5.114415

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0187784	.0003152	-.001069	88.46327	.0004477	.0448478
Stddev	.0005354	.0000473	.000062	.16670	.0000630	.0003838
%RSD	2.851305	14.99675	5.773386	.1884346	14.07473	.8557313
#1	.0181624	.0003578	-.001064	88.43993	.0003754	.0452513
#2	.0190404	.0002644	-.001133	88.64040	.0004769	.0444874
#3	.0191323	.0003235	-.001009	88.30947	.0004908	.0448048

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0703446	23.76805	2.278832	7.064651	.0125577	.0005255
Stddev	.0002993	.20462	.004780	.008607	.0000849	.0002274
%RSD	.4254839	.8609050	.2097773	.1218338	.6763036	43.26209
#1	.0706633	23.86407	2.277685	7.057222	.0124967	.0002908
#2	.0700694	23.90701	2.284081	7.074083	.0126547	.0007447
#3	.0703010	23.53308	2.274729	7.062647	.0125217	.0005410

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.43722	.0030649	.2167497	.6889190	.9006327	-.000223
Stddev	.07644	.0006959	.0003285	.0282215	.0037131	.000137
%RSD	.4146172	22.70690	.1515821	4.096495	.4122732	61.48062
#1	18.49323	.0038083	.2165602	.6600066	.8983705	-.000337
#2	18.46829	.0024289	.2165599	.6903557	.8986096	-.000260
#3	18.35013	.0029575	.2171291	.7163948	.9049179	-.000071

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01LX5 Acquired: 3/12/2025 14:41:23 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.002752	-.000423	F 11.56234	.0007395	F 83.58432	.0022124
Stddev	.000224	.000310	.06847	.0008658	.18692	.0012189
%RSD	8.131180	73.17915	.5922168	117.0780	.2236280	55.09434
#1	-.002906	-.000106	11.62367	.0014712	83.60416	.0008579
#2	-.002856	-.000725	11.57488	-.000216	83.38828	.0032209
#3	-.002496	-.000438	11.48846	.000964	83.76053	.0025584

Elem	Sr4077
Units	ppm
Avg	.1933703
Stddev	.0004803
%RSD	.2484023
#1	.1928312
#2	.1937527
#3	.1935269

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3217.274	72674.95	15879.77	2056.412	4361.840
Stddev	7.765	415.18	7.54	4.673	14.386
%RSD	.2413628	.5712881	.0474534	.2272351	.3298214
#1	3208.755	72279.82	15871.69	2051.395	4347.144
#2	3223.955	72637.41	15886.61	2060.640	4375.895
#3	3219.112	73107.63	15881.02	2057.200	4362.480

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01A Acquired: 3/12/2025 14:58:17 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.7791193	1.818745	.9037523	1.859242	.7699711	25.50077
Stddev	.0035252	.011991	.0029559	.003032	.0008293	.02488
%RSD	.4524582	.6592980	.3270710	.1630857	.1077082	.0975522
#1	.7763492	1.831854	.9057780	1.861325	.7700232	25.47257
#2	.7830873	1.808331	.9003604	1.860638	.7691169	25.51013
#3	.7779214	1.816049	.9051184	1.855764	.7707731	25.51961

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2522391	.1591104	.1827999	392.5554	.3571150	.4021164
Stddev	.0009479	.0005112	.0001581	3.2927	.0008350	.0011833
%RSD	.3757849	.3212700	.0865084	.8387950	.2338127	.2942639
#1	.2530658	.1587324	.1828687	389.7701	.3568457	.4019953
#2	.2524470	.1596920	.1826190	396.1894	.3564479	.4009984
#3	.2512046	.1589067	.1829120	391.7066	.3580514	.4033556

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5644962	106.1822	10.33231	32.97445	.5210467	.0683664
Stddev	.0015474	.1503	.02184	.15196	.0012439	.0001652
%RSD	.2741166	.1415695	.2113524	.4608478	.2387292	.2416196
#1	.5661129	106.2343	10.32381	32.80285	.5201229	.0681760
#2	.5630289	106.2996	10.35712	33.09197	.5205562	.0684523
#3	.5643467	106.0128	10.31600	33.02854	.5224611	.0684709

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	91.75824	.2510194	1.172056	13.48942	4.066243	.3660616
Stddev	.18310	.0011418	.002918	.04125	.007011	.0002222
%RSD	.1995462	.4548620	.2489393	.3057870	.1724149	.0606890
#1	91.82452	.2504654	1.173008	13.53643	4.063225	.3658687
#2	91.55123	.2523325	1.174379	13.45929	4.074258	.3663045
#3	91.89897	.2502604	1.168781	13.47254	4.061247	.3660116

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01A Acquired: 3/12/2025 14:58:17 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6702925	.1520599	F 53.39795	5.827450	F 405.9042	.2003322
Stddev	.0020576	.0006559	.03753	.012832	1.0007	.0011699
%RSD	.3069656	.4313624	.0702813	.2202033	.2465443	.5840011
#1	.6721995	.1517181	53.36604	5.818802	406.7247	.2016825
#2	.6681117	.1528161	53.38851	5.821354	404.7892	.1996935
#3	.6705662	.1516454	53.43929	5.842194	406.1986	.1996207

Elem	Sr4077
Units	ppm
Avg	1.024235
Stddev	.011156
%RSD	1.089206
#1	1.013076
#2	1.035388
#3	1.024240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3173.649	73637.23	15948.99	2054.937	3872.504
Stddev	3.125	379.41	116.03	18.449	7.026
%RSD	.0984632	.5152484	.7275194	.8977668	.1814214
#1	3172.391	74018.72	16063.70	2067.054	3873.561
#2	3177.207	73259.93	15831.68	2033.705	3878.941
#3	3171.350	73633.05	15951.59	2064.053	3865.010

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167099TB Acquired: 3/12/2025 15:02:34 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.001589	-.003384	-.000029	-.008421	-.001798	.0106362
Stddev	.002063	.000508	.000733	.001805	.000855	.0047551
%RSD	129.8374	15.01510	2563.227	21.43098	47.56496	44.70722
#1	-.001732	-.002984	-.000118	-.007343	-.001525	.0120253
#2	-.003578	-.003213	.000745	-.010505	-.001113	.0053412
#3	.000542	-.003956	-.000713	-.007416	-.002756	.0145421

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006554	-.000049	-.000011	.0562278	-.000465	-.000013
Stddev	.000352	.000034	.000059	.0066421	.000261	.000037
%RSD	5.368212	70.50403	563.2603	11.81278	56.02559	278.3273
#1	-.006157	-.000084	-.000062	.0638456	-.000693	.000017
#2	-.006826	-.000047	.000054	.0531901	-.000522	-.000002
#3	-.006680	-.000015	-.000023	.0516478	-.000181	-.000054

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005815	.0028961	-.000867	.0209391	.0000975	.0006789
Stddev	.0001720	.0003921	.000220	.0062148	.0001356	.0002169
%RSD	29.58191	13.53809	25.36942	29.68043	138.9790	31.94983
#1	.0003829	.0033213	-.000809	.0252405	.0001496	.0004499
#2	.0006856	.0025489	-.000683	.0237630	.0001993	.0007056
#3	.0006759	.0028180	-.001111	.0138137	-.000056	.0008813

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.097501	.0000845	.0051338	-.229612	.0107055	-.000312
Stddev	.005706	.0012008	.0002198	.022184	.0009751	.000163
%RSD	5.851994	1421.371	4.281416	9.661582	9.108272	52.29200
#1	-.098265	.0004125	.0049977	-.252819	.0110047	-.000154
#2	-.091451	.0010872	.0050162	-.208615	.0114960	-.000480
#3	-.102786	-.001246	.0053873	-.227403	.0096159	-.000304

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: PB167099TB Acquired: 3/12/2025 15:02:34 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.001439	.0015394	-.054526	-.000929	F 7.671642	-.005871
Stddev	.000518	.0005285	.007002	.001805	.075228	.000555
%RSD	36.01137	34.32899	12.84181	194.4007	.9806044	9.460497
#1	-.000920	.0011203	-.059600	-.000977	7.589963	-.006246
#2	-.001957	.0013649	-.057441	.000900	7.686874	-.005233
#3	-.001441	.0021331	-.046537	-.002710	7.738089	-.006135

Elem	Sr4077
Units	ppm
Avg	.0004908
Stddev	.0000508
%RSD	10.35983
#1	.0004800
#2	.0004462
#3	.0005462

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3367.278	77382.22	14787.14	2195.870	4983.929
Stddev	25.083	315.98	46.60	11.272	41.696
%RSD	.7449057	.4083348	.3151251	.5133130	.8366089
#1	3394.490	77653.00	14750.87	2203.897	5031.162
#2	3362.262	77458.61	14839.70	2200.728	4968.399
#3	3345.082	77035.05	14770.87	2182.983	4952.228

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01 Acquired: 3/12/2025 15:06:53 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0514464	.0021414	.2362896	-.025673	-.006390	40.23957	.1755579
Stddev	.0041969	.0003040	.0007257	.003557	.001708	.06401	.0018172
%RSD	8.157918	14.19843	.3071395	13.85421	26.73199	.1590813	1.035087
#1	.0544839	.0020826	.2370871	-.025635	-.004464	40.25335	.1749103
#2	.0466574	.0024705	.2361140	-.029248	-.006983	40.16980	.1741533
#3	.0531978	.0018710	.2356678	-.022135	-.007722	40.29558	.1776102

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040379	-.003714	69.51679	.1722153	.0314749	.1287709	119.9776
Stddev	.0000625	.000228	.17900	.0003791	.0003536	.0003748	.6666
%RSD	1.548691	6.143118	.2574922	.2201275	1.123539	.2910873	.5556021
#1	.0039658	-.003491	69.42137	.1720542	.0311416	.1285459	119.2429
#2	.0040778	-.003705	69.40571	.1719433	.0318458	.1292036	120.1462
#3	.0040701	-.003947	69.72328	.1726483	.0314372	.1285632	120.5437

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8726028	24.14765	.0581320	-.000221	4.120961	.1663083	.3226091
Stddev	.0038793	.03152	.0004083	.000405	.009234	.0016831	.0002624
%RSD	.4445698	.1305494	.7023189	183.1019	.2240836	1.012047	.0813391
#1	.8703442	24.11200	.0579045	-.000182	4.113791	.1679828	.3224122
#2	.8703819	24.17185	.0586034	-.000644	4.117711	.1646167	.3225081
#3	.8770822	24.15910	.0578883	.000163	4.131381	.1663253	.3229070

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.842196	-.122502	.0066705	.1485110	1.008722	6.005340	2.865757
Stddev	.065982	.001540	.0001156	.0011386	.006926	.133414	.002651
%RSD	1.129413	1.257076	1.732554	.7667003	.6866581	2.221598	.0925006
#1	5.790391	-.123214	.0065769	.1492084	1.001234	5.853191	2.864195
#2	5.819715	-.120735	.0067997	.1471971	1.014900	6.060498	2.868818
#3	5.916481	-.123557	.0066348	.1491276	1.010031	6.102330	2.864258

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01 Acquired: 3/12/2025 15:06:53 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.959061	.0691493	.2044712
Stddev	.002327	.0003870	.0010676
%RSD	.1188007	.5596639	.5221442
#1	1.956712	.0688631	.2038821
#2	1.959104	.0689952	.2038278
#3	1.961367	.0695897	.2057036

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3238.905	72866.13	15113.32	2104.622	4291.864
Stddev	7.025	160.54	21.30	7.429	10.655
%RSD	.2169020	.2203186	.1409367	.3529981	.2482711
#1	3232.435	72934.04	15089.69	2107.512	4279.567
#2	3237.903	72682.79	15119.22	2096.182	4297.669
#3	3246.378	72981.54	15131.05	2110.172	4298.357

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01DUP Acquired: 3/12/2025 15:11:03 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0508060	.0013359	.2348621	-.025698	-.006727	39.66966	.1803805
Stddev	.0035218	.0028592	.0017547	.001032	.002447	.22470	.0012533
%RSD	6.931758	214.0377	.7471073	4.016525	36.38214	.5664344	.6947890
#1	.0499863	.0025844	.2368570	-.024852	-.009534	39.42905	.1806296
#2	.0546653	-.001935	.2335576	-.026848	-.005607	39.70588	.1790214
#3	.0477664	.003358	.2341718	-.025394	-.005040	39.87406	.1814905

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0037920	-.004278	69.68565	.1712340	.0312354	.1258726	122.6302
Stddev	.0000934	.000092	.25261	.0006933	.0001314	.0005758	.3769
%RSD	2.463389	2.142041	.3624929	.4048715	.4205501	.4574454	.3073350
#1	.0036855	-.004177	69.39709	.1710625	.0311173	.1265063	122.8311
#2	.0038300	-.004302	69.79310	.1719970	.0313768	.1253815	122.1955
#3	.0038603	-.004355	69.86677	.1706426	.0312121	.1257299	122.8641

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8761593	23.98676	.0573589	.0006946	4.096846	.1668075	.3085556
Stddev	.0034182	.04220	.0004434	.0000677	.026937	.0004488	.0019788
%RSD	.3901389	.1759272	.7729786	9.751114	.6574971	.2690429	.6413146
#1	.8726030	23.94802	.0571482	.0006222	4.101114	.1672293	.3066135
#2	.8764544	24.03173	.0578683	.0007565	4.068031	.1668571	.3084842
#3	.8794204	23.98053	.0570601	.0007052	4.121395	.1663359	.3105692

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.957448	-.113752	.0070337	.1478020	.9977959	5.654897	2.839090
Stddev	.064085	.002169	.0002345	.0005987	.0013484	.117182	.002971
%RSD	1.075704	1.906450	3.333310	.4050320	.1351372	2.072226	.1046624
#1	6.016684	-.111605	.0071453	.1475902	.9984379	5.789276	2.839081
#2	5.889423	-.115941	.0071915	.1473380	.9962465	5.573983	2.842066
#3	5.966238	-.113709	.0067643	.1484777	.9987034	5.601433	2.836124

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01DUP Acquired: 3/12/2025 15:11:03 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.908340	.0690177	.2071830
Stddev	.006820	.0002844	.0012498
%RSD	.3574043	.4120556	.6032450
#1	1.901572	.0693417	.2061635
#2	1.908237	.0688093	.2068081
#3	1.915211	.0689021	.2085773

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3254.743	74109.24	15697.55	2123.832	4326.508
Stddev	5.367	126.49	52.99	8.580	2.532
%RSD	.1649013	.1706813	.3375789	.4039753	.0585180
#1	3256.730	74053.11	15755.59	2133.003	4326.056
#2	3258.834	74254.08	15685.31	2122.492	4329.235
#3	3248.666	74020.52	15651.75	2116.001	4324.233

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01LX5 Acquired: 3/12/2025 15:15:13 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0105497	-.000270	.0482381	-.010986	-.003119	8.416669	.0333637
Stddev	.0017532	.001533	.0011662	.000888	.001845	.037776	.0009191
%RSD	16.61799	567.3452	2.417579	8.079997	59.16171	.4488241	2.754683
#1	.0102196	.000327	.0480945	-.009966	-.004994	8.408681	.0327259
#2	.0089851	-.002012	.0471504	-.011579	-.001304	8.383525	.0329480
#3	.0124445	.000874	.0494695	-.011414	-.003059	8.457800	.0344172

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009103	-.001064	14.79855	.0361861	.0065758	.0272921	25.17220
Stddev	.0000536	.000069	.01284	.0004141	.0002577	.0001680	.04799
%RSD	5.882221	6.456688	.0867576	1.144454	3.919214	.6156011	.1906577
#1	.0009722	-.001144	14.79358	.0357206	.0064830	.0274145	25.16157
#2	.0008793	-.001029	14.78894	.0363238	.0063774	.0271006	25.13042
#3	.0008796	-.001021	14.81313	.0365138	.0068671	.0273613	25.22463

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1858672	5.091910	.0112518	.0003327	.8198571	.0357917	.0654840
Stddev	.0000984	.029657	.0002187	.0001509	.0043170	.0012404	.0003093
%RSD	.0529660	.5824382	1.943424	45.35288	.5265501	3.465739	.4723766
#1	.1857992	5.061727	.0115010	.0004767	.8157259	.0370306	.0654785
#2	.1859800	5.092991	.0110920	.0001757	.8243385	.0345497	.0651774
#3	.1858222	5.121012	.0111623	.0003458	.8195068	.0357948	.0657960

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.092187	-.028246	.0012447	.0293676	.2160761	1.182642	.5580620
Stddev	.026322	.000177	.0002075	.0008077	.0067722	.043686	.0025617
%RSD	2.410071	.6249274	16.66670	2.750437	3.134197	3.693901	.4590352
#1	1.072885	-.028316	.0014027	.0300144	.2228178	1.135981	.5602611
#2	1.081505	-.028377	.0013215	.0296260	.2092737	1.189377	.5586756
#3	1.122172	-.028045	.0010098	.0284622	.2161369	1.222570	.5552492

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01LX5 Acquired: 3/12/2025 15:15:13 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.3939669	.0116117	.0431884
Stddev	.0038615	.0012394	.0002189
%RSD	.9801508	10.67374	.5067262
#1	.3984192	.0111773	.0434273
#2	.3915310	.0106480	.0429975
#3	.3919506	.0130099	.0431404

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3293.955	73826.21	15078.22	2124.245	4637.236
Stddev	7.753	64.54	31.87	6.096	8.575
%RSD	.2353590	.0874154	.2113589	.2869699	.1849266
#1	3293.770	73847.37	15107.26	2126.189	4638.958
#2	3301.798	73753.76	15044.13	2117.414	4644.819
#3	3286.296	73877.52	15083.28	2129.132	4627.930

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV05 Acquired: 3/12/2025 15:25:22 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	5.206946	5.175834	5.008472	5.001754	5.053719	9.843680	9.223626
Stddev	.023136	.053642	.013838	.025135	.025990	.017546	.135060
%RSD	.4443337	1.036389	.2762938	.5025251	.5142792	.1782469	1.464279
#1	5.207545	5.150347	5.013705	5.001183	5.060216	9.848432	9.229085
#2	5.183516	5.139687	4.992781	4.976909	5.025096	9.858361	9.355874
#3	5.229777	5.237467	5.018931	5.027169	5.075844	9.824248	9.085920

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2347067	2.455249	23.47341	1.045643	2.446097	1.259792	4.837550
Stddev	.0012448	.004321	.07790	.001720	.004626	.004248	.009785
%RSD	.5303801	.1759760	.3318464	.1644672	.1891177	.3372306	.2022765
#1	.2348553	2.450824	23.42432	1.045579	2.442318	1.260827	4.837824
#2	.2358706	2.455464	23.56323	1.047393	2.444717	1.255122	4.847196
#3	.2333943	2.459458	23.43269	1.043956	2.451256	1.263428	4.827631

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.267116	23.86960	2.442223	1.251825	25.97217	2.392454	2.528052
Stddev	.004365	.10781	.003994	.000513	.04229	.004913	.011526
%RSD	.1925279	.4516750	.1635325	.0409815	.1628186	.2053352	.4559069
#1	2.263429	23.81083	2.438349	1.252386	25.99269	2.389341	2.532078
#2	2.271935	23.99403	2.441992	1.251380	25.92353	2.398117	2.537025
#3	2.265982	23.80394	2.446327	1.251709	26.00028	2.389904	2.515054

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.61088	4.643503	5.080403	4.964313	4.663863	5.433275	4.798299
Stddev	.06401	.007313	.019432	.015579	.006559	.013660	.020481
%RSD	.2600732	.1574975	.3824896	.3138171	.1406367	.2514201	.4268451
#1	24.64913	4.639365	5.084281	4.954529	4.659819	5.421147	4.795888
#2	24.53699	4.651947	5.059325	4.956130	4.671431	5.430605	4.779129
#3	24.64653	4.639197	5.097604	4.982278	4.660340	5.448073	4.819879

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV05 Acquired: 3/12/2025 15:25:22 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	4.774583	4.607273	4.721007
Stddev	.017413	.002796	.018518
%RSD	.3647002	.0606810	.3922462
#1	4.787565	4.610022	4.709403
#2	4.754795	4.604433	4.742363
#3	4.781389	4.607365	4.711255

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3215.086	71487.85	14363.87	2068.084	4339.596
Stddev	10.038	279.20	87.11	12.209	6.701
%RSD	.3122099	.3905529	.6064363	.5903317	.1544103
#1	3211.647	71446.95	14384.74	2065.508	4342.530
#2	3226.391	71231.36	14268.22	2057.369	4344.328
#3	3207.219	71785.24	14438.65	2081.375	4331.928

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB05 Acquired: 3/12/2025 15:29:33 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0012356	-.001157	-.000530	-.007875	-.001757	.0023952	-.004625
Stddev	.0019348	.001594	.001374	.001202	.000456	.0013704	.000472
%RSD	156.5943	137.7810	259.4321	15.25992	25.98118	57.21643	10.20469
#1	-.000763	.000451	.000803	-.007701	-.002069	.0025296	-.004952
#2	.001370	-.002737	-.001941	-.006770	-.001233	.0036935	-.004839
#3	.003100	-.001184	-.000451	-.009154	-.001969	.0009625	-.004084

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000128	.0001274	-.001392	.0001205	.0000732	-.000194	-.003231
Stddev	.0000531	.0000222	.005004	.0003901	.0002166	.000336	.001445
%RSD	413.8260	17.39574	359.5511	323.6596	295.9345	173.5663	44.73304
#1	-.000034	.0001037	-.005305	.0001011	-.000072	.000083	-.004666
#2	.000071	.0001309	.004247	-.000260	-.000030	-.000096	-.003253
#3	.000002	.0001476	-.003117	.000520	.000322	-.000568	-.001775

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000266	.0078996	-.000166	.0007763	-.014399	.0007120	-.000028
Stddev	.000058	.0063351	.000219	.0000835	.005589	.0015917	.000109
%RSD	21.90566	80.19562	132.1919	10.75949	38.81804	223.5547	392.8406
#1	-.000306	.0006212	-.000218	.0008724	-.018786	.0001622	-.000133
#2	-.000293	.0121732	.000075	.0007210	-.016306	-.000532	.000084
#3	-.000199	.0109044	-.000355	.0007354	-.008106	.002506	-.000034

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.078156	.0083241	-.000010	.0002346	.0017158	-.042547	-.003269
Stddev	.013555	.0001817	.000169	.0002152	.0003199	.001788	.000691
%RSD	17.34389	2.182557	1764.466	91.73526	18.64150	4.202894	21.14555
#1	-.093441	.0085127	.000155	.0001534	.0013581	-.043142	-.003794
#2	-.073434	.0081503	-.000002	.0000717	.0019741	-.043963	-.002486
#3	-.067594	.0083091	-.000182	.0004785	.0018154	-.040538	-.003529

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB05 Acquired: 3/12/2025 15:29:33 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	-.000545	-.003764	.0001443
Stddev	.000620	.001042	.0000286
%RSD	113.6934	27.67201	19.84258
#1	-.000468	-.003513	.0001732
#2	.000032	-.004908	.0001160
#3	-.001201	-.002871	.0001436

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3334.119	76147.69	14803.48	2184.633	4873.341
Stddev	4.349	289.14	58.02	10.212	4.473
%RSD	.1304385	.3797054	.3919579	.4674584	.0917779
#1	3338.061	75816.44	14801.36	2172.976	4878.152
#2	3329.453	76277.21	14862.53	2188.922	4872.561
#3	3334.842	76349.43	14746.55	2192.002	4869.309

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01MS Acquired: 3/12/2025 15:33:54 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8542774	1.953537	1.281771	1.764159	.5090215	46.68123	.3540530
Stddev	.0025661	.009634	.002308	.006263	.0019782	.06179	.0018039
%RSD	.3003865	.4931463	.1800911	.3550147	.3886366	.1323692	.5094938
#1	.8527547	1.944328	1.282680	1.761734	.5100118	46.62691	.3528352
#2	.8528374	1.952738	1.279146	1.759471	.5067437	46.74846	.3561254
#3	.8572401	1.963545	1.283485	1.771272	.5103090	46.66832	.3531984

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1860638	.1881483	55.23748	.5911956	.2226969	.4141542	124.0470
Stddev	.0008403	.0005431	.16934	.0017142	.0004187	.0008800	.5205
%RSD	.4516304	.2886413	.3065593	.2899603	.1879897	.2124705	.4196345
#1	.1861615	.1885696	55.23125	.5892639	.2231149	.4134222	123.4459
#2	.1868510	.1875354	55.40985	.5917872	.2222776	.4139101	124.3499
#3	.1851789	.1883398	55.07135	.5925356	.2226982	.4151305	124.3452

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9900174	21.59837	.5391095	.0741444	4.950255	.4246819	6.944867
Stddev	.0045465	.04507	.0017676	.0003281	.039093	.0010546	.012421
%RSD	.4592330	.2086620	.3278730	.4425444	.7897088	.2483238	.1788493
#1	.9905997	21.61589	.5409640	.0737739	4.909068	.4253757	6.958804
#2	.9942447	21.63204	.5374440	.0743982	4.954851	.4234683	6.934967
#3	.9852079	21.54717	.5389207	.0742612	4.986847	.4252016	6.940830

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.98638	.0857552	.3969996	.6953222	1.100650	7.150141	8.044865
Stddev	.06305	.0000462	.0001432	.0021183	.002380	.141391	.029376
%RSD	.3944294	.0538555	.0360663	.3046450	.2162276	1.977451	.3651545
#1	15.91864	.0857870	.3968710	.6963966	1.098876	6.987863	8.058725
#2	15.99713	.0857762	.3969741	.6928820	1.103354	7.215761	8.011123
#3	16.04337	.0857022	.3971539	.6966879	1.099718	7.246797	8.064747

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01MS Acquired: 3/12/2025 15:33:54 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.695941	.2640773	.3464542
Stddev	.007502	.0009863	.0007578
%RSD	.4423672	.3734836	.2187253
#1	1.697115	.2636781	.3456200
#2	1.687920	.2652007	.3471000
#3	1.702787	.2633533	.3466426

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3240.838	74508.35	14909.45	2102.427	4335.847
Stddev	6.470	290.08	26.19	6.161	8.720
%RSD	.1996385	.3893312	.1756596	.2930308	.2011147
#1	3246.741	74809.34	14913.97	2106.065	4332.656
#2	3241.852	74485.16	14881.29	2105.902	4345.713
#3	3233.921	74230.56	14933.08	2095.314	4329.171

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01MSD Acquired: 3/12/2025 15:37:54 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8596391	1.947793	1.291119	1.769756	.5132283	45.62528	.3646191
Stddev	.0049840	.014758	.002910	.010173	.0009370	.10628	.0016992
%RSD	.5797729	.7576625	.2253665	.5748148	.1825642	.2329495	.4660144
#1	.8631707	1.964258	1.292230	1.779784	.5138190	45.60708	.3642006
#2	.8539381	1.943365	1.287817	1.759444	.5121479	45.52928	.3631683
#3	.8618086	1.935756	1.293309	1.770040	.5137179	45.73950	.3664884

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1756873	.1865394	55.23618	.5970308	.2224078	.4113457	133.9018
Stddev	.0013020	.0006518	.13870	.0015947	.0007794	.0006707	.9036
%RSD	.7410918	.3494230	.2510981	.2671110	.3504429	.1630407	.6747970
#1	.1749362	.1861630	55.29230	.5984785	.2224477	.4113091	134.9266
#2	.1749349	.1861631	55.07822	.5972924	.2216092	.4106940	133.5591
#3	.1771907	.1872920	55.33803	.5953213	.2231665	.4120338	133.2198

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9812229	21.55979	.5395504	.0770378	5.102185	.4276277	7.031606
Stddev	.0043619	.03763	.0015569	.0004235	.026928	.0022577	.008260
%RSD	.4445367	.1745402	.2885463	.5496649	.5277744	.5279588	.1174699
#1	.9835229	21.58771	.5381264	.0768133	5.129904	.4285236	7.025152
#2	.9761923	21.51700	.5393121	.0767738	5.100526	.4250596	7.040915
#3	.9839533	21.57467	.5412126	.0775262	5.076125	.4292999	7.028750

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.47066	.1236854	.4064197	.6967445	1.065649	6.363088	8.015118
Stddev	.10518	.0032910	.0006782	.0015779	.017395	.043912	.026172
%RSD	.6020264	2.660810	.1668622	.2264610	1.632345	.6900979	.3265308
#1	17.56819	.1274589	.4062135	.6959688	1.068003	6.340703	7.998743
#2	17.48459	.1214094	.4058686	.6957046	1.047196	6.334881	8.001309
#3	17.35922	.1221880	.4071770	.6985600	1.081747	6.413682	8.045302

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01MSD Acquired: 3/12/2025 15:37:54 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.656523	.2687687	.3518501
Stddev	.001155	.0014862	.0017129
%RSD	.0697057	.5529833	.4868231
#1	1.655943	.2695745	.3527494
#2	1.655773	.2670535	.3498749
#3	1.657852	.2696779	.3529261

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3233.788	72450.17	15856.18	2058.666	4327.889
Stddev	1.924	187.54	75.27	3.403	6.246
%RSD	.0594859	.2588525	.4747131	.1652957	.1443160
#1	3234.125	72329.68	15916.02	2055.752	4333.395
#2	3231.718	72354.58	15880.83	2057.841	4329.170
#3	3235.521	72666.24	15771.67	2062.406	4321.102

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01A Acquired: 3/12/2025 15:41:53 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.8349959	1.926145	1.273097	1.725044	.4976534	45.31451	.3523065
Stddev	.0006877	.005869	.000348	.006538	.0010989	.05241	.0009683
%RSD	.0823547	.3046830	.0273129	.3789808	.2208229	.1156566	.2748523
#1	.8357659	1.932201	1.273221	1.732274	.4964887	45.33276	.3531933
#2	.8347788	1.925750	1.273366	1.719549	.4977994	45.35535	.3524528
#3	.8344429	1.920483	1.272704	1.723307	.4986720	45.25541	.3512733

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1856184	.1857023	54.90212	.5887420	.2208853	.4090253	126.3767
Stddev	.0008274	.0003086	.19188	.0012934	.0006536	.0004218	.5041
%RSD	.4457565	.1661790	.3495000	.2196843	.2958985	.1031288	.3989134
#1	.1865568	.1859094	55.03250	.5886047	.2216012	.4095124	126.2554
#2	.1853051	.1853476	54.99208	.5875227	.2207343	.4087867	126.9304
#3	.1849935	.1858500	54.68179	.5900985	.2203204	.4087769	125.9442

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9801398	21.62924	.5346288	.0750367	4.826877	.4246667	6.980090
Stddev	.0039331	.05272	.0007782	.0001395	.016909	.0008121	.009869
%RSD	.4012765	.2437243	.1455533	.1859405	.3503122	.1912391	.1413876
#1	.9826424	21.68492	.5354781	.0750023	4.807648	.4237308	6.978003
#2	.9821707	21.58009	.5344581	.0751903	4.833563	.4250824	6.990835
#3	.9756065	21.62273	.5339501	.0749177	4.839422	.4251868	6.971430

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.07054	.1001429	.4011158	.6858818	1.015325	5.102370	7.957741
Stddev	.04584	.0024649	.0017599	.0022024	.009203	.062793	.017334
%RSD	.2852464	2.461351	.4387491	.3211105	.9064473	1.230655	.2178318
#1	16.06823	.0994626	.4030886	.6884049	1.025557	5.031312	7.955779
#2	16.11750	.1028764	.3997073	.6848962	1.012695	5.125408	7.941471
#3	16.02590	.0980896	.4005514	.6843442	1.007723	5.150389	7.975973

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1545-01A Acquired: 3/12/2025 15:41:53 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.638892	.2614653	.3431297
Stddev	.003436	.0007075	.0015120
%RSD	.2096798	.2705848	.4406417
#1	1.642771	.2609512	.3435613
#2	1.636229	.2622721	.3443789
#3	1.637676	.2611725	.3414488

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3287.029	73174.95	15045.28	2085.365	4392.365
Stddev	7.720	111.34	43.60	7.204	2.565
%RSD	.2348719	.1521494	.2897951	.3454777	.0583953
#1	3278.578	73142.60	14997.51	2085.850	4389.544
#2	3293.711	73083.38	15055.38	2077.930	4392.994
#3	3288.797	73298.88	15082.94	2092.314	4394.556

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1547-01 Acquired: 3/12/2025 15:45:53 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0228730	-.010029	.1125416	-.031300	-.006165	83.87996
Stddev	.0030576	.003331	.0011047	.001792	.001062	.24182
%RSD	13.36756	33.21523	.9815551	5.726092	17.23492	.2882936
#1	.0248072	-.013795	.1112696	-.033352	-.005298	84.00423
#2	.0193480	-.007469	.1132600	-.030502	-.005846	84.03439
#3	.0244638	-.008822	.1130953	-.030044	-.007350	83.60128

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2519624	.0058263	-.000186	14.04848	.1713673	.0770643
Stddev	.0012063	.0000160	.000156	.02528	.0004796	.0000494
%RSD	.4787814	.2745376	84.09401	.1799456	.2798786	.0640623
#1	.2532517	.0058447	-.000364	14.06655	.1717835	.0770707
#2	.2517745	.0058191	-.000121	14.05931	.1714757	.0771101
#3	.2508610	.0058153	-.000073	14.01960	.1708428	.0770120

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1612461	135.4391	.9468118	22.30002	.1420978	-.000475
Stddev	.0003137	.2246	.0016839	.08896	.0011050	.000291
%RSD	.1945178	.1658606	.1778498	.3989212	.7776497	61.28688
#1	.1613164	135.5078	.9479131	22.32882	.1417862	-.000688
#2	.1609033	135.1881	.9448734	22.37101	.1411821	-.000596
#3	.1615186	135.6213	.9476490	22.20022	.1433252	-.000143

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.14029	.2741994	.3702348	5.544785	-.168195	.0006636
Stddev	.01298	.0019416	.0005343	.031735	.002649	.0003397
%RSD	.0644717	.7080844	.1443098	.5723417	1.574845	51.19441
#1	20.13372	.2758069	.3706241	5.551556	-.168847	.0008243
#2	20.15525	.2747490	.3696257	5.510211	-.170457	.0002733
#3	20.13190	.2720422	.3704547	5.572589	-.165281	.0008932

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1547-01 Acquired: 3/12/2025 15:45:53 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0004539	3.539871	F 11.23713	5.512958	.1331306	.1369025
Stddev	.0018970	.004645	.14764	.016855	.0043322	.0005716
%RSD	417.9669	.1312066	1.313871	.3057395	3.254075	.4175097
#1	.0007034	3.536508	11.35727	5.502197	.1361967	.1374931
#2	.0022138	3.537935	11.28181	5.504294	.1350207	.1363521
#3	-.001556	3.545171	11.07231	5.532383	.1281746	.1368622

Elem	Sr4077
Units	ppm
Avg	.0639029
Stddev	.0002220
%RSD	.3473556
#1	.0641317
#2	.0636884
#3	.0638885

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3850.274	87417.97	17949.75	2507.238	4384.774
Stddev	14.830	141.17	16.48	10.534	20.823
%RSD	.3851612	.1614877	.0917865	.4201593	.4748923
#1	3860.237	87488.37	17931.50	2495.207	4397.066
#2	3857.354	87510.10	17954.24	2511.703	4396.524
#3	3833.231	87255.45	17963.52	2514.805	4360.732

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1547-06 Acquired: 3/12/2025 15:49:58 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0372238	-.003430	.5596222	-.035945	-.006161	95.21966	.3634478
Stddev	.0018031	.000457	.0020480	.004598	.001329	.40188	.0017094
%RSD	4.844082	13.31763	.3659581	12.79285	21.56773	.4220539	.4703316
#1	.0373701	-.003903	.5608422	-.039194	-.004748	94.78418	.3616136
#2	.0353520	-.002991	.5607665	-.030684	-.006351	95.57624	.3649964
#3	.0389493	-.003395	.5572578	-.037958	-.007385	95.29855	.3637336

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073734	-.001483	21.66556	.2002918	.1070201	.2585054	187.9045
Stddev	.0001243	.000074	.08218	.0003994	.0001889	.0009708	.6852
%RSD	1.685796	4.965129	.3793073	.1994140	.1765504	.3755329	.3646549
#1	.0075169	-.001510	21.58868	.2004625	.1069339	.2580483	187.6497
#2	.0073032	-.001400	21.75217	.1998354	.1068897	.2578476	187.3832
#3	.0073001	-.001540	21.65581	.2005775	.1072368	.2596204	188.6806

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.157725	25.16509	.2189528	-.000090	5.899574	.2717109	.5762209
Stddev	.005841	.03453	.0001188	.000442	.043408	.0020832	.0028946
%RSD	.5045635	.1372263	.0542634	490.8494	.7357826	.7667088	.5023469
#1	1.152032	25.12521	.2188517	-.000592	5.857519	.2693309	.5736328
#2	1.163704	25.18509	.2190836	.000079	5.896983	.2732034	.5756832
#3	1.157438	25.18495	.2189231	.000242	5.944219	.2725985	.5793467

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.479928	-.202536	.0042107	.0101026	2.414558	8.864446	7.230190
Stddev	.026756	.004817	.0005037	.0011766	.003510	.157656	.001585
%RSD	.3577100	2.378190	11.96175	11.64665	.1453785	1.778518	.0219229
#1	7.475145	-.200301	.0039524	.0110361	2.414812	8.745520	7.231595
#2	7.455885	-.208064	.0038886	.0087810	2.417934	8.804544	7.230502
#3	7.508753	-.199242	.0047911	.0104909	2.410928	9.043273	7.228472

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1547-06 Acquired: 3/12/2025 15:49:58 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.297189	.1742412	.1312422
Stddev	.006300	.0007822	.0005465
%RSD	.4856352	.4489443	.4164334
#1	1.290435	.1736301	.1307556
#2	1.298225	.1751228	.1318335
#3	1.302906	.1739707	.1311374

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3887.920	86802.75	18723.14	2487.675	4309.182
Stddev	6.664	383.18	69.04	15.635	5.066
%RSD	.1714018	.4414388	.3687156	.6284973	.1175646
#1	3894.406	86899.07	18787.27	2488.669	4308.686
#2	3881.091	87128.58	18650.07	2502.789	4304.382
#3	3888.265	86380.60	18732.08	2471.567	4314.478

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1549-01 Acquired: 3/12/2025 15:54:04 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0531712	-.000589	.9064251	-.043749	-.004648	114.5210	.7348370
Stddev	.0016926	.001155	.0031302	.004658	.001418	.0142	.0004732
%RSD	3.183220	196.0314	.3453357	10.64666	30.51710	.0123850	.0643929
#1	.0522734	-.000041	.9094110	-.038747	-.005106	114.5084	.7353833
#2	.0551235	.000190	.9031682	-.047962	-.005781	114.5363	.7345666
#3	.0521167	-.001917	.9066962	-.044539	-.003057	114.5182	.7345609

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084659	-.003016	15.94284	.2384550	.1032779	.2756877	238.8032
Stddev	.0000285	.000266	.02551	.0011166	.0001096	.0010370	.6996
%RSD	.3361038	8.814589	.1599847	.4682829	.1060940	.3761312	.2929659
#1	.0084459	-.003135	15.95690	.2397004	.1034029	.2754720	239.6100
#2	.0084532	-.002711	15.91340	.2375432	.1031982	.2768156	238.3654
#3	.0084984	-.003200	15.95822	.2381213	.1032327	.2747756	238.4340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.684297	31.18222	.2191107	.0002079	4.406527	.3282366	1.164039
Stddev	.014319	.08877	.0005146	.0001798	.016618	.0001118	.006650
%RSD	.3056912	.2846704	.2348344	86.46722	.3771187	.0340620	.5712448
#1	4.696417	31.26954	.2190421	.0002335	4.389604	.3281086	1.159331
#2	4.668497	31.09207	.2186339	.0000167	4.422822	.3282859	1.171645
#3	4.687977	31.18505	.2196561	.0003736	4.407154	.3283152	1.161139

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.55786	-.219039	.0013962	.0170696	4.003047	7.378661	6.902123
Stddev	.00739	.000443	.0003040	.0001711	.009971	.045892	.008081
%RSD	.0639575	.2020339	21.77097	1.002207	.2490822	.6219534	.1170755
#1	11.55561	-.218944	.0010588	.0171335	4.005280	7.325797	6.908218
#2	11.56611	-.218653	.0014811	.0168758	3.992149	7.408281	6.905193
#3	11.55185	-.219522	.0016488	.0171996	4.011712	7.401903	6.892957

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1549-01 Acquired: 3/12/2025 15:54:04 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	1.136636	.2192913	.0954002
Stddev	.008143	.0010329	.0001319
%RSD	.7164027	.4710013	.1382253
#1	1.144989	.2200933	.0952481
#2	1.136198	.2196549	.0954711
#3	1.128721	.2181259	.0954815

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3610.569	80838.63	17832.74	2301.625	4248.510
Stddev	1.772	293.08	39.84	14.125	3.750
%RSD	.0490745	.3625497	.2234167	.6137050	.0882570
#1	3609.220	80613.37	17789.39	2310.018	4244.797
#2	3609.911	80732.55	17841.06	2285.317	4252.295
#3	3612.576	81169.99	17867.76	2309.540	4248.438

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01LX5 Acquired: 3/12/2025 15:58:08 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.0708533	.0021341	.0936829	-.018999	-.003244	21.95401	.1187296
Stddev	.0007646	.0009285	.0008280	.003282	.001252	1.72012	.0101114
%RSD	1.079069	43.50991	.8837793	17.27516	38.58400	7.835118	8.516307
#1	.0716967	.0018530	.0927861	-.015272	-.002636	20.09946	.1076210
#2	.0702057	.0013786	.0938444	-.021460	-.004684	22.26540	.1211712
#3	.0706575	.0031707	.0944182	-.020263	-.002413	23.49717	.1273966

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033593	-.003047	18.05980	.1672119	.0147594	.0397268	73.22087
Stddev	.0003024	.000220	1.39485	.0004497	.0001956	.0005735	1.00620
%RSD	9.002404	7.222660	7.723490	.2689653	1.325222	1.443716	1.374200
#1	.0030714	-.002794	16.54560	.1667742	.0145790	.0403836	72.08321
#2	.0033321	-.003155	18.34148	.1671887	.0149673	.0393252	73.58541
#3	.0036744	-.003193	19.29230	.1676728	.0147320	.0394715	73.99399

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2127660	5.252258	.0336368	-.000441	.4127185	.0970050	.1580626
Stddev	.0163879	.409327	.0006178	.000371	.0090030	.0075078	.0005920
%RSD	7.702332	7.793345	1.836558	84.16283	2.181398	7.739606	.3745349
#1	.1950264	4.815561	.0337958	-.000859	.4025017	.0884459	.1587462
#2	.2159308	5.314018	.0329551	-.000148	.4161634	.1000920	.1577154
#3	.2273406	5.627196	.0341595	-.000317	.4194904	.1024773	.1577263

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.206986	-.064434	.0047657	.0018511	.2209627	4.006138	1.909906
Stddev	.076848	.011641	.0002953	.0008174	.0169078	.047923	.005344
%RSD	1.826666	18.06720	6.196164	44.15864	7.651866	1.196238	.2797845
#1	4.118663	-.051837	.0051047	.0027320	.2028480	3.953973	1.904275
#2	4.258555	-.066670	.0046278	.0011171	.2237140	4.016229	1.910539
#3	4.243740	-.074795	.0045646	.0017041	.2363261	4.048212	1.914906

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01LX5 Acquired: 3/12/2025 15:58:08 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	3.382476	.0386462	.0902995
Stddev	.011612	.0027921	.0071005
%RSD	.3432914	7.224799	7.863250
#1	3.369108	.0356328	.0826444
#2	3.388263	.0391603	.0915843
#3	3.390056	.0411456	.0966699

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3430.840	75263.41	16613.63	2175.994	4568.447
Stddev	4.569	84.67	1070.27	8.641	6.007
%RSD	.1331798	.1125013	6.442131	.3971144	.1314892
#1	3429.287	75360.31	17771.55	2168.246	4568.923
#2	3435.983	75226.27	16408.72	2185.313	4574.202
#3	3427.249	75203.66	15660.64	2174.423	4562.216

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01MS Acquired: 3/12/2025 16:02:19 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.013192	1.838751	2.413440	1.463022	.2601970	115.5031
Stddev	.002492	.013106	.005724	.001839	.0019838	.4192
%RSD	.2459600	.7127429	.2371815	.1257206	.7624249	.3629236
#1	1.010978	1.834006	2.406909	1.463304	.2579396	115.8186
#2	1.012707	1.828679	2.417585	1.461058	.2609886	115.0275
#3	1.015891	1.853568	2.415826	1.464704	.2616627	115.6633

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6767563	.1586381	.1880458	118.2015	1.078952	.2731507
Stddev	.0015328	.0007256	.0002130	.5141	.002961	.0007234
%RSD	.2264898	.4573689	.1132729	.4349125	.2744450	.2648360
#1	.6778187	.1591630	.1880499	118.3678	1.075552	.2725492
#2	.6749992	.1578102	.1878308	117.6249	1.080960	.2729495
#3	.6774511	.1589412	.1882568	118.6119	1.080346	.2739534

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4739637	339.8640	.9925889	36.93559	.6461474	.0617039
Stddev	.0011684	.8759	.0032785	.08943	.0005621	.0005454
%RSD	.2465071	.2577307	.3303011	.2421227	.0869888	.8838403
#1	.4727714	338.8644	.9946543	36.94777	.6465640	.0610870
#2	.4740132	340.2298	.9888086	36.84070	.6455081	.0621219
#3	.4751066	340.4976	.9943038	37.01831	.6463700	.0619027

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.123809	.7370003	.8806885	33.83081	-.080514	.3228331
Stddev	.014821	.0033960	.0008685	.03106	.003866	.0005652
%RSD	.2892533	.4607921	.0986164	.0918146	4.801152	.1750739
#1	5.122141	.7406273	.8812501	33.80189	-.084971	.3224615
#2	5.139394	.7338958	.8811273	33.86364	-.078075	.3225542
#3	5.109893	.7364777	.8796881	33.82691	-.078495	.3234835

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01MS Acquired: 3/12/2025 16:02:19 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6695823	1.262244	F 17.20699	F 16.64189	F 17.25188	.3633458
Stddev	.0007721	.005173	.06317	.07370	.01344	.0006629
%RSD	.1153089	.4098641	.3671040	.4428830	.0778814	.1824492
#1	.6686911	1.264970	17.14199	16.55972	17.24262	.3637813
#2	.6700492	1.256277	17.21083	16.66375	17.24573	.3625828
#3	.6700066	1.265484	17.26815	16.70218	17.26729	.3636731

Elem	Sr4077
Units	ppm
Avg	.5062005
Stddev	.0021827
%RSD	.4312026
#1	.5075391
#2	.5036818
#3	.5073808

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3670.398	83487.35	18181.02	2386.258	4006.247
Stddev	2.549	201.16	55.72	6.503	3.044
%RSD	.0694380	.2409409	.3064987	.2725314	.0759750
#1	3672.900	83663.90	18145.03	2393.640	4009.349
#2	3670.488	83268.36	18245.21	2381.375	4006.127
#3	3667.805	83529.79	18152.82	2383.759	4003.265

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01MSD Acquired: 3/12/2025 16:06:17 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.013993	1.851382	2.404742	1.456875	.2635480	115.3828
Stddev	.006908	.011325	.003821	.009066	.0012353	.5067
%RSD	.6812520	.6117236	.1588747	.6222565	.4687310	.4391548
#1	1.009953	1.838784	2.407999	1.456649	.2649743	115.8560
#2	1.010056	1.860718	2.400537	1.447924	.2628506	114.8481
#3	1.021969	1.854645	2.405691	1.466051	.2628191	115.4442

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6604730	.1618653	.1882757	116.9752	1.080738	.2724778
Stddev	.0029277	.0013343	.0006573	.7369	.002285	.0008126
%RSD	.4432724	.8243396	.3491164	.6299254	.2114110	.2982214
#1	.6628149	.1633843	.1888920	117.7209	1.079299	.2724646
#2	.6571907	.1608823	.1875839	116.2475	1.079543	.2716719
#3	.6614136	.1613294	.1883511	116.9572	1.083373	.2732969

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4755146	331.7635	.9866885	36.82726	.6443273	.0600854
Stddev	.0018521	2.1676	.0058104	.31996	.0020325	.0000103
%RSD	.3894893	.6533641	.5888814	.8688146	.3154414	.0170597
#1	.4770083	329.6250	.9915814	37.16205	.6461318	.0600788
#2	.4734423	331.7064	.9802664	36.52454	.6421255	.0600801
#3	.4760933	333.9591	.9882178	36.79521	.6447247	.0600972

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.014252	.7350406	.8742443	32.64688	-.104552	.3221198
Stddev	.064101	.0055934	.0018269	.28832	.017956	.0010630
%RSD	1.278374	.7609668	.2089673	.8831435	17.17464	.3299968
#1	4.945075	.7401765	.8761848	32.31861	-.124980	.3220309
#2	5.026041	.7290810	.8739906	32.76295	-.097411	.3211041
#3	5.071640	.7358644	.8725575	32.85907	-.091265	.3232245

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01MSD Acquired: 3/12/2025 16:06:17 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6662771	1.250359	F 16.87143	F 16.69554	F 17.25841	.3577428
Stddev	.0004682	.005179	.13873	.02384	.01994	.0013742
%RSD	.0702755	.4142302	.8222901	.1428222	.1155465	.3841171
#1	.6658624	1.255681	16.72261	16.71039	17.25515	.3573097
#2	.6667848	1.245335	16.89449	16.66804	17.24030	.3566374
#3	.6661840	1.250062	16.99719	16.70819	17.27978	.3592814

Elem	Sr4077
Units	ppm
Avg	.4983627
Stddev	.0018077
%RSD	.3627303
#1	.4996465
#2	.4962954
#3	.4991461

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3672.534	83221.68	17766.15	2383.366	4008.643
Stddev	9.603	319.04	170.45	8.311	6.208
%RSD	.2614822	.3833667	.9593933	.3486960	.1548614
#1	3673.274	83481.24	17578.27	2391.120	4005.094
#2	3681.746	83318.32	17910.87	2384.386	4015.811
#3	3662.583	82865.49	17809.32	2374.593	4005.024

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01A Acquired: 3/12/2025 16:10:16 Type: Unk
Method: NON EPA-6010-200.7(v2799) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.025100	1.853707	2.429045	1.484064	.2654483	116.1488
Stddev	.003360	.007553	.004991	.006116	.0018352	.3058
%RSD	.3277902	.4074424	.2054776	.4120790	.6913735	.2632758
#1	1.021222	1.856761	2.425958	1.477558	.2639838	116.0044
#2	1.027155	1.845106	2.426374	1.484939	.2648539	115.9420
#3	1.026923	1.859255	2.434803	1.489695	.2675070	116.5001

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6664012	.1588111	.1894242	117.4941	1.091910	.2747908
Stddev	.0034366	.0007924	.0005416	.3200	.005989	.0015564
%RSD	.5156988	.4989889	.2859276	.2723204	.5484842	.5664081
#1	.6639253	.1597241	.1898468	117.4298	1.088282	.2747246
#2	.6649536	.1584077	.1888137	117.2112	1.088626	.2732685
#3	.6703248	.1583015	.1896122	117.8414	1.098823	.2763792

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4763325	338.6302	.9874171	36.80708	.6487529	.0615124
Stddev	.0003442	2.9262	.0046242	.15409	.0024613	.0006733
%RSD	.0722607	.8641210	.4683106	.4186350	.3793897	1.094496
#1	.4764289	335.6521	.9826608	36.91981	.6477471	.0608342
#2	.4759504	338.7371	.9876938	36.63150	.6469537	.0615223
#3	.4766183	341.5015	.9918967	36.86993	.6515578	.0621806

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.155750	.7365092	.8855216	33.56923	-.091178	.3245713
Stddev	.059258	.0036911	.0017793	.35869	.007849	.0012191
%RSD	1.149365	.5011610	.2009330	1.068513	8.608194	.3755963
#1	5.099999	.7322511	.8861098	33.27877	-.098911	.3254104
#2	5.149267	.7387987	.8835227	33.45876	-.091404	.3231730
#3	5.217983	.7384777	.8869323	33.97017	-.083218	.3251306

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1515-01A Acquired: 3/12/2025 16:10:16 Type: Unk
Method: NON EPA-6010-200.7(v2799) 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	.6728293	1.257539	F 17.46716	F 16.66491	F 17.36253	.3611661
Stddev	.0031796	.004034	.14195	.06628	.09070	.0023278
%RSD	.4725646	.3207682	.8126891	.3977421	.5223838	.6445298
#1	.6708144	1.257235	17.33029	16.70218	17.32822	.3588379
#2	.6711789	1.253665	17.45747	16.58838	17.29399	.3611668
#3	.6764947	1.261716	17.61371	16.70417	17.46538	.3634935

Elem	Sr4077
Units	ppm
Avg	.5010410
Stddev	.0022367
%RSD	.4464158
#1	.4991977
#2	.5003959
#3	.5035294

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3635.859	82489.58	18017.14	2337.463	3975.671
Stddev	2.795	272.07	59.37	9.168	8.245
%RSD	.0768781	.3298220	.3295295	.3922128	.2073904
#1	3632.649	82696.40	17948.81	2343.249	3975.046
#2	3637.754	82590.97	18046.51	2342.247	3984.211
#3	3637.174	82181.38	18056.11	2326.892	3967.756

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV06 Acquired: 3/12/2025 16:25:34 Type: Unk
Method: NON EPA-6010-200.7(v2800) 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	5.185094	5.065579	4.991299	4.961088	5.039754	9.795004	9.100819
Stddev	.019595	.031060	.011982	.016530	.019552	.004577	.112267
%RSD	.3779071	.6131557	.2400597	.3331945	.3879583	.0467249	1.233589
#1	5.185901	5.101430	4.991208	4.959143	5.044310	9.790586	9.230014
#2	5.165108	5.048514	4.979363	4.945618	5.018326	9.799724	9.026982
#3	5.204273	5.046793	5.003326	4.978505	5.056625	9.794701	9.045462

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2387536	2.447534	23.23651	1.050648	2.434288	1.256011	4.774423
Stddev	.0004881	.003748	.04794	.005957	.004442	.003762	.042771
%RSD	.2044432	.1531133	.2063226	.5669995	.1824951	.2995454	.8958308
#1	.2393168	2.448718	23.26723	1.050994	2.435827	1.255350	4.751101
#2	.2384916	2.443337	23.26103	1.056425	2.429280	1.252623	4.823786
#3	.2384524	2.450546	23.18127	1.044525	2.437756	1.260060	4.748383

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.361546	23.73729	2.432843	1.255745	25.68660	2.376205	2.534159
Stddev	.004520	.06843	.005252	.005404	.15135	.003019	.012613
%RSD	.1913818	.2882800	.2158693	.4303304	.5892271	.1270364	.4977230
#1	2.365026	23.69723	2.433155	1.253198	25.56080	2.379669	2.542167
#2	2.363174	23.69834	2.427443	1.261951	25.85456	2.374136	2.540690
#3	2.356438	23.81631	2.437932	1.252085	25.64443	2.374810	2.519619

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.10008	4.697813	5.060667	4.946340	4.602841	5.445803	4.805695
Stddev	.14160	.018867	.009301	.011538	.009801	.039378	.004830
%RSD	.5875371	.4016132	.1837915	.2332576	.2129262	.7230817	.1004962
#1	24.00207	4.718323	5.058917	4.954410	4.609423	5.420410	4.811164
#2	24.26242	4.681197	5.052365	4.933125	4.607523	5.491164	4.803905
#3	24.03574	4.693917	5.070719	4.951486	4.591577	5.425835	4.802015

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV06 Acquired: 3/12/2025 16:25:34 Type: Unk
Method: NON EPA-6010-200.7(v2800) 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	4.737945	4.519914	4.672132
Stddev	.002762	.009902	.032712
%RSD	.0583052	.2190835	.7001620
#1	4.741023	4.518729	4.708863
#2	4.735680	4.530355	4.646137
#3	4.737134	4.510657	4.661396

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3229.278	70942.90	14190.14	2054.693	4363.440
Stddev	3.934	232.15	62.08	12.463	4.367
%RSD	.1218120	.3272328	.4374861	.6065383	.1000793
#1	3230.527	70919.72	14119.18	2045.131	4360.206
#2	3232.435	70723.21	14234.43	2050.160	4368.407
#3	3224.871	71185.77	14216.80	2068.787	4361.706

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB06 Acquired: 3/12/2025 16:30:02 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.001246	-.001317	-.000260	-.008839	-.001917	.0021854	-.004898
Stddev	.000835	.000941	.000405	.001106	.000643	.0036796	.000192
%RSD	66.95609	71.45911	156.0924	12.51856	33.55192	168.3692	3.918001
#1	-.001830	-.002215	-.000296	-.007883	-.001861	.0001134	-.005033
#2	-.001619	-.001398	.000163	-.010051	-.001304	.0000091	-.004983
#3	-.000290	-.000338	-.000646	-.008582	-.002586	.0064339	-.004679

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000457	.0000286	.0049381	-.000057	.0000163	-.000067	-.003948
Stddev	.0000380	.0000199	.0033937	.000087	.0000262	.000296	.001740
%RSD	83.05784	69.60528	68.72407	153.9446	160.9108	442.0265	44.06390
#1	.0000428	.0000515	.0082336	.000017	.0000148	-.000296	-.005233
#2	.0000850	.0000193	.0051266	-.000153	.0000433	-.000172	-.004642
#3	.0000093	.0000151	.0014541	-.000034	-.000009	.000267	-.001968

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000597	.0081488	.0001547	.0007313	-.038668	.0009629	-.000044
Stddev	.000364	.0158711	.0001248	.0001201	.001231	.0006969	.000240
%RSD	60.98931	194.7673	80.67617	16.42577	3.184019	72.37007	549.5631
#1	-.001016	.0102134	.0000152	.0007405	-.039623	.0012475	-.000260
#2	-.000352	-.008654	.0002558	.0008465	-.037278	.0014724	-.000085
#3	-.000424	.022887	.0001930	.0006068	-.039102	.0001688	.000214

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.108543	.0039083	.0000901	.0001166	.0010756	-.037974	-.003863
Stddev	.025279	.0003018	.0001550	.0004044	.0005546	.006088	.001321
%RSD	23.28967	7.721029	172.0730	346.8597	51.55684	16.03132	34.19128
#1	-.115357	.0036772	.0000509	-.000239	.0004714	-.030976	-.003436
#2	-.080555	.0042497	-.000042	.000556	.0011940	-.040895	-.002808
#3	-.129716	.0037980	.000261	.000033	.0015614	-.042050	-.005344

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB06 Acquired: 3/12/2025 16:30:02 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.005459	-.003606	.0000279
Stddev	.003822	.000761	.0000476
%RSD	70.01806	21.10659	170.4999
#1	-.008198	-.004287	.0000496
#2	-.007086	-.003746	.0000609
#3	-.001092	-.002785	-.000027

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3353.925	74545.27	15409.94	2129.927	4898.182
Stddev	91.060	382.12	50.55	19.192	138.452
%RSD	2.715037	.5126060	.3280361	.9010518	2.826598
#1	3458.897	74581.29	15399.95	2131.757	5057.103
#2	3306.693	74146.42	15464.74	2109.885	4833.790
#3	3296.184	74908.11	15365.14	2148.137	4803.653

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01MS Acquired: 3/12/2025 16:34:22 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.7665508	1.788378	.9001119	1.815059	.7520893	25.23953
Stddev	.0019691	.007741	.0044667	.004072	.0038511	.03198
%RSD	.2568739	.4328574	.4962431	.2243701	.5120532	.1266979
#1	.7681181	1.796659	.8981736	1.818568	.7476978	25.27536
#2	.7643406	1.787155	.8969417	1.810594	.7536792	25.22937
#3	.7671936	1.781322	.9052203	1.816015	.7548909	25.21387

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493721	.1586648	.1823575	393.5811	.3579384	.4009828
Stddev	.0003445	.0004684	.0001599	1.3106	.0019940	.0002863
%RSD	.1381637	.2951998	.0877001	.3329959	.5570867	.0713914
#1	.2489890	.1585312	.1824224	394.5503	.3598715	.4009223
#2	.2494706	.1591855	.1824747	394.1030	.3558885	.4007316
#3	.2496567	.1582778	.1821753	392.0899	.3580551	.4012945

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5596125	105.9938	10.25588	33.39230	.5204657	.0677931
Stddev	.0002959	.3879	.01616	.04555	.0011703	.0004965
%RSD	.0528838	.3659610	.1576097	.1364037	.2248472	.7324044
#1	.5592719	106.3668	10.27264	33.34893	.5217608	.0682720
#2	.5598059	105.5925	10.24039	33.43975	.5201518	.0678267
#3	.5597599	106.0223	10.25461	33.38821	.5194843	.0672806

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	89.59961	.2483576	1.159903	13.23784	4.016774	.3626249
Stddev	.50791	.0022131	.004753	.09901	.004624	.0001452
%RSD	.5668678	.8910862	.4097397	.7479533	.1151252	.0400495
#1	90.03342	.2458591	1.158778	13.33352	4.015179	.3626741
#2	89.04090	.2491422	1.155813	13.13580	4.021985	.3624615
#3	89.72451	.2500714	1.165116	13.24419	4.013158	.3627392

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01MS Acquired: 3/12/2025 16:34:22 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6659061	.1491635	F 53.33812	5.794642	F 403.5255	.1931453
Stddev	.0018110	.0011096	.18276	.032309	.8346	.0007838
%RSD	.2719542	.7438810	.3426524	.5575652	.2068233	.4058208
#1	.6679972	.1502479	53.52247	5.827075	404.4867	.1933011
#2	.6648743	.1480303	53.15698	5.762458	403.1049	.1922952
#3	.6648468	.1492122	53.33492	5.794393	402.9849	.1938395

Elem	Sr4077
Units	ppm
Avg	1.007470
Stddev	.006009
%RSD	.5964329
#1	1.004908
#2	1.014335
#3	1.003166

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3225.537	73882.69	16038.56	2070.185	3918.006
Stddev	5.549	192.58	2.98	8.166	5.648
%RSD	.1720425	.2606577	.0185994	.3944608	.1441514
#1	3229.257	73744.77	16040.50	2065.006	3918.582
#2	3228.195	74102.71	16040.06	2079.599	3923.344
#3	3219.158	73800.59	16035.13	2065.950	3912.092

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01MSD Acquired: 3/12/2025 16:38:37 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.7692723	1.830585	.9114894	1.812843	.7562269	25.06526
Stddev	.0253473	.075975	.0402350	.071653	.0306251	.03884
%RSD	3.294964	4.150310	4.414208	3.952503	4.049723	.1549712
#1	.7710433	1.816712	.9086872	1.811088	.7544223	25.09058
#2	.7430860	1.762502	.8727287	1.742084	.7265439	25.02054
#3	.7936876	1.912540	.9530523	1.885357	.7877143	25.08468

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2575880	.1633773	.1844709	397.1992	.3626867	.4029453
Stddev	.0019319	.0000493	.0089320	2.3217	.0015388	.0174635
%RSD	.7500048	.0301588	4.841971	.5845114	.4242679	4.333964
#1	.2583592	.1633966	.1839726	399.7301	.3626154	.4016717
#2	.2590152	.1633213	.1757985	396.6991	.3642599	.3861535
#3	.2553896	.1634140	.1936417	395.1683	.3611849	.4210108

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5594428	106.6191	10.35255	33.62224	.5268848	.0690516
Stddev	.0221603	.3518	.00379	.06294	.0229688	.0000493
%RSD	3.961140	.3299796	.0366101	.1872045	4.359358	.0714392
#1	.5594843	106.6110	10.35598	33.61922	.5258801	.0690794
#2	.5372617	106.9749	10.35320	33.56086	.5044348	.0690808
#3	.5815823	106.2715	10.34848	33.68663	.5503395	.0689947

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	88.19767	.2545450	1.161723	13.41659	4.051890	.3706237
Stddev	.31086	.0017575	.007066	.02639	.004417	.0140303
%RSD	.3524603	.6904625	.6082415	.1967119	.1090072	3.785597
#1	88.47741	.2528937	1.154447	13.39753	4.056416	.3699939
#2	88.25260	.2563923	1.168559	13.44671	4.047592	.3569189
#3	87.86301	.2543490	1.162164	13.40552	4.051663	.3849583

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1540-01MSD Acquired: 3/12/2025 16:38:37 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6785733	.1559697	F 53.16665	5.904917	F 400.1485	.1972069
Stddev	.0305213	.0005946	.02973	.259492	16.6279	.0004663
%RSD	4.497865	.3812108	.0559091	4.394515	4.155423	.2364745
#1	.6769890	.1557948	53.16843	5.881252	399.4038	.1966703
#2	.6488749	.1554822	53.19544	5.658067	383.9055	.1974357
#3	.7098558	.1566321	53.13607	6.175431	417.1362	.1975146

Elem	Sr4077
Units	ppm
Avg	1.028541
Stddev	.003381
%RSD	.3286889
#1	1.026862
#2	1.032432
#3	1.026328

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3277.658	73932.56	15965.55	2107.350	3969.424
Stddev	109.609	251.62	29.99	14.957	149.681
%RSD	3.344141	.3403339	.1878137	.7097588	3.770854
#1	3278.980	73875.52	15944.85	2112.125	3974.464
#2	3386.600	73714.35	15951.87	2090.588	4116.521
#3	3167.393	74207.80	15999.94	2119.336	3817.286

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1516-03 Acquired: 3/12/2025 16:42:52 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.001207	-.004092	.0001252	-.009526	-.001405	.0789444
Stddev	.004879	.000993	.0005168	.001370	.001811	.0079726
%RSD	404.1492	24.26296	412.6926	14.38203	128.8904	10.09897
#1	.002562	-.003889	.0003262	-.010198	.000446	.0715776
#2	-.006719	-.003216	-.000462	-.007949	-.001487	.0874090
#3	.000535	-.005170	.000511	-.010429	-.003173	.0778465

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0919127	.0000490	-.000546	67.00027	-.000441	.0067440
Stddev	.0003278	.0000450	.000104	.12686	.000299	.0002152
%RSD	.3566266	91.67333	19.11100	.1893357	67.86498	3.190171
#1	.0915350	.0000968	-.000653	67.11160	-.000199	.0064967
#2	.0921220	.0000426	-.000444	67.02705	-.000348	.0068473
#3	.0920811	.0000076	-.000541	66.86216	-.000775	.0068881

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021204	11.38345	.4071878	21.73327	.0099771	.0004213
Stddev	.0004658	.10504	.0015130	.04304	.0000945	.0003439
%RSD	21.96663	.9227664	.3715771	.1980514	.9471798	81.62057
#1	.0017880	11.44660	.4088814	21.75012	.0100474	.0000864
#2	.0026527	11.26219	.4067127	21.76535	.0100142	.0007736
#3	.0019203	11.44156	.4059694	21.68436	.0098697	.0004040

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.58574	.0009284	.0523672	10.67237	.0514175	.0539518
Stddev	.30254	.0011968	.0001798	.11124	.0014347	.0004890
%RSD	.7275119	128.9081	.3433602	1.042303	2.790238	.9064206
#1	41.68552	-.000301	.0522682	10.68732	.0529169	.0536369
#2	41.24591	.000996	.0522586	10.55442	.0512776	.0537034
#3	41.82579	.002090	.0525747	10.77538	.0500579	.0545152

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1516-03 Acquired: 3/12/2025 16:42:52 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.001578	.0007218	F 21.59732	.0095274	F 30.54931	.0034432
Stddev	.000533	.0004827	.17984	.0009877	.13968	.0007895
%RSD	33.74400	66.86931	.8326729	10.36724	.4572172	22.92798
#1	-.001003	.0002087	21.69126	.0083954	30.42050	.0025429
#2	-.001679	.0011667	21.38997	.0099730	30.52966	.0037693
#3	-.002053	.0007900	21.71073	.0102139	30.69777	.0040173

Elem	Sr4077
Units	ppm
Avg	.3421379
Stddev	.0002841
%RSD	.0830277
#1	.3423744
#2	.3418228
#3	.3422165

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3214.275	73294.33	15745.25	2065.401	4525.126
Stddev	4.719	379.81	69.23	9.229	1.957
%RSD	.1468130	.5182030	.4396883	.4468273	.0432392
#1	3208.955	73000.04	15723.97	2055.467	4525.640
#2	3217.957	73723.08	15689.16	2073.708	4526.773
#3	3215.913	73159.87	15822.62	2067.027	4522.963

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1519-01 Acquired: 3/12/2025 16:47:06 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.001025	-.008096	-.001286	-.007797	-.004284	32.99321
Stddev	.001292	.001433	.000772	.000968	.001569	.12923
%RSD	126.1409	17.70345	60.05791	12.42090	36.62750	.3916822
#1	-.001722	-.009001	-.001179	-.007954	-.005996	32.95538
#2	-.001818	-.006444	-.000573	-.008678	-.002914	33.13714
#3	.000467	-.008844	-.002106	-.006760	-.003942	32.88713

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004232	-.000046	-.000068	12.10769	.5784449	.0050652
Stddev	.000415	.000024	.000031	.06511	.0140236	.0002125
%RSD	9.796262	53.31321	45.44079	.5377416	2.424366	4.196269
#1	-.004619	-.000064	-.000096	12.10031	.5687106	.0048201
#2	-.004281	-.000018	-.000035	12.17618	.5721051	.0051770
#3	-.003795	-.000054	-.000073	12.04659	.5945189	.0051985

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0274312	.3219764	.0079522	1.678431	.0136520	.0005275
Stddev	.0000769	.0020053	.0001315	.011580	.0002591	.0005569
%RSD	.2802607	.6228090	1.653013	.6899422	1.898022	105.5860
#1	.0275122	.3206088	.0078116	1.686740	.0136474	.0010548
#2	.0273593	.3210420	.0080720	1.683350	.0133952	.0005827
#3	.0274220	.3242783	.0079731	1.665203	.0139133	-.000055

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2405.100	-.000499	.1206001	261.3576	5.725373	.0321451
Stddev	37.076	.001114	.0038276	4.9658	.027680	.0003198
%RSD	1.541554	223.2095	3.173832	1.900014	.4834558	.9949011
#1	2374.037	-.001784	.1178698	258.0010	5.726225	.0322830
#2	2395.117	.000189	.1189553	259.0099	5.752618	.0323728
#3	2446.145	.000098	.1249752	267.0620	5.697278	.0317795

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1519-01 Acquired: 3/12/2025 16:47:06 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0046368	.0006044	.5326801	1.254745	F 1094.573	-.000598
Stddev	.0007766	.0004433	.0151340	.007430	2.319	.000109
%RSD	16.74824	73.35076	2.841111	.5921140	.2118279	18.24611
#1	.0050817	.0007244	.5152182	1.246772	1092.824	-.000538
#2	.0050886	.0001134	.5420025	1.261473	1093.691	-.000724
#3	.0037401	.0009753	.5408196	1.255991	1097.203	-.000532

Elem	Sr4077
Units	ppm
Avg	.0641670
Stddev	.0002845
%RSD	.4432892
#1	.0644047
#2	.0642445
#3	.0638519

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2731.460	59806.59	14609.65	1749.516	3376.648
Stddev	7.448	1180.11	91.06	37.444	6.803
%RSD	.2726901	1.973207	.6233146	2.140268	.2014607
#1	2738.607	60803.95	14613.17	1775.283	3384.139
#2	2723.742	60112.03	14516.88	1766.702	3374.948
#3	2732.030	58503.79	14698.91	1706.564	3370.856

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: LR1 Acquired: 3/12/2025 16:53:30 Type: Unk
Method: NON EPA-6010-200.7(v2801) 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	.0348417	.0682584	.0178592	-.211403	-.018876	2055.830	.0103593
Stddev	.0060309	.0090869	.0025856	.015171	.001148	21.585	.0013115
%RSD	17.30936	13.31251	14.47759	7.176297	6.083431	1.049949	12.66036
#1	.0281139	.0727713	.0189558	-.196971	-.017622	2077.573	.0094708
#2	.0366488	.0742055	.0197158	-.210020	-.019129	2055.511	.0118657
#3	.0397625	.0577985	.0149061	-.227218	-.019876	2034.406	.0097415

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073368	.0113318	1977.744	.0276521	.0304430	.0405331	990.6531
Stddev	.0000781	.0025909	23.262	.0000717	.0006284	.0018156	8.3194
%RSD	1.064877	22.86428	1.176207	.2594584	2.064200	4.479366	.8397890
#1	.0072862	.0084481	1978.651	.0277206	.0298251	.0384489	999.9947
#2	.0074268	.0120835	2000.539	.0276583	.0304224	.0417719	987.9220
#3	.0072974	.0134637	1954.041	.0275775	.0310814	.0413784	984.0425

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.103111	1640.963	.0027411	-.028119	1927.345	.0157587	.0928913
Stddev	.000427	13.832	.0008908	.001251	21.573	.0008452	.0006245
%RSD	.4141498	.8429310	32.49693	4.447295	1.119289	5.363391	.6722621
#1	-.102635	1646.565	.0026734	-.026855	1952.193	.0159531	.0921713
#2	-.103460	1651.116	.0036637	-.028147	1916.443	.0164898	.0932173
#3	-.103238	1625.209	.0018861	-.029356	1913.399	.0148332	.0932853

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1377.791	^ *****	.0063418	.0080155	-.033814	.1216203	.1343710
Stddev	4.874	-----	.0004206	.0050792	.000610	.0083253	.0050910
%RSD	.3537729	-----	6.632575	63.36685	1.803683	6.845288	3.788758
#1	1380.972	^ -----	.0058927	.0126740	-.033958	.1153995	.1353319
#2	1372.179	^ -----	.0064062	.0087718	-.034340	.1183837	.1288681
#3	1380.221	^ -----	.0067265	.0026006	-.033146	.1310779	.1389131

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: LR1 Acquired: 3/12/2025 16:53:30 Type: Unk
Method: NON EPA-6010-200.7(v2801) 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	-.188521	.0845627	.0116801
Stddev	.011936	.0059409	.0000352
%RSD	6.331372	7.025438	.3010193
#1	-.182447	.0893046	.0116914
#2	-.180843	.0778987	.0116406
#3	-.202272	.0864848	.0117081

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2134.625	48857.16	12327.01	1361.942	2540.008
Stddev	4.363	55.62	74.97	4.920	5.974
%RSD	.2043813	.1138418	.6081605	.3612622	.2351920
#1	2139.656	48797.87	12317.20	1361.382	2545.821
#2	2132.326	48865.42	12257.42	1367.119	2540.318
#3	2131.892	48908.19	12406.39	1357.326	2533.885

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: LR2 Acquired: 3/12/2025 16:58:27 Type: Unk
Method: NON EPA-6010-200.7(v2801) 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	.0056517	-.003712	232.4450	-.002216	-.008304	.1944411	^F *****
Stddev	.0009431	.002345	.7042	.003242	.001506	.0082834	-----
%RSD	16.68696	63.16745	.3029684	146.2985	18.13570	4.260112	-----
#1	.0045734	-.001145	233.2582	-.003102	-.009856	.2024234	^ -----
#2	.0063223	-.004251	232.0330	.001377	-.006849	.1950134	^ -----
#3	.0060595	-.005740	232.0438	-.004924	-.008206	.1858863	^ -----

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002794	-.003405	.2714064	.0010657	.0047118	266.2421	.0150384
Stddev	.000031	.000094	.0065808	.0001240	.0000857	1.1138	.0023887
%RSD	1.115514	2.767952	2.424707	11.63508	1.818611	.4183254	15.88411
#1	-.002829	-.003487	.2774644	.0011039	.0046886	267.4708	.0174189
#2	-.002781	-.003302	.2723502	.0011660	.0048067	265.9568	.0150547
#3	-.002771	-.003425	.2644047	.0009271	.0046401	265.2988	.0126416

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.87088	-.102382	45.75656	.0024287	.2721698	-.011148	31.92909
Stddev	.18876	.018987	.12437	.0003297	.0219879	.001068	.27295
%RSD	.4302568	18.54474	.2718046	13.57470	8.078747	9.580616	.8548775
#1	44.08723	-.080954	45.89951	.0020756	.2904724	-.012356	32.09689
#2	43.73979	-.117110	45.67319	.0027285	.2782576	-.010331	32.07624
#3	43.78563	-.109083	45.69697	.0024820	.2477794	-.010755	31.61413

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2344610	.0006364	-.006857	-.005574	-.035571	-.058374	.1669933
Stddev	.0434649	.0003596	.000340	.000287	.000415	.003592	.0009446
%RSD	18.53824	56.50995	4.951258	5.145720	1.167306	6.152769	.5656484
#1	.2691350	.0006616	-.007147	-.005830	-.035167	-.058424	.1659084
#2	.2485483	.0002648	-.006940	-.005264	-.035549	-.054757	.1674386
#3	.1856997	.0009827	-.006484	-.005629	-.035997	-.061940	.1676329

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: LR2 Acquired: 3/12/2025 16:58:27 Type: Unk
Method: NON EPA-6010-200.7(v2801) 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	.0472308	.0001770	.0015068
Stddev	.0021450	.0002311	.0000383
%RSD	4.541522	130.5745	2.541273
#1	.0478021	.0004412	.0014844
#2	.0490323	.0000126	.0015510
#3	.0448580	.0000772	.0014850

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2949.005	74092.20	14755.71	2041.111	4568.434
Stddev	6.301	108.34	40.34	21.429	8.007
%RSD	.2136740	.1462281	.2734180	1.049876	.1752784
#1	2947.442	73973.04	14714.66	2019.275	4559.205
#2	2955.941	74118.75	14757.16	2041.948	4572.546
#3	2943.633	74184.79	14795.31	2062.109	4573.549

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1517-01DLX20 Acquired: 3/12/2025 17:02:46 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	.0332040	.2277400	.0239436	.1310164	.0432022	.2860790
Stddev	.0022887	.0011744	.0010703	.0040483	.0005258	.0057150
%RSD	6.892941	.5156828	4.469943	3.089949	1.217074	1.997715
#1	.0352877	.2278202	.0239466	.1356791	.0431042	.2926603
#2	.0335701	.2288722	.0250124	.1289747	.0427323	.2832085
#3	.0307543	.2265275	.0228718	.1283956	.0437701	.2823682

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0141883	-.002834	-.001244	.4800164	.0051293	-.020560
Stddev	.0004944	.000066	.000055	.0046580	.0003319	.000130
%RSD	3.484736	2.321331	4.459406	.9703909	6.469892	.6313564
#1	.0136982	-.002910	-.001264	.4770118	.0049845	-.020590
#2	.0141797	-.002795	-.001181	.4776552	.0048944	-.020417
#3	.0146870	-.002797	-.001287	.4853822	.0055089	-.020672

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0468783	.0522471	.2554368	.0761565	.0027458	-.001171
Stddev	.0017197	.0021879	.0008170	.0055100	.0003307	.000174
%RSD	3.668420	4.187577	.3198544	7.235126	12.04433	14.89228
#1	.0485586	.0499118	.2550708	.0789404	.0031196	-.001143
#2	.0469546	.0542494	.2548667	.0797190	.0026264	-.001012
#3	.0451218	.0525803	.2563728	.0698099	.0024914	-.001357

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	163.6781	-.042955	.0724109	485.0088	.3686775	F 26.26458
Stddev	.1079	.000602	.0004844	2.0428	.0020855	.09439
%RSD	.0659132	1.401247	.6689058	.4211968	.5656565	.3593784
#1	163.7140	-.043498	.0726491	486.3128	.3701909	26.18754
#2	163.5568	-.043059	.0718536	482.6545	.3695430	26.23634
#3	163.7634	-.042308	.0727301	486.0592	.3662987	26.36987

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1517-01DLX20 Acquired: 3/12/2025 17:02:46 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	.0289413	.0026475	4.272960	1.319757	1.099610	.0054400
Stddev	.0012748	.0004726	.021479	.005873	.002326	.0012663
%RSD	4.404958	17.85219	.5026625	.4449732	.2115482	23.27737
#1	.0275283	.0021637	4.294092	1.314647	1.096924	.0068709
#2	.0300054	.0031082	4.251151	1.318452	1.101006	.0044640
#3	.0292902	.0026707	4.273637	1.326172	1.100899	.0049852

Elem	Sr4077
Units	ppm
Avg	.0068822
Stddev	.0000537
%RSD	.7809675
#1	.0068988
#2	.0068221
#3	.0069257

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2849.613	66790.52	14793.91	1827.677	4168.284
Stddev	4.505	69.10	40.25	1.070	9.726
%RSD	.1580840	.1034596	.2720685	.0585554	.2333218
#1	2845.438	66869.52	14795.73	1826.678	4159.054
#2	2854.387	66741.34	14752.78	1827.546	4178.439
#3	2849.014	66760.70	14833.21	1828.806	4167.358

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02 Acquired: 3/12/2025 17:07:17 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	-.004096	-.008999	.0138440	-.009255	.0007502	.7725525
Stddev	.002088	.001897	.0012077	.003364	.0005539	.0154035
%RSD	50.96405	21.07703	8.723524	36.35024	73.83650	1.993848
#1	-.004890	-.011182	.0152100	-.013036	.0007545	.7821634
#2	-.005671	-.008061	.0134041	-.006592	.0013019	.7547859
#3	-.001728	-.007754	.0129180	-.008137	.0001941	.7807082

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0531662	.0000787	.0000282	206.1591	.0004534	.0049004
Stddev	.0007044	.0000263	.0000211	3.7970	.0001105	.0002503
%RSD	1.324938	33.39123	74.70955	1.841795	24.36263	5.107953
#1	.0536078	.0000505	.0000502	206.4578	.0005655	.0051635
#2	.0523538	.0000831	.0000264	202.2216	.0003446	.0046652
#3	.0535370	.0001025	.0000081	209.7980	.0004502	.0048724

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060495	.2401826	.1098153	15.03285	.0255460	.0004733
Stddev	.0006452	.0018261	.0025352	.30143	.0001039	.0002706
%RSD	10.66584	.7602948	2.308609	2.005146	.4065034	57.18339
#1	.0067404	.2421387	.1096848	15.05259	.0255419	.0004278
#2	.0059456	.2398864	.1073479	14.72203	.0256519	.0007638
#3	.0054625	.2385227	.1124133	15.32392	.0254443	.0002283

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.5671	.0010921	.0310806	77.92183	.0646326	.0070332
Stddev	.4596	.0007451	.0002021	.25776	.0012611	.0000298
%RSD	.3012654	68.22644	.6503319	.3307923	1.951104	.4242046
#1	153.0078	.0011346	.0310362	77.81876	.0641860	.0070062
#2	152.6028	.0018149	.0309044	78.21517	.0636556	.0070652
#3	152.0907	.0003266	.0313012	77.73155	.0660562	.0070283

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02 Acquired: 3/12/2025 17:07:17 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	-.004112	-.002419	F 17.46550	.0668389	F 180.6429	-.001455
Stddev	.001427	.000675	.02922	.0031609	.8660	.000260
%RSD	34.69634	27.91432	.1673287	4.729080	.4793906	17.88504
#1	-.005080	-.001946	17.44820	.0632556	181.5664	-.001754
#2	-.002474	-.002118	17.49924	.0692313	179.8490	-.001281
#3	-.004783	-.003192	17.44906	.0680299	180.5133	-.001331

Elem	Sr4077
Units	ppm
Avg	1.234043
Stddev	.013734
%RSD	1.112949
#1	1.248221
#2	1.220801
#3	1.233106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3004.588	68915.14	14745.96	1931.286	4107.744
Stddev	16.407	168.88	242.18	2.707	16.507
%RSD	.5460659	.2450503	1.642332	.1401570	.4018584
#1	3003.405	69016.62	14714.08	1931.388	4102.823
#2	3021.554	68720.20	15002.50	1928.529	4126.153
#3	2988.804	69008.62	14521.30	1933.940	4094.257

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02DUP Acquired: 3/12/2025 17:11:48 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	-.001987	-.007880	.0255996	-.010112	.0001723	.7880698
Stddev	.000437	.000783	.0005013	.001589	.0006581	.0111928
%RSD	21.98875	9.942525	1.958133	15.71224	381.8322	1.420280
#1	-.002213	-.008762	.0260855	-.009295	.0008005	.7898727
#2	-.001483	-.007265	.0250843	-.009098	-.000512	.7760850
#3	-.002264	-.007613	.0256289	-.011943	.000229	.7982518

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0508934	.0000870	.0000103	201.5095	.0002680	.0051272
Stddev	.0003538	.0000349	.0000738	.1331	.0003009	.0000795
%RSD	.6950932	40.18090	714.5303	.0660735	112.2851	1.549771
#1	.0511878	.0001264	-.000074	201.6131	.0005692	.0050932
#2	.0509914	.0000748	.000044	201.5562	.0002674	.0050704
#3	.0505010	.0000597	.000061	201.3593	-.000033	.0052180

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0081307	.2697252	.1088565	14.72141	.0253980	.0005693
Stddev	.0001982	.0040449	.0007060	.02586	.0004289	.0004708
%RSD	2.437918	1.499619	.6485556	.1756822	1.688805	82.70570
#1	.0080706	.2725546	.1091644	14.73704	.0249721	.0000868
#2	.0083520	.2715286	.1093563	14.69155	.0253922	.0005936
#3	.0079695	.2650923	.1080489	14.73563	.0258299	.0010275

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	153.8983	.0007028	.0369651	77.41175	.0618527	.0067672
Stddev	2.8215	.0005809	.0005987	1.03884	.0005117	.0002261
%RSD	1.833341	82.65001	1.619681	1.341961	.8272420	3.341668
#1	157.0991	.0013062	.0376428	78.58388	.0614901	.0067157
#2	151.7719	.0006551	.0367447	77.04649	.0616302	.0070146
#3	152.8239	.0001473	.0365078	76.60488	.0624380	.0065712

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02DUP Acquired: 3/12/2025 17:11:48 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	-.003732	-.000995	F 17.44725	.0669609	F 180.0311	-.002367
Stddev	.000321	.000508	.22389	.0029311	.5637	.000252
%RSD	8.613417	51.07983	1.283265	4.377381	.3131093	10.65537
#1	-.004100	-.000455	17.70571	.0673007	180.6796	-.002457
#2	-.003509	-.001067	17.32311	.0638747	179.7554	-.002561
#3	-.003587	-.001463	17.31292	.0697074	179.6583	-.002082

Elem	Sr4077
Units	ppm
Avg	1.206126
Stddev	.006654
%RSD	.5517224
#1	1.212635
#2	1.199335
#3	1.206407

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3012.093	68930.77	14946.58	1891.105	4128.457
Stddev	11.377	1087.87	71.76	37.650	9.715
%RSD	.3777140	1.578208	.4800898	1.990893	.2353177
#1	2999.772	67699.48	14892.74	1847.644	4117.357
#2	3022.200	69761.84	15028.05	1913.756	4132.599
#3	3014.308	69331.00	14918.96	1911.915	4135.413

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02LX5 Acquired: 3/12/2025 17:16:20 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	-.001696	-.002362	.0015685	-.007382	-.002597	.2182369
Stddev	.002299	.000961	.0008649	.000944	.001090	.0059492
%RSD	135.5686	40.67831	55.13932	12.79145	41.97516	2.726014
#1	.000955	-.001532	.0009489	-.008443	-.002121	.2153583
#2	-.003146	-.002140	.0025567	-.006634	-.003844	.2250779
#3	-.002896	-.003414	.0012002	-.007070	-.001826	.2142746

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051156	.0000431	.0000450	41.30703	-.000102	.0010780
Stddev	.0003263	.0000410	.0000189	.07588	.000124	.0001625
%RSD	6.378921	95.18033	42.02266	.1836929	121.7518	15.07114
#1	.0048882	.0000882	.0000293	41.38389	-.000219	.0009064
#2	.0049691	.0000333	.0000396	41.23217	-.000116	.0012295
#3	.0054895	.0000079	.0000660	41.30504	.000029	.0010982

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010536	.0504137	.0231672	3.055482	.0051995	.0007473
Stddev	.0004349	.0020151	.0002966	.014445	.0002785	.0004055
%RSD	41.27931	3.997225	1.280482	.4727628	5.356891	54.25869
#1	.0007664	.0509827	.0229600	3.054458	.0052912	.0010970
#2	.0015539	.0481753	.0230346	3.070412	.0054206	.0008419
#3	.0008404	.0520832	.0235070	3.041576	.0048867	.0003029

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.29637	.0009389	.0068572	14.43808	.0108107	.0010541
Stddev	.04555	.0006477	.0002283	.05375	.0004589	.0003230
%RSD	.1609810	68.98749	3.329775	.3722515	4.244768	30.64327
#1	28.30704	.0006437	.0068011	14.49766	.0113282	.0009622
#2	28.24643	.0016816	.0071083	14.39324	.0104533	.0014131
#3	28.33564	.0004914	.0066621	14.42333	.0106506	.0007870

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02LX5 Acquired: 3/12/2025 17:16:20 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	-.001672	.0005183	3.281988	.0108571	F 36.33356	-.000331
Stddev	.000222	.0001326	.010036	.0028903	.13924	.000376
%RSD	13.28401	25.57786	.3057846	26.62170	.3832259	113.6679
#1	-.001508	.0004131	3.278541	.0117186	36.41529	-.000056
#2	-.001584	.0004746	3.274130	.0132187	36.41261	-.000177
#3	-.001925	.0006672	3.293293	.0076339	36.17279	-.000760

Elem	Sr4077
Units	ppm
Avg	.2458767
Stddev	.0004475
%RSD	.1819804
#1	.2462258
#2	.2453723
#3	.2460319

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3255.079	73617.31	15195.16	2097.042	4552.735
Stddev	9.562	159.07	26.95	12.497	8.582
%RSD	.2937426	.2160800	.1773284	.5959498	.1885032
#1	3248.833	73466.94	15183.64	2082.678	4545.339
#2	3250.318	73783.85	15225.95	2105.420	4550.721
#3	3266.087	73601.13	15175.89	2103.028	4562.145

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV07 Acquired: 3/12/2025 17:25:10 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	5.302138	5.091625	5.031287	5.119870	5.201972	9.920441
Stddev	.025914	.044996	.017896	.025709	.026120	.024974
%RSD	.4887459	.8837186	.3556974	.5021464	.5021204	.2517391
#1	5.282647	5.050879	5.012841	5.109293	5.191784	9.900856
#2	5.292222	5.084082	5.032440	5.101137	5.182481	9.911903
#3	5.331546	5.139916	5.048578	5.149181	5.231651	9.948564

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.239139	.2344770	2.456161	23.12395	1.049261	2.460305
Stddev	.119174	.0012779	.012917	.03728	.002324	.010569
%RSD	1.289886	.5450091	.5259019	.1612282	.2215159	.4295780
#1	9.221870	.2359172	2.442381	23.11430	1.046894	2.449381
#2	9.129541	.2334788	2.458109	23.09244	1.051541	2.461055
#3	9.366005	.2340350	2.467993	23.16511	1.049347	2.470479

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.279323	4.871902	2.250377	23.35141	2.449320	1.272539
Stddev	.007077	.042594	.011805	.08815	.011935	.002155
%RSD	.5531476	.8742691	.5245955	.3775004	.4872619	.1693083
#1	1.276479	4.830346	2.241842	23.45067	2.436618	1.271393
#2	1.274111	4.869898	2.245441	23.28225	2.451041	1.275024
#3	1.287379	4.915463	2.263850	23.32130	2.460300	1.271200

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.87252	2.394673	2.560148	25.10157	4.658252	5.171266
Stddev	.30562	.008257	.012937	.24710	.026814	.024214
%RSD	1.137288	.3447880	.5053412	.9843872	.5756259	.4682428
#1	26.54595	2.388738	2.548105	24.83540	4.688952	5.154209
#2	26.91997	2.391178	2.558516	25.14566	4.646380	5.160607
#3	27.15164	2.404102	2.573825	25.32365	4.639423	5.198981

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV07 Acquired: 3/12/2025 17:25:10 Type: Unk
Method: NON EPA-6010-200.7(v2802) 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	4.982556	4.669991	F 5.540037	4.793143	4.807314	4.648240
Stddev	.022317	.017580	.065524	.021385	.016237	.024677
%RSD	.4478958	.3764387	1.182745	.4461623	.3377606	.5308953
#1	4.959295	4.656123	5.465030	4.786137	4.795995	4.624582
#2	4.984582	4.664087	5.568938	4.776140	4.800028	4.646313
#3	5.003790	4.689763	5.586141	4.817153	4.825918	4.673824

Elem	Sr4077
Units	ppm
Avg	4.676951
Stddev	.046091
%RSD	.9854836
#1	4.625126
#2	4.692377
#3	4.713349

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3211.739	72248.85	14762.36	2057.010	4371.059
Stddev	8.327	295.26	40.19	15.084	15.283
%RSD	.2592627	.4086669	.2722719	.7332790	.3496427
#1	3216.786	72585.24	14719.24	2072.610	4388.113
#2	3216.304	72128.66	14798.78	2055.919	4366.458
#3	3202.128	72032.64	14769.05	2042.502	4358.604

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB07 Acquired: 3/12/2025 17:30:50 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0014389	-.000388	-.000052	-.008095	-.000208	.0006701	-.004898
Stddev	.0006145	.001060	.000677	.001853	.000541	.0020363	.000876
%RSD	42.70735	273.0484	1307.501	22.89354	260.1360	303.8807	17.88143
#1	.0021302	.000779	.000636	-.008093	-.000640	-.000215	-.005757
#2	.0012320	-.000653	-.000717	-.009949	.000399	-.000774	-.004006
#3	.0009545	-.001292	-.000074	-.006242	-.000382	.002999	-.004931

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000299	.0000193	-.003438	.0000067	.0001339	.0004113	-.004937
Stddev	.0000335	.0000862	.002437	.0003579	.0002599	.0001984	.001052
%RSD	111.8929	446.3999	70.89321	5366.088	194.1980	48.24788	21.31341
#1	-.000005	.0000316	-.006252	.0003592	.0000756	.0002513	-.003860
#2	.000061	-.000072	-.002020	-.000356	-.000092	.0006333	-.004989
#3	.000034	.000099	-.002041	.000017	.000418	.0003493	-.005963

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000566	.0031537	.0001611	.0007288	.0569828	.0001559	-.000041
Stddev	.000130	.0124910	.0002212	.0004390	.0035539	.0006909	.000124
%RSD	22.91600	396.0766	137.2940	60.23937	6.236849	443.1895	301.9435
#1	-.000446	.0139113	.0003859	.0002421	.0566020	.0001069	-.000183
#2	-.000548	-.010546	-.000056	.0008494	.0536346	-.000509	.000021
#3	-.000704	.006095	.000153	.0010948	.0607118	.000870	.000039

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.042318	.0024348	.0001331	-.000035	.0012287	-.041340	-.003426
Stddev	.013573	.0006194	.0002068	.000558	.0004449	.003905	.001124
%RSD	32.07278	25.43765	155.3997	1602.707	36.20558	9.447267	32.80060
#1	-.056717	.0031349	-.000036	-.000400	.0009697	-.045849	-.004715
#2	-.029759	.0019583	.000072	-.000312	.0017424	-.039113	-.002912
#3	-.040479	.0022112	.000364	.000607	.0009740	-.039057	-.002652

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB07 Acquired: 3/12/2025 17:30:50 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0013307	-.003399	-.000005
Stddev	.0024783	.001303	.000032
%RSD	186.2429	38.34492	645.5728
#1	.0041725	-.004717	-.000037
#2	.0002020	-.002110	.000027
#3	-.000382	-.003371	-.000004

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3376.738	74286.38	15141.67	2138.973	4939.036
Stddev	6.679	131.44	69.41	8.477	8.824
%RSD	.1977974	.1769355	.4584155	.3963220	.1786653
#1	3380.335	74207.24	15070.73	2129.668	4949.179
#2	3369.032	74213.79	15209.44	2146.257	4934.804
#3	3380.848	74438.10	15144.86	2140.993	4933.125

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02MS Acquired: 3/12/2025 17:35:08 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.8352482	1.800482	.9148921	1.955647	.8429033	2.694518
Stddev	.0022987	.010514	.0074611	.015923	.0062950	.028622
%RSD	.2752106	.5839452	.8155145	.8142235	.7468186	1.062239
#1	.8376202	1.804272	.9207200	1.971259	.8491020	2.721500
#2	.8350939	1.808575	.9174732	1.956250	.8430916	2.697557
#3	.8330305	1.788598	.9064832	1.939430	.8365163	2.664498

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2245187	.1900459	.1874361	205.2978	.4142318	.1966746
Stddev	.0014317	.0008790	.0014216	.8245	.0012074	.0013111
%RSD	.6376648	.4624964	.7584566	.4016308	.2914767	.6666266
#1	.2258912	.1890587	.1886025	206.0299	.4146126	.1977610
#2	.2230344	.1907435	.1878531	205.4587	.4152028	.1970444
#3	.2246306	.1903355	.1858526	204.4046	.4128799	.1952183

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2972594	3.018604	.3196065	16.99909	.5012864	.0607276
Stddev	.0024151	.024923	.0008503	.03822	.0042978	.0003176
%RSD	.8124663	.8256339	.2660401	.2248552	.8573621	.5229307
#1	.2999127	3.042664	.3205329	16.95685	.5054341	.0609499
#2	.2966760	2.992900	.3194250	17.03128	.5015725	.0603639
#3	.2951893	3.020248	.3188617	17.00914	.4968527	.0608691

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	145.6115	.2856026	.2384419	83.49582	.3231507	.4986404
Stddev	1.4164	.0035592	.0014942	.95004	.0019265	.0034444
%RSD	.9727545	1.246223	.6266532	1.137830	.5961742	.6907649
#1	147.1645	.2891025	.2394528	84.56447	.3209988	.5015328
#2	144.3906	.2857184	.2367256	83.17612	.3247149	.4995585
#3	145.2795	.2819868	.2391473	82.74687	.3237385	.4948300

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02MS Acquired: 3/12/2025 17:35:08 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6721097	.1814503	F 17.30345	5.904244	F 175.8411	.1889766
Stddev	.0050126	.0005145	.14489	.052553	1.1803	.0027849
%RSD	.7458015	.2835655	.8373192	.8900833	.6712446	1.473676
#1	.6771281	.1820429	17.47052	5.946688	176.9668	.1915896
#2	.6720982	.1811903	17.22751	5.920581	175.9435	.1892933
#3	.6671029	.1811176	17.21233	5.845464	174.6128	.1860469

Elem	Sr4077
Units	ppm
Avg	1.393253
Stddev	.015283
%RSD	1.096934
#1	1.405579
#2	1.398028
#3	1.376153

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3094.870	69280.62	14020.94	1994.310	4206.195
Stddev	30.029	115.52	64.94	5.427	38.951
%RSD	.9702989	.1667429	.4631892	.2721417	.9260503
#1	3063.280	69409.05	14092.57	1993.456	4167.593
#2	3098.283	69247.65	13965.91	2000.114	4205.503
#3	3123.048	69185.18	14004.32	1989.360	4245.487

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02MSD Acquired: 3/12/2025 17:39:25 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.8473684	1.802383	.9086939	1.975559	.8452488	2.693854
Stddev	.0043367	.019540	.0049456	.007869	.0016805	.007095
%RSD	.5117827	1.084101	.5442526	.3983350	.1988161	.2633778
#1	.8471404	1.795335	.9098089	1.978917	.8459632	2.689171
#2	.8431502	1.787345	.9032860	1.966567	.8433292	2.702017
#3	.8518145	1.824469	.9129868	1.981191	.8464542	2.690375

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2294588	.1751053	.1866834	202.0551	.4097381	.1965549
Stddev	.0015115	.0014673	.0006660	1.4526	.0038182	.0010961
%RSD	.6587331	.8379513	.3567532	.7189373	.9318521	.5576422
#1	.2312020	.1765578	.1867762	203.3309	.4102780	.1969900
#2	.2286628	.1736236	.1859758	200.4741	.4132576	.1953081
#3	.2285116	.1751346	.1872981	202.3603	.4056788	.1973666

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2979931	3.148171	.3153343	16.37372	.4990547	.0600746
Stddev	.0010625	.027945	.0018861	.09463	.0027725	.0010786
%RSD	.3565429	.8876534	.5981365	.5779657	.5555403	1.795444
#1	.2983116	3.146995	.3168333	16.38784	.5004838	.0604748
#2	.2968078	3.176685	.3132165	16.27282	.4958593	.0608958
#3	.2988599	3.120832	.3159531	16.46051	.5008210	.0588530

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	155.1810	.2829187	.2390474	90.07053	.2988130	.4937903
Stddev	.3437	.0007124	.0013357	.86243	.0034610	.0017018
%RSD	.2214537	.2517905	.5587597	.9574997	1.158238	.3446363
#1	155.3699	.2823042	.2398066	89.83661	.3022845	.4934555
#2	155.3887	.2836995	.2398306	91.02578	.2953627	.4922808
#3	154.7843	.2827525	.2375052	89.34919	.2987916	.4956346

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02MSD Acquired: 3/12/2025 17:39:25 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6726376	.1817207	F 18.19957	5.932313	F 176.5778	.1958293
Stddev	.0031122	.0012803	.17149	.031039	.7615	.0006359
%RSD	.4626825	.7045503	.9422688	.5232157	.4312671	.3246988
#1	.6726748	.1828434	18.15807	5.939711	176.6491	.1959070
#2	.6695070	.1803264	18.38801	5.898243	175.7831	.1951581
#3	.6757311	.1819923	18.05265	5.958983	177.3011	.1964227

Elem	Sr4077
Units	ppm
Avg	1.409894
Stddev	.016505
%RSD	1.170650
#1	1.425147
#2	1.392372
#3	1.412163

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3087.997	70808.82	15361.52	1986.120	4206.188
Stddev	4.851	354.85	112.29	11.620	8.595
%RSD	.1570986	.5011332	.7309682	.5850477	.2043306
#1	3090.098	71023.90	15316.63	1998.957	4208.585
#2	3091.444	70399.25	15489.30	1976.321	4213.329
#3	3082.450	71003.30	15278.61	1983.084	4196.649

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02A Acquired: 3/12/2025 17:43:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.8648029	1.833291	.9220352	2.035886	.8717830	2.739461
Stddev	.0024358	.007019	.0065444	.004547	.0023116	.017096
%RSD	.2816552	.3828851	.7097753	.2233292	.2651622	.6240699
#1	.8659767	1.828850	.9172998	2.035614	.8691138	2.742912
#2	.8620025	1.841383	.9193028	2.031481	.8731336	2.754568
#3	.8664295	1.829639	.9295030	2.040562	.8731016	2.720903

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2334882	.1743336	.1892653	205.4996	.4234674	.1989446
Stddev	.0005260	.0001653	.0006786	.6447	.0054410	.0012777
%RSD	.2252834	.0948201	.3585479	.3137199	1.284864	.6422407
#1	.2337610	.1742960	.1891716	206.0068	.4214773	.1983862
#2	.2338217	.1741903	.1886384	205.7179	.4193016	.1980411
#3	.2328818	.1745145	.1899859	204.7741	.4296232	.2004064

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3030778	3.302252	.3190485	16.63338	.5047627	.0559938
Stddev	.0007931	.007517	.0006685	.06354	.0022328	.0006554
%RSD	.2617001	.2276324	.2095449	.3819966	.4423479	1.170562
#1	.3021620	3.296445	.3198171	16.70233	.5036262	.0555864
#2	.3035227	3.299568	.3186018	16.62060	.5033268	.0556450
#3	.3035486	3.310742	.3187266	16.57720	.5073351	.0567499

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	159.5987	.2869622	.2463236	94.48532	.2953542	.5062396
Stddev	2.5867	.0018878	.0030082	.81975	.0001121	.0011631
%RSD	1.620739	.6578410	1.221224	.8675907	.0379462	.2297447
#1	156.9665	.2891275	.2442618	94.10034	.2953772	.5054893
#2	159.6922	.2856624	.2449337	93.92892	.2954529	.5056501
#3	162.1374	.2860967	.2497754	95.42669	.2952324	.5075794

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1522-02A Acquired: 3/12/2025 17:43:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6838697	.1839447	F 19.11204	5.957680	F 178.3749	.1965571
Stddev	.0027800	.0008083	.20296	.012261	.4691	.0003621
%RSD	.4065057	.4394139	1.061945	.2057999	.2629852	.1842132
#1	.6827313	.1841495	19.04288	5.961367	178.2191	.1966735
#2	.6818396	.1846309	18.95271	5.943998	178.0035	.1968467
#3	.6870382	.1830537	19.34055	5.967674	178.9020	.1961511

Elem	Sr4077
Units	ppm
Avg	1.443006
Stddev	.021791
%RSD	1.510082
#1	1.418929
#2	1.461374
#3	1.448714

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3022.595	68812.89	15439.60	1910.555	4137.434
Stddev	14.911	513.43	83.86	9.999	23.315
%RSD	.4933104	.7461251	.5431585	.5233768	.5635249
#1	3029.467	68750.56	15358.76	1909.008	4148.679
#2	3032.831	69354.64	15433.84	1921.238	4152.995
#3	3005.488	68333.47	15526.19	1901.419	4110.627

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07 Acquired: 3/12/2025 17:47:58 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0046669	-.008392	.0019072	-.007016	.0003658	4.007354
Stddev	.0043474	.000995	.0006987	.001524	.0001774	.006743
%RSD	93.15395	11.86097	36.63483	21.71492	48.50872	.1682610
#1	.0024141	-.008893	.0024012	-.008772	.0002617	4.002120
#2	.0019083	-.009037	.0011078	-.006037	.0005706	4.004979
#3	.0096783	-.007246	.0022124	-.006240	.0002649	4.014963

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2230118	.0001283	-.000208	140.6733	.0298300	.0073815
Stddev	.0009422	.0000269	.000097	.2389	.0002949	.0001228
%RSD	.4225045	20.97609	46.45424	.1698303	.9886460	1.663048
#1	.2219882	.0000983	-.000257	140.4319	.0296738	.0075231
#2	.2238430	.0001360	-.000097	140.9096	.0296460	.0073148
#3	.2232040	.0001504	-.000272	140.6785	.0301701	.0073065

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042665	7.634929	.4478216	8.392013	.0145591	.0007353
Stddev	.0003031	.040283	.0014339	.010645	.0001369	.0001025
%RSD	7.104467	.5276118	.3201940	.1268447	.9402487	13.94076
#1	.0044663	7.589673	.4465734	8.384319	.0145594	.0006223
#2	.0044156	7.648248	.4493878	8.387558	.0146958	.0008224
#3	.0039178	7.666865	.4475034	8.404161	.0144220	.0007614

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	147.2809	.1005256	.0278281	18.92269	.0503189	.1390831
Stddev	1.0530	.0013468	.0003927	.12120	.0010034	.0003596
%RSD	.7149865	1.339801	1.411331	.6404869	1.994167	.2585288
#1	146.3209	.0989893	.0274596	18.80294	.0505299	.1387215
#2	148.4072	.1015033	.0277835	19.04528	.0492267	.1390871
#3	147.1147	.1010842	.0282413	18.91986	.0512000	.1394406

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07 Acquired: 3/12/2025 17:47:58 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.002402	.1995015	F 42.61734	.1208358	F 41.79106	-.012145
Stddev	.000713	.0010865	.16487	.0025473	.06740	.000820
%RSD	29.68615	.5446007	.3868659	2.108046	.1612719	6.755242
#1	-.002154	.1984570	42.42851	.1183770	41.86659	-.011241
#2	-.001847	.2006256	42.73274	.1234632	41.76954	-.012352
#3	-.003207	.1994221	42.69078	.1206673	41.73706	-.012843

Elem	Sr4077
Units	ppm
Avg	.5111396
Stddev	.0014620
%RSD	.2860176
#1	.5095801
#2	.5124790
#3	.5113599

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3063.448	70727.08	15364.75	1956.610	4207.308
Stddev	4.119	161.07	23.05	11.797	1.260
%RSD	.1344602	.2277387	.1500169	.6029429	.0299368
#1	3065.366	70884.25	15347.94	1962.750	4207.676
#2	3058.720	70734.60	15391.03	1964.070	4205.905
#3	3066.259	70562.37	15355.29	1943.009	4208.343

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07DUP Acquired: 3/12/2025 17:52:20 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0044017	-.008233	.0011342	-.007126	-.000045	3.935496
Stddev	.0014273	.001486	.0012310	.001312	.002030	.003977
%RSD	32.42692	18.04970	108.5339	18.41706	4543.892	.1010497
#1	.0059028	-.008359	.0008447	-.007036	-.002057	3.931220
#2	.0042405	-.009652	.0024842	-.008482	-.000079	3.939084
#3	.0030618	-.006688	.0000738	-.005862	.002002	3.936185

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2311322	.0001109	-.000271	142.9751	.0291775	.0071118
Stddev	.0008982	.0000732	.000084	.7319	.0002967	.0001005
%RSD	.3886015	65.97699	30.78988	.5118816	1.016956	1.412537
#1	.2308844	.0001347	-.000181	142.7483	.0288484	.0070093
#2	.2303839	.0001692	-.000287	142.3834	.0292592	.0072101
#3	.2321282	.0000288	-.000346	143.7935	.0294247	.0071161

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042033	7.885876	.4534545	8.510186	.0144087	.0005044
Stddev	.0003726	.006927	.0029939	.065301	.0003125	.0003214
%RSD	8.865527	.0878395	.6602503	.7673300	2.168708	63.72827
#1	.0040042	7.892395	.4529585	8.465926	.0145014	.0001649
#2	.0039726	7.886629	.4507395	8.479448	.0140603	.0008040
#3	.0046333	7.878603	.4566654	8.585184	.0146643	.0005443

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	143.8188	.1010868	.0274854	19.37645	.0507528	.1363883
Stddev	1.2621	.0007558	.0001485	.07193	.0003490	.0006985
%RSD	.8775822	.7476713	.5402742	.3712372	.6875402	.5121297
#1	142.5885	.1016524	.0275872	19.41618	.0508412	.1358020
#2	145.1105	.1013796	.0273150	19.41976	.0503681	.1362018
#3	143.7572	.1002284	.0275539	19.29341	.0510490	.1371611

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07DUP Acquired: 3/12/2025 17:52:20 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.003009	.2013015	F 43.08741	.1230705	F 41.53975	-.012526
Stddev	.000462	.0006993	.11224	.0003502	.20148	.000346
%RSD	15.34808	.3474129	.2604914	.2845372	.4850226	2.765353
#1	-.003500	.2012165	43.15012	.1230747	41.48723	-.012824
#2	-.002584	.2006485	43.15428	.1227183	41.36973	-.012146
#3	-.002942	.2020395	42.95783	.1234186	41.76228	-.012608

Elem	Sr4077
Units	ppm
Avg	.5164078
Stddev	.0007501
%RSD	.1452577
#1	.5163176
#2	.5157068
#3	.5171989

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3124.274	70238.95	15448.54	2006.296	4244.656
Stddev	13.992	149.94	92.00	13.443	22.666
%RSD	.4478547	.2134702	.5955502	.6700331	.5340007
#1	3129.599	70106.45	15459.97	2001.102	4252.548
#2	3134.822	70401.71	15534.29	2021.561	4262.321
#3	3108.401	70208.68	15351.35	1996.225	4219.098

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07LX5 Acquired: 3/12/2025 17:56:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0015638	-.004377	-.000086	-.008856	-.001421	.8401960	.0413079
Stddev	.0017508	.001429	.001320	.002729	.000820	.0025345	.0008138
%RSD	111.9595	32.65029	1537.572	30.81134	57.70071	.3016511	1.970153
#1	.0017056	-.005566	-.000900	-.006475	-.002346	.8372919	.0422014
#2	.0032393	-.004773	.001438	-.008259	-.000784	.8413350	.0411131
#3	-.000254	-.002792	-.000795	-.011833	-.001132	.8419612	.0406091

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000477	-.000028	29.16610	.0060464	.0015946	.0009270	1.521583
Stddev	.0000302	.000022	.03917	.0001405	.0001260	.0001859	.002064
%RSD	63.28583	79.93933	.1343052	2.324181	7.903253	20.05975	.1356176
#1	.0000810	-.000048	29.15475	.0058938	.0015019	.0010811	1.519847
#2	.0000221	-.000004	29.20970	.0061706	.0017381	.0009794	1.521037
#3	.0000400	-.000032	29.13386	.0060748	.0015439	.0007204	1.523864

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0936829	1.789707	.0029320	.0002624	25.82947	.0208040	.0053365
Stddev	.0002220	.007917	.0002256	.0002220	.06456	.0004918	.0000666
%RSD	.2369681	.4423878	7.693576	84.63441	.2499306	2.363755	1.247621
#1	.0939356	1.782255	.0030442	.0000362	25.75592	.0211834	.0054120
#2	.0935937	1.788845	.0030795	.0002708	25.85573	.0202485	.0053109
#3	.0935193	1.798020	.0026723	.0004800	25.87675	.0209802	.0052865

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.345290	.0069010	.0269168	-.001742	.0426094	8.048492	.0204384
Stddev	.032113	.0004263	.0003104	.000451	.0005032	.008921	.0031288
%RSD	.9599325	6.177383	1.153352	25.91391	1.180964	.1108426	15.30846
#1	3.310129	.0073817	.0272478	-.002255	.0424599	8.049238	.0206258
#2	3.373069	.0065689	.0266320	-.001565	.0421979	8.057016	.0172201
#3	3.352671	.0067524	.0268707	-.001405	.0431704	8.039221	.0234693

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07LX5 Acquired: 3/12/2025 17:56:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	8.232184	-.002869	.1014471
Stddev	.009895	.000911	.0002407
%RSD	.1202033	31.76394	.2372596
#1	8.239809	-.003296	.1012746
#2	8.235741	-.003488	.1017221
#3	8.221002	-.001822	.1013446

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3325.407	74746.65	14865.93	2164.438	4662.595
Stddev	7.707	26.59	18.37	5.758	9.782
%RSD	.2317612	.0355674	.1235697	.2660452	.2098059
#1	3316.524	74776.99	14886.49	2170.397	4652.979
#2	3330.319	74727.42	14851.13	2164.014	4662.270
#3	3329.377	74735.54	14860.16	2158.904	4672.536

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07MS Acquired: 3/12/2025 18:00:56 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.8293938	1.854866	.9215305	1.897958	.7961082	6.180856
Stddev	.0065502	.010997	.0045098	.021202	.0072126	.024974
%RSD	.7897513	.5928945	.4893831	1.117090	.9059828	.4040508
#1	.8243256	1.846389	.9163432	1.876500	.7880218	6.152242
#2	.8270659	1.850917	.9237276	1.898480	.7984256	6.192061
#3	.8367900	1.867293	.9245207	1.918895	.8018774	6.198265

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4041097	.1783909	.1890758	144.3514	.4498779	.1998719
Stddev	.0014216	.0009109	.0012369	.5142	.0006415	.0010135
%RSD	.3517797	.5106101	.6541741	.3562005	.1425933	.5070624
#1	.4025088	.1776125	.1876798	143.8301	.4491976	.1987276
#2	.4052245	.1781676	.1895124	144.3659	.4504718	.2002318
#3	.4045957	.1793927	.1900351	144.8582	.4499644	.2006563

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2984724	10.86331	.6238060	10.43293	.4904689	.0265761
Stddev	.0011813	.04593	.0015264	.02617	.0029450	.0002320
%RSD	.3957650	.4227741	.2446830	.2507956	.6004491	.8729962
#1	.2971333	10.82284	.6220913	10.40771	.4871237	.0266602
#2	.2989174	10.85388	.6243106	10.43114	.4916121	.0263138
#3	.2993665	10.91323	.6250163	10.45995	.4926709	.0267543

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	141.7380	.3813436	.2328832	29.25886	.2865256	.5561798
Stddev	.6720	.0028200	.0008345	.06541	.0013660	.0034252
%RSD	.4741048	.7394842	.3583322	.2235441	.4767429	.6158448
#1	141.6740	.3784170	.2319227	29.29068	.2857378	.5524033
#2	141.1002	.3815706	.2332964	29.30227	.2857361	.5570502
#3	142.4396	.3840433	.2334304	29.18363	.2881029	.5590858

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07MS Acquired: 3/12/2025 18:00:56 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6663879	.3822791	F 43.96503	5.878565	F 41.42712	.1743833
Stddev	.0038606	.0014221	.09121	.027550	.22640	.0002438
%RSD	.5793313	.3720099	.2074678	.4686487	.5464988	.1398182
#1	.6619789	.3807519	44.00493	5.849632	41.19403	.1741328
#2	.6680227	.3825199	44.02949	5.881581	41.44118	.1746199
#3	.6691621	.3835654	43.86066	5.904483	41.64617	.1743971

Elem	Sr4077
Units	ppm
Avg	.6929802
Stddev	.0030581
%RSD	.4413017
#1	.6894538
#2	.6945826
#3	.6949042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3099.483	69660.30	14983.52	1999.290	4188.237
Stddev	22.331	160.06	32.04	2.606	27.460
%RSD	.7204807	.2297664	.2138546	.1303308	.6556522
#1	3124.266	69485.98	15016.11	1996.289	4219.326
#2	3093.261	69694.29	14982.40	2000.985	4178.091
#3	3080.923	69800.63	14952.06	2000.595	4167.293

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07MSD Acquired: 3/12/2025 18:05:05 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.8448668	1.892550	.9336789	1.935151	.8069028	6.270687
Stddev	.0025322	.002457	.0030755	.009184	.0057579	.024754
%RSD	.2997147	.1298355	.3293996	.4745867	.7135805	.3947653
#1	.8450103	1.891254	.9301347	1.928154	.8037905	6.299251
#2	.8422659	1.891012	.9352566	1.931748	.8033707	6.255489
#3	.8473242	1.895384	.9356454	1.945551	.8135470	6.257320

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3871476	.1910450	.1919522	143.7568	.4583060	.2019939
Stddev	.0014294	.0018334	.0004300	.4762	.0011461	.0007758
%RSD	.3692195	.9596887	.2240311	.3312765	.2500648	.3840704
#1	.3879095	.1931458	.1914703	144.3048	.4576944	.2017120
#2	.3854987	.1902219	.1920894	143.4427	.4575953	.2013985
#3	.3880347	.1897675	.1922968	143.5231	.4596281	.2028712

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3024065	10.23664	.6237565	10.55212	.4962916	.0262457
Stddev	.0010874	.06076	.0014365	.08707	.0017488	.0001320
%RSD	.3595752	.5935312	.2302990	.8251740	.3523758	.5030259
#1	.3013506	10.17790	.6253921	10.65222	.4942772	.0263832
#2	.3023460	10.23280	.6226995	10.51021	.4974206	.0261199
#3	.3035228	10.29923	.6231780	10.49393	.4971771	.0262340

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	137.2828	.3831100	.2345066	27.00138	.3039906	.5617487
Stddev	1.2907	.0031983	.0016923	.16634	.0021627	.0023507
%RSD	.9401706	.8348313	.7216323	.6160563	.7114479	.4184580
#1	137.8778	.3866309	.2359881	26.82534	.3057494	.5597715
#2	135.8019	.3823149	.2348693	27.02285	.3046466	.5611267
#3	138.1686	.3803843	.2326624	27.15594	.3015758	.5643478

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07MSD Acquired: 3/12/2025 18:05:05 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6788452	.3783114	F 41.69319	5.954220	F 42.08252	.1714242
Stddev	.0009572	.0013078	.13794	.010933	.07776	.0012616
%RSD	.1410014	.3456980	.3308406	.1836243	.1847712	.7359343
#1	.6780839	.3795087	41.54080	5.942773	42.06482	.1703697
#2	.6785319	.3785098	41.72925	5.955332	42.01513	.1710811
#3	.6799197	.3769157	41.80951	5.964554	42.16760	.1728218

Elem	Sr4077
Units	ppm
Avg	.6769045
Stddev	.0015661
%RSD	.2313631
#1	.6782005
#2	.6751643
#3	.6773488

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3057.250	68923.94	13861.72	1961.039	4132.484
Stddev	6.030	80.95	101.78	5.427	4.559
%RSD	.1972367	.1174416	.7342868	.2767494	.1103279
#1	3060.666	68989.47	13744.22	1959.486	4136.458
#2	3060.798	68948.91	13918.13	1956.558	4133.487
#3	3050.288	68833.46	13922.81	1967.074	4127.506

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07A Acquired: 3/12/2025 18:09:13 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.8505415	1.866291	.9369753	1.950925	.8117179	6.275777
Stddev	.0054238	.013034	.0027743	.003440	.0008189	.021358
%RSD	.6376829	.6983953	.2960930	.1763241	.1008799	.3403233
#1	.8478790	1.879358	.9344511	1.949371	.8112580	6.299277
#2	.8469636	1.853290	.9399456	1.954867	.8112324	6.270506
#3	.8567820	1.866224	.9365292	1.948536	.8126633	6.257549

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4091847	.1824814	.1923477	148.1408	.4548568	.2033506
Stddev	.0010236	.0008290	.0003941	.4594	.0005228	.0006046
%RSD	.2501618	.4542933	.2049075	.3101311	.1149343	.2972947
#1	.4103654	.1830490	.1926453	148.6466	.4551418	.2037917
#2	.4086422	.1828651	.1924972	148.0262	.4542534	.2026615
#3	.4085464	.1815301	.1919007	147.7495	.4551752	.2035988

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3027913	11.01638	.6437430	10.72186	.4985557	.0268263
Stddev	.0003563	.01305	.0030334	.00611	.0008300	.0001956
%RSD	.1176663	.1184210	.4712077	.0570288	.1664722	.7290361
#1	.3025104	11.02577	.6470417	10.71802	.4991667	.0270450
#2	.3026715	11.02189	.6431134	10.71866	.4976108	.0267660
#3	.3031921	11.00149	.6410738	10.72891	.4988895	.0266681

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	145.4865	.3884143	.2366642	29.44428	.2946790	.5661074
Stddev	1.5893	.0010930	.0010185	.10859	.0019422	.0011520
%RSD	1.092390	.2814127	.4303342	.3687905	.6590972	.2034959
#1	146.2458	.3882944	.2372721	29.56136	.2938831	.5660715
#2	146.5537	.3873861	.2372322	29.34688	.2968928	.5649738
#3	143.6600	.3895623	.2354884	29.42460	.2932612	.5672769

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-07A Acquired: 3/12/2025 18:09:13 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6796953	.3886719	F 44.58541	5.934827	F 43.08722	.1736129
Stddev	.0025340	.0015615	.10556	.002411	.06747	.0012814
%RSD	.3728195	.4017546	.2367550	.0406219	.1565976	.7380546
#1	.6795963	.3902687	44.66373	5.936102	43.15024	.1750884
#2	.6822774	.3885988	44.46537	5.936333	43.01604	.1727799
#3	.6772123	.3871482	44.62713	5.932047	43.09539	.1729703

Elem	Sr4077
Units	ppm
Avg	.7050348
Stddev	.0032273
%RSD	.4577575
#1	.7085520
#2	.7043427
#3	.7022096

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3073.655	69070.93	14698.66	1972.702	4145.990
Stddev	6.104	100.40	60.17	7.018	4.471
%RSD	.1985885	.1453632	.4093524	.3557775	.1078275
#1	3072.920	68955.93	14645.22	1965.024	4144.255
#2	3080.093	69141.20	14686.93	1978.787	4151.069
#3	3067.952	69115.65	14763.83	1974.295	4142.648

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-01 Acquired: 3/12/2025 18:13:20 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.001155	-.005836	-.000313	-.005872	-.000405	1.046506
Stddev	.000765	.000293	.000681	.004127	.000573	.005264
%RSD	66.24875	5.019409	217.4740	70.27662	141.5826	.5030340
#1	-.001628	-.005641	-.001097	-.001182	-.000390	1.049666
#2	-.000272	-.006173	.000033	-.008948	-.000985	1.049423
#3	-.001565	-.005695	.000125	-.007486	.000161	1.040429

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5611396	-.000009	-.000264	88.86820	.0083438	.0204004
Stddev	.0010919	.000044	.000074	.25887	.0001001	.0001625
%RSD	.1945941	466.8877	28.10807	.2912997	1.199841	.7966840
#1	.5610951	-.000028	-.000201	88.76358	.0084333	.0205752
#2	.5622531	-.000041	-.000346	89.16301	.0083625	.0203719
#3	.5600706	.000041	-.000245	88.67801	.0082357	.0202539

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020435	5.029868	1.180547	19.41223	.0216432	.0005401
Stddev	.0000420	.016610	.006492	.06441	.0001308	.0000930
%RSD	2.056825	.3302340	.5499079	.3317968	.6042803	17.21713
#1	.0019988	5.030780	1.176648	19.37116	.0216489	.0006438
#2	.0020823	5.012820	1.188041	19.48647	.0215096	.0005125
#3	.0020495	5.046003	1.176952	19.37907	.0217710	.0004640

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	151.6565	.0274450	.0334254	18.29771	.0275052	.0528735
Stddev	1.3451	.0002627	.0005699	.06685	.0004009	.0002456
%RSD	.8869423	.9571154	1.704882	.3653259	1.457631	.4645399
#1	152.9870	.0277379	.0340779	18.32242	.0271739	.0530900
#2	150.2973	.0273666	.0331732	18.22202	.0273908	.0526066
#3	151.6853	.0272304	.0330252	18.34868	.0279509	.0529239

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-01 Acquired: 3/12/2025 18:13:20 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.002253	.0417331	F 18.11317	.0601844	F 26.32740	-.001255
Stddev	.000526	.0005208	.06524	.0068696	.04960	.000926
%RSD	23.33241	1.248002	.3601944	11.41425	.1883799	73.76138
#1	-.002792	.0420002	18.12217	.0678394	26.36910	-.001156
#2	-.002224	.0420663	18.04390	.0581575	26.34055	-.002226
#3	-.001742	.0411330	18.17345	.0545563	26.27256	-.000383

Elem	Sr4077
Units	ppm
Avg	.6356049
Stddev	.0022498
%RSD	.3539592
#1	.6358722
#2	.6377092
#3	.6332335

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3166.930	69761.48	14714.07	2026.544	4295.971
Stddev	11.552	359.78	33.36	.819	14.697
%RSD	.3647777	.5157271	.2267282	.0403917	.3421116
#1	3153.770	69619.44	14692.12	2025.844	4279.471
#2	3175.396	70170.60	14697.62	2027.444	4307.657
#3	3171.625	69494.41	14752.46	2026.343	4300.786

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV08 Acquired: 3/12/2025 18:23:18 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.239061	5.154259	5.057576	5.014197	5.082330	9.932642	9.125380
Stddev	.019757	.036285	.005176	.012033	.019162	.026307	.050874
%RSD	.3771183	.7039808	.1023455	.2399690	.3770373	.2648535	.5575006
#1	5.222610	5.116936	5.052826	5.004521	5.067991	9.918874	9.167378
#2	5.233599	5.156431	5.063093	5.010399	5.074905	9.916076	9.068810
#3	5.260975	5.189409	5.056811	5.027670	5.104093	9.962975	9.139953

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2460623	2.486138	23.62190	1.068051	2.470241	1.268465	4.814449
Stddev	.0015108	.004054	.05225	.001745	.003703	.004395	.022834
%RSD	.6139917	.1630614	.2211746	.1633985	.1499078	.3464681	.4742725
#1	.2477709	2.482215	23.67919	1.066097	2.467333	1.264925	4.794962
#2	.2455133	2.485889	23.57688	1.069456	2.468981	1.267086	4.808811
#3	.2449028	2.490311	23.60964	1.068600	2.474410	1.273384	4.839573

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.274509	24.28213	2.468310	1.279181	25.57773	2.417780	2.583611
Stddev	.001470	.10785	.005844	.003017	.22798	.004390	.011638
%RSD	.0646306	.4441679	.2367696	.2358476	.8913407	.1815705	.4504433
#1	2.275517	24.40048	2.461678	1.282651	25.33504	2.412920	2.593983
#2	2.272822	24.18939	2.470547	1.277183	25.61076	2.418961	2.571025
#3	2.275189	24.25650	2.472706	1.277708	25.78741	2.421459	2.585824

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.16098	4.826301	5.120673	4.999442	4.667627	5.423079	4.887245
Stddev	.15836	.027400	.018449	.003515	.002630	.042321	.014743
%RSD	.6554352	.5677323	.3602802	.0703064	.0563432	.7803943	.3016663
#1	23.98174	4.857936	5.105310	4.997811	4.665552	5.374370	4.874784
#2	24.21924	4.810019	5.115573	5.003476	4.666744	5.444007	4.883432
#3	24.28195	4.810948	5.141135	4.997038	4.670585	5.450858	4.903521

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV08 Acquired: 3/12/2025 18:23:18 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.807993	4.554858	4.647960
Stddev	.017818	.011079	.025608
%RSD	.3705841	.2432434	.5509505
#1	4.788417	4.542094	4.651300
#2	4.812298	4.560484	4.671735
#3	4.823263	4.561995	4.620847

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3252.636	70947.59	14014.66	2050.703	4385.651
Stddev	6.573	52.28	51.32	6.877	6.994
%RSD	.2020672	.0736827	.3661743	.3353679	.1594734
#1	3259.843	70975.74	13955.56	2046.341	4393.193
#2	3251.094	70979.76	14040.52	2058.631	4379.380
#3	3246.973	70887.27	14047.91	2047.137	4384.381

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB08 Acquired: 3/12/2025 18:27:30 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028828	-.001106	-.001045	-.006579	.0001406	.0062618	-.006644
Stddev	.0016437	.002210	.001040	.002306	.0004231	.0019985	.000116
%RSD	57.01667	199.7139	99.50565	35.04871	300.9707	31.91510	1.750938
#1	.0047707	.001296	-.002121	-.005162	-.000116	.0080714	-.006511
#2	.0021080	-.001562	-.000046	-.009240	-.000092	.0041169	-.006701
#3	.0017698	-.003052	-.000967	-.005336	.000629	.0065971	-.006722

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000447	.0000360	-.000868	-.000040	.0001289	.0002135	-.003685
Stddev	.0000255	.0000146	.004330	.000023	.0001035	.0000771	.003655
%RSD	57.05682	40.54189	499.0501	57.73847	80.23704	36.13156	99.18458
#1	.0000153	.0000523	.002480	-.000036	.0001914	.0001442	-.003493
#2	.0000579	.0000317	.000674	-.000065	.0001859	.0001997	-.007431
#3	.0000608	.0000241	-.005757	-.000019	.0000095	.0002966	-.000129

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000550	.0004349	-.000300	.0009802	.0494872	.0003878	-.000176
Stddev	.000273	.0186387	.000010	.0002167	.0143882	.0005108	.000304
%RSD	49.65227	4285.693	3.405965	22.10760	29.07459	131.7111	173.2670
#1	-.000864	-.020950	-.000295	.0007804	.0366545	.0007400	-.000008
#2	-.000413	.009028	-.000294	.0012106	.0467651	-.000198	.000008
#3	-.000372	.013227	-.000312	.0009497	.0650421	.000622	-.000527

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002761	.0021696	.0001631	-.000453	.0020583	-.045506	-.002047
Stddev	.022310	.0006986	.0001714	.000510	.0005916	.007300	.000922
%RSD	808.1006	32.19774	105.0762	112.5518	28.74117	16.04186	45.03153
#1	-.021865	.0015326	.0003198	-.000991	.0013794	-.049902	-.002681
#2	-.008176	.0020595	-.000020	-.000390	.0023323	-.049536	-.000990
#3	.021759	.0029167	.000190	.000022	.0024632	-.037079	-.002470

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB08 Acquired: 3/12/2025 18:27:30 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0033197	-.003644	.0000354
Stddev	.0037279	.000402	.0000101
%RSD	112.2961	11.01913	28.48961
#1	-.000870	-.003465	.0000271
#2	.004558	-.003363	.0000466
#3	.006271	-.004104	.0000325

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3374.979	75040.42	14687.98	2155.184	4925.436
Stddev	2.778	146.88	19.51	8.115	6.373
%RSD	.0823061	.1957390	.1328080	.3765220	.1293941
#1	3376.720	75206.38	14665.50	2163.912	4930.899
#2	3376.441	74927.17	14700.37	2147.868	4926.975
#3	3371.775	74987.70	14698.08	2153.772	4918.434

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-03 Acquired: 3/12/2025 18:31:51 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.000855	-.003775	.0023890	.0019947	.0011746	3.259086
Stddev	.001663	.003416	.0011377	.0024370	.0012735	.009080
%RSD	194.4756	90.48729	47.62259	122.1726	108.4156	.2785924
#1	.000159	-.007580	.0017945	.0028029	-.000043	3.252918
#2	.000050	-.002774	.0016717	-.000744	.002498	3.254828
#3	-.002774	-.000972	.0037008	.003925	.001069	3.269512

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5892954	.0002382	-.000292	379.4585	.0417418	.0187114
Stddev	.0017549	.0000472	.000046	2.5469	.0007629	.0002825
%RSD	.2977911	19.80590	15.86727	.6711812	1.827538	1.509923
#1	.5877164	.0002884	-.000259	380.6701	.0413400	.0186425
#2	.5889851	.0002317	-.000345	376.5321	.0426216	.0190219
#3	.5911847	.0001947	-.000272	381.1734	.0412639	.0184696

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057029	7.628803	.8885585	13.47149	.0317653	.0004898
Stddev	.0005447	.054008	.0031280	.02476	.0001516	.0002238
%RSD	9.551827	.7079547	.3520284	.1838148	.4770976	45.69965
#1	.0051029	7.570642	.8886090	13.47964	.0319154	.0003774
#2	.0061664	7.638392	.8854056	13.44369	.0316123	.0003444
#3	.0058393	7.677374	.8916609	13.49116	.0317681	.0007476

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	172.1198	.0083067	.1793298	75.48020	.0152842	.6768496
Stddev	.5842	.0009778	.0018016	.62255	.0008812	.0014884
%RSD	.3394382	11.77153	1.004640	.8247811	5.765585	.2198991
#1	171.4683	.0080363	.1813012	74.76566	.0162994	.6775364
#2	172.5973	.0074925	.1789196	75.76937	.0147169	.6751419
#3	172.2937	.0093913	.1777687	75.90558	.0148361	.6778706

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-03 Acquired: 3/12/2025 18:31:51 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.003340	.1418083	F 28.57917	.1824397	F 152.8318	-.039990
Stddev	.000563	.0009662	.13503	.0040472	.6077	.000883
%RSD	16.86865	.6813650	.4724659	2.218388	.3976121	2.207601
#1	-.003459	.1407880	28.42429	.1869461	153.5232	-.040992
#2	-.002727	.1427094	28.67212	.1791146	152.3826	-.039326
#3	-.003835	.1419273	28.64111	.1812583	152.5895	-.039652

Elem	Sr4077
Units	ppm
Avg	1.491034
Stddev	.010820
%RSD	.7256475
#1	1.478547
#2	1.497613
#3	1.496943

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2959.373	67754.30	14700.62	1890.023	3981.791
Stddev	1.262	169.47	53.37	.287	9.245
%RSD	.0426569	.2501176	.3630780	.0152049	.2321789
#1	2958.425	67925.96	14640.37	1890.251	3971.188
#2	2960.806	67587.12	14719.51	1889.700	3986.021
#3	2958.887	67749.81	14741.98	1890.118	3988.164

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-05 Acquired: 3/12/2025 18:36:27 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0011359	-.004921	-.000384	-.011085	-.001525	3.195269
Stddev	.0013464	.000789	.000661	.001879	.001228	.008757
%RSD	118.5271	16.02213	171.8672	16.95238	80.54043	.2740594
#1	-.000336	-.005065	-.001135	-.013254	-.000703	3.191104
#2	.002306	-.004071	.000110	-.010052	-.000935	3.205331
#3	.001438	-.005628	-.000129	-.009948	-.002937	3.189372

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4435891	.0001141	-.000323	44.88011	.0153037	.0172718
Stddev	.0026361	.0000126	.000052	.18978	.0000253	.0002523
%RSD	.5942663	11.01928	16.16603	.4228558	.1650986	1.461043
#1	.4465649	.0001239	-.000359	44.95210	.0153299	.0174990
#2	.4415466	.0000999	-.000263	44.66487	.0152795	.0170002
#3	.4426557	.0001184	-.000348	45.02335	.0153016	.0173161

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084044	8.190877	1.182630	19.68283	.0214374	.0002505
Stddev	.0003547	.082227	.005735	.07210	.0002847	.0001066
%RSD	4.220628	1.003882	.4849701	.3662924	1.328159	42.53611
#1	.0081557	8.285024	1.188238	19.72703	.0213048	.0003564
#2	.0082468	8.133150	1.176775	19.59963	.0212432	.0002519
#3	.0088106	8.154457	1.182878	19.72181	.0217642	.0001433

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	83.12884	.0139597	.0640280	16.37600	.0187945	.0036526
Stddev	.38115	.0009833	.0003684	.10185	.0002193	.0002247
%RSD	.4585109	7.043966	.5754415	.6219586	1.166907	6.151957
#1	83.38302	.0135608	.0637676	16.48634	.0190475	.0036853
#2	83.31292	.0132385	.0638667	16.28558	.0186579	.0034133
#3	82.69059	.0150798	.0644495	16.35607	.0186782	.0038592

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1478-05 Acquired: 3/12/2025 18:36:27 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.002443	.2004282	F 35.47318	.1208386	F 11.77105	.0174565
Stddev	.001182	.0016693	.16281	.0008663	.03402	.0009730
%RSD	48.37731	.8328726	.4589569	.7169350	.2889905	5.573607
#1	-.003724	.2013728	35.64633	.1214764	11.74331	.0185741
#2	-.001395	.1985008	35.45001	.1198523	11.76083	.0169976
#3	-.002209	.2014109	35.32320	.1211873	11.80900	.0167979

Elem	Sr4077
Units	ppm
Avg	.4393736
Stddev	.0023129
%RSD	.5264137
#1	.4417210
#2	.4370968
#3	.4393031

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3239.343	71964.71	14548.10	2072.992	4464.791
Stddev	4.403	209.82	21.32	3.589	6.892
%RSD	.1359118	.2915537	.1465743	.1731308	.1543585
#1	3238.612	71887.36	14565.92	2077.127	4469.100
#2	3244.065	71804.55	14553.90	2070.682	4468.431
#3	3235.351	72202.22	14524.47	2071.167	4456.842

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1477-01 Acquired: 3/12/2025 18:40:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.000761	-.004616	.0020107	-.008940	.0005395	.0313499	-.004207
Stddev	.003467	.000963	.0002344	.001393	.0012855	.0061790	.000878
%RSD	455.3477	20.86318	11.65927	15.58445	238.2868	19.70969	20.87035
#1	.001996	-.003524	.0021970	-.008505	-.000563	.0358297	-.005153
#2	-.004653	-.004979	.0020877	-.007816	.000230	.0243008	-.004049
#3	.000374	-.005344	.0017475	-.010499	.001951	.0339192	-.003418

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000098	.0000059	4.296009	.0000551	.0075717	.0083564	.4956831
Stddev	.000039	.0000751	.014318	.0003698	.0001588	.0003292	.0013167
%RSD	39.74737	1276.909	.3332880	670.7907	2.097242	3.939655	.2656342
#1	-.000068	-.000018	4.279490	-.000144	.0076889	.0079830	.4960975
#2	-.000083	.000090	4.304850	-.000172	.0073910	.0086049	.4967428
#3	-.000142	-.000054	4.303687	.000482	.0076353	.0084812	.4942091

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1279567	2.089471	.0095149	.0004284	13.49506	.0003670	.0189431
Stddev	.0011178	.005225	.0002412	.0002712	.08926	.0007757	.0003861
%RSD	.8735891	.2500840	2.535418	63.31121	.6614357	211.3477	2.038049
#1	.1266660	2.090348	.0092386	.0007373	13.39278	.0010087	.0193607
#2	.1286084	2.094202	.0096837	.0003182	13.55726	-.000495	.0185992
#3	.1285958	2.083862	.0096223	.0002296	13.53513	.000587	.0188694

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8402467	.0018366	.0003062	-.000258	.0016035	5.656805	.0035523
Stddev	.0202610	.0001920	.0002031	.000727	.0001280	.031941	.0012780
%RSD	2.411311	10.45269	66.30756	282.0022	7.984029	.5646438	35.97626
#1	.8473686	.0016355	.0001874	-.000270	.0016298	5.621214	.0021426
#2	.8559851	.0018564	.0005407	.000475	.0014644	5.682978	.0046349
#3	.8173864	.0020179	.0001906	-.000978	.0017164	5.666223	.0038795

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1477-01 Acquired: 3/12/2025 18:40:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.9674444	-.006840	.0272111
Stddev	.0035177	.000176	.0001880
%RSD	.3636044	2.568081	.6907555
#1	.9644694	-.006829	.0270088
#2	.9713269	-.007022	.0272439
#3	.9665369	-.006671	.0273804

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3422.466	76132.55	14668.72	2189.522	4987.186
Stddev	4.783	142.47	13.41	9.802	8.841
%RSD	.1397584	.1871395	.0914489	.4476939	.1772786
#1	3416.945	76277.69	14669.94	2192.730	4976.979
#2	3425.116	76127.07	14681.48	2197.319	4992.458
#3	3425.338	75992.90	14654.74	2178.518	4992.121

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1477-04 Acquired: 3/12/2025 18:44:59 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.002521	-.004016	-.000523	-.006381	-.000835	.0270457	-.004503
Stddev	.001476	.000890	.000216	.001530	.001426	.0046860	.000377
%RSD	58.55181	22.17108	41.25663	23.97684	170.8310	17.32623	8.377924
#1	-.001315	-.005001	-.000313	-.007032	-.001174	.0221443	-.004410
#2	-.004167	-.003778	-.000512	-.007478	-.002061	.0275113	-.004918
#3	-.002081	-.003269	-.000744	-.004633	.000730	.0314815	-.004180

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000062	-.000013	4.366599	-.000006	.0081952	.0021219	.0643949
Stddev	.000016	.000041	.020941	.000054	.0000277	.0002198	.0020389
%RSD	26.18010	318.5332	.4795730	866.9171	.3381451	10.35761	3.166239
#1	-.000076	-.000009	4.388854	-.000034	.0081675	.0021133	.0621487
#2	-.000044	-.000056	4.363662	.000056	.0082229	.0023459	.0649070
#3	-.000066	.000026	4.347282	-.000040	.0081952	.0019066	.0661289

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138515	2.125924	.0098043	.0005199	12.83595	.0009972	.0136836
Stddev	.0001728	.007125	.0003870	.0003253	.02801	.0006711	.0003300
%RSD	1.247274	.3351536	3.946698	62.57364	.2182503	67.29574	2.411590
#1	.0136522	2.133254	.0099717	.0001810	12.83439	.0015405	.0133221
#2	.0139595	2.119023	.0100794	.0008297	12.80874	.0012041	.0139686
#3	.0139426	2.125496	.0093618	.0005490	12.86471	.0002470	.0137603

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7221880	.0012707	.0000624	-.000157	.0015322	5.748480	.0039151
Stddev	.0164769	.0005150	.0001001	.000674	.0004595	.006338	.0007805
%RSD	2.281527	40.52652	160.4379	429.4969	29.99098	.1102605	19.93622
#1	.7316817	.0011715	.0001758	-.000922	.0018892	5.746164	.0030140
#2	.7317203	.0008126	-.000014	.000103	.0010137	5.743625	.0043515
#3	.7031621	.0018281	.000025	.000349	.0016937	5.755650	.0043798

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: Q1477-04 Acquired: 3/12/2025 18:44:59 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.5339079	-.007291	.0279202
Stddev	.0089225	.001162	.0002454
%RSD	1.671166	15.94324	.8788013
#1	.5253127	-.006049	.0282033
#2	.5332861	-.008352	.0277678
#3	.5431251	-.007471	.0277897

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3392.880	76076.18	14785.42	2176.456	4932.322
Stddev	12.909	189.02	52.28	11.407	13.152
%RSD	.3804848	.2484673	.3535952	.5241134	.2666531
#1	3402.131	75999.02	14726.73	2166.025	4941.402
#2	3398.377	76291.58	14802.53	2188.637	4938.325
#3	3378.132	75937.94	14827.00	2174.706	4917.240

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV09 Acquired: 3/12/2025 18:49:17 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.285937	5.096076	5.062605	5.064291	5.128807	9.863717
Stddev	.014745	.042702	.008776	.016425	.016419	.013143
%RSD	.2789433	.8379399	.1733510	.3243235	.3201284	.1332481
#1	5.269013	5.058359	5.056588	5.047807	5.110500	9.851435
#2	5.296011	5.142440	5.058552	5.080656	5.142228	9.877578
#3	5.292787	5.087428	5.072675	5.064409	5.133693	9.862137

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.216085	.2354996	2.495207	23.63797	1.054316	2.482656
Stddev	.110895	.0007926	.006391	.02778	.002983	.005344
%RSD	1.203273	.3365557	.2561201	.1175119	.2829508	.2152687
#1	9.124698	.2345885	2.488487	23.61088	1.057034	2.477075
#2	9.184100	.2358802	2.495928	23.63663	1.054791	2.483167
#3	9.339457	.2360302	2.501207	23.66639	1.051124	2.487727

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.278754	4.959795	2.266593	24.08874	2.484315	1.272056
Stddev	.003454	.009483	.005720	.00772	.006019	.002707
%RSD	.2700840	.1911889	.2523571	.0320414	.2422623	.2128081
#1	1.274792	4.961583	2.264935	24.08119	2.477766	1.274787
#2	1.280335	4.968257	2.261885	24.09661	2.485575	1.272006
#3	1.281133	4.949546	2.272959	24.08842	2.489604	1.269373

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.29389	2.418684	2.563314	25.36744	4.609509	5.141204
Stddev	.06517	.005894	.007214	.10952	.018060	.015532
%RSD	.2478556	.2436951	.2814158	.4317536	.3918025	.3021070
#1	26.35648	2.423668	2.567991	25.49054	4.597740	5.123790
#2	26.22642	2.412178	2.566944	25.28078	4.600485	5.153626
#3	26.29877	2.420207	2.555007	25.33099	4.630303	5.146195

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCV09 Acquired: 3/12/2025 18:49:17 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.989546	4.692116	F 5.565752	4.898327	4.862927	4.606030
Stddev	.013101	.003367	.010312	.018762	.007887	.005661
%RSD	.2625738	.0717597	.1852674	.3830213	.1621838	.1228979
#1	4.975564	4.688700	5.553895	4.878736	4.853921	4.600762
#2	4.991535	4.692214	5.570740	4.916132	4.866257	4.605314
#3	5.001539	4.695432	5.572621	4.900112	4.868603	4.612015

Elem	Sr4077
Units	ppm
Avg	4.711992
Stddev	.021324
%RSD	.4525444
#1	4.688826
#2	4.730801
#3	4.716350

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3238.469	71747.98	14755.97	2067.100	4374.454
Stddev	4.383	231.77	15.48	11.407	6.998
%RSD	.1353290	.3230323	.1049095	.5518498	.1599722
#1	3243.129	71557.27	14771.82	2057.461	4377.486
#2	3237.848	71680.74	14740.88	2064.146	4379.425
#3	3234.430	72005.94	14755.23	2079.694	4366.452

Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB09 Acquired: 3/12/2025 18:53:27 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010605	-.001631	-.000023	-.007805	-.001745	.0014504	-.005530
Stddev	.0031566	.000240	.000442	.000768	.000757	.0009557	.000107
%RSD	297.6611	14.68546	1884.710	9.840936	43.38588	65.89232	1.927780
#1	-.001046	-.001380	.000266	-.006924	-.002212	.0005700	-.005612
#2	-.000462	-.001656	-.000532	-.008154	-.000871	.0024668	-.005409
#3	.004690	-.001858	.000196	-.008336	-.002151	.0013144	-.005568

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000334	.0000482	-.000469	-.000401	.0001438	.0002409	-.000452
Stddev	.0000708	.0000072	.003217	.000373	.0000971	.0001834	.002779
%RSD	211.8863	14.99153	686.2066	93.00892	67.54075	76.15456	614.9289
#1	.0000650	.0000453	.000714	-.000211	.0001735	.0004055	-.002815
#2	-.000048	.0000564	-.004110	-.000830	.0002227	.0002740	-.001151
#3	.000083	.0000428	.001990	-.000161	.0000353	.0000431	.002609

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000908	.0153942	-.000315	.0004844	.0405518	.0003459	-.000566
Stddev	.000193	.0122148	.000134	.0001021	.0077054	.0008497	.000095
%RSD	21.20404	79.34700	42.69948	21.08058	19.00144	245.6362	16.71944
#1	-.001119	.0202668	-.000444	.0003784	.0322436	-.000569	-.000655
#2	-.000741	.0014951	-.000176	.0005821	.0419484	.001111	-.000466
#3	-.000866	.0244207	-.000325	.0004926	.0474634	.000495	-.000577

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.046447	-.000419	.0000588	-.000286	.0015831	-.046538	-.002782
Stddev	.024686	.000354	.0001584	.000334	.0005059	.001935	.001824
%RSD	53.14939	84.43399	269.4633	116.6230	31.95601	4.157585	65.54651
#1	-.074653	-.000501	-.000123	-.000669	.0014067	-.048187	-.002581
#2	-.035908	-.000032	.000168	-.000056	.0021536	-.044408	-.004698
#3	-.028779	-.000725	.000132	-.000133	.0011891	-.047019	-.001068

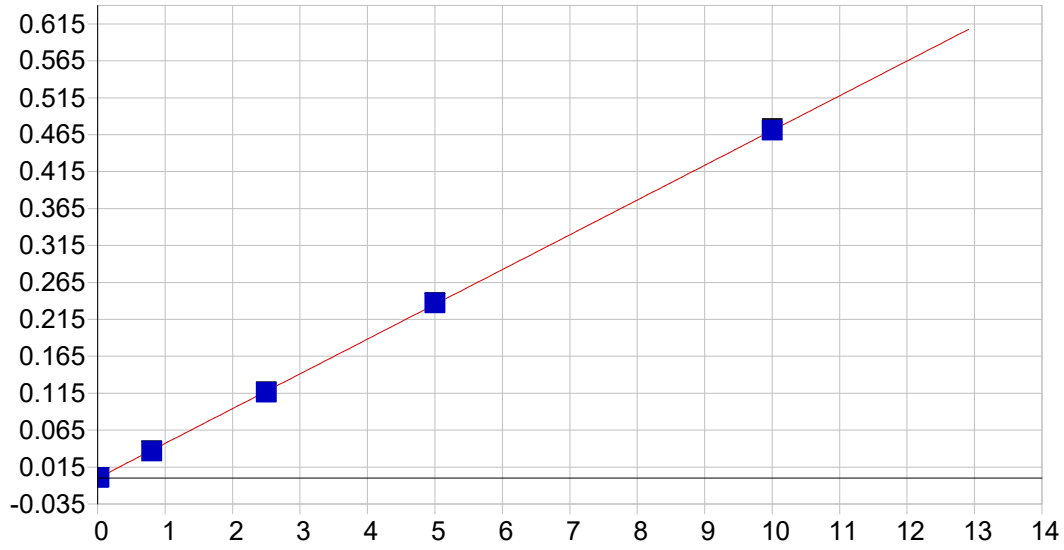
Reviewed By:jaswal
On:3/14/2025 1:32:25 PM
Inst Id :P4
LB :LB135011

Sample Name: CCB09 Acquired: 3/12/2025 18:53:27 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0002751	-.003505	.0000058
Stddev	.0017059	.001317	.0001118
%RSD	620.1289	37.57010	1914.929
#1	-.000158	-.001990	.0001100
#2	-.001173	-.004151	-.000112
#3	.002156	-.004375	.000020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3417.941	77142.42	15170.25	2197.411	5004.396
Stddev	2.709	29.36	50.07	7.273	.371
%RSD	.0792585	.0380611	.3300471	.3309619	.0074217
#1	3419.992	77126.78	15166.05	2205.687	5004.771
#2	3418.961	77124.19	15222.29	2192.040	5004.028
#3	3414.871	77176.29	15122.42	2194.505	5004.389

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



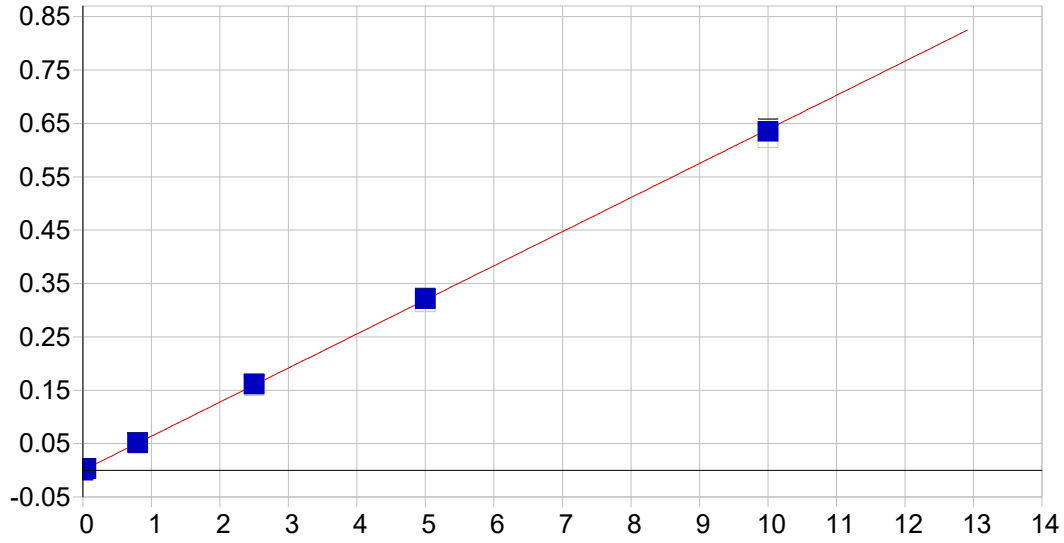
As 189.042 {479}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000062	Re-Slope:	1.000000
A1 (Gain):	0.047066	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999971	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.002559		
Predicted MQL:	0.008529		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00006	.000	1
S1	.02000	.02051	.001	2.56	.00090	.000	1
S3	2.5000	2.4746	-.025	-1.02	.11628	.000	1
S4	5.0000	5.0378	.038	.756	.23679	.000	1
S5	10.000	10.007	.007	.073	.47043	.002	1
S2	.80000	.77984	-.020	-2.52	.03660	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



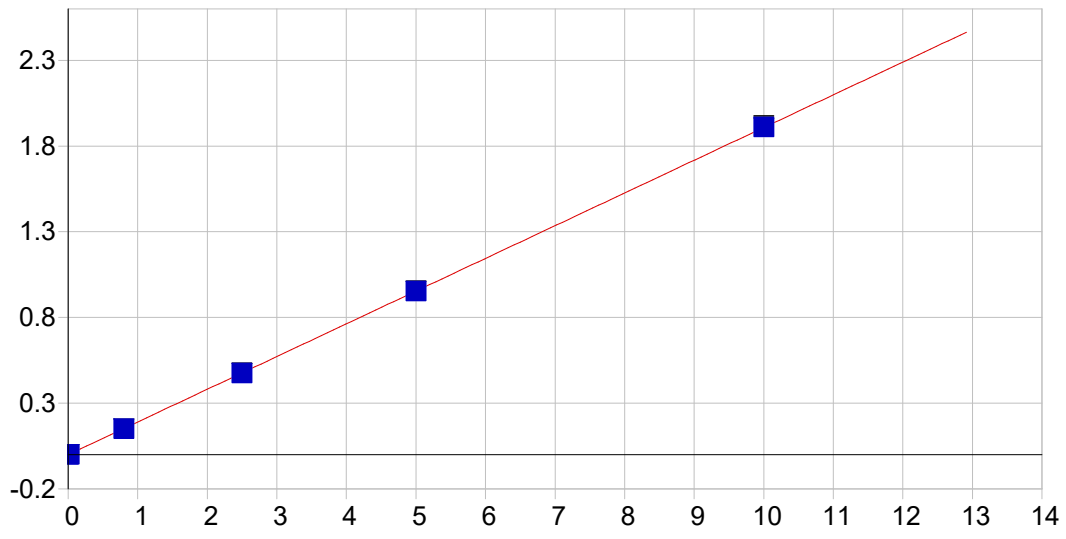
Tl 190.856 {477}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000134	Re-Slope:	1.000000
A1 (Gain):	0.063892	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.001733		
Predicted MQL:	0.005776		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00013	.000	1
S1	.04000	.04260	.003	6.51	.00242	.000	1
S3	2.5000	2.5244	.024	.976	.15821	.001	1
S4	5.0000	5.0294	.029	.589	.31532	.001	1
S5	10.000	9.9390	-.061	-.610	.62312	.005	1
S2	.80000	.80468	.005	.585	.05034	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



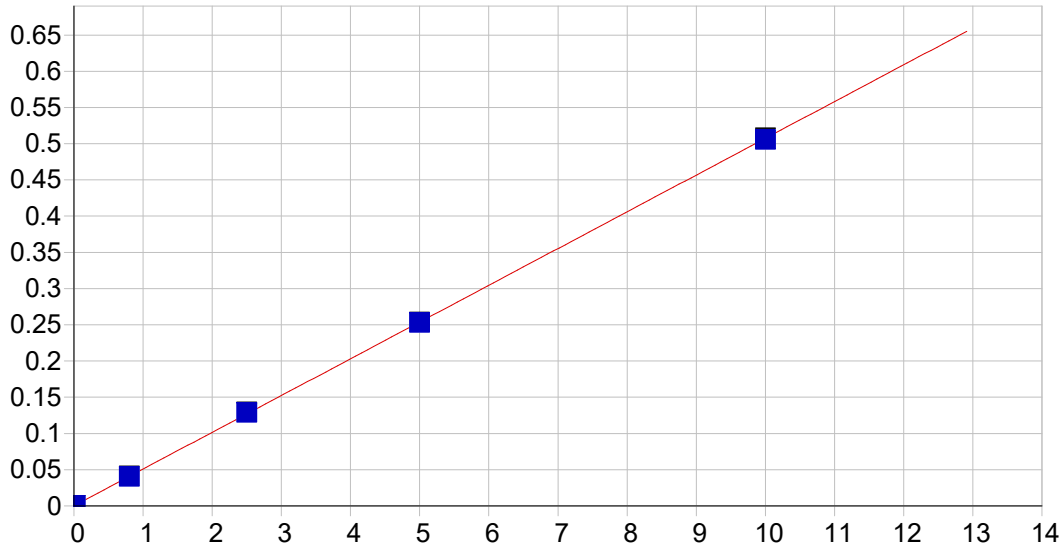
Pb 220.353 {453}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000275	Re-Slope:	1.000000
A1 (Gain):	0.190817	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999993	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.001409		
Predicted MQL:	0.004696		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00027	.000	1
S1	.01200	.01199	-.000	-.063	.00197	.000	1
S3	2.5000	2.4906	-.009	-.377	.47445	.001	1
S4	5.0000	5.0004	.000	.008	.95284	.001	1
S5	10.000	10.021	.021	.205	1.9097	.007	1
S2	.80000	.78849	-.012	-1.44	.15001	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



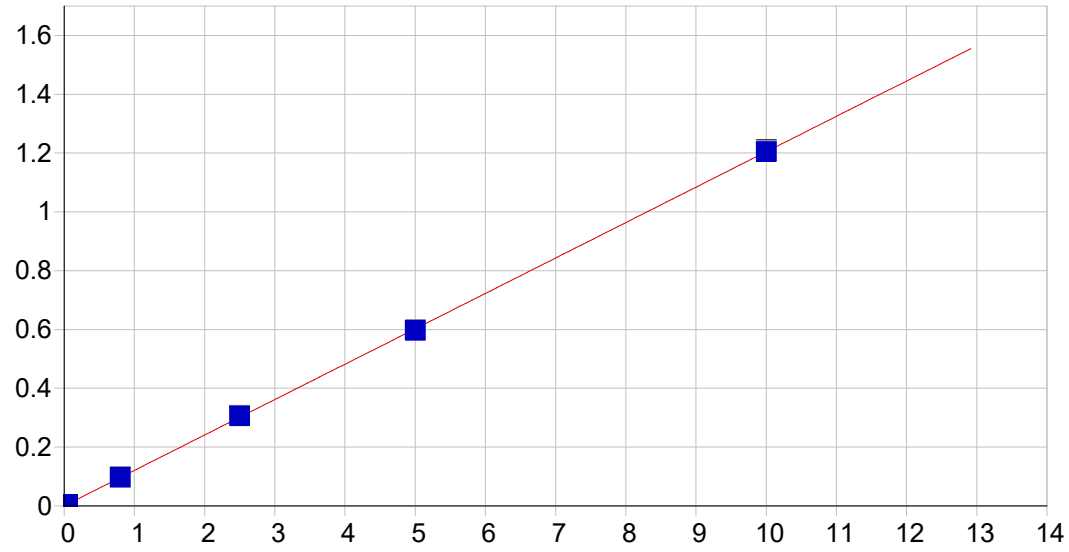
Se 196.090 {472}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000197	Re-Slope:	1.000000
A1 (Gain):	0.050722	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999977	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.002900		
Predicted MQL:	0.009665		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00020	.000	1
S1	.02000	.02181	.002	9.05	.00130	.000	1
S3	2.5000	2.5373	.037	1.49	.12885	.001	1
S4	5.0000	4.9898	-.010	-.204	.25320	.000	1
S5	10.000	9.9709	-.029	-.291	.50576	.002	1
S2	.80000	.80022	.000	.028	.04077	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



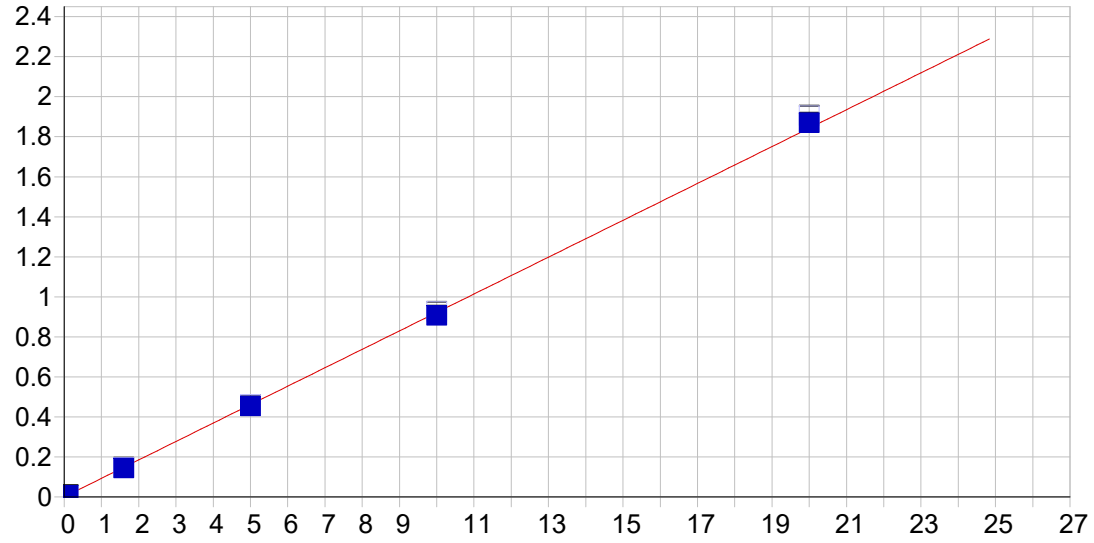
Sb 206.833 {463}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000297	Re-Slope:	1.000000
A1 (Gain):	0.120408	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.000038		
Predicted MDL:	0.001833		
Predicted MQL:	0.006111		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00030	.000	1
S1	.05000	.05318	.003	6.35	.00671	.000	1
S3	2.5000	2.5388	.039	1.55	.30681	.001	1
S4	5.0000	4.9521	-.048	-.959	.59820	.001	1
S5	10.000	9.9997	-.000	-.003	1.2076	.004	1
S2	.80000	.80628	.006	.784	.09764	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



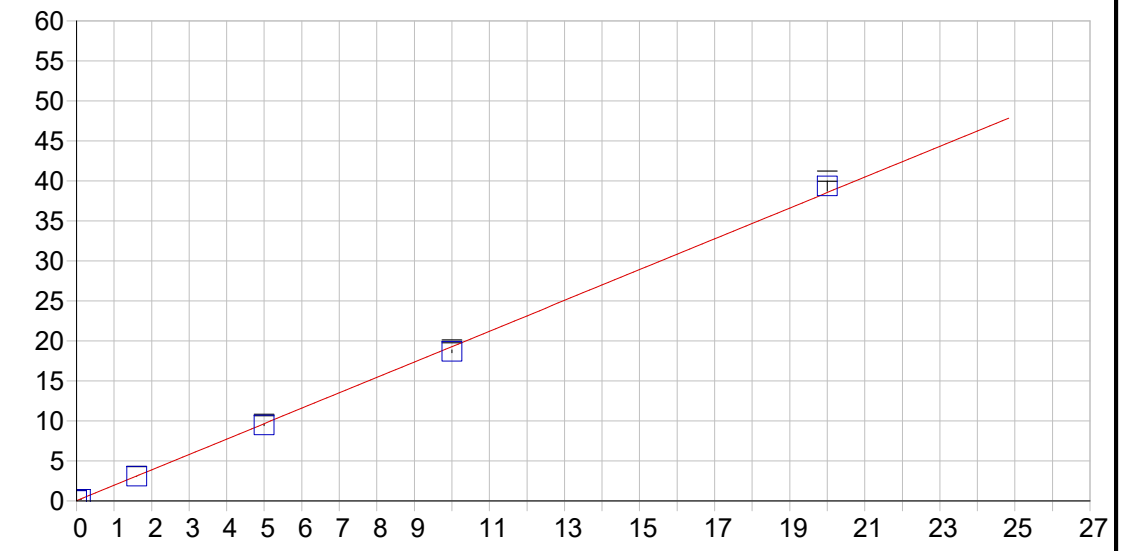
Al 396.152 { 85}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000789	Re-Slope:	1.000000
A1 (Gain):	0.092114	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999878	Status:	OK.
Std Error of Est:	0.000109		
Predicted MDL:	0.005226		
Predicted MQL:	0.017421		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00079	.000	1
S1	.10000	.09462	-.005	-5.38	.01022	.000	1
S3	5.0000	4.9140	-.086	-1.72	.46237	.000	1
S4	10.000	9.8420	-.158	-1.58	.92525	.002	1
S5	20.000	20.287	.287	1.44	1.9053	.003	1
S2	1.6000	1.5623	-.038	-2.35	.14756	.001	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



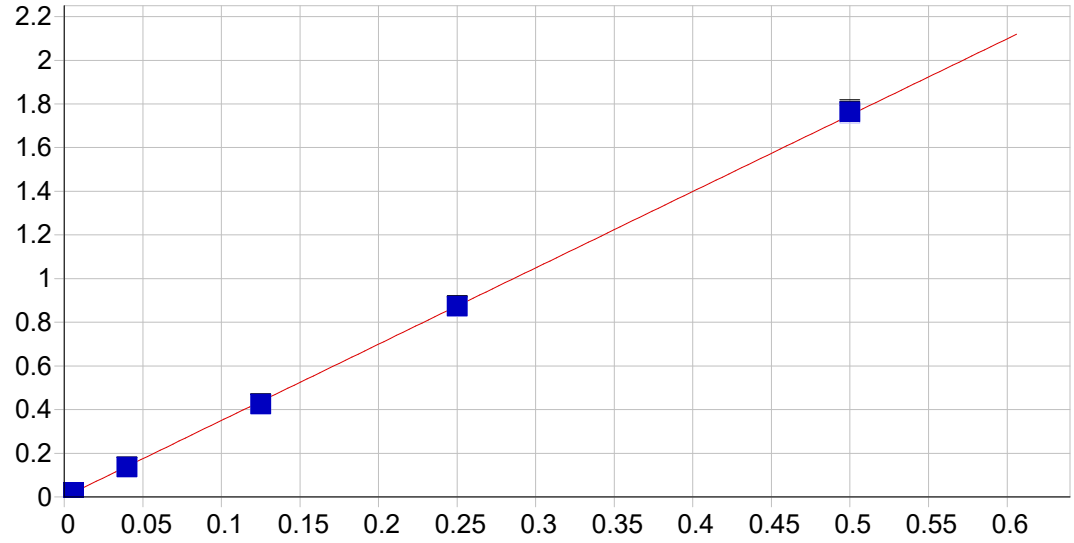
Ba 493.409 { 68}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.032123	Re-Slope:	1.000000
A1 (Gain):	1.925417	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999718	Status:	OK.
Std Error of Est:	0.003390		
Predicted MDL:	0.000918		
Predicted MQL:	0.003060		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.03214	.002	1
S1	.10000	.09490	-.005	-5.10	.21484	.001	1
S3	5.0000	4.9161	-.084	-1.68	9.4976	.087	1
S4	10.000	9.6902	-.310	-3.10	18.690	.185	1
S5	20.000	20.425	.425	2.12	39.358	.650	1
S2	1.6000	1.5742	-.026	-1.61	3.0632	.003	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



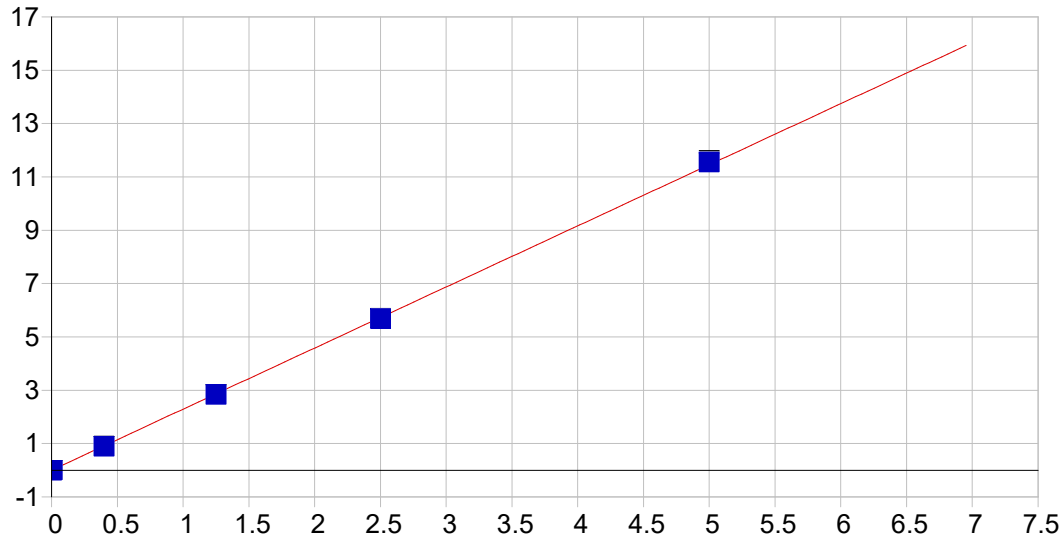
Be 234.861 {144}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000110	Re-Slope:	1.000000
A1 (Gain):	3.497329	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999916	Status:	OK.
Std Error of Est:	0.000130		
Predicted MDL:	0.000052		
Predicted MQL:	0.000173		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00011	.000	1
S1	.00600	.00604	.000	.713	.02109	.000	1
S3	.12500	.12168	-.003	-2.66	.42370	.002	1
S4	.25000	.24995	-.000	-.022	.87033	.002	1
S5	.50000	.50437	.004	.874	1.7562	.009	1
S2	.04000	.03897	-.001	-2.59	.13576	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



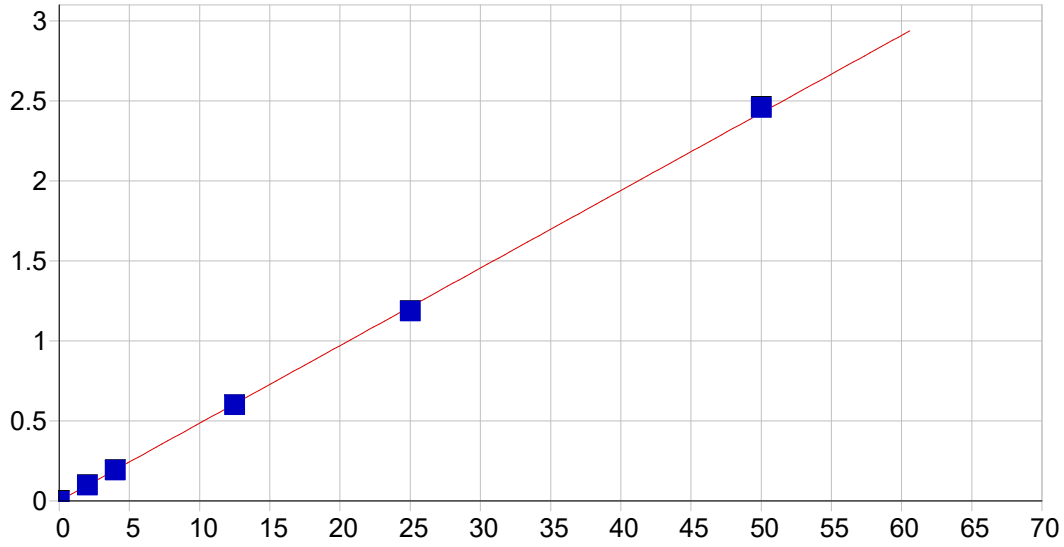
Cd 226.502 {449}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000109	Re-Slope:	1.000000
A1 (Gain):	2.291152	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999946	Status:	OK.
Std Error of Est:	0.000216		
Predicted MDL:	0.000081		
Predicted MQL:	0.000270		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00011	.000	1
S1	.00600	.00584	-.000	-2.73	.01333	.000	1
S3	1.2500	1.2378	-.012	-.973	2.8385	.006	1
S4	2.5000	2.4783	-.022	-.869	5.6831	.010	1
S5	5.0000	5.0446	.045	.891	11.568	.041	1
S2	.40000	.38949	-.011	-2.63	.89308	.002	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



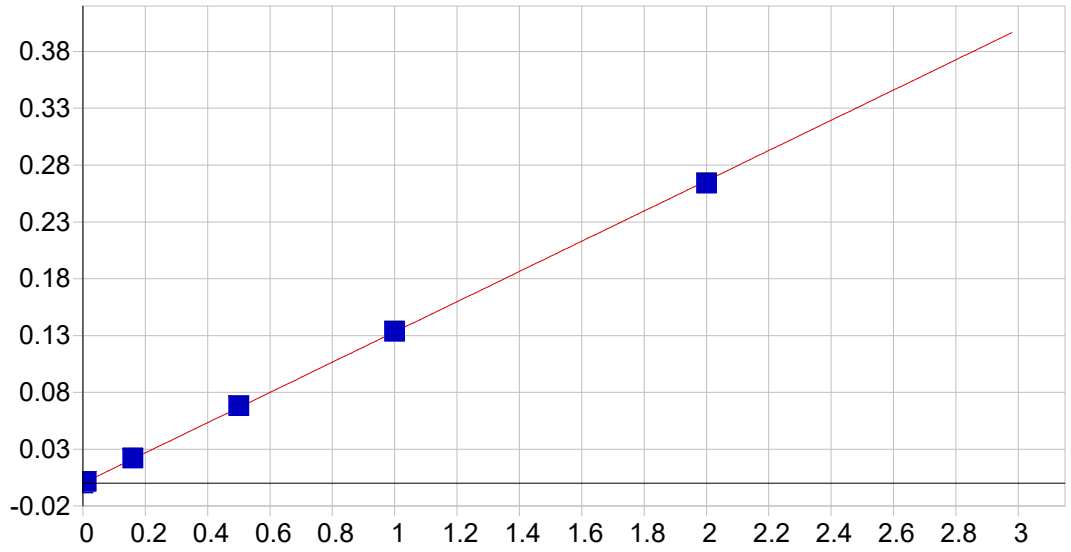
Ca 373.690 { 90}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000828	Re-Slope:	1.000000
A1 (Gain):	0.048476	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999877	Status:	OK.
Std Error of Est:	0.000403		
Predicted MDL:	0.007956		
Predicted MQL:	0.026521		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00005	.000	.000	.00083	.000	1
S2	4.0000	3.9497	-.050	-1.26	.19230	.001	1
S3	12.500	12.372	-.128	-1.02	.60057	.002	1
S4	25.000	24.469	-.531	-2.12	1.1870	.002	1
S5	50.000	50.697	.697	1.39	2.4584	.006	1
S1	2.0000	2.0130	.013	.651	.09841	.001	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



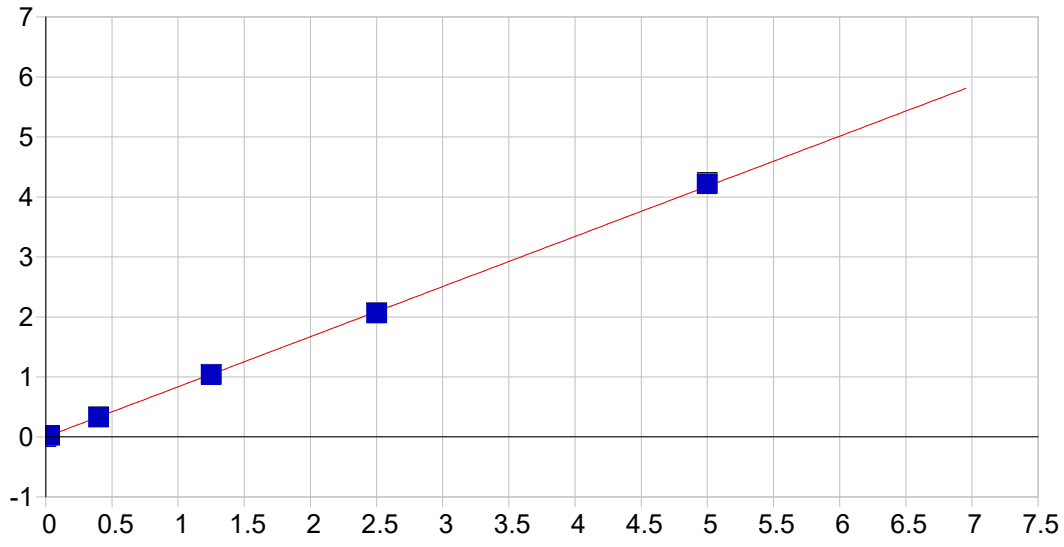
Cr 267.716 {126}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000039	Re-Slope:	1.000000
A1 (Gain):	0.133092	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999928	Status:	OK.
Std Error of Est:	0.000012		
Predicted MDL:	0.000462		
Predicted MQL:	0.001542		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00004	.000	1
S1	.01000	.01032	.000	3.24	.00141	.000	1
S3	.50000	.51148	.011	2.30	.06813	.000	1
S4	1.0000	1.0020	.002	.203	.13344	.000	1
S5	2.0000	1.9823	-.018	-.886	.26394	.000	1
S2	.16000	.16388	.004	2.42	.02186	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



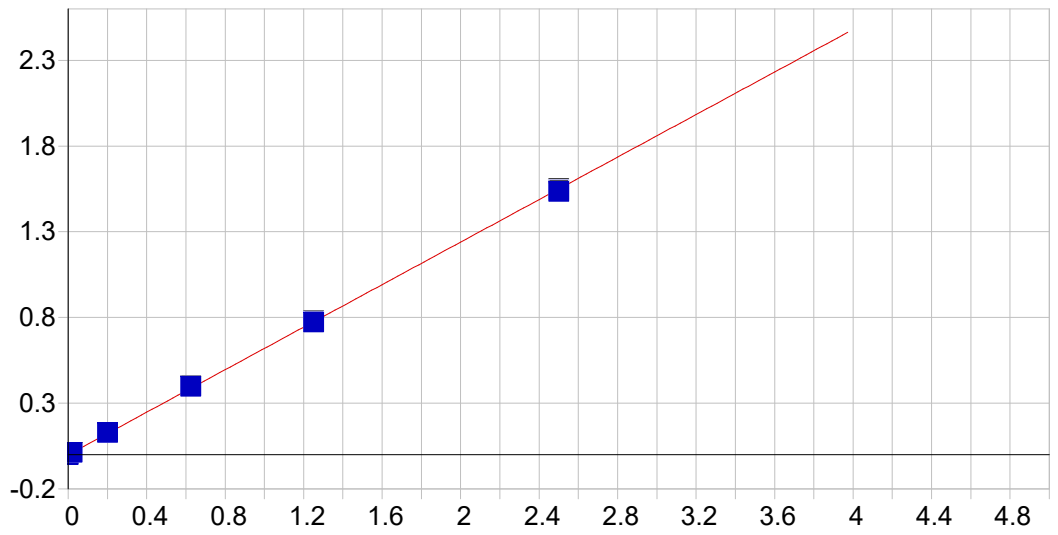
Co 228.616 {448}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000023	Re-Slope:	1.000000
A1 (Gain):	0.835360	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999945	Status:	OK.
Std Error of Est:	0.000178		
Predicted MDL:	0.000235		
Predicted MQL:	0.000784		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00002	.000	1
S1	.03000	.02965	-.000	-1.18	.02464	.000	1
S3	1.2500	1.2422	-.008	-.621	1.0395	.002	1
S4	2.5000	2.4690	-.031	-1.24	2.0660	.002	1
S5	5.0000	5.0466	.047	.932	4.2228	.014	1
S2	.40000	.39256	-.007	-1.86	.32847	.001	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



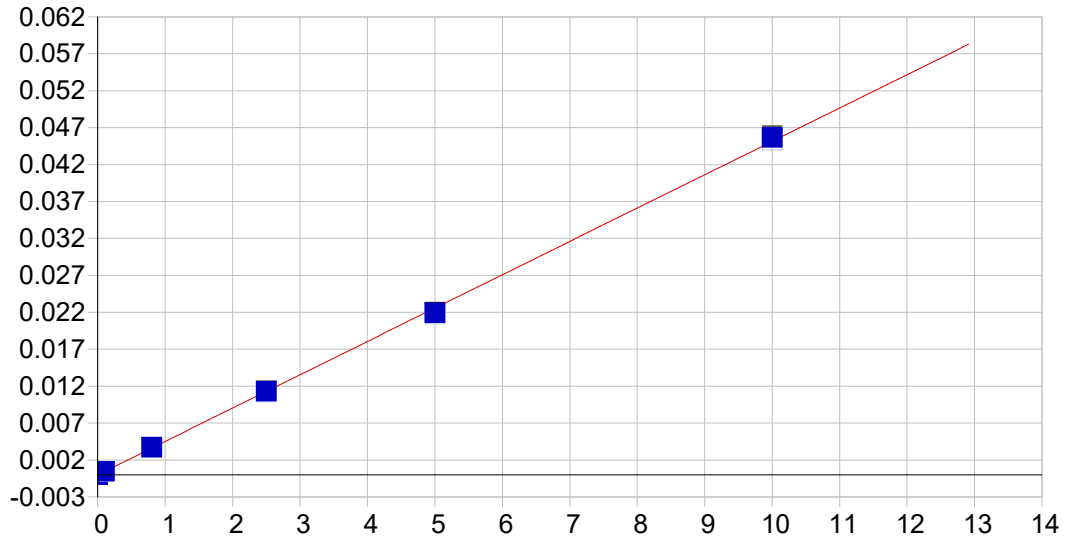
Cu 224.700 {450}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000614	Re-Slope:	1.000000
A1 (Gain):	0.620132	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999854	Status:	OK.
Std Error of Est:	0.000125		
Predicted MDL:	0.000416		
Predicted MQL:	0.001386		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00062	.000	1
S1	.02000	.02268	.003	13.4	.01357	.000	1
S3	.62500	.64205	.017	2.73	.40029	.001	1
S4	1.2500	1.2482	-.002	-.143	.77894	.001	1
S5	2.5000	2.4746	-.025	-1.01	1.5450	.007	1
S2	.20000	.20739	.007	3.70	.12888	.001	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



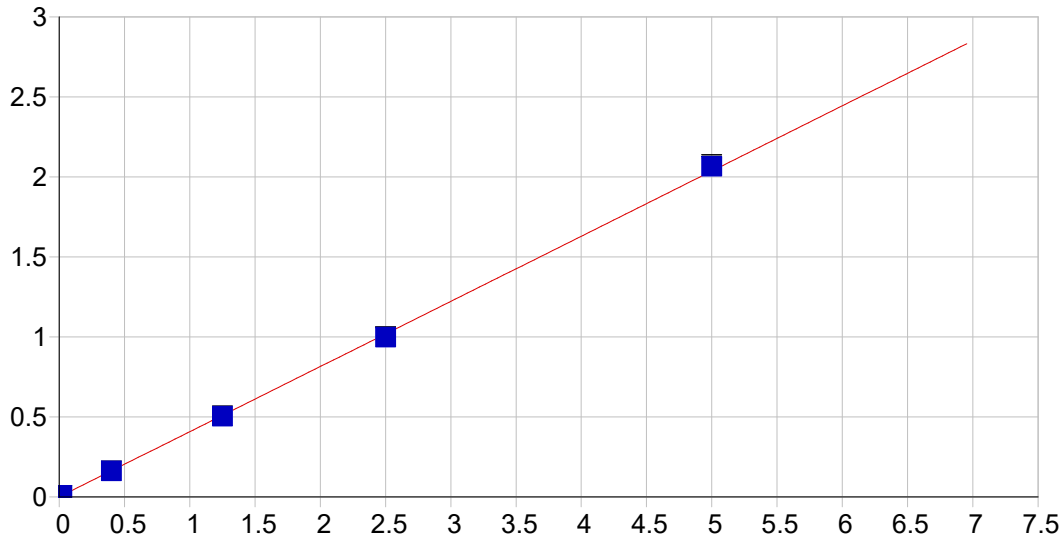
Fe 240.488 {140}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000008	Re-Slope:	1.000000
A1 (Gain):	0.004515	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999836	Status:	OK.
Std Error of Est:	0.000004		
Predicted MDL:	0.004482		
Predicted MQL:	0.014939		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.10000	.10076	.001	.762	.00044	.000	1
S3	2.5000	2.5017	.002	.069	.01119	.000	1
S4	5.0000	4.8594	-.141	-2.81	.02174	.000	1
S5	10.000	10.116	.116	1.16	.04528	.000	1
S2	.80000	.82223	.022	2.78	.00367	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



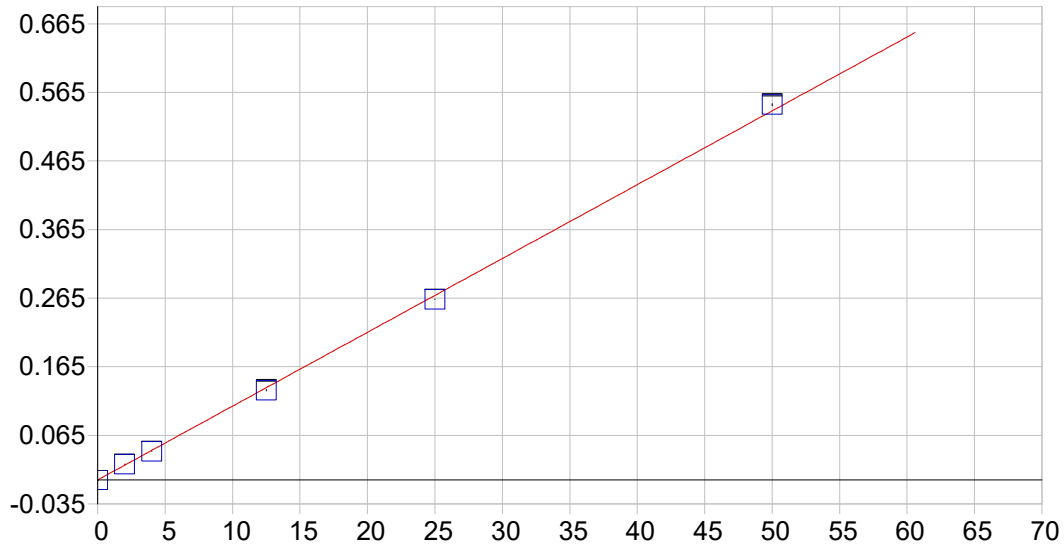
Mn 257.610 {131}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000255	Re-Slope:	1.000000
A1 (Gain):	0.407297	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999875	Status:	OK.
Std Error of Est:	0.000107		
Predicted MDL:	0.000347		
Predicted MQL:	0.001158		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00026	.000	1
S1	.02000	.01970	-.000	-1.50	.00828	.000	1
S3	1.2500	1.2357	-.014	-1.15	.50364	.002	1
S4	2.5000	2.4484	-.052	-2.06	.99770	.005	1
S5	5.0000	5.0709	.071	1.42	2.0660	.010	1
S2	.40000	.39529	-.005	-1.18	.16129	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



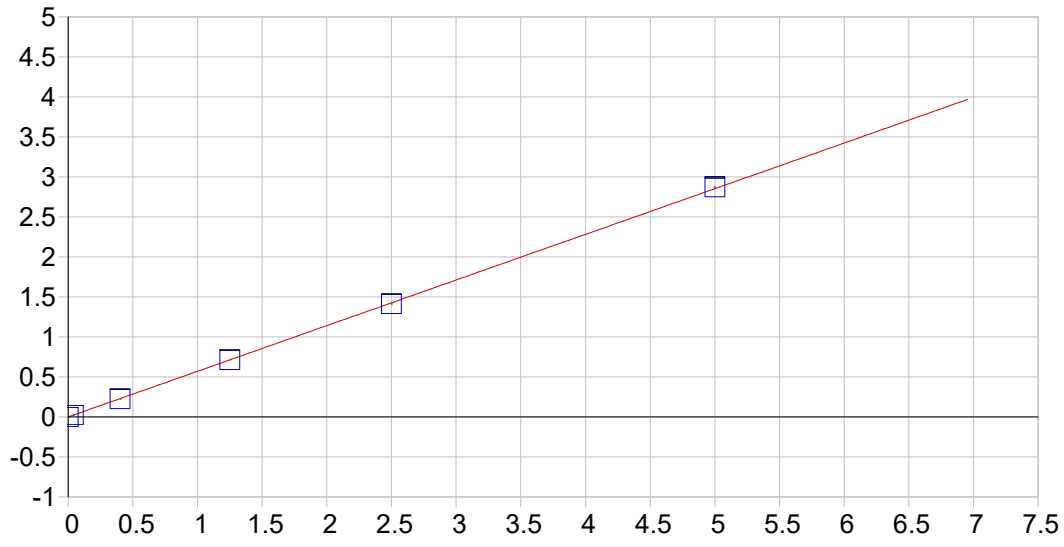
Mg 279.079 {121}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000102	Re-Slope:	1.000000
A1 (Gain):	0.010762	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999738	Status:	OK.
Std Error of Est:	0.000130		
Predicted MDL:	0.015197		
Predicted MQL:	0.050656		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	-.00010	.000	1
S2	4.0000	3.8777	-.122	-3.06	.04163	.000	1
S3	12.500	12.167	-.333	-2.66	.13085	.001	1
S4	25.000	24.466	-.534	-2.13	.26321	.000	1
S5	50.000	50.841	.841	1.68	.54707	.002	1
S1	2.0000	2.1474	.147	7.37	.02301	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



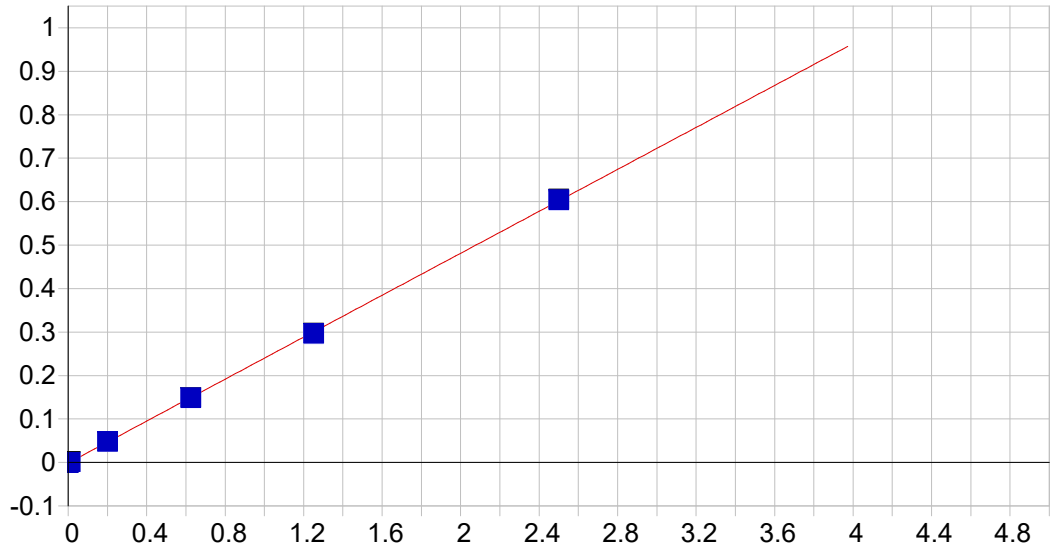
Ni 231.604 {446}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000177	Re-Slope:	1.000000
A1 (Gain):	0.570592	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999975	Status:	OK.
Std Error of Est:	0.000095		
Predicted MDL:	0.000324		
Predicted MQL:	0.001079		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00018	.000	1
S1	.04000	.03956	-.000	-1.10	.02240	.000	1
S3	1.2500	1.2483	-.002	-.133	.71211	.002	1
S4	2.5000	2.4761	-.024	-.955	1.4127	.001	1
S5	5.0000	5.0303	.030	.606	2.8701	.009	1
S2	.40000	.39567	-.004	-1.08	.22559	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



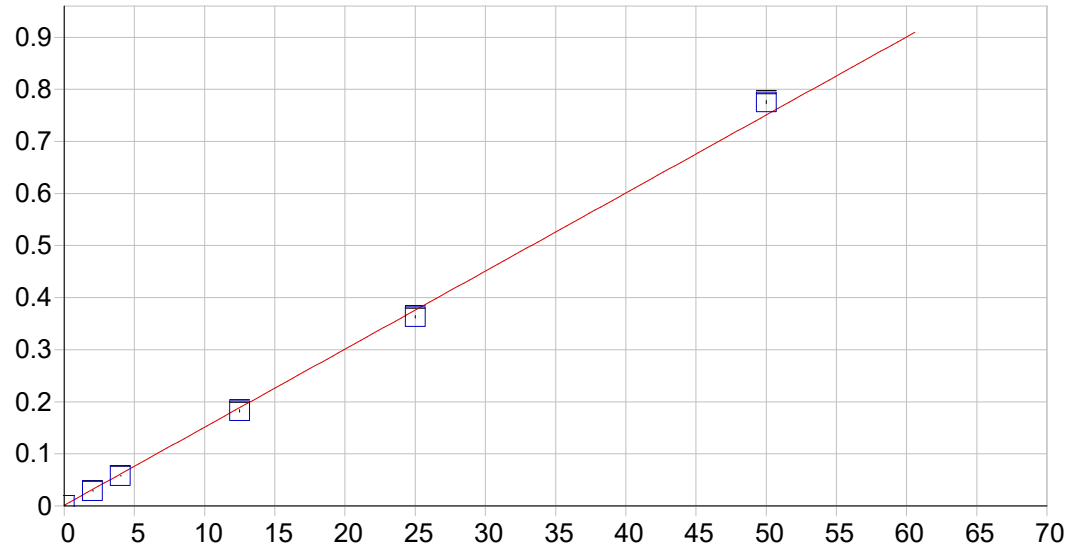
Ag 328.068 {103}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001368	Re-Slope:	1.000000
A1 (Gain):	0.241299	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.000357		
Predicted MQL:	0.001189		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00137	.000	1
S1	.01000	.01067	.001	6.73	.00119	.000	1
S3	.62500	.62232	-.003	-.428	.14820	.000	1
S4	1.2500	1.2362	-.014	-1.11	.29572	.001	1
S5	2.5000	2.5114	.011	.458	.60225	.002	1
S2	.20000	.20440	.004	2.20	.04776	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



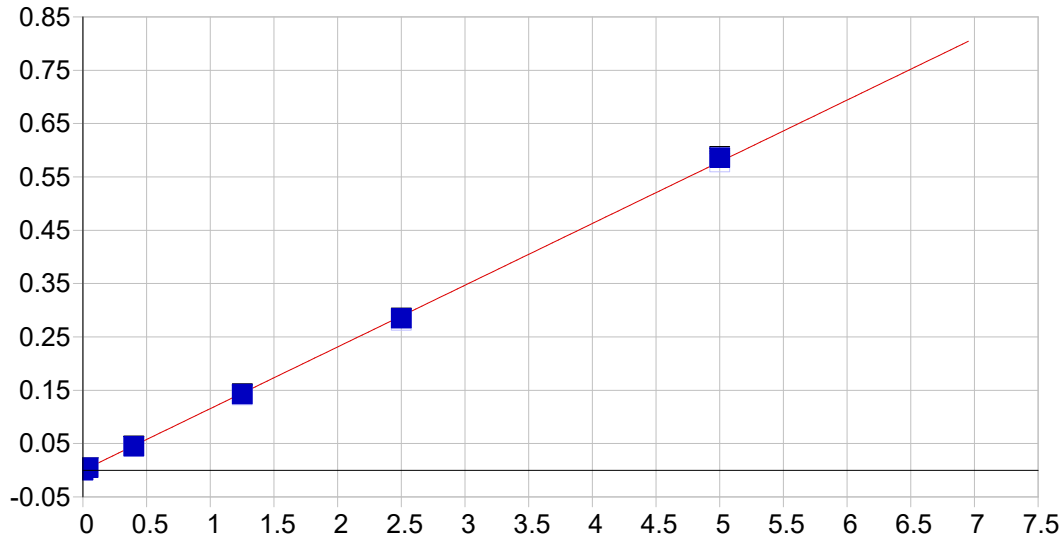
Na 589.592 { 57}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001303	Re-Slope:	1.000000
A1 (Gain):	0.014990	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999338	Status:	OK.
Std Error of Est:	0.000289		
Predicted MDL:	0.018531		
Predicted MQL:	0.061769		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00035	.000	.000	.00131	.000	1
S2	4.0000	3.7690	-.231	-5.78	.05780	.000	1
S3	12.500	12.085	-.415	-3.32	.18246	.002	1
S4	25.000	24.157	-.843	-3.37	.36342	.003	1
S5	50.000	51.654	1.65	3.31	.77562	.003	1
S1	2.0000	1.8354	-.165	-8.23	.02882	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



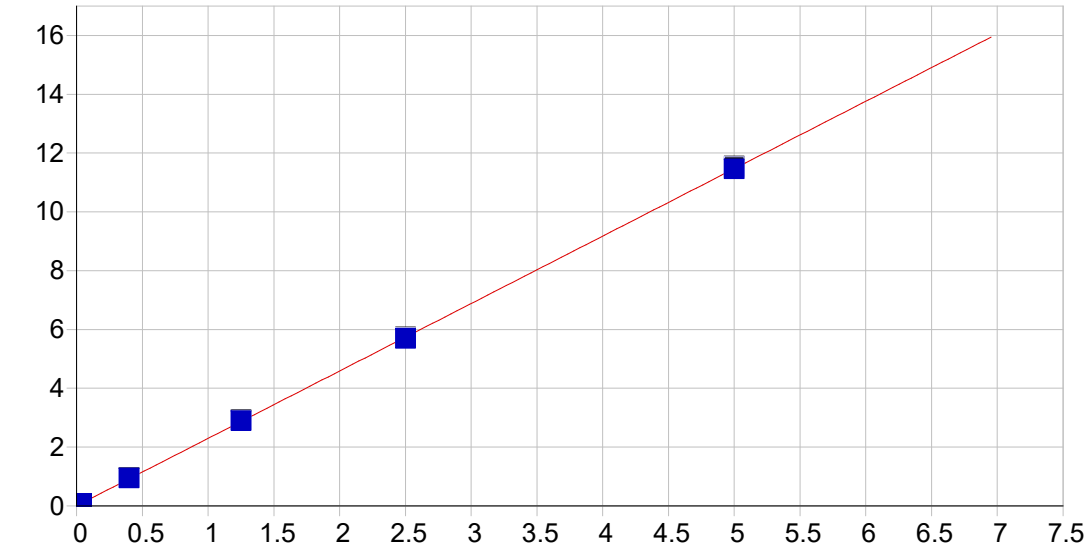
V 292.402 {115}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000033	Re-Slope:	1.000000
A1 (Gain):	0.115715	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999888	Status:	OK.
Std Error of Est:	0.000040		
Predicted MDL:	0.001541		
Predicted MQL:	0.005135		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00003	.000	1
S1	.04000	.04049	.000	1.22	.00448	.000	1
S3	1.2500	1.2346	-.015	-1.23	.14072	.000	1
S4	2.5000	2.4592	-.041	-1.63	.28031	.001	1
S5	5.0000	5.0661	.066	1.32	.57775	.002	1
S2	.40000	.38965	-.010	-2.59	.04438	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



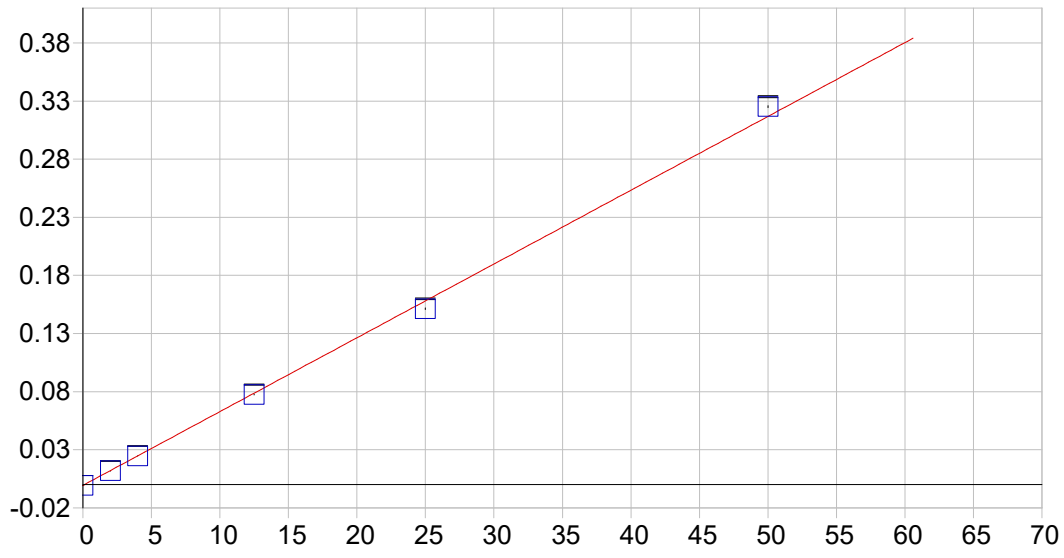
Zn 213.856 {158}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003824	Re-Slope:	1.000000
A1 (Gain):	2.292966	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000446		
Predicted MDL:	0.000325		
Predicted MQL:	0.001082		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00382	.001	1
S1	.04000	.04165	.002	4.13	.09997	.001	1
S3	1.2500	1.2628	.013	1.03	2.9194	.012	1
S4	2.5000	2.4793	-.021	-.826	5.7287	.015	1
S5	5.0000	4.9960	-.004	-.080	11.539	.023	1
S2	.40000	.41016	.010	2.54	.95068	.005	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



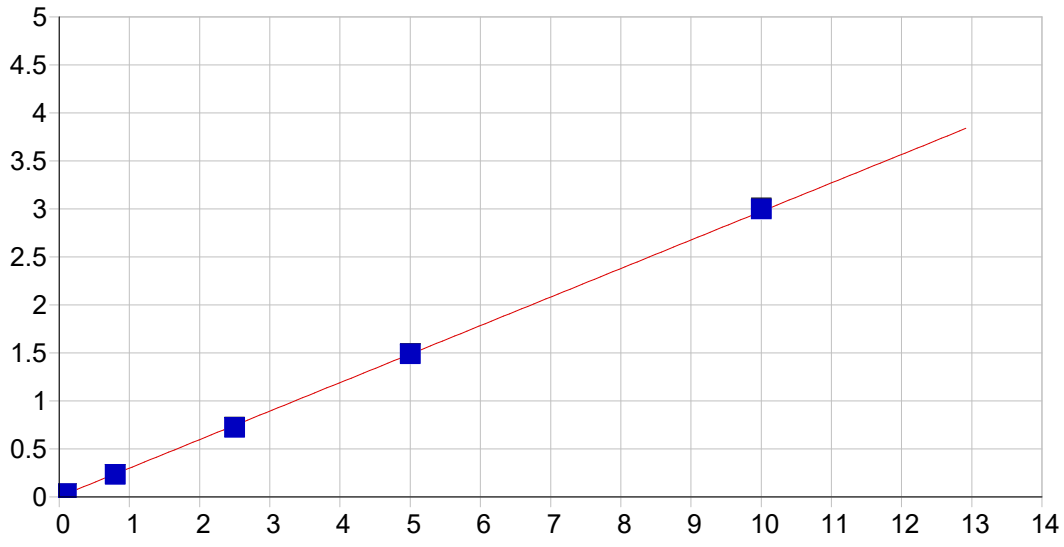
K 766.490 { 44}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000615	Re-Slope:	1.000000
A1 (Gain):	0.006348	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999555	Status:	OK.
Std Error of Est:	0.000100		
Predicted MDL:	0.029012		
Predicted MQL:	0.096706		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00011	.000	.000	-.00061	.000	1
S2	4.0000	3.9773	-.023	-.568	.02463	.000	1
S3	12.500	12.308	-.192	-1.54	.07752	.000	1
S4	25.000	23.939	-1.06	-4.24	.15135	.001	1
S5	50.000	51.312	1.31	2.62	.32511	.001	1
S1	2.0000	1.9630	-.037	-1.85	.01185	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



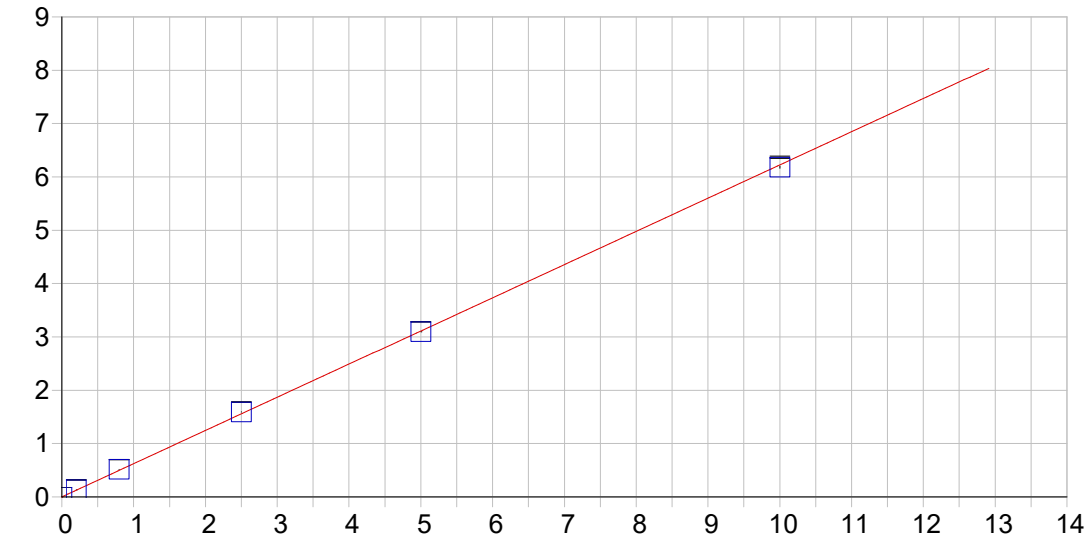
B 249.678 {135}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002418	Re-Slope:	1.000000
A1 (Gain):	0.297055	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999893	Status:	OK.
Std Error of Est:	0.000227		
Predicted MDL:	0.000726		
Predicted MQL:	0.002421		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00242	.000	1
S1	.10000	.10444	.004	4.44	.03329	.000	1
S3	2.5000	2.4229	-.077	-3.08	.71996	.004	1
S4	5.0000	5.0063	.006	.126	1.4852	.005	1
S5	10.000	10.088	.088	.876	2.9902	.011	1
S2	.80000	.77880	-.021	-2.65	.23306	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



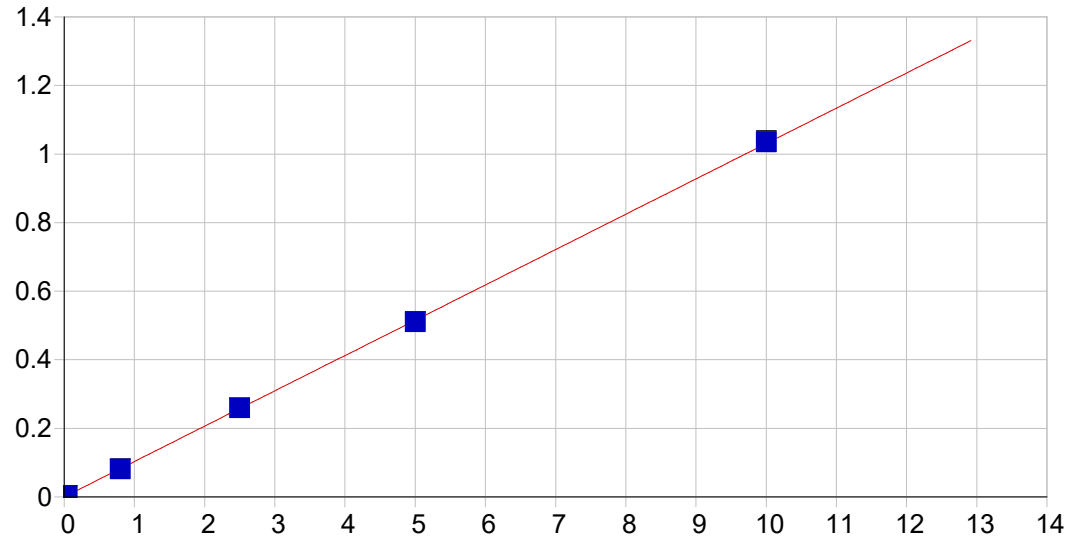
Mo 202.030 {467}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000156	Re-Slope:	1.000000
A1 (Gain):	0.622353	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999916	Status:	OK.
Std Error of Est:	0.000601		
Predicted MDL:	0.000265		
Predicted MQL:	0.000882		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00015	.000	1
S1	.20000	.20899	.009	4.49	.13022	.000	1
S3	2.5000	2.5588	.059	2.35	1.5926	.006	1
S4	5.0000	4.9757	-.024	-.487	3.0968	.001	1
S5	10.000	9.9321	-.068	-.679	6.1814	.022	1
S2	.80000	.82446	.024	3.06	.51326	.001	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



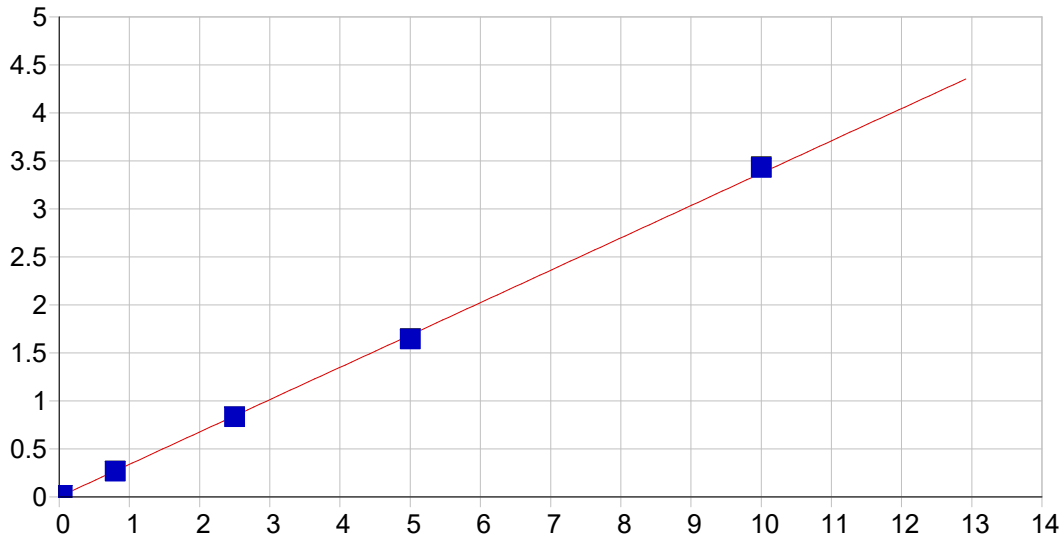
Sn 189.989 {478}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000189	Re-Slope:	1.000000
A1 (Gain):	0.103031	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.000826		
Predicted MQL:	0.002755		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00019	.000	1
S1	.04000	.03862	-.001	-3.45	.00416	.000	1
S3	2.5000	2.5170	.017	.678	.25925	.000	1
S4	5.0000	4.9526	-.047	-.949	.50993	.001	1
S5	10.000	10.044	.044	.445	1.0340	.004	1
S2	.80000	.78738	-.013	-1.58	.08123	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



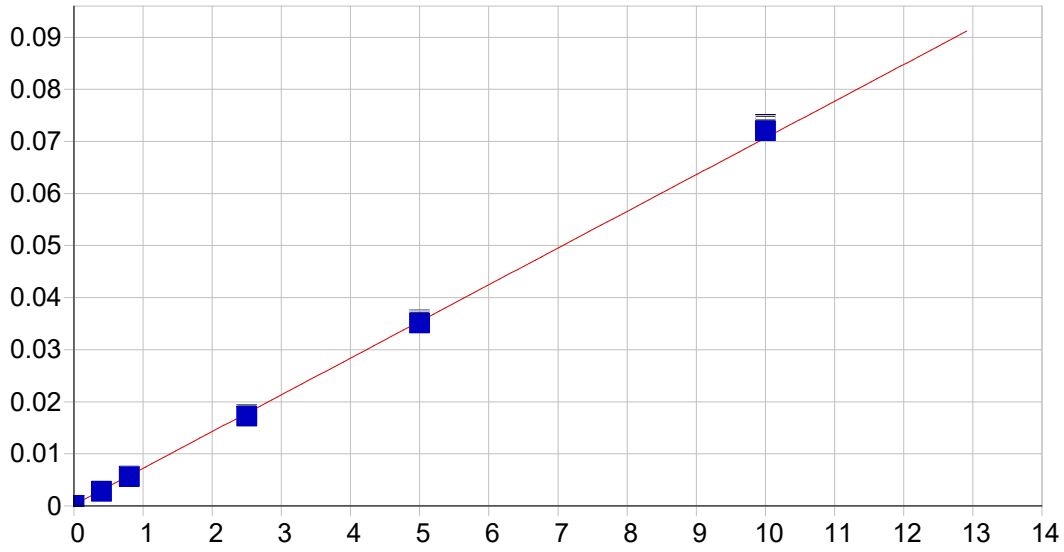
Ti 336.121 {100}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001962	Re-Slope:	1.000000
A1 (Gain):	0.336963	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999803	Status:	OK.
Std Error of Est:	0.000221		
Predicted MDL:	0.000712		
Predicted MQL:	0.002375		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00196	.000	1
S1	.04000	.04011	.000	.274	.01547	.000	1
S3	2.5000	2.4641	-.036	-1.43	.83198	.001	1
S4	5.0000	4.8707	-.129	-2.59	1.6426	.005	1
S5	10.000	10.178	.178	1.78	3.4302	.007	1
S2	.80000	.78753	-.012	-1.56	.26723	.001	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



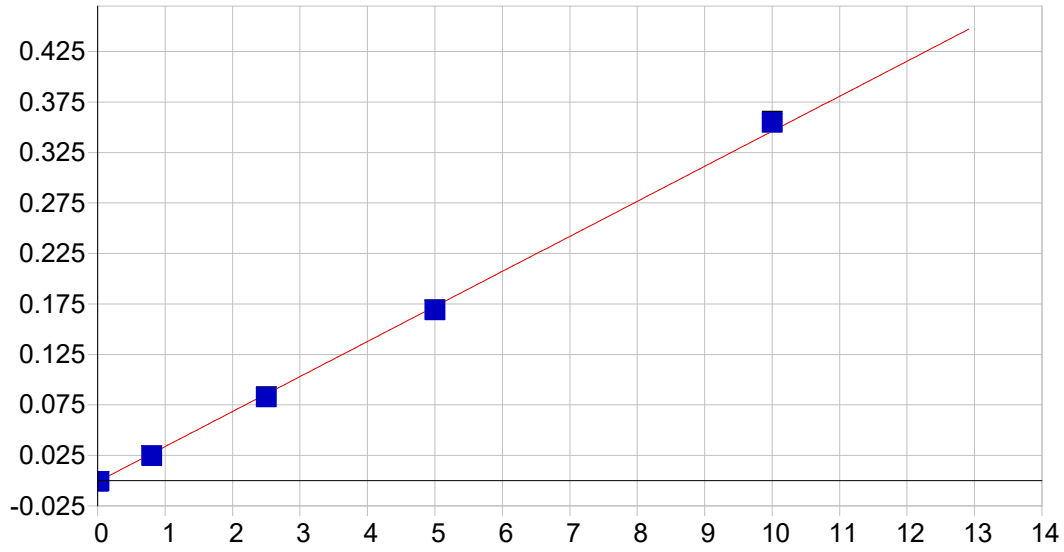
Si 288.158 {117}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000189	Re-Slope:	1.000000
A1 (Gain):	0.007047	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999708	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.005938		
Predicted MQL:	0.019795		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00006	.000	.000	.00019	.000	1
S1	.40000	.36549	-.035	-8.63	.00277	.000	1
S3	2.5000	2.4156	-.084	-3.37	.01748	.000	1
S4	5.0000	4.9570	-.043	-.860	.03565	.000	1
S5	10.000	10.194	.194	1.94	.07309	.000	1
S2	.80000	.76787	-.032	-4.02	.00569	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



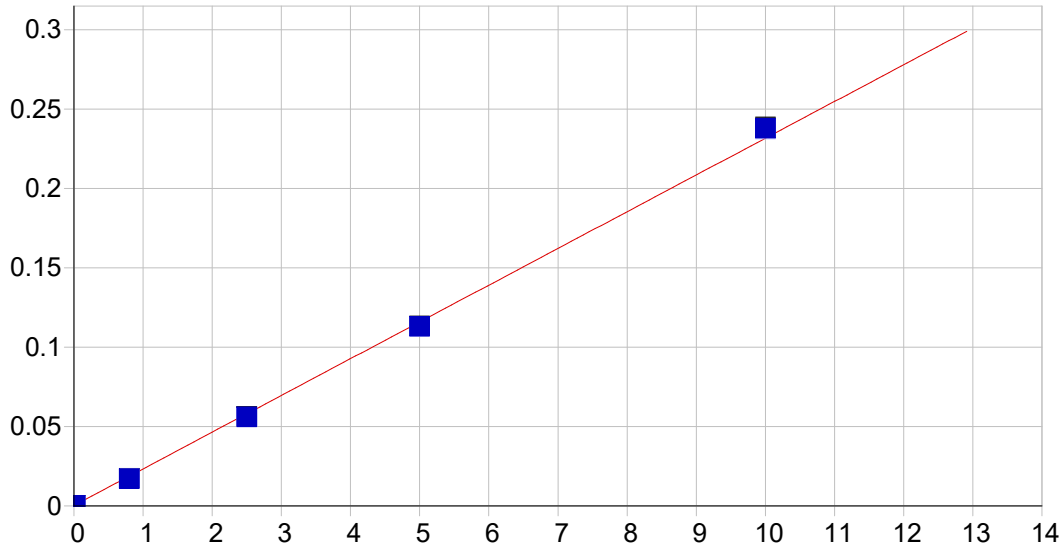
P 177.495 {490}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000989	Re-Slope:	1.000000
A1 (Gain):	0.034700	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999547	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.002616		
Predicted MQL:	0.008720		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00099	.000	1
S1	.02000	.01557	-.004	-22.1	-.00045	.000	1
S3	2.5000	2.4166	-.083	-3.34	.08285	.000	1
S4	5.0000	4.8964	-.104	-2.07	.16889	.000	1
S5	10.000	10.251	.251	2.51	.35466	.001	1
S2	.80000	.74066	-.059	-7.42	.02471	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



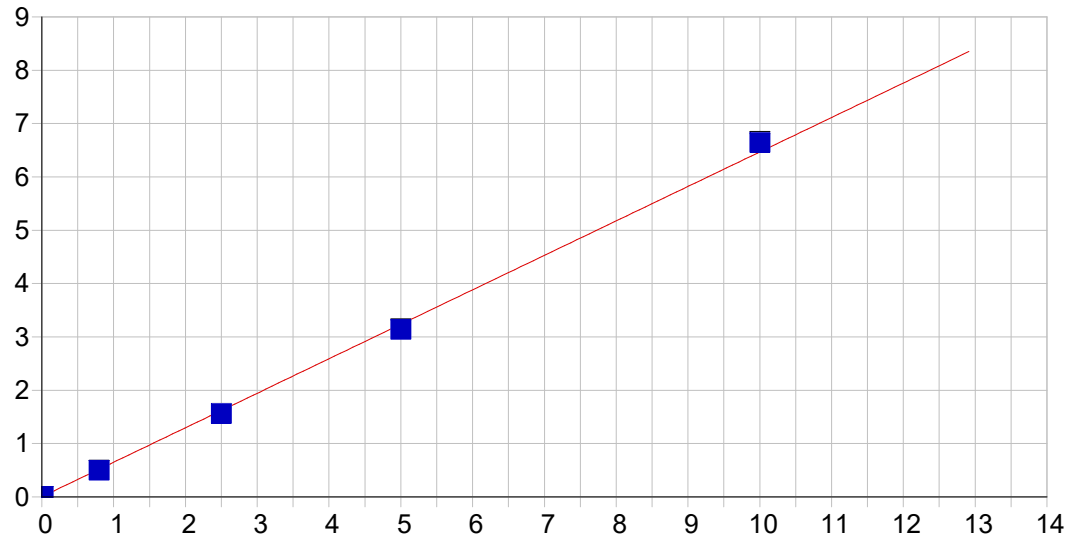
S 182.034 {485}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000174	Re-Slope:	1.000000
A1 (Gain):	0.023152	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999489	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.003413		
Predicted MQL:	0.011376		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00017	.000	1
S1	.02000	.01974	-.000	-1.30	.00061	.000	1
S3	2.5000	2.4158	-.084	-3.37	.05596	.000	1
S4	5.0000	4.8823	-.118	-2.35	.11291	.000	1
S5	10.000	10.270	.270	2.70	.23735	.001	1
S2	.80000	.73216	-.068	-8.48	.01708	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



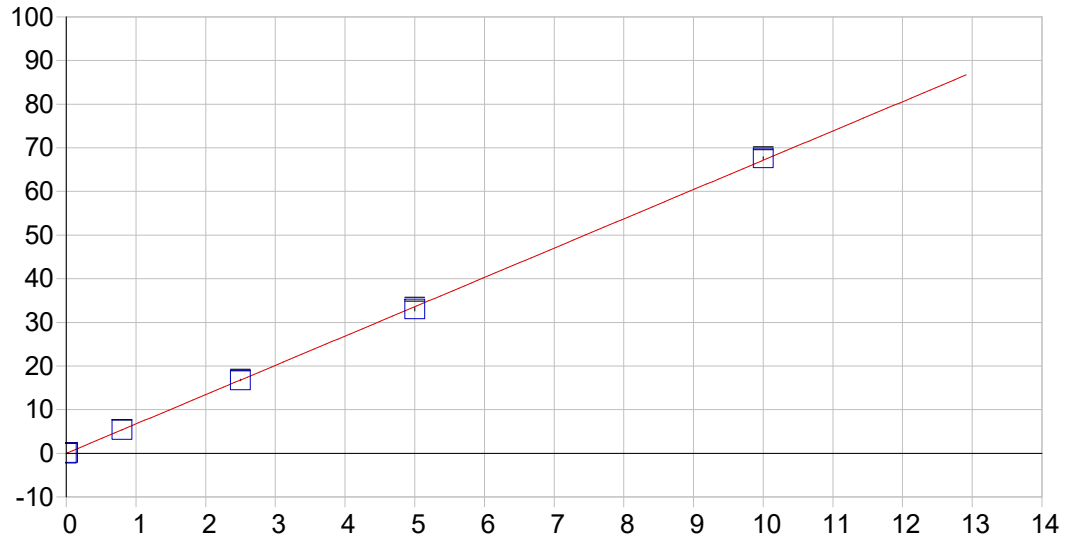
Li 670.784 { 50}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004319	Re-Slope:	1.000000
A1 (Gain):	0.646364	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999554	Status:	OK.
Std Error of Est:	0.000453		
Predicted MDL:	0.001163		
Predicted MQL:	0.003876		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00432	.000	1
S5	10.000	10.271	.271	2.71	6.6462	.021	1
S4	5.0000	4.8515	-.148	-2.97	3.1418	.007	1
S3	2.5000	2.4108	-.089	-3.57	1.5634	.005	1
S1	.02000	.02079	.001	3.96	.01796	.000	1
S2	.80000	.76617	-.034	-4.23	.49980	.000	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



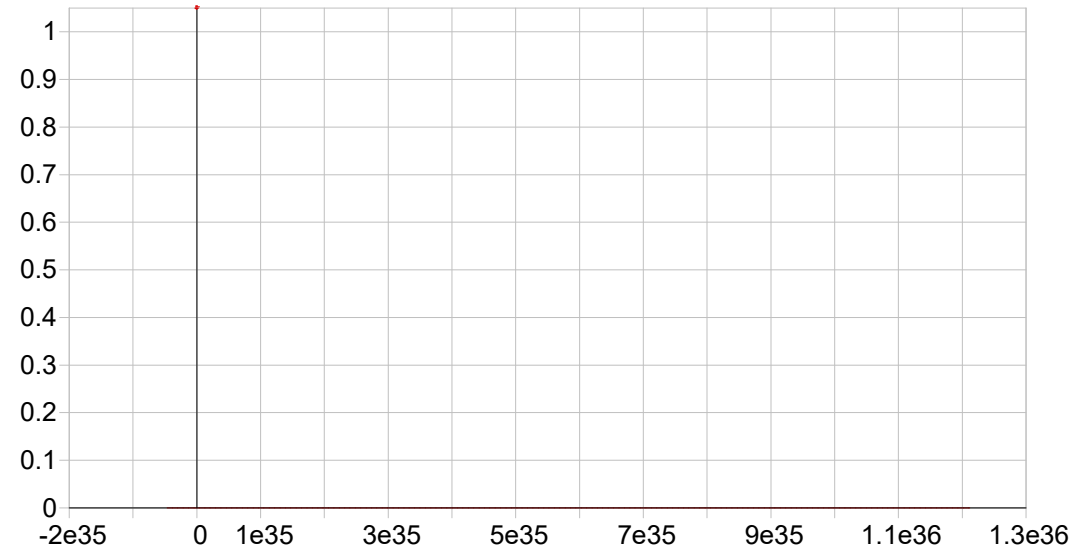
Sr 407.771 { 83}

Date of Fit:	3/13/2025 17:29:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000259	Re-Slope:	1.000000
A1 (Gain):	6.714714	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999949	Status:	OK.
Std Error of Est:	0.001584		
Predicted MDL:	0.000071		
Predicted MQL:	0.000236		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00026	.000	1
S1	.02000	.01958	-.000	-2.10	.13173	.000	1
S3	2.5000	2.5002	.000	.009	16.789	.198	1
S4	5.0000	4.9206	-.079	-1.59	33.040	.432	1
S5	10.000	10.074	.074	.737	67.643	.313	1
S2	.80000	.80589	.006	.736	5.4116	.006	1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

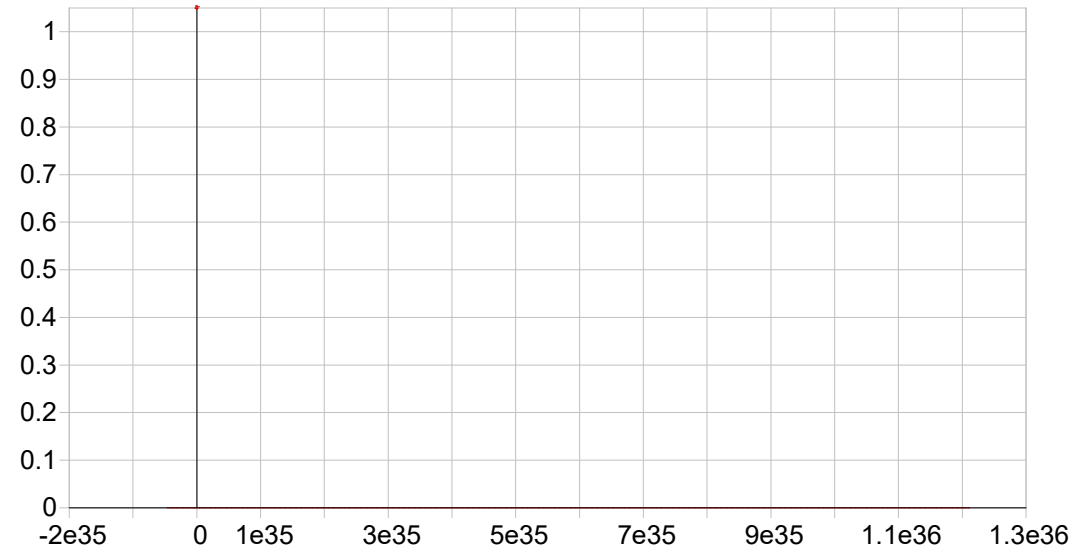


Y 224.306 {450}*

Date of Fit:	3/13/2025 17:29:47	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}*

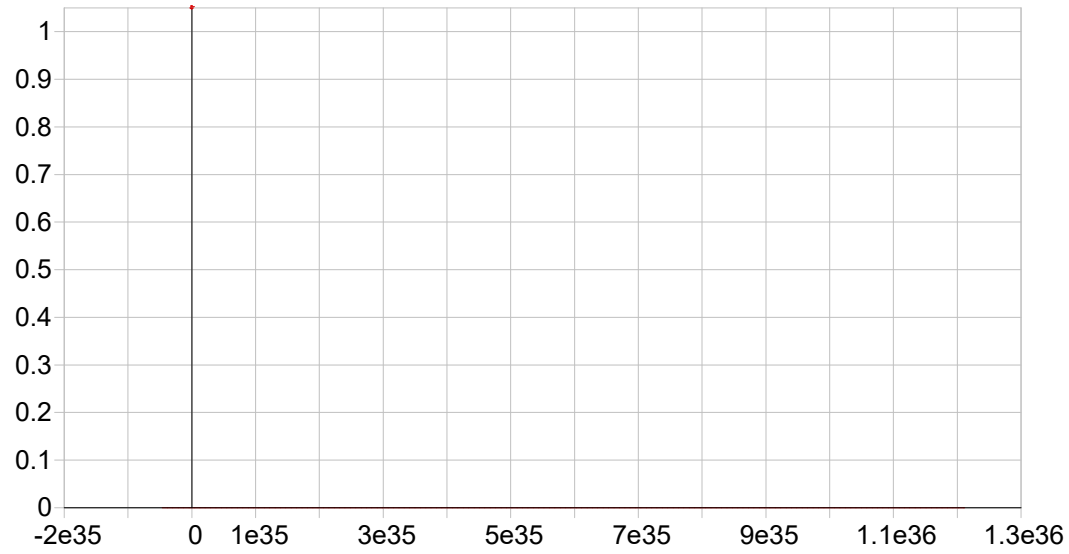
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

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



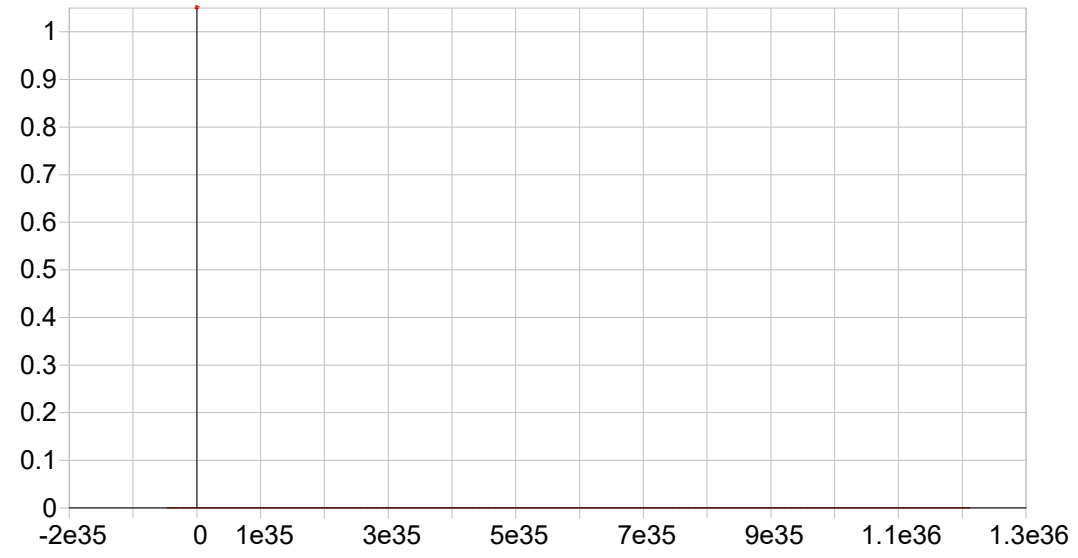
Y 371.030 { 91}*

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

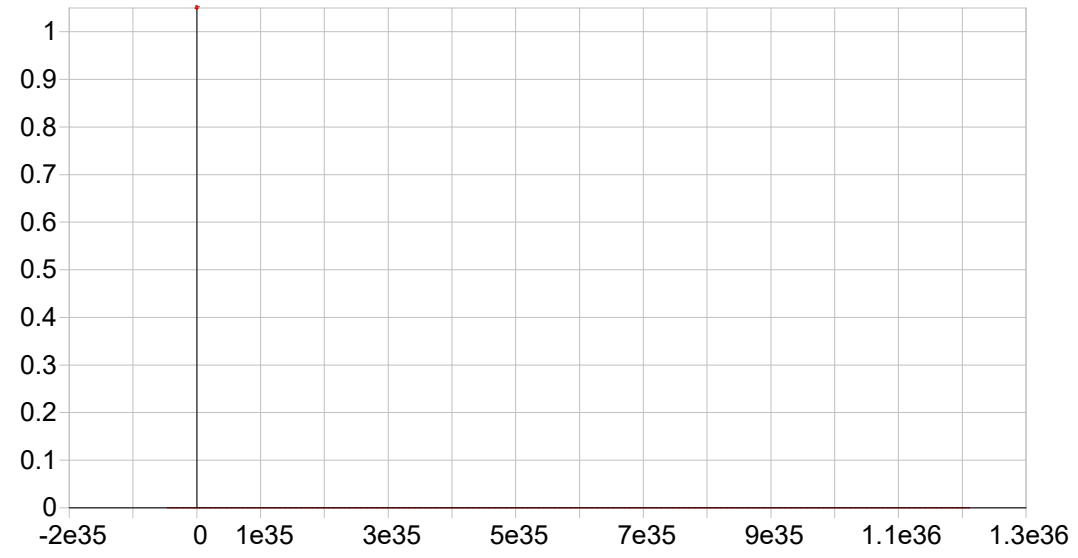
Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035



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	

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

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

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S0 Acquired: 3/13/2025 11:42:00 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	-.00006	-.00013	-.00027	.00020	.00030	.00079	.03214	.00011
Stddev	.00006	.00003	.00020	.00008	.00011	.00028	.00176	.00008
%RSD	101.36	23.813	72.496	42.228	36.462	35.991	5.4909	69.853
#1	-.00013	-.00010	-.00005	.00027	.00024	.00047	.03027	.00013
#2	-.00002	-.00016	-.00041	.00011	.00023	.00100	.03237	.00003
#3	-.00003	-.00015	-.00036	.00022	.00042	.00090	.03378	.00018

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	-.00011	.00083	.00004	-.00002	-.00062	-.00001	.00026	-.00010
Stddev	.00004	.00029	.00007	.00006	.00003	.00000	.00018	.00009
%RSD	32.306	35.453	171.17	290.13	4.1825	26.023	70.466	88.803
#1	-.00013	.00052	.00002	-.00003	-.00065	-.00001	.00028	-.00016
#2	-.00012	.00086	.00011	.00005	-.00060	-.00001	.00042	-.00014
#3	-.00007	.00111	-.00002	-.00008	-.00060	-.00001	.00006	.00000

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00018	-.00137	.00131	-.00003	.00382	-.00061	.00242	.00015
Stddev	.00023	.00007	.00009	.00016	.00067	.00013	.00032	.00007
%RSD	129.01	5.1895	7.0682	474.65	17.651	21.497	13.190	46.916
#1	.00009	-.00144	.00137	-.00002	.00316	-.00052	.00207	.00016
#2	-.00033	-.00129	.00135	.00012	.00379	-.00077	.00270	.00007
#3	-.00029	-.00137	.00120	-.00020	.00451	-.00055	.00248	.00021

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	.00019	.00196	.00019	-.00099	.00017	.00432	.00026
Stddev	.00002	.00015	.00002	.00005	.00004	.00041	.00038
%RSD	12.144	7.4615	12.275	5.4164	22.364	9.3894	146.10
#1	.00016	.00199	.00016	-.00103	.00014	.00426	-.00017
#2	.00020	.00180	.00021	-.00100	.00017	.00475	.00040
#3	.00020	.00209	.00020	-.00093	.00022	.00394	.00056

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S0 Acquired: 3/13/2025 11:42:00 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	3549.9	79658.	15653.	2291.3	5169.2
Stddev	5.9	143.	49.	5.6	11.7
%RSD	.16723	.17965	.31287	.24344	.22550
#1	3549.2	79587.	15611.	2288.2	5164.1
#2	3556.1	79565.	15642.	2297.8	5182.6
#3	3544.3	79823.	15707.	2288.0	5161.1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S1 Acquired: 3/13/2025 11:46:26 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	**.00090**	**.00242**	**.00197**	**.00130**	**.00671**	**.01022**	**.21484**	**.02109**
Stddev	.00005	.00007	.00024	.00014	.00010	.00031	.00117	.00003
%RSD	5.0644	3.0068	11.949	10.513	1.5281	3.0314	.54484	.15691
#1	.00086	.00251	.00173	.00145	.00668	.01047	.21568	.02111
#2	.00095	.00238	.00197	.00119	.00663	.01031	.21351	.02111
#3	.00089	.00238	.00220	.00127	.00683	.00987	.21535	.02105

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	**.01333**	**.09841**	**.00141**	**.02464**	**.01357**	**.00044**	**.00828**	**.02301**
Stddev	.00020	.00062	.00006	.00010	.00019	.00000	.00009	.00007
%RSD	1.4789	.63150	4.3211	.42048	1.3636	.70927	1.1297	.30727
#1	.01311	.09880	.00147	.02459	.01358	.00044	.00830	.02296
#2	.01349	.09770	.00141	.02476	.01376	.00044	.00818	.02298
#3	.01340	.09874	.00135	.02457	.01339	.00044	.00836	.02309

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	**.02240**	**.00119**	**.02882**	**.00448**	**.09997**	**.01185**	**.03329**	**.13022**
Stddev	.00013	.00004	.00008	.00013	.00083	.00014	.00024	.00014
%RSD	.59658	3.6717	.28205	2.8389	.83026	1.1576	.70750	.10941
#1	.02224	.00116	.02880	.00443	.09904	.01169	.03341	.13027
#2	.02248	.00118	.02874	.00438	.10065	.01191	.03302	.13033
#3	.02247	.00124	.02890	.00462	.10022	.01194	.03343	.13006

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	**.00416**	**.01547**	**.00277**	**-.00045**	**.00061**	**.01796**	**.13173**
Stddev	.00002	.00021	.00003	.00008	.00005	.00046	.00028
%RSD	.58001	1.3631	1.0032	17.986	7.3985	2.5644	.21073
#1	.00418	.01525	.00278	-.00054	.00064	.01825	.13142
#2	.00414	.01548	.00279	-.00043	.00056	.01821	.13182
#3	.00418	.01567	.00274	-.00038	.00064	.01743	.13196

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S1 Acquired: 3/13/2025 11:46:26 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	3551.3	78331.	15495.	2273.9	5106.8
Stddev	5.1	92.	72.	13.3	3.2
%RSD	.14413	.11694	.46164	.58328	.06207
#1	3545.4	78264.	15448.	2289.2	5103.2
#2	3554.0	78436.	15578.	2267.2	5109.4
#3	3554.6	78294.	15460.	2265.3	5107.7

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S2 Acquired: 3/13/2025 11:50:48 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	**.03660**	**.05034**	**.15001**	**.04077**	**.09764**	**.14756**	**3.0632**	**.13576**
Stddev	.00006	.00027	.00046	.00026	.00042	.00062	.0033	.00009
%RSD	.16657	.53671	.30829	.64484	.42508	.42241	.10877	.06536
#1	.03662	.05027	.14959	.04061	.09730	.14685	3.0614	.13577
#2	.03665	.05063	.14994	.04063	.09752	.14800	3.0670	.13567
#3	.03653	.05011	.15051	.04107	.09810	.14784	3.0611	.13584

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	**.89308**	**.19230**	**.02186**	**.32847**	**.12888**	**.00367**	**.16129**	**.04163**
Stddev	.00175	.00079	.00002	.00065	.00051	.00002	.00035	.00016
%RSD	.19624	.40901	.10157	.19726	.39805	.56129	.21868	.37248
#1	.89175	.19321	.02183	.32794	.12849	.00365	.16088	.04180
#2	.89242	.19187	.02186	.32828	.12868	.00367	.16144	.04150
#3	.89506	.19181	.02188	.32920	.12946	.00369	.16154	.04159

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	**.22559**	**.04776**	**.05780**	**.04438**	**.95068**	**.02463**	**.23306**	**.51326**
Stddev	.00023	.00022	.00020	.00016	.00537	.00014	.00023	.00085
%RSD	.10208	.46717	.34469	.36241	.56502	.57526	.09929	.16658
#1	.22539	.04769	.05776	.04430	.95503	.02479	.23321	.51228
#2	.22554	.04801	.05802	.04428	.94467	.02451	.23280	.51379
#3	.22584	.04758	.05763	.04457	.95234	.02460	.23319	.51373

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	**.08123**	**.26723**	**.00569**	**.02471**	**.01708**	**.49980**	**5.4116**
Stddev	.00042	.00064	.00002	.00006	.00016	.00017	.0059
%RSD	.51211	.23969	.27903	.22942	.94982	.03331	.10916
#1	.08075	.26713	.00570	.02467	.01690	.49998	5.4076
#2	.08142	.26665	.00568	.02468	.01711	.49966	5.4184
#3	.08152	.26792	.00568	.02477	.01722	.49977	5.4087

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S2 Acquired: 3/13/2025 11:50:48 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	3537.3	78521.	16074.	2257.7	4992.7
Stddev	4.6	161.	44.	15.3	7.4
%RSD	.12937	.20539	.27248	.67696	.14880
#1	3539.7	78364.	16034.	2242.3	4995.4
#2	3540.2	78687.	16121.	2272.9	4998.5
#3	3532.0	78511.	16066.	2258.0	4984.3

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S3 Acquired: 3/13/2025 11:54:53 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	**.11628**	**.15821**	**.47445**	**.12885**	**.30681**	**.46237**	**9.4976**	**.42370**
Stddev	.00026	.00050	.00139	.00063	.00099	.00026	.0868	.00150
%RSD	.22754	.31732	.29319	.49265	.32155	.05635	.91409	.35436
#1	.11604	.15821	.47304	.12820	.30570	.46230	9.5136	.42423
#2	.11624	.15872	.47448	.12888	.30714	.46266	9.5753	.42486
#3	.11656	.15772	.47582	.12947	.30758	.46216	9.4039	.42200

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	**2.8385**	**.60057**	**.06813**	**1.0395**	**.40029**	**.01119**	**.50364**	**.13085**
Stddev	.0055	.00172	.00011	.0016	.00097	.00005	.00154	.00113
%RSD	.19460	.28567	.16642	.15312	.24107	.46152	.30522	.86387
#1	2.8357	.59944	.06812	1.0381	.39942	.01123	.50521	.13133
#2	2.8349	.60255	.06825	1.0391	.40012	.01122	.50356	.13166
#3	2.8448	.59974	.06802	1.0412	.40133	.01113	.50214	.12955

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	**.71211**	**.14820**	**.18246**	**.14072**	**2.9194**	**.07752**	**.71996**	**1.5926**
Stddev	.00187	.00030	.00232	.00034	.0121	.00036	.00403	.0056
%RSD	.26300	.20412	1.2697	.23890	.41410	.45960	.55955	.34945
#1	.71100	.14825	.18435	.14077	2.9218	.07768	.71704	1.5885
#2	.71106	.14847	.17987	.14102	2.9301	.07711	.72455	1.5904
#3	.71428	.14787	.18315	.14036	2.9063	.07776	.71828	1.5989

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	**.25925**	**.83198**	**.01748**	**.08285**	**.05596**	**1.5634**	**16.789**
Stddev	.00035	.00142	.00007	.00007	.00010	.0053	.198
%RSD	.13416	.17039	.38052	.08312	.17345	.33979	1.1787
#1	.25941	.83357	.01754	.08279	.05607	1.5689	16.940
#2	.25885	.83087	.01741	.08284	.05590	1.5583	16.861
#3	.25949	.83149	.01748	.08293	.05590	1.5630	16.565

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S3 Acquired: 3/13/2025 11:54:53 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	3460.2	78160.	15867.	2230.2	4760.0
Stddev	9.1	158.	60.	6.1	9.5
%RSD	.26353	.20258	.38043	.27150	.20026
#1	3461.2	77979.	15853.	2223.2	4757.7
#2	3468.8	78227.	15815.	2233.8	4770.5
#3	3450.6	78274.	15933.	2233.6	4751.9

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S4 Acquired: 3/13/2025 11:59:06 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	.23679	.31532	.95284	.25320	.59820	.92525	18.690	.87033
Stddev	.00028	.00134	.00093	.00036	.00052	.00156	.185	.00238
%RSD	.11947	.42363	.09742	.14175	.08627	.16891	.98718	.27355
#1	.23650	.31679	.95386	.25341	.59788	.92576	18.898	.86884
#2	.23707	.31500	.95259	.25278	.59793	.92649	18.548	.87308
#3	.23681	.31418	.95206	.25340	.59880	.92349	18.623	.86908

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.6831	1.1870	.13344	2.0660	.77894	.02174	.99770	.26321
Stddev	.0104	.0024	.00037	.0017	.00069	.00008	.00467	.00017
%RSD	.18368	.20381	.27925	.08313	.08921	.38597	.46784	.06328
#1	5.6949	1.1882	.13385	2.0670	.77851	.02184	1.0001	.26336
#2	5.6751	1.1886	.13311	2.0640	.77857	.02169	1.0007	.26324
#3	5.6792	1.1842	.13336	2.0669	.77974	.02170	.99232	.26303

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	1.4127	.29572	.36342	.28031	5.7287	.15135	1.4852	3.0968
Stddev	.0008	.00060	.00256	.00106	.0154	.00059	.0048	.0010
%RSD	.05871	.20174	.70470	.37920	.26932	.39121	.32587	.03121
#1	1.4135	.29568	.36570	.28098	5.7112	.15149	1.4851	3.0977
#2	1.4118	.29515	.36065	.28087	5.7348	.15070	1.4901	3.0958
#3	1.4127	.29634	.36391	.27909	5.7402	.15186	1.4804	3.0968

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	.50993	1.6426	.03565	.16889	.11291	3.1418	33.040
Stddev	.00111	.0050	.00005	.00039	.00014	.0071	.432
%RSD	.21761	.30485	.13823	.23272	.12022	.22563	1.3066
#1	.51113	1.6450	.03569	.16935	.11289	3.1484	32.891
#2	.50970	1.6459	.03567	.16867	.11278	3.1426	33.527
#3	.50895	1.6368	.03560	.16866	.11305	3.1343	32.703

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S4 Acquired: 3/13/2025 11:59:06 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	3438.1	76550.	15063.	2202.3	4619.0
Stddev	1.7	27.	65.	6.7	2.5
%RSD	.05080	.03487	.43165	.30285	.05365
#1	3440.0	76531.	15062.	2208.6	4616.5
#2	3437.5	76581.	14999.	2195.3	4621.5
#3	3436.7	76539.	15129.	2202.9	4619.1

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S5 Acquired: 3/13/2025 12:03:18 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	.47043	.62312	1.9097	.50576	1.2076	1.9053	39.358	1.7562
Stddev	.00206	.00472	.0073	.00190	.0040	.0029	.650	.0094
%RSD	.43741	.75742	.38461	.37588	.33408	.14975	1.6512	.53413
#1	.47020	.62846	1.9081	.50622	1.2058	1.9060	39.643	1.7571
#2	.46850	.61952	1.9033	.50367	1.2048	1.9077	39.816	1.7651
#3	.47260	.62139	1.9177	.50738	1.2122	1.9021	38.614	1.7464

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11.568	2.4584	.26394	4.2228	1.5450	.04528	2.0660	.54707
Stddev	.041	.0057	.00030	.0141	.0066	.00022	.0095	.00163
%RSD	.35736	.23159	.11281	.33421	.42743	.49391	.46053	.29842
#1	11.549	2.4584	.26373	4.2153	1.5422	.04528	2.0643	.54827
#2	11.540	2.4641	.26428	4.2140	1.5403	.04551	2.0763	.54774
#3	11.615	2.4527	.26382	4.2391	1.5525	.04506	2.0575	.54521

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.8701	.60225	.77562	.57775	11.539	.32511	2.9902	6.1814
Stddev	.0095	.00161	.00290	.00203	.023	.00080	.0114	.0223
%RSD	.32972	.26790	.37357	.35202	.19975	.24709	.38226	.36162
#1	2.8634	.60138	.77726	.57918	11.529	.32581	2.9882	6.1771
#2	2.8659	.60411	.77732	.57865	11.523	.32530	3.0025	6.1615
#3	2.8809	.60125	.77227	.57542	11.566	.32423	2.9799	6.2056

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.0340	3.4302	.07309	.35466	.23735	6.6462	67.643
Stddev	.0036	.0068	.00016	.00112	.00080	.0207	.313
%RSD	.34391	.19918	.22210	.31601	.33746	.31099	.46226
#1	1.0343	3.4304	.07307	.35426	.23772	6.6449	67.845
#2	1.0303	3.4369	.07294	.35379	.23643	6.6674	67.800
#3	1.0374	3.4232	.07326	.35593	.23789	6.6262	67.282

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: S5 Acquired: 3/13/2025 12:03:18 Type: Cal
Method: NON EPA-6010-200.7(v2804) 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	3336.7	74580.	14829.	2146.7	4361.5
Stddev	11.9	138.	38.	4.2	12.1
%RSD	.35607	.18569	.25456	.19433	.27785
#1	3345.7	74456.	14832.	2143.9	4372.4
#2	3341.2	74556.	14790.	2151.5	4363.7
#3	3323.2	74729.	14865.	2144.8	4348.4

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICV01 Acquired: 3/13/2025 12:07:29 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.023319**	**1.052094**	**1.001120**	**1.044511**	**1.015793**	**2.507610**	**.5329574**
Stddev	.004018	.006402	.000878	.005339	.003001	.004977	.0025129
%RSD	.3926613	.6085450	.0877064	.5111775	.2954273	.1984933	.4715047
#1	1.018768	1.045256	1.001411	1.042022	1.014656	2.504538	.5307364
#2	1.026377	1.053078	1.000134	1.040871	1.013526	2.513353	.5324509
#3	1.024811	1.057947	1.001816	1.050641	1.019196	2.504940	.5356851

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5364067**	**.5027774**	**9.869264**	**.5252467**	**.5102300**	**.5292622**	**9.861429**
Stddev	.0024429	.0009015	.038361	.0020061	.0017139	.0008468	.080696
%RSD	.4554235	.1793134	.3886887	.3819296	.3359034	.1599883	.8183029
#1	.5345120	.5027253	9.826077	.5229693	.5091791	.5290191	9.847845
#2	.5391639	.5019030	9.899385	.5260191	.5093030	.5285635	9.788386
#3	.5355442	.5037038	9.882331	.5267518	.5122077	.5302039	9.948055

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5415575**	**6.274207**	**.5454800**	**.2522255**	**10.18936**	**.5183829**	**1.015069**
Stddev	.0044512	.034938	.0007003	.0004928	.10033	.0015395	.004345
%RSD	.8219249	.5568493	.1283813	.1953664	.9846097	.2969825	.4280379
#1	.5376438	6.241979	.5450443	.2519366	10.17582	.5197048	1.013295
#2	.5406289	6.311337	.5451079	.2519454	10.09649	.5187512	1.011892
#3	.5463997	6.269305	.5462878	.2527945	10.29576	.5166926	1.020020

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.14291**	**2.696643**	**2.396587**	**2.436881**	**2.446002**	**2.492802**	**2.550578**
Stddev	.07966	.012970	.004715	.004191	.009222	.015458	.005394
%RSD	.7853317	.4809520	.1967243	.1719643	.3770349	.6200931	.2114913
#1	10.13796	2.686208	2.393245	2.432842	2.439754	2.504716	2.546482
#2	10.06585	2.711163	2.394537	2.436592	2.441659	2.475335	2.548562
#3	10.22493	2.692559	2.401980	2.441208	2.456595	2.498355	2.556690

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICV01 Acquired: 3/13/2025 12:07:29 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.475240**	**2.545217**	**2.544442**
Stddev	.013193	.014263	.021560
%RSD	.5329980	.5603741	.8473313
#1	2.465872	2.540983	2.559040
#2	2.469520	2.533549	2.554608
#3	2.490328	2.561117	2.519679

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3494.428**	**79269.35**	**16100.95**	**2257.771**	**4859.966**
Stddev	11.432	107.09	64.06	14.089	15.032
%RSD	.3271619	.1350941	.3978719	.6240250	.3092956
#1	3501.051	79259.40	16154.01	2265.356	4870.125
#2	3501.006	79381.07	16029.78	2266.442	4867.075
#3	3481.227	79167.59	16119.05	2241.514	4842.699

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: LLICV01 Acquired: 3/13/2025 12:13:04 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.0172596**	**.0421056**	**.0126067**	**.0192262**	**.0542969**	**.0985612**
Stddev	.0021532	.0014164	.0009774	.0023553	.0004698	.0028567
%RSD	12.47529	3.363848	7.753288	12.25065	.8651495	2.898435
#1	.0177924	.0405700	.0134722	.0189478	.0542033	.1008285
#2	.0190964	.0433608	.0115466	.0217083	.0538810	.0995024
#3	.0148901	.0423860	.0128013	.0170223	.0548064	.0953526

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0922136**	**.0061511**	**.0059476**	**1.971992**	**.0100806**	**.0297386**
Stddev	.0031802	.0000778	.0000172	.005510	.0000608	.0000835
%RSD	3.448772	1.265271	.2886948	.2794300	.6031870	.2808128
#1	.0958675	.0062329	.0059378	1.975128	.0101009	.0296835
#2	.0907041	.0061423	.0059674	1.965630	.0101287	.0296977
#3	.0900693	.0060780	.0059375	1.975219	.0100123	.0298347

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0227367**	**.1009157**	**.0196450**	**2.096364**	**.0396712**	**.0106344**
Stddev	.0000976	.0027397	.0002434	.011569	.0001238	.0002441
%RSD	.4290747	2.714793	1.238821	.5518669	.3121577	2.295091
#1	.0227247	.1008352	.0199259	2.083227	.0398133	.0104430
#2	.0228397	.0982172	.0195094	2.105031	.0395865	.0109092
#3	.0226457	.1036947	.0194996	2.100835	.0396138	.0105508

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.740375**	**.0392525**	**.0413438**	**1.847967**	**.1174394**	**.2101818**
Stddev	.011571	.0012542	.0005091	.008042	.0013122	.0005881
%RSD	.6648488	3.195228	1.231411	.4352054	1.117333	.2798081
#1	1.733409	.0403237	.0415255	1.853820	.1184029	.2095075
#2	1.753731	.0395609	.0417372	1.838796	.1179704	.2104497
#3	1.733983	.0378729	.0407688	1.851285	.1159449	.2105883

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: LLICV01 Acquired: 3/13/2025 12:13:04 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.0389652	.0396029	.3536584	F .0152969	.0197096	.0194271
Stddev	.0006797	.0006561	.0037506	.0002645	.0004861	.0001142
%RSD	1.744489	1.656714	1.060509	1.728855	2.466358	.5876699
#1	.0396652	.0399245	.3525044	.0150709	.0191625	.0195502
#2	.0383077	.0400361	.3506204	.0152320	.0200919	.0194066
#3	.0389228	.0388480	.3578503	.0155877	.0198743	.0193247

Elem	Sr4077
Units	ppm
Avg	.0197111
Stddev	.0011097
%RSD	5.630027
#1	.0209926
#2	.0190712
#3	.0190697

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3521.223	79681.09	15157.86	2274.726	5064.013
Stddev	11.137	204.30	97.52	7.703	11.334
%RSD	.3162823	.2564017	.6433576	.3386518	.2238159
#1	3531.130	79445.52	15066.39	2268.786	5074.449
#2	3523.369	79787.88	15146.70	2271.961	5065.635
#3	3509.168	79809.86	15260.47	2283.430	5051.956

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICB01 Acquired: 3/13/2025 12:17:21 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.002229**	**.0014001**	**-.000087**	**.0023069**	**.0009129**	**-.015462**	**.0027191**
Stddev	.001030	.0006760	.000277	.0015516	.0019763	.000567	.0006563
%RSD	46.22196	48.28733	317.5144	67.25828	216.4989	3.666943	24.13578
#1	-.003418	.0020249	.000116	.0025256	-.001284	-.015767	.0034501
#2	-.001678	.0014929	.000025	.0037374	.002547	-.015811	.0025266
#3	-.001592	.0006824	-.000402	.0006575	.001476	-.014808	.0021807

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000112**	**-.000026**	**-.004653**	**-.000048**	**.0000323**	**-.000172**	**.0022416**
Stddev	.0000302	.000093	.009998	.000649	.0001114	.000062	.0027950
%RSD	268.9461	356.4676	214.8816	1356.466	344.8556	35.84461	124.6865
#1	-.000011	.000080	.005628	-.000166	-.000088	-.000198	.0054509
#2	.000046	-.000062	-.014341	.000652	.000054	-.000102	.0009328
#3	-.000001	-.000097	-.005246	-.000630	.000131	-.000216	.0003412

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000579**	**.0022769**	**.0000886**	**.0002191**	**.0190586**	**.0002395**	**-.000984**
Stddev	.000060	.0046970	.0003792	.0002227	.0087512	.0002402	.000270
%RSD	10.39624	206.2914	428.0715	101.6075	45.91751	100.3184	27.43638
#1	-.000617	-.002721	.0001349	.0000503	.0143383	.0004261	-.000679
#2	-.000611	.006600	.0004425	.0004715	.0136810	-.000032	-.001081
#3	-.000510	.002951	-.000312	.0001356	.0291565	.000324	-.001192

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0205279**	**.0083646**	**-.000047**	**-.001327**	**.0011089**	**-.001325**	**-.004482**
Stddev	.0141659	.0003555	.000222	.000322	.0002885	.003069	.002174
%RSD	69.00802	4.249800	472.7039	24.28550	26.01719	231.5738	48.49703
#1	.0179679	.0079609	.000195	-.001688	.0013492	.002217	-.004132
#2	.0078165	.0085019	-.000242	-.001225	.0011885	-.002994	-.006810
#3	.0357992	.0086309	-.000093	-.001067	.0007889	-.003199	-.002505

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICB01 Acquired: 3/13/2025 12:17:21 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	-.001205	.0017877	-.000005
Stddev	.002275	.0011110	.000058
%RSD	188.8608	62.14833	1246.240
#1	-.003791	.0010909	.000018
#2	.000488	.0012033	-.000071
#3	-.000311	.0030690	.000039

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3492.534	77771.29	14905.66	2237.123	5055.713
Stddev	2.715	138.57	77.76	4.354	9.040
%RSD	.0777299	.1781746	.5216599	.1946324	.1788125
#1	3495.463	77827.52	14841.46	2232.440	5065.697
#2	3492.035	77872.90	14992.12	2241.049	5048.082
#3	3490.103	77613.44	14883.40	2237.881	5053.359

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CRI01 Acquired: 3/13/2025 12:21:41 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.0211847**	**.0416487**	**.0117389**	**.0213279**	**.0528621**	**.0992258**
Stddev	.0017833	.0017286	.0015884	.0017131	.0009178	.0019327
%RSD	8.417925	4.150357	13.53137	8.032019	1.736232	1.947780
#1	.0203237	.0425463	.0135058	.0212138	.0518538	.0986406
#2	.0232351	.0427438	.0112814	.0196747	.0530837	.0976533
#3	.0199952	.0396560	.0104293	.0230951	.0536488	.1013834

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0940446**	**.0060719**	**.0058974**	**2.019066**	**.0104250**	**.0301677**
Stddev	.0004139	.0000269	.0000369	.004870	.0001175	.0001030
%RSD	.4401001	.4429253	.6263642	.2412135	1.126802	.3415486
#1	.0944633	.0061029	.0059285	2.021245	.0105554	.0302790
#2	.0940346	.0060582	.0058566	2.022466	.0103275	.0301482
#3	.0936357	.0060546	.0059071	2.013487	.0103920	.0300757

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0231299**	**.1102897**	**.0205900**	**2.140852**	**.0398264**	**.0106236**
Stddev	.0002067	.0031461	.0006144	.021546	.0002832	.0001731
%RSD	.8937693	2.852604	2.983971	1.006426	.7111547	1.628943
#1	.0231357	.1066671	.0211317	2.118860	.0401526	.0105158
#2	.0233337	.1118652	.0207159	2.141771	.0396845	.0105319
#3	.0229203	.1123368	.0199224	2.161923	.0396422	.0108233

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.827754**	**.0409944**	**.0424755**	**1.922954**	**.1099884**	**.2127317**
Stddev	.027746	.0013023	.0002774	.026153	.0010791	.0006908
%RSD	1.518011	3.176707	.6530889	1.360059	.9811008	.3247491
#1	1.805166	.0400745	.0426606	1.897618	.1110888	.2123119
#2	1.858724	.0404242	.0426093	1.921388	.1089320	.2123542
#3	1.819373	.0424845	.0421565	1.949855	.1099443	.2135291

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CRI01 Acquired: 3/13/2025 12:21:41 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.0400111	.0395867	.3662256	F .0158916	.0183800	.0204578
Stddev	.0010981	.0004552	.0051199	.0021132	.0017268	.0010730
%RSD	2.744454	1.149975	1.398022	13.29768	9.395021	5.245105
#1	.0399143	.0398825	.3628640	.0137687	.0174035	.0199262
#2	.0389646	.0390625	.3636948	.0179950	.0173627	.0197543
#3	.0411544	.0398151	.3721181	.0159112	.0203738	.0216928

Elem	Sr4077
Units	ppm
Avg	.0194576
Stddev	.0000188
%RSD	.0966164
#1	.0194764
#2	.0194576
#3	.0194388

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3493.045	77787.39	15267.76	2233.838	5011.215
Stddev	2.345	109.63	57.52	9.018	8.023
%RSD	.0671294	.1409300	.3767698	.4036976	.1601054
#1	3490.338	77710.28	15232.73	2223.573	5003.165
#2	3494.333	77739.01	15334.15	2237.459	5019.211
#3	3494.463	77912.89	15236.40	2240.483	5011.269

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSA01 Acquired: 3/13/2025 12:25:58 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043191**	**.0092274**	**.0047161**	**-.015246**	**-.002752**	**255.9178**
Stddev	.0032143	.0026089	.0002738	.002611	.000723	1.0710
%RSD	74.42085	28.27313	5.806221	17.12529	26.26053	.4184876
#1	.0028472	.0110850	.0045925	-.018105	-.002815	256.1936
#2	.0021043	.0103524	.0045258	-.012987	-.002000	254.7359
#3	.0080058	.0062448	.0050299	-.014645	-.003441	256.8240

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047186**	**.0012606**	**-.003111**	**242.3184**	**.0599869**	**.0015877**
Stddev	.0000880	.0000419	.000049	1.1014	.0003133	.0005026
%RSD	1.865651	3.322887	1.589569	.4545303	.5222672	31.65507
#1	.0046698	.0013061	-.003168	241.4612	.0603008	.0017264
#2	.0048202	.0012236	-.003086	241.9334	.0596742	.0020064
#3	.0046657	.0012521	-.003079	243.5606	.0599858	.0010304

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103832**	**103.0858**	**.0037665**	**262.3130**	**.0019277**	**-.000883**
Stddev	.0007069	.1753	.0002235	1.3822	.0004305	.000287
%RSD	6.807892	.1700588	5.932679	.5269276	22.33302	32.49798
#1	.0095984	103.2143	.0037073	261.5846	.0024230	-.001029
#2	.0105814	103.1571	.0035786	261.4474	.0016430	-.000553
#3	.0109698	102.8861	.0040136	263.9071	.0017172	-.001068

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0812520**	**.0034870**	**.0046492**	**.1116055**	F **-.128877**	**.0000384**
Stddev	.0127403	.0005941	.0006247	.0357706	.002924	.0003430
%RSD	15.68003	17.03731	13.43665	32.05097	2.269017	892.0976
#1	.0667752	.0030843	.0053229	.0850475	-.127142	.0004277
#2	.0907561	.0032075	.0040892	.1522805	-.127236	-.000219
#3	.0862246	.0041693	.0045353	.0974885	-.132253	-.000093

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSA01 Acquired: 3/13/2025 12:25:58 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003906	-.001020	.0216826	-.001555	-.009528	.0055634
Stddev	.000774	.000215	.0043397	.003299	.006168	.0002879
%RSD	19.81586	21.04609	20.01459	212.1479	64.73530	5.175402
#1	-.003015	-.000957	.0192414	-.004194	-.002756	.0058717
#2	-.004409	-.001259	.0191133	-.002615	-.014823	.0055172
#3	-.004295	-.000844	.0266931	.002144	-.011004	.0053014

Elem	Sr4077
Units	ppm
Avg	F .0985894
Stddev	.0004192
%RSD	.4251899
#1	.0982562
#2	.0984519
#3	.0990601

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3146.437	68248.75	14841.43	2008.065	4040.348
Stddev	2.410	91.17	75.62	3.827	6.699
%RSD	.0766011	.1335777	.5095368	.1905819	.1657906
#1	3147.957	68143.86	14892.93	2009.079	4047.972
#2	3147.697	68293.48	14876.75	2003.833	4035.405
#3	3143.658	68308.90	14754.61	2011.282	4037.668

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSAB01 Acquired: 3/13/2025 12:30:22 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.1131477**	**.1069166**	**.0541647**	**.0429599**	**.6104071**	**240.4082**
Stddev	.0017683	.0013837	.0003964	.0030794	.0021878	1.9793
%RSD	1.562820	1.294163	.7318334	7.168038	.3584176	.8232915
#1	.1145663	.1054132	.0543054	.0394247	.6078840	242.6781
#2	.1137103	.1072002	.0537172	.0443967	.6115598	239.0428
#3	.1111666	.1081366	.0544716	.0450582	.6117776	239.5036

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4849569**	**.4908953**	**1.002948**	**231.1152**	**.5640676**	**.5084867**
Stddev	.0020811	.0024778	.002420	1.2219	.0014895	.0014464
%RSD	.4291335	.5047595	.2412904	.5287102	.2640579	.2844585
#1	.4867010	.4937339	1.000467	232.5006	.5629073	.5068212
#2	.4855166	.4891657	1.003076	230.6542	.5657472	.5092106
#3	.4826532	.4897863	1.005302	230.1908	.5635482	.5094282

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5037197**	**100.4457**	**.4758053**	**248.9152**	**1.005905**	**.2183363**
Stddev	.0013971	.4143	.0028112	1.3351	.002991	.0008128
%RSD	.2773634	.4124413	.5908285	.5363652	.2973541	.3722694
#1	.5021167	100.3118	.4781586	250.4568	1.002529	.2175780
#2	.5043638	100.9104	.4765650	248.1342	1.006962	.2191944
#3	.5046785	100.1150	.4726923	248.1547	1.008225	.2182364

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0936484**	**.4696274**	**1.047119**	**.0789780**	**.8695390**	**1.068719**
Stddev	.0237110	.0030323	.004030	.0118902	.0035339	.001219
%RSD	25.31917	.6456783	.3848444	15.05507	.4064105	.1140540
#1	.0800141	.4729426	1.050028	.0874868	.8731053	1.067571
#2	.1210274	.4669941	1.042519	.0840551	.8660384	1.069998
#3	.0799037	.4689454	1.048809	.0653921	.8694732	1.068588

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSAB01 Acquired: 3/13/2025 12:30:22 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.088035	1.010617	.9838758	F 10.37073	F 10.59370	F 9.806880
Stddev	.002604	.005677	.0043700	.02176	.00948	.060009
%RSD	.2392886	.5617337	.4441635	.2098084	.0895202	.6119101
#1	1.089235	1.016044	.9883253	10.34562	10.59769	9.852287
#2	1.089822	1.011087	.9837122	10.38406	10.60054	9.829506
#3	1.085048	1.004720	.9795898	10.38252	10.58288	9.738847

Elem	Sr4077
Units	ppm
Avg	F 9.185808
Stddev	.063531
%RSD	.6916244
#1	9.179081
#2	9.125908
#3	9.252435

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3092.634	68363.42	15236.19	2015.378	3970.825
Stddev	5.747	113.41	80.08	6.216	6.279
%RSD	.1858201	.1658891	.5256156	.3084520	.1581217
#1	3098.598	68488.52	15145.53	2018.965	3977.926
#2	3092.171	68267.36	15297.30	2018.969	3968.539
#3	3087.133	68334.39	15265.74	2008.200	3966.009

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSADLX20 Acquired: 3/13/2025 12:34:40 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001301**	**.0010719**	**.0000700**	**.0021077**	**-.000424**	**12.50627**	**-.000428**
Stddev	.000873	.0005251	.0003773	.0026735	.000660	.00964	.000525
%RSD	67.06615	48.98561	538.7816	126.8416	155.8942	.0771101	122.7019
#1	-.002116	.0009952	.0000549	.0004706	.000318	12.51734	.000175
#2	-.001406	.0005894	-.000300	.0051928	-.000639	12.50177	-.000676
#3	-.000381	.0016311	.000455	.0006597	-.000949	12.49971	-.000784

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000709**	**-.000101**	**12.26734**	**.0026626**	**.0002647**	**.0002560**	**4.604028**
Stddev	.0000244	.000015	.04848	.0000923	.0000791	.0002120	.014562
%RSD	34.36048	14.57521	.3952023	3.465430	29.90373	82.81687	.3162843
#1	.0000728	-.000102	12.31552	.0026755	.0002031	.0003895	4.616648
#2	.0000456	-.000114	12.26795	.0025646	.0002370	.0003669	4.588095
#3	.0000943	-.000085	12.21856	.0027478	.0003539	.0000115	4.607340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000365**	**12.84154**	**.0001134**	**.0002111**	**.0041553**	**-.000592**	**-.000490**
Stddev	.000246	.00931	.0003747	.0004530	.0222161	.001223	.000204
%RSD	67.37318	.0724820	330.3494	214.5764	534.6389	206.5251	41.54907
#1	-.000084	12.84894	.0005400	-.000266	-.006240	-.000880	-.000278
#2	-.000470	12.83109	-.000037	.000635	-.010957	.000749	-.000684
#3	-.000541	12.84459	-.000163	.000265	.029663	-.001646	-.000508

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058223**	**-.009213**	**.0000062**	**-.001406**	**.0003266**	**.0007294**	**-.003690**
Stddev	.0154494	.000650	.0002523	.000749	.0009521	.0012894	.000567
%RSD	265.3511	7.051829	4053.066	53.26347	291.4941	176.7806	15.36038
#1	-.009528	-.008469	.0000724	-.002270	-.000630	.0010234	-.003227
#2	.005626	-.009667	.0002188	-.000970	.000335	-.000682	-.003522
#3	.021369	-.009502	-.000273	-.000976	.001275	.001846	-.004322

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSADLX20 Acquired: 3/13/2025 12:34:40 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002820	.0014477	.0048208
Stddev	.000880	.0008391	.0000408
%RSD	31.20405	57.96113	.8453568
#1	-.003356	.0014061	.0048296
#2	-.001804	.0006302	.0048565
#3	-.003300	.0023068	.0047764

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3490.599	78594.99	14550.86	2256.867	4909.572
Stddev	13.101	277.60	19.46	6.481	16.055
%RSD	.3753130	.3532056	.1337374	.2871514	.3270067
#1	3489.327	78627.61	14554.54	2261.348	4913.277
#2	3504.290	78854.85	14568.22	2259.816	4923.450
#3	3478.181	78302.53	14529.83	2249.436	4891.989

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSABDLX20 Acquired: 3/13/2025 12:38:56 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054837	.0062559	.0027619	.0054511	.0313760	12.88174	.0255975
Stddev	.0006390	.0007697	.0005939	.0005579	.0006464	.01404	.0010747
%RSD	11.65323	12.30312	21.50229	10.23409	2.060291	.1090106	4.198607
#1	.0056806	.0057290	.0031141	.0052298	.0321208	12.87154	.0248271
#2	.0060010	.0071391	.0020762	.0050379	.0309612	12.87593	.0251401
#3	.0047694	.0058995	.0030952	.0060857	.0310459	12.89776	.0268253

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0282476	.0524851	12.71507	.0315623	.0261492	.0284393	5.046730
Stddev	.0001554	.0003021	.04016	.0002142	.0000375	.0001753	.009059
%RSD	.5500239	.5756223	.3158710	.6785631	.1432409	.6165286	.1795090
#1	.0282030	.0522378	12.70196	.0316477	.0261725	.0282507	5.036398
#2	.0281194	.0523957	12.68310	.0313186	.0261060	.0284699	5.050478
#3	.0284204	.0528218	12.76015	.0317206	.0261692	.0285974	5.053314

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0255567	13.21483	.0525936	.0117177	.0250943	.0257439	.0554142
Stddev	.0001210	.08392	.0002770	.0000462	.0096312	.0020309	.0005795
%RSD	.4734889	.6350077	.5267474	.3942928	38.38003	7.888751	1.045797
#1	.0256882	13.21852	.0524924	.0116861	.0192240	.0238980	.0547451
#2	.0255321	13.12914	.0523814	.0117707	.0198493	.0279194	.0557385
#3	.0254499	13.29685	.0529070	.0116962	.0362096	.0254144	.0557588

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0121306	.0487079	.0585736	.0559624	.0560987	.0520832	-.004820
Stddev	.0343922	.0005101	.0002947	.0008596	.0006986	.0049713	.001244
%RSD	283.5161	1.047286	.5032186	1.536023	1.245368	9.544912	25.81278
#1	.0375969	.0489100	.0584926	.0552269	.0562052	.0506462	-.006152
#2	.0257874	.0481277	.0583278	.0557529	.0553529	.0479887	-.003689
#3	-.026992	.0490860	.0589004	.0569074	.0567380	.0576147	-.004619

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: ICSABDLX20 Acquired: 3/13/2025 12:38:56 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000568	.0006648	.0050006
Stddev	.001425	.0001634	.0000175
%RSD	250.9729	24.57701	.3504821
#1	.000084	.0005942	.0049945
#2	-.002202	.0005486	.0049869
#3	.000415	.0008517	.0050203

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3461.425	74923.30	14782.78	2185.858	4869.774
Stddev	8.021	64.85	18.58	7.521	17.440
%RSD	.2317244	.0865607	.1257165	.3440791	.3581363
#1	3467.124	74981.04	14777.88	2194.508	4883.851
#2	3464.898	74853.14	14803.32	2180.866	4875.208
#3	3452.253	74935.74	14767.13	2182.199	4850.264

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV01 Acquired: 3/13/2025 12:53:26 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.158631**	**5.104539**	**5.192543**	**5.067368**	**5.055720**	**10.26613**	**9.861959**
Stddev	.031720	.041858	.010813	.018813	.018132	.00918	.141106
%RSD	.6149003	.8200141	.2082393	.3712643	.3586492	.0894629	1.430806
#1	5.158688	5.147777	5.182641	5.067201	5.046514	10.26916	10.01796
#2	5.126882	5.064213	5.190906	5.048638	5.044038	10.25582	9.82470
#3	5.190323	5.101627	5.204081	5.086263	5.076608	10.27342	9.74322

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2736909**	**2.567739**	**25.45599**	**1.049302**	**2.555001**	**1.283313**	**4.894597**
Stddev	.0022023	.005441	.06450	.004224	.004205	.005376	.030686
%RSD	.8046569	.2118889	.2533867	.4025647	.1645636	.4188954	.6269295
#1	.2758250	2.563836	25.52483	1.044433	2.551228	1.282797	4.860760
#2	.2738214	2.565427	25.44620	1.051980	2.554241	1.278213	4.902412
#3	.2714263	2.573954	25.39695	1.051495	2.559534	1.288927	4.920620

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.533204**	**25.69180**	**2.557642**	**1.295268**	**24.00098**	**2.547808**	**2.596435**
Stddev	.003387	.08549	.006109	.002522	.26585	.005125	.009996
%RSD	.1336899	.3327523	.2388683	.1946724	1.107644	.2011376	.3849900
#1	2.536538	25.75849	2.552663	1.293080	23.86444	2.553725	2.584912
#2	2.529767	25.72149	2.555802	1.294699	23.83115	2.544892	2.602770
#3	2.533307	25.59543	2.564459	1.298026	24.30735	2.544806	2.601624

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.92823**	**5.426926**	**5.117513**	**5.148932**	**5.003388**	**4.992882**	**5.209350**
Stddev	.27343	.054191	.015008	.010290	.008718	.032646	.024400
%RSD	1.142730	.9985609	.2932585	.1998465	.1742505	.6538578	.4683872
#1	23.67957	5.484535	5.115103	5.147252	5.013364	4.958813	5.215064
#2	23.88407	5.419278	5.103855	5.139585	4.999572	4.995942	5.182600
#3	24.22106	5.376965	5.133579	5.159958	4.997229	5.023891	5.230385

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV01 Acquired: 3/13/2025 12:53:26 Type: Unk
Method: NON EPA-6010-200.7(v2804) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.037267	4.969641	5.020896
Stddev	.011414	.009119	.016251
%RSD	.2265906	.1834960	.3236644
#1	5.040780	4.974334	5.037071
#2	5.024509	4.959131	5.004570
#3	5.046511	4.975457	5.021046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3391.254	73690.80	14067.45	2158.217	4539.866
Stddev	4.817	362.79	71.19	14.473	3.956
%RSD	.1420473	.4923073	.5060815	.6706014	.0871332
#1	3386.689	74061.56	13994.01	2174.705	4535.300
#2	3396.289	73674.28	14072.19	2152.336	4542.269
#3	3390.784	73336.56	14136.16	2147.611	4542.029

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB01 Acquired: 3/13/2025 12:58:02 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.002387**	**.0010977**	**.0004597**	**.0021695**	**.0006425**	**-.006921**	**.0003490**
Stddev	.002634	.0007532	.0009438	.0027988	.0004202	.003487	.0006989
%RSD	110.3475	68.61981	205.2970	129.0064	65.39873	50.38731	200.2563
#1	-.000440	.0012934	.0002170	.0002679	.0006682	-.003514	-.000356
#2	-.005384	.0017337	-.000339	.0053832	.0010492	-.010483	.001042
#3	-.001337	.0002659	.001501	.0008573	.0002100	-.006766	.000361

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000054**	**-.000002**	**-.012236**	**.0003246**	**.0001148**	**.0000355**	**.0018518**
Stddev	.000028	.000041	.002315	.0001669	.0000755	.0001259	.0010769
%RSD	52.52552	1833.101	18.91785	51.41510	65.72702	353.9966	58.15245
#1	-.000026	.000035	-.009658	.0004697	.0000760	-.000048	.0010685
#2	-.000083	-.000046	-.014136	.0003618	.0000666	.000180	.0030799
#3	-.000053	.000004	-.012912	.0001422	.0002018	-.000026	.0014071

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000597**	**-.009727**	**.0000693**	**.0001260**	**.0129714**	**.0010015**	**-.000644**
Stddev	.000246	.008047	.0002227	.0001247	.0163551	.0012492	.000157
%RSD	41.13439	82.72277	321.2428	98.97174	126.0857	124.7235	24.40945
#1	-.000870	-.004231	.0001728	.0000670	.0007951	.0024266	-.000772
#2	-.000525	-.018964	.0002216	.0000417	.0065579	.0004824	-.000692
#3	-.000395	-.005987	-.000186	.0002692	.0315612	.0000957	-.000469

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.026845**	**.0064743**	**.0002276**	**-.000597**	**.0009144**	**.0065644**	**-.005550**
Stddev	.016867	.0009511	.0001302	.000106	.0011743	.0027744	.000951
%RSD	62.82964	14.69111	57.20689	17.66870	128.4210	42.26534	17.13651
#1	-.028246	.0074369	.0003728	-.000719	.0018842	.0035349	-.006639
#2	-.042968	.0055350	.0001211	-.000545	-.000391	.0089814	-.004881
#3	-.009322	.0064509	.0001890	-.000528	.001250	.0071768	-.005130

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB01 Acquired: 3/13/2025 12:58:02 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.001048**	**.0009422**	**-.000047**
Stddev	.003835	.0006982	.000006
%RSD	365.7758	74.10638	13.21865
#1	-.000354	.0003295	-.000051
#2	.002392	.0017024	-.000040
#3	-.005183	.0007948	-.000050

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3473.782**	**77092.51**	**14926.39**	**2235.288**	**5055.090**
Stddev	4.752	315.59	103.17	3.922	12.291
%RSD	.1367904	.4093631	.6912249	.1754671	.2431440
#1	3470.997	76808.51	14885.10	2230.789	5050.142
#2	3479.269	77036.77	14850.24	2237.086	5069.084
#3	3471.082	77432.26	15043.81	2237.989	5046.044

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB166963BL Acquired: 3/13/2025 13:02:22 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.001712**	**-.001582**	**.0010024**	**.0034584**	**.0011461**	**-.006177**	**.0001657**
Stddev	.001823	.001105	.0007616	.0009622	.0006692	.006834	.0009626
%RSD	106.4948	69.85166	75.97014	27.82072	58.38920	110.6289	580.8715
#1	-.001867	-.001609	.0003377	.0035662	.0017899	-.000227	-.000430
#2	.000184	-.000464	.0018334	.0043621	.0004541	-.004663	.001276
#3	-.003453	-.002673	.0008362	.0024469	.0011943	-.013640	-.000349

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000007**	**.0000286**	**-.009708**	**.0000395**	**.0000093**	**-.000175**	**.0025975**
Stddev	.000005	.0000066	.005527	.0002419	.0001754	.000137	.0020220
%RSD	68.22822	23.10413	56.93001	612.1016	1882.601	78.09927	77.84359
#1	-.000002	.0000319	-.012828	-.000004	.0001713	-.000018	.0044888
#2	-.000007	.0000210	-.003327	-.000177	.0000336	-.000266	.0028375
#3	-.000012	.0000329	-.012970	.000300	-.000177	-.000241	.0004662

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000664**	**.0005399**	**-.000248**	**.0002709**	**-.002837**	**.0002537**	**-.000858**
Stddev	.000172	.0099706	.000141	.0001489	.004462	.0007522	.000314
%RSD	25.89905	1846.799	56.79224	54.95437	157.2531	296.4656	36.54158
#1	-.000765	.0109728	-.000379	.0002114	-.007334	-.000567	-.001093
#2	-.000465	-.008893	-.000266	.0004403	-.002768	.000418	-.000979
#3	-.000761	-.000460	-.000099	.0001610	.001589	.000910	-.000502

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.012438**	**.0013039**	**-.000084**	**-.001209**	**.0009564**	**.0013470**	**-.005708**
Stddev	.016013	.0002088	.000242	.000385	.0006682	.0057961	.002626
%RSD	128.7392	16.01630	287.4437	31.82478	69.86735	430.3045	46.01036
#1	-.029900	.0011323	-.000210	-.000783	.0007649	-.004023	-.002678
#2	.001558	.0012429	.000195	-.001532	.0004048	.000572	-.007335
#3	-.008973	.0015364	-.000238	-.001310	.0016994	.007492	-.007110

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB166963BL Acquired: 3/13/2025 13:02:22 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	-.001600	.0013711	.0000031
Stddev	.004471	.0022777	.0000428
%RSD	279.3829	166.1250	1387.339
#1	-.004607	.0001086	.0000134
#2	.003537	.0000042	.0000398
#3	-.003731	.0040005	-.000044

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3466.354	76993.14	14829.64	2217.137	5062.884
Stddev	7.308	109.97	75.90	11.537	12.224
%RSD	.2108343	.1428287	.5118090	.5203443	.2414480
#1	3463.376	76883.06	14911.50	2227.711	5058.307
#2	3474.681	77103.00	14761.61	2218.866	5076.736
#3	3461.006	76993.38	14815.80	2204.833	5053.609

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB166963BS Acquired: 3/13/2025 13:06:42 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.7921126	1.969061	.9809113	1.970539	.7965106	1.948118
Stddev	.0026696	.015587	.0025661	.013113	.0034586	.006647
%RSD	.3370280	.7916054	.2616041	.6654438	.4342174	.3412043
#1	.7890473	1.970557	.9795774	1.960771	.7964753	1.940482
#2	.7933620	1.983847	.9792869	1.965404	.7930698	1.952602
#3	.7939284	1.952780	.9838697	1.985442	.7999867	1.951272

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1825339	.2065478	.1938344	1.000317	.4169650	.1947180
Stddev	.0005647	.0007741	.0004803	.002884	.0004448	.0009376
%RSD	.3093849	.3747919	.2477728	.2883206	.1066808	.4815358
#1	.1822806	.2059356	.1933046	.997107	.4164938	.1938449
#2	.1821402	.2074179	.1939577	1.001156	.4170236	.1946003
#3	.1831810	.2062898	.1942411	1.002689	.4173776	.1957090

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3093994	2.846777	.1945305	1.922776	.4891141	.0762624
Stddev	.0009825	.007889	.0000454	.037173	.0005708	.0001133
%RSD	.3175550	.2771334	.0233157	1.933323	.1167085	.1485032
#1	.3087115	2.837693	.1944782	1.885348	.4884787	.0763162
#2	.3089622	2.851908	.1945582	1.959690	.4892797	.0761323
#3	.3105247	2.850731	.1945552	1.923290	.4895837	.0763388

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.650329	.2892281	.2039316	8.997270	.3004789	.3995987
Stddev	.017570	.0012122	.0006808	.039344	.0026822	.0010639
%RSD	.6629288	.4191029	.3338545	.4372828	.8926560	.2662512
#1	2.656570	.2883203	.2033298	9.030533	.2976240	.3985228
#2	2.663926	.2906046	.2037944	8.953841	.3029463	.3996229
#3	2.630491	.2887593	.2046706	9.007435	.3008662	.4006502

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB166963BS Acquired: 3/13/2025 13:06:42 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.6916779	.1890023	.7540904	5.720030	F -.012654	.1955976
Stddev	.0018681	.0003290	.0054837	.031233	.003838	.0006232
%RSD	.2700851	.1740862	.7271992	.5460200	30.32734	.3185940
#1	.6895357	.1892369	.7548939	5.684085	-.014111	.1957643
#2	.6929681	.1891439	.7482493	5.735458	-.008301	.1961204
#3	.6925300	.1886262	.7591281	5.740546	-.015550	.1949080

Elem	Sr4077
Units	ppm
Avg	.1880190
Stddev	.0002544
%RSD	.1353232
#1	.1879573
#2	.1882987
#3	.1878012

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3405.691	74839.64	14523.99	2176.320	4822.206
Stddev	9.011	159.18	68.28	5.925	8.024
%RSD	.2645934	.2126964	.4701243	.2722591	.1663953
#1	3410.329	74843.18	14600.01	2170.563	4830.155
#2	3411.438	74997.02	14467.87	2182.400	4822.355
#3	3395.305	74678.71	14504.09	2175.997	4814.109

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167116BL Acquired: 3/13/2025 13:10:45 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.0002142**	**.0014913**	**.0005472**	**.0003853**	**-.000543**	**-.007975**	**.0001468**
Stddev	.0001999	.0004153	.0006019	.0013655	.001148	.003064	.0013634
%RSD	93.30984	27.84641	110.0055	354.3750	211.6487	38.42426	928.7570
#1	.0000388	.0010566	.0009856	.0019618	-.001132	-.005067	-.000284
#2	.0001721	.0018840	.0007951	-.000432	-.001277	-.007682	-.000949
#3	.0004318	.0015334	-.000139	-.000374	.000781	-.011175	.001674

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000046**	**.0000088**	**-.009680**	**.0001126**	**-.000061**	**-.000228**	**.0033716**
Stddev	.000019	.0000963	.002891	.0001004	.000137	.000392	.0013297
%RSD	41.24050	1092.928	29.87124	89.16472	224.4135	172.0781	39.43881
#1	-.000064	-.000023	-.012190	.0001585	-.000044	-.000547	.0024652
#2	-.000026	-.000067	-.006518	-.000003	-.000206	-.000345	.0027516
#3	-.000049	.000117	-.010331	.000182	.000067	.000209	.0048981

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000936**	**-.010328**	**-.000248**	**.0003078**	**-.013391**	**.0006476**	**-.000646**
Stddev	.000042	.003748	.000113	.0002161	.020717	.0007566	.000169
%RSD	4.481840	36.28947	45.67705	70.22708	154.7034	116.8193	26.16069
#1	-.000888	-.010830	-.000182	.0005498	-.017552	.0015212	-.000835
#2	-.000965	-.006354	-.000378	.0001342	.009090	.0002122	-.000510
#3	-.000955	-.013799	-.000183	.0002393	-.031712	.0002095	-.000594

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.024454**	**-.000590**	**.0000682**	**-.001586**	**.0007183**	**-.000249**	**-.003645**
Stddev	.029584	.000888	.0002666	.000159	.0002105	.002249	.001860
%RSD	120.9794	150.5813	390.8641	10.02288	29.30772	904.4804	51.01698
#1	-.046445	.000424	.0001312	-.001514	.0009525	-.000940	-.005791
#2	-.036096	-.000965	-.000224	-.001475	.0006574	.002265	-.002512
#3	.009180	-.001229	.000298	-.001768	.0005449	-.002071	-.002632

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167116BL Acquired: 3/13/2025 13:10:45 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	-.002566	.0002740	-.000081
Stddev	.003082	.0013987	.000051
%RSD	120.0979	510.5599	62.52166
#1	-.002011	.0018040	-.000029
#2	.000200	-.000043	-.000083
#3	-.005887	-.000939	-.000131

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3451.339	75909.53	14649.14	2200.578	5017.315
Stddev	6.375	50.04	42.10	2.333	4.277
%RSD	.1847030	.0659172	.2873999	.1060160	.0852413
#1	3444.079	75900.01	14639.88	2199.333	5015.416
#2	3456.022	75963.65	14612.44	2203.269	5022.213
#3	3453.916	75864.94	14695.10	2199.132	5014.317

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167116BS Acquired: 3/13/2025 13:15:05 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.7763336**	**1.931329**	**.9760031**	**1.934955**	**.7832455**	**1.934104**
Stddev	.0069003	.030623	.0085279	.016944	.0078606	.005281
%RSD	.8888254	1.585609	.8737617	.8756799	1.003592	.2730699
#1	.7822794	1.964817	.9792837	1.950571	.7889063	1.929955
#2	.7779540	1.924415	.9824036	1.937357	.7865597	1.940050
#3	.7687673	1.904753	.9663220	1.916939	.7742706	1.932309

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1868897**	**.2113398**	**.1934623**	**1.012279**	**.4099599**	**.1957618**
Stddev	.0007012	.0011864	.0015773	.005064	.0013474	.0017346
%RSD	.3751890	.5613902	.8152971	.5002996	.3286681	.8861017
#1	.1861191	.2123954	.1942001	1.018033	.4086537	.1970611
#2	.1874900	.2115682	.1945355	1.010307	.4113450	.1964324
#3	.1870602	.2100557	.1916513	1.008497	.4098810	.1937920

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3084685**	**2.839241**	**.1982833**	**1.974992**	**.4909100**	**.0756317**
Stddev	.0026279	.026074	.0012919	.008780	.0033050	.0001495
%RSD	.8519072	.9183485	.6515501	.4445790	.6732312	.1976142
#1	.3099731	2.811977	.1987715	1.982182	.4927762	.0757399
#2	.3099982	2.841812	.1992600	1.977587	.4928598	.0756941
#3	.3054341	2.863935	.1968185	1.965206	.4870941	.0754612

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.607017**	**.2918619**	**.2032027**	**8.887492**	**.3018061**	**.3976011**
Stddev	.032930	.0036220	.0014751	.067586	.0018242	.0038082
%RSD	1.263130	1.240980	.7259030	.7604658	.6044332	.9577918
#1	2.579722	.2938529	.2019389	8.811863	.3034408	.4004217
#2	2.643591	.2940516	.2028459	8.941982	.3021392	.3991123
#3	2.597738	.2876812	.2048235	8.908632	.2998383	.3932693

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167116BS Acquired: 3/13/2025 13:15:05 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.6854460	.1901120	F .7412375	5.778518	F -.009201	.1964216
Stddev	.0050106	.0008056	.0032635	.048570	.003049	.0007864
%RSD	.7310048	.4237768	.4402810	.8405227	33.14184	.4003759
#1	.6890052	.1909172	.7380910	5.816784	-.011919	.1973286
#2	.6876168	.1893059	.7410150	5.794892	-.009778	.1960074
#3	.6797160	.1901130	.7446067	5.723877	-.005904	.1959290

Elem	Sr4077
Units	ppm
Avg	.1902430
Stddev	.0004200
%RSD	.2207787
#1	.1899958
#2	.1907280
#3	.1900052

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3437.901	75522.52	14365.63	2221.641	4834.485
Stddev	22.071	243.16	60.62	11.315	33.705
%RSD	.6419937	.3219680	.4219831	.5093085	.6971729
#1	3424.982	75742.58	14296.86	2222.371	4819.905
#2	3425.336	75563.52	14388.74	2232.573	4810.526
#3	3463.386	75261.48	14411.30	2209.978	4873.026

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1485-01 Acquired: 3/13/2025 13:19:07 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.0909458	.0008562	2.349975	-.048201	.0269262	156.6956	1.455567
Stddev	.0027791	.0013724	.007788	.000280	.0021158	.6281	.009595
%RSD	3.055821	160.2870	.3314011	.5812171	7.857744	.4008154	.6591615
#1	.0934148	.0019473	2.344149	-.047912	.0270594	155.9986	1.444834
#2	.0879360	.0013058	2.346956	-.048222	.0289722	157.2176	1.463311
#3	.0914865	-.000685	2.358821	-.048471	.0247470	156.8707	1.458556

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138228	-.006404	42.32541	.3444296	.1709163	1.988846	374.8592
Stddev	.0001344	.000442	.23004	.0014296	.0005294	.005039	1.1969
%RSD	.9721695	6.908085	.5435130	.4150727	.3097621	.2533883	.3192957
#1	.0137123	-.006582	42.07224	.3444477	.1710745	1.985771	373.7856
#2	.0137837	-.006730	42.52163	.3458501	.1703259	1.986104	376.1497
#3	.0139724	-.005901	42.38236	.3429910	.1713487	1.994662	374.6424

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.235210	60.25125	.3755786	.0001535	6.564483	.4661876	1.129998
Stddev	.032216	.21477	.0014777	.0002956	.076419	.0033489	.003456
%RSD	.6153674	.3564609	.3934421	192.5459	1.164124	.7183552	.3058198
#1	5.198754	60.02660	.3745626	.0003767	6.477874	.4630382	1.128171
#2	5.259848	60.45455	.3748993	.0002657	6.622414	.4658191	1.133984
#3	5.247027	60.27259	.3772737	-.000182	6.593161	.4697055	1.127839

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.72894	-.470105	.0097158	.2097751	9.128929	9.968094	9.449659
Stddev	.09339	.002673	.0001528	.0010793	.045260	.022120	.042295
%RSD	.2350664	.5686373	1.572761	.5145124	.4957824	.2219064	.4475818
#1	39.63351	-.469717	.0095519	.2089196	9.077189	9.954321	9.436023
#2	39.82014	-.467647	.0097412	.2094181	9.161176	9.993608	9.415863
#3	39.73318	-.472951	.0098543	.2109877	9.148421	9.956351	9.497089

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1485-01 Acquired: 3/13/2025 13:19:07 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	3.929316	.3951664	.2997319
Stddev	.013736	.0029759	.0017655
%RSD	.3495816	.7530656	.5890320
#1	3.931916	.3921576	.2977356
#2	3.914465	.3981082	.3010880
#3	3.941566	.3952335	.3003721

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3735.882	81810.87	17237.88	2413.468	4244.313
Stddev	6.404	161.23	55.62	8.876	10.852
%RSD	.1714283	.1970774	.3226798	.3677831	.2556889
#1	3740.323	81798.32	17298.51	2419.235	4251.312
#2	3738.783	81656.28	17189.20	2403.247	4249.815
#3	3728.541	81978.01	17225.94	2417.922	4231.812

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1486-01 Acquired: 3/13/2025 13:23:10 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.0173818**	**-.015108**	**.5613788**	**-.031977**	**-.005601**	**158.5940**
Stddev	.0024189	.002378	.0073493	.000591	.001342	.1336
%RSD	13.91603	15.73726	1.309153	1.848349	23.96056	.0842241
#1	.0162420	-.012438	.5655429	-.031388	-.004079	158.5615
#2	.0157434	-.016997	.5657005	-.031974	-.006615	158.4796
#3	.0201600	-.015888	.5528931	-.032570	-.006109	158.7408

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8606767**	**.0087655**	**-.000478**	**178.7995**	**.2915288**	**.1195694**
Stddev	.0025025	.0000632	.000187	.4242	.0002510	.0010006
%RSD	.2907586	.7206103	39.03415	.2372389	.0860813	.8367994
#1	.8579598	.0088021	-.000296	178.9007	.2913007	.1202727
#2	.8611830	.0088019	-.000469	178.3338	.2914880	.1200115
#3	.8628874	.0086926	-.000669	179.1639	.2917976	.1184239

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1961657**	**226.2085**	**4.074142**	**67.43873**	**.1819835**	**-.000291**
Stddev	.0018551	1.2976	.014183	.29231	.0017487	.000417
%RSD	.9456653	.5736510	.3481184	.4334425	.9609331	143.0594
#1	.1971156	225.3160	4.068221	67.67573	.1821961	.000105
#2	.1973535	227.6971	4.063879	67.11210	.1836163	-.000253
#3	.1940281	225.6124	4.090326	67.52836	.1801382	-.000726

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.884177**	**.3782766**	**.8079568**	**58.73227**	**-.343865**	**.0114652**
Stddev	.061824	.0009704	.0015384	.39748	.008762	.0004980
%RSD	1.050682	.2565386	.1904117	.6767645	2.547954	4.343183
#1	5.833745	.3793640	.8078523	58.47349	-.351063	.0111139
#2	5.953150	.3779671	.8095448	59.18993	-.334109	.0120350
#3	5.865637	.3774987	.8064733	58.53338	-.346422	.0112465

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1486-01 Acquired: 3/13/2025 13:23:10 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.0181501	F 10.62970	F 11.18605	F 16.78013	4.104803	.4562834
Stddev	.0018706	.01055	.07132	.13160	.045671	.0019512
%RSD	10.30654	.0992166	.6375702	.7842815	1.112629	.4276225
#1	.0167466	10.62214	11.15540	16.84408	4.109523	.4543510
#2	.0174298	10.62522	11.26757	16.86754	4.147931	.4582528
#3	.0202738	10.64175	11.13518	16.62877	4.056955	.4562465

Elem	Sr4077
Units	ppm
Avg	.6911591
Stddev	.0012038
%RSD	.1741682
#1	.6898111
#2	.6915394
#3	.6921268

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3650.868	81071.06	16873.78	2347.680	4031.682
Stddev	17.392	236.82	84.23	19.974	29.502
%RSD	.4763806	.2921118	.4991573	.8508126	.7317560
#1	3641.081	81157.80	16838.81	2349.360	4016.855
#2	3640.575	80803.10	16969.86	2326.918	4012.535
#3	3670.949	81252.27	16812.67	2366.761	4065.657

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1487-01 Acquired: 3/13/2025 13:27:13 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**.0207536**	**-.012321**	**.3078575**	**-.068485**	**-.012291**	**230.1496**
Stddev	.0032910	.001298	.0021985	.002526	.003914	.0472
%RSD	15.85773	10.53285	.7141226	3.688482	31.84290	.0205023
#1	.0209448	-.013819	.3102809	-.070350	-.007891	230.1648
#2	.0239448	-.011564	.3059910	-.069495	-.015384	230.0966
#3	.0173711	-.011580	.3073007	-.065610	-.013598	230.1872

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.094332**	**.0148888**	**-.006765**	**39.56127**	**.5593714**	**.2601048**
Stddev	.004500	.0000391	.000860	.08157	.0020193	.0004353
%RSD	.2148611	.2627001	12.71940	.2061990	.3609872	.1673698
#1	2.093378	.0149281	-.007594	39.58562	.5599166	.2600839
#2	2.090385	.0148499	-.005876	39.47030	.5610621	.2596803
#3	2.099232	.0148883	-.006823	39.62790	.5571355	.2605502

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5642314**	**431.5491**	**4.698600**	**119.5928**	**.5317387**	**-.001116**
Stddev	.0013183	3.4905	.005274	.2913	.0011341	.000335
%RSD	.2336411	.8088391	.1122565	.2435908	.2132839	29.99359
#1	.5650392	433.7299	4.699480	119.4707	.5329593	-.001138
#2	.5649448	427.5233	4.692940	119.3824	.5307176	-.001439
#3	.5627101	433.3942	4.703379	119.9253	.5315391	-.000771

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.197185**	**.5504162**	**1.340682**	**121.1435**	**-.709830**	**.0030522**
Stddev	.013603	.0021379	.007441	.3602	.018956	.0003397
%RSD	.3240944	.3884112	.5550321	.2973100	2.670539	11.13137
#1	4.206869	.5480975	1.338818	121.5414	-.694052	.0030425
#2	4.203054	.5508420	1.348879	121.0494	-.730858	.0033967
#3	4.181633	.5523092	1.334351	120.8398	-.704580	.0027174

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1487-01 Acquired: 3/13/2025 13:27:13 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.0155741	F 18.27868	8.397311	8.279622	3.854363	.7672955
Stddev	.0023239	.02382	.020891	.030120	.006783	.0014489
%RSD	14.92167	.1303095	.2487847	.3637829	.1759723	.1888267
#1	.0182193	18.29684	8.419977	8.313522	3.857412	.7685610
#2	.0138607	18.25171	8.378827	8.255940	3.859087	.7657151
#3	.0146424	18.28748	8.393129	8.269405	3.846591	.7676105

Elem	Sr4077
Units	ppm
Avg	.2016621
Stddev	.0003392
%RSD	.1682265
#1	.2013740
#2	.2015762
#3	.2020360

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3406.141	74361.22	15468.85	2159.852	4061.673
Stddev	7.569	243.33	8.54	14.503	7.960
%RSD	.2222145	.3272259	.0552166	.6714636	.1959772
#1	3404.369	74148.42	15471.13	2149.698	4055.708
#2	3414.439	74308.73	15459.40	2153.396	4070.712
#3	3399.616	74626.51	15476.02	2176.461	4058.600

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-04 Acquired: 3/13/2025 13:31:32 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.002352**	**-.004147**	**.0028277**	**.0046838**	**.0010596**	**.0370270**	**.1558972**
Stddev	.003275	.000461	.0006049	.0049011	.0017849	.0056034	.0010109
%RSD	139.2769	11.12395	21.39288	104.6381	168.4520	15.13324	.6484380
#1	.001361	-.004679	.0028021	.0097422	-.000055	.0336391	.1564943
#2	-.003586	-.003898	.0034451	-.000043	.003118	.0434947	.1564672
#3	-.004830	-.003863	.0022360	.004352	.000115	.0339470	.1547300

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000424**	**-.000050**	**3.062928**	**.0003778**	**.0013949**	**.0213799**	**.0508516**
Stddev	.0000400	.000001	.004933	.0001566	.0002111	.0004422	.0048785
%RSD	94.45789	1.848210	.1610408	41.45814	15.13279	2.068389	9.593639
#1	.0000878	-.000049	3.061475	.0005053	.0013070	.0218033	.0558722
#2	.0000274	-.000051	3.068424	.0002030	.0016358	.0214154	.0461288
#3	.0000120	-.000049	3.058886	.0004252	.0012420	.0209210	.0505538

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1477420**	**.3913338**	**.0022199**	**.0002260**	**308.8072**	**.0010172**	**.0438451**
Stddev	.0005003	.0147990	.0001215	.0003023	1.6370	.0014687	.0003062
%RSD	.3386635	3.781678	5.473994	133.7247	.5301130	144.3851	.6984128
#1	.1472401	.3806601	.0020802	.0005217	309.8190	.0003991	.0436089
#2	.1482408	.3851135	.0023013	-.000082	306.9186	-.000041	.0441911
#3	.1477453	.4082276	.0022783	.000239	309.6841	.002694	.0437354

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4400594**	**.0120008**	**.0002846**	**-.001000**	**.0016431**	**.2106751**	**.0035874**
Stddev	.0249202	.0008125	.0000293	.000367	.0006289	.0031666	.0026975
%RSD	5.662922	6.770460	10.31259	36.73216	38.27659	1.503062	75.19448
#1	.4446908	.0117139	.0002702	-.001248	.0015939	.2070990	.0012600
#2	.4623390	.0113707	.0003183	-.001174	.0010402	.2131232	.0065439
#3	.4131484	.0129179	.0002651	-.000578	.0022952	.2118033	.0029583

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-04 Acquired: 3/13/2025 13:31:32 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.1829792	-.001692	.0248751
Stddev	.0023923	.000105	.0002053
%RSD	1.307407	6.212084	.8253913
#1	.1804840	-.001715	.0248140
#2	.1852532	-.001784	.0251040
#3	.1832004	-.001577	.0247073

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3213.726	70199.34	14201.71	2047.431	4331.479
Stddev	9.143	63.85	95.88	.177	4.219
%RSD	.2844895	.0909530	.6751253	.0086638	.0974053
#1	3216.451	70137.51	14227.68	2047.250	4333.470
#2	3221.196	70195.49	14281.94	2047.440	4334.333
#3	3203.530	70265.03	14095.53	2047.604	4326.632

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-06 Acquired: 3/13/2025 13:35:59 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.004805**	**-.004231**	**.0340288**	**.0029305**	**.0016950**	**.0435859**	**.3050335**
Stddev	.001890	.001557	.0008130	.0018782	.0017137	.0021222	.0017046
%RSD	39.33319	36.80463	2.389305	64.09006	101.1038	4.869102	.5588136
#1	-.004016	-.003619	.0331018	.0044952	-.000282	.0460303	.3059277
#2	-.003438	-.003073	.0343638	.0008477	.002606	.0422135	.3030679
#3	-.006962	-.006001	.0346209	.0034485	.002760	.0425139	.3061049

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000055**	**.0017456**	**8.047227**	**-.000200**	**.0041193**	**.3308505**	**.0224975**
Stddev	.000062	.0000541	.025260	.000266	.0001370	.0021446	.0015317
%RSD	112.1923	3.099623	.3138999	133.2893	3.325913	.6482138	6.808140
#1	-.000120	.0017643	8.059230	-.000495	.0040696	.3299084	.0226571
#2	.000003	.0016846	8.018203	-.000124	.0040142	.3293381	.0239431
#3	-.000049	.0017879	8.064248	.000020	.0042743	.3333049	.0208923

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.236304**	**1.170660**	**.0120015**	**.0001579**	**382.7558**	**.0006159**	**.2378748**
Stddev	.002929	.018895	.0006705	.0001631	1.8367	.0021156	.0003225
%RSD	.2369501	1.614079	5.586453	103.2887	.4798562	343.5062	.1355933
#1	1.239562	1.164707	.0127441	-.000029	384.5362	-.000229	.2376489
#2	1.233888	1.155458	.0118194	.000272	382.8637	-.000947	.2382442
#3	1.235462	1.191815	.0114409	.000231	380.8676	.003023	.2377313

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9688728**	**.0135374**	**.0001272**	**-.001306**	**.0000085**	**.3245919**	**.0311931**
Stddev	.0269269	.0006722	.0001260	.001019	.0006708	.0063282	.0007631
%RSD	2.779197	4.965789	99.01931	78.01636	7871.144	1.949600	2.446274
#1	.9777906	.0143114	.0002688	-.002332	-.000564	.3287503	.0318574
#2	.9386183	.0132015	.0000852	-.000294	-.000156	.3173091	.0303596
#3	.9902095	.0130993	.0000276	-.001293	.000746	.3277163	.0313622

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-06 Acquired: 3/13/2025 13:35:59 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	.3751128	-.002237	.0779592
Stddev	.0036316	.001376	.0003132
%RSD	.9681448	61.50511	.4017414
#1	.3710592	-.000738	.0781993
#2	.3762093	-.003443	.0776049
#3	.3780698	-.002531	.0780733

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3215.697	69749.00	14401.82	2048.836	4288.211
Stddev	16.870	182.29	40.66	2.340	17.776
%RSD	.5246062	.2613503	.2823282	.1142186	.4145318
#1	3226.140	69540.69	14413.06	2046.758	4295.880
#2	3224.717	69827.01	14435.68	2048.380	4300.865
#3	3196.235	69879.31	14356.73	2051.371	4267.888

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-08 Acquired: 3/13/2025 13:40:22 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	**-.002625**	**-.003438**	**.0068992**	**.0027316**	**.0011007**	**.0586407**	**.2000478**
Stddev	.002198	.001142	.0010946	.0016477	.0012627	.0009920	.0014247
%RSD	83.73234	33.21909	15.86558	60.32198	114.7108	1.691599	.7121922
#1	-.000141	-.004746	.0056864	.0025028	.0009399	.0594488	.2013703
#2	-.003418	-.002931	.0078139	.0012102	-.000074	.0589398	.2002341
#3	-.004318	-.002638	.0071972	.0044818	.002436	.0575336	.1985392

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000010**	**-.000016**	**4.777686**	**.0005177**	**.0008669**	**.0146533**	**.8427491**
Stddev	.000024	.000019	.024686	.0006139	.0001115	.0005331	.0084107
%RSD	233.4079	118.6997	.5166973	118.6012	12.85800	3.637813	.9980073
#1	.000015	.000000	4.803499	-.000191	.0008085	.0147038	.8425973
#2	-.000012	-.000037	4.775251	.000900	.0009954	.0140968	.8512348
#3	-.000033	-.000011	4.754308	.000843	.0007967	.0151593	.8344154

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1780756**	**3.273904**	**.0014324**	**-.000305**	**357.8585**	**.0098622**	**.0966907**
Stddev	.0012773	.009827	.0001089	.000133	5.1028	.0012831	.0000791
%RSD	.7172496	.3001576	7.604640	43.70829	1.425915	13.00988	.0818345
#1	.1787180	3.284961	.0015023	-.000151	357.6603	.0096782	.0967003
#2	.1789041	3.266168	.0014880	-.000390	363.0575	.0086810	.0966072
#3	.1766047	3.270583	.0013069	-.000374	352.8578	.0112272	.0967646

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.105402**	**.0530099**	**.0008287**	**-.000725**	**.0014204**	**.3552357**	**.0277354**
Stddev	.010961	.0009582	.0001051	.000517	.0003594	.0007467	.0028771
%RSD	.5206204	1.807509	12.67657	71.29088	25.30527	.2102029	10.37329
#1	2.103647	.0521911	.0007124	-.001207	.0017710	.3548013	.0253643
#2	2.095424	.0527749	.0008571	-.000179	.0010527	.3548078	.0269057
#3	2.117135	.0540637	.0009166	-.000790	.0014376	.3560979	.0309361

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-08 Acquired: 3/13/2025 13:40:22 Type: Unk
Method: NON EPA-6010-200.7(v2804) 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	1.288158	-.000044	.0477026
Stddev	.013449	.000734	.0003605
%RSD	1.044023	1670.000	.7557486
#1	1.302566	-.000892	.0479495
#2	1.275936	.000380	.0478695
#3	1.285973	.000380	.0472889

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3241.703	72057.90	14553.47	2117.619	4329.214
Stddev	26.728	215.87	34.22	4.552	32.054
%RSD	.8244927	.2995834	.2351252	.2149623	.7404177
#1	3239.670	72306.48	14516.34	2114.452	4317.682
#2	3269.388	71917.55	14560.32	2115.569	4365.439
#3	3216.049	71949.68	14583.74	2122.835	4304.521

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV02 Acquired: 3/13/2025 13:49:53 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.290119**	**5.111883**	**5.330192**	**5.179630**	**5.179698**	**10.43256**	**10.13034**
Stddev	.024030	.014276	.012705	.030867	.024458	.02211	.08553
%RSD	.4542401	.2792746	.2383590	.5959299	.4721868	.2119200	.8442951
#1	5.295455	5.100352	5.318414	5.172669	5.176973	10.41684	10.22299
#2	5.263870	5.107445	5.328507	5.152838	5.156716	10.42300	10.11364
#3	5.311033	5.127851	5.343656	5.213383	5.205404	10.45784	10.05440

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2675975**	**2.631688**	**26.04788**	**1.095199**	**2.605988**	**1.309816**	**5.129983**
Stddev	.0014060	.006651	.08345	.003802	.007822	.007193	.037791
%RSD	.5254133	.2527158	.3203888	.3471160	.3001698	.5491427	.7366770
#1	.2688446	2.626314	26.03770	1.093051	2.600730	1.307313	5.103933
#2	.2660738	2.629625	25.96999	1.092957	2.602255	1.304210	5.112688
#3	.2678741	2.639126	26.13596	1.099588	2.614977	1.317926	5.173327

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.582733**	**26.13231**	**2.604565**	**1.313325**	**25.60062**	**2.604295**	**2.621727**
Stddev	.007004	.09860	.007952	.001935	.23524	.005989	.012206
%RSD	.2711988	.3773199	.3053192	.1473214	.9188781	.2299558	.4655866
#1	2.579123	26.15491	2.597367	1.315018	25.33137	2.597659	2.612675
#2	2.578271	26.02437	2.603225	1.311216	25.70415	2.605930	2.616897
#3	2.590806	26.21765	2.613101	1.313741	25.76634	2.609297	2.635609

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.10547**	**5.306765**	**5.212738**	**5.333363**	**5.111583**	**5.302202**	**5.350626**
Stddev	.11646	.021233	.023398	.011661	.014872	.040815	.022371
%RSD	.4638695	.4001176	.4488705	.2186473	.2909566	.7697813	.4180930
#1	24.97121	5.326172	5.207138	5.324742	5.097314	5.269352	5.335221
#2	25.16613	5.284085	5.192648	5.328716	5.110440	5.289360	5.340373
#3	25.17908	5.310037	5.238428	5.346631	5.126994	5.347894	5.376286

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV02 Acquired: 3/13/2025 13:49:53 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**5.103279**	**5.034187**	**5.169602**
Stddev	.026425	.018289	.048205
%RSD	.5178099	.3632896	.9324748
#1	5.087854	5.013421	5.218525
#2	5.088191	5.041246	5.168132
#3	5.133792	5.047894	5.122148

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3274.246**	**71628.30**	**14156.82**	**2085.973**	**4387.404**
Stddev	10.144	146.41	60.75	5.900	7.165
%RSD	.3098143	.2044072	.4291016	.2828416	.1633003
#1	3272.593	71665.54	14107.37	2090.030	4391.226
#2	3285.115	71752.50	14224.63	2088.685	4391.847
#3	3265.030	71466.87	14138.45	2079.205	4379.139

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB02 Acquired: 3/13/2025 13:54:04 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.002280**	**.0010326**	**.0008389**	**.0016854**	**.0009020**	**-.004972**	**.0029080**
Stddev	.002535	.0008243	.0009164	.0018411	.0018758	.002488	.0013657
%RSD	111.1628	79.82309	109.2439	109.2419	207.9692	50.04360	46.96509
#1	-.001048	.0001318	.0008674	.0019969	-.000652	-.006820	.0044768
#2	-.005195	.0012170	-.000091	.0033509	.002986	-.005952	.0022630
#3	-.000597	.0017491	.001741	-.000292	.000372	-.002143	.0019842

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000242**	**.0000043**	**-.003695**	**.0002783**	**.0001673**	**.0000795**	**.0011773**
Stddev	.0000481	.0001070	.009120	.0002007	.0001656	.0002768	.0059662
%RSD	199.0110	2465.102	246.8146	72.11763	99.01127	348.3777	506.7776
#1	.0000747	.0001189	-.013722	.0001651	-.000021	-.000080	.0070739
#2	.0000190	-.000013	.004105	.0005100	.000289	.000399	-.004856
#3	-.000021	-.000093	-.001468	.0001597	.000235	-.000081	.001314

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000789**	**.0014163**	**-.000008**	**.0004444**	**.0238026**	**.0002016**	**-.000614**
Stddev	.000196	.0092458	.000059	.0002183	.0052493	.0007890	.000512
%RSD	24.85141	652.8079	697.8778	49.10764	22.05366	391.3962	83.47732
#1	-.000910	-.008214	.000021	.0005842	.0279769	-.000550	-.000024
#2	-.000895	.002240	-.000076	.0005562	.0179093	.000132	-.000872
#3	-.000563	.010223	.000029	.0001930	.0255216	.001023	-.000946

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0254096**	**.0057616**	**.0002665**	**-.000536**	**.0007145**	**.0040165**	**-.004289**
Stddev	.0084013	.0001682	.0002124	.000241	.0008010	.0037582	.000933
%RSD	33.06334	2.918570	79.72066	44.99583	112.1053	93.56926	21.74473
#1	.0222846	.0059475	.0004981	-.000272	.0016278	.0056688	-.003659
#2	.0190187	.0056201	.0000808	-.000744	.0003845	.0066654	-.005361
#3	.0349256	.0057172	.0002204	-.000592	.0001313	-.000285	-.003848

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB02 Acquired: 3/13/2025 13:54:04 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.003595	.0017093	.0001552
Stddev	.002238	.0005843	.0003392
%RSD	62.26571	34.18407	218.5172
#1	-.005872	.0016332	.0005466
#2	-.001398	.0011669	-.000053
#3	-.003514	.0023280	-.000028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3397.690	74150.87	14625.50	2166.226	4931.369
Stddev	11.149	230.61	18.19	8.050	14.611
%RSD	.3281458	.3109988	.1243536	.3716153	.2962928
#1	3405.446	73885.18	14628.46	2160.081	4935.110
#2	3402.711	74268.39	14606.02	2175.338	4943.745
#3	3384.913	74299.05	14642.03	2163.258	4915.250

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-10 Acquired: 3/13/2025 13:58:24 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.003931**	**-.003630**	**.0313954**	**.0052712**	**.0026052**	**.1481312**	**.1171170**
Stddev	.001741	.000928	.0016616	.0032713	.0013903	.0030260	.0007268
%RSD	44.29087	25.56019	5.292372	62.05988	53.36513	2.042785	.6206037
#1	-.004225	-.003674	.0299663	.0087608	.0015593	.1467889	.1165598
#2	-.005507	-.002681	.0310014	.0022741	.0041829	.1515961	.1168520
#3	-.002062	-.004535	.0332186	.0047787	.0020734	.1460085	.1179391

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000173**	**.0017164**	**5.483291**	**-.000157**	**.0082005**	**1.377312**	**.0774091**
Stddev	.000051	.0000485	.015080	.000043	.0003638	.006127	.0030889
%RSD	29.38668	2.824214	.2750254	27.71469	4.436218	.4448276	3.990387
#1	-.000153	.0017320	5.466747	-.000206	.0079426	1.374287	.0794105
#2	-.000230	.0016621	5.496268	-.000124	.0080422	1.373286	.0789651
#3	-.000134	.0017552	5.486858	-.000140	.0086166	1.384363	.0738516

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5546195**	**.4542265**	**.0109296**	**.0001075**	**340.0627**	**-.001238**	**.3374563**
Stddev	.0019078	.0139051	.0002476	.0000658	1.8244	.000551	.0010659
%RSD	.3439884	3.061279	2.265895	61.18069	.5364781	44.55306	.3158674
#1	.5534124	.4502621	.0110355	.0000548	340.8385	-.001855	.3366832
#2	.5536271	.4427341	.0106466	.0001812	337.9787	-.000792	.3370133
#3	.5568190	.4696833	.0111067	.0000864	341.3710	-.001066	.3386722

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6884068**	**.0157394**	**.0003045**	**-.000702**	**.0016143**	**.8932747**	**.0051732**
Stddev	.0078937	.0007566	.0001235	.000656	.0001732	.0086980	.0022370
%RSD	1.146656	4.807370	40.56307	93.48810	10.72899	.9737236	43.24262
#1	.6912304	.0150743	.0004337	-.000851	.0017106	.9002261	.0025993
#2	.6945004	.0155812	.0001876	-.001270	.0014144	.8960771	.0062709
#3	.6794897	.0165626	.0002923	.000016	.0017179	.8835209	.0066493

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-10 Acquired: 3/13/2025 13:58:24 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.3408979	-.000472	.0440281
Stddev	.0034589	.000717	.0001080
%RSD	1.014639	151.9731	.2453165
#1	.3446315	.000332	.0439259
#2	.3378026	-.001045	.0440173
#3	.3402597	-.000703	.0441411

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3143.542	69910.58	14106.72	2040.522	4192.665
Stddev	6.884	275.95	11.65	9.665	11.444
%RSD	.2189871	.3947208	.0825931	.4736375	.2729455
#1	3145.193	69640.81	14111.31	2037.377	4195.912
#2	3149.450	69898.60	14115.38	2032.822	4202.134
#3	3135.982	70192.32	14093.47	2051.368	4179.949

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-12 Acquired: 3/13/2025 14:02:47 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.002462**	**-.002927**	**.0892578**	**.0040035**	**.0018866**	**.0489787**	**.1181793**
Stddev	.001961	.002650	.0008938	.0022716	.0015558	.0044335	.0002710
%RSD	79.64598	90.54136	1.001339	56.73953	82.46594	9.051824	.2292773
#1	-.002080	-.005787	.0882958	.0047997	.0019972	.0518431	.1184914
#2	-.004585	-.000555	.0900623	.0014410	.0033842	.0512209	.1180428
#3	-.000720	-.002438	.0894154	.0057699	.0002785	.0438720	.1180038

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000090**	**.0010515**	**4.765159**	**.0001536**	**.0034400**	**.4860164**	**2.003688**
Stddev	.000038	.0001366	.019615	.0006546	.0000687	.0012040	.013962
%RSD	41.81277	12.99265	.4116361	426.1200	1.997672	.2477256	.6967944
#1	-.000090	.0011990	4.787392	.0008611	.0034047	.4854044	2.007198
#2	-.000052	.0010260	4.750298	-.000431	.0035192	.4852413	1.988306
#3	-.000128	.0009294	4.757786	.000030	.0033961	.4874034	2.015559

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4124520**	**1.995955**	**.0104666**	**.0000785**	**337.6491**	**.0018118**	**.4479119**
Stddev	.0007588	.003548	.0001873	.0000159	2.2539	.0009114	.0017301
%RSD	.1839626	.1777494	1.789279	20.26981	.6675167	50.30683	.3862663
#1	.4119055	2.000051	.0104990	.0000629	340.0122	.0007942	.4494606
#2	.4133183	1.993908	.0102652	.0000777	337.4119	.0025532	.4460446
#3	.4121323	1.993905	.0106355	.0000947	335.5232	.0020879	.4482306

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.217527**	**.0244755**	**.0000540**	**-.000308**	**.0008212**	**1.008176**	**.0060207**
Stddev	.018846	.0003955	.0000241	.000131	.0001527	.000788	.0014172
%RSD	1.547896	1.615927	44.64773	42.67455	18.59677	.0781834	23.53885
#1	1.195767	.0244505	.0000271	-.000405	.0006555	1.009012	.0076549
#2	1.228189	.0248829	.0000614	-.000158	.0009562	1.007446	.0051294
#3	1.228625	.0240931	.0000736	-.000361	.0008520	1.008069	.0052778

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-12 Acquired: 3/13/2025 14:02:47 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.3012202	.0030530	.0565154
Stddev	.0060251	.0014988	.0000988
%RSD	2.000233	49.09527	.1747830
#1	.2942678	.0040582	.0564239
#2	.3044741	.0037704	.0565023
#3	.3049189	.0013302	.0566201

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3213.148	69999.67	14675.47	2091.957	4279.821
Stddev	9.090	489.58	83.28	15.726	16.867
%RSD	.2828890	.6993986	.5674465	.7517524	.3940968
#1	3215.422	69545.32	14585.93	2075.346	4280.256
#2	3220.884	70518.15	14689.88	2106.617	4296.466
#3	3203.137	69935.53	14750.60	2093.907	4262.741

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-14 Acquired: 3/13/2025 14:07:11 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.1149075**	**.0073878**	**1.907094**	**-.016749**	**.0085376**	**61.97365**
Stddev	.0015472	.0023134	.011396	.002640	.0009907	.80701
%RSD	1.346496	31.31346	.5975468	15.76013	11.60421	1.302178
#1	.1132502	.0086147	1.895644	-.019022	.0093297	62.42768
#2	.1163140	.0047194	1.907205	-.013854	.0074267	61.04190
#3	.1151583	.0088293	1.918435	-.017372	.0088564	62.45138

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4428631**	**.0041712**	**.0025746**	**71.95883**	**.1382525**	**.0560422**
Stddev	.0053026	.0000287	.0003143	1.04798	.0009160	.0005443
%RSD	1.197352	.6884079	12.20854	1.456360	.6625624	.9711804
#1	.4470775	.0041415	.0022328	72.57282	.1379983	.0555397
#2	.4369092	.0041733	.0026399	70.74877	.1374904	.0559665
#3	.4446026	.0041988	.0028512	72.55491	.1392687	.0566204

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.18969**	**150.0268**	**7.634696**	**19.03100**	**.1943418**	**.0076163**
Stddev	.17875	.3713	.104549	.30919	.0019855	.0002775
%RSD	.7389688	.2474957	1.369393	1.624681	1.021652	3.643617
#1	24.02872	150.3734	7.701935	19.16796	.1921144	.0077139
#2	24.15829	149.6350	7.514245	18.67698	.1949853	.0073032
#3	24.38206	150.0720	7.687907	19.24806	.1959258	.0078319

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.98161**	**.1350665**	**3.521352**	**16.55806**	**-.008251**	**.0165670**
Stddev	.09154	.0040271	.015103	.02022	.002247	.0004032
%RSD	.3271511	2.981596	.4289013	.1221116	27.23596	2.433942
#1	28.02821	.1372331	3.511445	16.56230	-.008257	.0164275
#2	28.04047	.1304199	3.513875	16.53605	-.006001	.0162520
#3	27.87614	.1375466	3.538735	16.57581	-.010496	.0170214

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-14 Acquired: 3/13/2025 14:07:11 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.1002447	1.149754	F 67.86288	2.604508	F 10.55773	.1209384
Stddev	.0009314	.016567	.27132	.016751	.06873	.0014299
%RSD	.9291005	1.440933	.3998005	.6431552	.6509845	1.182298
#1	.0993299	1.163797	67.66289	2.588004	10.48148	.1212882
#2	.1011918	1.131482	67.75404	2.604025	10.57680	.1193661
#3	.1002126	1.153983	68.17172	2.621496	10.61492	.1221609

Elem	Sr4077
Units	ppm
Avg	.6261898
Stddev	.0084858
%RSD	1.355149
#1	.6328412
#2	.6166329
#3	.6290953

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3295.224	74978.77	14551.76	2180.824	4387.775
Stddev	26.784	153.78	195.76	5.647	33.268
%RSD	.8128049	.2051038	1.345239	.2589413	.7581925
#1	3315.565	75122.86	14456.99	2181.312	4416.704
#2	3305.229	74996.59	14776.87	2186.212	4395.198
#3	3264.878	74816.85	14421.44	2174.949	4351.423

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-01 Acquired: 3/13/2025 14:11:15 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0333917	.0029519	.2188027	-.024995	-.005585	144.0984	.6837014
Stddev	.0009330	.0033856	.0001695	.004997	.001072	.8645	.0024557
%RSD	2.794054	114.6894	.0774589	19.99045	19.18827	.5999681	.3591761
#1	.0344137	.0041091	.2188872	-.027031	-.004613	143.3101	.6810014
#2	.0325856	-.000860	.2186076	-.019302	-.006734	143.9621	.6843012
#3	.0331758	.005607	.2189133	-.028652	-.005407	145.0230	.6858017

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087407	-.006418	19.97422	.2105225	.1112622	.2238614	250.1534
Stddev	.0001747	.000156	.12460	.0009075	.0004109	.0004712	.4718
%RSD	1.998402	2.437630	.6238289	.4310676	.3693242	.2104970	.1886027
#1	.0085837	-.006566	19.87640	.2099661	.1109556	.2241035	250.1723
#2	.0087095	-.006254	19.93176	.2100317	.1111020	.2241624	249.6724
#3	.0089289	-.006435	20.11451	.2115697	.1117292	.2233184	250.6155

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.622742	35.83816	.2026622	.0007497	7.737120	.3876571	.4384553
Stddev	.020270	.27080	.0005345	.0001479	.044876	.0029715	.0026550
%RSD	.5595124	.7556061	.2637152	19.72949	.5800045	.7665242	.6055307
#1	3.601006	35.67299	.2020712	.0005898	7.716519	.3850962	.4367713
#2	3.626093	35.69081	.2028037	.0007776	7.788597	.3869598	.4370787
#3	3.641128	36.15068	.2031116	.0008816	7.706244	.3909152	.4415158

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.307072	-.251612	.0016132	.0086851	4.651775	8.692891	5.507975
Stddev	.008004	.008654	.0003083	.0005422	.027228	.018763	.031862
%RSD	.0859955	3.439584	19.10937	6.243381	.5853293	.2158417	.5784667
#1	9.313877	-.243998	.0019467	.0081250	4.626405	8.695461	5.471281
#2	9.298254	-.249815	.0013388	.0087228	4.648378	8.672975	5.524006
#3	9.309086	-.261024	.0015541	.0092075	4.680542	8.710236	5.528637

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-01 Acquired: 3/13/2025 14:11:15 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	1.487577	.2279997	.0869256
Stddev	.012186	.0003297	.0003224
%RSD	.8192055	.1445933	.3708908
#1	1.476221	.2281640	.0865757
#2	1.486059	.2276202	.0869906
#3	1.500452	.2282150	.0872106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3741.539	81478.65	17233.14	2403.678	4278.033
Stddev	10.870	353.67	140.84	14.884	12.984
%RSD	.2905153	.4340672	.8172699	.6192075	.3035067
#1	3753.964	81602.55	17355.45	2412.147	4292.945
#2	3736.868	81753.71	17264.82	2412.394	4271.923
#3	3733.786	81079.70	17079.16	2386.492	4269.231

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-03 Acquired: 3/13/2025 14:15:20 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0263588	.0035633	.1037443	-.017240	-.003347	71.46085	.5644663
Stddev	.0025518	.0015731	.0013703	.003088	.001123	.12540	.0013084
%RSD	9.681026	44.14697	1.320807	17.91431	33.55492	.1754857	.2317990
#1	.0240721	.0052875	.1035064	-.015779	-.004640	71.31702	.5639188
#2	.0258928	.0022064	.1025086	-.015153	-.002624	71.54727	.5659595
#3	.0291115	.0031959	.1052180	-.020788	-.002775	71.51825	.5635206

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059972	-.005371	15.58709	.1680132	.0727393	.2494948	155.1596
Stddev	.0000524	.000181	.01833	.0004616	.0006423	.0020027	.5865
%RSD	.8744838	3.365437	.1176287	.2747097	.8830109	.8027080	.3779902
#1	.0059695	-.005567	15.56700	.1675034	.0722309	.2480105	155.7843
#2	.0060577	-.005337	15.59135	.1681334	.0725258	.2487013	154.6208
#3	.0059644	-.005210	15.60291	.1684027	.0734611	.2517727	155.0737

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.169391	16.10349	.1156860	.0005917	.9685568	.1891067	.2536150
Stddev	.000405	.03748	.0004555	.0000993	.0104341	.0002733	.0013063
%RSD	.0345968	.2327627	.3937159	16.78329	1.077287	.1445264	.5150735
#1	1.168942	16.07478	.1160890	.0007036	.9686215	.1887945	.2550306
#2	1.169506	16.14589	.1151919	.0005139	.9789584	.1893032	.2533583
#3	1.169726	16.08980	.1157772	.0005576	.9580904	.1892222	.2524561

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.457138	-.210807	.0114914	.0054080	2.125585	6.817813	4.508949
Stddev	.011409	.004093	.0000922	.0001974	.002761	.028368	.026449
%RSD	.1766927	1.941774	.8025525	3.649185	.1298801	.4160871	.5865903
#1	6.449582	-.206234	.0114975	.0052121	2.122485	6.841579	4.504502
#2	6.470262	-.214127	.0115804	.0054051	2.127778	6.786407	4.485005
#3	6.451569	-.212061	.0113963	.0056068	2.126494	6.825451	4.537339

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-03 Acquired: 3/13/2025 14:15:20 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	5.067260	.1342781	.0916758
Stddev	.013832	.0003689	.0000138
%RSD	.2729666	.2747209	.0150160
#1	5.063163	.1340254	.0916645
#2	5.055940	.1341076	.0916717
#3	5.082678	.1347014	.0916911

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3676.648	80976.07	16564.37	2374.317	4480.813
Stddev	11.411	96.74	54.03	4.260	20.877
%RSD	.3103631	.1194654	.3261574	.1794356	.4659151
#1	3679.778	80876.14	16624.48	2369.626	4484.937
#2	3686.166	80982.80	16519.87	2375.378	4499.320
#3	3663.998	81069.26	16548.75	2377.946	4458.182

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-05 Acquired: 3/13/2025 14:19:27 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0732074	.0095671	2.355033	-.040120	-.003827	161.7785	1.446486
Stddev	.0024937	.0030317	.018629	.001719	.004312	.2980	.002005
%RSD	3.406292	31.68882	.7910192	4.283428	112.6565	.1842150	.1386031
#1	.0704497	.0077481	2.353123	-.038790	-.006752	161.4346	1.445728
#2	.0738692	.0078863	2.337432	-.042061	-.005854	161.9606	1.448759
#3	.0753035	.0130670	2.374543	-.039511	.001124	161.9404	1.444970

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0152343	.0022638	26.15869	.2827217	.1776444	3.851773	297.1157
Stddev	.0000460	.0003737	.05381	.0004920	.0012007	.022851	.5791
%RSD	.3019046	16.50971	.2057056	.1740140	.6759053	.5932515	.1948963
#1	.0152716	.0022587	26.18167	.2826109	.1778221	3.839019	296.5652
#2	.0151829	.0018926	26.19720	.2822945	.1763647	3.838145	297.0623
#3	.0152485	.0026400	26.09721	.2832596	.1787463	3.878153	297.7196

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.758579	58.48987	.3464646	.0023369	1.228855	.3499633	1.825455
Stddev	.014452	.09394	.0036121	.0004220	.011696	.0025384	.006836
%RSD	.1862688	.1606100	1.042571	18.05867	.9518117	.7253445	.3744679
#1	7.767746	58.56515	.3441667	.0026072	1.235890	.3506706	1.818047
#2	7.766071	58.51986	.3445990	.0025529	1.215354	.3520731	1.831520
#3	7.741919	58.38459	.3506280	.0018506	1.235323	.3471462	1.826798

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.64480	-.348928	.0236608	.0483443	3.606907	7.362039	9.428104
Stddev	.12152	.003625	.0007359	.0010198	.003832	.033301	.080223
%RSD	.5614488	1.038828	3.110372	2.109497	.1062455	.4523360	.8508933
#1	21.54119	-.350551	.0238692	.0471683	3.609733	7.330420	9.371604
#2	21.61465	-.351457	.0228431	.0488784	3.608443	7.358897	9.392780
#3	21.77856	-.344775	.0242700	.0489861	3.602545	7.396800	9.519927

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-05 Acquired: 3/13/2025 14:19:27 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	4.268355	.3938132	.2736249
Stddev	.037934	.0005634	.0003543
%RSD	.8887315	.1430750	.1294766
#1	4.237635	.3932247	.2733130
#2	4.256674	.3938670	.2740101
#3	4.310756	.3943478	.2735516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3888.350	85419.60	18074.48	2495.957	4228.665
Stddev	15.981	254.87	45.74	4.854	26.222
%RSD	.4110059	.2983764	.2530413	.1944657	.6200921
#1	3893.888	85711.98	18057.47	2500.107	4239.193
#2	3900.825	85302.55	18039.69	2497.144	4247.987
#3	3870.336	85244.28	18126.29	2490.620	4198.816

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-07 Acquired: 3/13/2025 14:23:29 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0422154**	**.0059359**	**.1237381**	**-.020734**	**-.004092**	**101.2748**
Stddev	.0007997	.0014140	.0008954	.002478	.003312	.1240
%RSD	1.894330	23.82191	.7236225	11.95069	80.95627	.1224526
#1	.0429836	.0072123	.1227055	-.022905	-.006101	101.1469
#2	.0413876	.0061794	.1242094	-.021262	-.005905	101.2831
#3	.0422750	.0044159	.1242995	-.018034	-.000268	101.3945

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1639439**	**.0063451**	**-.006935**	**8.700587**	**.1595739**	**.1071594**
Stddev	.0010338	.0000925	.000189	.012540	.0012838	.0003448
%RSD	.6306055	1.457205	2.718834	.1441224	.8045245	.3217500
#1	.1632852	.0063127	-.007117	8.711849	.1581266	.1067856
#2	.1651355	.0064494	-.006741	8.702837	.1600198	.1074649
#3	.1634110	.0062731	-.006946	8.687075	.1605753	.1072279

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1906356**	**185.9878**	**1.268144**	**20.90144**	**.1372508**	**.0003612**
Stddev	.0007590	.5946	.002676	.08926	.0006825	.0002733
%RSD	.3981560	.3196786	.2110059	.4270338	.4972294	75.65864
#1	.1897669	186.0962	1.268550	20.85405	.1368239	.0006010
#2	.1911704	185.3466	1.265288	20.84587	.1380379	.0000636
#3	.1909696	186.5208	1.270594	21.00439	.1368906	.0004191

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.870801**	**.2931575**	**.4978260**	**6.869913**	**-.214454**	**.0071510**
Stddev	.005034	.0009866	.0024724	.022388	.005822	.0002876
%RSD	.1753496	.3365436	.4966343	.3258886	2.714938	4.021655
#1	2.871359	.2940730	.4956940	6.844338	-.207798	.0068318
#2	2.875533	.2932869	.4972477	6.879430	-.218602	.0072315
#3	2.865511	.2921126	.5005363	6.885969	-.216962	.0073898

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-07 Acquired: 3/13/2025 14:23:29 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0081576	2.387520	6.977309	7.897429	F 119.0982	.2015331
Stddev	.0006401	.001918	.014601	.032684	.5357	.0017358
%RSD	7.846426	.0803281	.2092632	.4138529	.4497853	.8612777
#1	.0081588	2.388869	6.970920	7.860187	118.5237	.2015095
#2	.0075169	2.385325	6.966993	7.921341	119.5840	.1998092
#3	.0087971	2.388366	6.994016	7.910759	119.1868	.2032805

Elem	Sr4077
Units	ppm
Avg	.0968887
Stddev	.0002660
%RSD	.2745010
#1	.0969400
#2	.0966008
#3	.0971253

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3554.849	79138.04	16299.49	2355.319	4413.470
Stddev	9.471	192.00	39.96	5.645	14.398
%RSD	.2664318	.2426102	.2451395	.2396701	.3262299
#1	3565.786	79340.23	16345.46	2353.329	4429.222
#2	3549.465	79115.69	16273.08	2361.690	4400.989
#3	3549.298	78958.20	16279.93	2350.939	4410.198

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-09 Acquired: 3/13/2025 14:27:34 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.1985622**	**.0163514**	**4.221565**	**-.058933**	**.0073166**	**116.7843**	**.9398564**
Stddev	.0022911	.0017272	.008134	.003626	.0017856	.2835	.0026252
%RSD	1.153843	10.56312	.1926822	6.152549	24.40495	.2427881	.2793166
#1	.2011895	.0161071	4.223968	-.055714	.0057733	116.6051	.9397623
#2	.1975173	.0181878	4.212500	-.058226	.0069041	116.6365	.9372796
#3	.1969799	.0147594	4.228227	-.062861	.0092723	117.1112	.9425274

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0122756**	**.0053010**	**127.9534**	**.3340634**	**.1380582**	**19.40453**	**392.5705**
Stddev	.0000584	.0008431	.4100	.0022183	.0006186	.04031	3.0211
%RSD	.4761881	15.90428	.3204380	.6640242	.4480426	.2077334	.7695647
#1	.0122465	.0043874	128.3091	.3325685	.1376093	19.38124	395.9582
#2	.0123429	.0054668	127.5050	.3330096	.1378016	19.38128	391.5974
#3	.0122373	.0060490	128.0461	.3366121	.1387638	19.45108	390.1559

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.50446**	**24.63379**	**.3440858**	**-.002636**	**3.736649**	**.4354865**	**3.907813**
Stddev	.03864	.04934	.0013434	.000574	.030357	.0014902	.009080
%RSD	.3090126	.2002934	.3904249	21.77634	.8124122	.3422000	.2323452
#1	12.53653	24.65985	.3437057	-.002539	3.745479	.4372030	3.918266
#2	12.46156	24.57688	.3429734	-.002117	3.702856	.4347326	3.901891
#3	12.51530	24.66463	.3455783	-.003253	3.761612	.4345239	3.903281

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.64752**	**-.707228**	**.0254976**	**1.266817**	**5.548004**	**9.310163**	**6.415174**
Stddev	.08300	.014614	.0002536	.003854	.011446	.059661	.007765
%RSD	.7126314	2.066418	.9943904	.3041949	.2063158	.6408142	.1210415
#1	11.70051	-.691003	.0255145	1.266296	5.549336	9.311889	6.408250
#2	11.55186	-.719359	.0252361	1.263251	5.535950	9.249658	6.413702
#3	11.69020	-.711321	.0257423	1.270905	5.558727	9.368942	6.423569

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-09 Acquired: 3/13/2025 14:27:34 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	8.694876	.2338540	.8096590
Stddev	.032782	.0002146	.0015100
%RSD	.3770301	.0917708	.1864957
#1	8.669422	.2340026	.8105267
#2	8.683339	.2336080	.8079155
#3	8.731867	.2339515	.8105349

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3478.087	78072.99	14938.90	2287.365	4236.512
Stddev	7.186	183.14	10.17	7.725	8.603
%RSD	.2066158	.2345706	.0681037	.3377206	.2030567
#1	3482.801	77985.09	14939.01	2278.822	4237.690
#2	3481.644	78283.51	14928.67	2289.416	4244.465
#3	3469.816	77950.38	14949.02	2293.858	4227.382

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-11 Acquired: 3/13/2025 14:31:39 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0359756**	**.0129731**	**.2148719**	**-.020255**	**-.004512**	**76.90080**
Stddev	.0010018	.0009423	.0008266	.002270	.000776	.10532
%RSD	2.784526	7.263346	.3846783	11.20678	17.19022	.1369562
#1	.0348297	.0118990	.2156466	-.022634	-.004066	76.78055
#2	.0366852	.0136605	.2140018	-.020016	-.005407	76.94522
#3	.0364119	.0133598	.2149672	-.018113	-.004062	76.97664

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1522217**	**.0052892**	**-.008595**	**12.89407**	**.1150730**	**.0434041**
Stddev	.0007907	.0000466	.000247	.02245	.0005693	.0001349
%RSD	.5194644	.8802758	2.871485	.1741065	.4947436	.3108865
#1	.1530749	.0052428	-.008598	12.87420	.1157301	.0435597
#2	.1515136	.0052887	-.008841	12.88958	.1147610	.0433334
#3	.1520765	.0053359	-.008347	12.91842	.1147279	.0433192

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.189372**	**202.1766**	**1.112497**	**22.84836**	**.1067159**	**-.000547**
Stddev	.005651	.5531	.003192	.07013	.0001063	.000371
%RSD	.4751182	.2735642	.2869247	.3069473	.0996010	67.82823
#1	1.191903	202.7339	1.114992	22.84239	.1066018	-.000220
#2	1.182898	201.6279	1.113600	22.78141	.1067339	-.000950
#3	1.193315	202.1679	1.108900	22.92129	.1068121	-.000471

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.704066**	**.1388760**	**.6544242**	**6.030659**	**-.227601**	**.0371810**
Stddev	.026234	.0026318	.0004808	.005947	.002073	.0002797
%RSD	.3913175	1.895041	.0734740	.0986133	.9109477	.7521786
#1	6.733870	.1417025	.6541688	6.023871	-.225348	.0372278
#2	6.693862	.1384295	.6541249	6.033153	-.228027	.0368809
#3	6.684468	.1364961	.6549788	6.034953	-.229428	.0374344

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-11 Acquired: 3/13/2025 14:31:39 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0902699	1.528987	F 11.55768	3.856411	F 157.2399	.3403364
Stddev	.0014719	.002439	.01530	.021765	1.2108	.0010421
%RSD	1.630586	.1595286	.1324119	.5643962	.7700634	.3062040
#1	.0914976	1.530319	11.55784	3.866769	158.0109	.3406266
#2	.0886381	1.530471	11.54230	3.831401	155.8443	.3412026
#3	.0906740	1.526172	11.57291	3.871064	157.8646	.3391799

Elem	Sr4077
Units	ppm
Avg	.1784447
Stddev	.0003101
%RSD	.1738010
#1	.1788026
#2	.1782765
#3	.1782550

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3547.018	77980.10	15899.55	2283.585	4599.503
Stddev	16.686	210.69	34.38	8.071	24.407
%RSD	.4704275	.2701886	.2162530	.3534468	.5306509
#1	3542.309	77812.83	15863.77	2283.304	4588.105
#2	3565.553	78216.73	15932.35	2291.793	4627.524
#3	3533.193	77910.74	15902.51	2275.658	4582.880

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1491-02 Acquired: 3/13/2025 14:35:46 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.000757**	**.0009223**	**.0421633**	**.0011808**	**.0274114**	**2.249775**
Stddev	.001900	.0012139	.0004207	.0024484	.0004351	.004185
%RSD	251.0161	131.6120	.9978788	207.3451	1.587236	.1860187
#1	.001428	.0014875	.0423660	.0026060	.0269095	2.254591
#2	-.002019	-.000471	.0424444	.0025828	.0276816	2.247015
#3	-.001679	.001751	.0416796	-.001646	.0276430	2.247720

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1452827**	**.0002665**	**.0024803**	**25.10912**	**.0344049**	**.0044210**
Stddev	.0016309	.0000647	.0000316	.03922	.0009129	.0001910
%RSD	1.122597	24.27388	1.272837	.1561951	2.653329	4.320847
#1	.1467677	.0001964	.0024942	25.13080	.0334674	.0042039
#2	.1455433	.0003239	.0024442	25.13271	.0352910	.0044962
#3	.1435372	.0002792	.0025025	25.06385	.0344564	.0045631

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2448517**	**17.77591**	**.2191223**	**6.080847**	**.0386310**	**.0017095**
Stddev	.0015825	.12046	.0006166	.026458	.0000434	.0002871
%RSD	.6463099	.6776720	.2813895	.4351062	.1122494	16.79379
#1	.2446900	17.72499	.2198320	6.105927	.0386621	.0020258
#2	.2433562	17.91347	.2188167	6.083415	.0385815	.0016374
#3	.2465088	17.68926	.2187181	6.053198	.0386495	.0014654

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**521.4326**	**.0064699**	**.9545760**	**22.51925**	**.1418616**	**.0148925**
Stddev	5.6104	.0004684	.0028510	.22685	.0008330	.0002587
%RSD	1.075968	7.239579	.2986721	1.007370	.5871631	1.737263
#1	518.1732	.0059375	.9538824	22.43084	.1412375	.0146094
#2	527.9109	.0068183	.9577099	22.77700	.1428075	.0149516
#3	518.2136	.0066540	.9521358	22.34992	.1415399	.0151166

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1491-02 Acquired: 3/13/2025 14:35:46 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0103281	.0462200	F 26.83775	7.436160	F 29.30218	.0212625
Stddev	.0002978	.0021708	.23627	.015635	.16020	.0014276
%RSD	2.883775	4.696630	.8803717	.2102566	.5467251	6.714085
#1	.0103410	.0463166	26.70667	7.437631	29.13410	.0197523
#2	.0100240	.0483409	27.11051	7.419842	29.31930	.0225898
#3	.0106192	.0440026	26.69608	7.451008	29.45313	.0214453

Elem	Sr4077
Units	ppm
Avg	.2846994
Stddev	.0004825
%RSD	.1694665
#1	.2843395
#2	.2852476
#3	.2845110

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3122.176	67758.89	14661.92	2006.860	4060.174
Stddev	18.174	325.18	50.37	4.696	19.041
%RSD	.5820827	.4799148	.3435697	.2340068	.4689592
#1	3133.593	67826.74	14608.24	2007.387	4072.366
#2	3131.717	67405.14	14708.17	2001.922	4069.923
#3	3101.219	68044.80	14669.34	2011.270	4038.233

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV03 Acquired: 3/13/2025 14:40:03 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**5.126470**	**4.970811**	**5.152736**	**5.055544**	**5.043876**	**10.10511**	**9.834531**
Stddev	.016724	.035254	.004956	.013263	.008251	.03682	.049718
%RSD	.3262274	.7092144	.0961789	.2623434	.1635899	.3643905	.5055499
#1	5.141992	4.980244	5.157747	5.063759	5.053394	10.11934	9.810358
#2	5.128659	5.000389	5.152623	5.062629	5.039487	10.06329	9.801521
#3	5.108760	4.931800	5.147837	5.040243	5.038747	10.13269	9.891713

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2606511**	**2.544894**	**25.10587**	**1.054834**	**2.523681**	**1.271320**	**4.994064**
Stddev	.0010399	.001874	.06095	.001067	.003544	.004353	.019329
%RSD	.3989703	.0736421	.2427693	.1011761	.1404469	.3424004	.3870374
#1	.2606640	2.546190	25.07330	1.055771	2.527411	1.275450	4.972534
#2	.2596048	2.545746	25.06813	1.053673	2.523273	1.271735	4.999733
#3	.2616845	2.542745	25.17619	1.055058	2.520358	1.266774	5.009924

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.489387**	**25.13083**	**2.525800**	**1.284368**	**24.66097**	**2.518699**	**2.558259**
Stddev	.004176	.13813	.000837	.002380	.09613	.004558	.014204
%RSD	.1677636	.5496554	.0331360	.1853366	.3898241	.1809642	.5552127
#1	2.487677	25.02750	2.526647	1.283338	24.61504	2.516022	2.542222
#2	2.486337	25.07726	2.525780	1.287090	24.77145	2.516113	2.563299
#3	2.494147	25.28772	2.524974	1.282677	24.59642	2.523962	2.569255

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.51121**	**5.176209**	**5.057925**	**5.128156**	**4.950249**	**5.229926**	**5.126132**
Stddev	.07087	.014737	.012788	.004865	.008322	.031841	.005949
%RSD	.2891185	.2846994	.2528357	.0948767	.1681054	.6088210	.1160586
#1	24.45189	5.180398	5.070372	5.122657	4.948519	5.196187	5.132381
#2	24.58969	5.159832	5.058582	5.129913	4.942929	5.234143	5.125478
#3	24.49207	5.188398	5.044821	5.131900	4.959300	5.259449	5.120536

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV03 Acquired: 3/13/2025 14:40:03 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	4.962142	4.894748	4.977557
Stddev	.006716	.004497	.060101
%RSD	.1353469	.0918754	1.207443
#1	4.968233	4.899417	5.014235
#2	4.963253	4.890445	4.908197
#3	4.954939	4.894384	5.010241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3301.007	71608.58	14226.83	2080.837	4431.859
Stddev	13.339	95.17	43.92	9.641	11.228
%RSD	.4040764	.1329084	.3087176	.4633323	.2533547
#1	3287.903	71707.03	14214.52	2091.745	4420.607
#2	3300.549	71517.06	14275.59	2077.311	4431.905
#3	3314.568	71601.66	14190.38	2073.455	4443.064

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB03 Acquired: 3/13/2025 14:48:56 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0001658**	**.0013600**	**.0012141**	**-.000501**	**.0011453**	**-.007618**	**.0019363**
Stddev	.0008228	.0011263	.0006843	.001557	.0013955	.002376	.0005118
%RSD	496.3993	82.81386	56.36568	310.4694	121.8414	31.19528	26.43000
#1	.0003859	.0014579	.0007712	-.000456	-.000053	-.006763	.0015872
#2	.0008562	.0001880	.0008688	.001032	.002677	-.005787	.0016979
#3	-.000745	.0024341	.0020023	-.002080	.000811	-.010304	.0025237

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000026**	**-.000018**	**.0007566**	**.0001030**	**.0001981**	**-.000295**	**.0023265**
Stddev	.000030	.000047	.0035801	.0005950	.0000240	.000388	.0045986
%RSD	113.5608	262.1158	473.2075	577.8874	12.12332	131.4773	197.6646
#1	-.000058	.000025	.0048458	-.000029	.0002213	.000058	.0033370
#2	.000000	-.000067	-.000763	-.000415	.0001733	-.000711	-.002693
#3	-.000020	-.000012	-.001813	.000753	.0001998	-.000234	.006336

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000826**	**-.002104**	**-.000164**	**-.000004**	**.0283374**	**-.000100**	**-.000541**
Stddev	.000306	.009214	.000270	.000142	.0138177	.001202	.000352
%RSD	37.02951	437.9268	164.4881	3206.668	48.76123	1202.657	65.09288
#1	-.000850	.003085	-.000428	.000098	.0162694	-.001468	-.000332
#2	-.001119	-.012742	.000111	.000055	.0253326	.000786	-.000947
#3	-.000508	.003346	-.000176	-.000166	.0434103	.000382	-.000343

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0694044**	**-.001161**	**.0000099**	**-.001782**	**.0006306**	**-.001752**	**-.004989**
Stddev	.0285602	.000872	.0004283	.000405	.0003406	.002186	.001155
%RSD	41.15047	75.13910	4343.723	22.74883	54.00036	124.8238	23.14235
#1	.0472697	-.001565	.0003475	-.001539	.0004906	-.003891	-.003802
#2	.0593003	-.001759	-.000472	-.001558	.0003825	-.001843	-.006108
#3	.1016431	-.000160	.000154	-.002250	.0010189	.000479	-.005058

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB03 Acquired: 3/13/2025 14:48:56 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0014915	.0021374	-.000033
Stddev	.0035392	.0007167	.000046
%RSD	237.2832	33.52970	139.6098
#1	-.002261	.0013587	.000012
#2	.001967	.0027693	-.000079
#3	.004769	.0022841	-.000032

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3488.731	76460.92	14533.91	2267.092	5043.760
Stddev	4.208	503.65	27.30	23.026	7.518
%RSD	.1206099	.6586979	.1878133	1.015649	.1490592
#1	3489.363	76135.65	14513.69	2247.246	5049.106
#2	3484.243	76206.05	14564.96	2261.692	5035.163
#3	3492.586	77041.06	14523.07	2292.337	5047.009

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1495-01 Acquired: 3/13/2025 14:53:16 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0028093**	**-.000559**	**.0296287**	**-.003991**	**.0029265**	**1.564569**
Stddev	.0018712	.000701	.0006317	.003684	.0011408	.003843
%RSD	66.60643	125.4248	2.132104	92.30846	38.98355	.2456420
#1	.0048564	-.001076	.0303576	-.003653	.0030824	1.560760
#2	.0023841	-.000841	.0292887	-.000487	.0017157	1.564503
#3	.0011873	.000239	.0292397	-.007831	.0039813	1.568446

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1045823**	**.0002391**	**-.000305**	**125.0191**	**.0070898**	**.0046324**
Stddev	.0004092	.0000270	.000119	.3678	.0002368	.0002782
%RSD	.3912882	11.27580	38.97144	.2942194	3.340519	6.006345
#1	.1050156	.0002590	-.000265	124.6309	.0071269	.0043421
#2	.1042025	.0002499	-.000438	125.3625	.0073059	.0048967
#3	.1045288	.0002084	-.000211	125.0638	.0068366	.0046586

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0281154**	**16.33222**	**.4263904**	**11.11169**	**.0119325**	**.0004000**
Stddev	.0001377	.06843	.0025683	.05777	.0001637	.0003078
%RSD	.4896863	.4189704	.6023434	.5199241	1.372006	76.93188
#1	.0282296	16.25321	.4250613	11.08739	.0121116	.0001079
#2	.0279625	16.37271	.4293510	11.07004	.0118951	.0007214
#3	.0281541	16.37073	.4247590	11.17765	.0117907	.0003709

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1657.437**	**.0066959**	**.9328908**	**16.27108**	**.0748022**	**.0078919**
Stddev	36.575	.0015678	.0066060	.08865	.0010507	.0002883
%RSD	2.206692	23.41407	.7081164	.5448559	1.404626	3.653334
#1	1656.203	.0050870	.9260173	16.18042	.0746937	.0078509
#2	1694.614	.0082190	.9391920	16.27524	.0759029	.0081984
#3	1621.496	.0067816	.9334631	16.35758	.0738099	.0076262

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1495-01 Acquired: 3/13/2025 14:53:16 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.003126	.0604466	8.498285	1.500801	F 37.48291	.0132556
Stddev	.001445	.0005683	.027648	.000394	.13716	.0007198
%RSD	46.22940	.9402224	.3253353	.0262198	.3659241	5.430129
#1	-.002983	.0607799	8.469043	1.501070	37.48985	.0124433
#2	-.001757	.0597904	8.501814	1.500350	37.34241	.0138143
#3	-.004637	.0607695	8.524000	1.500985	37.61647	.0135092

Elem	Sr4077
Units	ppm
Avg	.4295398
Stddev	.0014743
%RSD	.3432371
#1	.4279309
#2	.4308262
#3	.4298624

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2868.925	62785.69	13406.53	1893.259	3523.105
Stddev	11.663	263.63	59.36	10.351	13.328
%RSD	.4065171	.4198882	.4427378	.5467131	.3782892
#1	2882.382	63089.95	13461.29	1904.899	3538.475
#2	2861.759	62641.91	13343.45	1885.090	3514.754
#3	2862.633	62625.21	13414.85	1889.787	3516.086

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1495-02 Acquired: 3/13/2025 14:57:36 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0122959**	**-.000844**	**.0357608**	**.0000740**	**.0038783**	**2.105145**
Stddev	.0033969	.001792	.0009314	.0007215	.0009192	.003827
%RSD	27.62657	212.2351	2.604538	975.3671	23.69996	.1817992
#1	.0131618	-.002785	.0361522	-.000533	.0035007	2.107612
#2	.0085498	-.000495	.0346975	.000872	.0032081	2.107087
#3	.0151761	.000747	.0364326	-.000117	.0049262	2.100736

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1151388**	**.0002137**	**-.000578**	**126.1224**	**.0092225**	**.0046828**
Stddev	.0007234	.0000207	.000038	.2671	.0003106	.0003325
%RSD	.6282620	9.696922	6.556450	.2118095	3.368141	7.100093
#1	.1159655	.0001938	-.000621	126.4067	.0095084	.0050353
#2	.1146220	.0002122	-.000565	126.0841	.0092670	.0046384
#3	.1148289	.0002351	-.000549	125.8765	.0088920	.0043748

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0320797**	**19.46410**	**.4517459**	**12.43849**	**.0120632**	**.0006168**
Stddev	.0001592	.07338	.0015952	.07727	.0005034	.0003609
%RSD	.4962960	.3769864	.3531198	.6212013	4.172993	58.51229
#1	.0320901	19.38701	.4529573	12.49592	.0117715	.0010299
#2	.0319155	19.53310	.4523420	12.35064	.0117736	.0003628
#3	.0322334	19.47218	.4499385	12.46890	.0126445	.0004577

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1937.266**	**.0087028**	**1.002558**	**18.61596**	**.1050208**	**.0076124**
Stddev	21.719	.0014790	.002182	.18007	.0005076	.0001972
%RSD	1.121107	16.99486	.2176024	.9672829	.4833108	2.590545
#1	1936.490	.0082401	1.004072	18.41208	.1050700	.0073852
#2	1959.363	.0075104	1.000058	18.75327	.1055020	.0077139
#3	1915.946	.0103579	1.003544	18.68251	.1044904	.0077383

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1495-02 Acquired: 3/13/2025 14:57:36 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.003499	.0838006	F 10.63061	1.599913	F 37.39093	.0302775
Stddev	.000131	.0007999	.04301	.001096	.08825	.0003858
%RSD	3.739784	.9544952	.4046065	.0685287	.2360264	1.274315
#1	-.003394	.0832219	10.58338	1.600373	37.32377	.0298385
#2	-.003456	.0847133	10.66753	1.600705	37.35814	.0305626
#3	-.003645	.0834666	10.64094	1.598662	37.49089	.0304316

Elem	Sr4077
Units	ppm
Avg	.4478318
Stddev	.0010610
%RSD	.2369222
#1	.4469626
#2	.4490141
#3	.4475186

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2828.556	60975.86	14034.08	1831.094	3467.773
Stddev	6.578	82.95	59.04	5.392	7.198
%RSD	.2325613	.1360438	.4206771	.2944471	.2075787
#1	2825.368	61045.74	13966.37	1829.774	3472.469
#2	2836.121	60884.19	14061.08	1837.023	3471.364
#3	2824.179	60997.66	14074.79	1826.486	3459.485

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-02 Acquired: 3/13/2025 15:01:56 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.004578**	**-.005013**	**.0714577**	**.0021561**	**.0023522**	**.0132964**	**.2324696**
Stddev	.001451	.001268	.0015091	.0024146	.0014603	.0036066	.0009552
%RSD	31.69255	25.30014	2.111811	111.9882	62.08028	27.12488	.4108767
#1	-.006173	-.004487	.0720258	.0049414	.0011509	.0112894	.2324622
#2	-.004225	-.006459	.0697471	.0008736	.0019282	.0111398	.2315182
#3	-.003337	-.004092	.0726003	.0006534	.0039776	.0174601	.2334285

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000052**	**.0004785**	**32.04328**	**-.000246**	**.0053291**	**.0109426**	**1.732005**
Stddev	.0000342	.0000241	.03678	.000365	.0002772	.0003495	.007701
%RSD	659.7391	5.028867	.1147956	148.2693	5.200908	3.194153	.4446348
#1	.0000102	.0004636	32.04681	-.000625	.0050621	.0112864	1.724136
#2	.0000366	.0005062	32.07817	-.000217	.0053098	.0105876	1.739527
#3	-.000031	.0004656	32.00485	.000103	.0056154	.0109538	1.732352

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6480976**	**1.627854**	**.0065124**	**.0000347**	**331.8984**	**-.000196**	**.0864858**
Stddev	.0008293	.004527	.0002811	.0001681	1.6772	.000576	.0006519
%RSD	.1279629	.2780726	4.316049	483.9658	.5053260	293.7561	.7537962
#1	.6490065	1.626161	.0065322	.0000297	330.5174	-.000497	.0858929
#2	.6473820	1.624419	.0067830	.0002052	333.7647	-.000560	.0871840
#3	.6479043	1.632984	.0062219	-.000131	331.4131	.000468	.0863807

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.512600**	**.0134502**	**.0001087**	**-.001525**	**-.000062**	**.4940651**	**.0015834**
Stddev	.032342	.0008884	.0001038	.000707	.000671	.0033623	.0016291
%RSD	2.138145	6.605133	95.52902	46.35542	1081.136	.6805397	102.8845
#1	1.487707	.0144486	.0001220	-.001530	.000712	.4901826	.0032541
#2	1.549155	.0127468	-.000001	-.000816	-.000473	.4960007	-.000001
#3	1.500936	.0131552	.000205	-.002229	-.000425	.4960119	.001497

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-02 Acquired: 3/13/2025 15:01:56 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.3680296	-.005208	.1033904
Stddev	.0015615	.000564	.0000979
%RSD	.4242721	10.82876	.0947237
#1	.3698211	-.005015	.1033108
#2	.3673106	-.004766	.1034998
#3	.3669573	-.005844	.1033607

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3193.767	70513.81	14879.07	2051.119	4241.819
Stddev	5.108	248.92	68.25	8.324	10.336
%RSD	.1599496	.3530056	.4586940	.4058149	.2436670
#1	3189.574	70687.21	14805.40	2058.914	4232.172
#2	3199.457	70228.59	14891.69	2042.351	4252.728
#3	3192.270	70625.63	14940.13	2052.091	4240.558

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-04 Acquired: 3/13/2025 15:06:22 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0035037	-.003385	.0118611	.0025576	.0031378	.0142533	.1606181
Stddev	.0013300	.001250	.0021154	.0024590	.0017904	.0018371	.0007279
%RSD	37.95938	36.92751	17.83460	96.14691	57.05834	12.88874	.4532110
#1	.0024421	-.003749	.0099460	.0036851	.0044872	.0137408	.1598104
#2	.0030734	-.004412	.0141317	.0042507	.0011067	.0127269	.1612234
#3	.0049955	-.001993	.0115054	-.000263	.0038194	.0162922	.1608204

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000698	-.001455	106.6138	-.000116	.0029449	.0071916	23.12802
Stddev	.0000396	.000022	.2702	.000203	.0003583	.0002823	.26108
%RSD	56.76922	1.536324	.2534575	174.1378	12.16613	3.925377	1.128858
#1	.0001091	-.001460	106.4095	.000025	.0025312	.0072056	22.87450
#2	.0000298	-.001430	106.9202	-.000349	.0031483	.0074667	23.11351
#3	.0000705	-.001474	106.5116	-.000026	.0031552	.0069026	23.39606

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.284110	2.384083	.0261034	.0000154	394.4475	.0012343	.1855472
Stddev	.004782	.022585	.0003115	.0001334	3.7087	.0013818	.0023885
%RSD	.3724194	.9473152	1.193203	868.5825	.9402308	111.9473	1.287291
#1	1.278657	2.366298	.0259374	.0000666	390.4906	.0024988	.1835157
#2	1.286083	2.409493	.0259101	-.000136	395.0075	.0014448	.1849476
#3	1.287590	2.376457	.0264627	.000116	397.8443	-.000241	.1881785

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.718520	-.009482	.0025054	-.002484	-.001837	.8703134	.1661073
Stddev	.047830	.000242	.0001251	.000991	.000172	.0112010	.0043262
%RSD	2.783226	2.556673	4.993796	39.90561	9.336300	1.287008	2.604466
#1	1.673486	-.009427	.0025185	-.003576	-.001880	.8625942	.1676829
#2	1.713349	-.009747	.0026234	-.002239	-.001983	.8651856	.1612141
#3	1.768726	-.009272	.0023742	-.001639	-.001648	.8831604	.1694249

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-04 Acquired: 3/13/2025 15:06:22 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	1.513665	-.007338	.3821242
Stddev	.006518	.000983	.0012614
%RSD	.4305819	13.40078	.3300980
#1	1.517208	-.008321	.3807558
#2	1.506143	-.006355	.3832404
#3	1.517643	-.007338	.3823764

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3178.315	69948.17	15146.45	2041.311	4180.200
Stddev	1.551	615.29	42.59	14.155	7.994
%RSD	.0487931	.8796306	.2811719	.6934250	.1912448
#1	3176.695	70580.44	15160.62	2057.377	4175.002
#2	3179.786	69912.66	15098.59	2035.881	4189.406
#3	3178.465	69351.40	15180.16	2030.675	4176.192

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06 Acquired: 3/13/2025 15:10:45 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.004039**	**-.004715**	**.0053197**	**.0058133**	**.0015852**	**.5809411**	**.0920214**
Stddev	.001695	.001305	.0008828	.0031247	.0013793	.0053504	.0013734
%RSD	41.96342	27.68487	16.59406	53.75165	87.00985	.9209903	1.492465
#1	-.003366	-.003517	.0062964	.0033020	-.000005	.5791509	.0912354
#2	-.002783	-.004522	.0050841	.0093126	.002453	.5767153	.0936073
#3	-.005967	-.006106	.0045787	.0048252	.002308	.5869570	.0912216

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000522**	**.0002713**	**49.61003**	**.0014411**	**.0100419**	**.0054480**	**.4640984**
Stddev	.0000276	.0000642	.08473	.0003496	.0000587	.0001174	.0058281
%RSD	52.83395	23.64980	.1707964	24.26181	.5846442	2.154986	1.255799
#1	.0000609	.0002050	49.69567	.0013799	.0100133	.0055195	.4667873
#2	.0000743	.0002760	49.60818	.0011261	.0100030	.0055119	.4574112
#3	.0000213	.0003330	49.52624	.0018173	.0101094	.0053125	.4680966

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4160458**	**2.111096**	**.0124498**	**-.000100**	**342.0208**	**.0001634**	**.0716971**
Stddev	.0004440	.015841	.0001007	.000235	1.5886	.0015403	.0002623
%RSD	.1067319	.7503835	.8086942	235.7521	.4644601	942.3761	.3657865
#1	.4160710	2.116339	.0125573	-.000245	343.1068	-.001417	.0714050
#2	.4155897	2.123650	.0123577	.000172	342.7580	.000247	.0719122
#3	.4164767	2.093297	.0124345	-.000226	340.1976	.001661	.0717742

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.871789**	**.0082627**	**.0008314**	**-.001745**	**.0001487**	**1.949484**	**.0034246**
Stddev	.053788	.0008090	.0001115	.000700	.0008866	.008840	.0017782
%RSD	1.389237	9.790786	13.40832	40.08904	596.1598	.4534723	51.92432
#1	3.846162	.0078295	.0008888	-.002428	-.000384	1.939307	.0032167
#2	3.835606	.0091961	.0007029	-.001029	.001172	1.955252	.0017595
#3	3.933598	.0077627	.0009025	-.001779	-.000343	1.953895	.0052977

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06 Acquired: 3/13/2025 15:10:45 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	2.772534	-.006150	.1480195
Stddev	.023425	.000721	.0004674
%RSD	.8448811	11.71783	.3157427
#1	2.790263	-.005769	.1483044
#2	2.781360	-.005700	.1474801
#3	2.745978	-.006981	.1482739

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3286.980	71436.19	14683.71	2117.710	4347.666
Stddev	15.326	405.58	27.29	5.732	15.420
%RSD	.4662501	.5677528	.1858519	.2706774	.3546718
#1	3280.154	71898.95	14685.67	2121.296	4339.338
#2	3276.252	71142.46	14655.50	2120.736	4338.201
#3	3304.532	71267.17	14709.97	2111.099	4365.459

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06DUP Acquired: 3/13/2025 15:15:10 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.005030**	**-.005086**	**.0041059**	**.0044715**	**.0012278**	**.5817619**	**.0941254**
Stddev	.002025	.000499	.0009047	.0027360	.0019694	.0023736	.0007580
%RSD	40.26584	9.807703	22.03313	61.18700	160.3910	.4080059	.8053152
#1	-.007152	-.005607	.0051427	.0019945	-.000496	.5805541	.0933962
#2	-.003118	-.004613	.0034771	.0040117	.000806	.5844965	.0949093
#3	-.004821	-.005040	.0036978	.0074082	.003374	.5802350	.0940706

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000018**	**.0002130**	**49.92114**	**.0017706**	**.0100460**	**.0052574**	**.4782506**
Stddev	.000037	.0000549	.04569	.0002279	.0002007	.0000771	.0057178
%RSD	209.0639	25.79064	.0915292	12.87195	1.997964	1.466199	1.195570
#1	-.000046	.0002591	49.87116	.0020242	.0098795	.0053213	.4841681
#2	.000024	.0001522	49.96078	.0015828	.0102688	.0051718	.4727559
#3	-.000031	.0002276	49.93146	.0017048	.0099895	.0052791	.4778277

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4158013**	**2.103612**	**.0123257**	**.0000578**	**348.5983**	**.0010768**	**.0709632**
Stddev	.0010579	.002075	.0002465	.0001190	4.3030	.0009530	.0006017
%RSD	.2544147	.0986514	2.000141	205.9068	1.234385	88.50505	.8479127
#1	.4145999	2.106006	.0124819	-.000067	352.5397	.0020254	.0708006
#2	.4165934	2.102311	.0120415	.000169	344.0075	.0001194	.0704594
#3	.4162105	2.102520	.0124538	.000071	349.2479	.0010855	.0716294

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.957639**	**.0077238**	**.0009055**	**-.001830**	**.0003030**	**1.979603**	**.0046700**
Stddev	.010313	.0004392	.0001079	.000763	.0002285	.009068	.0020880
%RSD	.2605747	5.686327	11.91557	41.66178	75.39275	.4580564	44.71067
#1	3.946388	.0073368	.0010300	-.001040	.0002097	1.969133	.0026093
#2	3.966642	.0076333	.0008405	-.002561	.0001360	1.984713	.0046164
#3	3.959888	.0082011	.0008460	-.001890	.0005634	1.984962	.0067842

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06DUP Acquired: 3/13/2025 15:15:10 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**2.797062**	**-.005636**	**.1489866**
Stddev	.006273	.000089	.0001414
%RSD	.2242857	1.585411	.0948881
#1	2.795990	-.005678	.1489727
#2	2.803802	-.005533	.1491344
#3	2.791393	-.005696	.1488526

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3242.882**	**71794.71**	**15113.13**	**2111.266**	**4291.672**
Stddev	6.500	164.77	38.91	11.676	12.045
%RSD	.2004446	.2295029	.2574678	.5530275	.2806664
#1	3247.418	71865.94	15099.38	2106.071	4299.156
#2	3235.435	71911.89	15157.04	2124.638	4277.777
#3	3245.791	71606.31	15082.95	2103.089	4298.083

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06LX5 Acquired: 3/13/2025 15:19:35 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.001785**	**-.000186**	**.0027720**	**.0030138**	**.0000451**	**.1168033**	**.0204381**
Stddev	.001522	.001251	.0008075	.0022888	.0009431	.0031016	.0003601
%RSD	85.22053	670.8139	29.13041	75.94250	2093.058	2.655438	1.762006
#1	-.000629	.001161	.0036766	.0020895	.0010969	.1192978	.0206167
#2	-.001218	-.001311	.0021237	.0013318	-.000237	.1177816	.0200236
#3	-.003509	-.000409	.0025158	.0056202	-.000725	.1133304	.0206740

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000004**	**.0000481**	**10.52859**	**-.000141**	**.0020676**	**.0009622**	**.1023632**
Stddev	.000045	.0000479	.01496	.000146	.0001938	.0002588	.0077155
%RSD	1182.179	99.59408	.1420609	103.2877	9.374796	26.89565	7.537343
#1	-.000054	.0000505	10.54183	.000023	.0021405	.0006649	.1112470
#2	.000013	.0000948	10.53157	-.000256	.0022145	.0011373	.0985020
#3	.000030	-.000001	10.51236	-.000191	.0018479	.0010843	.0973406

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0865388**	**.4494563**	**.0025074**	**.0002613**	**70.10296**	**.0008696**	**.0144905**
Stddev	.0005911	.0224779	.0000782	.0002688	.36032	.0008134	.0001569
%RSD	.6830216	5.001129	3.117333	102.8674	.5139838	93.54318	1.082911
#1	.0860943	.4433029	.0025544	.0005513	70.47400	.0014675	.0143097
#2	.0872096	.4743700	.0024172	.0002122	70.08044	.0011980	.0145712
#3	.0863126	.4306959	.0025506	.0000205	69.75442	-.000057	.0145907

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9229913**	**-.002167**	**.0001984**	**-.000879**	**.0009079**	**.4031569**	**-.003909**
Stddev	.0135743	.000916	.0004771	.000674	.0003438	.0022866	.001800
%RSD	1.470689	42.27848	240.5206	76.62285	37.86677	.5671843	46.03825
#1	.9084210	-.002674	.0007429	-.000110	.0009416	.4012300	-.003787
#2	.9252723	-.001110	-.000146	-.001365	.0012335	.4025570	-.002173
#3	.9352807	-.002719	-.000002	-.001162	.0005485	.4056837	-.005766

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06LX5 Acquired: 3/13/2025 15:19:35 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.5625482	.0084457	.0311720
Stddev	.0040943	.0012093	.0000794
%RSD	.7278136	14.31840	.2547820
#1	.5615918	.0073657	.0311042
#2	.5670360	.0082192	.0312594
#3	.5590167	.0097523	.0311526

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3388.565	73470.54	14950.58	2152.853	4638.614
Stddev	17.469	173.64	42.99	2.319	21.747
%RSD	.5155229	.2363365	.2875806	.1077008	.4688175
#1	3383.085	73287.35	14990.76	2155.353	4632.028
#2	3374.493	73491.56	14905.24	2150.773	4620.922
#3	3408.117	73632.71	14955.74	2152.432	4662.893

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06MS Acquired: 3/13/2025 15:23:53 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.7804302	1.730179	.9272565	1.889482	.7795168	2.436797	.2652758
Stddev	.0018125	.003992	.0016138	.002052	.0023635	.008376	.0002559
%RSD	.2322440	.2307142	.1740432	.1086085	.3031996	.3437143	.0964802
#1	.7795925	1.731928	.9257602	1.890720	.7811081	2.441009	.2654554
#2	.7791880	1.732998	.9270427	1.887113	.7768010	2.442231	.2653892
#3	.7825100	1.725611	.9289665	1.890612	.7806414	2.427151	.2649827

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1905308	.1929533	48.43389	.4061525	.2026169	.2862139	3.337223
Stddev	.0008906	.0005878	.12502	.0011666	.0001918	.0004855	.001739
%RSD	.4674189	.3046164	.2581235	.2872250	.0946568	.1696212	.0521067
#1	.1914063	.1923017	48.52603	.4073750	.2027799	.2859104	3.337161
#2	.1896259	.1931147	48.29158	.4060311	.2026653	.2859576	3.335516
#3	.1905602	.1934435	48.48407	.4050514	.2024056	.2867739	3.338992

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5838534	3.836374	.4912973	.0731554	328.2641	.2869665	.2643026
Stddev	.0011114	.019000	.0005757	.0004896	.5525	.0007487	.0015836
%RSD	.1903514	.4952481	.1171709	.6692651	.1683139	.2608895	.5991472
#1	.5850706	3.857646	.4911158	.0729843	328.8439	.2876222	.2626766
#2	.5828927	3.830386	.4908343	.0737075	327.7437	.2871265	.2658399
#3	.5835970	3.821090	.4919419	.0727742	328.2047	.2861507	.2643912

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.58817	.2619812	.4071497	.6858066	.1890663	2.653698	6.091044
Stddev	.11050	.0007644	.0010610	.0013305	.0004210	.008393	.012889
%RSD	.8132143	.2917941	.2605787	.1940048	.2226742	.3162769	.2115992
#1	13.52248	.2627694	.4074431	.6857770	.1894510	2.654400	6.076344
#2	13.71574	.2612429	.4059730	.6844913	.1891313	2.661719	6.100405
#3	13.52628	.2619313	.4080331	.6871517	.1886165	2.644977	6.096384

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06MS Acquired: 3/13/2025 15:23:53 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	2.649881	.1862554	.3272102
Stddev	.007413	.0011429	.0008501
%RSD	.2797403	.6136116	.2598148
#1	2.641825	.1859216	.3276948
#2	2.651404	.1853166	.3277072
#3	2.656414	.1875281	.3262285

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3260.289	71860.51	14785.24	2093.774	4312.556
Stddev	5.040	117.81	89.12	5.641	2.861
%RSD	.1545890	.1639472	.6027689	.2693967	.0663486
#1	3256.863	71756.50	14692.58	2093.506	4315.158
#2	3266.076	71836.59	14870.34	2088.272	4313.018
#3	3257.927	71988.45	14792.80	2099.544	4309.492

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06MSD Acquired: 3/13/2025 15:28:04 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.7724737	1.721494	.9234760	1.866246	.7695921	2.434717	.2702220
Stddev	.0046027	.013638	.0030787	.000892	.0026200	.007103	.0013353
%RSD	.5958369	.7921987	.3333826	.0477927	.3404366	.2917508	.4941399
#1	.7719531	1.736485	.9224529	1.866388	.7667736	2.426543	.2694394
#2	.7681534	1.709822	.9269360	1.867059	.7700492	2.438220	.2694628
#3	.7773145	1.718174	.9210391	1.865292	.7719534	2.439389	.2717638

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1904116	.1924568	48.93951	.3987480	.2025084	.2847203	3.333020
Stddev	.0009668	.0001773	.10236	.0008682	.0000722	.0003508	.043262
%RSD	.5077457	.0921117	.2091624	.2177187	.0356633	.1232185	1.297990
#1	.1901130	.1924359	48.89340	.3996642	.2024746	.2846987	3.362490
#2	.1914924	.1926435	48.86832	.3986422	.2025913	.2843807	3.283353
#3	.1896292	.1922908	49.05682	.3979376	.2024592	.2850814	3.353219

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5865223	3.886410	.4922949	.0724170	326.2331	.2883838	.2640458
Stddev	.0008394	.001275	.0001348	.0005610	2.9043	.0032292	.0001058
%RSD	.1431140	.0327986	.0273737	.7746656	.8902392	1.119740	.0400777
#1	.5868199	3.887695	.4921413	.0729005	329.3540	.2913380	.2639845
#2	.5855747	3.886388	.4923500	.0718020	323.6098	.2849364	.2639849
#3	.5871724	3.885146	.4923933	.0725487	325.7354	.2888770	.2641680

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.52300	.2610451	.4053797	.6801866	.1893150	2.637958	6.075285
Stddev	.08785	.0018397	.0007732	.0009406	.0015728	.024281	.012904
%RSD	.6496396	.7047534	.1907460	.1382850	.8308013	.9204382	.2124048
#1	13.55069	.2619859	.4056883	.6801751	.1877044	2.640863	6.062147
#2	13.42465	.2622240	.4044999	.6811329	.1893936	2.612355	6.075767
#3	13.59368	.2589252	.4059511	.6792518	.1908471	2.660656	6.087942

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06MSD Acquired: 3/13/2025 15:28:04 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	2.634810	.1865116	.3296714
Stddev	.005716	.0009141	.0017708
%RSD	.2169436	.4900840	.5371419
#1	2.630129	.1857319	.3290423
#2	2.641180	.1862853	.3283010
#3	2.633120	.1875176	.3316708

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3276.408	72716.01	14817.03	2112.725	4329.283
Stddev	14.423	70.89	49.89	.971	13.898
%RSD	.4401988	.0974835	.3367069	.0459735	.3210254
#1	3281.988	72634.28	14831.54	2111.713	4338.691
#2	3287.206	72752.96	14761.49	2112.812	4335.839
#3	3260.028	72760.78	14858.05	2113.650	4313.320

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06A Acquired: 3/13/2025 15:34:12 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.7499624**	**1.709394**	**.9078414**	**1.805325**	**.7456657**	**2.376367**	**.2705274**
Stddev	.0046870	.004597	.0041664	.001817	.0021134	.010608	.0021938
%RSD	.6249718	.2689223	.4589296	.1006328	.2834305	.4464076	.8109490
#1	.7490135	1.711285	.9030333	1.805119	.7460052	2.386708	.2702888
#2	.7458224	1.712743	.9103891	1.803621	.7434031	2.365510	.2684626
#3	.7550513	1.704153	.9101017	1.807237	.7475889	2.376883	.2728307

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1876342**	**.1890401**	**49.34821**	**.3934792**	**.1992244**	**.2790634**	**3.374739**
Stddev	.0017355	.0004420	.30179	.0026723	.0006010	.0003679	.008383
%RSD	.9249161	.2338033	.6115561	.6791418	.3016672	.1318151	.2483963
#1	.1882272	.1885457	49.52320	.3910733	.1987288	.2794545	3.366701
#2	.1856799	.1891778	48.99974	.3963554	.1990516	.2787244	3.383429
#3	.1889954	.1893969	49.52170	.3930088	.1998929	.2790112	3.374086

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5880190**	**3.893717**	**.4836737**	**.0721976**	**331.5176**	**.2828587**	**.2618996**
Stddev	.0057273	.027728	.0005398	.0003476	4.4646	.0018905	.0022228
%RSD	.9740006	.7121317	.1115982	.4814022	1.346714	.6683547	.8487111
#1	.5907735	3.889747	.4830648	.0725728	326.3624	.2816548	.2594540
#2	.5814348	3.868188	.4838630	.0721333	334.0808	.2818837	.2624479
#3	.5918485	3.923217	.4840934	.0718867	334.1096	.2850377	.2637969

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.79556**	**.2556529**	**.3952683**	**.6680152**	**.1856055**	**2.714436**	**6.030371**
Stddev	.10428	.0028033	.0011155	.0013590	.0010876	.029632	.001222
%RSD	.7558803	1.096509	.2822168	.2034447	.5859869	1.091658	.0202717
#1	13.81491	.2567429	.3940136	.6670137	.1866581	2.707893	6.031021
#2	13.88880	.2524684	.3956432	.6674697	.1844860	2.746793	6.028961
#3	13.68296	.2577475	.3961480	.6695623	.1856725	2.688623	6.031131

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-06A Acquired: 3/13/2025 15:34:12 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	2.649599	.1838931	.3280281
Stddev	.001202	.0003052	.0017779
%RSD	.0453738	.1659846	.5419923
#1	2.648645	.1839523	.3295381
#2	2.650949	.1835626	.3260686
#3	2.649203	.1841644	.3284776

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3284.126	70909.79	14855.62	2106.864	4327.412
Stddev	2.010	313.90	106.53	10.582	5.380
%RSD	.0612054	.4426780	.7170840	.5022457	.1243196
#1	3282.528	71103.43	14805.92	2117.182	4333.600
#2	3286.383	70547.62	14977.91	2096.037	4323.849
#3	3283.467	71078.32	14783.02	2107.371	4324.785

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV04 Acquired: 3/13/2025 15:38:23 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**4.953134**	**4.900976**	**5.049714**	**4.834008**	**4.843170**	**9.835349**	**9.580135**
Stddev	.009248	.030669	.011885	.018443	.012416	.007161	.047919
%RSD	.1867104	.6257732	.2353649	.3815290	.2563658	.0728132	.5001878
#1	4.942839	4.904941	5.041855	4.817592	4.828961	9.843199	9.620030
#2	4.955823	4.929469	5.043901	4.853965	4.848621	9.833673	9.593392
#3	4.960740	4.868517	5.063387	4.830465	4.851929	9.829173	9.526984

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2605563**	**2.505113**	**24.85450**	**1.029689**	**2.478255**	**1.237044**	**4.775820**
Stddev	.0013768	.003743	.05217	.003007	.003065	.001692	.035807
%RSD	.5284118	.1494033	.2099170	.2920414	.1236693	.1367527	.7497642
#1	.2589683	2.501646	24.87338	1.030604	2.474756	1.235101	4.788555
#2	.2612855	2.504611	24.89461	1.032133	2.479543	1.237837	4.803520
#3	.2614153	2.509081	24.79552	1.026331	2.480466	1.238193	4.735386

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.442503**	**25.28890**	**2.484190**	**1.238841**	**22.89023**	**2.473015**	**2.463581**
Stddev	.004715	.03623	.002800	.003177	.27213	.006588	.017794
%RSD	.1930509	.1432686	.1127298	.2564429	1.188855	.2663766	.7222744
#1	2.447827	25.31105	2.481251	1.241669	23.16549	2.478068	2.463533
#2	2.440829	25.30856	2.486828	1.239451	22.88387	2.475412	2.481398
#3	2.438854	25.24709	2.484490	1.235404	22.62134	2.465564	2.445811

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.19952**	**5.088390**	**4.940829**	**5.021722**	**4.834026**	**4.895015**	**5.094659**
Stddev	.18442	.027931	.009455	.008473	.016304	.033994	.001981
%RSD	.7949288	.5489106	.1913682	.1687246	.3372669	.6944655	.0388897
#1	23.36786	5.058213	4.930545	5.014711	4.837422	4.907655	5.094222
#2	23.22829	5.093621	4.949146	5.019317	4.848365	4.920879	5.092933
#3	23.00240	5.113335	4.942797	5.031137	4.816293	4.856512	5.096822

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV04 Acquired: 3/13/2025 15:38:23 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**4.817787**	**4.708914**	**4.822578**
Stddev	.005179	.017357	.054153
%RSD	.1074993	.3686025	1.122903
#1	4.814526	4.717607	4.764268
#2	4.823759	4.720207	4.871290
#3	4.815077	4.688928	4.832176

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3319.370**	**72481.55**	**13945.02**	**2123.897**	**4436.674**
Stddev	2.676	300.95	69.02	17.007	1.709
%RSD	.0806109	.4152059	.4949661	.8007429	.0385142
#1	3322.417	72358.48	14022.92	2118.174	4437.860
#2	3318.288	72261.63	13891.47	2110.491	4437.447
#3	3317.405	72824.52	13920.67	2143.028	4434.716

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB04 Acquired: 3/13/2025 15:42:34 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.001355**	**.0012275**	**.0007031**	**.0021333**	**.0015807**	**-.003407**	**.0032630**
Stddev	.004051	.0022518	.0003529	.0016399	.0012109	.003704	.0014101
%RSD	298.9790	183.4469	50.19594	76.87167	76.60629	108.7017	43.21553
#1	-.002145	.0027254	.0004641	.0009513	.0008751	-.002198	.0016449
#2	.003033	.0023192	.0005367	.0014431	.0008881	-.000459	.0039152
#3	-.004953	-.001362	.0011085	.0040055	.0029789	-.007564	.0042291

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000018**	**-.000012**	**.0027084**	**-.000326**	**-.000031**	**.0000729**	**.0013070**
Stddev	.000059	.000095	.0083562	.000425	.000116	.0002046	.0036439
%RSD	328.6865	767.5260	308.5269	130.3947	376.7975	280.5047	278.7879
#1	-.000061	-.000085	.0087930	-.000283	-.000137	.0002572	.0055125
#2	.000050	-.000047	-.006819	-.000771	.000092	.0001087	-.000912
#3	-.000043	.000095	.006151	.000076	-.000047	-.000147	-.000679

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000717**	**-.001034**	**-.000137**	**.0003440**	**.1421872**	**.0004991**	**-.000424**
Stddev	.000141	.021073	.000167	.0002373	.0225467	.0016180	.000075
%RSD	19.59291	2038.552	122.0264	68.97876	15.85703	324.1999	17.61016
#1	-.000663	-.023899	-.000310	.0002590	.1520820	-.000285	-.000497
#2	-.000877	.003189	-.000122	.0001609	.1163850	.002360	-.000429
#3	-.000612	.017609	.000022	.0006121	.1580945	-.000577	-.000348

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2509570**	**.0011407**	**.0002206**	**-.000735**	**.0016583**	**.0054170**	**-.004384**
Stddev	.0424274	.0004856	.0001298	.000377	.0006996	.0027204	.002108
%RSD	16.90623	42.57522	58.85168	51.29503	42.18979	50.22011	48.08309
#1	.2048649	.0016625	.0001069	-.000773	.0009126	.0031233	-.005169
#2	.2883808	.0007020	.0003621	-.000341	.0017621	.0084226	-.001996
#3	.2596251	.0010574	.0001928	-.001092	.0023002	.0047051	-.005987

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB04 Acquired: 3/13/2025 15:42:34 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0020855	.0056720	.0000080
Stddev	.0013502	.0007023	.0000500
%RSD	64.74149	12.38166	623.0690
#1	.0008669	.0049953	-.000049
#2	.0018526	.0063974	.000028
#3	.0035369	.0056235	.000045

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3437.065	74491.32	14388.80	2196.861	4973.012
Stddev	9.298	241.90	98.51	4.022	7.011
%RSD	.2705265	.3247343	.6846281	.1830936	.1409787
#1	3447.792	74226.65	14406.59	2192.401	4980.657
#2	3432.092	74546.35	14477.20	2200.215	4966.884
#3	3431.311	74700.96	14282.61	2197.968	4971.493

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-08 Acquired: 3/13/2025 15:46:53 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0298909**	**-.020228**	**.2697779**	**-.038248**	**-.003011**	**89.46560**
Stddev	.0023721	.002777	.0012868	.003540	.002265	.06075
%RSD	7.935869	13.73054	.4769762	9.255210	75.20902	.0679031
#1	.0324097	-.017956	.2683339	-.037505	-.003312	89.41118
#2	.0295635	-.019404	.2708031	-.035139	-.005110	89.53114
#3	.0276996	-.023324	.2701967	-.042101	-.000611	89.45448

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5776208**	**.0067597**	**.0032081**	**553.1516**	**.3160188**	**.1499773**
Stddev	.0011376	.0000393	.0001133	2.6141	.0013620	.0002836
%RSD	.1969496	.5810533	3.530661	.4725886	.4309828	.1891068
#1	.5778262	.0067510	.0031650	550.3796	.3161760	.1501878
#2	.5763944	.0068027	.0031227	553.5027	.3172953	.1496548
#3	.5786416	.0067256	.0033365	555.5724	.3145850	.1500894

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4393173**	**178.4306**	**5.850603**	**80.97139**	**.2503685**	**-.001899**
Stddev	.0008693	.6479	.011148	.63271	.0012545	.000278
%RSD	.1978746	.3631061	.1905461	.7814000	.5010707	14.62910
#1	.4389847	179.1301	5.837752	80.24481	.2502462	-.002103
#2	.4386635	178.3105	5.857683	81.26846	.2491796	-.001583
#3	.4403039	177.8511	5.856374	81.40089	.2516797	-.002010

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**805.1249**	**.2432429**	**.5181336**	**72.35626**	**-.135766**	**.0708977**
Stddev	10.8512	.0009131	.0015158	.57143	.004230	.0006541
%RSD	1.347760	.3753861	.2925566	.7897481	3.115449	.9226284
#1	792.6452	.2421977	.5198551	72.96965	-.131240	.0706824
#2	810.3948	.2436450	.5169990	72.26019	-.136438	.0703783
#3	812.3347	.2438859	.5175467	71.83896	-.139619	.0716323

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-08 Acquired: 3/13/2025 15:46:53 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	-.000377	7.984031	F 79.88794	4.457025	F 267.2164	.0956745
Stddev	.000782	.009226	.24552	.016528	.8002	.0010523
%RSD	207.2296	.1155592	.3073325	.3708198	.2994451	1.099841
#1	-.001014	7.973468	80.13918	4.451523	267.8537	.0968876
#2	.000496	7.988110	79.87607	4.443950	266.3184	.0951286
#3	-.000614	7.990515	79.64857	4.475601	267.4770	.0950074

Elem	Sr4077
Units	ppm
Avg	2.238609
Stddev	.012761
%RSD	.5700403
#1	2.226496
#2	2.237397
#3	2.251932

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3440.486	76401.41	16320.48	2214.251	3508.898
Stddev	3.105	124.17	99.61	5.781	4.123
%RSD	.0902349	.1625175	.6103105	.2610625	.1174985
#1	3440.593	76349.22	16433.72	2207.580	3510.600
#2	3443.536	76311.85	16281.30	2217.785	3511.897
#3	3437.330	76543.15	16246.42	2217.387	3504.196

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-09 Acquired: 3/13/2025 15:51:23 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.003184**	**-.002713**	**.0014289**	**.0019771**	**.0021856**	**.0098577**	**.0013232**
Stddev	.001843	.001001	.0009563	.0010928	.0012053	.0025777	.0010122
%RSD	57.89168	36.90088	66.92296	55.27530	55.14599	26.14869	76.49287
#1	-.004465	-.003751	.0006975	.0028958	.0013298	.0101965	.0024291
#2	-.004015	-.002635	.0025110	.0007686	.0035640	.0122492	.0004427
#3	-.001071	-.001753	.0010782	.0022668	.0016630	.0071274	.0010979

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000178**	**-.000086**	**.1154372**	**.0002640**	**-.000286**	**.0002708**	**.0467276**
Stddev	.000031	.000023	.0072757	.0004818	.000107	.0002235	.0017964
%RSD	17.14834	26.57647	6.302711	182.5310	37.23821	82.53874	3.844502
#1	-.000167	-.000090	.1108948	.0001316	-.000195	.0000761	.0483996
#2	-.000155	-.000062	.1238289	-.000138	-.000259	.0005149	.0448283
#3	-.000213	-.000107	.1115880	.000798	-.000403	.0002214	.0469549

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0030684**	**.0053782**	**.0001827**	**.0000782**	**.3511492**	**-.000329**	**.0096047**
Stddev	.0003982	.0188098	.0004483	.0000856	.0100021	.001302	.0000880
%RSD	12.97613	349.7430	245.3819	109.3460	2.848392	396.4565	.9160392
#1	.0026726	-.009125	.0003832	-.000020	.3411893	-.001217	.0095132
#2	.0034689	-.001373	.0004958	.000131	.3611929	.001167	.0096886
#3	.0030637	.026632	-.000331	.000124	.3510653	-.000935	.0096122

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000972**	**-.003720**	**.0009893**	**-.001346**	**.0015653**	**.0773578**	**.0023141**
Stddev	.008813	.000980	.0001908	.000196	.0002632	.0093994	.0027849
%RSD	906.2976	26.33277	19.29059	14.56819	16.81855	12.15051	120.3466
#1	.009204	-.004394	.0011705	-.001249	.0017760	.0851335	.0048703
#2	-.006033	-.002596	.0010073	-.001217	.0012702	.0800275	-.000654
#3	-.006088	-.004170	.0007901	-.001572	.0016496	.0669123	.002726

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-09 Acquired: 3/13/2025 15:51:23 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0342528	-.001733	.0002198
Stddev	.0028623	.001617	.0000672
%RSD	8.356258	93.30647	30.59150
#1	.0375526	-.003064	.0002975
#2	.0327645	.000066	.0001808
#3	.0324413	-.002200	.0001812

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3527.736	78665.98	14684.26	2286.032	5146.973
Stddev	10.168	141.63	13.16	2.894	15.849
%RSD	.2882272	.1800424	.0896097	.1265969	.3079271
#1	3536.947	78538.48	14672.76	2282.795	5159.738
#2	3529.435	78818.43	14681.42	2288.370	5151.949
#3	3516.825	78641.02	14698.61	2286.930	5129.234

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-01 Acquired: 3/13/2025 15:55:42 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0871207**	**-.005467**	**23.18623**	**-.060182**	**-.002484**	**123.5938**
Stddev	.0045947	.003959	.06284	.001985	.001470	.8630
%RSD	5.273964	72.42764	.2710147	3.298321	59.20093	.6982754
#1	.0920172	-.008524	23.16857	-.058743	-.003720	122.7979
#2	.0864415	-.000994	23.13411	-.059356	-.002874	123.4725
#3	.0829034	-.006882	23.25601	-.062446	-.000858	124.5111

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.208045**	**.0099988**	**.0009029**	**358.6861**	**.4275815**	**.1924679**
Stddev	.017001	.0001030	.0002183	3.7065	.0008877	.0009714
%RSD	.7699379	1.029912	24.18086	1.033357	.2075995	.5047217
#1	2.190181	.0098859	.0006523	354.4064	.4265868	.1917864
#2	2.209928	.0100226	.0010045	360.7877	.4282930	.1920370
#3	2.224025	.0100877	.0010520	360.8642	.4278648	.1935802

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.414645**	**372.3224**	**5.000391**	**72.16003**	**.4548137**	**-.001188**
Stddev	.003843	2.0452	.042594	.53553	.0013346	.000583
%RSD	.2716306	.5493024	.8518160	.7421430	.2934278	49.04365
#1	1.417279	374.3897	4.953989	71.67975	.4550472	-.001124
#2	1.410236	370.3001	5.009470	72.06284	.4533779	-.001801
#3	1.416420	372.2774	5.037714	72.73750	.4560161	-.000641

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.415483**	**.5315693**	**3.078248**	**26.92045**	**-.103160**	**.0112221**
Stddev	.008404	.0035877	.006968	.16928	.020239	.0004650
%RSD	.1309928	.6749247	.2263487	.6288200	19.61919	4.143892
#1	6.419862	.5274758	3.073088	27.11380	-.080276	.0114272
#2	6.420794	.5330649	3.075483	26.79892	-.118709	.0115494
#3	6.405795	.5341673	3.086174	26.84864	-.110495	.0106898

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-01 Acquired: 3/13/2025 15:55:42 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.5899327	9.023982	8.506568	F 10.58503	F 23.22771	.2956579
Stddev	.0017763	.072181	.060714	.04987	.07095	.0011157
%RSD	.3010988	.7998832	.7137267	.4711637	.3054584	.3773560
#1	.5885253	8.954675	8.567133	10.56405	23.20940	.2951274
#2	.5893443	9.018541	8.445707	10.54909	23.16770	.2949065
#3	.5919286	9.098729	8.506863	10.64197	23.30601	.2969399

Elem	Sr4077
Units	ppm
Avg	.8930109
Stddev	.0059547
%RSD	.6668135
#1	.8869061
#2	.8933235
#3	.8988032

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3575.614	78638.36	16443.87	2313.791	3920.439
Stddev	8.707	256.35	155.43	11.692	6.150
%RSD	.2434968	.3259876	.9452131	.5053155	.1568656
#1	3569.192	78344.24	16619.91	2303.250	3918.789
#2	3585.524	78814.38	16386.09	2326.367	3927.246
#3	3572.127	78756.45	16325.60	2311.757	3915.283

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-03 Acquired: 3/13/2025 15:59:54 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0391543**	**.0053854**	**.3593858**	**-.029138**	**-.000975**	**61.22313**
Stddev	.0059857	.0014364	.0014841	.002340	.002075	.08229
%RSD	15.28756	26.67264	.4129568	8.029839	212.7173	.1344046
#1	.0362396	.0067847	.3583622	-.031502	-.002041	61.24313
#2	.0460391	.0039145	.3587074	-.026823	-.002301	61.13268
#3	.0351841	.0054570	.3610879	-.029088	.001416	61.29357

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3513439**	**.0071857**	**-.004562**	**17.08973**	**.1202755**	**.1007960**
Stddev	.0019515	.0000525	.000254	.05923	.0009228	.0007926
%RSD	.5554354	.7312165	5.569917	.3465924	.7672520	.7863131
#1	.3505937	.0071261	-.004854	17.12127	.1204901	.1003319
#2	.3498788	.0072058	-.004441	17.02140	.1192643	.1003450
#3	.3535591	.0072252	-.004391	17.12651	.1210721	.1017112

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2423933**	**204.9785**	**1.059864**	**20.46842**	**.1789276**	**-.000597**
Stddev	.0019772	1.1204	.004136	.05167	.0005934	.000130
%RSD	.8156856	.5466082	.3902408	.2524280	.3316620	21.70344
#1	.2406851	204.7676	1.061972	20.46332	.1788084	-.000559
#2	.2419357	203.9786	1.055098	20.41950	.1784029	-.000491
#3	.2445592	206.1894	1.062521	20.52246	.1795717	-.000742

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9641644**	**.2153836**	**.7584826**	**5.896874**	**-.320959**	**.0062851**
Stddev	.0113343	.0011653	.0064006	.050076	.005065	.0000585
%RSD	1.175561	.5410279	.8438703	.8491888	1.578175	.9310184
#1	.9552753	.2140393	.7548454	5.845479	-.322491	.0062241
#2	.9602900	.2160049	.7547294	5.899627	-.315305	.0062905
#3	.9769279	.2161066	.7658731	5.945516	-.325082	.0063408

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-03 Acquired: 3/13/2025 15:59:54 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0143507	2.655818	7.824181	5.758984	F 31.05426	.1876076
Stddev	.0012651	.008918	.012258	.035959	.22247	.0007490
%RSD	8.815803	.3357945	.1566702	.6243957	.7163814	.3992404
#1	.0141597	2.654828	7.819531	5.734672	30.87143	.1879770
#2	.0157005	2.647435	7.814929	5.741989	30.98940	.1867457
#3	.0131920	2.665189	7.838084	5.800290	31.30194	.1881002

Elem	Sr4077
Units	ppm
Avg	.1115827
Stddev	.0004672
%RSD	.4187153
#1	.1114456
#2	.1111994
#3	.1121032

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3893.580	84713.78	16737.34	2494.005	4544.070
Stddev	21.552	270.54	53.32	17.608	21.014
%RSD	.5535172	.3193622	.3185709	.7060275	.4624393
#1	3907.279	84703.17	16712.49	2497.379	4558.955
#2	3904.724	84989.47	16798.55	2509.682	4553.223
#3	3868.738	84448.70	16700.98	2474.953	4520.033

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-05 Acquired: 3/13/2025 16:03:57 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0489500**	**-.037252**	**.3476853**	**-.050068**	**-.011717**	**126.7863**
Stddev	.0016375	.004002	.0016286	.001458	.000437	.3073
%RSD	3.345205	10.74323	.4684208	2.911487	3.725822	.2424016
#1	.0506848	-.040916	.3459345	-.050949	-.012146	126.5164
#2	.0474313	-.032982	.3491552	-.048386	-.011730	126.7217
#3	.0487338	-.037859	.3479664	-.050870	-.011274	127.1208

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6460608**	**.0101261**	**.0144804**	**131.9033**	**.5792010**	**.2226921**
Stddev	.0008907	.0002004	.0007311	.2169	.0020544	.0013444
%RSD	.1378666	1.979214	5.048802	.1644256	.3546954	.6036836
#1	.6464800	.0101951	.0141286	131.9835	.5789752	.2213021
#2	.6466646	.0099003	.0139918	131.6578	.5813590	.2227884
#3	.6450379	.0102830	.0153209	132.0687	.5772689	.2239856

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7632026**	**293.3684**	**2.858104**	**94.94989**	**.3894334**	**-.005047**
Stddev	.0023512	1.4437	.004286	.38366	.0013867	.000292
%RSD	.3080674	.4921093	.1499548	.4040670	.3560902	5.787344
#1	.7615192	293.5977	2.855332	94.89657	.3893056	-.004725
#2	.7621997	294.6837	2.863041	94.59568	.3881151	-.005122
#3	.7658889	291.8238	2.855940	95.35743	.3908797	-.005294

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.926508**	**.3924544**	**.6317177**	**36.91144**	**-.507695**	**.0430183**
Stddev	.048633	.0025149	.0026922	.28769	.007135	.0001335
%RSD	1.238594	.6408056	.4261656	.7794169	1.405331	.3102577
#1	3.940802	.3930853	.6287315	36.91401	-.510747	.0429063
#2	3.966393	.3896842	.6339590	37.19785	-.499542	.0429826
#3	3.872330	.3945938	.6324624	36.62248	-.512796	.0431659

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-05 Acquired: 3/13/2025 16:03:57 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0062598	F 12.80620	9.933228	F 12.45244	F 19.11150	.2549414
Stddev	.0008536	.01048	.022092	.06878	.11545	.0008450
%RSD	13.63531	.0818341	.2224095	.5523099	.6040925	.3314337
#1	.0071960	12.79585	9.917959	12.45820	19.12086	.2540457
#2	.0055248	12.80594	9.958560	12.38097	18.99165	.2557244
#3	.0060586	12.81681	9.923164	12.51816	19.22198	.2550541

Elem	Sr4077
Units	ppm
Avg	.2675729
Stddev	.0005621
%RSD	.2100656
#1	.2674106
#2	.2681983
#3	.2671098

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4464.365	100558.1	20172.09	2877.370	4051.430
Stddev	5.100	259.3	62.95	24.268	10.529
%RSD	.1142491	.2578828	.3120436	.8433933	.2598787
#1	4469.491	100571.7	20170.44	2902.995	4059.958
#2	4464.313	100292.2	20235.84	2854.738	4054.669
#3	4459.290	100810.4	20109.98	2874.377	4039.662

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1525-01 Acquired: 3/13/2025 16:08:01 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0801272**	**.0171867**	**.0684569**	**-.032070**	**-.002476**	**44.77009**
Stddev	.0009258	.0009410	.0013120	.000687	.001894	.13364
%RSD	1.155460	5.475253	1.916476	2.141216	76.49803	.2985076
#1	.0811648	.0181833	.0671820	-.031332	-.000326	44.62507
#2	.0798315	.0163134	.0683856	-.032689	-.003205	44.79690
#3	.0793854	.0170635	.0698030	-.032191	-.003898	44.88829

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4508892**	**.0005516**	**-.004504**	**164.5027**	**.1302505**	**.0382186**
Stddev	.0001511	.0000504	.000410	.4292	.0008850	.0000624
%RSD	.0334999	9.133256	9.106196	.2608886	.6794990	.1633666
#1	.4510035	.0006019	-.004441	164.3938	.1292408	.0381764
#2	.4509461	.0005012	-.004129	164.1386	.1306187	.0382903
#3	.4507180	.0005517	-.004942	164.9759	.1308920	.0381891

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1314286**	**196.3914**	F **45.64130**	**68.90890**	**.0677182**	**.0010929**
Stddev	.0009196	1.6723	.13398	.21513	.0001762	.0002274
%RSD	.6996855	.8515250	.2935561	.3122019	.2601632	20.80963
#1	.1303974	195.9124	45.70729	68.95080	.0677855	.0008982
#2	.1317248	195.0109	45.48712	68.67590	.0675183	.0013428
#3	.1321635	198.2510	45.72949	69.10001	.0678508	.0010377

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1985.507**	**.0945519**	**.3747035**	**16.61106**	**-.143881**	**.0043587**
Stddev	12.397	.0009619	.0037361	.20258	.003506	.0004180
%RSD	.6243896	1.017309	.9970876	1.219525	2.436466	9.589962
#1	1972.660	.0944109	.3738124	16.47384	-.141909	.0047578
#2	1986.460	.0955765	.3714935	16.51561	-.147928	.0039241
#3	1997.400	.0936683	.3788046	16.84373	-.141805	.0043943

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1525-01 Acquired: 3/13/2025 16:08:01 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0005255	.8999175	F 66.16455	2.190650	5.577888	.1237565
Stddev	.0020138	.0010908	.53010	.002574	.011923	.0008950
%RSD	383.2416	.1212142	.8011814	.1175062	.2137491	.7232172
#1	.0022081	.8986580	66.01578	2.189274	5.574743	.1227792
#2	-.001706	.9005562	65.72473	2.189056	5.591068	.1239539
#3	.001074	.9005383	66.75313	2.193620	5.567853	.1245363

Elem	Sr4077
Units	ppm
Avg	.7385761
Stddev	.0021266
%RSD	.2879298
#1	.7364540
#2	.7385671
#3	.7407071

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2902.514	63429.95	14592.03	1861.546	3393.609
Stddev	3.539	290.08	24.97	5.243	2.523
%RSD	.1219176	.4573224	.1711153	.2816584	.0743424
#1	2903.260	63595.84	14613.05	1865.985	3391.058
#2	2898.662	63599.00	14564.43	1862.892	3396.103
#3	2905.621	63094.99	14598.60	1855.761	3393.666

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1552-01 Acquired: 3/13/2025 16:12:26 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0809046**	**.0073349**	**1.308047**	**-.031613**	**.0001303**	**110.9329**
Stddev	.0010867	.0012905	.004777	.003521	.0011480	.6071
%RSD	1.343173	17.59328	.3651749	11.13637	880.7404	.5472610
#1	.0818126	.0076954	1.302983	-.031343	-.000635	110.2565
#2	.0812005	.0084067	1.308688	-.035261	.001450	111.1114
#3	.0797006	.0059025	1.312471	-.028235	-.000425	111.4307

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8722620**	**.0123409**	**-.002487**	**13.00095**	**.1917018**	**.0676780**
Stddev	.0028472	.0000282	.000457	.06674	.0002520	.0009225
%RSD	.3264111	.2281961	18.38230	.5133622	.1314768	1.363114
#1	.8691358	.0123110	-.002863	12.92539	.1919776	.0666763
#2	.8729437	.0123450	-.002620	13.05186	.1916442	.0678649
#3	.8747063	.0123669	-.001978	13.02560	.1914835	.0684927

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4271752**	**221.9096**	**.8787837**	**10.12546**	**.1107781**	**-.002309**
Stddev	.0031462	.4913	.0039179	.06419	.0006256	.000515
%RSD	.7365076	.2213876	.4458363	.6339846	.5646878	22.32472
#1	.4240029	221.9413	.8747473	10.05140	.1100948	-.002878
#2	.4272280	222.3843	.8790323	10.16521	.1109170	-.001875
#3	.4302946	221.4033	.8825714	10.15977	.1113226	-.002173

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.890263**	**.2937272**	**2.052961**	**4.752366**	**-.361858**	**.0041064**
Stddev	.021509	.0010978	.008974	.027575	.004738	.0005230
%RSD	1.137904	.3737405	.4371365	.5802320	1.309378	12.73509
#1	1.910977	.2924602	2.061005	4.781298	-.356438	.0042361
#2	1.868038	.2943269	2.054598	4.726386	-.363919	.0045522
#3	1.891774	.2943945	2.043281	4.749415	-.365217	.0035308

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1552-01 Acquired: 3/13/2025 16:12:26 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0294382	2.460815	4.329718	3.959374	F 51.75174	.1612114
Stddev	.0011683	.003572	.048952	.022002	.22538	.0008377
%RSD	3.968635	.1451525	1.130603	.5556912	.4355042	.5196055
#1	.0303282	2.456751	4.370620	3.937630	51.51564	.1611153
#2	.0281152	2.462238	4.275480	3.958866	51.77500	.1620929
#3	.0298710	2.463457	4.343052	3.981625	51.96460	.1604259

Elem	Sr4077
Units	ppm
Avg	.1062601
Stddev	.0005458
%RSD	.5135986
#1	.1056314
#2	.1065376
#3	.1066114

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3621.209	78806.01	15348.68	2346.913	4530.694
Stddev	19.534	163.26	60.26	8.473	26.730
%RSD	.5394374	.2071645	.3926302	.3610405	.5899709
#1	3642.300	78698.13	15418.09	2337.394	4560.033
#2	3617.590	78726.06	15318.20	2349.713	4524.324
#3	3603.737	78993.83	15309.74	2353.633	4507.725

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1553-01 Acquired: 3/13/2025 16:16:30 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0786960**	**-.000142**	**1.053602**	**-.027035**	**-.002037**	**93.00965**	**.6691490**
Stddev	.0012193	.001529	.007137	.001563	.001176	.27445	.0022107
%RSD	1.549320	1076.143	.6773605	5.781105	57.76095	.2950738	.3303673
#1	.0781367	.001445	1.048837	-.027401	-.002079	92.69792	.6673892
#2	.0800946	-.001605	1.061807	-.028383	-.003191	93.21492	.6716302
#3	.0778568	-.000265	1.050160	-.025322	-.000840	93.11611	.6684276

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0080836**	**-.001879**	**27.43092**	**.2628337**	**.1037721**	**.4492896**	**199.5639**
Stddev	.0002120	.000329	.10190	.0015549	.0005961	.0028680	.4878
%RSD	2.622259	17.52722	.3714801	.5915972	.5744171	.6383393	.2444343
#1	.0079521	-.001785	27.36916	.2614483	.1037297	.4479420	199.1847
#2	.0083282	-.001606	27.54853	.2625372	.1043883	.4525832	199.3928
#3	.0079706	-.002244	27.37506	.2645155	.1031984	.4473437	200.1142

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.052964**	**30.69542**	**.2043849**	**-.001406**	**4.744668**	**.4032470**	**1.483753**
Stddev	.017399	.14209	.0007665	.000305	.013526	.0021579	.001969
%RSD	.3443239	.4628871	.3750065	21.66135	.2850878	.5351299	.1326891
#1	5.038946	30.54823	.2040092	-.001662	4.750607	.4016107	1.483091
#2	5.072437	30.83177	.2052668	-.001069	4.729188	.4056925	1.482200
#3	5.047509	30.70625	.2038788	-.001487	4.754208	.4024378	1.485967

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.036681**	**-.296373**	**.0057563**	**.0261749**	**3.719837**	**4.226966**	**6.965037**
Stddev	.007947	.003437	.0003489	.0006902	.016833	.051953	.036721
%RSD	.1129433	1.159653	6.060600	2.636782	.4525254	1.229096	.5272226
#1	7.045077	-.293037	.0060724	.0264347	3.718589	4.178632	6.952737
#2	7.029275	-.296181	.0058144	.0266974	3.737259	4.220358	7.006330
#3	7.035691	-.299902	.0053820	.0253925	3.703662	4.281907	6.936045

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1553-01 Acquired: 3/13/2025 16:16:30 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	3.847599	.1534642	.1024864
Stddev	.024116	.0007312	.0003076
%RSD	.6267900	.4764764	.3001665
#1	3.836556	.1530047	.1021374
#2	3.875260	.1543074	.1027183
#3	3.830982	.1530805	.1026034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3766.451	82496.87	16240.33	2423.364	4573.800
Stddev	24.844	129.27	77.92	.964	30.209
%RSD	.6596035	.1567000	.4798012	.0397775	.6604684
#1	3778.606	82596.07	16307.12	2424.476	4588.854
#2	3737.870	82543.87	16154.72	2422.855	4539.022
#3	3782.876	82350.67	16259.15	2422.762	4593.523

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01 Acquired: 3/13/2025 16:20:35 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0339865**	**.0021290**	**.3909944**	**-.033325**	**-.004043**	**98.02091**	**.6043365**
Stddev	.0030003	.0035038	.0006866	.001296	.001886	.24847	.0037406
%RSD	8.827803	164.5779	.1756044	3.890254	46.64733	.2534819	.6189583
#1	.0344399	.0061748	.3915037	-.034442	-.006069	97.77527	.6001048
#2	.0367343	.0000883	.3912659	-.033629	-.003723	98.27210	.6072018
#3	.0307854	.0001238	.3902136	-.031904	-.002338	98.01536	.6057028

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0072930**	**-.003558**	**54.95876**	**.1557485**	**.0964963**	**.5702442**	**204.7974**
Stddev	.0000296	.000198	.20700	.0011085	.0001526	.0001602	1.1502
%RSD	.4061189	5.556019	.3766410	.7117116	.1581268	.0280928	.5616498
#1	.0072676	-.003618	54.72542	.1551947	.0963282	.5702405	204.2811
#2	.0073255	-.003337	55.03057	.1550261	.0966261	.5700859	203.9958
#3	.0072860	-.003718	55.12028	.1570247	.0965345	.5704062	206.1153

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.575067**	**42.35114**	**.1704996**	**-.002000**	**10.56011**	**.3207143**	**.4684422**
Stddev	.023266	.11693	.0002851	.000258	.07272	.0006210	.0004396
%RSD	.4173156	.2761009	.1671864	12.90901	.6886662	.1936323	.0938458
#1	5.549115	42.23814	.1708277	-.002079	10.47992	.3200325	.4683939
#2	5.594055	42.34365	.1703126	-.001711	10.57861	.3208627	.4680287
#3	5.582033	42.47164	.1703586	-.002209	10.62180	.3212477	.4689040

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.528750**	**-.239485**	**.0030371**	**.0253643**	**3.287626**	**3.920813**	**5.634008**
Stddev	.050687	.005226	.0001683	.0008995	.018419	.049244	.012030
%RSD	.5319373	2.182016	5.540500	3.546330	.5602625	1.255959	.2135186
#1	9.471034	-.237010	.0032089	.0244157	3.267664	3.912907	5.625727
#2	9.549196	-.245488	.0028726	.0254725	3.303965	3.876001	5.628491
#3	9.566022	-.235957	.0030297	.0262049	3.291248	3.973532	5.647807

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01 Acquired: 3/13/2025 16:20:35 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**3.482828**	**.1823191**	**.1987714**
Stddev	.004897	.0007377	.0008466
%RSD	.1406051	.4046228	.4259287
#1	3.480357	.1822166	.1978968
#2	3.479659	.1816379	.1995869
#3	3.488468	.1831027	.1988305

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3749.094**	**82322.26**	**16550.34**	**2401.941**	**4411.084**
Stddev	3.894	301.29	56.27	7.949	7.779
%RSD	.1038555	.3659926	.3399892	.3309238	.1763558
#1	3753.558	82460.35	16603.53	2407.170	4419.843
#2	3746.402	82529.76	16491.43	2405.860	4404.978
#3	3747.321	81976.67	16556.06	2392.794	4408.433

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01DUP Acquired: 3/13/2025 16:24:39 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0366320	.0023962	.3988622	-.029783	-.006422	99.67545	.6048908
Stddev	.0007764	.0012333	.0114460	.003326	.001612	.15506	.0008952
%RSD	2.119437	51.46896	2.869655	11.16789	25.10210	.1555614	.1479899
#1	.0364061	.0035263	.3870460	-.026487	-.007297	99.58383	.6039112
#2	.0374963	.0025816	.3996425	-.029722	-.004562	99.85448	.6050950
#3	.0359937	.0010807	.4098980	-.033139	-.007408	99.58804	.6056662

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074571	-.003424	55.23515	.1617744	.0968868	.5712019	205.9855
Stddev	.0000718	.001046	.09509	.0010806	.0031960	.0163971	1.0406
%RSD	.9635729	30.53905	.1721564	.6679472	3.298732	2.870628	.5051772
#1	.0074203	-.004604	55.14603	.1612380	.0936398	.5533127	205.8338
#2	.0074111	-.003060	55.22417	.1610669	.0969913	.5747758	205.0292
#3	.0075399	-.002609	55.33526	.1630182	.1000293	.5855173	207.0937

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.623499	42.68965	.1709418	-.002495	10.55212	.3237391	.4691116
Stddev	.015365	.06285	.0047427	.000188	.05163	.0004784	.0027126
%RSD	.2732261	.1472297	2.774457	7.535386	.4892581	.1477706	.5782510
#1	5.614541	42.62228	.1659107	-.002702	10.53667	.3236260	.4694466
#2	5.614715	42.69997	.1715840	-.002447	10.50999	.3233274	.4662471
#3	5.641241	42.74671	.1753307	-.002335	10.60971	.3242639	.4716413

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.513473	-.270918	.0033447	.0265877	3.291201	3.175496	5.617412
Stddev	.026756	.002662	.0000611	.0014580	.005760	.015918	.180946
%RSD	.2812393	.9826179	1.825616	5.483668	.1750264	.5012847	3.221156
#1	9.494422	-.268117	.0033716	.0272131	3.290551	3.191571	5.424615
#2	9.501935	-.273415	.0033878	.0249213	3.285793	3.175179	5.644073
#3	9.544061	-.271222	.0032748	.0276286	3.297259	3.159739	5.783548

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01DUP Acquired: 3/13/2025 16:24:39 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**3.479496**	**.1833170**	**.1992327**
Stddev	.129306	.0010650	.0002160
%RSD	3.716218	.5809318	.1084086
#1	3.342435	.1824447	.1992319
#2	3.496736	.1830026	.1994491
#3	3.599316	.1845038	.1990171

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3732.730**	**80731.86**	**16181.27**	**2341.745**	**4385.003**
Stddev	80.765	172.83	49.69	3.728	115.008
%RSD	2.163698	.2140847	.3070604	.1591962	2.622752
#1	3820.359	80885.94	16226.20	2345.209	4510.173
#2	3716.553	80764.66	16127.91	2337.799	4360.840
#3	3661.278	80544.97	16189.70	2342.226	4283.997

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV05 Acquired: 3/13/2025 16:28:43 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.247392**	**5.194312**	**5.301775**	**5.151920**	**5.125844**	**10.13496**
Stddev	.015993	.008053	.016936	.020528	.020163	.04809
%RSD	.3047800	.1550255	.3194313	.3984542	.3933569	.4744569
#1	5.264687	5.199929	5.315641	5.175542	5.148750	10.14024
#2	5.233138	5.185086	5.282900	5.141804	5.118002	10.08446
#3	5.244351	5.197920	5.306785	5.138413	5.110781	10.18020

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.882975**	**.2641841**	**2.632399**	**25.60833**	**1.073698**	**2.607598**
Stddev	.052065	.0017737	.009125	.13879	.003109	.007911
%RSD	.5268121	.6713975	.3466480	.5419590	.2895671	.3033785
#1	9.918788	.2644102	2.638255	25.58325	1.077252	2.613467
#2	9.823250	.2623082	2.621885	25.48379	1.071481	2.598601
#3	9.906887	.2658339	2.637058	25.75794	1.072361	2.610725

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.301558**	**5.115165**	**2.526029**	**25.90372**	**2.616404**	**1.298779**
Stddev	.003695	.012796	.015567	.13290	.010164	.002797
%RSD	.2838730	.2501559	.6162591	.5130494	.3884681	.2153635
#1	1.305755	5.108826	2.517240	25.91645	2.622111	1.299385
#2	1.300122	5.106775	2.516845	25.76492	2.604669	1.295728
#3	1.298796	5.129892	2.544003	26.02980	2.622432	1.301223

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.69960**	**2.554252**	**2.581538**	**24.95933**	**5.189989**	**5.192856**
Stddev	.06141	.013014	.016274	.04569	.034558	.013239
%RSD	.2486348	.5094918	.6303989	.1830543	.6658578	.2549373
#1	24.62899	2.553851	2.578327	24.90674	5.181368	5.208101
#2	24.74058	2.541444	2.567109	24.98193	5.160557	5.184263
#3	24.72922	2.567462	2.599179	24.98931	5.228041	5.186203

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV05 Acquired: 3/13/2025 16:28:43 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.264719**	**5.019166**	F **5.519811**	**5.259225**	**5.108575**	**4.887952**
Stddev	.021587	.020612	.009875	.021441	.014325	.018278
%RSD	.4100326	.4106691	.1788932	.4076835	.2804197	.3739337
#1	5.286144	5.012087	5.528329	5.268807	5.124971	4.882418
#2	5.242973	5.003025	5.522116	5.234663	5.098484	4.873080
#3	5.265040	5.042384	5.508988	5.274203	5.102268	4.908357

Elem	Sr4077
Units	ppm
Avg	**5.038619**
Stddev	.021527
%RSD	.4272361
#1	5.017384
#2	5.038049
#3	5.060426

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3271.055**	**71340.54**	**14271.01**	**2084.409**	**4370.025**
Stddev	10.653	89.13	73.21	6.777	16.126
%RSD	.3256736	.1249357	.5129657	.3251223	.3690060
#1	3258.894	71244.55	14256.87	2087.907	4353.792
#2	3275.530	71356.37	14350.26	2088.722	4386.041
#3	3278.740	71420.69	14205.91	2076.598	4370.243

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB05 Acquired: 3/13/2025 16:32:54 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.000534**	**-.000391**	**-.000336**	**.0023647**	**.0007614**	**-.002530**	**.0039848**
Stddev	.001566	.001306	.000236	.0016984	.0007204	.004443	.0003947
%RSD	293.0461	334.1695	70.18128	71.82244	94.61311	175.5779	9.904125
#1	-.002245	-.001899	-.000608	.0037143	.0012432	-.007368	.0035395
#2	-.000187	.000402	-.000213	.0029222	.0011078	-.001592	.0042912
#3	.000829	.000324	-.000187	.0004576	-.000067	.001369	.0041238

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000032**	**.0000419**	**-.004206**	**-.000155**	**-.000104**	**.0000228**	**-.003390**
Stddev	.000034	.0000416	.004480	.000044	.000191	.0001872	.002142
%RSD	105.8146	99.30766	106.5162	28.71022	183.2701	822.4375	63.18106
#1	-.000063	.0000681	-.001518	-.000182	-.000312	-.000080	-.000942
#2	.000004	.0000638	-.009377	-.000103	-.000065	.000239	-.004918
#3	-.000036	-.000006	-.001722	-.000179	.000064	-.000090	-.004309

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001109**	**.0021837**	**.0000411**	**.0000157**	**.1412779**	**.0007393**	**-.000798**
Stddev	.000279	.0114159	.0000777	.0001670	.0065838	.0007212	.000376
%RSD	25.17604	522.7708	188.9974	1062.069	4.660206	97.55435	47.13541
#1	-.001431	.0037389	-.000048	-.000177	.1433175	.0015375	-.000883
#2	-.000967	.0127424	.000081	.000110	.1466006	.0001346	-.001124
#3	-.000929	-.009930	.000091	.000114	.1339156	.0005457	-.000386

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2349119**	**.0010965**	**.0002358**	**-.001266**	**.0009531**	**.0044155**	**-.003568**
Stddev	.0185439	.0005646	.0001443	.000782	.0004859	.0037913	.002259
%RSD	7.893980	51.49463	61.19363	61.78571	50.97619	85.86347	63.32412
#1	.2393825	.0010867	.0001896	-.001956	.0011770	.0066968	-.003618
#2	.2145414	.0016660	.0003976	-.000416	.0003957	.0065108	-.001284
#3	.2508118	.0005368	.0001203	-.001425	.0012867	.0000390	-.005802

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB05 Acquired: 3/13/2025 16:32:54 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0022648	.0031577	-.000024
Stddev	.0010785	.0008852	.000032
%RSD	47.62011	28.03468	135.0034
#1	.0022583	.0039133	.000006
#2	.0033465	.0021837	-.000058
#3	.0011895	.0033759	-.000020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3466.550	75129.53	14306.28	2234.169	4972.455
Stddev	22.034	453.52	123.25	12.701	30.945
%RSD	.6356060	.6036532	.8614960	.5685055	.6223285
#1	3441.316	74914.34	14415.03	2221.185	4937.177
#2	3481.983	74823.67	14172.40	2234.756	4995.013
#3	3476.351	75650.59	14331.40	2246.567	4985.175

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01LX5 Acquired: 3/13/2025 16:37:13 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0056311	.0010316	.0823445	-.005665	-.001462	21.53589	.1373813
Stddev	.0003423	.0023948	.0011635	.000173	.000161	.01176	.0009516
%RSD	6.077942	232.1521	1.412915	3.057591	11.04655	.0545943	.6926646
#1	.0052803	-.001613	.0813257	-.005649	-.001634	21.54452	.1378834
#2	.0059641	.003054	.0820954	-.005501	-.001438	21.52249	.1362839
#3	.0056491	.001654	.0836123	-.005847	-.001314	21.54064	.1379767

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017391	-.001861	12.53230	.0348690	.0193433	.1335922	45.18741
Stddev	.0000212	.000047	.01296	.0004974	.0002203	.0011811	.10669
%RSD	1.218192	2.535814	.1034218	1.426396	1.138760	.8840826	.2361057
#1	.0017565	-.001867	12.54725	.0351834	.0191088	.1323043	45.25884
#2	.0017453	-.001905	12.52546	.0351280	.0195459	.1338478	45.06477
#3	.0017155	-.001811	12.52420	.0342956	.0193752	.1346245	45.23863

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.267462	9.601719	.0347084	-.000891	2.249976	.0716757	.1023027
Stddev	.007506	.024137	.0003324	.000457	.007781	.0001449	.0009862
%RSD	.5921889	.2513813	.9578171	51.35475	.3458125	.2021972	.9639547
#1	1.273577	9.628107	.0344581	-.000401	2.251414	.0715240	.1012354
#2	1.259086	9.596293	.0345815	-.000964	2.241577	.0718127	.1031801
#3	1.269724	9.580757	.0350856	-.001307	2.256937	.0716905	.1024926

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.198866	-.059654	.0008521	.0044689	.7357975	.7553397	1.129220
Stddev	.008270	.001359	.0002061	.0004494	.0004998	.0212901	.008771
%RSD	.3761090	2.277775	24.19295	10.05552	.0679242	2.818606	.7767600
#1	2.196642	-.058403	.0008353	.0047043	.7361424	.7415025	1.122981
#2	2.191935	-.061100	.0010661	.0039508	.7352244	.7798556	1.125429
#3	2.208020	-.059460	.0006548	.0047517	.7360258	.7446609	1.139249

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01LX5 Acquired: 3/13/2025 16:37:13 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.6803491	.0413002	.0442071
Stddev	.0056384	.0014123	.0000623
%RSD	.8287434	3.419530	.1409815
#1	.6767431	.0427717	.0441851
#2	.6774575	.0411733	.0441588
#3	.6868466	.0399557	.0442775

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3516.906	76257.98	14804.98	2267.982	4703.420
Stddev	7.507	46.98	43.14	13.372	11.635
%RSD	.2134587	.0616081	.2913646	.5895900	.2473730
#1	3519.849	76248.18	14765.54	2279.515	4707.256
#2	3522.497	76309.09	14851.04	2253.324	4712.652
#3	3508.374	76216.68	14798.35	2271.107	4690.351

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01MS Acquired: 3/13/2025 16:41:26 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0351562**	**.0017878**	**.3871023**	**-.027381**	**-.005593**	**98.13260**	**.5762160**
Stddev	.0015008	.0004080	.0006527	.001121	.001657	.04994	.0019968
%RSD	4.268884	22.82252	.1686012	4.093865	29.62591	.0508872	.3465398
#1	.0368193	.0021125	.3878249	-.026837	-.006377	98.07521	.5756215
#2	.0347464	.0013298	.3869265	-.028670	-.003689	98.16615	.5784426
#3	.0339028	.0019210	.3865556	-.026636	-.006711	98.15643	.5745840

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0071227**	**-.003800**	**77.08576**	**.1562200**	**.1005018**	**.2880221**	**201.3515**
Stddev	.0000707	.000127	.17245	.0012455	.0003893	.0010741	.2004
%RSD	.9925339	3.351546	.2237080	.7972779	.3873490	.3729154	.0995273
#1	.0071173	-.003880	77.09113	.1547899	.1001225	.2869642	201.2669
#2	.0071960	-.003653	77.25546	.1570669	.1004826	.2879905	201.2073
#3	.0070549	-.003866	76.91069	.1568033	.1009004	.2891116	201.5803

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.371406**	**55.51797**	**.1674282**	**-.001001**	**11.33598**	**.3176879**	**.4948890**
Stddev	.012449	.17432	.0006606	.000079	.02980	.0009810	.0008353
%RSD	.3692389	.3139910	.3945535	7.858589	.2628669	.3087931	.1687893
#1	3.367060	55.46790	.1667008	-.000974	11.30815	.3177297	.4939483
#2	3.385445	55.71184	.1679907	-.001089	11.33236	.3166867	.4955442
#3	3.361713	55.37416	.1675931	-.000939	11.36742	.3186474	.4951744

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.08862**	**-.254847**	**.0033994**	**.0146257**	**3.258580**	**6.304106**	**5.360402**
Stddev	.06043	.004283	.0001473	.0005761	.011200	.109991	.009373
%RSD	.5989827	1.680510	4.331684	3.938847	.3437217	1.744745	.1748521
#1	10.04602	-.250133	.0034259	.0152909	3.245735	6.184636	5.353059
#2	10.06206	-.258499	.0035316	.0142889	3.266307	6.326516	5.370959
#3	10.15778	-.255909	.0032407	.0142974	3.263700	6.401166	5.357187

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01MS Acquired: 3/13/2025 16:41:26 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**2.674975**	**.1806385**	**.2095585**
Stddev	.022277	.0007847	.0001422
%RSD	.8328011	.4344191	.0678428
#1	2.650925	.1812999	.2093943
#2	2.694905	.1797714	.2096392
#3	2.679095	.1808442	.2096419

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3673.001**	**82106.16**	**16758.68**	**2388.329**	**4304.720**
Stddev	10.342	230.73	87.14	12.566	9.840
%RSD	.2815573	.2810180	.5199519	.5261527	.2285892
#1	3680.962	82372.52	16826.06	2402.591	4313.052
#2	3676.730	81978.34	16660.27	2383.516	4307.244
#3	3661.313	81967.62	16789.69	2378.881	4293.864

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01MSD Acquired: 3/13/2025 16:45:32 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.0348686**	**.0036731**	**.3879967**	**-.028110**	**-.004380**	**98.18974**	**.5688877**
Stddev	.0019671	.0014938	.0023163	.000957	.001584	.10864	.0008564
%RSD	5.641583	40.66961	.5969855	3.404160	36.16880	.1106419	.1505463
#1	.0371273	.0019669	.3856711	-.027842	-.003700	98.10387	.5682672
#2	.0339471	.0047457	.3880154	-.027315	-.006191	98.15349	.5698649
#3	.0335313	.0043067	.3903036	-.029172	-.003249	98.31187	.5685311

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0072109**	**-.004110**	**76.04524**	**.1589955**	**.0997328**	**.2837383**	**203.2902**
Stddev	.0000905	.000026	.21773	.0001458	.0005872	.0011156	.5628
%RSD	1.255079	.6285032	.2863208	.0916769	.5887559	.3931785	.2768367
#1	.0071374	-.004138	75.98800	.1591108	.0996666	.2833481	203.3743
#2	.0073120	-.004106	76.28588	.1590441	.0991815	.2828702	202.6901
#3	.0071833	-.004087	75.86185	.1588316	.1003503	.2849966	203.8062

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.353358**	**54.74981**	**.1659193**	**-.000721**	**11.49582**	**.3159668**	**.4757011**
Stddev	.009704	.28859	.0002209	.000157	.03815	.0016981	.0013575
%RSD	.2893940	.5271135	.1331581	21.72719	.3318402	.5374155	.2853728
#1	3.348866	54.82567	.1660922	-.000664	11.48041	.3171832	.4750288
#2	3.364494	54.99290	.1659954	-.000899	11.46779	.3166903	.4748108
#3	3.346713	54.43087	.1656704	-.000601	11.53927	.3140268	.4772635

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.10053**	**-.258375**	**.0038290**	**.0156019**	**3.223568**	**5.712783**	**5.272907**
Stddev	.09319	.004466	.0003387	.0014570	.013083	.040397	.013229
%RSD	.9226532	1.728645	8.844407	9.338294	.4058503	.7071328	.2508853
#1	10.06225	-.253222	.0036647	.0159790	3.220156	5.719286	5.264549
#2	10.03258	-.261149	.0036038	.0168333	3.238019	5.669529	5.266013
#3	10.20677	-.260752	.0042184	.0139935	3.212529	5.749534	5.288159

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01MSD Acquired: 3/13/2025 16:45:32 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	2.651535	.1811071	.2077261
Stddev	.021663	.0014363	.0002556
%RSD	.8170077	.7930907	.1230568
#1	2.648301	.1802919	.2075261
#2	2.631671	.1802638	.2076381
#3	2.674634	.1827656	.2080141

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3665.592	79849.37	16573.34	2339.860	4307.227
Stddev	3.844	106.56	100.95	7.225	2.731
%RSD	.1048563	.1334486	.6091033	.3087942	.0634044
#1	3668.707	79948.71	16611.29	2345.622	4306.469
#2	3661.297	79862.58	16458.92	2331.753	4310.257
#3	3666.774	79736.82	16649.82	2342.204	4304.955

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01A Acquired: 3/13/2025 16:49:37 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0369078	.0031767	.3810011	-.028503	-.004334	95.13400	.5544898
Stddev	.0022397	.0004710	.0024844	.001500	.001050	.57039	.0033523
%RSD	6.068462	14.82593	.6520766	5.264180	24.23676	.5995597	.6045715
#1	.0362144	.0035534	.3790953	-.027900	-.005537	94.78155	.5530050
#2	.0350968	.0026486	.3800970	-.027397	-.003869	94.82838	.5521362
#3	.0394123	.0033279	.3838110	-.030211	-.003596	95.79207	.5583280

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069403	-.004581	74.09181	.1551323	.0984616	.2807751	201.3526
Stddev	.0001333	.000149	.47930	.0002458	.0006155	.0014603	.3508
%RSD	1.920472	3.249891	.6469019	.1584184	.6251008	.5201015	.1742164
#1	.0068255	-.004602	73.69406	.1552674	.0979139	.2794568	201.2502
#2	.0069088	-.004719	73.95740	.1548486	.0983432	.2805237	201.7432
#3	.0070865	-.004423	74.62397	.1552808	.0991276	.2823448	201.0644

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.263928	53.37135	.1632234	-.000872	11.38806	.3085114	.4626011
Stddev	.020959	.34919	.0012054	.000125	.01982	.0011304	.0015187
%RSD	.6421486	.6542649	.7384964	14.38157	.1740600	.3663903	.3282847
#1	3.255188	53.06404	.1618543	-.000857	11.36652	.3095828	.4623750
#2	3.248754	53.29895	.1636913	-.001005	11.40554	.3073301	.4642201
#3	3.287843	53.75107	.1641248	-.000755	11.39211	.3086212	.4612082

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.840002	-.235648	.0032672	.0132913	3.104443	3.770974	5.176069
Stddev	.040450	.006412	.0002646	.0017292	.018185	.056552	.023191
%RSD	.4110737	2.720966	8.099617	13.00984	.5857618	1.499670	.4480489
#1	9.865364	-.234128	.0033224	.0150415	3.095257	3.765851	5.154532
#2	9.861288	-.230133	.0029793	.0132485	3.092684	3.829913	5.173056
#3	9.793354	-.242683	.0034999	.0115839	3.125388	3.717157	5.200620

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1556-01A Acquired: 3/13/2025 16:49:37 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**2.611082**	**.1770717**	**.2029683**
Stddev	.008646	.0008855	.0012774
%RSD	.3311144	.5000736	.6293706
#1	2.602442	.1764926	.2027831
#2	2.611071	.1766316	.2017936
#3	2.619733	.1780910	.2043282

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3722.466**	**80967.32**	**17096.03**	**2367.208**	**4381.445**
Stddev	5.633	136.71	129.92	10.540	13.095
%RSD	.1513242	.1688483	.7599615	.4452330	.2988851
#1	3727.769	81120.83	17169.51	2368.348	4394.284
#2	3723.077	80858.68	17172.55	2356.145	4381.944
#3	3716.553	80922.46	16946.01	2377.132	4368.107

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: LR1 Acquired: 3/13/2025 16:53:20 Type: Unk
Method: NON EPA-6010-200.7(v2805) 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	.0432594	.0779784	.0221107	-.177652	-.020309	2096.629	.0210760
Stddev	.0060862	.0055442	.0089084	.022783	.012452	13.413	.0017149
%RSD	14.06898	7.109911	40.29013	12.82471	61.31458	.6397204	8.136549
#1	.0499125	.0841958	.0254607	-.153511	-.018840	2095.370	.0196110
#2	.0418934	.0761909	.0288585	-.198777	-.033431	2083.890	.0206548
#3	.0379723	.0735484	.0120129	-.180667	-.008656	2110.627	.0229622

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089908	-.001674	1903.027	.0288505	.0304120	.6009829	1008.075
Stddev	.0001197	.006765	23.626	.0006032	.0019561	.0294469	6.902
%RSD	1.331334	403.9871	1.241489	2.090923	6.432049	4.899782	.6847006
#1	.0089582	-.009290	1884.684	.0294720	.0282124	.5670729	1005.824
#2	.0088907	.000630	1894.710	.0282673	.0310671	.6157696	1015.822
#3	.0091234	.003637	1929.686	.0288123	.0319565	.6201062	1002.579

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.093975	1830.518	.0058389	-.037457	2191.597	.0178666	.0783260
Stddev	.000518	23.554	.0007399	.001006	7.525	.0001892	.0016564
%RSD	.5514016	1.286743	12.67132	2.685200	.3433424	1.059091	2.114756
#1	-.093418	1809.373	.0052877	-.038439	2200.246	.0177074	.0772740
#2	-.094065	1826.276	.0055494	-.036429	2187.997	.0178166	.0774686
#3	-.094442	1855.905	.0066798	-.037503	2186.549	.0180758	.0802354

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1276.638	^ *****	.0048126	.0026029	-.037464	.1867313	.1330570
Stddev	9.039	-----	.0005955	.0053682	.001430	.0017981	.0028548
%RSD	.7080093	-----	12.37313	206.2376	3.816950	.9629529	2.145568
#1	1286.901	^ -----	.0042982	-.003588	-.039114	.1853977	.1351708
#2	1273.151	^ -----	.0054649	.005422	-.036586	.1860200	.1341909
#3	1269.862	^ -----	.0046748	.005975	-.036692	.1887763	.1298095

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: LR1 Acquired: 3/13/2025 16:53:20 Type: Unk
Method: NON EPA-6010-200.7(v2805) 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	-.211651	.1128008	.0125446
Stddev	.014642	.0058808	.0001113
%RSD	6.918239	5.213435	.8874728
#1	-.227970	.1163221	.0124840
#2	-.207320	.1160684	.0126731
#3	-.199662	.1060118	.0124766

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2339.789	50087.76	11865.68	1462.784	2717.667
Stddev	73.105	114.06	105.43	8.350	87.169
%RSD	3.124415	.2277118	.8885158	.5708464	3.207510
#1	2424.101	50133.46	11953.77	1453.180	2818.210
#2	2301.230	49957.94	11894.41	1466.845	2671.503
#3	2294.036	50171.88	11748.87	1468.328	2663.288

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: LR2 Acquired: 3/13/2025 16:58:18 Type: Unk
Method: NON EPA-6010-200.7(v2805) 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	.0082980	-.002120	247.5949	.0162226	-.004301	.2206853	^F *****
Stddev	.0007856	.002200	1.3995	.0037304	.001521	.0025402	-----
%RSD	9.466795	103.7582	.5652289	22.99512	35.36173	1.151040	-----
#1	.0088336	-.003814	247.1798	.0199117	-.002820	.2209352	^ -----
#2	.0086642	.000366	246.4500	.0124522	-.004225	.2230912	91.04036
#3	.0073962	-.002911	249.1550	.0163039	-.005859	.2180293	90.23960

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003423	-.003549	.0785397	.0011245	.0055756	225.5188	.0378137
Stddev	.000036	.000044	.0087840	.0003182	.0003328	1.5130	.0036371
%RSD	1.042542	1.245221	11.18415	28.29448	5.968581	.6709096	9.618471
#1	-.003382	-.003591	.0810031	.0010253	.0058840	226.0874	.0412519
#2	-.003437	-.003552	.0858290	.0008677	.0056198	223.8039	.0381832
#3	-.003449	-.003503	.0687870	.0014804	.0052228	226.6652	.0340059

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.92435	-.086098	49.27059	.0017083	.3246598	-.012263	33.65544
Stddev	.40551	.020522	.29545	.0002273	.0273427	.001313	.05120
%RSD	.8829999	23.83563	.5996391	13.30383	8.421943	10.70671	.1521361
#1	46.32457	-.102610	49.24195	.0014678	.3381270	-.011877	33.66619
#2	45.93473	-.063122	48.99051	.0019196	.3426568	-.013726	33.70042
#3	45.51375	-.092562	49.57932	.0017374	.2931957	-.011187	33.59972

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3295613	-.004955	-.007827	-.005790	-.038537	-.002571	.3209676
Stddev	.0400474	.000528	.000475	.000223	.000983	.002633	.0075311
%RSD	12.15173	10.65528	6.073905	3.850085	2.549471	102.4179	2.346371
#1	.3750779	-.005524	-.007398	-.005535	-.039568	-.004999	.3281264
#2	.3138723	-.004481	-.007745	-.005887	-.038432	-.002941	.3131126
#3	.2997337	-.004860	-.008338	-.005947	-.037612	.000228	.3216637

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: LR2 Acquired: 3/13/2025 16:58:18 Type: Unk
Method: NON EPA-6010-200.7(v2805) 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	.0378515	.0032109	.0016481
Stddev	.0073257	.0007138	.0001037
%RSD	19.35376	22.23162	6.291632
#1	.0323959	.0024132	.0015650
#2	.0349807	.0037895	.0017643
#3	.0461777	.0034300	.0016150

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2990.465	72723.84	14139.80	2067.881	4582.940
Stddev	18.713	281.25	106.93	5.147	23.508
%RSD	.6257459	.3867368	.7561989	.2489095	.5129398
#1	2987.834	72925.55	14023.94	2070.798	4586.461
#2	3010.353	72843.42	14160.79	2061.938	4604.488
#3	2973.206	72402.57	14234.68	2070.907	4557.870

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167103TB Acquired: 3/13/2025 17:04:10 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	-.004645	-.004888	.0041289	.0038556	.0022419	.0030857
Stddev	.001038	.000615	.0017997	.0017637	.0006486	.0014127
%RSD	22.33531	12.57866	43.58853	45.74509	28.93143	45.78345
#1	-.004737	-.005407	.0053199	.0043236	.0029908	.0019857
#2	-.005634	-.005047	.0020586	.0019050	.0018647	.0025925
#3	-.003565	-.004209	.0050081	.0053381	.0018701	.0046790

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000009	-.000158	-.000059	.0193178	.0005526	-.000120
Stddev	.000750	.000033	.000062	.0085006	.0003879	.000299
%RSD	8738.397	20.89284	104.6196	44.00405	70.20453	249.0627
#1	-.000523	-.000121	-.000091	.0124510	.0003108	-.000079
#2	-.000354	-.000184	-.000098	.0166769	.0003469	.000156
#3	.000852	-.000169	.000012	.0288254	.0010000	-.000438

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021380	.0072346	.0003572	.0006648	.0011880	-.000043
Stddev	.0003528	.0016816	.0001040	.0055813	.0001038	.000095
%RSD	16.50126	23.24311	29.11201	839.5023	8.735479	220.7148
#1	.0018891	.0053479	.0004091	.0037336	.0012898	-.000088
#2	.0019832	.0085753	.0004251	.0040384	.0010824	.000066
#3	.0025418	.0077807	.0002375	-.005777	.0011917	-.000107

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 300.8827	.0004220	.0018635	.0271656	-.006519	.0001314
Stddev	3.8900	.0010899	.0001695	.0212045	.000258	.0002488
%RSD	1.292850	258.2807	9.096801	78.05651	3.957291	189.2706
#1	305.2842	.0015980	.0018695	.0514320	-.006374	.0003820
#2	297.9063	.0002221	.0020300	.0122067	-.006367	-.000115
#3	299.4574	-.000554	.0016911	.0178579	-.006817	.000128

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167103TB Acquired: 3/13/2025 17:04:10 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	-.001252	.0011839	.0118092	-.000504	F .0176398	-.001826
Stddev	.000572	.0003928	.0046532	.000959	.0008818	.001732
%RSD	45.67508	33.17574	39.40288	190.2490	4.998977	94.86156
#1	-.001912	.0016326	.0163322	-.001454	.0181485	-.003519
#2	-.000918	.0010171	.0070359	.000465	.0181494	-.001901
#3	-.000925	.0009021	.0120596	-.000524	.0166216	-.000057

Elem	Sr4077
Units	ppm
Avg	.0000119
Stddev	.0000480
%RSD	405.0234
#1	-.000005
#2	.000066
#3	-.000025

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3231.222	72326.22	14972.06	2107.414	4337.974
Stddev	90.960	53.47	55.23	6.260	127.480
%RSD	2.815047	.0739310	.3689072	.2970320	2.938704
#1	3293.569	72379.31	15031.38	2111.547	4427.574
#2	3126.847	72272.38	14962.69	2100.212	4192.030
#3	3273.251	72326.98	14922.11	2110.483	4394.319

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05 Acquired: 3/13/2025 17:08:36 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**-.004368**	**-.003776**	**.0416065**	**.0040325**	**.0010556**	**.0291585**	**.2069863**
Stddev	.000961	.001195	.0004265	.0010721	.0009831	.0062396	.0004008
%RSD	22.00012	31.65554	1.025148	26.58730	93.12993	21.39878	.1936226
#1	-.003259	-.003093	.0420876	.0028337	-.000021	.0234597	.2071832
#2	-.004885	-.005156	.0414569	.0048997	.001283	.0358256	.2072505
#3	-.004960	-.003079	.0412749	.0043641	.001905	.0281902	.2065251

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000096**	**.0010554**	**7.697806**	**.0025903**	**.0005271**	**.0094398**	**.0208188**
Stddev	.000020	.0000459	.034917	.0002223	.0001464	.0000055	.0019165
%RSD	21.27870	4.347220	.4536002	8.581403	27.77662	.0582826	9.205851
#1	-.000073	.0010561	7.738110	.0028123	.0006228	.0094360	.0187191
#2	-.000112	.0011008	7.678632	.0023677	.0003586	.0094373	.0212633
#3	-.000102	.0010091	7.676678	.0025909	.0006000	.0094461	.0224741

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0308982**	**.5537634**	**.0031740**	**.0001803**	**315.3461**	**.0004886**	**.0875235**
Stddev	.0006705	.0069872	.0002219	.0001945	2.9111	.0009641	.0001564
%RSD	2.169979	1.261773	6.992592	107.8327	.9231443	197.3327	.1787277
#1	.0312670	.5560699	.0031494	-.000043	312.0493	.0016008	.0876622
#2	.0313034	.5593059	.0034072	.000310	317.5626	-.000027	.0873539
#3	.0301243	.5459146	.0029653	.000274	316.4263	-.000109	.0875543

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3567319**	**.0217592**	**.0001569**	**-.000989**	**.0012437**	**.6077737**	**.0115902**
Stddev	.0299629	.0007359	.0000119	.001114	.0012134	.0078405	.0008002
%RSD	8.399277	3.382260	7.555152	112.5971	97.55898	1.290036	6.904134
#1	.3900619	.0216498	.0001493	-.001635	.0003143	.6010561	.0115299
#2	.3481047	.0225438	.0001508	-.001628	.0008005	.6163888	.0124189
#3	.3320290	.0210841	.0001705	.000297	.0026164	.6058762	.0108219

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05 Acquired: 3/13/2025 17:08:36 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.3169029	-.002923	.0453530
Stddev	.0010210	.000102	.0000941
%RSD	.3221745	3.497881	.2074891
#1	.3179503	-.003034	.0454475
#2	.3159106	-.002832	.0453521
#3	.3168477	-.002904	.0452593

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3241.716	70835.85	14735.91	2070.475	4323.348
Stddev	5.704	173.17	48.43	9.265	1.935
%RSD	.1759526	.2444615	.3286769	.4474974	.0447586
#1	3247.004	70903.43	14682.66	2077.844	4323.059
#2	3242.471	70965.04	14747.73	2073.507	4321.574
#3	3235.672	70639.08	14777.34	2060.073	4325.412

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05DUP Acquired: 3/13/2025 17:13:02 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**-.005946**	**-.003657**	**.0419073**	**.0021646**	**.0007798**	**.0258652**	**.2108098**
Stddev	.001311	.001908	.0013333	.0027944	.0011291	.0031145	.0012027
%RSD	22.04086	52.16715	3.181551	129.0978	144.8025	12.04139	.5705199
#1	-.004455	-.005848	.0432056	-.000380	.0019999	.0290203	.2110622
#2	-.006470	-.002362	.0405416	.001719	-.000228	.0227929	.2118662
#3	-.006914	-.002762	.0419746	.005155	.000568	.0257824	.2095009

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000057**	**.0010678**	**7.681896**	**.0026667**	**.0005813**	**.0091733**	**.0195744**
Stddev	.000062	.0000427	.016403	.0003449	.0004227	.0001921	.0015271
%RSD	109.5106	4.001653	.2135259	12.93280	72.71859	2.094428	7.801578
#1	-.000101	.0011144	7.691325	.0022696	.0000968	.0090634	.0189660
#2	-.000084	.0010305	7.662956	.0028399	.0008746	.0093951	.0213119
#3	.000014	.0010585	7.691408	.0028907	.0007726	.0090613	.0184452

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0308554**	**.5502627**	**.0026780**	**-.000121**	**312.5550**	**.0001199**	**.0856160**
Stddev	.0000720	.0214430	.0001210	.000238	4.8022	.0011451	.0000623
%RSD	.2334582	3.896874	4.519311	196.3998	1.536424	955.0997	.0728176
#1	.0307724	.5441075	.0027906	-.000046	317.6722	.0013633	.0856880
#2	.0309020	.5741102	.0026935	.000070	308.1466	-.000891	.0855774
#3	.0308918	.5325703	.0025500	-.000387	311.8464	-.000112	.0855828

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3685115**	**.0209029**	**.0001532**	**-.001089**	**.0008773**	**.6019695**	**.0132935**
Stddev	.0267951	.0006674	.0002634	.000876	.0002938	.0087033	.0025138
%RSD	7.271177	3.192827	171.9226	80.46440	33.49046	1.445800	18.91030
#1	.3772602	.0212927	.0001475	-.000086	.0012163	.5928210	.0111522
#2	.3384355	.0201323	.0004195	-.001478	.0006965	.6101459	.0160613
#3	.3898388	.0212838	-.000107	-.001704	.0007191	.6029416	.0126668

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05DUP Acquired: 3/13/2025 17:13:02 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.3217331	-.002187	.0457207
Stddev	.0023935	.001341	.0001398
%RSD	.7439439	61.30223	.3057342
#1	.3218438	-.001701	.0457940
#2	.3192862	-.001157	.0458086
#3	.3240693	-.003703	.0455595

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3312.076	73285.15	15189.48	2132.759	4420.887
Stddev	12.425	169.52	8.26	18.596	22.101
%RSD	.3751574	.2313179	.0544068	.8719062	.4999334
#1	3305.670	73209.87	15180.06	2111.863	4412.514
#2	3326.397	73166.31	15192.90	2138.929	4445.951
#3	3304.160	73479.28	15195.49	2147.486	4404.194

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05LX5 Acquired: 3/13/2025 17:17:28 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**-.001784**	**-.000967**	**.0090504**	**.0008835**	**.0005334**	**.0022095**	**.0448592**
Stddev	.003234	.001118	.0003225	.0038797	.0022112	.0019108	.0007753
%RSD	181.2150	115.5987	3.563419	439.1318	414.5606	86.48224	1.728232
#1	-.002067	-.000263	.0088498	-.003000	-.001010	.0004386	.0456967
#2	.001581	-.000382	.0094225	.004759	.003066	.0042348	.0447145
#3	-.004867	-.002257	.0088791	.000891	-.000456	.0019552	.0441666

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000024**	**.0001414**	**1.611679**	**.0008703**	**.0000710**	**.0020672**	**.0064983**
Stddev	.000078	.0000430	.011726	.0001316	.0001894	.0003345	.0041999
%RSD	331.2480	30.41338	.7275711	15.11956	266.9620	16.18179	64.63079
#1	-.000061	.0001571	1.601073	.0010078	.0001271	.0022624	.0016832
#2	-.000076	.0000928	1.609694	.0007455	.0002260	.0016810	.0094058
#3	.000066	.0001744	1.624271	.0008578	-.000140	.0022583	.0084060

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057887**	**.1104509**	**.0005571**	**-.000375**	**60.55737**	**.0015784**	**.0173123**
Stddev	.0000237	.0088612	.0000557	.000207	.07779	.0010153	.0003570
%RSD	.4100770	8.022755	10.00369	55.18888	.1284599	64.32383	2.062419
#1	.0057622	.1132765	.0005859	-.000160	60.49374	.0009870	.0170945
#2	.0057958	.1005215	.0004928	-.000392	60.64409	.0027508	.0171180
#3	.0058080	.1175547	.0005924	-.000574	60.53427	.0009976	.0177244

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1892175**	**.0001433**	**-.000052**	**-.001135**	**.0009370**	**.1145914**	**.0007089**
Stddev	.0287266	.0008151	.000098	.000263	.0007003	.0017346	.0022815
%RSD	15.18177	568.5852	189.5401	23.15521	74.74032	1.513741	321.8542
#1	.1830168	.0008771	-.000108	-.001104	.0017447	.1149503	-.000080
#2	.2205380	.0002869	.000061	-.000890	.0005687	.1127054	.003280
#3	.1640977	-.000734	-.000108	-.001413	.0004977	.1161185	-.001074

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05LX5 Acquired: 3/13/2025 17:17:28 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.0649829	.0058895	.0095564
Stddev	.0016133	.0007865	.0000662
%RSD	2.482683	13.35440	.6930471
#1	.0662940	.0065261	.0096304
#2	.0654735	.0050102	.0095027
#3	.0631812	.0061320	.0095360

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3417.377	73602.80	14146.76	2191.959	4687.391
Stddev	14.372	217.25	92.52	4.359	26.771
%RSD	.4205571	.2951711	.6540367	.1988738	.5711229
#1	3427.466	73625.30	14072.94	2189.281	4704.243
#2	3423.744	73375.18	14250.56	2189.608	4701.407
#3	3400.921	73807.93	14116.78	2196.990	4656.522

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV06 Acquired: 3/13/2025 17:21:47 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**5.070560**	**5.074795**	**5.180185**	**4.973060**	**4.975558**	**10.02855**	**9.979444**
Stddev	.034682	.046561	.026150	.033134	.025544	.02319	.145857
%RSD	.6839956	.9175045	.5048149	.6662688	.5133850	.2312024	1.461573
#1	5.036596	5.047242	5.156147	4.938871	4.957024	10.03031	9.832020
#2	5.069164	5.048590	5.176379	4.975282	4.964955	10.05081	10.12368
#3	5.105919	5.128554	5.208030	5.005027	5.004696	10.00454	9.98263

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2638450**	**2.572398**	**25.66825**	**1.058839**	**2.548582**	**1.272260**	**5.039567**
Stddev	.0008974	.011150	.08946	.002200	.011098	.004867	.022072
%RSD	.3401090	.4334522	.3485088	.2077467	.4354563	.3825317	.4379705
#1	.2646212	2.561565	25.76075	1.060903	2.537426	1.266930	5.064901
#2	.2640514	2.571789	25.66182	1.059088	2.548698	1.273383	5.029316
#3	.2628624	2.583840	25.58219	1.056525	2.559621	1.276467	5.024485

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.512560**	**26.02495**	**2.554966**	**1.287593**	**24.06556**	**2.544340**	**2.547271**
Stddev	.013961	.10363	.011261	.001123	.17258	.011570	.007410
%RSD	.5556487	.3982069	.4407403	.0872491	.7171246	.4547332	.2909081
#1	2.526458	26.13712	2.543163	1.288149	24.18020	2.556791	2.545524
#2	2.512684	25.93277	2.556143	1.286300	24.14942	2.542308	2.540890
#3	2.498537	26.00498	2.565592	1.288330	23.86708	2.533921	2.555399

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.79497**	**5.139561**	**5.081842**	**5.138306**	**5.007957**	**5.344049**	**5.220974**
Stddev	.06628	.006896	.023500	.028770	.023251	.013129	.027142
%RSD	.2673129	.1341724	.4624244	.5599038	.4642846	.2456717	.5198702
#1	24.84624	5.147523	5.060603	5.107989	5.029334	5.358560	5.195818
#2	24.81855	5.135513	5.077836	5.141700	5.011336	5.332993	5.217364
#3	24.72013	5.135647	5.107087	5.165228	4.983202	5.340594	5.249741

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV06 Acquired: 3/13/2025 17:21:47 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**4.970776**	**4.831627**	**5.034528**
Stddev	.024774	.025375	.055374
%RSD	.4983981	.5251762	1.099880
#1	4.946900	4.848240	5.083735
#2	4.969068	4.844223	4.974566
#3	4.996360	4.802419	5.045284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3330.323**	**71634.49**	**14271.63**	**2110.158**	**4448.119**
Stddev	14.411	111.11	38.96	2.053	19.082
%RSD	.4327278	.1551067	.2730124	.0972964	.4289878
#1	3339.323	71660.83	14253.82	2110.713	4459.706
#2	3337.945	71512.58	14244.75	2107.884	4458.556
#3	3313.702	71730.07	14316.31	2111.877	4426.095

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB06 Acquired: 3/13/2025 17:25:57 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**-.001699**	**-.000211**	**.0000910**	**-.002051**	**.0020133**	**-.005019**	**.0028432**
Stddev	.001386	.001095	.0010910	.000573	.0014205	.000124	.0010628
%RSD	81.55911	518.0778	1198.352	27.91651	70.55642	2.472913	37.38246
#1	-.003133	.000423	-.000366	-.002674	.0014871	-.004889	.0016315
#2	-.000367	.000418	.001336	-.001547	.0036219	-.005033	.0032799
#3	-.001596	-.001475	-.000697	-.001933	.0009310	-.005136	.0036181

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000004**	**.0000253**	**-.003343**	**.0000433**	**.0000202**	**.0001708**	**.0036308**
Stddev	.000034	.0000145	.005017	.0006675	.0002889	.0003353	.0013984
%RSD	827.0824	57.23073	150.0544	1541.408	1431.859	196.3427	38.51338
#1	.000028	.0000086	-.009134	.0006447	.0002132	.0002502	.0031002
#2	-.000001	.0000343	-.000293	.0001601	.0001592	.0004593	.0025754
#3	-.000039	.0000330	-.000603	-.000675	-.000312	-.000197	.0052168

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000511**	**-.002129**	**-.000115**	**.0001199**	**.1472494**	**.0005229**	**-.000661**
Stddev	.000456	.004238	.000140	.0003738	.0055535	.0003479	.000463
%RSD	89.18601	199.0269	121.1342	311.7946	3.771513	66.53762	70.07025
#1	-.000846	-.004851	-.000270	-.000197	.1428295	.0007790	-.000866
#2	.000008	-.004289	.000002	.000532	.1454356	.0001268	-.000986
#3	-.000696	.002753	-.000079	.000025	.1534830	.0006630	-.000131

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0919917**	**.0006153**	**.0002540**	**-.000496**	**.0014592**	**.0090047**	**-.005417**
Stddev	.0299547	.0006491	.0001316	.000306	.0002656	.0016308	.001800
%RSD	32.56240	105.4847	51.80498	61.57886	18.20148	18.11017	33.22330
#1	.1068191	.0008603	.0004057	-.000186	.0011539	.0084052	-.007360
#2	.1116408	.0011062	.0001856	-.000506	.0016373	.0108503	-.003808
#3	.0575152	-.000121	.0001708	-.000797	.0015862	.0077585	-.005083

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB06 Acquired: 3/13/2025 17:25:57 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	-.000533	.0032378	.0000831
Stddev	.002593	.0002271	.0000606
%RSD	486.6956	7.014166	72.85795
#1	-.002352	.0035000	.0000899
#2	.002436	.0031111	.0001399
#3	-.001682	.0031023	.0000194

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3443.227	74472.28	14283.41	2185.324	4980.677
Stddev	3.649	107.30	61.04	1.827	10.245
%RSD	.1059790	.1440872	.4273246	.0836048	.2057005
#1	3447.439	74353.46	14256.70	2183.253	4988.809
#2	3441.194	74562.12	14240.28	2186.707	4984.052
#3	3441.047	74501.25	14353.25	2186.011	4969.170

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05MS Acquired: 3/13/2025 17:30:17 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**.8054089**	**1.776928**	**.9752016**	**1.902398**	**.7815544**	**1.934399**	**.3865491**
Stddev	.0021824	.017224	.0013119	.004230	.0034398	.005462	.0011943
%RSD	.2709648	.9692998	.1345227	.2223450	.4401185	.2823419	.3089638
#1	.8028893	1.774244	.9764042	1.897929	.7826317	1.931763	.3877791
#2	.8066300	1.795336	.9738026	1.902926	.7777049	1.930755	.3853940
#3	.8067074	1.761204	.9753978	1.906339	.7843265	1.940678	.3864742

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1938814**	**.1969316**	**8.572990**	**.4166448**	**.1973208**	**.2943024**	**2.985841**
Stddev	.0002552	.0003003	.025872	.0013918	.0001762	.0007104	.023648
%RSD	.1316142	.1524676	.3017882	.3340435	.0892865	.2413671	.7919889
#1	.1941558	.1965924	8.552409	.4182518	.1974373	.2944844	2.999793
#2	.1936512	.1971635	8.564527	.4158269	.1974071	.2935188	2.958538
#3	.1938373	.1970388	8.602034	.4158557	.1971181	.2949041	2.999194

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2213221**	**2.423896**	**.4912662**	**.0749357**	**312.8173**	**.2927639**	**.2875034**
Stddev	.0012083	.010617	.0014386	.0002783	.8629	.0020241	.0020975
%RSD	.5459452	.4380306	.2928243	.3713971	.2758526	.6913767	.7295539
#1	.2225629	2.432309	.4897942	.0751937	313.1696	.2937448	.2861755
#2	.2201492	2.411966	.4926687	.0749727	311.8340	.2904363	.2899215
#3	.2212542	2.427412	.4913358	.0746407	313.4484	.2941107	.2864133

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.30773**	**.2848920**	**.4084299**	**.6926895**	**.1910236**	**1.408579**	**5.987482**
Stddev	.03202	.0019226	.0003072	.0025453	.0009716	.002829	.016755
%RSD	.3106252	.6748670	.0752093	.3674475	.5086088	.2008303	.2798408
#1	10.34427	.2826908	.4087614	.6897506	.1910427	1.405366	5.982111
#2	10.29436	.2857427	.4081549	.6941370	.1900426	1.409676	6.006264
#3	10.28457	.2862426	.4083735	.6941810	.1919855	1.410696	5.974070

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05MS Acquired: 3/13/2025 17:30:17 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.2923244	.1878519	.2309340
Stddev	.0049175	.0005952	.0010136
%RSD	1.682198	.3168229	.4389157
#1	.2887450	.1872138	.2319475
#2	.2902967	.1879499	.2299203
#3	.2979314	.1883919	.2309343

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3301.660	71234.09	14721.93	2081.256	4398.238
Stddev	7.980	155.59	15.17	8.342	4.232
%RSD	.2417102	.2184242	.1030548	.4008356	.0962101
#1	3298.839	71073.28	14713.23	2089.327	4402.751
#2	3310.667	71383.87	14739.45	2072.667	4397.604
#3	3295.473	71245.12	14713.11	2081.775	4394.359

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05MSD Acquired: 3/13/2025 17:34:27 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.8048625	1.774762	.9745565	1.901528	.7793531	1.928115	.3851094
Stddev	.0031539	.014093	.0014661	.002713	.0024018	.001631	.0015671
%RSD	.3918496	.7940674	.1504328	.1426590	.3081775	.0846059	.4069193
#1	.8083784	1.765930	.9732413	1.901375	.7809157	1.927823	.3865526
#2	.8039264	1.767342	.9761371	1.904314	.7805561	1.926648	.3834425
#3	.8022826	1.791015	.9742910	1.898895	.7765876	1.929872	.3853330

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1972624	.1963376	8.595865	.4131216	.1971878	.2949192	2.927167
Stddev	.0009500	.0004752	.010826	.0012819	.0007573	.0006672	.018633
%RSD	.4815729	.2420113	.1259443	.3102886	.3840530	.2262438	.6365633
#1	.1962368	.1964773	8.583376	.4140251	.1970046	.2941703	2.945097
#2	.1981121	.1967273	8.601640	.4116545	.1980199	.2954505	2.907902
#3	.1974383	.1958083	8.602580	.4136853	.1965389	.2951368	2.928502

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2222659	2.440361	.4918535	.0744598	307.9242	.2950682	.2852711
Stddev	.0007006	.017399	.0005863	.0003967	5.9865	.0003357	.0002307
%RSD	.3152075	.7129492	.1191955	.5327901	1.944138	.1137827	.0808746
#1	.2221724	2.444963	.4919943	.0746900	314.8279	.2953768	.2850051
#2	.2216168	2.421125	.4923565	.0740017	304.1697	.2951171	.2853921
#3	.2230086	2.454996	.4912097	.0746876	304.7749	.2947107	.2854162

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.03774	.2884141	.4079748	.6895981	.1919059	1.363206	6.004339
Stddev	.03867	.0013246	.0012913	.0041954	.0013071	.003623	.018053
%RSD	.3852011	.4592782	.3165046	.6083867	.6811282	.2657392	.3006688
#1	10.06605	.2881573	.4073172	.6895660	.1924525	1.367363	5.984331
#2	9.99368	.2898483	.4094625	.6938096	.1928509	1.361536	6.019411
#3	10.05348	.2872366	.4071447	.6854189	.1904142	1.360720	6.009274

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05MSD Acquired: 3/13/2025 17:34:27 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.2949943	.1879431	.2309041
Stddev	.0037477	.0013592	.0003417
%RSD	1.270444	.7231986	.1479876
#1	.2986176	.1885229	.2312816
#2	.2911335	.1889162	.2308146
#3	.2952318	.1863901	.2306160

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3307.785	72059.37	14489.93	2111.347	4402.772
Stddev	12.666	239.41	36.14	6.400	13.066
%RSD	.3829028	.3322392	.2493886	.3031353	.2967677
#1	3308.533	71952.43	14531.45	2106.664	4400.033
#2	3294.761	72333.61	14465.63	2118.639	4391.293
#3	3320.059	71892.07	14472.69	2108.737	4416.991

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05A Acquired: 3/13/2025 17:38:38 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.7829580	1.753771	.9663901	1.848942	.7577616	1.867369	.3934170
Stddev	.0020516	.013210	.0058354	.010909	.0068801	.005234	.0020690
%RSD	.2620367	.7532208	.6038383	.5900392	.9079494	.2803050	.5259088
#1	.7834393	1.739277	.9596840	1.836860	.7498645	1.862147	.3911323
#2	.7807085	1.765133	.9691737	1.851895	.7609610	1.872616	.3939545
#3	.7847261	1.756902	.9703124	1.858071	.7624595	1.867343	.3951643

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1890739	.1947889	8.644263	.4025309	.1959665	.2913008	2.965815
Stddev	.0001374	.0013168	.034914	.0014505	.0017982	.0014937	.017114
%RSD	.0726608	.6760061	.4038979	.3603326	.9175951	.5127641	.5770570
#1	.1890999	.1933803	8.629596	.4036398	.1939219	.2896676	2.965203
#2	.1889253	.1949974	8.619075	.4008895	.1966755	.2916372	2.949015
#3	.1891964	.1959890	8.684118	.4030635	.1973022	.2925976	2.983228

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2206660	2.425931	.4898202	.0725965	310.7105	.2895875	.2777064
Stddev	.0015616	.015972	.0039856	.0001152	5.2532	.0022333	.0009897
%RSD	.7076945	.6583843	.8136868	.1587004	1.690711	.7711838	.3563755
#1	.2200162	2.436792	.4855243	.0724775	306.0685	.2870634	.2788043
#2	.2195342	2.407592	.4905386	.0726047	309.6498	.2903918	.2774322
#3	.2224476	2.433410	.4933978	.0727075	316.4131	.2913071	.2768828

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.22734	.2764221	.4012346	.6802892	.1889453	1.379887	5.978197
Stddev	.02794	.0006874	.0020955	.0042340	.0010657	.017802	.040697
%RSD	.2731582	.2486650	.5222679	.6223886	.5640339	1.290070	.6807595
#1	10.21298	.2771268	.3988345	.6759427	.1884716	1.364518	5.937845
#2	10.20951	.2757536	.4027008	.6805239	.1881986	1.375751	5.977516
#3	10.25954	.2763859	.4021685	.6844010	.1901658	1.399393	6.019231

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-05A Acquired: 3/13/2025 17:38:38 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.2912400	.1874482	.2314363
Stddev	.0063610	.0002733	.0009829
%RSD	2.184112	.1458141	.4247046
#1	.2869222	.1872562	.2304579
#2	.2882531	.1873272	.2314273
#3	.2985448	.1877611	.2324237

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3332.774	72962.00	14974.87	2158.487	4416.640
Stddev	18.784	342.59	64.06	7.818	31.838
%RSD	.5636280	.4695420	.4277693	.3621992	.7208620
#1	3351.576	72856.22	14979.87	2151.900	4446.326
#2	3332.740	73345.00	15036.29	2167.127	4420.577
#3	3314.008	72684.78	14908.46	2156.436	4383.016

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-10 Acquired: 3/13/2025 17:42:48 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**-.001476**	**-.004217**	**.0129484**	**.0033742**	**.0009026**	**.0203576**	**.2650763**
Stddev	.002350	.001986	.0016847	.0009776	.0008079	.0039406	.0006083
%RSD	159.2178	47.09916	13.01117	28.97132	89.51191	19.35705	.2294933
#1	-.001328	-.005968	.0142501	.0029741	.0005818	.0241980	.2649918
#2	.000797	-.004625	.0135495	.0044884	.0003043	.0205508	.2657225
#3	-.003897	-.002059	.0110456	.0026602	.0018216	.0163239	.2645147

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000009**	**.0001161**	**11.22772**	**-.000079**	**.0153508**	**.0116022**	**1.403295**
Stddev	.000013	.0000445	.01271	.000167	.0002448	.0003225	.005320
%RSD	143.2805	38.29374	.1131789	210.5415	1.594453	2.779530	.3791134
#1	.000003	.0001671	11.23633	.000010	.0152598	.0116404	1.407969
#2	-.000007	.0000855	11.21312	-.000273	.0156280	.0112624	1.404411
#3	-.000022	.0000957	11.23370	.000024	.0151646	.0119040	1.397506

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3676692**	**.6166513**	**.0037323**	**-.000135**	**316.6692**	**.0015856**	**.0853280**
Stddev	.0002794	.0125569	.0003991	.000244	4.9896	.0009242	.0002517
%RSD	.0759820	2.036304	10.69322	180.9761	1.575661	58.28986	.2949723
#1	.3678330	.6092688	.0033322	.000142	321.0825	.0007325	.0850504
#2	.3673466	.6311500	.0037343	-.000316	317.6701	.0014567	.0855413
#3	.3678280	.6095352	.0041304	-.000230	311.2550	.0025675	.0853923

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9165102**	**.0308125**	**-.000002**	**-.001309**	**.0008983**	**.8082710**	**.0097488**
Stddev	.0170686	.0003518	.000198	.000359	.0002631	.0094446	.0030642
%RSD	1.862348	1.141598	12039.96	27.46419	29.29056	1.168492	31.43164
#1	.9104422	.0306746	-.000224	-.001677	.0010677	.8073207	.0096132
#2	.9033046	.0305505	.000064	-.001290	.0005952	.8181548	.0128786
#3	.9357837	.0312123	.000155	-.000959	.0010322	.7993375	.0067546

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1547-10 Acquired: 3/13/2025 17:42:48 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.3950351	-.001895	.0793749
Stddev	.0026865	.000878	.0000804
%RSD	.6800765	46.35003	.1012266
#1	.3976106	-.002555	.0794356
#2	.3922498	-.000898	.0794052
#3	.3952448	-.002232	.0792838

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3314.798	71850.90	14515.51	2131.317	4415.137
Stddev	3.402	450.19	15.36	12.406	9.888
%RSD	.1026265	.6265620	.1057964	.5820611	.2239616
#1	3317.711	71743.58	14529.57	2119.854	4415.663
#2	3311.059	71464.07	14499.12	2129.609	4404.996
#3	3315.624	72345.06	14517.83	2144.488	4424.751

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1552-05 Acquired: 3/13/2025 17:47:14 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.0065243	-.002203	.0171192	.0016177	.0029561	.0892956	.5991115
Stddev	.0027373	.000914	.0008813	.0007334	.0016303	.0047909	.0011874
%RSD	41.95546	41.48921	5.148008	45.33816	55.14842	5.365179	.1981853
#1	.0090103	-.003090	.0161540	.0007808	.0024748	.0838863	.5996446
#2	.0069718	-.002255	.0178811	.0021487	.0047728	.0930038	.5999388
#3	.0035909	-.001264	.0173224	.0019235	.0016207	.0909966	.5977510

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001268	-.000863	12.96602	.0003235	.0018501	.0192508	12.24144
Stddev	.0000265	.000060	.01768	.0003165	.0001585	.0000132	.04494
%RSD	20.93790	6.891746	.1363639	97.81453	8.565060	.0684130	.3671527
#1	.0001563	-.000923	12.95709	.0006773	.0019931	.0192655	12.29157
#2	.0001192	-.000804	12.98639	.0000675	.0018773	.0192403	12.22803
#3	.0001048	-.000862	12.95459	.0002258	.0016797	.0192466	12.20473

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2256814	4.435617	.0029199	.0003008	340.3673	.0029253	.2847634
Stddev	.0006634	.041410	.0004419	.0005018	2.1381	.0012995	.0011995
%RSD	.2939445	.9335734	15.13525	166.8495	.6281888	44.42206	.4212201
#1	.2260495	4.415710	.0024650	-.000047	338.1237	.0014862	.2845928
#2	.2260790	4.483221	.0033476	.000876	342.3814	.0032769	.2860391
#3	.2249155	4.407920	.0029470	.000074	340.5969	.0040128	.2836584

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.971155	.1473849	.0000203	-.001819	.0024593	1.178881	.1430528
Stddev	.012690	.0006097	.0001869	.000492	.0001681	.007422	.0005261
%RSD	.4271168	.4136668	919.7099	27.04650	6.837493	.6295741	.3677344
#1	2.981942	.1476838	-.000132	-.001909	.0025553	1.187451	.1436600
#2	2.974351	.1477874	-.000036	-.002261	.0022651	1.174695	.1427374
#3	2.957172	.1466834	.000229	-.001289	.0025574	1.174499	.1427608

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1552-05 Acquired: 3/13/2025 17:47:14 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.6568495	.0033785	.1127152
Stddev	.0063565	.0003501	.0004829
%RSD	.9677231	10.36353	.4284580
#1	.6511051	.0037666	.1131441
#2	.6557647	.0032826	.1128095
#3	.6636785	.0030864	.1121921

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3281.737	71845.75	15035.45	2104.045	4377.629
Stddev	23.833	110.53	87.35	5.906	22.423
%RSD	.7262273	.1538484	.5809370	.2806863	.5122079
#1	3300.428	71777.69	15089.77	2097.228	4392.404
#2	3289.884	71786.28	14934.69	2107.610	4388.655
#3	3254.899	71973.29	15081.89	2107.296	4351.829

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167117BL Acquired: 3/13/2025 17:51:38 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.0002026	.0007802	.0004670	.0013533	.0019466	-.006017	.0022761
Stddev	.0024422	.0023288	.0008029	.0020450	.0002752	.004070	.0019383
%RSD	1205.555	298.4709	171.9201	151.1039	14.13778	67.64652	85.15835
#1	-.002595	.0029481	.0012246	.0025787	.0021575	-.006957	.0003452
#2	.001908	-.001682	.0005512	-.001007	.0020470	-.001559	.0022615
#3	.001295	.001074	-.000375	.002489	.0016353	-.009535	.0042218

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000351	.0000627	-.003878	.0002241	.0001068	.0000847	.0023057
Stddev	.0000344	.0000725	.013588	.0002275	.0001004	.0002176	.0023236
%RSD	98.21450	115.6086	350.4104	101.4835	94.02358	256.7953	100.7755
#1	-.000003	.0000499	-.004134	.0004867	.0000832	.0002066	.0007031
#2	.000043	.0001407	.009837	.0000870	.0002168	.0002140	.0012434
#3	.000065	-.000003	-.017335	.0000987	.0000202	-.000166	.0049705

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000601	.0061467	-.000131	.0000069	.2191507	-.000444	-.001136
Stddev	.000136	.0070259	.000093	.0004202	.0239567	.001115	.000378
%RSD	22.72866	114.3039	70.55634	6070.931	10.93163	251.1875	33.29589
#1	-.000544	.0009451	-.000207	.0004493	.2046980	.000663	-.001287
#2	-.000501	.0033557	-.000159	-.000387	.2468041	-.001565	-.000705
#3	-.000756	.0141392	-.000028	-.000042	.2059499	-.000429	-.001414

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1057200	-.004164	.0000155	-.001340	.0006875	-.003753	-.003826
Stddev	.0128872	.000560	.0000406	.000395	.0004450	.002235	.001006
%RSD	12.18990	13.43631	261.0540	29.47277	64.72675	59.55941	26.30264
#1	.0923834	-.004810	.0000097	-.001016	.0006543	-.001439	-.003756
#2	.1181050	-.003848	-.000022	-.001224	.0002600	-.005901	-.002857
#3	.1066717	-.003835	.000059	-.001780	.0011481	-.003920	-.004866

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167117BL Acquired: 3/13/2025 17:51:38 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	-.001668	.0050715	-.000051
Stddev	.003015	.0005799	.000067
%RSD	180.7929	11.43367	132.8273
#1	-.003585	.0046129	-.000093
#2	.001808	.0048782	-.000086
#3	-.003227	.0057233	.000027

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3442.256	75017.49	14299.24	2198.246	4981.174
Stddev	26.034	227.09	56.77	10.024	33.301
%RSD	.7563199	.3027156	.3970086	.4560077	.6685332
#1	3460.057	75003.57	14354.23	2191.102	5008.733
#2	3454.335	74797.67	14302.65	2193.932	4990.617
#3	3412.376	75251.21	14240.84	2209.705	4944.171

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167117BS Acquired: 3/13/2025 17:55:58 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**.7915988**	**1.969029**	**.9639414**	**1.917598**	**.7791807**	**1.881172**
Stddev	.0023670	.010462	.0028571	.008878	.0057612	.007330
%RSD	.2990178	.5313524	.2963933	.4629503	.7393895	.3896592
#1	.7901028	1.979217	.9614438	1.910513	.7765056	1.889323
#2	.7903658	1.958312	.9633236	1.914726	.7752433	1.875122
#3	.7943278	1.969560	.9670568	1.927556	.7857930	1.879072

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1768342**	**.2103217**	**.1918852**	**.9809289**	**.4071497**	**.1933373**
Stddev	.0012133	.0019895	.0005856	.0078170	.0007045	.0007390
%RSD	.6861455	.9459343	.3051901	.7968953	.1730202	.3822288
#1	.1781222	.2121099	.1914703	.9891518	.4063363	.1927412
#2	.1757127	.2081787	.1916302	.9735936	.4075632	.1931066
#3	.1766678	.2106766	.1925551	.9800414	.4075495	.1941641

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3039258**	**2.703886**	**.1911803**	**1.922416**	**.4861262**	**.0742940**
Stddev	.0018646	.015876	.0008023	.012994	.0021139	.0002342
%RSD	.6134936	.5871459	.4196487	.6759262	.4348452	.3152758
#1	.3026845	2.691756	.1921002	1.937322	.4843242	.0744693
#2	.3030229	2.721854	.1908151	1.913475	.4856015	.0740280
#3	.3060699	2.698047	.1906256	1.916452	.4884531	.0743848

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.563249**	**.2841139**	**.1986337**	**8.535070**	**.2964622**	**.3968197**
Stddev	.010065	.0008028	.0013191	.093072	.0025137	.0014581
%RSD	.3926812	.2825746	.6640611	1.090470	.8478813	.3674397
#1	2.574362	.2833799	.1974732	8.430665	.2993626	.3960770
#2	2.560637	.2839904	.1983597	8.609345	.2949154	.3958825
#3	2.554746	.2849713	.2000682	8.565199	.2951086	.3984996

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: PB167117BS Acquired: 3/13/2025 17:55:58 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.6827311	.1861890	F .7200973	5.669972	F -.012793	.1894475
Stddev	.0026389	.0005913	.0088082	.022149	.001121	.0006043
%RSD	.3865149	.3175847	1.223197	.3906314	8.760268	.3189996
#1	.6807695	.1864352	.7111301	5.657505	-.012709	.1901453
#2	.6816926	.1855144	.7287374	5.656867	-.013954	.1890927
#3	.6857312	.1866174	.7204245	5.695545	-.011717	.1891046

Elem	Sr4077
Units	ppm
Avg	.1820682
Stddev	.0005008
%RSD	.2750717
#1	.1826421
#2	.1818424
#3	.1817200

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3448.328	75706.46	14094.24	2223.248	4855.039
Stddev	7.357	149.13	121.96	10.576	5.520
%RSD	.2133536	.1969897	.8652846	.4757170	.1137027
#1	3445.896	75878.04	13968.58	2228.381	4855.738
#2	3456.593	75633.34	14212.12	2230.279	4860.177
#3	3442.494	75607.99	14102.02	2211.085	4849.203

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1545-01DLX5 Acquired: 3/13/2025 17:59:59 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.0170219	.0024836	.0144592	-.002638	-.000346	9.011489
Stddev	.0020997	.0012610	.0012113	.003394	.001172	.006207
%RSD	12.33504	50.77245	8.377577	128.6772	338.8989	.0688825
#1	.0178856	.0013724	.0155622	.000368	-.001282	9.008279
#2	.0185520	.0038540	.0146528	-.006318	.000969	9.007544
#3	.0146281	.0022242	.0131628	-.001962	-.000725	9.018644

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0921931	.0000863	-.001258	34.91364	.0271494	.0073963
Stddev	.0009436	.0000329	.000049	.06975	.0001865	.0002136
%RSD	1.023498	38.06508	3.883007	.1997810	.6869212	2.888532
#1	.0929442	.0000746	-.001254	34.89520	.0272833	.0076395
#2	.0911340	.0001234	-.001308	34.85495	.0269364	.0072391
#3	.0925011	.0000609	-.001211	34.99075	.0272285	.0073102

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0309426	36.93689	9.924113	14.80785	.0136921	-.000722
Stddev	.0006333	.31811	.033317	.03720	.0004416	.000235
%RSD	2.046597	.8612376	.3357132	.2512248	3.225447	32.50173
#1	.0311913	36.60500	9.916204	14.80099	.0131824	-.000969
#2	.0302227	36.96650	9.895464	14.77456	.0139333	-.000695
#3	.0314137	37.23916	9.960673	14.84800	.0139607	-.000502

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	386.5274	.0216014	.0718662	2.723940	-.047564	.0006928
Stddev	3.5252	.0011359	.0005519	.048148	.001901	.0002076
%RSD	.9120271	5.258249	.7679601	1.767592	3.996508	29.96530
#1	384.5733	.0215025	.0715897	2.671768	-.049686	.0009029
#2	384.4120	.0205182	.0725017	2.733388	-.046991	.0004878
#3	390.5969	.0227834	.0715071	2.766663	-.046015	.0006876

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1545-01DLX5 Acquired: 3/13/2025 17:59:59 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	-.001898	.1856285	F 11.83799	.4088863	1.036876	.0262526
Stddev	.000271	.0007611	.08257	.0049381	.000951	.0003427
%RSD	14.29878	.4100035	.6975076	1.207685	.0917025	1.305339
#1	-.002074	.1856004	11.74394	.4138808	1.037624	.0264353
#2	-.001586	.1848818	11.89857	.4040067	1.035806	.0258573
#3	-.002034	.1864032	11.87145	.4087713	1.037199	.0264653

Elem	Sr4077
Units	ppm
Avg	.1472532
Stddev	.0006539
%RSD	.4440487
#1	.1468921
#2	.1468596
#3	.1480080

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3271.172	70599.06	14072.54	2135.785	4128.296
Stddev	15.973	255.92	45.47	11.047	16.552
%RSD	.4883032	.3624924	.3231457	.5172305	.4009316
#1	3258.229	70889.53	14024.36	2147.831	4118.775
#2	3289.023	70500.87	14114.71	2133.395	4147.408
#3	3266.262	70406.77	14078.54	2126.129	4118.705

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-13DLX10 Acquired: 3/13/2025 18:04:21 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**.1022843**	**.0223009**	**2.571095**	**-.050084**	**-.013178**	**284.7247**
Stddev	.0017292	.0041504	.007901	.003013	.002530	.1135
%RSD	1.690601	18.61102	.3072862	6.015337	19.19993	.0398609
#1	.1041675	.0257956	2.565552	-.046697	-.014999	284.6056
#2	.1007679	.0233937	2.567591	-.052465	-.010289	284.8316
#3	.1019176	.0177134	2.580141	-.051089	-.014248	284.7370

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5233256**	**.0217035**	**.0402230**	**57.42780**	**.5574380**	**.3451633**
Stddev	.0006985	.0000845	.0004275	.15995	.0025622	.0009757
%RSD	.1334705	.3893074	1.062766	.2785251	.4596355	.2826913
#1	.5236591	.0216546	.0397310	57.38922	.5547023	.3441247
#2	.5225229	.0216549	.0404343	57.29066	.5578302	.3453043
#3	.5237949	.0218011	.0405037	57.60351	.5597815	.3460608

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.824043**	**350.6715**	**12.69073**	**86.13104**	**.7479633**	**-.003961**
Stddev	.012923	1.0768	.04038	.37665	.0025189	.000276
%RSD	.2678863	.3070723	.3181532	.4373045	.3367620	6.971453
#1	4.812596	349.4983	12.67626	85.84704	.7452929	-.004088
#2	4.821475	350.9013	12.65958	85.98779	.7483002	-.004151
#3	4.838056	351.6149	12.73634	86.55831	.7502967	-.003644

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.24047**	**.4492488**	**8.696345**	**29.93002**	**-.353234**	**.0206279**
Stddev	.07908	.0013519	.029396	.11696	.001677	.0002494
%RSD	.3555560	.3009268	.3380319	.3907807	.4747067	1.209221
#1	22.15296	.4487370	8.717193	29.79779	-.355023	.0207882
#2	22.30679	.4482276	8.709120	30.01993	-.351699	.0207549
#3	22.26168	.4507820	8.662723	29.97235	-.352980	.0203405

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-13DLX10 Acquired: 3/13/2025 18:04:21 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.0214499	1.234721	7.717380	F 18.48676	F 87.48469	.5545051
Stddev	.0025542	.000455	.114995	.06523	.46598	.0005815
%RSD	11.90768	.0368563	1.490077	.3528220	.5326435	.1048614
#1	.0238381	1.234335	7.589902	18.42637	87.04349	.5544155
#2	.0187571	1.234604	7.748938	18.47800	87.43856	.5539736
#3	.0217547	1.235223	7.813302	18.55593	87.97202	.5551261

Elem	Sr4077
Units	ppm
Avg	.4112732
Stddev	.0008092
%RSD	.1967433
#1	.4110322
#2	.4106120
#3	.4121755

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4552.144	97889.61	21138.50	2939.536	4025.720
Stddev	8.663	271.96	39.06	8.550	14.371
%RSD	.1903111	.2778246	.1847714	.2908662	.3569917
#1	4558.801	98201.88	21138.88	2942.275	4038.961
#2	4555.283	97704.73	21177.37	2929.951	4027.762
#3	4542.349	97762.21	21099.26	2946.380	4010.436

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-07DLX10 Acquired: 3/13/2025 18:08:39 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	**.0862058**	**.0064891**	**26.93084**	**-.031791**	**-.003453**	**103.2196**
Stddev	.0036085	.0020533	.04572	.003922	.001252	.0756
%RSD	4.185907	31.64200	.1697795	12.33763	36.26275	.0732881
#1	.0890827	.0045043	26.90652	-.030398	-.003646	103.1848
#2	.0821570	.0086046	26.98358	-.036220	-.002116	103.3063
#3	.0873776	.0063584	26.90241	-.028756	-.004598	103.1675

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.496819**	**.0087592**	**.0076460**	**564.7645**	**.3202701**	**.1395883**
Stddev	.002441	.0000907	.0000646	5.0496	.0005047	.0006689
%RSD	.1630600	1.035199	.8445012	.8941072	.1575845	.4792035
#1	1.496461	.0087619	.0075768	563.8417	.3200415	.1390928
#2	1.499418	.0086673	.0076567	560.2399	.3208487	.1403492
#3	1.494576	.0088486	.0077046	570.2118	.3199203	.1393229

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.700912**	**247.3903**	**4.825668**	**54.93974**	**.4562169**	**-.002149**
Stddev	.003245	.6480	.011235	.18768	.0010667	.000417
%RSD	.0690259	.2619169	.2328095	.3416097	.2338138	19.39812
#1	4.697550	247.4296	4.824119	54.93940	.4553863	-.002606
#2	4.704025	248.0177	4.815288	54.75224	.4574199	-.002054
#3	4.701161	246.7236	4.837597	55.12760	.4558446	-.001788

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.49326**	**.2929330**	**6.410060**	**22.25902**	**-.145706**	**.0089791**
Stddev	.07869	.0026510	.032840	.15797	.010211	.0001093
%RSD	.5429404	.9049732	.5123256	.7096987	7.007671	1.216702
#1	14.55383	.2932502	6.396969	22.25792	-.140621	.0091030
#2	14.52161	.2901377	6.447427	22.41754	-.139037	.0089375
#3	14.40432	.2954110	6.385784	22.10160	-.157461	.0088968

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-07DLX10 Acquired: 3/13/2025 18:08:39 Type: Unk
Method: NON EPA-6010-200.7(v2806) 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	.0423719	3.253808	F 18.40142	7.203053	F 55.29131	.1680698
Stddev	.0008652	.004714	.07705	.029888	.12953	.0014155
%RSD	2.041947	.1448818	.4187181	.4149340	.2342682	.8421837
#1	.0413931	3.254518	18.33836	7.211804	55.34307	.1666120
#2	.0430345	3.248779	18.48731	7.227588	55.38696	.1694387
#3	.0426881	3.258127	18.37860	7.169766	55.14391	.1681585

Elem	Sr4077
Units	ppm
Avg	1.548391
Stddev	.007528
%RSD	.4861739
#1	1.545969
#2	1.556831
#3	1.542371

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3426.250	74900.53	15603.49	2196.010	3879.085
Stddev	8.005	181.41	47.35	9.732	10.430
%RSD	.2336384	.2421959	.3034707	.4431565	.2688665
#1	3435.122	74893.59	15607.79	2198.366	3888.499
#2	3419.566	74722.70	15648.55	2185.316	3867.874
#3	3424.062	75085.31	15554.14	2204.348	3880.881

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV07 Acquired: 3/13/2025 18:12:58 Type: Unk
Method: NON EPA-6010-200.7(v2806) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.254388**	**5.221212**	**5.332944**	**5.179713**	**5.162615**	**10.18104**
Stddev	.048924	.044526	.041213	.040368	.050289	.06042
%RSD	.9311049	.8527958	.7727917	.7793568	.9740994	.5934582
#1	5.197991	5.177267	5.285666	5.134139	5.104596	10.11517
#2	5.279750	5.220071	5.351888	5.194026	5.189564	10.23388
#3	5.285424	5.266297	5.361279	5.210976	5.193687	10.19408

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.962327**	**.2672721**	**2.640300**	**25.76465**	**1.087808**	**2.615391**
Stddev	.060391	.0008855	.021218	.14461	.012822	.020552
%RSD	.6061921	.3312967	.8036072	.5612644	1.178697	.7857998
#1	10.00761	.2664202	2.615805	25.60074	1.073566	2.591745
#2	9.89376	.2672085	2.652100	25.87422	1.098434	2.625479
#3	9.98561	.2681877	2.652994	25.81898	1.091424	2.628950

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.306956**	**5.150240**	**2.544194**	**26.05334**	**2.617499**	**1.313131**
Stddev	.010507	.065874	.019611	.07392	.022838	.012119
%RSD	.8039464	1.279038	.7708143	.2837142	.8725118	.9228858
#1	1.294839	5.075627	2.521549	25.96955	2.591134	1.300059
#2	1.312469	5.200355	2.555535	26.08113	2.631178	1.323991
#3	1.313559	5.174737	2.555499	26.10933	2.630185	1.315344

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.66040**	**2.570958**	**2.595571**	**25.00401**	**5.246646**	**5.216289**
Stddev	.42158	.018422	.029200	.42589	.013967	.044314
%RSD	1.709558	.7165549	1.124992	1.703298	.2662081	.8495342
#1	24.19484	2.550475	2.564434	24.55443	5.234129	5.165403
#2	25.01635	2.576229	2.622342	25.40141	5.244098	5.237075
#3	24.77001	2.586170	2.599937	25.05618	5.261712	5.246389

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV07 Acquired: 3/13/2025 18:12:58 Type: Unk
Method: NON EPA-6010-200.7(v2806) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.313756**	**5.052778**	F **5.519977**	**5.319648**	**5.136323**	**4.878473**
Stddev	.047327	.033179	.068772	.041890	.048683	.045993
%RSD	.8906497	.6566519	1.245870	.7874668	.9478087	.9427808
#1	5.259250	5.014857	5.443314	5.271430	5.080244	4.826468
#2	5.344424	5.076470	5.576242	5.340427	5.161001	4.913803
#3	5.337594	5.067006	5.540376	5.347088	5.167724	4.895147

Elem	Sr4077
Units	ppm
Avg	**5.119384**
Stddev	.020533
%RSD	.4010807
#1	5.108787
#2	5.106315
#3	5.143051

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3272.996**	**71055.81**	**14168.57**	**2078.755**	**4369.971**
Stddev	22.191	646.02	33.00	24.128	27.584
%RSD	.6779892	.9091739	.2328852	1.160690	.6312094
#1	3298.608	71761.75	14189.73	2102.833	4401.748
#2	3259.525	70494.09	14185.42	2054.577	4352.208
#3	3260.855	70911.59	14130.55	2078.856	4355.957

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB07 Acquired: 3/13/2025 18:35:44 Type: Unk
Method: NON EPA-6010-200.7(v2807) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003443**	**.0003873**	**.0004767**	**.0010832**	**.0009277**	**.0350891**
Stddev	.001522	.0010169	.0011112	.0006958	.0011556	.0040293
%RSD	44.18568	262.5499	233.0825	64.24095	124.5647	11.48295
#1	-.001789	-.000784	.0013632	.0016384	-.000085	.0397410
#2	-.004782	.000907	-.000770	.0013085	.000682	.0326926
#3	-.003760	.001039	.000837	.0003026	.002186	.0328338

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009465**	**-.000005**	**-.000065**	**.0096253**	**.0004963**	**.0000982**
Stddev	.0007017	.000044	.000039	.0041656	.0003809	.0002168
%RSD	74.13561	908.8259	59.75856	43.27812	76.74513	220.8872
#1	.0001611	-.000019	-.000047	.0075401	.0000592	.0002414
#2	.0011665	.000044	-.000109	.0069141	.0007567	.0002043
#3	.0015117	-.000040	-.000038	.0144218	.0006731	-.000151

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006039**	**.0456432**	**.0021504**	**.0204709**	**.0001640**	**.0002486**
Stddev	.0000675	.0042720	.0002479	.0072105	.0001245	.0001780
%RSD	11.17303	9.359586	11.52942	35.22341	75.93418	71.61901
#1	.0006447	.0494763	.0024350	.0283610	.0001322	.0002498
#2	.0005260	.0464157	.0020348	.0188283	.0000585	.0000700
#3	.0006409	.0410377	.0019814	.0142233	.0003013	.0004261

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0744459**	**.0009945**	**.0003660**	**.0630431**	**-.002452**	**-.000039**
Stddev	.0171228	.0016565	.0000626	.0349635	.001099	.000028
%RSD	23.00033	166.5562	17.09595	55.45966	44.80499	71.70239
#1	.0688591	.0024193	.0004345	.0341530	-.003379	-.000007
#2	.0608144	.0013873	.0003118	.0530655	-.001238	-.000059
#3	.0936644	-.000823	.0003516	.1019108	-.002739	-.000049

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB07 Acquired: 3/13/2025 18:35:44 Type: Unk
Method: NON EPA-6010-200.7(v2807) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001294	.0018077	.0196236	-.003213	F .0105764	.0008358
Stddev	.000539	.0002666	.0016630	.001477	.0008338	.0008751
%RSD	41.61524	14.74733	8.474342	45.97745	7.883200	104.7094
#1	-.001272	.0021123	.0214618	-.004825	.0099689	.0000585
#2	-.001844	.0016167	.0191852	-.001924	.0115269	.0006652
#3	-.000767	.0016941	.0182237	-.002890	.0102333	.0017837

Elem	Sr4077
Units	ppm
Avg	.0000199
Stddev	.0000249
%RSD	125.3220
#1	.0000242
#2	.0000424
#3	-.000007

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3465.809	74589.02	14297.03	2176.017	5038.206
Stddev	16.453	86.96	33.31	13.109	24.663
%RSD	.4747272	.1165853	.2329689	.6024396	.4895245
#1	3446.816	74593.82	14274.26	2169.146	5009.920
#2	3474.902	74673.49	14335.26	2191.134	5049.486
#3	3475.708	74499.77	14281.57	2167.772	5055.213

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-13 Acquired: 3/13/2025 18:39:38 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.3270694	-.033025	21.41415	-.263034	-.031657	781.4163
Stddev	.0031190	.007077	.05015	.002856	.001060	6.3263
%RSD	.9536128	21.42799	.2341727	1.085640	3.349443	.8095964
#1	.3276556	-.038157	21.47109	-.263092	-.032474	786.0940
#2	.3298537	-.035966	21.37656	-.265860	-.032037	783.9368
#3	.3236989	-.024952	21.39481	-.260150	-.030458	774.2183

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.437383	.0594507	1.075739	145.9756	1.428332	2.923285
Stddev	.022814	.0002198	.002333	1.3147	.002996	.006093
%RSD	.6637140	.3696677	.2168600	.9006635	.2097587	.2084450
#1	3.429059	.0595922	1.078389	146.5083	1.426276	2.928243
#2	3.419900	.0595625	1.073998	146.9404	1.431770	2.916483
#3	3.463191	.0591975	1.074829	144.4781	1.426951	2.925129

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.88596	761.5116	29.60540	219.2043	5.885835	^ *****
Stddev	.01148	.6561	.02656	.7846	.016053	-----
%RSD	.0965639	.0861624	.0897297	.3579284	.2727395	-----
#1	11.89438	760.8596	29.58664	220.0967	5.902078	^ -----
#2	11.89061	762.1718	29.63580	218.6228	5.869979	^ -----
#3	11.87289	761.5036	29.59377	218.8934	5.885448	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	81.02651	1.141432	8.949270	105.9974	^ *****	.0576410
Stddev	.34721	.000680	.034570	.4467	-----	.0004293
%RSD	.4285129	.0595390	.3862850	.4213820	-----	.7448334
#1	81.35046	1.141694	8.948039	106.0247	^ -----	.0576574
#2	81.06911	1.140661	8.915333	106.4298	^ -----	.0572037
#3	80.65997	1.141942	8.984439	105.5377	^ -----	.0580618

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-13 Acquired: 3/13/2025 18:39:38 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.1835505	3.277685	F 32.81593	F 145.4242	F 692.9766	1.624255
Stddev	.0048991	.004977	.13562	.4634	1.9244	.002916
%RSD	2.669069	.1518381	.4132840	.3186405	.2776968	.1795067
#1	.1779851	3.282186	32.68086	145.9374	695.0706	1.624150
#2	.1872110	3.272340	32.81481	145.2989	692.5735	1.627222
#3	.1854556	3.278529	32.95210	145.0364	691.2857	1.621393

Elem	Sr4077
Units	ppm
Avg	1.142834
Stddev	.002304
%RSD	.2015772
#1	1.145275
#2	1.142529
#3	1.140698

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10888.31	250594.6	62969.35	6941.948	2862.922
Stddev	8.58	73.6	213.05	25.582	7.556
%RSD	.0787597	.0293809	.3383423	.3685131	.2639273
#1	10879.16	250627.5	62782.97	6917.985	2854.782
#2	10889.60	250510.3	62923.49	6968.889	2869.713
#3	10896.16	250646.1	63201.60	6938.970	2864.270

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-07 Acquired: 3/13/2025 18:44:46 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**.5439785**	**-.083497**	F **241.6701**	**-.272098**	**-.011694**	**607.5722**
Stddev	.0033924	.004582	1.0146	.003927	.002788	7.1166
%RSD	.6236308	5.487869	.4198183	1.443187	23.83973	1.171312
#1	.5433965	-.085424	241.8076	-.269910	-.009418	615.2494
#2	.5476242	-.078266	240.5938	-.269752	-.014804	606.2716
#3	.5409147	-.086802	242.6089	-.276631	-.010861	601.1957

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.07703**	**.0475851**	**.4795052**	F **2560.086**	**1.519981**	**1.313382**
Stddev	.08283	.0001073	.0029304	14.691	.005200	.003976
%RSD	.5884360	.2253934	.6111251	.5738460	.3421333	.3027394
#1	14.00671	.0475380	.4808674	2563.716	1.515875	1.313734
#2	14.05605	.0475094	.4761417	2543.920	1.525829	1.309242
#3	14.16834	.0477078	.4815065	2572.621	1.518239	1.317171

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.66240**	F **1115.970**	**23.67159**	**279.0531**	**3.951546**	^ *****
Stddev	.03700	3.314	.21874	1.2945	.017125	-----
%RSD	.1632795	.2969617	.9240444	.4638946	.4333860	-----
#1	22.64464	1114.137	23.45971	279.2198	3.951784	^ -----
#2	22.63763	1119.795	23.89659	277.6832	3.934302	^ -----
#3	22.70494	1113.978	23.65845	280.2561	3.968551	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.2919**	**1.482029**	**18.26090**	**152.1861**	^ *****	**.0495992**
Stddev	.4556	.012682	.09444	.3397	-----	.0003859
%RSD	.4542437	.8557162	.5171693	.2231854	-----	.7780140
#1	99.9145	1.478856	18.28238	151.8888	^ -----	.0496400
#2	100.1632	1.471235	18.34276	152.1132	^ -----	.0499631
#3	100.7980	1.495996	18.15758	152.5563	^ -----	.0491946

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1514-07 Acquired: 3/13/2025 18:44:46 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.3947380	F 17.11657	F 129.8402	F 72.75713	F 537.6080	1.053862
Stddev	.0065202	.10482	.3042	.38230	2.4824	.002753
%RSD	1.651776	.6123847	.2343038	.5254530	.4617491	.2612256
#1	.3965038	17.12576	129.4900	72.94785	538.7103	1.055109
#2	.3875168	17.00746	130.0392	72.31699	534.7654	1.050706
#3	.4001935	17.21649	129.9913	73.00656	539.3484	1.055770

Elem	Sr4077
Units	ppm
Avg	7.920092
Stddev	.053802
%RSD	.6793103
#1	7.952254
#2	7.857980
#3	7.950043

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4502.425	105300.4	24213.46	2887.906	2679.360
Stddev	2.312	309.2	79.50	27.123	4.527
%RSD	.0513474	.2936664	.3283201	.9392015	.1689594
#1	4502.928	105357.8	24154.76	2871.983	2678.231
#2	4499.903	104966.4	24303.93	2872.511	2684.345
#3	4504.443	105576.8	24181.69	2919.224	2675.505

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-13REDLX10 Acquired: 3/13/2025 18:49:35 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0910011	.0243208	2.455129	-.048450	-.013600	281.8411
Stddev	.0029094	.0052299	.007811	.005036	.000662	3.9512
%RSD	3.197107	21.50400	.3181459	10.39479	4.866007	1.401922
#1	.0876463	.0187388	2.461332	-.042746	-.014132	285.1989
#2	.0925249	.0251159	2.457697	-.052283	-.012859	282.8373
#3	.0928322	.0291076	2.446357	-.050322	-.013810	277.4872

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4897239	.0211593	.0366803	55.95812	.5432403	.3299456
Stddev	.0019529	.0000052	.0008325	.05658	.0011444	.0000788
%RSD	.3987789	.0246773	2.269601	.1011191	.2106680	.0238820
#1	.4893227	.0211600	.0374780	55.97194	.5420008	.3299772
#2	.4880028	.0211641	.0367460	55.89591	.5442568	.3298559
#3	.4918463	.0211537	.0358169	56.00652	.5434633	.3300038

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.700574	341.3552	12.44633	84.40388	.7149709	-.003658
Stddev	.002195	4.1404	.01327	.10893	.0001152	.000912
%RSD	.0467014	1.212943	.1066349	.1290530	.0161086	24.93643
#1	4.703093	337.0467	12.45056	84.52846	.7148635	-.004204
#2	4.699071	341.7147	12.43145	84.35659	.7149566	-.004166
#3	4.699558	345.3041	12.45696	84.32659	.7150926	-.002605

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.19235	.4416939	7.774519	29.49669	-.345447	.0202737
Stddev	.17544	.0004058	.022168	.20451	.012334	.0002838
%RSD	.8278393	.0918782	.2851350	.6933219	3.570474	1.400085
#1	21.03078	.4414771	7.748985	29.29055	-.358421	.0200070
#2	21.16730	.4421620	7.785733	29.50001	-.344049	.0202422
#3	21.37896	.4414424	7.788839	29.69953	-.333872	.0205720

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1488-13REDLX10 Acquired: 3/13/2025 18:49:35 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.0204742	1.362363	F 13.91823	F 17.65106	F 83.41607	.5295140
Stddev	.0006040	.012881	.03254	.03115	.08489	.0015311
%RSD	2.950004	.9454809	.2337716	.1764757	.1017693	.2891590
#1	.0208700	1.371478	13.88272	17.61590	83.48390	.5277470
#2	.0207737	1.347627	13.92538	17.66210	83.32087	.5304499
#3	.0197790	1.367986	13.94660	17.67519	83.44345	.5303451

Elem	Sr4077
Units	ppm
Avg	.4004432
Stddev	.0003872
%RSD	.0966801
#1	.4000249
#2	.4005159
#3	.4007888

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4530.827	97787.56	20923.61	2933.071	4079.743
Stddev	3.755	255.20	87.74	3.529	5.723
%RSD	.0828867	.2609740	.4193242	.1203011	.1402858
#1	4528.800	98073.24	20841.78	2931.667	4079.150
#2	4528.522	97707.29	20912.79	2930.460	4074.339
#3	4535.161	97582.14	21016.25	2937.085	4085.740

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV08 Acquired: 3/13/2025 18:53:53 Type: Unk
Method: NON EPA-6010-200.7(v2808) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.954074**	**4.916991**	**5.057677**	**4.843185**	**4.849242**	**9.616900**	**9.389481**
Stddev	.005446	.030817	.015891	.008438	.009128	.378266	.558789
%RSD	.1099254	.6267541	.3142008	.1742241	.1882300	3.933348	5.951218
#1	4.947796	4.893757	5.046436	4.835093	4.847087	9.809377	9.764979
#2	4.957522	4.905266	5.050738	4.842531	4.841385	9.860219	9.656150
#3	4.956906	4.951950	5.075858	4.851931	4.859255	9.181103	8.747314

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2597565**	**2.507007**	**24.65310**	**1.035846**	**2.480738**	**1.238107**	**4.876480**
Stddev	.0076569	.006508	.90381	.029099	.005469	.002187	.116487
%RSD	2.947728	.2595795	3.666118	2.809218	.2204486	.1766504	2.388759
#1	.2643742	2.502603	25.21471	1.003668	2.479861	1.235608	4.747152
#2	.2639772	2.503935	25.13408	1.043557	2.475760	1.239674	4.909127
#3	.2509180	2.514482	23.61051	1.060313	2.486592	1.239040	4.973160

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.443400**	**25.20963**	**2.482963**	**1.254840**	**23.37048**	**2.459015**	**2.327536**
Stddev	.091551	.94905	.006634	.031296	.46693	.095101	.067771
%RSD	3.746861	3.764624	.2671692	2.494051	1.997954	3.867449	2.911719
#1	2.505717	25.77493	2.477579	1.220462	22.86496	2.519754	2.262294
#2	2.486193	25.74001	2.480938	1.262383	23.46090	2.507875	2.322733
#3	2.338289	24.11395	2.490374	1.281676	23.78559	2.349416	2.397581

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.36449**	**5.077001**	**4.940286**	**5.026643**	**4.818384**	**5.254650**	**5.042939**
Stddev	.54936	.156356	.003051	.013875	.177036	.133039	.012145
%RSD	2.351244	3.079686	.0617500	.2760278	3.674182	2.531833	.2408260
#1	22.74597	5.161808	4.937139	5.012777	4.935085	5.104582	5.033176
#2	23.55182	5.172629	4.940487	5.026625	4.905387	5.301236	5.039102
#3	23.79568	4.896565	4.943231	5.040527	4.614681	5.358130	5.056538

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV08 Acquired: 3/13/2025 18:53:53 Type: Unk
Method: NON EPA-6010-200.7(v2808) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.845904**	**4.525593**	**4.813273**
Stddev	.013137	.160347	.222117
%RSD	.2710917	3.543121	4.614676
#1	4.831138	4.628318	4.991003
#2	4.850278	4.607636	4.884549
#3	4.856295	4.340826	4.564268

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3380.544**	**72762.71**	**14308.78**	**2132.631**	**4517.331**
Stddev	4.190	1778.04	493.86	45.295	2.449
%RSD	.1239559	2.443608	3.451441	2.123893	.0542236
#1	3380.524	74751.26	14001.49	2180.402	4520.119
#2	3376.363	72210.78	14046.40	2127.186	4516.350
#3	3384.743	71326.10	14878.45	2090.305	4515.524

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB08 Acquired: 3/13/2025 19:03:24 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000092**	**.0004518**	**.0021339**	**.0055212**	**.0024447**	**-.005332**
Stddev	.000978	.0016741	.0009572	.0018570	.0008563	.004412
%RSD	1063.679	370.5378	44.85525	33.63331	35.02470	82.73404
#1	-.000142	.0016338	.0011033	.0075650	.0032054	-.004695
#2	-.001044	.0011855	.0029950	.0050613	.0026113	-.001274
#3	.000910	-.001464	.0023036	.0039375	.0015174	-.010028

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000616**	**-.000028**	**.0000169**	**.0047773**	**-.000021**	**-.000043**
Stddev	.000180	.000051	.0000522	.0036864	.000051	.000278
%RSD	29.16007	183.1298	309.6760	77.16311	249.3862	653.2721
#1	-.000418	-.000033	.0000157	.0081965	-.000063	-.000357
#2	-.000664	.000025	.0000697	.0052635	.000037	.000172
#3	-.000767	-.000076	-.000035	.0008720	-.000036	.000057

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001743**	**.0063023**	**-.000898**	**-.001574**	**-.000205**	**.0001877**
Stddev	.0002296	.0050151	.000302	.007078	.000234	.0000923
%RSD	131.7554	79.57633	33.63786	449.8214	114.1147	49.18316
#1	-.000008	.0092443	-.001091	-.008569	-.000469	.0001796
#2	.000432	.0091510	-.001054	.005585	-.000022	.0000997
#3	.000099	.0005116	-.000550	-.001736	-.000125	.0002838

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1069850**	**-.000087**	**-.000578**	**.1927656**	**-.000845**	**.0000736**
Stddev	.0230698	.000898	.000522	.0227838	.000674	.0000205
%RSD	21.56357	1029.417	90.21552	11.81944	79.71468	27.89145
#1	.1010210	-.000302	-.000998	.1666037	-.000227	.0000535
#2	.1324512	-.000859	-.000743	.2034441	-.001564	.0000728
#3	.0874828	.000899	.000006	.2082489	-.000745	.0000946

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB08 Acquired: 3/13/2025 19:03:24 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB08 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000809	.0013233	.0093764	.0040326	F .0199398	.0003083
Stddev	.000663	.0005340	.0029482	.0035225	.0041594	.0007502
%RSD	81.86392	40.35716	31.44235	87.35107	20.85990	243.3383
#1	-.000995	.0007071	.0121327	.0008092	.0160688	.0010570
#2	-.001360	.0016526	.0062680	.0034959	.0194131	.0003114
#3	-.000074	.0016101	.0097285	.0077926	.0243374	-.000443

Elem	Sr4077
Units	ppm
Avg	-.000092
Stddev	.000009
%RSD	9.944679
#1	-.000102
#2	-.000084
#3	-.000089

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3451.527	75284.95	14610.90	2194.961	5005.988
Stddev	14.366	92.91	91.72	6.918	14.724
%RSD	.4162156	.1234103	.6277184	.3151545	.2941319
#1	3456.234	75183.33	14684.26	2202.842	5017.030
#2	3435.399	75365.56	14508.07	2189.891	4989.271
#3	3462.949	75305.95	14640.37	2192.151	5011.664

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1528-02 Acquired: 3/13/2025 19:07:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	**-.149073**	**-.212836**	**-.001437**	**1.829123**	**.2127742**	**6.325321**
Stddev	.007335	.002431	.000862	.024347	.0060443	.030784
%RSD	4.920660	1.142335	60.01080	1.331059	2.840706	.4866857
#1	-.143146	-.210919	-.000490	1.816788	.2141834	6.340031
#2	-.146796	-.215571	-.002177	1.813413	.2061497	6.345990
#3	-.157277	-.212018	-.001644	1.857169	.2179893	6.289941

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0605189**	**.0011754**	**-.002940**	**7.176557**	**.0313404**	**.0156083**
Stddev	.0004580	.0000411	.000152	.031892	.0006391	.0005532
%RSD	.7568369	3.500901	5.177498	.4443913	2.039174	3.544373
#1	.0610476	.0012014	-.003079	7.191043	.0320312	.0157029
#2	.0602410	.0011279	-.002964	7.198635	.0307702	.0150139
#3	.0602682	.0011968	-.002778	7.139993	.0312200	.0161082

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1922920**	**24.90155**	**.1591539**	**2.957000**	**.0030853**	**.0026033**
Stddev	.0019201	.21664	.0006150	.010454	.0004637	.0003160
%RSD	.9985298	.8699757	.3864023	.3535494	15.03092	12.13994
#1	.1923703	24.90848	.1597549	2.955938	.0036207	.0029598
#2	.1903340	25.11465	.1591810	2.947117	.0028110	.0023575
#3	.1941718	24.68154	.1585258	2.967945	.0028241	.0024925

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**198.2282**	**.0217398**	**1.471160**	**656.2874**	**.0833257**	**.0193196**
Stddev	1.4445	.0012293	.012797	8.3469	.0017111	.0001563
%RSD	.7287202	5.654535	.8698356	1.271841	2.053546	.8089418
#1	198.9959	.0213447	1.477972	655.2540	.0847567	.0194626
#2	199.1268	.0231181	1.479109	665.1029	.0814303	.0191528
#3	196.5619	.0207567	1.456398	648.5053	.0837901	.0193433

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: Q1528-02 Acquired: 3/13/2025 19:07:41 Type: Unk
Method: NON EPA-6010-200.7(v2770) 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	.5471702	.1688857	8.076958	F 188.3940	F 27.79000	.0198811
Stddev	.0051422	.0008874	.078806	1.0483	.25477	.0003607
%RSD	.9397879	.5254451	.9756874	.5564261	.9167545	1.814475
#1	.5435004	.1695123	8.069619	188.3437	27.71867	.0199011
#2	.5449627	.1692746	8.159176	187.3718	27.57849	.0195108
#3	.5530477	.1678703	8.002077	189.4666	28.07282	.0202314

Elem	Sr4077
Units	ppm
Avg	.0333481
Stddev	.0002641
%RSD	.7918538
#1	.0336344
#2	.0332959
#3	.0331141

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2399.727	54984.81	14582.72	1518.258	3668.966
Stddev	18.940	556.29	49.96	24.987	28.702
%RSD	.7892366	1.011724	.3425663	1.645772	.7823011
#1	2399.362	55045.92	14549.13	1527.152	3663.983
#2	2418.846	54400.49	14558.91	1490.041	3699.834
#3	2380.973	55508.03	14640.13	1537.582	3643.082

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV09 Acquired: 3/13/2025 19:12:00 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.277354**	**5.019484**	**5.119639**	**5.438692**	**5.059522**	**9.647873**	**9.619680**
Stddev	.028525	.006230	.044330	.011969	.040010	.387342	.254727
%RSD	.5405197	.1241233	.8658805	.2200627	.7907949	4.014787	2.647982
#1	5.256605	5.012786	5.082075	5.441425	5.018895	9.270086	9.441037
#2	5.265575	5.025107	5.108307	5.425594	5.060785	9.629423	9.506637
#3	5.309883	5.020558	5.168535	5.449058	5.098885	10.04411	9.911365

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2577379**	**2.552172**	**24.59379**	**1.067064**	**2.552476**	**1.291463**	**5.234706**
Stddev	.0084391	.018660	.89269	.003803	.020227	.010631	.056794
%RSD	3.274287	.7311418	3.629748	.3563788	.7924633	.8231370	1.084960
#1	.2498635	2.535158	23.76479	1.064172	2.533705	1.281891	5.175206
#2	.2567039	2.549231	24.47775	1.065648	2.549824	1.289593	5.240572
#3	.2666464	2.572128	25.53883	1.071371	2.573898	1.302904	5.288340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.449761**	**24.84225**	**2.553448**	**1.293416**	**23.52524**	**2.463202**	**2.489869**
Stddev	.094091	.96501	.021228	.008455	.25692	.082930	.011572
%RSD	3.840839	3.884535	.8313514	.6537306	1.092101	3.366737	.4647573
#1	2.357463	23.89653	2.532909	1.287263	23.28853	2.380216	2.476980
#2	2.446272	24.80477	2.552133	1.289927	23.48872	2.463316	2.493258
#3	2.545548	25.82545	2.575304	1.303057	23.79846	2.546075	2.499367

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.38927**	**5.039873**	**5.152723**	**5.073064**	**4.833675**	**5.307499**	**5.216465**
Stddev	.22471	.165019	.032169	.031263	.179179	.067946	.051877
%RSD	.9213448	3.274267	.6243065	.6162635	3.706892	1.280187	.9944924
#1	24.15842	4.882036	5.123872	5.040821	4.655912	5.235978	5.163162
#2	24.40210	5.026341	5.146888	5.075127	4.830874	5.315326	5.219444
#3	24.60728	5.211241	5.187411	5.103246	5.014237	5.371192	5.266789

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCV09 Acquired: 3/13/2025 19:12:00 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.927785**	**4.583289**	**4.915298**
Stddev	.043159	.173413	.186731
%RSD	.8758266	3.783599	3.798984
#1	4.892803	4.410050	4.779622
#2	4.914538	4.582939	4.838006
#3	4.976015	4.756876	5.128266

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3334.826**	**73172.46**	**14875.50**	**2134.969**	**4533.725**
Stddev	19.649	286.21	458.88	8.804	33.867
%RSD	.5892079	.3911468	3.084788	.4123839	.7470094
#1	3349.146	73483.19	15336.01	2144.785	4562.775
#2	3342.906	73114.59	14872.23	2132.352	4541.873
#3	3312.425	72919.61	14418.27	2127.771	4496.527

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB09 Acquired: 3/13/2025 19:21:09 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000211**	**-.000102**	**.0004086**	**.0092890**	**.0022882**	**.0141567**
Stddev	.002386	.001481	.0010641	.0007723	.0001131	.0051102
%RSD	1132.794	1447.735	260.4396	8.314341	4.942737	36.09744
#1	.001578	-.001740	-.000108	.0086848	.0023073	.0094493
#2	.000710	.001142	.001632	.0101591	.0021667	.0195918
#3	-.002919	.000291	-.000299	.0090229	.0023905	.0134292

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001001**	**-.000014**	**-.000021**	**.0337569**	**.0002439**	**.0001522**
Stddev	.0008696	.000070	.000071	.0067598	.0002404	.0000409
%RSD	868.4215	488.7948	343.5976	20.02502	98.55969	26.89824
#1	.0009640	.000019	-.000098	.0288925	.0004973	.0001784
#2	.0001115	-.000095	.000041	.0414757	.0002153	.0001733
#3	-.000775	.000033	-.000004	.0309024	.0000191	.0001051

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005259**	**.0314241**	**.0003584**	**-.001485**	**-.000011**	**.0004342**
Stddev	.0003546	.0061432	.0004377	.010847	.000180	.0001149
%RSD	67.44348	19.54937	122.1284	730.5206	1650.631	26.46754
#1	.0005772	.0244279	.0000481	-.002963	.000175	.0004275
#2	.0008520	.0339078	.0001680	.010026	-.000184	.0003228
#3	.0001483	.0359367	.0008590	-.011517	-.000023	.0005524

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0783474**	**-.000159**	**.0000169**	**.2243706**	**-.003286**	**.0001405**
Stddev	.0194811	.001106	.0004765	.0225061	.000646	.0003429
%RSD	24.86505	696.7578	2822.615	10.03078	19.65175	244.1028
#1	.0771106	.000952	.0005384	.2085100	-.003525	.0005361
#2	.0595141	-.001260	-.000092	.2144725	-.002554	-.000043
#3	.0984174	-.000168	-.000396	.2501295	-.003777	-.000072

Reviewed By:Mohan
On:3/14/2025 1:33:41 PM
Inst Id :P4
LB :LB135035

Sample Name: CCB09 Acquired: 3/13/2025 19:21:09 Type: Unk
Method: NON EPA-6010-200.7(v2770) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000920	.0014434	.0002299	.0003815	F .0136055	.0002976
Stddev	.000368	.0000582	.0039826	.0013234	.0051740	.0006638
%RSD	40.00882	4.033772	1732.572	346.8650	38.02909	223.0916
#1	-.001261	.0013784	.0044663	-.000682	.0140165	.0008751
#2	-.000969	.0014906	-.000339	-.000037	.0185618	.0004451
#3	-.000530	.0014613	-.003438	.001864	.0082382	-.000428

Elem	Sr4077
Units	ppm
Avg	.0001082
Stddev	.0000159
%RSD	14.69152
#1	.0001140
#2	.0001203
#3	.0000902

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3510.154	80343.25	13971.40	2334.027	5082.514
Stddev	8.454	4480.16	10.88	130.205	17.022
%RSD	.2408523	5.576278	.0778409	5.578544	.3349208
#1	3519.368	76212.75	13980.73	2212.705	5101.818
#2	3502.754	85105.92	13959.45	2471.591	5069.657
#3	3508.338	79711.08	13974.00	2317.785	5076.066

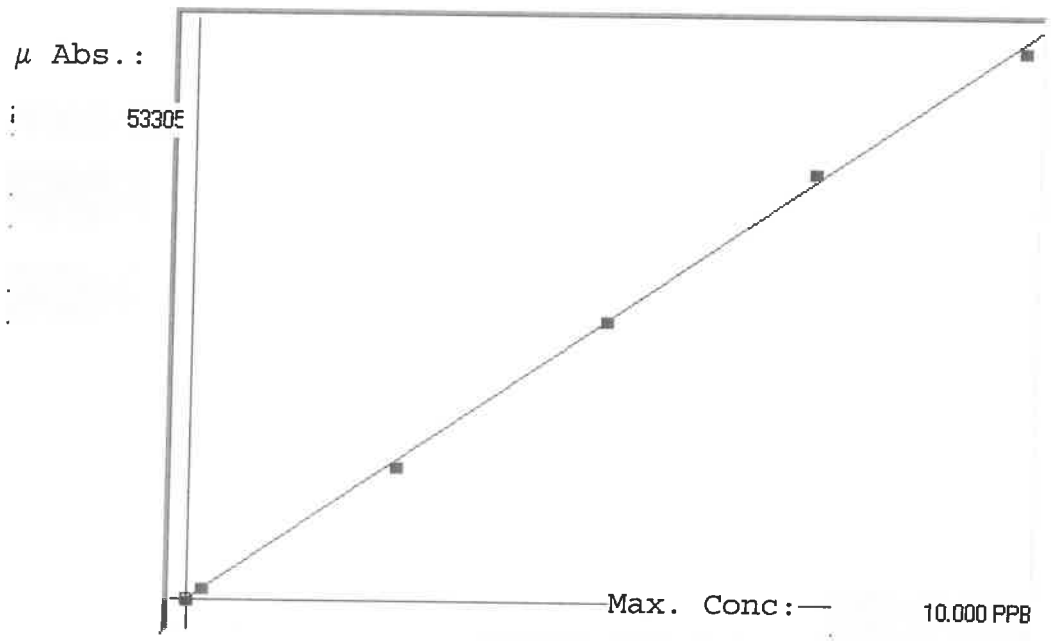
Reviewed By:kareem
On:3/6/2025 3:12:17 PM
Inst Id :CV1
LB :LB134903

LB134903

7471B

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 1.8483e-004

C= 1.8785e-003

Rho= 0.9995544

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	σ/μ
0.0	0.000	0.006	0.006	23	0.000	23					1
0.2	0.200	0.215	0.015	1154	0.0 %	1154					-7
2.5	2.500	2.389	-0.111	12914	0.0 %	12914					-4
5.0	5.000	5.043	0.043	27275	0.0 %	27275					1
7.5	7.500	7.692	0.192	41609	0.0 %	41609					3
10.0	10.000	9.854	-0.146	53305	0.0 %	53305					-1

Reviewed By:kareem
On:3/6/2025 3:12:17 PM
Inst Id :CV1
LB :LB134903

LB134903 INSTRUMENT ID : CV1

Method: 7471B Operator: Admin Date of Analysis: 05 Mar 2025 13:38:27

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	50	23	-	0.0000	7471B	PPB	05 Mar 2025 13:42:10	S	Std
0.2 - 1	50.2	1154	-	0.2000	7471B	PPB	05 Mar 2025 13:44:27	S	Std
2.5 - 1	52.5	12914	-	2.5000	7471B	PPB	05 Mar 2025 13:46:44	S	Std
5.0 - 1	55	27275	-	5.0000	7471B	PPB	05 Mar 2025 13:49:01	S	Std
7.5 - 1	57.5	41609	-	7.5000	7471B	PPB	05 Mar 2025 13:51:20	S	Std
10.0 - 1	60	53305	-	10.0000	7471B	PPB	05 Mar 2025 13:56:25	S	Std
ICV32 - 1	ICV32	19726	3.6478		-7471B	PPB	05 Mar 2025 13:59:13	U	SMPL
ICB32 - 1	ICB32	-366	-0.0658		-7471B	PPB	05 Mar 2025 14:01:29	U	SMPL
CCV65 - 1	CCV65	27129	5.0162		-7471B	PPB	05 Mar 2025 14:03:47	U	SMPL
CCB65 - 1	CCB65	-396	-0.0713		-7471B	PPB	05 Mar 2025 14:06:02	U	SMPL
CRA - 1	CRA	1104	0.2059		-7471B	PPB	05 Mar 2025 14:08:21	U	SMPL
HighStd - 1	HighStd	53632	9.9147		-7471B	PPB	05 Mar 2025 14:10:36	U	SMPL
ChkStd - 1	ChkStd	38520	7.1216		-7471B	PPB	05 Mar 2025 14:12:51	U	SMPL
PB166988BL - 1	PBS	-458	-0.0828		-7471B	PPB	05 Mar 2025 14:19:38	U	SMPL
PB166988BS - 1	LCSS	21257	3.9308		-7471B	PPB	05 Mar 2025 14:21:56	U	SMPL
Q1474-01 - 1	BU-03-02282025	1910	0.3549		-7471B	PPB	05 Mar 2025 14:29:32	U	SMPL
Q1474-01DUP - 1	BU-03-02282025DUP	1759	0.3270		-7471B	PPB	05 Mar 2025 14:31:48	U	SMPL
Q1474-01MS - 1	BU-03-02282025MS	22644	4.1872		-7471B	PPB	05 Mar 2025 14:34:05	U	SMPL
Q1474-01MSD - 1	BU-03-02282025MSD	25538	4.7221		-7471B	PPB	05 Mar 2025 14:36:22	U	SMPL
Q1475-01 - 1	TR-04-02282025	649	0.1218		-7471B	PPB	05 Mar 2025 14:38:40	U	SMPL
CCV66 - 1	CCV66	26624	4.9228		-7471B	PPB	05 Mar 2025 14:40:58	U	SMPL
CCB66 - 1	CCB66	-379	-0.0682		-7471B	PPB	05 Mar 2025 14:43:14	U	SMPL
Q1480-01 - 1	TP-1	6358	1.1770		-7471B	PPB	05 Mar 2025 14:45:32	U	SMPL
Q1480-09 - 1	TP-2	3099	0.5747		-7471B	PPB	05 Mar 2025 14:47:48	U	SMPL
Q1480-17 - 1	TP-3	9255	1.7125		-7471B	PPB	05 Mar 2025 14:50:05	U	SMPL
Q1480-25 - 1	TP-4	2949	0.5469		-7471B	PPB	05 Mar 2025 14:52:22	U	SMPL
Q1481-01 - 1	WC-K1311	3083	0.5717		-7471B	PPB	05 Mar 2025 14:54:40	U	SMPL
Q1482-01 - 1	OR-03-030425	1514	0.2817		-7471B	PPB	05 Mar 2025 14:56:57	U	SMPL
Q1484-01 - 1	TR-OTR-COMP-01	2175	0.4039		-7471B	PPB	05 Mar 2025 14:59:15	U	SMPL
Q1485-01 - 1	DN-B-41	2573	0.4774		-7471B	PPB	05 Mar 2025 15:01:31	U	SMPL
Q1486-01 - 1	DN-B-40	1222	0.2277		-7471B	PPB	05 Mar 2025 15:03:48	U	SMPL
Q1487-01 - 1	DN-B-42	2458	0.4562		-7471B	PPB	05 Mar 2025 15:06:03	U	SMPL
CCV67 - 1	CCV67	26873	4.9688		-7471B	PPB	05 Mar 2025 15:08:19	U	SMPL
CCB67 - 1	CCB67	-313	-0.0560		-7471B	PPB	05 Mar 2025 15:10:37	U	SMPL
Q1489-01 - 1	TP-1	5790	1.0720		-7471B	PPB	05 Mar 2025 15:12:56	U	SMPL
Q1489-05 - 1	TP-2	80529	14.8861		-7471B	PPB	05 Mar 2025 15:15:12	U	SMPL
Q1489-09 - 1	TP-3	14240	2.6339		-7471B	PPB	05 Mar 2025 15:17:29	U	SMPL
Q1489-13 - 1	TP-4	1470	0.2736		-7471B	PPB	05 Mar 2025 15:20:00	U	SMPL
Q1474-01LX5 - 1		246	0.0473		-7471B	PPB	05 Mar 2025 15:22:19	U	SMPL
Q1474-01A - 1		24065	4.4498		-7471B	PPB	05 Mar 2025 15:24:35	U	SMPL
Q1489-05DLX5 - 1		17217	3.1841		-7471B	PPB	05 Mar 2025 15:26:52	U	SMPL
CCV68 - 1	CCV68	26644	4.9265		-7471B	PPB	05 Mar 2025 15:29:11	U	SMPL
CCB68 - 1	CCB68	-278	-0.0495		-7471B	PPB	05 Mar 2025 15:31:33	U	SMPL

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB166977

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 #5 2. N/A

Start Digest Date: 03/05/2025 **Time :** 10:05 **Temp :** 96 °C

End Digest Date: 03/05/2025 **Time :** 12:10 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. #5

Dig Technician Signature: SLS.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	1.00	M6003
LFS-2	1.00	M6011
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
1:1 HNO3	10.00	MP84041
Conc. HNO3	5.00	M6126
30% H2O2	3.00	M6125
Conc. HCL	10.00	M6151
PTFE Boiling Stones	N/A	M5585
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 # 5 CELL 35 Temp :96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
03/05/25 13:10	SLS. met dig	[illegible]
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB166977

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
PB166977BL	PBS977	N/A	2.04	100	Colorless	Yellow	Fine	N/A	N/A	1
PB166977BS	LCS977	N/A	2.01	100	Colorless	Yellow	Fine	N/A	M6003,M6011	2
Q1481-01	WC-K1311	N/A	2.40	100	Brown	Yellow	Medium	N/A	N/A	3
Q1482-01	OR-03-030425	N/A	2.30	100	Brown	Yellow	Medium	N/A	N/A	4
Q1482-01MS	OR-03-030425MS	N/A	2.27	100	Brown	Yellow	Medium	N/A	M6003,M6011	6
Q1482-01MSD	OR-03-030425MSD	N/A	2.29	100	Brown	Yellow	Medium	N/A	M6003,M6011	7
Q1482-01DUP	OR-03-030425DUP	N/A	2.14	100	Brown	Yellow	Medium	N/A	N/A	5
Q1484-01	TR-OTR-COMP-01	N/A	2.30	100	Brown	Yellow	Medium	N/A	N/A	8
Q1485-01	DN-B-41	N/A	2.26	100	Brown	Yellow	Medium	N/A	N/A	9
Q1486-01	DN-B-40	N/A	2.15	100	Brown	Yellow	Medium	N/A	N/A	10
Q1487-01	DN-B-42	N/A	2.11	100	Brown	Yellow	Medium	N/A	N/A	11
Q1488-01	ENV-101-SB01	N/A	2.23	100	Black	Yellow	Medium	N/A	N/A	12
Q1488-03	ENV-101-SB02	N/A	2.15	100	Black	Yellow	Medium	N/A	N/A	13
Q1488-05	ENV-102-SB01	N/A	2.17	100	Black	Yellow	Medium	N/A	N/A	14
Q1488-07	ENV-102-SB02	N/A	2.20	100	Black	Yellow	Medium	N/A	N/A	15
Q1488-09	ENV-104-SB01	N/A	2.47	100	Black	Yellow	Medium	N/A	N/A	16
Q1488-11	ENV-104-SB02	N/A	2.27	100	Black	Yellow	Medium	N/A	N/A	17
Q1489-01	TP-1	N/A	2.15	100	Gray	Yellow	Medium	N/A	N/A	18
Q1489-05	TP-2	N/A	2.37	100	Gray	Yellow	Medium	N/A	N/A	19
Q1489-09	TP-3	N/A	2.42	100	Gray	Yellow	Medium	N/A	N/A	20
Q1489-13	TP-4	N/A	2.38	100	Gray	Yellow	Medium	N/A	N/A	21

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB166977 **WorkList ID :** 188021 **Department :** Digestion **Date :** 03-05-2025 08:19:54

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1481-01	WC-K1311	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	H31	03/04/2025	6010D
Q1482-01	OR-03-030425	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG05	H31	03/04/2025	6010D
Q1484-01	TR-OTR-COMP-01	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	H31	03/04/2025	6010D
Q1485-01	DN-B-41	Solid	Metals ICP-RCRA	Cool 4 deg C	JPCL01	H31	03/04/2025	6010D
Q1486-01	DN-B-40	Solid	Metals ICP-RCRA	Cool 4 deg C	JPCL01	I11	03/04/2025	6010D
Q1487-01	DN-B-42	Solid	Metals ICP-RCRA	Cool 4 deg C	JPCL01	I11	03/04/2025	6010D
Q1488-01	ENV-101-SB01	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1488-03	ENV-101-SB02	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1488-05	ENV-102-SB01	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1488-07	ENV-102-SB02	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1488-09	ENV-104-SB01	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1488-11	ENV-104-SB02	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1489-01	TP-1	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H31	03/04/2025	6010D
Q1489-05	TP-2	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	I22	03/04/2025	6010D
Q1489-09	TP-3	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	I22	03/04/2025	6010D
Q1489-13	TP-4	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	I22	03/04/2025	6010D

Date/Time 03/05/25 8:40
Raw Sample Received by: SLB. met. dlo
Raw Sample Relinquished by: AP SM

Date/Time 03/05/25 9:40
Raw Sample Received by: AP SM
Raw Sample Relinquished by: SLB. met. dlo

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB166988

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: 03/05/2025 **Time :** 09:50 **Temp :** 94 °C

End Digest Date: 03/05/2025 **Time :** 10:20 **Temp :** 94 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: JZ

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP84766
CCV	30mL	MP84768
CRA	30mL	MP84770
Blank Spike	0.48mL	MP84759
Matrix Spike	0.48mL	MP84759

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	1.5mL	MP84772
KMnO4 (5%)	4.5mL	MP84564
Hydroxylamine HCL (12%)	2.0mL	MP84566
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	MP84760
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP84761
2.5 ppb	S2.5	30mL	MP84762
5.0 ppb	S5.0	30mL	MP84763
7.5 ppb	S7.5	30mL	MP84764
10.0 ppb	S10.0	30mL	MP84765
ICV	ICV	30mL	MP84766
ICB	ICB	30mL	MP84767
CCV	CCV	30mL	MP84768
CCB	CCB	30mL	MP84769
CRI	CRI	30mL	MP84770
CHK STD	CHK STD	30mL	MP84771

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
3/5/25 @ 10:55	MB - MT3 Lab	MB MT3 Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB166988

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB166988BL	PBS988	0.52	35	NA	N/A	3-19
PB166988BS	LCS988	0.55	35	NA	MP84759	20
Q1474-01DUP	BU-03-02282025DUP	0.55	35	NA	N/A	22
Q1474-01MS	BU-03-02282025MS	0.53	35	NA	MP84759	23
Q1474-01MSD	BU-03-02282025MSD	0.56	35	NA	MP84759	24
Q1474-01	BU-03-02282025	0.57	35	NA	N/A	21
Q1475-01	TR-04-02282025	0.53	35	NA	N/A	25
Q1480-01	TP-1	0.56	35	NA	N/A	26
Q1480-09	TP-2	0.52	35	NA	N/A	27
Q1480-17	TP-3	0.60	35	NA	N/A	28
Q1480-25	TP-4	0.58	35	NA	N/A	29
Q1481-01	WC-K1311	0.59	35	NA	N/A	30
Q1482-01	OR-03-030425	0.51	35	NA	N/A	31
Q1484-01	TR-OTR-COMP-01	0.58	35	NA	N/A	32
Q1485-01	DN-B-41	0.55	35	NA	N/A	33
Q1486-01	DN-B-40	0.50	35	NA	N/A	34
Q1487-01	DN-B-42	0.51	35	NA	N/A	35
Q1489-01	TP-1	0.53	35	NA	N/A	36
Q1489-05	TP-2	0.51	35	NA	N/A	37
Q1489-09	TP-3	0.53	35	NA	N/A	38
Q1489-13	TP-4	0.56	35	NA	N/A	39

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 030525_7471 **WorkList ID :** 188031 **Department :** Digestion **Date :** 03-05-2025 08:18:04

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1485-01	DN-B-41	Solid	Mercury	Cool 4 deg C	JPCL01	H31	03/04/2025	7471B
Q1486-01	DN-B-40	Solid	Mercury	Cool 4 deg C	JPCL01	I11	03/04/2025	7471B
Q1487-01	DN-B-42	Solid	Mercury	Cool 4 deg C	JPCL01	I11	03/04/2025	7471B
Q1480-01	TP-1	Solid	Mercury	Cool 4 deg C	PSEG03	I11	03/03/2025	7471B
Q1480-09	TP-2	Solid	Mercury	Cool 4 deg C	PSEG03	I11	03/03/2025	7471B
Q1480-17	TP-3	Solid	Mercury	Cool 4 deg C	PSEG03	I11	03/03/2025	7471B
Q1480-25	TP-4	Solid	Mercury	Cool 4 deg C	PSEG03	I11	03/03/2025	7471B
Q1481-01	WC-K1311	Solid	Mercury	Cool 4 deg C	PSEG03	H31	03/04/2025	7471B
Q1484-01	TR-OTR-COMP-01	Solid	Mercury	Cool 4 deg C	PSEG03	H31	03/04/2025	7471B
Q1489-01	TP-1	Solid	Mercury	Cool 4 deg C	PSEG03	I22	03/04/2025	7471B
Q1489-05	TP-2	Solid	Mercury	Cool 4 deg C	PSEG03	I22	03/04/2025	7471B
Q1489-09	TP-3	Solid	Mercury	Cool 4 deg C	PSEG03	I22	03/04/2025	7471B
Q1489-13	TP-4	Solid	Mercury	Cool 4 deg C	PSEG03	I22	03/04/2025	7471B
Q1474-01	BU-03-02282025	Solid	Mercury	Cool 4 deg C	PSEG05	H31	02/28/2025	7471B
Q1475-01	TR-04-02282025	Solid	Mercury	Cool 4 deg C	PSEG05	H31	02/28/2025	7471B
Q1482-01	OR-03-030425	Solid	Mercury	Cool 4 deg C	PSEG05	H31	03/04/2025	7471B

Date/Time 3/5/25 @ 9:05

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 3/5/25 @ 10:05

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:40
In Date: 03/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:35
Out Date: 03/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134889

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
Q1480-01	TP-1	1	1.13	8.86	9.99	8.95	88.3	
Q1480-02	TP-1-E2	2	1.12	8.86	9.98	9.14	90.5	
Q1480-03	TP-1-E3	3	1.15	8.76	9.91	8.11	79.5	
Q1480-04	TP-1-E4	4	1.15	8.48	9.63	8.73	89.4	
Q1480-05	TP-1-E5	5	1.15	8.82	9.97	8.71	85.7	
Q1480-06	TP-1-E6	6	1.15	8.81	9.96	8.93	88.3	
Q1480-07	TP-1-E7	7	1.14	8.71	9.85	8.61	85.8	
Q1480-09	TP-2	8	1.12	8.74	9.86	8.56	85.1	
Q1480-10	TP-2-E2	9	1.14	8.82	9.96	8.53	83.8	
Q1480-11	TP-2-E3	10	1.15	8.50	9.65	8.62	87.9	
Q1480-12	TP-2-E4	11	1.14	8.76	9.9	8.8	87.4	
Q1480-13	TP-2-E5	12	1.15	8.82	9.97	8.92	88.1	
Q1480-14	TP-2-E6	13	1.16	8.82	9.98	8.95	88.3	
Q1480-15	TP-2-E7	14	1.12	8.73	9.85	8.88	88.9	
Q1480-17	TP-3	15	1.15	8.83	9.98	9.11	90.1	
Q1480-18	TP-3-E2	16	1.15	8.83	9.98	8.89	87.7	
Q1480-19	TP-3-E3	17	1.13	8.58	9.71	8.67	87.9	
Q1480-20	TP-3-E4	18	1.15	8.61	9.76	8.51	85.5	
Q1480-21	TP-3-E5	19	1.15	8.80	9.95	8.8	86.9	
Q1480-22	TP-3-E6	20	1.15	8.84	9.99	8.92	87.9	
Q1480-23	TP-3-E7	21	1.19	8.63	9.82	8.75	87.6	
Q1480-25	TP-4	22	1.14	8.83	9.97	9.07	89.8	
Q1480-26	TP-4-E2	23	1.17	8.80	9.97	9.32	92.6	
Q1480-27	TP-4-E3	24	1.13	8.76	9.89	8.95	89.3	
Q1480-28	TP-4-E4	25	1.16	8.81	9.97	9.13	90.5	
Q1480-29	TP-4-E5	26	1.12	8.67	9.79	8.97	90.5	
Q1480-30	TP-4-E6	27	1.15	8.83	9.98	9.34	92.8	
Q1480-31	TP-4-E7	28	1.11	8.62	9.73	8.88	90.1	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:40
In Date: 03/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:35
Out Date: 03/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134889

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
Q1481-01	WC-K1311	29	1.15	8.70	9.85	9.00	90.2	
Q1482-01	OR-03-030425	30	1.15	8.48	9.63	8.85	90.8	
Q1482-02	OR-03-030425-E2	31	1.15	8.83	9.98	9.17	90.8	
Q1484-01	TR-OTR-COMP-01	35	1.15	8.83	9.98	9.14	90.5	
Q1484-02	TR-OTR-VOC-01	36	1.15	8.81	9.96	9.22	91.6	
Q1484-03	TR-OTR-01	37	1.12	8.63	9.75	8.83	89.3	
Q1484-04	TR-OTR-02	38	1.15	8.78	9.93	8.99	89.3	
Q1484-05	TR-OTR-03	39	1.14	8.63	9.77	8.6	86.4	
Q1485-01	DN-B-41	32	1.16	8.53	9.69	8.25	83.1	
Q1486-01	DN-B-40	33	1.16	8.40	9.56	9.02	93.6	
Q1487-01	DN-B-42	34	1.13	8.84	9.97	8.92	88.1	
Q1488-01	ENV-101-SB01	40	1.13	8.45	9.58	8.61	88.5	
Q1488-03	ENV-101-SB02	41	1.15	8.82	9.97	9.14	90.6	
Q1488-05	ENV-102-SB01	42	1.16	8.82	9.98	8.72	85.7	
Q1488-07	ENV-102-SB02	43	1.13	8.55	9.68	7.98	80.1	
Q1488-09	ENV-104-SB01	44	1.12	8.50	9.62	8.14	82.6	
Q1488-11	ENV-104-SB02	45	1.14	8.85	9.99	8.32	81.1	
Q1489-01	TP-1	46	1.13	8.86	9.99	8.18	79.6	
Q1489-02	TP-1-E2	47	1.15	8.83	9.98	8.17	79.5	
Q1489-03	TP-1-E3	48	1.13	8.70	9.83	7.68	75.3	
Q1489-05	TP-2	49	1.11	8.76	9.87	6.93	66.4	
Q1489-06	TP-2-E2	50	1.16	8.63	9.79	7.38	72.1	
Q1489-07	TP-2-E3	51	1.15	8.83	9.98	7.53	72.3	
Q1489-09	TP-3	52	1.19	8.58	9.77	7.71	76.0	
Q1489-10	TP-3-E2	53	1.15	8.84	9.99	8.7	85.4	
Q1489-11	TP-3-E3	54	1.15	8.38	9.53	7.9	80.5	
Q1489-13	TP-4	55	1.16	8.81	9.97	8.57	84.1	
Q1489-14	TP-4-E2	56	1.16	8.82	9.98	8.46	82.8	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:40
In Date: 03/04/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:35
Out Date: 03/05/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134889

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
Q1489-15	TP-4-E3	57	1.16	8.50	9.66	8.02	80.7	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

UB134889

WorkList Name : %1-030425 **WorkList ID :** 187994 **Department :** Wet-Chemistry **Date :** 03-04-2025 07:58:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1480-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-02	TP-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-03	TP-1-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-04	TP-1-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-05	TP-1-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-06	TP-1-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-07	TP-1-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-09	TP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-10	TP-2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-11	TP-2-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-12	TP-2-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-13	TP-2-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-14	TP-2-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-15	TP-2-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-17	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-18	TP-3-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-19	TP-3-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-20	TP-3-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-21	TP-3-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-22	TP-3-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-23	TP-3-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO

Date/Time 03/04/25 16:15

Raw Sample Received by: JD (WC)

Raw Sample Relinquished by: CP SM

Date/Time 03/04/25 18:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JD (WC)

WORKLIST(Hardcopy Internal Chain)

VB134889

WorkList Name : %1-030425 **WorkList ID :** 187994 **Department :** Wet-Chemistry **Date :** 03-04-2025 07:58:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1480-25	TP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-26	TP-4-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-27	TP-4-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-28	TP-4-E4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-29	TP-4-E5	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-30	TP-4-E6	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1480-31	TP-4-E7	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1481-01	WC-K1311	Solid	Percent Solids	Cool 4 deg C	PSEG03	I11	03/03/2025	Chemtech -SO
Q1482-01	OR-03-030425	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1482-02	OR-03-030425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	03/04/2025	Chemtech -SO
Q1484-01	TR-OTR-COMP-01	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	03/04/2025	Chemtech -SO
Q1484-02	TR-OTR-VOC-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1484-03	TR-OTR-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1484-04	TR-OTR-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1484-05	TR-OTR-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1485-01	DN-B-41	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	03/04/2025	Chemtech -SO
Q1486-01	DN-B-40	Solid	Percent Solids	Cool 4 deg C	JPCL01	I11	03/04/2025	Chemtech -SO
Q1487-01	DN-B-42	Solid	Percent Solids	Cool 4 deg C	JPCL01	I11	03/04/2025	Chemtech -SO
Q1488-01	ENV-101-SB01	Solid	Percent Solids	Cool 4 deg C	JPCL01	I11	03/04/2025	Chemtech -SO
Q1488-03	ENV-101-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1488-05	ENV-102-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO

Date/Time 03/04/25 16:15

Raw Sample Received by: SB (WCJ)

Raw Sample Relinquished by: CP SM

Date/Time 03/04/25 18:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: SB (WCJ)

WORKLIST(Hardcopy Internal Chain)

1B134889

WorkList Name : %1-030425 **WorkList ID :** 187994 **Department :** Wet-Chemistry **Date :** 03-04-2025 07:58:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1488-07	ENV-102-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1488-09	ENV-104-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1488-11	ENV-104-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H31	03/04/2025	Chemtech -SO
Q1489-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-02	TP-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-03	TP-1-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-05	TP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-06	TP-2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-07	TP-2-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-09	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-10	TP-3-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-11	TP-3-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-13	TP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-14	TP-4-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO
Q1489-15	TP-4-E3	Solid	Percent Solids	Cool 4 deg C	PSEG03	I22	03/04/2025	Chemtech -SO

Date/Time 03/04/25 16:15

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 03/04/25 1840

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134903

Review By	Mohan	Review On	3/6/2025 12:19:24 PM
Supervise By	kareem	Supervise On	3/6/2025 3:12:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP84760,MP84761,MP84762,MP84763,MP84764,MP84765
ICV Standard	MP84766
CCV Standard	MP84768
ICSA Standard	
CRI Standard	MP84770
LCS Standard	
Chk Standard	MP84767,MP84769,MP84771,MP84773

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	03/05/25 13:42		Mohan	OK
2	S0.2	S0.2	CAL2	03/05/25 13:44		Mohan	OK
3	S2.5	S2.5	CAL3	03/05/25 13:46		Mohan	OK
4	S5	S5	CAL4	03/05/25 13:49		Mohan	OK
5	S7.5	S7.5	CAL5	03/05/25 13:51		Mohan	OK
6	S10	S10	CAL6	03/05/25 13:56		Mohan	OK
7	ICV32	ICV32	ICV	03/05/25 13:59		Mohan	OK
8	ICB32	ICB32	ICB	03/05/25 14:01		Mohan	OK
9	CCV65	CCV65	CCV	03/05/25 14:03		Mohan	OK
10	CCB65	CCB65	CCB	03/05/25 14:06		Mohan	OK
11	CRA	CRA	CRDL	03/05/25 14:08		Mohan	OK
12	HighStd	HighStd	HIGH STD	03/05/25 14:10		Mohan	OK
13	ChkStd	ChkStd	SAM	03/05/25 14:12		Mohan	OK
14	PB166988BL	PB166988BL	MB	03/05/25 14:19		Mohan	OK
15	PB166988BS	PB166988BS	LCS	03/05/25 14:21		Mohan	OK
16	Q1474-01	BU-03-02282025	SAM	03/05/25 14:29		Mohan	OK
17	Q1474-01DUP	BU-03-02282025DUP	DUP	03/05/25 14:31		Mohan	OK
18	Q1474-01MS	BU-03-02282025MS	MS	03/05/25 14:34		Mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134903

Review By	Mohan	Review On	3/6/2025 12:19:24 PM
Supervise By	kareem	Supervise On	3/6/2025 3:12:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP84760,MP84761,MP84762,MP84763,MP84764,MP84765
ICV Standard	MP84766
CCV Standard	MP84768
ICSA Standard	
CRI Standard	MP84770
LCS Standard	
Chk Standard	MP84767,MP84769,MP84771,MP84773

19	Q1474-01MSD	BU-03-02282025MSD	MSD	03/05/25 14:36		Mohan	OK
20	Q1475-01	TR-04-02282025	SAM	03/05/25 14:38		Mohan	OK
21	CCV66	CCV66	CCV	03/05/25 14:40		Mohan	OK
22	CCB66	CCB66	CCB	03/05/25 14:43		Mohan	OK
23	Q1480-01	TP-1	SAM	03/05/25 14:45		Mohan	OK
24	Q1480-09	TP-2	SAM	03/05/25 14:47		Mohan	OK
25	Q1480-17	TP-3	SAM	03/05/25 14:50		Mohan	OK
26	Q1480-25	TP-4	SAM	03/05/25 14:52		Mohan	OK
27	Q1481-01	WC-K1311	SAM	03/05/25 14:54		Mohan	OK
28	Q1482-01	OR-03-030425	SAM	03/05/25 14:56		Mohan	OK
29	Q1484-01	TR-OTR-COMP-01	SAM	03/05/25 14:59		Mohan	OK
30	Q1485-01	DN-B-41	SAM	03/05/25 15:01		Mohan	OK
31	Q1486-01	DN-B-40	SAM	03/05/25 15:03		Mohan	OK
32	Q1487-01	DN-B-42	SAM	03/05/25 15:06		Mohan	OK
33	CCV67	CCV67	CCV	03/05/25 15:08		Mohan	OK
34	CCB67	CCB67	CCB	03/05/25 15:10		Mohan	OK
35	Q1489-01	TP-1	SAM	03/05/25 15:12		Mohan	OK
36	Q1489-05	TP-2	SAM	03/05/25 15:15	High	Mohan	Dilution
37	Q1489-09	TP-3	SAM	03/05/25 15:17		Mohan	OK
38	Q1489-13	TP-4	SAM	03/05/25 15:20		Mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134903

Review By	Mohan	Review On	3/6/2025 12:19:24 PM
Supervise By	kareem	Supervise On	3/6/2025 3:12:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP84760,MP84761,MP84762,MP84763,MP84764,MP84765
ICV Standard	MP84766
CCV Standard	MP84768
ICSA Standard	
CRI Standard	MP84770
LCS Standard	
Chk Standard	MP84767,MP84769,MP84771,MP84773

39	Q1474-01L	BU-03-02282025L	SD	03/05/25 15:22		Mohan	OK
40	Q1474-01A	BU-03-02282025A	PS	03/05/25 15:24		Mohan	OK
41	Q1489-05DL	TP-2DL	SAM	03/05/25 15:26	Report 5X	Mohan	Confirms
42	CCV68	CCV68	CCV	03/05/25 15:29		Mohan	OK
43	CCB68	CCB68	CCB	03/05/25 15:31		Mohan	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134928

Review By	kareem	Review On	3/7/2025 12:31:36 PM
Supervise By	Janvi	Supervise On	3/12/2025 10:18:22 AM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84642
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84642
LCS Standard	
Chk Standard	MP84649,MP84650

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	03/06/25 10:19		Kareem	OK
2	S1	S1	CAL2	03/06/25 10:24		Kareem	OK
3	S2	S2	CAL3	03/06/25 10:28		Kareem	OK
4	S3	S3	CAL4	03/06/25 10:32		Kareem	OK
5	S4	S4	CAL5	03/06/25 10:37		Kareem	OK
6	S5	S5	CAL6	03/06/25 10:41		Kareem	OK
7	ICV01	ICV01	ICV	03/06/25 10:50		Kareem	OK
8	LLICV01	LLICV01	LLICV	03/06/25 11:38		Kareem	OK
9	ICB01	ICB01	ICB	03/06/25 11:43		Kareem	OK
10	CRI01	CRI01	CRDL	03/06/25 11:47		Kareem	OK
11	ICSA01	ICSA01	ICSA	03/06/25 11:51		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	03/06/25 12:04		Kareem	OK
13	ICSADL	ICSADL	ICSA	03/06/25 12:10		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	03/06/25 12:14		Kareem	OK
15	CCV01	CCV01	CCV	03/06/25 12:19		Kareem	OK
16	CCB01	CCB01	CCB	03/06/25 12:23		Kareem	OK
17	Q1464-01	COMP-1	SAM	03/06/25 12:27		Kareem	OK
18	Q1464-02	COMP-2	SAM	03/06/25 12:32		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134928

Review By	kareem	Review On	3/7/2025 12:31:36 PM
Supervise By	Janvi	Supervise On	3/12/2025 10:18:22 AM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84642
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84642
LCS Standard	
Chk Standard	MP84649,MP84650

19	Q1465-01	ST-OILY-DEBRIS	SAM	03/06/25 12:36		Kareem	OK
20	Q1480-33	TP-3-WATER-SAMPL	SAM	03/06/25 12:40		Kareem	OK
21	Q1489-01	TP-1	SAM	03/06/25 12:45		Kareem	OK
22	Q1489-05	TP-2	SAM	03/06/25 12:49		Kareem	OK
23	Q1489-09	TP-3	SAM	03/06/25 12:53		Kareem	OK
24	Q1489-13	TP-4	SAM	03/06/25 12:57		Kareem	OK
25	Q1465-01DUP	ST-OILY-DEBRISDUP	DUP	03/06/25 13:01		Kareem	OK
26	Q1465-01L	ST-OILY-DEBRISL	SD	03/06/25 13:05		Kareem	OK
27	CCV02	CCV02	CCV	03/06/25 13:10		Kareem	OK
28	CCB02	CCB02	CCB	03/06/25 13:14		Kareem	OK
29	Q1465-01MS	ST-OILY-DEBRISMS	MS	03/06/25 13:18	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
30	Q1465-01MSD	ST-OILY-DEBRISMSD	MSD	03/06/25 13:22	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
31	Q1465-01A	ST-OILY-DEBRISA	PS	03/06/25 13:27	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
32	PB166947BL-RE	PB166947BL-RE	MB	03/06/25 13:31	Not Use	Kareem	Not Ok
33	PB166947BS	PB166947BS	LCS	03/06/25 13:35	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
34	Q1410-01	KITCHEN-TAP	SAM	03/06/25 13:39		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134928

Review By	kareem	Review On	3/7/2025 12:31:36 PM
Supervise By	Janvi	Supervise On	3/12/2025 10:18:22 AM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84642
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84642
LCS Standard	
Chk Standard	MP84649,MP84650

35	Q1410-01DUP	KITCHEN-TAPDUP	DUP	03/06/25 13:43		Kareem	OK
36	Q1410-01L	KITCHEN-TAPL	SD	03/06/25 13:48		Kareem	OK
37	Q1410-01MS	KITCHEN-TAPMS	MS	03/06/25 13:52	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
38	Q1410-01MSD	KITCHEN-TAPMSD	MSD	03/06/25 13:56	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
39	CCV03	CCV03	CCV	03/06/25 14:00		Kareem	OK
40	CCB03	CCB03	CCB	03/06/25 14:05		Kareem	OK
41	Q1410-01A	KITCHEN-TAPA	PS	03/06/25 14:09	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
42	PB166847BL	PB166847BL	MB	03/06/25 14:13	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
43	PB166847BS	PB166847BS	LCS	03/06/25 14:17	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
44	Q1482-01	OR-03-030425	SAM	03/06/25 14:22		Kareem	OK
45	Q1482-01DUP	OR-03-030425DUP	DUP	03/06/25 14:26		Kareem	OK
46	Q1482-01L	OR-03-030425L	SD	03/06/25 14:30		Kareem	OK
47	Q1482-01MS	OR-03-030425MS	MS	03/06/25 14:34	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
48	Q1482-01MSD	OR-03-030425MSD	MSD	03/06/25 14:38	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134928

Review By	kareem	Review On	3/7/2025 12:31:36 PM
Supervise By	Janvi	Supervise On	3/12/2025 10:18:22 AM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84642
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84642
LCS Standard	
Chk Standard	MP84649,MP84650

49	Q1482-01A	OR-03-030425A	PS	03/06/25 14:42	0.1 ML M6003 M6011 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
50	Q1484-01	TR-OTR-COMP-01	SAM	03/06/25 14:46		Kareem	OK
51	CCV04	CCV04	CCV	03/06/25 14:50		Kareem	OK
52	CCB04	CCB04	CCB	03/06/25 14:54		Kareem	OK
53	LR1	LR1	HIGH STD	03/06/25 15:04		Kareem	OK
54	PB166947BL	PB166947BL	MB	03/06/25 15:09		Kareem	OK
55	Q1484-06	TR-OTR-COMP-01	SAM	03/06/25 15:13		Kareem	OK
56	Q1480-08	TP-1	SAM	03/06/25 15:17	Need to confirm (Ba)	Kareem	OK
57	Q1480-16	TP-2	SAM	03/06/25 15:27	Need to confirm (Ba)	Kareem	OK
58	Q1480-24	TP-3	SAM	03/06/25 15:31	Need to confirm (Ba,Zn)	Kareem	OK
59	Q1480-32	TP-4	SAM	03/06/25 15:35	Need to confirm (Ba,Zn)	Kareem	OK
60	LR2	LR2	HIGH STD	03/06/25 15:49		Kareem	OK
61	CCV05	CCV05	CCV	03/06/25 15:53		Kareem	OK
62	CCB05	CCB05	CCB	03/06/25 15:57		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	03/12/25 10:27		Kareem	OK
2	S1	S1	CAL2	03/12/25 10:31		Kareem	OK
3	S2	S2	CAL3	03/12/25 10:35		Kareem	OK
4	S3	S3	CAL4	03/12/25 10:39		Kareem	OK
5	S4	S4	CAL5	03/12/25 10:44		Kareem	OK
6	S5	S5	CAL6	03/12/25 10:48		Kareem	OK
7	ICV01	ICV01	ICV	03/12/25 10:52	ICV As,Be,Tl,Zn (200.7)	Kareem	OK
8	LLICV01	LLICV01	LLICV	03/12/25 10:56		Kareem	OK
9	ICB01	ICB01	ICB	03/12/25 11:01		Kareem	OK
10	CRI01	CRI01	CRDL	03/12/25 11:05		Kareem	OK
11	ICSA01	ICSA01	ICSA	03/12/25 11:09		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	03/12/25 11:14		Kareem	OK
13	ICSADL	ICSADL	ICSA	03/12/25 11:21		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	03/12/25 11:25		Kareem	OK
15	CCV01	CCV01	CCV	03/12/25 11:29		Kareem	OK
16	CCB01	CCB01	CCB	03/12/25 11:34		Kareem	OK
17	PB167037BL	PB167037BL	MB	03/12/25 11:38		Kareem	OK
18	PB167037BS	PB167037BS	LCS	03/12/25 11:42	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

19	PB166981BL	PB166981BL	MB	03/12/25 11:46		Kareem	OK
20	PB166981BS	PB166981BS	LCS	03/12/25 11:51	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
21	PB167038BL	PB167038BL	MB	03/12/25 11:55		Kareem	OK
22	PB167038BS	PB167038BS	LCS	03/12/25 11:59	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
23	PB167024BL	PB167024BL	MB	03/12/25 12:03		Kareem	OK
24	PB167024BS	PB167024BS	LCS	03/12/25 12:07	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
25	PB167100BL	PB167100BL	MB	03/12/25 12:11		Kareem	OK
26	PB167100BS	PB167100BS	LCS	03/12/25 12:16	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
27	CCV02	CCV02	CCV	03/12/25 12:20		Kareem	OK
28	CCB02	CCB02	CCB	03/12/25 12:24		Kareem	OK
29	PB166977BL	PB166977BL	MB	03/12/25 12:28		Kareem	OK
30	PB166977BS	PB166977BS	LCS	03/12/25 12:33	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
31	PB166963BL	PB166963BL	MB	03/12/25 12:37	Ba fail LCS	Kareem	Not Ok
32	PB166963BS	PB166963BS	LCS	03/12/25 12:41	Ba fail LCS	Kareem	Not Ok
33	Q1466-05	CITY WATER	SAM	03/12/25 12:49		Kareem	OK
34	Q1466-05DUP	CITY WATERDUP	DUP	03/12/25 12:53		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

35	Q1466-05L	CITY WATERL	SD	03/12/25 12:58		Kareem	OK
36	Q1466-05MS	CITY WATERMS	MS	03/12/25 13:02	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
37	Q1466-05MSD	CITY WATERMSD	MSD	03/12/25 13:06	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
38	CCV03	CCV03	CCV	03/12/25 13:10		Kareem	OK
39	CCB03	CCB03	CCB	03/12/25 13:14		Kareem	OK
40	Q1466-05A	CITY WATERA	PS	03/12/25 13:18	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
41	Q1507-01	50-MIDDLESEX-AVE	SAM	03/12/25 13:22		Kareem	OK
42	Q1508-01	RBR251372	SAM	03/12/25 13:27		Kareem	OK
43	Q1510-01	FMC-25-0001-0005	SAM	03/12/25 13:31		Kareem	OK
44	PB167098BL	PB167098BL	MB	03/12/25 13:59		Kareem	OK
45	PB167098BS	PB167098BS	LCS	03/12/25 14:03	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
46	PB167099BL	PB167099BL	MB	03/12/25 14:07		Kareem	OK
47	PB167099BS	PB167099BS	LCS	03/12/25 14:12	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
48	Q1515-01	AU-06-030625	SAM	03/12/25 14:16		Kareem	OK
49	Q1515-01DUP	AU-06-030625DUP	DUP	03/12/25 14:20		Kareem	OK
50	CCV04	CCV04	CCV	03/12/25 14:24		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

51	CCB04	CCB04	CCB	03/12/25 14:28		Kareem	OK
52	Q1540-01	OU4-CF-15R-031025	SAM	03/12/25 14:32		Kareem	OK
53	Q1540-01DUP	OU4-CF-15R-031025	DUP	03/12/25 14:37		Kareem	OK
54	Q1540-01L	OU4-CF-15R-031025	SD	03/12/25 14:41		Kareem	OK
55	Q1540-01A	OU4-CF-15R-031025	PS	03/12/25 14:58	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
56	PB167088TB	PB167088TB	MB	03/12/25 15:02		Kareem	OK
57	Q1545-01	BU-02-031125	SAM	03/12/25 15:06		Kareem	OK
58	Q1545-01DUP	BU-02-031125DUP	DUP	03/12/25 15:11		Kareem	OK
59	Q1545-01L	BU-02-031125L	SD	03/12/25 15:15		Kareem	OK
60	CCV05	CCV05	CCV	03/12/25 15:25		Kareem	OK
61	CCB05	CCB05	CCB	03/12/25 15:29		Kareem	OK
62	Q1545-01MS	BU-02-031125MS	MS	03/12/25 15:33	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
63	Q1545-01MSD	BU-02-031125MSD	MSD	03/12/25 15:37	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
64	Q1545-01A	BU-02-031125A	PS	03/12/25 15:41	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
65	Q1547-01	OR-620-JB-COMP-01	SAM	03/12/25 15:45		Kareem	OK
66	Q1547-06	OR-620-JB-COMP-02	SAM	03/12/25 15:49		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

67	Q1549-01	72-11978	SAM	03/12/25 15:54		Kareem	OK
68	Q1515-01L	AU-06-030625L	SD	03/12/25 15:58		Kareem	OK
69	Q1515-01MS	AU-06-030625MS	MS	03/12/25 16:02	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
70	Q1515-01MSD	AU-06-030625MSD	MSD	03/12/25 16:06	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
71	Q1515-01A	AU-06-030625A	PS	03/12/25 16:10	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
72	CCV06	CCV06	CCV	03/12/25 16:25		Kareem	OK
73	CCB06	CCB06	CCB	03/12/25 16:30		Kareem	OK
74	Q1540-01MS	OU4-CF-15R-031025I	MS	03/12/25 16:34	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
75	Q1540-01MSD	OU4-CF-15R-031025I	MSD	03/12/25 16:38	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
76	Q1516-03	GAS-AUD-25-0026	SAM	03/12/25 16:42		Kareem	OK
77	Q1519-01	WATER TREATMENT	SAM	03/12/25 16:47		Kareem	OK
78	LR1	LR1	HIGH STD	03/12/25 16:53		Kareem	OK
79	LR2	LR2	HIGH STD	03/12/25 16:58		Kareem	OK
80	Q1517-01DL	MOO-25-0062DL	SAM	03/12/25 17:02		Kareem	OK
81	Q1522-02	TW-WTS-04	SAM	03/12/25 17:07		Kareem	OK
82	Q1522-02DUP	TW-WTS-04DUP	DUP	03/12/25 17:11		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

83	Q1522-02L	TW-WTS-04L	SD	03/12/25 17:16		Kareem	OK
84	CCV07	CCV07	CCV	03/12/25 17:25		Kareem	OK
85	CCB07	CCB07	CCB	03/12/25 17:30		Kareem	OK
86	Q1522-02MS	TW-WTS-04MS	MS	03/12/25 17:35	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
87	Q1522-02MSD	TW-WTS-04MSD	MSD	03/12/25 17:39	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
88	Q1522-02A	TW-WTS-04A	PS	03/12/25 17:43	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
89	Q1478-07	IDW-AQ-IW-03-COMP	SAM	03/12/25 17:47		Kareem	OK
90	Q1478-07DUP	IDW-AQ-IW-03-COMP	DUP	03/12/25 17:52		Kareem	OK
91	Q1478-07L	IDW-AQ-IW-03-COMP	SD	03/12/25 17:56		Kareem	OK
92	Q1478-07MS	IDW-AQ-IW-03-COMP	MS	03/12/25 18:00	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
93	Q1478-07MSD	IDW-AQ-IW-03-COMP	MSD	03/12/25 18:05	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
94	Q1478-07A	IDW-AQ-IW-03-COMP	PS	03/12/25 18:09	0.1 ML OF M6004 AND M6013 WERE ADDED TO 10 ML OF SAMPLE	Kareem	OK
95	Q1478-01	IDW-AQ-MW-19B-CO	SAM	03/12/25 18:13		Kareem	OK
96	CCV08	CCV08	CCV	03/12/25 18:23		Kareem	OK
97	CCB08	CCB08	CCB	03/12/25 18:27		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135011

Review By	kareem	Review On	3/13/2025 10:36:08 AM
Supervise By	jaswal	Supervise On	3/14/2025 1:32:25 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84637,MP84638,MP84639,MP84640,MP84846
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84846
LCS Standard	
Chk Standard	MP84649,MP84650

98	Q1478-03	IDW-AQ-IW-01-COMP	SAM	03/12/25 18:31		Kareem	OK
99	Q1478-05	IDW-AQ-IW-02-COMP	SAM	03/12/25 18:36		Kareem	OK
100	Q1477-01	RW7-SP100-2025022	SAM	03/12/25 18:40		Kareem	OK
101	Q1477-04	RW7-SP303-2025022	SAM	03/12/25 18:44		Kareem	OK
102	CCV09	CCV09	CCV	03/12/25 18:49		Kareem	OK
103	CCB09	CCB09	CCB	03/12/25 18:53		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135035

Review By	jaswal	Review On	3/14/2025 1:24:23 PM
Supervise By	Mohan	Supervise On	3/14/2025 1:33:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84846,MP84640,MP84639,MP84638,MP84637
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84640
LCS Standard	
Chk Standard	MP84649,MP84650

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	03/13/25 11:42		Kareem	OK
2	S1	S1	CAL2	03/13/25 11:46		Kareem	OK
3	S2	S2	CAL3	03/13/25 11:50		Kareem	OK
4	S3	S3	CAL4	03/13/25 11:54		Kareem	OK
5	S4	S4	CAL5	03/13/25 11:59		Kareem	OK
6	S5	S5	CAL6	03/13/25 12:03		Kareem	OK
7	ICV01	ICV01	ICV	03/13/25 12:07		Kareem	OK
8	LLICV01	LLICV01	LLICV	03/13/25 12:13		Kareem	OK
9	ICB01	ICB01	ICB	03/13/25 12:17		Kareem	OK
10	CRI01	CRI01	CRDL	03/13/25 12:21		Kareem	OK
11	ICSA01	ICSA01	ICSA	03/13/25 12:25		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	03/13/25 12:30		Kareem	OK
13	ICSADL	ICSADL	ICSA	03/13/25 12:34		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	03/13/25 12:38		Kareem	OK
15	CCV01	CCV01	CCV	03/13/25 12:53		Kareem	OK
16	CCB01	CCB01	CCB	03/13/25 12:58		Kareem	OK
17	PB166963BL	PB166963BL	MB	03/13/25 13:02		Kareem	OK
18	PB166963BS	PB166963BS	LCS	03/13/25 13:06		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135035

Review By	jaswal	Review On	3/14/2025 1:24:23 PM
Supervise By	Mohan	Supervise On	3/14/2025 1:33:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84846,MP84640,MP84639,MP84638,MP84637
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84640
LCS Standard	
Chk Standard	MP84649,MP84650

19	PB167116BL	PB167116BL	MB	03/13/25 13:10		Kareem	OK
20	PB167116BS	PB167116BS	LCS	03/13/25 13:15		Kareem	OK
21	Q1485-01	DN-B-41	SAM	03/13/25 13:19		Kareem	OK
22	Q1486-01	DN-B-40	SAM	03/13/25 13:23		Kareem	OK
23	Q1487-01	DN-B-42	SAM	03/13/25 13:27		Kareem	OK
24	Q1488-04	ENV-101-SB02	SAM	03/13/25 13:31		Kareem	OK
25	Q1488-06	ENV-102-SB01	SAM	03/13/25 13:35		Kareem	OK
26	Q1488-08	ENV-102-SB02	SAM	03/13/25 13:40		Kareem	OK
27	CCV02	CCV02	CCV	03/13/25 13:49		Kareem	OK
28	CCB02	CCB02	CCB	03/13/25 13:54		Kareem	OK
29	Q1488-10	ENV-104-SB01	SAM	03/13/25 13:58		Kareem	OK
30	Q1488-12	ENV-104-SB02	SAM	03/13/25 14:02		Kareem	OK
31	Q1488-14	ENV-104-GW01	SAM	03/13/25 14:07		Kareem	OK
32	Q1488-01	ENV-101-SB01	SAM	03/13/25 14:11		Kareem	OK
33	Q1488-03	ENV-101-SB02	SAM	03/13/25 14:15		Kareem	OK
34	Q1488-05	ENV-102-SB01	SAM	03/13/25 14:19		Kareem	OK
35	Q1488-07	ENV-102-SB02	SAM	03/13/25 14:23		Kareem	OK
36	Q1488-09	ENV-104-SB01	SAM	03/13/25 14:27		Kareem	OK
37	Q1488-11	ENV-104-SB02	SAM	03/13/25 14:31		Kareem	OK
38	Q1491-02	COMP	SAM	03/13/25 14:35		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135035

Review By	jaswal	Review On	3/14/2025 1:24:23 PM
Supervise By	Mohan	Supervise On	3/14/2025 1:33:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84846,MP84640,MP84639,MP84638,MP84637
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84640
LCS Standard	
Chk Standard	MP84649,MP84650

39	CCV03	CCV03	CCV	03/13/25 14:40		Kareem	OK
40	CCB03	CCB03	CCB	03/13/25 14:48		Kareem	OK
41	Q1495-01	001-WILLETS-PT-BL	SAM	03/13/25 14:53		Kareem	OK
42	Q1495-02	002-35TH-AVE(MAR)	SAM	03/13/25 14:57		Kareem	OK
43	Q1514-02	ENV-105-SB01	SAM	03/13/25 15:01		Kareem	OK
44	Q1514-04	ENV-105-SB02	SAM	03/13/25 15:06		Kareem	OK
45	Q1514-06	ENV-103-SB01	SAM	03/13/25 15:10		Kareem	OK
46	Q1514-06DUP	ENV-103-SB01DUP	DUP	03/13/25 15:15		Kareem	OK
47	Q1514-06L	ENV-103-SB01L	SD	03/13/25 15:19		Kareem	OK
48	Q1514-06MS	ENV-103-SB01MS	MS	03/13/25 15:23		Kareem	OK
49	Q1514-06MSD	ENV-103-SB01MSD	MSD	03/13/25 15:28		Kareem	OK
50	Q1514-06A	ENV-103-SB01A	PS	03/13/25 15:34		Kareem	OK
51	CCV04	CCV04	CCV	03/13/25 15:38		Kareem	OK
52	CCB04	CCB04	CCB	03/13/25 15:42		Kareem	OK
53	Q1514-08	ENV-103-GW01	SAM	03/13/25 15:46		Kareem	OK
54	Q1514-09	FB03062025	SAM	03/13/25 15:51		Kareem	OK
55	Q1514-01	ENV-105-SB01	SAM	03/13/25 15:55		Kareem	OK
56	Q1514-03	ENV-105-SB02	SAM	03/13/25 15:59		Kareem	OK
57	Q1514-05	ENV-103-SB01	SAM	03/13/25 16:03		Kareem	OK
58	Q1525-01	MW10	SAM	03/13/25 16:08	Mn high	Kareem	Dilution

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135035

Review By	jaswal	Review On	3/14/2025 1:24:23 PM
Supervise By	Mohan	Supervise On	3/14/2025 1:33:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84846,MP84640,MP84639,MP84638,MP84637
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84640
LCS Standard	
Chk Standard	MP84649,MP84650

59	Q1552-01	NB-418-JB-COMP-01	SAM	03/13/25 16:12		Kareem	OK
60	Q1553-01	RT2321	SAM	03/13/25 16:16		Kareem	OK
61	Q1556-01	OR-02-031225	SAM	03/13/25 16:20	MS,MSD fail for many parameters	Kareem	Not Ok
62	Q1556-01DUP	OR-02-031225DUP	DUP	03/13/25 16:24	MS,MSD fail for many parameters	Kareem	Not Ok
63	CCV05	CCV05	CCV	03/13/25 16:28		Kareem	OK
64	CCB05	CCB05	CCB	03/13/25 16:32		Kareem	OK
65	Q1556-01L	OR-02-031225L	SD	03/13/25 16:37	MS,MSD fail for many parameters	Kareem	Not Ok
66	Q1556-01MS	OR-02-031225MS	MS	03/13/25 16:41	Fail for many parameters	Kareem	Not Ok
67	Q1556-01MSD	OR-02-031225MSD	MSD	03/13/25 16:45	Fail for many parameters	Kareem	Not Ok
68	Q1556-01A	OR-02-031225A	PS	03/13/25 16:49	MS,MSD fail for many parameters	Kareem	Not Ok
69	LR1	LR1	HIGH STD	03/13/25 16:53		Kareem	OK
70	LR2	LR2	HIGH STD	03/13/25 16:58		Kareem	OK
71	PB167103TB	PB167103TB	MB	03/13/25 17:04		Kareem	OK
72	Q1547-05	OR-620-JB-COMP-01	SAM	03/13/25 17:08		Kareem	OK
73	Q1547-05DUP	OR-620-JB-COMP-01	DUP	03/13/25 17:13		Kareem	OK
74	Q1547-05L	OR-620-JB-COMP-01	SD	03/13/25 17:17		Kareem	OK
75	CCV06	CCV06	CCV	03/13/25 17:21		Kareem	OK
76	CCB06	CCB06	CCB	03/13/25 17:25		Kareem	OK
77	Q1547-05MS	OR-620-JB-COMP-01	MS	03/13/25 17:30		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB135035

Review By	jaswal	Review On	3/14/2025 1:24:23 PM
Supervise By	Mohan	Supervise On	3/14/2025 1:33:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84636,MP84846,MP84640,MP84639,MP84638,MP84637
ICV Standard	MP84643
CCV Standard	MP84646
ICSA Standard	MP84644,MP84721
CRI Standard	MP84640
LCS Standard	
Chk Standard	MP84649,MP84650

78	Q1547-05MSD	OR-620-JB-COMP-01	MSD	03/13/25 17:34		Kareem	OK
79	Q1547-05A	OR-620-JB-COMP-01	PS	03/13/25 17:38		Kareem	OK
80	Q1547-10	OR-620-JB-COMP-02	SAM	03/13/25 17:42		Kareem	OK
81	Q1552-05	NB-418-JB-COMP-01	SAM	03/13/25 17:47		Kareem	OK
82	PB167117BL	PB167117BL	MB	03/13/25 17:51		Kareem	OK
83	PB167117BS	PB167117BS	LCS	03/13/25 17:55		Kareem	OK
84	Q1525-01DL	MW10DL	SAM	03/13/25 17:59	5X for Mn	Kareem	Confirms
85	Q1488-13DL	ENV-102-GW01DL	SAM	03/13/25 18:04	10X for Ag	Kareem	Confirms
86	Q1514-07DL	ENV-105-GW01DL	SAM	03/13/25 18:08	10X for Ca,Ag,Fe	Kareem	Confirms
87	CCV07	CCV07	CCV	03/13/25 18:12		Kareem	OK
88	CCB07	CCB07	CCB	03/13/25 18:35		Kareem	OK
89	Q1488-13	ENV-102-GW01	SAM	03/13/25 18:39	Ag oversaturated	Kareem	Dilution
90	Q1514-07	ENV-105-GW01	SAM	03/13/25 18:44	Ag oversaturated,Ca,Fe high	Kareem	Dilution
91	Q1488-13REDL	ENV-102-GW01RE	SAM	03/13/25 18:49	Not used	Kareem	Not Ok
92	CCV08	CCV08	CCV	03/13/25 18:53		Kareem	OK
93	CCB08	CCB08	CCB	03/13/25 19:03		Kareem	OK
94	Q1528-02	22725	SAM	03/13/25 19:07		Kareem	OK
95	CCV09	CCV09	CCV	03/13/25 19:12		Kareem	OK
96	CCB09	CCB09	CCB	03/13/25 19:21		Kareem	OK

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

Prep Standard - Chemical Standard Summary

Order ID : Q1486

Test : Mercury,Metals ICP-RCRA

Prepbatch ID : PB166977,PB166988,

Sequence ID/Qc Batch ID: LB134903,LB134928,LB135011,LB135035,LB135035,

Standard ID :

MP84041,MP84564,MP84566,MP84636,MP84637,MP84638,MP84639,MP84640,MP84641,MP84642,MP84643,MP84644,MP84646,MP84649,MP84650,MP84721,MP84759,MP84760,MP84761,MP84762,MP84763,MP84764,MP84765,MP84766,MP84767,MP84768,MP84769,MP84770,MP84771,MP84772,MP84773,MP84845,MP84846,

Chemical ID :

M4371,M4583,M4883,M4884,M4891,M4916,M5062,M5192,M5218,M5288,M5296,M5395,M5429,M5467,M5472,M5496,M5497,M5532,M5585,M5658,M5697,M5698,M5747,M5748,M5751,M5769,M5789,M5792,M5798,M5799,M5800,M5801,M5806,M5808,M5811,M5814,M5815,M5816,M5817,M5820,M5875,M5882,M5884,M5959,M5962,M5970,M5978,M5985,M6003,M6011,M6021,M6023,M6028,M6030,M6032,M6077,M6125,M6126,M6127,M6128,M6137,M6144,M6145,M6146,M6150,M6151,M6152,M6155,M6156,W3112,

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP84564	02/18/2025	08/18/2025	Mohan Bera	None	None	Janvi Patel 02/19/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP84566	02/18/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel 02/19/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP84636	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 125.00000ml of M5792 + 2350.00000ml of W3112 + 25.00000ml of M5789 = 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)	MP84637	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 5.00000ml of M5395 + 5.00000ml of M5467 + 5.00000ml of M5472 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M6077 + 5.00000ml of M6146 + 455.00000ml of MP84636 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP84638	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 50.00000ml of MP84636 + 50.00000ml of MP84637 = 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	MP84639	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 25.00000ml of MP84637 + 75.00000ml of MP84636 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP84640	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 16.00000ml of MP84637 + 184.00000ml of MP84636 = 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	MP84641	02/25/2025	03/09/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 0.00200ml of M5816 + 0.00400ml of M5978 + 0.03000ml of M6028 + 0.04000ml of M4884 + 0.05000ml of M5496 + 0.05000ml of M5658 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.06000ml of M5747 + 0.10000ml of M5472 + 0.10000ml of M5751 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6145 + 0.25000ml of M5467 + 0.25000ml of M6146 + 0.50000ml of M5798 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M5192 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M6127 + 1.00000ml of M6144 + 77.68000ml of MP84636 = 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	MP84642	02/25/2025	03/09/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 2.00000ml of MP84641 + 98.00000ml of MP84636 = 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
912	ICP AES ICV SOLN	MP84643	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.10000ml of M5467 + 0.25000ml of M5218 + 0.25000ml of M5472 + 10.00000ml of M6150 + 89.77500ml of MP84636 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP84644	02/24/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP84636 = 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
911	ICP AES CCV SOLN	MP84646	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 50.00000ml of MP84636 + 50.00000ml of MP84637 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP84649	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M5789 = Final Quantity: 2000.000 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
513	RINSE SOLN	MP84650	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 200.00000ml of M5789 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP84721	02/25/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 02/28/2025

FROM 0.01000ml of M5815 + 0.01000ml of M5817 + 0.10000ml of M5296 + 0.10000ml of M5472 + 0.10000ml of M5970 + 10.00000ml of M6152 + 10.00000ml of M6155 + 79.50000ml of MP84636 = 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
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP84759	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 1.00000ml of M6126 + 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	MP84760	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = 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
1341	Hg 0.2 PPB STD	MP84761	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 + 0.20000ml of MP84759 = 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	MP84762	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84759 = 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
1343	Hg 5.0 PPB STD	MP84763	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84759 = 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	MP84764	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84759 = 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
1345	Hg 10.0 PPB STD	MP84765	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP84759 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP84766	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6126 + 245.00000ml of W3112 = 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
1351	ICB (Hg 0.00 PPB SOLUTION)	MP84767	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP84768	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP84759 = 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)	MP84769	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6126 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP84770	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84759 = 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)	MP84771	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 2.50000ml of M6126 + 240.50000ml of W3112 + 7.00000ml of MP84759 = 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	MP84772	03/05/2025	03/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 03/05/2025

FROM 150.00000ml of M6151 + 50.00000ml of M6126 = 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	MP84773	03/05/2025	03/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 03/05/2025

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
2950	ICP AES S1/CRI STOCK STD	MP84845	03/09/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 03/11/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.04000ml of M6137 + 0.05000ml of M5658 + 0.05000ml of M5808 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.06000ml of M5747 + 0.10000ml of M4883 + 0.10000ml of M5472 + 0.10000ml of M5697 + 0.10000ml of M5698 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5970 + 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 M5467 + 0.25000ml of M6146 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M5769 + 1.00000ml of M5806 + 1.00000ml of M5978 + 1.00000ml of M6156 + 2.00000ml of M5816 + 77.68000ml of MP84636 = 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
2951	ICP AES S1/CRI WORK STD	MP84846	03/09/2025	03/25/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 03/11/2025

FROM 2.00000ml of MP84845 + 98.00000ml of MP84636 = Final Quantity: 100.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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.	57014 / Si, 1000 PPM, 125 ml	030921	03/09/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4884

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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.	57042 / Mo, 1000 PPM, 125 ml	051722	05/17/2025	07/01/2022 / bin	06/17/2022 / jaswal	M5192

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	S2-MEB711674	11/02/2026	07/01/2022 / bin	09/10/2021 / bin	M5218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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 #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	S2-MEB711673	11/02/2026	09/19/2022 / jaswal	08/20/2022 / jaswal	M5296

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

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.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	01/14/2025 / Jaswal	03/16/2023 / jaswal	M5472

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	03/15/2025	01/02/2025 /	03/30/2023 / mohan	M5532

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 #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	03/31/2025	01/20/2024 /	06/12/2023 / jaswal	M5585

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	102623	10/26/2026	04/18/2024 / jaswal	10/27/2023 / jaswal	M5698

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	100923	10/09/2026	05/20/2024 / Jaswal	12/20/2023 / jaswal	M5747

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

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 #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22D1462006	08/05/2025	02/05/2024 / Al-Terek	02/24/2022 / Al-Terek	M5792

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

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.	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.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

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	122926	12/29/2026	12/18/2024 / janvi	01/03/2024 / jaswal	M5808

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

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.	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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	02/20/2029	07/01/2024 / Jaswal	06/14/2024 / Jaswal	M5959

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/26/2025	02/26/2025 / Eman	05/14/2024 / Jaswal	M6003

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	U2-MEB731108	07/14/2025	01/14/2025 / Eman	05/14/2024 / Jaswal	M6011

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	09/06/2029	01/23/2025 / kareem	09/19/2024 / kareem	M6077

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 /	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

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 #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	08/24/2025	02/24/2025 / kareem	04/20/2021 / kareem	M6152

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	06/20/2025	02/10/2025 / kareem	02/09/2024 / kareem	M6155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Certificate of Analysis

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

R: 01/03/24 M5808, M5809

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58113
Lot Number: 122923
Description: Aluminum (Al)

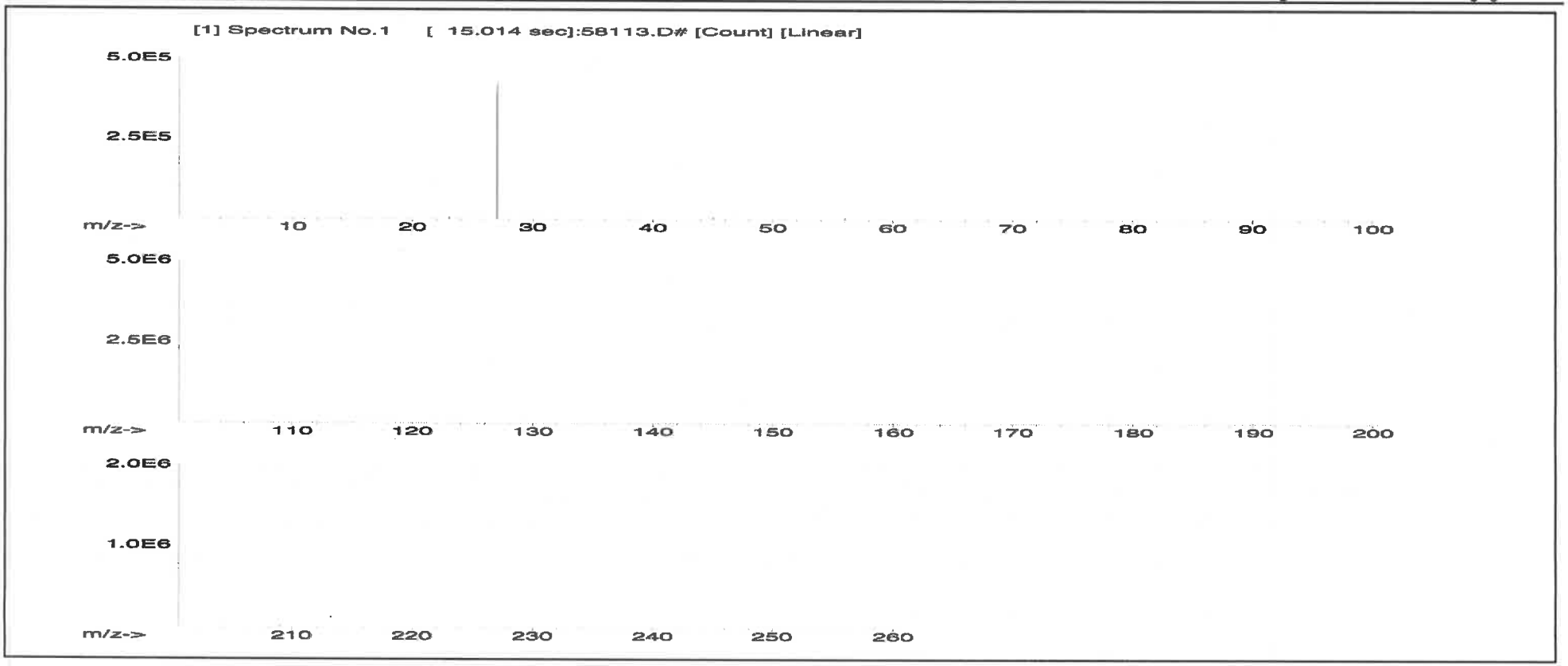
Expiration Date: 122926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	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. Aluminum nitrate nonahydrate (Al)	IN022	ALM092022A1	10000	99.999	0.10	7.30	273.9779	273.9813	**10000.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	T	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	17	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	0.03
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	4.5	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	0.56	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6032

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

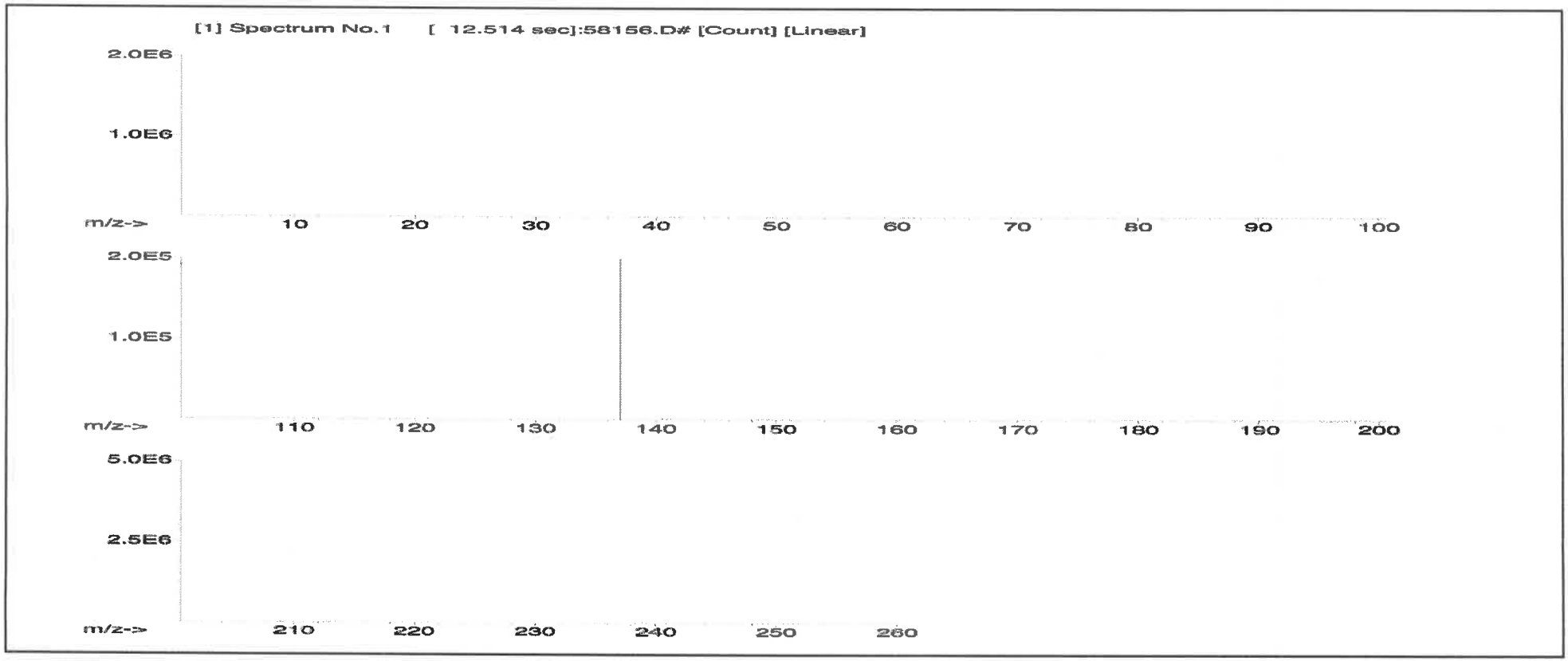
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	010924
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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R 8/5/24

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

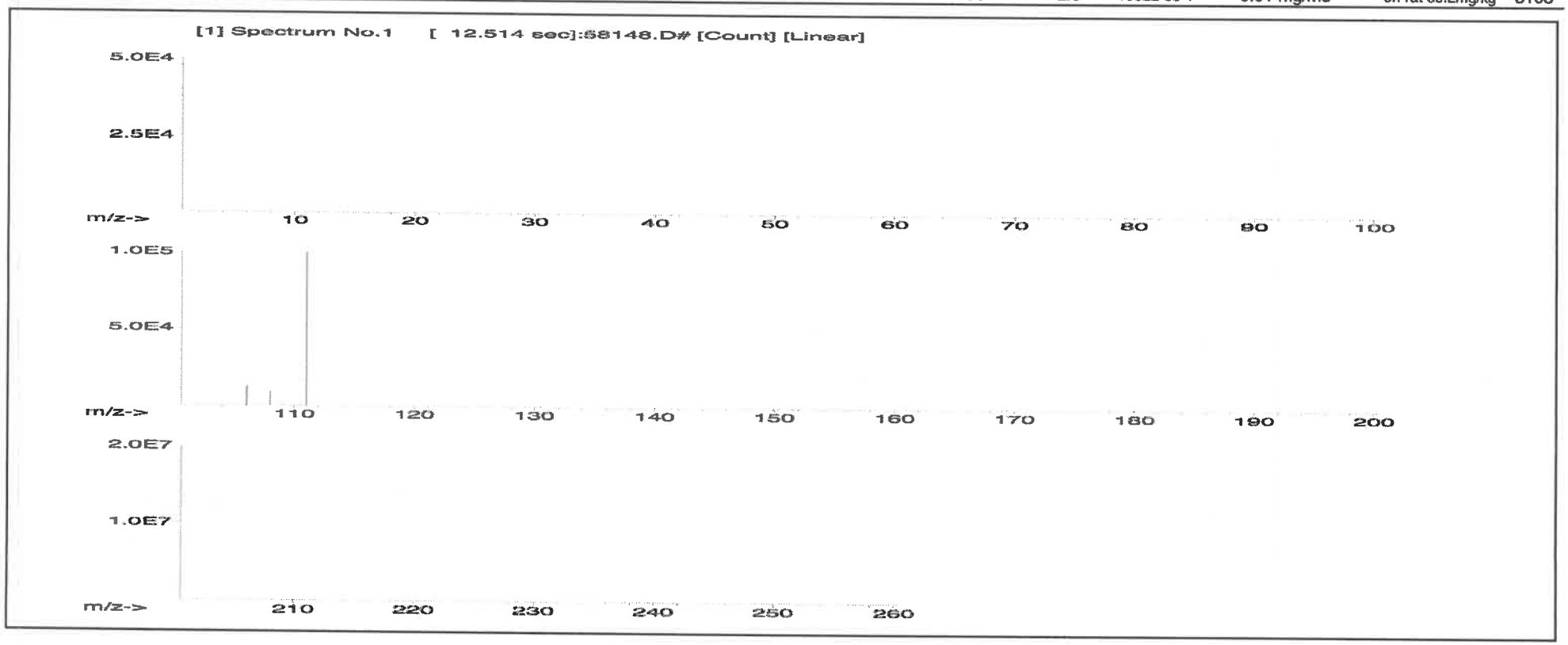
CERTIFIED WEIGHT REPORT:

Part Number:	**57048**		**Lot #**		
Lot Number:	**070124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Cadmium (Cd)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	070124
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



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).

M5296 OP: 09/19/2022 BH

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	S2-MEB711673
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 ± 6 µg/mL**	**Molybdenum, Mo**	**1 000 ± 6 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 6 µg/mL**
Titanium, Ti	**1 000 ± 7 µg/mL**		

Density: 1.030 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 250 µg/mL ea: Silver, Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**2 000 ± 7 µg/mL**	**Barium, Ba**	**2 000 ± 9 µg/mL**
Beryllium, Be	**50.00 ± 0.26 µg/mL**	**Calcium, Ca**	**5 000 ± 22 µg/mL**
Chromium, Cr	**200.0 ± 1.0 µg/mL**	**Cobalt, Co**	**500.0 ± 2.4 µg/mL**
Copper, Cu	**250.0 ± 1.0 µg/mL**	**Iron, Fe**	**1 000 ± 4 µg/mL**
Magnesium, Mg	**5 000 ± 20 µg/mL**	**Manganese, Mn**	**500.0 ± 2.0 µg/mL**
Nickel, Ni	**500.0 ± 2.2 µg/mL**	**Potassium, K**	**5 000 ± 19 µg/mL**
Silver, Ag	**250.0 ± 1.1 µg/mL**	**Sodium, Na**	**5 000 ± 18 µg/mL**
Vanadium, V	**499.7 ± 2.2 µg/mL**	**Zinc, Zn**	**500.0 ± 2.2 µg/mL**

Density: 1.118 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

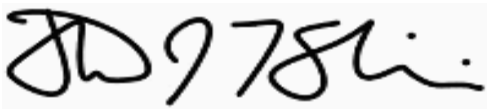
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 13, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 13, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

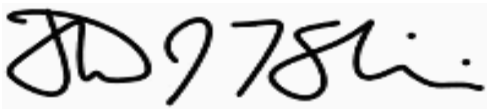
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R : 01/03/24. M5810, M5811

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 051523
Description: Iron (Fe)

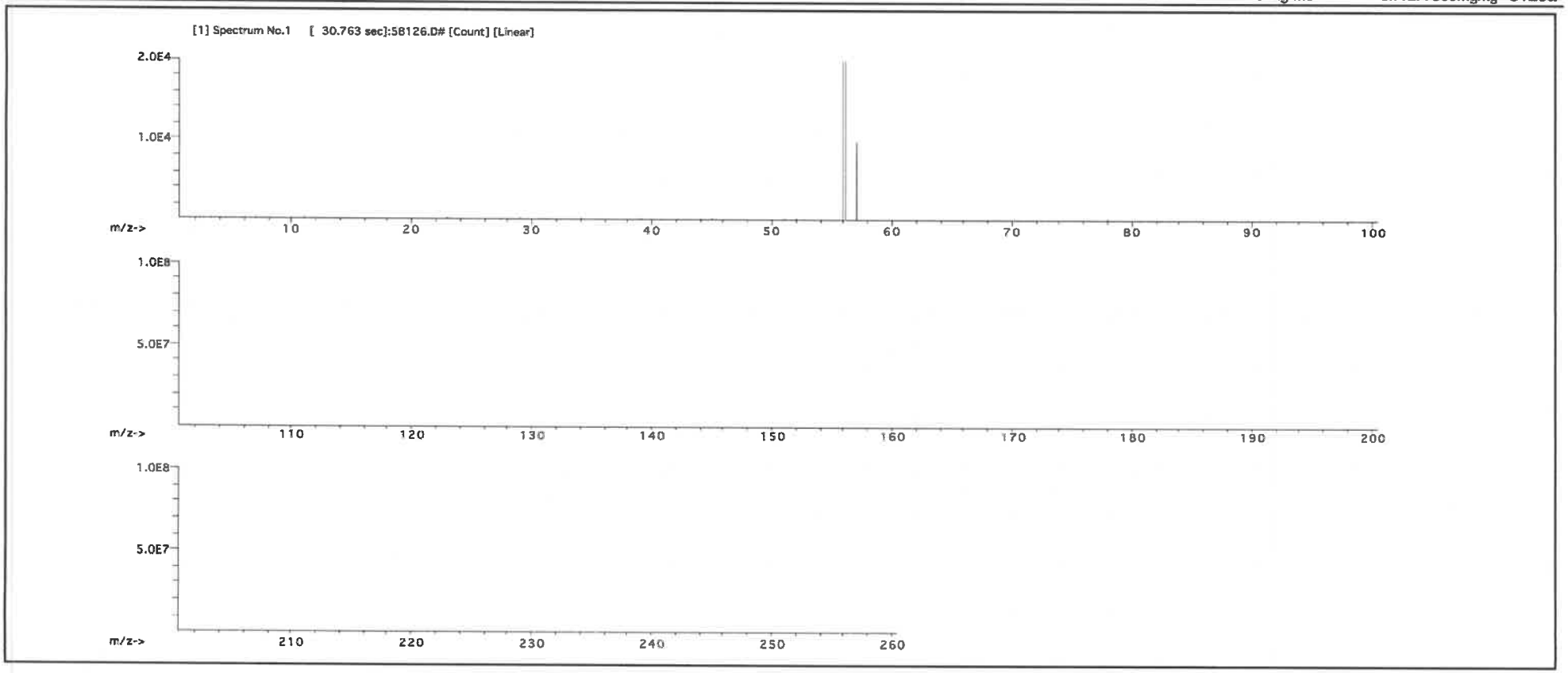
Expiration Date: 051526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 5000.1 ± 0.12 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
	5.0%	250.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	051523
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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.10
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M4371

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

Rec – 06.07.19

J.T.Baker® | avantor™

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

M45 P3
Expd Dt. 5 7 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 ºC)			
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	

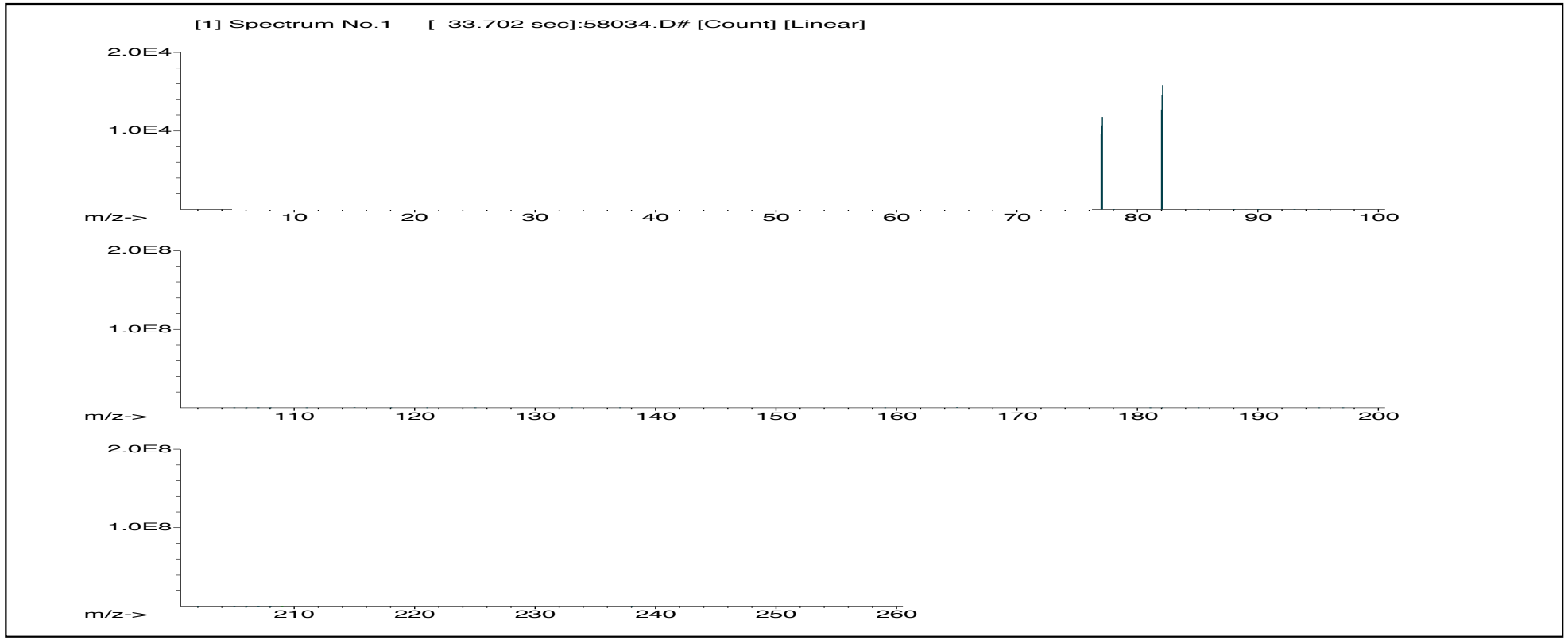
Giovanni Esposito

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



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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

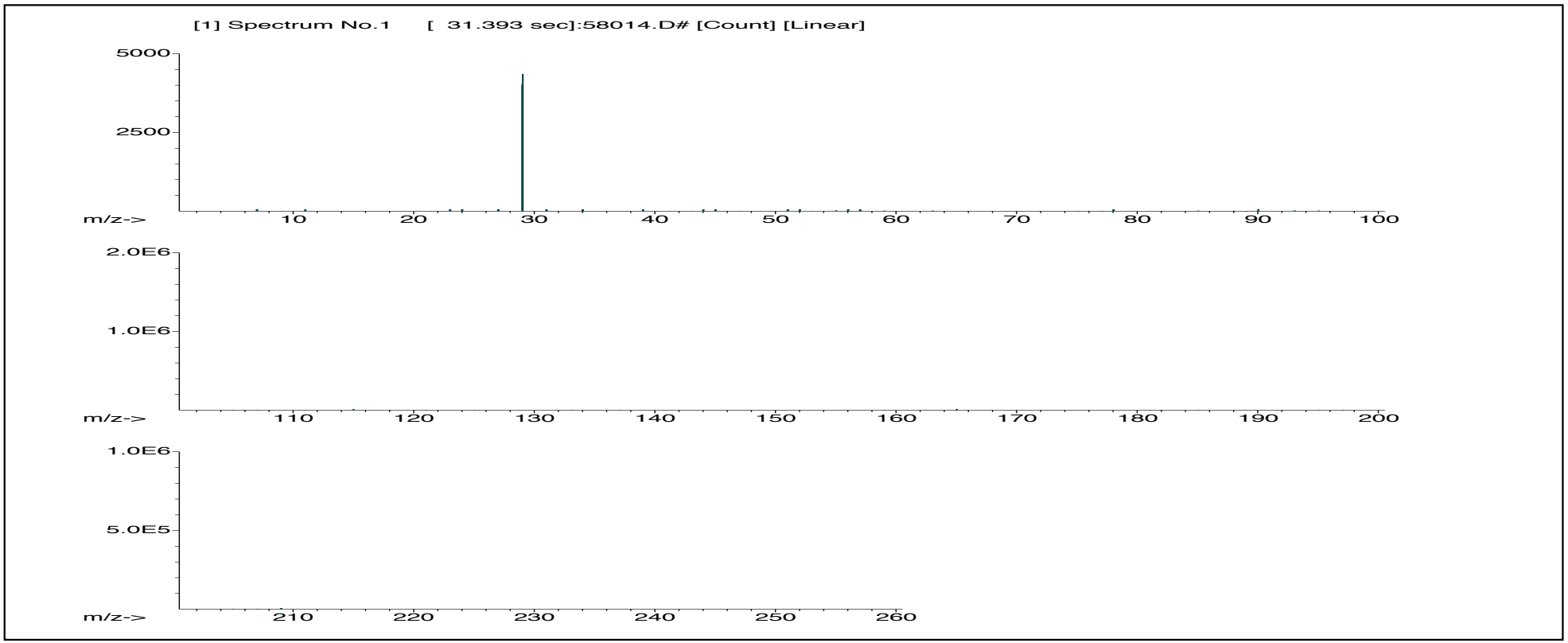
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57014**	19410105	Nitric Acid	
Lot Number:	**030921**			
Description:	**Silicon (Si)**			
		2.0%	60.0	Nitric Acid
Expiration Date:	030924		(mL)	
Recommended Storage:	Ambient (20 ºC)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	030921
Reviewed By:	Pedro L. Rentas	030921

	Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	**Final Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1.	Ammonium hexafluorosilicate (Si)	58114	070120	0.1000	300.0	0.084	1000	10000.0	**1000.0**	**2.1**	16919-19-0	2.50 mg/m3	orl-rat 70 mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	T	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		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 ºC)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

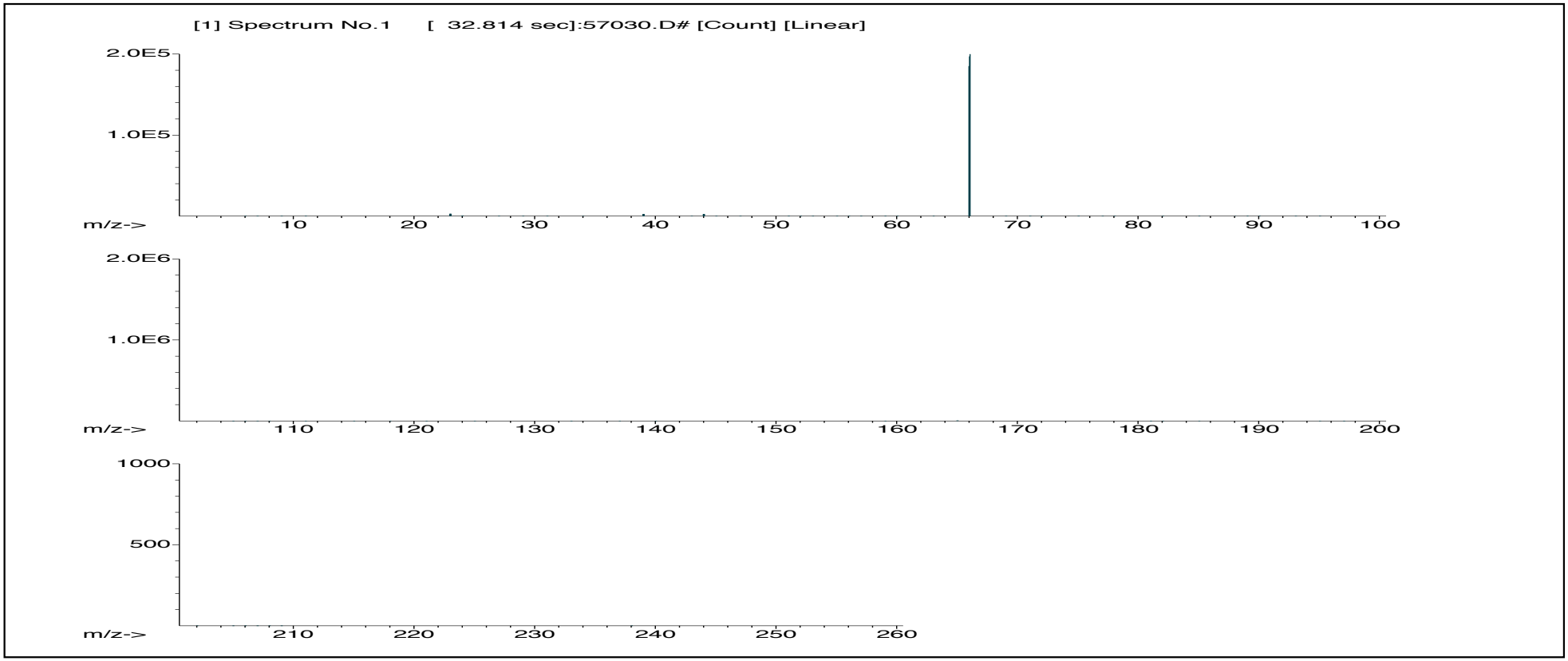
Giovanni Esposito

Formulated By:	Giovanni Esposito	031921

Pedro Rentas

Reviewed By:	Pedro L. Rentas	031921

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	**Final Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	58130	082020	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

ThermoFisher SCIENTIFIC

M4913-16

MB

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5192 R: 06/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

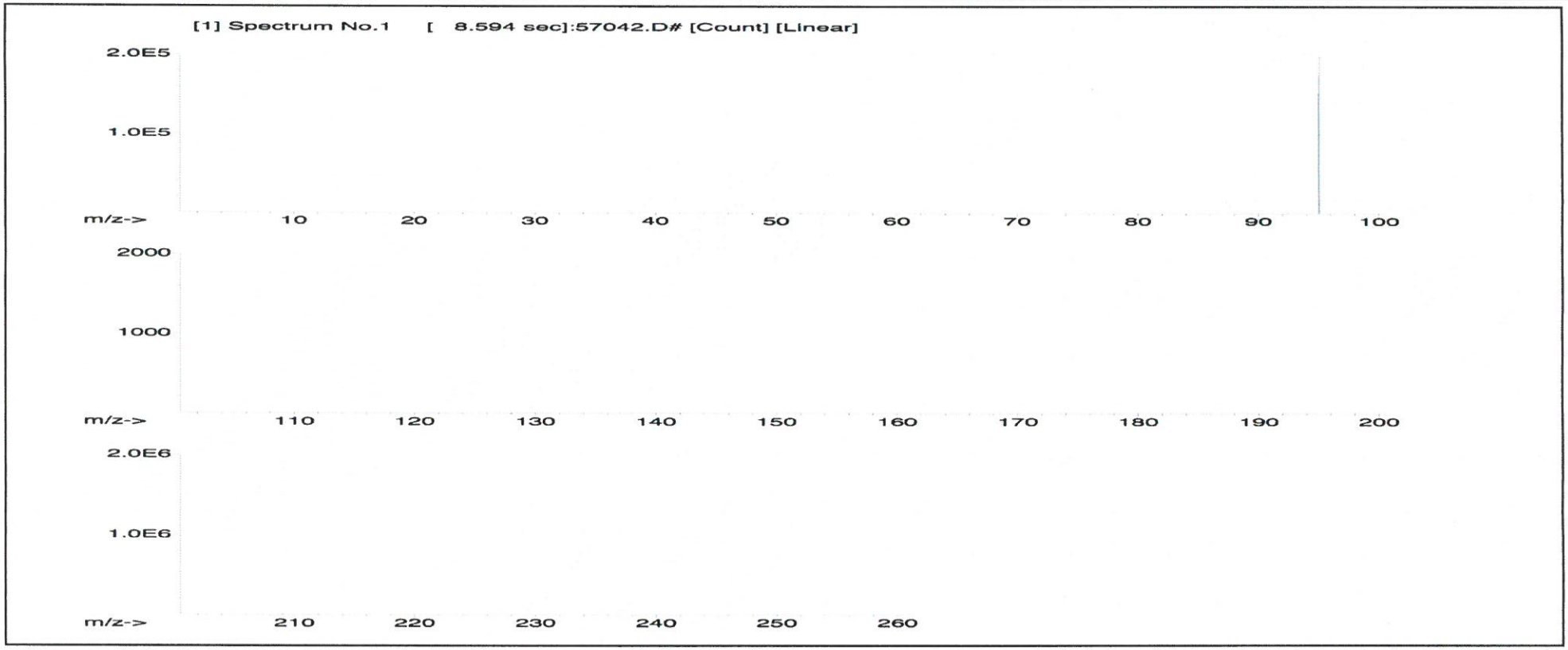
Part Number: 57042
Lot Number: 051722
Description: Molybdenum (Mo)

	Lot #	Solvent:	
	MKBQ8597V	Ammonium hydroxide	
	0.5%	15.0 (mL)	Ammonium hydroxide

Expiration Date: 051725
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Volume shown below was diluted to (mL): 3000.41 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	051722
Reviewed By:	Pedro L. Rentas	051722

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium molybdate (Mo)	58142	022222	0.1000	300.0	0.084	1000	10001.0	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	T	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-QC-4
Lot Number:	S2-MEB711674
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 7 µg/mL**	**Molybdenum, Mo**	**1 000 ± 5 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 5 µg/mL**
Titanium, Ti	**1 001 ± 6 µg/mL**		

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5288 R: 07/21/2022

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

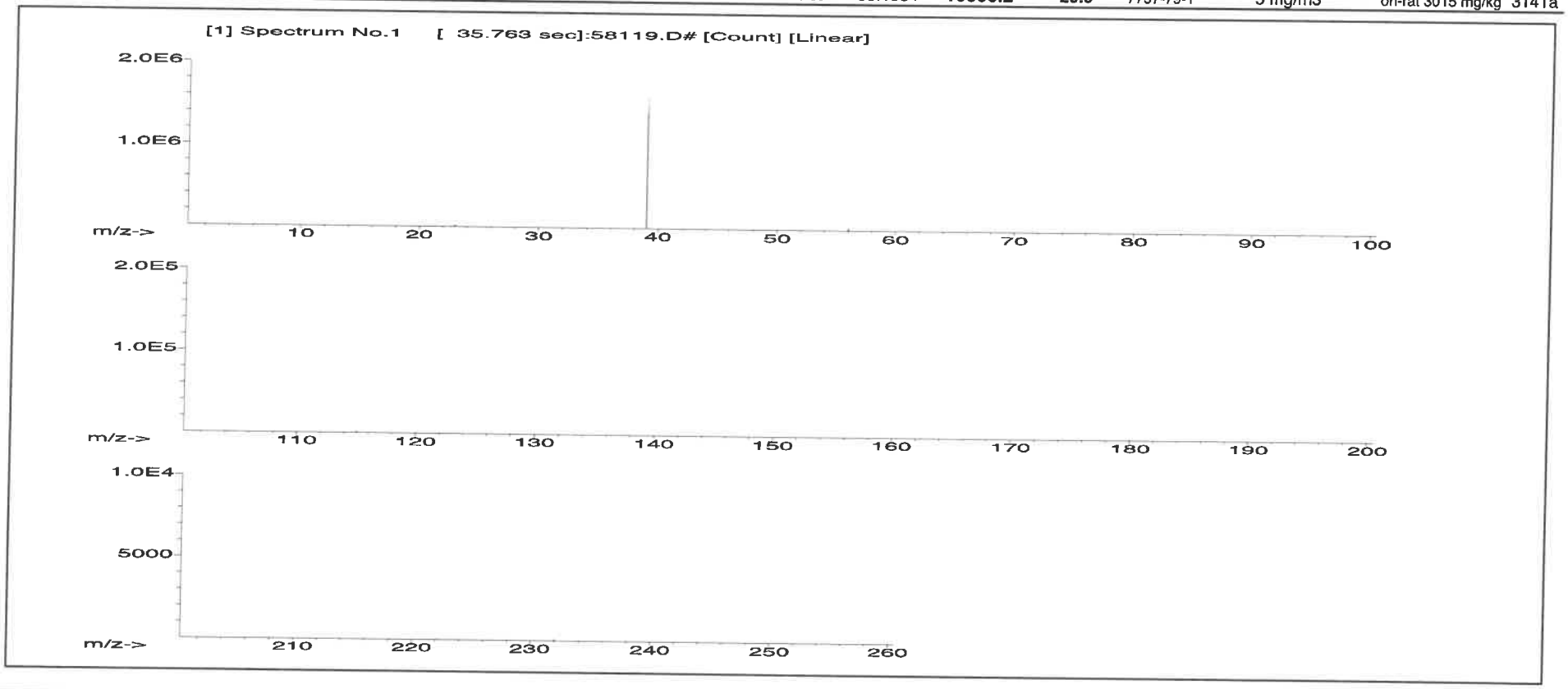
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5429 R1 01/26/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

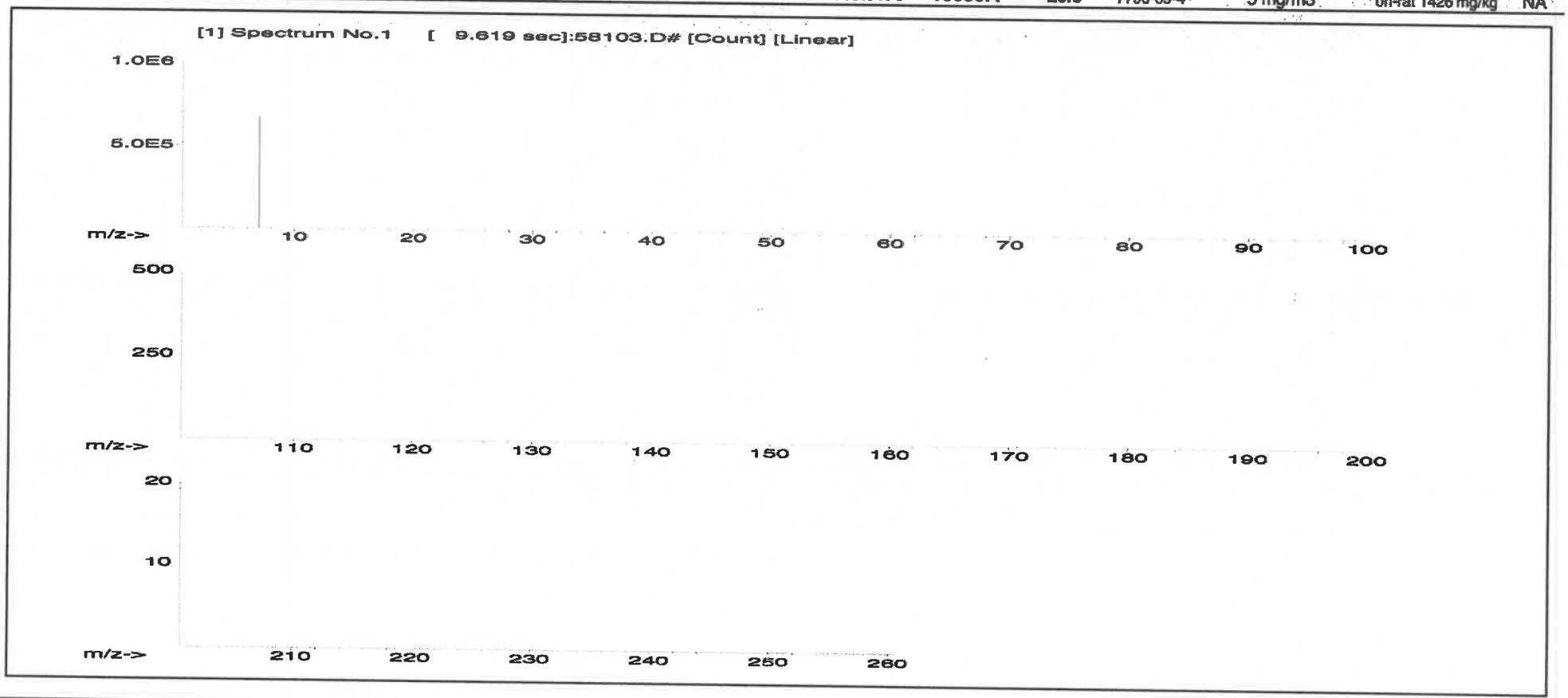
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	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



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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5467 R: 03/01/23 (LA)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 020623
Description: Cerium (Ce)

Expiration Date: 020626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

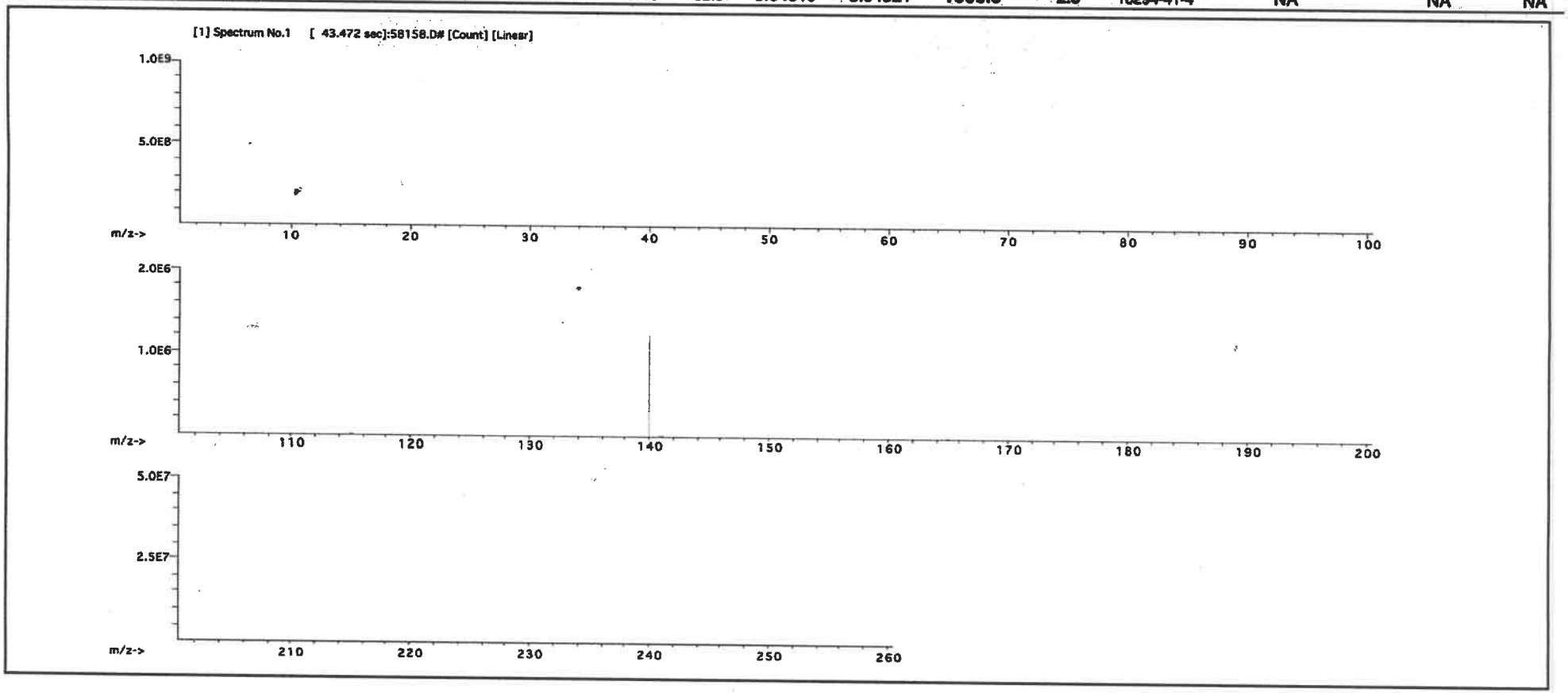
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
2%	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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5496 R 7/20/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

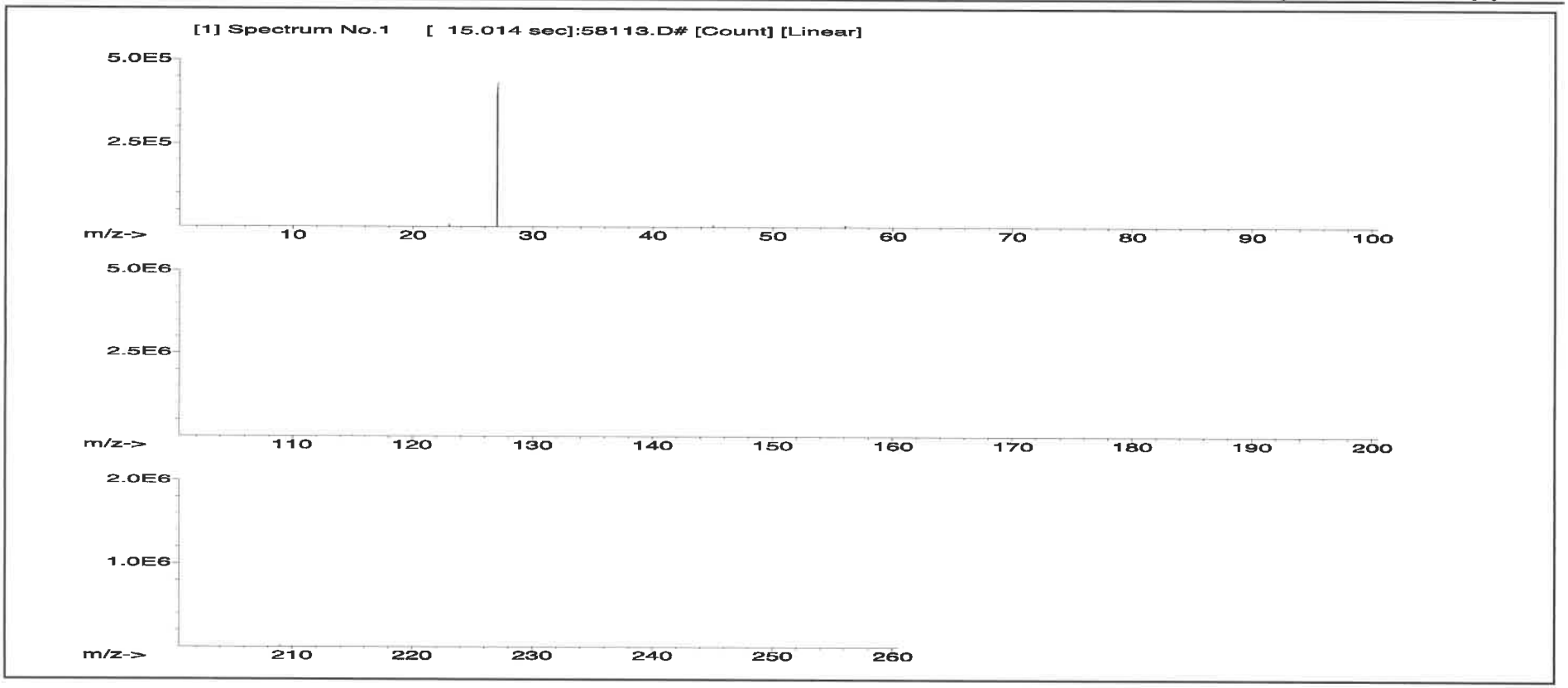
CERTIFIED WEIGHT REPORT:

Part Number:	**58113**		**Lot #**		
Lot Number:	**011623**	**Solvent:**	20510011	Nitric Acid	
Description:	**Aluminum (Al)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	011623
Reviewed By:	Pedro L. Rentas	011623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

IN5497 - IN5498 R: 03/17/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

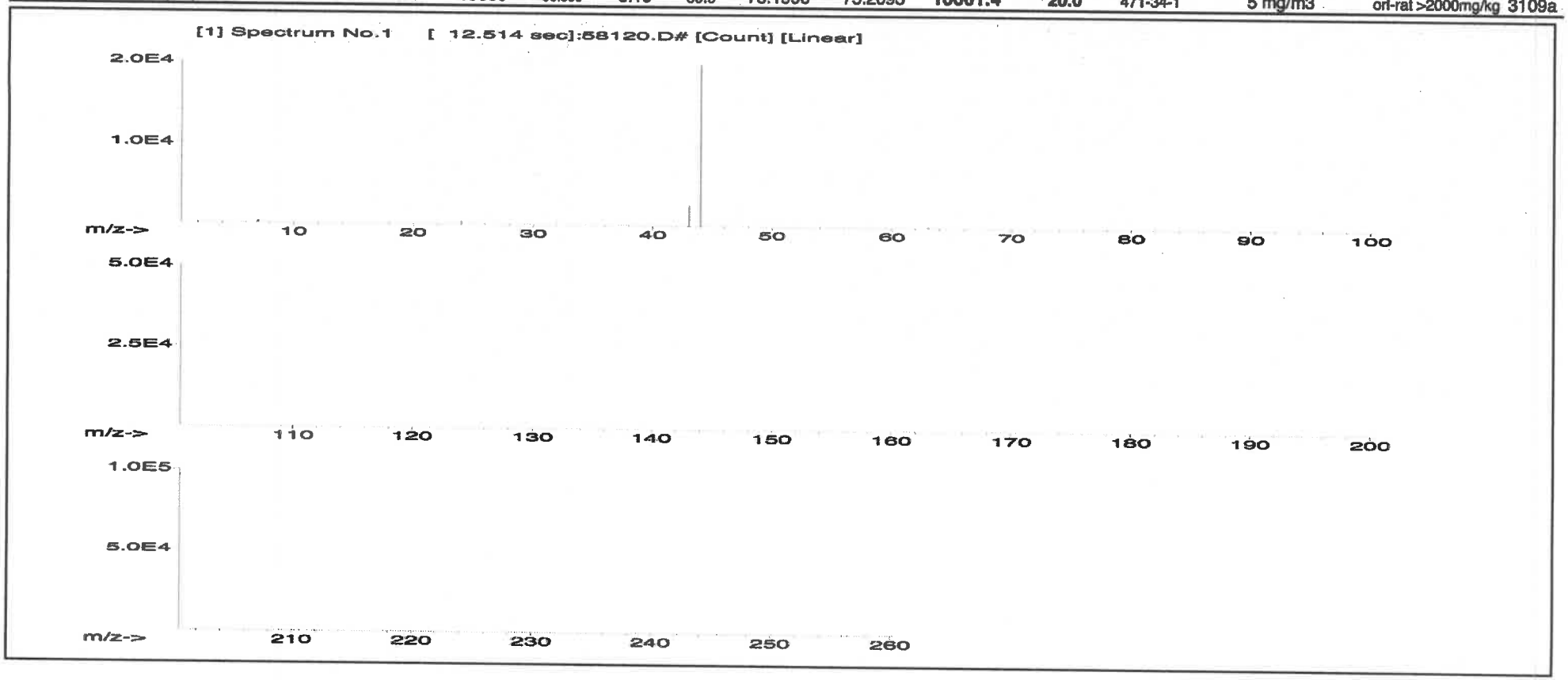
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MSS28-37
MB

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

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

RD: 06/12/2023, M5581, M5582, M5583, M5584, M5585

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-68118-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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5658 R ! 8/25/23

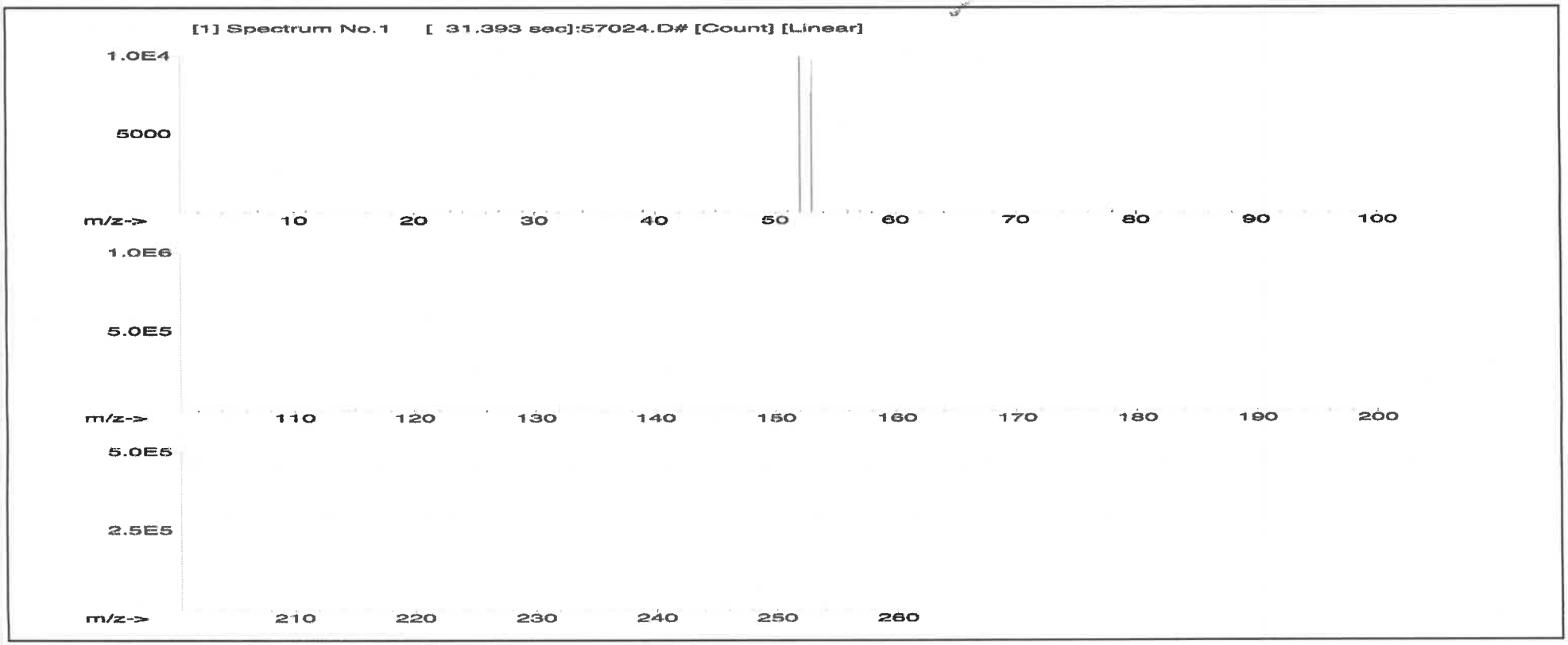
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5697 R: 10/27/23

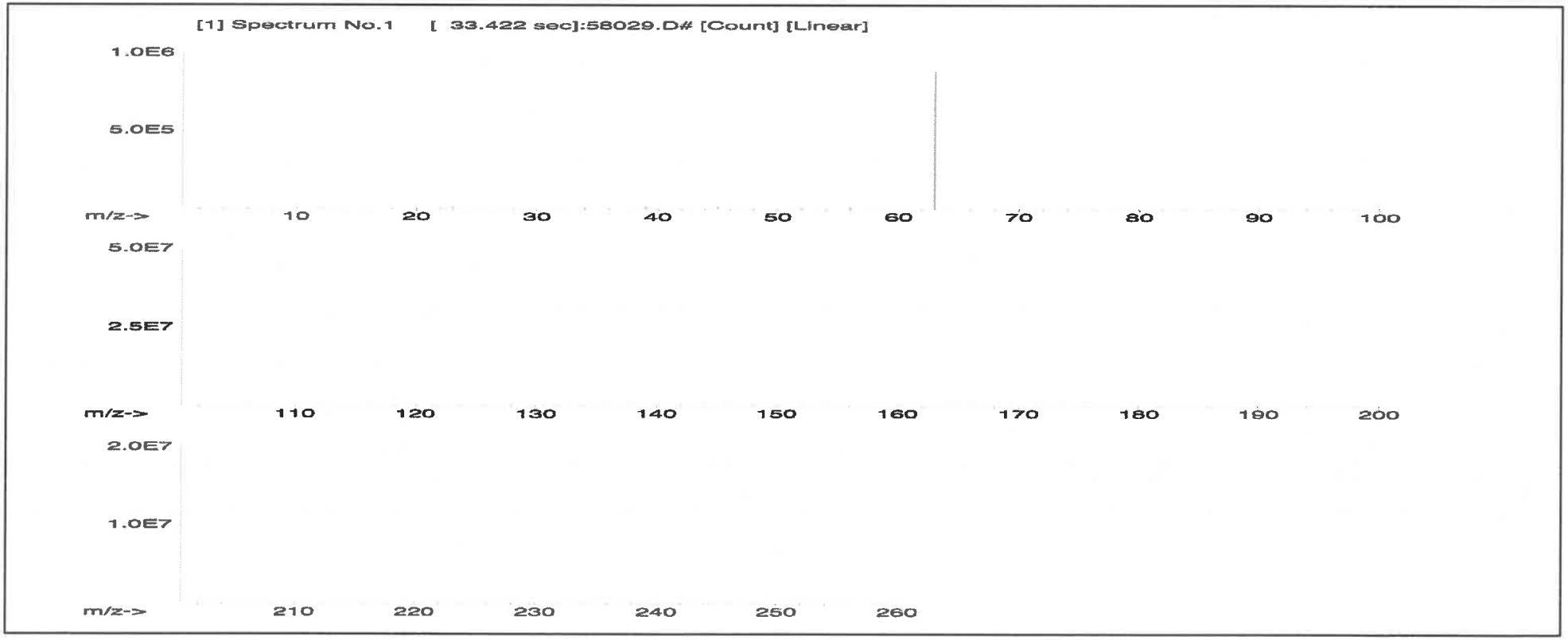
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5648 R: 10/27/23

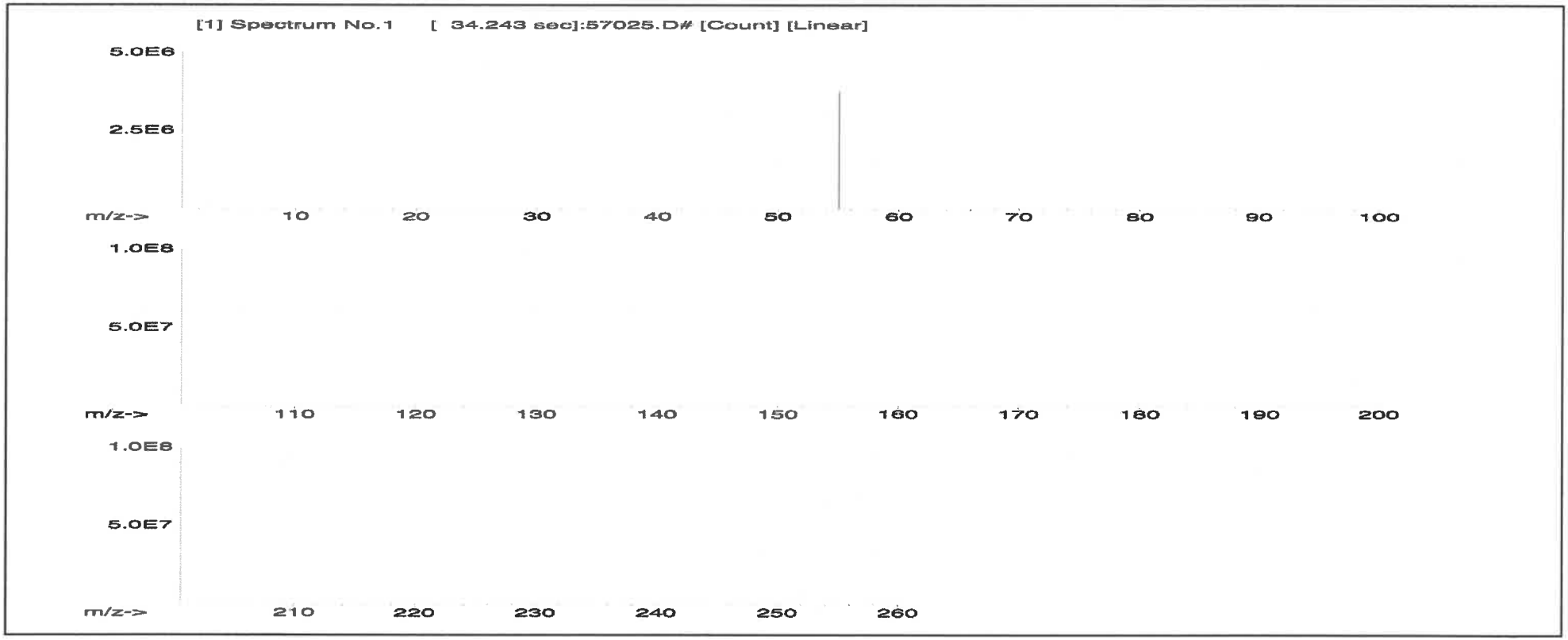
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58025**	24002546	Nitric Acid	
Lot Number:	**102623**			
Description:	**Manganese (Mn)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	102626			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102623
Reviewed By:	Pedro L. Rentas	102623

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. Manganese(II) nitrate tetrahydrate (Mn)	58125	071123	0.1000	300.0	0.084	1000	10000.1	**1000.0**	**2.1**	20694-39-7	5 mg/m3	orl-rat >300mg/kg	3132



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:

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 balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 12/20/23 M5747

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57082
Lot Number: 100923
Description: Lead (Pb)

Expiration Date: 100926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

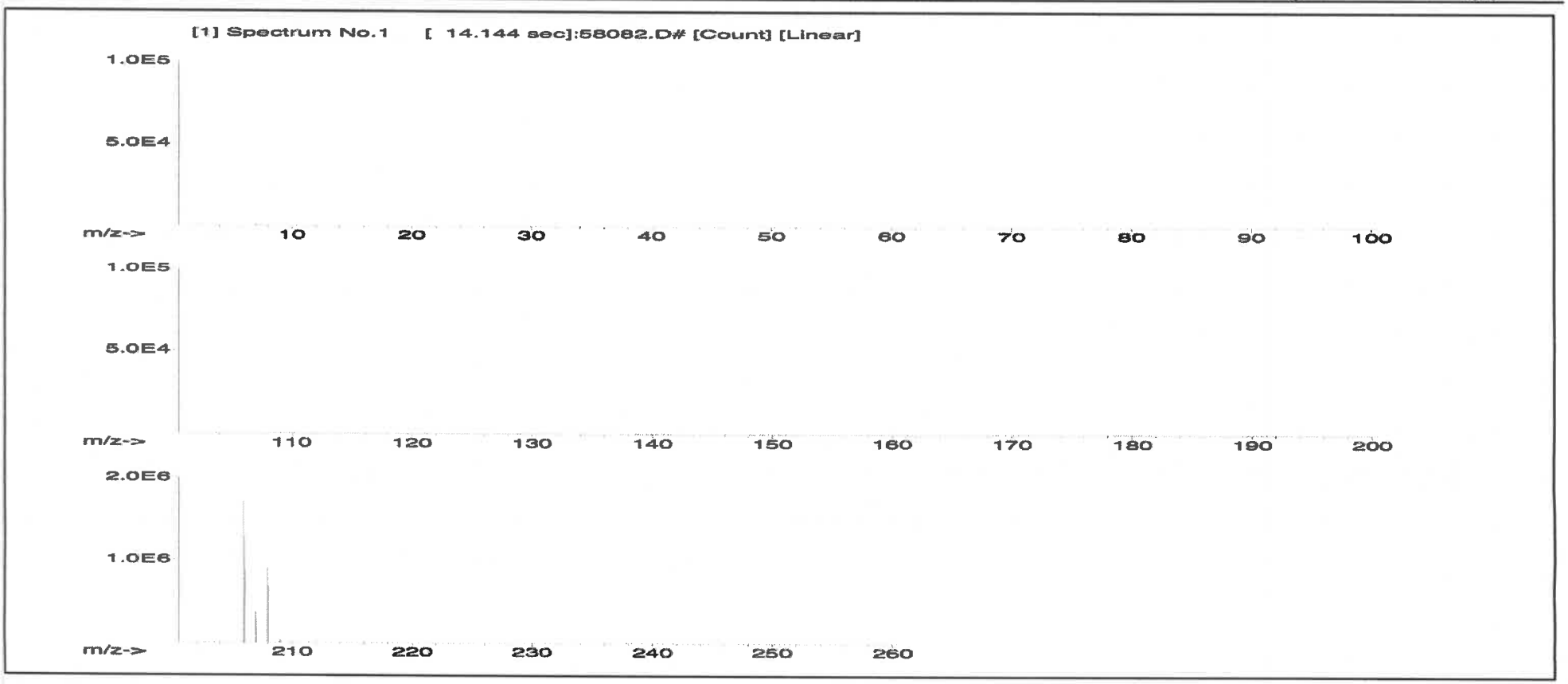
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	100923
Reviewed By:	Pedro L. Rentas	100923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	1000	99.999	0.10	62.5	4.80071	4.80077	**1000.0**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 12/20/23 M5748

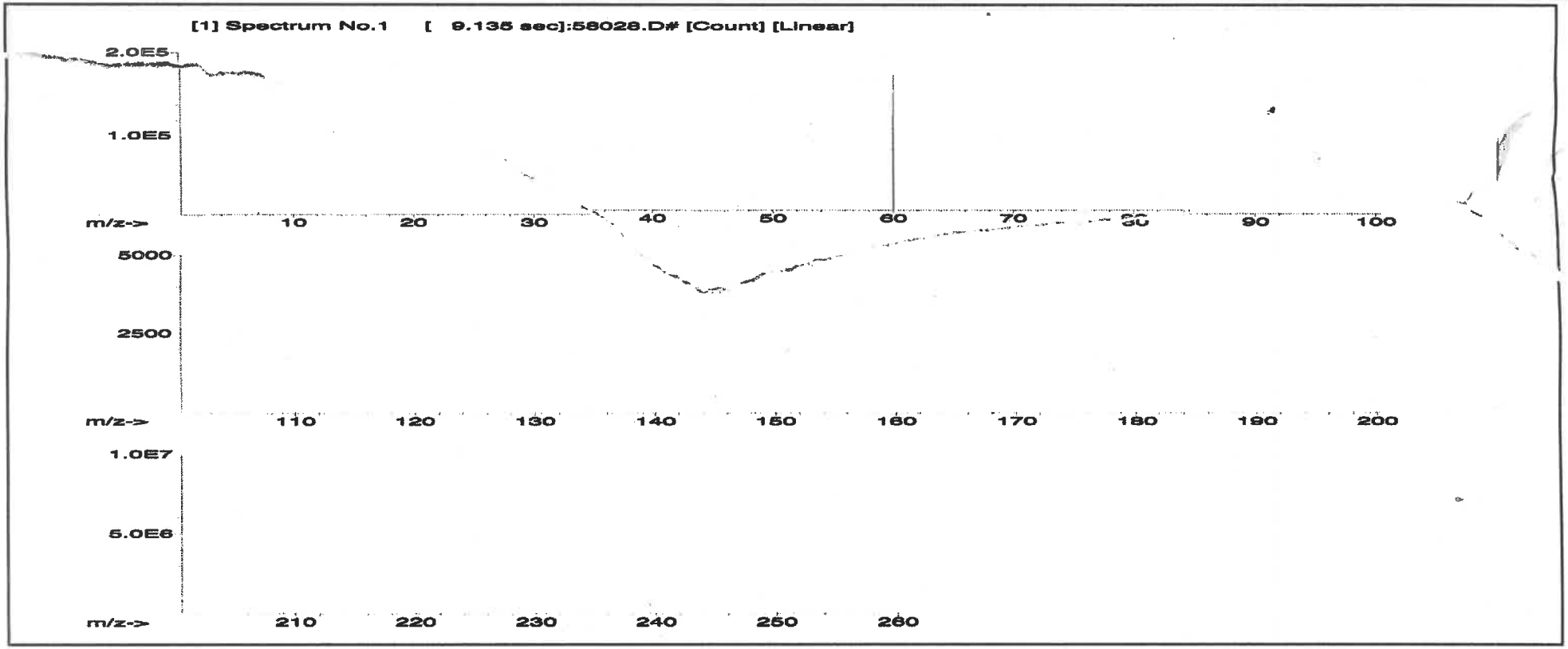
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	**2.2**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 8/25/23 M5751

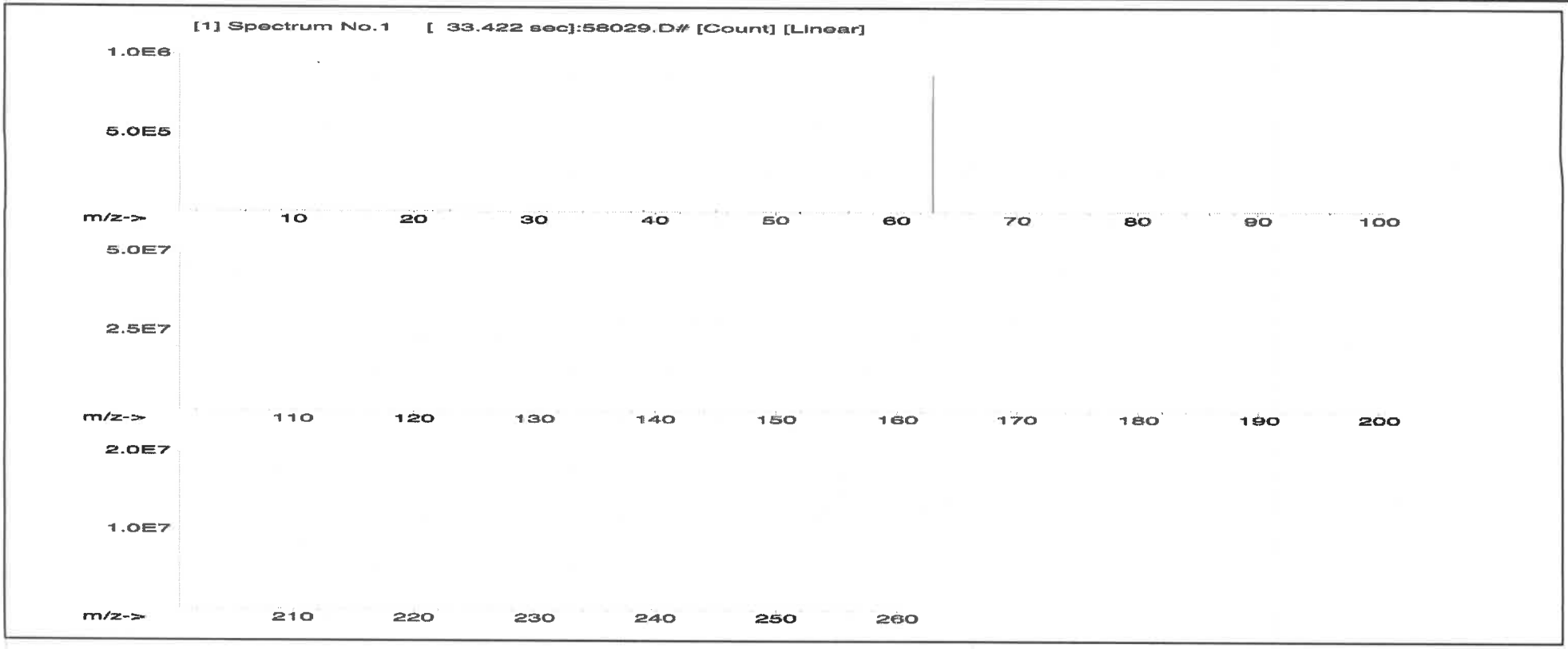
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	022723	0.1000	200.0	0.084	1000	10000.5	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M5768 M5769 (BP) R:1/3/24

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

M5768, M5769 (BP) R: 1/3/24

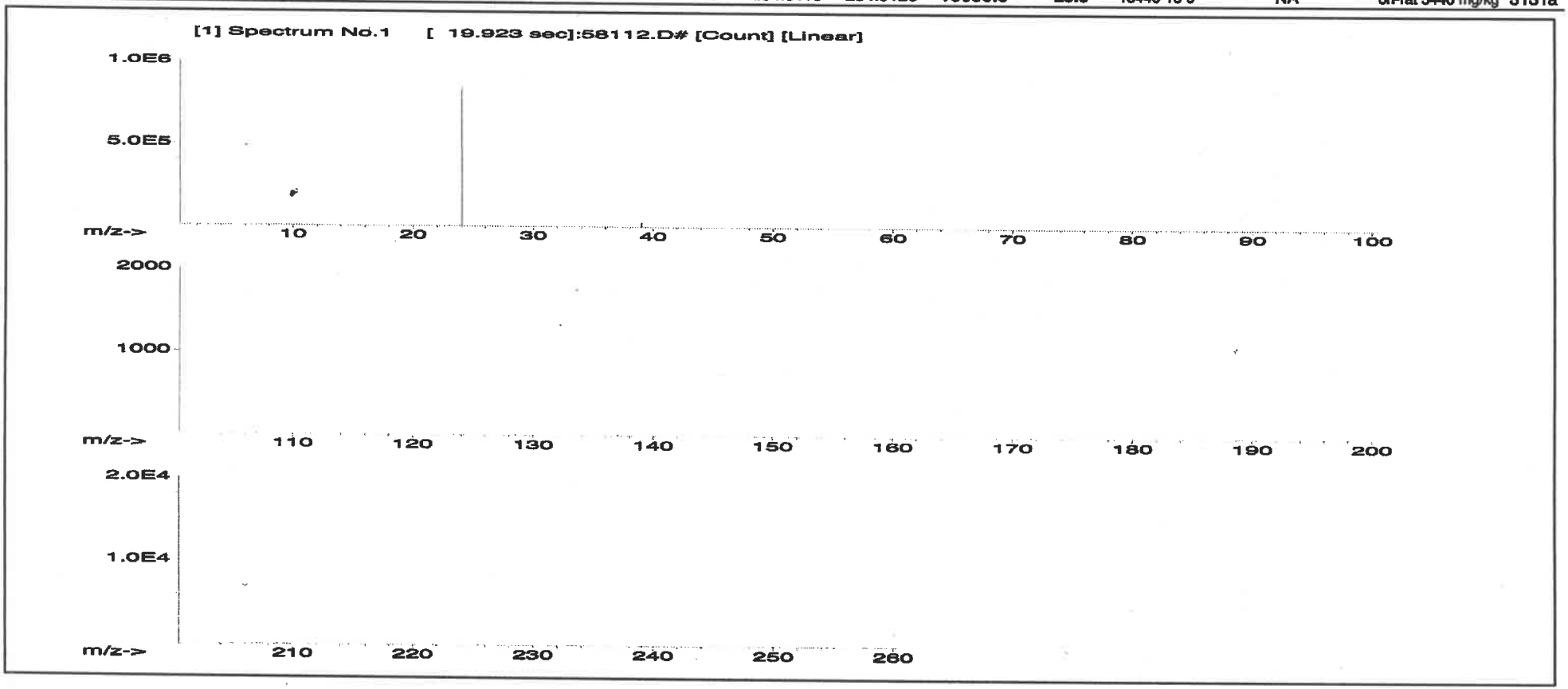
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid
		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	ori-rat 5440 mg/kg	3131a



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5798

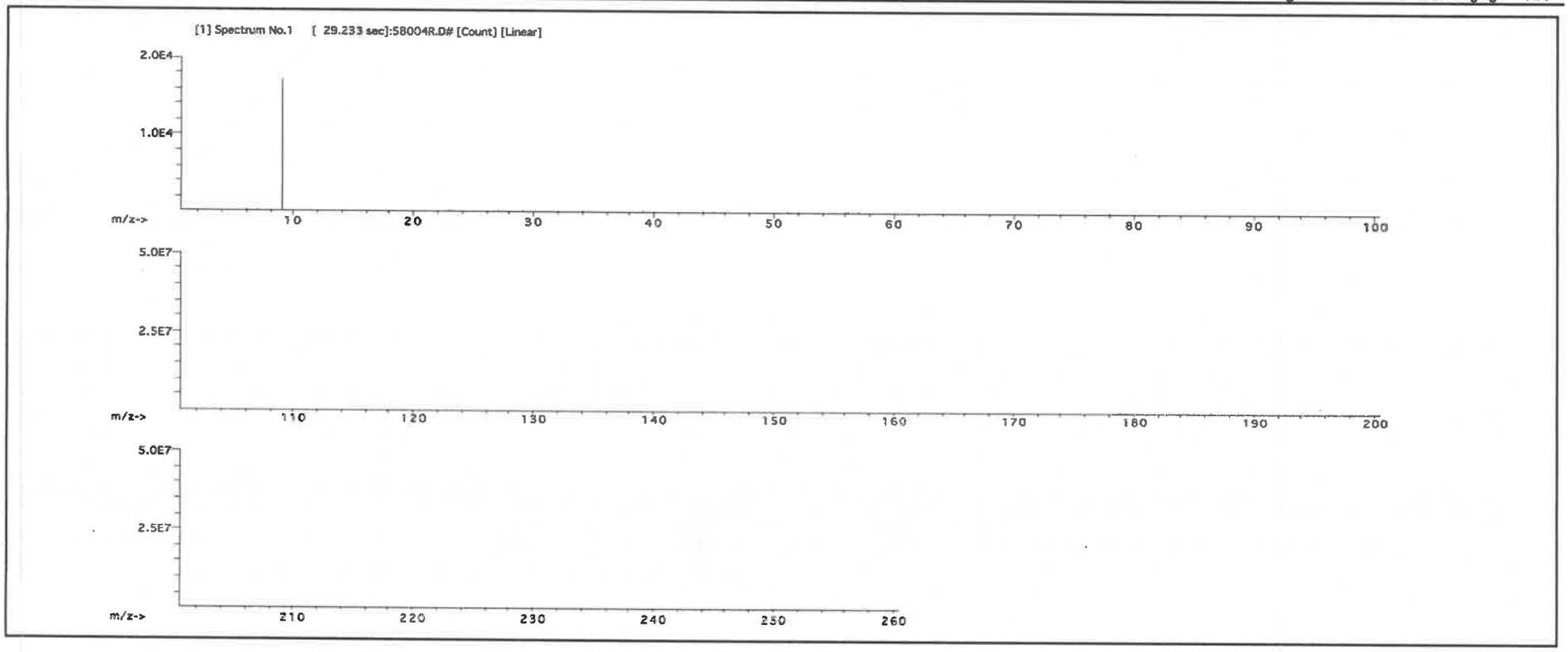
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R? 02/09/24 IV15799

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

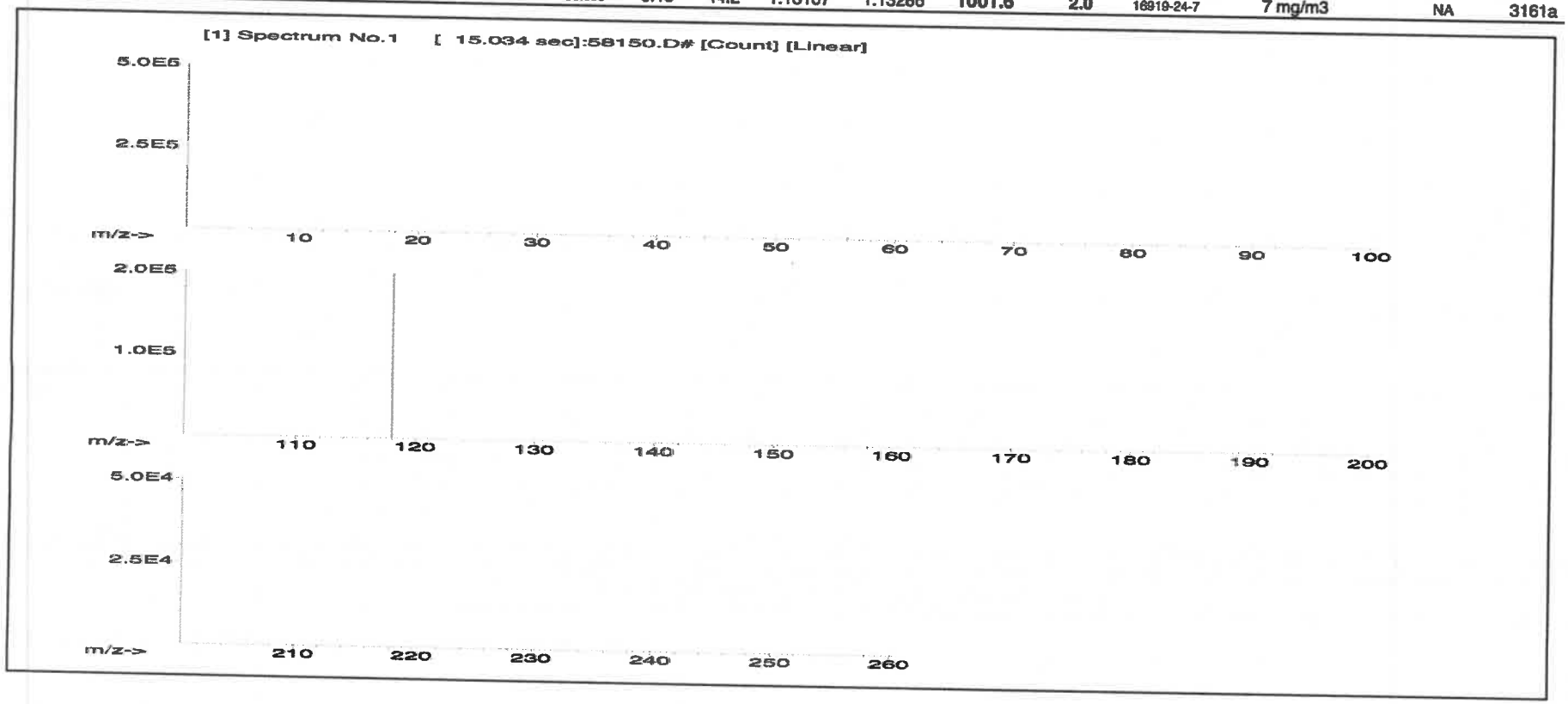
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 IM5800 BH

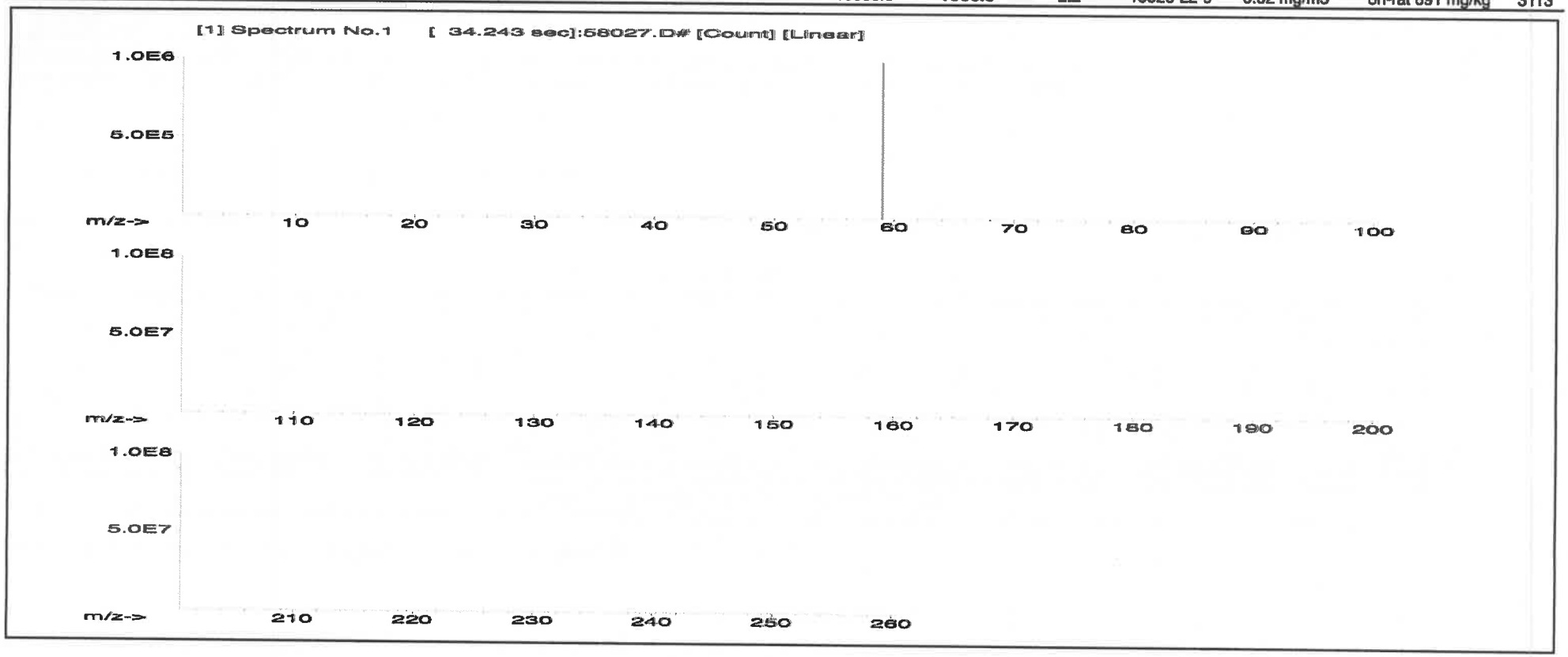
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 IM5801 BH

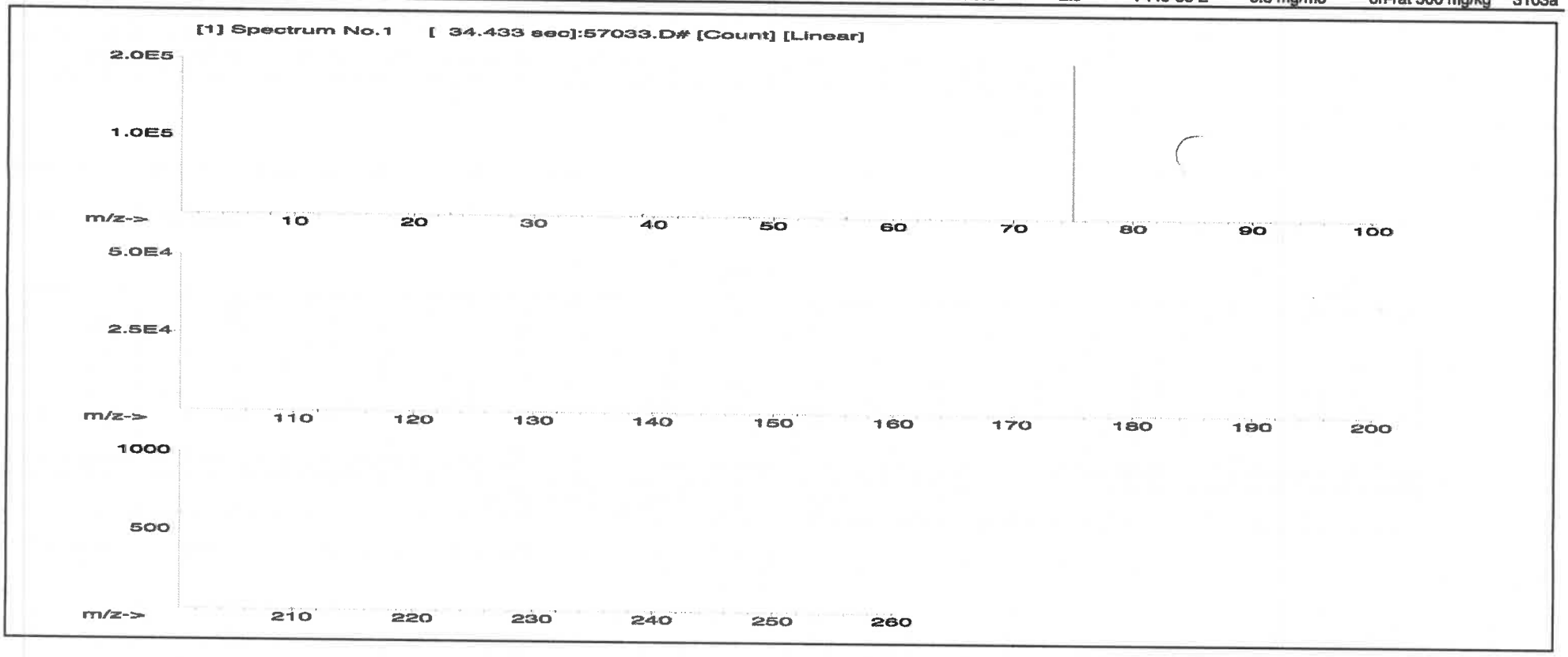
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

A: 02/09/24 M.5814

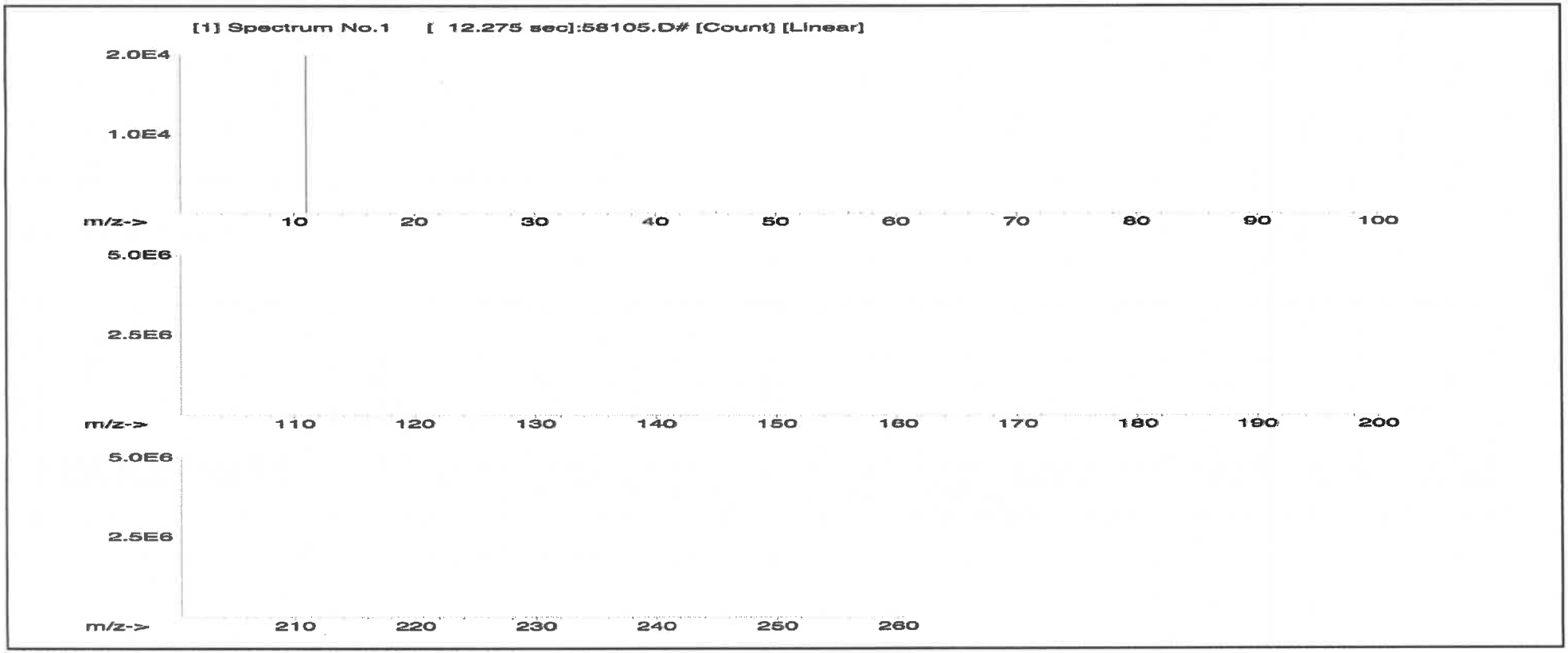
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57005**		**Solvent:**	MKBQ8597V	Ammonium hydroxide
Lot Number:	**071123**				
Description:	**Boron (B)**		2.0%	40.0 (mL)	Ammonium hydroxide
Expiration Date:	071126				
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):	1999.48	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. 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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	T	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R1 02/09/24. M58165

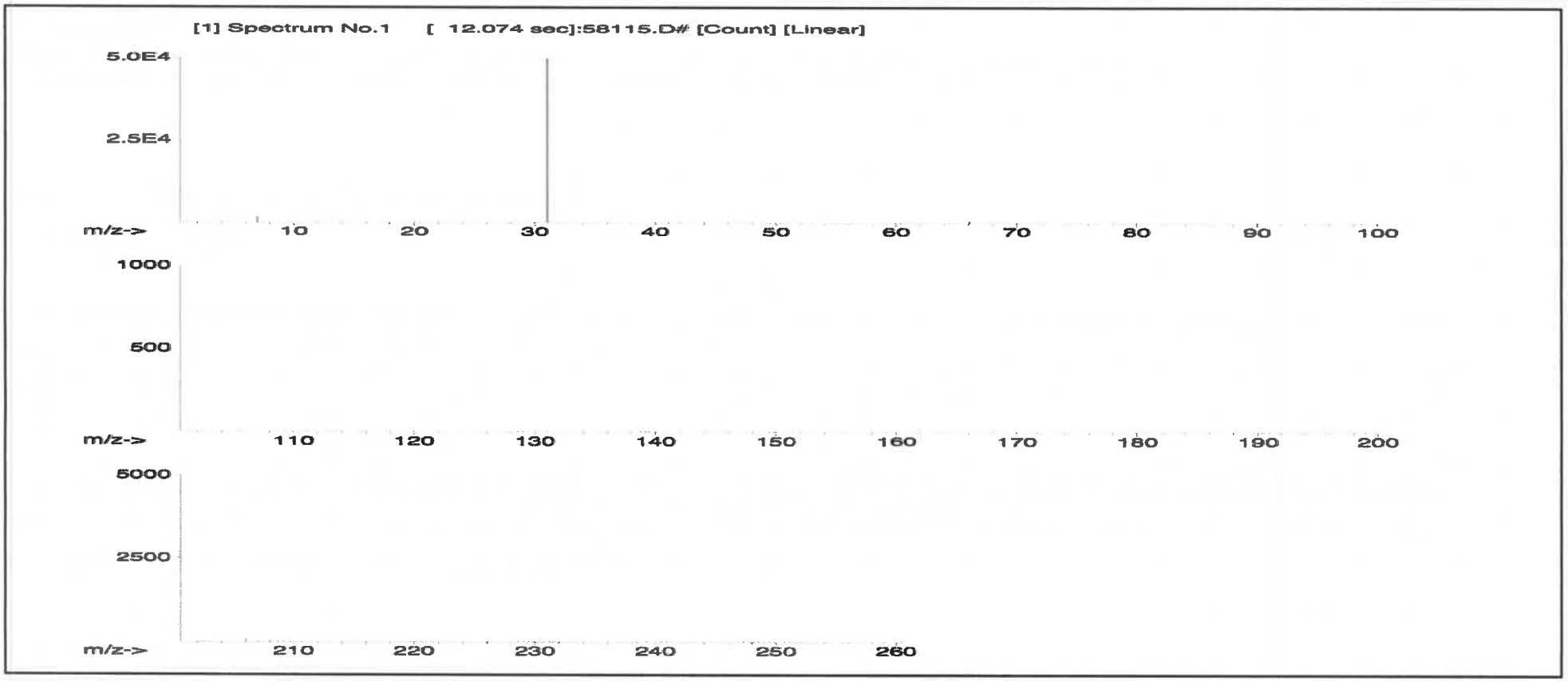
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	**57115**	**Solvent:**	21110221	Nitric Acid
Lot Number:	**041723**			
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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5816

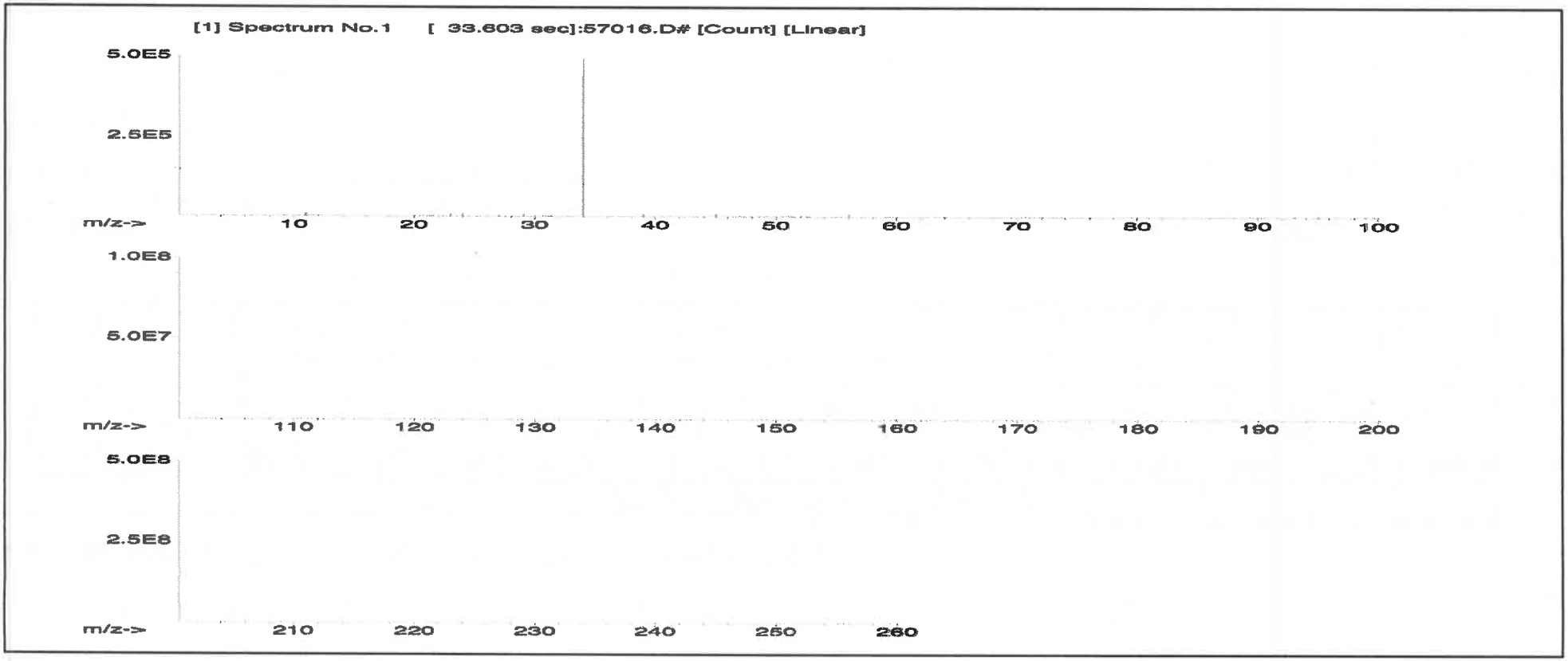
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**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



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.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5817

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

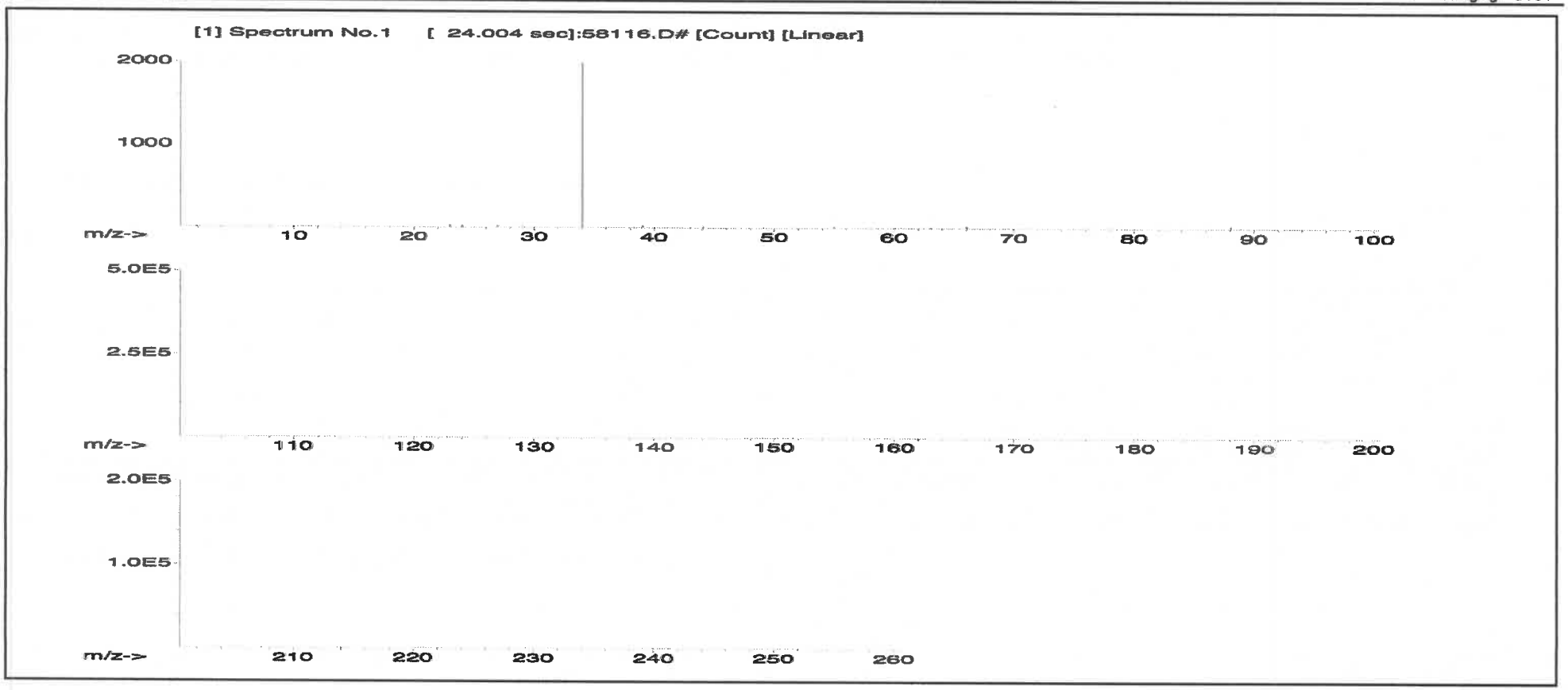
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



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.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5820

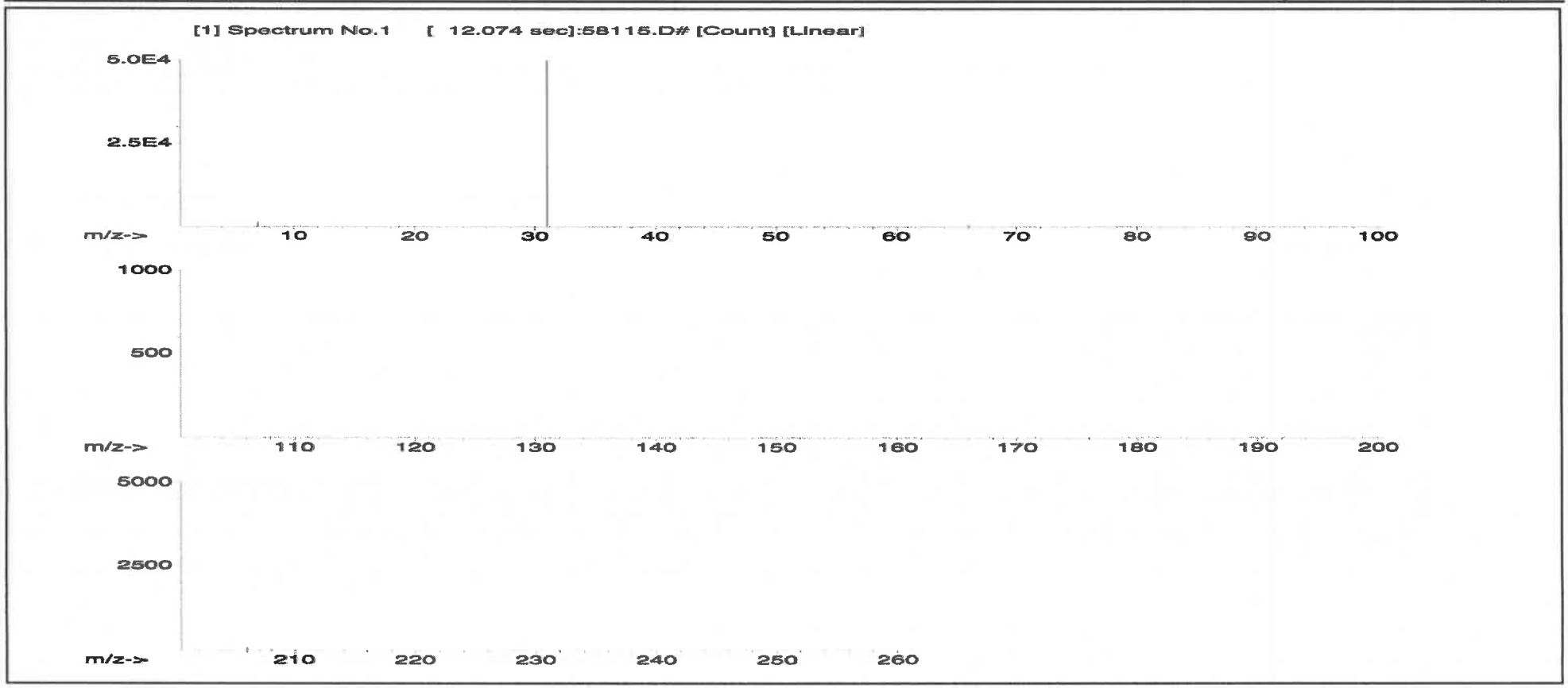
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MT884
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

M5959 R: 6/14/24.

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

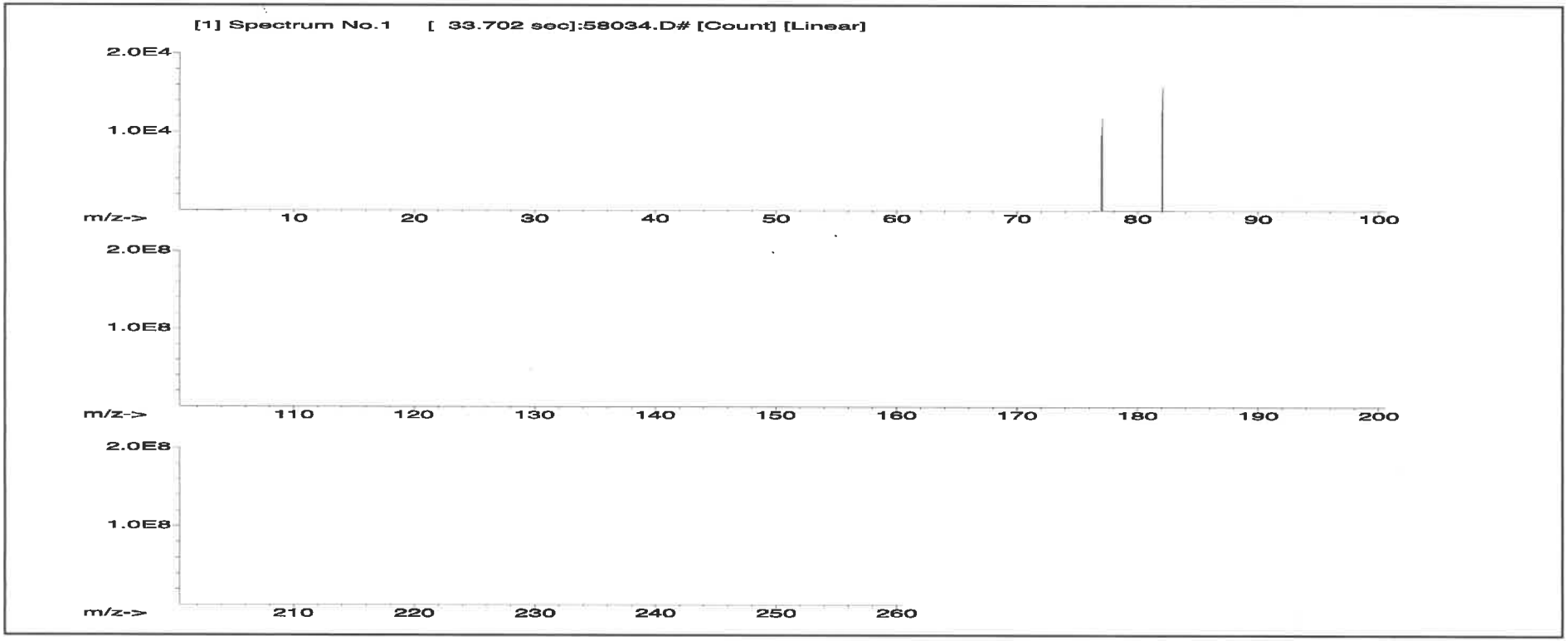
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

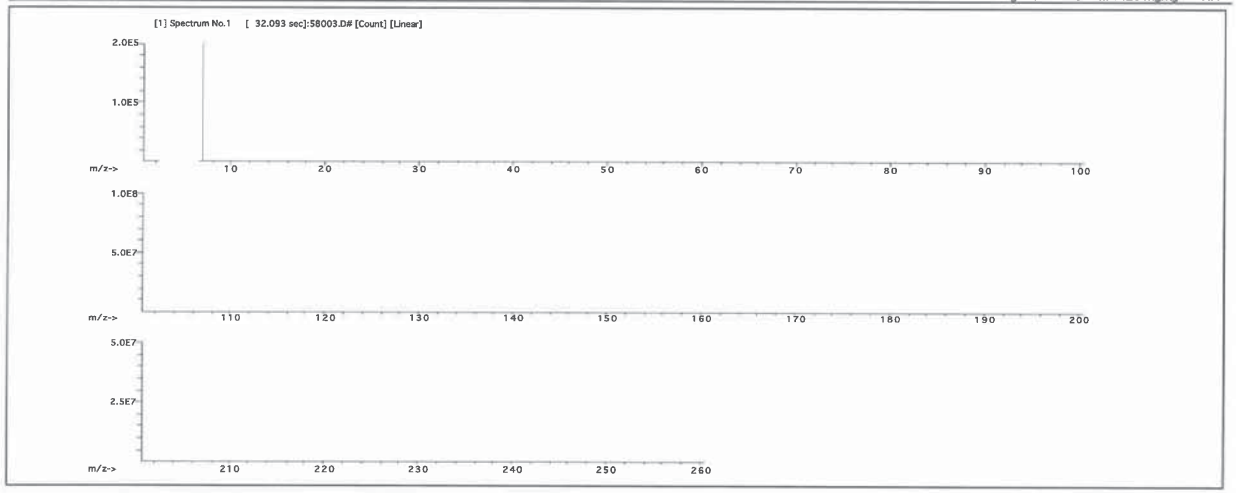
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05 Balance Uncertainty	
Volume shown below was diluted to (mL):	250.11	0.016 Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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).

M5978, M5979

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/24

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO_3 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

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

M6074
M6075
M6076
M6077

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 5 µg/mL**	**Molybdenum, Mo**	**1 000 ± 5 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 5 µg/mL**
Titanium, Ti	**1 000 ± 6 µg/mL**		

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 06, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M6125 Receive -> 11/22/24

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

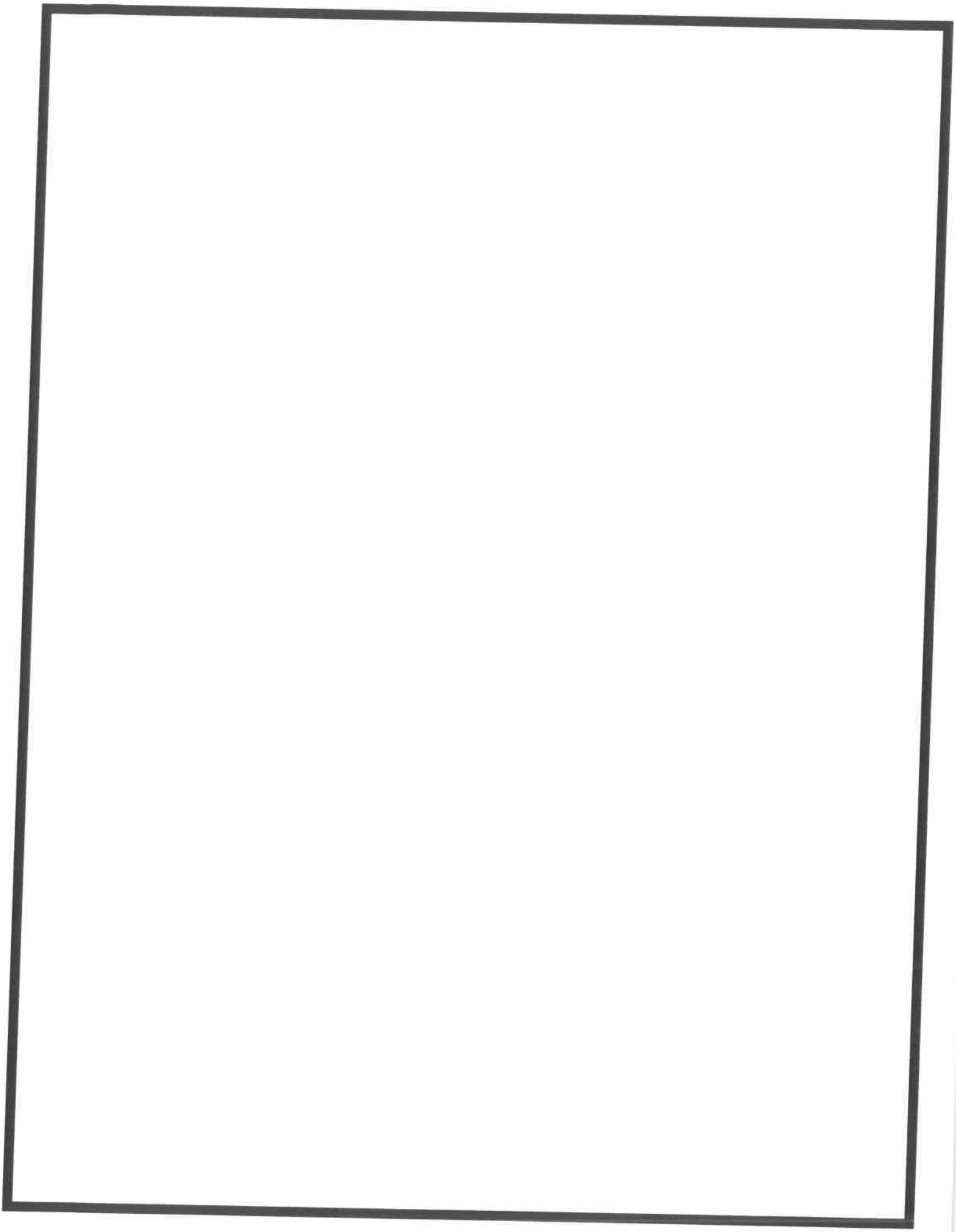
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

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

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R -> 1/13/25

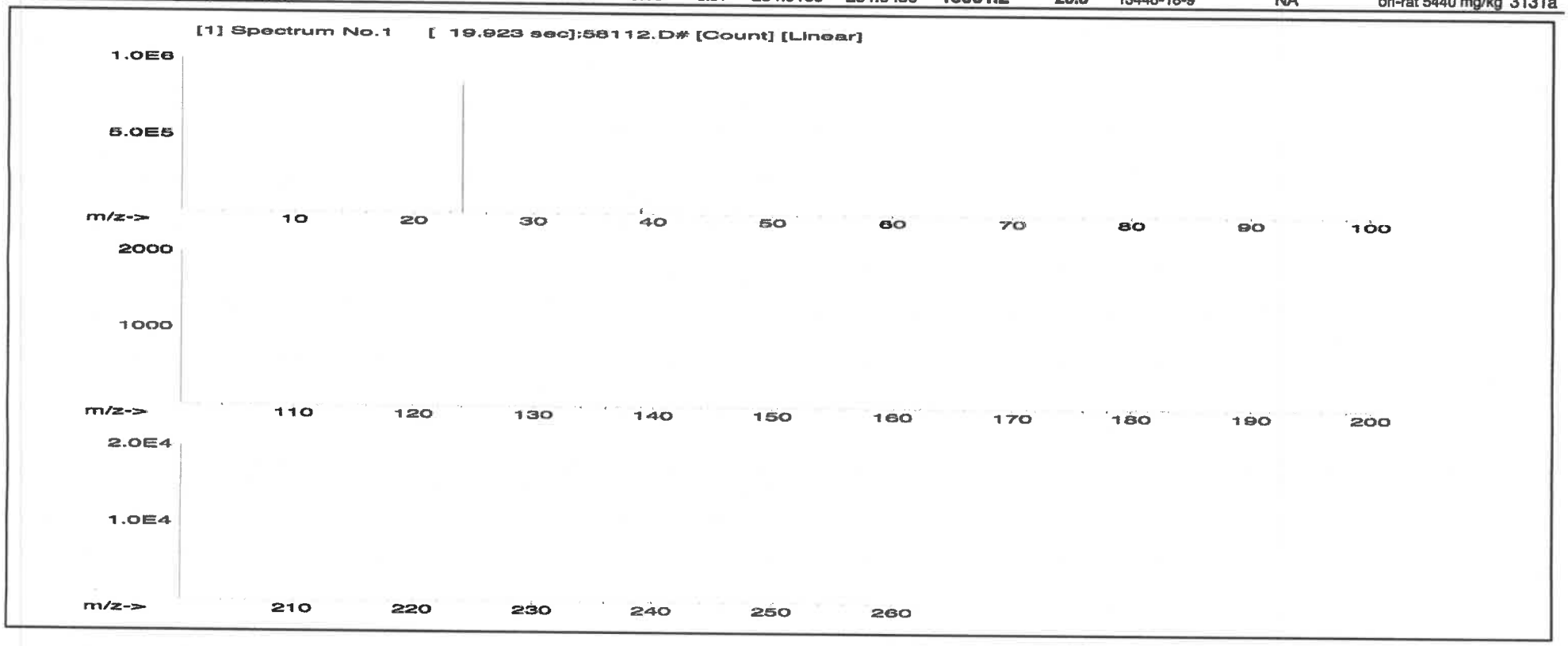
M 6127

			Lot #	
Part Number:	**58112**	**Solvent:**	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



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

R->1/13/28

M6128

Part Number:	**58025**	**Solvent:**	**Lot #** 24002546	Nitric Acid
Lot Number:	**101124**			
Description:	**Manganese (Mn)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	101127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty	

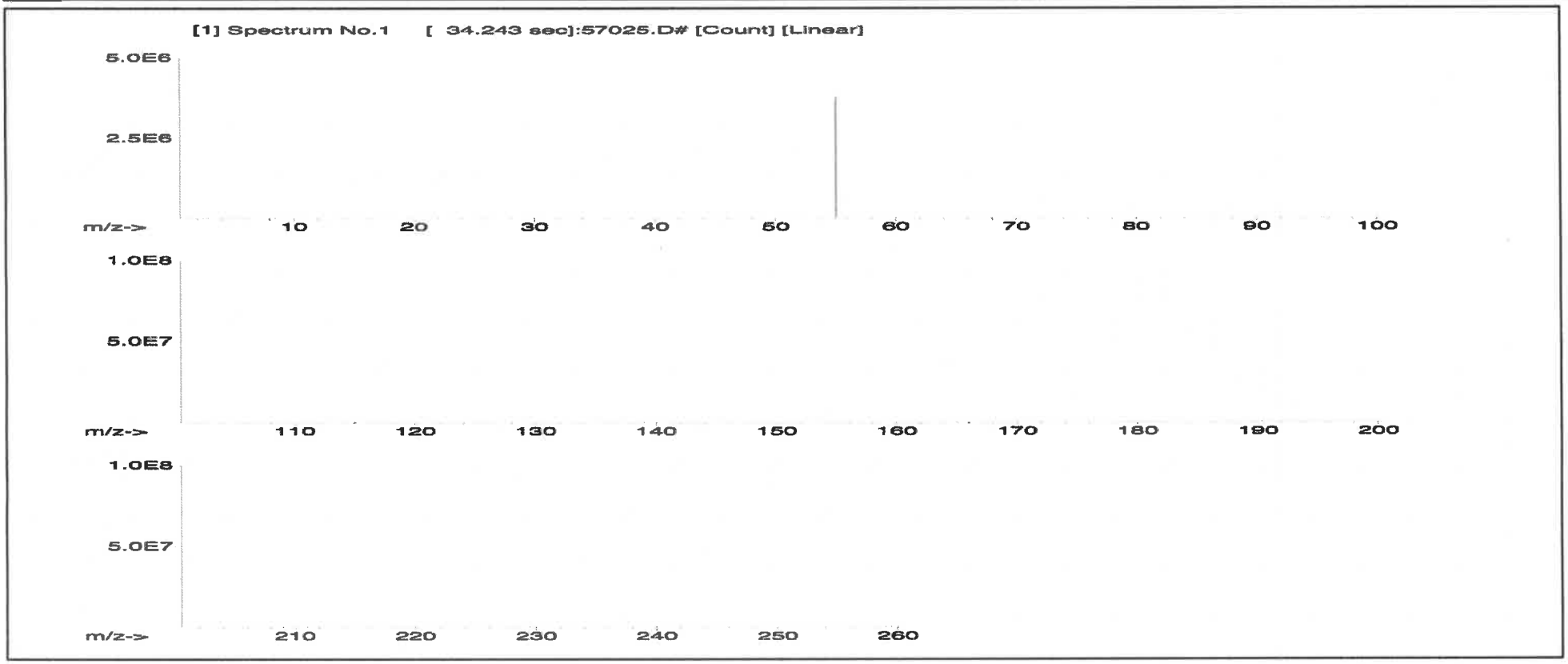
Giovanni Esposito

Formulated By:	Giovanni Esposito	101124

Pedro Rentas

Reviewed By:	Pedro L. Rentas	101124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	**SDS Information** (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M6137 R→10/3/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**999 ± 5 µg/mL** ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	**1000 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 10, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

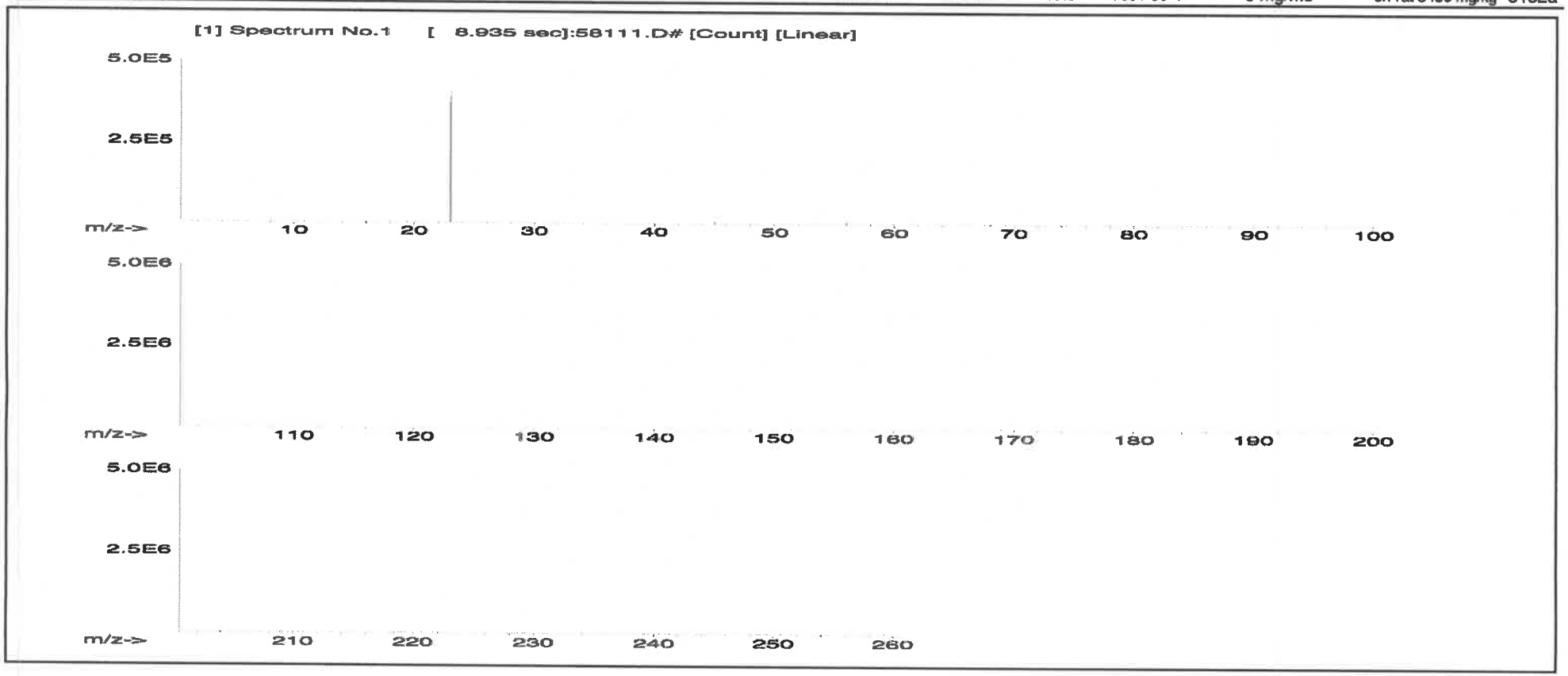
CERTIFIED WEIGHT REPORT:

R->1/13/25

Part Number:	**58111**		**Lot #**		
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		MG144 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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

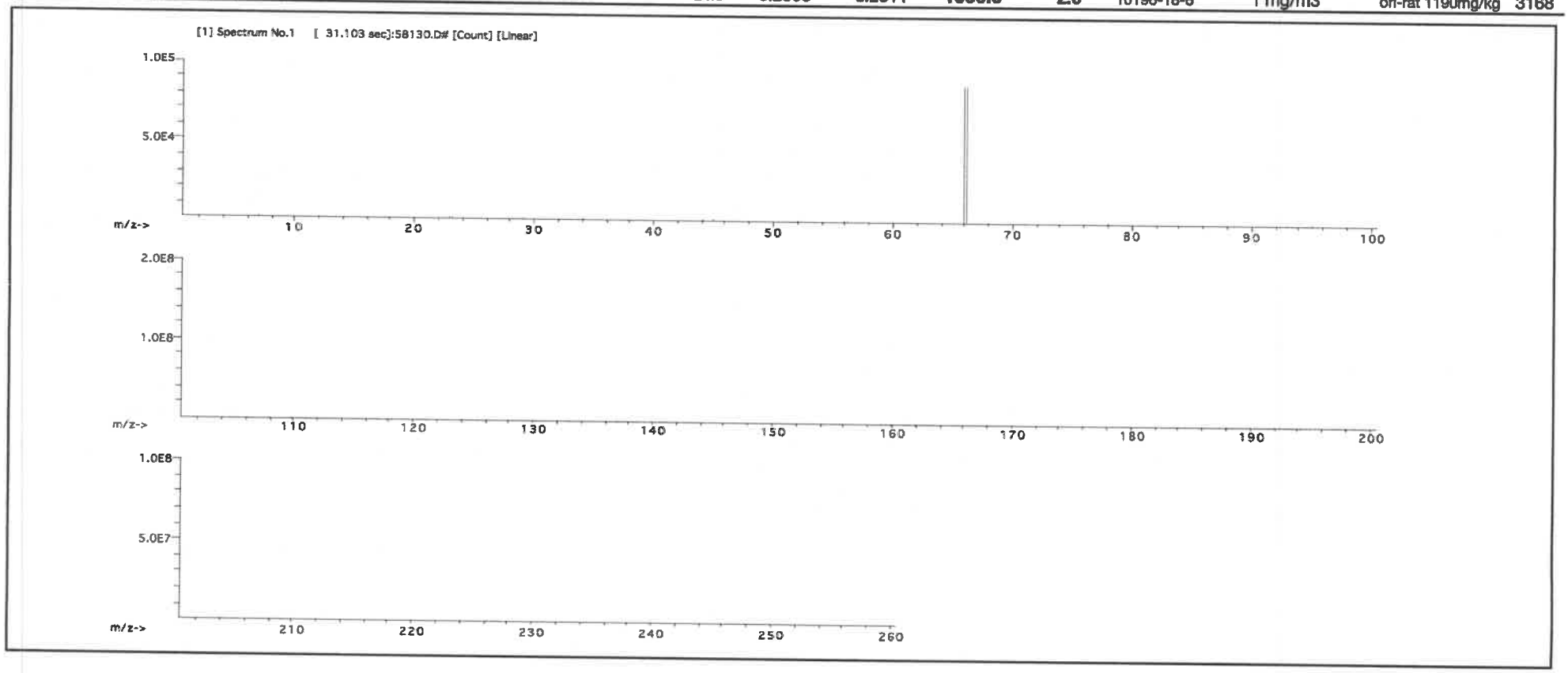
CERTIFIED WEIGHT REPORT:

Part Number:	**58030**	R → 1/13/25	**Solvent:**	**Lot #** 24012496	Nitric Acid
Lot Number:	**121724**				
Description:	**Zinc (Zn)**	M6145	2%	40.0 (mL)	Nitric Acid
Expiration Date:	121727				
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	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	orl-rat 1190mg/kg	3168



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R-> 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M6156

Certified Reference Material CRM

R→ 6/12/24

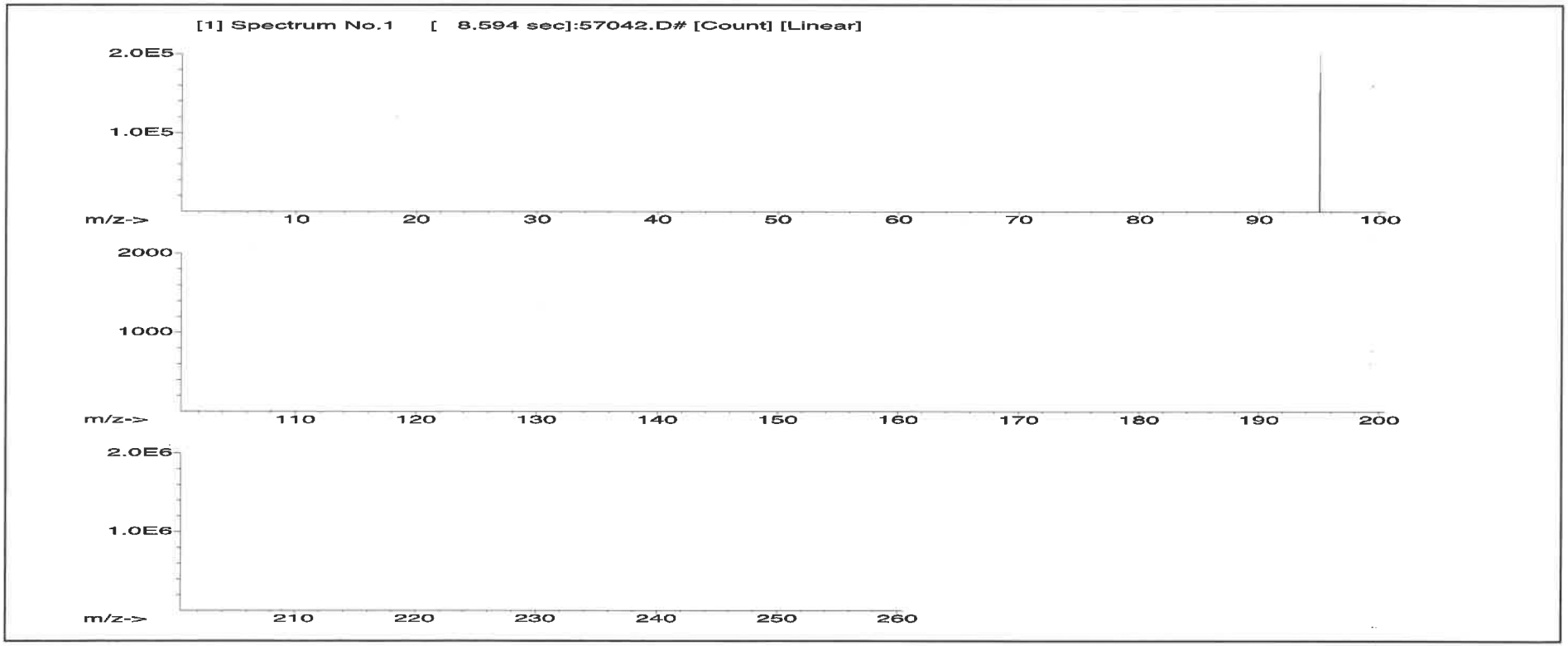
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57042**			
Lot Number:	**032123**			
Description:	**Molybdenum (Mo)**	MKBQ8597V	Ammonium hydroxide	
		0.5%	15.0 (mL)	Ammonium hydroxide
Expiration Date:	032126			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	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



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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M5806, M5807

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 122223
Description: Sodium (Na)

Expiration Date: 122226
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

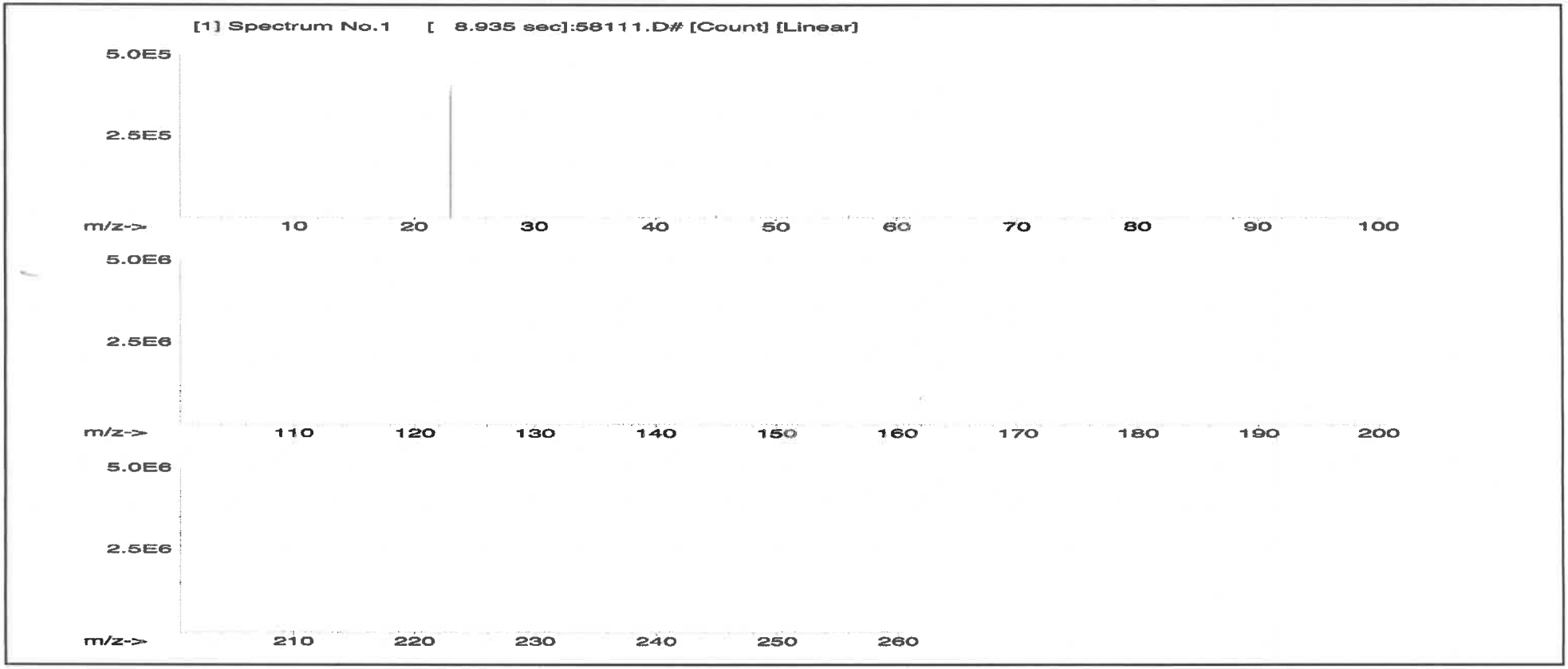
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	122223
Reviewed By:	Pedro L. Rentas	122223

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	111.5479	**10000.7**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6030

R: 8/5/24

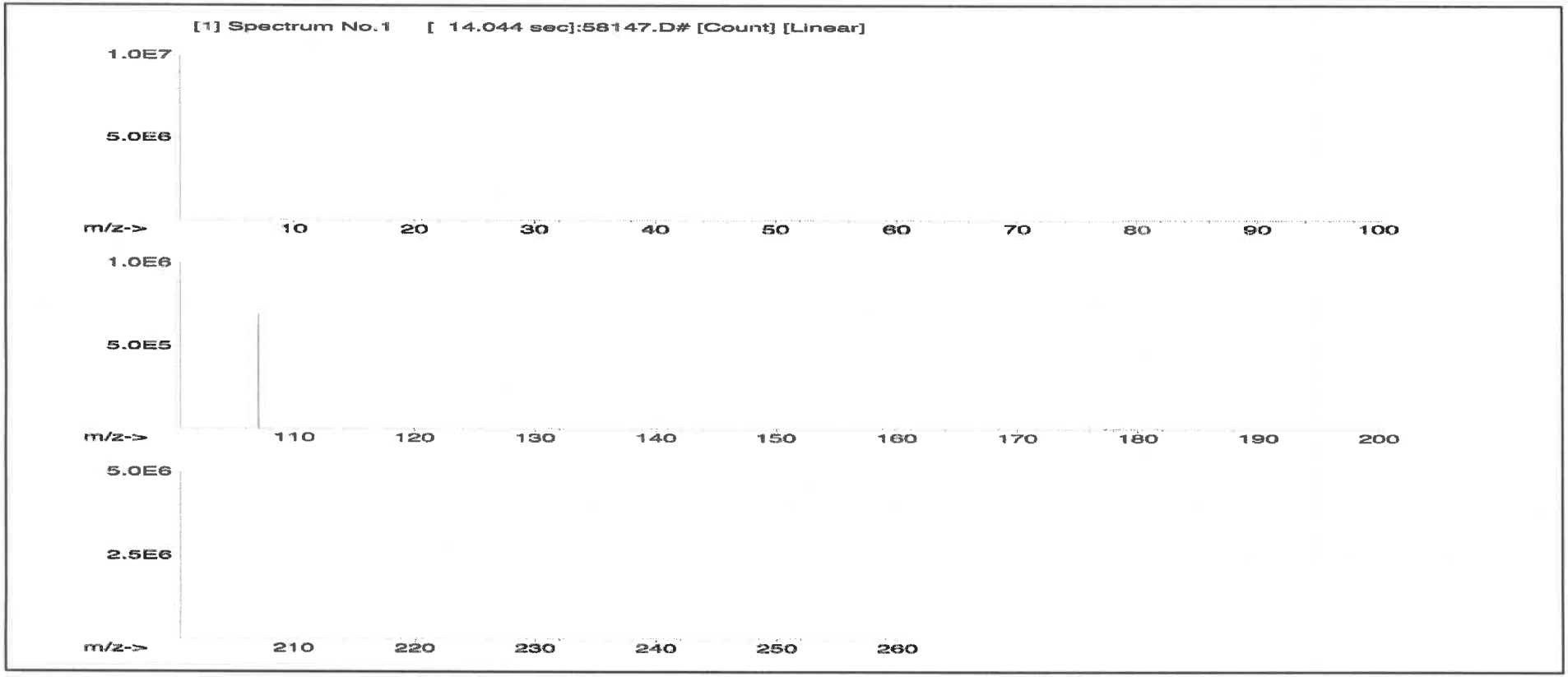
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57047**		**Lot #**		
Lot Number:	**122823**	**Solvent:**	24002546	Nitric Acid	
Description:	**Silver (Ag)**	2%	80.0 (mL)	Nitric Acid	
Expiration Date:	122826				
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):	4000.30	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 10/18/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

MG146

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**071724**			
Description:	**Antimony (Sb)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071727			
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):	2000.26	0.058	Flask Uncertainty	

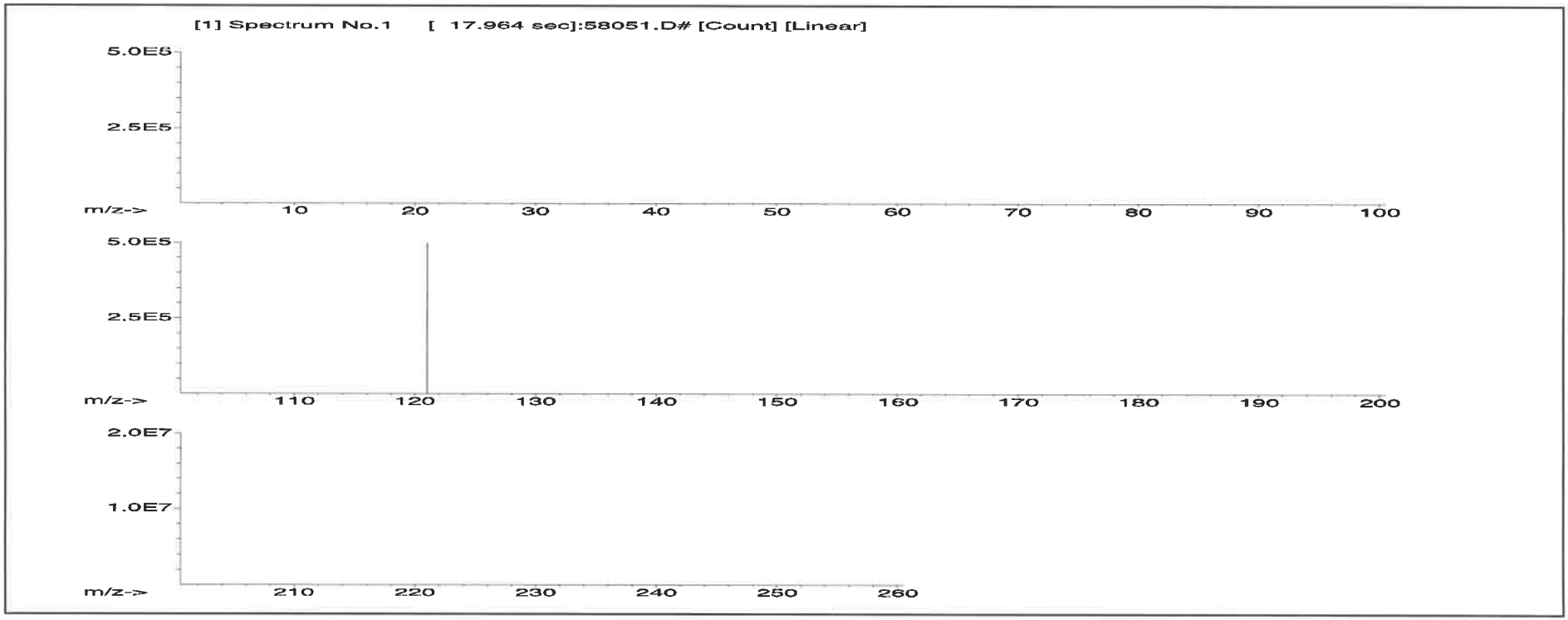
Giovanni Esposito

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

APTIM

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

M6152

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

APTIM

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

M6155

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 8/5/24 M6019

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R ! 8/5/24

M6023

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

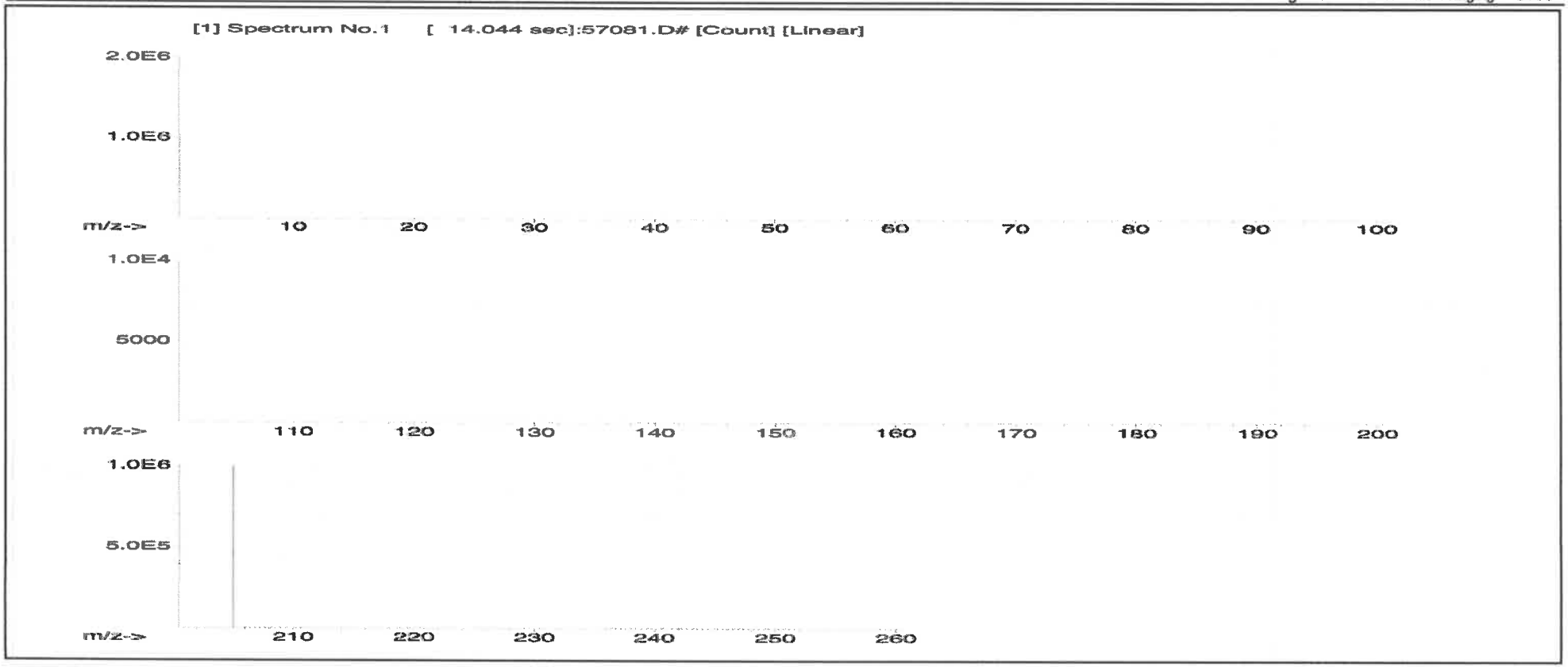
CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Bc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

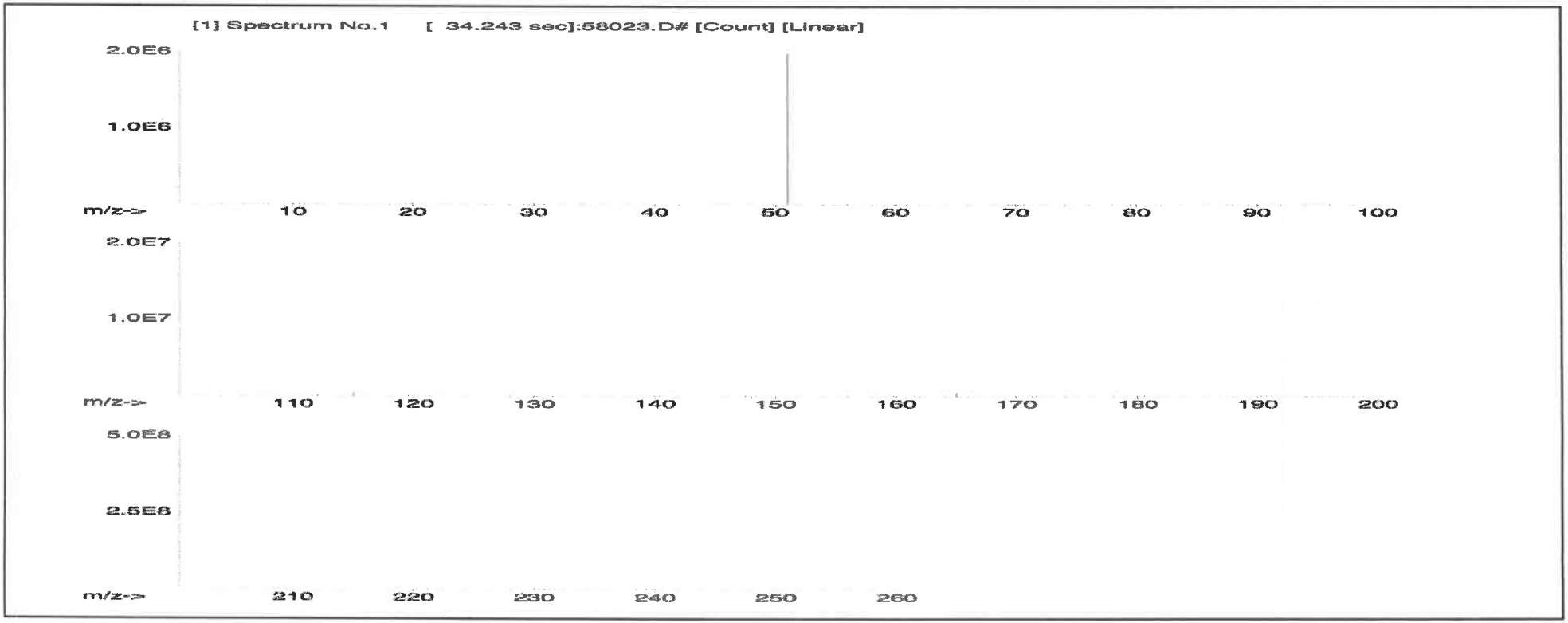
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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:

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).



SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q1486
QUOTE NO. ~~P3861~~
COC Number 2045860

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY: JPCL Engineering, LLC
ADDRESS: 2 Clerico LN, Bldg #1
CITY Hillsborough STATE: NY ZIP: 08844
ATTENTION: PAUL Rotondi
PHONE: (609) 203-3846 FAX: N/A

CLIENT PROJECT INFORMATION

PROJECT NAME: 2 Bridges over the Bronx
PROJECT NO.: LOCATION: Bronx NY
PROJECT MANAGER: protondi@JPCLengring
e-mail: protondi@JPCLengineering.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: SAME AS client PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☒ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

1: SVOC 2: PEST 3: PCB 4: METAL 5: 6: 7: 8: 9:

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
									N	O	N	E					← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER
1.	DN-B-40	Soil	X				3	3	3	3	3						
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	3-4-25 1520	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.8 °C
Comments: IR Gun #1

Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other _____

Shipment Complete ☐ YES ☐ NO

Copyright © 2024

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148