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

DATA PACKAGE

METALS

PROJECT NAME : CTO WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : P5283

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

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Cover Page

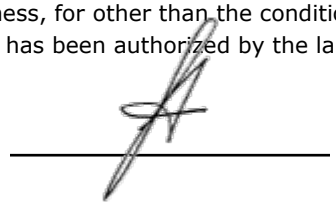
Order ID : P5283

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
P5283-01	TT-TB-20241213
P5283-02	TT-RW10A-IDWGW-20241213

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

Signature : 

APPROVED

Date: 12/26/2024

By Mohammad Ahmed(Laboratory Manager) at 10:53 am, Jan 03, 2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager : Ernie Wu
Chemtech Project # P5283
Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:
2 Water samples were received on 12/13/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH and VOCMS Group4. This data package contains results for Metals ICP-TAL,Mercury.

C. Analytical Techniques:
The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

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 (220-2-TRANS-WATERMS) analysis met criteria for all samples except for Potassium due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (220-2-TRANS-WATERMSD) analysis met criteria for all samples except for Potassium due to Chemical Interference during Digestion Process.

The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution (220-2-TRANS-WATERL) met criteria for all samples except for Aluminum due to sample matrix interference.

E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

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

Signature 

APPROVED

By Mohammad Ahmed(Laboratory Manager) at 10:53 am, Jan 03, 2025

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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

QA Control # A3040961

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P5283 MATRIX: Water

METHOD: 6010D,7470A

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Serial Dilution Summary (if applicable) Submitted.		✓	
	The Serial Dilution (220-2-TRANS-WATERL) met criteria for all samples except for Aluminum due to sample matrix interference.			
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Matrix Spike (220-2-TRANS-WATERMS) analysis met criteria for all samples except for Potassium due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (220-2-TRANS-WATERMSD) analysis met criteria for all samples except for Potassium due to Chemical Interference during Digestion Process.			
7.	Sample Duplicate Analysis Met QC Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS: The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

APPROVED

By Mohammad Ahmed(Laboratory Manager) at 10:53 am, Jan 03, 2025

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P5283

	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: Mohammad Ahmed **Date:** 01/03/2025

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LAB CHRONICLE

OrderID:	P5283	**OrderDate:**	12/13/2024 1:07:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L61,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5283-02	**TT-RW10A-IDWGW-20241213**	**Water**			**12/13/24**			**12/13/24**
			Mercury	7470A		12/16/24	12/17/24	
			Metals ICP-TAL	6010D		12/16/24	12/16/24	

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Hit Summary Sheet
SW-846

SDG No.: P5283 **Order ID:** P5283

Client: Tetra Tech NUS, Inc. **Project ID:** CTO WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : TT-RW10A-IDWGW-20241213									
P5283-02	TT-RW10A-IDWGW-20241213	Water	Aluminum	45300		28.3	40.0	50.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Arsenic	56.0		3.48	8.00	10.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Barium	176		6.28	12.5	50.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Beryllium	7.61		0.13	0.75	3.00	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Cadmium	19.5		0.094	0.75	3.00	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Calcium	11800		33.0	250	1000	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Chromium	165		0.66	2.50	5.00	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Cobalt	231		0.50	3.75	15.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Copper	233		7.07	8.00	10.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Iron	113000		18.5	40.0	50.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Lead	152		3.51	4.80	6.00	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Magnesium	4380		39.4	250	1000	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Manganese	840		1.46	2.50	10.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Mercury	0.89		0.081	0.16	0.20	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Nickel	471		0.85	5.00	20.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Potassium	6160		685	800	1000	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Sodium	27500		237	500	1000	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Vanadium	213		3.06	10.0	20.0	ug/L
P5283-02	TT-RW10A-IDWGW-20241213	Water	Zinc	394		1.75	5.00	20.0	ug/L

SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/13/24
Client Sample ID:	TT-RW10A-IDWGW-20241213	SDG No.:	P5283
Lab Sample ID:	P5283-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	45300		1	28.3	40.0	50.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-36-0	Antimony	6.25	U	1	2.06	6.25	25.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-38-2	Arsenic	56.0		1	3.48	8.00	10.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-39-3	Barium	176		1	6.28	12.5	50.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-41-7	Beryllium	7.61		1	0.13	0.75	3.00	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-43-9	Cadmium	19.5		1	0.094	0.75	3.00	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-70-2	Calcium	11800		1	33.0	250	1000	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-47-3	Chromium	165		1	0.66	2.50	5.00	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-48-4	Cobalt	231		1	0.50	3.75	15.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-50-8	Copper	233		1	7.07	8.00	10.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7439-89-6	Iron	113000		1	18.5	40.0	50.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7439-92-1	Lead	152		1	3.51	4.80	6.00	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7439-95-4	Magnesium	4380		1	39.4	250	1000	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7439-96-5	Manganese	840		1	1.46	2.50	10.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7439-97-6	Mercury	0.89		1	0.081	0.16	0.20	ug/L	12/16/24 14:40	12/17/24 11:25	SW7470A	
7440-02-0	Nickel	471		1	0.85	5.00	20.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-09-7	Potassium	6160	N	1	685	800	1000	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7782-49-2	Selenium	8.00	U	1	5.88	8.00	10.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-22-4	Silver	2.50	U	1	0.58	2.50	5.00	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-23-5	Sodium	27500		1	237	500	1000	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-28-0	Thallium	10.0	U	1	2.32	10.0	20.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-62-2	Vanadium	213		1	3.06	10.0	20.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010
7440-66-6	Zinc	394		1	1.75	5.00	20.0	ug/L	12/16/24 11:10	12/16/24 21:18	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS-TAL				

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

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

METAL CALIBRATION DATA

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

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

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
ICV20	Mercury	4.17	4.0	104	90 - 110	CV	12/17/2024	11:05	LB133972

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

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
CCV32	Mercury	4.92	5.0	98	90 - 110	CV	12/17/2024	11:10	LB133972
CCV33	Mercury	5.24	5.0	105	90 - 110	CV	12/17/2024	11:40	LB133972
CCV34	Mercury	5.43	5.0	109	90 - 110	CV	12/17/2024	11:59	LB133972

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2620	2500	105	90 - 110	P	12/16/2024	16:02	LB133968
	Antimony	1020	1000	102	90 - 110	P	12/16/2024	16:02	LB133968
	Arsenic	1030	1000	103	90 - 110	P	12/16/2024	16:02	LB133968
	Barium	520	520	100	90 - 110	P	12/16/2024	16:02	LB133968
	Beryllium	527	510	103	90 - 110	P	12/16/2024	16:02	LB133968
	Cadmium	519	510	102	90 - 110	P	12/16/2024	16:02	LB133968
	Calcium	10300	10000	103	90 - 110	P	12/16/2024	16:02	LB133968
	Chromium	540	520	104	90 - 110	P	12/16/2024	16:02	LB133968
	Cobalt	526	520	101	90 - 110	P	12/16/2024	16:02	LB133968
	Copper	541	510	106	90 - 110	P	12/16/2024	16:02	LB133968
	Iron	10200	10000	102	90 - 110	P	12/16/2024	16:02	LB133968
	Lead	1030	1000	103	90 - 110	P	12/16/2024	16:02	LB133968
	Magnesium	6050	6000	101	90 - 110	P	12/16/2024	16:02	LB133968
	Manganese	527	520	101	90 - 110	P	12/16/2024	16:02	LB133968
	Nickel	529	530	100	90 - 110	P	12/16/2024	16:02	LB133968
	Potassium	9980	9900	101	90 - 110	P	12/16/2024	16:02	LB133968
	Selenium	1060	1000	106	90 - 110	P	12/16/2024	16:02	LB133968
	Silver	255	250	102	90 - 110	P	12/16/2024	16:02	LB133968
	Sodium	10200	10000	102	90 - 110	P	12/16/2024	16:02	LB133968
	Thallium	1060	1000	106	90 - 110	P	12/16/2024	16:02	LB133968
	Vanadium	511	500	102	90 - 110	P	12/16/2024	16:02	LB133968
	Zinc	1060	1000	106	90 - 110	P	12/16/2024	16:02	LB133968

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	103	100	103	80 - 120	P	12/16/2024	16:06	LB133968
	Antimony	46.4	50.0	93	80 - 120	P	12/16/2024	16:06	LB133968
	Arsenic	19.2	20.0	96	80 - 120	P	12/16/2024	16:06	LB133968
	Barium	95.0	100	95	80 - 120	P	12/16/2024	16:06	LB133968
	Beryllium	5.99	6.0	100	80 - 120	P	12/16/2024	16:06	LB133968
	Cadmium	5.53	6.0	92	80 - 120	P	12/16/2024	16:06	LB133968
	Calcium	1990	2000	99	80 - 120	P	12/16/2024	16:06	LB133968
	Chromium	9.70	10.0	97	80 - 120	P	12/16/2024	16:06	LB133968
	Cobalt	28.0	30.0	93	80 - 120	P	12/16/2024	16:06	LB133968
	Copper	21.6	20.0	108	80 - 120	P	12/16/2024	16:06	LB133968
	Iron	91.1	100	91	80 - 120	P	12/16/2024	16:06	LB133968
	Lead	10.6	12.0	88	80 - 120	P	12/16/2024	16:06	LB133968
	Magnesium	2080	2000	104	80 - 120	P	12/16/2024	16:06	LB133968
	Manganese	20.2	20.0	101	80 - 120	P	12/16/2024	16:06	LB133968
	Nickel	37.5	40.0	94	80 - 120	P	12/16/2024	16:06	LB133968
	Potassium	1960	2000	98	80 - 120	P	12/16/2024	16:06	LB133968
	Selenium	19.7	20.0	98	80 - 120	P	12/16/2024	16:06	LB133968
	Silver	9.45	10.0	94	80 - 120	P	12/16/2024	16:06	LB133968
	Sodium	1910	2000	95	80 - 120	P	12/16/2024	16:06	LB133968
	Thallium	35.6	40.0	89	80 - 120	P	12/16/2024	16:06	LB133968
	Vanadium	38.7	40.0	97	80 - 120	P	12/16/2024	16:06	LB133968
	Zinc	39.8	40.0	100	80 - 120	P	12/16/2024	16:06	LB133968

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9630	10000	96	90 - 110	P	12/16/2024	16:57	LB133968
	Antimony	4800	5000	96	90 - 110	P	12/16/2024	16:57	LB133968
	Arsenic	4810	5000	96	90 - 110	P	12/16/2024	16:57	LB133968
	Barium	9520	10000	95	90 - 110	P	12/16/2024	16:57	LB133968
	Beryllium	252	250	101	90 - 110	P	12/16/2024	16:57	LB133968
	Cadmium	2460	2500	99	90 - 110	P	12/16/2024	16:57	LB133968
	Calcium	24500	25000	98	90 - 110	P	12/16/2024	16:57	LB133968
	Chromium	993	1000	99	90 - 110	P	12/16/2024	16:57	LB133968
	Cobalt	2440	2500	98	90 - 110	P	12/16/2024	16:57	LB133968
	Copper	1220	1250	97	90 - 110	P	12/16/2024	16:57	LB133968
	Iron	4780	5000	96	90 - 110	P	12/16/2024	16:57	LB133968
	Lead	4930	5000	99	90 - 110	P	12/16/2024	16:57	LB133968
	Magnesium	24600	25000	98	90 - 110	P	12/16/2024	16:57	LB133968
	Manganese	2420	2500	97	90 - 110	P	12/16/2024	16:57	LB133968
	Nickel	2450	2500	98	90 - 110	P	12/16/2024	16:57	LB133968
	Potassium	23400	25000	94	90 - 110	P	12/16/2024	16:57	LB133968
	Selenium	4810	5000	96	90 - 110	P	12/16/2024	16:57	LB133968
	Silver	1220	1250	98	90 - 110	P	12/16/2024	16:57	LB133968
	Sodium	23800	25000	95	90 - 110	P	12/16/2024	16:57	LB133968
	Thallium	4960	5000	99	90 - 110	P	12/16/2024	16:57	LB133968
	Vanadium	2430	2500	97	90 - 110	P	12/16/2024	16:57	LB133968
	Zinc	2460	2500	98	90 - 110	P	12/16/2024	16:57	LB133968
CCV02	Aluminum	9700	10000	97	90 - 110	P	12/16/2024	17:58	LB133968
	Antimony	4720	5000	94	90 - 110	P	12/16/2024	17:58	LB133968
	Arsenic	4740	5000	95	90 - 110	P	12/16/2024	17:58	LB133968
	Barium	9620	10000	96	90 - 110	P	12/16/2024	17:58	LB133968
	Beryllium	263	250	105	90 - 110	P	12/16/2024	17:58	LB133968
	Cadmium	2500	2500	100	90 - 110	P	12/16/2024	17:58	LB133968
	Calcium	25100	25000	100	90 - 110	P	12/16/2024	17:58	LB133968
	Chromium	1020	1000	102	90 - 110	P	12/16/2024	17:58	LB133968
	Cobalt	2470	2500	99	90 - 110	P	12/16/2024	17:58	LB133968
	Copper	1220	1250	97	90 - 110	P	12/16/2024	17:58	LB133968
	Iron	4840	5000	97	90 - 110	P	12/16/2024	17:58	LB133968
	Lead	5000	5000	100	90 - 110	P	12/16/2024	17:58	LB133968

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	25300	25000	101	90 - 110	P	12/16/2024	17:58	LB133968
	Manganese	2490	2500	99	90 - 110	P	12/16/2024	17:58	LB133968
	Nickel	2480	2500	99	90 - 110	P	12/16/2024	17:58	LB133968
	Potassium	23100	25000	92	90 - 110	P	12/16/2024	17:58	LB133968
	Selenium	4710	5000	94	90 - 110	P	12/16/2024	17:58	LB133968
	Silver	1240	1250	99	90 - 110	P	12/16/2024	17:58	LB133968
	Sodium	23700	25000	95	90 - 110	P	12/16/2024	17:58	LB133968
	Thallium	4930	5000	98	90 - 110	P	12/16/2024	17:58	LB133968
	Vanadium	2480	2500	99	90 - 110	P	12/16/2024	17:58	LB133968
	Zinc	2470	2500	99	90 - 110	P	12/16/2024	17:58	LB133968
CCV03	Aluminum	9590	10000	96	90 - 110	P	12/16/2024	18:48	LB133968
	Antimony	4660	5000	93	90 - 110	P	12/16/2024	18:48	LB133968
	Arsenic	4700	5000	94	90 - 110	P	12/16/2024	18:48	LB133968
	Barium	9330	10000	93	90 - 110	P	12/16/2024	18:48	LB133968
	Beryllium	263	250	105	90 - 110	P	12/16/2024	18:48	LB133968
	Cadmium	2480	2500	99	90 - 110	P	12/16/2024	18:48	LB133968
	Calcium	25100	25000	100	90 - 110	P	12/16/2024	18:48	LB133968
	Chromium	1020	1000	102	90 - 110	P	12/16/2024	18:48	LB133968
	Cobalt	2450	2500	98	90 - 110	P	12/16/2024	18:48	LB133968
	Copper	1210	1250	96	90 - 110	P	12/16/2024	18:48	LB133968
	Iron	4810	5000	96	90 - 110	P	12/16/2024	18:48	LB133968
	Lead	4950	5000	99	90 - 110	P	12/16/2024	18:48	LB133968
	Magnesium	25300	25000	101	90 - 110	P	12/16/2024	18:48	LB133968
	Manganese	2470	2500	99	90 - 110	P	12/16/2024	18:48	LB133968
	Nickel	2460	2500	98	90 - 110	P	12/16/2024	18:48	LB133968
	Potassium	22800	25000	91	90 - 110	P	12/16/2024	18:48	LB133968
	Selenium	4670	5000	93	90 - 110	P	12/16/2024	18:48	LB133968
	Silver	1230	1250	98	90 - 110	P	12/16/2024	18:48	LB133968
	Sodium	23300	25000	93	90 - 110	P	12/16/2024	18:48	LB133968
	Thallium	4800	5000	96	90 - 110	P	12/16/2024	18:48	LB133968
	Vanadium	2460	2500	98	90 - 110	P	12/16/2024	18:48	LB133968
	Zinc	2440	2500	98	90 - 110	P	12/16/2024	18:48	LB133968
CCV04	Aluminum	9770	10000	98	90 - 110	P	12/16/2024	19:51	LB133968
	Antimony	4690	5000	94	90 - 110	P	12/16/2024	19:51	LB133968

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	4740	5000	95	90 - 110	P	12/16/2024	19:51	LB133968
	Barium	9400	10000	94	90 - 110	P	12/16/2024	19:51	LB133968
	Beryllium	274	250	110	90 - 110	P	12/16/2024	19:51	LB133968
	Cadmium	2550	2500	102	90 - 110	P	12/16/2024	19:51	LB133968
	Calcium	25700	25000	103	90 - 110	P	12/16/2024	19:51	LB133968
	Chromium	1040	1000	104	90 - 110	P	12/16/2024	19:51	LB133968
	Cobalt	2510	2500	100	90 - 110	P	12/16/2024	19:51	LB133968
	Copper	1220	1250	98	90 - 110	P	12/16/2024	19:51	LB133968
	Iron	4880	5000	98	90 - 110	P	12/16/2024	19:51	LB133968
	Lead	5050	5000	101	90 - 110	P	12/16/2024	19:51	LB133968
	Magnesium	26200	25000	105	90 - 110	P	12/16/2024	19:51	LB133968
	Manganese	2540	2500	102	90 - 110	P	12/16/2024	19:51	LB133968
	Nickel	2510	2500	101	90 - 110	P	12/16/2024	19:51	LB133968
	Potassium	26900	25000	108	90 - 110	P	12/16/2024	19:51	LB133968
	Selenium	4680	5000	94	90 - 110	P	12/16/2024	19:51	LB133968
	Silver	1240	1250	100	90 - 110	P	12/16/2024	19:51	LB133968
	Sodium	25300	25000	101	90 - 110	P	12/16/2024	19:51	LB133968
	Thallium	4970	5000	99	90 - 110	P	12/16/2024	19:51	LB133968
	Vanadium	2530	2500	101	90 - 110	P	12/16/2024	19:51	LB133968
	Zinc	2460	2500	98	90 - 110	P	12/16/2024	19:51	LB133968
CCV05	Aluminum	9980	10000	100	90 - 110	P	12/16/2024	20:49	LB133968
	Antimony	4980	5000	100	90 - 110	P	12/16/2024	20:49	LB133968
	Arsenic	4960	5000	99	90 - 110	P	12/16/2024	20:49	LB133968
	Barium	9720	10000	97	90 - 110	P	12/16/2024	20:49	LB133968
	Beryllium	263	250	105	90 - 110	P	12/16/2024	20:49	LB133968
	Cadmium	2520	2500	101	90 - 110	P	12/16/2024	20:49	LB133968
	Calcium	25000	25000	100	90 - 110	P	12/16/2024	20:49	LB133968
	Chromium	1030	1000	103	90 - 110	P	12/16/2024	20:49	LB133968
	Cobalt	2500	2500	100	90 - 110	P	12/16/2024	20:49	LB133968
	Copper	1260	1250	101	90 - 110	P	12/16/2024	20:49	LB133968
	Iron	4950	5000	99	90 - 110	P	12/16/2024	20:49	LB133968
	Lead	5060	5000	101	90 - 110	P	12/16/2024	20:49	LB133968
	Magnesium	25400	25000	102	90 - 110	P	12/16/2024	20:49	LB133968
	Manganese	2500	2500	100	90 - 110	P	12/16/2024	20:49	LB133968

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2510	2500	100	90 - 110	P	12/16/2024	20:49	LB133968
	Potassium	23200	25000	93	90 - 110	P	12/16/2024	20:49	LB133968
	Selenium	4960	5000	99	90 - 110	P	12/16/2024	20:49	LB133968
	Silver	1270	1250	101	90 - 110	P	12/16/2024	20:49	LB133968
	Sodium	27000	25000	108	90 - 110	P	12/16/2024	20:49	LB133968
	Thallium	5030	5000	101	90 - 110	P	12/16/2024	20:49	LB133968
	Vanadium	2530	2500	101	90 - 110	P	12/16/2024	20:49	LB133968
	Zinc	2520	2500	101	90 - 110	P	12/16/2024	20:49	LB133968
CCV06	Aluminum	9700	10000	97	90 - 110	P	12/16/2024	21:47	LB133968
	Antimony	4710	5000	94	90 - 110	P	12/16/2024	21:47	LB133968
	Arsenic	4730	5000	95	90 - 110	P	12/16/2024	21:47	LB133968
	Barium	9350	10000	94	90 - 110	P	12/16/2024	21:47	LB133968
	Beryllium	268	250	107	90 - 110	P	12/16/2024	21:47	LB133968
	Cadmium	2510	2500	100	90 - 110	P	12/16/2024	21:47	LB133968
	Calcium	25200	25000	101	90 - 110	P	12/16/2024	21:47	LB133968
	Chromium	1030	1000	103	90 - 110	P	12/16/2024	21:47	LB133968
	Cobalt	2470	2500	99	90 - 110	P	12/16/2024	21:47	LB133968
	Copper	1220	1250	97	90 - 110	P	12/16/2024	21:47	LB133968
	Iron	4840	5000	97	90 - 110	P	12/16/2024	21:47	LB133968
	Lead	5020	5000	100	90 - 110	P	12/16/2024	21:47	LB133968
	Magnesium	25600	25000	102	90 - 110	P	12/16/2024	21:47	LB133968
	Manganese	2490	2500	100	90 - 110	P	12/16/2024	21:47	LB133968
	Nickel	2480	2500	99	90 - 110	P	12/16/2024	21:47	LB133968
	Potassium	27100	25000	109	90 - 110	P	12/16/2024	21:47	LB133968
	Selenium	4700	5000	94	90 - 110	P	12/16/2024	21:47	LB133968
	Silver	1250	1250	100	90 - 110	P	12/16/2024	21:47	LB133968
	Sodium	24900	25000	100	90 - 110	P	12/16/2024	21:47	LB133968
	Thallium	4870	5000	97	90 - 110	P	12/16/2024	21:47	LB133968
	Vanadium	2490	2500	100	90 - 110	P	12/16/2024	21:47	LB133968
	Zinc	2470	2500	99	90 - 110	P	12/16/2024	21:47	LB133968
CCV07	Aluminum	9690	10000	97	90 - 110	P	12/16/2024	23:02	LB133968
	Antimony	4630	5000	92	90 - 110	P	12/16/2024	23:02	LB133968
	Arsenic	4700	5000	94	90 - 110	P	12/16/2024	23:02	LB133968
	Barium	9330	10000	93	90 - 110	P	12/16/2024	23:02	LB133968

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	232	250	93	90 - 110	P	12/16/2024	23:02	LB133968
	Cadmium	2560	2500	102	90 - 110	P	12/16/2024	23:02	LB133968
	Calcium	25700	25000	103	90 - 110	P	12/16/2024	23:02	LB133968
	Chromium	1050	1000	105	90 - 110	P	12/16/2024	23:02	LB133968
	Cobalt	2500	2500	100	90 - 110	P	12/16/2024	23:02	LB133968
	Copper	1210	1250	96	90 - 110	P	12/16/2024	23:02	LB133968
	Iron	4820	5000	96	90 - 110	P	12/16/2024	23:02	LB133968
	Lead	5100	5000	102	90 - 110	P	12/16/2024	23:02	LB133968
	Magnesium	26300	25000	105	90 - 110	P	12/16/2024	23:02	LB133968
	Manganese	2520	2500	101	90 - 110	P	12/16/2024	23:02	LB133968
	Nickel	2520	2500	101	90 - 110	P	12/16/2024	23:02	LB133968
	Potassium	26900	25000	108	90 - 110	P	12/16/2024	23:02	LB133968
	Selenium	4640	5000	93	90 - 110	P	12/16/2024	23:02	LB133968
	Silver	1250	1250	100	90 - 110	P	12/16/2024	23:02	LB133968
	Sodium	23100	25000	92	90 - 110	P	12/16/2024	23:02	LB133968
	Thallium	4980	5000	100	90 - 110	P	12/16/2024	23:02	LB133968
	Vanadium	2510	2500	100	90 - 110	P	12/16/2024	23:02	LB133968
	Zinc	2460	2500	99	90 - 110	P	12/16/2024	23:02	LB133968
CCV08	Aluminum	9720	10000	97	90 - 110	P	12/16/2024	23:35	LB133968
	Antimony	4760	5000	95	90 - 110	P	12/16/2024	23:35	LB133968
	Arsenic	4800	5000	96	90 - 110	P	12/16/2024	23:35	LB133968
	Barium	9410	10000	94	90 - 110	P	12/16/2024	23:35	LB133968
	Beryllium	274	250	109	90 - 110	P	12/16/2024	23:35	LB133968
	Cadmium	2540	2500	102	90 - 110	P	12/16/2024	23:35	LB133968
	Calcium	25500	25000	102	90 - 110	P	12/16/2024	23:35	LB133968
	Chromium	1050	1000	105	90 - 110	P	12/16/2024	23:35	LB133968
	Cobalt	2500	2500	100	90 - 110	P	12/16/2024	23:35	LB133968
	Copper	1230	1250	99	90 - 110	P	12/16/2024	23:35	LB133968
	Iron	4830	5000	97	90 - 110	P	12/16/2024	23:35	LB133968
	Lead	5070	5000	102	90 - 110	P	12/16/2024	23:35	LB133968
	Magnesium	25900	25000	104	90 - 110	P	12/16/2024	23:35	LB133968
	Manganese	2500	2500	100	90 - 110	P	12/16/2024	23:35	LB133968
	Nickel	2520	2500	101	90 - 110	P	12/16/2024	23:35	LB133968
	Potassium	26700	25000	107	90 - 110	P	12/16/2024	23:35	LB133968

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV08	Selenium	4760	5000	95	90 - 110	P	12/16/2024	23:35	LB133968
	Silver	1260	1250	101	90 - 110	P	12/16/2024	23:35	LB133968
	Sodium	24300	25000	97	90 - 110	P	12/16/2024	23:35	LB133968
	Thallium	4900	5000	98	90 - 110	P	12/16/2024	23:35	LB133968
	Vanadium	2510	2500	100	90 - 110	P	12/16/2024	23:35	LB133968
	Zinc	2490	2500	100	90 - 110	P	12/16/2024	23:35	LB133968

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2410	2500	97	90 - 110	P	12/23/2024	11:17	LB134066
	Antimony	1010	1000	101	90 - 110	P	12/23/2024	11:17	LB134066
	Arsenic	1050	1000	105	90 - 110	P	12/23/2024	11:17	LB134066
	Barium	484	520	93	90 - 110	P	12/23/2024	11:17	LB134066
	Beryllium	472	510	93	90 - 110	P	12/23/2024	11:17	LB134066
	Cadmium	508	510	100	90 - 110	P	12/23/2024	11:17	LB134066
	Calcium	9500	10000	95	90 - 110	P	12/23/2024	11:17	LB134066
	Chromium	532	520	102	90 - 110	P	12/23/2024	11:17	LB134066
	Cobalt	516	520	99	90 - 110	P	12/23/2024	11:17	LB134066
	Copper	530	510	104	90 - 110	P	12/23/2024	11:17	LB134066
	Iron	10200	10000	102	90 - 110	P	12/23/2024	11:17	LB134066
	Lead	1020	1000	102	90 - 110	P	12/23/2024	11:17	LB134066
	Magnesium	5570	6000	93	90 - 110	P	12/23/2024	11:17	LB134066
	Manganese	490	520	94	90 - 110	P	12/23/2024	11:17	LB134066
	Nickel	519	530	98	90 - 110	P	12/23/2024	11:17	LB134066
	Potassium	9950	9900	100	90 - 110	P	12/23/2024	11:17	LB134066
	Selenium	1050	1000	105	90 - 110	P	12/23/2024	11:17	LB134066
	Silver	260	250	104	90 - 110	P	12/23/2024	11:17	LB134066
	Sodium	9710	10000	97	90 - 110	P	12/23/2024	11:17	LB134066
	Thallium	1020	1000	102	90 - 110	P	12/23/2024	11:17	LB134066
	Vanadium	470	500	94	90 - 110	P	12/23/2024	11:17	LB134066
	Zinc	1030	1000	103	90 - 110	P	12/23/2024	11:17	LB134066

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	99.3	100	99	80 - 120	P	12/23/2024	11:37	LB134066
	Antimony	50.0	50.0	100	80 - 120	P	12/23/2024	11:37	LB134066
	Arsenic	20.6	20.0	103	80 - 120	P	12/23/2024	11:37	LB134066
	Barium	90.4	100	90	80 - 120	P	12/23/2024	11:37	LB134066
	Beryllium	5.75	6.0	96	80 - 120	P	12/23/2024	11:37	LB134066
	Cadmium	5.89	6.0	98	80 - 120	P	12/23/2024	11:37	LB134066
	Calcium	1970	2000	98	80 - 120	P	12/23/2024	11:37	LB134066
	Chromium	9.87	10.0	99	80 - 120	P	12/23/2024	11:37	LB134066
	Cobalt	29.2	30.0	97	80 - 120	P	12/23/2024	11:37	LB134066
	Copper	21.8	20.0	109	80 - 120	P	12/23/2024	11:37	LB134066
	Iron	105	100	104	80 - 120	P	12/23/2024	11:37	LB134066
	Lead	12.0	12.0	100	80 - 120	P	12/23/2024	11:37	LB134066
	Magnesium	2020	2000	101	80 - 120	P	12/23/2024	11:37	LB134066
	Manganese	19.5	20.0	98	80 - 120	P	12/23/2024	11:37	LB134066
	Nickel	39.3	40.0	98	80 - 120	P	12/23/2024	11:37	LB134066
	Potassium	1870	2000	94	80 - 120	P	12/23/2024	11:37	LB134066
	Selenium	19.0	20.0	95	80 - 120	P	12/23/2024	11:37	LB134066
	Silver	10.8	10.0	108	80 - 120	P	12/23/2024	11:37	LB134066
	Sodium	1800	2000	90	80 - 120	P	12/23/2024	11:37	LB134066
	Thallium	40.5	40.0	101	80 - 120	P	12/23/2024	11:37	LB134066
	Vanadium	38.0	40.0	95	80 - 120	P	12/23/2024	11:37	LB134066
	Zinc	45.7	40.0	114	80 - 120	P	12/23/2024	11:37	LB134066

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9870	10000	99	90 - 110	P	12/23/2024	12:31	LB134066
	Antimony	5170	5000	103	90 - 110	P	12/23/2024	12:31	LB134066
	Arsenic	5110	5000	102	90 - 110	P	12/23/2024	12:31	LB134066
	Barium	9710	10000	97	90 - 110	P	12/23/2024	12:31	LB134066
	Beryllium	232	250	93	90 - 110	P	12/23/2024	12:31	LB134066
	Cadmium	2450	2500	98	90 - 110	P	12/23/2024	12:31	LB134066
	Calcium	23800	25000	95	90 - 110	P	12/23/2024	12:31	LB134066
	Chromium	998	1000	100	90 - 110	P	12/23/2024	12:31	LB134066
	Cobalt	2460	2500	98	90 - 110	P	12/23/2024	12:31	LB134066
	Copper	1280	1250	102	90 - 110	P	12/23/2024	12:31	LB134066
	Iron	5080	5000	102	90 - 110	P	12/23/2024	12:31	LB134066
	Lead	4890	5000	98	90 - 110	P	12/23/2024	12:31	LB134066
	Magnesium	23600	25000	94	90 - 110	P	12/23/2024	12:31	LB134066
	Manganese	2380	2500	95	90 - 110	P	12/23/2024	12:31	LB134066
	Nickel	2470	2500	99	90 - 110	P	12/23/2024	12:31	LB134066
	Potassium	25700	25000	103	90 - 110	P	12/23/2024	12:31	LB134066
	Selenium	5190	5000	104	90 - 110	P	12/23/2024	12:31	LB134066
	Silver	1250	1250	100	90 - 110	P	12/23/2024	12:31	LB134066
	Sodium	25200	25000	101	90 - 110	P	12/23/2024	12:31	LB134066
	Thallium	5150	5000	103	90 - 110	P	12/23/2024	12:31	LB134066
	Vanadium	2440	2500	98	90 - 110	P	12/23/2024	12:31	LB134066
	Zinc	2450	2500	98	90 - 110	P	12/23/2024	12:31	LB134066
CCV02	Aluminum	10200	10000	102	90 - 110	P	12/23/2024	13:43	LB134066
	Antimony	5450	5000	109	90 - 110	P	12/23/2024	13:43	LB134066
	Arsenic	5360	5000	107	90 - 110	P	12/23/2024	13:43	LB134066
	Barium	10100	10000	101	90 - 110	P	12/23/2024	13:43	LB134066
	Beryllium	230	250	92	90 - 110	P	12/23/2024	13:43	LB134066
	Cadmium	2500	2500	100	90 - 110	P	12/23/2024	13:43	LB134066
	Calcium	24000	25000	96	90 - 110	P	12/23/2024	13:43	LB134066
	Chromium	1000	1000	100	90 - 110	P	12/23/2024	13:43	LB134066
	Cobalt	2520	2500	101	90 - 110	P	12/23/2024	13:43	LB134066
	Copper	1340	1250	107	90 - 110	P	12/23/2024	13:43	LB134066
	Iron	5260	5000	105	90 - 110	P	12/23/2024	13:43	LB134066
	Lead	4990	5000	100	90 - 110	P	12/23/2024	13:43	LB134066

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	23600	25000	94	90 - 110	P	12/23/2024	13:43	LB134066
	Manganese	2410	2500	96	90 - 110	P	12/23/2024	13:43	LB134066
	Nickel	2530	2500	101	90 - 110	P	12/23/2024	13:43	LB134066
	Potassium	27300	25000	109	90 - 110	P	12/23/2024	13:43	LB134066
	Selenium	5480	5000	110	90 - 110	P	12/23/2024	13:43	LB134066
	Silver	1270	1250	102	90 - 110	P	12/23/2024	13:43	LB134066
	Sodium	26600	25000	106	90 - 110	P	12/23/2024	13:43	LB134066
	Thallium	5230	5000	105	90 - 110	P	12/23/2024	13:43	LB134066
	Vanadium	2490	2500	100	90 - 110	P	12/23/2024	13:43	LB134066
	Zinc	2450	2500	98	90 - 110	P	12/23/2024	13:43	LB134066
CCV03	Aluminum	10200	10000	102	90 - 110	P	12/23/2024	14:07	LB134066
	Antimony	5490	5000	110	90 - 110	P	12/23/2024	14:07	LB134066
	Arsenic	5340	5000	107	90 - 110	P	12/23/2024	14:07	LB134066
	Barium	10200	10000	102	90 - 110	P	12/23/2024	14:07	LB134066
	Beryllium	230	250	92	90 - 110	P	12/23/2024	14:07	LB134066
	Cadmium	2470	2500	99	90 - 110	P	12/23/2024	14:07	LB134066
	Calcium	24000	25000	96	90 - 110	P	12/23/2024	14:07	LB134066
	Chromium	1000	1000	100	90 - 110	P	12/23/2024	14:07	LB134066
	Cobalt	2500	2500	100	90 - 110	P	12/23/2024	14:07	LB134066
	Copper	1340	1250	107	90 - 110	P	12/23/2024	14:07	LB134066
	Iron	5200	5000	104	90 - 110	P	12/23/2024	14:07	LB134066
	Lead	4940	5000	99	90 - 110	P	12/23/2024	14:07	LB134066
	Magnesium	23400	25000	94	90 - 110	P	12/23/2024	14:07	LB134066
	Manganese	2400	2500	96	90 - 110	P	12/23/2024	14:07	LB134066
	Nickel	2510	2500	100	90 - 110	P	12/23/2024	14:07	LB134066
	Potassium	27200	25000	109	90 - 110	P	12/23/2024	14:07	LB134066
	Selenium	5480	5000	110	90 - 110	P	12/23/2024	14:07	LB134066
	Silver	1270	1250	102	90 - 110	P	12/23/2024	14:07	LB134066
	Sodium	26100	25000	104	90 - 110	P	12/23/2024	14:07	LB134066
	Thallium	5190	5000	104	90 - 110	P	12/23/2024	14:07	LB134066
	Vanadium	2490	2500	100	90 - 110	P	12/23/2024	14:07	LB134066
	Zinc	2450	2500	98	90 - 110	P	12/23/2024	14:07	LB134066
CCV04	Aluminum	10000	10000	100	90 - 110	P	12/23/2024	15:06	LB134066
	Antimony	5310	5000	106	90 - 110	P	12/23/2024	15:06	LB134066

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	5210	5000	104	90 - 110	P	12/23/2024	15:06	LB134066
	Barium	9720	10000	97	90 - 110	P	12/23/2024	15:06	LB134066
	Beryllium	226	250	90	90 - 110	P	12/23/2024	15:06	LB134066
	Cadmium	2450	2500	98	90 - 110	P	12/23/2024	15:06	LB134066
	Calcium	23400	25000	94	90 - 110	P	12/23/2024	15:06	LB134066
	Chromium	998	1000	100	90 - 110	P	12/23/2024	15:06	LB134066
	Cobalt	2460	2500	98	90 - 110	P	12/23/2024	15:06	LB134066
	Copper	1300	1250	104	90 - 110	P	12/23/2024	15:06	LB134066
	Iron	5150	5000	103	90 - 110	P	12/23/2024	15:06	LB134066
	Lead	4870	5000	97	90 - 110	P	12/23/2024	15:06	LB134066
	Magnesium	23100	25000	92	90 - 110	P	12/23/2024	15:06	LB134066
	Manganese	2330	2500	93	90 - 110	P	12/23/2024	15:06	LB134066
	Nickel	2480	2500	99	90 - 110	P	12/23/2024	15:06	LB134066
	Potassium	26400	25000	106	90 - 110	P	12/23/2024	15:06	LB134066
	Selenium	5340	5000	107	90 - 110	P	12/23/2024	15:06	LB134066
	Silver	1250	1250	100	90 - 110	P	12/23/2024	15:06	LB134066
	Sodium	24200	25000	97	90 - 110	P	12/23/2024	15:06	LB134066
	Thallium	5280	5000	106	90 - 110	P	12/23/2024	15:06	LB134066
	Vanadium	2440	2500	98	90 - 110	P	12/23/2024	15:06	LB134066
	Zinc	2350	2500	94	90 - 110	P	12/23/2024	15:06	LB134066
CCV05	Aluminum	10300	10000	103	90 - 110	P	12/23/2024	16:06	LB134066
	Antimony	5490	5000	110	90 - 110	P	12/23/2024	16:06	LB134066
	Arsenic	5380	5000	108	90 - 110	P	12/23/2024	16:06	LB134066
	Barium	9910	10000	99	90 - 110	P	12/23/2024	16:06	LB134066
	Beryllium	227	250	91	90 - 110	P	12/23/2024	16:06	LB134066
	Cadmium	2470	2500	99	90 - 110	P	12/23/2024	16:06	LB134066
	Calcium	23700	25000	95	90 - 110	P	12/23/2024	16:06	LB134066
	Chromium	1010	1000	101	90 - 110	P	12/23/2024	16:06	LB134066
	Cobalt	2490	2500	100	90 - 110	P	12/23/2024	16:06	LB134066
	Copper	1340	1250	108	90 - 110	P	12/23/2024	16:06	LB134066
	Iron	5240	5000	105	90 - 110	P	12/23/2024	16:06	LB134066
	Lead	4920	5000	98	90 - 110	P	12/23/2024	16:06	LB134066
	Magnesium	23200	25000	93	90 - 110	P	12/23/2024	16:06	LB134066
	Manganese	2360	2500	94	90 - 110	P	12/23/2024	16:06	LB134066

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2510	2500	100	90 - 110	P	12/23/2024	16:06	LB134066
	Potassium	27100	25000	108	90 - 110	P	12/23/2024	16:06	LB134066
	Selenium	5500	5000	110	90 - 110	P	12/23/2024	16:06	LB134066
	Silver	1270	1250	102	90 - 110	P	12/23/2024	16:06	LB134066
	Sodium	25000	25000	100	90 - 110	P	12/23/2024	16:06	LB134066
	Thallium	5080	5000	102	90 - 110	P	12/23/2024	16:06	LB134066
	Vanadium	2490	2500	100	90 - 110	P	12/23/2024	16:06	LB134066
	Zinc	2350	2500	94	90 - 110	P	12/23/2024	16:06	LB134066
CCV06	Aluminum	10300	10000	103	90 - 110	P	12/23/2024	16:54	LB134066
	Antimony	5440	5000	109	90 - 110	P	12/23/2024	16:54	LB134066
	Arsenic	5350	5000	107	90 - 110	P	12/23/2024	16:54	LB134066
	Barium	10100	10000	101	90 - 110	P	12/23/2024	16:54	LB134066
	Beryllium	243	250	97	90 - 110	P	12/23/2024	16:54	LB134066
	Cadmium	2540	2500	102	90 - 110	P	12/23/2024	16:54	LB134066
	Calcium	24500	25000	98	90 - 110	P	12/23/2024	16:54	LB134066
	Chromium	1040	1000	104	90 - 110	P	12/23/2024	16:54	LB134066
	Cobalt	2540	2500	102	90 - 110	P	12/23/2024	16:54	LB134066
	Copper	1350	1250	108	90 - 110	P	12/23/2024	16:54	LB134066
	Iron	5220	5000	104	90 - 110	P	12/23/2024	16:54	LB134066
	Lead	5030	5000	100	90 - 110	P	12/23/2024	16:54	LB134066
	Magnesium	24200	25000	97	90 - 110	P	12/23/2024	16:54	LB134066
	Manganese	2430	2500	97	90 - 110	P	12/23/2024	16:54	LB134066
	Nickel	2560	2500	102	90 - 110	P	12/23/2024	16:54	LB134066
	Potassium	26600	25000	106	90 - 110	P	12/23/2024	16:54	LB134066
	Selenium	5460	5000	109	90 - 110	P	12/23/2024	16:54	LB134066
	Silver	1280	1250	103	90 - 110	P	12/23/2024	16:54	LB134066
	Sodium	24700	25000	99	90 - 110	P	12/23/2024	16:54	LB134066
	Thallium	5270	5000	105	90 - 110	P	12/23/2024	16:54	LB134066
	Vanadium	2540	2500	101	90 - 110	P	12/23/2024	16:54	LB134066
	Zinc	2340	2500	94	90 - 110	P	12/23/2024	16:54	LB134066

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Aluminum	94.7	100	95	40 - 160	P	12/16/2024	16:14	LB133968
	Antimony	47.4	50.0	95	40 - 160	P	12/16/2024	16:14	LB133968
	Arsenic	18.9	20.0	95	40 - 160	P	12/16/2024	16:14	LB133968
	Barium	97.7	100	98	40 - 160	P	12/16/2024	16:14	LB133968
	Beryllium	6.13	6.0	102	40 - 160	P	12/16/2024	16:14	LB133968
	Cadmium	5.61	6.0	94	40 - 160	P	12/16/2024	16:14	LB133968
	Calcium	2010	2000	101	40 - 160	P	12/16/2024	16:14	LB133968
	Chromium	9.95	10.0	100	40 - 160	P	12/16/2024	16:14	LB133968
	Cobalt	28.5	30.0	95	40 - 160	P	12/16/2024	16:14	LB133968
	Copper	21.3	20.0	107	40 - 160	P	12/16/2024	16:14	LB133968
	Iron	91.4	100	91	40 - 160	P	12/16/2024	16:14	LB133968
	Lead	12.0	12.0	100	40 - 160	P	12/16/2024	16:14	LB133968
	Magnesium	2110	2000	105	40 - 160	P	12/16/2024	16:14	LB133968
	Manganese	20.6	20.0	103	40 - 160	P	12/16/2024	16:14	LB133968
	Nickel	38.0	40.0	95	40 - 160	P	12/16/2024	16:14	LB133968
	Potassium	1900	2000	95	40 - 160	P	12/16/2024	16:14	LB133968
	Selenium	19.0	20.0	95	40 - 160	P	12/16/2024	16:14	LB133968
	Silver	9.77	10.0	98	40 - 160	P	12/16/2024	16:14	LB133968
	Sodium	1860	2000	93	40 - 160	P	12/16/2024	16:14	LB133968
	Thallium	38.1	40.0	95	40 - 160	P	12/16/2024	16:14	LB133968
	Vanadium	40.5	40.0	101	40 - 160	P	12/16/2024	16:14	LB133968
	Zinc	43.5	40.0	109	40 - 160	P	12/16/2024	16:14	LB133968
CRA	Mercury	0.19	0.2	96	40 - 160	CV	12/17/2024	11:14	LB133972
CRI01	Aluminum	102	100	102	40 - 160	P	12/23/2024	11:51	LB134066
	Antimony	49.6	50.0	99	40 - 160	P	12/23/2024	11:51	LB134066
	Arsenic	19.2	20.0	96	40 - 160	P	12/23/2024	11:51	LB134066
	Barium	92.0	100	92	40 - 160	P	12/23/2024	11:51	LB134066
	Beryllium	5.71	6.0	95	40 - 160	P	12/23/2024	11:51	LB134066
	Cadmium	5.81	6.0	97	40 - 160	P	12/23/2024	11:51	LB134066
	Calcium	1940	2000	97	40 - 160	P	12/23/2024	11:51	LB134066
	Chromium	9.74	10.0	97	40 - 160	P	12/23/2024	11:51	LB134066
	Cobalt	29.2	30.0	97	40 - 160	P	12/23/2024	11:51	LB134066
	Copper	21.9	20.0	110	40 - 160	P	12/23/2024	11:51	LB134066
	Iron	100	100	100	40 - 160	P	12/23/2024	11:51	LB134066
	Lead	11.0	12.0	92	40 - 160	P	12/23/2024	11:51	LB134066

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Magnesium	2040	2000	102	40 - 160	P	12/23/2024	11:51	LB134066
	Manganese	19.6	20.0	98	40 - 160	P	12/23/2024	11:51	LB134066
	Nickel	39.3	40.0	98	40 - 160	P	12/23/2024	11:51	LB134066
	Potassium	1910	2000	96	40 - 160	P	12/23/2024	11:51	LB134066
	Selenium	17.1	20.0	86	40 - 160	P	12/23/2024	11:51	LB134066
	Silver	11.0	10.0	110	40 - 160	P	12/23/2024	11:51	LB134066
	Sodium	1810	2000	91	40 - 160	P	12/23/2024	11:51	LB134066
	Thallium	41.5	40.0	104	40 - 160	P	12/23/2024	11:51	LB134066
	Vanadium	38.4	40.0	96	40 - 160	P	12/23/2024	11:51	LB134066
	Zinc	41.4	40.0	104	40 - 160	P	12/23/2024	11:51	LB134066

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB20	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/17/2024	11:07	LB133972

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB32	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/17/2024	11:12	LB133972
CCB33	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/17/2024	11:42	LB133972
CCB34	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/17/2024	12:02	LB133972

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	16:10	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	16:10	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	16:10	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	16:10	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	16:10	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	16:10	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	16:10	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	16:10	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	16:10	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	16:10	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	16:10	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	16:10	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	16:10	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	16:10	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	16:10	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	16:10	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	16:10	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	16:10	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	16:10	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	16:10	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	16:10	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	16:10	LB133968

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	17:01	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	17:01	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	17:01	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	17:01	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	17:01	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	17:01	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	17:01	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	17:01	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	17:01	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	17:01	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	17:01	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	17:01	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	17:01	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	17:01	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	17:01	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	17:01	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	17:01	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	17:01	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	17:01	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	17:01	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	17:01	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	17:01	LB133968
CCB02	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	18:02	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	18:02	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	18:02	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	18:02	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	18:02	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	18:02	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	18:02	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	18:02	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	18:02	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	18:02	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	18:02	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	18:02	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	18:02	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	18:02	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	18:02	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	18:02	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	18:02	LB133968

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	18:02	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	18:02	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	18:02	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	18:02	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	18:02	LB133968
CCB03	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	18:52	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	18:52	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	18:52	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	18:52	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	18:52	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	18:52	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	18:52	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	18:52	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	18:52	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	18:52	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	18:52	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	18:52	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	18:52	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	18:52	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	18:52	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	18:52	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	18:52	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	18:52	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	18:52	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	18:52	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	18:52	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	18:52	LB133968
CCB04	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	19:57	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	19:57	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	19:57	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	19:57	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	19:57	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	19:57	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	19:57	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	19:57	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	19:57	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	19:57	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	19:57	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	19:57	LB133968

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	19:57	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	19:57	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	19:57	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	19:57	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	19:57	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	19:57	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	19:57	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	19:57	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	19:57	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	19:57	LB133968
CCB05	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	20:53	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	20:53	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	20:53	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	20:53	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	20:53	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	20:53	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	20:53	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	20:53	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	20:53	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	20:53	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	20:53	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	20:53	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	20:53	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	20:53	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	20:53	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	20:53	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	20:53	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	20:53	LB133968
	Sodium	850	+/-2000	J	1000	2000	P	12/16/2024	20:53	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	20:53	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	20:53	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	20:53	LB133968
CCB06	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	21:51	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	21:51	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	21:51	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	21:51	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	21:51	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	21:51	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	21:51	LB133968

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	21:51	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	21:51	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	21:51	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	21:51	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	21:51	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	21:51	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	21:51	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	21:51	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	21:51	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	21:51	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	21:51	LB133968
	Sodium	917	+/-2000	J	1000	2000	P	12/16/2024	21:51	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	21:51	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	21:51	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	21:51	LB133968
CCB07	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	23:06	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	23:06	LB133968
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	23:06	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	23:06	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	23:06	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	23:06	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	23:06	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	23:06	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	23:06	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	23:06	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	23:06	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	23:06	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	23:06	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	23:06	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	23:06	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	23:06	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	23:06	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	23:06	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	23:06	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	23:06	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	23:06	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	23:06	LB133968
CCB08	Aluminum	100	+/-100	U	80.0	100	P	12/16/2024	23:39	LB133968
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/16/2024	23:39	LB133968

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	23:39	LB133968
	Barium	100	+/-100	U	25.0	100	P	12/16/2024	23:39	LB133968
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	23:39	LB133968
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/16/2024	23:39	LB133968
	Calcium	2000	+/-2000	U	500	2000	P	12/16/2024	23:39	LB133968
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	23:39	LB133968
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/16/2024	23:39	LB133968
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	23:39	LB133968
	Iron	100	+/-100	U	80.0	100	P	12/16/2024	23:39	LB133968
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/16/2024	23:39	LB133968
	Magnesium	2000	+/-2000	U	500	2000	P	12/16/2024	23:39	LB133968
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/16/2024	23:39	LB133968
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	23:39	LB133968
	Potassium	2000	+/-2000	U	1600	2000	P	12/16/2024	23:39	LB133968
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/16/2024	23:39	LB133968
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/16/2024	23:39	LB133968
	Sodium	2000	+/-2000	U	1000	2000	P	12/16/2024	23:39	LB133968
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	23:39	LB133968
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/16/2024	23:39	LB133968
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/16/2024	23:39	LB133968

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	11:44	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	11:44	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	11:44	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	11:44	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	11:44	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	11:44	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	11:44	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	11:44	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	11:44	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	11:44	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	11:44	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	11:44	LB134066
	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	11:44	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	11:44	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	11:44	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	11:44	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	11:44	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	11:44	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	11:44	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	11:44	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	11:44	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	11:44	LB134066

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	12:35	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	12:35	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	12:35	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	12:35	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	12:35	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	12:35	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	12:35	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	12:35	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	12:35	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	12:35	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	12:35	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	12:35	LB134066
	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	12:35	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	12:35	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	12:35	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	12:35	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	12:35	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	12:35	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	12:35	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	12:35	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	12:35	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	12:35	LB134066
CCB02	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	13:47	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	13:47	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	13:47	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	13:47	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	13:47	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	13:47	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	13:47	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	13:47	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	13:47	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	13:47	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	13:47	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	13:47	LB134066
	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	13:47	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	13:47	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	13:47	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	13:47	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	13:47	LB134066

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	13:47	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	13:47	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	13:47	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	13:47	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	13:47	LB134066
CCB03	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	14:11	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	14:11	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	14:11	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	14:11	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	14:11	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	14:11	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	14:11	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	14:11	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	14:11	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	14:11	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	14:11	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	14:11	LB134066
	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	14:11	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	14:11	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	14:11	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	14:11	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	14:11	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	14:11	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	14:11	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	14:11	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	14:11	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	14:11	LB134066
CCB04	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	15:10	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	15:10	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	15:10	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	15:10	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	15:10	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	15:10	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	15:10	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	15:10	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	15:10	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	15:10	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	15:10	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	15:10	LB134066

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	15:10	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	15:10	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	15:10	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	15:10	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	15:10	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	15:10	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	15:10	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	15:10	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	15:10	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	15:10	LB134066
CCB05	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	16:10	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	16:10	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:10	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	16:10	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:10	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:10	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	16:10	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	16:10	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	16:10	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:10	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	16:10	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	16:10	LB134066
	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	16:10	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	16:10	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:10	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	16:10	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:10	LB134066
	Silver	1.18	+/-10.0	J	5.00	10.0	P	12/23/2024	16:10	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	16:10	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	16:10	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	16:10	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:10	LB134066
CCB06	Aluminum	100	+/-100	U	80.0	100	P	12/23/2024	16:58	LB134066
	Antimony	50.0	+/-50.0	U	12.5	50.0	P	12/23/2024	16:58	LB134066
	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:58	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	16:58	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:58	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:58	LB134066
	Calcium	2000	+/-2000	U	500	2000	P	12/23/2024	16:58	LB134066

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	16:58	LB134066
	Cobalt	30.0	+/-30.0	U	7.50	30.0	P	12/23/2024	16:58	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:58	LB134066
	Iron	100	+/-100	U	80.0	100	P	12/23/2024	16:58	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	16:58	LB134066
	Magnesium	2000	+/-2000	U	500	2000	P	12/23/2024	16:58	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	16:58	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:58	LB134066
	Potassium	2000	+/-2000	U	1600	2000	P	12/23/2024	16:58	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:58	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	16:58	LB134066
	Sodium	2000	+/-2000	U	1000	2000	P	12/23/2024	16:58	LB134066
	Thallium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	16:58	LB134066
	Vanadium	40.0	+/-40.0	U	20.0	40.0	P	12/23/2024	16:58	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:58	LB134066

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB165693BL		**WATER**		**Batch Number:**		**PB165693**		**Prep Date:**	**12/16/2024**	
	Mercury	0.20	<0.20	U	0.16	0.20	CV	12/17/2024	11:21	LB133972

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB165659BL		**WATER**		**Batch Number:**		**PB165659**		**Prep Date:**	**12/16/2024**	
	Aluminum	50.0	<50.0	U	40.0	50.0	P	12/23/2024	12:59	LB134066
	Antimony	25.0	<25.0	U	6.25	25.0	P	12/23/2024	12:59	LB134066
	Arsenic	10.0	<10.0	U	8.00	10.0	P	12/23/2024	12:59	LB134066
	Barium	50.0	<50.0	U	12.5	50.0	P	12/23/2024	12:59	LB134066
	Beryllium	3.00	<3.00	U	0.75	3.00	P	12/23/2024	12:59	LB134066
	Cadmium	3.00	<3.00	U	0.75	3.00	P	12/23/2024	12:59	LB134066
	Calcium	1000	<1000	U	250	1000	P	12/23/2024	12:59	LB134066
	Chromium	5.00	<5.00	U	2.50	5.00	P	12/23/2024	12:59	LB134066
	Cobalt	15.0	<15.0	U	3.75	15.0	P	12/23/2024	12:59	LB134066
	Copper	10.0	<10.0	U	8.00	10.0	P	12/23/2024	12:59	LB134066
	Iron	50.0	<50.0	U	40.0	50.0	P	12/23/2024	12:59	LB134066
	Lead	6.00	<6.00	U	4.80	6.00	P	12/23/2024	12:59	LB134066
	Magnesium	1000	<1000	U	250	1000	P	12/23/2024	12:59	LB134066
	Manganese	10.0	<10.0	U	2.50	10.0	P	12/23/2024	12:59	LB134066
	Nickel	20.0	<20.0	U	5.00	20.0	P	12/23/2024	12:59	LB134066
	Potassium	1000	<1000	U	800	1000	P	12/23/2024	12:59	LB134066
	Selenium	10.0	<10.0	U	8.00	10.0	P	12/23/2024	12:59	LB134066
	Silver	5.00	<5.00	U	2.50	5.00	P	12/23/2024	12:59	LB134066
	Sodium	1000	<1000	U	500	1000	P	12/23/2024	12:59	LB134066
	Thallium	20.0	<20.0	U	10.0	20.0	P	12/23/2024	12:59	LB134066
	Vanadium	20.0	<20.0	U	10.0	20.0	P	12/23/2024	12:59	LB134066
	Zinc	20.0	<20.0	U	5.00	20.0	P	12/23/2024	12:59	LB134066

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	260000	255000	102	216000	294000	12/16/2024	16:19	LB133968
	Antimony	-2.84			-50	50	12/16/2024	16:19	LB133968
	Arsenic	-0.59			-20	20	12/16/2024	16:19	LB133968
	Barium	3.44	6.0	57	-94	106	12/16/2024	16:19	LB133968
	Beryllium	2.17			-6	6	12/16/2024	16:19	LB133968
	Cadmium	0.76	1.0	76	-5	7	12/16/2024	16:19	LB133968
	Calcium	248000	245000	101	208000	282000	12/16/2024	16:19	LB133968
	Chromium	56.2	52.0	108	42	62	12/16/2024	16:19	LB133968
	Cobalt	2.10			-30	30	12/16/2024	16:19	LB133968
	Copper	-13.8	2.0	690	-18	22	12/16/2024	16:19	LB133968
	Iron	100000	101000	99	85600	116500	12/16/2024	16:19	LB133968
	Lead	9.55			-12	12	12/16/2024	16:19	LB133968
	Magnesium	272000	255000	107	216000	294000	12/16/2024	16:19	LB133968
	Manganese	-0.46	7.0	6	-13	27	12/16/2024	16:19	LB133968
	Nickel	2.40	2.0	120	-38	42	12/16/2024	16:19	LB133968
	Potassium	180			0	0	12/16/2024	16:19	LB133968
	Selenium	-16.7			-20	20	12/16/2024	16:19	LB133968
	Silver	-6.96			-10	10	12/16/2024	16:19	LB133968
	Sodium	128			0	0	12/16/2024	16:19	LB133968
	Thallium	-9.72			-40	40	12/16/2024	16:19	LB133968
	Vanadium	5.91			-40	40	12/16/2024	16:19	LB133968
	Zinc	4.52			-40	40	12/16/2024	16:19	LB133968
ICSAB01	Aluminum	254000	247000	103	209000	285000	12/16/2024	16:53	LB133968
	Antimony	584	618	94	525	711	12/16/2024	16:53	LB133968
	Arsenic	107	104	103	88.4	120	12/16/2024	16:53	LB133968
	Barium	514	537	96	437	637	12/16/2024	16:53	LB133968
	Beryllium	533	495	108	420	570	12/16/2024	16:53	LB133968
	Cadmium	1010	972	104	826	1120	12/16/2024	16:53	LB133968
	Calcium	246000	235000	105	199000	271000	12/16/2024	16:53	LB133968
	Chromium	561	542	104	460	624	12/16/2024	16:53	LB133968
	Cobalt	503	476	106	404	548	12/16/2024	16:53	LB133968
	Copper	460	511	90	434	588	12/16/2024	16:53	LB133968
	Iron	97300	99300	98	84400	114500	12/16/2024	16:53	LB133968
	Lead	55.9	49.0	114	37	61	12/16/2024	16:53	LB133968
	Magnesium	269000	248000	108	210000	286000	12/16/2024	16:53	LB133968
	Manganese	504	507	99	430	584	12/16/2024	16:53	LB133968
	Nickel	989	954	104	810	1100	12/16/2024	16:53	LB133968
	Potassium	-33.3			0	0	12/16/2024	16:53	LB133968
	Selenium	36.8	46.0	80	26	66	12/16/2024	16:53	LB133968
	Silver	189	201	94	170	232	12/16/2024	16:53	LB133968
	Sodium	69.2			0	0	12/16/2024	16:53	LB133968
	Thallium	81.3	108	75	68	148	12/16/2024	16:53	LB133968

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Vanadium	500	491	102	417	565	12/16/2024	16:53	LB133968
	Zinc	1060	952	111	809	1095	12/16/2024	16:53	LB133968
ICSA01	Aluminum	244000	255000	96	216000	294000	12/23/2024	11:55	LB134066
	Antimony	-1.86			-50	50	12/23/2024	11:55	LB134066
	Arsenic	-0.83			-20	20	12/23/2024	11:55	LB134066
	Barium	2.71	6.0	45	-94	106	12/23/2024	11:55	LB134066
	Beryllium	1.22			-6	6	12/23/2024	11:55	LB134066
	Cadmium	5.83	1.0	583	-5	7	12/23/2024	11:55	LB134066
	Calcium	227000	245000	93	208000	282000	12/23/2024	11:55	LB134066
	Chromium	58.0	52.0	112	42	62	12/23/2024	11:55	LB134066
	Cobalt	1.84			-30	30	12/23/2024	11:55	LB134066
	Copper	16.1	2.0	805	-18	22	12/23/2024	11:55	LB134066
	Iron	104000	101000	103	85600	116500	12/23/2024	11:55	LB134066
	Lead	7.19			-12	12	12/23/2024	11:55	LB134066
	Magnesium	247000	255000	97	216000	294000	12/23/2024	11:55	LB134066
	Manganese	4.79	7.0	68	-13	27	12/23/2024	11:55	LB134066
	Nickel	2.98	2.0	149	-38	42	12/23/2024	11:55	LB134066
	Potassium	30.6			0	0	12/23/2024	11:55	LB134066
	Selenium	-12.8			-20	20	12/23/2024	11:55	LB134066
	Silver	3.28			-10	10	12/23/2024	11:55	LB134066
	Sodium	19.7			0	0	12/23/2024	11:55	LB134066
	Thallium	10.1			-40	40	12/23/2024	11:55	LB134066
	Vanadium	6.09			-40	40	12/23/2024	11:55	LB134066
	Zinc	7.82			-40	40	12/23/2024	11:55	LB134066
ICSAB01	Aluminum	241000	247000	98	209000	285000	12/23/2024	12:06	LB134066
	Antimony	641	618	104	525	711	12/23/2024	12:06	LB134066
	Arsenic	116	104	112	88.4	120	12/23/2024	12:06	LB134066
	Barium	486	537	90	437	637	12/23/2024	12:06	LB134066
	Beryllium	477	495	96	420	570	12/23/2024	12:06	LB134066
	Cadmium	1040	972	107	826	1120	12/23/2024	12:06	LB134066
	Calcium	225000	235000	96	199000	271000	12/23/2024	12:06	LB134066
	Chromium	581	542	107	460	624	12/23/2024	12:06	LB134066
	Cobalt	526	476	110	404	548	12/23/2024	12:06	LB134066
	Copper	565	511	111	434	588	12/23/2024	12:06	LB134066
	Iron	102000	99300	103	84400	114500	12/23/2024	12:06	LB134066
	Lead	55.4	49.0	113	37	61	12/23/2024	12:06	LB134066
	Magnesium	244000	248000	98	210000	286000	12/23/2024	12:06	LB134066
	Manganese	478	507	94	430	584	12/23/2024	12:06	LB134066
	Nickel	1040	954	109	810	1100	12/23/2024	12:06	LB134066
	Potassium	-25.6			0	0	12/23/2024	12:06	LB134066
	Selenium	37.4	46.0	81	26	66	12/23/2024	12:06	LB134066
	Silver	203	201	101	170	232	12/23/2024	12:06	LB134066

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Sodium	9.80			0	0	12/23/2024	12:06	LB134066
	Thallium	112	108	104	68	148	12/23/2024	12:06	LB134066
	Vanadium	478	491	97	417	565	12/23/2024	12:06	LB134066
	Zinc	1070	952	112	809	1095	12/23/2024	12:06	LB134066

METAL QC DATA

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** P5283

contract: TETR06 **lab code:** CHEM **case no.:** P5283 **sas no.:** P5283

matrix: Water **sample id:** P5287-05 **client id:** 220-2-TRANS-WATERMS

Percent Solids for Sample: NA **Spiked ID:** P5287-05MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	86 - 115	2640		1510		1000	113		P
Antimony	ug/L	88 - 113	354		25.0	U	400	88		P
Arsenic	ug/L	87 - 113	356		10.0	U	400	89		P
Barium	ug/L	88 - 113	109		13.2	J	100	96		P
Beryllium	ug/L	89 - 112	107		3.00	U	100	107		P
Cadmium	ug/L	88 - 113	93.7		3.00	U	100	94		P
Calcium	ug/L	87 - 113	9470		8640		500	166		P
Chromium	ug/L	90 - 113	208		2.11	J	200	103		P
Cobalt	ug/L	89 - 114	97.0		1.05	J	100	96		P
Copper	ug/L	86 - 114	155		12.6		150	95		P
Iron	ug/L	87 - 115	2610		1130		1500	99		P
Lead	ug/L	86 - 113	455		6.00	U	500	91		P
Magnesium	ug/L	85 - 113	3100		1960		1000	113		P
Manganese	ug/L	90 - 114	139		35.3		100	103		P
Mercury	ug/L	82 - 119	3.60		0.20	U	4.0	90		CV
Nickel	ug/L	88 - 113	242		3.95	J	250	95		P
Potassium	ug/L	86 - 114	7990		4080		5000	78	N	P
Selenium	ug/L	83 - 114	843		10.0	U	1000	84		P
Silver	ug/L	84 - 115	35.7		5.00	U	37.5	95		P
Sodium	ug/L	87 - 115	17700		17200		1500	33		P
Thallium	ug/L	85 - 114	875		20.0	U	1000	88		P
Vanadium	ug/L	90 - 111	159		5.48	J	150	102		P
Zinc	ug/L	87 - 115	129		32.2		100	97		P

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** P5283

contract: TETR06 **lab code:** CHEM **case no.:** P5283 **sas no.:** P5283

matrix: Water **sample id:** P5287-05 **client id:** 220-2-TRANS-WATERMSD

Percent Solids for Sample: NA **Spiked ID:** P5287-05MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	86 - 115	2620		1510		1000	111		P
Antimony	ug/L	88 - 113	353		25.0	U	400	88		P
Arsenic	ug/L	87 - 113	355		10.0	U	400	89		P
Barium	ug/L	88 - 113	109		13.2	J	100	96		P
Beryllium	ug/L	89 - 112	107		3.00	U	100	107		P
Cadmium	ug/L	88 - 113	94.2		3.00	U	100	94		P
Calcium	ug/L	87 - 113	9460		8640		500	165		P
Chromium	ug/L	90 - 113	209		2.11	J	200	103		P
Cobalt	ug/L	89 - 114	97.6		1.05	J	100	97		P
Copper	ug/L	86 - 114	155		12.6		150	95		P
Iron	ug/L	87 - 115	2590		1130		1500	98		P
Lead	ug/L	86 - 113	458		6.00	U	500	92		P
Magnesium	ug/L	85 - 113	3090		1960		1000	112		P
Manganese	ug/L	90 - 114	137		35.3		100	102		P
Mercury	ug/L	82 - 119	3.64		0.20	U	4.0	91		CV
Nickel	ug/L	88 - 113	243		3.95	J	250	96		P
Potassium	ug/L	86 - 114	8060		4080		5000	80	N	P
Selenium	ug/L	83 - 114	843		10.0	U	1000	84		P
Silver	ug/L	84 - 115	35.7		5.00	U	37.5	95		P
Sodium	ug/L	87 - 115	18000		17200		1500	54		P
Thallium	ug/L	85 - 114	885		20.0	U	1000	88		P
Vanadium	ug/L	90 - 111	159		5.48	J	150	102		P
Zinc	ug/L	87 - 115	130		32.2		100	98		P

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Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Matrix: Water **Level:** LOW **Client ID:** 220-2-TRANS-WATERA

Sample ID: P5287-05 **Spiked ID:** P5287-05A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Potassium	ug/L	86 - 114	8030		4080		5000	79		P

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Matrix: Water **Sample ID:** P5287-05 **Client ID:** 220-2-TRANS-WATERDUP

Percent Solids for Sample: NA **Duplicate ID** P5287-05DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	20	1510		1500		1		P
Antimony	ug/L	20	25.0	U	10.7	J	200.0		P
Arsenic	ug/L	20	10.0	U	10.5		200.0		P
Barium	ug/L	20	13.2	J	16.6	J	23		P
Beryllium	ug/L	20	3.00	U	3.62		200.0		P
Cadmium	ug/L	20	3.00	U	3.36		200.0		P
Calcium	ug/L	20	8640		8710		1		P
Chromium	ug/L	20	2.11	J	9.44		127		P
Cobalt	ug/L	20	1.05	J	4.45	J	124		P
Copper	ug/L	20	12.6		18.0		35		P
Iron	ug/L	20	1130		1160		3		P
Lead	ug/L	20	6.00	U	18.7		200.0		P
Magnesium	ug/L	20	1960		2000		2		P
Manganese	ug/L	20	35.3		38.7		9		P
Mercury	ug/L	20	0.20	U	0.20	U			CV
Nickel	ug/L	20	3.95	J	12.5	J	104		P
Potassium	ug/L	20	4080		4200		3		P
Selenium	ug/L	20	10.0	U	32.9		200.0		P
Silver	ug/L	20	5.00	U	0.97	J	200.0		P
Sodium	ug/L	20	17200		17400		1		P
Thallium	ug/L	20	20.0	U	29.0		200.0		P
Vanadium	ug/L	20	5.48	J	10.2	J	60		P
Zinc	ug/L	20	32.2		36.1		11		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Matrix: Water **Sample ID:** P5287-05MS **Client ID:** 220-2-TRANS-WATERMSD

Percent Solids for Sample: NA **Duplicate ID** P5287-05MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	20	2640		2620		1		P
Antimony	ug/L	20	354		353		0		P
Arsenic	ug/L	20	356		355		0		P
Barium	ug/L	20	109		109		0		P
Beryllium	ug/L	20	107		107		0		P
Cadmium	ug/L	20	93.7		94.2		1		P
Calcium	ug/L	20	9470		9460		0		P
Chromium	ug/L	20	208		209		0		P
Cobalt	ug/L	20	97.0		97.6		1		P
Copper	ug/L	20	155		155		0		P
Iron	ug/L	20	2610		2590		1		P
Lead	ug/L	20	455		458		1		P
Magnesium	ug/L	20	3100		3090		0		P
Manganese	ug/L	20	139		137		1		P
Mercury	ug/L	20	3.60		3.64		1		CV
Nickel	ug/L	20	242		243		0		P
Potassium	ug/L	20	7990		8060		1		P
Selenium	ug/L	20	843		843		0		P
Silver	ug/L	20	35.7		35.7		0		P
Sodium	ug/L	20	17700		18000		2		P
Thallium	ug/L	20	875		885		1		P
Vanadium	ug/L	20	159		159		0		P
Zinc	ug/L	20	129		130		1		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB165659BS							
Aluminum	ug/L	1000	963		96	86 - 115	P
Antimony	ug/L	400	411		103	88 - 113	P
Arsenic	ug/L	400	412		103	87 - 113	P
Barium	ug/L	100	92.8		93	88 - 113	P
Beryllium	ug/L	100	90.7		91	89 - 112	P
Cadmium	ug/L	100	94.9		95	88 - 113	P
Calcium	ug/L	500	494	J	99	87 - 113	P
Chromium	ug/L	200	201		100	90 - 113	P
Cobalt	ug/L	100	97.5		98	89 - 114	P
Copper	ug/L	150	160		107	86 - 114	P
Iron	ug/L	1500	1530		102	87 - 115	P
Lead	ug/L	500	482		96	86 - 113	P
Magnesium	ug/L	1000	905	J	90	85 - 113	P
Manganese	ug/L	100	94.6		95	90 - 114	P
Nickel	ug/L	250	245		98	88 - 113	P
Potassium	ug/L	5000	5060		101	86 - 114	P
Selenium	ug/L	1000	1020		102	83 - 114	P
Silver	ug/L	37.5	38.0		101	84 - 115	P
Sodium	ug/L	1500	1430		95	87 - 115	P
Thallium	ug/L	1000	992		99	85 - 114	P
Vanadium	ug/L	150	143		95	90 - 111	P
Zinc	ug/L	100	101		101	87 - 115	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB165693BS							
Mercury	ug/L	4.0	4.49		112	82 - 119	CV

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ICP SERIAL DILUTIONS

SAMPLE NO.

220-2-TRANS-WATERL

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

Lab Code: CHEM **Lb No.:** lb133968 **Lab Sample ID :** P5287-05L **SDG No.:** P5283

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1510		1980		31		P
Antimony	25.0	U	125	U			P
Arsenic	10.0	U	50.0	U			P
Barium	13.2	J	250	U	100.0		P
Beryllium	3.00	U	15.0	U			P
Cadmium	3.00	U	15.0	U			P
Calcium	8640		9860		14		P
Chromium	2.11	J	3.33	J	58		P
Cobalt	1.05	J	75.0	U	100.0		P
Copper	12.6		50.0	U	100.0		P
Iron	1130		1340		19		P
Lead	6.00	U	30.0	U			P
Magnesium	1960		2300	J	17		P
Manganese	35.3		40.5	J	15		P
Mercury	0.20	U	1.00	U			CV
Nickel	3.95	J	4.43	J	12		P
Potassium	4080		6750		66		P
Selenium	10.0	U	50.0	U			P
Silver	5.00	U	25.0	U			P
Sodium	17200		20000		16		P
Thallium	20.0	U	100	U			P
Vanadium	5.48	J	100	U	100.0		P
Zinc	32.2		32.0	J	0		P

METAL PREPARATION & INSTRUMENT DATA

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5283 **SAS No.:** P5283

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

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

Case No.: P5283 **SAS No.:** P5283

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB165659**						
P5283-02	TT-RW10A-IDWGW-20241213	SAM	WATER	12/16/2024	50.0	25.0	
P5287-05DUP	220-2-TRANS-WATERDUP	DUP	WATER	12/16/2024	50.0	25.0	
P5287-05MS	220-2-TRANS-WATERMS	MS	WATER	12/16/2024	50.0	25.0	
P5287-05MSD	220-2-TRANS-WATERMSD	MSD	WATER	12/16/2024	50.0	25.0	
PB165659BL	PB165659BL	MB	WATER	12/16/2024	50.0	25.0	
PB165659BS	PB165659BS	LCS	WATER	12/16/2024	50.0	25.0	

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SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5283

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

Case No.: P5283 **SAS No.:** P5283

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB165693**						
P5283-02	TT-RW10A-IDWGW-20241213	SAM	WATER	12/16/2024	30.0	30.0	
P5287-05DUP	220-2-TRANS-WATERDUP	DUP	WATER	12/16/2024	30.0	30.0	
P5287-05MS	220-2-TRANS-WATERMS	MS	WATER	12/16/2024	30.0	30.0	
P5287-05MSD	220-2-TRANS-WATERMSD	MSD	WATER	12/16/2024	30.0	30.0	
PB165693BL	PB165693BL	MB	WATER	12/16/2024	30.0	30.0	
PB165693BS	PB165693BS	LCS	WATER	12/16/2024	30.0	30.0	

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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** P5283 **Sas no.:** P5283 **Sdg no.:** P5283

Instrument id number: **Method:** **Run number:** LB133968

Start date: 12/16/2024 **End date:** 12/16/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1536	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1540	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1545	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1549	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1553	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1557	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1602	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1606	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1610	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1614	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1619	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1653	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1657	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1701	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1758	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1802	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1848	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1852	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1951	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1957	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	2049	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	2053	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
P5283-02	TT-RW10A-IDWGW-20241213	1	2118	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
P5287-05DUP	220-2-TRANS-WATERDUP	1	2126	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
P5287-05L	220-2-TRANS-WATERL	5	2130	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	2147	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	2151	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
P5287-05MS	220-2-TRANS-WATERMS	1	2200	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
P5287-05MSD	220-2-TRANS-WATERMSD	1	2204	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
P5287-05A	220-2-TRANS-WATERA	1	2246	K
CCV07	CCV07	1	2302	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	2306	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV08	CCV08	1	2335	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	2339	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

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

metals
- 14 -
ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** P5283 **Sas no.:** P5283 **Sdg no.:** P5283

Instrument id number: **Method:** **Run number:** LB133972

Start date: 12/17/2024 **End date:** 12/17/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0.0	S0.0	1	1040	HG
S0.2	S0.2	1	1042	HG
S2.5	S2.5	1	1045	HG
S5.0	S5.0	1	1047	HG
S7.5	S7.5	1	1049	HG
S10.0	S10.0	1	1057	HG
ICV20	ICV20	1	1105	HG
ICB20	ICB20	1	1107	HG
CCV32	CCV32	1	1110	HG
CCB32	CCB32	1	1112	HG
CRA	CRA	1	1114	HG
PB165693BL	PB165693BL	1	1121	HG
P5283-02	TT-RW10A-IDWGW-20241213	1	1125	HG
P5287-05DUP	220-2-TRANS-WATERDUP	1	1130	HG
P5287-05MS	220-2-TRANS-WATERMS	1	1135	HG
P5287-05MSD	220-2-TRANS-WATERMSD	1	1137	HG
CCV33	CCV33	1	1140	HG
CCB33	CCB33	1	1142	HG
PB165693BS	PB165693BS	1	1152	HG
P5287-05L	220-2-TRANS-WATERL	5	1155	HG
CCV34	CCV34	1	1159	HG
CCB34	CCB34	1	1202	HG

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metals
- 14 -
ANALYSIS RUN LOG

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

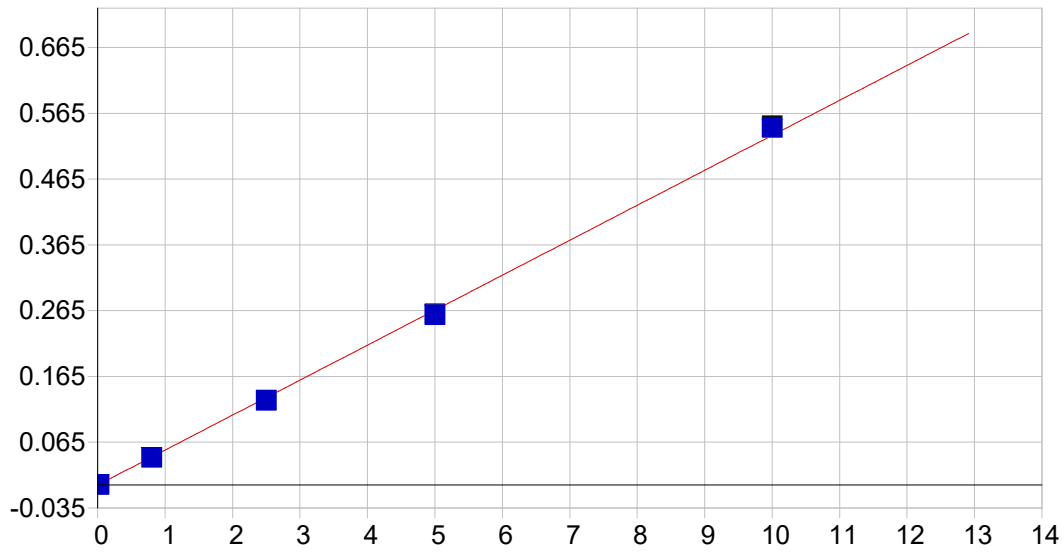
Lab code: CHEM **Case no.:** P5283 **Sas no.:** P5283 **Sdg no.:** P5283

Instrument id number: **Method:** **Run number:** LB134066

Start date: 12/23/2024 **End date:** 12/23/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1051	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1056	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1100	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1104	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1109	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1113	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1117	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1137	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1144	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1151	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1155	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1206	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1231	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1235	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB165659BL	PB165659BL	1	1259	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB165659BS	PB165659BS	1	1303	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1343	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1347	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1407	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1411	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1506	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1510	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1606	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1610	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1654	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1658	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

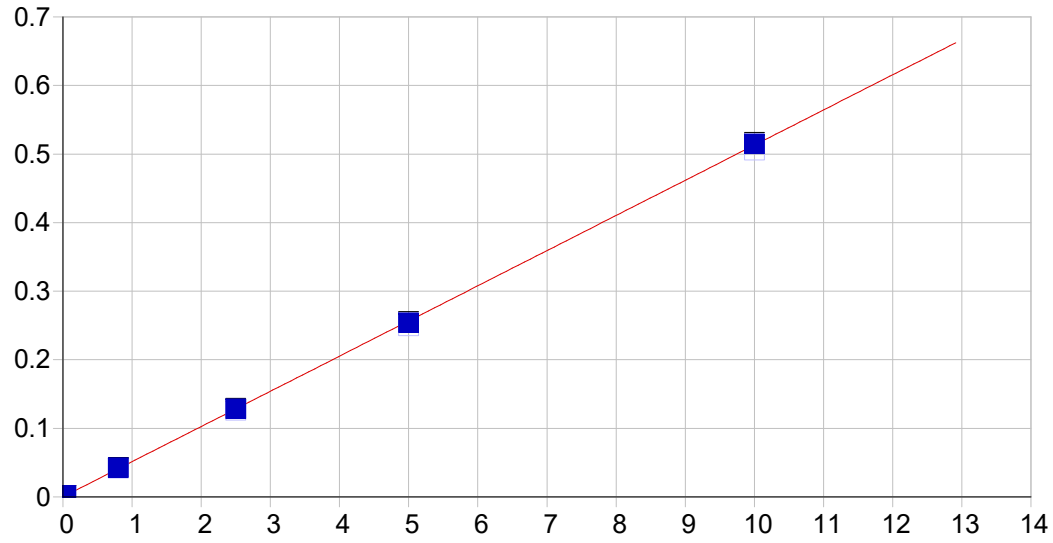


As 189.042 {479}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000134	Re-Slope:	1.000000
A1 (Gain):	0.053175	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999679	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.002743		
Predicted MQL:	0.009143		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00013	.000	1
S1	.02000	.01622	-.004	-18.9	.00072	.000	1
S3	2.5000	2.4228	-.077	-3.09	.12855	.000	1
S4	5.0000	4.8711	-.129	-2.58	.25860	.001	1
S5	10.000	10.224	.224	2.24	.54298	.002	1
S2	.80000	.78550	-.014	-1.81	.04159	.000	1

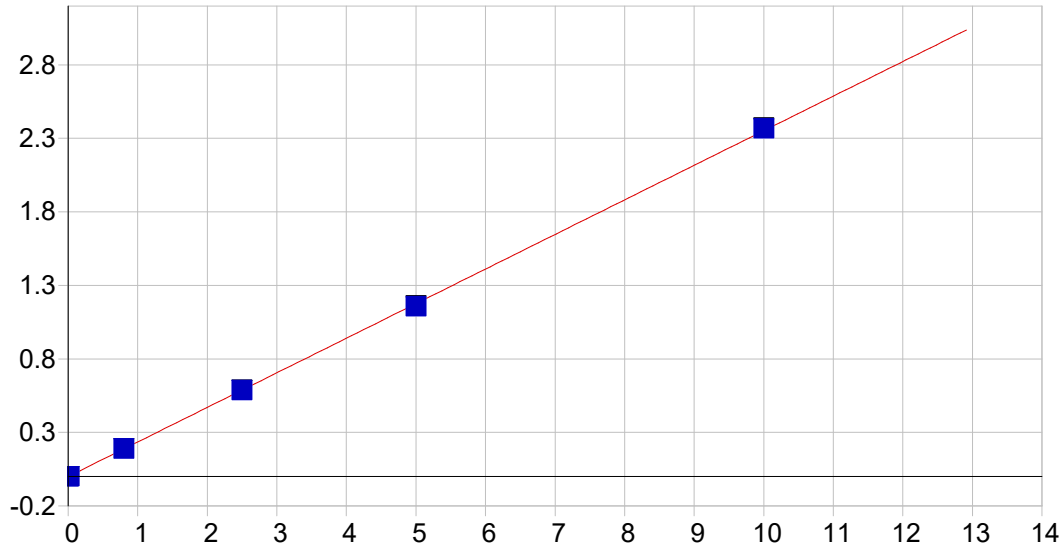


Tl 190.856 {477}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000157	Re-Slope:	1.000000
A1 (Gain):	0.051285	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999956	Status:	OK.
Std Error of Est:	0.000016		
Predicted MDL:	0.001891		
Predicted MQL:	0.006302		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00016	.000	1
S1	.04000	.03835	-.002	-4.13	.00199	.000	1
S3	2.5000	2.4954	-.005	-.183	.12577	.001	1
S4	5.0000	4.9452	-.055	-1.10	.24905	.002	1
S5	10.000	10.037	.037	.366	.50544	.002	1
S2	.80000	.82427	.024	3.03	.04167	.000	1

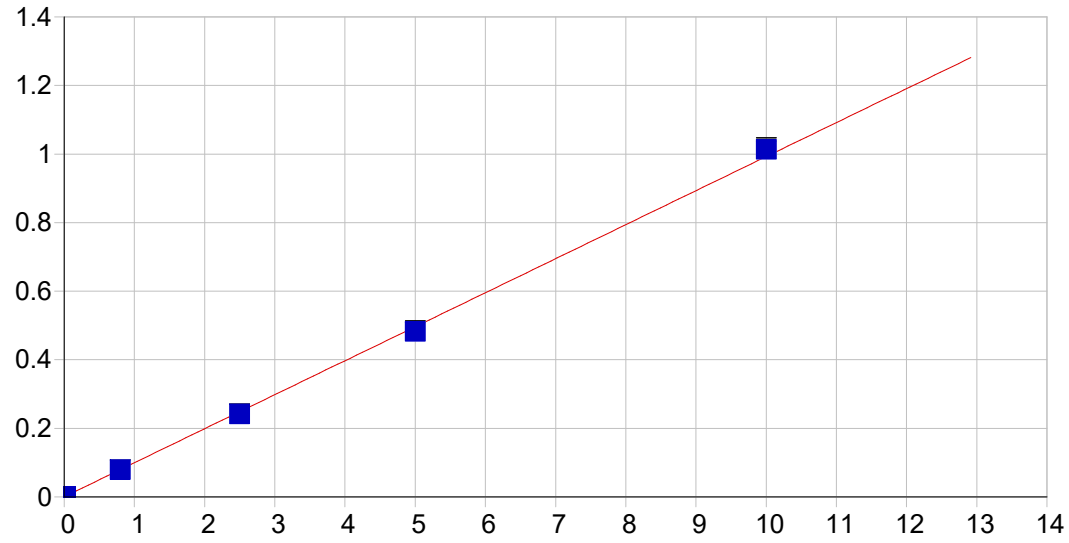


Pb 220.353 {453}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000357	Re-Slope:	1.000000
A1 (Gain):	0.235245	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999950	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.001020		
Predicted MQL:	0.003401		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00036	.000	1
S1	.01200	.01143	-.001	-4.75	.00228	.000	1
S3	2.5000	2.4973	-.003	-.106	.58648	.001	1
S4	5.0000	4.9230	-.077	-1.54	1.1565	.004	1
S5	10.000	10.070	.070	.704	2.3661	.003	1
S2	.80000	.80979	.010	1.22	.18994	.000	1

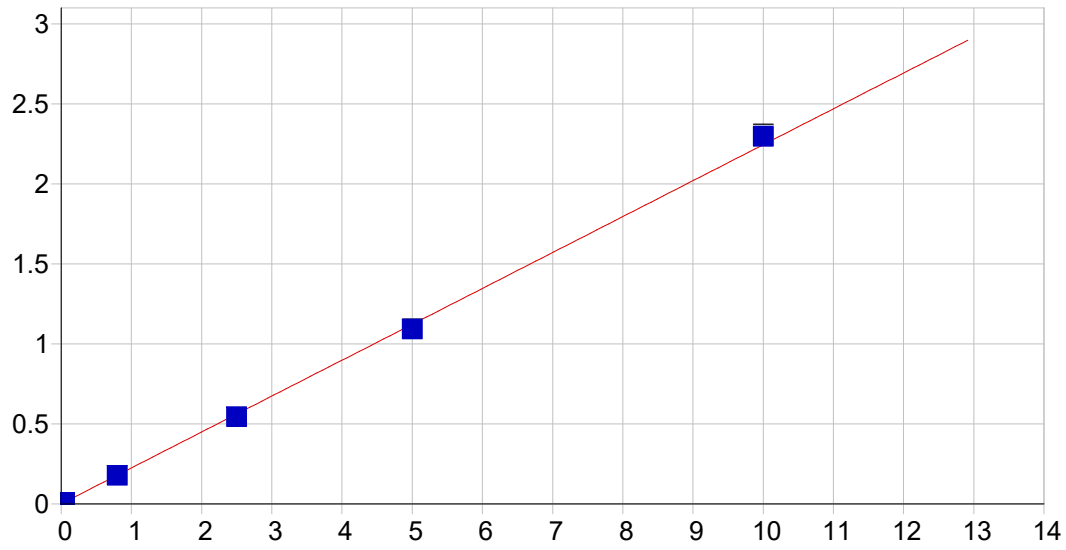


Se 196.090 {472}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000406	Re-Slope:	1.000000
A1 (Gain):	0.099198	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999715	Status:	OK.
Std Error of Est:	0.000056		
Predicted MDL:	0.002031		
Predicted MQL:	0.006771		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00041	.000	1
S1	.02000	.01853	-.001	-7.34	.00225	.000	1
S3	2.5000	2.4329	-.067	-2.68	.24169	.001	1
S4	5.0000	4.8615	-.138	-2.77	.48254	.002	1
S5	10.000	10.215	.215	2.15	1.0135	.005	1
S2	.80000	.79186	-.008	-1.02	.07894	.000	1

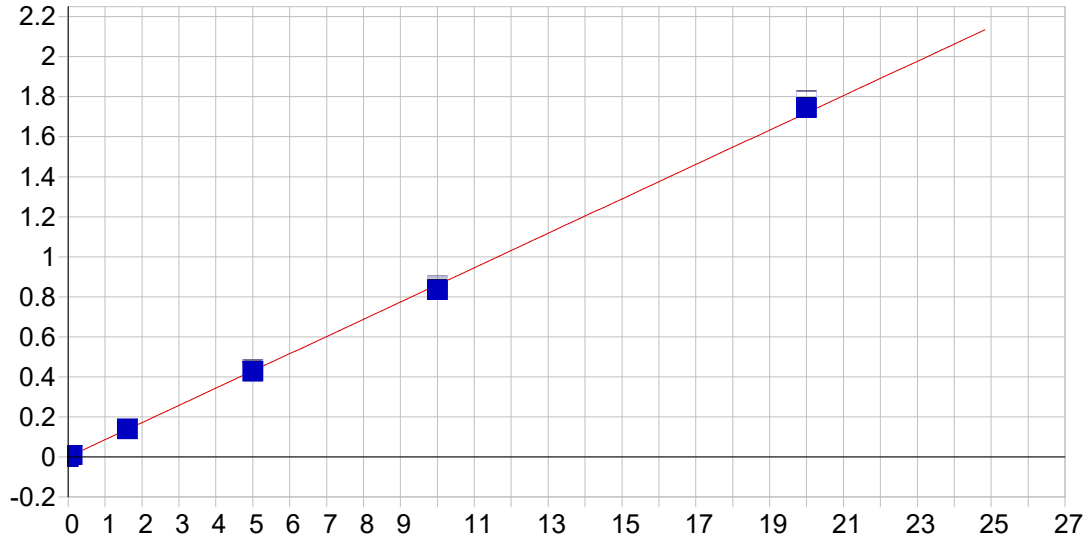


Sb 206.833 {463}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000397	Re-Slope:	1.000000
A1 (Gain):	0.224406	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999681	Status:	OK.
Std Error of Est:	0.000211		
Predicted MDL:	0.001099		
Predicted MQL:	0.003663		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00040	.000	1
S1	.05000	.04802	-.002	-3.95	.01120	.000	1
S3	2.5000	2.4218	-.078	-3.13	.54538	.001	1
S4	5.0000	4.8625	-.138	-2.75	1.0946	.002	1
S5	10.000	10.230	.230	2.30	2.3021	.010	1
S2	.80000	.78792	-.012	-1.51	.17770	.001	1

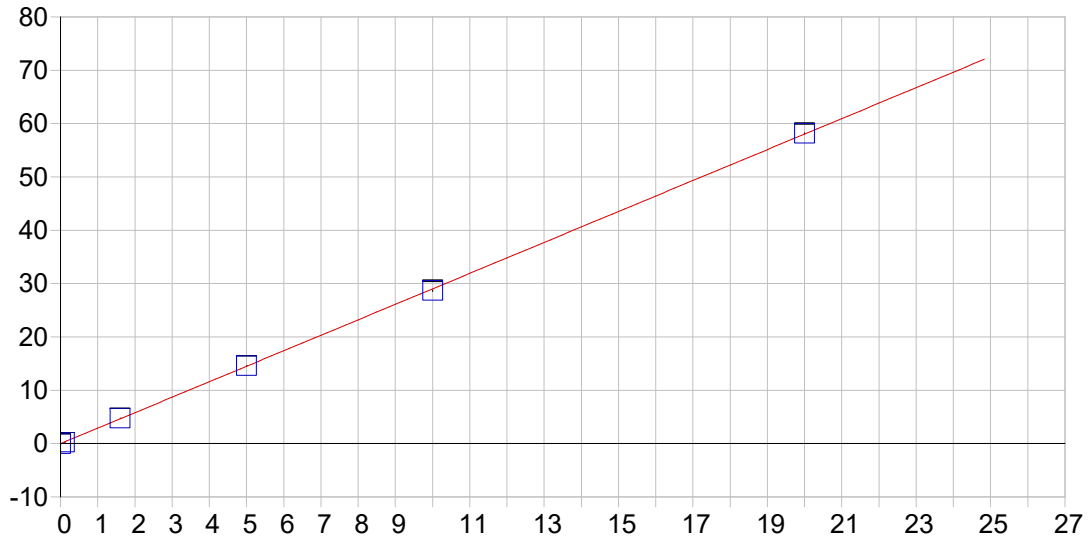


Al 396.152 { 85}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000126	Re-Slope:	1.000000
A1 (Gain):	0.085970	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999831	Status:	OK.
Std Error of Est:	0.000120		
Predicted MDL:	0.004865		
Predicted MQL:	0.016216		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00013	.000	1
S1	.10000	.10392	.004	3.92	.00947	.000	1
S3	5.0000	4.9619	-.038	-.762	.43479	.001	1
S4	10.000	9.7194	-.281	-2.81	.85212	.002	1
S5	20.000	20.292	.292	1.46	1.7777	.001	1
S2	1.6000	1.6230	.023	1.44	.14207	.000	1

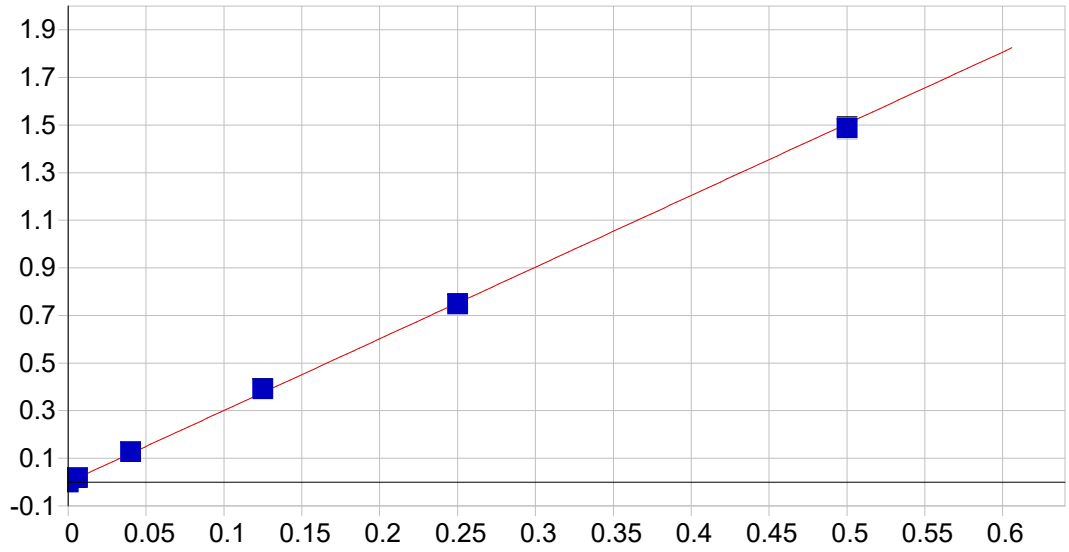


Ba 493.409 { 68}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.011259	Re-Slope:	1.000000
A1 (Gain):	2.902164	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999960	Status:	OK.
Std Error of Est:	0.001936		
Predicted MDL:	0.000515		
Predicted MQL:	0.001717		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.01126	.001	1
S1	.10000	.09867	-.001	-1.33	.27509	.001	1
S3	5.0000	5.0318	.032	.636	14.592	.021	1
S4	10.000	9.8834	-.117	-1.17	28.672	.129	1
S5	20.000	20.040	.040	.202	58.149	.136	1
S2	1.6000	1.6458	.046	2.86	4.7650	.006	1

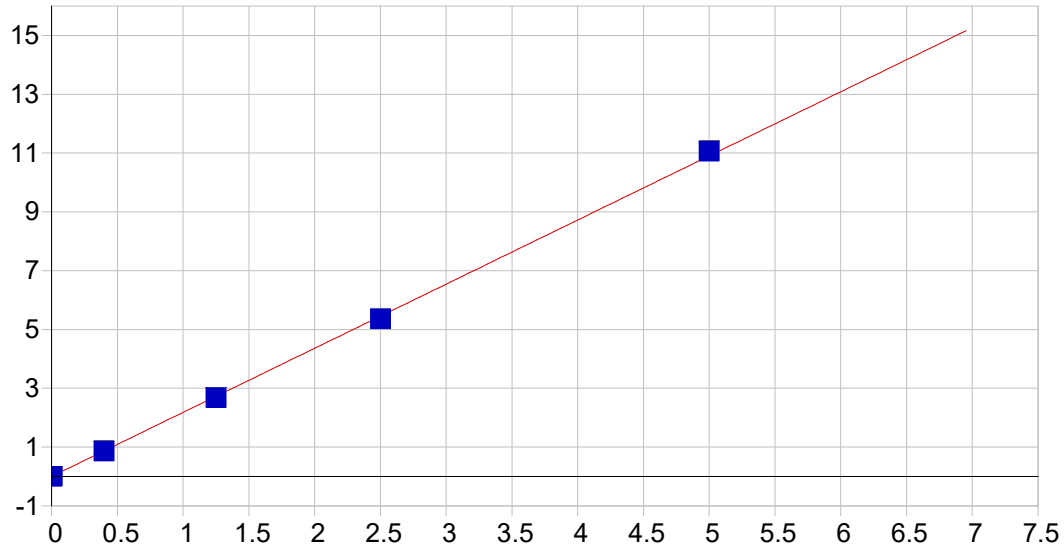


Be 234.861 {144}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000399	Re-Slope:	1.000000
A1 (Gain):	3.011967	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999760	Status:	OK.
Std Error of Est:	0.000189		
Predicted MDL:	0.000068		
Predicted MQL:	0.000227		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00040	.000	1
S1	.00600	.00611	.000	1.89	.01788	.000	1
S3	.12500	.13010	.005	4.08	.38978	.000	1
S4	.25000	.24845	-.002	-.619	.74456	.002	1
S5	.50000	.49393	-.006	-1.21	1.4806	.006	1
S2	.04000	.04240	.002	6.00	.12676	.000	1

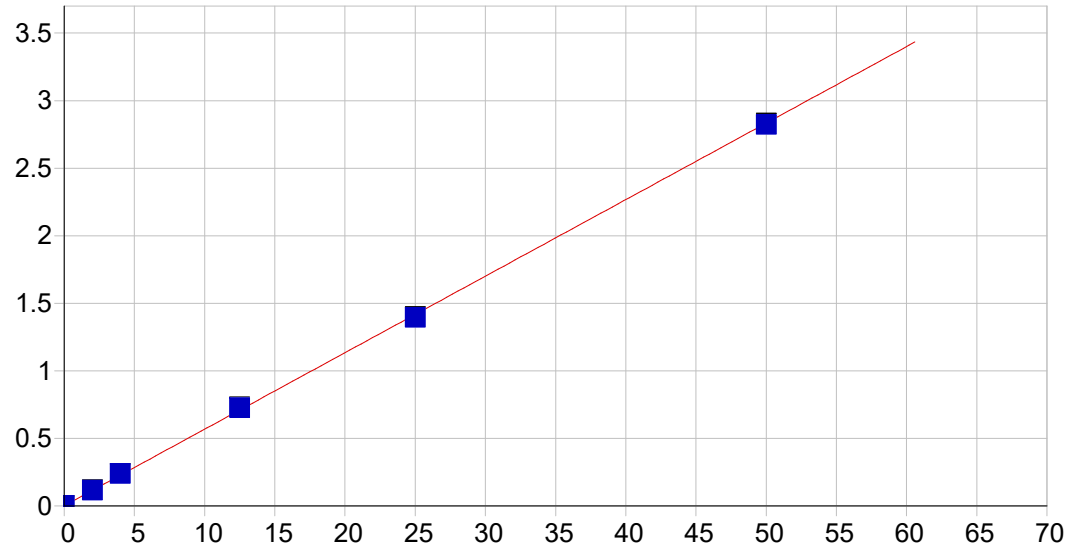


Cd 226.502 {449}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000047	Re-Slope:	1.000000
A1 (Gain):	2.180887	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999880	Status:	OK.
Std Error of Est:	0.000307		
Predicted MDL:	0.000085		
Predicted MQL:	0.000282		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00005	.000	1
S1	.00600	.00573	-.000	-4.54	.01261	.000	1
S3	1.2500	1.2290	-.021	-1.68	2.6828	.004	1
S4	2.5000	2.4563	-.044	-1.75	5.3617	.018	1
S5	5.0000	5.0706	.071	1.41	11.068	.011	1
S2	.40000	.39444	-.006	-1.39	.86104	.000	1

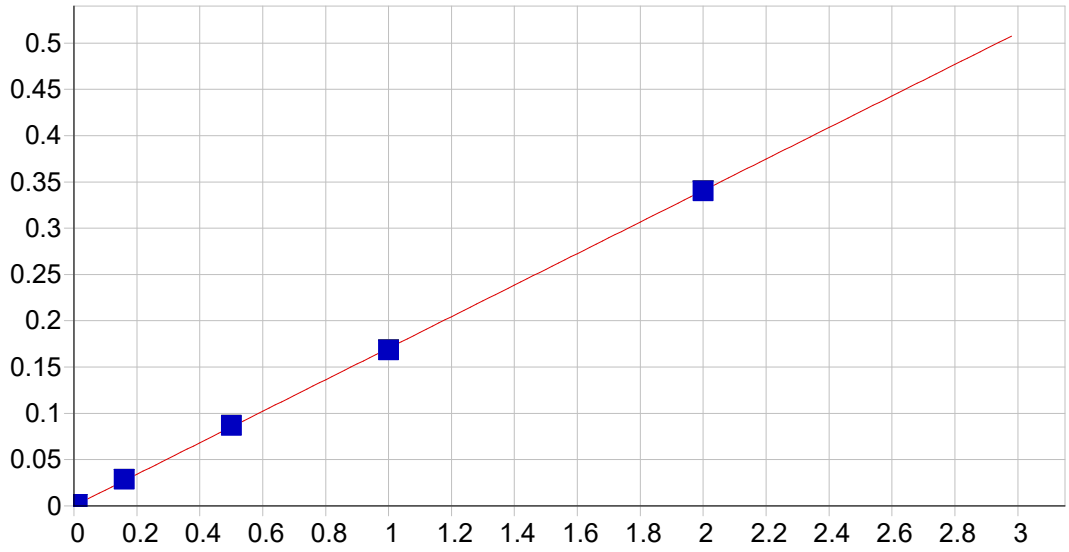


Ca 373.690 { 90}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001366	Re-Slope:	1.000000
A1 (Gain):	0.056645	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999870	Status:	OK.
Std Error of Est:	0.000484		
Predicted MDL:	0.007008		
Predicted MQL:	0.023361		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.00136	.000	1
S2	4.0000	4.1925	.193	4.81	.23885	.001	1
S3	12.500	12.817	.317	2.54	.72738	.004	1
S4	25.000	24.626	-.374	-1.50	1.3963	.004	1
S5	50.000	49.824	-.176	-.352	2.8236	.009	1
S1	2.0000	2.0404	.040	2.02	.11694	.000	1

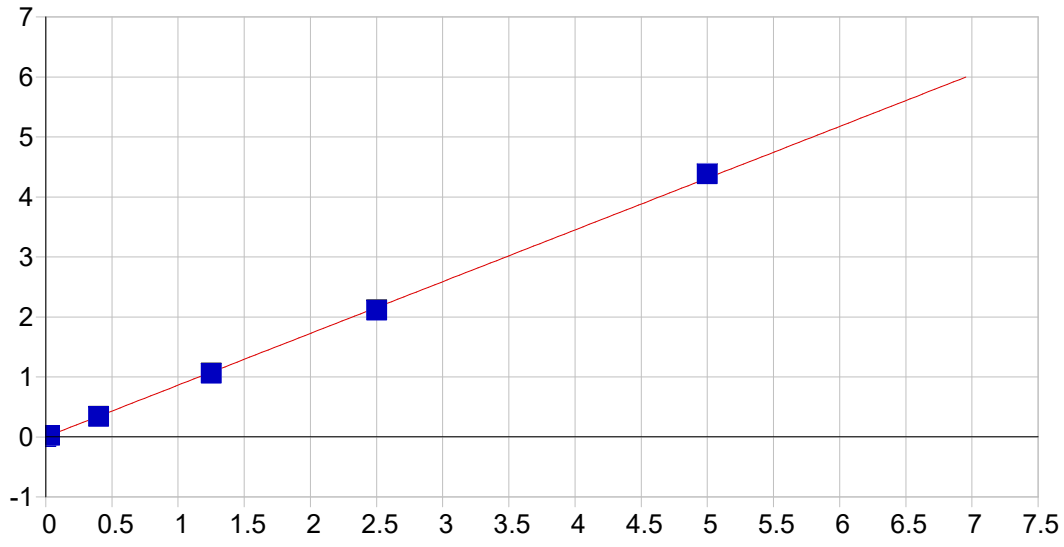


Cr 267.716 {126}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000081	Re-Slope:	1.000000
A1 (Gain):	0.170314	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999910	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.000438		
Predicted MQL:	0.001461		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00008	.000	1
S1	.01000	.00979	-.000	-2.11	.00175	.000	1
S3	.50000	.50905	.009	1.81	.08681	.000	1
S4	1.0000	.98719	-.013	-1.28	.16826	.001	1
S5	2.0000	1.9968	-.003	-.162	.34026	.000	1
S2	.16000	.16721	.007	4.51	.02857	.000	1

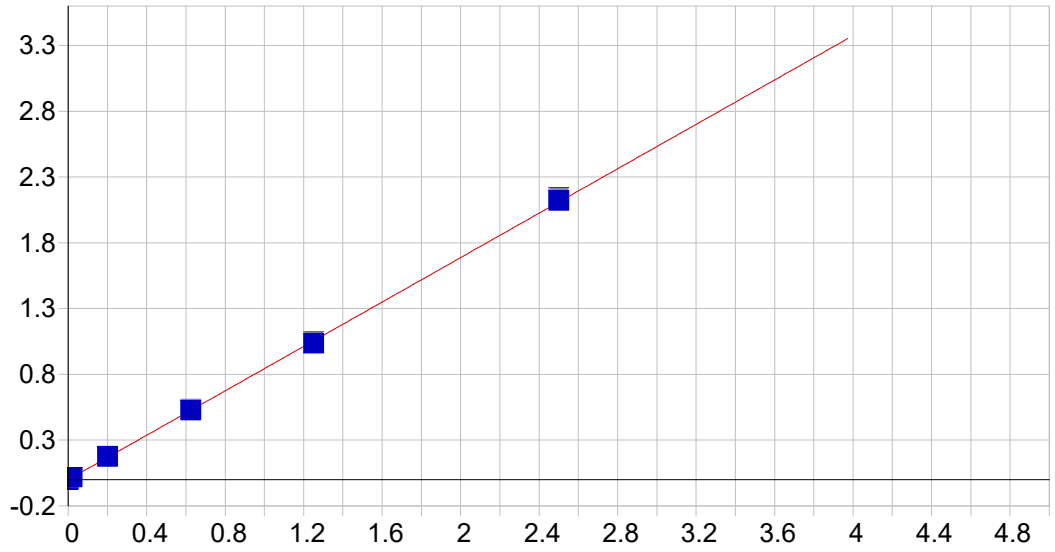


Co 228.616 {448}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000002	Re-Slope:	1.000000
A1 (Gain):	0.862341	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999837	Status:	OK.
Std Error of Est:	0.000317		
Predicted MDL:	0.000191		
Predicted MQL:	0.000635		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00000	.000	1
S1	.03000	.02895	-.001	-3.49	.02486	.000	1
S3	1.2500	1.2277	-.022	-1.78	1.0605	.002	1
S4	2.5000	2.4463	-.054	-2.15	2.1132	.007	1
S5	5.0000	5.0821	.082	1.64	4.3898	.004	1
S2	.40000	.39486	-.005	-1.28	.34109	.001	1

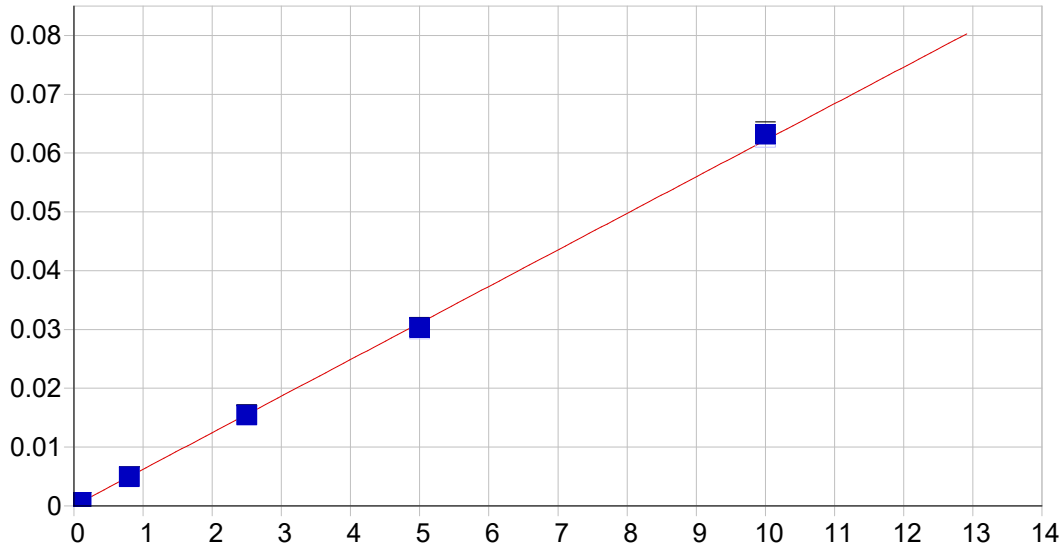


Cu 224.700 {450}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000534	Re-Slope:	1.000000
A1 (Gain):	0.844179	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999898	Status:	OK.
Std Error of Est:	0.000143		
Predicted MDL:	0.000379		
Predicted MQL:	0.001263		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00054	.000	1
S1	.02000	.02195	.002	9.74	.01821	.000	1
S3	.62500	.62461	-.000	-.063	.53178	.002	1
S4	1.2500	1.2273	-.023	-1.81	1.0456	.002	1
S5	2.5000	2.5136	.014	.543	2.1415	.004	1
S2	.20000	.20753	.008	3.76	.17627	.001	1

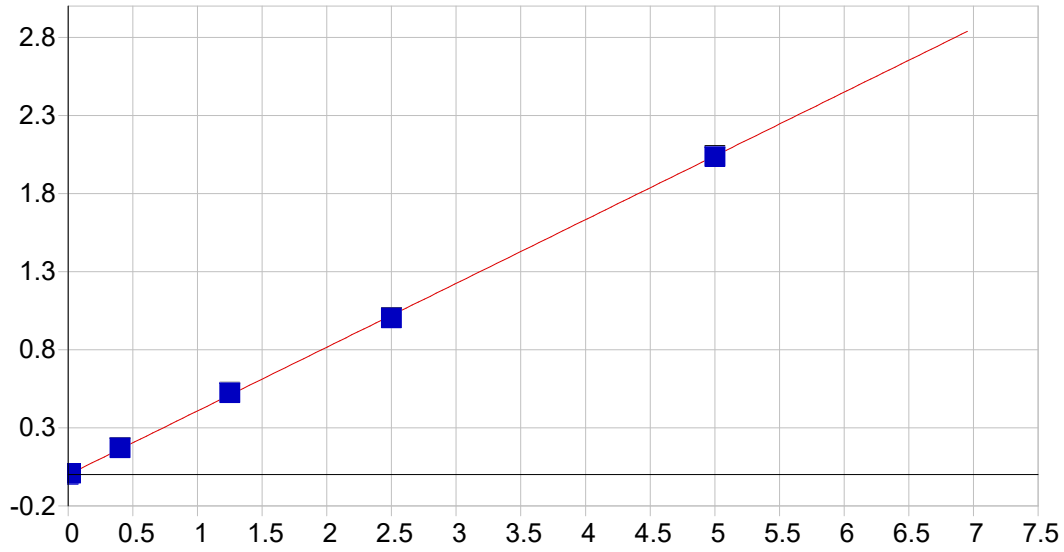


Fe 240.488 {140}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000021	Re-Slope:	1.000000
A1 (Gain):	0.006216	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999827	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.003868		
Predicted MQL:	0.012894		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00002	.000	1
S1	.10000	.09618	-.004	-3.82	.00061	.000	1
S3	2.5000	2.4828	-.017	-.690	.01532	.000	1
S4	5.0000	4.8689	-.131	-2.62	.03002	.000	1
S5	10.000	10.159	.159	1.59	.06263	.000	1
S2	.80000	.79360	-.006	-.800	.00491	.000	1

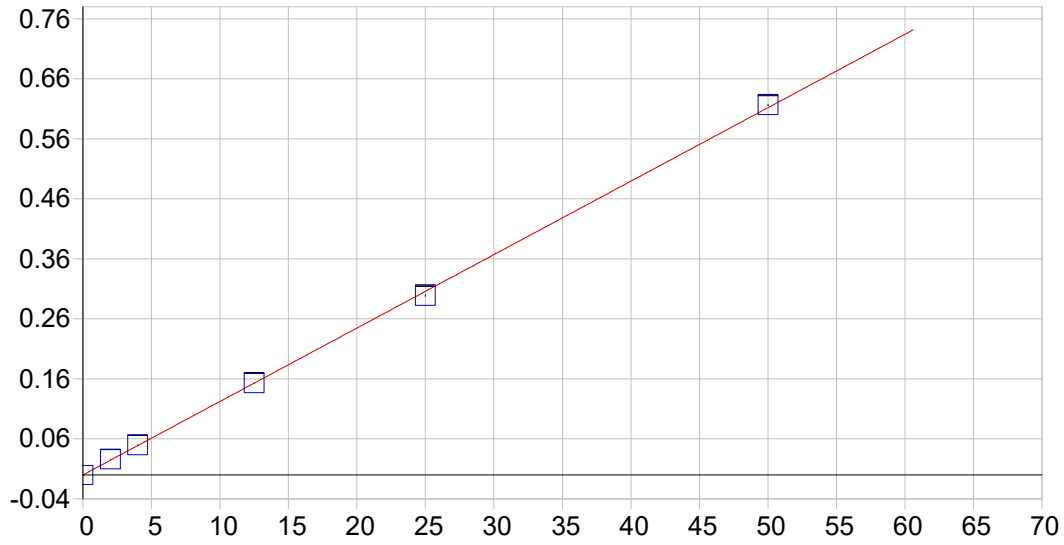


Mn 257.610 {131}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000018	Re-Slope:	1.000000
A1 (Gain):	0.408133	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999856	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.000373		
Predicted MQL:	0.001244		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00002	.000	1
S1	.02000	.02099	.001	4.95	.00855	.000	1
S3	1.2500	1.2844	.034	2.75	.52429	.002	1
S4	2.5000	2.4573	-.043	-1.71	1.0031	.002	1
S5	5.0000	4.9884	-.012	-.231	2.0363	.006	1
S2	.40000	.41893	.019	4.73	.17099	.001	1

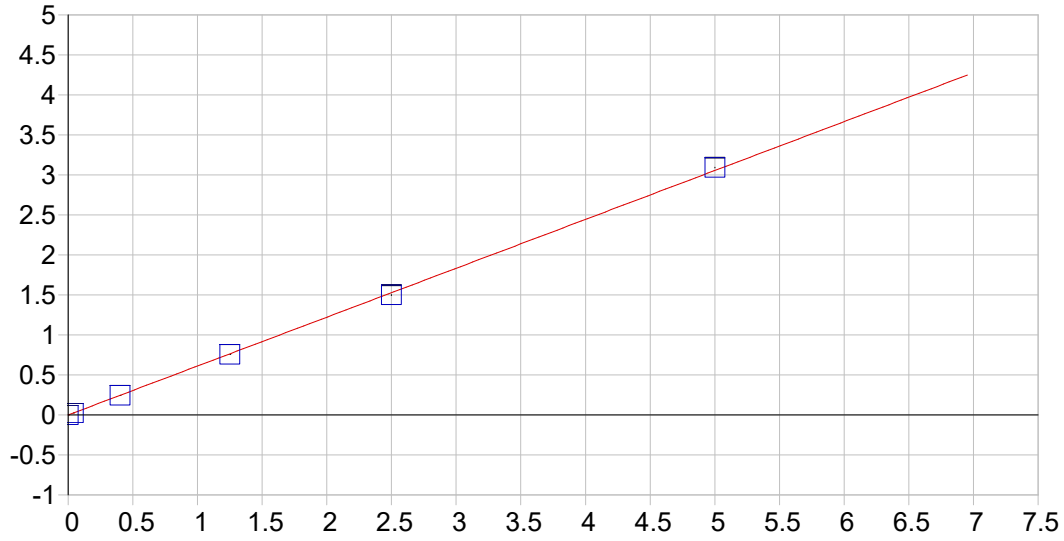


Mg 279.079 {121}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000042	Re-Slope:	1.000000
A1 (Gain):	0.012238	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999865	Status:	OK.
Std Error of Est:	0.000106		
Predicted MDL:	0.013469		
Predicted MQL:	0.044897		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00013	-.000	.000	-.00004	.000	1
S2	4.0000	4.0631	.063	1.58	.04968	.001	1
S3	12.500	12.519	.019	.151	.15316	.001	1
S4	25.000	24.418	-.582	-2.33	.29878	.001	1
S5	50.000	50.375	.375	.749	.61643	.001	1
S1	2.0000	2.1252	.125	6.26	.02597	.000	1

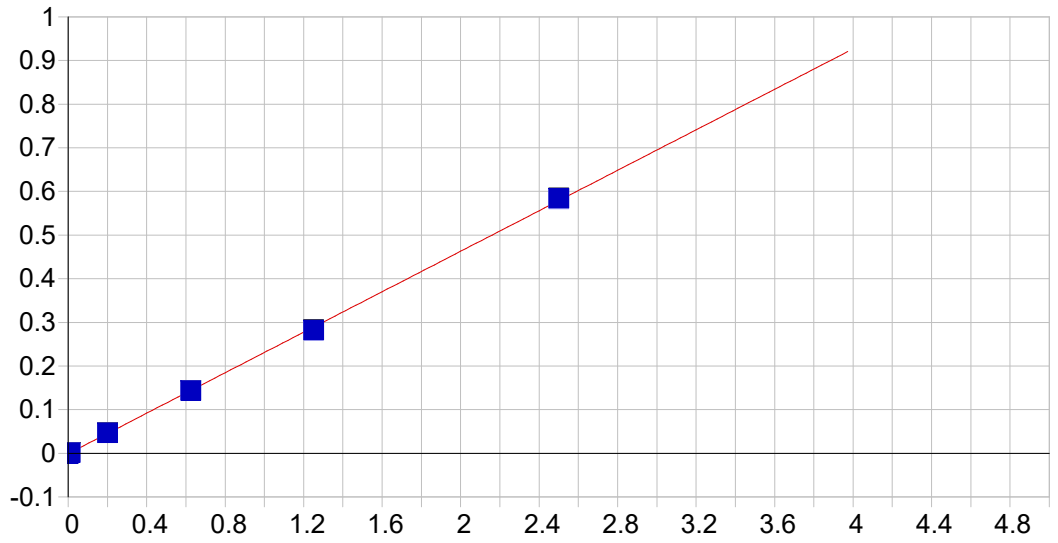


Ni 231.604 {446}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000108	Re-Slope:	1.000000
A1 (Gain):	0.610991	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999897	Status:	OK.
Std Error of Est:	0.000205		
Predicted MDL:	0.000302		
Predicted MQL:	0.001006		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00011	.000	1
S1	.04000	.03896	-.001	-2.60	.02370	.000	1
S3	1.2500	1.2362	-.014	-1.11	.75517	.001	1
S4	2.5000	2.4522	-.048	-1.91	1.4982	.005	1
S5	5.0000	5.0629	.063	1.26	3.0933	.004	1
S2	.40000	.39979	-.000	-.052	.24416	.000	1

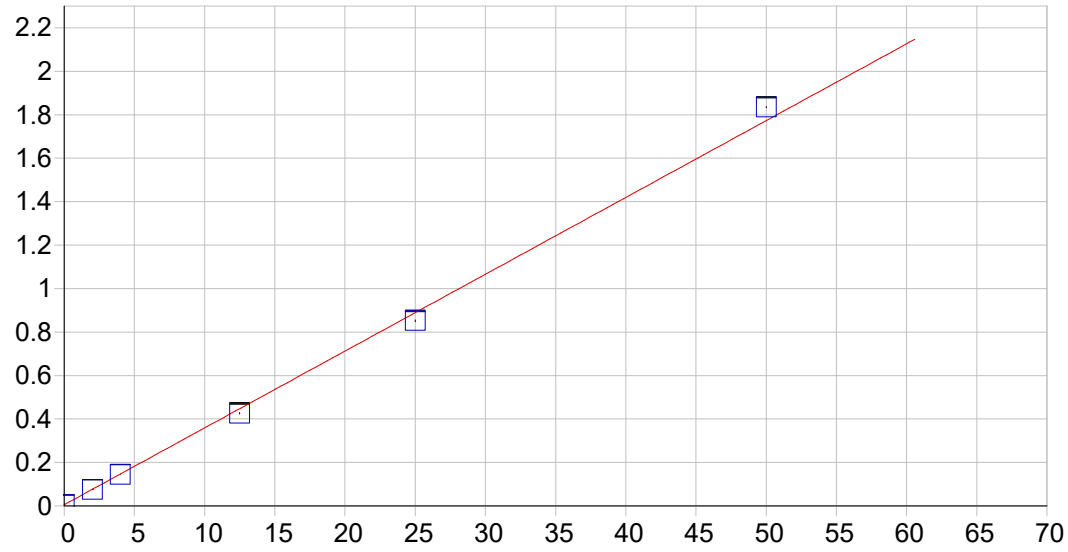


Ag 328.068 {103}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000905	Re-Slope:	1.000000
A1 (Gain):	0.231925	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999880	Status:	OK.
Std Error of Est:	0.000030		
Predicted MDL:	0.000410		
Predicted MQL:	0.001367		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00091	.000	1
S1	.01000	.01020	.000	2.04	.00145	.000	1
S3	.62500	.62348	-.002	-.243	.14312	.000	1
S4	1.2500	1.2211	-.029	-2.31	.28115	.000	1
S5	2.5000	2.5242	.024	.970	.58223	.000	1
S2	.20000	.20596	.006	2.98	.04668	.000	1

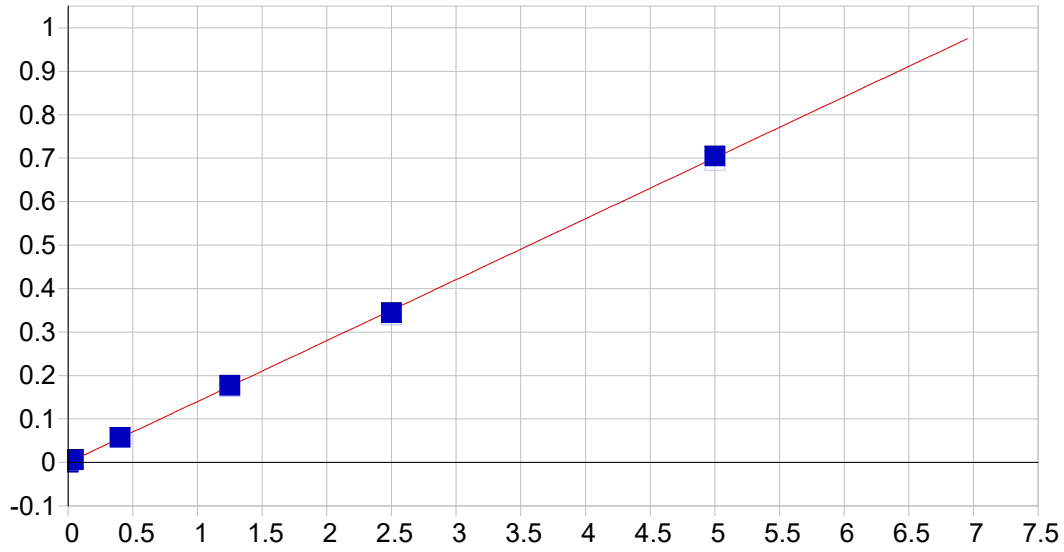


Na 589.592 { 57}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005518	Re-Slope:	1.000000
A1 (Gain):	0.035346	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999278	Status:	OK.
Std Error of Est:	0.000711		
Predicted MDL:	0.004651		
Predicted MQL:	0.015503		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00017	.000	.000	.00552	.000	1
S2	4.0000	3.9414	-.059	-1.47	.14483	.001	1
S3	12.500	11.896	-.604	-4.84	.42598	.003	1
S4	25.000	23.953	-1.05	-4.19	.85217	.004	1
S5	50.000	51.741	1.74	3.48	1.8344	.003	1
S1	2.0000	1.9692	-.031	-1.54	.07512	.000	1

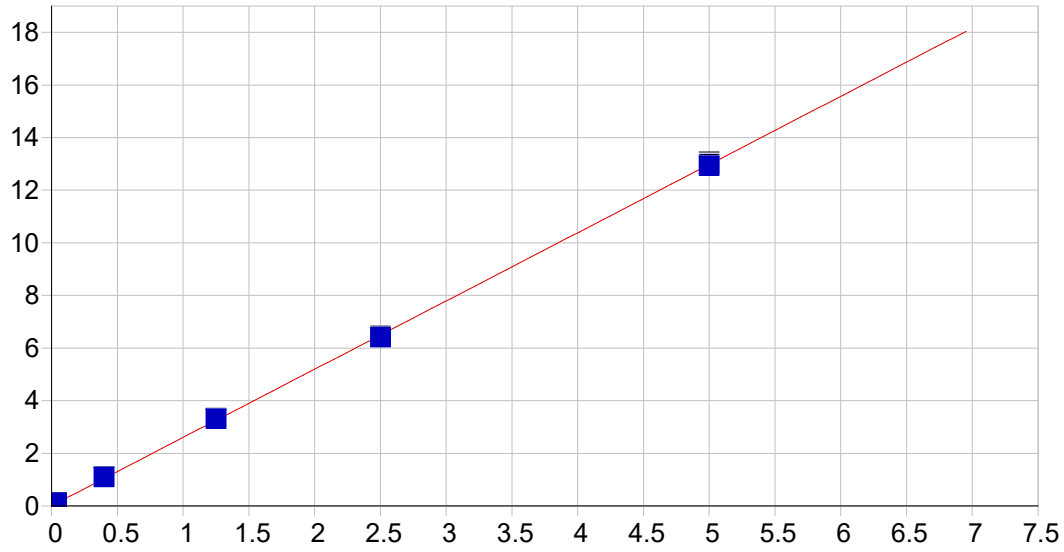


V 292.402 {115}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000011	Re-Slope:	1.000000
A1 (Gain):	0.140192	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999923	Status:	OK.
Std Error of Est:	0.000040		
Predicted MDL:	0.001306		
Predicted MQL:	0.004353		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.04000	.04127	.001	3.18	.00557	.000	1
S3	1.2500	1.2604	.010	.832	.17413	.001	1
S4	2.5000	2.4537	-.046	-1.85	.33887	.000	1
S5	5.0000	5.0243	.024	.487	.69414	.000	1
S2	.40000	.41031	.010	2.58	.05669	.000	1

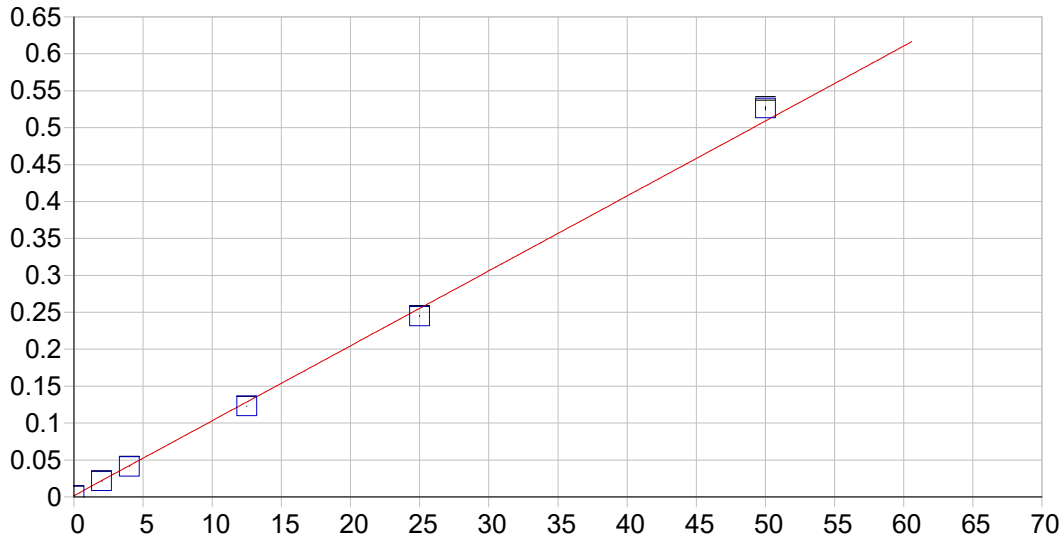


Zn 213.856 {158}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008352	Re-Slope:	1.000000
A1 (Gain):	2.593739	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999859	Status:	OK.
Std Error of Est:	0.001030		
Predicted MDL:	0.000279		
Predicted MQL:	0.000929		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00833	.000	1
S1	.04000	.04543	.005	13.6	.12691	.001	1
S3	1.2500	1.2713	.021	1.70	3.3282	.006	1
S4	2.5000	2.4689	-.031	-1.24	6.4571	.005	1
S5	5.0000	4.9835	-.016	-.329	13.025	.050	1
S2	.40000	.42086	.021	5.21	1.1072	.000	1

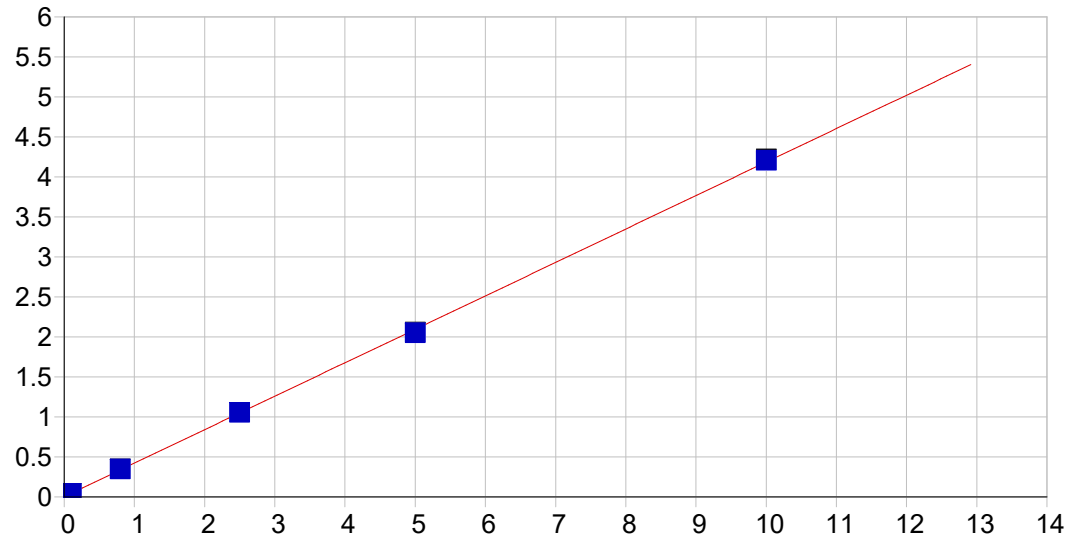


K 766.490 { 44}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001715	Re-Slope:	1.000000
A1 (Gain):	0.010145	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999312	Status:	OK.
Std Error of Est:	0.000199		
Predicted MDL:	0.019000		
Predicted MQL:	0.063333		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00019	.000	.000	.00172	.000	1
S2	4.0000	3.9095	-.090	-2.26	.04138	.000	1
S3	12.500	11.944	-.556	-4.45	.12289	.000	1
S4	25.000	23.969	-1.03	-4.12	.24490	.001	1
S5	50.000	51.715	1.71	3.43	.52639	.002	1
S1	2.0000	1.9619	-.038	-1.91	.02162	.000	1

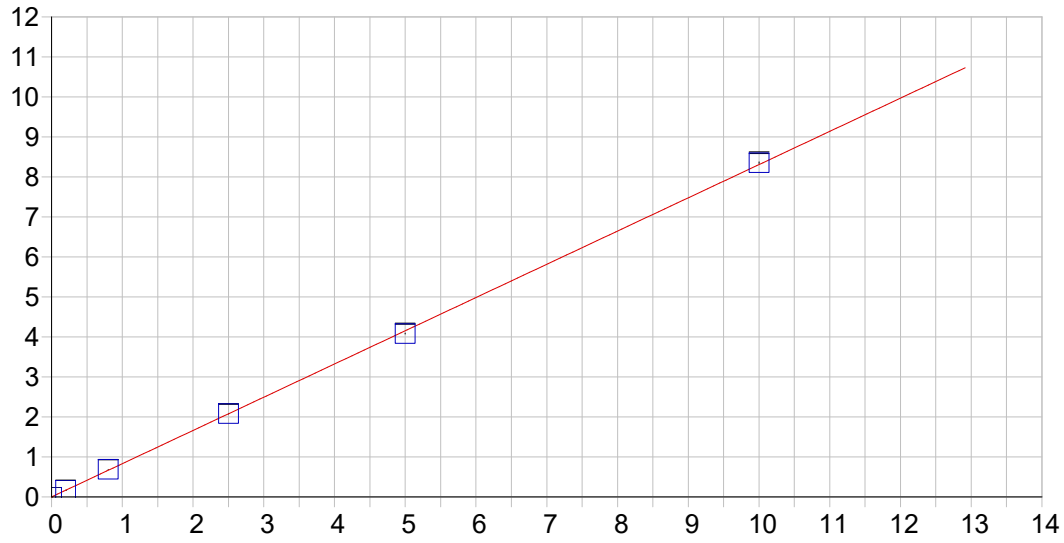


B 249.678 {135}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003848	Re-Slope:	1.000000
A1 (Gain):	0.418127	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999918	Status:	OK.
Std Error of Est:	0.000281		
Predicted MDL:	0.000880		
Predicted MQL:	0.002933		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00385	.000	1
S1	.10000	.10383	.004	3.83	.04708	.000	1
S3	2.5000	2.5177	.018	.710	1.0545	.001	1
S4	5.0000	4.9018	-.098	-1.96	2.0493	.009	1
S5	10.000	10.057	.057	.567	4.2007	.014	1
S2	.80000	.81996	.020	2.49	.34604	.002	1

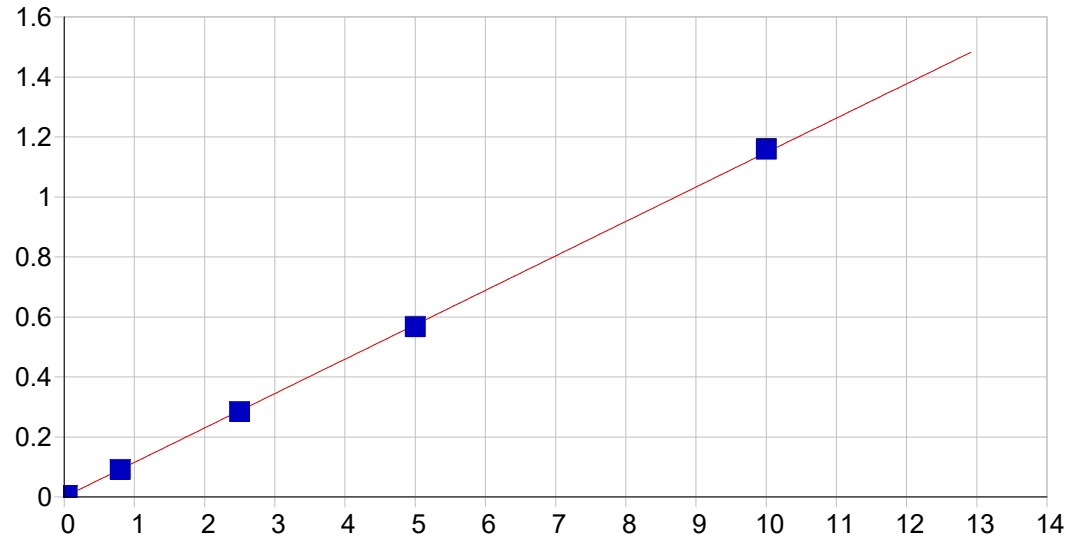


Mo 202.030 {467}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000437	Re-Slope:	1.000000
A1 (Gain):	0.830540	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999932	Status:	OK.
Std Error of Est:	0.000722		
Predicted MDL:	0.000250		
Predicted MQL:	0.000834		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00043	.000	1
S1	.20000	.19980	-.000	-.100	.16638	.000	1
S3	2.5000	2.5016	.002	.066	2.0782	.004	1
S4	5.0000	4.9146	-.085	-1.71	4.0822	.011	1
S5	10.000	10.060	.060	.603	8.3559	.022	1
S2	.80000	.82363	.024	2.95	.68450	.002	1

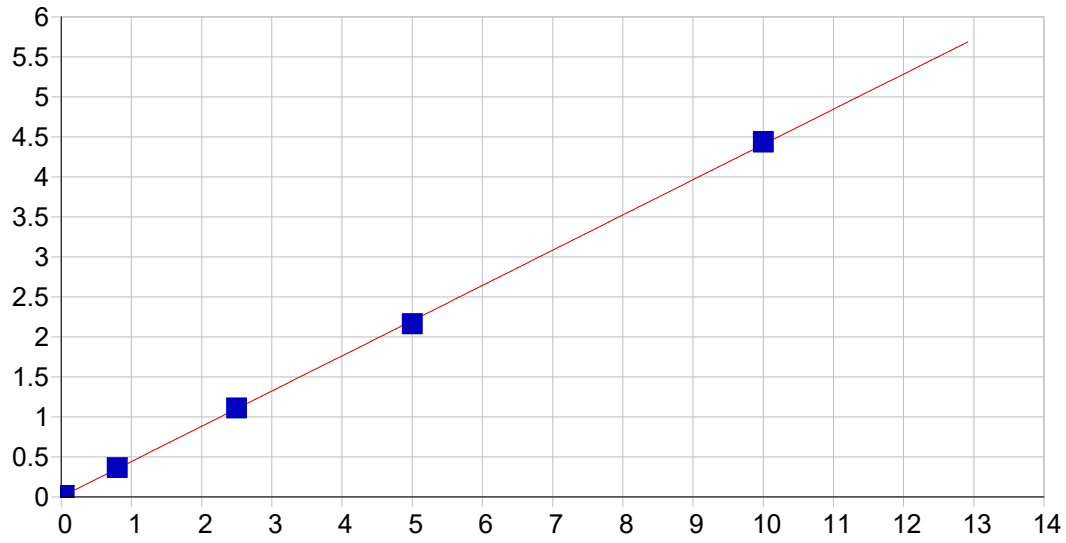


Sn 189.989 {478}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000134	Re-Slope:	1.000000
A1 (Gain):	0.114743	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999942	Status:	OK.
Std Error of Est:	0.000041		
Predicted MDL:	0.000763		
Predicted MQL:	0.002544		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00013	.000	1
S1	.04000	.03863	-.001	-3.42	.00456	.000	1
S3	2.5000	2.4743	-.026	-1.03	.28375	.000	1
S4	5.0000	4.9362	-.064	-1.28	.56594	.002	1
S5	10.000	10.097	.097	.974	1.1576	.002	1
S2	.80000	.79346	-.007	-.818	.09108	.000	1

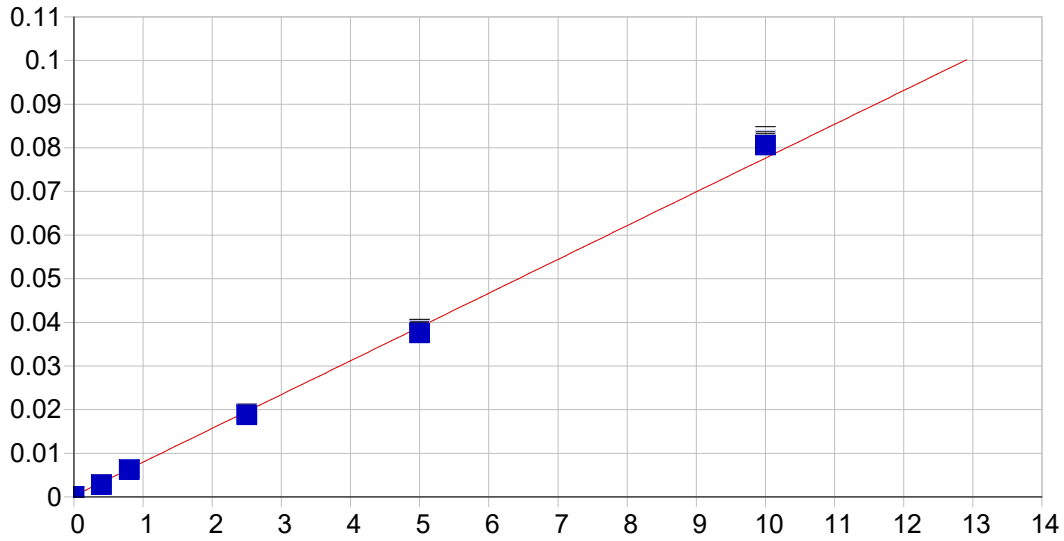


Ti 336.121 {100}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001824	Re-Slope:	1.000000
A1 (Gain):	0.440289	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000178		
Predicted MDL:	0.000567		
Predicted MQL:	0.001888		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00182	.000	1
S1	.04000	.03944	-.001	-1.39	.01918	.000	1
S3	2.5000	2.5120	.012	.482	1.1075	.001	1
S4	5.0000	4.9055	-.095	-1.89	2.1609	.002	1
S5	10.000	10.063	.063	.632	4.4310	.009	1
S2	.80000	.81980	.020	2.47	.36264	.000	1

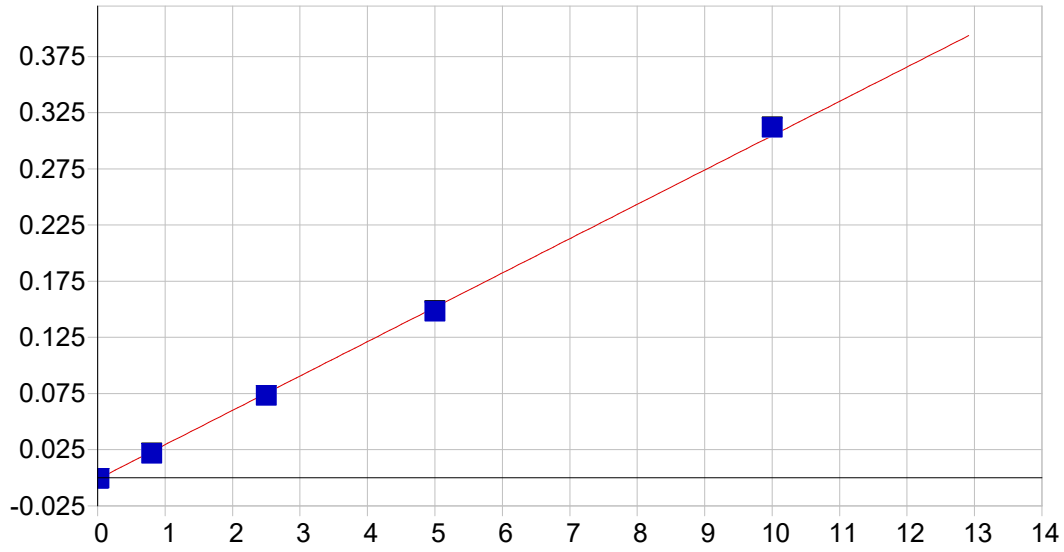


Si 288.158 {117}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000232	Re-Slope:	1.000000
A1 (Gain):	0.007742	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998965	Status:	OK.
Std Error of Est:	0.000038		
Predicted MDL:	0.005345		
Predicted MQL:	0.017816		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00010	.000	.000	.00023	.000	1
S1	.40000	.32638	-.074	-18.4	.00276	.000	1
S3	2.5000	2.3994	-.101	-4.03	.01910	.000	1
S4	5.0000	4.8179	-.182	-3.64	.03811	.000	1
S5	10.000	10.383	.383	3.83	.08178	.001	1
S2	.80000	.77229	-.028	-3.46	.00630	.000	1

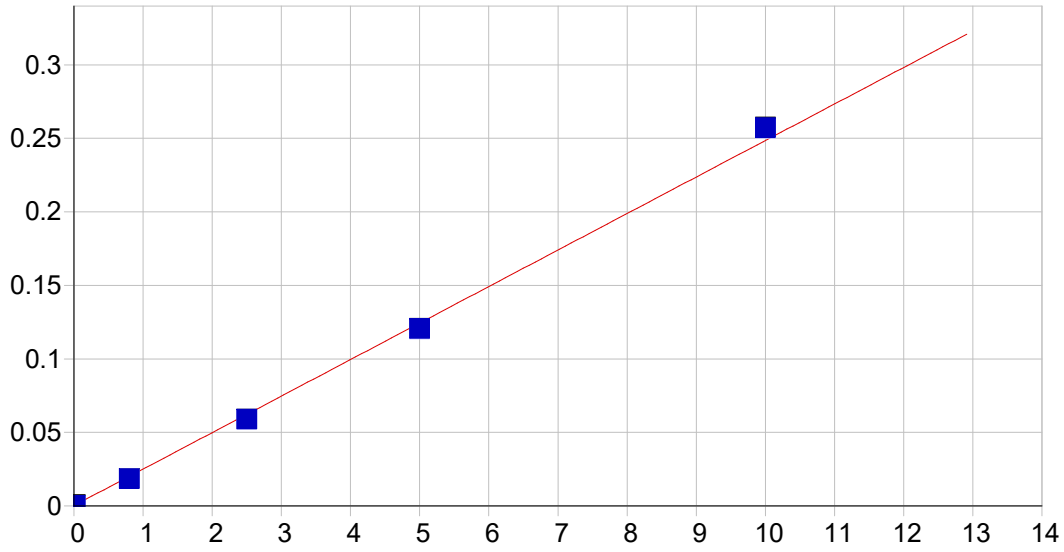


P 177.495 {490}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001100	Re-Slope:	1.000000
A1 (Gain):	0.030573	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999629	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.002657		
Predicted MQL:	0.008858		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00110	.000	1
S1	.02000	.01812	-.002	-9.41	-.00055	.000	1
S3	2.5000	2.4341	-.066	-2.64	.07331	.000	1
S4	5.0000	4.8813	-.119	-2.37	.14811	.001	1
S5	10.000	10.237	.237	2.37	.31184	.000	1
S2	.80000	.74924	-.051	-6.35	.02180	.000	1

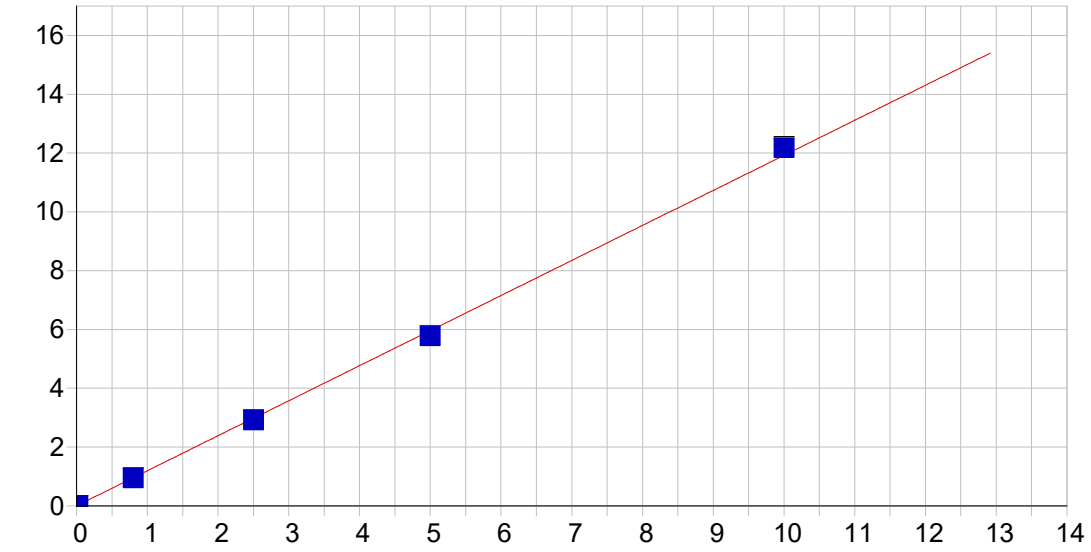


S 182.034 {485}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000207	Re-Slope:	1.000000
A1 (Gain):	0.024834	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999184	Status:	OK.
Std Error of Est:	0.000023		
Predicted MDL:	0.003252		
Predicted MQL:	0.010840		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00021	.000	1
S1	.02000	.01867	-.001	-6.63	.00065	.000	1
S3	2.5000	2.3639	-.136	-5.45	.05875	.000	1
S4	5.0000	4.8437	-.156	-3.13	.12017	.000	1
S5	10.000	10.355	.355	3.55	.25673	.000	1
S2	.80000	.73825	-.062	-7.72	.01849	.000	1

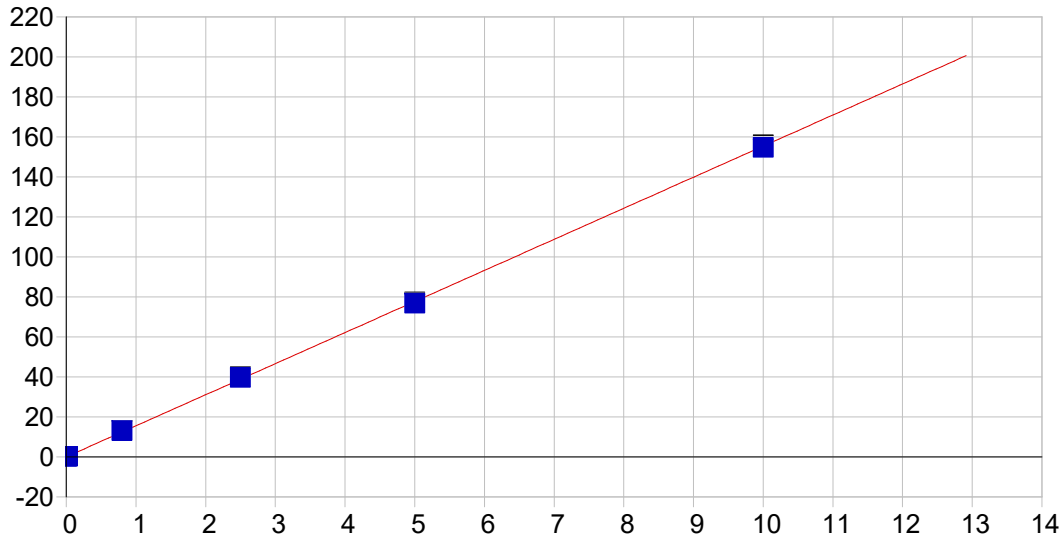


Li 670.784 { 50}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001956	Re-Slope:	1.000000
A1 (Gain):	1.192114	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999704	Status:	OK.
Std Error of Est:	0.000680		
Predicted MDL:	0.000660		
Predicted MQL:	0.002202		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00196	.001	1
S5	10.000	10.217	.217	2.17	12.192	.030	1
S4	5.0000	4.8430	-.157	-3.14	5.7807	.019	1
S3	2.5000	2.4455	-.055	-2.18	2.9199	.012	1
S1	.02000	.01913	-.001	-4.37	.02519	.001	1
S2	.80000	.79590	-.004	-.512	.95162	.002	1

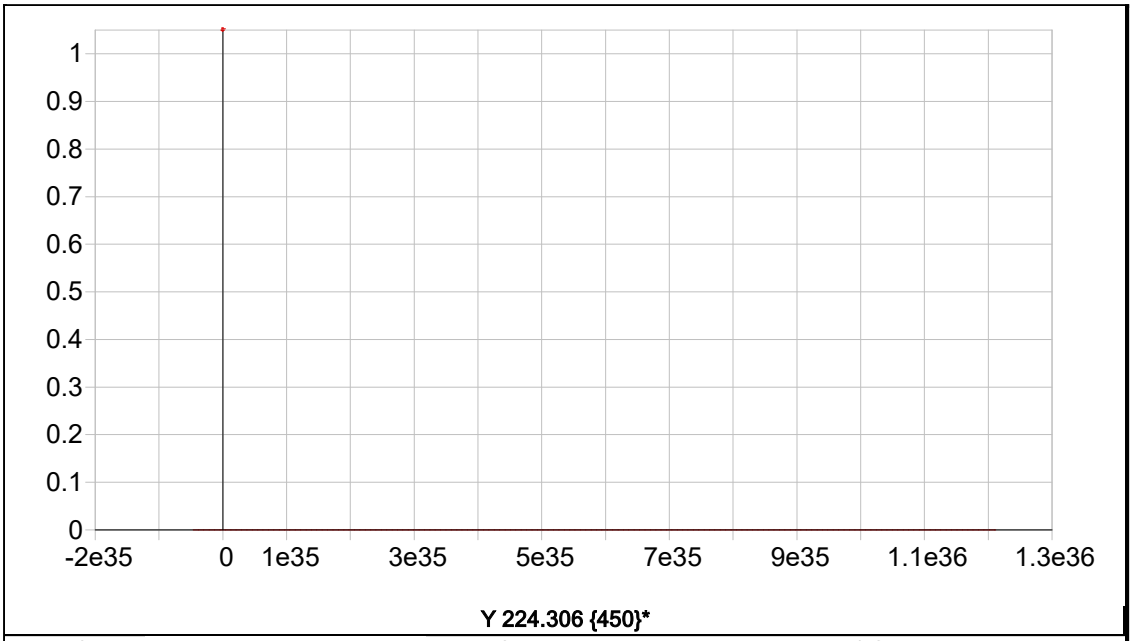


Sr 407.771 { 83}

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000246	Re-Slope:	1.000000
A1 (Gain):	15.539270	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999887	Status:	OK.
Std Error of Est:	0.005473		
Predicted MDL:	0.000030		
Predicted MQL:	0.000100		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00022	.000	1
S1	.02000	.02073	.001	3.63	.32387	.001	1
S3	2.5000	2.5578	.058	2.31	39.786	.217	1
S4	5.0000	4.9429	-.057	-1.14	76.887	.495	1
S5	10.000	9.9590	-.041	-.410	154.91	1.11	1
S2	.80000	.83955	.040	4.94	13.059	.023	1

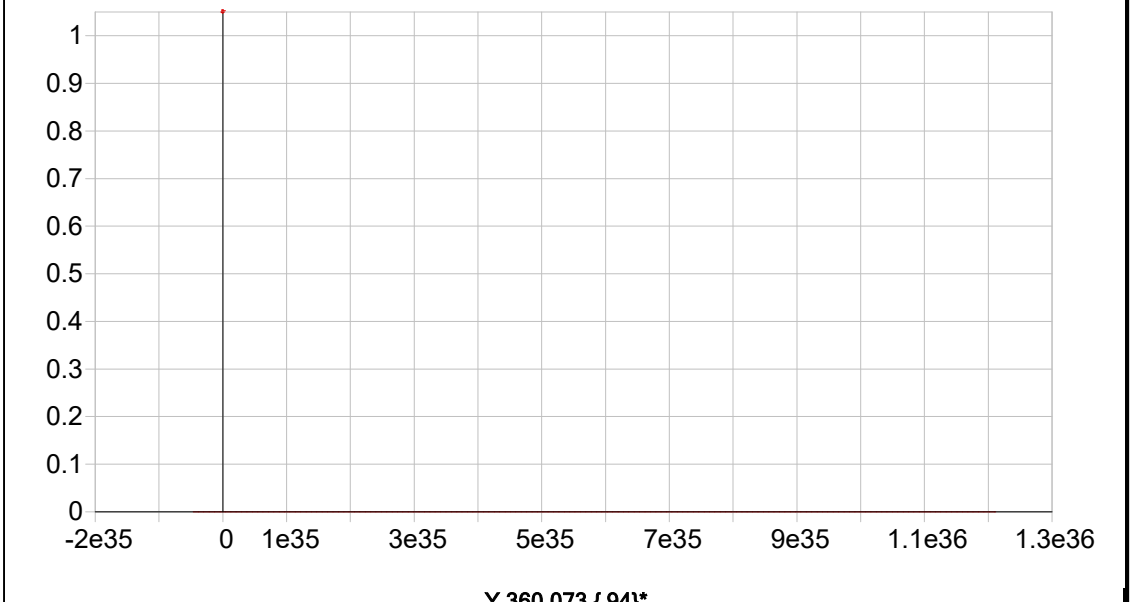


Y 224.306 {450}*

Date of Fit:	12/16/2024 15:58:37	Type of Fit:	Linear	Weighting:	1/Conc

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

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



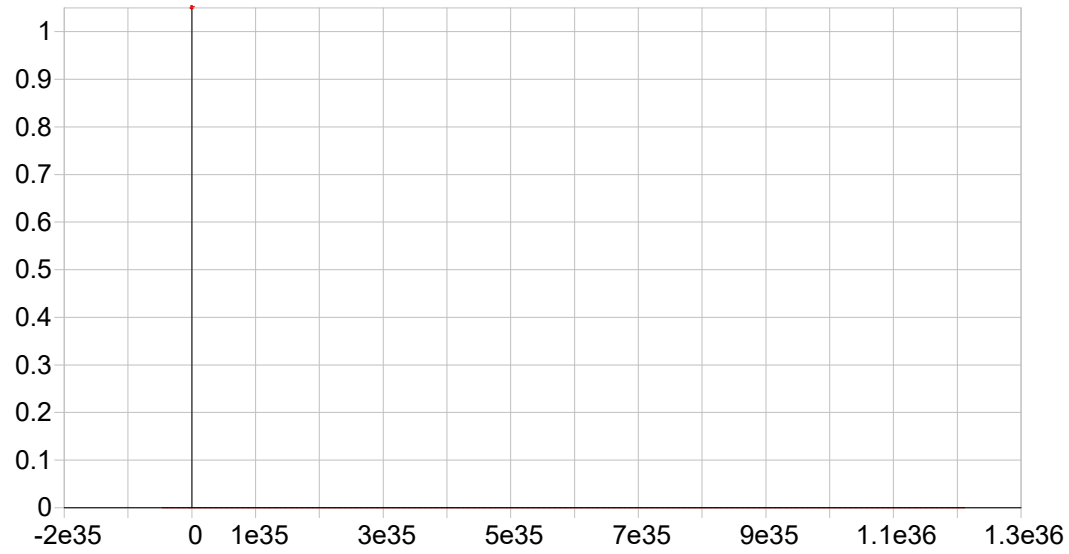
Y 360.073 { 94}*

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

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

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

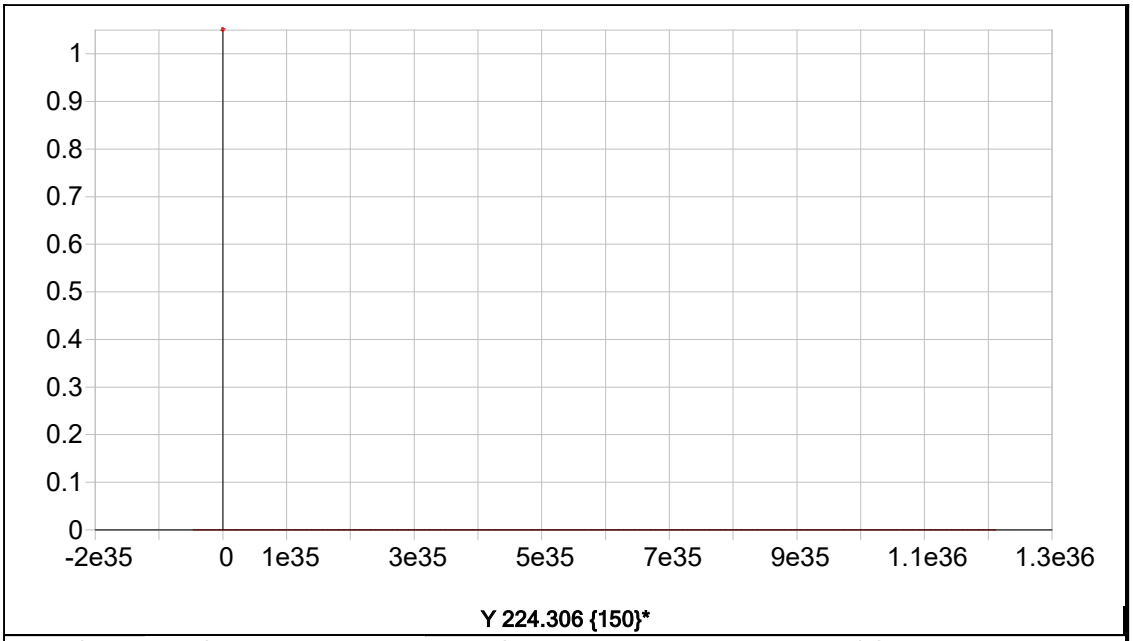
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

Date of Fit:	<not fit>		Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):		0.000000		Re-Slope:	1.000000	
A1 (Gain):		0.000000		Y-int:	0.000000	
A2 (Curvature):		0.000000				
n (Exponent):		1.000000				
Correlation:		0.000000		Status:	Warning	Zero Gain
Std Error of Est:		0.000000				
Predicted MDL:		n/a				
Predicted MQL:		n/a				

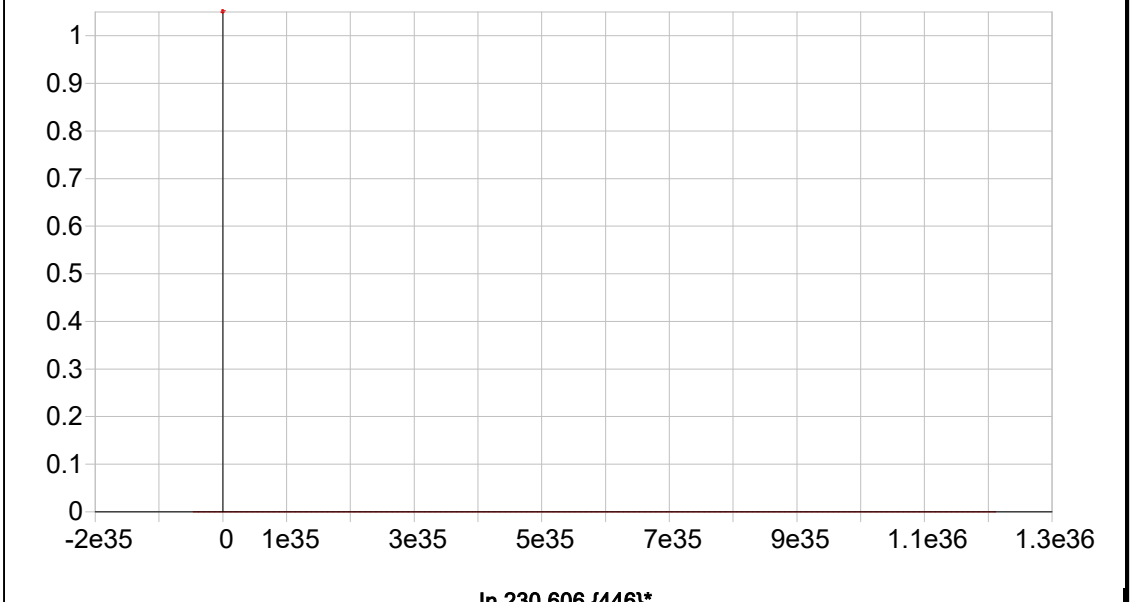
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 224.306 {150}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000		Status:	Warning	Zero Gain
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

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



In 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	

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

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S0 Acquired: 12/16/2024 15:36:07 Type: Cal
Method: NON EPA-6010-200.7(v2527) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00013**	**.00016**	**-.00036**	**.00041**	**.00040**	**-.00013**	**-.01126**	**-.00040**
Stddev	.00007	.00005	.00009	.00009	.00013	.00018	.00143	.00019
%RSD	52.604	34.126	25.386	21.346	33.708	140.33	12.674	48.609
#1	-.00006	.00020	-.00045	.00031	.00039	-.00024	-.01035	-.00018
#2	-.00020	.00010	-.00027	.00047	.00027	.00008	-.01053	-.00046
#3	-.00013	.00017	-.00035	.00044	.00053	-.00022	-.01291	-.00056

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	**.00005**	**.00136**	**.00008**	**-.00000**	**-.00054**	**.00002**	**-.00002**	**-.00004**
Stddev	.00015	.00018	.00005	.00012	.00015	.00001	.00019	.00009
%RSD	302.03	13.567	65.156	38234.	27.871	72.007	1012.7	209.45
#1	.00002	.00131	.00004	.00013	-.00059	.00004	.00014	-.00005
#2	-.00008	.00156	.00006	-.00010	-.00065	.00001	-.00023	-.00013
#3	.00021	.00121	.00014	-.00003	-.00037	.00001	.00004	.00005

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00011**	**-.00091**	**.00552**	**-.00001**	**.00833**	**.00172**	**.00385**	**.00043**
Stddev	.00002	.00005	.00048	.00015	.00035	.00038	.00027	.00027
%RSD	18.428	6.0298	8.7284	1373.5	4.2130	22.145	7.0710	61.226
#1	-.00012	-.00094	.00500	.00002	.00805	.00152	.00353	.00036
#2	-.00011	-.00084	.00563	.00013	.00823	.00148	.00399	.00073
#3	-.00009	-.00094	.00594	-.00017	.00872	.00215	.00402	.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	**.00013**	**.00182**	**.00023**	**-.00110**	**.00021**	**.00196**	**.00022**
Stddev	.00008	.00013	.00001	.00006	.00010	.00080	.00024
%RSD	57.419	7.3332	3.9496	5.8081	50.076	40.659	108.33
#1	.00022	.00175	.00022	-.00109	.00028	.00105	.00016
#2	.00012	.00174	.00023	-.00104	.00009	.00227	.00002
#3	.00006	.00198	.00024	-.00117	.00025	.00255	.00048

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S0 Acquired: 12/16/2024 15:36:07 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	2491.3	58427.	12714.	2081.7	4531.2
Stddev	2.1	154.	4.	8.1	6.7
%RSD	.08255	.26307	.03212	.39120	.14793
#1	2493.0	58323.	12718.	2075.5	4537.3
#2	2491.8	58353.	12710.	2078.7	4532.3
#3	2489.0	58603.	12716.	2091.0	4524.0

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S1 Acquired: 12/16/2024 15:40:35 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	**.00072**	**.00199**	**.00228**	**.00225**	**.01120**	**.00947**	**.27509**	**.01788**
Stddev	.00008	.00001	.00009	.00013	.00024	.00011	.00118	.00015
%RSD	10.586	.68942	4.0771	5.9791	2.1137	1.1544	.42931	.83415
#1	.00064	.00201	.00226	.00217	.01095	.00941	.27404	.01778
#2	.00079	.00199	.00238	.00240	.01122	.00960	.27488	.01805
#3	.00074	.00198	.00219	.00217	.01142	.00942	.27637	.01781

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	**.01261**	**.11694**	**.00175**	**.02486**	**.01821**	**.00061**	**.00855**	**.02597**
Stddev	.00006	.00042	.00003	.00018	.00011	.00002	.00008	.00020
%RSD	.50025	.35962	1.6421	.72150	.60089	3.3303	.88089	.76674
#1	.01260	.11686	.00178	.02506	.01818	.00059	.00850	.02613
#2	.01255	.11657	.00175	.02478	.01812	.00061	.00864	.02574
#3	.01267	.11740	.00172	.02473	.01833	.00063	.00852	.02603

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	**.02370**	**.00145**	**.07512**	**.00557**	**.12691**	**.02162**	**.04708**	**.16638**
Stddev	.00015	.00004	.00010	.00011	.00077	.00011	.00017	.00024
%RSD	.61360	2.9418	.13276	1.9983	.60865	.50283	.36723	.14419
#1	.02361	.00144	.07503	.00566	.12603	.02169	.04701	.16613
#2	.02361	.00140	.07523	.00559	.12749	.02167	.04695	.16661
#3	.02386	.00149	.07511	.00544	.12721	.02149	.04728	.16640

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	**.00456**	**.01918**	**.00276**	**-.00055**	**.00065**	**.02519**	**.32387**
Stddev	.00009	.00005	.00003	.00003	.00010	.00056	.00139
%RSD	2.0714	.25608	1.2255	6.2230	15.186	2.2255	.42918
#1	.00452	.01922	.00274	-.00055	.00069	.02577	.32230
#2	.00467	.01918	.00280	-.00058	.00054	.02465	.32496
#3	.00450	.01913	.00275	-.00051	.00072	.02514	.32435

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S1 Acquired: 12/16/2024 15:40:35 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	**2483.1**	**57509.**	**12802.**	**2079.1**	**4414.1**
Stddev	4.8	23.	9.	7.7	4.5
%RSD	.19259	.04025	.07160	.37065	.10096
#1	2479.2	57510.	12795.	2070.2	4410.3
#2	2488.4	57486.	12813.	2083.6	4419.0
#3	2481.8	57532.	12800.	2083.5	4413.0

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S2 Acquired: 12/16/2024 15:45:01 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	**.04159**	**.04167**	**.18994**	**.07894**	**.17770**	**.14207**	**4.7650**	**.12676**
Stddev	.00025	.00029	.00013	.00029	.00068	.00028	.0056	.00025
%RSD	.59432	.69366	.06945	.36706	.38046	.19514	.11679	.19342
#1	.04180	.04199	.19007	.07917	.17835	.14224	4.7691	.12689
#2	.04166	.04143	.18993	.07861	.17700	.14175	4.7587	.12692
#3	.04132	.04160	.18981	.07903	.17774	.14222	4.7673	.12648

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	**.86104**	**.23885**	**.02857**	**.34109**	**.17627**	**.00491**	**.17099**	**.04968**
Stddev	.00050	.00092	.00009	.00059	.00062	.00002	.00080	.00053
%RSD	.05754	.38537	.30594	.17227	.35092	.39528	.47074	1.0768
#1	.86062	.23825	.02867	.34048	.17679	.00489	.17067	.04976
#2	.86091	.23839	.02854	.34113	.17642	.00492	.17040	.04911
#3	.86159	.23991	.02850	.34165	.17559	.00492	.17191	.05018

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	**.24416**	**.04668**	**.14483**	**.05669**	**1.1072**	**.04138**	**.34604**	**.68450**
Stddev	.00043	.00019	.00060	.00009	.0004	.00035	.00210	.00202
%RSD	.17777	.40710	.41153	.16313	.03876	.85598	.60761	.29568
#1	.24405	.04649	.14512	.05671	1.1067	.04102	.34366	.68683
#2	.24464	.04687	.14523	.05659	1.1076	.04172	.34682	.68332
#3	.24379	.04667	.14415	.05678	1.1072	.04140	.34764	.68333

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	**.09108**	**.36264**	**.00630**	**.02180**	**.01849**	**.95162**	**13.059**
Stddev	.00027	.00040	.00004	.00014	.00004	.00234	.023
%RSD	.30057	.11093	.57672	.62916	.23861	.24606	.17678
#1	.09077	.36233	.00634	.02191	.01849	.95129	13.041
#2	.09125	.36251	.00630	.02165	.01845	.95411	13.051
#3	.09123	.36310	.00627	.02185	.01853	.94946	13.085

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S2 Acquired: 12/16/2024 15:45:01 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	2530.3	57542.	12869.	2109.4	4439.3
Stddev	12.3	51.	22.	5.1	12.0
%RSD	.48636	.08904	.17137	.24044	.27059
#1	2516.1	57487.	12876.	2115.2	4425.9
#2	2537.8	57553.	12886.	2107.0	4442.9
#3	2537.0	57588.	12844.	2106.0	4449.1

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S3 Acquired: 12/16/2024 15:49:21 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	.12855	.12577	.58648	.24169	.54538	.43479	14.592	.38978
Stddev	.00014	.00120	.00069	.00078	.00098	.00108	.021	.00032
%RSD	.11269	.95266	.11745	.32096	.17920	.24901	.14381	.08127
#1	.12871	.12691	.58604	.24258	.54614	.43457	14.579	.38947
#2	.12843	.12590	.58728	.24122	.54428	.43382	14.616	.39010
#3	.12851	.12452	.58613	.24126	.54571	.43596	14.580	.38977

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	2.6828	.72738	.08681	1.0605	.53178	.01532	.52429	.15316
Stddev	.0039	.00448	.00034	.0021	.00171	.00003	.00249	.00072
%RSD	.14444	.61651	.39637	.20192	.32170	.19480	.47399	.46969
#1	2.6785	.72237	.08711	1.0589	.53263	.01529	.52182	.15235
#2	2.6838	.72875	.08643	1.0598	.52981	.01532	.52427	.15371
#3	2.6860	.73103	.08687	1.0630	.53289	.01535	.52679	.15342

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	.75517	.14312	.42598	.17413	3.3282	.12289	1.0545	2.0782
Stddev	.00067	.00008	.00340	.00071	.0059	.00038	.0014	.0044
%RSD	.08841	.05335	.79855	.40699	.17606	.31310	.13307	.21251
#1	.75458	.14312	.42989	.17351	3.3343	.12333	1.0530	2.0823
#2	.75504	.14304	.42371	.17398	3.3226	.12275	1.0557	2.0735
#3	.75589	.14320	.42433	.17490	3.3279	.12260	1.0549	2.0787

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	.28375	1.1075	.01910	.07331	.05875	2.9199	39.786
Stddev	.00033	.0012	.00001	.00010	.00009	.0115	.217
%RSD	.11699	.10363	.03185	.13437	.16129	.39391	.54561
#1	.28338	1.1062	.01910	.07340	.05867	2.9319	39.669
#2	.28388	1.1084	.01910	.07321	.05885	2.9089	40.036
#3	.28400	1.1078	.01909	.07331	.05873	2.9189	39.652

Sample Name: S3 Acquired: 12/16/2024 15:49:21 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	2470.9	56447.	12711.	2056.9	4208.6
Stddev	8.2	118.	31.	2.9	8.3
%RSD	.33336	.20826	.24020	.14167	.19607
#1	2464.4	56347.	12746.	2060.3	4206.9
#2	2480.2	56416.	12687.	2055.5	4217.6
#3	2468.1	56576.	12702.	2055.1	4201.3

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: S4 Acquired: 12/16/2024 15:53:42 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	**.25860**	**.24905**	**1.1565**	**.48254**	**1.0946**	**.85212**	**28.672**	**.74456**
Stddev	.00114	.00212	.0043	.00218	.0015	.00187	.129	.00158
%RSD	.44129	.85035	.37013	.45123	.13779	.21970	.44880	.21237
#1	.25765	.24662	1.1519	.48064	1.0936	.85002	28.772	.74395
#2	.25828	.25008	1.1572	.48206	1.0939	.85361	28.717	.74338
#3	.25986	.25046	1.1603	.48491	1.0963	.85274	28.527	.74636

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	**5.3617**	**1.3963**	**.16826**	**2.1132**	**1.0456**	**.03002**	**1.0031**	**.29878**
Stddev	.0181	.0036	.00059	.0069	.0024	.00008	.0017	.00111
%RSD	.33686	.26022	.34795	.32518	.23430	.27726	.16877	.37262
#1	5.3427	1.3964	.16779	2.1065	1.0434	.02993	1.0038	.29781
#2	5.3636	1.3926	.16809	2.1129	1.0452	.03004	1.0011	.29854
#3	5.3787	1.3999	.16892	2.1203	1.0482	.03009	1.0043	.30000

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	**1.4982**	**.28115**	**.85217**	**.33887**	**6.4571**	**.24490**	**2.0493**	**4.0822**
Stddev	.0049	.00031	.00376	.00019	.0052	.00071	.0086	.0109
%RSD	.32586	.10911	.44073	.05666	.08010	.28842	.41906	.26616
#1	1.4932	.28091	.85315	.33888	6.4533	.24498	2.0571	4.0726
#2	1.4984	.28104	.85534	.33906	6.4551	.24556	2.0401	4.0800
#3	1.5029	.28150	.84802	.33867	6.4630	.24415	2.0507	4.0940

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	**.56594**	**2.1609**	**.03811**	**.14811**	**.12017**	**5.7807**	**76.887**
Stddev	.00212	.0021	.00032	.00064	.00031	.0187	.495
%RSD	.37453	.09484	.82861	.43300	.25398	.32308	.64319
#1	.56354	2.1631	.03775	.14741	.12006	5.7886	77.088
#2	.56673	2.1605	.03831	.14828	.11994	5.7941	77.250
#3	.56755	2.1590	.03829	.14866	.12052	5.7594	76.324

Sample Name: S4 Acquired: 12/16/2024 15:53:42 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	2369.2	55062.	12693.	1996.7	3948.0
Stddev	1.1	89.	15.	8.1	3.8
%RSD	.04546	.16103	.11440	.40730	.09705
#1	2368.7	55137.	12677.	1989.7	3951.8
#2	2370.4	54964.	12705.	1994.9	3948.0
#3	2368.4	55084.	12698.	2005.6	3944.1

Sample Name: S5 Acquired: 12/16/2024 15:57:57 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	**.54298**	**.50544**	**2.3661**	**1.0135**	**2.3021**	**1.7777**	**58.149**	**1.4806**
Stddev	.00228	.00217	.0033	.0046	.0102	.0014	.136	.0061
%RSD	.41944	.43020	.13970	.44999	.44340	.07666	.23370	.41001
#1	.54080	.50300	2.3623	1.0100	2.2932	1.7775	58.303	1.4870
#2	.54278	.50616	2.3672	1.0118	2.2999	1.7764	58.100	1.4798
#3	.54534	.50716	2.3686	1.0186	2.3133	1.7791	58.044	1.4749

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	**11.068**	**2.8236**	**.34026**	**4.3898**	**2.1415**	**.06263**	**2.0363**	**.61643**
Stddev	.011	.0091	.00038	.0043	.0044	.00047	.0056	.00116
%RSD	.09607	.32365	.11180	.09839	.20370	.75179	.27533	.18818
#1	11.056	2.8308	.33997	4.3850	2.1374	.06211	2.0356	.61777
#2	11.077	2.8267	.34011	4.3934	2.1411	.06278	2.0423	.61579
#3	11.070	2.8134	.34069	4.3911	2.1461	.06301	2.0311	.61574

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	**3.0933**	**.58223**	**1.8344**	**.69414**	**13.025**	**.52639**	**4.2007**	**8.3559**
Stddev	.0042	.00016	.0028	.00044	.050	.00230	.0138	.0219
%RSD	.13459	.02762	.15030	.06401	.38240	.43783	.32731	.26191
#1	3.0886	.58213	1.8312	.69398	13.010	.52374	4.2073	8.3367
#2	3.0963	.58241	1.8363	.69464	13.080	.52749	4.2099	8.3513
#3	3.0950	.58214	1.8356	.69380	12.983	.52793	4.1849	8.3798

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	**1.1576**	**4.4310**	**.08178**	**.31184**	**.25673**	**12.192**	**154.91**
Stddev	.0022	.0091	.00080	.00033	.00030	.030	1.11
%RSD	.18812	.20614	.97981	.10665	.11559	.24725	.71376
#1	1.1551	4.4296	.08092	.31155	.25682	12.157	155.14
#2	1.1591	4.4407	.08191	.31177	.25640	12.213	155.88
#3	1.1586	4.4226	.08251	.31220	.25697	12.206	153.71

Sample Name: S5 Acquired: 12/16/2024 15:57:57 Type: Cal
Method: NON EPA-6010-200.7(v2527) 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	2206.4	52256.	12435.	1860.7	3612.2
Stddev	6.6	65.	56.	7.6	8.6
%RSD	.29948	.12519	.45122	.41096	.23768
#1	2211.0	52323.	12384.	1856.7	3619.3
#2	2209.4	52192.	12425.	1855.9	3614.7
#3	2198.8	52253.	12495.	1869.5	3602.6

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: ICV01 Acquired: 12/16/2024 16:02:09 Type: Unk
Method: NON EPA-6010-200.7(v2527) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.028278**	**1.060242**	**1.025664**	**1.059299**	**1.020064**	**2.615975**
Stddev	.000656	.011341	.003483	.000787	.003361	.007362
%RSD	.0638402	1.069657	.3395438	.0742955	.3294669	.2814369
#1	1.027621	1.048787	1.023912	1.060173	1.023057	2.614647
#2	1.028278	1.060473	1.029674	1.059078	1.016428	2.609367
#3	1.028934	1.071466	1.023404	1.058647	1.020707	2.623911

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5202661**	**.5270268**	**.5187346**	**10.33723**	**.5396486**	**.5257592**
Stddev	.0007381	.0030706	.0011469	.00578	.0017366	.0010243
%RSD	.1418683	.5826299	.2210870	.0558684	.3218012	.1948262
#1	.5198276	.5266547	.5174104	10.33185	.5394707	.5247613
#2	.5211183	.5241591	.5194052	10.33650	.5380078	.5268081
#3	.5198525	.5302665	.5193883	10.34333	.5414673	.5257081

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5410022**	**10.19901**	**.5267206**	**6.051082**	**.5290796**	**.2546913**
Stddev	.0007036	.01632	.0011784	.020526	.0008538	.0005242
%RSD	.1300464	.1600042	.2237306	.3392128	.1613809	.2058371
#1	.5407944	10.19919	.5272712	6.074697	.5281600	.2551081
#2	.5417862	10.21525	.5253676	6.041033	.5298472	.2541027
#3	.5404259	10.18261	.5275230	6.037517	.5292315	.2548631

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.17622**	**.5114879**	**1.060796**	**9.978123**	**2.279761**	**2.274328**
Stddev	.03571	.0005793	.001274	.032216	.009972	.002942
%RSD	.3509469	.1132633	.1200694	.3228621	.4373947	.1293470
#1	10.16641	.5110174	1.061092	9.941580	2.285918	2.275401
#2	10.21581	.5113113	1.059401	10.00242	2.268257	2.271000
#3	10.14643	.5121350	1.061897	9.99037	2.285109	2.276583

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: ICV01 Acquired: 12/16/2024 16:02:09 Type: Unk
Method: NON EPA-6010-200.7(v2527) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.230737	F 2.236572	F 1.752243	F .0065629	F -.008323	F -.001678
Stddev	.003903	.000084	.003410	.0022038	.002003	.000386
%RSD	.1749768	.0037573	.1946005	33.57950	24.06228	23.02301
#1	2.228614	2.236538	1.755421	.0057055	-.006943	-.001994
#2	2.235241	2.236509	1.748641	.0049167	-.010620	-.001248
#3	2.228355	2.236667	1.752666	.0090665	-.007406	-.001793

Elem	Sr4077
Units	ppm
Avg	F -.008798
Stddev	.000015
%RSD	.1701164
#1	-.008790
#2	-.008815
#3	-.008789

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2411.942	56328.94	13062.77	2054.691	4153.832
Stddev	6.504	118.85	23.71	11.683	5.596
%RSD	.2696411	.2109947	.1814772	.5686183	.1347227
#1	2404.478	56218.76	13036.91	2046.806	4149.939
#2	2414.963	56313.17	13083.48	2049.153	4151.311
#3	2416.386	56454.89	13067.90	2068.114	4160.245

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: LLICV01 Acquired: 12/16/2024 16:06:09 Type: Unk
Method: NON EPA-6010-200.7(v2527) 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	**.0191694**	**.0356420**	**.0106123**	**.0196850**	**.0464029**	**.1028547**
Stddev	.0003275	.0009384	.0001873	.0015894	.0003118	.0016082
%RSD	1.708293	2.632826	1.764628	8.074198	.6719793	1.563514
#1	.0195068	.0358918	.0108022	.0185160	.0462909	.1019420
#2	.0188529	.0346040	.0104278	.0214948	.0461626	.1047115
#3	.0191485	.0364302	.0106068	.0190443	.0467553	.1019104

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0949647**	**.0059870**	**.0055313**	**1.987802**	**.0096975**	**.0279824**
Stddev	.0004443	.0000512	.0000057	.009467	.0002041	.0000457
%RSD	.4678149	.8557987	.1024226	.4762659	2.104825	.1632336
#1	.0944597	.0059428	.0055263	1.988319	.0097237	.0280198
#2	.0951390	.0059752	.0055375	1.978087	.0098872	.0279315
#3	.0952953	.0060432	.0055302	1.997000	.0094815	.0279959

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0215966**	**.0911026**	**.0202231**	**2.083992**	**.0375015**	**.0094521**
Stddev	.0002770	.0031769	.0003583	.003712	.0000758	.0000910
%RSD	1.282786	3.487122	1.771797	.1781299	.2022029	.9631785
#1	.0215727	.0933477	.0199134	2.086149	.0374471	.0095099
#2	.0213323	.0874676	.0206156	2.079706	.0375881	.0093472
#3	.0218848	.0924923	.0201404	2.086122	.0374694	.0094993

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.906884**	**.0386505**	**.0398148**	**1.955877**	**.1101442**	**.1964120**
Stddev	.004931	.0013738	.0002819	.017472	.0019039	.0010006
%RSD	.2585988	3.554276	.7081175	.8933018	1.728570	.5094494
#1	1.904471	.0378695	.0399863	1.975655	.1084897	.1970419
#2	1.912557	.0402367	.0394894	1.949434	.1097178	.1952582
#3	1.903624	.0378454	.0399686	1.942541	.1122252	.1969359

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: LLICV01 Acquired: 12/16/2024 16:06:09 Type: Unk
Method: NON EPA-6010-200.7(v2527) 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	.0379387	.0383997	F .3174193	.0189809	.0162545	.0181158
Stddev	.0006682	.0003438	.0033409	.0007141	.0030498	.0003258
%RSD	1.761344	.8953990	1.052521	3.762141	18.76272	1.798542
#1	.0376767	.0383592	.3136492	.0192484	.0134599	.0179501
#2	.0374413	.0380779	.3185961	.0195226	.0195076	.0184912
#3	.0386983	.0387619	.3200126	.0181717	.0157959	.0179062

Elem	Sr4077
Units	ppm
Avg	.0205037
Stddev	.0000216
%RSD	.1051999
#1	.0205144
#2	.0204789
#3	.0205178

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2558.583	58065.73	13052.16	2142.355	4599.746
Stddev	5.390	94.43	36.97	3.352	5.420
%RSD	.2106730	.1626287	.2832226	.1564747	.1178394
#1	2552.829	57972.91	13092.29	2142.037	4593.617
#2	2563.514	58062.59	13044.69	2139.172	4601.712
#3	2559.407	58161.69	13019.50	2145.854	4603.910

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: ICB01 Acquired: 12/16/2024 16:10:28 Type: Unk
Method: NON EPA-6010-200.7(v2527) 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	**-.001712**	**-.002997**	**-.000040**	**-.001335**	**-.000260**	**.0018489**	**.0001310**
Stddev	.001398	.000467	.000297	.000799	.000505	.0017416	.0005211
%RSD	81.66441	15.57127	735.4189	59.83116	193.9503	94.19540	397.6507
#1	-.002245	-.003535	-.000351	-.000522	-.000831	.0028779	.0001419
#2	-.000126	-.002706	.000241	-.002119	.000128	.0028306	-.000395
#3	-.002766	-.002750	-.000011	-.001365	-.000077	-.000162	.000647

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000652**	**.0000091**	**-.008505**	**-.000021**	**-.000060**	**.0003276**	**-.001855**
Stddev	.0000023	.0000264	.009165	.000312	.000191	.0003922	.002801
%RSD	3.558944	290.9870	107.7623	1493.932	320.0353	119.7260	150.9846
#1	.0000671	.0000246	.000624	.000325	-.000261	-.000029	.000646
#2	.0000626	.0000240	-.017706	-.000106	-.000037	.000265	-.001329
#3	.0000660	-.000021	-.008433	-.000282	.000119	.000747	-.004882

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000006**	**-.013831**	**.0000036**	**-.000277**	**.0372276**	**-.000544**	**-.002120**
Stddev	.000083	.008897	.0000336	.000123	.0111788	.000235	.000263
%RSD	1286.489	64.32625	927.9629	44.34408	30.02840	43.25106	12.41925
#1	-.000059	-.012146	.0000383	-.000309	.0263269	-.000723	-.002336
#2	.000090	-.023450	-.000029	-.000381	.0366906	-.000278	-.002198
#3	-.000050	-.005897	.000001	-.000142	.0486652	-.000630	-.001827

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0487690**	**.0032479**	**-.000228**	**.0002359**	**-.000526**	**-.001127**	**.0000251**
Stddev	.0218262	.0006948	.000182	.0003335	.000553	.000864	.0007614
%RSD	44.75416	21.39247	79.81354	141.3328	105.1986	76.63549	3033.760
#1	.0397700	.0040442	-.000036	.0005213	-.000314	-.001703	-.000849
#2	.0328811	.0027649	-.000249	.0003172	-.000110	-.001545	.000381
#3	.0736559	.0029346	-.000398	-.000131	-.001154	-.000134	.000544

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: ICB01 Acquired: 12/16/2024 16:10:28 Type: Unk
Method: NON EPA-6010-200.7(v2527) 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	**-.000633**	**-.000676**	**-.000075**
Stddev	.004273	.000708	.000014
%RSD	674.9366	104.8757	18.72366
#1	.003606	-.001483	-.000091
#2	-.000566	-.000160	-.000064
#3	-.004940	-.000383	-.000070

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2634.264**	**59519.50**	**13137.17**	**2184.288**	**4809.988**
Stddev	3.685	111.95	11.38	3.525	11.170
%RSD	.1398993	.1880968	.0866267	.1613795	.2322155
#1	2630.278	59411.22	13129.32	2187.862	4797.632
#2	2637.548	59512.47	13131.96	2180.814	4812.962
#3	2634.965	59634.80	13150.22	2184.188	4819.368

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CRI01 Acquired: 12/16/2024 16:14:49 Type: Unk
Method: NON EPA-6010-200.7(v2527) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0189132**	**.0381380**	**.0119523**	**.0189940**	**.0474139**	**.0947229**	**.0977021**
Stddev	.0015445	.0008642	.0002117	.0010095	.0004354	.0022600	.0003971
%RSD	8.166345	2.265923	1.770975	5.315104	.9183680	2.385929	.4064302
#1	.0205376	.0385467	.0119535	.0181475	.0476970	.0959022	.0976588
#2	.0174634	.0371453	.0121634	.0187231	.0469125	.0921171	.0981191
#3	.0187387	.0387221	.0117401	.0201113	.0476323	.0961493	.0973285

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0061329**	**.0056091**	**2.012112**	**.0099522**	**.0285268**	**.0213284**	**.0914322**
Stddev	.0000274	.0000228	.002628	.0000917	.0001554	.0002894	.0003552
%RSD	.4470203	.4065918	.1306012	.9209251	.5445612	1.356628	.3885440
#1	.0061622	.0056096	2.009303	.0100526	.0285300	.0216570	.0915592
#2	.0061288	.0055861	2.012521	.0098731	.0283699	.0212162	.0910309
#3	.0061078	.0056317	2.014511	.0099309	.0286805	.0211119	.0917064

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0205679**	**2.106493**	**.0380360**	**.0097678**	**1.859749**	**.0405135**	**.0434876**
Stddev	.0003851	.006668	.0000708	.0001845	.010730	.0002004	.0003179
%RSD	1.872151	.3165469	.1861917	1.888611	.5769633	.4947127	.7310826
#1	.0206370	2.110055	.0380310	.0097899	1.847448	.0405761	.0438202
#2	.0209138	2.098801	.0381092	.0099402	1.867181	.0406752	.0431868
#3	.0201530	2.110625	.0379678	.0095733	1.864618	.0402893	.0434557

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.895289**	**.1014641**	**.1961644**	**.0383443**	**.0382224**	**.3125050**	**.0185836**
Stddev	.009161	.0013834	.0004828	.0000941	.0005947	.0021893	.0020528
%RSD	.4833641	1.363414	.2461028	.2455485	1.555820	.7005614	11.04606
#1	1.890089	.1001743	.1963550	.0383281	.0378179	.3101038	.0187136
#2	1.905867	.1012927	.1956155	.0382593	.0389052	.3143901	.0164690
#3	1.889911	.1029251	.1965228	.0384455	.0379441	.3130212	.0205683

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CRI01 Acquired: 12/16/2024 16:14:49 Type: Unk
Method: NON EPA-6010-200.7(v2527) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0177732	.0176693	.0201963
Stddev	.0003227	.0001806	.0000537
%RSD	1.815895	1.022119	.2660343
#1	.0180806	.0174630	.0201419
#2	.0174371	.0177457	.0202493
#3	.0178020	.0177991	.0201979

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2553.813	58747.91	12929.06	2155.161	4525.010
Stddev	9.492	131.68	22.46	1.371	4.516
%RSD	.3716915	.2241386	.1737453	.0636154	.0998020
#1	2551.772	58663.64	12930.84	2156.581	4524.342
#2	2564.160	58680.44	12905.76	2153.844	4529.823
#3	2545.507	58899.65	12950.58	2155.059	4520.865

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: ICSA01 Acquired: 12/16/2024 16:19:07 Type: Unk
Method: NON EPA-6010-200.7(v2527) 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	**-.000587**	**-.009715**	**.0095477**	**-.016675**	**-.002837**	**259.8064**
Stddev	.001733	.003215	.0014169	.002635	.001395	1.2087
%RSD	295.1228	33.09369	14.84017	15.80177	49.15313	.4652387
#1	-.001636	-.011092	.0088274	-.017496	-.001378	259.9058
#2	.001414	-.012012	.0086357	-.013728	-.004156	260.9624
#3	-.001540	-.006041	.0111801	-.018802	-.002977	258.5511

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034358**	**.0021731**	**.0007555**	**248.3674**	**.0562357**	**.0020956**
Stddev	.0004983	.0000735	.0002174	.6541	.0004326	.0000967
%RSD	14.50437	3.383187	28.77806	.2633723	.7691995	4.615405
#1	.0033819	.0021453	.0005099	247.7055	.0567323	.0021376
#2	.0029666	.0022565	.0009233	248.3833	.0559409	.0021642
#3	.0039589	.0021176	.0008333	249.0134	.0560339	.0019850

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.013806**	**100.2800**	**-.000458**	**272.0870**	**.0024037**	**-.006958**
Stddev	.000317	.2606	.000740	.8032	.0001078	.000252
%RSD	2.292532	.2599073	161.4836	.2952010	4.483307	3.627386
#1	-.014132	100.1217	-.000136	271.4020	.0022883	-.006967
#2	-.013499	100.1375	-.001305	271.8879	.0024210	-.006701
#3	-.013787	100.5808	.000066	272.9710	.0025017	-.007205

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1276092**	**.0059061**	**.0045183**	**.1797097**	**.0028829**	**.0003815**
Stddev	.0177012	.0007229	.0002849	.0267278	.0011206	.0005324
%RSD	13.87140	12.23917	6.305174	14.87276	38.87000	139.5417
#1	.1122849	.0058912	.0048302	.1681581	.0023897	.0009538
#2	.1235577	.0051909	.0042717	.1607004	.0020936	.0002901
#3	.1469848	.0066364	.0044530	.2102704	.0041655	-.000099

Sample Name: ICSA01 Acquired: 12/16/2024 16:19:07 Type: Unk
Method: NON EPA-6010-200.7(v2527) 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	-.002593	-.002628	.0137544	.0011041	-.013263	F -.041958
Stddev	.000790	.000319	.0023562	.0028521	.001522	.000257
%RSD	30.47317	12.14981	17.13027	258.3191	11.47569	.6123175
#1	-.003486	-.002261	.0125603	.0012168	-.013254	-.042069
#2	-.001983	-.002783	.0164685	.0038982	-.014790	-.042141
#3	-.002310	-.002841	.0122344	-.001803	-.011746	-.041665

Elem	Sr4077
Units	ppm
Avg	.0054275
Stddev	.0003374
%RSD	6.216686
#1	.0057393
#2	.0054738
#3	.0050693

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2223.111	50431.63	12254.92	1847.332	3510.621
Stddev	5.267	39.11	13.04	7.528	8.683
%RSD	.2369153	.0775423	.1064279	.4075314	.2473246
#1	2223.831	50390.15	12266.19	1843.656	3515.494
#2	2227.981	50436.91	12257.94	1842.347	3515.772
#3	2217.521	50467.82	12240.63	1855.992	3500.596

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: ICSAB01 Acquired: 12/16/2024 16:53:22 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.1068337**	**.0813165**	**.0558802**	**.0367943**	**.5842327**	**254.1289**
Stddev	.0065659	.0014582	.0002426	.0019537	.0013896	.8788
%RSD	6.145926	1.793201	.4341129	5.309801	.2378503	.3457907
#1	.1125948	.0798600	.0556495	.0381983	.5830751	253.1213
#2	.0996848	.0827764	.0558579	.0376216	.5838492	254.5285
#3	.1082214	.0813130	.0561331	.0345631	.5857737	254.7368

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5140770**	**.5328371**	**1.008145**	**246.3858**	**.5614007**	**.5026827**
Stddev	.0013095	.0003284	.002315	.2269	.0018870	.0009281
%RSD	.2547243	.0616353	.2296115	.0921071	.3361201	.1846198
#1	.5154919	.5325378	1.006284	246.1775	.5592494	.5018783
#2	.5138316	.5331884	1.007413	246.3522	.5621767	.5024716
#3	.5129076	.5327850	1.010737	246.6277	.5627760	.5036981

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4598414**	**97.33106**	**.5043936**	**269.3451**	**.9886847**	**.1890701**
Stddev	.0018429	.26274	.0009935	.6034	.0026941	.0011792
%RSD	.4007736	.2699416	.1969637	.2240381	.2724943	.6236931
#1	.4595144	97.04834	.5048875	268.6523	.9863156	.1877630
#2	.4581839	97.37714	.5050433	269.6265	.9881231	.1893934
#3	.4618260	97.56772	.5032500	269.7564	.9916153	.1900540

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0691510**	**.4995347**	**1.063973**	**-.033259**	**.8866769**	**.9278159**
Stddev	.0189491	.0011438	.004539	.028266	.0020823	.0036969
%RSD	27.40246	.2289676	.4266091	84.98595	.2348447	.3984472
#1	.0472708	.5001571	1.068911	-.065022	.8888176	.9287427
#2	.0801914	.4982147	1.059982	-.010874	.8865547	.9237439
#3	.0799907	.5002323	1.063026	-.023881	.8846584	.9309613

Sample Name: ICSAB01 Acquired: 12/16/2024 16:53:22 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.9404179	.9468312	F .7699658	F .0097277	F -.013827	F -.042870
Stddev	.0036775	.0014224	.0047365	.0014938	.001446	.000445
%RSD	.3910443	.1502321	.6151602	15.35651	10.45794	1.038305
#1	.9374476	.9468458	.7710655	.0105671	-.014705	-.043075
#2	.9392752	.9482462	.7740557	.0080030	-.012158	-.043177
#3	.9445311	.9454015	.7647761	.0106130	-.014619	-.042360

Elem	Sr4077
Units	ppm
Avg	F .0050690
Stddev	.0005035
%RSD	9.932670
#1	.0055866
#2	.0050395
#3	.0045809

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2284.694	51518.02	12261.68	1891.406	3615.003
Stddev	11.529	37.97	13.86	15.506	13.912
%RSD	.5046405	.0737046	.1130593	.8198128	.3848491
#1	2284.476	51519.45	12246.18	1873.502	3620.392
#2	2296.331	51555.25	12265.99	1900.259	3625.416
#3	2273.275	51479.35	12272.88	1900.458	3599.203

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV01 Acquired: 12/16/2024 16:57:37 Type: Unk
Method: NON EPA-6010-200.7(v2434) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.812086**	**4.958832**	**4.930196**	**4.811499**	**4.801600**	**9.625010**	**9.518130**
Stddev	.006352	.067258	.014482	.014311	.003989	.013553	.098122
%RSD	.1319996	1.356335	.2937377	.2974254	.0830733	.1408127	1.030892
#1	4.819411	5.034295	4.917876	4.828000	4.804503	9.632760	9.627842
#2	4.808089	4.936997	4.926564	4.802490	4.797052	9.632911	9.487778
#3	4.808759	4.905205	4.946148	4.804007	4.803246	9.609361	9.438771

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2515715**	**2.464783**	**24.45127**	**.9930384**	**2.440897**	**1.216662**	**4.780482**
Stddev	.0004502	.007399	.05489	.0029585	.006341	.002163	.014530
%RSD	.1789718	.3001694	.2244842	.2979186	.2597732	.1777533	.3039486
#1	.2517633	2.457297	24.42499	.9936256	2.434719	1.215842	4.769786
#2	.2518940	2.464962	24.41446	.9956592	2.440581	1.215028	4.774634
#3	.2510571	2.472091	24.51436	.9898303	2.447389	1.219114	4.797025

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.415434**	**24.57164**	**2.447716**	**1.218170**	**23.84937**	**2.432364**	**2.455315**
Stddev	.004897	.04394	.006532	.000742	.12044	.004515	.006391
%RSD	.2027358	.1788375	.2668743	.0608720	.5049901	.1856288	.2603063
#1	2.410414	24.52578	2.440679	1.219007	23.98120	2.427371	2.448001
#2	2.415690	24.57576	2.448882	1.217597	23.82183	2.433562	2.459824
#3	2.420198	24.61338	2.453587	1.217906	23.74509	2.436159	2.458121

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.38149**	**4.984792**	**4.811876**	**4.936933**	**4.799391**	**4.764944**	**4.902216**
Stddev	.02203	.011485	.008251	.009998	.002964	.014420	.027705
%RSD	.0942383	.2304091	.1714696	.2025160	.0617534	.3026277	.5651454
#1	23.40692	4.972104	4.819175	4.936514	4.798896	4.751859	4.929671
#2	23.36961	4.994479	4.802923	4.927151	4.802572	4.762567	4.902708
#3	23.36795	4.987793	4.813528	4.947134	4.796707	4.780404	4.874269

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV01 Acquired: 12/16/2024 16:57:37 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**4.839532**	**4.675227**	**4.929353**
Stddev	.009414	.021993	.003459
%RSD	.1945268	.4704107	.0701776
#1	4.849332	4.696433	4.929838
#2	4.830558	4.676723	4.932545
#3	4.838708	4.652524	4.925677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2456.860**	**56136.16**	**12882.29**	**2087.172**	**4047.242**
Stddev	2.508	45.33	7.43	8.716	7.834
%RSD	.1020870	.0807495	.0576545	.4176012	.1935752
#1	2458.053	56149.43	12874.15	2096.115	4056.195
#2	2458.550	56173.37	12888.70	2086.698	4043.886
#3	2453.979	56085.67	12884.03	2078.703	4041.645

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB01 Acquired: 12/16/2024 17:01:53 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001545**	**-.001211**	**.0000251**	**.0010161**	**-.001204**	**.0048300**	**.0000823**
Stddev	.001093	.001315	.0004415	.0017356	.000287	.0041848	.0002414
%RSD	70.78327	108.6477	1757.861	170.8097	23.81855	86.64181	293.3831
#1	-.002150	-.001798	.0000102	.0029619	-.001089	.0068517	.0002378
#2	-.000282	-.002130	.0004739	-.000372	-.000993	.0076201	.0002049
#3	-.002201	.000296	-.000409	.000459	-.001531	.0000182	-.000196

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000384**	**-.000014**	**-.006148**	**.0002958**	**-.000036**	**.0001714**	**-.000692**
Stddev	.0000557	.000011	.010358	.0002228	.000045	.0002407	.001312
%RSD	145.1440	78.33616	168.4921	75.32255	124.3198	140.4670	189.5717
#1	.0000302	-.000027	-.017279	.0000386	.000015	.0003526	.000054
#2	-.000013	-.000011	.003207	.0004203	-.000054	.0002632	-.002207
#3	.000098	-.000005	-.004370	.0004286	-.000069	-.000102	.000077

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001441**	**-.000925**	**.0000725**	**.0002953**	**.0111036**	**.0001412**	**-.002061**
Stddev	.0004152	.015423	.0001677	.0004849	.0107139	.0004303	.000125
%RSD	288.1871	1667.726	231.1271	164.2156	96.49090	304.7689	6.065075
#1	.0000992	-.017913	.0002549	.0008543	-.001071	.0005237	-.001926
#2	.0005799	.002940	.0000375	-.000012	.015289	-.000325	-.002087
#3	-.000247	.012198	-.000075	.000044	.019093	.000225	-.002172

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.052414**	**.0005016**	**.0000918**	**.0002331**	**-.000328**	**-.003076**	**-.001660**
Stddev	.001466	.0005838	.0002556	.0002599	.000057	.002322	.001440
%RSD	2.796812	116.3927	278.4986	111.4991	17.36285	75.48923	86.70126
#1	-.051608	-.000060	.0002181	.0004539	-.000361	-.003865	-.001017
#2	-.051527	.000460	.0002596	.0002987	-.000262	-.000463	-.003310
#3	-.054106	.001105	-.000202	-.000053	-.000361	-.004902	-.000655

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB01 Acquired: 12/16/2024 17:01:53 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.000071	-.001387	.0000779
Stddev	.000582	.000538	.0000672
%RSD	819.5453	38.81178	86.27485
#1	-.000525	-.001929	.0000021
#2	-.000274	-.000853	.0001015
#3	.000586	-.001378	.0001300

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2629.214	60044.76	13187.97	2259.460	4682.720
Stddev	6.874	96.63	20.62	3.296	10.156
%RSD	.2614448	.1609249	.1563557	.1458561	.2168917
#1	2622.561	60153.37	13175.23	2258.073	4674.968
#2	2628.791	59968.32	13176.91	2257.084	4678.975
#3	2636.290	60012.60	13211.76	2263.222	4694.217

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165558TB Acquired: 12/16/2024 17:10:29 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.008145**	**-.006456**	**-.001129**	**.0028842**	**-.000154**	**.0375737**
Stddev	.002502	.001495	.000862	.0014494	.000244	.0024048
%RSD	30.71649	23.15429	76.37931	50.25444	157.9505	6.400240
#1	-.005507	-.004779	-.000488	.0014451	-.000322	.0350728
#2	-.008444	-.006939	-.002109	.0028638	.000125	.0398692
#3	-.010484	-.007649	-.000790	.0043437	-.000267	.0377791

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008855**	**-.000150**	**-.000127**	**.0356243**	**.0007587**	**-.000206**
Stddev	.0004285	.000018	.000050	.0037835	.0003015	.000024
%RSD	48.38567	11.87579	39.04688	10.62045	39.73978	11.86863
#1	.0004118	-.000137	-.000149	.0394476	.0010596	-.000182
#2	.0009989	-.000143	-.000070	.0318820	.0007599	-.000231
#3	.0012459	-.000170	-.000162	.0355433	.0004566	-.000205

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000661**	**.0462314**	**.0047974**	**.0072668**	**.0010953**	**-.000511**
Stddev	.0001257	.0006952	.0002000	.0142437	.0001229	.000359
%RSD	190.3621	1.503823	4.169595	196.0101	11.22308	70.22919
#1	-.000049	.0465662	.0046889	.0107607	.0010585	-.000606
#2	.000200	.0466959	.0050282	.0194384	.0009949	-.000812
#3	.000046	.0454321	.0046751	-.008399	.0012324	-.000114

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **287.4798**	**.0002052**	**.0022772**	**-.061169**	**-.003353**	**-.000221**
Stddev	1.1602	.0000517	.0000843	.023414	.000655	.000078
%RSD	.4035741	25.18022	3.701323	38.27737	19.53035	35.44833
#1	288.3578	.0002480	.0022993	-.065122	-.003234	-.000311
#2	287.9171	.0002198	.0021841	-.082354	-.002767	-.000183
#3	286.1645	.0001478	.0023482	-.036030	-.004060	-.000169

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165558TB Acquired: 12/16/2024 17:10:29 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0013724	.0002699	.0230426	.0099404	F .0387543	-.003657
Stddev	.0013047	.0001608	.0058671	.0022536	.0031756	.000384
%RSD	95.06853	59.58495	25.46195	22.67071	8.194235	10.49589
#1	.0024857	.0001147	.0260137	.0112860	.0354109	-.003835
#2	.0016947	.0002591	.0268298	.0111966	.0417302	-.003216
#3	-.000063	.0004357	.0162843	.0073388	.0391219	-.003919

Elem	Sr4077
Units	ppm
Avg	-.000028
Stddev	.000011
%RSD	37.80505
#1	-.000034
#2	-.000035
#3	-.000016

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2376.009	52692.82	12468.54	1999.650	3927.232
Stddev	4.092	34.50	10.65	1.928	4.615
%RSD	.1722366	.0654829	.0854257	.0963936	.1175127
#1	2371.876	52653.34	12465.41	1997.501	3922.074
#2	2380.060	52717.23	12480.41	2001.225	3928.655
#3	2376.091	52707.88	12459.81	2000.225	3930.969

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165597BL Acquired: 12/16/2024 17:19:31 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001391**	**-.002027**	**-.000775**	**.0004369**	**-.000106**	**.0042590**	**.0018659**
Stddev	.000666	.001088	.000478	.0020650	.000416	.0018664	.0002994
%RSD	47.87019	53.66011	61.70622	472.6486	394.4343	43.82194	16.04806
#1	-.001249	-.001337	-.001031	-.000256	-.000581	.0050607	.0018865
#2	-.000808	-.001464	-.000223	.002759	.000067	.0055905	.0015566
#3	-.002117	-.003282	-.001072	-.001192	.000197	.0021257	.0021544

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000378**	**-.000122**	**-.000316**	**.0001040**	**.0001019**	**.0002441**	**-.000578**
Stddev	.0000344	.000044	.002839	.0003476	.0001314	.0001528	.001610
%RSD	90.97961	35.65612	899.9661	334.1614	129.0046	62.61869	278.7784
#1	.0000644	-.000109	-.003568	-.000297	.0001978	.0003411	.000899
#2	.0000502	-.000087	.001666	.000305	.0001557	.0000679	-.002295
#3	-.000001	-.000171	.000956	.000304	-.000048	.0003233	-.000337

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000209**	**-.012618**	**-.000111**	**-.000008**	**.1333947**	**-.000221**	**-.002063**
Stddev	.000291	.015212	.000081	.000159	.0185192	.000352	.000089
%RSD	138.8466	120.5589	73.58062	1931.855	13.88302	159.3196	4.291992
#1	-.000545	-.009326	-.000124	.000158	.1127457	.000003	-.002058
#2	-.000042	-.029207	-.000185	-.000159	.1389050	-.000626	-.002154
#3	-.000041	.000679	-.000024	-.000024	.1485333	-.000040	-.001978

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.041090**	**-.004323**	**-.000474**	**-.000317**	**-.000261**	**-.001135**	**-.000563**
Stddev	.025371	.000216	.000194	.000697	.000109	.001485	.001773
%RSD	61.74614	5.003907	40.94858	220.0935	41.86921	130.8311	314.8469
#1	-.062784	-.004541	-.000347	-.000012	-.000386	-.002304	.000748
#2	-.047294	-.004109	-.000378	.000177	-.000215	.000536	-.002581
#3	-.013192	-.004320	-.000698	-.001115	-.000182	-.001636	.000143

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165597BL Acquired: 12/16/2024 17:19:31 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.000617	.0008390	-.000092
Stddev	.001939	.0006863	.000026
%RSD	314.4198	81.80248	27.90839
#1	-.002466	.0001207	-.000111
#2	-.000784	.0009082	-.000063
#3	.001401	.0014880	-.000103

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2599.538	58941.56	12691.62	2231.774	4559.086
Stddev	7.338	62.54	23.15	11.253	4.690
%RSD	.2822620	.1061135	.1823920	.5042026	.1028664
#1	2601.296	58972.51	12670.05	2219.143	4556.610
#2	2605.837	58982.60	12688.74	2235.450	4564.494
#3	2591.481	58869.58	12716.07	2240.729	4556.152

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165597BS Acquired: 12/16/2024 17:23:55 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7497852**	**2.066395**	**.9872603**	**1.896959**	**.7513824**	**1.985538**
Stddev	.0053759	.011893	.0010004	.006228	.0020426	.004498
%RSD	.7169962	.5755252	.1013272	.3283360	.2718492	.2265258
#1	.7454477	2.060590	.9861177	1.890972	.7514077	1.981654
#2	.7557997	2.080075	.9876845	1.896502	.7493273	1.984493
#3	.7481081	2.058520	.9879786	1.903403	.7534123	1.990466

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1951809**	**.2195738**	**.1983712**	**1.086597**	**.4125821**	**.1993718**
Stddev	.0001142	.0007664	.0002041	.003725	.0005520	.0002896
%RSD	.0585328	.3490344	.1028955	.3428577	.1337851	.1452635
#1	.1951986	.2199943	.1981952	1.087556	.4129210	.1995036
#2	.1952852	.2186892	.1983234	1.082486	.4119451	.1990398
#3	.1950588	.2200379	.1985949	1.089749	.4128800	.1995721

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3050938**	**2.913642**	**.2085248**	**2.061808**	**.5015739**	**.0743861**
Stddev	.0008590	.011573	.0003824	.003814	.0004118	.0002174
%RSD	.2815529	.3971939	.1833992	.1849809	.0821020	.2922263
#1	.3043267	2.900379	.2086023	2.057584	.5014392	.0746230
#2	.3049327	2.921689	.2081095	2.062841	.5012463	.0741959
#3	.3060219	2.918858	.2088625	2.065000	.5020362	.0743393

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.857733**	**.3063794**	**.2039759**	**8.938134**	**.3041404**	**.3904244**
Stddev	.016534	.0008771	.0013138	.043737	.0004398	.0010424
%RSD	.5785865	.2862741	.6440713	.4893285	.1445940	.2669886
#1	2.839091	.3072024	.2028392	8.887712	.3037077	.3892396
#2	2.870623	.3064791	.2036742	8.960871	.3041265	.3908329
#3	2.863484	.3054568	.2054142	8.965819	.3045869	.3912006

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165597BS Acquired: 12/16/2024 17:23:55 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6911299	.1980412	F .6770633	5.613851	F -.007979	.1986777
Stddev	.0018656	.0007304	.0084088	.015743	.003452	.0008989
%RSD	.2699323	.3688307	1.241951	.2804376	43.26166	.4524416
#1	.6889868	.1973153	.6732411	5.625956	-.004627	.1982396
#2	.6923906	.1987761	.6867043	5.596053	-.011523	.1997117
#3	.6920122	.1980322	.6712445	5.619544	-.007787	.1980819

Elem	Sr4077
Units	ppm
Avg	.2086518
Stddev	.0002787
%RSD	.1335641
#1	.2086077
#2	.2089499
#3	.2083978

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2556.912	57823.23	12471.39	2201.770	4369.396
Stddev	2.085	76.48	11.45	10.688	4.253
%RSD	.0815583	.1322600	.0918449	.4854303	.0973313
#1	2558.867	57910.45	12466.85	2214.075	4368.482
#2	2554.717	57767.65	12484.42	2194.796	4365.675
#3	2557.152	57791.58	12462.90	2196.439	4374.032

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165591BL Acquired: 12/16/2024 17:27:57 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0001087**	**-.000945**	**.0002681**	**.0002768**	**-.001113**	**.0009851**	**.0020929**
Stddev	.0012966	.001277	.0004005	.0009423	.000177	.0008691	.0001777
%RSD	1192.661	135.1438	149.3740	340.3858	15.93461	88.22760	8.490843
#1	-.001081	-.002394	.0004232	-.000775	-.001291	.0005460	.0022770
#2	-.000084	-.000452	-.000187	.001045	-.001111	.0004231	.0019224
#3	.001491	.000012	.000568	.000560	-.000937	.0019862	.0020791

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000664**	**-.000084**	**-.010897**	**.0001925**	**-.000064**	**-.000047**	**.0010070**
Stddev	.0000547	.000028	.007730	.0003335	.000169	.000151	.0014966
%RSD	82.40426	32.92172	70.93092	173.2613	263.0209	320.8308	148.6258
#1	.0000407	-.000054	-.002146	-.000192	.000105	.000127	.0017247
#2	.0000293	-.000109	-.013755	.000409	-.000065	-.000125	-.000713
#3	.0001293	-.000089	-.016791	.000360	-.000233	-.000142	.002009

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000030**	**-.000044**	**-.000003**	**-.000044**	**.0490915**	**-.000200**	**-.001737**
Stddev	.000218	.002524	.000173	.000270	.0123404	.000532	.000292
%RSD	715.5722	5702.829	6508.940	617.0337	25.13746	266.6815	16.80572
#1	.000079	.001495	-.000166	.000192	.0363725	-.000800	-.001751
#2	.000111	.001329	-.000021	.000015	.0498873	-.000012	-.001438
#3	-.000281	-.002957	.000179	-.000338	.0610147	.000214	-.002021

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.036221**	**-.004499**	**-.000482**	**-.000281**	**.0000580**	**-.003018**	**-.000676**
Stddev	.015506	.000122	.000285	.000553	.0001305	.005745	.001096
%RSD	42.80895	2.706330	58.98645	196.4719	225.1041	190.3388	162.1471
#1	-.046934	-.004637	-.000260	-.000700	.0001093	-.008874	-.001437
#2	-.018440	-.004454	-.000803	-.000490	.0001550	-.002791	-.001171
#3	-.043288	-.004407	-.000384	.000345	-.000090	.002610	.000580

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165591BL Acquired: 12/16/2024 17:27:57 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001855**	**-.000972**	**-.000108**
Stddev	.001336	.000730	.000004
%RSD	72.04722	75.07246	3.324523
#1	-.003350	-.001742	-.000112
#2	-.001438	-.000883	-.000106
#3	-.000776	-.000291	-.000105

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2649.108**	**59357.59**	**12808.85**	**2273.293**	**4674.850**
Stddev	8.143	154.56	10.72	5.510	8.955
%RSD	.3073949	.2603891	.0837256	.2423699	.1915652
#1	2656.180	59337.83	12809.62	2273.920	4673.610
#2	2650.940	59213.86	12797.76	2267.497	4684.361
#3	2640.205	59521.08	12819.17	2278.462	4666.579

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165591BS Acquired: 12/16/2024 17:32:20 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7090462**	**1.916962**	**.9479615**	**1.783040**	**.7102149**	**1.918602**
Stddev	.0050744	.010870	.0037686	.002236	.0016873	.004821
%RSD	.7156649	.5670620	.3975506	.1254277	.2375820	.2512949
#1	.7118566	1.928319	.9504962	1.782244	.7092110	1.914023
#2	.7120936	1.915913	.9497575	1.781311	.7121629	1.918149
#3	.7031884	1.906655	.9436308	1.785566	.7092707	1.923634

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1908794**	**.2170633**	**.1893417**	**1.059282**	**.4013154**	**.1906898**
Stddev	.0004593	.0005021	.0007401	.010079	.0009551	.0008756
%RSD	.2405969	.2313239	.3909092	.9514620	.2379944	.4591546
#1	.1914009	.2171578	.1891127	1.069406	.4019891	.1903977
#2	.1907018	.2165207	.1901693	1.049249	.4002224	.1916741
#3	.1905354	.2175115	.1887431	1.059191	.4017348	.1899977

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2910912**	**2.781132**	**.2039841**	**2.030455**	**.4790382**	**.0720768**
Stddev	.0010470	.008488	.0010411	.003222	.0011128	.0002263
%RSD	.3596746	.3051939	.5103908	.1587031	.2322894	.3139826
#1	.2909405	2.790137	.2040702	2.032401	.4792064	.0718280
#2	.2922053	2.773279	.2029026	2.032229	.4800572	.0721320
#3	.2901277	2.779979	.2049795	2.026735	.4778509	.0722704

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.672396**	**.2997434**	**.1970072**	**8.507890**	**.3008377**	**.3761991**
Stddev	.013796	.0013138	.0003711	.029874	.0011517	.0003707
%RSD	.5162241	.4383034	.1883600	.3511351	.3828224	.0985436
#1	2.656983	.2984749	.1973553	8.516625	.3021431	.3761281
#2	2.683587	.2996571	.1970495	8.474622	.3004044	.3766002
#3	2.676619	.3010982	.1966167	8.532423	.2999655	.3758691

Sample Name: PB165591BS Acquired: 12/16/2024 17:32:20 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6570626	.1912920	F .6433490	5.361761	F -.006351	.1899025
Stddev	.0030953	.0014518	.0059042	.010854	.001167	.0004034
%RSD	.4710778	.7589475	.9177222	.2024407	18.37346	.2124077
#1	.6594813	.1921406	.6376260	5.362685	-.007485	.1895160
#2	.6581322	.1896156	.6494190	5.372123	-.006414	.1903209
#3	.6535744	.1921197	.6430019	5.350474	-.005154	.1898706

Elem	Sr4077
Units	ppm
Avg	.2008680
Stddev	.0006126
%RSD	.3049586
#1	.2001850
#2	.2010501
#3	.2013688

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2675.081	59117.88	12503.48	2254.847	4626.068
Stddev	4.082	125.42	29.38	11.785	12.699
%RSD	.1526053	.2121608	.2349897	.5226465	.2745049
#1	2676.056	58982.39	12469.91	2252.540	4622.462
#2	2670.600	59141.32	12516.01	2244.386	4615.562
#3	2678.588	59229.94	12524.52	2267.615	4640.180

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165640BL Acquired: 12/16/2024 17:36:21 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.000690**	**-.001366**	**.0002882**	**-.001466**	**-.000705**	**-.002435**	**.0035491**
Stddev	.001689	.001145	.0004224	.001093	.000585	.003318	.0003997
%RSD	244.6723	83.81833	146.5588	74.55057	83.04774	136.2551	11.26293
#1	-.002507	-.000282	-.000116	-.001895	-.000381	.001316	.0037186
#2	.000832	-.002564	.000727	-.000223	-.001381	-.004985	.0038361
#3	-.000396	-.001253	.000255	-.002278	-.000353	-.003636	.0030925

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000034**	**-.000069**	**-.002206**	**.0002695**	**.0000291**	**-.000154**	**.0027142**
Stddev	.000020	.000062	.001410	.0003026	.0000841	.000316	.0024361
%RSD	58.52670	89.90718	63.94537	112.2538	288.5538	205.2547	89.75386
#1	-.000018	.000003	-.003830	.0005439	.0000700	-.000132	.0015664
#2	-.000027	-.000108	-.001290	.0003197	-.000068	.000151	.0010640
#3	-.000056	-.000103	-.001498	-.000055	.000085	-.000481	.0055121

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000132**	**-.018744**	**.0000063**	**-.000126**	**.1058876**	**-.000367**	**-.002266**
Stddev	.000229	.013817	.0002024	.000353	.0109258	.000789	.000237
%RSD	174.2628	73.71810	3203.287	280.5777	10.31827	215.1299	10.45425
#1	.000127	-.007262	.0002363	-.000397	.0942755	-.001178	-.002011
#2	-.000310	-.014890	-.000073	.000273	.1074224	.000397	-.002479
#3	-.000212	-.034079	-.000144	-.000254	.1159647	-.000318	-.002308

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.058772**	**-.005164**	**-.000384**	**-.000328**	**-.000735**	**-.002647**	**-.001411**
Stddev	.021034	.000121	.000162	.000183	.000380	.005461	.000901
%RSD	35.78916	2.350907	42.17572	55.73753	51.64958	206.3200	63.88078
#1	-.082666	-.005153	-.000213	-.000300	-.001135	.001168	-.002392
#2	-.050598	-.005290	-.000404	-.000523	-.000379	-.008903	-.000619
#3	-.043052	-.005048	-.000535	-.000161	-.000693	-.000206	-.001222

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165640BL Acquired: 12/16/2024 17:36:21 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001047**	**-.001579**	**-.000064**
Stddev	.004290	.000273	.000022
%RSD	409.6774	17.29170	34.71148
#1	-.005595	-.001298	-.000070
#2	.002926	-.001596	-.000040
#3	-.000472	-.001844	-.000083

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2715.058**	**60292.78**	**12678.74**	**2293.966**	**4825.037**
Stddev	1.270	2.52	61.92	7.052	4.496
%RSD	.0467906	.0041791	.4883558	.3074133	.0931853
#1	2713.698	60294.14	12608.49	2286.468	4822.788
#2	2715.262	60294.32	12702.36	2300.465	4830.214
#3	2716.215	60289.87	12725.38	2294.966	4822.109

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165561TB Acquired: 12/16/2024 17:44:46 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.004381	-.003782	.0003921	.0019199	-.001563	.0186399
Stddev	.000826	.000777	.0012111	.0026325	.000040	.0013389
%RSD	18.85371	20.53842	308.9191	137.1108	2.529079	7.183232
#1	-.004925	-.004441	.0010566	.0012707	-.001524	.0200654
#2	-.003431	-.003978	-.001006	-.000327	-.001562	.0184454
#3	-.004788	-.002926	.001125	.004816	-.001603	.0174088

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021653	-.000102	-.000115	.0071297	-.000015	-.000034
Stddev	.0003381	.000036	.000048	.0034085	.000039	.000218
%RSD	15.61304	34.92907	41.80891	47.80684	265.7575	644.4059
#1	.0023699	-.000101	-.000067	.0110647	-.000005	-.000275
#2	.0017751	-.000067	-.000163	.0052344	.000018	.000151
#3	.0023509	-.000138	-.000116	.0050901	-.000058	.000022

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002870	.0355968	.0016816	.0022082	.0016274	.0000246
Stddev	.0002755	.0016266	.0001995	.0046751	.0000498	.0003178
%RSD	95.98802	4.569418	11.86047	211.7191	3.061867	1290.419
#1	.0005955	.0345615	.0015955	.0051399	.0016793	.0002618
#2	.0000655	.0347574	.0015397	-.003183	.0016232	-.000336
#3	.0001999	.0374716	.0019096	.004668	.0015799	.000149

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 160.0214	.0004487	.0000475	-.107478	-.006374	-.000566
Stddev	1.4317	.0002014	.0002701	.005564	.000174	.000121
%RSD	.8946844	44.87701	568.0673	5.176791	2.722040	21.43762
#1	158.4610	.0006517	.0002785	-.113741	-.006510	-.000510
#2	160.3285	.0002490	-.000249	-.105587	-.006179	-.000705
#3	161.2745	.0004454	.000114	-.103106	-.006435	-.000483

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165561TB Acquired: 12/16/2024 17:44:46 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.000051	.0002325	.0132408	.0037141	F .0175598	-.003853
Stddev	.000031	.0004439	.0032755	.0027359	.0003074	.000255
%RSD	60.31091	190.9554	24.73766	73.66383	1.750605	6.615049
#1	-.000085	-.000177	.0109690	.0063722	.0172469	-.003573
#2	-.000024	.000704	.0117579	.0009065	.0175712	-.004071
#3	-.000044	.000170	.0169954	.0038634	.0178614	-.003914

Elem	Sr4077
Units	ppm
Avg	-.000031
Stddev	.000027
%RSD	87.79227
#1	-.000008
#2	-.000061
#3	-.000024

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2443.914	55643.41	12945.52	2134.163	4041.012
Stddev	16.208	270.99	44.95	10.734	22.225
%RSD	.6632011	.4870059	.3472334	.5029447	.5499916
#1	2454.548	55896.03	12914.24	2145.580	4056.497
#2	2451.936	55677.01	12997.03	2132.633	4050.993
#3	2425.260	55357.19	12925.29	2124.277	4015.546

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16DUP Acquired: 12/16/2024 17:49:17 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0028280	.0117749	.0170987	.0162165	.0045063	.0475362	.1481735
Stddev	.0006002	.0014513	.0006176	.0016954	.0003850	.0014678	.0005034
%RSD	21.22250	12.32489	3.611730	10.45505	8.543081	3.087748	.3397101
#1	.0030613	.0123772	.0174106	.0150003	.0049245	.0458655	.1487134
#2	.0032766	.0101195	.0174982	.0181532	.0044275	.0486185	.1477172
#3	.0021463	.0128281	.0163874	.0154960	.0041668	.0481248	.1480899

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016590	.0016430	6.380781	.0035201	.0028331	.0077689	.0556038
Stddev	.0000149	.0000503	.035466	.0002929	.0000508	.0002125	.0024963
%RSD	.8993332	3.064411	.5558235	8.320309	1.794418	2.735264	4.489522
#1	.0016512	.0016960	6.421716	.0038556	.0027833	.0076097	.0567592
#2	.0016762	.0016372	6.361341	.0033894	.0028849	.0080102	.0573131
#3	.0016495	.0015958	6.359286	.0033153	.0028312	.0076869	.0527390

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7441420	.6744608	.0053327	.0002349	135.0113	.0032752	.0553324
Stddev	.0036597	.0028445	.0001446	.0003576	.7141	.0011255	.0000867
%RSD	.4918052	.4217374	2.712544	152.2716	.5289229	34.36466	.1567043
#1	.7481870	.6773432	.0051735	-.000177	135.5989	.0034660	.0554173
#2	.7431788	.6716559	.0054560	.000418	134.2165	.0042931	.0553360
#3	.7410601	.6743832	.0053686	.000464	135.2186	.0020665	.0552440

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8443862	.0160252	.0027553	.0056215	.0015545	.4314952	.0556057
Stddev	.0187156	.0005151	.0002042	.0001721	.0001664	.0070630	.0022413
%RSD	2.216473	3.214480	7.411429	3.060894	10.70471	1.636873	4.030657
#1	.8229738	.0165560	.0025472	.0056786	.0015415	.4326184	.0581766
#2	.8576232	.0155273	.0027634	.0054282	.0017271	.4239378	.0540631
#3	.8525616	.0159924	.0029554	.0057578	.0013950	.4379292	.0545774

Sample Name: P5216-16DUP Acquired: 12/16/2024 17:49:17 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.2032759	-.002450	.0400091
Stddev	.0007673	.000576	.0000719
%RSD	.3774613	23.49794	.1797680
#1	.2028688	-.002706	.0399262
#2	.2041609	-.001790	.0400468
#3	.2027979	-.002852	.0400543

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2514.337	55729.09	12976.01	2131.391	4180.565
Stddev	4.836	45.30	35.50	1.614	8.074
%RSD	.1923552	.0812869	.2735468	.0757418	.1931344
#1	2509.378	55683.92	12935.08	2131.186	4171.360
#2	2519.041	55728.82	12994.74	2129.889	4186.450
#3	2514.593	55774.52	12998.23	2133.098	4183.883

Sample Name: P5216-16 Acquired: 12/16/2024 17:53:47 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.003182**	**-.002114**	**.0094046**	**-.000284**	**-.001389**	**.0315546**	**.1487043**
Stddev	.000949	.000357	.0005644	.001029	.000676	.0011351	.0004369
%RSD	29.81940	16.90430	6.001356	361.9327	48.65460	3.597270	.2938130
#1	-.003237	-.001967	.0095256	-.000485	-.001965	.0303398	.1485637
#2	-.004103	-.001854	.0087895	.000830	-.001557	.0317359	.1491943
#3	-.002207	-.002522	.0098987	-.001198	-.000645	.0325882	.1483551

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000049**	**.0000340**	**6.438594**	**-.000497**	**.0011733**	**.0054682**	**.0317373**
Stddev	.000041	.0000984	.010517	.000316	.0001718	.0002637	.0038948
%RSD	83.61538	289.1771	.1633472	63.67472	14.64052	4.822678	12.27200
#1	-.000077	-.000057	6.449096	-.000146	.0010086	.0055135	.0317435
#2	-.000002	.000138	6.438624	-.000761	.0011600	.0057062	.0356290
#3	-.000067	.000021	6.428061	-.000583	.0013513	.0051847	.0278394

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7515356**	**.6559494**	**.0013089**	**-.000248**	**130.6711**	**.0005084**	**.0523368**
Stddev	.0012474	.0199572	.0002379	.000330	.5473	.0006596	.0003586
%RSD	.1659854	3.042484	18.17298	133.1248	.4188357	129.7399	.6851239
#1	.7526325	.6658057	.0011152	-.000119	130.9551	-.000247	.0525036
#2	.7517957	.6690608	.0012370	-.000001	130.0401	.000804	.0525816
#3	.7501786	.6329816	.0015743	-.000623	131.0180	.000968	.0519252

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7147655**	**.0143211**	**-.000697**	**-.000609**	**.0001152**	**.4191910**	**.0091795**
Stddev	.0095297	.0009827	.000071	.000607	.0006150	.0050908	.0022541
%RSD	1.333266	6.861663	10.20033	99.58939	533.7983	1.214439	24.55554
#1	.7244349	.0145461	-.000646	-.001288	.0003479	.4245451	.0072296
#2	.7144796	.0151717	-.000778	-.000422	.0005799	.4186153	.0116476
#3	.7053819	.0132454	-.000666	-.000118	-.000582	.4144124	.0086615

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16 Acquired: 12/16/2024 17:53:47 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.1832105	-.004467	.0378036
Stddev	.0020997	.000632	.0000830
%RSD	1.146075	14.15895	.2196794
#1	.1808601	-.005188	.0378846
#2	.1838703	-.004205	.0377186
#3	.1849011	-.004007	.0378075

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2516.950	56501.22	12866.20	2140.293	4222.306
Stddev	6.846	120.22	19.60	4.124	7.682
%RSD	.2720008	.2127815	.1523593	.1926637	.1819421
#1	2524.479	56408.48	12864.43	2144.806	4229.843
#2	2515.275	56637.05	12847.54	2136.723	4222.589
#3	2511.097	56458.13	12886.62	2139.350	4214.486

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV02 Acquired: 12/16/2024 17:58:16 Type: Unk
Method: NON EPA-6010-200.7(v2434) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.737366**	**4.926280**	**4.996830**	**4.712369**	**4.717467**	**9.702124**	**9.615583**
Stddev	.010457	.045269	.003276	.004624	.011724	.006778	.087402
%RSD	.2207351	.9189205	.0655548	.0981166	.2485315	.0698564	.9089616
#1	4.734461	4.912963	4.993551	4.715615	4.718854	9.709950	9.706502
#2	4.728668	4.976714	5.000102	4.707075	4.705111	9.698224	9.532184
#3	4.748968	4.889164	4.996836	4.714418	4.728436	9.698197	9.608063

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2632690**	**2.504896**	**25.09712**	**1.017789**	**2.471060**	**1.215985**	**4.840496**
Stddev	.0010559	.004502	.08974	.000875	.003928	.003152	.030619
%RSD	.4010781	.1797287	.3575828	.0859663	.1589723	.2592505	.6325634
#1	.2642847	2.499955	25.17031	1.017162	2.467449	1.218420	4.845293
#2	.2621770	2.508765	24.99699	1.018789	2.475243	1.212424	4.807761
#3	.2633454	2.505969	25.12405	1.017416	2.470487	1.217109	4.868433

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.485344**	**25.28074**	**2.481324**	**1.235926**	**23.66256**	**2.478232**	**2.467142**
Stddev	.016117	.03884	.002060	.001121	.07687	.005338	.005187
%RSD	.6484642	.1536257	.0830123	.0906868	.3248685	.2153969	.2102549
#1	2.497380	25.29589	2.478980	1.235106	23.73246	2.479389	2.473009
#2	2.467034	25.23661	2.482148	1.235468	23.67498	2.472410	2.465250
#3	2.491618	25.30972	2.482844	1.237203	23.58023	2.482897	2.463166

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.13335**	**5.131618**	**4.818150**	**4.984151**	**4.866410**	**4.726458**	**4.936939**
Stddev	.02974	.016882	.004289	.013415	.018300	.017709	.026182
%RSD	.1285567	.3289857	.0890098	.2691558	.3760404	.3746872	.5303327
#1	23.16091	5.149895	4.818555	4.976499	4.884629	4.706898	4.919427
#2	23.10183	5.116607	4.813674	4.999642	4.848030	4.731076	4.967037
#3	23.13732	5.128353	4.822223	4.976313	4.866571	4.741402	4.924351

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV02 Acquired: 12/16/2024 17:58:16 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**4.848435**	**4.673598**	**4.917186**
Stddev	.018295	.021008	.032283
%RSD	.3773417	.4495079	.6565352
#1	4.842454	4.696307	4.921361
#2	4.868972	4.654856	4.883019
#3	4.833879	4.669633	4.947179

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2491.179**	**55604.86**	**12505.29**	**2105.101**	**4074.389**
Stddev	10.438	58.58	52.03	6.757	6.050
%RSD	.4189859	.1053508	.4160698	.3210040	.1484953
#1	2482.649	55543.53	12450.87	2097.684	4069.334
#2	2502.818	55660.23	12554.55	2110.909	4081.093
#3	2488.070	55610.83	12510.45	2106.711	4072.741

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB02 Acquired: 12/16/2024 18:02:29 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001146**	**-.000963**	**-.000034**	**.0000605**	**-.000679**	**.0020982**	**.0027874**
Stddev	.001541	.000377	.000716	.0006816	.000206	.0015461	.0001736
%RSD	134.4874	39.10385	2110.429	1126.354	30.38800	73.68765	6.226932
#1	-.002707	-.000984	-.000348	-.000725	-.000504	.0004284	.0028943
#2	-.001105	-.001329	-.000539	.000411	-.000907	.0023860	.0028808
#3	.000374	-.000577	.000785	.000495	-.000628	.0034801	.0025871

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000395**	**-.000032**	**-.003022**	**.0003166**	**.0000734**	**.0001333**	**.0217273**
Stddev	.0000201	.000086	.003294	.0003239	.0001251	.0001194	.0027490
%RSD	50.94606	265.1770	109.0002	102.3040	170.4701	89.53251	12.65219
#1	.0000367	.000005	-.003061	.0006762	.0002038	-.000004	.0241540
#2	.0000608	.000028	-.006297	.0000476	-.000046	.000215	.0187419
#3	.0000209	-.000131	.000291	.0002261	.000062	.000189	.0222861

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002777**	**.0016319**	**.0002409**	**-.000128**	**.0508569**	**-.000469**	**-.001244**
Stddev	.0002886	.0165393	.0001025	.000218	.0157782	.000961	.000217
%RSD	103.9440	1013.498	42.56326	169.7252	31.02477	204.7177	17.47556
#1	.0003483	-.016731	.0001773	-.000280	.0349191	-.001440	-.001250
#2	.0005244	.006271	.0001862	-.000227	.0511809	-.000450	-.001024
#3	-.000040	.015357	.0003591	.000121	.0664706	.000482	-.001458

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.031420**	**-.000309**	**.0001612**	**.0000026**	**-.000509**	**-.002376**	**-.001121**
Stddev	.012165	.000565	.0000664	.0005497	.000380	.003928	.001223
%RSD	38.71792	183.0536	41.17791	21091.31	74.59545	165.3596	109.0391
#1	-.043786	-.000901	.0001984	-.000622	-.000937	-.003164	-.002508
#2	-.031006	-.000250	.0002007	.000215	-.000213	.001887	-.000198
#3	-.019467	.000225	.0000846	.000415	-.000378	-.005850	-.000658

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB02 Acquired: 12/16/2024 18:02:29 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.001931	-.000705	-.000066
Stddev	.002297	.000290	.000014
%RSD	118.9544	41.15130	21.73570
#1	-.004362	-.000393	-.000080
#2	-.001634	-.000755	-.000067
#3	.000203	-.000966	-.000051

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2657.648	59538.25	12779.63	2270.743	4687.582
Stddev	3.501	45.39	25.58	5.785	3.211
%RSD	.1317252	.0762318	.2001958	.2547498	.0684935
#1	2661.310	59486.13	12750.47	2268.596	4688.002
#2	2657.299	59569.07	12798.34	2266.339	4690.562
#3	2654.334	59559.54	12790.06	2277.295	4684.182

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16LX5 Acquired: 12/16/2024 18:06:52 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.003666**	**-.002107**	**.0022036**	**-.000399**	**-.001175**	**.0073773**	**.0314476**
Stddev	.003004	.002438	.0004999	.000360	.000577	.0009695	.0002801
%RSD	81.94165	115.7277	22.68590	90.22469	49.12000	13.14207	.8905746
#1	-.004230	.000531	.0023405	-.000810	-.000671	.0081709	.0315367
#2	-.000420	-.004278	.0026207	-.000242	-.001049	.0062967	.0316723
#3	-.006349	-.002574	.0016495	-.000144	-.001805	.0076642	.0311338

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000793**	**-.000008**	**1.298324**	**.0001215**	**.0003301**	**.0011308**	**.0078713**
Stddev	.0000285	.000077	.007800	.0001098	.0001164	.0001532	.0002891
%RSD	35.88453	908.2063	.6008104	90.43058	35.27350	13.54777	3.672688
#1	.0000472	.000080	1.300569	-.000003	.0003707	.0009560	.0076602
#2	.0000892	-.000044	1.289648	.000163	.0004208	.0012419	.0077530
#3	.0001014	-.000062	1.304756	.000204	.0001988	.0011944	.0082008

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1531989**	**.1281961**	**.0004012**	**.0000902**	**25.36472**	**-.000493**	**.0095049**
Stddev	.0012858	.0080426	.0001859	.0000777	.02463	.001070	.0001496
%RSD	.8392782	6.273689	46.33125	86.16592	.0970899	216.9551	1.573497
#1	.1521023	.1274941	.0002067	.0000412	25.38757	.000711	.0096122
#2	.1528804	.1365668	.0005771	.0001798	25.33864	-.001337	.0095685
#3	.1546140	.1205275	.0004199	.0000496	25.36795	-.000854	.0093341

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1145859**	**.0008327**	**-.000177**	**.0000924**	**-.000307**	**.0807382**	**-.000371**
Stddev	.0136490	.0002329	.000228	.0003249	.000468	.0016019	.001263
%RSD	11.91155	27.96645	128.9960	351.4155	152.1817	1.984079	340.1851
#1	.1212269	.0007628	-.000410	.0001919	.000153	.0822416	.000053
#2	.0988873	.0010925	-.000167	.0003560	-.000293	.0809197	-.001791
#3	.1236434	.0006428	.000046	-.000271	-.000782	.0790533	.000625

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16LX5 Acquired: 12/16/2024 18:06:52 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0345783	-.001398	.0077152
Stddev	.0031242	.000274	.0000094
%RSD	9.035076	19.57895	.1215176
#1	.0331571	-.001265	.0077092
#2	.0324174	-.001216	.0077260
#3	.0381604	-.001713	.0077105

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2598.520	58007.46	12822.38	2224.242	4445.318
Stddev	5.428	90.48	12.83	6.987	4.496
%RSD	.2088710	.1559784	.1000585	.3141460	.1011305
#1	2604.454	58009.75	12822.49	2216.632	4450.440
#2	2597.300	58096.78	12835.16	2225.725	4443.486
#3	2593.807	57915.86	12809.50	2230.368	4442.027

Sample Name: P5216-16MS Acquired: 12/16/2024 18:11:13 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**1.111799**	**2.767445**	**1.399998**	**2.701850**	**1.090623**	**2.929441**	**.4604173**
Stddev	.005592	.002508	.003613	.012709	.003345	.005828	.0020317
%RSD	.5029466	.0906381	.2580889	.4703645	.3067444	.1989323	.4412679
#1	1.109428	2.764778	1.402688	2.696941	1.087251	2.924171	.4600476
#2	1.107783	2.767801	1.401415	2.692328	1.090676	2.935699	.4585959
#3	1.118185	2.769757	1.395891	2.716281	1.093941	2.928453	.4626085

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3153893**	**.2905074**	**9.211541**	**.6000429**	**.2930450**	**.4296502**	**4.372457**
Stddev	.0008639	.0002353	.059333	.0030408	.0001493	.0011244	.008589
%RSD	.2739252	.0809996	.6441109	.5067680	.0509397	.2617090	.1964327
#1	.3163426	.2904416	9.268462	.5984906	.2932015	.4296821	4.363348
#2	.3151671	.2907686	9.216101	.5980915	.2929041	.4285101	4.373617
#3	.3146581	.2903120	9.150060	.6035466	.2930295	.4307583	4.380408

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.191154**	**3.764819**	**.7297552**	**.1090049**	**155.8230**	**.4549437**	**.3631789**
Stddev	.006206	.042581	.0012058	.0001186	.8507	.0017700	.0010748
%RSD	.5210257	1.131011	.1652384	.1087840	.5459084	.3890678	.2959388
#1	1.197944	3.791964	.7305881	.1089415	155.1193	.4568041	.3620752
#2	1.185775	3.786750	.7303051	.1091417	156.7683	.4532805	.3642222
#3	1.189744	3.715744	.7283724	.1089315	155.5813	.4547465	.3632393

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.86128**	**.4366332**	**.5743850**	**.9983211**	**.2917450**	**1.521195**	**8.516986**
Stddev	.10296	.0036645	.0012268	.0018198	.0009793	.006849	.010998
%RSD	.6928211	.8392558	.2135905	.1822899	.3356816	.4502594	.1291331
#1	14.75920	.4407887	.5745880	1.000064	.2922817	1.513287	8.527024
#2	14.85955	.4352461	.5730693	.996433	.2906146	1.525226	8.505230
#3	14.96510	.4338648	.5754976	.998466	.2923386	1.525073	8.518704

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16MS Acquired: 12/16/2024 18:11:13 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.2322994	.2855237	.3466550
Stddev	.0027212	.0018839	.0010343
%RSD	1.171415	.6598039	.2983687
#1	.2334827	.2839635	.3455301
#2	.2342287	.2849911	.3468699
#3	.2291869	.2876166	.3475650

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2454.820	55395.07	12289.33	2108.161	4031.046
Stddev	7.497	172.19	33.46	12.216	6.882
%RSD	.3053980	.3108319	.2722924	.5794693	.1707306
#1	2456.262	55593.87	12264.30	2109.833	4032.402
#2	2461.492	55298.10	12276.36	2095.195	4037.150
#3	2446.707	55293.23	12327.34	2119.456	4023.587

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16MSD Acquired: 12/16/2024 18:15:22 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**1.104673**	**2.737246**	**1.385664**	**2.691971**	**1.095681**	**2.913162**	**.4549132**
Stddev	.004446	.028574	.002438	.006466	.000805	.010970	.0021051
%RSD	.4024895	1.043895	.1759687	.2402048	.0734503	.3765744	.4627551
#1	1.100638	2.707852	1.388362	2.684519	1.094834	2.922708	.4558030
#2	1.109440	2.764922	1.383618	2.696101	1.096436	2.915602	.4564273
#3	1.103941	2.738965	1.385011	2.695293	1.095772	2.901178	.4525093

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3088656**	**.2879044**	**9.117565**	**.5959322**	**.2909589**	**.4274421**	**4.395436**
Stddev	.0016819	.0003416	.028437	.0018425	.0001997	.0007448	.012273
%RSD	.5445292	.1186378	.3118933	.3091750	.0686491	.1742423	.2792154
#1	.3097821	.2875836	9.146583	.5980362	.2908962	.4276436	4.391377
#2	.3098902	.2882635	9.116364	.5951530	.2911825	.4280654	4.409224
#3	.3069246	.2878662	9.089747	.5946073	.2907981	.4266173	4.385707

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.179685**	**3.727540**	**.7228367**	**.1090265**	**158.5059**	**.4508373**	**.3632908**
Stddev	.003471	.010383	.0011971	.0001342	.2621	.0023598	.0003777
%RSD	.2942157	.2785570	.1656132	.1230964	.1653785	.5234232	.1039813
#1	1.182198	3.730969	.7241319	.1088718	158.4130	.4535150	.3631730
#2	1.181132	3.735775	.7217708	.1091113	158.3029	.4499355	.3629860
#3	1.175724	3.715876	.7226074	.1090965	158.8018	.4490614	.3637134

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**15.03015**	**.4289143**	**.5759365**	**.9893157**	**.2917648**	**1.546211**	**8.329326**
Stddev	.04455	.0014461	.0015768	.0009649	.0006381	.004535	.037648
%RSD	.2964063	.3371552	.2737839	.0975358	.2187208	.2933116	.4519983
#1	15.04720	.4295848	.5745885	.9882626	.2918945	1.546167	8.299552
#2	14.97959	.4299034	.5776705	.9901574	.2923282	1.541697	8.371645
#3	15.06366	.4272546	.5755504	.9895270	.2910718	1.550767	8.316780

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16MSD Acquired: 12/16/2024 18:15:22 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.2264882	.2850601	.3478700
Stddev	.0034487	.0008215	.0004690
%RSD	1.522688	.2881986	.1348205
#1	.2237625	.2858830	.3482679
#2	.2303653	.2850575	.3473529
#3	.2253367	.2842399	.3479891

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2441.952	54866.86	12391.96	2084.608	4029.641
Stddev	4.515	160.81	15.78	15.881	3.608
%RSD	.1848742	.2930938	.1273461	.7618456	.0895312
#1	2444.376	55019.42	12402.11	2100.519	4028.950
#2	2436.743	54882.27	12373.78	2084.548	4026.429
#3	2444.736	54698.90	12399.98	2068.756	4033.545

Sample Name: P5216-16A Acquired: 12/16/2024 18:19:33 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**1.111082**	**2.754902**	**1.395272**	**2.700981**	**1.094377**	**2.921762**	**.4519481**
Stddev	.004331	.007000	.002470	.000907	.003973	.005163	.0012855
%RSD	.3898189	.2540835	.1770283	.0335924	.3630589	.1767039	.2844412
#1	1.111058	2.748053	1.394997	2.701411	1.089792	2.915893	.4504787
#2	1.106763	2.754610	1.397869	2.699939	1.096809	2.925604	.4525002
#3	1.115426	2.762043	1.392952	2.701594	1.096530	2.923788	.4528653

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3102446**	**.2892100**	**9.061719**	**.5974548**	**.2920686**	**.4300023**	**4.396456**
Stddev	.0020159	.0003426	.047765	.0005373	.0001054	.0003857	.022450
%RSD	.6497865	.1184689	.5271096	.0899246	.0360994	.0897022	.5106415
#1	.3079973	.2891997	9.011159	.5970419	.2921654	.4303495	4.370682
#2	.3108428	.2895576	9.106086	.5980623	.2920842	.4295871	4.411752
#3	.3118938	.2888726	9.067911	.5972603	.2919563	.4300703	4.406933

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.175705**	**3.720150**	**.7270872**	**.1091784**	**159.1876**	**.4494876**	**.3624288**
Stddev	.007929	.002390	.0006109	.0001526	.7906	.0024376	.0013392
%RSD	.6744166	.0642444	.0840253	.1397735	.4966758	.5422959	.3695074
#1	1.166565	3.717404	.7277284	.1093128	158.5651	.4466878	.3637416
#2	1.179801	3.721290	.7270213	.1092100	160.0772	.4511375	.3610647
#3	1.180748	3.721757	.7265119	.1090125	158.9206	.4506375	.3624802

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.95170**	**.4306732**	**.5737118**	**.9949822**	**.2899732**	**1.532946**	**8.535516**
Stddev	.08181	.0024260	.0006890	.0019436	.0014007	.002357	.030122
%RSD	.5471735	.5632959	.1200873	.1953391	.4830454	.1537845	.3529008
#1	15.03047	.4279887	.5731042	.9970571	.2887110	1.534971	8.515973
#2	14.95749	.4313221	.5735709	.9946854	.2914801	1.533509	8.520369
#3	14.86715	.4327087	.5744603	.9932041	.2897285	1.530358	8.570205

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5216-16A Acquired: 12/16/2024 18:19:33 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.2277030	.2846927	.3486790
Stddev	.0038664	.0003359	.0002914
%RSD	1.697991	.1180005	.0835771
#1	.2313124	.2845617	.3488042
#2	.2236228	.2844420	.3483459
#3	.2281739	.2850744	.3488869

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2461.827	55425.89	12472.55	2102.317	4050.196
Stddev	8.167	38.12	56.85	8.310	10.975
%RSD	.3317630	.0687825	.4557612	.3952885	.2709758
#1	2469.130	55400.13	12537.15	2092.933	4060.588
#2	2463.342	55407.86	12450.34	2105.274	4051.281
#3	2453.008	55469.69	12430.16	2108.744	4038.718

Sample Name: P5224-02 Acquired: 12/16/2024 18:23:41 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.005763**	**-.007024**	**.0004296**	**.0023060**	**.0013100**	**.0163329**	**.0643868**
Stddev	.001140	.002296	.0012507	.0015365	.0006491	.0015321	.0003616
%RSD	19.78453	32.68268	291.1475	66.63088	49.54914	9.380334	.5615831
#1	-.005337	-.009608	-.000785	.0016148	.0005795	.0173134	.0639781
#2	-.004897	-.005220	.001714	.0040667	.0018206	.0171178	.0645171
#3	-.007055	-.006244	.000360	.0012365	.0015300	.0145674	.0646651

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000149**	**-.000190**	**11.29735**	**.0053983**	**-.000120**	**.0011104**	**.0674262**
Stddev	.000046	.000043	.01546	.0002247	.000246	.0001224	.0018306
%RSD	31.14175	22.43526	.1368182	4.163075	203.9125	11.02529	2.714895
#1	-.000186	-.000200	11.28446	.0054348	-.000340	.0009717	.0660754
#2	-.000164	-.000226	11.29311	.0056026	-.000166	.0012033	.0666937
#3	-.000097	-.000143	11.31449	.0051576	.000145	.0011561	.0695096

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0464714**	**2.823549**	**.0022822**	**-.000624**	**8.248056**	**.0004636**	**.0231840**
Stddev	.0005379	.003812	.0001717	.000322	.037647	.0007253	.0000200
%RSD	1.157553	.1350079	7.523693	51.51433	.4564306	156.4390	.0861581
#1	.0459814	2.827366	.0021357	-.000988	8.278949	.0002471	.0232044
#2	.0463860	2.819741	.0022398	-.000378	8.206124	.0012725	.0231645
#3	.0470470	2.823539	.0024712	-.000507	8.259096	-.000129	.0231830

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.013195**	**.0509685**	**.0008247**	**.0003450**	**-.000483**	**.6814781**	**.0078598**
Stddev	.011643	.0007797	.0002481	.0006119	.000336	.0047048	.0007455
%RSD	1.149184	1.529856	30.08003	177.3914	69.54629	.6903863	9.484320
#1	1.025493	.0503209	.0005708	-.000315	-.000870	.6823108	.0070636
#2	1.002341	.0518340	.0010665	.000456	-.000294	.6764125	.0079748
#3	1.011752	.0507505	.0008366	.000894	-.000284	.6857109	.0085411

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02 Acquired: 12/16/2024 18:23:41 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	5.584855	-.004999	.0479876
Stddev	.010700	.000779	.0001750
%RSD	.1915835	15.57830	.3646768
#1	5.579019	-.004668	.0481666
#2	5.578342	-.005889	.0479793
#3	5.597203	-.004441	.0478169

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.638	59039.24	12762.30	2211.526	4535.371
Stddev	5.374	20.77	15.63	14.247	9.861
%RSD	.2074520	.0351738	.1224764	.6442242	.2174149
#1	2588.895	59047.22	12775.15	2211.160	4535.943
#2	2596.668	59054.83	12744.90	2197.466	4544.933
#3	2586.351	59015.67	12766.85	2225.953	4525.237

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02DUP Acquired: 12/16/2024 18:28:01 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.006299**	**-.005606**	**.0015099**	**.0014524**	**.0001796**	**.0175508**	**.0652897**
Stddev	.000746	.000773	.0005161	.0006980	.0005690	.0017165	.0003519
%RSD	11.84775	13.78155	34.18312	48.05800	316.8379	9.779924	.5389640
#1	-.005804	-.006209	.0014616	.0022449	-.000475	.0188741	.0655785
#2	-.005935	-.005873	.0020484	.0009288	.000552	.0156113	.0653927
#3	-.007157	-.004735	.0010196	.0011837	.000462	.0181670	.0648978

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000128**	**-.000168**	**11.24522**	**.0053303**	**-.000019**	**.0009263**	**.0640389**
Stddev	.000064	.000038	.01340	.0003360	.000098	.0001589	.0028789
%RSD	50.13666	22.46182	.1191515	6.304251	528.5232	17.15064	4.495490
#1	-.000078	-.000209	11.26020	.0056784	.000092	.0009142	.0629254
#2	-.000200	-.000135	11.24108	.0053048	-.000052	.0007739	.0673082
#3	-.000105	-.000160	11.23438	.0050078	-.000096	.0010909	.0618831

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0460584**	**2.809340**	**.0022878**	**-.000498**	**8.123586**	**-.001008**	**.0228319**
Stddev	.0006651	.011880	.0002022	.000148	.021525	.000804	.0000598
%RSD	1.444089	.4228811	8.836666	29.72197	.2649744	79.74198	.2619065
#1	.0453549	2.820328	.0022839	-.000337	8.099042	-.000128	.0228155
#2	.0466770	2.810958	.0020876	-.000627	8.139253	-.001704	.0228982
#3	.0461433	2.796733	.0024918	-.000530	8.132463	-.001193	.0227821

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9903606**	**.0496125**	**.0008164**	**-.000281**	**-.000336**	**.6748694**	**.0077387**
Stddev	.0266922	.0006054	.0001741	.000557	.000522	.0055654	.0019203
%RSD	2.695196	1.220227	21.32788	198.2765	155.1290	.8246574	24.81400
#1	.9604017	.0501953	.0006570	-.000258	.000145	.6743782	.0098327
#2	.9990695	.0489868	.0007900	-.000848	-.000264	.6806641	.0060602
#3	1.011611	.0496553	.0010023	.000264	-.000891	.6695660	.0073231

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02DUP Acquired: 12/16/2024 18:28:01 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**5.391630**	**-.005183**	**.0473104**
Stddev	.005914	.000585	.0000168
%RSD	.1096838	11.28213	.0355893
#1	5.389292	-.004513	.0473297
#2	5.387243	-.005588	.0473032
#3	5.398356	-.005449	.0472984

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2640.365**	**59724.01**	**12843.94**	**2250.915**	**4658.429**
Stddev	5.581	31.63	14.70	6.040	13.658
%RSD	.2113564	.0529585	.1144604	.2683506	.2931794
#1	2643.288	59756.98	12835.00	2244.038	4670.788
#2	2643.878	59693.92	12860.91	2255.363	4660.734
#3	2633.930	59721.14	12835.91	2253.343	4643.766

Sample Name: P5224-02LX5 Acquired: 12/16/2024 18:32:20 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.002179**	**-.001668**	**-.000168**	**-.000190**	**-.000089**	**.0031543**	**.0158814**
Stddev	.001072	.003079	.000173	.001408	.000795	.0018367	.0004138
%RSD	49.18371	184.5612	103.0205	741.6258	894.1358	58.22715	2.605833
#1	-.002949	.001807	.000020	-.000496	.000756	.0052537	.0155571
#2	-.000955	-.002755	-.000205	-.001420	-.000822	.0018438	.0163475
#3	-.002633	-.004056	-.000320	.001346	-.000201	.0023656	.0157396

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000038**	**-.000059**	**2.304709**	**.0011257**	**.0000073**	**.0001120**	**.0166520**
Stddev	.000023	.000020	.011042	.0004458	.0000543	.0003482	.0014847
%RSD	61.26499	34.49333	.4790884	39.60041	739.8948	310.9452	8.916293
#1	-.000011	-.000081	2.316075	.0007987	-.000052	.0004993	.0174123
#2	-.000053	-.000057	2.304028	.0016334	.000019	.0000116	.0176027
#3	-.000050	-.000040	2.294024	.0009449	.000055	-.000175	.0149411

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0092856**	**.5777723**	**.0006775**	**-.000080**	**1.682760**	**.0013412**	**.0032544**
Stddev	.0001419	.0086507	.0001488	.000216	.014695	.0013438	.0002823
%RSD	1.527614	1.497256	21.96336	269.8140	.8732696	100.1976	8.674130
#1	.0094201	.5875904	.0006893	-.000205	1.670118	.0024376	.0035663
#2	.0092995	.5712700	.0008200	-.000205	1.679279	.0017440	.0030163
#3	.0091374	.5744566	.0005231	.000170	1.698883	-.000158	.0031808

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1780331**	**.0063453**	**.0000167**	**-.000181**	**-.000072**	**.1333334**	**.0007675**
Stddev	.0253743	.0006004	.0001614	.000176	.000114	.0037090	.0006396
%RSD	14.25255	9.462115	964.0444	97.47762	156.9634	2.781755	83.32426
#1	.1517795	.0062250	-.000035	-.000215	-.000114	.1372264	.0005233
#2	.2024256	.0058142	.000198	-.000337	.000056	.1298409	.0002861
#3	.1798942	.0069968	-.000112	.000010	-.000159	.1329328	.0014932

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02LX5 Acquired: 12/16/2024 18:32:20 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	1.153912	-.001051	.0097203
Stddev	.004617	.000412	.0000270
%RSD	.4000883	39.21434	.2780742
#1	1.158336	-.000932	.0097277
#2	1.154275	-.001509	.0096903
#3	1.149125	-.000711	.0097428

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2663.779	59739.36	12756.12	2286.633	4667.654
Stddev	3.585	39.60	35.87	7.900	4.848
%RSD	.1345851	.0662902	.2812166	.3454804	.1038688
#1	2659.744	59733.40	12758.94	2295.366	4672.606
#2	2664.995	59703.08	12718.92	2279.984	4662.917
#3	2666.598	59781.61	12790.50	2284.549	4667.439

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02MS Acquired: 12/16/2024 18:36:42 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7025279**	**1.780627**	**.8884095**	**1.665914**	**.7201702**	**1.940743**	**.2492266**
Stddev	.0055257	.003550	.0002308	.001347	.0014220	.002568	.0005151
%RSD	.7865511	.1993540	.0259767	.0808552	.1974530	.1323028	.2066624
#1	.6963369	1.784405	.8883229	1.666536	.7185515	1.937876	.2497486
#2	.7042865	1.780113	.8886711	1.664368	.7212180	1.941522	.2487188
#3	.7069603	1.777362	.8882347	1.666837	.7207412	1.942830	.2492122

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2062322**	**.1830469**	**12.50537**	**.4099301**	**.1883887**	**.2828397**	**2.835181**
Stddev	.0007232	.0001379	.00265	.0007883	.0002533	.0006149	.010088
%RSD	.3506619	.0753450	.0211988	.1923027	.1344596	.2174016	.3558314
#1	.2070527	.1830936	12.50290	.4107976	.1885988	.2825578	2.834493
#2	.2059561	.1828917	12.50817	.4097351	.1884600	.2824163	2.825453
#3	.2056876	.1831553	12.50504	.4092576	.1881074	.2835450	2.845595

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2502131**	**4.906539**	**.4696359**	**.0692972**	**10.72904**	**.3035673**	**.2190366**
Stddev	.0011231	.028641	.0009439	.0004569	.02484	.0010695	.0005047
%RSD	.4488393	.5837267	.2009940	.6592863	.2315035	.3523004	.2304324
#1	.2505384	4.876866	.4694559	.0694681	10.75159	.3047828	.2184921
#2	.2511375	4.908729	.4687949	.0687796	10.70242	.3031486	.2191286
#3	.2489633	4.934022	.4706568	.0696441	10.73312	.3027706	.2194889

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.582105**	**.3197814**	**.4001943**	**.6489026**	**.1948562**	**1.372473**	**5.176462**
Stddev	.030047	.0010464	.0001946	.0005326	.0005018	.003840	.012889
%RSD	.3135696	.3272105	.0486346	.0820846	.2575163	.2797922	.2490000
#1	9.611496	.3185907	.3999743	.6483261	.1945139	1.376902	5.191340
#2	9.551443	.3205542	.4002649	.6490052	.1946226	1.370071	5.169385
#3	9.583375	.3201993	.4003439	.6493764	.1954322	1.370447	5.168662

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02MS Acquired: 12/16/2024 18:36:42 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	5.552908	.1845836	.2542939
Stddev	.007806	.0012526	.0003883
%RSD	.1405813	.6786042	.1527187
#1	5.557105	.1857576	.2546142
#2	5.543901	.1832650	.2538619
#3	5.557719	.1847281	.2544055

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2539.124	57488.04	12271.69	2178.427	4414.440
Stddev	.774	56.95	10.59	7.753	4.615
%RSD	.0304661	.0990632	.0862770	.3558851	.1045460
#1	2539.818	57425.21	12264.19	2182.813	4409.916
#2	2539.265	57536.27	12283.80	2182.991	4419.141
#3	2538.290	57502.62	12267.07	2169.475	4414.263

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02MSD Acquired: 12/16/2024 18:40:42 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7021508**	**1.768501**	**.8851523**	**1.662802**	**.7177769**	**1.929059**	**.2509653**
Stddev	.0054528	.011207	.0020080	.002377	.0027045	.006996	.0004003
%RSD	.7765831	.6337150	.2268475	.1429388	.3767928	.3626567	.1595125
#1	.6976999	1.780924	.8871931	1.661707	.7148554	1.921425	.2507544
#2	.7005194	1.765429	.8850849	1.661170	.7201933	1.935163	.2507145
#3	.7082331	1.759150	.8831789	1.665529	.7182821	1.930590	.2514270

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2019679**	**.1823425**	**12.38821**	**.4050059**	**.1869412**	**.2817011**	**2.835540**
Stddev	.0010608	.0002484	.04224	.0009436	.0001222	.0004320	.006633
%RSD	.5252266	.1362185	.3409948	.2329851	.0653908	.1533519	.2339166
#1	.2025545	.1825747	12.42206	.4056775	.1870746	.2812218	2.835005
#2	.2007433	.1820806	12.34087	.4054133	.1869145	.2818208	2.829191
#3	.2026057	.1823723	12.40171	.4039271	.1868345	.2820605	2.842424

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2489095**	**4.845451**	**.4665210**	**.0687990**	**10.76022**	**.3012222**	**.2175382**
Stddev	.0011896	.047874	.0006799	.0002162	.04674	.0021413	.0006928
%RSD	.4779387	.9880213	.1457442	.3142633	.4343377	.7108754	.3184540
#1	.2502449	4.882925	.4670991	.0689675	10.73062	.3033317	.2179918
#2	.2479632	4.791519	.4666921	.0685552	10.81410	.2990504	.2167408
#3	.2485203	4.861908	.4657719	.0688744	10.73594	.3012845	.2178820

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.638357**	**.3153412**	**.3989336**	**.6463243**	**.1938172**	**1.366667**	**5.129036**
Stddev	.027430	.0013759	.0007839	.0009619	.0006728	.009437	.014332
%RSD	.2845967	.4363348	.1964920	.1488194	.3471319	.6905192	.2794255
#1	9.640184	.3164697	.3980607	.6453131	.1945602	1.358811	5.145074
#2	9.664829	.3138084	.3991628	.6464320	.1936422	1.377135	5.124550
#3	9.610059	.3157455	.3995773	.6472278	.1932492	1.364055	5.117484

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02MSD Acquired: 12/16/2024 18:40:42 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**5.524953**	**.1841569**	**.2509984**
Stddev	.006199	.0008863	.0004784
%RSD	.1121915	.4812873	.1906013
#1	5.531838	.1836683	.2508344
#2	5.523206	.1851800	.2515372
#3	5.519816	.1836224	.2506236

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2546.616**	**58086.44**	**12489.01**	**2183.099**	**4432.931**
Stddev	4.599	95.90	41.80	10.988	1.983
%RSD	.1805775	.1650911	.3347228	.5033317	.0447345
#1	2551.866	58046.12	12444.24	2179.383	4431.238
#2	2544.679	58017.29	12527.02	2174.451	4435.113
#3	2543.302	58195.91	12495.76	2195.464	4432.443

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02A Acquired: 12/16/2024 18:44:44 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7017858**	**1.757241**	**.8845746**	**1.669880**	**.7164230**	**1.923704**	**.2496820**
Stddev	.0017741	.010804	.0015482	.005112	.0026117	.002325	.0008361
%RSD	.2527937	.6148532	.1750224	.3061552	.3645517	.1208592	.3348698
#1	.7037167	1.746376	.8839771	1.675469	.7194381	1.926272	.2504220
#2	.7002279	1.767984	.8834141	1.668734	.7148612	1.923101	.2498489
#3	.7014127	1.757362	.8863325	1.665438	.7149697	1.921741	.2487749

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2006748**	**.1824465**	**12.29001**	**.4060542**	**.1872042**	**.2821071**	**2.808222**
Stddev	.0004024	.0001552	.02576	.0019400	.0003253	.0007453	.017839
%RSD	.2005077	.0850713	.2096351	.4777697	.1737781	.2641992	.6352244
#1	.2009477	.1824642	12.31605	.4039122	.1874091	.2829523	2.796654
#2	.2002127	.1825922	12.26453	.4065572	.1868291	.2815440	2.828766
#3	.2008640	.1822833	12.28946	.4076931	.1873745	.2818249	2.799247

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2448106**	**4.805203**	**.4669817**	**.0686192**	**10.77554**	**.2987414**	**.2163036**
Stddev	.0018244	.020787	.0014584	.0003578	.03723	.0004758	.0008298
%RSD	.7452423	.4325886	.3123112	.5214815	.3454960	.1592651	.3836294
#1	.2468360	4.812847	.4685294	.0688229	10.75077	.2989352	.2155525
#2	.2432960	4.781677	.4667828	.0682060	10.81836	.2981993	.2161640
#3	.2442998	4.821086	.4656329	.0688286	10.75750	.2990897	.2171944

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.628711**	**.3128045**	**.3971789**	**.6465064**	**.1931623**	**1.372448**	**5.151663**
Stddev	.044907	.0020942	.0012785	.0015225	.0007500	.006441	.018753
%RSD	.4663859	.6694902	.3218942	.2355005	.3882793	.4692758	.3640278
#1	9.619478	.3152193	.3986407	.6481104	.1933142	1.365042	5.130059
#2	9.677517	.3114869	.3962696	.6463275	.1938247	1.375563	5.161184
#3	9.589138	.3117073	.3966264	.6450812	.1923479	1.376739	5.163747

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5224-02A Acquired: 12/16/2024 18:44:44 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**5.544818**	**.1825621**	**.2506144**
Stddev	.009540	.0007753	.0002410
%RSD	.1720566	.4246520	.0961492
#1	5.541119	.1830103	.2507023
#2	5.555653	.1830091	.2507991
#3	5.537680	.1816669	.2503418

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2547.899**	**58065.75**	**12566.58**	**2195.298**	**4423.273**
Stddev	11.735	72.89	33.24	.651	10.973
%RSD	.4605624	.1255309	.2644802	.0296676	.2480709
#1	2534.395	58149.53	12532.13	2194.945	4411.545
#2	2553.685	58016.85	12598.45	2194.900	4424.986
#3	2555.618	58030.88	12569.17	2196.050	4433.289

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV03 Acquired: 12/16/2024 18:48:43 Type: Unk
Method: NON EPA-6010-200.7(v2434) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.697386**	**4.798766**	**4.947976**	**4.665143**	**4.659285**	**9.590249**	**9.328674**
Stddev	.008521	.051890	.010669	.007322	.003240	.029812	.073484
%RSD	.1814076	1.081329	.2156153	.1569526	.0695423	.3108599	.7877215
#1	4.707214	4.847983	4.959855	4.661447	4.661784	9.597342	9.327926
#2	4.692883	4.803754	4.944864	4.673576	4.655624	9.615875	9.402529
#3	4.692061	4.744562	4.939210	4.660405	4.660447	9.557530	9.255566

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2630217**	**2.480130**	**25.06194**	**1.017000**	**2.445437**	**1.205643**	**4.812217**
Stddev	.0011037	.005115	.09843	.004192	.004379	.002288	.037635
%RSD	.4196175	.2062573	.3927400	.4122276	.1790571	.1898103	.7820727
#1	.2638876	2.484736	25.05485	1.020125	2.448848	1.203483	4.815119
#2	.2633986	2.481030	25.16372	1.012236	2.446963	1.208041	4.848317
#3	.2617790	2.474625	24.96724	1.018639	2.440499	1.205404	4.773215

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.465381**	**25.30322**	**2.457970**	**1.230751**	**23.30780**	**2.456312**	**2.440226**
Stddev	.016809	.13596	.002690	.000346	.09145	.006840	.008303
%RSD	.6818189	.5373234	.1094480	.0281144	.3923592	.2784479	.3402684
#1	2.467156	25.28093	2.461042	1.230369	23.40105	2.457862	2.438882
#2	2.481233	25.44895	2.456034	1.231043	23.21826	2.462243	2.449120
#3	2.447755	25.17979	2.456834	1.230842	23.30409	2.448830	2.432677

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.76206**	**5.114622**	**4.759525**	**4.933417**	**4.809549**	**4.697197**	**4.915721**
Stddev	.01241	.014462	.003006	.012730	.017787	.016383	.003118
%RSD	.0545206	.2827499	.0631557	.2580419	.3698368	.3487784	.0634208
#1	22.77246	5.117561	4.758421	4.946392	4.818347	4.685848	4.919225
#2	22.76539	5.127388	4.762927	4.932912	4.821223	4.689764	4.913254
#3	22.74832	5.098916	4.757227	4.920947	4.789077	4.715978	4.914684

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Sample Name: CCV03 Acquired: 12/16/2024 18:48:43 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**4.814507**	**4.563232**	**4.870731**
Stddev	.017549	.013294	.019448
%RSD	.3644974	.2913241	.3992785
#1	4.832968	4.567920	4.883051
#2	4.812514	4.573547	4.880831
#3	4.798040	4.548230	4.848311

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2506.531**	**55650.59**	**12511.38**	**2128.213**	**4108.487**
Stddev	2.306	95.31	62.35	14.305	9.899
%RSD	.0920152	.1712687	.4983832	.6721383	.2409487
#1	2504.372	55540.54	12486.15	2132.047	4098.049
#2	2506.260	55705.08	12465.60	2112.383	4109.670
#3	2508.961	55706.16	12582.40	2140.210	4117.742

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB03 Acquired: 12/16/2024 18:52:54 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0000812**	**-.001642**	**-.000403**	**.0011284**	**-.000408**	**.0040648**	**.0040158**
Stddev	.0016929	.001849	.000314	.0020223	.000781	.0023670	.0002643
%RSD	2084.475	112.6333	78.01721	179.2134	191.3214	58.23198	6.580948
#1	.0018774	.000153	-.000109	.0032322	.000274	.0067600	.0039005
#2	-.001485	-.003540	-.000366	-.000801	-.001260	.0031110	.0043181
#3	-.000149	-.001538	-.000734	.000954	-.000238	.0023235	.0038287

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000111**	**-.000033**	**-.008016**	**.0005000**	**.0000548**	**.0001429**	**-.001438**
Stddev	.0000635	.000070	.005165	.0003517	.0000856	.0004198	.001819
%RSD	572.3709	214.0614	64.42601	70.33518	156.4524	293.7936	126.4884
#1	.0000052	-.000094	-.013922	.0005125	.0001509	.0004572	-.003251
#2	.0000773	.000044	-.005782	.0008453	.0000266	.0003052	-.001450
#3	-.000049	-.000049	-.004345	.0001422	-.000013	-.000334	.000387

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000118**	**-.003239**	**.0001972**	**-.000458**	**.0340992**	**-.000467**	**-.001540**
Stddev	.0000459	.009780	.0001611	.000089	.0143426	.000207	.000339
%RSD	388.9520	301.9751	81.71838	19.53440	42.06142	44.36031	22.02309
#1	-.000008	-.014447	.0002614	-.000503	.0181834	-.000706	-.001173
#2	-.000021	.001167	.0000138	-.000516	.0380916	-.000339	-.001604
#3	.000064	.003564	.0003163	-.000355	.0460226	-.000356	-.001842

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.010362**	**.0009525**	**.0001217**	**.0004546**	**-.000555**	**-.006007**	**-.001852**
Stddev	.017044	.0004213	.0001390	.0001407	.000267	.002281	.000881
%RSD	164.4751	44.23735	114.1925	30.95155	48.11849	37.97605	47.56691
#1	-.022839	.0013814	.0002749	.0005665	-.000251	-.003379	-.002869
#2	-.017305	.0005391	.0000036	.0002966	-.000750	-.007477	-.001314
#3	.009057	.0009368	.0000867	.0005006	-.000664	-.007165	-.001374

Reviewed By:jaswal
On:12/26/2024
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Inst Id :P4
LB :LB133968

Sample Name: CCB03 Acquired: 12/16/2024 18:52:54 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.000209	-.000514	-.000002
Stddev	.002766	.000607	.000029
%RSD	1325.699	118.1369	1188.994
#1	.002281	-.000821	.000031
#2	-.003187	-.000906	-.000013
#3	.000280	.000185	-.000025

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2686.917	60044.56	12722.25	2276.882	4758.112
Stddev	1.053	40.43	30.77	5.089	2.522
%RSD	.0392003	.0673397	.2418354	.2235074	.0530121
#1	2687.657	60003.32	12695.53	2281.356	4759.406
#2	2687.382	60084.13	12755.89	2277.944	4759.725
#3	2685.711	60046.24	12715.33	2271.346	4755.205

Sample Name: LR1 Acquired: 12/16/2024 18:57:29 Type: Unk
Method: NON EPA-6010-200.7(v2528) 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	**-.001885**	**-.136315**	**.0219379**	**-.223646**	**-.000412**	**1805.489**	**.0171553**
Stddev	.015472	.011826	.0031423	.015904	.004926	.847	.0012223
%RSD	820.8537	8.675624	14.32386	7.111389	1196.567	.0469008	7.125105
#1	.003322	-.149291	.0224442	-.222779	-.004284	1805.826	.0184485
#2	-.019288	-.133510	.0185731	-.239965	.005133	1806.115	.0169985
#3	.010311	-.126143	.0247963	-.208192	-.002084	1804.526	.0160189

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0185327**	**.1935334**	**1689.716**	**-.008985**	**.0420496**	**.0079486**	**814.1102**
Stddev	.0001257	.0008207	12.551	.000724	.0005725	.0018520	3.4274
%RSD	.6781225	.4240388	.7427694	8.055656	1.361383	23.30001	.4209942
#1	.0183936	.1927893	1704.207	-.009788	.0425402	.0060953	817.9516
#2	.0186382	.1933974	1682.295	-.008384	.0414206	.0097993	811.3652
#3	.0185661	.1944136	1682.646	-.008783	.0421879	.0079511	813.0138

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.201846**	**1775.304**	**.0170480**	**-.158387**	**1726.123**	**.0563698**	**.1521449**
Stddev	.002666	3.261	.0002155	.001109	16.440	.0034661	.0006471
%RSD	1.320795	.1836666	1.264156	.6999378	.9524319	6.148916	.4253279
#1	-.204924	1776.915	.0170120	-.157294	1743.947	.0600358	.1526037
#2	-.200349	1777.445	.0168527	-.158356	1711.554	.0531460	.1524262
#3	-.200266	1771.551	.0172792	-.159510	1722.866	.0559277	.1514047

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**952.1545**	**-.849180**	**-.010171**	**.0223089**	**-.049783**	**.1157818**	**.0960125**
Stddev	6.0039	.008627	.001169	.0032812	.000359	.0083923	.0065035
%RSD	.6305579	1.015865	11.49251	14.70786	.7219347	7.248409	6.773630
#1	958.6437	-.839561	-.009560	.0224416	-.050064	.1239050	.0951106
#2	951.0228	-.851751	-.011519	.0189634	-.049378	.1162965	.1029200
#3	946.7971	-.856229	-.009434	.0255217	-.049907	.1071440	.0900070

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: LR1 Acquired: 12/16/2024 18:57:29 Type: Unk
Method: NON EPA-6010-200.7(v2528) 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	-.176367	-.273671	-.802592
Stddev	.007691	.002479	.003437
%RSD	4.360805	.9058034	.4282298
#1	-.178707	-.276530	-.806455
#2	-.167778	-.272356	-.799873
#3	-.182617	-.272126	-.801447

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1570.725	34412.86	9379.829	1220.005	2174.070
Stddev	3.988	55.79	20.599	4.852	5.625
%RSD	.2538769	.1621059	.2196065	.3977175	.2587202
#1	1572.954	34394.61	9381.591	1215.453	2178.686
#2	1573.100	34475.48	9399.491	1219.454	2175.720
#3	1566.121	34368.48	9358.406	1225.110	2167.805

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: LR2 Acquired: 12/16/2024 19:02:26 Type: Unk
Method: NON EPA-6010-200.7(v2528) 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	**.0067022**	**.0235684**	**187.1183**	**.0060281**	**-.006825**	**.0578576**	^ *****
Stddev	.0018859	.0038567	.9523	.0011658	.000654	.0098806	-----
%RSD	28.13885	16.36381	.5089178	19.33992	9.586683	17.07747	-----
#1	.0084479	.0221011	186.1773	.0053817	-.006474	.0691812	^ -----
#2	.0047019	.0279433	188.0815	.0053288	-.006421	.0534037	^ -----
#3	.0069567	.0206607	187.0962	.0073740	-.007580	.0509879	^ -----

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003640**	**-.008144**	**.3891459**	**.0138800**	**-.031087**	**188.4019**	**.0018894**
Stddev	.000032	.000112	.0131644	.0001577	.000275	1.3074	.0079500
%RSD	.8902367	1.372957	3.382883	1.136025	.8842398	.6939175	420.7691
#1	-.003648	-.008078	.4043092	.0140471	-.031348	188.3979	.0094459
#2	-.003605	-.008273	.3824893	.0138590	-.030800	187.0966	.0026253
#3	-.003668	-.008081	.3806392	.0137338	-.031113	189.7113	-.006403

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.62795**	**-.051639**	**39.08313**	**.0052484**	**.4659023**	**-.015852**	**23.09055**
Stddev	.03887	.014056	.18597	.0005248	.0156860	.000638	.15119
%RSD	.1033102	27.22022	.4758250	9.999031	3.366807	4.027388	.6547702
#1	37.63744	-.035944	38.89515	.0058543	.4485445	-.015163	22.92424
#2	37.58521	-.055903	39.26701	.0049495	.4790624	-.016423	23.12772
#3	37.66120	-.063069	39.08723	.0049413	.4701000	-.015970	23.21969

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2316070**	**-.004790**	**-.006868**	**-.005546**	**-.053858**	**-.011136**	**2.006462**
Stddev	.0157810	.000576	.000422	.001032	.000796	.005421	.020801
%RSD	6.813688	12.02442	6.140385	18.61571	1.478712	48.67585	1.036690
#1	.2304369	-.005187	-.007186	-.006737	-.052969	-.005359	1.982491
#2	.2479404	-.004129	-.006390	-.004916	-.054506	-.011939	2.017135
#3	.2164436	-.005054	-.007028	-.004985	-.054099	-.016111	2.019759

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: LR2 Acquired: 12/16/2024 19:02:26 Type: Unk
Method: NON EPA-6010-200.7(v2528) 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	.0420330	.0017591	.0021350
Stddev	.0061358	.0004874	.0000342
%RSD	14.59753	27.70615	1.599595
#1	.0420518	.0012028	.0020962
#2	.0358878	.0019633	.0021483
#3	.0481593	.0021112	.0021605

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2244.164	56073.47	12591.31	1978.778	4150.051
Stddev	12.024	182.59	36.49	14.160	8.969
%RSD	.5358100	.3256183	.2898154	.7156063	.2161121
#1	2240.472	56222.67	12598.29	1983.754	4152.385
#2	2257.601	55869.87	12623.80	1962.801	4157.623
#3	2234.418	56127.87	12551.83	1989.779	4140.146

Sample Name: P5268-01 Acquired: 12/16/2024 19:11:01 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0288078**	**-.035499**	**.2412612**	**-.033591**	**-.000298**	**111.4616**	**.4984636**
Stddev	.0017813	.002324	.0002160	.002263	.000600	.1026	.0022163
%RSD	6.183296	6.545763	.0895117	6.737977	201.5148	.0920350	.4446246
#1	.0269047	-.033011	.2410415	-.032421	-.000731	111.5753	.5002793
#2	.0304350	-.037613	.2414732	-.036200	.000387	111.3759	.4991177
#3	.0290837	-.035874	.2412690	-.032151	-.000549	111.4337	.4959939

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103596**	**.0267126**	**55.43563**	**.1576065**	**.1182077**	**.3503458**	**203.8127**
Stddev	.0000635	.0001744	.07744	.0004979	.0001231	.0007421	.3526
%RSD	.6131715	.6529817	.1396846	.3159135	.1041080	.2118162	.1730046
#1	.0104247	.0268478	55.52340	.1575076	.1183380	.3496499	203.9950
#2	.0102978	.0267742	55.37695	.1571655	.1181918	.3502608	204.0368
#3	.0103564	.0265157	55.40654	.1581464	.1180934	.3511268	203.4063

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.518261**	**55.15361**	**.2217935**	**-.014851**	**4.240006**	**.3607535**	**.4795585**
Stddev	.019158	.19911	.0007459	.000127	.020348	.0004683	.0013172
%RSD	.4240107	.3610077	.3362929	.8576813	.4799093	.1297985	.2746712
#1	4.538663	55.25659	.2219714	-.014722	4.237524	.3612713	.4797482
#2	4.515465	54.92410	.2224343	-.014854	4.261481	.3606295	.4807705
#3	4.500654	55.28013	.2209747	-.014977	4.221012	.3603597	.4781567

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.734935**	**-.050043**	**.0033788**	**.0063948**	**4.382989**	**6.828027**	**5.562384**
Stddev	.028132	.000959	.0000987	.0008264	.012359	.013948	.016529
%RSD	.3637062	1.916563	2.922224	12.92246	.2819759	.2042808	.2971506
#1	7.718177	-.051146	.0034841	.0055892	4.393680	6.818227	5.570434
#2	7.767414	-.049577	.0033638	.0063549	4.385831	6.843996	5.573345
#3	7.719213	-.049406	.0032883	.0072404	4.369457	6.821857	5.543372

Sample Name: P5268-01 Acquired: 12/16/2024 19:11:01 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**2.270109**	**.1032215**	**-.024819**
Stddev	.002319	.0006251	.000463
%RSD	.1021717	.6056021	1.867092
#1	2.271981	.1037378	-.025119
#2	2.270831	.1034002	-.025054
#3	2.267514	.1025265	-.024286

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2906.449**	**65302.50**	**14933.72**	**2469.137**	**3896.572**
Stddev	2.011	52.11	37.84	10.338	4.574
%RSD	.0691982	.0797945	.2533700	.4187085	.1173812
#1	2904.319	65362.63	14902.61	2476.402	3892.917
#2	2906.713	65270.50	14975.84	2457.301	3895.098
#3	2908.315	65274.37	14922.70	2473.709	3901.701

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5277-01 Acquired: 12/16/2024 19:15:08 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.002344**	**-.055691**	**.2676057**	**-.062948**	**-.003361**	**364.9924**
Stddev	.003565	.007157	.0005270	.001807	.000375	.3083
%RSD	152.0919	12.85055	.1969149	2.870813	11.17003	.0844755
#1	-.003473	-.060623	.2670451	-.061765	-.002928	364.7367
#2	.001649	-.058967	.2676810	-.062051	-.003555	364.9058
#3	-.005209	-.047483	.2680909	-.065028	-.003599	365.3348

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.780428**	**.0294985**	**.0496127**	**15.51990**	**.4453400**	**.2194739**
Stddev	.004230	.0000689	.0003070	.06672	.0013606	.0003792
%RSD	.2375902	.2335008	.6187937	.4299216	.3055073	.1727846
#1	1.784090	.0294663	.0499426	15.53436	.4457003	.2195913
#2	1.781398	.0294517	.0493353	15.57821	.4464843	.2190499
#3	1.775798	.0295776	.0495603	15.44713	.4438357	.2197805

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2535983**	**380.4871**	**5.362319**	**138.0464**	**.3349566**	**-.029746**
Stddev	.0033462	2.0735	.000676	.1736	.0005030	.000381
%RSD	1.319469	.5449528	.0126069	.1257733	.1501627	1.279382
#1	.2517260	381.3802	5.361627	137.8529	.3355280	-.029334
#2	.2516074	381.9642	5.362977	138.0976	.3345805	-.029819
#3	.2574615	378.1167	5.362353	138.1886	.3347614	-.030084

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.507821**	**.6045383**	**1.110234**	**134.0417**	**-.184153**	**-.002420**
Stddev	.004247	.0003129	.002069	.6443	.003833	.000129
%RSD	.2816681	.0517601	.1863994	.4806751	2.081351	5.338635
#1	1.502992	.6044380	1.111954	134.6893	-.183833	-.002339
#2	1.510976	.6048891	1.110811	134.0352	-.180491	-.002569
#3	1.509495	.6042879	1.107937	133.4008	-.188136	-.002351

Sample Name: P5277-01 Acquired: 12/16/2024 19:15:08 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0032198	F 23.12553	8.750572	3.222280	.1663802	.2448322
Stddev	.0020086	.09137	.034766	.009580	.0055225	.0004235
%RSD	62.38480	.3951212	.3972945	.2973121	3.319180	.1729812
#1	.0055389	23.18219	8.784603	3.213418	.1715225	.2452375
#2	.0020903	23.02012	8.751998	3.220976	.1605433	.2448665
#3	.0020302	23.17428	8.715115	3.232445	.1670747	.2443926

Elem	Sr4077
Units	ppm
Avg	-.328680
Stddev	.002171
%RSD	.6604659
#1	-.329637
#2	-.330207
#3	-.326195

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2731.470	59494.92	13677.34	2289.837	3672.499
Stddev	6.589	156.71	27.62	2.899	11.648
%RSD	.2412122	.2633937	.2019398	.1266214	.3171581
#1	2723.943	59337.61	13708.88	2288.260	3659.330
#2	2734.276	59496.13	13657.49	2293.183	3681.451
#3	2736.191	59651.02	13665.64	2288.067	3676.715

Sample Name: P5277-02 Acquired: 12/16/2024 19:19:36 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0044964**	**-.135782**	**.3231595**	**-.117063**	**-.001871**	**424.9195**
Stddev	.0026759	.006135	.0019692	.001201	.002587	.1290
%RSD	59.51199	4.518567	.6093502	1.025774	138.2450	.0303590
#1	.0043087	-.131420	.3247218	-.115832	.000595	424.8343
#2	.0072613	-.142798	.3238091	-.118231	-.004565	425.0679
#3	.0019194	-.133129	.3209476	-.117127	-.001644	424.8562

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.344548**	**.0439807**	**.1111785**	**31.36026**	**.7920198**	**.3915713**
Stddev	.003978	.0001039	.0002330	.06861	.0023552	.0010907
%RSD	.1696836	.2363260	.2095675	.2187743	.2973645	.2785421
#1	2.343306	.0440747	.1113750	31.28414	.7929016	.3928307
#2	2.348999	.0439983	.1109211	31.41734	.7938067	.3909307
#3	2.341339	.0438690	.1112394	31.37928	.7893509	.3909526

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4544294**	**644.0830**	**10.65013**	**219.8479**	**.7078121**	**-.058704**
Stddev	.0028396	2.3042	.03139	.4260	.0023265	.000867
%RSD	.6248626	.3577485	.2947280	.1937855	.3286835	1.476578
#1	.4554286	642.6769	10.63866	219.5007	.7104965	-.059702
#2	.4512254	646.7422	10.68564	220.3233	.7063792	-.058141
#3	.4566344	642.8300	10.62609	219.7198	.7065607	-.058268

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.824106**	**1.261129**	**1.628905**	**215.2472**	**-.415029**	**-.004823**
Stddev	.009930	.002858	.003831	.1962	.008900	.000379
%RSD	.3516189	.2265918	.2351635	.0911721	2.144377	7.867218
#1	2.825581	1.257853	1.633205	215.4073	-.406834	-.004535
#2	2.813521	1.262427	1.625856	215.3060	-.413756	-.004680
#3	2.833216	1.263107	1.627655	215.0283	-.424497	-.005253

Sample Name: P5277-02 Acquired: 12/16/2024 19:19:36 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0046482	F 32.19579	F 10.55204	8.431729	.6687588	.3694176
Stddev	.0006507	.15203	.00975	.021065	.0035394	.0006316
%RSD	13.99805	.4721902	.0924100	.2498276	.5292556	.1709740
#1	.0041894	32.05229	10.54640	8.414763	.6726431	.3698575
#2	.0053928	32.35511	10.54643	8.455307	.6679172	.3697015
#3	.0043622	32.17997	10.56330	8.425117	.6657159	.3686939

Elem	Sr4077
Units	ppm
Avg	-.542412
Stddev	.002311
%RSD	.4260181
#1	-.541223
#2	-.545075
#3	-.540937

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2853.253	63241.95	14572.50	2386.803	3466.860
Stddev	2.596	38.21	25.85	6.125	4.027
%RSD	.0909711	.0604213	.1774010	.2566194	.1161459
#1	2850.363	63265.67	14598.26	2381.453	3462.231
#2	2855.387	63197.86	14546.56	2393.484	3469.552
#3	2854.008	63262.30	14572.68	2385.473	3468.797

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5277-03 Acquired: 12/16/2024 19:24:05 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0056034**	**-.247068**	**.2604384**	**-.137804**	**.0015531**	**468.1399**
Stddev	.0037552	.008608	.0043182	.003397	.0006005	1.1212
%RSD	67.01659	3.484010	1.658035	2.465237	38.66555	.2395066
#1	.0032340	-.252077	.2569564	-.141724	.0020893	467.5895
#2	.0099331	-.251998	.2590886	-.135721	.0016658	469.4300
#3	.0036431	-.237129	.2652703	-.135967	.0009042	467.4003

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.071927**	**.0416914**	**.1841768**	**105.9471**	**.7397469**	**.5920106**
Stddev	.006730	.0001045	.0006596	.1336	.0009609	.0001008
%RSD	.1652895	.2505686	.3581421	.1260881	.1298966	.0170194
#1	4.079552	.0417236	.1839522	106.0493	.7389666	.5920050
#2	4.069417	.0417759	.1836588	105.7960	.7394538	.5921140
#3	4.066813	.0415746	.1849194	105.9961	.7408202	.5919128

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.064773**	**735.0780**	**8.511780**	**205.3237**	**.6003456**	**-.075029**
Stddev	.001491	3.8072	.011805	.3480	.0017599	.001616
%RSD	.1399962	.5179291	.1386917	.1694800	.2931398	2.153317
#1	1.063183	738.8716	8.523371	205.7069	.5991820	-.073505
#2	1.066140	731.2574	8.499771	205.0274	.5994846	-.076723
#3	1.064995	735.1049	8.512198	205.2369	.6023702	-.074860

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.220381**	**1.483740**	**1.704901**	**232.4070**	**-.598606**	**.0107815**
Stddev	.010153	.004360	.005484	1.8057	.006613	.0003307
%RSD	.3152764	.2938464	.3216457	.7769389	1.104724	3.066997
#1	3.209309	1.483227	1.700160	234.4077	-.594462	.0110620
#2	3.222578	1.488334	1.703638	231.9152	-.606232	.0104169
#3	3.229255	1.479659	1.710906	230.8983	-.595124	.0108656

Sample Name: P5277-03 Acquired: 12/16/2024 19:24:05 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.012875	F 44.82601	5.544670	F 14.24605	1.310202	.2895946
Stddev	.000921	.12492	.006848	.05488	.010142	.0009478
%RSD	7.151882	.2786726	.1235003	.3852524	.7740459	.3272820
#1	-.013374	44.96056	5.552047	14.23059	1.298602	.2898900
#2	-.011813	44.71371	5.538516	14.20056	1.314609	.2903595
#3	-.013439	44.80377	5.543448	14.30701	1.317394	.2885343

Elem	Sr4077
Units	ppm
Avg	-.325995
Stddev	.004388
%RSD	1.345960
#1	-.330351
#2	-.321577
#3	-.326058

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3127.858	70453.41	16655.25	2613.789	3258.063
Stddev	5.315	66.14	3.70	4.564	4.235
%RSD	.1699214	.0938784	.0222322	.1745939	.1299763
#1	3128.183	70487.61	16657.89	2617.456	3260.697
#2	3133.003	70495.45	16651.02	2615.233	3260.313
#3	3122.388	70377.18	16656.84	2608.678	3253.178

Sample Name: P5279-01 Acquired: 12/16/2024 19:28:49 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0830305**	**-.019301**	**1.547637**	**-.015968**	**.0072608**	**12.73692**	**.3710564**
Stddev	.0033608	.001230	.003459	.000741	.0005195	.02701	.0015244
%RSD	4.047693	6.370987	.2234956	4.641306	7.155383	.2120431	.4108354
#1	.0791506	-.018243	1.545584	-.016683	.0078170	12.71318	.3725230
#2	.0850410	-.019011	1.545698	-.016020	.0071774	12.73128	.3711663
#3	.0849000	-.020650	1.551631	-.015203	.0067880	12.76631	.3694801

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0049543**	**.0130650**	**62.35739**	**.0953388**	**.0308861**	**.4915042**	**127.3088**
Stddev	.0000126	.0000172	.14357	.0006285	.0000633	.0023923	.3872
%RSD	.2535333	.1315961	.2302335	.6592113	.2048985	.4867217	.3041194
#1	.0049616	.0130844	62.34858	.0960621	.0309585	.4890705	127.6553
#2	.0049399	.0130591	62.50516	.0949256	.0308583	.4915894	127.3802
#3	.0049616	.0130516	62.21843	.0950287	.0308414	.4938527	126.8909

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6737951**	**12.64848**	**.0973468**	**-.008115**	**.7394113**	**.1215537**	**2.723873**
Stddev	.0021533	.00877	.0002665	.000267	.0068274	.0014066	.003685
%RSD	.3195797	.0693506	.2737627	3.294100	.9233612	1.157221	.1352837
#1	.6759550	12.64955	.0975976	-.008267	.7337200	.1216362	2.721413
#2	.6737819	12.63922	.0970670	-.008271	.7375325	.1201077	2.728110
#3	.6716484	12.65667	.0973760	-.007806	.7469815	.1229173	2.722096

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.507832**	**-.068169**	**.0111009**	**.0697810**	**1.442622**	**3.572080**	**1.865930**
Stddev	.022755	.000829	.0001323	.0008731	.004369	.004447	.002981
%RSD	.9073716	1.215688	1.191550	1.251154	.3028753	.1244954	.1597397
#1	2.482072	-.068866	.0109652	.0688460	1.445918	3.567002	1.862980
#2	2.516227	-.068387	.0112294	.0705750	1.444282	3.575281	1.868940
#3	2.525198	-.067252	.0111080	.0699219	1.437666	3.573957	1.865870

Sample Name: P5279-01 Acquired: 12/16/2024 19:28:49 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	9.660280	.0087852	.1885057
Stddev	.025610	.0003769	.0014342
%RSD	.2651080	4.290459	.7608348
#1	9.638940	.0084320	.1869160
#2	9.653220	.0087416	.1888989
#3	9.688680	.0091820	.1897024

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2556.129	57467.50	12680.67	2189.946	4240.520
Stddev	9.586	40.59	16.43	7.625	7.038
%RSD	.3750284	.0706282	.1295498	.3481628	.1659730
#1	2566.624	57450.03	12674.43	2193.105	4247.308
#2	2553.926	57438.57	12668.28	2181.250	4240.996
#3	2547.835	57513.90	12699.30	2195.484	4233.256

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01DUP Acquired: 12/16/2024 19:32:56 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0853472	-.019842	1.582257	-.015547	.0071452	12.91592	.3710311
Stddev	.0017302	.004018	.002313	.002080	.0002403	.02670	.0006294
%RSD	2.027249	20.25066	.1461714	13.37745	3.363381	.2067180	.1696317
#1	.0834711	-.018804	1.579958	-.015094	.0068931	12.92572	.3703194
#2	.0868800	-.016445	1.582229	-.013731	.0073718	12.93634	.3712595
#3	.0856906	-.024277	1.584583	-.017816	.0071706	12.88571	.3715145

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048732	.0134129	62.81281	.0965654	.0315498	.4996529	129.2726
Stddev	.0001287	.0001438	.13349	.0002075	.0002306	.0002176	.3974
%RSD	2.640803	1.072386	.2125152	.2148893	.7308171	.0435406	.3073788
#1	.0048561	.0135641	62.87167	.0967153	.0316318	.4996404	128.8362
#2	.0050095	.0132778	62.66001	.0963285	.0312894	.4998765	129.6135
#3	.0047539	.0133967	62.90676	.0966523	.0317281	.4994419	129.3682

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6775507	12.80257	.0993962	-.008483	.7470912	.1245737	2.766901
Stddev	.0016754	.04282	.0004161	.000554	.0040718	.0008257	.001720
%RSD	.2472689	.3344730	.4186416	6.525106	.5450157	.6627792	.0621607
#1	.6761953	12.77205	.0993305	-.007959	.7424782	.1237284	2.766072
#2	.6770329	12.78413	.0990169	-.008428	.7501849	.1246145	2.768878
#3	.6794238	12.85152	.0998413	-.009062	.7486104	.1253782	2.765752

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.517125	-.068449	.0115509	.0715263	1.450321	3.689104	1.903200
Stddev	.024878	.002160	.0002505	.0001080	.000239	.019570	.005178
%RSD	.9883660	3.156099	2.168836	.1509572	.0164501	.5304889	.2720940
#1	2.495364	-.069298	.0112623	.0714591	1.450242	3.683776	1.898967
#2	2.544247	-.065993	.0116780	.0716508	1.450589	3.710787	1.908974
#3	2.511765	-.070055	.0117123	.0714689	1.450132	3.672750	1.901658

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01DUP Acquired: 12/16/2024 19:32:56 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	9.866563	.0087993	.1918344
Stddev	.024309	.0002324	.0008332
%RSD	.2463788	2.640687	.4343217
#1	9.843883	.0089164	.1927944
#2	9.863579	.0085317	.1914103
#3	9.892226	.0089499	.1912987

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2509.143	56618.39	12589.72	2150.106	4158.320
Stddev	4.485	106.41	28.04	7.913	11.426
%RSD	.1787285	.1879371	.2227180	.3680395	.2747799
#1	2511.021	56660.60	12580.75	2144.604	4160.655
#2	2512.383	56497.35	12621.15	2159.175	4168.399
#3	2504.025	56697.21	12567.27	2146.539	4145.907

Sample Name: P5279-01LX5 Acquired: 12/16/2024 19:37:03 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0140221**	**-.003520**	**.3280409**	**-.004352**	**.0006905**	**2.618297**	**.0771927**
Stddev	.0012102	.001086	.0013037	.000238	.0011859	.008085	.0003686
%RSD	8.630780	30.86477	.3974064	5.463693	171.7472	.3088051	.4774720
#1	.0126628	-.004187	.3295415	-.004626	-.000466	2.609287	.0774506
#2	.0144206	-.004106	.3271875	-.004195	.000634	2.624922	.0773570
#3	.0149827	-.002266	.3273936	-.004235	.001904	2.620683	.0767706

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010676**	**.0024435**	**12.86596**	**.0205102**	**.0063386**	**.1049686**	**25.94428**
Stddev	.0000405	.0000634	.05289	.0001208	.0000332	.0003386	.02196
%RSD	3.789657	2.594315	.4110529	.5888988	.5232613	.3225375	.0846429
#1	.0010345	.0024737	12.80612	.0206463	.0063044	.1049799	25.92385
#2	.0010555	.0024861	12.90642	.0204688	.0063707	.1046245	25.96750
#3	.0011127	.0023707	12.88535	.0204156	.0063405	.1053013	25.94149

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1390468**	**2.602172**	**.0197483**	**-.002358**	**.2319786**	**.0255583**	**.5740999**
Stddev	.0011726	.016032	.0001754	.000306	.0191833	.0009831	.0007570
%RSD	.8433420	.6161070	.8879906	12.98137	8.269448	3.846475	.1318508
#1	.1376938	2.604968	.0195468	-.002078	.2118001	.0248739	.5735170
#2	.1396760	2.616622	.0198323	-.002685	.2341545	.0266848	.5738273
#3	.1397705	2.584925	.0198659	-.002311	.2499812	.0251163	.5749554

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6044496**	**-.020190**	**.0019422**	**.0135605**	**.2934361**	**.7005042**	**.3737898**
Stddev	.0169053	.001490	.0000360	.0003807	.0010234	.0023523	.0012320
%RSD	2.796809	7.381513	1.852219	2.807067	.3487655	.3358007	.3296052
#1	.5901508	-.019406	.0019767	.0133298	.2923250	.6990689	.3742624
#2	.6000903	-.021909	.0019049	.0139999	.2943403	.6992248	.3747156
#3	.6231076	-.019256	.0019450	.0133519	.2936429	.7032190	.3723915

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01LX5 Acquired: 12/16/2024 19:37:03 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	1.940153	.0014937	.0391242
Stddev	.004919	.0001312	.0001355
%RSD	.2535603	8.785191	.3463392
#1	1.934851	.0016185	.0392014
#2	1.941036	.0015059	.0389678
#3	1.944571	.0013568	.0392036

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2619.109	57700.90	12500.39	2225.645	4476.968
Stddev	7.093	178.23	26.55	6.279	9.610
%RSD	.2708179	.3088789	.2124030	.2821136	.2146542
#1	2610.985	57500.95	12521.77	2219.642	4467.138
#2	2622.276	57758.69	12470.67	2232.168	4477.424
#3	2624.067	57843.06	12508.74	2225.125	4486.342

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01MS Acquired: 12/16/2024 19:41:56 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.8098030**	**1.822234**	**2.477974**	**1.719742**	**1.456695**	**14.59557**	**.5596395**
Stddev	.0038891	.011272	.002841	.005857	.004756	.02202	.0035859
%RSD	.4802551	.6185987	.1146443	.3405566	.3264732	.1508583	.6407489
#1	.8091530	1.820587	2.477255	1.726478	1.460387	14.59495	.5563187
#2	.8062798	1.834239	2.481105	1.716894	1.451329	14.61789	.5591579
#3	.8139762	1.811875	2.475562	1.715854	1.458370	14.57387	.5634418

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2198356**	**.2074612**	**63.36348**	**.4983392**	**.2269028**	**.7715927**	**126.9398**
Stddev	.0007459	.0000778	.07072	.0017509	.0002546	.0018651	.1927
%RSD	.3393058	.0375183	.1116118	.3513392	.1122238	.2417204	.1518118
#1	.2206136	.2074261	63.32935	.5002615	.2271890	.7721382	126.7283
#2	.2197665	.2075504	63.44479	.4979203	.2268180	.7695157	127.1055
#3	.2191266	.2074071	63.31629	.4968358	.2267014	.7731242	126.9856

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8719213**	**14.71119**	**.5884491**	**.0642635**	**3.467053**	**.4229723**	**2.858597**
Stddev	.0033360	.07752	.0005852	.0002242	.005496	.0011979	.001758
%RSD	.3826072	.5269534	.0994407	.3488320	.1585346	.2832168	.0614845
#1	.8681798	14.78750	.5891058	.0640576	3.460751	.4216297	2.860178
#2	.8729984	14.71355	.5879830	.0642307	3.470853	.4233551	2.858909
#3	.8745857	14.63251	.5882585	.0645023	3.469556	.4239320	2.856705

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.29075**	**.2275449**	**.7779556**	**1.421935**	**1.820904**	**4.858041**	**7.565991**
Stddev	.06546	.0009607	.0009629	.001215	.002433	.012898	.017402
%RSD	.5797765	.4222180	.1237753	.0854636	.1336071	.2655073	.2299998
#1	11.21517	.2264399	.7779174	1.421176	1.818837	4.851796	7.547371
#2	11.32774	.2280127	.7770123	1.423337	1.820290	4.872873	7.581843
#3	11.32935	.2281822	.7789370	1.421293	1.823585	4.849454	7.568757

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01MS Acquired: 12/16/2024 19:41:56 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**9.693647**	**.1985146**	**.3903450**
Stddev	.018249	.0018418	.0001666
%RSD	.1882567	.9277724	.0426666
#1	9.700285	.1967173	.3905054
#2	9.707648	.1984286	.3901729
#3	9.673008	.2003978	.3903566

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2537.892**	**57052.28**	**12277.50**	**2173.691**	**4165.166**
Stddev	7.410	83.52	14.54	9.207	5.304
%RSD	.2919653	.1463866	.1184569	.4235602	.1273379
#1	2531.676	57003.89	12272.42	2183.756	4159.781
#2	2546.092	57004.22	12266.17	2171.622	4170.385
#3	2535.908	57148.71	12293.90	2165.694	4165.332

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV04 Acquired: 12/16/2024 19:51:05 Type: Unk
Method: NON EPA-6010-200.7(v2529) 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	**4.741131**	**4.971288**	**5.050682**	**4.684572**	**4.690091**	**9.773311**	**9.397670**
Stddev	.007310	.031222	.010246	.011169	.005822	.014113	.044522
%RSD	.1541819	.6280490	.2028630	.2384227	.1241372	.1444006	.4737585
#1	4.738858	4.998796	5.060106	4.688286	4.683591	9.760933	9.376535
#2	4.749307	4.937352	5.052164	4.693410	4.691856	9.788679	9.367653
#3	4.735227	4.977715	5.039775	4.672019	4.694827	9.770319	9.448824

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2737268**	**2.549672**	**25.69556**	**1.041965**	**2.507429**	**1.218679**	**4.879103**
Stddev	.0012762	.003761	.06209	.003019	.002404	.001517	.037080
%RSD	.4662128	.1475215	.2416344	.2897812	.0958643	.1244536	.7599792
#1	.2738843	2.553247	25.64744	1.039826	2.509840	1.217359	4.841784
#2	.2749169	2.550020	25.76564	1.040650	2.507413	1.218343	4.879585
#3	.2723792	2.545749	25.67358	1.045419	2.505033	1.220336	4.915940

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.539561**	**26.23017**	**2.513854**	**1.244152**	**25.32838**	**2.525688**	**2.456421**
Stddev	.006056	.03680	.001247	.000644	.02281	.004711	.008206
%RSD	.2384765	.1403010	.0495851	.0517799	.0900546	.1865309	.3340711
#1	2.538370	26.20263	2.515168	1.244519	25.34789	2.522116	2.461146
#2	2.546124	26.21591	2.513708	1.244530	25.30330	2.531027	2.446945
#3	2.534189	26.27197	2.512688	1.243409	25.33396	2.523920	2.461171

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.91778**	**5.279265**	**4.860676**	**5.056889**	**4.904486**	**4.783058**	**5.007501**
Stddev	.11049	.029518	.002869	.010949	.017680	.040557	.010382
%RSD	.4104699	.5591273	.0590218	.2165239	.3604917	.8479248	.2073381
#1	26.84593	5.284399	4.863866	5.069335	4.894320	4.743441	5.019275
#2	26.86240	5.305879	4.859850	5.052594	4.924901	4.781240	4.999658
#3	27.04500	5.247517	4.858310	5.048739	4.894237	4.824494	5.003570

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV04 Acquired: 12/16/2024 19:51:05 Type: Unk
Method: NON EPA-6010-200.7(v2529) 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	**4.862919**	**4.536622**	**4.951094**
Stddev	.017436	.016202	.011572
%RSD	.3585549	.3571405	.2337255
#1	4.882460	4.525696	4.942244
#2	4.857347	4.555237	4.964189
#3	4.848949	4.528932	4.946849

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2476.686**	**54266.22**	**11937.39**	**2094.028**	**4023.133**
Stddev	2.437	56.43	51.92	6.698	1.533
%RSD	.0984076	.1039811	.4349763	.3198532	.0380930
#1	2479.220	54267.47	11911.67	2087.450	4024.799
#2	2476.479	54322.01	11903.34	2100.840	4021.783
#3	2474.359	54209.17	11997.16	2093.794	4022.817

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB04 Acquired: 12/16/2024 19:57:33 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**-.002032**	**-.001974**	**.0009026**	**-.000483**	**-.001324**	**.0042981**	**.0025025**
Stddev	.001579	.000775	.0004258	.002192	.000720	.0038814	.0004824
%RSD	77.71046	39.27824	47.17896	453.9283	54.42016	90.30543	19.27788
#1	-.003438	-.002865	.0004447	.000876	-.000710	.0000775	.0023006
#2	-.000324	-.001455	.0012867	.000687	-.002117	.0051026	.0030531
#3	-.002333	-.001601	.0009764	-.003011	-.001145	.0077142	.0021538

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000617**	**-.000018**	**-.006889**	**.0002546**	**.0000056**	**.0001301**	**.0021942**
Stddev	.0000316	.000039	.006654	.0001577	.0000969	.0001470	.0022751
%RSD	51.21114	211.2801	96.58938	61.94781	1719.039	112.9558	103.6849
#1	.0000513	-.000029	-.011160	.0002307	-.000009	.0002608	-.000252
#2	.0000366	-.000051	.000778	.0001102	.000109	-.000029	.004246
#3	.0000972	.000025	-.010284	.0004229	-.000083	.000159	.002589

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000039**	**-.007685**	**.0000445**	**-.000334**	**.0990530**	**-.000208**	**-.002285**
Stddev	.000301	.009532	.0002075	.000188	.0122227	.000915	.000196
%RSD	768.6253	124.0348	466.3433	56.19530	12.33953	439.4738	8.594308
#1	-.000249	-.004984	.0002654	-.000153	.0881485	.000414	-.002227
#2	.000306	.000205	-.000146	-.000322	.0967456	.000221	-.002125
#3	-.000174	-.018276	.000014	-.000527	.1122649	-.001259	-.002504

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1931714**	**-.000836**	**-.000244**	**.0005924**	**.0000933**	**.0017471**	**-.003044**
Stddev	.0199496	.000187	.000154	.0004034	.0001572	.0015660	.001635
%RSD	10.32741	22.41747	63.02071	68.09462	168.4733	89.63537	53.71184
#1	.1769855	-.000624	-.000076	.0004458	-.000087	.0034291	-.001553
#2	.1870694	-.000902	-.000379	.0002828	.000204	.0003313	-.002787
#3	.2154594	-.000981	-.000278	.0010486	.000163	.0014808	-.004793

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB04 Acquired: 12/16/2024 19:57:33 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	.0005078	-.001279	-.000034
Stddev	.0017545	.000550	.000016
%RSD	345.4969	43.03623	48.19814
#1	.0007807	-.001444	-.000053
#2	-.001367	-.001728	-.000024
#3	.002110	-.000665	-.000025

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2596.207	57774.04	12143.78	2224.047	4527.262
Stddev	8.143	411.91	10.97	22.362	13.565
%RSD	.3136330	.7129627	.0903349	1.005471	.2996384
#1	2601.788	57302.41	12146.52	2198.235	4537.809
#2	2599.970	58063.16	12131.70	2236.328	4532.017
#3	2586.864	57956.56	12153.12	2237.577	4511.959

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01MSD Acquired: 12/16/2024 20:01:53 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**.8223429**	**1.841900**	**2.486948**	**1.742711**	**1.484063**	**14.97138**	**.5682142**
Stddev	.0018564	.011440	.003937	.006053	.001632	.01041	.0019739
%RSD	.2257457	.6210708	.1582941	.3473273	.1099507	.0695224	.3473956
#1	.8234486	1.828825	2.491473	1.736664	1.485493	14.95990	.5691232
#2	.8233805	1.846808	2.484312	1.742701	1.484410	14.98020	.5695700
#3	.8201997	1.850066	2.485058	1.748770	1.482285	14.97403	.5659496

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2177125**	**.2079319**	**63.89888**	**.5029657**	**.2278330**	**.7745934**	**129.3345**
Stddev	.0004334	.0002119	.09372	.0009810	.0001124	.0004480	.3163
%RSD	.1990940	.1018841	.1466618	.1950456	.0493427	.0578313	.2445329
#1	.2179189	.2081747	63.99175	.5019117	.2278833	.7742945	129.3480
#2	.2180041	.2078359	63.90056	.5038521	.2277043	.7743773	129.6439
#3	.2172144	.2077849	63.80434	.5031334	.2279115	.7751085	129.0118

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8778316**	**14.77377**	**.5898392**	**.0651915**	**3.567092**	**.4265721**	**2.917243**
Stddev	.0028887	.04155	.0005747	.0005028	.004501	.0021476	.008034
%RSD	.3290712	.2812684	.0974380	.7712632	.1261741	.5034606	.2754042
#1	.8801350	14.79781	.5897905	.0646488	3.569450	.4272888	2.908326
#2	.8787692	14.79771	.5892904	.0656414	3.569924	.4282697	2.923917
#3	.8745905	14.72579	.5904368	.0652844	3.561902	.4241578	2.919486

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.56270**	**.2226374**	**.7921282**	**1.422160**	**1.856370**	**5.301242**	**7.408651**
Stddev	.01779	.0023214	.0001620	.003554	.006727	.021673	.026428
%RSD	.1538680	1.042694	.0204569	.2498700	.3623809	.4088294	.3567115
#1	11.56025	.2231927	.7920179	1.424902	1.857325	5.280981	7.437602
#2	11.58159	.2246307	.7920525	1.423433	1.862569	5.298650	7.402528
#3	11.54626	.2200886	.7923142	1.418145	1.849217	5.324094	7.385822

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01MSD Acquired: 12/16/2024 20:01:53 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	9.645873	.2026137	.3990334
Stddev	.005702	.0003132	.0008838
%RSD	.0591133	.1545930	.2214850
#1	9.651071	.2023326	.3991011
#2	9.639774	.2025571	.3981176
#3	9.646774	.2029514	.3998814

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2490.112	56122.32	12238.62	2122.005	4117.741
Stddev	4.452	60.38	4.82	7.098	2.742
%RSD	.1787994	.1075865	.0393797	.3345110	.0665799
#1	2494.922	56192.03	12233.19	2129.225	4120.881
#2	2489.279	56086.21	12240.30	2115.035	4116.523
#3	2486.135	56088.72	12242.38	2121.754	4115.819

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01A Acquired: 12/16/2024 20:05:49 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**.8102926**	**1.819404**	**2.468324**	**1.719262**	**1.462742**	**15.01778**	**.5617353**
Stddev	.0053075	.012303	.001994	.002754	.005493	.06229	.0043655
%RSD	.6550048	.6762276	.0807876	.1602068	.3754939	.4147970	.7771474
#1	.8104603	1.806107	2.468971	1.722141	1.468950	14.94854	.5570534
#2	.8049034	1.830384	2.466087	1.718992	1.460763	15.06927	.5656942
#3	.8155143	1.821723	2.469915	1.716652	1.458513	15.03553	.5624581

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2175515**	**.2063967**	**63.46833**	**.4999860**	**.2262877**	**.7682722**	**128.9037**
Stddev	.0008088	.0003519	.36132	.0009470	.0000436	.0021903	.4798
%RSD	.3717678	.1704715	.5692850	.1894138	.0192460	.2850956	.3722247
#1	.2166561	.2066461	63.07440	.4989286	.2263315	.7707059	128.4490
#2	.2177693	.2059943	63.78430	.5002734	.2262871	.7664595	129.4052
#3	.2182291	.2065499	63.54630	.5007561	.2262444	.7676511	128.8568

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8748113**	**14.75485**	**.5851080**	**.0647154**	**3.537170**	**.4245761**	**2.893211**
Stddev	.0087106	.09272	.0010340	.0001647	.016397	.0028364	.008253
%RSD	.9957141	.6284197	.1767231	.2545610	.4635647	.6680664	.2852659
#1	.8651560	14.66332	.5858370	.0648939	3.521683	.4214063	2.887689
#2	.8820794	14.84872	.5839246	.0646831	3.554346	.4268750	2.889247
#3	.8771986	14.75251	.5855623	.0645692	3.535480	.4254469	2.902699

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.45633**	**.2259233**	**.7856179**	**1.413820**	**1.852067**	**5.471668**	**7.366258**
Stddev	.04223	.0007829	.0008628	.003188	.011234	.033836	.012566
%RSD	.3685974	.3465458	.1098227	.2254904	.6065440	.6183909	.1705915
#1	11.40767	.2251545	.7862413	1.410240	1.840390	5.442048	7.354026
#2	11.48336	.2267196	.7846332	1.414869	1.862798	5.508544	7.379134
#3	11.47796	.2258957	.7859793	1.416351	1.853013	5.464411	7.365616

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5279-01A Acquired: 12/16/2024 20:05:49 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	9.522493	.2011964	.3996129
Stddev	.019005	.0016503	.0015478
%RSD	.1995839	.8202550	.3873250
#1	9.500604	.1994649	.3978385
#2	9.532076	.2013729	.4003148
#3	9.534799	.2027513	.4006855

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2528.237	56237.44	12251.82	2133.661	4181.987
Stddev	4.319	109.30	61.77	2.911	3.690
%RSD	.1708132	.1943612	.5041777	.1364171	.0882317
#1	2523.279	56321.14	12318.59	2136.434	4179.059
#2	2530.256	56113.78	12196.71	2133.920	4180.770
#3	2531.177	56277.40	12240.18	2130.630	4186.131

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03DLX10 Acquired: 12/16/2024 20:09:45 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**.0006212**	**-.001380**	**.0122664**	**-.000879**	**.0009411**	**.4691978**	**.0245836**
Stddev	.0023487	.002092	.0007261	.001022	.0003433	.0016296	.0006423
%RSD	378.0666	151.5743	5.919589	116.2942	36.48380	.3473195	2.612820
#1	-.000206	-.000719	.0120783	-.001623	.0009295	.4683008	.0252438
#2	-.001202	.000301	.0130681	-.001301	.0006037	.4710788	.0239608
#3	.003272	-.003723	.0116528	.000287	.0012901	.4682137	.0245461

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000847**	**.0007663**	**15.99861**	**.0039020**	**.0005108**	**.0127932**	**1.380074**
Stddev	.0000239	.0000762	.05857	.0002481	.0002014	.0000194	.006410
%RSD	28.17859	9.940195	.3661183	6.359098	39.42507	.1517742	.4644974
#1	.0000815	.0006988	15.99509	.0040710	.0005433	.0127777	1.383748
#2	.0001100	.0007511	15.94188	.0036171	.0006939	.0128150	1.372672
#3	.0000626	.0008489	16.05887	.0040179	.0002951	.0127870	1.383802

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0196431**	**.6061106**	**.0032197**	**-.000950**	**925.0753**	**.0042133**	**.0473429**
Stddev	.0000892	.0134656	.0001330	.000141	4.4480	.0019281	.0006996
%RSD	.4542317	2.221649	4.130245	14.88328	.4808214	45.76168	1.477770
#1	.0197180	.6121542	.0031171	-.000975	929.0894	.0063550	.0467052
#2	.0196670	.6154956	.0031721	-.000797	925.8430	.0036691	.0480913
#3	.0195444	.5906819	.0033699	-.001077	920.2935	.0026158	.0472322

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.896091**	**.0016711**	**.0011445**	**.0003705**	**.0114747**	**1.254852**	**.6553484**
Stddev	.113623	.0003035	.0002705	.0003761	.0006664	.000727	.0017378
%RSD	2.916332	18.16425	23.63804	101.5128	5.807485	.0579648	.2651672
#1	3.775913	.0018317	.0014448	.0004269	.0122431	1.254587	.6569967
#2	3.910593	.0013210	.0009198	.0007151	.0110549	1.254295	.6555152
#3	4.001766	.0018606	.0010689	-.000031	.0111261	1.255675	.6535332

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03DLX10 Acquired: 12/16/2024 20:09:45 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	4.504965	.0015881	.2137204
Stddev	.015234	.0011702	.0000950
%RSD	.3381660	73.68754	.0444354
#1	4.487786	.0010155	.2136850
#2	4.510275	.0008144	.2136483
#3	4.516833	.0029344	.2138280

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2188.271	46959.80	11525.62	1830.410	3371.321
Stddev	4.745	67.92	28.56	4.721	4.268
%RSD	.2168418	.1446365	.2478254	.2578974	.1265885
#1	2184.162	46890.32	11497.03	1834.988	3369.560
#2	2193.464	46963.03	11554.15	1830.684	3376.188
#3	2187.185	47026.04	11525.69	1825.559	3368.216

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03DUPDLX10 Acquired: 12/16/2024 20:14:13 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**-.002903**	**-.002864**	**.0121922**	**.0010156**	**-.000036**	**.4723158**	**.0228347**
Stddev	.001167	.002891	.0005938	.0023392	.001421	.0073131	.0006896
%RSD	40.20559	100.9496	4.870087	230.3284	3958.362	1.548358	3.020121
#1	-.004154	-.003607	.0115279	.0006902	-.001107	.4735239	.0236282
#2	-.002711	.000326	.0126713	.0035004	-.000576	.4789496	.0223795
#3	-.001844	-.005311	.0123775	-.001144	.001576	.4644738	.0224964

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000894**	**.0006820**	**15.60150**	**.0044590**	**.0005305**	**.0125582**	**1.371250**
Stddev	.0000449	.0000612	.05559	.0002917	.0002335	.0007817	.003042
%RSD	50.21876	8.971889	.3563285	6.540657	44.01657	6.224504	.2218185
#1	.0001249	.0006347	15.64402	.0041324	.0002632	.0119676	1.367803
#2	.0000389	.0006602	15.53859	.0046933	.0006949	.0134446	1.372391
#3	.0001042	.0007511	15.62187	.0045514	.0006332	.0122625	1.373557

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0194754**	**.5936605**	**.0035219**	**-.000770**	**913.8298**	**.0037170**	**.0487707**
Stddev	.0002201	.0058436	.0000941	.000422	3.2826	.0014200	.0003598
%RSD	1.130211	.9843346	2.671772	54.81108	.3592158	38.20286	.7378085
#1	.0193458	.5992041	.0034144	-.000768	916.5710	.0029946	.0490901
#2	.0197296	.5942201	.0035619	-.001193	914.7263	.0053530	.0483809
#3	.0193509	.5875571	.0035894	-.000349	910.1920	.0028035	.0488411

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.343828**	**.0005269**	**.0008796**	**.0007735**	**.0122739**	**1.282340**	**.6437076**
Stddev	.124094	.0011079	.0001309	.0001363	.0012019	.016887	.0034577
%RSD	2.856786	210.2709	14.88557	17.62695	9.792406	1.316911	.5371525
#1	4.205432	.0017361	.0007530	.0006465	.0131265	1.265470	.6413293
#2	4.380868	-.000439	.0008714	.0009176	.0108993	1.299244	.6421195
#3	4.445185	.000284	.0010145	.0007563	.0127960	1.282305	.6476741

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03DUPDLX10 Acquired: 12/16/2024 20:14:13 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	4.444561	.0056523	.2124466
Stddev	.025068	.0008460	.0005470
%RSD	.5640094	14.96701	.2574608
#1	4.416582	.0048425	.2120202
#2	4.452126	.0055840	.2122563
#3	4.464976	.0065303	.2130633

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2135.582	46724.82	11706.94	1804.647	3316.869
Stddev	.640	133.20	63.15	9.985	12.907
%RSD	.0299551	.2850723	.5394394	.5532712	.3891384
#1	2135.119	46842.37	11637.20	1807.748	3331.386
#2	2136.312	46751.95	11760.25	1812.712	3312.531
#3	2135.315	46580.15	11723.38	1793.479	3306.690

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03LDLX50 Acquired: 12/16/2024 20:18:40 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**-.001493**	**-.001837**	**.0025951**	**.0006065**	**-.000422**	**.0942725**	**.0053309**
Stddev	.001716	.000668	.0009443	.0026837	.000659	.0038268	.0008069
%RSD	114.9306	36.34492	36.38726	442.4783	155.9120	4.059277	15.13701
#1	-.003352	-.001077	.0034188	-.000637	-.001050	.0907511	.0050449
#2	-.001160	-.002107	.0015646	-.001230	.000263	.0983450	.0062419
#3	.000032	-.002328	.0028018	.003686	-.000480	.0937215	.0047060

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000108**	**.0000787**	**3.319128**	**.0009422**	**.0002635**	**.0025213**	**.2628213**
Stddev	.0000641	.0000513	.020270	.0001969	.0000605	.0001627	.0046909
%RSD	594.0444	65.17585	.6106989	20.89691	22.95427	6.450965	1.784812
#1	.0000847	.0000280	3.296077	.0009325	.0002732	.0023342	.2620866
#2	-.000030	.0000775	3.327140	.0011438	.0003185	.0026289	.2678362
#3	-.000023	.0001306	3.334168	.0007504	.0001987	.0026009	.2585412

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042440**	**.1273445**	**.0007188**	**-.000405**	**187.6942**	**.0011577**	**.0079620**
Stddev	.0000144	.0053028	.0002082	.000107	3.5063	.0008341	.0002330
%RSD	.3382310	4.164163	28.97067	26.43404	1.868108	72.04903	2.925743
#1	.0042580	.1281319	.0007295	-.000354	191.1692	.0003794	.0081626
#2	.0042448	.1216919	.0009215	-.000334	187.7561	.0020382	.0080168
#3	.0042293	.1322096	.0005054	-.000529	184.1574	.0010555	.0077065

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.213208**	**-.004902**	**-.000096**	**.0001236**	**.0020605**	**.2346984**	**.1200521**
Stddev	.057336	.000218	.000153	.0007537	.0001324	.0048557	.0007703
%RSD	4.725953	4.445944	159.2847	609.7887	6.425268	2.068906	.6416415
#1	1.156173	-.004701	-.000186	.0009101	.0020277	.2330692	.1194435
#2	1.212612	-.005133	-.000183	.0000531	.0022062	.2308668	.1209182
#3	1.270840	-.004871	.000081	-.000592	.0019475	.2401592	.1197947

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03LDLX50 Acquired: 12/16/2024 20:18:40 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	.8237939	.0030180	.0439563
Stddev	.0009381	.0004572	.0002624
%RSD	.1138750	15.14779	.5970486
#1	.8232198	.0025289	.0438988
#2	.8232855	.0030905	.0437273
#3	.8248765	.0034345	.0442427

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2323.162	50940.41	11703.33	1969.731	3780.719
Stddev	7.334	85.89	49.16	7.247	12.815
%RSD	.3156753	.1686076	.4200670	.3678994	.3389638
#1	2330.965	50841.48	11757.37	1977.454	3795.025
#2	2322.109	50995.90	11691.35	1968.656	3776.844
#3	2316.411	50983.86	11661.26	1963.081	3770.289

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03MSDLX10 Acquired: 12/16/2024 20:23:08 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**.0721216**	**.1620057**	**.1008642**	**.1863889**	**.0703048**	**.8228779**	**.0373495**
Stddev	.0021905	.0022064	.0011092	.0020366	.0027805	.0051316	.0007418
%RSD	3.037200	1.361916	1.099717	1.092673	3.954891	.6236135	1.985977
#1	.0733004	.1617125	.0996539	.1846557	.0681493	.8254161	.0365156
#2	.0734703	.1599606	.1018323	.1858790	.0693220	.8262458	.0379357
#3	.0695942	.1643440	.1011064	.1886320	.0734433	.8169719	.0375971

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0191804**	**.0200445**	**15.67952**	**.0465790**	**.0195115**	**.0399237**	**2.007420**
Stddev	.0002748	.0001121	.10299	.0002987	.0001158	.0006547	.004662
%RSD	1.432676	.5591354	.6568218	.6411873	.5932903	1.639866	.2322207
#1	.0193546	.0200606	15.68139	.0469101	.0194328	.0395273	2.009549
#2	.0193230	.0199252	15.78156	.0464972	.0196444	.0395644	2.002073
#3	.0188636	.0201476	15.57561	.0463298	.0194572	.0406794	2.010636

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0387481**	**.8062077**	**.0510224**	**.0070677**	**919.5079**	**.0323083**	**.0703191**
Stddev	.0004469	.0018315	.0003610	.0004865	11.2515	.0005526	.0003318
%RSD	1.153308	.2271712	.7075827	6.883700	1.223642	1.710472	.4719009
#1	.0383208	.8054322	.0506914	.0076218	932.4983	.0324792	.0699566
#2	.0392123	.8048916	.0509686	.0067104	912.8344	.0316903	.0706078
#3	.0387112	.8082993	.0514074	.0068710	913.1909	.0327552	.0703929

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.426275**	**.0256069**	**.0368100**	**.0655364**	**.0308744**	**1.653193**	**1.312481**
Stddev	.112829	.0008675	.0003102	.0017686	.0005827	.022422	.013745
%RSD	2.079317	3.387699	.8426676	2.698644	1.887267	1.356311	1.047268
#1	5.306820	.0256020	.0364869	.0637898	.0315347	1.678380	1.299690
#2	5.440967	.0264767	.0368378	.0654932	.0304325	1.645798	1.310738
#3	5.531039	.0247418	.0371054	.0673262	.0306559	1.635403	1.327014

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03MSDLX10 Acquired: 12/16/2024 20:23:08 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	4.548385	.0235692	.2393928
Stddev	.047881	.0011592	.0008324
%RSD	1.052696	4.918158	.3477200
#1	4.509839	.0223070	.2400314
#2	4.533334	.0238143	.2396957
#3	4.601983	.0245861	.2384514

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2056.725	45407.59	11355.25	1750.040	3188.839
Stddev	11.358	205.97	81.48	5.122	25.021
%RSD	.5522267	.4536135	.7175266	.2926842	.7846437
#1	2068.221	45256.90	11301.85	1752.899	3212.017
#2	2056.443	45323.59	11314.87	1753.093	3192.188
#3	2045.511	45642.30	11449.03	1744.126	3162.312

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03MSDDLX10 Acquired: 12/16/2024 20:27:34 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**.0753650**	**.1680133**	**.1036346**	**.1908960**	**.0732624**	**.8287199**	**.0401646**
Stddev	.0035406	.0014665	.0028337	.0029682	.0013581	.0017045	.0006450
%RSD	4.697897	.8728602	2.734291	1.554884	1.853780	.2056783	1.605873
#1	.0739776	.1664016	.1049101	.1875257	.0717439	.8304776	.0394658
#2	.0727282	.1683691	.1003874	.1920419	.0743609	.8286078	.0407370
#3	.0793891	.1692691	.1056064	.1931205	.0736825	.8270742	.0402909

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0195433**	**.0205759**	**16.28874**	**.0482306**	**.0199420**	**.0402894**	**2.114939**
Stddev	.0000548	.0002089	.01629	.0001999	.0001034	.0003422	.004623
%RSD	.2803715	1.015214	.1000153	.4144334	.5186774	.8493867	.2185726
#1	.0196061	.0206486	16.29263	.0484611	.0199349	.0403944	2.115257
#2	.0195180	.0203404	16.27085	.0481052	.0200489	.0405669	2.110165
#3	.0195057	.0207388	16.30273	.0481255	.0198424	.0399070	2.119394

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0399308**	**.8296718**	**.0524309**	**.0073339**	**941.8383**	**.0331603**	**.0725138**
Stddev	.0005696	.0011244	.0002328	.0002206	7.6714	.0009044	.0004173
%RSD	1.426403	.1355271	.4440811	3.007612	.8145108	2.727350	.5754755
#1	.0405874	.8308736	.0525989	.0075251	949.3128	.0328726	.0722878
#2	.0395708	.8286453	.0521651	.0070926	942.2182	.0324347	.0722583
#3	.0396340	.8294965	.0525285	.0073840	933.9841	.0341735	.0729954

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.809022**	**.0257250**	**.0378724**	**.0648073**	**.0291683**	**1.666459**	**1.332947**
Stddev	.148467	.0005523	.0005348	.0007772	.0005384	.005571	.003830
%RSD	2.555801	2.147133	1.412196	1.199164	1.845693	.3342720	.2873248
#1	5.658981	.0260814	.0372616	.0639273	.0288503	1.668679	1.332594
#2	5.812221	.0260049	.0382570	.0653996	.0297899	1.660121	1.329306
#3	5.955864	.0250887	.0380986	.0650950	.0288647	1.670577	1.336941

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03MSDDLX10 Acquired: 12/16/2024 20:27:34 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	4.659834	.0258749	.2435749
Stddev	.021774	.0013540	.0011305
%RSD	.4672801	5.232711	.4641389
#1	4.666699	.0243881	.2423454
#2	4.635454	.0261997	.2438097
#3	4.677348	.0270369	.2445695

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2044.667	44588.98	11373.55	1712.165	3164.989
Stddev	4.668	138.69	33.07	12.273	2.491
%RSD	.2283061	.3110495	.2907359	.7168155	.0787097
#1	2050.053	44600.03	11338.72	1719.841	3165.812
#2	2041.788	44721.81	11377.42	1718.644	3166.964
#3	2042.161	44445.09	11404.52	1698.010	3162.190

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03ADLX10 Acquired: 12/16/2024 20:32:00 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**.0719167**	**.1646467**	**.1022090**	**.1871394**	**.0714040**	**.8575637**	**.0401758**
Stddev	.0009462	.0007554	.0007196	.0026967	.0010978	.0057196	.0013409
%RSD	1.315722	.4588021	.7040234	1.440999	1.537496	.6669587	3.337502
#1	.0711569	.1638435	.1019401	.1865595	.0706855	.8633504	.0396755
#2	.0716167	.1653429	.1030244	.1847798	.0726677	.8574268	.0391571
#3	.0729766	.1647536	.1016627	.1900788	.0708588	.8519137	.0416949

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0195210**	**.0202707**	**16.15154**	**.0477234**	**.0196195**	**.0399167**	**2.076090**
Stddev	.0001313	.0000879	.14144	.0004932	.0001845	.0002126	.002779
%RSD	.6726085	.4335892	.8756812	1.033436	.9406137	.5326071	.1338764
#1	.0195736	.0201750	16.09999	.0482521	.0195051	.0399019	2.073646
#2	.0193716	.0203478	16.04311	.0476424	.0198324	.0397119	2.075511
#3	.0196178	.0202893	16.31152	.0472757	.0195209	.0401364	2.079113

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0391770**	**.8331958**	**.0517798**	**.0073413**	**902.2060**	**.0328354**	**.0707976**
Stddev	.0002610	.0040828	.0004224	.0001654	11.2661	.0017793	.0003201
%RSD	.6661044	.4900185	.8157078	2.252484	1.248727	5.418848	.4520787
#1	.0394167	.8376942	.0515191	.0075232	912.9286	.0343450	.0704676
#2	.0388990	.8297249	.0522671	.0073004	903.2237	.0308736	.0708182
#3	.0392152	.8321683	.0515531	.0072002	890.4655	.0332875	.0711067

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.642512**	**.0250356**	**.0373301**	**.0647937**	**.0337263**	**1.757966**	**1.324797**
Stddev	.080024	.0002997	.0001295	.0009316	.0011566	.015386	.010981
%RSD	1.418240	1.197302	.3467766	1.437776	3.429393	.8752015	.8288462
#1	5.556665	.0247638	.0373851	.0651473	.0350172	1.775678	1.312284
#2	5.655828	.0249860	.0371823	.0654967	.0333773	1.750299	1.332824
#3	5.715044	.0253571	.0374231	.0637371	.0327843	1.747920	1.329283

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03ADLX10 Acquired: 12/16/2024 20:32:00 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	4.615959	.0255879	.2394802
Stddev	.013555	.0007893	.0004114
%RSD	.2936562	3.084553	.1717770
#1	4.614175	.0247049	.2390058
#2	4.630318	.0258341	.2397375
#3	4.603384	.0262247	.2396975

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2102.060	45986.29	11624.05	1788.699	3256.265
Stddev	13.406	125.86	61.36	10.173	10.178
%RSD	.6377319	.2736887	.5278688	.5687272	.3125811
#1	2098.080	45885.18	11627.25	1799.092	3250.265
#2	2117.004	45946.44	11683.75	1778.762	3268.017
#3	2091.095	46127.25	11561.15	1788.242	3250.513

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03 Acquired: 12/16/2024 20:36:27 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**-.007843**	**-.017258**	**.0979283**	**.0043095**	**.0113319**	**5.623217**
Stddev	.002130	.003118	.0014586	.0016012	.0016973	.071944
%RSD	27.16464	18.06830	1.489496	37.15443	14.97772	1.279418
#1	-.010052	-.018833	.0968978	.0028996	.0093825	5.542450
#2	-.007676	-.019275	.0995973	.0039786	.0124814	5.646761
#3	-.005801	-.013667	.0972897	.0060502	.0121318	5.680440

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2263720**	**.0002623**	**.0076819**	**122.5919**	**.0345197**	**.0040867**
Stddev	.0011844	.0000710	.0001145	1.7354	.0003216	.0000123
%RSD	.5232098	27.07705	1.490630	1.415620	.9316129	.2996603
#1	.2255579	.0003436	.0078082	124.3260	.0348282	.0040731
#2	.2258275	.0002126	.0075849	122.5946	.0345444	.0040969
#3	.2277308	.0002307	.0076526	120.8551	.0341865	.0040900

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1027607**	**14.65719**	**.1643384**	**4.727731**	**.0264497**	**-.001236**
Stddev	.0004567	.11950	.0018504	.075831	.0000529	.000172
%RSD	.4444407	.8152668	1.125980	1.603961	.1998628	13.92910
#1	.1023129	14.77136	.1664585	4.809843	.0264621	-.001049
#2	.1032258	14.66721	.1635087	4.713009	.0264952	-.001387
#3	.1027434	14.53300	.1630481	4.660340	.0263917	-.001272

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.0312860**	**.6235575**	**63.10418**	**.0393287**	**.0134439**
Stddev	-----	.0011437	.0051679	2.27857	.0011353	.0006270
%RSD	-----	3.655735	.8287825	3.610812	2.886768	4.663663
#1	^ -----	.0324819	.6196107	60.75820	.0393796	.0127911
#2	^ -----	.0311734	.6294070	63.24558	.0404378	.0140415
#3	^ -----	.0302028	.6216547	65.30876	.0381688	.0134991

Sample Name: P5220-03 Acquired: 12/16/2024 20:36:27 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	.0027241	.0771845	F 16.85166	7.490410	F 48.62417	.0142295
Stddev	.0012981	.0012972	.18850	.038506	.07071	.0024820
%RSD	47.65391	1.680590	1.118597	.5140751	.1454227	17.44275
#1	.0027945	.0762426	16.63675	7.446115	48.58870	.0114837
#2	.0039856	.0786640	16.98897	7.509218	48.70560	.0148911
#3	.0013922	.0766470	16.92928	7.515899	48.57822	.0163137

Elem	Sr4077
Units	ppm
Avg	2.063279
Stddev	.012466
%RSD	.6041634
#1	2.061265
#2	2.051943
#3	2.076629

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1234.388	30376.92	9546.893	1039.974	1807.066
Stddev	8.030	73.85	36.785	9.159	7.023
%RSD	.6504931	.2431218	.3853062	.8807276	.3886673
#1	1236.625	30422.87	9509.489	1049.865	1807.852
#2	1241.061	30291.73	9548.163	1031.786	1813.664
#3	1225.477	30416.17	9583.026	1038.269	1799.683

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03DUP Acquired: 12/16/2024 20:40:52 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	**-.005870**	**-.015787**	**.1046560**	**.0063040**	**.0094211**	**5.423257**
Stddev	.009119	.003780	.0024887	.0001502	.0021573	.055236
%RSD	155.3603	23.94587	2.377995	2.382078	22.89830	1.018506
#1	.003905	-.013364	.1060849	.0064652	.0110847	5.390006
#2	-.007365	-.020143	.1017822	.0061681	.0101949	5.392746
#3	-.014149	-.013854	.1061007	.0062785	.0069836	5.487019

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2399544**	**.0001585**	**.0079695**	**126.6188**	**.0325070**	**.0038438**
Stddev	.0017650	.0000474	.0001179	1.3739	.0001237	.0002084
%RSD	.7355607	29.89271	1.479007	1.085036	.3806096	5.422762
#1	.2379893	.0001321	.0080767	126.3813	.0326389	.0040837
#2	.2414051	.0002132	.0079885	128.0960	.0324885	.0037068
#3	.2404687	.0001301	.0078432	125.3792	.0323935	.0037410

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1080186**	**13.71204**	**.1622487**	**4.778494**	**.0270148**	**-.001482**
Stddev	.0008023	.08656	.0017122	.031137	.0003119	.000423
%RSD	.7426950	.6313012	1.055301	.6516113	1.154671	28.56674
#1	.1083886	13.75182	.1619924	4.760028	.0271595	-.001060
#2	.1085690	13.77156	.1640746	4.814444	.0272281	-.001906
#3	.1070981	13.61274	.1606791	4.761012	.0266568	-.001480

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.0291679**	**.6546819**	**74.55949**	**.0407671**	**.0127009**
Stddev	-----	.0011804	.0024800	1.95456	.0015782	.0001964
%RSD	-----	4.046922	.3788034	2.621471	3.871182	1.546165
#1	^ -----	.0281266	.6573675	72.77628	.0390257	.0125244
#2	^ -----	.0304502	.6524784	74.25301	.0421030	.0126658
#3	^ -----	.0289270	.6541997	76.64918	.0411726	.0129124

Sample Name: P5220-03DUP Acquired: 12/16/2024 20:40:52 Type: Unk
Method: NON EPA-6010-200.7(v2530) 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	.0002747	.0786088	F 16.46966	7.840199	F 52.28340	.0102034
Stddev	.0007927	.0013981	.07614	.051549	.21611	.0014078
%RSD	288.5311	1.778552	.4622921	.6575005	.4133405	13.79717
#1	-.000414	.0783234	16.50787	7.822119	52.45360	.0090369
#2	.001141	.0801276	16.38198	7.898353	52.35634	.0098062
#3	.000097	.0773755	16.51912	7.800125	52.04026	.0117671

Elem	Sr4077
Units	ppm
Avg	2.140227
Stddev	.023970
%RSD	1.119990
#1	2.113717
#2	2.160373
#3	2.146592

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1242.774	30254.58	9481.719	1019.273	1792.582
Stddev	11.433	92.35	36.236	10.372	9.351
%RSD	.9199294	.3052519	.3821639	1.017544	.5216656
#1	1251.693	30148.10	9494.845	1007.334	1800.629
#2	1246.744	30302.70	9440.750	1024.432	1794.793
#3	1229.886	30312.93	9509.564	1026.054	1782.323

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV05 Acquired: 12/16/2024 20:49:26 Type: Unk
Method: NON EPA-6010-200.7(v2531) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.955502**	**5.033660**	**5.058222**	**4.963390**	**4.980238**	**9.982252**	**9.720852**
Stddev	.002699	.006253	.001014	.001586	.003615	.035799	.013782
%RSD	.0544605	.1242138	.0200496	.0319489	.0725835	.3586268	.1417781
#1	4.952400	5.029497	5.057138	4.963469	4.984316	9.952392	9.728199
#2	4.957311	5.040850	5.059148	4.964935	4.977426	9.972428	9.704953
#3	4.956795	5.030633	5.058379	4.961767	4.978973	10.02194	9.729404

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2629031**	**2.521615**	**25.02588**	**1.030005**	**2.504297**	**1.259872**	**4.947665**
Stddev	.0006942	.000984	.13404	.001912	.000658	.001285	.018655
%RSD	.2640700	.0390345	.5356220	.1856247	.0262748	.1020066	.3770373
#1	.2635849	2.520707	24.87286	1.032090	2.503543	1.260761	4.926506
#2	.2621971	2.522661	25.12253	1.028334	2.504759	1.258399	4.961737
#3	.2629274	2.521477	25.08226	1.029591	2.504588	1.260457	4.954754

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.496077**	**25.42255**	**2.511323**	**1.265975**	**26.95728**	**2.525516**	**2.523802**
Stddev	.014835	.14475	.001036	.000712	.33504	.013836	.011254
%RSD	.5943146	.5693668	.0412484	.0562247	1.242851	.5478447	.4459097
#1	2.479025	25.25655	2.511058	1.266104	27.29378	2.509631	2.536788
#2	2.506012	25.52242	2.512465	1.265207	26.95434	2.534935	2.517733
#3	2.503194	25.48869	2.510445	1.266613	26.62372	2.531982	2.516885

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.18639**	**5.200413**	**5.004174**	**5.041904**	**4.944424**	**5.014267**	**4.915405**
Stddev	.04473	.005540	.002631	.010182	.017461	.044122	.009952
%RSD	.1928972	.1065311	.0525798	.2019417	.3531510	.8799363	.2024675
#1	23.16447	5.205135	5.002863	5.033215	4.924507	4.966996	4.904861
#2	23.23784	5.201789	5.002456	5.053107	4.957097	5.021444	4.916720
#3	23.15684	5.194314	5.007203	5.039391	4.951668	5.054361	4.924634

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV05 Acquired: 12/16/2024 20:49:26 Type: Unk
Method: NON EPA-6010-200.7(v2531) 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	**4.910965**	**4.777633**	**5.152009**
Stddev	.004428	.009521	.023942
%RSD	.0901658	.1992777	.4647124
#1	4.916077	4.767479	5.133409
#2	4.908315	4.779060	5.143597
#3	4.908503	4.786359	5.179022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2412.906**	**54774.87**	**12552.78**	**2042.269**	**4013.049**
Stddev	4.983	13.16	4.94	9.009	7.761
%RSD	.2065254	.0240235	.0393790	.4411215	.1933937
#1	2410.135	54760.60	12556.41	2031.986	4009.537
#2	2418.659	54777.48	12547.15	2046.047	4021.945
#3	2409.925	54786.53	12554.78	2048.773	4007.665

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB05 Acquired: 12/16/2024 20:53:47 Type: Unk
Method: NON EPA-6010-200.7(v2532) 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	**-.001448**	**-.000096**	**.0004664**	**.0003227**	**-.000020**	**.0001465**	**-.000870**
Stddev	.001470	.001122	.0006674	.0006588	.000404	.0077456	.000139
%RSD	101.5620	1170.206	143.0958	204.1429	2003.317	5287.470	15.98373
#1	-.002496	-.000783	.0003578	.0001008	.000446	-.005083	-.000972
#2	.000233	-.000704	.0011815	.0010638	-.000276	.009045	-.000928
#3	-.002080	.001199	-.000140	-.000196	-.000231	-.003522	-.000712

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000266**	**-.000017**	**-.003373**	**.0004163**	**-.000142**	**.0003413**	**.0008067**
Stddev	.0000588	.000036	.005112	.0002678	.000148	.0002018	.0020528
%RSD	221.3969	214.4037	151.5352	64.33442	104.0340	59.10817	254.4618
#1	-.000000	-.000052	-.004784	.0005819	-.000307	.0001176	.0006752
#2	.000094	.000020	.002296	.0001073	-.000022	.0003971	-.001177
#3	-.000014	-.000018	-.007632	.0005597	-.000097	.0005093	.002922

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000711**	**-.011108**	**.0001726**	**.0000125**	**.8502220**	**.0007032**	**-.002357**
Stddev	.0001954	.004412	.0001493	.0001038	.0373991	.0003325	.000129
%RSD	274.6963	39.71628	86.50139	827.7119	4.398751	47.28085	5.474353
#1	.0000533	-.006454	.0003411	-.000041	.8109209	.0006937	-.002264
#2	.0002749	-.015229	.0001202	-.000054	.8543720	.0003756	-.002303
#3	-.000115	-.011641	.0000566	.000132	.8853730	.0010403	-.002504

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8267068**	**-.001073**	**.0000845**	**-.000208**	**-.000193**	**.0011090**	**.0028430**
Stddev	.0769026	.000703	.0000569	.000158	.000228	.0009739	.0007824
%RSD	9.302280	65.49913	67.37644	75.78872	117.8564	87.82247	27.52027
#1	.7404814	-.001815	.0000903	-.000032	-.000389	-.000012	.0019401
#2	.8514380	-.000417	.0000249	-.000336	-.000246	.001591	.0032686
#3	.8882012	-.000988	.0001384	-.000257	.000056	.001748	.0033204

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB05 Acquired: 12/16/2024 20:53:47 Type: Unk
Method: NON EPA-6010-200.7(v2532) 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	**-.001400**	**.0032943**	**.0000366**
Stddev	.000882	.0005593	.0000136
%RSD	62.98848	16.97876	37.02418
#1	-.001489	.0026657	.0000480
#2	-.002234	.0034801	.0000403
#3	-.000477	.0037371	.0000216

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2641.873**	**59942.50**	**13089.33**	**2243.510**	**4756.825**
Stddev	3.088	42.34	51.58	7.914	3.886
%RSD	.1168866	.0706264	.3940966	.3527581	.0817028
#1	2640.056	59914.92	13032.02	2234.503	4761.111
#2	2640.125	59991.24	13103.96	2249.351	4753.531
#3	2645.439	59921.34	13132.03	2246.676	4755.832

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03LX5 Acquired: 12/16/2024 21:00:47 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.003350**	**-.001392**	**.0232237**	**.0016672**	**.0014643**	**.9042912**	**.0403384**
Stddev	.001449	.001837	.0003238	.0022730	.0004396	.0034639	.0008628
%RSD	43.25300	131.8898	1.394222	136.3310	30.02426	.3830510	2.139031
#1	-.001818	-.000186	.0235766	.0042212	.0010412	.9003231	.0401947
#2	-.003534	-.003506	.0231540	.0009141	.0019188	.9067103	.0412640
#3	-.004698	-.000485	.0229404	-.000134	.0014328	.9058401	.0395563

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001209**	**.0013836**	**28.96561**	**.0080509**	**.0008860**	**.0244061**	**2.723266**
Stddev	.0000725	.0000822	.25688	.0003267	.0000398	.0004232	.017927
%RSD	59.94250	5.940592	.8868572	4.058444	4.489740	1.734006	.6582851
#1	.0001166	.0013722	28.97323	.0084235	.0009195	.0239743	2.708534
#2	.0001955	.0014709	29.21860	.0079155	.0008964	.0244239	2.743226
#3	.0000507	.0013077	28.70501	.0078135	.0008420	.0248201	2.718039

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0358399**	**1.103866**	**.0063221**	**-.000757**	**1451.459**	**.0067688**	**.0997524**
Stddev	.0004990	.013588	.0005090	.000344	23.741	.0016116	.0005256
%RSD	1.392430	1.230916	8.051656	45.39533	1.635684	23.80950	.5269376
#1	.0360299	1.112361	.0067965	-.000442	1473.942	.0050364	.0994931
#2	.0362160	1.111041	.0063855	-.001124	1453.803	.0070463	.0994067
#3	.0352737	1.088195	.0057843	-.000706	1426.633	.0082236	.1003572

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.15068**	**.0053215**	**.0024246**	**-.000094**	**.0208895**	**2.616764**	**1.310081**
Stddev	.20281	.0005457	.0003134	.001587	.0016305	.017565	.011841
%RSD	1.998037	10.25507	12.92736	1680.818	7.805421	.6712371	.9038394
#1	9.93828	.0053837	.0021120	.001722	.0226829	2.597366	1.297146
#2	10.17145	.0047473	.0027389	-.001210	.0204891	2.631591	1.320385
#3	10.34231	.0058334	.0024230	-.000795	.0194965	2.621335	1.312712

Sample Name: P5220-03LX5 Acquired: 12/16/2024 21:00:47 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**9.181610**	**.0101284**	**.4292972**
Stddev	.049109	.0009437	.0004636
%RSD	.5348591	9.317022	.1079963
#1	9.127192	.0092645	.4292124
#2	9.195012	.0099851	.4288819
#3	9.222627	.0111355	.4297974

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1915.746**	**42839.90**	**11635.41**	**1617.193**	**2938.784**
Stddev	4.900	150.43	67.36	6.784	7.492
%RSD	.2557887	.3511493	.5789133	.4194702	.2549209
#1	1915.981	42904.94	11600.70	1612.527	2944.795
#2	1920.524	42667.89	11592.49	1614.077	2941.165
#3	1910.732	42946.87	11713.05	1624.975	2930.391

Sample Name: P5220-03MS Acquired: 12/16/2024 21:05:11 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.8723254	1.365989	.8745563	2.099011	.9063203	9.869127
Stddev	.0041816	.010031	.0030014	.019578	.0061630	.055392
%RSD	.4793615	.7343453	.3431920	.9327271	.6800070	.5612641
#1	.8732467	1.377425	.8762064	2.076454	.8994126	9.829898
#2	.8759695	1.361863	.8763707	2.109000	.9112559	9.844992
#3	.8677599	1.358679	.8710919	2.111581	.9082925	9.932492

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4330830	.2024482	.1728785	132.3108	.3762473	.1712050
Stddev	.0013558	.0008234	.0007853	1.5118	.0018320	.0007879
%RSD	.3130454	.4067225	.4542491	1.142581	.4869167	.4601907
#1	.4335278	.2033544	.1737841	133.8977	.3742112	.1707751
#2	.4315608	.2022440	.1723857	132.1475	.3767681	.1721143
#3	.4341605	.2017461	.1724658	130.8874	.3777625	.1707255

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3329423	20.48984	.3446433	6.635776	.4368333	.1128287
Stddev	.0018039	.15026	.0017778	.083687	.0029771	.0003613
%RSD	.5418074	.7333429	.5158234	1.261142	.6815167	.3201768
#1	.3317464	20.57956	.3460252	6.724212	.4401164	.1132326
#2	.3350172	20.57359	.3452669	6.625289	.4360744	.1127171
#3	.3320632	20.31637	.3426378	6.557827	.4343091	.1125365

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2895829	.9181940	86.93614	.2695662	.3412791
Stddev	-----	.0018183	.0023719	2.22640	.0026431	.0005405
%RSD	-----	.6279136	.2583246	2.560958	.9805082	.1583850
#1	^ -----	.2916824	.9200830	84.74388	.2724359	.3406994
#2	^ -----	.2885508	.9189671	86.86936	.2690312	.3417693
#3	^ -----	.2885154	.9155320	89.19518	.2672316	.3413686

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03MS Acquired: 12/16/2024 21:05:11 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.5621572	.2708615	F 21.36386	F 15.32458	F 51.21129	.2749916
Stddev	.0053186	.0008735	.13154	.05498	.11950	.0033454
%RSD	.9460986	.3224735	.6157100	.3587621	.2333420	1.216555
#1	.5682102	.2718193	21.23835	15.38033	51.13590	.2715136
#2	.5600297	.2701089	21.35255	15.32300	51.34907	.2752746
#3	.5582318	.2706562	21.50070	15.27041	51.14890	.2781865

Elem	Sr4077
Units	ppm
Avg	2.351242
Stddev	.007592
%RSD	.3228829
#1	2.350130
#2	2.344268
#3	2.359328

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1256.481	30659.87	9242.965	1047.693	1820.715
Stddev	9.919	151.16	90.056	8.574	9.892
%RSD	.7894585	.4930102	.9743200	.8183388	.5432898
#1	1267.764	30485.33	9139.139	1037.799	1831.765
#2	1252.550	30748.13	9289.867	1052.331	1817.696
#3	1249.130	30746.14	9299.890	1052.949	1812.685

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03MSD Acquired: 12/16/2024 21:09:27 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.8627206	1.407421	.8934984	2.077004	.8857255	9.927840
Stddev	.0083268	.001522	.0003401	.016603	.0080146	.146955
%RSD	.9651799	.1081364	.0380583	.7993921	.9048675	1.480236
#1	.8570221	1.407799	.8938776	2.061668	.8790678	9.759052
#2	.8588632	1.405745	.8932205	2.074708	.8834875	9.997102
#3	.8722767	1.408718	.8933971	2.094636	.8946213	10.02737

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4266105	.2065401	.1771625	136.3764	.3834633	.1744250
Stddev	.0012535	.0015893	.0009049	1.5109	.0021706	.0007456
%RSD	.2938288	.7694941	.5107602	1.107877	.5660451	.4274497
#1	.4252135	.2083118	.1764947	138.1206	.3858374	.1742834
#2	.4276370	.2052397	.1781923	135.5397	.3815804	.1752313
#3	.4269811	.2060688	.1768005	135.4690	.3829721	.1737604

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3336769	20.71920	.3511180	6.881037	.4459227	.1115985
Stddev	.0005364	.24051	.0041025	.057600	.0013486	.0008197
%RSD	.1607422	1.160792	1.168403	.8370823	.3024224	.7345491
#1	.3336424	20.96410	.3556292	6.947282	.4460932	.1125430
#2	.3331585	20.71017	.3501140	6.842773	.4471779	.1111810
#3	.3342296	20.48334	.3476107	6.853056	.4444970	.1110716

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2959838	.9114873	91.09403	.2734502	.3408169
Stddev	-----	.0026088	.0057107	2.22002	.0024119	.0010688
%RSD	-----	.8814099	.6265205	2.437061	.8820153	.3136115
#1	^ -----	.2989198	.9177762	88.53336	.2759231	.3400295
#2	^ -----	.2939317	.9100600	92.47790	.2711043	.3403876
#3	^ -----	.2951001	.9066257	92.27081	.2733231	.3420337

Sample Name: P5220-03MSD Acquired: 12/16/2024 21:09:27 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.5759876	.2940459	F 21.58604	F 15.56849	F 52.10495	.2584840
Stddev	.0028518	.0013091	.24881	.10589	.22209	.0037173
%RSD	.4951118	.4451840	1.152622	.6801858	.4262378	1.438118
#1	.5772568	.2925379	21.33153	15.46054	51.86638	.2542339
#2	.5779845	.2948897	21.82872	15.57273	52.30570	.2600888
#3	.5727216	.2947100	21.59785	15.67220	52.14276	.2611293

Elem	Sr4077
Units	ppm
Avg	2.374118
Stddev	.017448
%RSD	.7349086
#1	2.367798
#2	2.360711
#3	2.393845

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1295.801	30808.99	9129.530	1073.791	1850.089
Stddev	10.971	232.23	55.413	10.289	14.172
%RSD	.8466462	.7537709	.6069623	.9581982	.7660277
#1	1302.097	30671.50	9065.681	1065.006	1861.503
#2	1302.174	30678.34	9157.850	1071.258	1854.537
#3	1283.133	31077.11	9165.060	1085.111	1834.226

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5220-03A Acquired: 12/16/2024 21:13:43 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.8777095**	**1.402669**	**.8764228**	**2.108152**	**.9030488**	**9.882873**
Stddev	.0111558	.016738	.0015128	.030587	.0163351	.088207
%RSD	1.271017	1.193319	.1726057	1.450882	1.808879	.8925214
#1	.8749838	1.417745	.8762658	2.084224	.8898184	9.848076
#2	.8681691	1.405606	.8780080	2.097620	.8980213	9.817372
#3	.8899756	1.384657	.8749947	2.142614	.9213066	9.983171

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4138711**	**.2041153**	**.1737092**	**134.0147**	**.3868645**	**.1720310**
Stddev	.0019972	.0007232	.0012195	.7680	.0027919	.0005124
%RSD	.4825535	.3543108	.7020424	.5731002	.7216701	.2978632
#1	.4140705	.2047665	.1750974	133.2024	.3899654	.1725103
#2	.4117818	.2042424	.1732197	134.7291	.3860775	.1714909
#3	.4157611	.2033369	.1728104	134.1126	.3845506	.1720918

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3306207**	**20.41980**	**.3421398**	**6.782937**	**.4387630**	**.1091266**
Stddev	.0022021	.11335	.0033483	.046850	.0004680	.0006590
%RSD	.6660346	.5550838	.9786231	.6907033	.1066729	.6039165
#1	.3297705	20.29591	.3384467	6.732272	.4386747	.1085920
#2	.3289705	20.51830	.3429956	6.791848	.4392689	.1089248
#3	.3331211	20.44519	.3449770	6.824692	.4383454	.1098629

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.2877219**	**.8973631**	**90.02697**	**.2652902**	**.3390550**
Stddev	-----	.0004182	.0041525	1.91957	.0019254	.0029431
%RSD	-----	.1453579	.4627439	2.132220	.7257702	.8680441
#1	^ -----	.2881629	.8925688	88.16141	.2674896	.3379823
#2	^ -----	.2876719	.8998206	89.92315	.2644717	.3367987
#3	^ -----	.2873309	.8997001	91.99634	.2639093	.3423841

Sample Name: P5220-03A Acquired: 12/16/2024 21:13:43 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.5634379	.3086886	F 21.86039	F 15.47229	F 51.20720	.2451099
Stddev	.0028781	.0022149	.20847	.04087	.19262	.0018996
%RSD	.5108156	.7175174	.9536356	.2641734	.3761532	.7749999
#1	.5667612	.3111450	21.65836	15.51838	51.30158	.2446647
#2	.5617627	.3080773	21.84807	15.44045	50.98559	.2434725
#3	.5617897	.3068436	22.07475	15.45804	51.33442	.2471926

Elem	Sr4077
Units	ppm
Avg	2.334526
Stddev	.017917
%RSD	.7674611
#1	2.320122
#2	2.328868
#3	2.354589

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.043	31115.89	9286.991	1103.876	1819.234
Stddev	25.643	26.02	16.047	6.370	28.023
%RSD	2.027061	.0836075	.1727941	.5770245	1.540348
#1	1284.619	31128.81	9270.713	1111.225	1841.153
#2	1274.494	31132.92	9287.463	1099.935	1828.889
#3	1236.015	31085.95	9302.797	1100.468	1787.661

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5283-02 Acquired: 12/16/2024 21:18:00 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.1119142**	**-.050216**	**.3049375**	**-.035859**	**-.002678**	**90.60387**
Stddev	.0022513	.001124	.0008731	.000619	.000580	.14296
%RSD	2.011664	2.238389	.2863380	1.725862	21.67046	.1577897
#1	.1094894	-.048930	.3057286	-.035992	-.002047	90.43959
#2	.1123150	-.050706	.3050833	-.036401	-.002800	90.70009
#3	.1139383	-.051011	.3040007	-.035185	-.003188	90.67194

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3512572**	**.0152151**	**.0390413**	**23.69537**	**.3306394**	**.4614915**
Stddev	.0010136	.0000666	.0001524	.14904	.0006626	.0004476
%RSD	.2885524	.4376595	.3903008	.6289842	.2003953	.0969787
#1	.3500989	.0151421	.0390680	23.52540	.3310489	.4616280
#2	.3519816	.0152307	.0391785	23.75700	.3298750	.4609916
#3	.3516911	.0152725	.0388773	23.80371	.3309943	.4618549

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4668412**	**225.1164**	**1.680551**	**8.762363**	**.9423027**	**-.017862**
Stddev	.0010879	1.2617	.008937	.023764	.0012207	.000465
%RSD	.2330326	.5604769	.5318092	.2712089	.1295431	2.603111
#1	.4673991	223.8840	1.670234	8.747027	.9411249	-.017530
#2	.4675370	225.0598	1.685522	8.750325	.9435621	-.018394
#3	.4655876	226.4055	1.685898	8.789738	.9422209	-.017663

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**54.92086**	**.4251230**	**.7874920**	**12.32205**	**.0270322**	**.0060024**
Stddev	.18155	.0015954	.0010700	.03969	.0037432	.0002104
%RSD	.3305648	.3752715	.1358810	.3221174	13.84719	3.505794
#1	54.76675	.4236376	.7865882	12.29598	.0246797	.0062062
#2	54.87484	.4268093	.7872143	12.30244	.0250683	.0057859
#3	55.12099	.4249219	.7886735	12.36773	.0313487	.0060150

Sample Name: P5283-02 Acquired: 12/16/2024 21:18:00 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0036992	1.468239	F 58.79004	1.661025	F 162.0712	.0408648
Stddev	.0000834	.010197	.23242	.004055	.1345	.0003629
%RSD	2.253551	.6945079	.3953449	.2441294	.0830114	.8881072
#1	.0036049	1.456700	58.64613	1.657476	162.0307	.0409827
#2	.0037630	1.476036	58.66581	1.665445	162.2214	.0411542
#3	.0037297	1.471982	59.05818	1.660155	161.9616	.0404576

Elem	Sr4077
Units	ppm
Avg	.0508786
Stddev	.0009465
%RSD	1.860329
#1	.0518089
#2	.0509102
#3	.0499167

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3307.025	75308.29	17477.41	2809.906	3938.570
Stddev	2.738	88.55	33.65	1.953	4.522
%RSD	.0827864	.1175872	.1925519	.0695018	.1148172
#1	3307.213	75317.87	17484.70	2812.001	3940.613
#2	3309.664	75391.66	17440.71	2808.136	3941.710
#3	3304.198	75215.33	17506.83	2809.582	3933.387

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05 Acquired: 12/16/2024 21:22:03 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.002731**	**-.004379**	**.0052656**	**.0038697**	**.0020369**	**3.018972**
Stddev	.000703	.000785	.0004601	.0016035	.0010400	.013001
%RSD	25.75121	17.93016	8.737735	41.43646	51.05880	.4306359
#1	-.003236	-.004756	.0050332	.0057104	.0032373	3.032866
#2	-.003029	-.004905	.0057956	.0027764	.0014666	3.016949
#3	-.001928	-.003477	.0049681	.0031223	.0014067	3.007102

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0263227**	**-.000033**	**.0001338**	**17.27026**	**.0042157**	**.0020974**
Stddev	.0003837	.000023	.0000282	.03383	.0003949	.0000236
%RSD	1.457849	67.93794	21.06283	.1959046	9.366321	1.125141
#1	.0267411	-.000044	.0001558	17.28369	.0037895	.0021110
#2	.0259871	-.000007	.0001436	17.29531	.0042885	.0020701
#3	.0262401	-.000049	.0001020	17.23177	.0045691	.0021110

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0252134**	**2.254201**	**.0705695**	**3.927623**	**.0079055**	**-.000809**
Stddev	.0001337	.002648	.0001777	.007876	.0002595	.000277
%RSD	.5304365	.1174705	.2518694	.2005293	3.282806	34.25597
#1	.0251341	2.255357	.0703925	3.931113	.0078865	-.000662
#2	.0253678	2.251171	.0705681	3.918605	.0076560	-.000636
#3	.0251383	2.256074	.0707480	3.933151	.0081740	-.001129

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**34.42233**	**.0109579**	**.0643514**	**8.157246**	**.0780984**	**.0045581**
Stddev	.18453	.0002152	.0007214	.031225	.0014576	.0002942
%RSD	.5360743	1.964178	1.121103	.3827889	1.866373	6.454352
#1	34.30225	.0107120	.0641124	8.121493	.0797806	.0045609
#2	34.32994	.0111123	.0651619	8.171090	.0772090	.0042625
#3	34.63481	.0110492	.0637797	8.179157	.0773057	.0048509

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05 Acquired: 12/16/2024 21:22:03 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.000127	.0664595	F 10.62724	.0922645	5.225906	-.000764
Stddev	.000510	.0021957	.03007	.0016063	.020980	.000282
%RSD	401.9190	3.303777	.2829850	1.740983	.4014584	36.92548
#1	-.000454	.0661987	10.59494	.0918181	5.232228	-.000950
#2	.000460	.0687740	10.65443	.0940469	5.202492	-.000903
#3	-.000387	.0644059	10.63236	.0909287	5.242998	-.000440

Elem	Sr4077
Units	ppm
Avg	.1084174
Stddev	.0001560
%RSD	.1439244
#1	.1084046
#2	.1082681
#3	.1085794

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2520.081	57319.01	12999.48	2142.005	4368.801
Stddev	7.122	50.42	41.90	7.932	9.121
%RSD	.2826275	.0879670	.3223008	.3703112	.2087732
#1	2525.662	57358.29	12959.21	2136.325	4377.126
#2	2522.522	57336.58	12996.40	2138.622	4370.225
#3	2512.059	57262.15	13042.83	2151.068	4359.052

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05DUP Acquired: 12/16/2024 21:26:19 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0209402**	**.0580955**	**.0374084**	**.0658231**	**.0213507**	**2.997107**
Stddev	.0018507	.0019241	.0004414	.0013118	.0006293	.018110
%RSD	8.837817	3.312026	1.180029	1.992855	2.947201	.6042633
#1	.0216700	.0586241	.0369739	.0658286	.0207629	3.015524
#2	.0188359	.0597001	.0378565	.0645086	.0212747	2.996477
#3	.0223147	.0559623	.0373949	.0671321	.0220145	2.979319

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0331743**	**.0072384**	**.0067166**	**17.41460**	**.0188839**	**.0089023**
Stddev	.0007029	.0000604	.0000837	.05513	.0001468	.0000331
%RSD	2.118819	.8338945	1.245619	.3165667	.7772670	.3720174
#1	.0326998	.0072050	.0066271	17.35616	.0188217	.0088918
#2	.0339819	.0073081	.0067929	17.46567	.0190516	.0089394
#3	.0328414	.0072021	.0067296	17.42196	.0187785	.0088758

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0359764**	**2.310982**	**.0774713**	**4.000190**	**.0249367**	**.0019380**
Stddev	.0002618	.016828	.0003281	.011297	.0000304	.0002381
%RSD	.7277128	.7281613	.4235588	.2824177	.1219714	12.28724
#1	.0357852	2.319182	.0771726	3.988043	.0249618	.0018151
#2	.0358692	2.291626	.0778226	4.010383	.0249454	.0017864
#3	.0362748	2.322137	.0774188	4.002144	.0249029	.0022125

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**34.88713**	**.0203013**	**.0721427**	**8.394233**	**.0882423**	**.0156982**
Stddev	.05308	.0013157	.0002374	.037702	.0008330	.0004467
%RSD	.1521401	6.480907	.3289999	.4491406	.9440239	2.845757
#1	34.94492	.0217447	.0719128	8.382733	.0879595	.0162090
#2	34.87591	.0191691	.0723869	8.436346	.0891799	.0155046
#3	34.84056	.0199900	.0721283	8.363621	.0875874	.0153809

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05DUP Acquired: 12/16/2024 21:26:19 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0179480	.0699076	F 10.43905	.2838369	5.289379	.0064720
Stddev	.0010519	.0012199	.04449	.0017961	.019264	.0002026
%RSD	5.860652	1.744962	.4261548	.6327941	.3641929	3.129851
#1	.0191002	.0687791	10.48118	.2838134	5.300753	.0062470
#2	.0177046	.0697419	10.39253	.2820526	5.300247	.0065293
#3	.0170391	.0712019	10.44343	.2856446	5.267138	.0066398

Elem	Sr4077
Units	ppm
Avg	.1161696
Stddev	.0002045
%RSD	.1759933
#1	.1160996
#2	.1163999
#3	.1160094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2516.334	56965.00	12914.31	2134.885	4333.249
Stddev	4.851	83.34	37.87	10.337	6.998
%RSD	.1927792	.1462990	.2932425	.4842003	.1614847
#1	2516.309	56899.79	12949.15	2122.950	4329.320
#2	2521.197	56936.32	12874.00	2140.691	4329.098
#3	2511.495	57058.89	12919.78	2141.015	4341.328

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05LX5 Acquired: 12/16/2024 21:30:35 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.002580**	**-.003531**	**.0012135**	**-.000465**	**.0000284**	**.7930148**	**.0075669**
Stddev	.001276	.001342	.0004207	.002123	.0003371	.0058895	.0006397
%RSD	49.47687	37.99614	34.66853	456.7725	1187.631	.7426758	8.454072
#1	-.001210	-.005064	.0007624	.001823	.0003454	.7980898	.0068422
#2	-.003736	-.002952	.0015952	-.000844	.0000655	.7943978	.0078049
#3	-.002794	-.002576	.0012829	-.002373	-.000326	.7865569	.0080534

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000215**	**-.000039**	**3.943205**	**.0013317**	**.0003586**	**.0057315**	**.5372101**
Stddev	.0000356	.000050	.024020	.0002155	.0000524	.0000930	.0021089
%RSD	165.5288	126.4625	.6091478	16.18321	14.62251	1.622348	.3925629
#1	.0000625	-.000032	3.915814	.0010853	.0003606	.0056441	.5360149
#2	.0000018	.000006	3.960676	.0014854	.0003052	.0058292	.5396451
#3	.0000001	-.000093	3.953126	.0014243	.0004101	.0057213	.5359702

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0162008**	**.9209409**	**.0017709**	**-.000703**	**8.013083**	**.0026977**	**.0128119**
Stddev	.0004194	.0019710	.0001174	.000142	.043892	.0004754	.0002768
%RSD	2.588723	.2140235	6.626421	20.13928	.5477487	17.62203	2.160228
#1	.0157326	.9195619	.0018042	-.000604	7.967308	.0031252	.0126836
#2	.0165422	.9231984	.0016405	-.000640	8.017131	.0021857	.0126226
#3	.0163275	.9200622	.0018680	-.000865	8.054811	.0027823	.0131295

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.700610**	**.0145585**	**.0005615**	**-.000413**	**.0191455**	**2.480881**	**.0220201**
Stddev	.144305	.0003006	.0003487	.000072	.0009978	.016656	.0021400
%RSD	5.343407	2.065041	62.10077	17.36605	5.211638	.6713628	9.718420
#1	2.546002	.0142278	.0002057	-.000409	.0200998	2.482960	.0211969
#2	2.724098	.0146326	.0009026	-.000487	.0192276	2.496400	.0204140
#3	2.831729	.0148152	.0005761	-.000344	.0181092	2.463284	.0244495

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05LX5 Acquired: 12/16/2024 21:30:35 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	1.131278	.0018716	.0240763
Stddev	.011126	.0006551	.0001106
%RSD	.9835226	35.00247	.4591716
#1	1.140578	.0012838	.0241989
#2	1.134303	.0017530	.0240458
#3	1.118951	.0025778	.0239842

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2664.909	59115.42	12682.70	2244.668	4713.822
Stddev	8.156	24.19	27.03	2.190	19.945
%RSD	.3060531	.0409259	.2130943	.0975614	.4231156
#1	2655.560	59103.88	12711.81	2246.576	4693.429
#2	2668.598	59099.16	12658.40	2245.151	4714.750
#3	2670.569	59143.22	12677.91	2242.276	4733.287

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV06 Acquired: 12/16/2024 21:47:27 Type: Unk
Method: NON EPA-6010-200.7(v2533) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.734650**	**4.866066**	**5.015564**	**4.700943**	**4.712437**	**9.698460**	**9.348042**
Stddev	.006237	.047088	.010389	.020260	.014095	.011425	.017878
%RSD	.1317276	.9676708	.2071358	.4309833	.2990995	.1178048	.1912443
#1	4.740078	4.914744	5.012272	4.723341	4.727519	9.686578	9.332690
#2	4.736034	4.862706	5.027200	4.695595	4.710193	9.699437	9.367670
#3	4.727837	4.820749	5.007220	4.683894	4.699599	9.709366	9.343766

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2682960**	**2.510278**	**25.16496**	**1.033050**	**2.473898**	**1.215656**	**4.840117**
Stddev	.0014342	.005544	.13692	.001773	.005840	.004314	.007266
%RSD	.5345642	.2208634	.5440948	.1716307	.2360508	.3548810	.1501187
#1	.2667765	2.507305	25.00707	1.034442	2.471615	1.220568	4.838920
#2	.2696262	2.516674	25.23675	1.033654	2.480534	1.213920	4.847906
#3	.2684853	2.506854	25.25105	1.031054	2.469545	1.212480	4.833523

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.489687**	**25.62501**	**2.482287**	**1.247552**	**24.89839**	**2.490557**	**2.466142**
Stddev	.012406	.18834	.003973	.002449	.48236	.005603	.003379
%RSD	.4982949	.7349749	.1600384	.1962669	1.937325	.2249529	.1370032
#1	2.475571	25.40757	2.481565	1.245952	25.42650	2.484799	2.467283
#2	2.494630	25.73045	2.486571	1.250370	24.78760	2.490881	2.468802
#3	2.498859	25.73702	2.478725	1.246333	24.48105	2.495990	2.462340

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.14715**	**5.215452**	**4.827005**	**4.992782**	**4.859450**	**4.843570**	**4.867239**
Stddev	.17499	.028965	.012086	.012465	.016872	.014118	.020360
%RSD	.6445934	.5553615	.2503817	.2496673	.3471908	.2914849	.4183007
#1	27.33246	5.182704	4.839786	4.998438	4.841311	4.829017	4.889416
#2	27.12423	5.237711	4.825469	5.001417	4.874674	4.857209	4.862906
#3	26.98475	5.225941	4.815761	4.978492	4.862366	4.844485	4.849394

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV06 Acquired: 12/16/2024 21:47:27 Type: Unk
Method: NON EPA-6010-200.7(v2533) 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	**4.825353**	**4.530333**	**4.969526**
Stddev	.022488	.016700	.005075
%RSD	.4660298	.3686345	.1021233
#1	4.842341	4.542318	4.967927
#2	4.833867	4.537424	4.965443
#3	4.799852	4.511257	4.975208

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2506.966**	**55162.67**	**12342.23**	**2110.752**	**4109.438**
Stddev	7.470	102.50	27.90	1.372	6.112
%RSD	.2979817	.1858093	.2260934	.0650098	.1487298
#1	2498.415	55046.24	12374.45	2109.288	4102.434
#2	2512.221	55239.31	12326.55	2110.958	4112.183
#3	2510.263	55202.45	12325.70	2112.009	4113.695

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB06 Acquired: 12/16/2024 21:51:51 Type: Unk
Method: NON EPA-6010-200.7(v2534) 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	**-.002825**	**-.001227**	**-.000467**	**.0009930**	**-.000962**	**.0030942**	**.0016530**
Stddev	.001225	.001022	.000205	.0005893	.001019	.0039952	.0005816
%RSD	43.35833	83.32525	43.92349	59.35067	105.9506	129.1164	35.18261
#1	-.004077	-.000470	-.000655	.0003354	-.001232	.0046376	.0015668
#2	-.001629	-.000821	-.000499	.0011702	-.001818	-.001442	.0011194
#3	-.002770	-.002390	-.000248	.0014734	.000165	.006088	.0022729

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000256**	**-.000025**	**-.004651**	**.0002782**	**.0000231**	**.0002735**	**-.001822**
Stddev	.0000254	.000056	.000574	.0000242	.0000682	.0000690	.000276
%RSD	99.35101	226.3529	12.34702	8.708578	294.9049	25.21343	15.13659
#1	.0000479	-.000025	-.004978	.0002983	.0000113	.0002636	-.002132
#2	-.000002	.000031	-.004986	.0002513	.0000964	.0002101	-.001603
#3	.000031	-.000080	-.003988	.0002849	-.000038	.0003470	-.001731

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003258**	**-.001932**	**.0001610**	**-.000605**	**.9171485**	**.0002724**	**-.001310**
Stddev	.0003300	.011204	.0000739	.000143	.0595100	.0002355	.000126
%RSD	101.2754	579.9307	45.91071	23.70198	6.488589	86.46143	9.588043
#1	-.000035	.008945	.0002364	-.000769	.8547672	.0005054	-.001451
#2	.000401	-.001305	.0001578	-.000509	.9233820	.0002773	-.001271
#3	.000612	-.013436	.0000887	-.000535	.9732965	.0000345	-.001209

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8667097**	**.0024719**	**.0000776**	**.0003417**	**-.000166**	**.0013059**	**-.000011**
Stddev	.0782725	.0002732	.0001679	.0006406	.000292	.0015131	.000956
%RSD	9.030991	11.05348	216.3728	187.4908	176.4050	115.8660	8904.569
#1	.7917322	.0027591	.0001345	.0009949	-.000175	.0028893	-.000434
#2	.8604907	.0022152	.0002096	.0003157	.000131	-.000126	.001084
#3	.9479061	.0024414	-.000111	-.000286	-.000453	.001154	-.000682

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB06 Acquired: 12/16/2024 21:51:51 Type: Unk
Method: NON EPA-6010-200.7(v2534) 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	.0015793	.0005294	.0000802
Stddev	.0027298	.0002252	.0000122
%RSD	172.8513	42.53582	15.15896
#1	.0037366	.0004781	.0000913
#2	.0024909	.0007759	.0000822
#3	-.001490	.0003344	.0000672

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2648.165	58739.76	12553.79	2265.586	4643.109
Stddev	5.546	65.97	23.87	8.941	6.050
%RSD	.2094249	.1123146	.1901805	.3946609	.1303068
#1	2641.768	58815.58	12531.54	2267.063	4636.130
#2	2651.619	58708.26	12550.80	2255.999	4646.332
#3	2651.109	58695.45	12579.01	2273.698	4646.866

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05MS Acquired: 12/16/2024 22:00:35 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7111762**	**1.750416**	**.9098726**	**1.685774**	**.7085592**	**5.278966**
Stddev	.0056882	.013232	.0013397	.005894	.0004141	.028806
%RSD	.7998355	.7559406	.1472422	.3496266	.0584416	.5456680
#1	.7072154	1.735642	.9088593	1.685098	.7080811	5.269257
#2	.7176943	1.754425	.9113916	1.680248	.7088019	5.256270
#3	.7086190	1.761179	.9093670	1.691977	.7087947	5.311372

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2188110**	**.2143294**	**.1873226**	**18.93069**	**.4161692**	**.1939854**
Stddev	.0007984	.0008204	.0001009	.11407	.0007455	.0005249
%RSD	.3648690	.3827583	.0538843	.6025736	.1791252	.2706013
#1	.2178916	.2137037	.1872076	18.79932	.4169841	.1938666
#2	.2192123	.2152582	.1873636	19.00463	.4155217	.1935301
#3	.2193292	.2140263	.1873966	18.98812	.4160018	.1945596

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3090010**	**5.228865**	**.2771485**	**6.194414**	**.4848958**	**.0714475**
Stddev	.0008743	.031194	.0017747	.064512	.0010037	.0004347
%RSD	.2829600	.5965782	.6403544	1.041447	.2069828	.6084397
#1	.3080475	5.221295	.2755884	6.120710	.4843335	.0714488
#2	.3091901	5.202153	.2790793	6.221915	.4842994	.0718816
#3	.3097652	5.263148	.2767777	6.240618	.4860545	.0710122

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.41164**	**.3174069**	**.2576899**	**15.97927**	**.3701060**	**.3991505**
Stddev	.11120	.0015593	.0012921	.01947	.0020838	.0005985
%RSD	.3140256	.4912676	.5014133	.1218205	.5630178	.1499370
#1	35.53975	.3156815	.2563176	16.00011	.3679776	.3989296
#2	35.35518	.3187154	.2588830	15.97614	.3721421	.3986938
#3	35.33999	.3178237	.2578692	15.96156	.3701984	.3998280

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05MS Acquired: 12/16/2024 22:00:35 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6524308	.2763094	F 11.60649	5.516010	5.090342	.1896321
Stddev	.0012835	.0037079	.05711	.005394	.004225	.0001489
%RSD	.1967252	1.341957	.4920354	.0977894	.0829923	.0785222
#1	.6512362	.2766553	11.59941	5.511824	5.086485	.1894639
#2	.6537877	.2724406	11.55325	5.514110	5.094857	.1896854
#3	.6522684	.2798322	11.66681	5.522097	5.089683	.1897470

Elem	Sr4077
Units	ppm
Avg	.3107607
Stddev	.0005633
%RSD	.1812539
#1	.3111336
#2	.3110357
#3	.3101127

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2579.376	57582.48	12281.64	2187.068	4406.162
Stddev	4.819	40.52	45.02	15.541	5.767
%RSD	.1868339	.0703770	.3665644	.7105963	.1308823
#1	2577.989	57535.69	12325.40	2201.687	4403.286
#2	2584.736	57605.45	12235.46	2170.745	4412.801
#3	2575.402	57606.30	12284.05	2188.773	4402.398

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05MSD Acquired: 12/16/2024 22:04:33 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7094124**	**1.770025**	**.9161102**	**1.686459**	**.7060687**	**5.240000**
Stddev	.0014128	.002349	.0004686	.004944	.0036862	.045266
%RSD	.1991547	.1327136	.0511477	.2931818	.5220698	.8638633
#1	.7081058	1.769784	.9160622	1.684783	.7025391	5.212669
#2	.7109117	1.767806	.9166009	1.682570	.7057733	5.215081
#3	.7092196	1.772486	.9156675	1.692023	.7098936	5.292251

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2186138**	**.2138674**	**.1884845**	**18.91697**	**.4174155**	**.1951502**
Stddev	.0004684	.0011234	.0001493	.05167	.0009811	.0004793
%RSD	.2142495	.5252940	.0791894	.2731229	.2350512	.2456241
#1	.2182190	.2125710	.1886467	18.85830	.4162826	.1950738
#2	.2191313	.2145552	.1883529	18.93692	.4179921	.1956632
#3	.2184910	.2144760	.1884538	18.95568	.4179718	.1947137

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3091836**	**5.180288**	**.2745661**	**6.174584**	**.4868336**	**.0714136**
Stddev	.0010622	.021497	.0006649	.014768	.0009239	.0003418
%RSD	.3435355	.4149795	.2421458	.2391815	.1897699	.4786854
#1	.3080265	5.199526	.2752713	6.159696	.4874029	.0712064
#2	.3094099	5.157084	.2739507	6.174825	.4873303	.0712263
#3	.3101143	5.184253	.2744762	6.189230	.4857676	.0718081

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**36.05373**	**.3170031**	**.2597892**	**16.11568**	**.3638847**	**.3990757**
Stddev	.11557	.0025611	.0008146	.04212	.0026663	.0013259
%RSD	.3205546	.8079091	.3135674	.2613795	.7327209	.3322514
#1	36.09020	.3186300	.2600026	16.08173	.3614718	.3980843
#2	35.92432	.3140509	.2588892	16.10249	.3667472	.3985609
#3	36.14666	.3183283	.2604759	16.16282	.3634351	.4005818

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05MSD Acquired: 12/16/2024 22:04:33 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6570735	.2735432	F 11.57838	5.515381	5.143024	.1888556
Stddev	.0007175	.0012083	.07988	.015855	.007666	.0014554
%RSD	.1091893	.4417376	.6899148	.2874602	.1490620	.7706480
#1	.6578436	.2739312	11.60784	5.503333	5.143858	.1895204
#2	.6569527	.2721885	11.48796	5.509466	5.134975	.1871865
#3	.6564240	.2745099	11.63936	5.533342	5.150239	.1898600

Elem	Sr4077
Units	ppm
Avg	.3100767
Stddev	.0006558
%RSD	.2114874
#1	.3096092
#2	.3097945
#3	.3108263

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2564.300	57077.71	12264.85	2176.664	4362.534
Stddev	9.236	41.58	33.17	2.186	4.378
%RSD	.3601928	.0728433	.2704491	.1004397	.1003476
#1	2570.087	57089.61	12300.32	2174.163	4365.487
#2	2569.166	57112.04	12259.60	2177.612	4364.611
#3	2553.648	57031.48	12234.61	2178.215	4357.505

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165658BL Acquired: 12/16/2024 22:25:23 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001312**	**-.002187**	**.0000925**	**.0001213**	**-.000201**	**.0044941**	**.0042425**
Stddev	.001271	.001158	.0005673	.0009816	.000428	.0012984	.0000307
%RSD	96.84482	52.95632	613.3010	809.5504	212.6366	28.89005	.7225755
#1	-.002750	-.003189	.0007424	-.001000	.000278	.0054415	.0042385
#2	-.000339	-.000919	-.000303	.000539	-.000544	.0030142	.0042140
#3	-.000848	-.002453	-.000162	.000825	-.000338	.0050268	.0042750

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000614**	**-.000062**	**-.005993**	**.0002451**	**-.000059**	**-.000124**	**-.001158**
Stddev	.0000038	.000051	.007491	.0002280	.000238	.000338	.004050
%RSD	6.232753	82.71448	125.0139	93.01358	401.6778	271.8038	349.6972
#1	.0000584	-.000047	.001805	.0000443	.000103	.000262	-.004580
#2	.0000601	-.000019	-.013135	.0004929	.000052	-.000366	.003313
#3	.0000657	-.000118	-.006648	.0001980	-.000332	-.000270	-.002208

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000064**	**-.003271**	**.0001942**	**-.000977**	**.7733030**	**.0002691**	**-.002158**
Stddev	.000446	.009163	.0001400	.000213	.0478459	.0007580	.000106
%RSD	696.1809	280.1452	72.06827	21.80457	6.187215	281.6812	4.931855
#1	.000110	-.009108	.0001576	-.000831	.7261558	-.000591	-.002109
#2	.000268	.007290	.0000762	-.000878	.7719348	.000558	-.002086
#3	-.000570	-.007995	.0003488	-.001221	.8218183	.000840	-.002281

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7237926**	**-.003583**	**-.000331**	**-.000001**	**-.000578**	**-.001532**	**.0026199**
Stddev	.0693980	.000976	.000275	.000482	.000268	.002629	.0021751
%RSD	9.588100	27.22781	82.98920	37374.73	46.46632	171.6459	83.01953
#1	.6500175	-.003799	-.000210	.000540	-.000748	-.004381	.0039127
#2	.7335876	-.002517	-.000138	-.000384	-.000717	.000800	.0038384
#3	.7877727	-.004432	-.000646	-.000160	-.000268	-.001014	.0001088

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165658BL Acquired: 12/16/2024 22:25:23 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	-.000327	-.001115	-.000078
Stddev	.002774	.000654	.000020
%RSD	848.9632	58.66532	25.12865
#1	-.003465	-.001693	-.000062
#2	.000687	-.001248	-.000100
#3	.001798	-.000405	-.000071

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2818.198	60644.63	12554.59	2358.744	5043.056
Stddev	5.642	158.63	27.78	2.978	7.304
%RSD	.2002162	.2615717	.2212842	.1262725	.1448246
#1	2813.239	60511.38	12539.95	2356.865	5035.032
#2	2817.018	60602.43	12586.63	2362.178	5044.822
#3	2824.337	60820.10	12537.20	2357.189	5049.315

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165659BL Acquired: 12/16/2024 22:29:45 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.000532**	**-.001776**	**.0001489**	**-.000130**	**-.000949**	**.0034630**	**.0051100**
Stddev	.001430	.000623	.0005056	.000196	.000614	.0021466	.0002741
%RSD	268.7010	35.08071	339.6038	150.5875	64.70427	61.98531	5.364534
#1	.001032	-.001939	.0003476	.000090	-.001493	.0013731	.0047997
#2	-.001773	-.001087	.0005249	-.000287	-.001070	.0056620	.0052112
#3	-.000855	-.002301	-.000426	-.000193	-.000283	.0033539	.0053192

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000797**	**-.000082**	**-.007040**	**.0000182**	**.0000409**	**.0000817**	**-.001125**
Stddev	.0000283	.000060	.004890	.0002754	.0001329	.0001655	.004111
%RSD	35.50964	73.32430	69.45727	1512.231	324.9967	202.4590	365.5313
#1	.0000784	-.000015	-.008553	-.000266	-.000043	-.000079	-.003285
#2	.0000520	-.000131	-.001573	.000283	.000194	.000251	.003616
#3	.0001086	-.000101	-.010995	.000038	-.000028	.000073	-.003705

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000060**	**-.019012**	**-.000121**	**-.000889**	**.7032621**	**.0003873**	**-.002273**
Stddev	.000137	.011245	.000055	.000115	.0497945	.0010255	.000067
%RSD	228.8688	59.14523	45.10588	12.91868	7.080506	264.7692	2.959131
#1	.000030	-.006200	-.000158	-.000824	.6519932	.0008844	-.002341
#2	.000008	-.023592	-.000058	-.000821	.7063550	-.000792	-.002206
#3	-.000218	-.027245	-.000148	-.001021	.7514381	.001070	-.002274

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6547213**	**-.003925**	**-.000388**	**.0000519**	**-.000178**	**-.004848**	**-.000179**
Stddev	.0639798	.000142	.000260	.0007844	.000168	.002452	.001486
%RSD	9.772065	3.614450	67.05196	1512.361	94.27546	50.58362	828.2263
#1	.5856113	-.003813	-.000201	.0008071	-.000355	-.004153	-.001703
#2	.6666652	-.003878	-.000278	-.000759	-.000157	-.002818	-.000099
#3	.7118876	-.004085	-.000685	.000107	-.000021	-.007572	.001265

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165659BL Acquired: 12/16/2024 22:29:45 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0016274	-.000495	-.000084
Stddev	.0029408	.000468	.000023
%RSD	180.7096	94.42213	27.53806
#1	.0048433	-.000176	-.000110
#2	.0009637	-.001032	-.000078
#3	-.000925	-.000278	-.000065

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2725.868	59346.64	12313.79	2315.841	4771.283
Stddev	5.220	48.61	13.89	5.770	6.902
%RSD	.1914920	.0819131	.1127609	.2491657	.1446596
#1	2723.716	59309.07	12329.65	2318.849	4767.477
#2	2731.820	59329.31	12307.85	2319.486	4779.250
#3	2722.068	59401.54	12303.86	2309.188	4767.122

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165640BS Acquired: 12/16/2024 22:34:07 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7205809**	**1.970003**	**.9790411**	**1.803107**	**.7201803**	**1.934764**
Stddev	.0022599	.010109	.0015383	.005582	.0023688	.007737
%RSD	.3136202	.5131562	.1571216	.3095909	.3289204	.3999078
#1	.7224025	1.960416	.9772881	1.799619	.7201659	1.929756
#2	.7180520	1.969030	.9801658	1.800157	.7178187	1.943675
#3	.7212883	1.980564	.9796693	1.809546	.7225563	1.930861

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1919787**	**.2294527**	**.1963611**	**1.075295**	**.4143813**	**.1965257**
Stddev	.0001812	.0004467	.0002121	.002420	.0010188	.0003330
%RSD	.0943667	.1946723	.1080314	.2250772	.2458671	.1694417
#1	.1918308	.2294405	.1962792	1.077960	.4144894	.1961733
#2	.1921808	.2299054	.1962022	1.073234	.4133127	.1965687
#3	.1919247	.2290123	.1966020	1.074690	.4153417	.1968351

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2967323**	**2.833767**	**.2096806**	**2.088915**	**.4955641**	**.0746394**
Stddev	.0005861	.001434	.0005192	.008699	.0004548	.0005230
%RSD	.1975256	.0506159	.2476346	.4164400	.0917663	.7006683
#1	.2968304	2.834881	.2092097	2.089780	.4951663	.0746438
#2	.2961033	2.832149	.2102375	2.079816	.4954662	.0751601
#3	.2972632	2.834272	.2095946	2.097150	.4960599	.0741142

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.800926**	**.3046624**	**.1972071**	**8.488923**	**.3152503**	**.3802821**
Stddev	.023792	.0002541	.0009162	.044343	.0007264	.0009599
%RSD	.8494393	.0833935	.4646026	.5223662	.2304322	.2524292
#1	2.775404	.3049394	.1982636	8.438940	.3159502	.3793848
#2	2.804880	.3046078	.1966305	8.504290	.3145000	.3801671
#3	2.822493	.3044401	.1967272	8.523538	.3153008	.3812943

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165640BS Acquired: 12/16/2024 22:34:07 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6841083	.1942663	F .6465624	5.601720	F -.004212	.1886263
Stddev	.0012268	.0006358	.0068466	.010918	.003424	.0001195
%RSD	.1793253	.3272956	1.058928	.1949102	81.29910	.0633667
#1	.6828921	.1935345	.6422078	5.606598	-.004923	.1884945
#2	.6840874	.1946840	.6430254	5.589213	-.000488	.1887276
#3	.6853454	.1945802	.6544541	5.609349	-.007224	.1886568

Elem	Sr4077
Units	ppm
Avg	.2028593
Stddev	.0002581
%RSD	.1272397
#1	.2028621
#2	.2025997
#3	.2031159

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2681.165	58720.05	12161.75	2301.821	4561.270
Stddev	1.969	81.92	3.59	5.582	2.476
%RSD	.0734430	.1395105	.0295175	.2424947	.0542841
#1	2680.897	58730.06	12163.09	2300.474	4562.950
#2	2683.255	58796.51	12157.68	2307.954	4562.433
#3	2679.344	58633.59	12164.48	2297.037	4558.426

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165659BS Acquired: 12/16/2024 22:38:07 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7100857**	**1.935305**	**.9617866**	**1.779299**	**.7096845**	**1.915311**
Stddev	.0012526	.014364	.0018323	.006079	.0026305	.003350
%RSD	.1764049	.7422111	.1905060	.3416384	.3706584	.1749120
#1	.7114089	1.950859	.9599671	1.781296	.7072694	1.912716
#2	.7099299	1.922540	.9617612	1.784129	.7124873	1.914124
#3	.7089182	1.932516	.9636314	1.772474	.7092967	1.919093

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1903747**	**.2251598**	**.1927575**	**1.075259**	**.4074915**	**.1931565**
Stddev	.0006440	.0008825	.0001801	.004719	.0011605	.0004909
%RSD	.3382699	.3919216	.0934268	.4388419	.2847893	.2541648
#1	.1897282	.2256277	.1926492	1.078094	.4088049	.1929742
#2	.1903798	.2257097	.1926579	1.069811	.4070652	.1927828
#3	.1910162	.2241419	.1929654	1.077870	.4066045	.1937125

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2922759**	**2.792009**	**.2067422**	**2.056941**	**.4871175**	**.0728584**
Stddev	.0005965	.003846	.0006818	.007960	.0011411	.0003300
%RSD	.2040922	.1377433	.3297913	.3870054	.2342465	.4529389
#1	.2917095	2.795720	.2075255	2.055643	.4866156	.0726103
#2	.2928985	2.788041	.2064197	2.065471	.4863135	.0732329
#3	.2922197	2.792267	.2062815	2.049710	.4884235	.0727319

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.775740**	**.3006973**	**.1962466**	**8.458611**	**.3100210**	**.3741433**
Stddev	.017029	.0011820	.0005877	.044660	.0011956	.0007522
%RSD	.6134939	.3930696	.2994706	.5279830	.3856380	.2010500
#1	2.756745	.2995226	.1955872	8.438705	.3106444	.3733670
#2	2.780835	.3018864	.1967151	8.427366	.3107761	.3748688
#3	2.789640	.3006828	.1964376	8.509763	.3086426	.3741942

Sample Name: PB165659BS Acquired: 12/16/2024 22:38:07 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6689006	.1920920	F .6453421	5.442819	F -.004122	.1878714
Stddev	.0020133	.0009779	.0056987	.016623	.005061	.0016895
%RSD	.3009826	.5090695	.8830514	.3054165	122.7757	.8992627
#1	.6680095	.1914573	.6410613	5.460755	-.000820	.1859798
#2	.6674866	.1932182	.6518105	5.427930	-.001597	.1892302
#3	.6712056	.1916006	.6431546	5.439771	-.009948	.1884043

Elem	Sr4077
Units	ppm
Avg	.2002590
Stddev	.0003878
%RSD	.1936482
#1	.2003019
#2	.2006236
#3	.1998515

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2674.561	58416.20	12144.51	2276.154	4569.630
Stddev	4.466	26.29	25.18	7.255	1.057
%RSD	.1669831	.0450084	.2073017	.3187495	.0231209
#1	2677.125	58389.56	12123.21	2279.451	4569.739
#2	2669.404	58442.13	12138.04	2267.836	4570.628
#3	2677.154	58416.92	12172.29	2281.175	4568.524

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165658BS Acquired: 12/16/2024 22:42:08 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7163844**	**1.980787**	**.9708910**	**1.794567**	**.7204660**	**1.949510**
Stddev	.0008929	.007552	.0019363	.002665	.0005121	.006345
%RSD	.1246428	.3812855	.1994354	.1484834	.0710827	.3254406
#1	.7159431	1.972395	.9706678	1.791765	.7210403	1.955152
#2	.7157981	1.982929	.9690760	1.797069	.7203012	1.950737
#3	.7174121	1.987038	.9729292	1.794865	.7200566	1.942642

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1898189**	**.2286610**	**.1943511**	**1.090313**	**.4161571**	**.1952242**
Stddev	.0014027	.0004040	.0004649	.003905	.0016763	.0003408
%RSD	.7389522	.1766895	.2392291	.3581418	.4028099	.1745507
#1	.1883616	.2283022	.1943275	1.086210	.4146208	.1949270
#2	.1911597	.2285822	.1938984	1.093984	.4159056	.1951495
#3	.1899355	.2290986	.1948274	1.090744	.4179450	.1955961

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2949503**	**2.836172**	**.2078893**	**2.113082**	**.4908596**	**.0740772**
Stddev	.0001456	.015082	.0006484	.011793	.0007444	.0001368
%RSD	.0493573	.5317653	.3119182	.5581113	.1516440	.1846371
#1	.2951148	2.823479	.2074896	2.100399	.4905563	.0739413
#2	.2948379	2.852844	.2075409	2.115127	.4903147	.0740755
#3	.2948983	2.832193	.2086375	2.123718	.4917077	.0742148

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.755461**	**.3041507**	**.1991005**	**8.462883**	**.3134300**	**.3816592**
Stddev	.013685	.0008050	.0007165	.009976	.0009181	.0010495
%RSD	.4966461	.2646649	.3598587	.1178831	.2929356	.2749919
#1	2.742960	.3033626	.1982733	8.453468	.3124032	.3811954
#2	2.753341	.3049715	.1995063	8.473339	.3141721	.3809214
#3	2.770082	.3041181	.1995221	8.461844	.3137147	.3828607

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: PB165658BS Acquired: 12/16/2024 22:42:08 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6775129	.1948344	F .6595563	5.471840	F -.009813	.1887291
Stddev	.0034604	.0006895	.0044103	.012964	.003802	.0012140
%RSD	.5107461	.3539121	.6686817	.2369213	38.74319	.6432703
#1	.6753501	.1940487	.6631700	5.458331	-.014113	.1882085
#2	.6756847	.1951160	.6608571	5.473008	-.006894	.1901167
#3	.6815039	.1953387	.6546419	5.484180	-.008434	.1878623

Elem	Sr4077
Units	ppm
Avg	.2043925
Stddev	.0001729
%RSD	.0846014
#1	.2045335
#2	.2044444
#3	.2041996

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2689.769	58356.39	12135.79	2286.919	4613.791
Stddev	2.185	50.30	4.03	9.123	.619
%RSD	.0812300	.0861934	.0331923	.3989094	.0134195
#1	2687.369	58311.40	12137.44	2279.632	4614.431
#2	2690.296	58347.08	12138.74	2283.975	4613.745
#3	2691.642	58410.70	12131.20	2297.150	4613.195

Sample Name: P5287-05A Acquired: 12/16/2024 22:46:07 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.7067696**	**1.749511**	**.9041013**	**1.670867**	**.6949214**	**5.073487**
Stddev	.0016167	.006459	.0020889	.006162	.0020096	.020565
%RSD	.2287447	.3691690	.2310470	.3688188	.2891865	.4053435
#1	.7051108	1.742519	.9055038	1.664535	.6929565	5.095924
#2	.7068574	1.750761	.9017006	1.671221	.6948347	5.069004
#3	.7083407	1.755254	.9050996	1.676845	.6969729	5.055533

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2130822**	**.2079878**	**.1864898**	**18.81592**	**.4106224**	**.1926885**
Stddev	.0006147	.0005457	.0004538	.06074	.0014387	.0006383
%RSD	.2884741	.2623846	.2433274	.3228065	.3503827	.3312489
#1	.2128162	.2075841	.1865863	18.75660	.4119881	.1930509
#2	.2137851	.2077705	.1859955	18.87799	.4107587	.1919515
#3	.2126452	.2086087	.1868875	18.81317	.4091203	.1930631

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3051701**	**5.114656**	**.2701561**	**6.102090**	**.4823045**	**.0703510**
Stddev	.0005405	.004097	.0004277	.034971	.0005267	.0003441
%RSD	.1771241	.0801056	.1582978	.5730997	.1092038	.4891380
#1	.3045743	5.118941	.2703657	6.069264	.4822403	.0706421
#2	.3056290	5.114248	.2704384	6.138870	.4818128	.0704397
#3	.3053070	5.110777	.2696640	6.098134	.4828603	.0699713

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.89118**	**.3112052**	**.2591124**	**16.05836**	**.3527418**	**.3923211**
Stddev	.03353	.0006111	.0017591	.01216	.0010590	.0004947
%RSD	.0934107	.1963676	.6789091	.0756993	.3002254	.1260824
#1	35.86862	.3105571	.2608493	16.04587	.3521184	.3917544
#2	35.87522	.3112873	.2573318	16.07016	.3521424	.3925432
#3	35.92971	.3117710	.2591560	16.05904	.3539645	.3926659

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-05A Acquired: 12/16/2024 22:46:07 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6501550	.2700634	F 11.37045	5.366396	5.161889	.1863347
Stddev	.0016700	.0023643	.05236	.009168	.011634	.0004333
%RSD	.2568594	.8754553	.4604781	.1708386	.2253825	.2325353
#1	.6517026	.2678703	11.42602	5.355835	5.155243	.1858848
#2	.6483849	.2725680	11.32204	5.371043	5.155101	.1863701
#3	.6503775	.2697520	11.36329	5.372310	5.175322	.1867492

Elem	Sr4077
Units	ppm
Avg	.3088121
Stddev	.0004471
%RSD	.1447776
#1	.3083737
#2	.3087950
#3	.3092674

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2546.758	56757.75	12303.09	2168.881	4306.847
Stddev	1.341	65.33	25.33	3.000	2.786
%RSD	.0526586	.1151070	.2058997	.1383230	.0646924
#1	2548.053	56731.20	12329.54	2172.320	4304.346
#2	2546.846	56709.87	12279.04	2166.800	4309.850
#3	2545.375	56832.18	12300.68	2167.524	4306.345

Sample Name: P5287-03 Acquired: 12/16/2024 22:50:05 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0031028**	**-.023929**	**.0384137**	**-.020518**	**-.002900**	**142.9563**	**.1440528**
Stddev	.0003746	.003260	.0010811	.002952	.001166	.1592	.0005003
%RSD	12.07433	13.62533	2.814402	14.38477	40.22220	.1113971	.3472936
#1	.0035289	-.026829	.0394822	-.018133	-.001870	142.8827	.1435857
#2	.0029539	-.020400	.0373204	-.023819	-.004166	143.1391	.1445807
#3	.0028254	-.024559	.0384383	-.019603	-.002663	142.8473	.1439921

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043155**	**.0143606**	**104.2855**	**.3191396**	**.0729743**	**.8773419**	**122.2033**
Stddev	.0000839	.0001416	.4841	.0001571	.0002932	.0010324	.1943
%RSD	1.943838	.9856879	.4641826	.0492126	.4017301	.1176681	.1589568
#1	.0044124	.0145228	104.1289	.3191933	.0726470	.8782406	121.9855
#2	.0042651	.0142969	104.8285	.3192628	.0730630	.8762143	122.3586
#3	.0042692	.0142620	103.8991	.3189627	.0732128	.8775707	122.2658

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9743526**	**36.51778**	**.1865322**	**-.011430**	**14.62750**	**.3793517**	**.6907983**
Stddev	.0030867	.10090	.0004213	.000397	.05411	.0009222	.0013541
%RSD	.3167948	.2763084	.2258390	3.472090	.3698911	.2430863	.1960229
#1	.9726160	36.52892	.1869862	-.011255	14.64290	.3794910	.6896315
#2	.9779165	36.61265	.1864566	-.011885	14.56737	.3801963	.6904802
#3	.9725254	36.41177	.1861539	-.011151	14.67225	.3783679	.6922831

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.77328**	**-.040157**	**.0015784**	**.0102704**	**3.393803**	**3.759573**	**6.626057**
Stddev	.08081	.000575	.0000849	.0008393	.008774	.037140	.003771
%RSD	.7501148	1.432581	5.379925	8.172022	.2585164	.9878804	.0569124
#1	10.74291	-.039697	.0016248	.0101319	3.392761	3.767873	6.627968
#2	10.71205	-.040802	.0016300	.0111703	3.403051	3.718985	6.628490
#3	10.86487	-.039971	.0014804	.0095090	3.385597	3.791860	6.621713

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03 Acquired: 12/16/2024 22:50:05 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	1.698352	.0261187	.1664266
Stddev	.005864	.0008206	.0002250
%RSD	.3453001	3.141928	.1351868
#1	1.700893	.0251722	.1664740
#2	1.702517	.0266308	.1666242
#3	1.691645	.0265531	.1661817

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2912.276	63249.38	14117.62	2472.594	3997.834
Stddev	3.861	46.59	51.07	8.115	3.927
%RSD	.1325724	.0736683	.3617228	.3282040	.0982227
#1	2910.618	63217.07	14120.39	2476.690	3993.583
#2	2916.689	63302.79	14065.23	2477.844	4001.325
#3	2909.521	63228.29	14167.25	2463.247	3998.594

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03DUP Acquired: 12/16/2024 22:54:11 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0030663**	**-.027752**	**.0398695**	**-.018501**	**-.003275**	**142.5003**	**.1468096**
Stddev	.0026070	.001248	.0006533	.001899	.000636	.2861	.0006818
%RSD	85.02296	4.497424	1.638584	10.26656	19.41729	.2007390	.4643845
#1	.0002219	-.027862	.0396220	-.016943	-.003796	142.2757	.1475944
#2	.0036349	-.028941	.0393762	-.017943	-.002566	142.4029	.1464698
#3	.0053421	-.026452	.0406104	-.020617	-.003463	142.8224	.1463645

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044378**	**.0143588**	**104.9738**	**.3183926**	**.0732483**	**.8785482**	**122.1734**
Stddev	.0000743	.0001628	.1721	.0005751	.0001551	.0002451	.2380
%RSD	1.673731	1.133881	.1639831	.1806170	.2117614	.0278940	.1947989
#1	.0044794	.0144017	104.8963	.3180403	.0730723	.8783413	122.4410
#2	.0043520	.0141789	104.8541	.3190562	.0733653	.8784845	122.0940
#3	.0044820	.0144959	105.1711	.3180813	.0733071	.8788188	121.9853

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9816965**	**36.58221**	**.1867325**	**-.011955**	**14.49980**	**.3802454**	**.6851652**
Stddev	.0029590	.08165	.0003900	.000559	.03241	.0011768	.0019477
%RSD	.3014201	.2232010	.2088306	4.674584	.2235435	.3094756	.2842644
#1	.9821323	36.62460	.1863245	-.011623	14.52202	.3789096	.6874141
#2	.9785437	36.48808	.1867714	-.011641	14.51478	.3806976	.6840181
#3	.9844134	36.63396	.1871015	-.012600	14.46261	.3811289	.6840636

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.75025**	**-.041523**	**.0018713**	**.0095952**	**3.417130**	**3.881992**	**6.722209**
Stddev	.01027	.000960	.0000987	.0010082	.003029	.029292	.012757
%RSD	.0955067	2.310872	5.275116	10.50754	.0886462	.7545641	.1897670
#1	10.74390	-.042622	.0019767	.0107573	3.415800	3.910664	6.736730
#2	10.76210	-.040855	.0018564	.0089535	3.414993	3.883195	6.717095
#3	10.74476	-.041090	.0017809	.0090749	3.420597	3.852117	6.712804

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03DUP Acquired: 12/16/2024 22:54:11 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	1.695146	.0266601	.1636488
Stddev	.005273	.0003474	.0009427
%RSD	.3110487	1.302902	.5760343
#1	1.701178	.0270340	.1626943
#2	1.692846	.0263474	.1636729
#3	1.691414	.0265991	.1645792

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2904.858	63428.29	14061.12	2469.063	3981.475
Stddev	3.022	39.86	26.96	5.855	5.703
%RSD	.1040163	.0628504	.1917178	.2371364	.1432433
#1	2907.355	63403.62	14067.63	2463.851	3987.280
#2	2905.719	63406.96	14084.22	2467.939	3981.265
#3	2901.499	63474.28	14031.50	2475.398	3975.879

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV07 Acquired: 12/16/2024 23:02:15 Type: Unk
Method: NON EPA-6010-200.7(v2535) 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	**4.697225**	**4.983734**	**5.102233**	**4.642232**	**4.626368**	**9.687639**
Stddev	.006052	.036665	.010509	.010459	.001597	.005086
%RSD	.1288374	.7356939	.2059774	.2252904	.0345265	.0525000
#1	4.694306	5.025219	5.093799	4.653946	4.626760	9.687436
#2	4.693186	4.955672	5.098893	4.633834	4.624611	9.692823
#3	4.704183	4.970312	5.114006	4.638915	4.627733	9.682658

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.326506**	**.2324767**	**2.556821**	**25.67774**	**1.049875**	**2.504432**
Stddev	.046341	.0005456	.008514	.01977	.002359	.008146
%RSD	.4968741	.2347095	.3330031	.0769957	.2247177	.3252830
#1	9.349619	.2324976	2.547663	25.70052	1.048579	2.495844
#2	9.356745	.2330115	2.558303	25.66759	1.048448	2.505401
#3	9.273155	.2319209	2.564497	25.66510	1.052598	2.512051

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.206431**	**4.824678**	**2.515288**	**26.25147**	**2.517152**	**1.251363**
Stddev	.002027	.027589	.004423	.02143	.006667	.000519
%RSD	.1679986	.5718215	.1758284	.0816238	.2648662	.0414723
#1	1.207109	4.823523	2.510330	26.22786	2.510473	1.250867
#2	1.204153	4.797686	2.516709	26.25687	2.517175	1.251319
#3	1.208033	4.852826	2.518826	26.26968	2.523807	1.251902

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.05828**	**2.506703**	**2.463922**	**26.87017**	**5.342495**	**4.785567**
Stddev	.21623	.005183	.001638	.09725	.012971	.006867
%RSD	.9377543	.2067586	.0664936	.3619142	.2427921	.1434853
#1	23.30768	2.509853	2.464267	26.87806	5.342336	4.790417
#2	22.92333	2.509535	2.465360	26.76922	5.355545	4.777710
#3	22.94382	2.500722	2.462138	26.96323	5.329604	4.788574

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV07 Acquired: 12/16/2024 23:02:15 Type: Unk
Method: NON EPA-6010-200.7(v2535) 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	**5.108164**	**4.856140**	**4.747268**	**5.054272**	**4.936254**	F **4.460730**
Stddev	.009715	.007204	.030791	.018170	.009241	.007325
%RSD	.1901883	.1483550	.6486112	.3594926	.1872055	.1642046
#1	5.097440	4.849052	4.732589	5.065427	4.925944	4.452292
#2	5.116378	4.855914	4.726564	5.033306	4.939029	4.464444
#3	5.110674	4.863455	4.782653	5.064083	4.943790	4.465454

Elem	Sr4077
Units	ppm
Avg	**4.904362**
Stddev	.017416
%RSD	.3551195
#1	4.898063
#2	4.924052
#3	4.890972

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2531.350**	**54661.82**	**11965.05**	**2147.310**	**4075.622**
Stddev	4.165	38.62	37.72	4.300	13.899
%RSD	.1645477	.0706447	.3152565	.2002376	.3410362
#1	2532.540	54635.15	11957.55	2144.037	4089.570
#2	2534.792	54706.10	11931.65	2145.713	4075.524
#3	2526.720	54644.20	12005.96	2152.179	4061.772

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB07 Acquired: 12/16/2024 23:06:01 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001500**	**-.001163**	**.0002108**	**.0006505**	**-.000059**	**.0057171**	**.0044970**
Stddev	.000611	.000600	.0004964	.0028207	.000352	.0014655	.0003450
%RSD	40.70344	51.55821	235.4660	433.5854	590.8930	25.63413	7.671957
#1	-.001332	-.000515	.0001921	.0038985	-.000463	.0040734	.0048922
#2	-.000992	-.001275	.0007163	-.000763	.000179	.0068876	.0043430
#3	-.002178	-.001699	-.000276	-.001183	.000105	.0061902	.0042557

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000877**	**.0000303**	**-.002619**	**.0003275**	**.0000350**	**-.000015**	**-.000979**
Stddev	.0000026	.0000986	.003068	.0000352	.0001810	.000069	.002997
%RSD	2.976584	324.8087	117.1783	10.73603	516.5172	456.4806	306.1858
#1	.0000907	.0000716	-.005501	.0003680	.0002399	.000044	.001905
#2	.0000860	.0001017	.000607	.0003046	-.000103	.000001	-.004076
#3	.0000865	-.000082	-.002961	.0003099	-.000032	-.000090	-.000765

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000586**	**-.005634**	**.0001759**	**-.000673**	**.4428421**	**-.000695**	**-.002321**
Stddev	.0002115	.018100	.0000851	.000245	.0279933	.000505	.000328
%RSD	360.6305	321.2900	48.38736	36.45596	6.321271	72.69016	14.11740
#1	-.000121	-.026534	.0001274	-.000904	.4118829	-.000224	-.001954
#2	.000006	.004736	.0002742	-.000415	.4502738	-.001229	-.002584
#3	.000292	.004897	.0001261	-.000699	.4663695	-.000633	-.002425

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3582831**	**.0054976**	**.0002323**	**-.000464**	**.0004199**	**.0054836**	**-.001311**
Stddev	.0407938	.0005704	.0002934	.000366	.0002519	.0060892	.002339
%RSD	11.38592	10.37526	126.2902	78.91956	59.98422	111.0451	178.4550
#1	.3269571	.0053255	.0004857	-.000077	.0004054	.0125031	-.002915
#2	.3434806	.0061343	.0003004	-.000805	.0001756	.0023247	-.002391
#3	.4044116	.0050332	-.000089	-.000510	.0006787	.0016229	.001373

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB07 Acquired: 12/16/2024 23:06:01 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0010949	-.001042	.0001267
Stddev	.0022685	.000238	.0000193
%RSD	207.1809	22.79485	15.21529
#1	-.000304	-.001276	.0001094
#2	-.000123	-.000801	.0001474
#3	.003712	-.001049	.0001232

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2717.633	58771.52	12275.01	2307.678	4828.683
Stddev	1.441	106.49	13.79	13.218	1.959
%RSD	.0530244	.1812009	.1123177	.5727639	.0405762
#1	2719.148	58649.67	12275.36	2303.058	4827.998
#2	2717.469	58846.78	12261.05	2297.391	4827.158
#3	2716.281	58818.11	12288.62	2322.586	4830.893

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03DLX5 Acquired: 12/16/2024 23:10:22 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.001552**	**-.002924**	**.0090213**	**-.003901**	**-.001762**	**32.49431**	**.0366583**
Stddev	.000501	.000610	.0001034	.000801	.000714	.04149	.0001412
%RSD	32.30028	20.85795	1.146006	20.52649	40.50073	.1276948	.3852790
#1	-.001166	-.003027	.0090089	-.003773	-.001154	32.47085	.0368213
#2	-.002118	-.003476	.0091303	-.003172	-.002547	32.46985	.0365814
#3	-.001372	-.002269	.0089247	-.004758	-.001584	32.54221	.0365721

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011073**	**.0021883**	**24.32465**	**.0754954**	**.0149271**	**.2147077**	**28.12729**
Stddev	.0000917	.0000680	.09660	.0000832	.0001317	.0002520	.04237
%RSD	8.278373	3.108357	.3971386	.1101994	.8819631	.1173660	.1506229
#1	.0010251	.0022265	24.22452	.0754430	.0148609	.2148878	28.07954
#2	.0012061	.0022285	24.33214	.0754519	.0148417	.2144197	28.16036
#3	.0010907	.0021097	24.41729	.0755914	.0150787	.2148156	28.14196

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2299051**	**8.467782**	**.0392078**	**-.003465**	**3.357417**	**.0877817**	**.1588475**
Stddev	.0007685	.076398	.0002808	.000209	.014480	.0010405	.0000819
%RSD	.3342842	.9022249	.7162688	6.032409	.4312742	1.185372	.0515309
#1	.2293219	8.380314	.0393657	-.003334	3.359709	.0872036	.1588572
#2	.2296175	8.501577	.0388835	-.003355	3.370614	.0889829	.1589241
#3	.2307760	8.521454	.0393741	-.003706	3.341928	.0871586	.1587612

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.588456**	**-.010045**	**.0004042**	**.0009870**	**.7949742**	**.9240856**	**1.319563**
Stddev	.013183	.000929	.0002419	.0007520	.0015303	.0184569	.000504
%RSD	.5092836	9.246423	59.85411	76.18313	.1924988	1.997315	.0381636
#1	2.573880	-.009154	.0001336	.0018137	.7954468	.9147300	1.319298
#2	2.599544	-.009974	.0005997	.0003437	.7932634	.9453469	1.320143
#3	2.591945	-.011008	.0004792	.0008038	.7962125	.9121800	1.319246

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03DLX5 Acquired: 12/16/2024 23:10:22 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.3370223	.0051696	.0384854
Stddev	.0010779	.0005943	.0000626
%RSD	.3198286	11.49555	.1625678
#1	.3358346	.0044960	.0385491
#2	.3372939	.0053926	.0384240
#3	.3379384	.0056201	.0384830

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2692.861	58133.16	12670.55	2300.440	4327.375
Stddev	.432	92.51	37.69	1.226	3.677
%RSD	.0160298	.1591323	.2974604	.0532786	.0849657
#1	2693.345	58148.97	12696.66	2300.290	4330.663
#2	2692.723	58033.77	12687.65	2299.296	4328.059
#3	2692.516	58216.75	12627.34	2301.734	4323.405

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03MS Acquired: 12/16/2024 23:14:36 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.6372320**	**1.789587**	**.9870405**	**1.482053**	**.6196866**	**144.6598**
Stddev	.0019647	.006258	.0007452	.003444	.0034206	.4070
%RSD	.3083168	.3497054	.0754999	.2324007	.5519954	.2813689
#1	.6353992	1.782424	.9874543	1.478917	.6180269	144.2762
#2	.6393063	1.792343	.9861802	1.485740	.6174124	144.6164
#3	.6369905	1.793995	.9874869	1.481503	.6236204	145.0868

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3023374**	**.1956428**	**.2124312**	**105.4508**	**.6701801**	**.2710922**
Stddev	.0008583	.0003403	.0004121	.1745	.0012255	.0001902
%RSD	.2838744	.1739354	.1940041	.1654631	.1828552	.0701766
#1	.3026471	.1960268	.2126842	105.3313	.6707693	.2712201
#2	.3013673	.1953787	.2119557	105.3700	.6687713	.2708736
#3	.3029979	.1955228	.2126538	105.6510	.6709996	.2711830

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.110278**	**122.2111**	**1.131997**	**38.38402**	**.6792109**	**.0548295**
Stddev	.001672	.2906	.004355	.07419	.0014297	.0002139
%RSD	.1506313	.2377992	.3847566	.1932744	.2104892	.3901352
#1	1.110604	122.0780	1.132119	38.36791	.6789059	.0549257
#2	1.108467	122.0110	1.127582	38.31921	.6779583	.0545844
#3	1.111764	122.5445	1.136291	38.46493	.6807684	.0549784

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.63394**	**.6380529**	**.8510989**	**18.41260**	**.2084628**	**.3290291**
Stddev	.04899	.0015432	.0018891	.07216	.0006004	.0004850
%RSD	.2945383	.2418590	.2219548	.3919189	.2879871	.1474006
#1	16.58400	.6364592	.8491084	18.33784	.2090806	.3287843
#2	16.63590	.6381596	.8528667	18.41811	.2084261	.3287154
#3	16.68193	.6395400	.8513217	18.48185	.2078816	.3295877

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03MS Acquired: 12/16/2024 23:14:36 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6970241	3.561375	4.529256	F 12.43118	1.673931	.1899328
Stddev	.0016039	.012300	.020399	.01995	.005948	.0019421
%RSD	.2301052	.3453735	.4503842	.1604666	.3553134	1.022519
#1	.6984759	3.557987	4.512276	12.41129	1.680274	.1880303
#2	.6953024	3.551124	4.523609	12.43104	1.668480	.1898560
#3	.6972941	3.575014	4.551884	12.45119	1.673038	.1919122

Elem	Sr4077
Units	ppm
Avg	.3443545
Stddev	.0008887
%RSD	.2580737
#1	.3433330
#2	.3447797
#3	.3449507

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2857.737	62155.21	13756.06	2447.783	3910.891
Stddev	6.040	59.36	12.65	7.291	6.136
%RSD	.2113720	.0955025	.0919418	.2978801	.1568836
#1	2857.965	62205.37	13760.77	2455.918	3907.566
#2	2863.659	62170.59	13765.67	2445.598	3917.971
#3	2851.585	62089.68	13741.73	2441.834	3907.135

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03MSD Acquired: 12/16/2024 23:18:34 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.6330420**	**1.771808**	**.9885271**	**1.479748**	**.6177485**	**143.9987**
Stddev	.0021631	.010116	.0011742	.004563	.0027769	.1822
%RSD	.3416952	.5709148	.1187822	.3083560	.4495262	.1265076
#1	.6320695	1.767966	.9871958	1.475776	.6175767	143.7887
#2	.6355206	1.764177	.9889703	1.478738	.6150615	144.1150
#3	.6315359	1.783282	.9894152	1.484732	.6206074	144.0924

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3078877**	**.1978107**	**.2113175**	**105.5974**	**.6602504**	**.2700608**
Stddev	.0014523	.0005914	.0001830	.5848	.0023790	.0005134
%RSD	.4717000	.2989569	.0866078	.5538248	.3603239	.1900993
#1	.3064676	.1972026	.2111799	105.0313	.6629463	.2701841
#2	.3093702	.1983837	.2112475	106.1993	.6593597	.2694971
#3	.3078253	.1978459	.2115252	105.5615	.6584453	.2705014

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.104882**	**122.7329**	**1.158255**	**38.25847**	**.6761931**	**.0545709**
Stddev	.001446	.1171	.010038	.22540	.0010713	.0001699
%RSD	.1309134	.0953994	.8666428	.5891487	.1584288	.3113797
#1	1.104869	122.6325	1.147358	38.09719	.6771177	.0547665
#2	1.103442	122.8615	1.167125	38.51602	.6750191	.0544861
#3	1.106335	122.7048	1.160282	38.16220	.6764426	.0544601

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.52290**	**.6393810**	**.8500180**	**18.35245**	**.2191839**	**.3296582**
Stddev	.09541	.0039933	.0005019	.06327	.0013734	.0001467
%RSD	.5774177	.6245581	.0590495	.3447699	.6266094	.0444952
#1	16.63053	.6348868	.8494553	18.42481	.2206192	.3297875
#2	16.44875	.6425213	.8504196	18.30748	.2190505	.3294988
#3	16.48942	.6407350	.8501790	18.32508	.2178821	.3296884

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03MSD Acquired: 12/16/2024 23:18:34 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6974511	3.597933	4.568279	F 12.50604	1.661929	.1928080
Stddev	.0009075	.011719	.031923	.04641	.009357	.0004733
%RSD	.1301124	.3257127	.6987960	.3711330	.5630057	.2454917
#1	.6979535	3.585384	4.605049	12.50796	1.664470	.1925569
#2	.6964035	3.608593	4.552131	12.45869	1.651565	.1925132
#3	.6979962	3.599821	4.547655	12.55146	1.669753	.1933540

Elem	Sr4077
Units	ppm
Avg	.3390943
Stddev	.0004755
%RSD	.1402416
#1	.3393936
#2	.3385460
#3	.3393434

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2874.373	62961.72	13707.03	2438.305	3948.076
Stddev	4.584	102.93	64.27	5.867	7.163
%RSD	.1594667	.1634812	.4689163	.2406217	.1814363
#1	2878.093	62851.37	13775.20	2443.377	3951.551
#2	2875.774	62978.66	13647.53	2431.879	3952.839
#3	2869.252	63055.13	13698.36	2439.659	3939.838

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03A Acquired: 12/16/2024 23:22:33 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.6092551**	**1.694459**	**.9519825**	**1.416996**	**.6134736**	**144.9158**
Stddev	.0006440	.007831	.0019668	.002431	.0033195	.1695
%RSD	.1057109	.4621769	.2065947	.1715647	.5411021	.1169414
#1	.6098645	1.702748	.9520544	1.416296	.6158279	144.8304
#2	.6085813	1.693444	.9499807	1.419701	.6096769	145.1109
#3	.6093195	1.687184	.9539122	1.414992	.6149159	144.8060

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3033072**	**.1897799**	**.2046923**	**105.9923**	**.6518661**	**.2628155**
Stddev	.0010655	.0006921	.0000688	.0489	.0018436	.0000569
%RSD	.3512979	.3646619	.0335913	.0461763	.2828106	.0216485
#1	.3043477	.1892841	.2047365	105.9875	.6514008	.2627532
#2	.3033554	.1894849	.2046131	106.0435	.6502998	.2628284
#3	.3022183	.1905705	.2047274	105.9460	.6538977	.2628648

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.086269**	**121.7173**	**1.142249**	**38.22720**	**.6564670**	**.0529359**
Stddev	.001132	.2854	.002890	.05194	.0009027	.0004420
%RSD	.1042415	.2344468	.2529888	.1358847	.1375114	.8350539
#1	1.085133	122.0404	1.145551	38.16999	.6574981	.0534023
#2	1.087398	121.5001	1.141012	38.24019	.6558191	.0525232
#3	1.086275	121.6113	1.140184	38.27141	.6560837	.0528821

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.76745**	**.6309968**	**.8475191**	**18.20032**	**.2032106**	**.3265302**
Stddev	.04652	.0028272	.0013546	.02988	.0005261	.0004609
%RSD	.2774303	.4480477	.1598292	.1641763	.2588956	.1411572
#1	16.79388	.6277701	.8489533	18.19992	.2037967	.3259980
#2	16.79474	.6330391	.8473424	18.23040	.2030559	.3268031
#3	16.71374	.6321813	.8462615	18.17064	.2027791	.3267893

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-03A Acquired: 12/16/2024 23:22:33 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.6847539	3.622761	4.859895	F 11.99460	1.619907	.1872492
Stddev	.0015300	.005490	.021608	.02984	.004711	.0003418
%RSD	.2234303	.1515316	.4446249	.2487561	.2908445	.1825457
#1	.6865171	3.625351	4.852185	12.02840	1.614797	.1872146
#2	.6837760	3.626477	4.884301	11.97190	1.620845	.1876070
#3	.6839687	3.616455	4.843199	11.98351	1.624079	.1869260

Elem	Sr4077
Units	ppm
Avg	.3386915
Stddev	.0008254
%RSD	.2437074
#1	.3377603
#2	.3393332
#3	.3389808

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2890.057	62682.04	13740.66	2432.214	3974.448
Stddev	7.509	46.69	13.20	2.446	4.692
%RSD	.2598134	.0744856	.0960845	.1005602	.1180508
#1	2898.592	62678.32	13751.87	2431.635	3979.716
#2	2884.466	62730.48	13744.00	2430.110	3970.717
#3	2887.115	62637.33	13726.11	2434.897	3972.913

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-01 Acquired: 12/16/2024 23:26:30 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**.0056572**	**-.015517**	**.1222604**	**-.013689**	**-.000788**	**162.0128**	**.1682810**
Stddev	.0014307	.002002	.0014963	.002338	.000914	.3183	.0007094
%RSD	25.29025	12.90313	1.223830	17.08111	116.0142	.1964827	.4215588
#1	.0040185	-.013949	.1232395	-.016214	-.001642	161.7011	.1674683
#2	.0066581	-.014831	.1205381	-.011598	.000176	162.0001	.1687757
#3	.0062949	-.017773	.1230037	-.013255	-.000899	162.3373	.1685992

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034434**	**.0113445**	**110.3224**	**.3279299**	**.0821324**	**1.184191**	**101.0936**
Stddev	.0001105	.0001442	.0447	.0009418	.0001484	.003416	.3764
%RSD	3.209363	1.270641	.0405472	.2872060	.1807059	.2885017	.3723489
#1	.0035076	.0115059	110.3685	.3272193	.0822312	1.188061	101.0355
#2	.0033158	.0112286	110.3196	.3289982	.0819618	1.181592	101.4956
#3	.0035068	.0112990	110.2792	.3275722	.0822043	1.182921	100.7495

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8991493**	**53.27669**	**.2142919**	**-.009768**	**17.26305**	**.2840931**	**2.742928**
Stddev	.0013319	.07941	.0010601	.000027	.05817	.0017650	.010187
%RSD	.1481312	.1490598	.4946780	.2726593	.3369364	.6212621	.3713766
#1	.9005700	53.36697	.2154749	-.009738	17.21666	.2858489	2.753576
#2	.8989492	53.24548	.2139726	-.009782	17.32831	.2823191	2.741932
#3	.8979288	53.21762	.2134281	-.009785	17.24417	.2841113	2.733276

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.973479**	**-.015977**	**.0011689**	**.0102867**	**2.586735**	**2.878257**	**7.740013**
Stddev	.030782	.001240	.0003267	.0006630	.000887	.017925	.045919
%RSD	.3860558	7.761928	27.95025	6.445711	.0342837	.6227666	.5932732
#1	7.941962	-.017261	.0012841	.0108557	2.585860	2.857648	7.788460
#2	8.003470	-.014786	.0014225	.0104458	2.587633	2.890214	7.697128
#3	7.975004	-.015884	.0008002	.0095585	2.586712	2.886909	7.734452

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: P5287-01 Acquired: 12/16/2024 23:26:30 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	1.654436	.0755160	.2912080
Stddev	.004727	.0006399	.0012103
%RSD	.2856868	.8473631	.4156265
#1	1.659336	.0751016	.2902847
#2	1.649904	.0762530	.2907610
#3	1.654069	.0751933	.2925782

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2594.658	55905.23	12595.43	2192.113	3965.918
Stddev	7.827	116.57	33.54	12.171	7.997
%RSD	.3016763	.2085206	.2662738	.5552054	.2016393
#1	2586.253	55873.21	12556.71	2178.415	3957.818
#2	2595.984	55808.02	12614.25	2196.243	3966.129
#3	2601.738	56034.47	12615.32	2201.681	3973.808

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV08 Acquired: 12/16/2024 23:35:29 Type: Unk
Method: NON EPA-6010-200.7(v2536) 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	**4.797910**	**4.904590**	**5.073432**	**4.760574**	**4.761711**	**9.716072**	**9.409820**
Stddev	.012170	.028675	.012306	.006990	.009599	.020795	.022915
%RSD	.2536568	.5846596	.2425589	.1468337	.2015834	.2140311	.2435212
#1	4.785354	4.931602	5.066123	4.753548	4.751682	9.717597	9.401789
#2	4.798723	4.874500	5.066534	4.760647	4.762641	9.736063	9.435669
#3	4.809653	4.907668	5.087640	4.767528	4.770812	9.694556	9.392001

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2735972**	**2.540717**	**25.47458**	**1.048762**	**2.502986**	**1.234587**	**4.833044**
Stddev	.0012473	.006516	.04783	.003422	.007817	.002706	.019684
%RSD	.4558968	.2564571	.1877752	.3262489	.3123168	.2192001	.4072809
#1	.2749059	2.535232	25.52346	1.047082	2.495114	1.231514	4.826003
#2	.2734636	2.538999	25.47242	1.052699	2.503096	1.236616	4.855281
#3	.2724220	2.547919	25.42786	1.046504	2.510748	1.235629	4.817850

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.496938**	**25.91078**	**2.517646**	**1.258470**	**24.32265**	**2.507472**	**2.492324**
Stddev	.006886	.09797	.007299	.001673	.15199	.006886	.007342
%RSD	.2757589	.3781055	.2899205	.1329008	.6248733	.2746005	.2945722
#1	2.503649	26.02119	2.511060	1.259007	24.40226	2.513476	2.494715
#2	2.497274	25.83426	2.516385	1.259808	24.41830	2.508986	2.484085
#3	2.489891	25.87688	2.525494	1.256595	24.14740	2.499956	2.498172

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.74671**	**5.272090**	**4.852635**	**5.074300**	**4.866848**	**4.776959**	**4.978204**
Stddev	.08460	.019771	.003918	.011856	.013367	.036536	.011326
%RSD	.3163056	.3750113	.0807352	.2336444	.2746553	.7648304	.2275109
#1	26.75127	5.291621	4.848405	5.064785	4.871023	4.736357	4.990903
#2	26.82894	5.272562	4.853360	5.070534	4.877630	4.807183	4.969146
#3	26.65992	5.252088	4.856139	5.087582	4.851892	4.787337	4.974564

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCV08 Acquired: 12/16/2024 23:35:29 Type: Unk
Method: NON EPA-6010-200.7(v2536) 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	**4.938196**	**4.503586**	**4.962446**
Stddev	.008850	.017450	.031945
%RSD	.1792230	.3874607	.6437264
#1	4.927977	4.499721	4.984845
#2	4.943182	4.522645	4.925866
#3	4.943428	4.488393	4.976627

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2434.914**	**53840.89**	**11989.32**	**2092.236**	**3971.654**
Stddev	2.026	63.98	59.82	8.754	5.451
%RSD	.0832201	.1188323	.4989213	.4184072	.1372499
#1	2436.470	53781.79	11921.98	2087.575	3976.965
#2	2432.622	53832.06	12009.68	2102.334	3971.923
#3	2435.648	53908.83	12036.30	2086.798	3966.073

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB08 Acquired: 12/16/2024 23:39:17 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	**-.002552**	**-.000672**	**-.000466**	**.0006175**	**-.000669**	**.0051278**	**.0020571**
Stddev	.002135	.000413	.000392	.0002489	.000156	.0034239	.0001028
%RSD	83.66926	61.38107	84.04481	40.30901	23.34074	66.76964	4.995133
#1	-.000349	-.000683	-.000672	.0003378	-.000580	.0089284	.0021499
#2	-.002696	-.000254	-.000711	.0007001	-.000578	.0041707	.0019467
#3	-.004612	-.001079	-.000014	.0008146	-.000849	.0022844	.0020746

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000504**	**.0000028**	**-.006197**	**.0001177**	**-.000025**	**.0004261**	**.0002760**
Stddev	.0000171	.0000593	.002280	.0002946	.000112	.0001473	.0015655
%RSD	33.85388	2080.856	36.79360	250.3570	455.4681	34.56209	567.1921
#1	.0000307	-.000020	-.006248	.0002358	-.000109	.0005634	-.001013
#2	.0000595	-.000042	-.003892	.0003348	.000102	.0004444	.002018
#3	.0000611	.000070	-.008451	-.000218	-.000067	.0002705	-.000177

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002112**	**-.006008**	**.0001564**	**-.000577**	**.3835826**	**.0002822**	**.0004873**
Stddev	.0001284	.007369	.0001497	.000104	.0278343	.0010357	.0000088
%RSD	60.78586	122.6465	95.74870	17.99433	7.256393	366.9756	1.807972
#1	.0000631	-.007749	.0000795	-.000622	.3542992	-.000210	.0004906
#2	.0002917	.002075	.0003289	-.000458	.3867521	.001472	.0004939
#3	.0002787	-.012350	.0000607	-.000650	.4096964	-.000416	.0004773

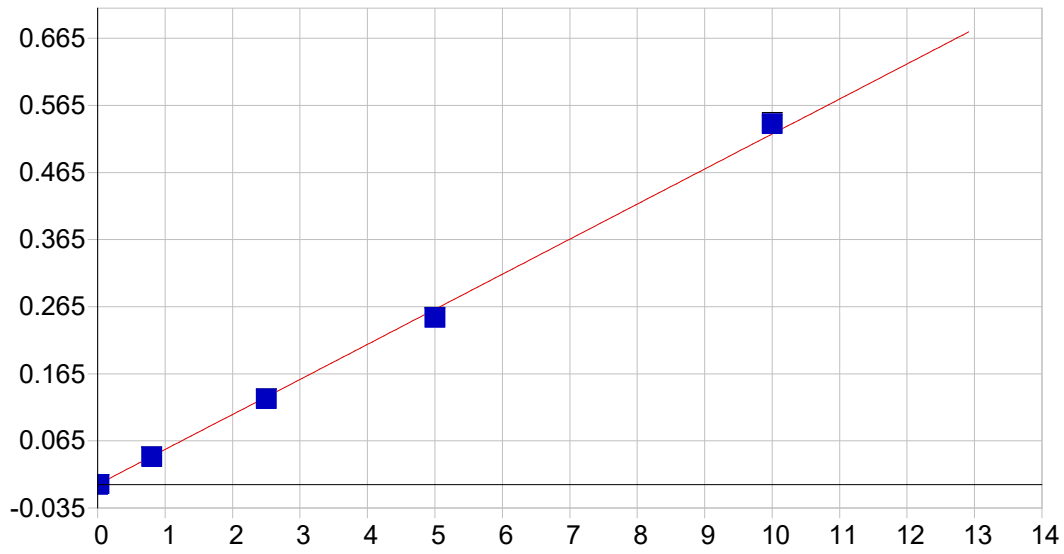
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2345161**	**.0021683**	**.0002769**	**-.000316**	**-.000240**	**-.000660**	**.0000379**
Stddev	.0292199	.0007125	.0002267	.000109	.000767	.004845	.0014372
%RSD	12.45965	32.85874	81.84860	34.44101	320.0829	734.0269	3795.556
#1	.2023414	.0028180	.0004833	-.000393	.000321	-.000036	.0006929
#2	.2418062	.0022806	.0003131	-.000364	-.001114	.003843	-.001610
#3	.2594008	.0014064	.0000344	-.000192	.000074	-.005787	.001031

Reviewed By:jaswal
On:12/26/2024
10:45:00 PM
Inst Id :P4
LB :LB133968

Sample Name: CCB08 Acquired: 12/16/2024 23:39:17 Type: Unk
Method: NON EPA-6010-200.7(v2434) 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	.0001323	-.001083	.0000775
Stddev	.0020906	.000491	.0000363
%RSD	1579.852	45.36492	46.83488
#1	-.000823	-.001567	.0000852
#2	.002530	-.001095	.0001094
#3	-.001310	-.000585	.0000380

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2592.278	57390.11	12293.49	2226.739	4556.741
Stddev	9.886	37.58	26.00	6.505	5.975
%RSD	.3813639	.0654886	.2114767	.2921252	.1311219
#1	2580.911	57401.37	12265.24	2219.467	4550.520
#2	2597.054	57420.77	12298.82	2228.747	4557.267
#3	2598.871	57348.18	12316.41	2232.004	4562.435

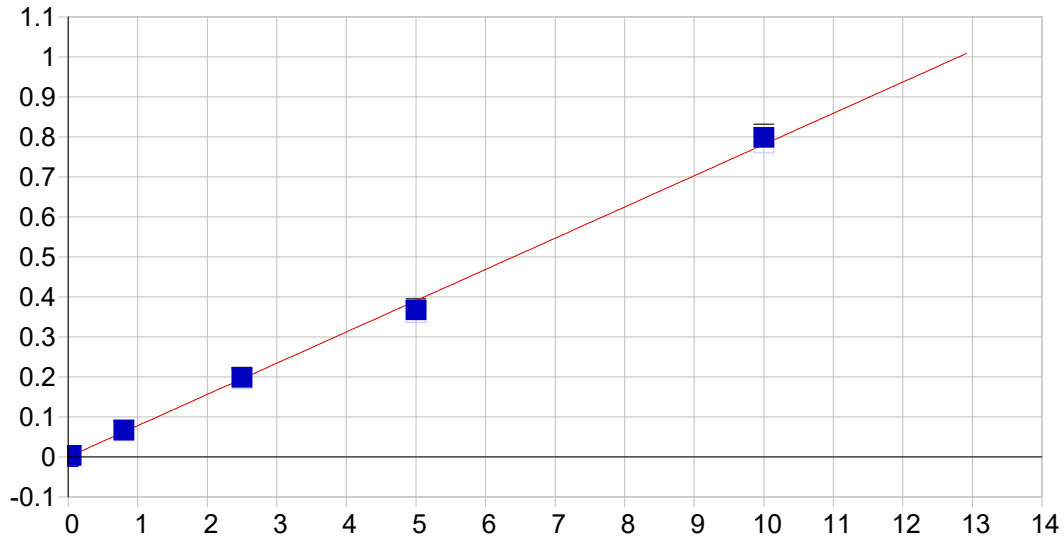


As 189.042 {479}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000130	Re-Slope:	1.000000
A1 (Gain):	0.052253	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999424	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.002423		
Predicted MQL:	0.008075		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00013	.000	1
S1	.02000	.02053	.001	2.64	.00094	.000	1
S3	2.5000	2.4469	-.053	-2.12	.12759	.000	1
S4	5.0000	4.7624	-.238	-4.75	.24844	.000	1
S5	10.000	10.294	.294	2.94	.53720	.002	1
S2	.80000	.79620	-.004	-.475	.04143	.000	1

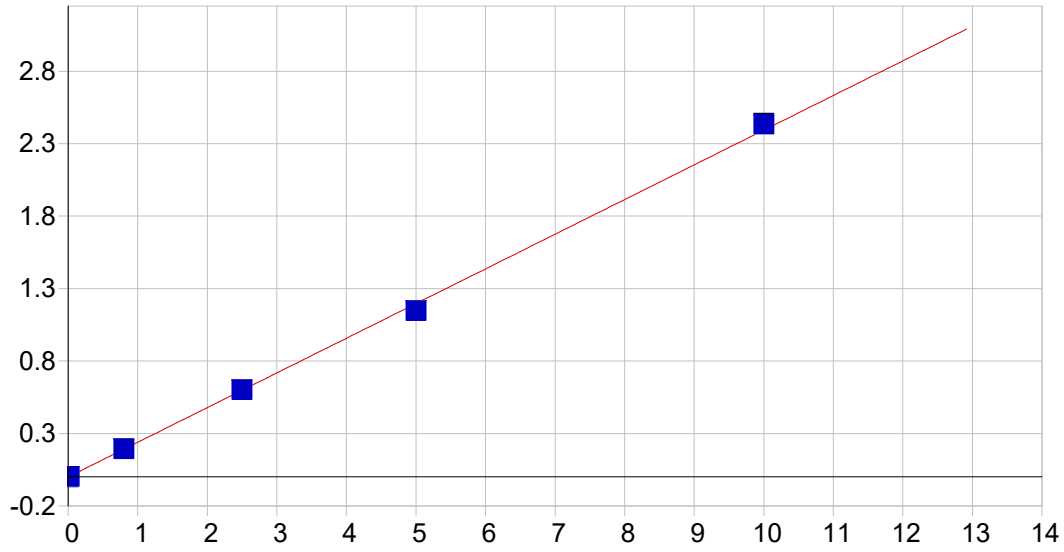


Tl 190.856 {477}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000013	Re-Slope:	1.000000
A1 (Gain):	0.078099	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999253	Status:	OK.
Std Error of Est:	0.000098		
Predicted MDL:	0.001502		
Predicted MQL:	0.005006		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.04000	.04042	.000	1.05	.00294	.000	1
S3	2.5000	2.5361	.036	1.44	.19446	.001	1
S4	5.0000	4.6974	-.303	-6.05	.35966	.004	1
S5	10.000	10.219	.219	2.19	.78369	.009	1
S2	.80000	.84714	.047	5.89	.06500	.001	1

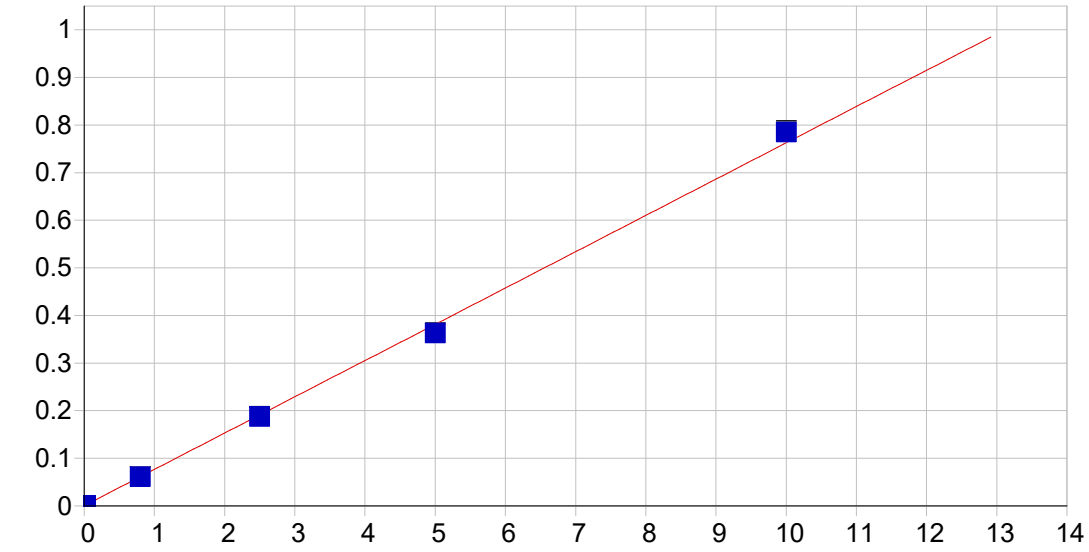


Pb 220.353 {453}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000210	Re-Slope:	1.000000
A1 (Gain):	0.239342	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999683	Status:	OK.
Std Error of Est:	0.000109		
Predicted MDL:	0.001029		
Predicted MQL:	0.003431		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00021	.000	1
S1	.01200	.01146	-.001	-4.50	.00248	.000	1
S3	2.5000	2.5154	.015	.617	.60118	.001	1
S4	5.0000	4.7974	-.203	-4.05	1.1467	.000	1
S5	10.000	10.176	.176	1.76	2.4327	.006	1
S2	.80000	.81179	.012	1.47	.19388	.001	1

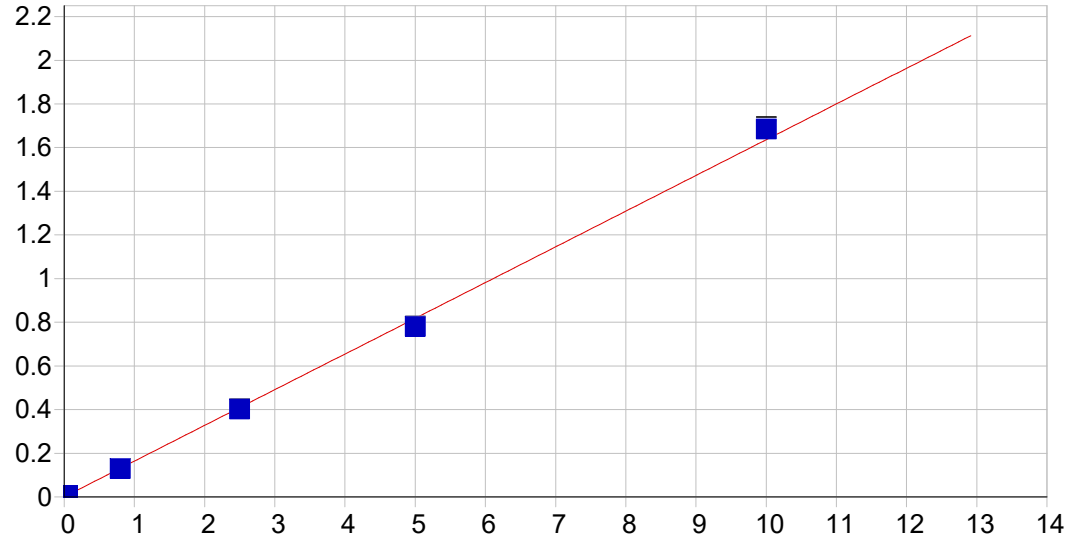


Se 196.090 {472}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000444	Re-Slope:	1.000000
A1 (Gain):	0.076222	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999409	Status:	OK.
Std Error of Est:	0.000061		
Predicted MDL:	0.002218		
Predicted MQL:	0.007392		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00044	.000	1
S1	.02000	.01971	-.000	-1.47	.00195	.000	1
S3	2.5000	2.4546	-.045	-1.82	.18749	.000	1
S4	5.0000	4.7537	-.246	-4.93	.36268	.001	1
S5	10.000	10.294	.294	2.94	.78491	.003	1
S2	.80000	.79756	-.002	-.304	.06122	.000	1

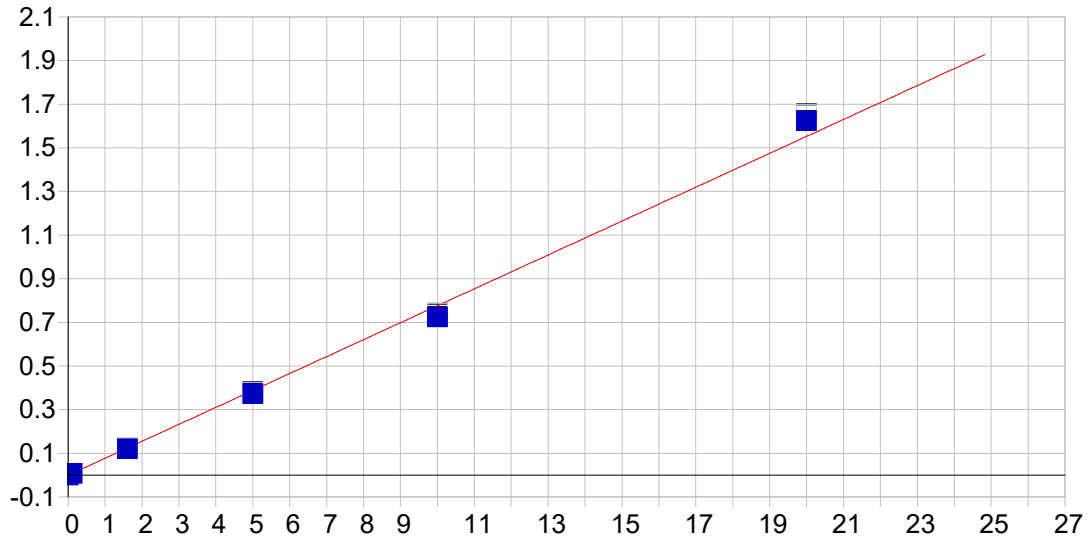


Sb 206.833 {463}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000308	Re-Slope:	1.000000
A1 (Gain):	0.163578	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999436	Status:	OK.
Std Error of Est:	0.000204		
Predicted MDL:	0.001272		
Predicted MQL:	0.004241		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00031	.000	1
S1	.05000	.04819	-.002	-3.61	.00821	.000	1
S3	2.5000	2.4511	-.049	-1.96	.40237	.001	1
S4	5.0000	4.7654	-.235	-4.69	.78204	.001	1
S5	10.000	10.295	.295	2.95	1.6887	.007	1
S2	.80000	.79051	-.009	-1.19	.12997	.001	1

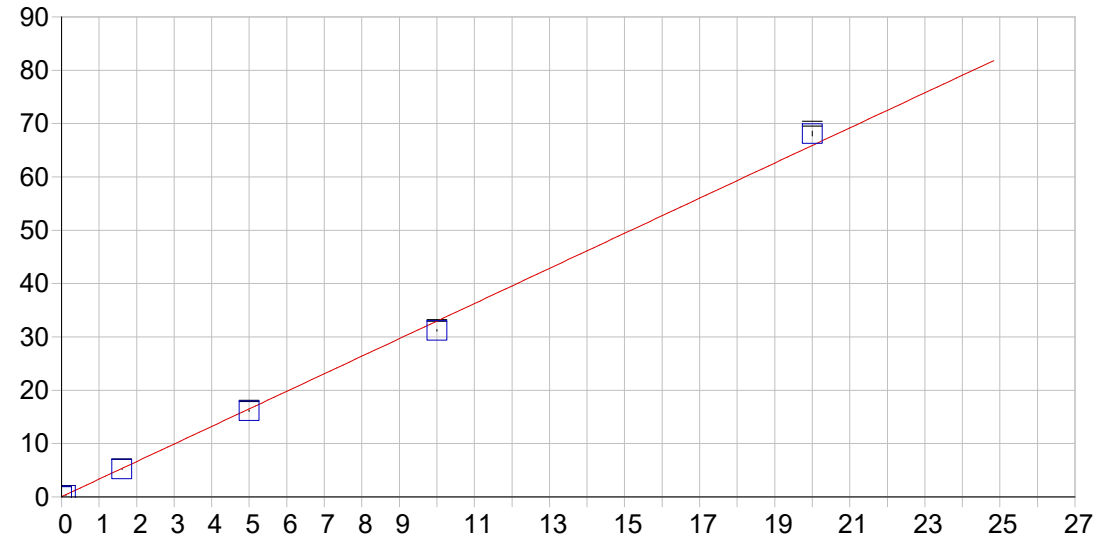


Al 396.152 { 85}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000385	Re-Slope:	1.000000
A1 (Gain):	0.077637	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998765	Status:	OK.
Std Error of Est:	0.000292		
Predicted MDL:	0.006401		
Predicted MQL:	0.021336		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00038	.000	1
S1	.10000	.09878	-.001	-1.22	.00789	.000	1
S3	5.0000	4.8019	-.198	-3.96	.37995	.003	1
S4	10.000	9.3409	-.659	-6.59	.73988	.003	1
S5	20.000	20.910	.910	4.55	1.6532	.002	1
S2	1.6000	1.5481	-.052	-3.24	.12222	.001	1

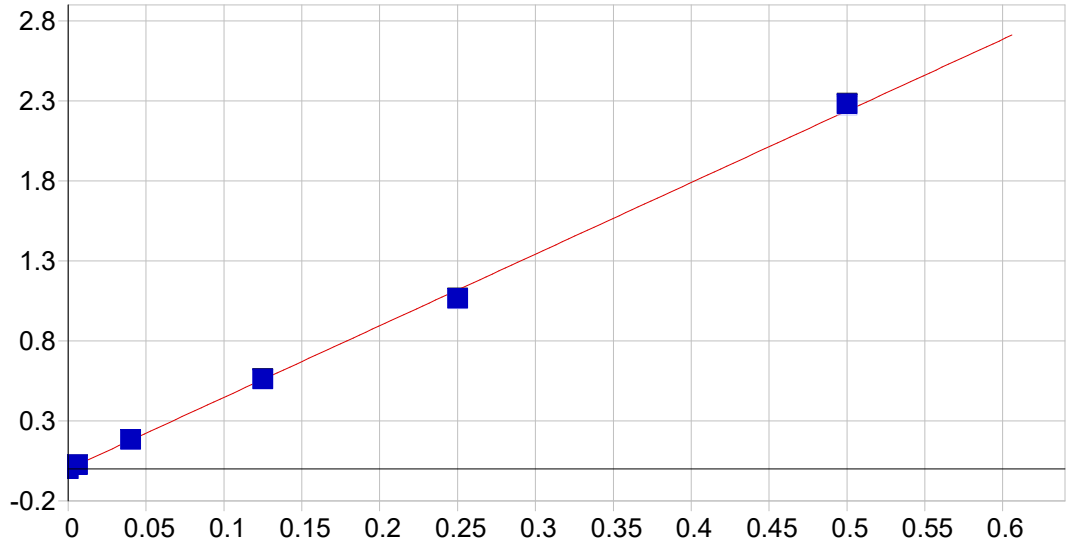


Ba 493.409 { 68}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.042060	Re-Slope:	1.000000
A1 (Gain):	3.292632	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999259	Status:	OK.
Std Error of Est:	0.009403		
Predicted MDL:	0.000497		
Predicted MQL:	0.001657		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.04210	.000	1
S1	.10000	.09520	-.005	-4.80	.35553	.002	1
S3	5.0000	4.8877	-.112	-2.25	16.135	.120	1
S4	10.000	9.4675	-.533	-5.33	31.215	.156	1
S5	20.000	20.676	.676	3.38	68.121	.456	1
S2	1.6000	1.5734	-.027	-1.66	5.2226	.017	1

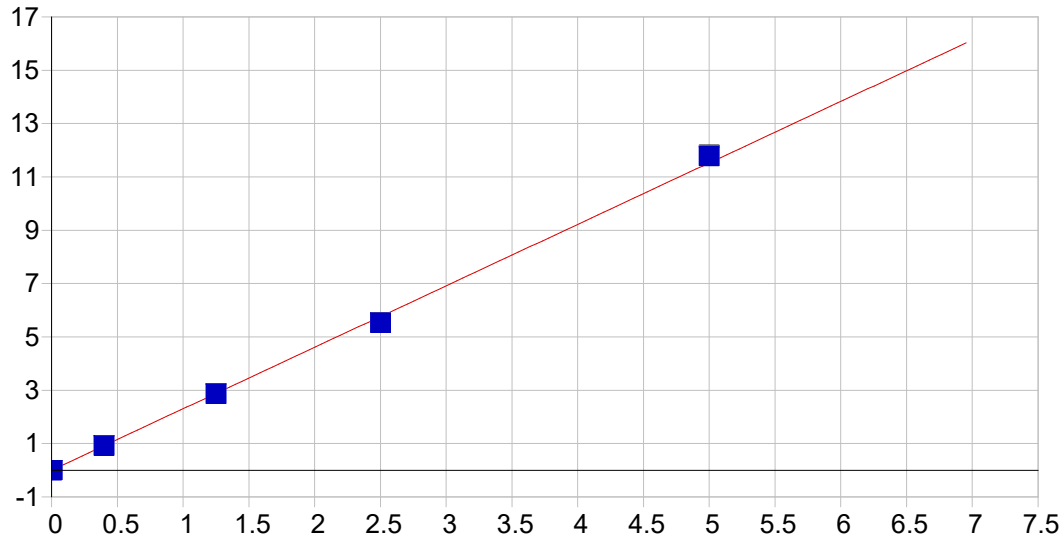


Be 234.861 {144}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000555	Re-Slope:	1.000000
A1 (Gain):	4.475363	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999579	Status:	OK.
Std Error of Est:	0.000372		
Predicted MDL:	0.000054		
Predicted MQL:	0.000179		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00055	.000	1
S1	.00600	.00587	-.000	-2.20	.02551	.000	1
S3	.12500	.12564	.001	.511	.55922	.003	1
S4	.25000	.23843	-.012	-4.63	1.0615	.002	1
S5	.50000	.51003	.010	2.01	2.2720	.004	1
S2	.04000	.04103	.001	2.57	.18226	.000	1

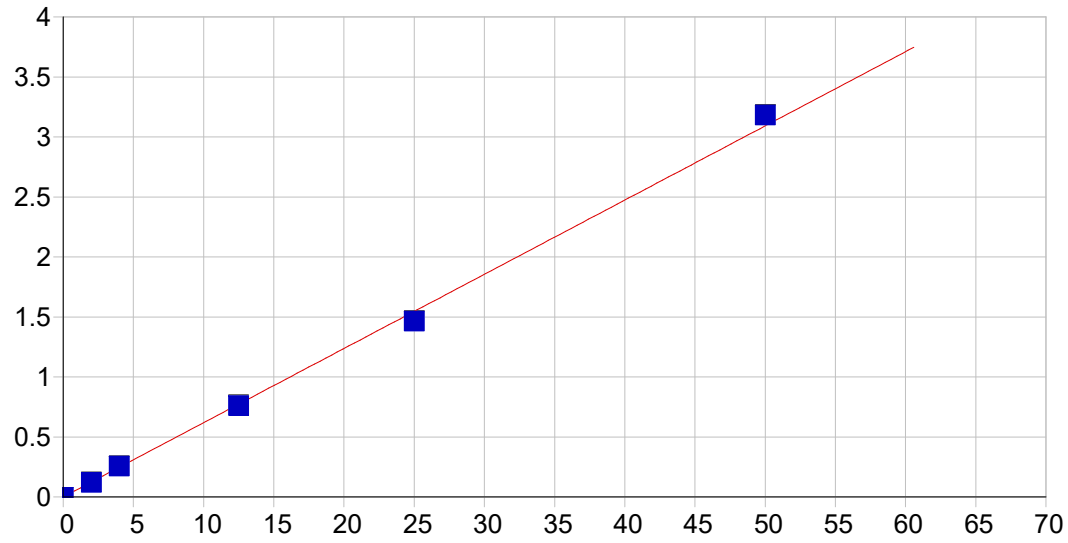


Cd 226.502 {449}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000024	Re-Slope:	1.000000
A1 (Gain):	2.304944	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999638	Status:	OK.
Std Error of Est:	0.000563		
Predicted MDL:	0.000082		
Predicted MQL:	0.000272		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00003	.000	1
S1	.00600	.00575	-.000	-4.12	.01333	.000	1
S3	1.2500	1.2427	-.007	-.585	2.8663	.001	1
S4	2.5000	2.3983	-.102	-4.07	5.5319	.005	1
S5	5.0000	5.1106	.111	2.21	11.788	.034	1
S2	.40000	.39871	-.001	-.321	.91967	.004	1

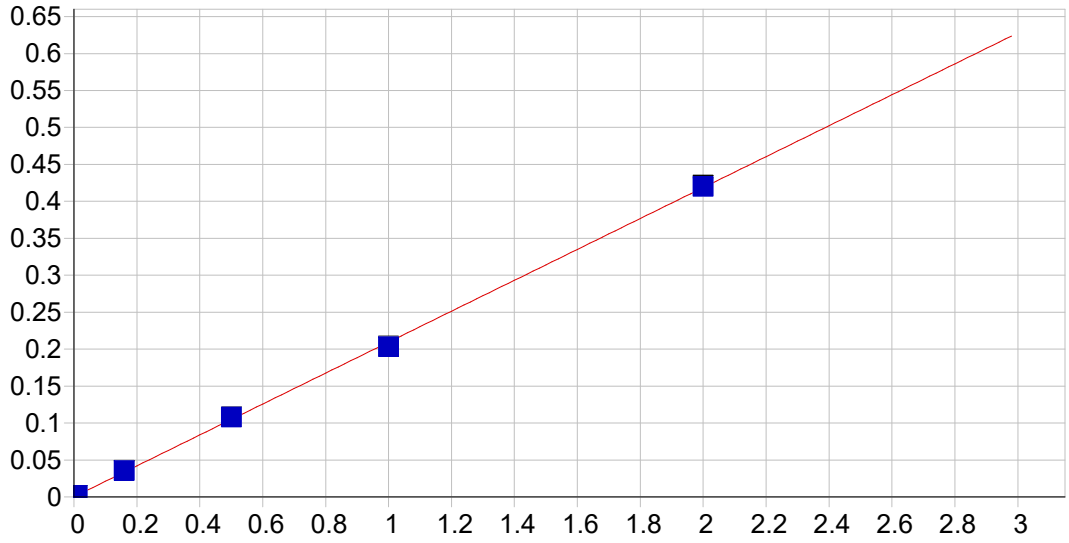


Ca 373.690 { 90}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000323	Re-Slope:	1.000000
A1 (Gain):	0.061829	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999345	Status:	OK.
Std Error of Est:	0.001185		
Predicted MDL:	0.007745		
Predicted MQL:	0.025817		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00006	.000	.000	.00033	.000	1
S2	4.0000	4.1334	.133	3.34	.25589	.001	1
S3	12.500	12.296	-.204	-1.63	.76058	.005	1
S4	25.000	23.663	-1.34	-5.35	1.4634	.002	1
S5	50.000	51.454	1.45	2.91	3.1817	.002	1
S1	2.0000	1.9533	-.047	-2.33	.12110	.001	1

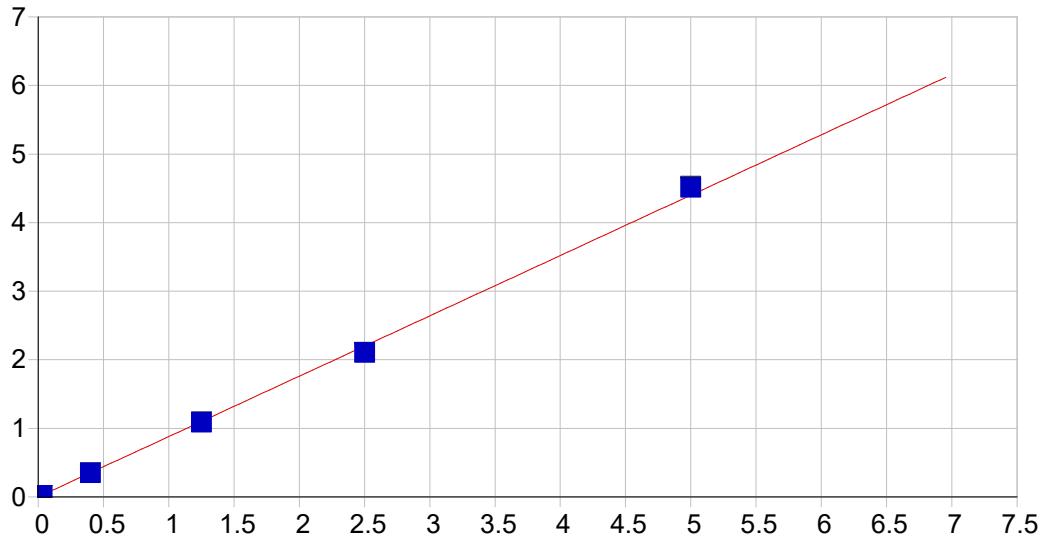


Cr 267.716 {126}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000155	Re-Slope:	1.000000
A1 (Gain):	0.209259	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999727	Status:	OK.
Std Error of Est:	0.000036		
Predicted MDL:	0.000359		
Predicted MQL:	0.001198		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00015	.000	1
S1	.01000	.00925	-.001	-7.54	.00209	.000	1
S3	.50000	.51558	.016	3.12	.10807	.000	1
S4	1.0000	.96982	-.030	-3.02	.20316	.001	1
S5	2.0000	2.0061	.006	.304	.42007	.002	1
S2	.16000	.16928	.009	5.80	.03559	.000	1

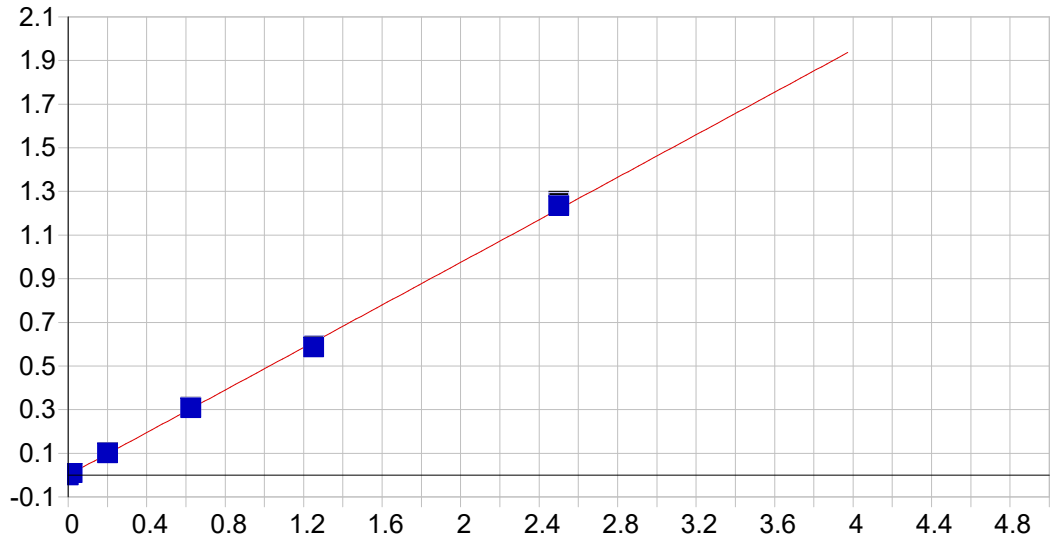


Co 228.616 {448}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000083	Re-Slope:	1.000000
A1 (Gain):	0.879931	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999549	Status:	OK.
Std Error of Est:	0.000538		
Predicted MDL:	0.000191		
Predicted MQL:	0.000636		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00009	.000	1
S1	.03000	.02891	-.001	-3.62	.02541	.000	1
S3	1.2500	1.2376	-.012	-.993	1.0909	.001	1
S4	2.5000	2.3893	-.111	-4.43	2.1062	.001	1
S5	5.0000	5.1271	.127	2.54	4.5190	.014	1
S2	.40000	.39712	-.003	-.719	.35012	.002	1

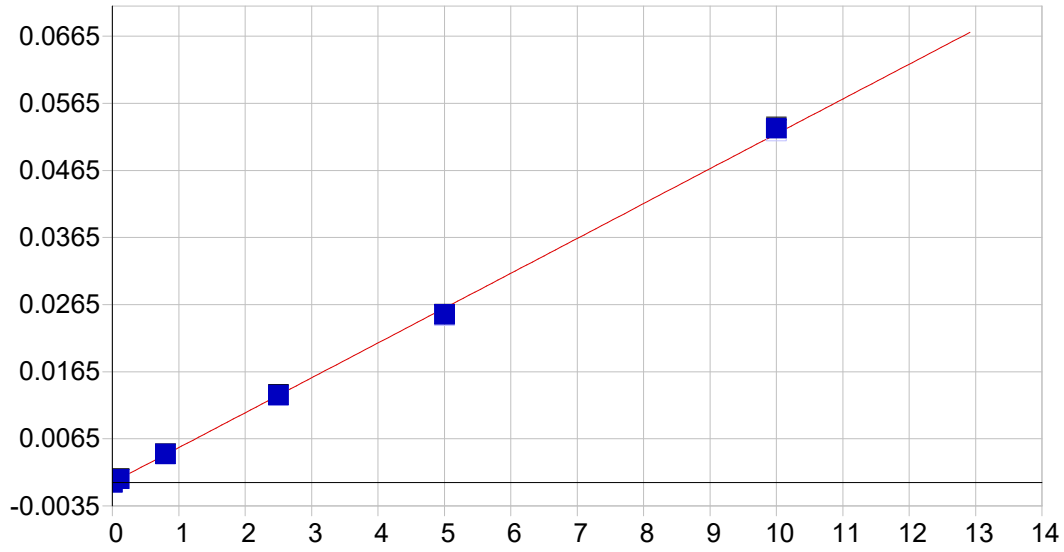


Cu 224.700 {450}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000173	Re-Slope:	1.000000
A1 (Gain):	0.487503	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999715	Status:	OK.
Std Error of Est:	0.000138		
Predicted MDL:	0.000519		
Predicted MQL:	0.001729		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00017	.000	1
S1	.02000	.02103	.001	5.17	.01024	.000	1
S3	.62500	.63022	.005	.835	.31071	.000	1
S4	1.2500	1.2021	-.048	-3.83	.59315	.000	1
S5	2.5000	2.5340	.034	1.36	1.2498	.005	1
S2	.20000	.20763	.008	3.82	.10222	.001	1

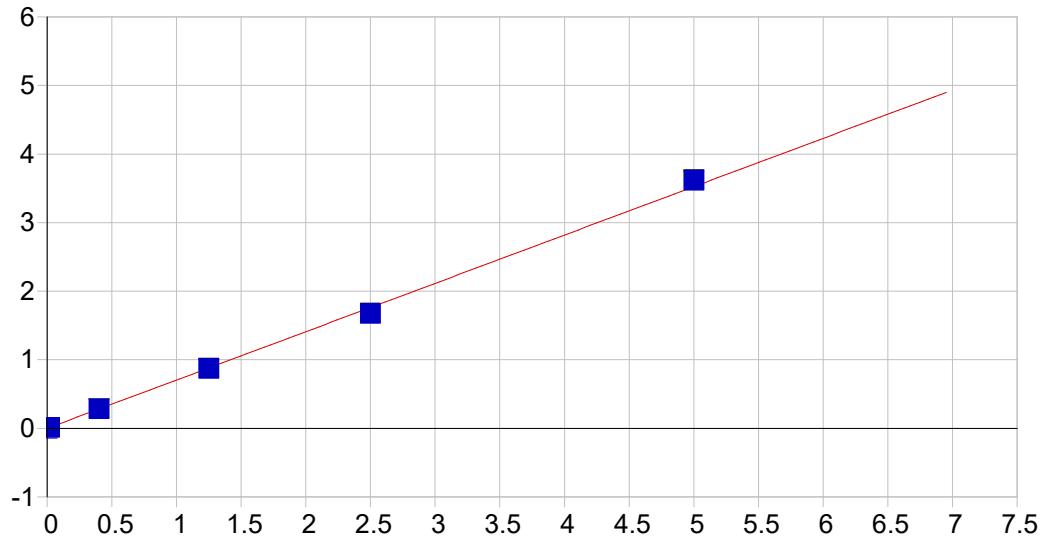


Fe 240.488 {140}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000003	Re-Slope:	1.000000
A1 (Gain):	0.005195	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999741	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.004390		
Predicted MQL:	0.014633		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00000	.000	1
S1	.10000	.10164	.002	1.64	.00052	.000	1
S3	2.5000	2.5025	.003	.101	.01289	.000	1
S4	5.0000	4.8201	-.180	-3.60	.02482	.000	1
S5	10.000	10.159	.159	1.59	.05233	.000	1
S2	.80000	.81661	.017	2.08	.00420	.000	1

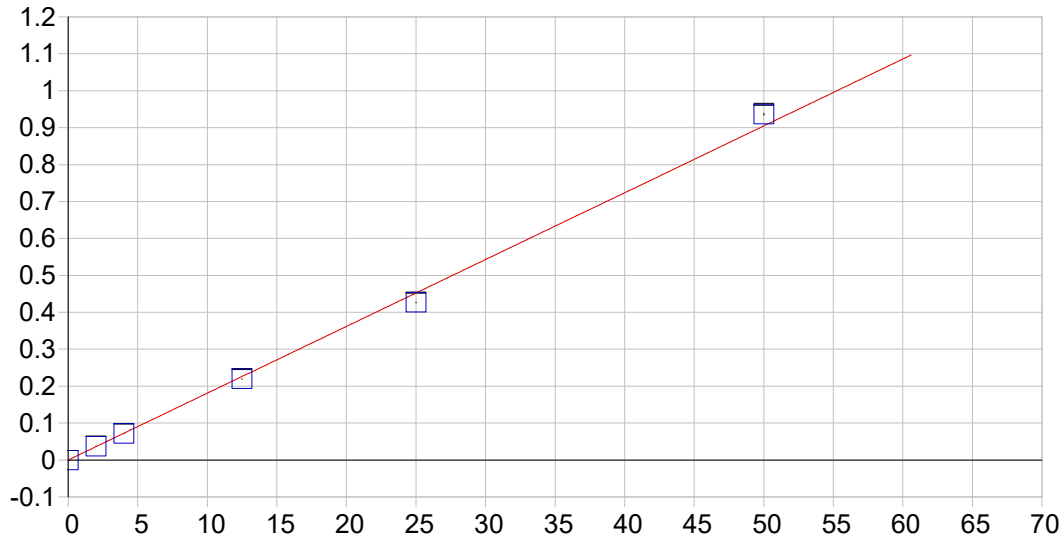


Mn 257.610 {131}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000035	Re-Slope:	1.000000
A1 (Gain):	0.704742	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999472	Status:	OK.
Std Error of Est:	0.000380		
Predicted MDL:	0.000276		
Predicted MQL:	0.000919		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00004	.000	1
S1	.02000	.01993	-.000	-.328	.01409	.000	1
S3	1.2500	1.2373	-.013	-1.02	.87218	.006	1
S4	2.5000	2.3774	-.123	-4.91	1.6758	.004	1
S5	5.0000	5.1331	.133	2.66	3.6182	.013	1
S2	.40000	.40235	.002	.587	.28364	.002	1

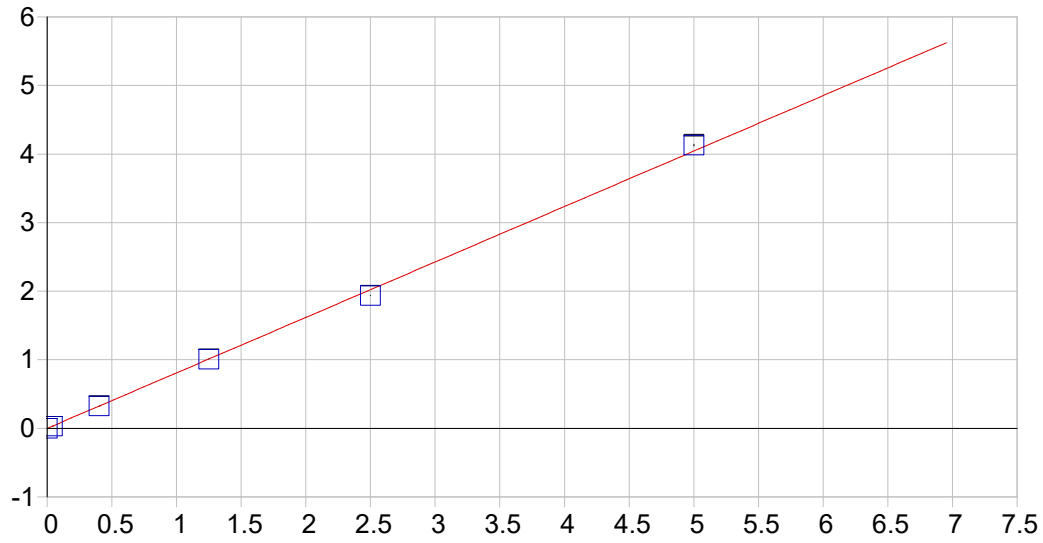


Mg 279.079 {121}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000093	Re-Slope:	1.000000
A1 (Gain):	0.018096	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999179	Status:	OK.
Std Error of Est:	0.000388		
Predicted MDL:	0.011570		
Predicted MQL:	0.038567		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00006	.000	.000	-.00009	.000	1
S2	4.0000	3.9421	-.058	-1.45	.07125	.001	1
S3	12.500	12.145	-.355	-2.84	.21969	.001	1
S4	25.000	23.594	-1.41	-5.62	.42688	.001	1
S5	50.000	51.751	1.75	3.50	.93643	.002	1
S1	2.0000	2.0673	.067	3.36	.03732	.000	1

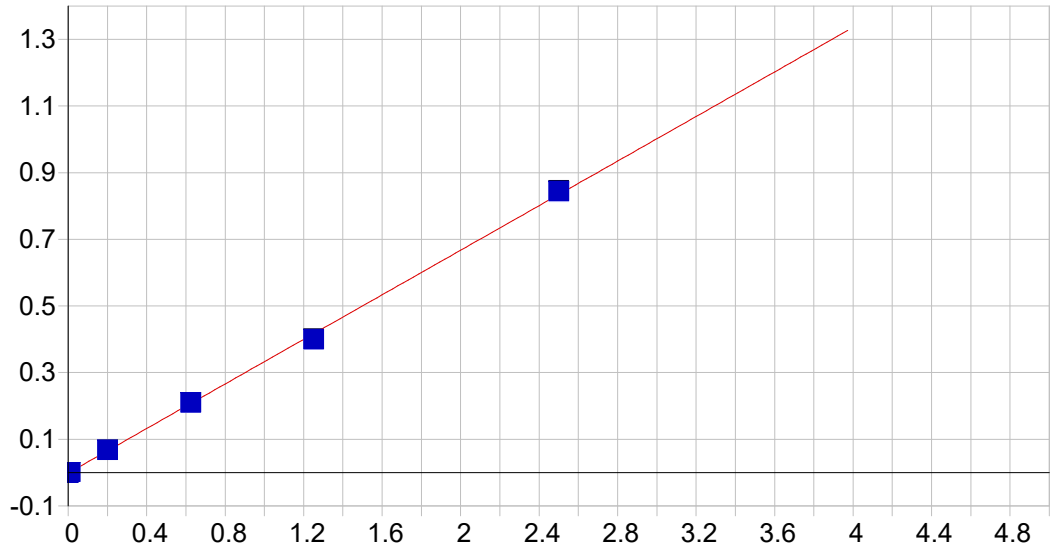


Ni 231.604 {446}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000183	Re-Slope:	1.000000
A1 (Gain):	0.808726	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999638	Status:	OK.
Std Error of Est:	0.000511		
Predicted MDL:	0.000251		
Predicted MQL:	0.000837		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00018	.000	1
S1	.04000	.03891	-.001	-2.73	.03128	.000	1
S3	1.2500	1.2468	-.003	-.259	1.0081	.001	1
S4	2.5000	2.3956	-.104	-4.18	1.9372	.002	1
S5	5.0000	5.1059	.106	2.12	4.1291	.012	1
S2	.40000	.40282	.003	.705	.32559	.001	1

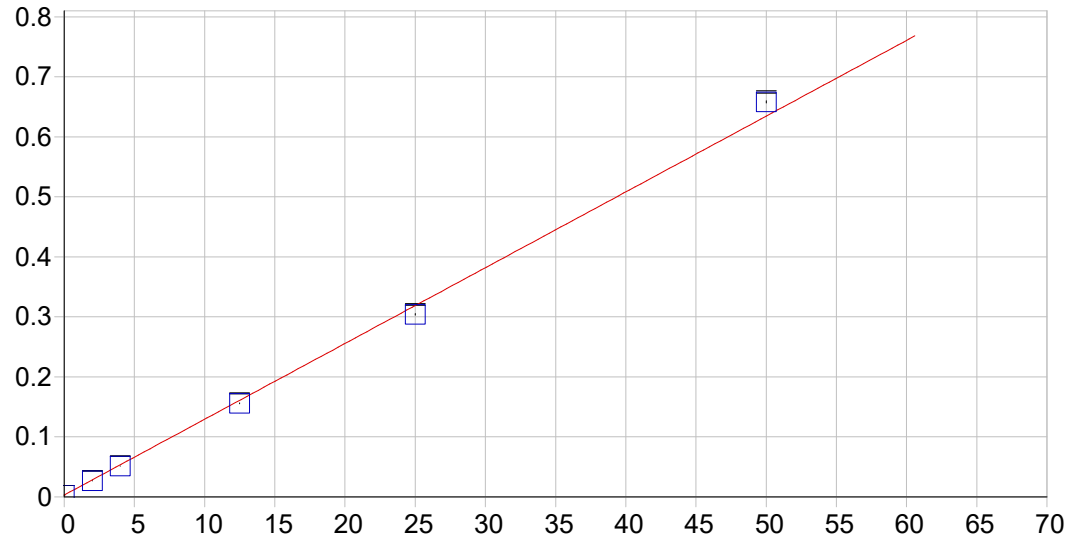


Ag 328.068 {103}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001482	Re-Slope:	1.000000
A1 (Gain):	0.334377	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999692	Status:	OK.
Std Error of Est:	0.000069		
Predicted MDL:	0.000320		
Predicted MQL:	0.001066		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00148	.000	1
S1	.01000	.01016	.000	1.63	.00189	.000	1
S3	.62500	.63285	.008	1.26	.20930	.000	1
S4	1.2500	1.2011	-.049	-3.91	.39849	.001	1
S5	2.5000	2.5322	.032	1.29	.84191	.002	1
S2	.20000	.20866	.009	4.33	.06802	.000	1

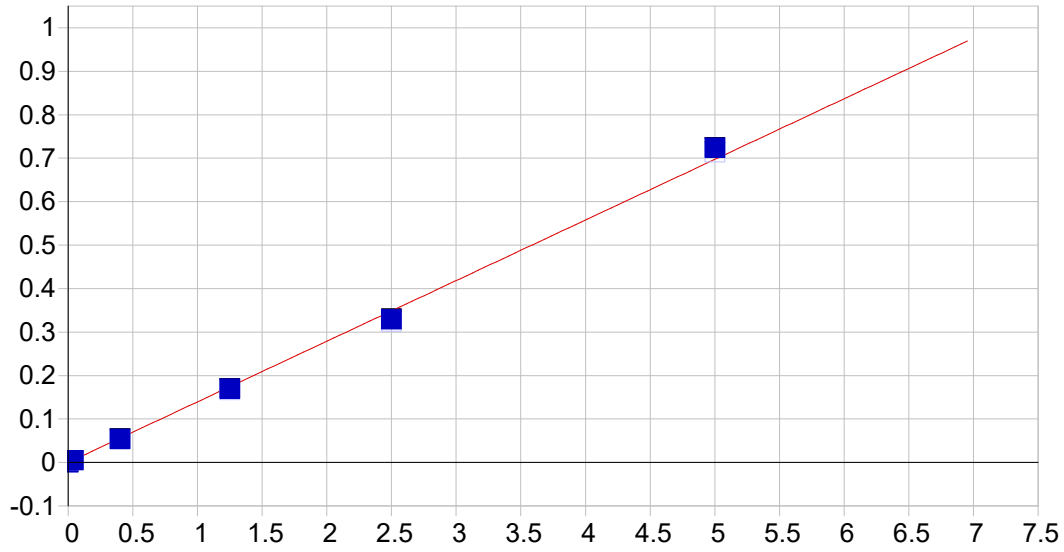


Na 589.592 { 57}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003157	Re-Slope:	1.000000
A1 (Gain):	0.012626	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999176	Status:	OK.
Std Error of Est:	0.000271		
Predicted MDL:	0.012398		
Predicted MQL:	0.041326		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00030	.000	.000	.00316	.000	1
S2	4.0000	3.8172	-.183	-4.57	.05135	.000	1
S3	12.500	12.100	-.400	-3.20	.15593	.001	1
S4	25.000	23.838	-1.16	-4.65	.30413	.001	1
S5	50.000	51.876	1.88	3.75	.65814	.002	1
S1	2.0000	1.8688	-.131	-6.56	.02675	.000	1

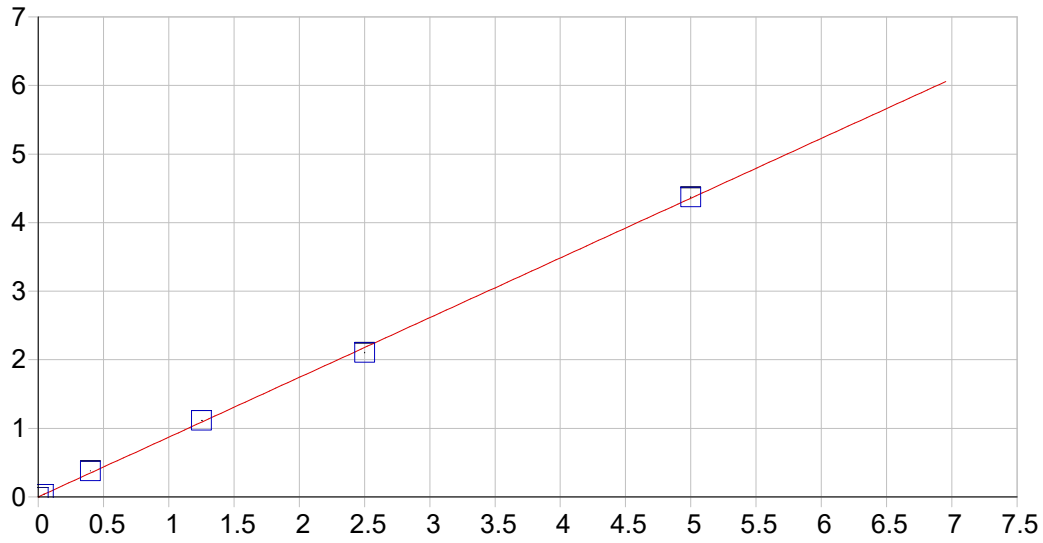


V 292.402 {115}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000039	Re-Slope:	1.000000
A1 (Gain):	0.139440	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999066	Status:	OK.
Std Error of Est:	0.000139		
Predicted MDL:	0.001554		
Predicted MQL:	0.005181		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00004	.000	1
S1	.04000	.03717	-.003	-7.07	.00501	.000	1
S3	1.2500	1.2125	-.038	-3.00	.16657	.001	1
S4	2.5000	2.3609	-.139	-5.56	.32417	.001	1
S5	5.0000	5.1909	.191	3.82	.71370	.001	1
S2	.40000	.38837	-.012	-2.91	.05338	.000	1

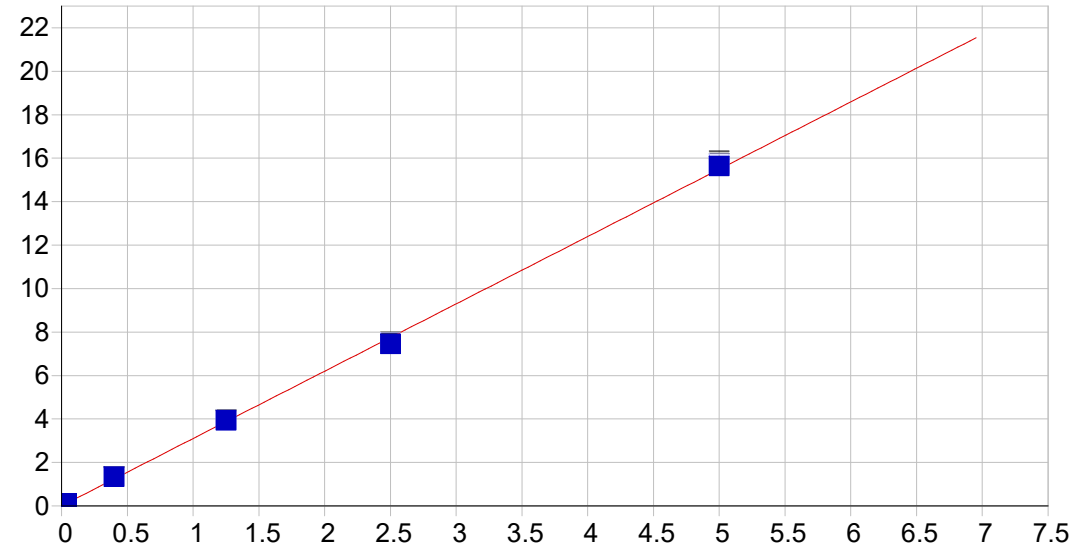


Zn 206.200 {464}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000257	Re-Slope:	1.000000
A1 (Gain):	0.871240	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999618	Status:	OK.
Std Error of Est:	0.000565		
Predicted MDL:	0.000193		
Predicted MQL:	0.000644		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00025	.000	1
S1	.04000	.04233	.002	5.82	.03713	.000	1
S3	1.2500	1.2806	.031	2.45	1.1160	.002	1
S4	2.5000	2.4142	-.086	-3.43	2.1036	.004	1
S5	5.0000	5.0174	.017	.349	4.3716	.006	1
S2	.40000	.43543	.035	8.86	.37962	.002	1

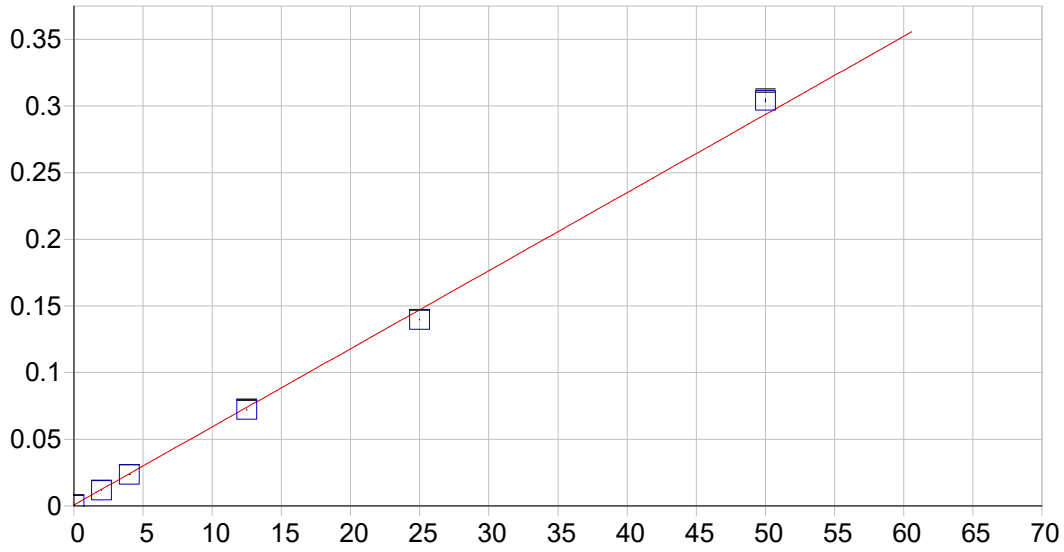


Zn 213.856 {158}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002316	Re-Slope:	1.000000
A1 (Gain):	3.098002	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999640	Status:	OK.
Std Error of Est:	0.001964		
Predicted MDL:	0.000264		
Predicted MQL:	0.000879		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00230	.000	1
S1	.04000	.04174	.002	4.35	.13250	.001	1
S3	1.2500	1.2693	.019	1.55	3.9616	.015	1
S4	2.5000	2.4038	-.096	-3.85	7.5030	.029	1
S5	5.0000	5.0454	.045	.907	15.741	.133	1
S2	.40000	.42979	.030	7.45	1.3424	.005	1

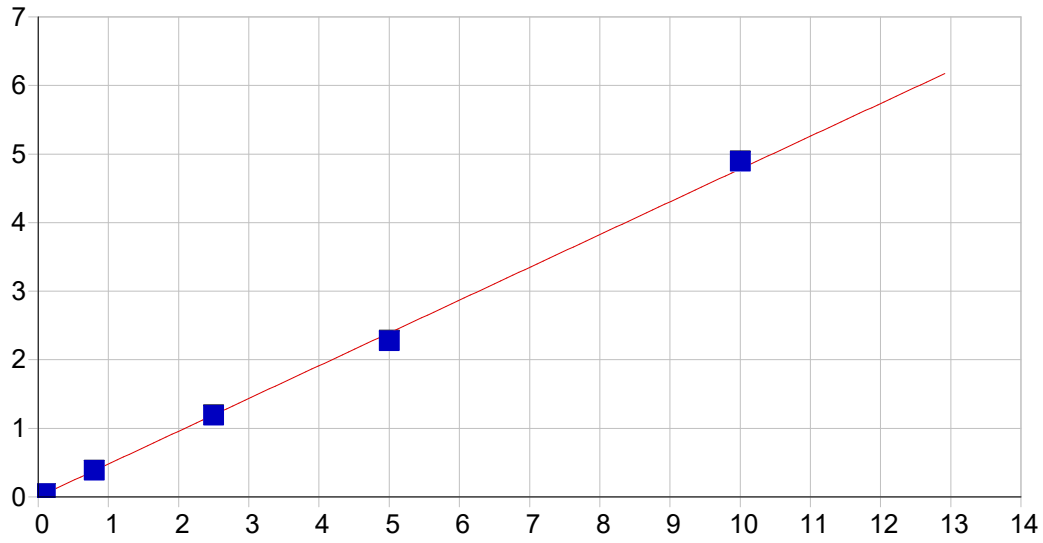


K 766.490 { 44}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000716	Re-Slope:	1.000000
A1 (Gain):	0.005858	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999199	Status:	OK.
Std Error of Est:	0.000124		
Predicted MDL:	0.030057		
Predicted MQL:	0.100190		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00026	.000	.000	.00072	.000	1
S2	4.0000	3.8877	-.112	-2.81	.02349	.000	1
S3	12.500	12.207	-.293	-2.34	.07223	.001	1
S4	25.000	23.719	-1.28	-5.12	.13967	.000	1
S5	50.000	51.815	1.82	3.63	.30426	.001	1
S1	2.0000	1.8707	-.129	-6.47	.01167	.000	1

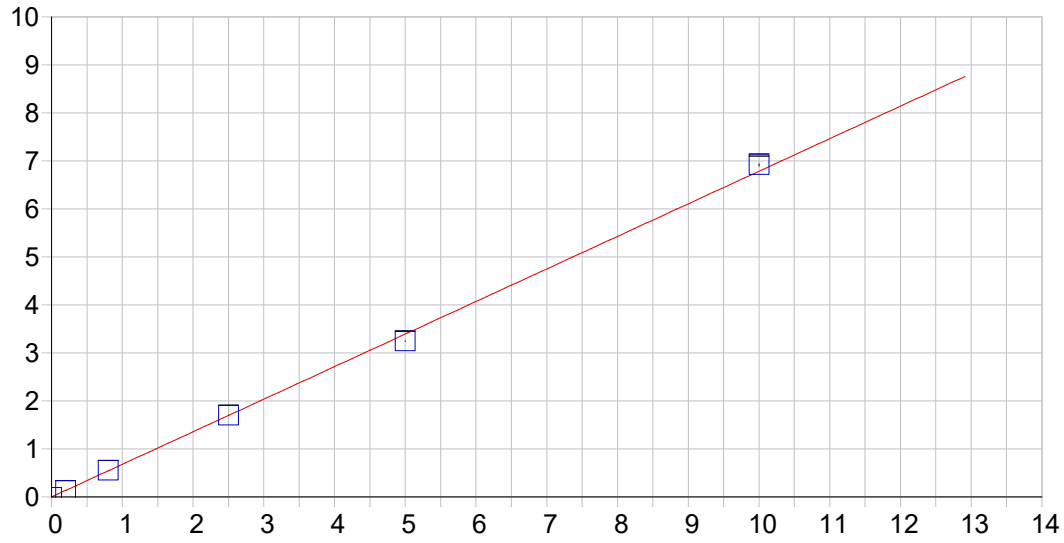


B 249.678 {135}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001292	Re-Slope:	1.000000
A1 (Gain):	0.477996	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999539	Status:	OK.
Std Error of Est:	0.000760		
Predicted MDL:	0.000626		
Predicted MQL:	0.002087		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00129	.000	1
S1	.10000	.09976	-.000	-.237	.04877	.000	1
S3	2.5000	2.4875	-.013	-.500	1.1880	.006	1
S4	5.0000	4.7654	-.235	-4.69	2.2745	.008	1
S5	10.000	10.240	.240	2.40	4.8866	.006	1
S2	.80000	.80746	.007	.933	.38651	.000	1

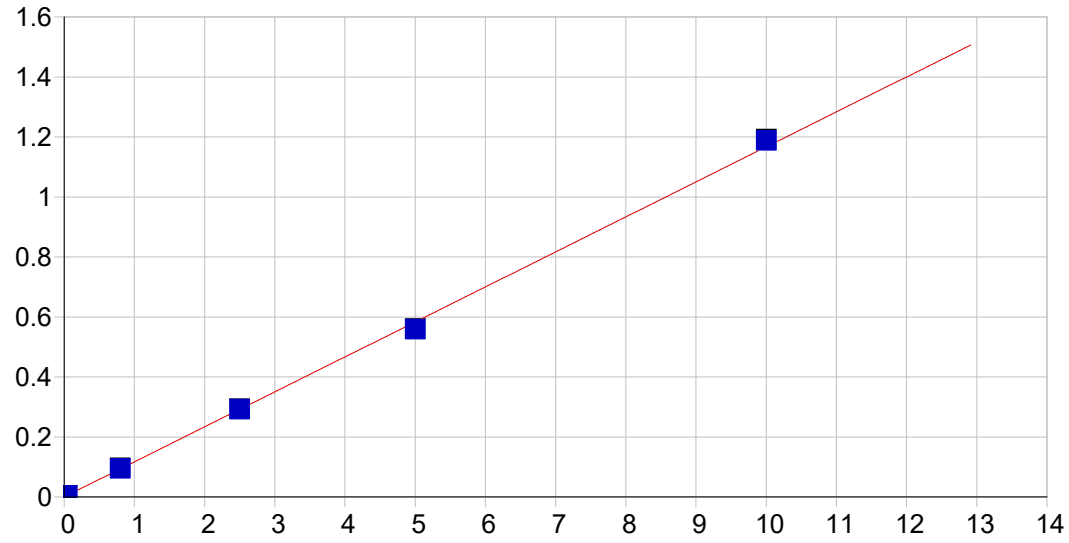


Mo 202.030 {467}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000245	Re-Slope:	1.000000
A1 (Gain):	0.678450	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999636	Status:	OK.
Std Error of Est:	0.001363		
Predicted MDL:	0.000259		
Predicted MQL:	0.000863		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00025	.000	1
S1	.20000	.19859	-.001	-.706	.13498	.001	1
S3	2.5000	2.5076	.008	.305	1.7015	.002	1
S4	5.0000	4.7838	-.216	-4.32	3.2458	.006	1
S5	10.000	10.196	.196	1.96	6.9178	.022	1
S2	.80000	.81387	.014	1.73	.55241	.002	1

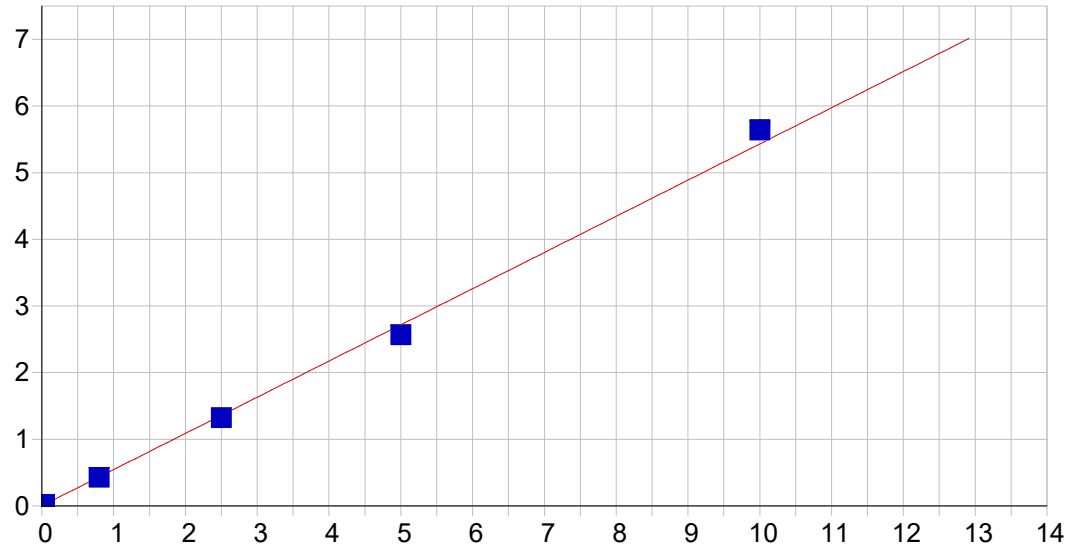


Sn 189.989 {478}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000153	Re-Slope:	1.000000
A1 (Gain):	0.116643	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999658	Status:	OK.
Std Error of Est:	0.000101		
Predicted MDL:	0.000729		
Predicted MQL:	0.002429		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00015	.000	1
S1	.04000	.03818	-.002	-4.56	.00460	.000	1
S3	2.5000	2.5080	.008	.318	.29239	.000	1
S4	5.0000	4.7921	-.208	-4.16	.55852	.002	1
S5	10.000	10.186	.186	1.86	1.1871	.004	1
S2	.80000	.81563	.016	1.95	.09519	.001	1

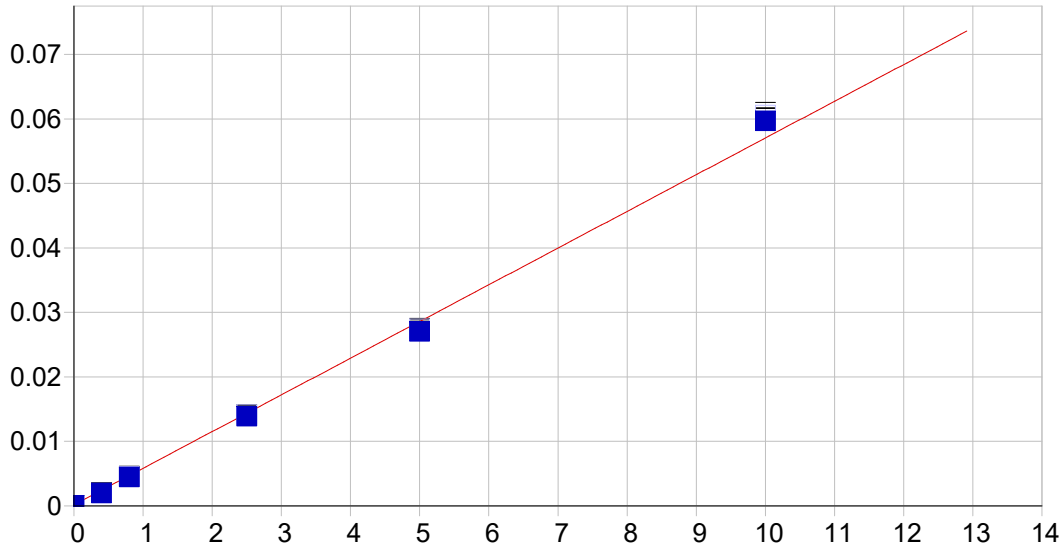


Ti 336.121 {100}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001570	Re-Slope:	1.000000
A1 (Gain):	0.543008	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999110	Status:	OK.
Std Error of Est:	0.000760		
Predicted MDL:	0.000593		
Predicted MQL:	0.001978		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00157	.000	1
S1	.04000	.03803	-.002	-4.92	.02221	.000	1
S3	2.5000	2.4276	-.072	-2.89	1.3193	.007	1
S4	5.0000	4.7174	-.283	-5.65	2.5622	.006	1
S5	10.000	10.375	.375	3.75	5.6335	.008	1
S2	.80000	.78165	-.018	-2.29	.42586	.001	1

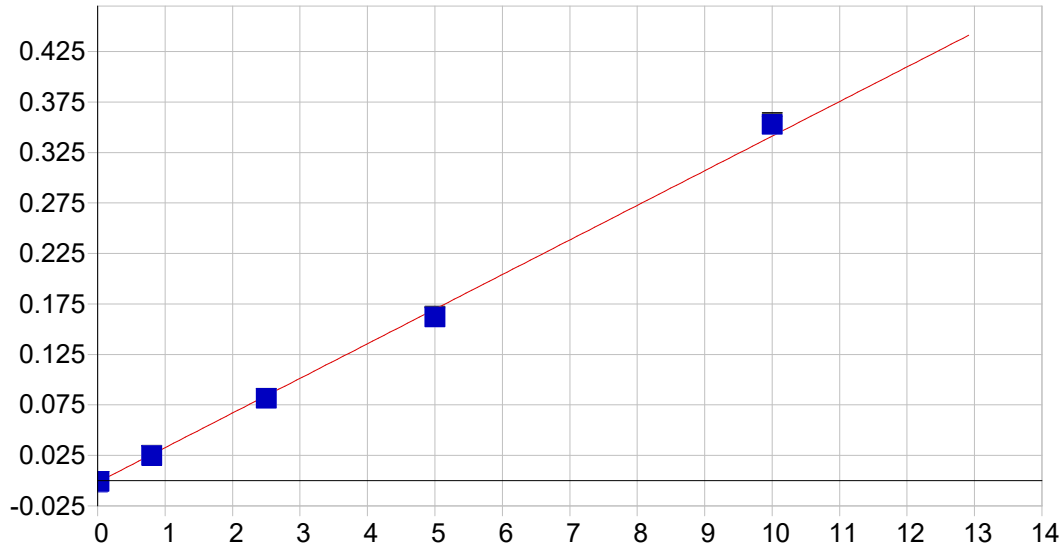


Si 288.158 {117}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000146	Re-Slope:	1.000000
A1 (Gain):	0.005690	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998566	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.007120		
Predicted MQL:	0.023733		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00011	.000	.000	.00015	.000	1
S1	.40000	.32568	-.074	-18.6	.00200	.000	1
S3	2.5000	2.4202	-.080	-3.19	.01413	.000	1
S4	5.0000	4.7226	-.277	-5.55	.02744	.000	1
S5	10.000	10.467	.467	4.67	.06056	.000	1
S2	.80000	.76316	-.037	-4.60	.00456	.000	1

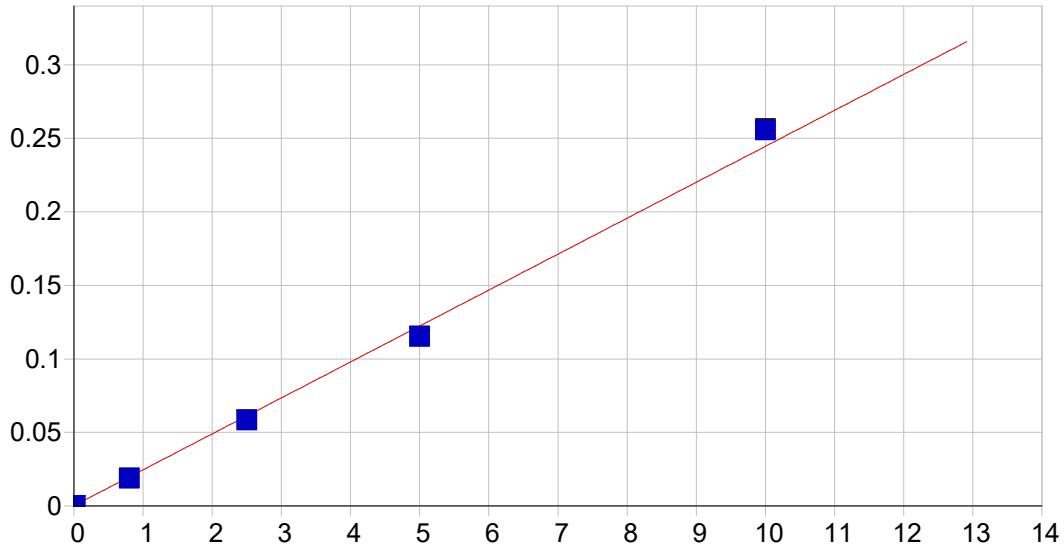


P 177.495 {490}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001564	Re-Slope:	1.000000
A1 (Gain):	0.034277	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999312	Status:	OK.
Std Error of Est:	0.000030		
Predicted MDL:	0.002403		
Predicted MQL:	0.008012		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00156	.000	1
S1	.02000	.01959	-.000	-2.03	-.00089	.000	1
S3	2.5000	2.4197	-.080	-3.21	.08136	.000	1
S4	5.0000	4.7729	-.227	-4.54	.16201	.001	1
S5	10.000	10.336	.336	3.36	.35268	.002	1
S2	.80000	.77141	-.029	-3.57	.02487	.000	1

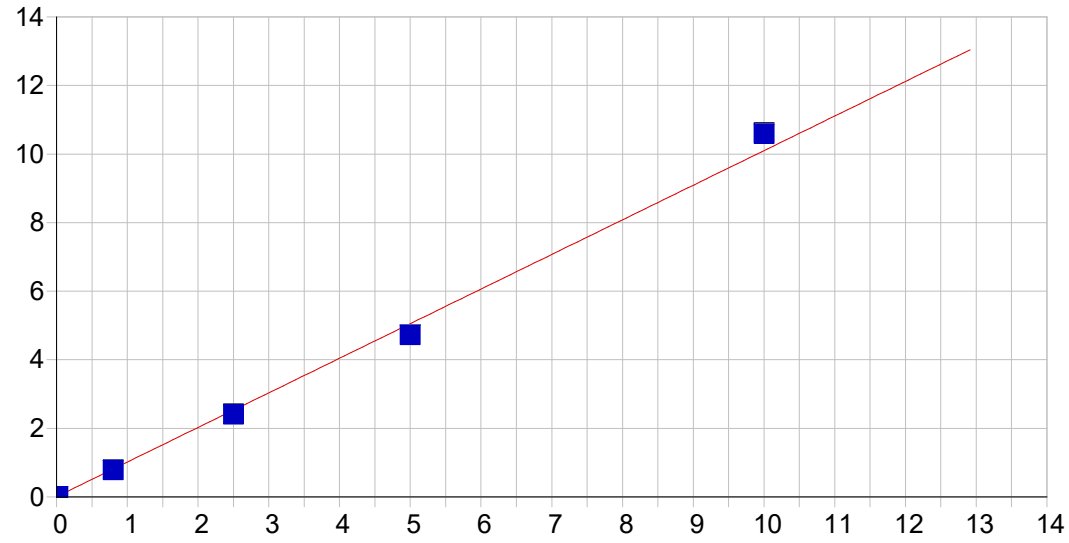


S 182.034 {485}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000130	Re-Slope:	1.000000
A1 (Gain):	0.024447	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998742	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.003211		
Predicted MQL:	0.010702		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00013	.000	1
S1	.02000	.02084	.001	4.19	.00062	.000	1
S3	2.5000	2.3767	-.123	-4.93	.05807	.000	1
S4	5.0000	4.7047	-.295	-5.91	.11483	.001	1
S5	10.000	10.455	.455	4.55	.25508	.001	1
S2	.80000	.76306	-.037	-4.62	.01873	.000	1

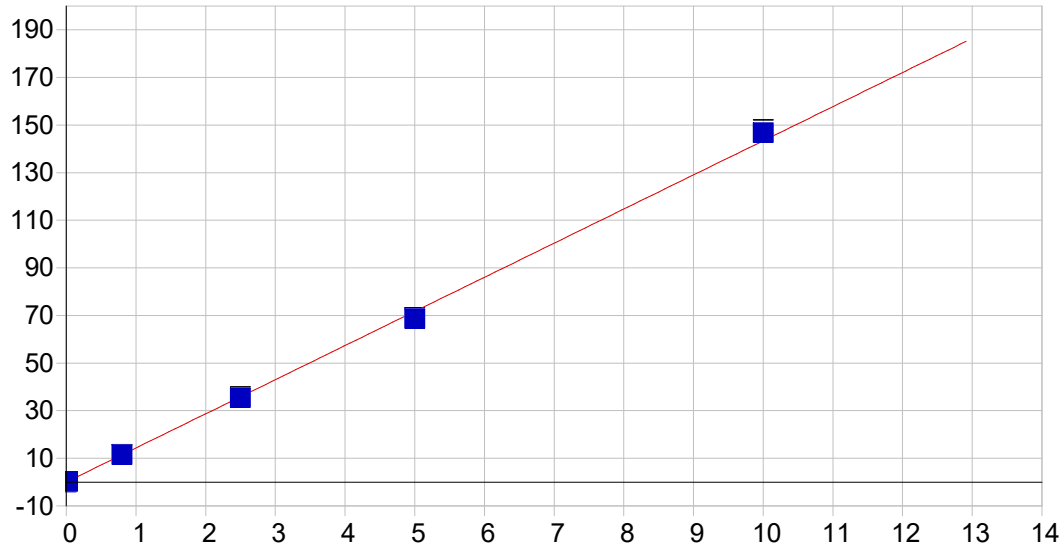


Li 670.784 { 50}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006499	Re-Slope:	1.000000
A1 (Gain):	1.009305	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998564	Status:	OK.
Std Error of Est:	0.001270		
Predicted MDL:	0.000898		
Predicted MQL:	0.002993		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00650	.000	1
S5	10.000	10.486	.486	4.86	10.599	.020	1
S4	5.0000	4.6729	-.327	-6.54	4.7274	.009	1
S3	2.5000	2.3757	-.124	-4.97	2.4066	.014	1
S1	.02000	.01766	-.002	-11.7	.02468	.001	1
S2	.80000	.76748	-.033	-4.07	.78185	.003	1

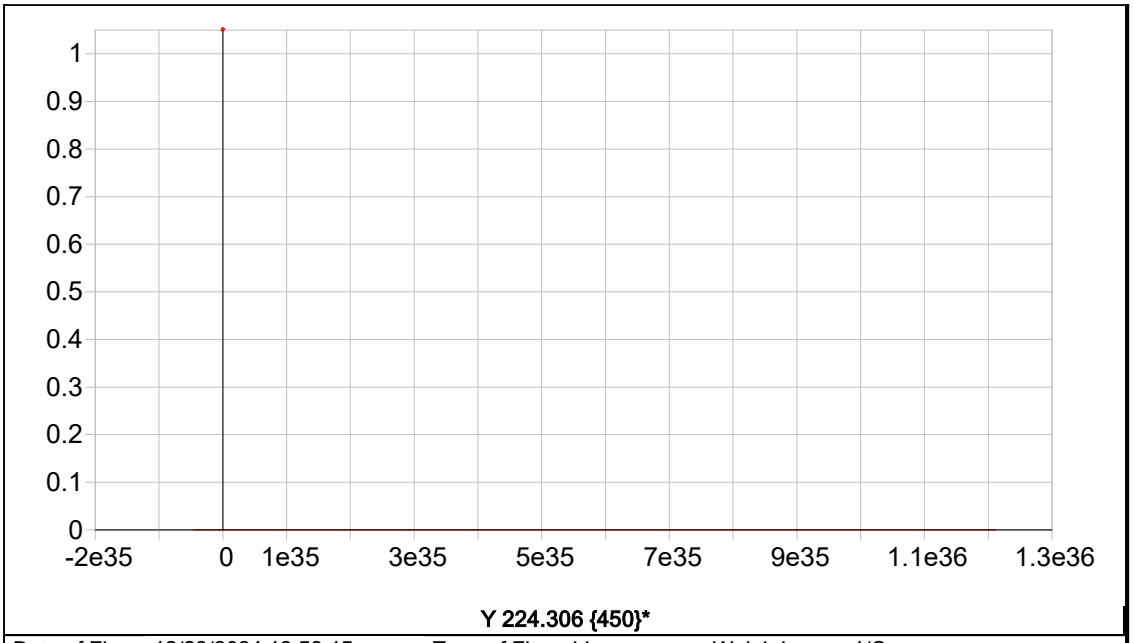


Sr 407.771 { 83}

Date of Fit:	12/23/2024 13:53:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000736	Re-Slope:	1.000000
A1 (Gain):	14.340461	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999606	Status:	OK.
Std Error of Est:	0.009442		
Predicted MDL:	0.000038		
Predicted MQL:	0.000128		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00072	.000	1
S1	.02000	.01938	-.001	-3.09	.27863	.002	1
S3	2.5000	2.4751	-.025	-.997	35.529	.320	1
S4	5.0000	4.7895	-.210	-4.21	68.755	.365	1
S5	10.000	10.230	.230	2.30	146.85	1.32	1
S2	.80000	.80586	.006	.733	11.567	.035	1

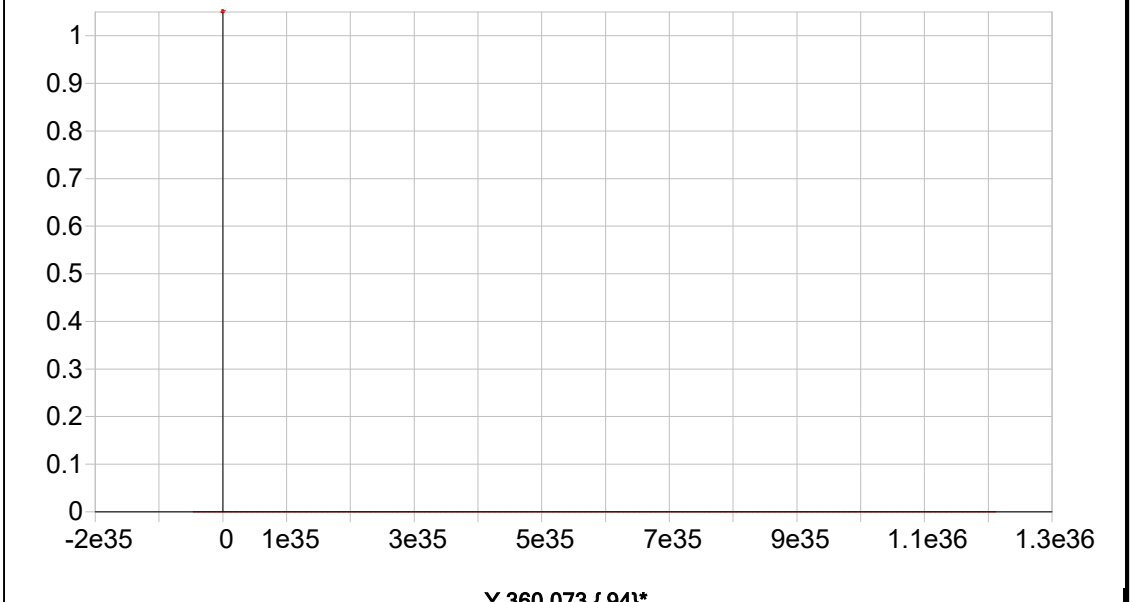


Y 224.306 {450}*

Date of Fit:	12/23/2024 13:53:15	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}*

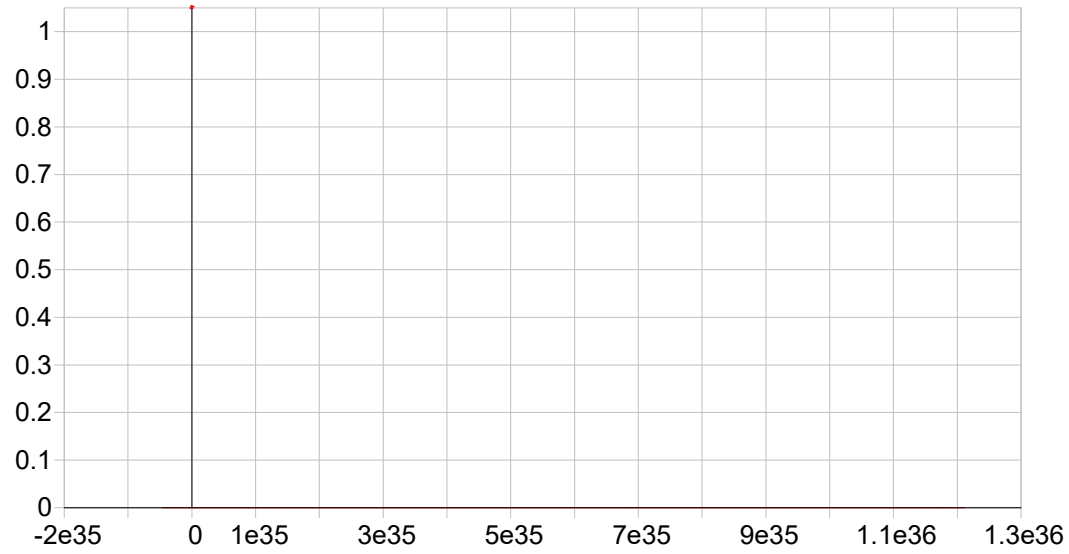
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

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

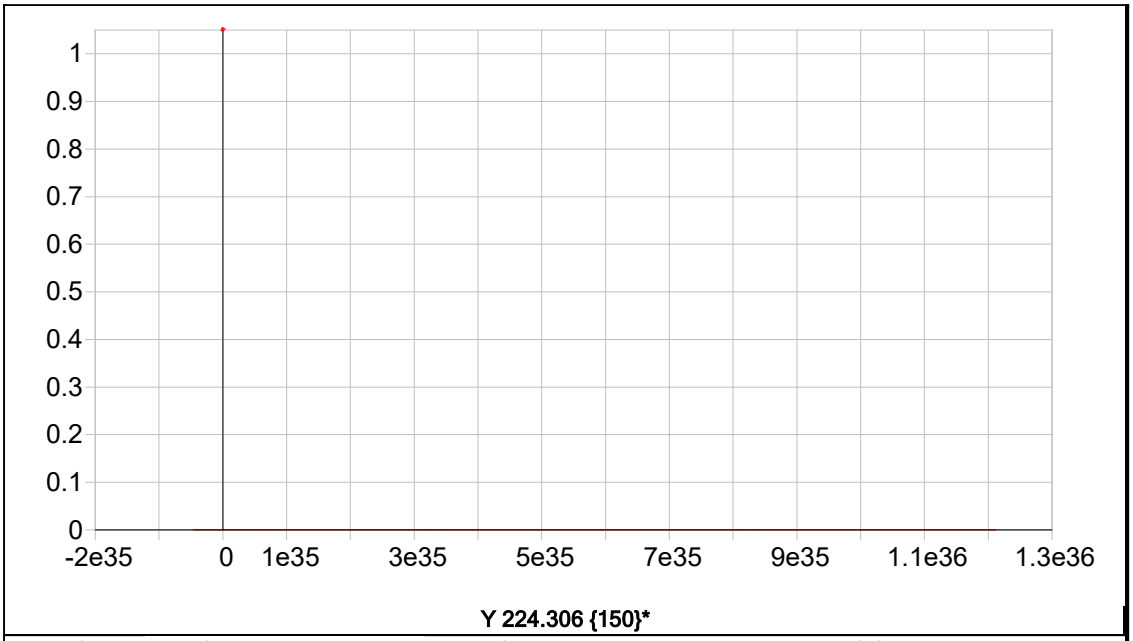
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

Date of Fit:	<not fit>		Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):		0.000000		Re-Slope:	1.000000	
A1 (Gain):		0.000000		Y-int:	0.000000	
A2 (Curvature):		0.000000				
n (Exponent):		1.000000				
Correlation:		0.000000		Status:	Warning	Zero Gain
Std Error of Est:		0.000000				
Predicted MDL:		n/a				
Predicted MQL:		n/a				

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

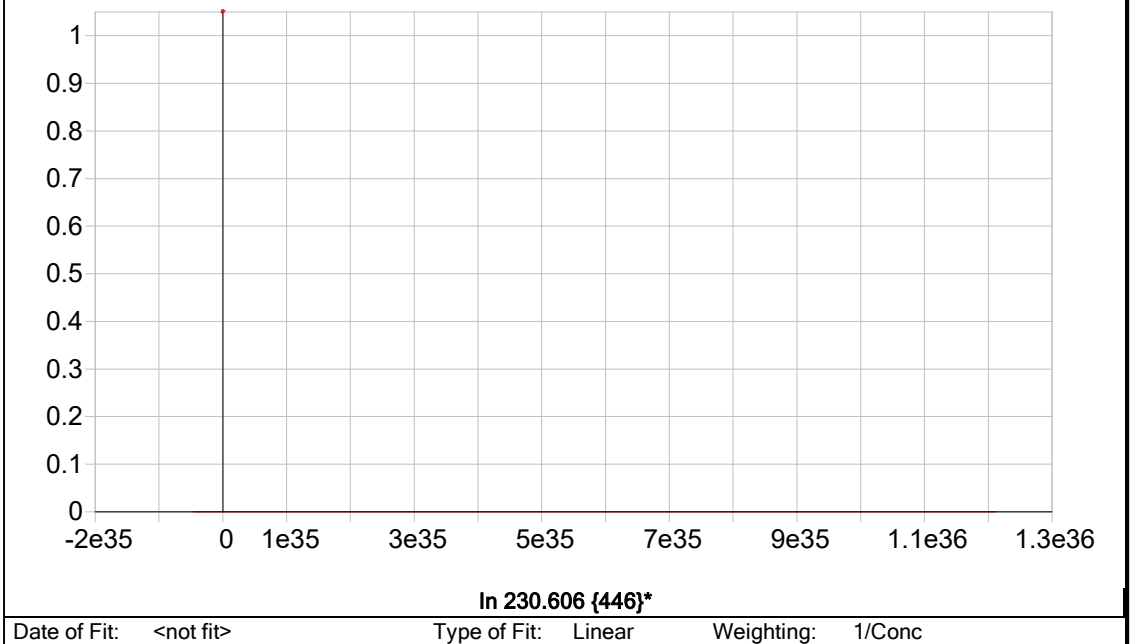


Y 224.306 {150}*

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

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

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



In 230.606 {446}*

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

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

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

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S0 Acquired: 12/23/2024 10:51:36 Type: Cal
Method: NON EPA-6010-200.7(v2547) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00013	-.00001	-.00021	.00044	.00031	-.00038	.04210	-.00055
Stddev	.00005	.00006	.00013	.00012	.00016	.00025	.00027	.00023
%RSD	39.188	479.36	61.315	26.613	51.973	65.094	.64823	41.022
#1	-.00014	.00006	-.00028	.00037	.00012	-.00020	.04180	-.00033
#2	-.00007	-.00004	-.00006	.00038	.00040	-.00067	.04214	-.00056
#3	-.00018	-.00005	-.00029	.00058	.00041	-.00029	.04234	-.00078

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00003	.00033	.00015	.00009	-.00017	-.00000	.00004	-.00009
Stddev	.00011	.00011	.00003	.00005	.00016	.00001	.00020	.00003
%RSD	453.75	33.835	18.626	55.612	92.194	401.76	562.91	37.315
#1	.00016	.00043	.00014	.00003	-.00014	.00000	.00026	-.00011
#2	-.00006	.00034	.00019	.00011	-.00035	-.00002	-.00012	-.00005
#3	-.00002	.00021	.00014	.00011	-.00003	.00001	-.00004	-.00012

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	-.00148	.00316	.00004	.00230	.00072	.00129	.00025
Stddev	.00005	.00005	.00027	.00020	.00022	.00017	.00010	.00011
%RSD	27.609	3.1692	8.5767	491.05	9.6168	23.203	8.1190	43.978
#1	-.00016	-.00153	.00285	.00020	.00235	.00053	.00119	.00037
#2	-.00014	-.00144	.00327	.00010	.00250	.00083	.00130	.00019
#3	-.00024	-.00148	.00336	-.00018	.00206	.00079	.00140	.00018

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	.00015	.00157	.00015	-.00156	.00013	.00650	-.00072
Stddev	.00003	.00019	.00001	.00003	.00005	.00041	.00025
%RSD	17.737	11.809	5.6686	2.1828	35.901	6.2821	34.669
#1	.00016	.00136	.00014	-.00159	.00018	.00604	-.00055
#2	.00018	.00164	.00015	-.00153	.00011	.00683	-.00060
#3	.00012	.00171	.00015	-.00158	.00010	.00664	-.00101

Sample Name: S0 Acquired: 12/23/2024 10:51:36 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	3317.4	70472.	12523.	2371.3	5114.2
Stddev	14.2	227.	13.	5.9	23.6
%RSD	.42846	.32203	.10032	.25053	.46052
#1	3319.9	70326.	12524.	2364.5	5120.1
#2	3330.3	70357.	12534.	2374.3	5134.2
#3	3302.2	70734.	12509.	2375.2	5088.2

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S1 Acquired: 12/23/2024 10:56:04 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	.00094	.00294	.00248	.00195	.00821	.00789	.35553	.02551
Stddev	.00004	.00007	.00009	.00010	.00021	.00042	.00220	.00032
%RSD	3.9043	2.4787	3.6006	5.2241	2.5596	5.2838	.61871	1.2498
#1	.00096	.00290	.00249	.00183	.00843	.00815	.35763	.02585
#2	.00096	.00291	.00238	.00202	.00802	.00810	.35324	.02522
#3	.00090	.00303	.00256	.00198	.00817	.00741	.35571	.02544

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	.12110	.00209	.02541	.01024	.00052	.01409	.03732
Stddev	.00007	.00075	.00006	.00008	.00016	.00001	.00012	.00025
%RSD	.55488	.62100	3.0780	.32375	1.6065	.97642	.86162	.67280
#1	.01342	.12148	.00216	.02535	.01040	.00051	.01395	.03761
#2	.01328	.12158	.00203	.02539	.01024	.00052	.01417	.03720
#3	.01330	.12023	.00209	.02551	.01007	.00052	.01415	.03715

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	.03128	.00189	.02675	.00501	.13250	.01167	.04877	.13498
Stddev	.00007	.00001	.00022	.00008	.00111	.00008	.00038	.00073
%RSD	.23213	.63940	.82071	1.5142	.84074	.68456	.77110	.54198
#1	.03128	.00190	.02650	.00510	.13143	.01176	.04915	.13414
#2	.03121	.00188	.02686	.00496	.13242	.01161	.04877	.13548
#3	.03136	.00190	.02690	.00498	.13365	.01166	.04840	.13532

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	.00460	.02221	.00200	-.00089	.00062	.02468	.27863
Stddev	.00009	.00029	.00002	.00011	.00001	.00079	.00169
%RSD	1.9753	1.3225	.78564	12.881	1.7169	3.1903	.60666
#1	.00465	.02254	.00201	-.00099	.00061	.02381	.28058
#2	.00450	.02211	.00198	-.00092	.00063	.02489	.27761
#3	.00466	.02197	.00201	-.00077	.00061	.02534	.27771

Sample Name: S1 Acquired: 12/23/2024 10:56:04 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	3253.9	69275.	12408.	2311.3	4961.2
Stddev	6.4	319.	86.	10.6	4.7
%RSD	.19548	.46009	.69491	.45888	.09461
#1	3258.9	68933.	12309.	2299.5	4963.4
#2	3255.9	69564.	12465.	2320.1	4964.4
#3	3246.7	69328.	12450.	2314.4	4955.8

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S2 Acquired: 12/23/2024 11:00:29 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	.04143	.06500	.19388	.06122	.12997	.12222	5.2226	.18226
Stddev	.00020	.00075	.00089	.00029	.00056	.00051	.0168	.00026
%RSD	.47182	1.1565	.45979	.47512	.43346	.41851	.32073	.14374
#1	.04150	.06557	.19490	.06149	.13023	.12163	5.2103	.18217
#2	.04158	.06527	.19339	.06126	.13036	.12257	5.2417	.18255
#3	.04121	.06415	.19333	.06091	.12933	.12245	5.2158	.18205

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	.91967	.25589	.03559	.35012	.10222	.00420	.28364	.07125
Stddev	.00418	.00051	.00028	.00175	.00052	.00005	.00184	.00065
%RSD	.45485	.20008	.79964	.50125	.50771	1.0908	.64928	.91616
#1	.92450	.25533	.03587	.35207	.10276	.00419	.28284	.07049
#2	.91752	.25600	.03559	.34964	.10173	.00426	.28575	.07157
#3	.91701	.25633	.03530	.34866	.10215	.00417	.28235	.07167

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	.32559	.06802	.05135	.05338	1.3424	.02349	.38651	.55241
Stddev	.00143	.00021	.00035	.00023	.0049	.00004	.00004	.00194
%RSD	.43965	.31278	.68741	.43732	.36187	.16933	.01138	.35117
#1	.32724	.06826	.05164	.05311	1.3478	.02354	.38653	.55465
#2	.32483	.06795	.05146	.05353	1.3383	.02348	.38654	.55123
#3	.32469	.06786	.05096	.05350	1.3411	.02346	.38646	.55135

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	.09519	.42586	.00456	.02487	.01873	.78185	11.567
Stddev	.00054	.00147	.00004	.00011	.00015	.00317	.035
%RSD	.57007	.34629	.84070	.44960	.79440	.40496	.30117
#1	.09582	.42417	.00453	.02499	.01885	.78141	11.537
#2	.09489	.42691	.00454	.02485	.01878	.78521	11.605
#3	.09487	.42649	.00460	.02477	.01857	.77892	11.560

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S2 Acquired: 12/23/2024 11:00:29 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	3176.9	67542.	12146.	2259.6	4753.2
Stddev	9.1	350.	38.	16.9	21.7
%RSD	.28643	.51813	.31529	.74824	.45726
#1	3166.4	67356.	12152.	2246.5	4728.3
#2	3182.4	67323.	12104.	2253.6	4768.6
#3	3181.9	67945.	12180.	2278.7	4762.6

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S3 Acquired: 12/23/2024 11:04:40 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	.12759	.19446	.60118	.18749	.40237	.37995	16.135	.55922
Stddev	.00036	.00131	.00071	.00037	.00112	.00298	.120	.00293
%RSD	.27917	.67335	.11871	.19776	.27953	.78490	.74236	.52353
#1	.12726	.19359	.60103	.18742	.40210	.37795	16.240	.55940
#2	.12797	.19382	.60196	.18716	.40140	.37853	16.005	.55620
#3	.12753	.19596	.60055	.18789	.40360	.38338	16.161	.56205

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	2.8663	.76058	.10807	1.0909	.31071	.01289	.87218	.21969
Stddev	.0010	.00545	.00022	.0012	.00043	.00011	.00584	.00121
%RSD	.03364	.71668	.20498	.11203	.13992	.82840	.66915	.54950
#1	2.8670	.75808	.10809	1.0909	.31090	.01278	.86581	.21888
#2	2.8652	.75683	.10785	1.0897	.31021	.01299	.87346	.21911
#3	2.8668	.76683	.10829	1.0922	.31101	.01289	.87727	.22107

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	1.0081	.20930	.15593	.16657	3.9616	.07223	1.1880	1.7015
Stddev	.0009	.00006	.00096	.00140	.0150	.00055	.0062	.0019
%RSD	.09320	.02944	.61286	.83972	.37985	.75890	.52278	.11054
#1	1.0078	.20925	.15534	.16539	3.9622	.07170	1.1866	1.7021
#2	1.0092	.20937	.15703	.16620	3.9463	.07280	1.1826	1.6994
#3	1.0074	.20928	.15541	.16811	3.9764	.07218	1.1948	1.7031

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	.29239	1.3193	.01413	.08136	.05807	2.4066	35.529
Stddev	.00040	.0074	.00001	.00011	.00022	.0137	.320
%RSD	.13792	.56130	.10299	.14043	.38547	.57102	.89932
#1	.29254	1.3121	.01411	.08123	.05821	2.3911	35.306
#2	.29193	1.3189	.01414	.08141	.05781	2.4111	35.386
#3	.29269	1.3269	.01414	.08145	.05820	2.4174	35.895

Sample Name: S3 Acquired: 12/23/2024 11:04:40 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	3126.6	66408.	12038.	2194.0	4590.8
Stddev	3.5	114.	68.	4.6	3.5
%RSD	.11207	.17109	.56855	.20867	.07566
#1	3122.8	66375.	12031.	2198.2	4589.9
#2	3127.3	66534.	12110.	2194.7	4587.9
#3	3129.7	66314.	11974.	2189.1	4594.7

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S4 Acquired: 12/23/2024 11:09:03 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	.24844	.35966	1.1467	.36268	.78204	.73988	31.215	1.0615
Stddev	.00033	.00367	.0001	.00084	.00055	.00263	.156	.0017
%RSD	.13442	1.0206	.00531	.23254	.06974	.35497	.49830	.15506
#1	.24807	.35683	1.1466	.36172	.78243	.73748	31.165	1.0616
#2	.24853	.35833	1.1467	.36303	.78142	.73946	31.091	1.0598
#3	.24872	.36380	1.1467	.36329	.78229	.74268	31.389	1.0631

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	5.5319	1.4634	.20316	2.1062	.59315	.02482	1.6758	.42688
Stddev	.0051	.0024	.00081	.0013	.00034	.00002	.0043	.00134
%RSD	.09285	.16061	.39943	.06122	.05786	.07938	.25659	.31479
#1	5.5272	1.4607	.20407	2.1050	.59283	.02480	1.6710	.42575
#2	5.5311	1.4646	.20290	2.1061	.59351	.02484	1.6771	.42653
#3	5.5374	1.4649	.20251	2.1075	.59310	.02482	1.6793	.42836

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	1.9372	.39849	.30413	.32417	7.5030	.13967	2.2745	3.2458
Stddev	.0017	.00093	.00123	.00139	.0287	.00020	.0078	.0058
%RSD	.08796	.23223	.40523	.42733	.38245	.14461	.34216	.18001
#1	1.9353	.39943	.30538	.32278	7.5327	.13990	2.2728	3.2395
#2	1.9376	.39758	.30408	.32416	7.4754	.13961	2.2676	3.2471
#3	1.9387	.39846	.30292	.32555	7.5010	.13951	2.2829	3.2510

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	.55852	2.5622	.02744	.16201	.11483	4.7274	68.755
Stddev	.00166	.0056	.00008	.00075	.00054	.0085	.365
%RSD	.29644	.22070	.30117	.46303	.47037	.18030	.53032
#1	.55712	2.5571	.02735	.16273	.11421	4.7230	68.787
#2	.55810	2.5611	.02747	.16207	.11509	4.7221	68.376
#3	.56035	2.5683	.02751	.16123	.11519	4.7373	69.103

Sample Name: S4 Acquired: 12/23/2024 11:09:03 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	3017.5	65477.	11824.	2131.0	4365.1
Stddev	4.3	160.	19.	11.8	3.0
%RSD	.14346	.24396	.15729	.55377	.06790
#1	3022.1	65301.	11817.	2117.4	4367.3
#2	3013.6	65517.	11845.	2138.5	4361.7
#3	3016.9	65613.	11809.	2137.1	4366.1

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: S5 Acquired: 12/23/2024 11:13:23 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	.53720	.78369	2.4327	.78491	1.6887	1.6532	68.121	2.2720
Stddev	.00183	.00885	.0060	.00269	.0073	.0024	.456	.0037
%RSD	.34064	1.1287	.24558	.34321	.42975	.14342	.67006	.16517
#1	.53527	.77476	2.4261	.78320	1.6847	1.6514	67.915	2.2678
#2	.53740	.79244	2.4341	.78351	1.6844	1.6559	67.805	2.2749
#3	.53892	.78387	2.4378	.78801	1.6971	1.6522	68.645	2.2733

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	11.788	3.1817	.42007	4.5190	1.2498	.05233	3.6182	.93643
Stddev	.034	.0021	.00171	.0138	.0052	.00020	.0127	.00242
%RSD	.29127	.06717	.40789	.30513	.41593	.37523	.35093	.25817
#1	11.750	3.1797	.41812	4.5050	1.2456	.05231	3.6094	.93377
#2	11.795	3.1840	.42134	4.5196	1.2481	.05215	3.6125	.93850
#3	11.817	3.1813	.42074	4.5326	1.2556	.05254	3.6328	.93701

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	4.1291	.84191	.65814	.71370	15.741	.30426	4.8866	6.9178
Stddev	.0121	.00208	.00196	.00103	.133	.00118	.0061	.0224
%RSD	.29193	.24727	.29730	.14454	.84660	.38776	.12504	.32430
#1	4.1171	.83958	.65810	.71287	15.597	.30327	4.8832	6.8990
#2	4.1289	.84253	.65620	.71485	15.860	.30394	4.8936	6.9118
#3	4.1412	.84360	.66011	.71336	15.765	.30557	4.8829	6.9426

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	1.1871	5.6335	.06056	.35268	.25508	10.599	146.85
Stddev	.0040	.0083	.00047	.00174	.00099	.020	1.32
%RSD	.33818	.14755	.78296	.49219	.39000	.18503	.90086
#1	1.1825	5.6270	.06002	.35074	.25397	10.581	145.95
#2	1.1894	5.6306	.06074	.35409	.25589	10.597	148.37
#3	1.1894	5.6428	.06091	.35321	.25537	10.620	146.23

Sample Name: S5 Acquired: 12/23/2024 11:13:23 Type: Cal
Method: NON EPA-6010-200.7(v2547) 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	2874.6	63771.	11302.	1994.8	4085.9
Stddev	10.4	101.	3.	11.5	14.8
%RSD	.36338	.15768	.02517	.57792	.36297
#1	2880.7	63880.	11299.	2005.2	4099.2
#2	2880.5	63753.	11302.	1982.4	4088.5
#3	2862.5	63682.	11304.	1996.8	4069.9

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICV01 Acquired: 12/23/2024 11:17:42 Type: Unk
Method: NON EPA-6010-200.7(v2547) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.046668	1.021422	1.016834	1.047319	1.011797	2.414150
Stddev	.002308	.022953	.000468	.002081	.003174	.011575
%RSD	.2205455	2.247117	.0460517	.1986561	.3137024	.4794633
#1	1.048661	1.037188	1.016528	1.048764	1.009935	2.402519
#2	1.044139	1.031989	1.017373	1.048259	1.015462	2.414263
#3	1.047204	.995089	1.016601	1.044934	1.009995	2.425668

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4835184	.4720804	.5075253	9.499332	.5315357	.5164000
Stddev	.0028857	.0030644	.0008369	.048754	.0010178	.0013768
%RSD	.5968197	.6491254	.1649034	.5132360	.1914825	.2666234
#1	.4817737	.4712220	.5071775	9.479676	.5304437	.5162263
#2	.4819322	.4695368	.5084800	9.463475	.5317053	.5178555
#3	.4868493	.4754825	.5069183	9.554846	.5324580	.5151183

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5296134	10.21711	.4898324	5.570607	.5187201	.2602798
Stddev	.0013706	.05097	.0051523	.038593	.0008988	.0006018
%RSD	.2587933	.4988225	1.051852	.6927881	.1732700	.2311968
#1	.5287258	10.16741	.4865601	5.560615	.5188082	.2597425
#2	.5311920	10.21468	.4871656	5.537994	.5195717	.2601669
#3	.5289225	10.26925	.4957715	5.613213	.5177806	.2609300

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.709721	.4696770	1.027989	9.947672	2.256397	2.527229
Stddev	.049463	.0024152	.001805	.020623	.006965	.006745
%RSD	.5094173	.5142243	.1756073	.2073161	.3086874	.2668885
#1	9.653609	.4696440	1.027654	9.925905	2.255571	2.528246
#2	9.747004	.4672786	1.026374	9.950190	2.249881	2.533408
#3	9.728550	.4721086	1.029938	9.966920	2.263738	2.520033

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICV01 Acquired: 12/23/2024 11:17:42 Type: Unk
Method: NON EPA-6010-200.7(v2547) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.419342	2.304835	F 2.024576	F .0069499	F -.005937	F -.003433
Stddev	.010759	.012921	.009790	.0007679	.001839	.000633
%RSD	.4447042	.5606186	.4835367	11.04825	30.97846	18.45089
#1	2.425313	2.298683	2.013574	.0076736	-.006516	-.002786
#2	2.425791	2.296140	2.032325	.0070317	-.003878	-.003461
#3	2.406921	2.319683	2.027831	.0061445	-.007418	-.004051

Elem	Sr4077
Units	ppm
Avg	F -.008191
Stddev	.000216
%RSD	2.632639
#1	-.007958
#2	-.008231
#3	-.008384

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3057.916	67298.69	12983.39	2152.849	4628.587
Stddev	6.037	48.30	65.58	9.194	7.993
%RSD	.1974277	.0717654	.5051225	.4270590	.1726928
#1	3062.503	67339.15	12968.83	2142.331	4634.589
#2	3051.076	67311.70	13055.03	2159.358	4619.513
#3	3060.169	67245.22	12926.31	2156.858	4631.658

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: LLICV01 Acquired: 12/23/2024 11:37:05 Type: Unk
Method: NON EPA-6010-200.7(v2547) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0205639	.0404542	.0119727	.0190454	.0499728	.0993134	.0903828
Stddev	.0012714	.0006038	.0005296	.0012259	.0004213	.0022352	.0002835
%RSD	6.182564	1.492515	4.423082	6.436486	.8429726	2.250635	.3137014
#1	.0191366	.0410760	.0113614	.0182828	.0500866	.0970720	.0902437
#2	.0215752	.0398702	.0122901	.0183940	.0503254	.1015423	.0901957
#3	.0209798	.0404166	.0122666	.0204595	.0495063	.0993258	.0907090

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057530	.0058881	1.966286	.0098685	.0291907	.0217970	.1045191
Stddev	.0000153	.0000348	.014348	.0005111	.0001205	.0002812	.0037265
%RSD	.2666851	.5912471	.7296896	5.179145	.4127031	1.289950	3.565398
#1	.0057699	.0058525	1.951672	.0103214	.0291225	.0219753	.1018064
#2	.0057491	.0059221	1.966834	.0093144	.0291199	.0214728	.1087682
#3	.0057400	.0058896	1.980351	.0099695	.0293298	.0219427	.1029828

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0195371	2.023845	.0392713	.0107527	1.799902	.0379542	.0457385
Stddev	.0001982	.013425	.0000525	.0001220	.010983	.0005644	.0000710
%RSD	1.014609	.6633272	.1337508	1.134679	.6101945	1.487142	.1552139
#1	.0197319	2.016349	.0392829	.0106789	1.788334	.0378067	.0457776
#2	.0195437	2.039343	.0392140	.0108935	1.810187	.0374781	.0457813
#3	.0193356	2.015842	.0393172	.0106856	1.801186	.0385777	.0456565

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.871866	.0987485	.2073608	.0394649	.0380604	.3538846	.0170295
Stddev	.013683	.0002738	.0002401	.0003917	.0005467	.0039480	.0014810
%RSD	.7309588	.2772272	.1157964	.9925166	1.436363	1.115618	8.696529
#1	1.856172	.0990263	.2075519	.0397876	.0374814	.3505335	.0185086
#2	1.881287	.0984790	.2070913	.0390291	.0385677	.3528836	.0155466
#3	1.878140	.0987403	.2074392	.0395780	.0381319	.3582368	.0170332

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: LLICV01 Acquired: 12/23/2024 11:37:05 Type: Unk
Method: NON EPA-6010-200.7(v2547) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0187600	.0164457	.0193496
Stddev	.0028931	.0004952	.0000447
%RSD	15.42185	3.011120	.2307579
#1	.0218430	.0158742	.0193234
#2	.0161042	.0167143	.0193242
#3	.0183328	.0167486	.0194011

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3092.054	67116.53	12625.02	2136.993	4814.065
Stddev	7.134	189.58	9.25	7.260	8.162
%RSD	.2307085	.2824663	.0732795	.3397290	.1695520
#1	3083.940	67153.81	12622.23	2141.688	4804.925
#2	3094.885	66911.08	12635.35	2128.630	4820.628
#3	3097.338	67284.71	12617.49	2140.659	4816.642

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICB01 Acquired: 12/23/2024 11:44:41 Type: Unk
Method: NON EPA-6010-200.7(v2547) 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	.0003202	-.000795	-.000209	-.001666	-.000224	-.001053	-.002207
Stddev	.0015936	.000407	.000255	.001328	.001120	.003023	.000216
%RSD	497.7556	51.13096	122.2057	79.70807	500.0400	287.1268	9.774188
#1	.0002669	-.000326	-.000487	-.003111	.000234	-.003009	-.002216
#2	.0019397	-.001018	.000015	-.000500	.000594	-.002578	-.002417
#3	-.001246	-.001041	-.000154	-.001386	-.001500	.002429	-.001986

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000027	-.000056	.0079168	-.000397	-.000048	-.000298	.0038212
Stddev	.0000686	.000064	.0108442	.000085	.000132	.000673	.0024161
%RSD	2576.588	113.6766	136.9781	21.43014	274.4614	226.0404	63.22714
#1	.0000419	-.000069	.0070291	-.000343	.000061	-.000959	.0011673
#2	-.000077	.000013	.0191775	-.000495	-.000195	-.000321	.0058931
#3	.000043	-.000113	-.002456	-.000352	-.000011	.000387	.0044033

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000230	.0002075	-.000083	.0004727	-.096496	.0004189	-.000173
Stddev	.000164	.0051334	.000181	.0001262	.007077	.0012357	.000519
%RSD	71.49055	2473.475	217.1609	26.70486	7.334095	295.0016	299.8260
#1	-.000064	-.003191	-.000219	.0005000	-.104209	-.000872	-.000697
#2	-.000393	-.002299	-.000152	.0003351	-.094977	.001590	.000340
#3	-.000233	.006113	.000122	.0005831	-.090301	.000539	-.000162

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.036041	.0015348	.0000745	-.000383	.0007762	.0037112	-.001408
Stddev	.033835	.0006117	.0001938	.000500	.0002854	.0081971	.003854
%RSD	93.87905	39.85665	260.3098	130.5566	36.76392	220.8725	273.7445
#1	-.075038	.0009281	-.000099	-.000959	.0009498	-.003028	-.001982
#2	-.014467	.0021514	.000283	-.000131	.0009319	.001325	.002701
#3	-.018620	.0015248	.000039	-.000059	.0004468	.012837	-.004942

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICB01 Acquired: 12/23/2024 11:44:41 Type: Unk
Method: NON EPA-6010-200.7(v2547) 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	.0027053	-.003162	-.000041
Stddev	.0007047	.000488	.000007
%RSD	26.04677	15.41883	17.47534
#1	.0034499	-.003615	-.000032
#2	.0020489	-.003226	-.000045
#3	.0026171	-.002646	-.000045

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3052.540	66064.23	12170.90	2107.827	4807.062
Stddev	9.621	327.20	66.57	12.262	12.765
%RSD	.3151744	.4952800	.5469637	.5817377	.2655436
#1	3042.248	65718.41	12107.59	2094.441	4792.342
#2	3061.308	66105.35	12164.81	2110.525	4813.775
#3	3054.064	66368.92	12240.31	2118.516	4815.071

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CRI01 Acquired: 12/23/2024 11:51:20 Type: Unk
Method: NON EPA-6010-200.7(v2547) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0192123	.0415006	.0110226	.0171051	.0496270	.1019219	.0920460
Stddev	.0023286	.0011483	.0009900	.0011704	.0004208	.0044927	.0003521
%RSD	12.12059	2.766850	8.981954	6.842425	.8479972	4.408022	.3825131
#1	.0189255	.0404095	.0117155	.0183324	.0491963	.0992444	.0923611
#2	.0216710	.0426986	.0114636	.0160014	.0500373	.0994126	.0921109
#3	.0170403	.0413937	.0098887	.0169816	.0496474	.1071087	.0916659

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057082	.0058113	1.941611	.0097390	.0292253	.0219147	.1003351
Stddev	.0000385	.0000347	.015149	.0001419	.0000882	.0004445	.0032763
%RSD	.6748218	.5971743	.7802227	1.456555	.3017744	2.028269	3.265371
#1	.0057192	.0058252	1.934049	.0096424	.0291407	.0214090	.0966613
#2	.0056654	.0058369	1.931731	.0099018	.0293167	.0220913	.1013895
#3	.0057401	.0057718	1.959052	.0096726	.0292183	.0222438	.1029543

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0195547	2.035508	.0393227	.0109703	1.814825	.0383908	.0414315
Stddev	.0004731	.016388	.0002567	.0001903	.005196	.0006630	.0000776
%RSD	2.419387	.8050981	.6528406	1.734496	.2862975	1.726875	.1872231
#1	.0192656	2.040562	.0395174	.0108606	1.809676	.0379294	.0413649
#2	.0201007	2.017188	.0390318	.0108602	1.820066	.0380925	.0415166
#3	.0192979	2.048773	.0394189	.0111900	1.814734	.0391505	.0414129

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.909290	.0989243	.2094269	.0385780	.0383071	.3553096	.0185824
Stddev	.024281	.0004303	.0004717	.0004945	.0001438	.0008004	.0013676
%RSD	1.271723	.4350215	.2252387	1.281902	.3754884	.2252645	7.359491
#1	1.881344	.0993244	.2088902	.0391138	.0381491	.3556247	.0199486
#2	1.925220	.0984691	.2097758	.0381391	.0383419	.3559046	.0185850
#3	1.921307	.0989795	.2096147	.0384810	.0384304	.3543997	.0172135

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CRI01 Acquired: 12/23/2024 11:51:20 Type: Unk
Method: NON EPA-6010-200.7(v2547) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0210378	.0167787	.0195441
Stddev	.0014437	.0006020	.0000601
%RSD	6.862678	3.587970	.3077003
#1	.0210524	.0164110	.0195300
#2	.0224742	.0174734	.0196100
#3	.0195868	.0164516	.0194922

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3067.566	66331.96	12484.18	2110.190	4785.680
Stddev	1.859	124.18	29.46	5.933	6.306
%RSD	.0605888	.1872035	.2359673	.2811761	.1317781
#1	3068.842	66243.56	12460.92	2103.782	4781.251
#2	3068.424	66473.93	12517.30	2115.493	4792.900
#3	3065.434	66278.39	12474.31	2111.295	4782.889

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSA01 Acquired: 12/23/2024 11:55:41 Type: Unk
Method: NON EPA-6010-200.7(v2547) 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	-.000829	.0101071	.0071931	-.012825	-.001860	244.3344
Stddev	.001881	.0001352	.0013130	.002319	.001164	1.8000
%RSD	226.7842	1.337720	18.25282	18.08192	62.58749	.7366818
#1	.000724	.0101712	.0067353	-.011040	-.001922	245.6497
#2	-.002920	.0101983	.0086737	-.015446	-.000666	245.0704
#3	-.000292	.0099518	.0061704	-.011988	-.002992	242.2830

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027075	.0012170	.0058282	227.1629	.0580268	.0018350
Stddev	.0003017	.0000682	.0000695	.5630	.0004388	.0002427
%RSD	11.14158	5.605203	1.192965	.2478485	.7562487	13.22782
#1	.0028557	.0012899	.0059027	227.5777	.0575750	.0015548
#2	.0023604	.0011547	.0057650	227.3891	.0584514	.0019816
#3	.0029063	.0012064	.0058169	226.5220	.0580539	.0019686

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0160827	104.2086	.0047863	247.3142	.0029810	.0032805
Stddev	.0005962	.2363	.0003727	.7838	.0000889	.0002124
%RSD	3.707004	.2267303	7.787542	.3169183	2.983693	6.474558
#1	.0164182	103.9507	.0044087	247.5871	.0029834	.0032097
#2	.0164355	104.4146	.0051540	247.9251	.0030687	.0035193
#3	.0153943	104.2606	.0047962	246.4305	.0028908	.0031126

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197308	.0060939	.0078167	.0305652	.0374817	-.000485
Stddev	.0184091	.0006428	.0002918	.0348504	.0014981	.000504
%RSD	93.30123	10.54841	3.732838	114.0199	3.996890	103.9976
#1	-.000215	.0053638	.0075430	-.009506	.0361823	-.000570
#2	.036069	.0063428	.0077836	.047392	.0371425	.000056
#3	.023338	.0065750	.0081237	.053809	.0391203	-.000941

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSA01 Acquired: 12/23/2024 11:55:41 Type: Unk
Method: NON EPA-6010-200.7(v2547) 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	-.002926	-.002003	.0103916	.0020179	-.017272	F -.039579
Stddev	.000673	.000287	.0069892	.0021610	.002971	.000490
%RSD	22.99292	14.33778	67.25844	107.0891	17.20024	1.236956
#1	-.002445	-.001941	.0179962	-.000152	-.016856	-.039026
#2	-.002637	-.001752	.0042489	.002037	-.020429	-.039958
#3	-.003695	-.002317	.0089297	.004169	-.014531	-.039752

Elem	Sr4077
Units	ppm
Avg	-.008088
Stddev	.000550
%RSD	6.794554
#1	-.007455
#2	-.008370
#3	-.008440

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2661.500	57300.64	12032.26	1838.757	3738.012
Stddev	7.359	195.75	65.78	6.873	11.778
%RSD	.2764873	.3416110	.5467087	.3738077	.3150865
#1	2654.890	57482.15	11970.39	1845.556	3730.634
#2	2669.429	57093.24	12025.04	1831.811	3751.595
#3	2660.181	57326.52	12101.36	1838.902	3731.807

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSAB01 Acquired: 12/23/2024 12:06:26 Type: Unk
Method: NON EPA-6010-200.7(v2548) 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	.1157207	.1118743	.0553617	.0374069	.6414283	240.5110
Stddev	.0027890	.0012991	.0027907	.0031781	.0043473	.8427
%RSD	2.410102	1.161194	5.040832	8.496061	.6777515	.3503975
#1	.1162099	.1112937	.0577339	.0355769	.6416217	240.0691
#2	.1127195	.1133624	.0522868	.0355671	.6456756	239.9810
#3	.1182328	.1109668	.0560643	.0410766	.6369875	241.4828

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4857193	.4774254	1.044243	225.1681	.5805274	.5257452
Stddev	.0026884	.0017651	.001400	.9829	.0021622	.0004767
%RSD	.5534825	.3697126	.1340513	.4365361	.3724475	.0906650
#1	.4827889	.4790367	1.044324	224.6111	.5830148	.5260203
#2	.4862974	.4755389	1.042804	224.5902	.5790977	.5251948
#3	.4880716	.4777007	1.045601	226.3031	.5794696	.5260205

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5652942	101.8328	.4780335	243.9122	1.037116	.2027092
Stddev	.0012074	.2336	.0020492	.9363	.001097	.0004387
%RSD	.2135797	.2293626	.4286677	.3838631	.1057865	.2164340
#1	.5639333	101.6207	.4769908	243.4514	1.037356	.2027784
#2	.5657125	101.7945	.4767153	243.2957	1.035919	.2022400
#3	.5662368	102.0831	.4803943	244.9896	1.038074	.2031093

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098029	.4779666	1.067202	-.025584	.8843854	1.008586
Stddev	.0319858	.0014261	.003036	.032601	.0049037	.002688
%RSD	326.2901	.2983796	.2845111	127.4262	.5544756	.2665252
#1	-.022636	.4763247	1.069671	-.060658	.8883241	1.005530
#2	.010729	.4788980	1.063812	-.019890	.8788931	1.009646
#3	.041316	.4786770	1.068124	.003794	.8859391	1.010583

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSAB01 Acquired: 12/23/2024 12:06:26 Type: Unk
Method: NON EPA-6010-200.7(v2548) 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	.9847902	.9040460	.8629507	F .0102523	F -.022808	F -.040035
Stddev	.0023144	.0041848	.0104799	.0026269	.011908	.000379
%RSD	.2350093	.4628931	1.214424	25.62273	52.20868	.9470389
#1	.9851416	.9002277	.8513856	.0119527	-.013572	-.039938
#2	.9823202	.9033905	.8656488	.0115776	-.018604	-.039714
#3	.9869087	.9085199	.8718177	.0072267	-.036247	-.040453

Elem	Sr4077
Units	ppm
Avg	F -.005314
Stddev	.000196
%RSD	3.693417
#1	-.005534
#2	-.005155
#3	-.005254

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2631.497	57965.66	12023.79	1846.636	3712.030
Stddev	2.160	206.33	51.20	9.240	1.305
%RSD	.0820953	.3559502	.4257978	.5003825	.0351432
#1	2632.808	57736.37	11976.39	1836.530	3710.576
#2	2629.004	58136.33	12078.09	1854.654	3713.097
#3	2632.679	58024.29	12016.89	1848.724	3712.418

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSADLX20 Acquired: 12/23/2024 12:10:38 Type: Unk
Method: NON EPA-6010-200.7(v2548) 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	-.001007	.0019234	.0009743	-.000654	-.001034	12.22618	-.002381
Stddev	.002736	.0003325	.0011155	.001364	.000375	.08404	.000500
%RSD	271.7071	17.28506	114.4961	208.5703	36.22367	.6873504	21.01771
#1	-.001049	.0015696	.0022608	-.000144	-.000958	12.32077	-.001927
#2	.001750	.0022294	.0003872	.000381	-.001441	12.19763	-.002918
#3	-.003722	.0019711	.0002750	-.002200	-.000703	12.16014	-.002299

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002245	.0001679	11.92693	.0026049	-.000084	.0035903	5.130327
Stddev	.0000428	.0000634	.11376	.0001582	.000144	.0003243	.043131
%RSD	19.07372	37.74076	.9537821	6.072397	170.3070	9.033955	.8407106
#1	.0002735	.0002406	12.05723	.0026808	-.000139	.0039527	5.176387
#2	.0001943	.0001246	11.87611	.0027109	.000079	.0033272	5.123703
#3	.0002056	.0001385	11.84744	.0024231	-.000192	.0034909	5.090891

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005965	12.26405	.0000271	.0006168	-.040794	.0005107	.0005092
Stddev	.0002847	.06695	.0001600	.0001795	.010690	.0006217	.0001045
%RSD	47.72694	.5459230	590.1622	29.10222	26.20389	121.7411	20.51870
#1	.0008866	12.33752	.0001552	.0008043	-.050755	-.000203	.0004834
#2	.0005853	12.24814	-.000152	.0005995	-.042126	.000932	.0006241
#3	.0003175	12.20648	.000078	.0004466	-.029501	.000803	.0004200

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.052623	.0026407	.0003027	-.001174	.0016734	.0011441	.0039586
Stddev	.016565	.0003323	.0002480	.000493	.0004287	.0085809	.0014526
%RSD	31.47850	12.58223	81.92820	42.01772	25.61674	750.0355	36.69476
#1	-.068841	.0029281	.0000177	-.000876	.0021353	.0105717	.0044617
#2	-.053298	.0027170	.0004694	-.001743	.0012884	-.000929	.0023214
#3	-.035731	.0022769	.0004209	-.000902	.0015964	-.006210	.0050928

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSADLX20 Acquired: 12/23/2024 12:10:38 Type: Unk
Method: NON EPA-6010-200.7(v2548) 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	.0017606	-.004922	-.000154
Stddev	.0016825	.000379	.000039
%RSD	95.55976	7.699633	25.38665
#1	.0024391	-.004935	-.000146
#2	.0029979	-.005293	-.000196
#3	-.000155	-.004536	-.000119

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2983.489	64989.44	12445.77	2078.446	4550.543
Stddev	2.890	160.42	25.23	14.876	2.562
%RSD	.0968510	.2468342	.2026871	.7157355	.0562983
#1	2980.609	64805.60	12418.89	2062.178	4549.820
#2	2986.388	65101.00	12468.92	2091.357	4553.389
#3	2983.470	65061.73	12449.52	2081.801	4548.421

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSABDLX20 Acquired: 12/23/2024 12:14:56 Type: Unk
Method: NON EPA-6010-200.7(v2548) 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	.0052089	.0047196	.0025150	.0021216	.0309406	11.97694	.0216502
Stddev	.0034224	.0004115	.0010199	.0003010	.0005970	.01374	.0004706
%RSD	65.70285	8.718739	40.55251	14.18843	1.929378	.1147241	2.173510
#1	.0091598	.0051817	.0017871	.0020496	.0302672	11.97846	.0212755
#2	.0031593	.0043927	.0036807	.0024521	.0314048	11.96250	.0214968
#3	.0033076	.0045845	.0020772	.0018631	.0311498	11.98985	.0221783

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0248215	.0510401	11.68630	.0299103	.0253375	.0293572	5.080377
Stddev	.0000653	.0001626	.04680	.0000245	.0003376	.0001508	.012053
%RSD	.2629248	.3185502	.4004887	.0819476	1.332496	.5137627	.2372558
#1	.0247689	.0509164	11.66938	.0299355	.0254177	.0294032	5.075856
#2	.0248011	.0509796	11.65031	.0299090	.0249670	.0294797	5.071239
#3	.0248946	.0512242	11.73921	.0298865	.0256278	.0291888	5.094038

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0249707	12.02362	.0514725	.0103400	-.046154	.0242246	.0528859
Stddev	.0000919	.10454	.0003249	.0001843	.019099	.0013331	.0005429
%RSD	.3681071	.8694386	.6312123	1.782265	41.38124	5.502976	1.026468
#1	.0248699	11.92319	.0514083	.0101306	-.067807	.0248488	.0534889
#2	.0249920	12.01583	.0511845	.0104777	-.031705	.0251310	.0524362
#3	.0250500	12.13183	.0518247	.0104115	-.038948	.0226939	.0527325

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.052907	.0463593	.0512117	.0468290	.0465745	.0453392	-.001689
Stddev	.035160	.0002549	.0004409	.0004896	.0001667	.0027198	.001919
%RSD	66.45595	.5498701	.8609543	1.045491	.3580324	5.998897	113.6245
#1	-.093307	.0462524	.0507702	.0464808	.0467391	.0430970	-.001471
#2	-.036174	.0466503	.0512130	.0473888	.0465788	.0483648	.000112
#3	-.029238	.0461753	.0516520	.0466172	.0464057	.0445559	-.003708

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: ICSABDLX20 Acquired: 12/23/2024 12:14:56 Type: Unk
Method: NON EPA-6010-200.7(v2548) 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	.0008776	-.005700	-.000196
Stddev	.0022366	.000866	.000032
%RSD	254.8635	15.19917	16.08704
#1	.0034233	-.005484	-.000188
#2	-.000772	-.004962	-.000231
#3	-.000019	-.006654	-.000169

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3019.706	64933.29	12608.04	2056.079	4630.813
Stddev	5.273	25.57	12.47	2.921	10.103
%RSD	.1746329	.0393810	.0988683	.1420539	.2181599
#1	3017.087	64925.97	12615.99	2053.705	4630.033
#2	3025.776	64912.18	12614.47	2055.191	4641.283
#3	3016.255	64961.73	12593.67	2059.341	4621.123

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV01 Acquired: 12/23/2024 12:31:08 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	5.108580	5.152270	4.885046	5.188829	5.172448	9.866024	9.705877
Stddev	.015656	.046251	.009066	.023736	.019833	.040803	.055879
%RSD	.3064719	.8976826	.1855948	.4574382	.3834368	.4135750	.5757206
#1	5.113380	5.118288	4.895294	5.197285	5.180986	9.827949	9.649036
#2	5.091086	5.133580	4.878069	5.162023	5.149776	9.861028	9.707856
#3	5.121274	5.204941	4.881775	5.207178	5.186582	9.909095	9.760740

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2324022	2.446211	23.81704	.9975233	2.455973	1.278796	5.083006
Stddev	.0012798	.004866	.02606	.0038166	.004340	.003791	.032931
%RSD	.5506864	.1989351	.1094262	.3826104	.1767282	.2964396	.6478610
#1	.2338209	2.450131	23.81910	.9984277	2.460148	1.281410	5.044987
#2	.2320512	2.440765	23.79001	1.000806	2.451484	1.274448	5.102606
#3	.2313346	2.447738	23.84202	.993336	2.456285	1.280530	5.101425

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.380121	23.57530	2.466052	1.251670	25.21130	2.438978	2.453363
Stddev	.011411	.03799	.003653	.002721	.08834	.004332	.015676
%RSD	.4794225	.1611485	.1481515	.2174259	.3504098	.1776321	.6389471
#1	2.377785	23.56118	2.469268	1.250826	25.11777	2.434649	2.451005
#2	2.370058	23.54639	2.462080	1.254713	25.29333	2.438970	2.470083
#3	2.392518	23.61833	2.466810	1.249470	25.22280	2.443314	2.438999

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.69538	4.675824	5.152649	4.934064	4.839172	5.163217	4.909322
Stddev	.19379	.017547	.020465	.008326	.022510	.060560	.015511
%RSD	.7542007	.3752766	.3971808	.1687397	.4651536	1.172908	.3159578
#1	25.47432	4.696030	5.159545	4.934614	4.820631	5.093769	4.905983
#2	25.77578	4.667014	5.129626	4.925477	4.832668	5.190858	4.895752
#3	25.83603	4.664427	5.168775	4.942101	4.864217	5.205025	4.926231

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV01 Acquired: 12/23/2024 12:31:08 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	4.906970	4.898821	4.939025
Stddev	.006169	.030179	.015533
%RSD	.1257119	.6160485	.3144946
#1	4.906194	4.868041	4.949070
#2	4.901226	4.900061	4.921134
#3	4.913490	4.928360	4.946871

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2830.981	62804.50	12020.71	1940.411	4189.042
Stddev	8.828	198.52	48.22	8.800	7.862
%RSD	.3118482	.3160977	.4011257	.4535057	.1876845
#1	2824.274	62774.34	11965.98	1943.284	4180.903
#2	2840.983	62622.77	12039.19	1930.534	4196.594
#3	2827.686	63016.37	12056.95	1947.416	4189.630

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB01 Acquired: 12/23/2024 12:35:20 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000721	-.000118	-.000059	.0007783	-.000887	.0037143	-.004380
Stddev	.001285	.001144	.000582	.0006205	.000464	.0031184	.000488
%RSD	178.1847	970.5965	990.2731	79.72827	52.30732	83.95463	11.15107
#1	-.000686	-.001224	-.000178	.0014026	-.001153	.0069233	-.003830
#2	.000546	-.000191	.000574	.0007705	-.001155	.0006952	-.004763
#3	-.002024	.001061	-.000572	.0001617	-.000351	.0035246	-.004549

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000540	-.000017	.0070791	-.000185	-.000060	.0006226	.0024782
Stddev	.0000297	.000071	.0008470	.000182	.000237	.0002248	.0028528
%RSD	55.04755	412.1703	11.96516	98.37277	398.6069	36.11509	115.1182
#1	.0000379	.000061	.0078451	-.000032	-.000330	.0003734	.0051557
#2	.0000358	-.000037	.0061694	-.000385	.000038	.0008102	.0028012
#3	.0000883	-.000075	.0072228	-.000136	.000113	.0006842	-.000522

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000532	-.002496	-.000038	.0007101	-.070336	.0002004	-.000118
Stddev	.0001912	.001774	.000185	.0001513	.014701	.0004082	.000289
%RSD	359.5688	71.08621	487.1908	21.30514	20.90105	203.6694	244.2703
#1	.0002739	-.000789	.000001	.0005967	-.087018	-.000015	.000164
#2	-.000055	-.004330	-.000239	.0006517	-.064713	-.000055	-.000105
#3	-.000059	-.002368	.000125	.0008819	-.059276	.000671	-.000414

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.031479	.0062391	.0002550	-.000327	.0008684	.0012640	.0016780
Stddev	.005127	.0005291	.0003396	.000437	.0002932	.0051642	.0002636
%RSD	16.28749	8.479939	133.1778	133.7194	33.76314	408.5501	15.70747
#1	-.026047	.0056420	.0002980	-.000732	.0008191	.0038032	.0017790
#2	-.036233	.0064253	.0005710	-.000385	.0011830	.0046671	.0018761
#3	-.032156	.0066498	-.000104	.000136	.0006029	-.004678	.0013788

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB01 Acquired: 12/23/2024 12:35:20 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000899	-.003228	.0001540
Stddev	.002443	.000653	.0000485
%RSD	271.6778	20.22946	31.47085
#1	-.001141	-.003552	.0002045
#2	-.003213	-.002476	.0001497
#3	.001656	-.003655	.0001078

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2971.934	66361.46	12904.74	2060.116	4748.659
Stddev	7.529	130.69	36.34	4.873	6.346
%RSD	.2533397	.1969299	.2815878	.2365355	.1336320
#1	2965.673	66356.75	12893.33	2058.648	4741.352
#2	2969.842	66494.44	12875.47	2065.554	4751.839
#3	2980.288	66233.19	12945.41	2056.145	4752.786

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165789BL Acquired: 12/23/2024 12:51:12 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000747	-.000580	-.000670	.0012354	-.001262	.0006721	-.006840
Stddev	.000514	.001276	.001052	.0010099	.000916	.0018438	.000286
%RSD	68.82692	219.8957	157.0637	81.74630	72.55360	274.3508	4.188086
#1	-.000870	-.001785	.000502	.0013805	-.000495	-.001402	-.006676
#2	-.000182	.000757	-.000979	.0021648	-.001016	.002124	-.006673
#3	-.001188	-.000712	-.001532	.0001608	-.002277	.001295	-.007171

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000146	-.000037	.0047360	-.000244	.0000867	-.000242	.0028928
Stddev	.0000096	.000115	.0038326	.000623	.0000216	.000429	.0004567
%RSD	65.49722	311.0471	80.92599	254.7261	24.95453	176.9708	15.78708
#1	.0000246	-.000001	.0034210	-.000764	.0001047	-.000353	.0025389
#2	.0000139	-.000165	.0090530	.000446	.0000928	-.000605	.0034084
#3	.0000055	.000056	.0017339	-.000415	.0000627	.000231	.0027312

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000265	-.010433	.0001069	.0009493	-.050194	-.000714	-.000306
Stddev	.000109	.003891	.0003319	.0002130	.033666	.000755	.000278
%RSD	41.18919	37.29664	310.4462	22.43639	67.07163	105.7291	90.77209
#1	-.000281	-.007400	-.000156	.0008681	-.088411	.000022	-.000473
#2	-.000365	-.014821	-.000004	.0007888	-.037250	-.000678	.000015
#3	-.000149	-.009079	.000480	.0011909	-.024921	-.001486	-.000460

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.056305	.0007310	.0000208	-.000170	.0003236	-.000483	.0009493
Stddev	.015473	.0006408	.0002252	.000221	.0002790	.001016	.0018527
%RSD	27.48044	87.65889	1081.322	129.9395	86.22102	210.2354	195.1588
#1	-.073555	.0014605	-.000212	.000077	.0002334	-.000323	-.001132
#2	-.051712	.0002594	.000237	-.000238	.0001008	.000443	.001561
#3	-.043650	.0004730	.000038	-.000350	.0006366	-.001570	.002419

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165789BL Acquired: 12/23/2024 12:51:12 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.001283	-.001463	-.000059
Stddev	.002426	.000087	.000015
%RSD	189.0644	5.975445	25.59486
#1	-.002955	-.001409	-.000042
#2	-.002395	-.001416	-.000066
#3	.001500	-.001564	-.000071

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2914.587	65994.12	12905.68	2032.729	4697.335
Stddev	11.428	43.49	42.14	9.207	21.305
%RSD	.3921093	.0658933	.3265235	.4529371	.4535649
#1	2908.958	65970.73	12865.21	2030.694	4687.827
#2	2907.065	65967.34	12949.31	2024.711	4682.439
#3	2927.738	66044.30	12902.52	2042.784	4721.739

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165789BS Acquired: 12/23/2024 12:55:34 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.8399444	2.036704	.9797185	2.086650	.8306710	1.925683
Stddev	.0036136	.029566	.0020281	.015348	.0040289	.003997
%RSD	.4302171	1.451640	.2070123	.7355129	.4850183	.2075572
#1	.8373918	2.004118	.9805748	2.070629	.8260713	1.923453
#2	.8383622	2.061814	.9774027	2.088099	.8323681	1.923299
#3	.8440792	2.044182	.9811781	2.101222	.8335738	1.930298

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1858813	.1812406	.1935327	.9719478	.4016049	.1981592
Stddev	.0009791	.0005836	.0006211	.0080698	.0008229	.0007242
%RSD	.5267386	.3220063	.3209156	.8302758	.2048966	.3654524
#1	.1849905	.1808580	.1934702	.9627270	.4025110	.1980098
#2	.1857238	.1809513	.1929452	.9753939	.4009042	.1975213
#3	.1869296	.1819123	.1941826	.9777225	.4013996	.1989464

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3241477	3.085072	.1901214	1.809626	.4992387	.0764819
Stddev	.0012221	.019174	.0011148	.013734	.0018427	.0001696
%RSD	.3770300	.6215047	.5863844	.7589621	.3691007	.2217824
#1	.3229639	3.063017	.1891378	1.796069	.4982594	.0763977
#2	.3240744	3.097782	.1898940	1.809277	.4980924	.0766771
#3	.3254048	3.094417	.1913324	1.823531	.5013643	.0763708

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.896820	.2851022	.2006264	10.14960	.2714266	.4243108
Stddev	.007136	.0017706	.0013060	.03220	.0010808	.0020592
%RSD	.2463257	.6210294	.6509743	.3172956	.3981807	.4853047
#1	2.889136	.2830954	.2020866	10.12687	.2715323	.4223275
#2	2.898087	.2857671	.1995699	10.18645	.2702969	.4241664
#3	2.903237	.2864440	.2002227	10.13548	.2724507	.4264383

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165789BS Acquired: 12/23/2024 12:55:34 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6844205	.1911739	.7901446	5.542041	F -.008871	.1990090
Stddev	.0027067	.0004528	.0120873	.016596	.002899	.0014056
%RSD	.3954721	.2368661	1.529754	.2994534	32.68111	.7063205
#1	.6817397	.1908703	.7842886	5.524489	-.011005	.1975288
#2	.6843693	.1909571	.7821007	5.544156	-.010038	.1991722
#3	.6871524	.1916944	.8040445	5.557478	-.005570	.2003258

Elem	Sr4077
Units	ppm
Avg	.1962233
Stddev	.0007281
%RSD	.3710366
#1	.1954659
#2	.1962859
#3	.1969180

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2890.056	65593.70	12783.99	2027.221	4508.556
Stddev	8.461	130.18	38.80	9.870	12.123
%RSD	.2927568	.1984657	.3034948	.4868543	.2688794
#1	2898.064	65443.90	12794.88	2017.087	4513.699
#2	2890.899	65657.75	12816.18	2027.774	4517.259
#3	2881.205	65679.44	12740.91	2036.803	4494.709

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165659BL Acquired: 12/23/2024 12:59:36 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.001229	.0009692	.0009009	-.001309	.0000155	.0060498	-.006872
Stddev	.001011	.0014011	.0011531	.000269	.0011379	.0008211	.000396
%RSD	82.22486	144.5548	127.9955	20.55937	7353.816	13.57315	5.760992
#1	-.000275	-.000557	.0010730	-.001618	.0004553	.0069448	-.007236
#2	-.001124	.001266	.0019583	-.001132	.0008678	.0058736	-.006929
#3	-.002289	.002198	-.000329	-.001176	-.001277	.0053311	-.006451

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001890	-.000005	.0004797	.0003568	.0000475	.0002238	.0021492
Stddev	.0000488	.000060	.0045543	.0001443	.0002200	.0003852	.0019134
%RSD	25.83152	1115.651	949.4062	40.44288	462.6466	172.0901	89.02644
#1	.0001741	.000060	-.003772	.0002347	.0001990	.0006679	.0042777
#2	.0002436	-.000058	.005286	.0005160	.0001484	-.000019	.0005719
#3	.0001495	-.000018	-.000075	.0003196	-.000205	.000023	.0015981

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000452	.0082245	.0001916	.0008354	-.061927	.0000575	-.000097
Stddev	.0001740	.0088180	.0000321	.0001057	.018313	.0004904	.000147
%RSD	384.8512	107.2166	16.77146	12.64881	29.57235	852.5870	152.3478
#1	-.000152	.0094124	.0002205	.0007134	-.078531	.0004676	-.000178
#2	.000108	.0163883	.0001974	.0008929	-.064966	-.000486	-.000185
#3	.000179	-.001127	.0001570	.0008998	-.042285	.000191	.000073

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.046928	.0009570	.0000995	.0002096	.0009271	.0005349	.0034648
Stddev	.021154	.0004686	.0001188	.0003127	.0003433	.0085397	.0028251
%RSD	45.07827	48.96391	119.3925	149.1493	37.02499	1596.367	81.53668
#1	-.028213	.0006259	.0002359	-.000121	.0011330	-.006761	.0057816
#2	-.069880	.0014931	.0000445	.000500	.0005309	.009928	.0042952
#3	-.042690	.0007519	.0000182	.000250	.0011175	-.001562	.0003176

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165659BL Acquired: 12/23/2024 12:59:36 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000751	-.001835	.0001695
Stddev	.002190	.000259	.0000287
%RSD	291.5336	14.10279	16.95902
#1	-.002762	-.001548	.0002022
#2	-.001074	-.002051	.0001579
#3	.001583	-.001907	.0001483

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2907.109	65928.03	12944.15	2033.127	4662.930
Stddev	6.423	58.86	15.37	11.411	5.452
%RSD	.2209452	.0892744	.1187219	.5612565	.1169219
#1	2902.307	65895.80	12930.80	2020.136	4656.812
#2	2904.614	65995.96	12960.95	2041.527	4664.704
#3	2914.405	65892.32	12940.71	2037.720	4667.274

Sample Name: PB165659BS Acquired: 12/23/2024 13:03:59 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.8241285	1.984155	.9631900	2.047062	.8216180	1.926172
Stddev	.0007894	.027407	.0009044	.005626	.0018020	.004540
%RSD	.0957853	1.381291	.0938990	.2748454	.2193281	.2356880
#1	.8235685	2.007160	.9622161	2.053477	.8225267	1.927172
#2	.8250314	1.953832	.9640036	2.044746	.8227849	1.921216
#3	.8237856	1.991474	.9633502	2.042964	.8195426	1.930129

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1855155	.1813693	.1897961	.9880940	.4017942	.1950889
Stddev	.0005734	.0003860	.0002642	.0137579	.0010620	.0003414
%RSD	.3090737	.2128161	.1392196	1.392370	.2643215	.1750173
#1	.1848534	.1809574	.1894941	.9803006	.4028651	.1948509
#2	.1858480	.1817228	.1899848	1.003979	.4017762	.1954801
#3	.1858451	.1814276	.1899094	.980002	.4007413	.1949357

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3206672	3.057960	.1891684	1.810030	.4906676	.0760957
Stddev	.0007824	.008908	.0009989	.010362	.0005042	.0003745
%RSD	.2439756	.2912978	.5280738	.5724909	.1027498	.4921373
#1	.3214181	3.061887	.1883321	1.800791	.4906652	.0757320
#2	.3198568	3.064230	.1902745	1.808064	.4911729	.0760750
#3	.3207268	3.047764	.1888984	1.821234	.4901646	.0764801

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.869129	.2858521	.2020521	10.12348	.2709167	.4231200
Stddev	.011078	.0010435	.0004784	.02717	.0010701	.0004587
%RSD	.3861197	.3650298	.2367685	.2683680	.3949782	.1084147
#1	2.865343	.2856865	.2016281	10.12691	.2699494	.4229814
#2	2.860440	.2869684	.2019576	10.09476	.2707346	.4227465
#3	2.881604	.2849013	.2025707	10.14877	.2720662	.4236320

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165659BS Acquired: 12/23/2024 13:03:59 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6722687	.1904566	.7817860	5.374756	F -.008876	.1997838
Stddev	.0006415	.0005811	.0078090	.011059	.002190	.0003886
%RSD	.0954266	.3051253	.9988672	.2057667	24.66786	.1945044
#1	.6722380	.1897862	.7854883	5.372806	-.007953	.1999035
#2	.6716430	.1907660	.7870552	5.364801	-.011376	.1993494
#3	.6729250	.1908175	.7728144	5.386661	-.007300	.2000984

Elem	Sr4077
Units	ppm
Avg	.1960558
Stddev	.0004185
%RSD	.2134561
#1	.1955777
#2	.1962341
#3	.1963556

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2917.010	65105.00	12667.86	1993.118	4592.053
Stddev	.225	212.86	39.23	3.389	3.579
%RSD	.0077262	.3269506	.3096571	.1700415	.0779371
#1	2917.061	64928.09	12648.40	1991.673	4596.180
#2	2916.763	65045.68	12642.16	1990.690	4590.175
#3	2917.205	65341.23	12713.01	1996.990	4589.803

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5330-04 Acquired: 12/23/2024 13:08:02 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.009346	-.008065	.0041077	.0040289	-.000615	.2981283	.2381641
Stddev	.002205	.002070	.0005759	.0024346	.001500	.0016829	.0015037
%RSD	23.59632	25.66292	14.01890	60.42950	243.9977	.5645041	.6313632
#1	-.011888	-.005698	.0047607	.0012536	.000651	.2966722	.2387609
#2	-.007947	-.008962	.0038901	.0058048	-.000224	.2999709	.2392778
#3	-.008203	-.009535	.0036724	.0050283	-.002272	.2977418	.2364536

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000095	-.000140	7.382579	.0039292	.0004097	.0212737	.2495018
Stddev	.000074	.000096	.015992	.0001342	.0001894	.0004865	.0057406
%RSD	77.42136	68.43621	.2166187	3.415612	46.21901	2.286935	2.300824
#1	-.000045	-.000245	7.365810	.0038123	.0004618	.0207249	.2430037
#2	-.000060	-.000057	7.384266	.0040757	.0005676	.0214439	.2516170
#3	-.000179	-.000119	7.397660	.0038996	.0001997	.0216522	.2538846

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0790785	.7434850	.0016186	.0008176	399.8020	.0015275	.1207538
Stddev	.0004881	.0154953	.0000694	.0000333	4.0467	.0007294	.0002541
%RSD	.6172262	2.084145	4.288445	4.067453	1.012170	47.74894	.2104606
#1	.0796145	.7571438	.0016631	.0007865	398.0160	.0023665	.1209972
#2	.0789614	.7266465	.0015386	.0008527	396.9555	.0011718	.1204902
#3	.0786596	.7466648	.0016542	.0008137	404.4344	.0010443	.1207739

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4502560	.0608757	.0005967	.0012074	.0052517	.7225802	.0237991
Stddev	.0131244	.0004381	.0000276	.0004749	.0007700	.0027139	.0008865
%RSD	2.914886	.7196970	4.628335	39.33149	14.66274	.3755865	3.724881
#1	.4351183	.0608007	.0005688	.0014558	.0061386	.7195302	.0234034
#2	.4584489	.0613465	.0006240	.0006598	.0047530	.7234819	.0231794
#3	.4572007	.0604799	.0005972	.0015064	.0048634	.7247285	.0248145

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5330-04 Acquired: 12/23/2024 13:08:02 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7323923	-.006302	.0493989
Stddev	.0024215	.000772	.0001991
%RSD	.3306276	12.25432	.4029842
#1	.7306779	-.007194	.0496097
#2	.7351624	-.005866	.0493727
#3	.7313365	-.005847	.0492142

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2594.608	58611.03	12751.57	1791.368	3905.306
Stddev	3.190	136.89	36.08	6.465	5.714
%RSD	.1229413	.2335579	.2829169	.3609132	.1463087
#1	2598.251	58637.97	12710.25	1791.747	3909.908
#2	2592.318	58732.45	12767.66	1797.635	3907.100
#3	2593.254	58462.67	12776.80	1784.721	3898.911

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5337-03 Acquired: 12/23/2024 13:12:31 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.010881	-.008450	-.000125	.0030891	.0008483	-.045100	.0852908
Stddev	.001944	.001225	.000826	.0034132	.0003753	.008991	.0008168
%RSD	17.86613	14.50029	658.4563	110.4920	44.23744	19.93533	.9576860
#1	-.008921	-.009262	-.000728	.0046873	.0012130	-.035992	.0856590
#2	-.010912	-.009047	-.000465	.0054101	.0004633	-.053969	.0858586
#3	-.012809	-.007041	.000816	-.000830	.0008685	-.045338	.0843547

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000118	-.000111	150.7720	.0004940	-.000475	.0018632	.0113103
Stddev	.000009	.000041	.1404	.0000710	.000068	.0012361	.0028231
%RSD	7.902773	37.30522	.0931461	14.36430	14.40666	66.34335	24.96049
#1	-.000129	-.000088	150.8291	.0004766	-.000449	.0029634	.0084775
#2	-.000112	-.000086	150.8749	.0004334	-.000424	.0021004	.0141236
#3	-.000114	-.000159	150.6120	.0005721	-.000553	.0005257	.0113297

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036984	.1834162	.0006202	.0007117	336.8922	.0043544	.0083424
Stddev	.0000726	.0140212	.0001378	.0001891	1.5793	.0008006	.0005664
%RSD	1.963488	7.644477	22.22657	26.57389	.4687843	18.38603	6.788998
#1	.0037745	.1897423	.0007500	.0006561	335.6855	.0037965	.0089846
#2	.0036299	.1931598	.0004755	.0005567	336.3115	.0039949	.0081286
#3	.0036907	.1673466	.0006350	.0009224	338.6796	.0052717	.0079142

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.768859	.0279625	.0020456	-.003107	-.003454	5.177351	.0087769
Stddev	.026389	.0006696	.0001950	.000689	.000136	.022204	.0003613
%RSD	1.491887	2.394640	9.531386	22.17263	3.940355	.4288596	4.115884
#1	1.757094	.0277332	.0022210	-.002854	-.003445	5.164791	.0084310
#2	1.750398	.0287167	.0018357	-.003886	-.003323	5.164274	.0091518
#3	1.799084	.0274377	.0020801	-.002580	-.003595	5.202988	.0087479

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5337-03 Acquired: 12/23/2024 13:12:31 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	9.703073	-.029018	.3707885
Stddev	.069825	.000133	.0003846
%RSD	.7196207	.4567918	.1037298
#1	9.651509	-.029030	.3703937
#2	9.675177	-.028881	.3708097
#3	9.782534	-.029145	.3711621

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2531.224	58378.01	12866.31	1771.572	3780.820
Stddev	10.263	205.97	34.92	11.720	19.176
%RSD	.4054708	.3528257	.2714385	.6615776	.5071816
#1	2543.032	58531.01	12835.83	1780.608	3802.662
#2	2526.193	58459.21	12858.68	1775.778	3773.041
#3	2524.446	58143.81	12904.42	1758.328	3766.756

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5338-01 Acquired: 12/23/2024 13:16:55 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.008977	-.006400	.0032793	.0034118	.0000119	.0169706	.1515634
Stddev	.003047	.000919	.0014044	.0024520	.0004007	.0030296	.0009798
%RSD	33.93929	14.36100	42.82469	71.87023	3356.721	17.85210	.6464851
#1	-.005601	-.005674	.0025734	.0013067	.0004738	.0141213	.1508602
#2	-.009808	-.006091	.0023680	.0028244	-.000243	.0201530	.1511473
#3	-.011523	-.007433	.0048966	.0061041	-.000195	.0166374	.1526826

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000127	-.000185	.3263525	-.000225	-.000530	.0016474	.0244227
Stddev	.000040	.000082	.0232464	.000336	.000150	.0002714	.0022918
%RSD	31.19096	44.19816	7.123089	148.8724	28.27288	16.47608	9.384058
#1	-.000115	-.000244	.3160586	-.000227	-.000361	.0014526	.0240949
#2	-.000172	-.000219	.3100304	.000111	-.000645	.0019574	.0223124
#3	-.000096	-.000092	.3529685	-.000560	-.000585	.0015321	.0268607

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063029	.0407567	.0006181	.0007196	330.4060	-.000073	.1726461
Stddev	.0000602	.0058560	.0001244	.0001287	2.2991	.000880	.0013014
%RSD	.9558213	14.36812	20.12946	17.88103	.6958301	1210.709	.7537802
#1	.0063025	.0461184	.0006077	.0008455	328.0629	.000877	.1711446
#2	.0062429	.0345077	.0007474	.0005883	330.4969	-.000234	.1733459
#3	.0063634	.0416439	.0004992	.0007250	332.6583	-.000860	.1734479

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1841335	.0389746	.0004180	.0001605	.0004255	.0330372	.0074854
Stddev	.0125492	.0004598	.0001318	.0006942	.0002540	.0019271	.0011834
%RSD	6.815275	1.179786	31.52131	432.4383	59.70308	5.833188	15.80963
#1	.1887730	.0395054	.0004180	-.000254	.0005414	.0351949	.0083005
#2	.1699252	.0387217	.0005497	-.000227	.0006008	.0324296	.0061280
#3	.1937024	.0386968	.0002862	.000962	.0001342	.0314871	.0080277

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5338-01 Acquired: 12/23/2024 13:16:55 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.5457275	-.005949	.0036244
Stddev	.0034355	.000328	.0000709
%RSD	.6295251	5.514833	1.955007
#1	.5460484	-.006231	.0035697
#2	.5489913	-.006028	.0035992
#3	.5421428	-.005589	.0037044

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2647.798	59290.78	12892.87	1804.634	4023.347
Stddev	7.277	132.54	35.42	10.416	5.177
%RSD	.2748489	.2235476	.2747203	.5771648	.1286754
#1	2652.207	59280.76	12853.41	1813.309	4022.963
#2	2651.788	59163.53	12903.27	1793.083	4028.706
#3	2639.398	59428.05	12921.92	1807.512	4018.373

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5338-02 Acquired: 12/23/2024 13:21:22 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.003491	-.001511	-.000694	.0029628	-.001529	.0109956	-.007932
Stddev	.001249	.000968	.000884	.0010687	.000705	.0019635	.000391
%RSD	35.78578	64.07006	127.3113	36.06969	46.08389	17.85751	4.923877
#1	-.004553	-.000488	-.001437	.0026092	-.002329	.0131148	-.007669
#2	-.002114	-.001631	.000283	.0041634	-.001256	.0106339	-.007747
#3	-.003807	-.002413	-.000930	.0021158	-.001002	.0092380	-.008381

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000054	-.000166	.1450933	-.000444	-.000100	.0026287	.0119699
Stddev	.000029	.000080	.0011803	.000203	.000192	.0000448	.0002728
%RSD	53.04514	48.22374	.8134714	45.83062	191.1400	1.702838	2.279168
#1	-.000034	-.000218	.1462342	-.000675	-.000072	.0026799	.0122602
#2	-.000041	-.000074	.1451685	-.000294	-.000305	.0025969	.0119306
#3	-.000087	-.000206	.1438772	-.000361	.000076	.0026093	.0117189

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017764	.0084002	-.000131	.0011371	-.052904	-.000311	.0310770
Stddev	.0002961	.0039327	.000150	.0001828	.020675	.000978	.0001969
%RSD	16.66894	46.81725	114.1982	16.07684	39.08029	314.1493	.6336155
#1	.0014498	.0049767	-.000169	.0013460	-.029119	-.001441	.0308841
#2	.0018521	.0075282	-.000258	.0010584	-.066571	.000254	.0312777
#3	.0020273	.0126958	.000034	.0010067	-.063021	.000253	.0310692

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.136454	-.001145	.0002696	.0000277	.0003218	.0089187	.0075924
Stddev	.021291	.000146	.0000821	.0001103	.0004490	.0057568	.0011753
%RSD	15.60303	12.76613	30.43297	397.6192	139.5386	64.54728	15.47982
#1	-.122193	-.001180	.0002354	.0001005	-.000108	.0032282	.0085273
#2	-.126241	-.000985	.0003633	.0000819	.000788	.0087883	.0079770
#3	-.160927	-.001271	.0002102	-.000099	.000285	.0147396	.0062730

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5338-02 Acquired: 12/23/2024 13:21:22 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.2869590	-.005259	.0000263
Stddev	.0037730	.000721	.0000168
%RSD	1.314812	13.71534	63.65159
#1	.2827533	-.004535	.0000453
#2	.2880775	-.005977	.0000134
#3	.2900463	-.005266	.0000204

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2907.316	68402.89	13742.13	2059.958	4767.470
Stddev	5.326	468.79	44.05	20.219	9.338
%RSD	.1831854	.6853336	.3205756	.9815460	.1958741
#1	2904.601	68796.05	13691.36	2077.300	4769.978
#2	2913.452	68528.54	13770.31	2064.825	4775.297
#3	2903.895	67884.08	13764.71	2037.750	4757.133

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5341-02 Acquired: 12/23/2024 13:25:43 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.010132	-.005869	.3081836	.0012564	.0020454	.0456459	.4083550
Stddev	.002079	.000889	.0011437	.0025516	.0003298	.0020086	.0033060
%RSD	20.52407	15.15074	.3711082	203.0958	16.12524	4.400410	.8095840
#1	-.011216	-.006883	.3093786	-.000512	.0017065	.0467890	.4067137
#2	-.011445	-.005500	.3080730	.004182	.0020646	.0468221	.4121604
#3	-.007734	-.005223	.3070992	.000099	.0023653	.0433266	.4061908

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000219	.0395768	25.26716	.0024123	.0125670	.0181028	6.507708
Stddev	.0000183	.0001023	.12991	.0002692	.0001912	.0003561	.007958
%RSD	83.62795	.2583645	.5141353	11.15815	1.521849	1.967252	.1222831
#1	.0000205	.0396326	25.15842	.0021504	.0125886	.0177531	6.507652
#2	.0000409	.0394588	25.41101	.0023981	.0123658	.0184650	6.515694
#3	.0000043	.0396391	25.23204	.0026882	.0127465	.0180902	6.499779

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5239810	3.623451	.0251835	.0009463	357.1757	.0000879	6.433924
Stddev	.0039454	.017902	.0000923	.0004131	.9809	.0006001	.045195
%RSD	.7529647	.4940650	.3663506	43.65469	.2746132	682.8823	.7024462
#1	.5220421	3.613932	.0250875	.0012787	357.8014	-.000145	6.420923
#2	.5285207	3.612320	.0252715	.0010765	357.6804	.000770	6.396654
#3	.5213803	3.644102	.0251916	.0004838	356.0452	-.000361	6.484194

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.93117	.0575548	-.000748	-.001343	.0006387	2.063173	.0201160
Stddev	.02475	.0006858	.000162	.000333	.0002124	.016982	.0033713
%RSD	.1128429	1.191517	21.64629	24.83108	33.25637	.8230995	16.75939
#1	21.92398	.0577276	-.000872	-.001407	.0007965	2.049776	.0198798
#2	21.95871	.0581376	-.000808	-.001639	.0007225	2.057471	.0168690
#3	21.91081	.0567992	-.000565	-.000982	.0003972	2.082272	.0235992

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5341-02 Acquired: 12/23/2024 13:25:43 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.9763017	-.004484	.0994749
Stddev	.0035076	.000566	.0007760
%RSD	.3592727	12.63202	.7800991
#1	.9783671	-.004139	.0990033
#2	.9782862	-.004175	.1003706
#3	.9722517	-.005138	.0990510

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2540.759	58506.38	13021.47	1758.198	3826.582
Stddev	13.842	59.20	51.08	6.418	11.753
%RSD	.5448050	.1011938	.3922495	.3650349	.3071381
#1	2555.287	58438.02	13050.56	1752.943	3838.897
#2	2539.265	58539.79	12962.49	1765.351	3825.361
#3	2527.724	58541.33	13051.35	1756.301	3815.487

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02 Acquired: 12/23/2024 13:39:03 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.009905	-.007356	.0067762	.0063876	.0007587	.1013903	.4664316
Stddev	.003326	.000633	.0004983	.0025494	.0004596	.0028009	.0036061
%RSD	33.57669	8.605825	7.353477	39.91103	60.58157	2.762455	.7731321
#1	-.013153	-.006897	.0062108	.0035524	.0011769	.1046123	.4662556
#2	-.010057	-.008078	.0071510	.0071194	.0002666	.0995363	.4701225
#3	-.006506	-.007093	.0069669	.0084912	.0008325	.1000223	.4629166

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001009	.0005487	14.95274	-.000197	-.000277	.0199711	.0608634
Stddev	.0000213	.0000257	.08583	.000275	.000179	.0000722	.0016855
%RSD	21.06822	4.679039	.5740415	139.4624	64.59963	.3614322	2.769350
#1	.0001048	.0005393	14.98775	-.000422	-.000182	.0200003	.0603124
#2	.0000779	.0005290	15.01555	-.000278	-.000484	.0198889	.0595224
#3	.0001199	.0005778	14.85494	.000109	-.000166	.0200242	.0627555

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1603249	4.674857	.0046584	.0008764	433.7294	-.000103	.2266536
Stddev	.0018020	.024835	.0001944	.0001950	2.3103	.000269	.0018736
%RSD	1.123971	.5312506	4.172935	22.25083	.5326690	261.0903	.8266473
#1	.1610262	4.675660	.0046101	.0010573	434.2307	-.000360	.2245396
#2	.1616708	4.699281	.0048725	.0009020	435.7478	-.000125	.2281089
#3	.1582777	4.649630	.0044928	.0006698	431.2095	.000177	.2273125

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.486741	.0536387	.0005910	.0001140	.0016951	1.351233	.0802781
Stddev	.016668	.0005013	.0000888	.0007127	.0002423	.013737	.0038976
%RSD	.6702900	.9346659	15.02431	625.0347	14.29583	1.016650	4.855107
#1	2.470036	.0530895	.0006676	.0007416	.0015403	1.351172	.0833970
#2	2.486813	.0540720	.0004937	-.000661	.0015707	1.365000	.0759087
#3	2.503373	.0537544	.0006117	.000261	.0019744	1.337526	.0815285

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02 Acquired: 12/23/2024 13:39:03 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6594556	-.006232	.0914751
Stddev	.0020077	.000412	.0006264
%RSD	.3044535	6.614979	.6847999
#1	.6571488	-.005955	.0915462
#2	.6608085	-.006036	.0920630
#3	.6604096	-.006706	.0908162

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2532.777	57645.35	12948.00	1734.685	3813.751
Stddev	10.667	33.02	88.68	12.752	13.807
%RSD	.4211511	.0572900	.6849306	.7351289	.3620382
#1	2530.127	57607.73	12905.77	1727.068	3814.436
#2	2544.518	57669.56	12888.33	1727.580	3827.203
#3	2523.684	57658.77	13049.91	1749.407	3799.614

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV02 Acquired: 12/23/2024 13:43:28 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	5.358494	5.232249	4.991716	5.481228	5.451889	10.17155	10.11433
Stddev	.006117	.081836	.015021	.014637	.008017	.02622	.08794
%RSD	.1141565	1.564067	.3009259	.2670436	.1470467	.2577324	.8694871
#1	5.365558	5.299439	4.983425	5.486072	5.452189	10.15913	10.06550
#2	5.354982	5.141111	4.982666	5.464783	5.443726	10.20166	10.21585
#3	5.354944	5.256198	5.009055	5.492829	5.459751	10.15384	10.06164

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2295214	2.498199	23.99836	1.003007	2.515304	1.336708	5.262340
Stddev	.0012627	.005903	.15044	.002622	.005511	.003039	.016548
%RSD	.5501421	.2363028	.6268753	.2613890	.2191153	.2273551	.3144586
#1	.2284997	2.496615	23.85324	1.003939	2.512093	1.336594	5.274258
#2	.2309331	2.493249	24.15360	1.005036	2.512150	1.333728	5.243446
#3	.2291315	2.504733	23.98825	1.000047	2.521668	1.339803	5.269316

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.409206	23.59319	2.530092	1.272712	26.61068	2.490792	2.445771
Stddev	.009978	.17112	.005101	.002317	.16503	.013680	.022329
%RSD	.4141795	.7252786	.2016002	.1820725	.6201557	.5492313	.9129533
#1	2.398075	23.41921	2.527618	1.273951	26.63902	2.479911	2.449193
#2	2.417349	23.76129	2.526699	1.274146	26.43332	2.506150	2.466192
#3	2.412194	23.59908	2.535958	1.270039	26.75970	2.486315	2.421929

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.26546	4.644616	5.352562	5.040625	4.965656	5.376765	4.959823
Stddev	.05919	.021754	.011934	.014728	.015383	.028983	.011771
%RSD	.2171036	.4683713	.2229594	.2921788	.3097786	.5390333	.2373170
#1	27.32403	4.621729	5.352176	5.039238	4.948187	5.353881	4.969877
#2	27.20566	4.665024	5.340826	5.026640	4.977175	5.367058	4.946876
#3	27.26670	4.647095	5.364685	5.055998	4.971604	5.409355	4.962718

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV02 Acquired: 12/23/2024 13:43:28 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	5.065216	5.127415	5.129600
Stddev	.024125	.012146	.031823
%RSD	.4762956	.2368812	.6203747
#1	5.065592	5.114072	5.125183
#2	5.040906	5.130344	5.163400
#3	5.089152	5.137828	5.100217

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2686.715	61587.88	12076.76	1877.099	4015.795
Stddev	4.029	157.59	53.78	21.592	8.004
%RSD	.1499474	.2558816	.4453075	1.150265	.1993016
#1	2689.959	61462.91	12103.03	1865.948	4020.727
#2	2687.981	61535.82	12014.89	1863.362	4020.098
#3	2682.206	61764.92	12112.35	1901.986	4006.560

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB02 Acquired: 12/23/2024 13:47:39 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.002919	-.001365	.0000053	-.000209	-.000320	.0063628	-.006776
Stddev	.000486	.001081	.0002696	.000114	.000364	.0010125	.000417
%RSD	16.64493	79.19025	5095.965	54.52111	113.4692	15.91287	6.151590
#1	-.002358	-.000514	-.000064	-.000153	-.000125	.0055202	-.007198
#2	-.003193	-.000999	-.000223	-.000133	-.000740	.0060822	-.006365
#3	-.003206	-.002581	.000303	-.000340	-.000096	.0074860	-.006765

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000560	.0000711	.0036633	-.000146	.0000463	-.000309	-.002085
Stddev	.0000616	.0000396	.0023405	.000092	.0002503	.000237	.005685
%RSD	109.8955	55.69917	63.89160	62.72220	540.6667	76.68343	272.6374
#1	.0000732	.0001164	.0030904	-.000236	.0003031	-.000066	-.006097
#2	.0001071	.0000543	.0016624	-.000053	.0000327	-.000539	.004420
#3	-.000012	.0000427	.0062371	-.000149	-.000197	-.000321	-.004579

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000109	-.000196	.0000970	.0011443	.0369126	-.000720	-.000189
Stddev	.000034	.006133	.0000866	.0001461	.0156847	.000210	.000092
%RSD	31.67608	3133.766	89.31105	12.76328	42.49147	29.19971	48.84090
#1	-.000114	-.006634	.0001703	.0012757	.0294648	-.000598	-.000284
#2	-.000072	.000469	.0000014	.0011703	.0263393	-.000600	-.000184
#3	-.000140	.005578	.0001192	.0009870	.0549336	-.000963	-.000099

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0919105	.0062151	.0004151	-.000293	.0008825	.0020266	.0049057
Stddev	.0389702	.0001315	.0002218	.000315	.0002770	.0027790	.0010573
%RSD	42.40013	2.115436	53.43872	107.3812	31.38478	137.1272	21.55145
#1	.0481528	.0062198	.0006675	.000068	.0009889	.0050011	.0053588
#2	.1046997	.0060813	.0002511	-.000438	.0010906	-.000503	.0056609
#3	.1228791	.0063441	.0003268	-.000510	.0005681	.001582	.0036974

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB02 Acquired: 12/23/2024 13:47:39 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0000451	-.001269	.0000648
Stddev	.0027562	.000551	.0000253
%RSD	6114.229	43.42222	38.97780
#1	-.002474	-.000635	.0000850
#2	.002989	-.001634	.0000365
#3	-.000380	-.001539	.0000731

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2887.346	64615.97	12803.17	1960.435	4712.278
Stddev	3.455	253.30	9.89	18.288	7.902
%RSD	.1196700	.3920066	.0772235	.9328298	.1676806
#1	2891.165	64335.58	12811.98	1939.737	4720.748
#2	2886.438	64828.26	12805.05	1974.407	4710.983
#3	2884.436	64684.06	12792.47	1967.161	4705.105

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01 Acquired: 12/23/2024 13:52:00 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0861863	.0314591	1.761849	-.076954	.0188700	183.2307
Stddev	.0018346	.0026198	.004206	.003656	.0002662	.7039
%RSD	2.128658	8.327530	.2387088	4.751052	1.410595	.3841819
#1	.0852970	.0344626	1.762369	-.072933	.0191171	182.4267
#2	.0849658	.0296450	1.757407	-.077852	.0189048	183.5295
#3	.0882961	.0302697	1.765770	-.080077	.0185882	183.7360

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.159484	.0184001	.0665401	36.15529	.3640654	.4196121
Stddev	.022084	.0000684	.0004255	.05264	.0019781	.0004883
%RSD	.3585303	.3715643	.6394907	.1456022	.5433256	.1163580
#1	6.135010	.0184630	.0662159	36.18601	.3647497	.4190630
#2	6.177923	.0183273	.0670219	36.09450	.3618361	.4199973
#3	6.165519	.0184099	.0663825	36.18535	.3656105	.4197761

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6897832	442.6093	F 41.34850	96.46743	.9686421	.0184063
Stddev	.0030139	3.0767	.08612	.11301	.0026176	.0005653
%RSD	.4369339	.6951186	.2082761	.1171440	.2702372	3.071149
#1	.6864205	445.8942	41.41340	96.35191	.9666565	.0190583
#2	.6906880	439.7951	41.25080	96.47266	.9676613	.0181057
#3	.6922410	442.1385	41.38130	96.57774	.9716085	.0180548

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.026955	.4815357	2.356778	25.41766	.1987329	.0028323
Stddev	.027149	.0006804	.015212	.05833	.0040651	.0002454
%RSD	.6741864	.1412979	.6454640	.2294730	2.045510	8.665358
#1	4.058285	.4821073	2.351636	25.48459	.2028964	.0025672
#2	4.010345	.4817167	2.344804	25.39068	.1947739	.0030517
#3	4.012234	.4807831	2.373895	25.37771	.1985286	.0028778

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01 Acquired: 12/23/2024 13:52:00 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0587955	3.325077	5.640514	F 12.13443	2.338580	.7542672
Stddev	.0019360	.008142	.006656	.01795	.006536	.0030524
%RSD	3.292740	.2448553	.1180121	.1479182	.2795027	.4046819
#1	.0580791	3.334473	5.644743	12.14542	2.333735	.7577029
#2	.0573198	3.320111	5.643959	12.14416	2.346014	.7518681
#3	.0609875	3.320646	5.632841	12.11372	2.335992	.7532306

Elem	Sr4077
Units	ppm
Avg	-.159817
Stddev	.002185
%RSD	1.367189
#1	-.162214
#2	-.157937
#3	-.159301

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3510.347	81582.73	17580.47	2457.932	3689.323
Stddev	4.571	88.13	23.87	15.016	6.844
%RSD	.1302093	.1080256	.1357684	.6109022	.1854987
#1	3509.283	81561.27	17564.63	2452.950	3692.781
#2	3515.356	81679.60	17607.92	2474.805	3693.747
#3	3506.402	81507.31	17568.85	2446.040	3681.440

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01DLX5 Acquired: 12/23/2024 13:58:54 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0209655	.0061465	.3789338	-.018945	.0036079	47.53064	1.615349
Stddev	.0017891	.0005166	.0020047	.001393	.0009279	.03726	.004859
%RSD	8.533496	8.404573	.5290278	7.355322	25.71835	.0784011	.3008231
#1	.0197264	.0055710	.3785351	-.017804	.0026434	47.53318	1.619564
#2	.0230166	.0065702	.3771584	-.018533	.0044943	47.56656	1.610034
#3	.0201534	.0062982	.3811079	-.020498	.0036859	47.49216	1.616448

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051747	.0085866	9.810417	.0993414	.0863278	.1925470	120.4890
Stddev	.0001033	.0001645	.021556	.0003926	.0003965	.0000487	.1481
%RSD	1.995788	1.915587	.2197299	.3952474	.4593326	.0252776	.1229083
#1	.0051850	.0087387	9.814574	.0995149	.0867639	.1925030	120.5170
#2	.0050666	.0084120	9.787084	.0996174	.0859889	.1925993	120.3289
#3	.0052724	.0086089	9.829591	.0988919	.0862307	.1925387	120.6210

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.70961	25.20926	.2040986	.0054699	.9525057	.1276351	.6411716
Stddev	.03121	.04302	.0005047	.0001907	.0140828	.0012274	.0011267
%RSD	.2665581	.1706428	.2472852	3.485552	1.478502	.9616893	.1757305
#1	11.74273	25.17036	.2045507	.0054741	.9362992	.1272173	.6416606
#2	11.68074	25.20196	.2035541	.0052772	.9617655	.1266710	.6419713
#3	11.70536	25.25547	.2041910	.0056584	.9594524	.1290169	.6398830

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.220891	.0573943	.0005724	.0112962	.8879735	1.419317	2.430942
Stddev	.032111	.0005964	.0003659	.0009770	.0002923	.004314	.004009
%RSD	.5161844	1.039175	63.92754	8.648666	.0329174	.3039737	.1649337
#1	6.199930	.0568400	.0001500	.0101683	.8877158	1.415692	2.435281
#2	6.204884	.0573175	.0007755	.0118434	.8879134	1.418171	2.427375
#3	6.257860	.0580254	.0007918	.0118770	.8882911	1.424089	2.430168

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01DLX5 Acquired: 12/23/2024 13:58:54 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4387870	.1894101	-.046413
Stddev	.0031885	.0013021	.000212
%RSD	.7266547	.6874434	.4572359
#1	.4380549	.1900084	-.046169
#2	.4360282	.1879164	-.046521
#3	.4422778	.1903055	-.046550

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2980.728	67017.36	13815.00	2041.474	4177.192
Stddev	10.168	219.69	60.11	10.568	13.548
%RSD	.3411321	.3278062	.4350963	.5176823	.3243271
#1	2970.795	66887.32	13758.70	2034.308	4161.859
#2	2991.116	66893.76	13808.00	2036.504	4187.545
#3	2980.274	67271.00	13878.30	2053.611	4182.172

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV03 Acquired: 12/23/2024 14:07:22 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	5.341906	5.186907	4.937472	5.479522	5.492506	10.21047	10.21066
Stddev	.003715	.063115	.010247	.009797	.002846	.05893	.09806
%RSD	.0695495	1.216813	.2075424	.1787866	.0518083	.5771918	.9603403
#1	5.342144	5.253396	4.945095	5.484540	5.493725	10.17111	10.09852
#2	5.338077	5.127819	4.925823	5.468233	5.489254	10.18209	10.28026
#3	5.345496	5.179504	4.941498	5.485793	5.494538	10.27823	10.25321

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2301634	2.470846	23.97673	1.002685	2.498366	1.338377	5.197875
Stddev	.0018473	.004707	.18286	.004552	.005830	.003740	.012537
%RSD	.8026109	.1904946	.7626526	.4539789	.2333339	.2794735	.2411929
#1	.2285164	2.471848	23.80076	1.001882	2.499575	1.338275	5.183786
#2	.2298131	2.465718	23.96366	.998587	2.492027	1.334689	5.202037
#3	.2321608	2.474970	24.16577	1.007585	2.503496	1.342168	5.207801

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.395668	23.40895	2.508543	1.270516	26.11744	2.493330	2.449576
Stddev	.016208	.13736	.004694	.005042	.12280	.014572	.012910
%RSD	.6765572	.5867979	.1871139	.3968412	.4701965	.5844448	.5270487
#1	2.377311	23.26815	2.510327	1.270864	26.25923	2.479441	2.464445
#2	2.401691	23.41610	2.503219	1.265310	26.04499	2.492049	2.443073
#3	2.408002	23.54259	2.512083	1.275375	26.04811	2.508500	2.441210

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.24673	4.661732	5.392769	4.981811	4.989282	5.405926	4.873570
Stddev	.15848	.026929	.011956	.018946	.022473	.045520	.030149
%RSD	.5816623	.5776510	.2217049	.3803002	.4504189	.8420378	.6186228
#1	27.30556	4.634073	5.395139	4.995000	4.967156	5.385897	4.907914
#2	27.06725	4.663257	5.379806	4.960101	4.988604	5.373855	4.851466
#3	27.36739	4.687865	5.403363	4.990333	5.012086	5.458026	4.861331

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV03 Acquired: 12/23/2024 14:07:22 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	4.994778	5.169267	5.163238
Stddev	.021710	.019109	.024865
%RSD	.4346508	.3696596	.4815769
#1	5.004760	5.159608	5.134653
#2	4.969872	5.156916	5.175200
#3	5.009701	5.191277	5.179861

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2673.176	61228.81	11971.86	1829.508	4027.510
Stddev	5.484	306.73	71.38	6.845	9.544
%RSD	.2051561	.5009515	.5962199	.3741498	.2369662
#1	2674.387	61190.82	12038.19	1821.830	4026.237
#2	2677.953	61552.76	11981.07	1834.973	4037.627
#3	2667.187	60942.85	11896.33	1831.720	4018.667

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB03 Acquired: 12/23/2024 14:11:32 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000207	.0007776	-.000164	.0013306	.0004296	.0085352	-.005475
Stddev	.001601	.0004794	.000774	.0005324	.0006177	.0046245	.000625
%RSD	775.0026	61.64821	473.4519	40.01423	143.7799	54.18140	11.41200
#1	.000115	.0002748	.000248	.0014439	.0010968	.0138141	-.004994
#2	-.001944	.0008285	-.001057	.0017972	.0003145	.0065927	-.005251
#3	.001209	.0012295	.000318	.0007506	-.000122	.0051988	-.006182

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000895	.0001685	.0155271	-.000136	.0000660	.0003230	.0072239
Stddev	.0000407	.0001001	.0037097	.000376	.0002614	.0000395	.0004964
%RSD	45.46968	59.39057	23.89190	277.2178	396.1083	12.22249	6.872065
#1	.0000959	.0001890	.0120252	.000289	.0002899	.0002999	.0077959
#2	.0000460	.0002568	.0151415	-.000269	.0001293	.0003005	.0069055
#3	.0001267	.0000598	.0194145	-.000426	-.000221	.0003686	.0069702

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009119	-.000970	.0000957	.0011072	.0068866	-.000130	.0000313
Stddev	.0004202	.006241	.0003845	.0002305	.0138382	.001279	.0001053
%RSD	46.08282	643.2719	401.8375	20.81521	200.9440	986.0678	336.3063
#1	.0013578	.006230	.0002008	.0008425	-.005692	.001020	-.000087
#2	.0008546	-.004850	-.000330	.0012638	.004641	.000098	.000115
#3	.0005233	-.004290	.000417	.0012152	.021710	-.001507	.000066

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1300654	.0087835	.0007148	.0004083	.0019449	.0108777	.0011527
Stddev	.0166699	.0010792	.0002199	.0003454	.0003702	.0045787	.0031919
%RSD	12.81656	12.28708	30.76691	84.59891	19.03413	42.09265	276.8983
#1	.1205953	.0098019	.0008716	.0005259	.0023333	.0159572	.0044321
#2	.1202876	.0088964	.0008095	.0000194	.0019052	.0070678	.0009700
#3	.1493134	.0076523	.0004634	.0006794	.0015961	.0096080	-.001944

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB03 Acquired: 12/23/2024 14:11:32 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0011991	-.001914	.0014068
Stddev	.0008069	.000631	.0003546
%RSD	67.28973	32.98447	25.21000
#1	.0021253	-.001390	.0017611
#2	.0008225	-.002614	.0014076
#3	.0006494	-.001736	.0010518

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2819.299	64613.37	12942.09	1961.709	4547.616
Stddev	7.759	174.95	30.88	7.920	5.755
%RSD	.2751940	.2707643	.2386067	.4037526	.1265429
#1	2810.652	64411.64	12967.83	1953.073	4541.536
#2	2825.652	64723.65	12907.85	1963.418	4552.977
#3	2821.593	64704.80	12950.60	1968.635	4548.335

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5343-05 Acquired: 12/23/2024 14:15:52 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0163985	-.002826	-.000650	.0042947	.0006344	.0129176	.1465311
Stddev	.0010415	.001138	.001329	.0027004	.0004920	.0052855	.0005945
%RSD	6.351050	40.27085	204.5280	62.87775	77.54335	40.91688	.4057191
#1	.0152626	-.002665	-.001387	.0034697	.0007998	.0188572	.1472081
#2	.0173085	-.004035	.000884	.0073114	.0010225	.0111630	.1460942
#3	.0166245	-.001777	-.001446	.0021031	.0000811	.0087325	.1462910

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000704	.0002299	18.36902	.0601155	.0041754	.0077952	.2891290
Stddev	.0000222	.0000417	.02380	.0004901	.0001365	.0006086	.0049260
%RSD	31.53130	18.12322	.1295880	.8153278	3.267865	7.807413	1.703734
#1	.0000825	.0002730	18.39316	.0596324	.0041733	.0070925	.2947556
#2	.0000448	.0001899	18.34556	.0601019	.0040400	.0081428	.2855933
#3	.0000839	.0002267	18.36835	.0606124	.0043129	.0081504	.2870382

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0866128	5.242194	.2120112	.0011182	283.5077	.0008205	1.633759
Stddev	.0006680	.023312	.0006418	.0001625	1.2486	.0004856	.005639
%RSD	.7712434	.4446913	.3027069	14.52912	.4404245	59.17973	.3451245
#1	.0873738	5.215322	.2118263	.0010449	284.3241	.0013293	1.628502
#2	.0861235	5.254270	.2114823	.0013044	284.1287	.0003619	1.633061
#3	.0863410	5.256990	.2127252	.0010054	282.0703	.0007704	1.639714

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.995852	.3022082	.2664348	-.000020	.0003845	5.121707	.8070458
Stddev	.023359	.0007558	.0011894	.000474	.0003814	.023772	.0047850
%RSD	.2596638	.2501069	.4464170	2378.282	99.17102	.4641323	.5929005
#1	9.021563	.3030620	.2651743	.000436	.0006978	5.096856	.8073708
#2	8.990055	.3019381	.2665929	.000014	-.000040	5.144227	.8021067
#3	8.975937	.3016245	.2675373	-.000510	.000496	5.124037	.8116600

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5343-05 Acquired: 12/23/2024 14:15:52 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	3.938437	-.003559	.1600607
Stddev	.027422	.000256	.0008334
%RSD	.6962602	7.183074	.5206650
#1	3.937456	-.003791	.1610192
#2	3.911520	-.003285	.1595078
#3	3.966337	-.003602	.1596550

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2595.174	58842.70	12969.62	1772.589	3938.641
Stddev	19.596	122.53	11.07	8.283	20.167
%RSD	.7550791	.2082375	.0853242	.4672632	.5120350
#1	2616.184	58978.23	12956.99	1781.107	3958.550
#2	2591.945	58739.76	12974.25	1764.563	3939.148
#3	2577.393	58810.11	12977.62	1772.098	3918.225

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02DUP Acquired: 12/23/2024 14:20:12 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.011718	-.008347	.0074466	.0056506	-.000012	.1098161	.4669687
Stddev	.001340	.001439	.0006073	.0017642	.000543	.0034497	.0021673
%RSD	11.43566	17.23469	8.155157	31.22104	4514.823	3.141304	.4641272
#1	-.010505	-.008832	.0078090	.0050258	-.000111	.1062681	.4653828
#2	-.011492	-.006729	.0067455	.0076422	-.000498	.1131582	.4660850
#3	-.013156	-.009481	.0077853	.0042839	.000574	.1100219	.4694383

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000951	.0004947	14.94674	-.000109	-.000437	.0205758	.0690715
Stddev	.0000303	.0000352	.06416	.000138	.000284	.0003316	.0071907
%RSD	31.81136	7.120503	.4292428	126.4107	64.98838	1.611546	10.41048
#1	.0001155	.0005176	14.90567	-.000065	-.000691	.0201932	.0765962
#2	.0000604	.0005124	14.91388	.000002	-.000490	.0207796	.0622694
#3	.0001095	.0004541	15.02067	-.000264	-.000130	.0207546	.0683488

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1597812	4.700320	.0048660	.0007911	435.9724	.0001742	.2259666
Stddev	.0017005	.036185	.0002739	.0000671	1.4115	.0008675	.0025398
%RSD	1.064242	.7698515	5.629741	8.485375	.3237497	497.8850	1.123967
#1	.1580545	4.702935	.0046730	.0008659	434.4062	.0011284	.2249633
#2	.1598349	4.662898	.0047455	.0007713	437.1460	-.000039	.2288547
#3	.1614541	4.735127	.0051795	.0007361	436.3651	-.000567	.2240816

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.583864	.0550674	.0008898	-.000291	.0022719	1.401631	.0811355
Stddev	.033804	.0002963	.0002723	.000498	.0001311	.004402	.0017119
%RSD	1.308256	.5381292	30.59961	171.4789	5.768747	.3140919	2.109873
#1	2.622874	.0553370	.0006189	-.000768	.0022223	1.396585	.0823569
#2	2.565540	.0547501	.0008871	.000226	.0021729	1.404686	.0791788
#3	2.563180	.0551152	.0011634	-.000329	.0024205	1.403621	.0818706

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02DUP Acquired: 12/23/2024 14:20:12 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6676392	-.007121	.0921604
Stddev	.0036046	.000485	.0002981
%RSD	.5398960	6.808853	.3234695
#1	.6650394	-.007521	.0918507
#2	.6661242	-.007260	.0921852
#3	.6717540	-.006581	.0924453

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2490.871	56868.22	12874.39	1706.515	3755.742
Stddev	4.774	57.47	50.10	6.103	5.751
%RSD	.1916750	.1010660	.3891548	.3576155	.1531304
#1	2485.593	56801.99	12882.57	1700.340	3749.105
#2	2494.889	56904.95	12919.90	1706.663	3758.850
#3	2492.132	56897.73	12820.70	1712.542	3759.270

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02LX5 Acquired: 12/23/2024 14:24:37 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.004134	-.001665	.0009627	.0010179	-.000452	.0237295	.0883178
Stddev	.002129	.000362	.0007672	.0016339	.000659	.0029554	.0004189
%RSD	51.49932	21.76532	79.69265	160.5173	145.8802	12.45464	.4743255
#1	-.005713	-.001504	.0010827	.0008597	.000276	.0253646	.0878448
#2	-.004977	-.002080	.0016628	.0027252	-.000622	.0255062	.0886420
#3	-.001713	-.001411	.0001426	-.000531	-.001008	.0203179	.0884664

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000468	.0000957	3.144629	-.000325	-.000094	.0043038	.0176648
Stddev	.0000252	.0000643	.016722	.000168	.000116	.0002352	.0048109
%RSD	53.71478	67.17370	.5317782	51.74426	123.3256	5.464219	27.23434
#1	.0000196	.0001029	3.125320	-.000385	.000034	.0045456	.0121484
#2	.0000691	.0001562	3.154364	-.000135	-.000192	.0040759	.0198561
#3	.0000518	.0000282	3.154204	-.000456	-.000125	.0042900	.0209900

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0332135	.9913499	.0010033	.0010009	83.19494	.0000604	.0447990
Stddev	.0002110	.0109136	.0004257	.0003279	.26162	.0003150	.0007047
%RSD	.6353099	1.100886	42.42840	32.76427	.3144674	521.5180	1.572913
#1	.0331080	.9787580	.0005333	.0006279	83.48941	-.000238	.0454490
#2	.0334564	.9972105	.0013629	.0012440	83.10609	.000029	.0440502
#3	.0330760	.9980813	.0011136	.0011309	82.98931	.000390	.0448979

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5658458	.0143073	.0002920	.0002307	.0008870	.2715241	.0188168
Stddev	.0367968	.0003578	.0000834	.0008111	.0002440	.0050105	.0013422
%RSD	6.502967	2.500665	28.55516	351.6331	27.51036	1.845344	7.133043
#1	.5593766	.0140480	.0002472	-.000424	.0007425	.2744348	.0192121
#2	.5327127	.0141584	.0002406	.001138	.0011688	.2657384	.0173213
#3	.6054482	.0147155	.0003882	-.000021	.0007499	.2743990	.0199169

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02LX5 Acquired: 12/23/2024 14:24:37 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.1326955	.0009357	.0188692
Stddev	.0006175	.0008404	.0000877
%RSD	.4653758	89.81472	.4649402
#1	.1322313	-.000034	.0187790
#2	.1324589	.001385	.0189543
#3	.1333964	.001456	.0188743

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2690.360	61055.34	12816.55	1836.925	4150.894
Stddev	8.463	315.64	38.99	14.956	7.241
%RSD	.3145839	.5169808	.3041922	.8141891	.1744350
#1	2696.852	60690.89	12822.32	1819.926	4156.914
#2	2693.441	61241.04	12775.01	1848.064	4152.908
#3	2680.788	61234.09	12852.34	1842.784	4142.859

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02MS Acquired: 12/23/2024 14:28:57 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.9063952	1.950109	.9635732	2.221415	.8071919	2.091182	.5434998
Stddev	.0043892	.025819	.0015835	.004404	.0055904	.005534	.0031639
%RSD	.4842461	1.323992	.1643337	.1982433	.6925727	.2646455	.5821250
#1	.9087736	1.925180	.9638404	2.224998	.8016778	2.085107	.5398496
#2	.9013302	1.976735	.9650060	2.216499	.8070422	2.095937	.5454549
#3	.9090819	1.948410	.9618731	2.222749	.8128556	2.092501	.5451949

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1742890	.2013843	12.36243	.4270284	.2056001	.3327082	3.429838
Stddev	.0004620	.0003858	.05448	.0017055	.0004684	.0007353	.033929
%RSD	.2650983	.1915917	.4406726	.3993837	.2278299	.2209976	.9892172
#1	.1738709	.2014279	12.30138	.4276175	.2053642	.3333345	3.392212
#2	.1747850	.2017465	12.37982	.4283613	.2052966	.3318986	3.458105
#3	.1742110	.2009786	12.40609	.4251065	.2061396	.3328914	3.439196

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3099900	5.369201	.5269662	.0799292	306.4134	.3001823	.3691620
Stddev	.0019089	.012643	.0007733	.0001347	1.5579	.0010247	.0010169
%RSD	.6158035	.2354810	.1467450	.1685713	.5084201	.3413504	.2754737
#1	.3077982	5.364240	.5277205	.0800547	306.0982	.2992435	.3702371
#2	.3108830	5.383572	.5270028	.0797869	308.1047	.3000280	.3682155
#3	.3112887	5.359790	.5261752	.0799461	305.0372	.3012754	.3690333

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.70046	.2817924	.4223138	.6410147	.1810601	1.824789	6.093320
Stddev	.03638	.0011806	.0009325	.0014224	.0006955	.005858	.024195
%RSD	.2655188	.4189448	.2208125	.2218973	.3841022	.3209989	.3970722
#1	13.66866	.2804398	.4217903	.6420580	.1807826	1.818180	6.066209
#2	13.69258	.2826156	.4217607	.6415916	.1818514	1.829338	6.112717
#3	13.74013	.2823217	.4233904	.6393945	.1805461	1.826849	6.101035

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02MS Acquired: 12/23/2024 14:28:57 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4815685	.2031446	.2686267
Stddev	.0037468	.0007920	.0014402
%RSD	.7780479	.3898697	.5361352
#1	.4777785	.2023211	.2669679
#2	.4852706	.2039008	.2693539
#3	.4816565	.2032119	.2695584

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2565.524	58445.55	12515.58	1759.710	3863.449
Stddev	10.177	129.69	36.55	6.219	6.140
%RSD	.3966742	.2218920	.2920329	.3534018	.1589156
#1	2565.572	58565.94	12556.28	1765.596	3863.993
#2	2575.678	58308.23	12485.55	1753.205	3869.299
#3	2555.324	58462.49	12504.91	1760.328	3857.056

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02MSD Acquired: 12/23/2024 14:33:06 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.9075642	1.999891	.9772554	2.213332	.8021190	2.106433	.5478929
Stddev	.0061168	.020782	.0032901	.011146	.0035529	.008123	.0009179
%RSD	.6739839	1.039149	.3366671	.5035898	.4429354	.3856435	.1675290
#1	.9126632	2.023628	.9755106	2.226186	.8057805	2.097076	.5484744
#2	.9007820	1.991072	.9752053	2.207471	.8018909	2.110539	.5468347
#3	.9092474	1.984973	.9810504	2.206340	.7986857	2.111683	.5483695

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1778209	.2040776	12.58004	.4302778	.2071762	.3324936	3.454068
Stddev	.0007045	.0006623	.01154	.0008799	.0003555	.0008352	.017460
%RSD	.3961575	.3245356	.0917101	.2044960	.1716048	.2511962	.5054767
#1	.1770666	.2038053	12.56681	.4312467	.2068542	.3334579	3.448063
#2	.1784617	.2035947	12.58533	.4300583	.2071167	.3320020	3.440403
#3	.1779344	.2048326	12.58799	.4295285	.2075578	.3320208	3.473737

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3157259	5.482829	.5330792	.0804729	311.8794	.3034352	.3713636
Stddev	.0008990	.025829	.0015187	.0005386	1.2446	.0013849	.0007078
%RSD	.2847340	.4710800	.2848923	.6693076	.3990709	.4564081	.1905863
#1	.3148927	5.454172	.5324378	.0803035	312.6385	.3050012	.3708206
#2	.3156063	5.504312	.5319864	.0810759	310.4430	.3029327	.3721641
#3	.3166787	5.490004	.5348134	.0800394	312.5566	.3023717	.3711061

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.62920	.2868073	.4221931	.6501694	.1823009	1.804023	6.221979
Stddev	.01836	.0008386	.0007084	.0019636	.0010788	.003853	.004199
%RSD	.1347411	.2923979	.1677846	.3020100	.5917483	.2135827	.0674895
#1	13.65037	.2861759	.4229935	.6492682	.1822553	1.799676	6.219900
#2	13.61753	.2877589	.4216470	.6488182	.1812456	1.807020	6.226812
#3	13.61971	.2864872	.4219386	.6524218	.1834017	1.805372	6.219225

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02MSD Acquired: 12/23/2024 14:33:06 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4892916	.2037442	.2704756
Stddev	.0068960	.0008073	.0005721
%RSD	1.409389	.3962515	.2115186
#1	.4942893	.2045948	.2710654
#2	.4814241	.2029885	.2699230
#3	.4921615	.2036494	.2704384

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2583.573	58211.00	12314.15	1772.376	3858.345
Stddev	3.550	53.85	24.21	10.309	7.327
%RSD	.1374035	.0925158	.1966031	.5816483	.1898918
#1	2579.474	58154.05	12338.79	1760.696	3860.254
#2	2585.570	58261.11	12290.40	1776.223	3864.527
#3	2585.674	58217.84	12313.25	1780.208	3850.252

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02A Acquired: 12/23/2024 14:37:15 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.9093993	1.970235	.9679252	2.218917	.8045117	2.101482	.5478538
Stddev	.0049248	.024244	.0054660	.000802	.0016017	.003969	.0028275
%RSD	.5415399	1.230520	.5647139	.0361654	.1990914	.1888887	.5161036
#1	.9037278	1.972479	.9646894	2.218879	.8032720	2.098339	.5482413
#2	.9125936	1.944947	.9648502	2.219738	.8063202	2.100164	.5504676
#3	.9118765	1.993280	.9742361	2.218134	.8039430	2.105943	.5448526

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1765125	.2021439	12.49006	.4284439	.2061910	.3321690	3.447355
Stddev	.0002505	.0010049	.03646	.0010086	.0006467	.0002364	.006071
%RSD	.1419174	.4971276	.2918869	.2354147	.3136403	.0711689	.1761041
#1	.1764826	.2015337	12.46615	.4275422	.2057310	.3323416	3.454361
#2	.1767767	.2015943	12.53202	.4282563	.2059116	.3322658	3.443650
#3	.1762783	.2033038	12.47201	.4295331	.2069304	.3318995	3.444053

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3142546	5.457709	.5286947	.0800542	310.1734	.3026028	.3690724
Stddev	.0014830	.018317	.0020657	.0002793	1.7860	.0003276	.0012908
%RSD	.4719215	.3356223	.3907102	.3488355	.5758100	.1082615	.3497304
#1	.3138681	5.441279	.5276317	.0798688	308.1383	.3022334	.3675889
#2	.3158926	5.477459	.5273771	.0799183	310.9014	.3027165	.3696897
#3	.3130031	5.454389	.5310754	.0803753	311.4804	.3028583	.3699386

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.64808	.2847098	.4217212	.6448197	.1822843	1.822539	6.114702
Stddev	.03694	.0014041	.0009367	.0032722	.0007114	.011689	.024046
%RSD	.2706316	.4931734	.2221198	.5074595	.3902730	.6413502	.3932426
#1	13.67431	.2862971	.4210169	.6420942	.1830952	1.809120	6.098597
#2	13.60584	.2842023	.4213625	.6439161	.1817651	1.827993	6.103167
#3	13.66409	.2836300	.4227843	.6484487	.1819926	1.830504	6.142342

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-02A Acquired: 12/23/2024 14:37:15 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4835771	.2043350	.2702981
Stddev	.0011051	.0018189	.0011463
%RSD	.2285196	.8901441	.4240883
#1	.4823377	.2059305	.2706461
#2	.4844594	.2047201	.2712301
#3	.4839343	.2023544	.2690181

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2580.760	58456.21	12377.96	1766.524	3872.559
Stddev	6.353	58.06	30.12	5.414	6.811
%RSD	.2461628	.0993226	.2433020	.3064728	.1758818
#1	2584.896	58408.90	12363.01	1760.602	3879.991
#2	2573.445	58521.00	12358.25	1771.219	3866.615
#3	2583.939	58438.72	12412.63	1767.751	3871.071

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17 Acquired: 12/23/2024 14:41:25 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6780557	1.802131	.9328962	1.539624	.3698856	136.3845
Stddev	.0028773	.009555	.0017690	.005257	.0023757	.1564
%RSD	.4243447	.5301905	.1896244	.3414168	.6422837	.1146602
#1	.6811741	1.793714	.9333721	1.540218	.3675391	136.2430
#2	.6774892	1.812517	.9343786	1.544558	.3698282	136.3580
#3	.6755038	1.800161	.9309379	1.534096	.3722895	136.5524

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3318325	.1370483	.2297308	111.0214	.3278200	.5031647
Stddev	.0011897	.0002237	.0004959	.0477	.0011866	.0005618
%RSD	.3585091	.1632029	.2158590	.0430049	.3619641	.1116457
#1	.3304620	.1367904	.2292905	110.9940	.3272722	.5037904
#2	.3325984	.1371878	.2296340	111.0765	.3291815	.5030002
#3	.3324371	.1371669	.2302680	110.9937	.3270063	.5027036

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.353171	467.3792	3.721958	89.39191	.6410625	.0813007
Stddev	.003061	1.5089	.011940	.14985	.0004621	.0003457
%RSD	.2261777	.3228483	.3208080	.1676333	.0720854	.4252632
#1	1.355000	468.7827	3.708172	89.33339	.6405580	.0816983
#2	1.354874	465.7833	3.729028	89.56219	.6414653	.0810707
#3	1.349637	467.5716	3.728674	89.28015	.6411642	.0811332

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	30.36684	1.648019	.7037633	11.30813	.6950360	.3359037
Stddev	.07670	.002382	.0011049	.03182	.0022570	.0011567
%RSD	.2525798	.1445239	.1569983	.2813751	.3247235	.3443561
#1	30.27878	1.645271	.7044254	11.28893	.6976243	.3370744
#2	30.41903	1.649470	.7043766	11.34486	.6934781	.3358754
#3	30.40272	1.649318	.7024877	11.29060	.6940058	.3347615

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17 Acquired: 12/23/2024 14:41:25 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6338080	8.692808	7.804104	F 15.56147	4.931256	.2248261
Stddev	.0013381	.022346	.005794	.01416	.014484	.0008988
%RSD	.2111192	.2570641	.0742474	.0909893	.2937185	.3997866
#1	.6334755	8.667398	7.800271	15.55123	4.935885	.2238225
#2	.6326675	8.701622	7.801271	15.57763	4.915023	.2250987
#3	.6352810	8.709402	7.810769	15.55555	4.942859	.2255570

Elem	Sr4077
Units	ppm
Avg	-.000550
Stddev	.002795
%RSD	508.0217
#1	-.003641
#2	.001797
#3	.000194

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3014.452	70653.83	15175.68	2106.770	3626.663
Stddev	7.133	33.52	12.23	7.376	6.982
%RSD	.2366169	.0474397	.0806220	.3501262	.1925294
#1	3007.184	70618.84	15161.88	2098.349	3623.170
#2	3021.441	70685.65	15179.96	2109.876	3634.702
#3	3014.732	70657.00	15185.19	2112.086	3622.115

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17DUP Acquired: 12/23/2024 14:45:32 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6685628	1.763014	.9187069	1.500705	.3629177	136.6090
Stddev	.0051144	.018766	.0029154	.001214	.0021550	.4249
%RSD	.7649796	1.064454	.3173351	.0808788	.5937844	.3109990
#1	.6670634	1.780593	.9153658	1.501472	.3639779	136.1527
#2	.6742593	1.743251	.9200206	1.501338	.3604381	136.9932
#3	.6643658	1.765197	.9207343	1.499306	.3643372	136.6810

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3311202	.1360752	.2267346	110.8205	.3274500	.4977662
Stddev	.0013228	.0004830	.0005849	.1741	.0011279	.0015326
%RSD	.3994834	.3549454	.2579896	.1571440	.3444387	.3078930
#1	.3297322	.1365143	.2261639	110.6552	.3287184	.4959968
#2	.3323663	.1361534	.2267070	111.0023	.3270719	.4986262
#3	.3312620	.1355578	.2273328	110.8040	.3265598	.4986757

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.331363	466.5845	3.701520	88.96392	.6320771	.0808776
Stddev	.002535	.7724	.012990	.22851	.0012448	.0002369
%RSD	.1904162	.1655422	.3509293	.2568601	.1969312	.2928502
#1	1.328566	467.1456	3.687608	88.83907	.6306928	.0806048
#2	1.332016	465.7036	3.713332	89.22766	.6324341	.0810310
#3	1.333509	466.9044	3.703619	88.82503	.6331043	.0809970

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.97136	1.650520	.7061865	11.26489	.6942646	.3330143
Stddev	.07402	.004955	.0012975	.04277	.0006252	.0003839
%RSD	.2469633	.3001983	.1837382	.3796603	.0900487	.1152931
#1	29.88594	1.645344	.7047335	11.23302	.6940868	.3331556
#2	30.01648	1.655219	.7065967	11.31350	.6937477	.3325797
#3	30.01167	1.650997	.7072294	11.24816	.6949595	.3333075

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17DUP Acquired: 12/23/2024 14:45:32 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.6216647	8.699929	7.852018	F 15.15518	4.790597	.2235298
Stddev	.0010171	.025038	.003848	.02538	.006315	.0014404
%RSD	.1636041	.2877931	.0490053	.1674822	.1318152	.6443723
#1	.6221022	8.672252	7.856454	15.18138	4.789999	.2218671
#2	.6223899	8.721006	7.850004	15.13070	4.784603	.2243259
#3	.6205021	8.706528	7.849594	15.15346	4.797190	.2243963

Elem	Sr4077
Units	ppm
Avg	.0006906
Stddev	.0025133
%RSD	363.9277
#1	-.002004
#2	.002970
#3	.001106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3049.490	70658.21	15182.11	2079.686	3675.023
Stddev	1.690	99.09	34.51	1.924	2.176
%RSD	.0554171	.1402318	.2272941	.0925097	.0592109
#1	3049.524	70559.85	15168.63	2078.564	3675.850
#2	3047.783	70656.76	15156.39	2081.907	3672.555
#3	3051.162	70758.01	15221.33	2078.586	3676.664

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17LX5 Acquired: 12/23/2024 14:49:37 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.1524986	.3882438	.1933414	.3600565	.0824531	31.08621	.0697297
Stddev	.0020053	.0098928	.0008554	.0030246	.0001955	.11262	.0005252
%RSD	1.314956	2.548102	.4424291	.8400408	.2371506	.3622895	.7531682
#1	.1542100	.3957626	.1942615	.3612254	.0822689	30.95625	.0694688
#2	.1502922	.3770366	.1925702	.3566219	.0826583	31.14708	.0703343
#3	.1529936	.3919323	.1931925	.3623223	.0824321	31.15529	.0693861

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0328247	.0425486	26.25800	.0797349	.1002271	.3325448	112.8652
Stddev	.0001167	.0002744	.11253	.0004029	.0004273	.0009576	.2193
%RSD	.3553986	.6449440	.4285733	.5053399	.4263283	.2879482	.1942773
#1	.0329431	.0425802	26.14712	.0796895	.1000424	.3325598	112.8661
#2	.0328211	.0422597	26.37212	.0801586	.0999232	.3315799	113.0840
#3	.0327099	.0428058	26.25474	.0793566	.1007157	.3334948	112.6454

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8871077	20.65443	.1293897	.0197825	6.231585	.3877864	.1640672
Stddev	.0044010	.07923	.0004321	.0002712	.028962	.0009416	.0002996
%RSD	.4961101	.3836099	.3339183	1.371054	.4647538	.2428241	.1826097
#1	.8868161	20.56911	.1290457	.0200254	6.239655	.3871515	.1640574
#2	.8916473	20.72570	.1298746	.0194898	6.255655	.3888683	.1643716
#3	.8828598	20.66847	.1292489	.0198321	6.199444	.3873394	.1637726

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.571335	.1769128	.0782493	.1263252	2.033587	1.766461	3.007688
Stddev	.052178	.0011926	.0006166	.0007139	.004919	.003992	.010645
%RSD	2.029202	.6741410	.7879568	.5651391	.2418838	.2259641	.3539271
#1	2.511966	.1775056	.0781985	.1271459	2.029115	1.763597	3.014586
#2	2.592128	.1776930	.0776596	.1258471	2.038856	1.764766	2.995428
#3	2.609910	.1755400	.0788896	.1259827	2.032790	1.771020	3.013049

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17LX5 Acquired: 12/23/2024 14:49:37 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.9292194	.0488491	-.005500
Stddev	.0024183	.0001819	.000204
%RSD	.2602537	.3723421	3.710378
#1	.9300562	.0487075	-.005491
#2	.9264938	.0490542	-.005300
#3	.9311082	.0487855	-.005708

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2844.416	64644.40	13478.98	1927.668	4180.324
Stddev	10.089	113.47	44.70	10.997	5.270
%RSD	.3546877	.1755281	.3316441	.5704622	.1260772
#1	2847.534	64600.55	13476.40	1935.639	4185.762
#2	2852.577	64559.40	13435.63	1915.122	4179.971
#3	2833.136	64773.25	13524.92	1932.242	4175.239

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17MS Acquired: 12/23/2024 14:53:43 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	1.385184	3.641658	1.811778	3.206630	1.073482	138.9138
Stddev	.007361	.009518	.003046	.002386	.002305	.2756
%RSD	.5314241	.2613652	.1681276	.0744173	.2147203	.1983840
#1	1.378147	3.630670	1.808263	3.203930	1.076020	138.7328
#2	1.384573	3.647369	1.813428	3.208456	1.071519	138.7777
#3	1.392832	3.646934	1.813643	3.207504	1.072905	139.2310

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4864857	.2718531	.4102659	111.7307	.6339986	.6861742
Stddev	.0009304	.0011861	.0006437	.3935	.0019999	.0018524
%RSD	.1912390	.4363154	.1568979	.3521924	.3154472	.2699568
#1	.4856308	.2718824	.4105074	111.6361	.6340566	.6868117
#2	.4863497	.2706527	.4095364	111.3931	.6319703	.6840873
#3	.4874765	.2730244	.4107540	112.1629	.6359689	.6876237

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.571274	462.5067	3.847143	90.68533	1.102284	.1428445
Stddev	.004341	1.5588	.017441	.43211	.000933	.0006098
%RSD	.2763040	.3370247	.4533375	.4764944	.0846517	.4269094
#1	1.575618	461.3111	3.840918	90.59298	1.101638	.1423789
#2	1.566935	464.2697	3.833669	90.30686	1.101861	.1435348
#3	1.571268	461.9393	3.866842	91.15615	1.103354	.1426199

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.68836	1.875539	.8450421	20.53489	.8719782	.6830750
Stddev	.10506	.002717	.0021188	.08227	.0004893	.0014518
%RSD	.3315442	.1448883	.2507299	.4006537	.0561086	.2125398
#1	31.60407	1.873802	.8429888	20.44931	.8718605	.6844049
#2	31.80607	1.874144	.8472208	20.61340	.8725155	.6815262
#3	31.65496	1.878670	.8449167	20.54198	.8715584	.6832940

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17MS Acquired: 12/23/2024 14:53:43 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	1.284052	8.864222	8.643724	F 20.47001	4.797772	.3940495
Stddev	.006532	.019866	.012936	.00402	.005300	.0013230
%RSD	.5087255	.2241200	.1496630	.0196357	.1104779	.3357354
#1	1.277628	8.853214	8.629582	20.47464	4.797781	.3932005
#2	1.283839	8.852297	8.646627	20.46748	4.803068	.3955738
#3	1.290688	8.887156	8.654962	20.46790	4.792467	.3933741

Elem	Sr4077
Units	ppm
Avg	.1646834
Stddev	.0015943
%RSD	.9681081
#1	.1649042
#2	.1629902
#3	.1661558

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2994.953	70414.52	14927.88	2070.750	3620.439
Stddev	5.210	80.22	48.70	3.627	3.754
%RSD	.1739515	.1139325	.3262225	.1751388	.1036837
#1	2990.200	70452.68	14908.18	2073.679	3622.892
#2	3000.523	70468.54	14983.35	2071.876	3622.308
#3	2994.135	70322.33	14892.12	2066.693	3616.118

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV04 Acquired: 12/23/2024 15:06:19 Type: Unk
Method: NON EPA-6010-200.7(v2459) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.212520	5.277374	4.871822	5.342638	5.314485	10.03629	9.721366
Stddev	.022367	.113310	.011460	.024420	.022756	.02668	.073003
%RSD	.4291019	2.147095	.2352261	.4570799	.4281869	.2658333	.7509569
#1	5.194511	5.192631	4.861690	5.326060	5.301031	10.05630	9.747437
#2	5.205491	5.233413	4.869517	5.331174	5.301665	10.00600	9.638906
#3	5.237557	5.406077	4.884259	5.370681	5.340759	10.04657	9.777754

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2259269	2.448787	23.39792	.9983512	2.460146	1.303605	5.151923
Stddev	.0008740	.006675	.04511	.0025939	.006084	.004524	.040649
%RSD	.3868389	.2726027	.1928003	.2598227	.2473031	.3470673	.7890048
#1	.2258528	2.443718	23.40993	.9983763	2.454806	1.299410	5.198760
#2	.2250924	2.446292	23.34801	.9957448	2.458864	1.303005	5.125840
#3	.2268356	2.456350	23.43580	1.000933	2.466769	1.308399	5.131170

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.325168	23.13130	2.475837	1.246197	24.23622	2.440202	2.346349
Stddev	.007603	.13748	.003855	.002647	.24692	.007782	.006681
%RSD	.3270055	.5943359	.1556884	.2124099	1.018816	.3189056	.2847480
#1	2.330667	23.02156	2.473608	1.243776	24.49881	2.448441	2.338776
#2	2.316491	23.08683	2.473614	1.245792	24.20115	2.432977	2.348861
#3	2.328344	23.28551	2.480288	1.249024	24.00871	2.439187	2.351411

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.37729	4.513904	5.293206	4.943145	4.824996	5.352190	4.796495
Stddev	.15956	.020279	.024406	.015606	.016489	.015496	.036437
%RSD	.6049079	.4492640	.4610837	.3157164	.3417418	.2895321	.7596537
#1	26.53965	4.509090	5.274646	4.928173	4.843593	5.335285	4.776784
#2	26.37153	4.496465	5.284121	4.941946	4.812161	5.355566	4.774160
#3	26.22069	4.536158	5.320852	4.959316	4.819233	5.365721	4.838541

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV04 Acquired: 12/23/2024 15:06:19 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	4.892968	4.935283	4.946066
Stddev	.035869	.032719	.031783
%RSD	.7330698	.6629566	.6425860
#1	4.870494	4.972403	4.982717
#2	4.874076	4.922814	4.926107
#3	4.934334	4.910632	4.929373

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2694.941	60650.41	12002.26	1816.945	4036.564
Stddev	4.409	30.41	26.71	8.414	6.969
%RSD	.1636165	.0501380	.2225512	.4630588	.1726385
#1	2697.588	60659.30	11999.48	1823.451	4040.478
#2	2697.384	60675.39	12030.26	1807.444	4040.696
#3	2689.851	60616.55	11977.06	1819.941	4028.518

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB04 Acquired: 12/23/2024 15:10:30 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.002136	.0006992	-.000164	.0003386	-.000699	.0057105	-.007070
Stddev	.001083	.0006754	.000772	.0027826	.000814	.0065331	.000526
%RSD	50.69546	96.60837	471.1085	821.9208	116.4661	114.4064	7.445947
#1	-.002558	.0001180	-.001010	.0025078	-.001605	.0055407	-.007424
#2	-.002944	.0014402	.000015	.0013067	-.000459	-.000736	-.006465
#3	-.000906	.0005393	.000503	-.002799	-.000032	.012327	-.007321

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000903	.0000206	.0109808	-.000412	-.000135	.0003474	.0057993
Stddev	.0000675	.0000606	.0034807	.000134	.000129	.0003563	.0036940
%RSD	74.78528	294.1931	31.69773	32.47864	95.49134	102.5488	63.69700
#1	.0000338	.0000754	.0108538	-.000323	-.000029	.0001578	.0086497
#2	.0001651	.0000310	.0145232	-.000347	-.000097	.0001260	.0071223
#3	.0000720	-.000045	.0075654	-.000566	-.000279	.0007584	.0016260

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002684	-.001383	.0001241	.0011346	.0395202	-.000012	.0001643
Stddev	.0000840	.006977	.0002335	.0001995	.0130534	.001336	.0001259
%RSD	31.27851	504.4182	188.1489	17.58581	33.02976	11385.52	76.63268
#1	.0003590	.001228	.0003864	.0013582	.0289693	-.001525	.0002824
#2	.0001933	.003912	-.000061	.0010707	.0541178	.000488	.0000318
#3	.0002529	-.009289	.000047	.0009748	.0354736	.001002	.0001789

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2108281	.0071658	.0006585	.0003173	.0014197	.0096932	.0037054
Stddev	.0355071	.0003859	.0001390	.0010964	.0002840	.0053625	.0016670
%RSD	16.84174	5.385862	21.10212	345.4982	20.00458	55.32205	44.98734
#1	.2035717	.0069546	.0007280	.0005809	.0010919	.0043452	.0037578
#2	.1795096	.0076112	.0007490	-.000887	.0015923	.0150701	.0053457
#3	.2494028	.0069314	.0004985	.001258	.0015749	.0096643	.0020129

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB04 Acquired: 12/23/2024 15:10:30 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0025376	-.003128	.0005800
Stddev	.0008471	.000201	.0001091
%RSD	33.38361	6.437791	18.80386
#1	.0016678	-.003156	.0007012
#2	.0033600	-.003315	.0005491
#3	.0025849	-.002915	.0004897

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2830.099	64163.72	12695.55	1936.473	4590.825
Stddev	2.554	33.36	32.91	4.082	.256
%RSD	.0902316	.0519934	.2592214	.2108153	.0055809
#1	2827.192	64139.47	12726.68	1931.794	4590.743
#2	2831.126	64149.92	12661.11	1938.317	4591.112
#3	2831.979	64201.77	12698.85	1939.308	4590.619

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17MSD Acquired: 12/23/2024 15:14:51 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	1.371897	3.651956	1.833506	3.180764	1.049079	144.4549
Stddev	.001759	.019317	.003915	.001963	.001665	.4298
%RSD	.1281842	.5289577	.2135257	.0617200	.1586806	.2975082
#1	1.369868	3.669410	1.829064	3.179609	1.050804	144.2499
#2	1.372980	3.655257	1.835002	3.183031	1.047482	144.1660
#3	1.372843	3.631201	1.836452	3.179652	1.048950	144.9488

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4920004	.2771067	.4158621	115.2019	.6381064	.6965271
Stddev	.0002423	.0002715	.0006783	.1675	.0011135	.0003172
%RSD	.0492501	.0979770	.1631026	.1454346	.1745044	.0455425
#1	.4918445	.2773696	.4152227	115.2139	.6389963	.6961614
#2	.4922796	.2768274	.4165735	115.0287	.6368577	.6966924
#3	.4918772	.2771232	.4157900	115.3631	.6384652	.6967275

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.590821	462.9094	3.909087	92.66793	1.114073	.1422596
Stddev	.002263	1.6798	.003968	.26735	.002199	.0005521
%RSD	.1422809	.3628749	.1015052	.2885077	.1974185	.3880590
#1	1.593197	464.6978	3.906176	92.64452	1.111579	.1425610
#2	1.590576	461.3649	3.907478	92.41305	1.115735	.1416225
#3	1.588691	462.6653	3.913606	92.94622	1.114906	.1425954

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.55385	1.914604	.8487157	20.24352	.8717033	.6780627
Stddev	.05663	.008221	.0046284	.09066	.0050801	.0013632
%RSD	.1794751	.4294039	.5453385	.4478342	.5827753	.2010382
#1	31.56889	1.912733	.8533429	20.14536	.8775550	.6796172
#2	31.60144	1.907479	.8440861	20.26110	.8684241	.6774997
#3	31.49121	1.923599	.8487180	20.32410	.8691308	.6770712

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17MSD Acquired: 12/23/2024 15:14:51 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	1.294382	9.194196	9.353419	F 20.85356	4.865478	.3910911
Stddev	.001540	.013647	.030725	.02347	.014369	.0017724
%RSD	.1189486	.1484292	.3284911	.1125695	.2953261	.4531858
#1	1.293525	9.182257	9.347964	20.82646	4.849195	.3891277
#2	1.296159	9.191258	9.325786	20.86784	4.870858	.3915730
#3	1.293461	9.209072	9.386506	20.86637	4.876380	.3925728

Elem	Sr4077
Units	ppm
Avg	.1733096
Stddev	.0026984
%RSD	1.556957
#1	.1701951
#2	.1747880
#3	.1749456

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3010.788	70195.67	14678.47	2094.006	3606.307
Stddev	1.905	89.10	38.54	7.788	7.282
%RSD	.0632581	.1269338	.2625676	.3719151	.2019145
#1	3010.169	70116.80	14636.74	2085.133	3614.237
#2	3012.925	70292.32	14712.72	2099.706	3604.765
#3	3009.269	70177.88	14685.96	2097.180	3599.920

Sample Name: P5306-17A Acquired: 12/23/2024 15:18:54 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	1.379943	3.616384	1.842951	3.202648	1.045984	151.2190
Stddev	.001710	.020159	.004616	.005552	.002802	.1871
%RSD	.1239018	.5574299	.2504869	.1733499	.2679060	.1237489
#1	1.380250	3.639640	1.844623	3.208368	1.047214	151.0142
#2	1.381478	3.603887	1.837732	3.197281	1.047962	151.2619
#3	1.378100	3.605624	1.846499	3.202296	1.042778	151.3810

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4962520	.2756976	.4185021	117.7382	.6390655	.7034697
Stddev	.0004884	.0005581	.0001861	.2498	.0025474	.0018622
%RSD	.0984219	.2024127	.0444552	.2121875	.3986156	.2647206
#1	.4963583	.2751138	.4184114	117.6690	.6361247	.7015680
#2	.4966786	.2762257	.4183787	117.5303	.6404835	.7035513
#3	.4957192	.2757532	.4187161	118.0153	.6405885	.7052898

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.596703	473.8481	3.954150	93.55312	1.121333	.1441788
Stddev	.001983	1.9512	.007220	.26050	.002029	.0006656
%RSD	.1241688	.4117875	.1826053	.2784466	.1809772	.4616718
#1	1.596675	471.7436	3.961133	93.39650	1.119080	.1435391
#2	1.594734	475.5972	3.946714	93.40903	1.123017	.1448676
#3	1.598699	474.2035	3.954604	93.85382	1.121903	.1441295

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.44660	1.942139	.8583311	20.48988	.8733545	.6811855
Stddev	.11012	.002967	.0065908	.02095	.0070350	.0004332
%RSD	.3393940	.1527557	.7678560	.1022218	.8055174	.0635912
#1	32.53407	1.941122	.8545650	20.50719	.8652425	.6815617
#2	32.48278	1.939813	.8544869	20.46660	.8777819	.6807120
#3	32.32293	1.945480	.8659413	20.49586	.8770392	.6812830

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5306-17A Acquired: 12/23/2024 15:18:54 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	1.296437	9.531856	F 10.58641	F 21.04770	4.884805	.3918579
Stddev	.002799	.008970	.02597	.07245	.006264	.0014334
%RSD	.2159216	.0941039	.2453523	.3442171	.1282242	.3657881
#1	1.295747	9.538676	10.56045	21.12973	4.891834	.3934929
#2	1.294047	9.521695	10.61240	21.02088	4.879814	.3912631
#3	1.299517	9.535197	10.58639	20.99247	4.882768	.3908177

Elem	Sr4077
Units	ppm
Avg	.1696928
Stddev	.0029354
%RSD	1.729808
#1	.1729585
#2	.1672740
#3	.1688458

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3007.427	70424.09	14844.23	2075.355	3598.445
Stddev	.926	38.37	14.11	8.237	3.639
%RSD	.0307907	.0544853	.0950508	.3969140	.1011308
#1	3006.565	70431.02	14836.92	2069.677	3602.287
#2	3007.308	70382.72	14860.50	2084.803	3597.998
#3	3008.406	70458.52	14835.28	2071.586	3595.051

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01DUP Acquired: 12/23/2024 15:22:58 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0856871	.0349344	1.779834	-.074997	.0180589	186.4042
Stddev	.0028235	.0052634	.001210	.003932	.0016656	.3622
%RSD	3.295135	15.06639	.0679772	5.243219	9.222870	.1942893
#1	.0874914	.0410027	1.780586	-.070644	.0196556	185.9919
#2	.0824332	.0321905	1.778439	-.076056	.0181891	186.5498
#3	.0871366	.0316099	1.780479	-.078291	.0163321	186.6710

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.111020	.0187163	.0686527	36.59774	.3702134	.4258182
Stddev	.045871	.0000735	.0002809	.11785	.0005313	.0007347
%RSD	.7506301	.3925202	.4092121	.3220109	.1434980	.1725471
#1	6.083235	.0187996	.0686542	36.51915	.3708073	.4259918
#2	6.085859	.0186607	.0689329	36.54082	.3697835	.4250122
#3	6.163966	.0186885	.0683710	36.73324	.3700493	.4264506

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6943298	445.6692	F 41.21477	97.12287	.9826523	.0199327
Stddev	.0003363	1.1904	.10027	.22805	.0004532	.0004293
%RSD	.0484278	.2671134	.2432832	.2348014	.0461182	2.153832
#1	.6946258	445.3377	41.18332	97.21620	.9825240	.0196122
#2	.6943994	444.6796	41.32699	96.86296	.9822770	.0197653
#3	.6939642	446.9902	41.13399	97.28944	.9831558	.0204204

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.974201	.4874140	2.326786	25.57196	.1846114	.0026445
Stddev	.024876	.0009809	.000645	.06053	.0016072	.0004158
%RSD	.6259249	.2012466	.0277195	.2366956	.8706024	15.72193
#1	3.945908	.4881756	2.327336	25.50320	.1847183	.0027811
#2	3.984058	.4863071	2.326946	25.59544	.1829533	.0029748
#3	3.992638	.4877592	2.326076	25.61722	.1861625	.0021776

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01DUP Acquired: 12/23/2024 15:22:58 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0609891	3.397927	6.402620	F 12.25703	2.341395	.7504604
Stddev	.0016874	.002894	.037554	.00614	.014592	.0024254
%RSD	2.766757	.0851663	.5865480	.0500909	.6232371	.3231855
#1	.0629260	3.394608	6.385365	12.25118	2.330424	.7481545
#2	.0598376	3.399925	6.376794	12.25648	2.335804	.7529898
#3	.0602036	3.399248	6.445701	12.26342	2.357956	.7502368

Elem	Sr4077
Units	ppm
Avg	-.161463
Stddev	.001346
%RSD	.8336292
#1	-.162340
#2	-.159913
#3	-.162137

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3458.657	80102.51	17428.04	2378.352	3630.449
Stddev	4.182	134.87	21.55	4.502	4.435
%RSD	.1209263	.1683715	.1236547	.1892795	.1221506
#1	3454.803	80030.56	17425.09	2380.482	3625.658
#2	3458.063	80258.10	17450.90	2381.392	3631.277
#3	3463.104	80018.87	17408.11	2373.180	3634.411

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01LX5 Acquired: 12/23/2024 15:27:36 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0191071	.0060548	.3896725	-.017932	.0049338	48.47154	1.601875
Stddev	.0007699	.0005414	.0001578	.000961	.0002323	.06505	.002580
%RSD	4.029243	8.941380	.0405049	5.357533	4.707717	.1341937	.1610715
#1	.0194656	.0055625	.3896716	-.018274	.0046673	48.39955	1.599407
#2	.0196323	.0059672	.3895152	-.018674	.0050408	48.48900	1.604554
#3	.0182233	.0066346	.3898308	-.016847	.0050933	48.52609	1.601664

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051614	.0090726	9.959005	.1008394	.0888176	.1994160	121.5179
Stddev	.0000157	.0000839	.002524	.0005015	.0001199	.0018382	.5049
%RSD	.3036856	.9247441	.0253487	.4972980	.1349789	.9218071	.4155344
#1	.0051764	.0089797	9.956851	.1005956	.0887248	.1985012	121.4631
#2	.0051627	.0090952	9.958382	.1014162	.0887750	.1982146	122.0480
#3	.0051451	.0091429	9.961783	.1005065	.0889529	.2015321	121.0426

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.67356	25.57460	.2102842	.0065979	.9349858	.1301710	.6303924
Stddev	.04506	.05095	.0004403	.0000624	.0098648	.0020144	.0046136
%RSD	.3860046	.1992404	.2093958	.9453809	1.055072	1.547498	.7318653
#1	11.62575	25.52814	.2105385	.0065381	.9278707	.1324246	.6308506
#2	11.71524	25.62910	.2097757	.0066625	.9308396	.1295432	.6347598
#3	11.67968	25.56657	.2105383	.0065932	.9462469	.1285453	.6255667

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.293428	.0534188	.0004249	.0116600	.8974221	1.522451	2.522707
Stddev	.028050	.0007728	.0004787	.0013139	.0036432	.008827	.002102
%RSD	.4456965	1.446605	112.6819	11.26861	.4059630	.5798047	.0833148
#1	6.262301	.0533939	.0006189	.0121200	.8932302	1.528154	2.521101
#2	6.316744	.0542038	.0007761	.0126820	.8998243	1.512283	2.525086
#3	6.301239	.0526589	-.000120	.0101779	.8992118	1.526916	2.521935

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01LX5 Acquired: 12/23/2024 15:27:36 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4543984	.1884860	-.047714
Stddev	.0030822	.0006062	.000484
%RSD	.6783042	.3215942	1.013960
#1	.4558432	.1885171	-.047696
#2	.4564928	.1890760	-.048206
#3	.4508592	.1878649	-.047239

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2902.295	66418.98	13792.77	2023.127	4064.706
Stddev	2.480	239.32	30.32	12.918	3.109
%RSD	.0854526	.3603230	.2198253	.6385090	.0764836
#1	2901.689	66310.20	13816.66	2018.080	4063.801
#2	2905.021	66253.36	13758.66	2013.495	4068.167
#3	2900.173	66693.37	13802.98	2037.807	4062.150

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MS Acquired: 12/23/2024 15:31:42 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7138541	1.899494	2.677783	1.436046	.6377798	188.7007
Stddev	.0008144	.010934	.003693	.002086	.0032167	.9610
%RSD	.1140773	.5756415	.1379001	.1452501	.5043588	.5092789
#1	.7147190	1.893533	2.673617	1.437558	.6367011	187.7820
#2	.7131021	1.892836	2.680655	1.433667	.6352411	188.6211
#3	.7137410	1.912114	2.679076	1.436914	.6413972	189.6991

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.227840	.1398574	.2583562	37.28036	.6446000	.6183758
Stddev	.041927	.0002826	.0000907	.11799	.0003869	.0008042
%RSD	.6732174	.2020879	.0351215	.3165026	.0600176	.1300529
#1	6.183755	.1395816	.2583133	37.14494	.6449923	.6175493
#2	6.267211	.1401464	.2582949	37.33510	.6445888	.6184226
#3	6.232554	.1398442	.2584605	37.36104	.6442188	.6191557

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9074452	441.6049	F 41.16145	98.97538	1.457019	.0764871
Stddev	.0022598	4.3055	.23379	.32267	.000784	.0006376
%RSD	.2490324	.9749638	.5679880	.3260119	.0537886	.8335767
#1	.9078561	441.7570	40.91669	98.60937	1.457827	.0763702
#2	.9094714	437.2254	41.38245	99.09799	1.456967	.0759160
#3	.9050081	445.8323	41.18522	99.21877	1.456262	.0771750

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.103290	.6887234	2.423770	33.13018	.3428548	.3150607
Stddev	.038767	.0022065	.000961	.08669	.0052715	.0006407
%RSD	.6351832	.3203757	.0396377	.2616640	1.537535	.2033677
#1	6.122855	.6867648	2.423961	33.17648	.3438240	.3144712
#2	6.058639	.6882913	2.424621	33.03018	.3371659	.3149682
#3	6.128376	.6911139	2.422728	33.18390	.3475745	.3157427

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MS Acquired: 12/23/2024 15:31:42 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7339304	3.525742	7.144444	F 17.71677	2.307271	.8906883
Stddev	.0020007	.007600	.031330	.04459	.012024	.0025210
%RSD	.2725999	.2155446	.4385287	.2516902	.5211278	.2830449
#1	.7327513	3.522698	7.108486	17.73259	2.307973	.8917154
#2	.7327995	3.520136	7.165865	17.66643	2.294912	.8878159
#3	.7362405	3.534391	7.158982	17.75130	2.318929	.8925337

Elem	Sr4077
Units	ppm
Avg	-.018071
Stddev	.003285
%RSD	18.17636
#1	-.018567
#2	-.014567
#3	-.021080

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3430.642	79754.78	17053.83	2358.051	3611.272
Stddev	.592	46.36	26.29	4.192	1.450
%RSD	.0172432	.0581327	.1541409	.1777771	.0401552
#1	3431.116	79702.94	17083.52	2353.314	3612.921
#2	3430.831	79792.28	17033.54	2359.559	3610.700
#3	3429.979	79769.13	17044.42	2361.281	3610.196

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MSD Acquired: 12/23/2024 15:36:14 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7055691	1.897646	2.654344	1.419664	.6341046	188.3594
Stddev	.0023689	.024176	.005884	.006297	.0013308	1.1067
%RSD	.3357374	1.273991	.2216876	.4435373	.2098694	.5875512
#1	.7029925	1.913099	2.647558	1.418023	.6352058	187.1385
#2	.7060624	1.869786	2.657431	1.414351	.6326258	189.2966
#3	.7076525	1.910054	2.658042	1.426619	.6344822	188.6432

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.256517	.1402511	.2572558	37.43901	.6449800	.6155466
Stddev	.048836	.0001110	.0005638	.08971	.0021490	.0018290
%RSD	.7805568	.0791227	.2191792	.2396114	.3331947	.2971397
#1	6.221445	.1401484	.2569938	37.35260	.6468837	.6143695
#2	6.312294	.1403688	.2568707	37.53169	.6426496	.6146164
#3	6.235812	.1402360	.2579030	37.43275	.6454067	.6176537

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8991579	440.1953	F 41.25648	99.20677	1.447217	.0762159
Stddev	.0005500	2.0960	.20149	.34178	.004470	.0001899
%RSD	.0611657	.4761474	.4883787	.3445136	.3089022	.2491397
#1	.8993746	439.8059	41.37897	98.82967	1.443576	.0760328
#2	.8995666	438.3214	41.02393	99.49611	1.445868	.0762030
#3	.8985326	442.4587	41.36653	99.29454	1.452207	.0764119

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.140129	.6914865	2.397296	33.20510	.3391033	.3130663
Stddev	.000225	.0029796	.005331	.06279	.0025716	.0001154
%RSD	.0036607	.4309047	.2223891	.1890997	.7583386	.0368520
#1	6.140374	.6897942	2.401194	33.20050	.3391297	.3131986
#2	6.139933	.6949269	2.391221	33.14473	.3365186	.3130144
#3	6.140079	.6897383	2.399475	33.27006	.3416615	.3129861

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MSD Acquired: 12/23/2024 15:36:14 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7251512	3.632805	8.109876	F 17.64453	2.271198	.8931762
Stddev	.0019786	.011719	.026868	.09465	.008148	.0015580
%RSD	.2728584	.3225960	.3312995	.5364512	.3587588	.1744294
#1	.7259580	3.621989	8.091613	17.61090	2.272090	.8914146
#2	.7228967	3.645256	8.097289	17.57127	2.262641	.8943729
#3	.7265990	3.631170	8.140727	17.75140	2.278864	.8937411

Elem	Sr4077
Units	ppm
Avg	-.012253
Stddev	.002297
%RSD	18.74422
#1	-.012662
#2	-.009779
#3	-.014317

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3450.121	79858.32	17003.36	2365.901	3634.418
Stddev	6.794	165.13	37.41	7.512	12.148
%RSD	.1969168	.2067793	.2199977	.3175186	.3342601
#1	3457.776	79741.41	17031.03	2357.229	3646.262
#2	3444.806	80047.23	16960.80	2370.410	3635.005
#3	3447.782	79786.34	17018.24	2370.065	3621.986

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01A Acquired: 12/23/2024 15:40:45 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7337203	1.993349	2.712536	1.485728	.6570867	191.7273
Stddev	.0033733	.013306	.006052	.003585	.0042759	.5160
%RSD	.4597601	.6675246	.2231127	.2412822	.6507322	.2691407
#1	.7366457	1.983743	2.717080	1.489769	.6619380	191.9300
#2	.7344850	2.008536	2.705666	1.482930	.6554558	192.1111
#3	.7300302	1.987767	2.714861	1.484485	.6538662	191.1407

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.286622	.1449616	.2654684	37.74466	.6613591	.6284551
Stddev	.049427	.0002824	.0005663	.04962	.0014574	.0013425
%RSD	.7862312	.1948157	.2133290	.1314670	.2203702	.2136189
#1	6.308073	.1449072	.2661057	37.71528	.6610339	.6295616
#2	6.321699	.1452673	.2652766	37.80195	.6629517	.6269616
#3	6.230093	.1447104	.2650228	37.71675	.6600917	.6288420

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9118781	445.1326	F 41.51841	100.4754	1.479805	.0795232
Stddev	.0016920	1.9996	.13700	.2493	.002689	.0001873
%RSD	.1855496	.4492136	.3299632	.2481265	.1817405	.2355789
#1	.9114656	447.3993	41.44639	100.2255	1.481695	.0797224
#2	.9104305	444.3801	41.67639	100.7241	1.476726	.0794968
#3	.9137382	443.6184	41.43245	100.4766	1.480995	.0793505

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.234950	.7018568	2.406131	33.81551	.3422057	.3238781
Stddev	.030737	.0014394	.003305	.05808	.0026341	.0012270
%RSD	.4929737	.2050858	.1373622	.1717440	.7697335	.3788623
#1	6.265373	.7008921	2.409515	33.83395	.3452459	.3251409
#2	6.235566	.7035113	2.402910	33.75045	.3406061	.3238031
#3	6.203909	.7011670	2.405969	33.86213	.3407652	.3226902

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01A Acquired: 12/23/2024 15:40:45 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.7549289	3.743868	9.482679	F 18.08639	2.317235	.9024006
Stddev	.0013443	.001266	.050163	.02644	.007412	.0020640
%RSD	.1780649	.0338167	.5289933	.1461725	.3198817	.2287174
#1	.7547438	3.743503	9.429819	18.06821	2.311621	.9047812
#2	.7536867	3.745277	9.488599	18.11672	2.325638	.9013061
#3	.7563561	3.742825	9.529619	18.07426	2.314448	.9011144

Elem	Sr4077
Units	ppm
Avg	-.012981
Stddev	.001168
%RSD	8.996854
#1	-.014315
#2	-.012485
#3	-.012142

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3408.732	79081.37	16925.56	2360.353	3582.235
Stddev	9.620	42.34	35.41	2.176	7.553
%RSD	.2822272	.0535449	.2092309	.0921791	.2108453
#1	3398.680	79061.28	16911.11	2357.956	3574.213
#2	3417.853	79052.81	16899.65	2362.203	3589.210
#3	3409.663	79130.02	16965.91	2360.899	3583.283

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01DUPDLX5 Acquired: 12/23/2024 15:49:45 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0188032	.0076235	.3872600	-.019882	.0037801	48.49781	1.584677
Stddev	.0020302	.0004451	.0014267	.002039	.0011458	.01851	.001703
%RSD	10.79710	5.837838	.3683981	10.25728	30.31143	.0381609	.1074612
#1	.0166173	.0079040	.3856252	-.018820	.0026794	48.47875	1.584268
#2	.0206297	.0071103	.3882531	-.022233	.0036945	48.51570	1.586547
#3	.0191625	.0078561	.3879017	-.018593	.0049662	48.49897	1.583216

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0052023	.0091338	9.975456	.1014232	.0884150	.1976651	120.8268
Stddev	.0000824	.0000799	.021935	.0002200	.0002615	.0009850	.5191
%RSD	1.584712	.8743076	.2198926	.2169556	.2958250	.4982932	.4296331
#1	.0052626	.0092083	9.950198	.1016629	.0881324	.1976628	120.4111
#2	.0052358	.0090495	9.989722	.1012303	.0886486	.1986512	120.6606
#3	.0051083	.0091437	9.986449	.1013763	.0884639	.1966813	121.4086

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.66608	25.51869	.2095597	.0063140	.9898872	.1292809	.6249505
Stddev	.01282	.03140	.0002154	.0004160	.0118280	.0017678	.0020135
%RSD	.1098919	.1230399	.1027919	6.588918	1.194882	1.367397	.3221915
#1	11.65185	25.51137	.2093154	.0061519	.9766472	.1289955	.6270238
#2	11.66966	25.49160	.2096415	.0060035	.9936039	.1276732	.6230026
#3	11.67673	25.55310	.2097222	.0067867	.9994104	.1311740	.6248251

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.230391	.0485598	.0003892	.0118538	.9015329	1.589509	2.512634
Stddev	.022789	.0004276	.0000711	.0003691	.0022941	.009281	.007949
%RSD	.3657653	.8805513	18.28016	3.114103	.2544615	.5838998	.3163472
#1	6.204177	.0481079	.0003504	.0122535	.8990863	1.584708	2.503888
#2	6.245488	.0486136	.0004713	.0117823	.9036356	1.583611	2.514598
#3	6.241507	.0489580	.0003458	.0115256	.9018767	1.600207	2.519417

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01DUPDLX5 Acquired: 12/23/2024 15:49:45 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4532977	.1887408	-.047549
Stddev	.0026685	.0012086	.000588
%RSD	.5886793	.6403226	1.237664
#1	.4549837	.1874857	-.047096
#2	.4502212	.1898967	-.047336
#3	.4546883	.1888400	-.048214

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2871.672	65424.95	13470.58	1984.497	4028.219
Stddev	5.802	93.43	32.33	10.342	6.351
%RSD	.2020282	.1427976	.2399953	.5211540	.1576611
#1	2865.506	65412.19	13441.12	1978.667	4026.161
#2	2872.489	65524.10	13465.46	1996.439	4035.344
#3	2877.023	65338.56	13505.16	1978.387	4023.152

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01LDLX25 Acquired: 12/23/2024 15:53:52 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0036007	.0003283	.0805486	-.004006	.0004478	10.68301	.3388738
Stddev	.0020784	.0022885	.0008763	.001846	.0010485	.01810	.0027277
%RSD	57.72246	697.0517	1.087861	46.08699	234.1683	.1694115	.8049287
#1	.0026232	.0010434	.0808689	-.001972	-.000549	10.70260	.3410481
#2	.0021913	-.002232	.0812197	-.005577	.001541	10.67953	.3397601
#3	.0059877	.002174	.0795573	-.004468	.000352	10.66691	.3358132

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012038	.0014931	2.219284	.0224405	.0178936	.0444904	26.60945
Stddev	.0000604	.0000733	.010135	.0000958	.0001016	.0002477	.09509
%RSD	5.018707	4.912743	.4566770	.4268314	.5676405	.5567220	.3573549
#1	.0012666	.0015439	2.225350	.0223726	.0178340	.0444536	26.63893
#2	.0011987	.0014090	2.224918	.0223989	.0178359	.0442631	26.68631
#3	.0011461	.0015264	2.207584	.0225500	.0180109	.0447544	26.50311

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.595334	5.593255	.0422782	.0021046	.2355216	.0276104	.1387678
Stddev	.013412	.034819	.0001262	.0002829	.0145266	.0008077	.0006167
%RSD	.5167652	.6225188	.2985623	13.44013	6.167860	2.925330	.4444091
#1	2.602166	5.621339	.0424027	.0018061	.2191976	.0283034	.1394695
#2	2.603955	5.604131	.0421503	.0023686	.2403418	.0278045	.1383122
#3	2.579882	5.554297	.0422816	.0021390	.2470254	.0267234	.1385216

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.444665	.0105358	.0000784	.0018520	.1985127	.3384557	.5016198
Stddev	.015297	.0005336	.0002159	.0005879	.0012957	.0044384	.0016899
%RSD	1.058851	5.064461	275.5186	31.74483	.6527006	1.311377	.3368885
#1	1.427530	.0100045	.0001909	.0012646	.1973368	.3347642	.4998843
#2	1.449522	.0105314	-.000171	.0018510	.1982995	.3372225	.5032601
#3	1.456944	.0110716	.000215	.0024404	.1999017	.3433803	.5017150

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01LDLX25 Acquired: 12/23/2024 15:53:52 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0879154	.0389239	-.010143
Stddev	.0032623	.0002454	.000018
%RSD	3.710698	.6304506	.1765047
#1	.0842751	.0390293	-.010123
#2	.0905745	.0390989	-.010157
#3	.0888965	.0386434	-.010150

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2810.370	63582.61	12909.76	1923.093	4338.242
Stddev	3.228	64.00	51.80	3.717	6.661
%RSD	.1148636	.1006540	.4012767	.1932664	.1535336
#1	2811.820	63597.31	12876.32	1926.940	4330.749
#2	2812.618	63512.54	12883.53	1919.521	4343.491
#3	2806.671	63637.98	12969.44	1922.819	4340.487

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV05 Acquired: 12/23/2024 16:06:39 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	5.375618	5.082290	4.919396	5.499302	5.491012	10.27005	9.909651
Stddev	.008401	.082867	.010092	.020486	.013701	.01198	.081442
%RSD	.1562867	1.630507	.2051382	.3725204	.2495091	.1166062	.8218403
#1	5.381059	5.099251	4.917986	5.520021	5.506671	10.28307	10.00309
#2	5.365942	4.992255	4.910084	5.479057	5.485131	10.25951	9.87213
#3	5.379854	5.155365	4.930118	5.498826	5.481234	10.26756	9.85374

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2274521	2.474183	23.69466	1.007502	2.494947	1.344477	5.244169
Stddev	.0004357	.006098	.01445	.006525	.006324	.001096	.023047
%RSD	.1915795	.2464743	.0609969	.6476703	.2534750	.0815480	.4394783
#1	.2278117	2.472868	23.67834	1.009583	2.494928	1.345021	5.233847
#2	.2275771	2.468849	23.69981	1.000190	2.488633	1.345196	5.228086
#3	.2269675	2.480831	23.70584	1.012733	2.501281	1.343215	5.270572

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.357766	23.22892	2.511067	1.269764	24.98082	2.489970	2.354131
Stddev	.001488	.06905	.004647	.000951	.12391	.002686	.010647
%RSD	.0630995	.2972579	.1850707	.0749038	.4960359	.1078550	.4522771
#1	2.358208	23.14919	2.511262	1.270099	25.12192	2.493020	2.358185
#2	2.358982	23.26814	2.506325	1.268691	24.88968	2.488928	2.342052
#3	2.356107	23.26942	2.515613	1.270503	24.93087	2.487961	2.362156

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.07638	4.566373	5.396685	4.966164	4.920661	5.494860	4.864609
Stddev	.10867	.010130	.003490	.019801	.005870	.057180	.036883
%RSD	.4013434	.2218478	.0646681	.3987092	.1192881	1.040602	.7581974
#1	27.10799	4.571404	5.400471	4.965186	4.925350	5.452565	4.875267
#2	26.95540	4.573004	5.393597	4.946871	4.922556	5.472101	4.823570
#3	27.16573	4.554712	5.395987	4.986435	4.914078	5.559915	4.894989

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV05 Acquired: 12/23/2024 16:06:39 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	4.941949	5.073581	5.077684
Stddev	.026243	.008693	.020554
%RSD	.5310349	.1713475	.4047967
#1	4.953315	5.082041	5.059120
#2	4.911938	5.074030	5.074159
#3	4.960593	5.064671	5.099773

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2628.549	60027.49	11976.69	1783.558	3969.484
Stddev	5.366	184.10	42.87	14.977	7.528
%RSD	.2041303	.3066856	.3579272	.8397447	.1896583
#1	2622.865	59883.71	11932.54	1768.041	3963.070
#2	2629.258	60234.97	11979.40	1797.930	3977.773
#3	2633.525	59963.77	12018.15	1784.704	3967.608

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB05 Acquired: 12/23/2024 16:10:50 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000615	.0000353	-.000185	.0011355	-.000102	.0030972	-.009936
Stddev	.000807	.0009852	.000694	.0006291	.000794	.0013178	.000385
%RSD	131.0984	2787.271	375.6477	55.40428	780.6899	42.54925	3.877927
#1	-.001458	-.001090	.000300	.0015835	-.000140	.0021650	-.010342
#2	-.000536	.000451	.000125	.0004163	-.000876	.0046049	-.009575
#3	.000149	.000744	-.000979	.0014067	.000711	.0025217	-.009891

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000650	-.000006	.0026142	-.000167	-.000071	.0002794	-.000962
Stddev	.0000384	.000036	.0027658	.000113	.000072	.0005733	.002728
%RSD	59.03858	655.6079	105.7960	67.49860	101.5009	205.2096	283.6600
#1	.0000688	.000023	.0010080	-.000092	-.000140	-.000264	.001628
#2	.0001013	.000006	.0058078	-.000112	.000004	.000224	-.000704
#3	.0000249	-.000046	.0010268	-.000296	-.000076	.000878	-.003809

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000059	-.006320	.0000787	.0011817	.0125848	-.000573	.0000727
Stddev	.000282	.005497	.0000450	.0001675	.0234973	.001044	.0000652
%RSD	476.8072	86.98452	57.25148	14.17548	186.7123	182.1624	89.68443
#1	.000062	-.000060	.0000367	.0013592	-.007327	.000556	.0000080
#2	.000142	-.008539	.0001263	.0011596	.006580	-.000773	.0001384
#3	-.000381	-.010360	.0000730	.0010264	.038502	-.001503	.0000716

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0959957	.0060579	.0007051	.0001114	.0002070	.0087658	.0002457
Stddev	.0311060	.0001238	.0001951	.0002542	.0000930	.0028894	.0004532
%RSD	32.40347	2.043703	27.66990	228.2342	44.91583	32.96213	184.4948
#1	.0601500	.0059783	.0006805	-.000137	.0001122	.0086280	.0004258
#2	.1158924	.0059948	.0009114	.000371	.0002981	.0059477	.0005811
#3	.1119447	.0062005	.0005235	.000100	.0002108	.0117216	-.000270

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB05 Acquired: 12/23/2024 16:10:50 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	-.000502	-.002367	-.000022
Stddev	.002898	.000458	.000013
%RSD	577.7923	19.33419	58.86629
#1	-.001102	-.002846	-.000033
#2	-.003053	-.002322	-.000008
#3	.002650	-.001934	-.000025

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2745.343	63389.76	12880.59	1899.804	4474.363
Stddev	3.099	102.14	20.18	4.537	3.738
%RSD	.1128871	.1611327	.1566535	.2387955	.0835416
#1	2742.041	63345.57	12892.14	1895.989	4471.359
#2	2745.802	63317.17	12892.34	1904.820	4478.549
#3	2748.188	63506.56	12857.29	1898.603	4473.180

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MSDLX5 Acquired: 12/23/2024 16:15:11 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.1835360	.4158862	.5771657	.3873618	.1676838	48.84567	1.647138
Stddev	.0019248	.0096614	.0012901	.0023484	.0023359	.08802	.002490
%RSD	1.048731	2.323089	.2235221	.6062556	1.393021	.1801954	.1511554
#1	.1829186	.4222699	.5778439	.3888957	.1667625	48.75510	1.644792
#2	.1819957	.4206177	.5756780	.3885314	.1703398	48.93089	1.646873
#3	.1856938	.4047710	.5779753	.3846582	.1659491	48.85101	1.649750

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0377511	.0491806	10.12375	.1763754	.1281816	.2543174	122.0740
Stddev	.0001406	.0000726	.01798	.0004978	.0001355	.0009643	.5254
%RSD	.3723503	.1475096	.1776447	.2822262	.1057404	.3791541	.4304266
#1	.0377122	.0491786	10.10399	.1769501	.1281965	.2548158	121.5039
#2	.0376341	.0492541	10.13915	.1760807	.1280393	.2532059	122.1793
#3	.0379070	.0491090	10.12813	.1760954	.1283091	.2549304	122.5389

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.58936	25.49633	.3084873	.0217644	1.514444	.1835394	.6534737
Stddev	.02923	.10726	.0005604	.0002473	.017797	.0003329	.0009478
%RSD	.2522049	.4206855	.1816485	1.136381	1.175168	.1813965	.1450392
#1	11.55769	25.40383	.3082185	.0217906	1.497869	.1837426	.6539938
#2	11.61530	25.61391	.3081120	.0215051	1.512209	.1831552	.6540476
#3	11.59508	25.47125	.3091314	.0219976	1.533253	.1837205	.6523798

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.387480	.1003273	.0840379	.1524618	.9638624	2.063116	3.589615
Stddev	.051468	.0002139	.0001671	.0005090	.0016313	.016097	.014528
%RSD	.6136234	.2132265	.1988320	.3338435	.1692411	.7802139	.4047264
#1	8.329073	.1004360	.0842264	.1521982	.9620880	2.044630	3.597118
#2	8.407182	.1000809	.0839792	.1530485	.9642021	2.070689	3.598857
#3	8.426187	.1004651	.0839081	.1521386	.9652970	2.074030	3.572869

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MSDLX5 Acquired: 12/23/2024 16:15:11 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4326906	.2296706	-.010102
Stddev	.0043586	.0009747	.000511
%RSD	1.007317	.4243903	5.060994
#1	.4294928	.2285469	-.009513
#2	.4376552	.2302868	-.010430
#3	.4309238	.2301782	-.010364

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2888.652	65690.21	13752.86	1975.051	4085.655
Stddev	1.847	91.50	26.68	6.003	1.552
%RSD	.0639431	.1392853	.1939798	.3039359	.0379885
#1	2890.008	65789.93	13751.50	1975.020	4087.433
#2	2886.548	65610.13	13726.88	1969.064	4084.571
#3	2889.399	65670.56	13780.19	1981.069	4084.960

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MSDDLX5 Acquired: 12/23/2024 16:19:16 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.1809166	.4102732	.5726948	.3810220	.1648690	48.15463	1.631287
Stddev	.0045688	.0076663	.0012864	.0034902	.0023410	.05104	.006501
%RSD	2.525351	1.868594	.2246229	.9160099	1.419889	.1059974	.3985250
#1	.1756847	.4158613	.5718994	.3842857	.1643269	48.12326	1.631369
#2	.1829456	.4015334	.5720060	.3773426	.1674335	48.12711	1.637747
#3	.1841194	.4134250	.5741789	.3814377	.1628467	48.21353	1.624746

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0375087	.0487775	10.00241	.1745918	.1272321	.2516835	120.2108
Stddev	.0002619	.0001405	.01643	.0005658	.0001046	.0006539	.1598
%RSD	.6981911	.2881179	.1642411	.3240822	.0821867	.2598184	.1329747
#1	.0372178	.0488031	9.98398	.1750783	.1271893	.2524173	120.0273
#2	.0375825	.0486258	10.01552	.1739709	.1271557	.2514708	120.3201
#3	.0377257	.0489034	10.00772	.1747263	.1273513	.2511624	120.2850

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.47662	25.17485	.3057266	.0213899	1.491928	.1816113	.6506971
Stddev	.02969	.06260	.0003892	.0002575	.013959	.0011022	.0019239
%RSD	.2587136	.2486602	.1272980	1.203724	.9356475	.6069242	.2956595
#1	11.45105	25.11389	.3052914	.0212226	1.478937	.1806386	.6494195
#2	11.50918	25.17169	.3060412	.0216864	1.506686	.1828085	.6529097
#3	11.46964	25.23897	.3058472	.0212608	1.490160	.1813866	.6497620

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.283173	.0974779	.0830553	.1506577	.9317597	1.791832	3.557702
Stddev	.006900	.0003443	.0002278	.0005832	.0025245	.006243	.019713
%RSD	.0832983	.3531813	.2743279	.3870754	.2709428	.3484019	.5540932
#1	8.290857	.0970885	.0832332	.1503294	.9305258	1.791474	3.554522
#2	8.277509	.0976034	.0831341	.1503126	.9346639	1.785776	3.539772
#3	8.281153	.0977418	.0827985	.1513310	.9300896	1.798247	3.578811

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01MSDDLX5 Acquired: 12/23/2024 16:19:16 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4266610	.2266308	-.009487
Stddev	.0033281	.0007011	.000437
%RSD	.7800358	.3093453	4.601820
#1	.4304000	.2265782	-.009256
#2	.4255603	.2273568	-.009215
#3	.4240227	.2259576	-.009991

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2905.305	65867.41	13756.92	1979.731	4099.478
Stddev	5.833	73.31	17.27	4.199	3.842
%RSD	.2007743	.1113067	.1255357	.2120917	.0937314
#1	2899.697	65898.09	13775.15	1984.196	4095.174
#2	2904.878	65920.40	13740.80	1979.133	4102.563
#3	2911.340	65783.74	13754.82	1975.863	4100.699

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01ADLX5 Acquired: 12/23/2024 16:23:21 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.1830964	.4243507	.5813450	.3875290	.1653644	48.77893	1.621712
Stddev	.0015516	.0019791	.0007817	.0024776	.0019776	.05860	.007263
%RSD	.8474282	.4663702	.1344570	.6393388	1.195909	.1201356	.4478594
#1	.1813171	.4223011	.5810523	.3882211	.1632762	48.76826	1.615086
#2	.1841677	.4245004	.5807519	.3847789	.1672087	48.84213	1.629477
#3	.1838046	.4262507	.5822307	.3895869	.1656084	48.72640	1.620575

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0381330	.0494223	10.07278	.1765159	.1284895	.2547303	120.9412
Stddev	.0001431	.0002731	.02166	.0007818	.0001520	.0004362	.4811
%RSD	.3752815	.5525862	.2150619	.4428975	.1182957	.1712430	.3977747
#1	.0382973	.0492616	10.05929	.1759572	.1283460	.2546601	120.4204
#2	.0380658	.0492676	10.09777	.1761812	.1284739	.2543335	121.0342
#3	.0380358	.0497376	10.06129	.1774093	.1286488	.2551974	121.3689

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.57372	25.45808	.3097169	.0215462	1.456834	.1824975	.6559674
Stddev	.04749	.06910	.0011416	.0001451	.004801	.0022867	.0029737
%RSD	.4102862	.2714396	.3685905	.6734945	.3295641	1.253009	.4533268
#1	11.51939	25.37832	.3089855	.0214290	1.451867	.1820351	.6580261
#2	11.60731	25.49999	.3091328	.0215011	1.461450	.1849801	.6525581
#3	11.59446	25.49592	.3110323	.0217085	1.457184	.1804774	.6573180

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.258299	.0980581	.0831363	.1527325	.9457459	1.923473	3.601410
Stddev	.030122	.0003644	.0001635	.0012077	.0037196	.008927	.008771
%RSD	.3647430	.3716577	.1966732	.7907545	.3932972	.4641173	.2435549
#1	8.232201	.0984685	.0830531	.1528152	.9429962	1.913721	3.595280
#2	8.291260	.0977723	.0830312	.1538967	.9499781	1.925454	3.597492
#3	8.251435	.0979336	.0833247	.1514855	.9442633	1.931243	3.611457

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: P5355-01ADLX5 Acquired: 12/23/2024 16:23:21 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.4433578	.2275087	-.010571
Stddev	.0039178	.0008463	.000350
%RSD	.8836772	.3719804	3.309880
#1	.4468219	.2275849	-.010361
#2	.4391059	.2283143	-.010377
#3	.4441456	.2266269	-.010975

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2886.599	65788.21	13623.63	1994.730	4063.864
Stddev	2.324	102.77	13.13	5.539	7.080
%RSD	.0805147	.1562097	.0963900	.2776671	.1742287
#1	2884.756	65840.96	13627.45	1997.421	4063.444
#2	2889.210	65853.88	13609.01	1998.409	4071.145
#3	2885.830	65669.77	13634.42	1988.360	4057.003

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: LR1 Acquired: 12/23/2024 16:27:31 Type: Unk
Method: NON EPA-6010-200.7(v2549) 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	.0004189	.1083534	-.013516	-.248959	-.012853	1851.127	.0041178
Stddev	.0020751	.0073493	.004755	.022604	.003298	10.032	.0010008
%RSD	495.3617	6.782724	35.18353	9.079363	25.66275	.5419238	24.30451
#1	-.001966	.1044007	-.012680	-.258093	-.009797	1840.235	.0052320
#2	.001412	.1168332	-.009234	-.223218	-.016349	1859.988	.0038267
#3	.001811	.1038264	-.018634	-.265568	-.012413	1853.158	.0032949

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087282	.1617458	1919.202	-.005019	.0422196	.5704173	909.0097
Stddev	.0000616	.0002065	6.030	.000936	.0008178	.0093916	5.8207
%RSD	.7052282	.1276652	.3142105	18.64146	1.937062	1.646452	.6403368
#1	.0087426	.1615088	1923.744	-.004013	.0413218	.5710048	910.7427
#2	.0087813	.1618420	1921.502	-.005181	.0424151	.5607457	913.7671
#3	.0086608	.1618866	1912.360	-.005863	.0429220	.5795014	902.5193

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.084445	1947.346	.0244192	-.014707	1922.657	.0440897	.2418941
Stddev	.000976	1.998	.0006340	.000792	6.550	.0013465	.0009886
%RSD	1.156325	.1026235	2.596409	5.387816	.3406777	3.053963	.4086730
#1	-.083589	1948.072	.0247360	-.015508	1929.674	.0449679	.2412870
#2	-.084238	1948.879	.0248324	-.013924	1921.594	.0447616	.2430348
#3	-.085508	1945.085	.0236892	-.014688	1916.704	.0425394	.2413604

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1417.297	-.003621	-.017193	.0199129	-.042403	.1212643	.0971414
Stddev	.514	.011343	.000746	.0015890	.000593	.0117252	.0144671
%RSD	.0362688	313.2699	4.340706	7.979878	1.398282	9.669148	14.89278
#1	1417.870	.004305	-.016333	.0211377	-.041754	.1112689	.1138178
#2	1416.876	.001446	-.017575	.0181174	-.042917	.1183532	.0896516
#3	1417.146	-.016614	-.017672	.0204838	-.042538	.1341709	.0879548

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: LR1 Acquired: 12/23/2024 16:27:31 Type: Unk
Method: NON EPA-6010-200.7(v2549) 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	-.213967	-.316093	-.897518
Stddev	.015647	.000811	.005786
%RSD	7.312827	.2566558	.6446402
#1	-.213398	-.316048	-.899326
#2	-.229891	-.316926	-.902184
#3	-.198612	-.315305	-.891044

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1579.676	37941.15	9861.666	1082.295	2159.505
Stddev	4.899	50.41	25.857	6.266	5.209
%RSD	.3101213	.1328560	.2621963	.5789249	.2412054
#1	1579.323	37888.10	9891.075	1075.120	2163.480
#2	1584.742	37946.94	9842.500	1086.686	2161.427
#3	1574.963	37988.41	9851.422	1085.080	2153.608

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: LR2 Acquired: 12/23/2024 16:32:28 Type: Unk
Method: NON EPA-6010-200.7(v2549) 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	.0062920	-.018243	240.9870	.0110972	-.004063	.2764579
Stddev	.0027202	.001376	.7781	.0020918	.001761	.1213782
%RSD	43.23258	7.541724	.3228824	18.85010	43.34871	43.90479
#1	.0092724	-.017266	241.6296	.0127551	-.004182	.4100812
#2	.0056604	-.017647	241.2094	.0117895	-.005762	.2462698
#3	.0039431	-.019816	240.1218	.0087470	-.002245	.1730226

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^F *****	-.002031	-.007692	.6832963	.0159006	-.038092
Stddev	-----	.000006	.000090	.1574849	.0001453	.000221
%RSD	-----	.2853818	1.170394	23.04783	.9139358	.5812839
#1	^ -----	-.002037	-.007591	.8556923	.0157350	-.038142
#2	^ -----	-.002026	-.007763	.6472103	.0160069	-.038284
#3	^ -----	-.002029	-.007722	.5469862	.0159600	-.037850

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 311.5135	.1267931	41.70397	.2516574	48.54567	.0047339
Stddev	.9160	.0680376	.16081	.1562188	.15666	.0002468
%RSD	.2940604	53.66032	.3855908	62.07598	.3227029	5.214323
#1	312.1669	.2006890	41.69375	.4249911	48.68333	.0044502
#2	310.4664	.1129460	41.86964	.2082441	48.57847	.0048992
#3	311.9072	.0667442	41.54851	.1217369	48.37521	.0048524

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6666898	-.014932	F 22.08494	.5267514	.0013773	-.006849
Stddev	.1329476	.001338	.11465	.0992419	.0001531	.000459
%RSD	19.94144	8.959667	.5191235	18.84036	11.11867	6.706864
#1	.8119736	-.014206	22.21712	.6370624	.0015369	-.006758
#2	.6369958	-.016475	22.01245	.4984765	.0013633	-.007347
#3	.5511001	-.014113	22.02525	.4447153	.0012316	-.006442

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: LR2 Acquired: 12/23/2024 16:32:28 Type: Unk
Method: NON EPA-6010-200.7(v2549) 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	-.005238	-.044516	.0037816	1.262692	-.028130	-.001121
Stddev	.000435	.000419	.0014562	.013700	.003364	.000443
%RSD	8.309155	.9414391	38.50802	1.085007	11.95958	39.52328
#1	-.005679	-.044360	.0032129	1.250219	-.024281	-.001564
#2	-.005227	-.044197	.0026955	1.260502	-.030507	-.001123
#3	-.004808	-.044991	.0054363	1.277356	-.029603	-.000677

Elem	Sr4077
Units	ppm
Avg	.0019534
Stddev	.0000608
%RSD	3.112360
#1	.0018839
#2	.0019799
#3	.0019965

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2331.551	61298.63	12946.51	1751.527	4059.418
Stddev	14.024	24.14	51.91	.303	13.884
%RSD	.6015038	.0393867	.4009542	.0173134	.3420316
#1	2342.204	61272.04	12949.34	1751.330	4074.112
#2	2336.786	61319.19	12893.25	1751.375	4057.627
#3	2315.662	61304.65	12996.96	1751.876	4046.517

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165733TB Acquired: 12/23/2024 16:36:34 Type: Unk
Method: NON EPA-6010-200.7(v2550) 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	-.006474	-.005393	.0081410	.0041655	-.000165	.0924088
Stddev	.001706	.001236	.0034181	.0006620	.001239	.0188868
%RSD	26.35693	22.92412	41.98604	15.89363	749.2844	20.43827
#1	-.004879	-.005830	.0079261	.0046211	.000298	.1139124
#2	-.008273	-.003998	.0048354	.0044693	-.001570	.0848041
#3	-.006270	-.006352	.0116614	.0034061	.000776	.0785098

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032703	-.000044	-.000194	.0899460	.0007693	-.000309
Stddev	.0049980	.000020	.000033	.0131262	.0000463	.000104
%RSD	152.8278	44.07726	16.84705	14.59345	6.022849	33.52664
#1	.0088753	-.000067	-.000228	.1034682	.0007455	-.000224
#2	.0016584	-.000031	-.000163	.0891143	.0007396	-.000279
#3	-.000723	-.000035	-.000190	.0772553	.0008226	-.000425

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091732	.0831049	.0095849	.0556820	.0024885	.0009868
Stddev	.0039157	.0159079	.0025518	.0177935	.0008932	.0001486
%RSD	42.68607	19.14190	26.62327	31.95550	35.89070	15.05719
#1	.0071664	.1012689	.0124478	.0762245	.0022561	.0008361
#2	.0066677	.0763920	.0087571	.0450719	.0017346	.0009911
#3	.0136855	.0716539	.0075498	.0457498	.0034749	.0011332

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 284.6169	.0000975	.0053611	.2008492	-.000201	.0001104
Stddev	.7862	.0008906	.0005314	.0380550	.000310	.0001398
%RSD	.2762460	913.7667	9.912729	18.94705	154.5320	126.5659
#1	283.8231	.0000106	.0059440	.2436237	-.000508	.0001792
#2	285.3954	.0010283	.0049035	.1881760	.000113	-.000050
#3	284.6323	-.000746	.0052359	.1707477	-.000207	.000202

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: PB165733TB Acquired: 12/23/2024 16:36:34 Type: Unk
Method: NON EPA-6010-200.7(v2550) 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	.0009794	.0010627	.0384117	.0115053	F .0643750	-.006451
Stddev	.0008112	.0002572	.0027677	.0022583	.0047629	.000548
%RSD	82.82363	24.20258	7.205277	19.62811	7.398663	8.487316
#1	.0000893	.0011314	.0356529	.0102272	.0669999	-.006113
#2	.0011719	.0012785	.0383941	.0141128	.0672480	-.006158
#3	.0016770	.0007781	.0411882	.0101760	.0588772	-.007083

Elem	Sr4077
Units	ppm
Avg	-.000053
Stddev	.000014
%RSD	26.22311
#1	-.000070
#2	-.000044
#3	-.000046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2538.318	56997.76	12311.29	1739.026	3835.844
Stddev	5.096	22.00	92.82	1.232	4.020
%RSD	.2007775	.0385943	.7539229	.0708597	.1047914
#1	2534.394	56978.30	12405.55	1737.663	3833.688
#2	2544.078	56993.35	12308.33	1740.060	3840.481
#3	2536.481	57021.63	12219.99	1739.356	3833.362

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV06 Acquired: 12/23/2024 16:54:37 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	5.354328	5.270296	5.025637	5.462373	5.440392	10.33987	10.06312
Stddev	.009707	.056495	.005802	.015435	.013749	.03524	.04201
%RSD	.1812911	1.071960	.1154531	.2825700	.2527214	.3408512	.4175094
#1	5.345559	5.292699	5.029011	5.448836	5.428944	10.30030	10.02662
#2	5.352667	5.312155	5.018937	5.459101	5.436589	10.35143	10.10905
#3	5.364758	5.206035	5.028963	5.479181	5.455642	10.36788	10.05368

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2425152	2.537690	24.53011	1.036304	2.541297	1.346081	5.221849
Stddev	.0005977	.004959	.06947	.005455	.004380	.001554	.005597
%RSD	.2464495	.1954116	.2832121	.5263497	.1723706	.1154157	.1071869
#1	.2422168	2.537838	24.45409	1.033487	2.540885	1.344304	5.217314
#2	.2421255	2.532659	24.54597	1.032834	2.537137	1.347182	5.220130
#3	.2432033	2.542573	24.59029	1.042591	2.545868	1.346757	5.228105

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.431776	24.17160	2.557230	1.282194	24.73932	2.536180	2.338966
Stddev	.004791	.06031	.004995	.005416	.08989	.004209	.008885
%RSD	.1970000	.2495130	.1953359	.4224372	.3633506	.1659592	.3798836
#1	2.429878	24.12876	2.558445	1.281662	24.82029	2.531344	2.335560
#2	2.437225	24.14546	2.551739	1.277062	24.75507	2.538182	2.332286
#3	2.428225	24.24057	2.561505	1.287856	24.64259	2.539014	2.349050

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.55279	4.773409	5.406974	5.077435	5.006414	5.360837	4.975482
Stddev	.04590	.007248	.006723	.007780	.006692	.040362	.001979
%RSD	.1728512	.1518316	.1243356	.1532278	.1336715	.7529117	.0397682
#1	26.52078	4.768302	5.399339	5.084662	5.000290	5.321726	4.973512
#2	26.53220	4.770221	5.409575	5.069200	5.013557	5.358441	4.977469
#3	26.60537	4.781704	5.412008	5.078442	5.005395	5.402344	4.975464

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCV06 Acquired: 12/23/2024 16:54:37 Type: Unk
Method: NON EPA-6010-200.7(v2459) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.033577	5.009135	5.124944
Stddev	.004347	.009106	.048428
%RSD	.0863599	.1817931	.9449390
#1	5.038578	5.005611	5.079168
#2	5.030701	5.019476	5.175647
#3	5.031452	5.002317	5.120018

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2649.975	59134.60	11359.96	1821.181	3954.612
Stddev	4.441	201.39	4.86	5.737	6.920
%RSD	.1675830	.3405677	.0427992	.3150283	.1749928
#1	2653.965	59157.86	11365.57	1827.511	3956.158
#2	2650.769	59323.36	11357.00	1819.707	3960.628
#3	2645.190	58922.60	11357.30	1816.324	3947.049

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB06 Acquired: 12/23/2024 16:58:48 Type: Unk
Method: NON EPA-6010-200.7(v2459) 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	.0001387	-.000472	-.000341	.0002891	-.001627	.0056701	-.006458
Stddev	.0025497	.000848	.000422	.0019770	.001346	.0025154	.000289
%RSD	1838.535	179.6179	123.5002	683.7423	82.74577	44.36202	4.481471
#1	.0009838	-.000884	-.000407	.0025558	-.001683	.0041087	-.006754
#2	-.002726	.000503	.000109	-.001079	-.002944	.0043297	-.006176
#3	.002159	-.001036	-.000727	-.000609	-.000254	.0085718	-.006445

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000471	.0000839	.0099015	-.000220	-.000059	-.000072	.0019901
Stddev	.0000516	.0000831	.0024546	.000230	.000119	.000628	.0017406
%RSD	109.6538	98.97254	24.79016	104.8752	202.7760	877.4744	87.46711
#1	-.000004	.0001517	.0104640	-.000247	.000005	-.000361	.0022929
#2	.000099	-.000009	.0072145	.000023	-.000197	.000649	.0035594
#3	.000046	.000109	.0120260	-.000435	.000015	-.000503	.0001179

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000878	-.001030	.0001744	.0010677	.0796915	.0010087	-.000186
Stddev	.0000645	.004212	.0003125	.0002993	.0241840	.0007761	.000154
%RSD	73.46958	408.9925	179.1883	28.02911	30.34699	76.93914	82.87223
#1	.0001599	.001368	.0005330	.0013291	.0560129	.0002282	-.000030
#2	.0000355	.001436	.0000297	.0011327	.0787105	.0017803	-.000189
#3	.0000681	-.005893	-.000040	.0007413	.1043510	.0010175	-.000337

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1361565	.0060899	.0006950	-.000181	.0011218	.0083085	-.001546
Stddev	.0124392	.0001505	.0002797	.000313	.0000607	.0032109	.001056
%RSD	9.135925	2.470727	40.24244	173.5168	5.411908	38.64663	68.30619
#1	.1218838	.0061487	.0009820	.000128	.0011779	.0110762	-.002693
#2	.1418961	.0062021	.0004232	-.000171	.0011302	.0090612	-.000616
#3	.1446895	.0059189	.0006799	-.000499	.0010574	.0047880	-.001328

Reviewed By:jaswal
On:12/26/2024
10:44:49 PM
Inst Id :P4
LB :LB134066

Sample Name: CCB06 Acquired: 12/23/2024 16:58:48 Type: Unk
Method: NON EPA-6010-200.7(v2459) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

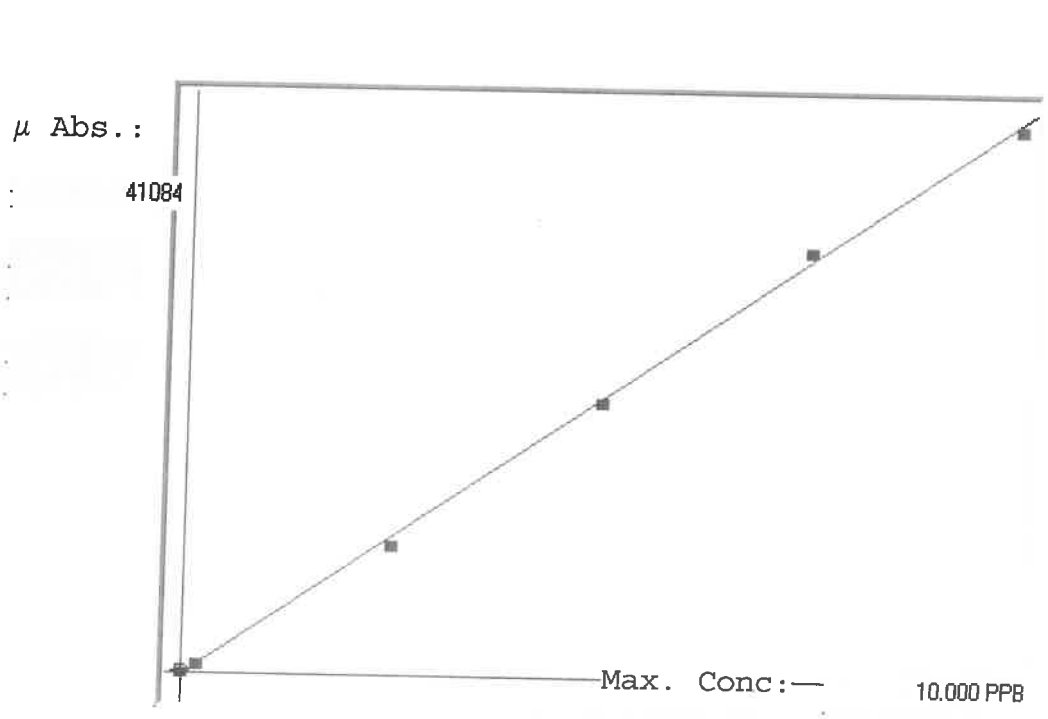
Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000545	-.003664	.0004225
Stddev	.002150	.000835	.0001164
%RSD	394.2080	22.78604	27.54295
#1	.000836	-.003370	.0005322
#2	.000550	-.003017	.0004347
#3	-.003022	-.004607	.0003005

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2816.552	62766.96	12145.25	1943.606	4532.700
Stddev	.494	82.66	22.92	9.387	7.122
%RSD	.0175531	.1316910	.1887267	.4829428	.1571277
#1	2817.084	62671.54	12118.99	1932.858	4524.881
#2	2816.106	62816.59	12161.19	1947.765	4534.404
#3	2816.467	62812.75	12155.58	1950.195	4538.816

Reviewed By:mohan
On:12/17/2024
10:32:07 PM
Inst Id :CV1
LB :LB133972

LB133972

7470A INSTRUMENT ID: CV1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0	0.000	0.073	0.073	161	0.000	161	0			
0.2	0.200	0.211	0.011	737	0.0 %	737				
2.5	2.500	2.359	-0.141	9679	0.0 %	9679				
5.0	5.000	4.963	-0.037	20521	0.0 %	20521				
7.5	7.500	7.692	0.192	31883	0.0 %	31883				
10.0	10.000	9.902	-0.098	41084	0.0 %	41084				

0/0 D

12/17/24

Reviewed By:mohan
On:12/17/2024
10:32:07 PM
Inst Id :CV1
LB :LB133972

LB133972 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 17 Dec 2024 10:13:33

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S0	161	-	0.00000	7470A	PPB	17 Dec 2024 10:40:40	S	Std
0.2 - 1	S0-2	737	-	0.20000	7470A	PPB	17 Dec 2024 10:42:56	S	Std
2.5 - 1	S2.5	9679	-	2.50000	7470A	PPB	17 Dec 2024 10:45:14	S	Std
5.0 - 1	S5	20521	-	5.00000	7470A	PPB	17 Dec 2024 10:47:30	S	Std
7.5 - 1	S7.5	31883	-	7.50000	7470A	PPB	17 Dec 2024 10:49:47	S	Std
10.0 - 1	S10	41084	-	10.00000	7470A	PPB	17 Dec 2024 10:57:47	S	Std
ICV20 - 1	ICV20	17211	4.1680		-7470A	PPB	17 Dec 2024 11:05:33	U	SMP
ICB20 - 1	ICB20	-141	0.0002		-7470A	PPB	17 Dec 2024 11:07:48	U	SMP
CCV32 - 1	CCV32	20325	4.9160		-7470A	PPB	17 Dec 2024 11:10:05	U	SMPL
CCB32 - 1	CCB32	-120	0.0052		-7470A	PPB	17 Dec 2024 11:12:20	U	SMP
CRA - 1	CRA	660	0.1926		-7470A	PPB	17 Dec 2024 11:14:37	U	SMPL
HighStd - 1	HighStd	41509	10.0042		-7470A	PPB	17 Dec 2024 11:16:53	U	SMP
ChkStd - 1	ChkStd	29527	7.1262		-7470A	PPB	17 Dec 2024 11:19:08	U	SMPL
PB165693BL - 1	PBW	-52	0.0216		-7470A	PPB	17 Dec 2024 11:21:26	U	SMP
P5283-02 - 1	TT-RW10A-IDWGW-20241213	3572	0.8920		-7470A	PPB	17 Dec 2024 11:25:59	U	SMP
P5287-05 - 1	220-2-TRANS-WATER	-137	0.0012		-7470A	PPB	17 Dec 2024 11:28:17	U	SMP
P5287-05DUP - 1	220-2-TRANS-WATERDUP	54	0.0470		-7470A	PPB	17 Dec 2024 11:30:36	U	SMP
P5287-05MS - 1	220-2-TRANS-WATERMS	14851	3.6012		-7470A	PPB	17 Dec 2024 11:35:31	U	SMPL
P5287-05MSD - 1	220-2-TRANS-WATERMSD	15025	3.6430		-7470A	PPB	17 Dec 2024 11:37:46	U	SMP
CCV33 - 1	CCV33	21655	5.2354		-7470A	PPB	17 Dec 2024 11:40:02	U	SMPL
CCB33 - 1	CCB33	-6	0.0326		-7470A	PPB	17 Dec 2024 11:42:18	U	SMP
PB165693BS - 1	LCSW	18536	4.4863		-7470A	PPB	17 Dec 2024 11:52:21	U	SMPL
P5287-05LX5 - 1		-95	0.0112		-7470A	PPB	17 Dec 2024 11:55:21	U	SMP
P5287-05A - 1		18404	4.4546		-7470A	PPB	17 Dec 2024 11:57:36	U	SMP
CCV34 - 1	CCV34	22471	5.4314		-7470A	PPB	17 Dec 2024 11:59:52	U	SMPL
CCB34 - 1	CCB34	7	0.0357		-7470A	PPB	17 Dec 2024 12:02:09	U	SMP

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB165659

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 12/16/2024 **Time :** 11:10 **Temp :** 96 °C

End Digest Date: 12/16/2024 **Time :** 14:05 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. # 1

Dig Technician Signature: SLR.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6000
LFS-2	0.25	M6009
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6126
1:1 HCL	5.00	MP83499
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#1 CELL #55 Temp: 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/16/24 15:05	SLR. met digestion	[signature]
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB165659

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
P5283-02	TT-RW10A-IDWGW-202412	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
P5287-05MS	220-2-TRANS-WATERMS	<2	50	25	Colorless	Colorless	Clear	Clear	M6000,M6009	4
P5287-05MSD	220-2-TRANS-WATERMSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6000,M6009	5
P5287-05DUP	220-2-TRANS-WATERDUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	3
P5287-05	220-2-TRANS-WATER	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	2
PB165659BL	PBW659	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	6
PB165659BS	LCS659	<2	50	25	Colorless	Colorless	Clear	Clear	M6000,M6009	7

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB165659 **WorkList ID :** 186363 **Department :** Digestion **Date :** 12-16-2024 10:13:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5283-02	TT-RW10A-IDWGW-20241213	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	TETR06	L61	12/13/2024	6010D
P5287-05	220-2-TRANS-WATER	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	L61	12/13/2024	6010D

Date/Time 12/16/24 10:45
Raw Sample Received by: S129. met Digestion
Raw Sample Relinquished by: CP SM

Date/Time 12/16/24 11:45
Raw Sample Received by: CP SM
Raw Sample Relinquished by: S129. met Digestion

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB165693

SOP ID : M7470A-Mercury-19

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : NA

pH Strip ID : M4909

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 12/16/2024 **Time :** 14:40 **Temp :** 94 °C

End Digest Date: 12/16/2024 **Time :** 16:40 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature:

Supervisor Signature:

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP83644
CCV	30mL	MP83646
CRA	30mL	MP83648
Blank Spike	0.48mL	MP83637
Matrix Spike	0.48mL	MP83637

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP83207
KMnO4 (5%)	4.5mL	MP83208
K2S2O8 (5%)	2.5mL	MP83209
Hydroxylamine HCL (12%)	2.0mL	MP83210
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	MP83638
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP83639
2.5 ppb	S2.5	30mL	MP83640
5.0 ppb	S5.0	30mL	MP83641
7.5 ppb	S7.5	30mL	MP83642
10.0 ppb	S10.0	30mL	MP83643
ICV	ICV	30mL	MP83644
ICB	ICB	30mL	MP83645
CCV	CCV	30mL	MP83646
CCB	CCB	30mL	MP83647
CRI	CRI	30mL	MP83648
CHK STD	CHK STD	30mL	MP83649

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/16/24 @ 19:10	HG-DIG CMS	HG-Digital CMS
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB165693

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
P5283-02	TT-RW10A-IDWGW-20241213	30	30	<2	N/A	3-1
P5287-05	220-2-TRANS-WATER	30	30	<2	N/A	2
P5287-05DUP	220-2-TRANS-WATERDUP	30	30	<2	N/A	3
P5287-05MS	220-2-TRANS-WATERMS	30	30	<2	MP83637	4
P5287-05MSD	220-2-TRANS-WATERMSD	30	30	<2	MP83637	5
PB165693BL	PBW693	30	30	<2	N/A	6
PB165693BS	LCS693	30	30	<2	MP83637	7

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 121624_7470 **WorkList ID :** 186344 **Department :** Digestion **Date :** 12-16-2024 08:05:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5283-02	TT-RW10A-IDWGW-20241213	Water	Mercury	1:1 HNO3 to pH < 2	TETR06	L61	12/13/2024	7470A
P5287-05	220-2-TRANS-WATER	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L61	12/13/2024	7470A

Date/Time 12/16/24 @ 14:20

Raw Sample Received by: ABr DRG LMS

Raw Sample Relinquished by: ABr DRG LMS

Date/Time 12/16/24 @ 15:00

Raw Sample Received by: ABr DRG LMS

Raw Sample Relinquished by: ABr 12.17.24 CMB

Alliance TECHNICAL GROUP
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 # LB133968

Review By	kareem	Review On	12/19/2024 12:18:43 AM
Supervise By	jaswal	Supervise On	12/26/2024 10:45:00 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/16/24 15:36		Kareem	OK
2	S1	S1	CAL2	12/16/24 15:40		Kareem	OK
3	S2	S2	CAL3	12/16/24 15:45		Kareem	OK
4	S3	S3	CAL4	12/16/24 15:49		Kareem	OK
5	S4	S4	CAL5	12/16/24 15:53		Kareem	OK
6	S5	S5	CAL6	12/16/24 15:57		Kareem	OK
7	ICV01	ICV01	ICV	12/16/24 16:02		Kareem	OK
8	LLICV01	LLICV01	LLICV	12/16/24 16:06		Kareem	OK
9	ICB01	ICB01	ICB	12/16/24 16:10		Kareem	OK
10	CRI01	CRI01	CRDL	12/16/24 16:14		Kareem	OK
11	ICSA01	ICSA01	ICSA	12/16/24 16:19		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	12/16/24 16:53		Kareem	OK
13	CCV01	CCV01	CCV	12/16/24 16:57		Kareem	OK
14	CCB01	CCB01	CCB	12/16/24 17:01		Kareem	OK
15	PB165558TB	PB165558TB	MB	12/16/24 17:10		Kareem	OK
16	PB165597BL	PB165597BL	MB	12/16/24 17:19		Kareem	OK
17	PB165597BS	PB165597BS	LCS	12/16/24 17:23	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
18	PB165591BL	PB165591BL	MB	12/16/24 17:27		Kareem	OK

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Review By	kareem	Review On	12/19/2024 12:18:43 AM
Supervise By	jaswal	Supervise On	12/26/2024 10:45:00 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

19	PB165591BS	PB165591BS	LCS	12/16/24 17:32	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
20	PB165640BL	PB165640BL	MB	12/16/24 17:36		Kareem	OK
21	PB165561TB	PB165561TB	MB	12/16/24 17:44		Kareem	OK
22	P5216-16DUP	TP-12DUP	DUP	12/16/24 17:49		Kareem	OK
23	P5216-16	TP-12	SAM	12/16/24 17:53		Kareem	OK
24	CCV02	CCV02	CCV	12/16/24 17:58		Kareem	OK
25	CCB02	CCB02	CCB	12/16/24 18:02		Kareem	OK
26	P5216-16L	TP-12L	SD	12/16/24 18:06		Kareem	OK
27	P5216-16MS	TP-12MS	MS	12/16/24 18:11	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
28	P5216-16MSD	TP-12MSD	MSD	12/16/24 18:15	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
29	P5216-16A	TP-12A	PS	12/16/24 18:19	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
30	P5224-02	NP-WS-001	SAM	12/16/24 18:23		Kareem	OK
31	P5224-02DUP	NP-WS-001DUP	DUP	12/16/24 18:28		Kareem	OK
32	P5224-02L	NP-WS-001L	SD	12/16/24 18:32		Kareem	OK
33	P5224-02MS	NP-WS-001MS	MS	12/16/24 18:36	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK

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Review By	kareem	Review On	12/19/2024 12:18:43 AM
Supervise By	jaswal	Supervise On	12/26/2024 10:45:00 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

34	P5224-02MSD	NP-WS-001MSD	MSD	12/16/24 18:40	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
35	P5224-02A	NP-WS-001A	PS	12/16/24 18:44	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
36	CCV03	CCV03	CCV	12/16/24 18:48		Kareem	OK
37	CCB03	CCB03	CCB	12/16/24 18:52		Kareem	OK
38	LR1	LR1	HIGH STD	12/16/24 18:57		Kareem	OK
39	LR2	LR2	HIGH STD	12/16/24 19:02		Kareem	OK
40	P5268-01	OR-02-12122024	SAM	12/16/24 19:11		Kareem	OK
41	P5277-01	COMP-1A	SAM	12/16/24 19:15		Kareem	OK
42	P5277-02	COMP-2A	SAM	12/16/24 19:19		Kareem	OK
43	P5277-03	COMP-3A	SAM	12/16/24 19:24		Kareem	OK
44	P5279-01	ROCKAWAY-PARK	SAM	12/16/24 19:28		Kareem	OK
45	P5279-01DUP	ROCKAWAY-PARKDU	DUP	12/16/24 19:32		Kareem	OK
46	P5279-01L	ROCKAWAY-PARKL	SD	12/16/24 19:37		Kareem	OK
47	P5279-01MS	ROCKAWAY-PARKMS	MS	12/16/24 19:41		Kareem	OK
48	CCV04	CCV04	CCV	12/16/24 19:51		Kareem	OK
49	CCB04	CCB04	CCB	12/16/24 19:57		Kareem	OK
50	P5279-01MSD	ROCKAWAY-PARKMS	MSD	12/16/24 20:01		Kareem	OK
51	P5279-01A	ROCKAWAY-PARKA	PS	12/16/24 20:05		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133968

Review By	kareem	Review On	12/19/2024 12:18:43 AM
Supervise By	jaswal	Supervise On	12/26/2024 10:45:00 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

52	P5220-03DL	GAS-AUD-1610-1611-	SAM	12/16/24 20:09	10X for Na	Kareem	Confirms
53	P5220-03DUPDL	GAS-AUD-1610-1611-	DUP	12/16/24 20:14	10X for Na	Kareem	Confirms
54	P5220-03LDL	GAS-AUD-1610-1611-	SD	12/16/24 20:18	10X for Na	Kareem	Confirms
55	P5220-03MSDL	GAS-AUD-1610-1611-	MS	12/16/24 20:23	10X for Na	Kareem	Confirms
56	P5220-03MSDDL	GAS-AUD-1610-1611-	MSD	12/16/24 20:27	10X for Na	Kareem	Confirms
57	P5220-03ADL	GAS-AUD-1610-1611-	PS	12/16/24 20:32	Not used	Kareem	Not Ok
58	P5220-03	GAS-AUD-1610-1611-	SAM	12/16/24 20:36	Na oversaturated	Kareem	Dilution
59	P5220-03DUP	GAS-AUD-1610-1611-	DUP	12/16/24 20:40	Na oversaturated	Kareem	Dilution
60	CCV05	CCV05	CCV	12/16/24 20:49		Kareem	OK
61	CCB05	CCB05	CCB	12/16/24 20:53		Kareem	OK
62	P5220-03L	GAS-AUD-1610-1611-	SD	12/16/24 21:00	Na oversaturated	Kareem	Dilution
63	P5220-03MS	GAS-AUD-1610-1611-	MS	12/16/24 21:05	Na oversaturated	Kareem	Dilution
64	P5220-03MSD	GAS-AUD-1610-1611-	MSD	12/16/24 21:09	Na oversaturated	Kareem	Dilution
65	P5220-03A	GAS-AUD-1610-1611-	PS	12/16/24 21:13	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
66	P5283-02	TT-RW10A-IDWGW-2	SAM	12/16/24 21:18		Kareem	OK
67	P5287-05	220-2-TRANS-WATEF	SAM	12/16/24 21:22		Kareem	OK
68	P5287-05DUP	220-2-TRANS-WATEF	DUP	12/16/24 21:26		Kareem	OK
69	P5287-05L	220-2-TRANS-WATEF	SD	12/16/24 21:30		Kareem	OK
70	CCV06	CCV06	CCV	12/16/24 21:47		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133968

Review By	kareem	Review On	12/19/2024 12:18:43 AM
Supervise By	jaswal	Supervise On	12/26/2024 10:45:00 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

71	CCB06	CCB06	CCB	12/16/24 21:51		Kareem	OK
72	P5287-05MS	220-2-TRANS-WATER	MS	12/16/24 22:00	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
73	P5287-05MSD	220-2-TRANS-WATER	MSD	12/16/24 22:04	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
74	PB165658BL	PB165658BL	MB	12/16/24 22:25		Kareem	OK
75	PB165659BL	PB165659BL	MB	12/16/24 22:29	LCS fail	Kareem	Not Ok
76	PB165640BS	PB165640BS	LCS	12/16/24 22:34	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
77	PB165659BS	PB165659BS	LCS	12/16/24 22:38	Be, K fail	Kareem	Not Ok
78	PB165658BS	PB165658BS	LCS	12/16/24 22:42	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
79	P5287-05A	220-2-TRANS-WATER	PS	12/16/24 22:46	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
80	P5287-03	STONES-B	SAM	12/16/24 22:50		Kareem	OK
81	P5287-03DUP	STONES-BDUP	DUP	12/16/24 22:54		Kareem	OK
82	CCV07	CCV07	CCV	12/16/24 23:02		Kareem	OK
83	CCB07	CCB07	CCB	12/16/24 23:06		Kareem	OK
84	P5287-03L	STONES-BL	SD	12/16/24 23:10		Kareem	OK
85	P5287-03MS	STONES-BMS	MS	12/16/24 23:14		Kareem	OK
86	P5287-03MSD	STONES-BMSD	MSD	12/16/24 23:18		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133968

Review By	kareem	Review On	12/19/2024 12:18:43 AM
Supervise By	jaswal	Supervise On	12/26/2024 10:45:00 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

87	P5287-03A	STONES-BA	PS	12/16/24 23:22	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
88	P5287-01	STONES-A	SAM	12/16/24 23:26		Kareem	OK
89	CCV08	CCV08	CCV	12/16/24 23:35		Kareem	OK
90	CCB08	CCB08	CCB	12/16/24 23:39		Kareem	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133972

Review By	jaswal	Review On	12/17/2024 10:30:24 PM
Supervise By	mohan	Supervise On	12/17/2024 10:32:07 PM

STD. NAME	STD REF.#
ICAL Standard	MP83638,MP83639,MP83640,MP83641,MP83642,MP83643
ICV Standard	MP83644
CCV Standard	MP83646
ICSA Standard	
CRI Standard	MP83648
LCS Standard	
Chk Standard	MP83645,MP83647,MP83649,MP83667

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0.0	S0.0	CAL1	12/17/24 10:40		Mohan	OK
2	S0.2	S0.2	CAL2	12/17/24 10:42		Mohan	OK
3	S2.5	S2.5	CAL3	12/17/24 10:45		Mohan	OK
4	S5.0	S5.0	CAL4	12/17/24 10:47		Mohan	OK
5	S7.5	S7.5	CAL5	12/17/24 10:49		Mohan	OK
6	S10.0	S10.0	CAL6	12/17/24 10:57		Mohan	OK
7	ICV20	ICV20	ICV	12/17/24 11:05		Mohan	OK
8	ICB20	ICB20	ICB	12/17/24 11:07		Mohan	OK
9	CCV32	CCV32	CCV	12/17/24 11:10		Mohan	OK
10	CCB32	CCB32	CCB	12/17/24 11:12		Mohan	OK
11	CRA	CRA	CRDL	12/17/24 11:14		Mohan	OK
12	HighStd	HighStd	HIGH STD	12/17/24 11:16		Mohan	OK
13	ChkStd	ChkStd	SAM	12/17/24 11:19		Mohan	OK
14	PB165693BL	PB165693BL	MB	12/17/24 11:21		Mohan	OK
15	P5283-02	TT-RW10A-IDWGW-2	SAM	12/17/24 11:25		Mohan	OK
16	P5287-05	220-2-TRANS-WATEF	SAM	12/17/24 11:28		Mohan	OK
17	P5287-05DUP	220-2-TRANS-WATEF	DUP	12/17/24 11:30		Mohan	OK
18	P5287-05MS	220-2-TRANS-WATEF	MS	12/17/24 11:35		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 # LB133972

Review By	jaswal	Review On	12/17/2024 10:30:24 PM
Supervise By	mohan	Supervise On	12/17/2024 10:32:07 PM

STD. NAME	STD REF.#
ICAL Standard	MP83638,MP83639,MP83640,MP83641,MP83642,MP83643
ICV Standard	MP83644
CCV Standard	MP83646
ICSA Standard	
CRI Standard	MP83648
LCS Standard	
Chk Standard	MP83645,MP83647,MP83649,MP83667

19	P5287-05MSD	220-2-TRANS-WATER	MSD	12/17/24 11:37		Mohan	OK
20	CCV33	CCV33	CCV	12/17/24 11:40		Mohan	OK
21	CCB33	CCB33	CCB	12/17/24 11:42		Mohan	OK
22	PB165693BS	PB165693BS	LCS	12/17/24 11:52		Mohan	OK
23	P5287-05L	220-2-TRANS-WATER	SD	12/17/24 11:55		Mohan	OK
24	P5287-05A	220-2-TRANS-WATER	PS	12/17/24 11:57		Mohan	OK
25	CCV34	CCV34	CCV	12/17/24 11:59		Mohan	OK
26	CCB34	CCB34	CCB	12/17/24 12:02		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 # LB134066

Review By	mohan	Review On	12/26/2024 10:44:26 PM
Supervise By	jaswal	Supervise On	12/26/2024 10:44:49 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/23/24 10:51		Kareem	OK
2	S1	S1	CAL2	12/23/24 10:56		Kareem	OK
3	S2	S2	CAL3	12/23/24 11:00		Kareem	OK
4	S3	S3	CAL4	12/23/24 11:04		Kareem	OK
5	S4	S4	CAL5	12/23/24 11:09		Kareem	OK
6	S5	S5	CAL6	12/23/24 11:13		Kareem	OK
7	ICV01	ICV01	ICV	12/23/24 11:17		Kareem	OK
8	LLICV01	LLICV01	LLICV	12/23/24 11:37		Kareem	OK
9	ICB01	ICB01	ICB	12/23/24 11:44		Kareem	OK
10	CRI01	CRI01	CRDL	12/23/24 11:51		Kareem	OK
11	ICSA01	ICSA01	ICSA	12/23/24 11:55		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	12/23/24 12:06		Kareem	OK
13	ICSADL	ICSADL	ICSA	12/23/24 12:10		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	12/23/24 12:14		Kareem	OK
15	CCV01	CCV01	CCV	12/23/24 12:31		Kareem	OK
16	CCB01	CCB01	CCB	12/23/24 12:35		Kareem	OK
17	PB165789BL	PB165789BL	MB	12/23/24 12:51		Kareem	OK
18	PB165789BS	PB165789BS	LCS	12/23/24 12:55		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134066

Review By	mohan	Review On	12/26/2024 10:44:26 PM
Supervise By	jaswal	Supervise On	12/26/2024 10:44:49 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

19	PB165659BL	PB165659BL	MB	12/23/24 12:59		Kareem	OK
20	PB165659BS	PB165659BS	LCS	12/23/24 13:03		Kareem	OK
21	P5330-04	TP-5	SAM	12/23/24 13:08		Kareem	OK
22	P5337-03	ETGI-357	SAM	12/23/24 13:12		Kareem	OK
23	P5338-01	USED-OIL-DEBRIS	SAM	12/23/24 13:16		Kareem	OK
24	P5338-02	USED-MOBILE-TRAN	SAM	12/23/24 13:21		Kareem	OK
25	P5341-02	STORMWATER-SOLI	SAM	12/23/24 13:25		Kareem	OK
26	P5355-02	RBR251688	SAM	12/23/24 13:39		Kareem	OK
27	CCV02	CCV02	CCV	12/23/24 13:43		Kareem	OK
28	CCB02	CCB02	CCB	12/23/24 13:47		Kareem	OK
29	P5355-01	RBR251688	SAM	12/23/24 13:52		Kareem	OK
30	P5355-01DL	RBR251688DL	SAM	12/23/24 13:58	NOT USE	Kareem	Not Ok
31	CCV03	CCV03	CCV	12/23/24 14:07		Kareem	OK
32	CCB03	CCB03	CCB	12/23/24 14:11		Kareem	OK
33	P5343-05	OILY-RAGS-274	SAM	12/23/24 14:15		Kareem	OK
34	P5355-02DUP	RBR251688DUP	DUP	12/23/24 14:20		Kareem	OK
35	P5355-02L	RBR251688L	SD	12/23/24 14:24		Kareem	OK
36	P5355-02MS	RBR251688MS	MS	12/23/24 14:28		Kareem	OK
37	P5355-02MSD	RBR251688MSD	MSD	12/23/24 14:33		Kareem	OK
38	P5355-02A	RBR251688A	PS	12/23/24 14:37		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134066

Review By	mohan	Review On	12/26/2024 10:44:26 PM
Supervise By	jaswal	Supervise On	12/26/2024 10:44:49 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

39	P5306-17	OU4-VSL-06R-12122	SAM	12/23/24 14:41		Kareem	OK
40	P5306-17DUP	OU4-VSL-06R-12122	DUP	12/23/24 14:45		Kareem	OK
41	P5306-17L	OU4-VSL-06R-12122	SD	12/23/24 14:49		Kareem	OK
42	P5306-17MS	OU4-VSL-06R-12122	MS	12/23/24 14:53		Kareem	OK
43	CCV04	CCV04	CCV	12/23/24 15:06		Kareem	OK
44	CCB04	CCB04	CCB	12/23/24 15:10		Kareem	OK
45	P5306-17MSD	OU4-VSL-06R-12122	MSD	12/23/24 15:14		Kareem	OK
46	P5306-17A	OU4-VSL-06R-12122	PS	12/23/24 15:18		Kareem	OK
47	P5355-01DUP	RBR251688DUP	DUP	12/23/24 15:22		Kareem	OK
48	P5355-01L	RBR251688L	SD	12/23/24 15:27		Kareem	OK
49	P5355-01MS	RBR251688MS	MS	12/23/24 15:31		Kareem	OK
50	P5355-01MSD	RBR251688MSD	MSD	12/23/24 15:36		Kareem	OK
51	P5355-01A	RBR251688A	PS	12/23/24 15:40		Kareem	OK
52	P5355-01DUPDL	RBR251688DUPDL	DUP	12/23/24 15:49	NOT USE	Kareem	Not Ok
53	P5355-01LDL	RBR251688LDL	SD	12/23/24 15:53	NOT USE	Kareem	Not Ok
54	CCV05	CCV05	CCV	12/23/24 16:06		Kareem	OK
55	CCB05	CCB05	CCB	12/23/24 16:10		Kareem	OK
56	P5355-01MSDL	RBR251688MSDL	MS	12/23/24 16:15	NOT USE	Kareem	Not Ok
57	P5355-01MSDDL	RBR251688MSDDL	MSD	12/23/24 16:19	NOT USE	Kareem	Not Ok
58	P5355-01ADL	RBR251688ADL	PS	12/23/24 16:23	NOT USE	Kareem	Not Ok

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134066

Review By	mohan	Review On	12/26/2024 10:44:26 PM
Supervise By	jaswal	Supervise On	12/26/2024 10:44:49 PM

STD. NAME	STD REF.#
ICAL Standard	MP83552,MP83553,MP83554,MP83555,MP83556,MP83558
ICV Standard	MP83559
CCV Standard	MP83562
ICSA Standard	MP83560,MP83561
CRI Standard	MP83558
LCS Standard	
Chk Standard	MP83565,MP83566

59	LR1	LR1	HIGH STD	12/23/24 16:27		Kareem	OK
60	LR2	LR2	HIGH STD	12/23/24 16:32		Kareem	OK
61	PB165733TB	PB165733TB	MB	12/23/24 16:36		Kareem	OK
62	CCV06	CCV06	CCV	12/23/24 16:54		Kareem	OK
63	CCB06	CCB06	CCB	12/23/24 16:58		Kareem	OK

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Prep Standard - Chemical Standard Summary

Order ID : P5283

Test : Mercury,Metals ICP-TAL

Prepbatch ID : PB165659,PB165693,

Sequence ID/Qc Batch ID: LB133968,LB133972,LB134066,

Standard ID :
MP83207,MP83208,MP83209,MP83210,MP83499,MP83500,MP83552,MP83553,MP83554,MP83555,MP83556,MP83557,MP83558,MP83559,MP83560,MP83561,MP83562,MP83565,MP83566,MP83637,MP83638,MP83639,MP83640,MP83641,MP83642,MP83643,MP83644,MP83645,MP83646,MP83647,MP83648,MP83649,MP83667,

Chemical ID :
M4371,M4465,M4916,M5062,M5130,M5192,M5218,M5223,M5288,M5295,M5296,M5390,M5393,M5429,M5466,M5467,M5497,M5515,M5658,M5673,M5697,M5698,M5747,M5748,M5768,M5798,M5799,M5800,M5801,M5802,M5806,M5814,M5815,M5816,M5817,M5818,M5819,M5820,M5875,M5882,M5884,M5953,M5959,M5962,M5970,M5978,M5982,M5985,M6000,M6009,M6021,M6023,M6028,M6030,M6033,M6119,M6121,M6126,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP83207	11/11/2024	05/09/2025	Mohan Bera	None	None	Sarabjit Jaswal 11/11/2024

FROM 1600.00000ml of M5673 + 800.00000ml of M6119 = Final Quantity: 3200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP83208	11/11/2024	05/11/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 11/11/2024

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP83209	11/11/2024	05/11/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 11/11/2024

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP83210	11/11/2024	05/11/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 11/11/2024

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP83499	12/09/2024	12/28/2024	Eman Mughal	None	None	Sarabjit Jaswal 12/09/2024

FROM 1250.00000ml of M6121 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP83500	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = Final Quantity: 2500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
514	CAL BLK (S0/ICB/CCB)	MP83552	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP83553	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 5.00000ml of M5296 + 5.00000ml of M5393 + 5.00000ml of M5467 + 5.00000ml of M5802 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M5982 + 455.00000ml of MP83500 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP83554	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 50.00000ml of MP83500 + 50.00000ml of MP83553 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP83555	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 25.00000ml of MP83553 + 75.00000ml of MP83500 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP83556	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 16.00000ml of MP83553 + 184.00000ml of MP83500 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP83557	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 0.00600ml of M5816 + 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5515 + 0.05000ml of M5658 + 0.05000ml of M6030 + 0.05000ml of M6033 + 0.06000ml of M5747 + 0.10000ml of M5697 + 0.10000ml of M5698 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M5982 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M5819 + 0.20000ml of M5978 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.25000ml of M5467 + 0.25000ml of M5802 + 0.50000ml of M5390 + 0.50000ml of M5814 + 1.00000ml of M5192 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M5768 + 1.00000ml of M5806 + 2.00000ml of M5818 + 77.68000ml of MP83500 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP83558	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 2.00000ml of MP83557 + 98.00000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
912	ICP AES ICV SOLN	MP83559	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.10000ml of M5466 + 0.25000ml of M5218 + 0.25000ml of M5982 + 10.00000ml of M5295 + 89.77500ml of MP83500 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP83560	12/06/2024	12/28/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 25.00000ml of M5130 + 225.00000ml of MP83500 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP83561	12/06/2024	12/28/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 0.01000ml of M5815 + 0.01000ml of M5817 + 0.10000ml of M5296 + 0.10000ml of M5970 + 0.10000ml of M5982 + 10.00000ml of M5130 + 10.00000ml of M5223 + 79.50000ml of MP83500 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP83562	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 50.00000ml of MP83500 + 50.00000ml of MP83553 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP83565	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6126 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP83566	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/11/2024

FROM 200.00000ml of M6126 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP83637	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 1.00000ml of M6126 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP83638	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

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
1341	Hg 0.2 PPB STD	MP83639	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP83637 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP83640	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP83637 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP83641	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP83637 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP83642	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP83637 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP83643	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP83637 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP83644	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M5953 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP83645	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP83646	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP83637 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP83647	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 495.00000ml of W3112 + 5.00000ml of M6126 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP83648	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP83637 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP83649	12/16/2024	12/17/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 12/17/2024

FROM 2.50000ml of M6126 + 240.50000ml of W3112 + 7.00000ml of MP83637 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP83667	12/17/2024	12/18/2024	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 12/17/2024

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = Final Quantity: 500.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / jaswal	07/25/2019 / manojkumar	M4465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	12/28/2024	05/20/2024 / jaswal	04/20/2021 / bin	M5130

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	S2-MEB711674	11/02/2026	07/01/2022 / bin	09/10/2021 / bin	M5218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	12/28/2024	05/20/2024 / jaswal	04/20/2021 / bin	M5223

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV-1014	02/05/2025	08/07/2024 / jaswal	04/20/2021 / bin	M5295

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 #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	08/07/2024 / jaswal	09/18/2022 / bin	M5390

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB714159	01/13/2027	10/12/2022 / bin	09/19/2022 / bin	M5393

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	061322	06/13/2025	03/06/2023 / bin	03/01/2023 / bin	M5466

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	092122	09/21/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5515

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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 #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	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.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

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.	57014 / Si, 1000 PPM, 125 ml	122023	12/20/2026	03/06/2024 / jaswal	02/09/2024 / jaswal	M5818

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL	T2-MEB714417	01/27/2027	04/19/2024 / jaswal	02/22/2024 / jaswal	M5875

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

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	01/01/2025	07/01/2024 / mohan	03/30/2023 / mohan	M5953

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	02/20/2029	07/01/2024 / Jaswal	06/14/2024 / Jaswal	M5959

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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 #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	031524	03/15/2027	07/01/2024 / Jaswal	06/11/2024 / Jaswal	M5982

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/30/2026	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6000

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	03/17/2028	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

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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	08/07/2024 / Jaswal	01/03/2024 / Jaswal	M6033

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)	24B1362001	05/09/2025	11/09/2024 / Janvi	10/09/2024 / Janvi	M6119

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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 #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6028

R 8/15/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

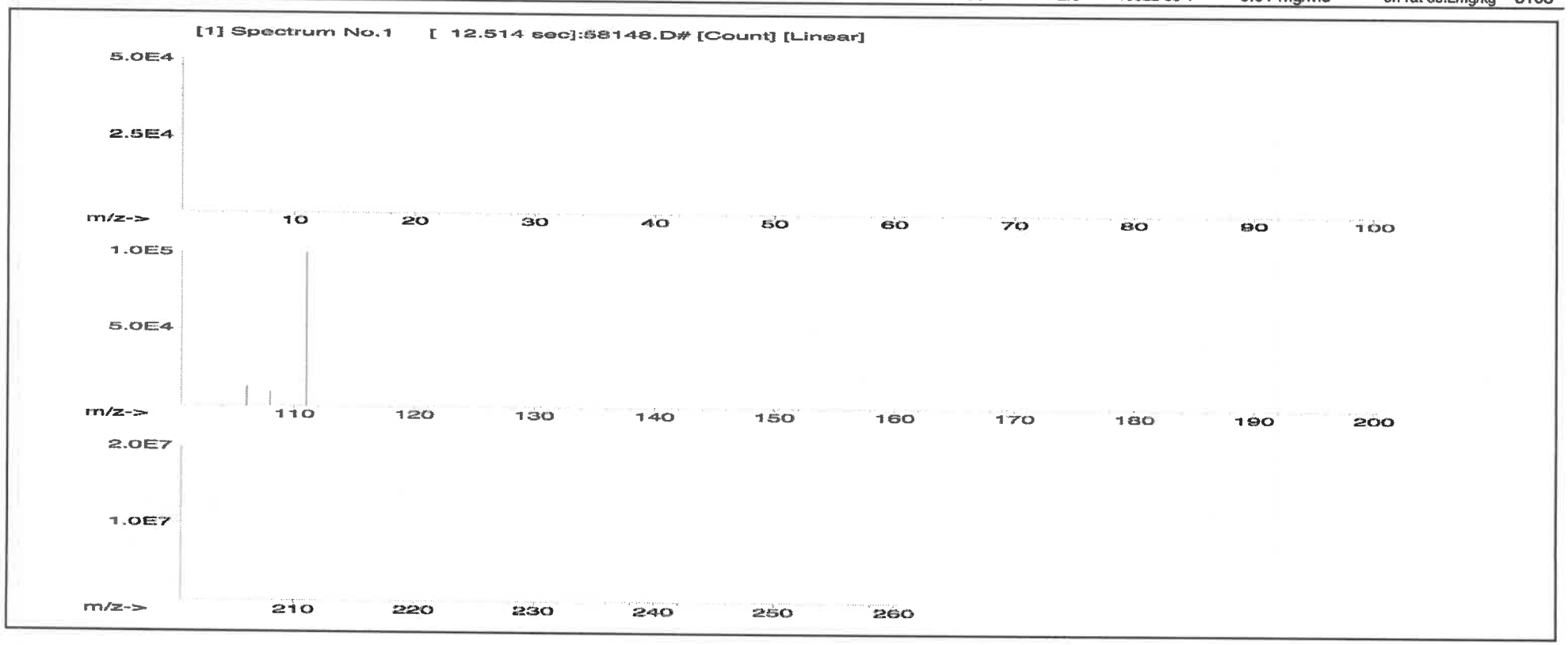
CERTIFIED WEIGHT REPORT:

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



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Certified Reference Material CRM

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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certificate of Analysis

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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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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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



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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 250 µg/mL ea: Silver, Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.00 ± 0.26 µg/mL	Calcium, Ca	5 000 ± 22 µg/mL
Chromium, Cr	200.0 ± 1.0 µg/mL	Cobalt, Co	500.0 ± 2.4 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 20 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Potassium, K	5 000 ± 19 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 18 µg/mL
Vanadium, V	499.7 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.118 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

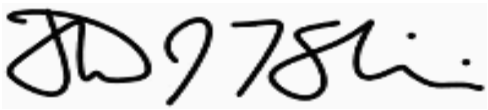
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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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"

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10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 13, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 13, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

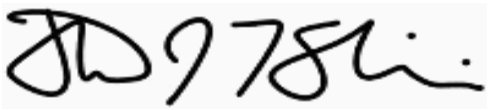
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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RD:05/14/2024

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

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ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M4371

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

Rec – 06.07.19

J.T.Baker® | avantor™

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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
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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 HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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:

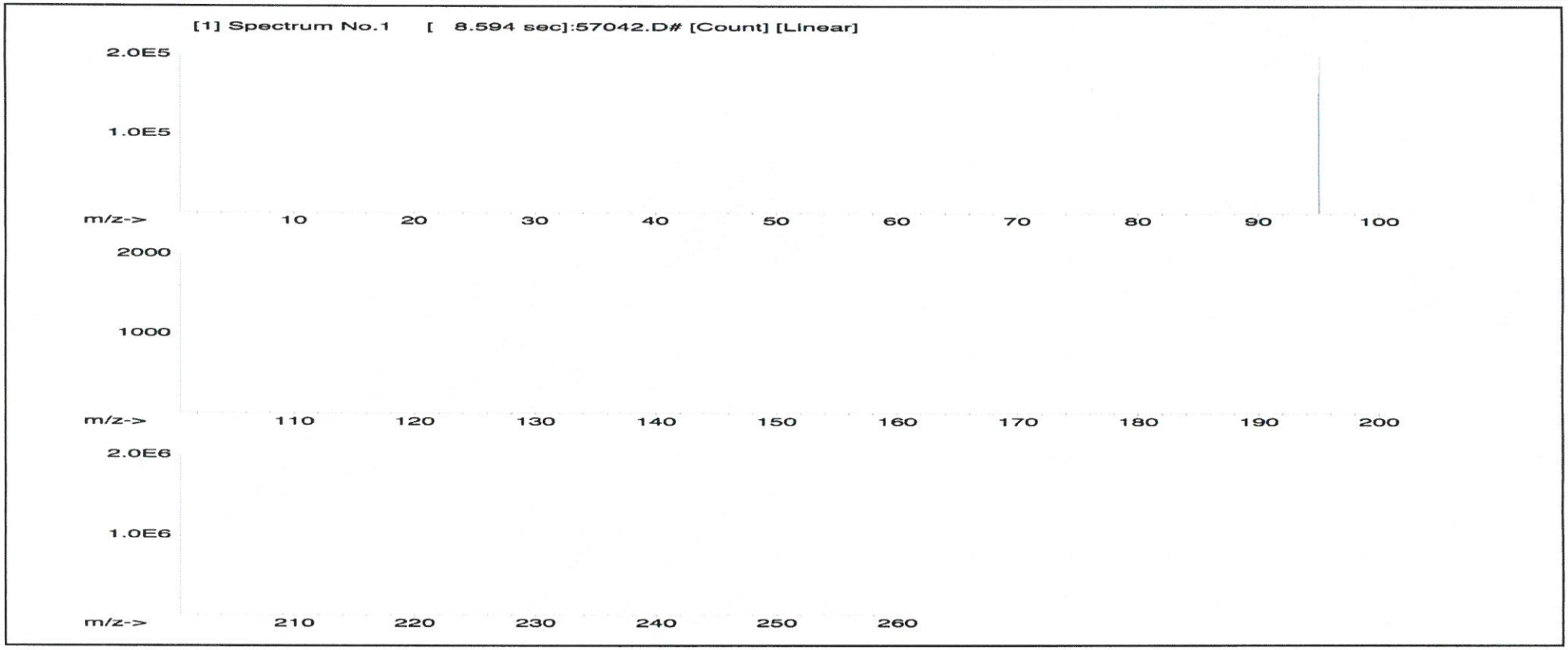
Part Number: 57042
Lot Number: 051722
Description: Molybdenum (Mo)
Expiration Date: 051725
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 3000.41

Lot #	Solvent:			
MKBQ8597V	Ammonium hydroxide	0.5%	15.0 (mL)	Ammonium hydroxide

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By: Lawrence Barry 051722
Reviewed By: Pedro L. Rentas 051722

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium molybdate (Mo)	58142	022222	0.1000	300.0	0.084	1000	10001.0	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass 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:

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

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-QC-4
Lot Number:	S2-MEB711674
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 7 µg/mL**	**Molybdenum, Mo**	**1 000 ± 5 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 5 µg/mL**
Titanium, Ti	**1 001 ± 6 µg/mL**		

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

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APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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M5288 R: 07/21/2022

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CERTIFIED WEIGHT REPORT:

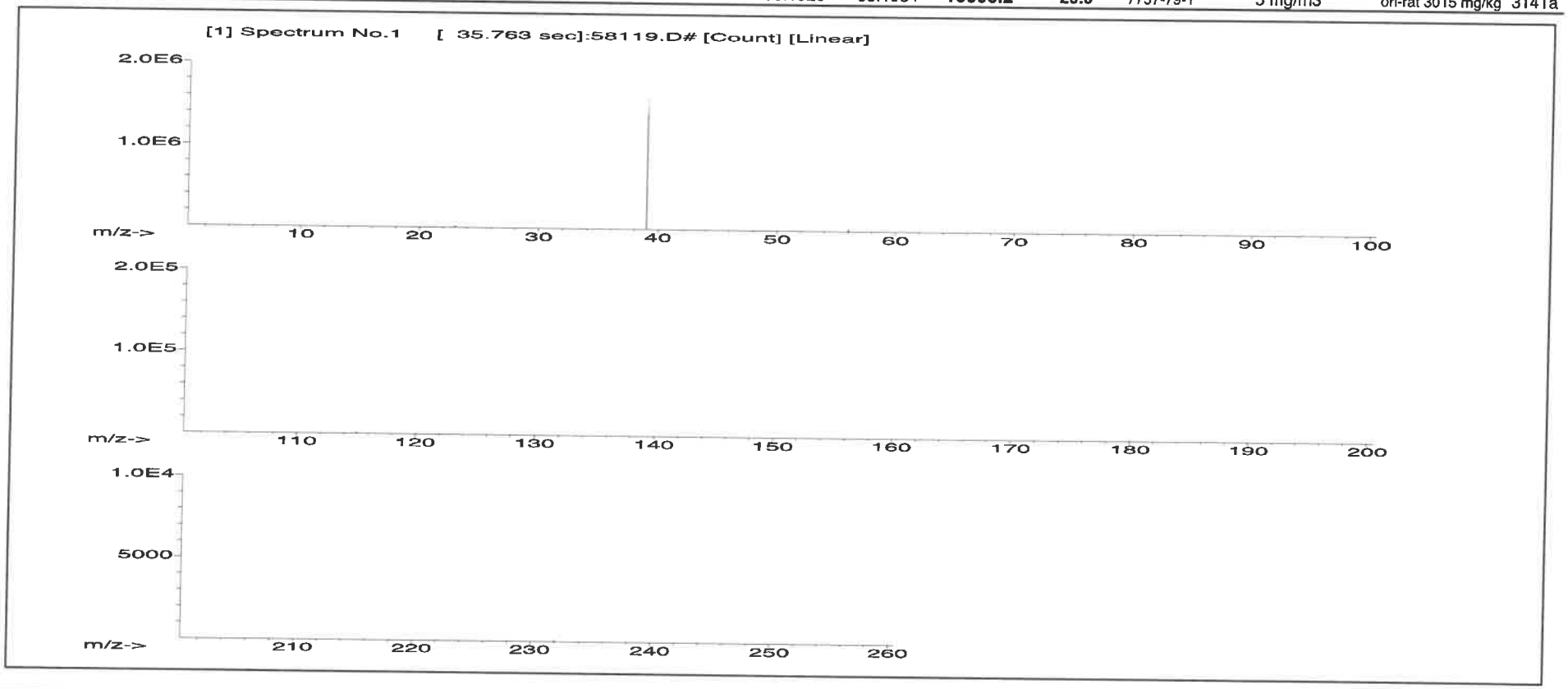
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	071122
Reviewed By:	Pedro L. Rentas	071122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	**10000.2**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 4/20/21

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.

Contains Metals in Dilute Acidic or
Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

M5291
M5292
M5293
M5294
M5295

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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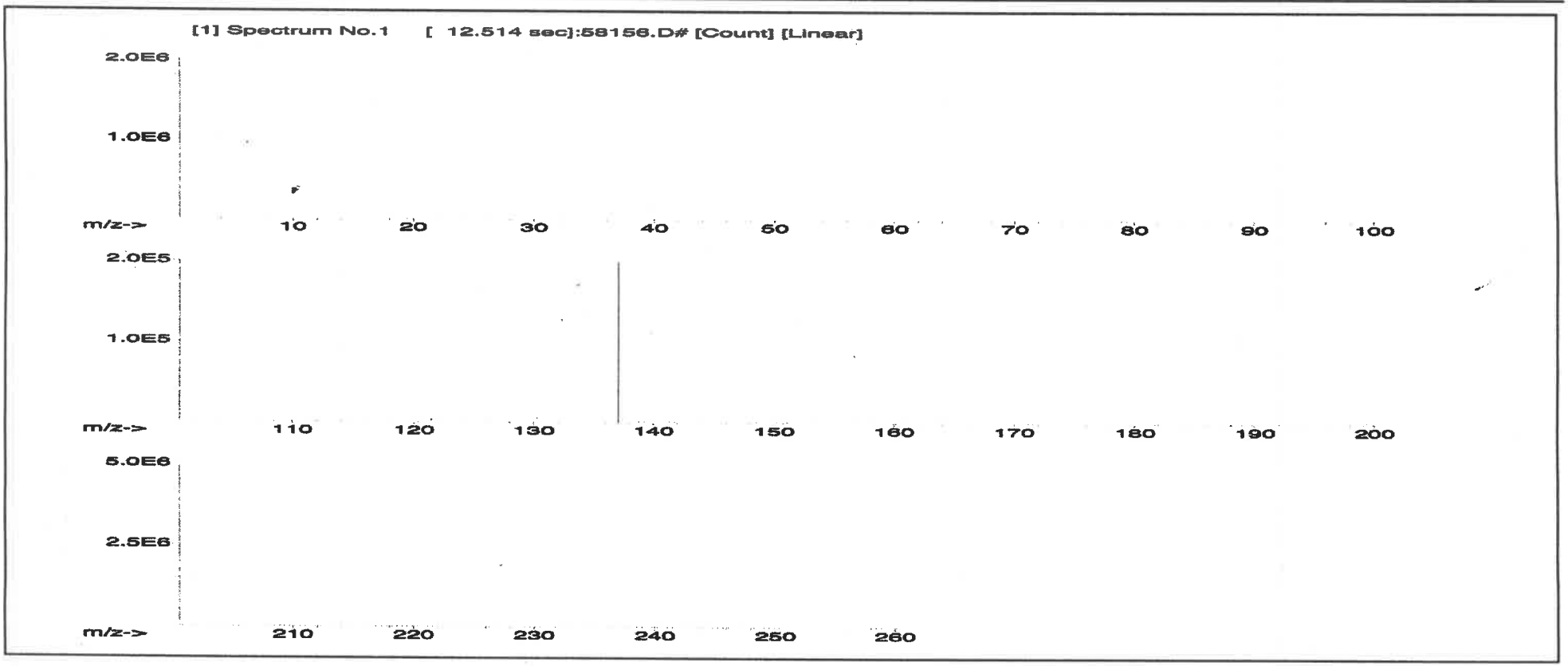
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

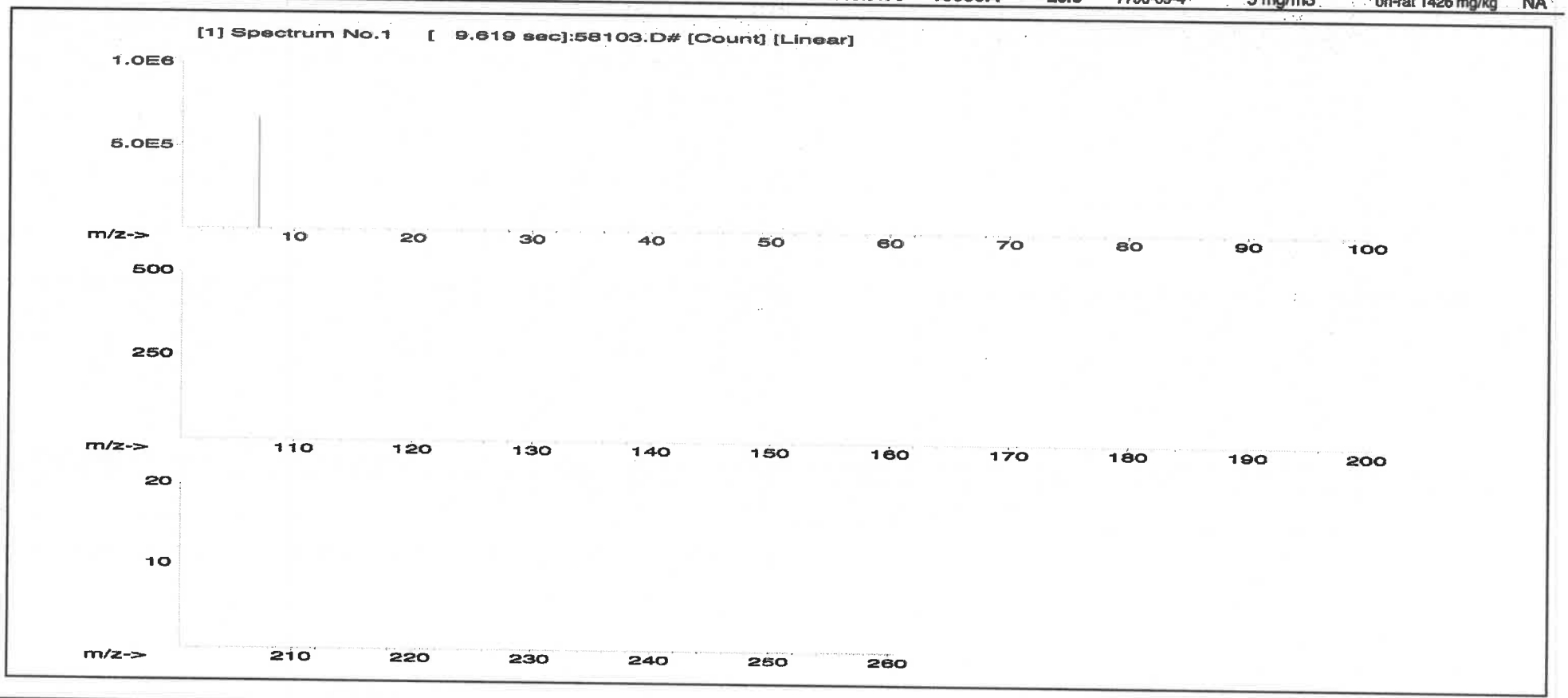
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	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).

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M 5466

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CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 061322
Description: Cerium (Ce)

Expiration Date: 061325
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1000.12 ± 0.058 Flask Uncertainty

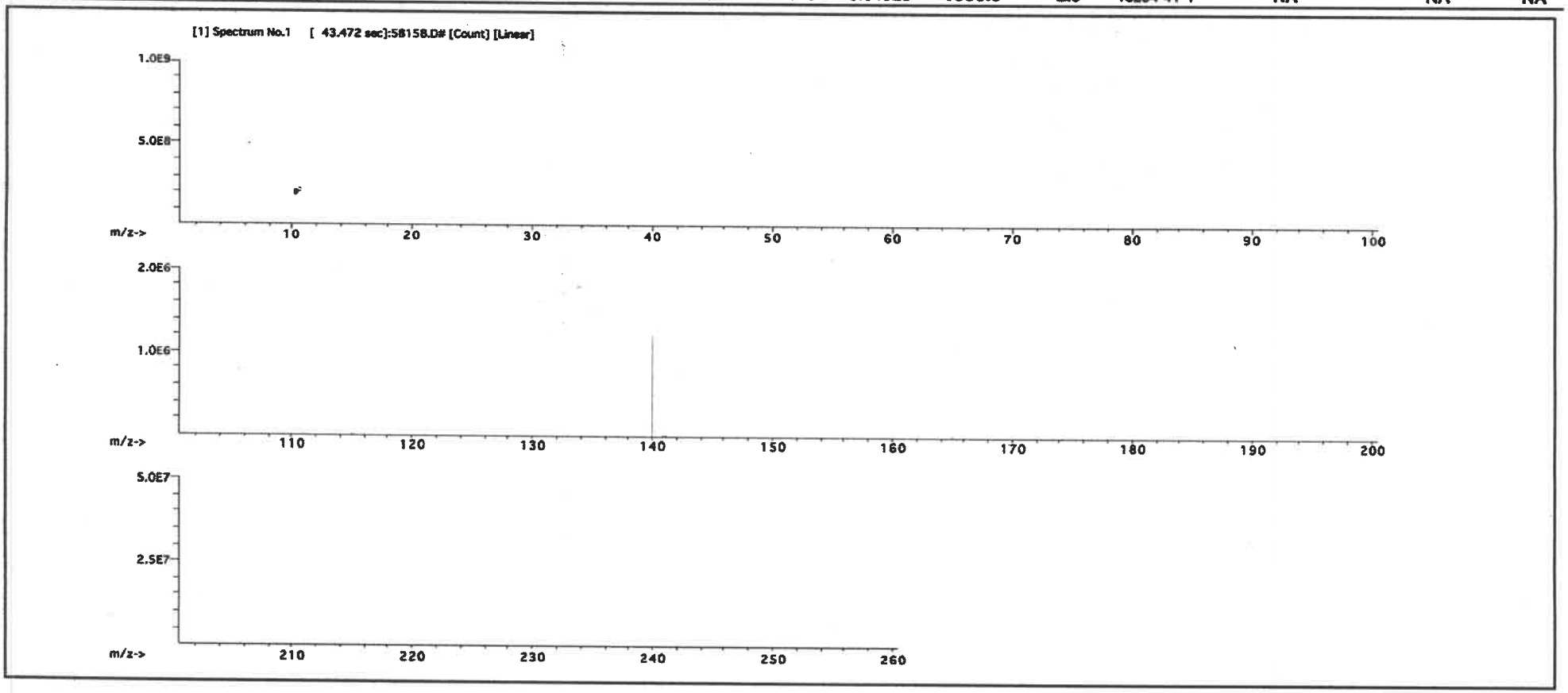
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By: Lawrence Barry 061322

Reviewed By: Pedro L. Rentas 061322

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04923	1000.0	2.0	10294-41-4	NA	NA	NA



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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5467 R: 03/01/23 (LA)

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CERTIFIED WEIGHT REPORT:

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

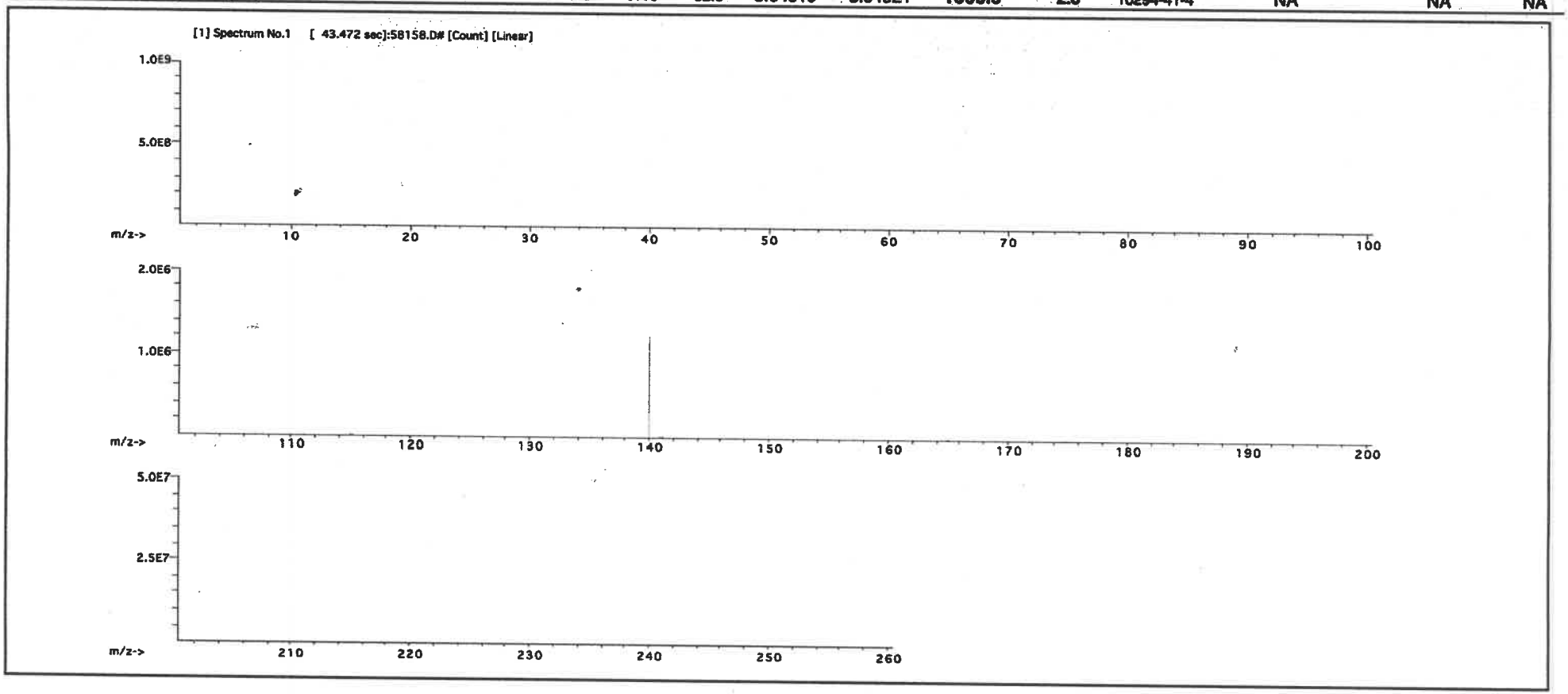
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

	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



ICP-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5497 - M5498 R: 03/17/23 (BP)

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

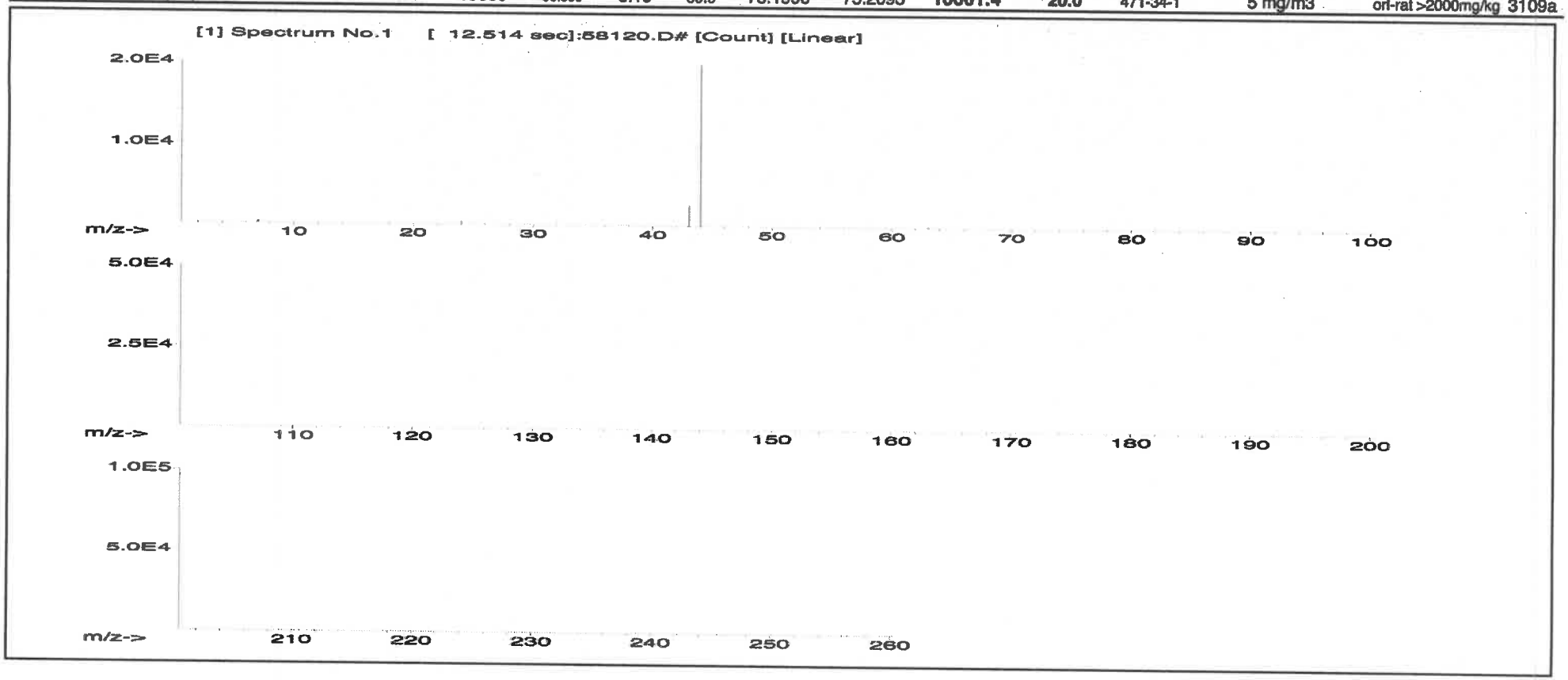
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5514 , M5515 R: 03/17/23

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CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 092122
Description: Iron (Fe)

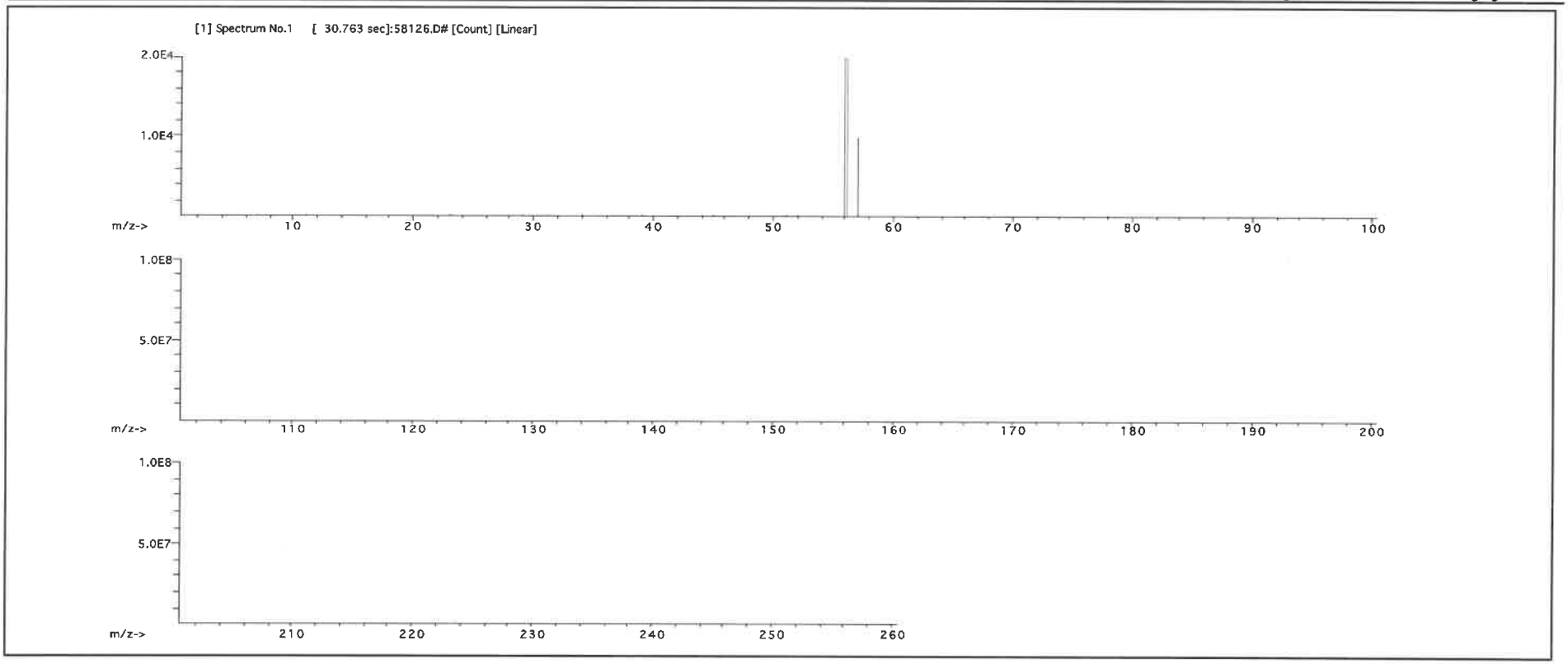
Expiration Date: 092125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 5000.1

	Lot #		
Solvent:	20510011	Nitric Acid	
7.0%	350.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.12	Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 092122

Pedro Rentas
Reviewed By: Pedro L. Rentas 092122

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	2224912-500	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



P223 METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	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	<0.05
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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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M5658 R ! 8/25/23

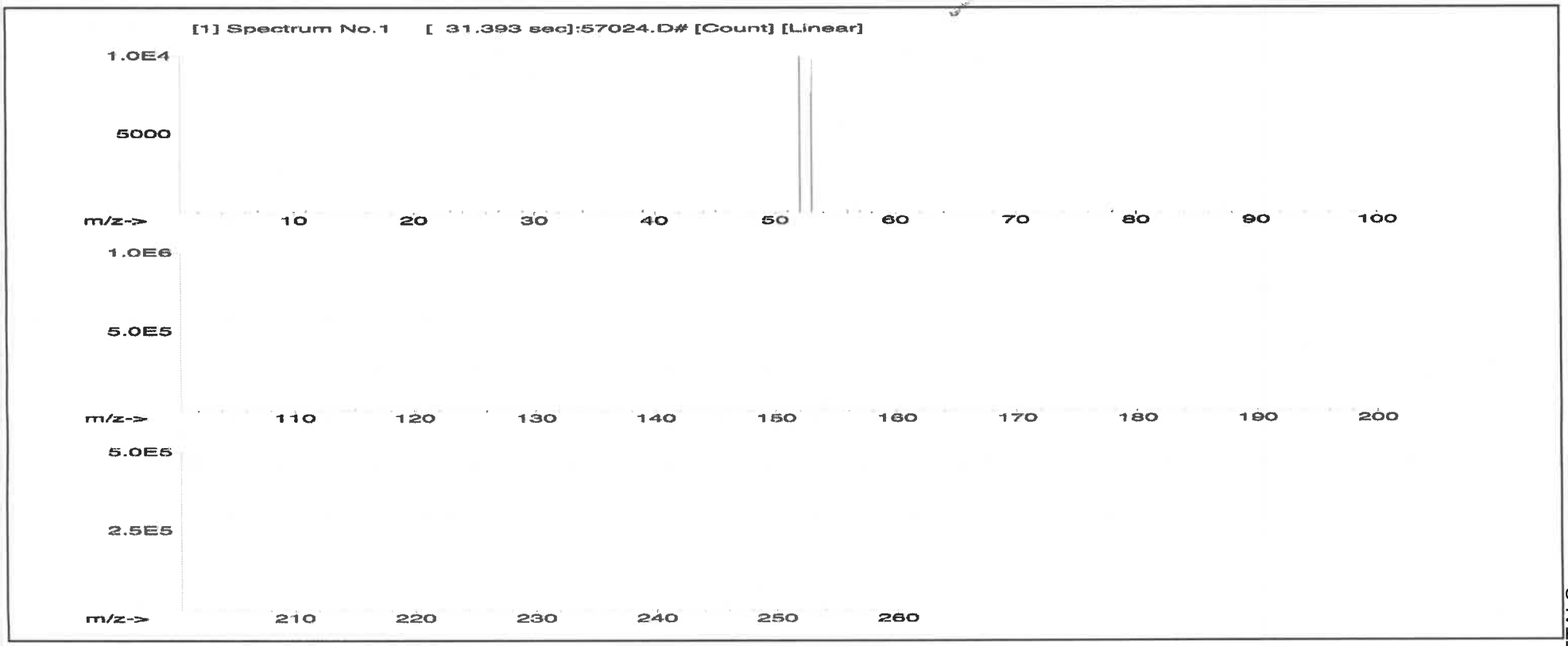
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

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M5697 R: 10/27/23

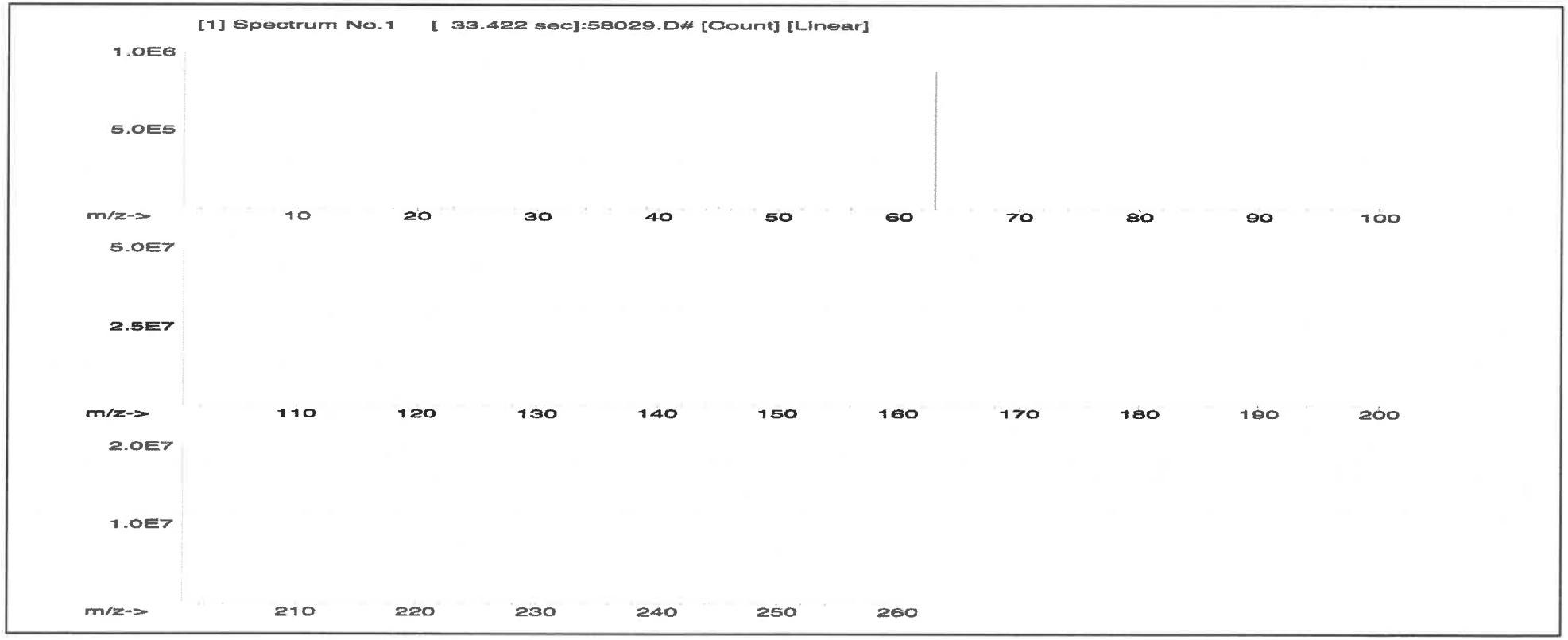
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
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Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5648 R: 10/27/23

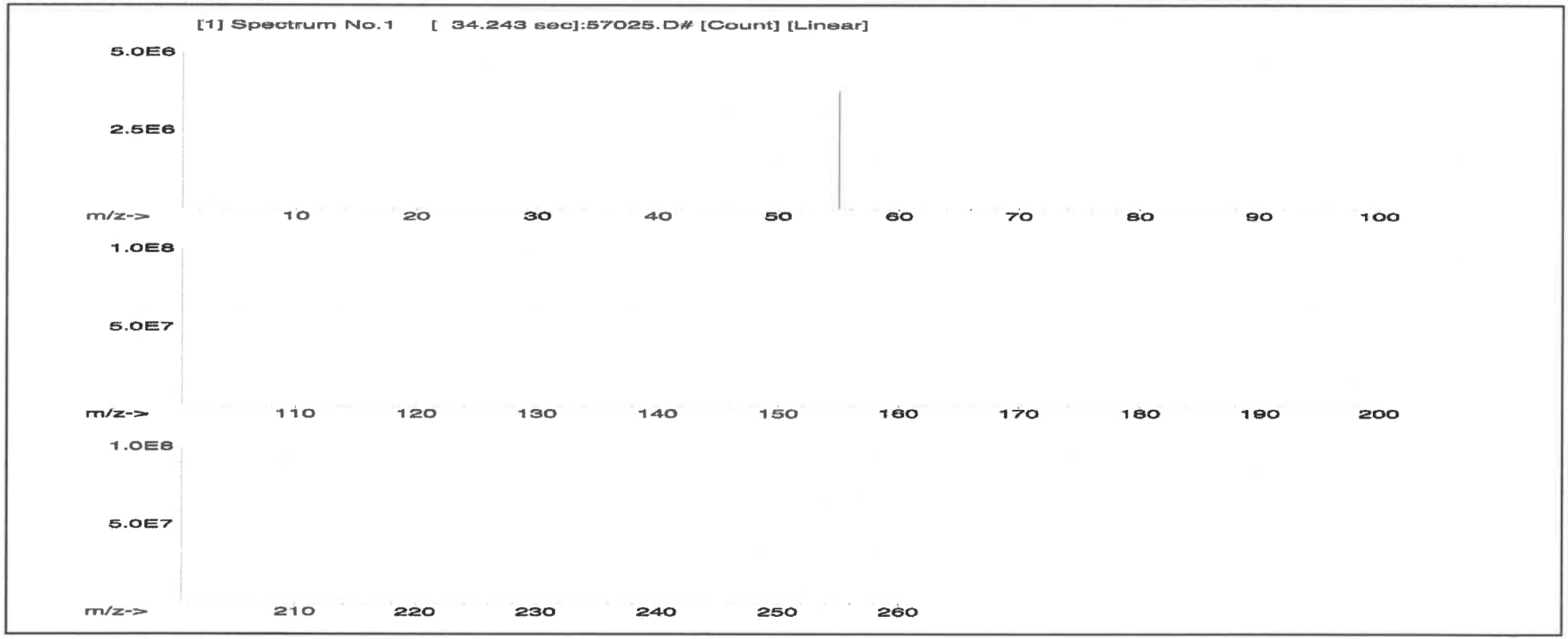
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

		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



R2233METALS
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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).

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R: 12/20/23 M5747

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CERTIFIED WEIGHT REPORT:

Part Number: 57082
Lot Number: 100923
Description: Lead (Pb)

Expiration Date: 100926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

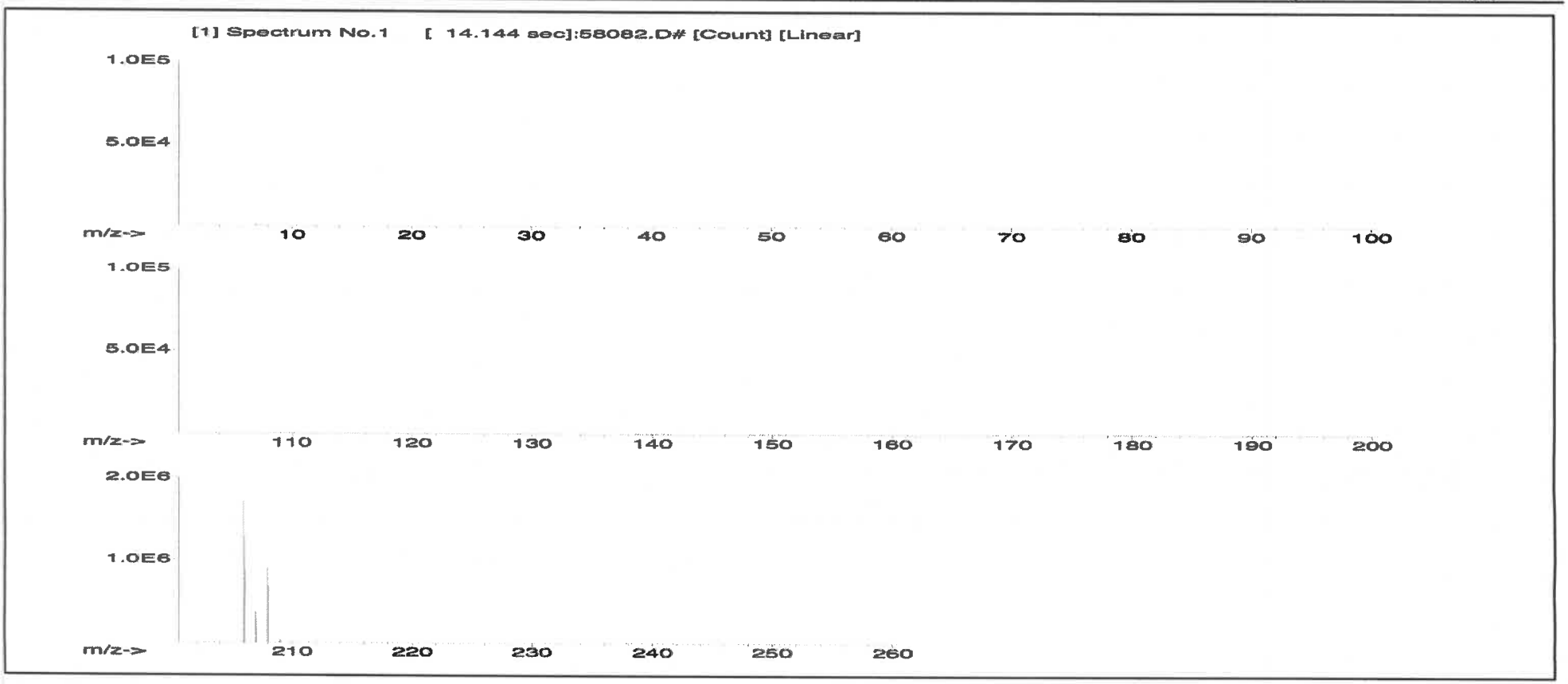
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	100923
Reviewed By:	Pedro L. Rentas	100923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	1000	99.999	0.10	62.5	4.80071	4.80077	**1000.0**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 12/20/23 M5748

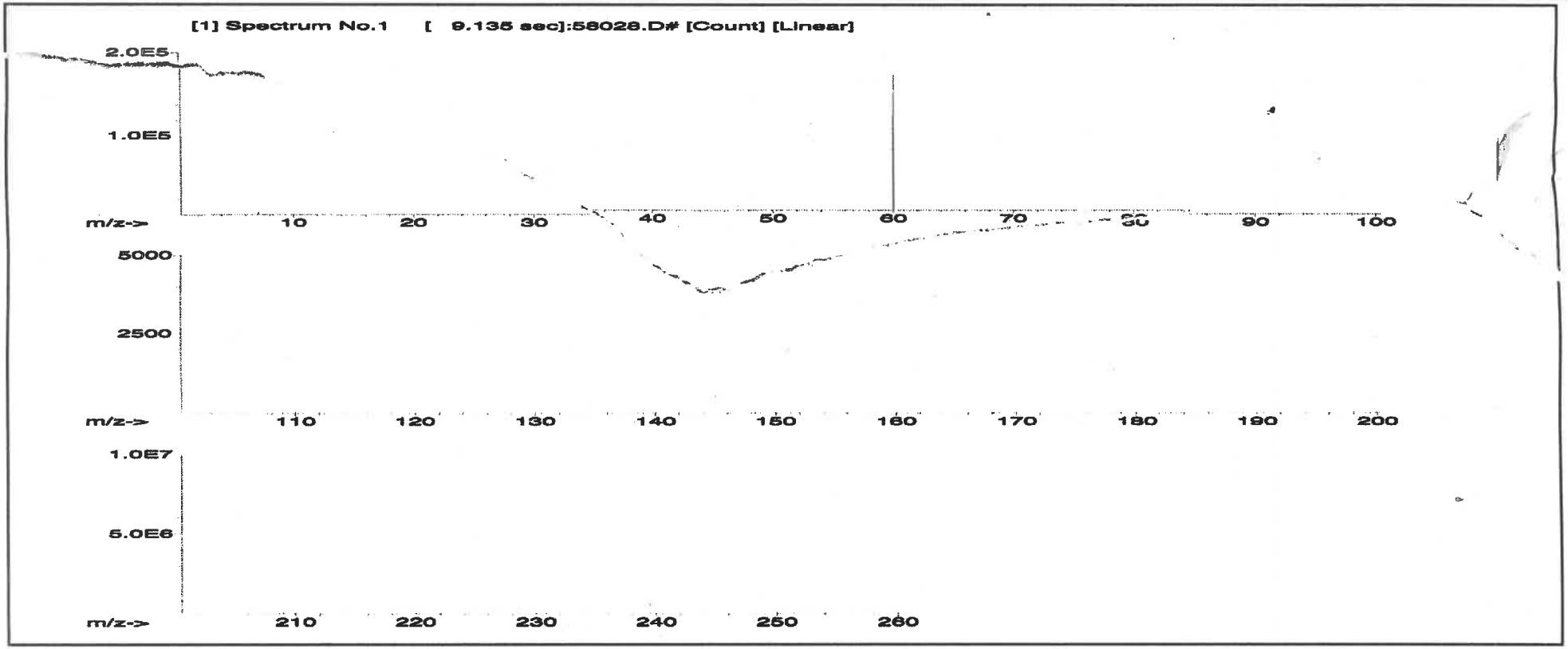
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5768 M5769 (BP) R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

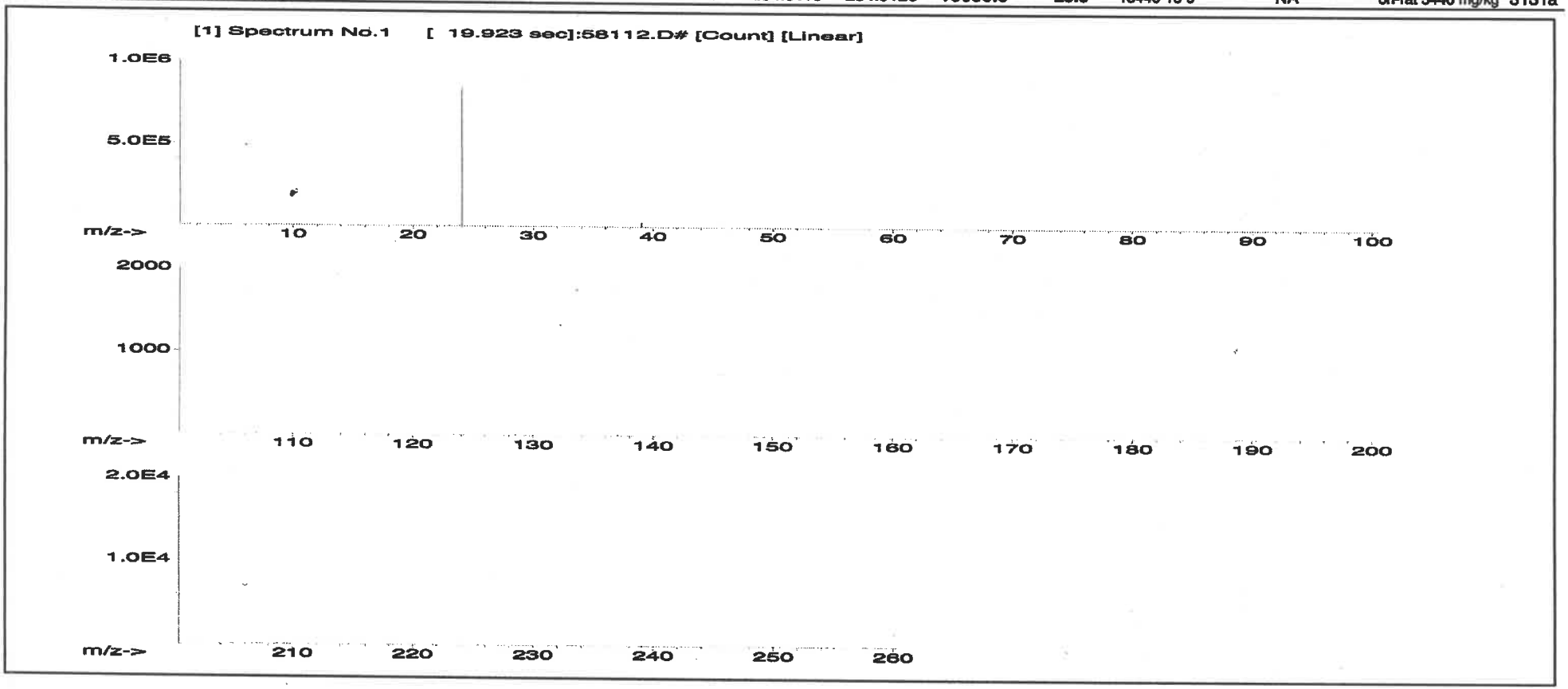
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

M5768, M5769 (BP) R: 1/3/24

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	091823
Reviewed By:	Pedro L. Rentas	091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 02/09/24 M5798

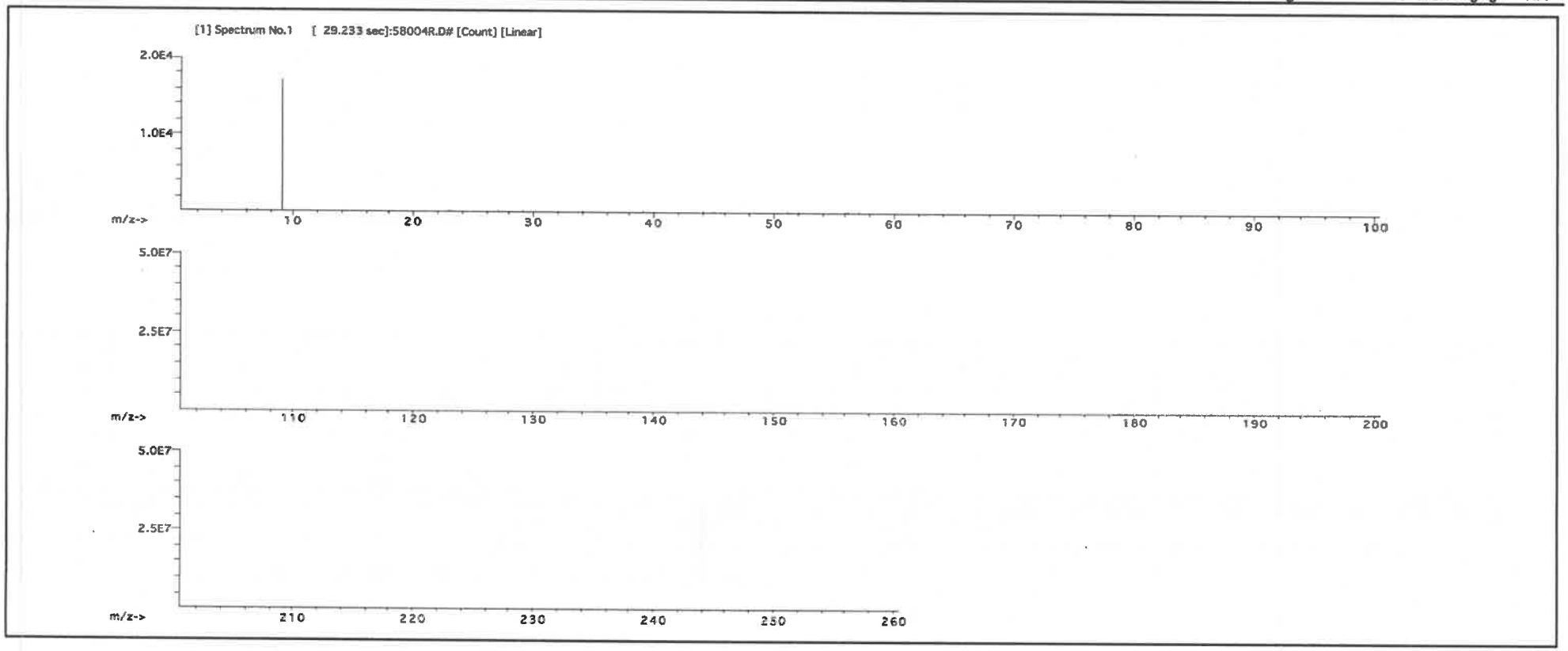
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57004**	24002546	Nitric Acid		
Lot Number:	**102523**				
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	102526				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



65283-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R? 02/09/24 IV15799

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

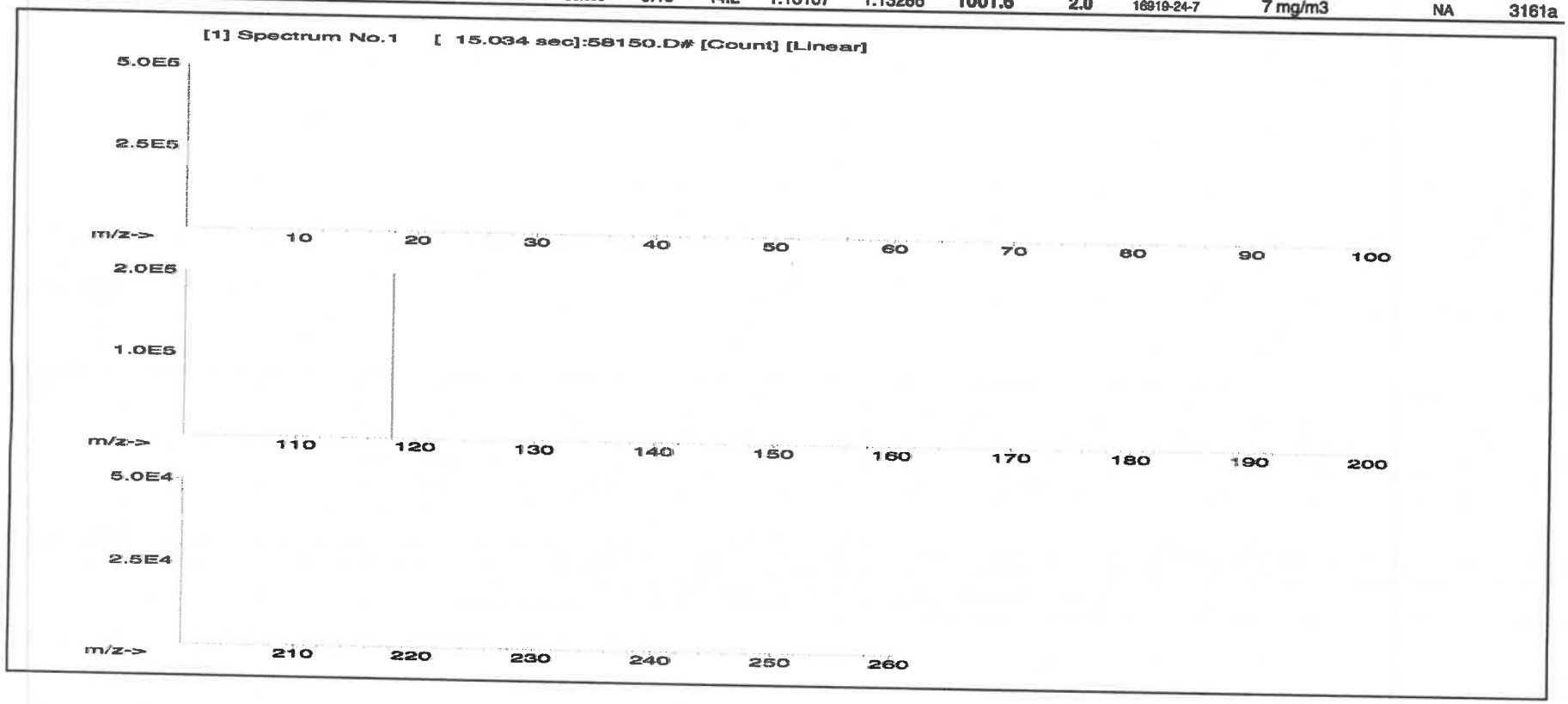
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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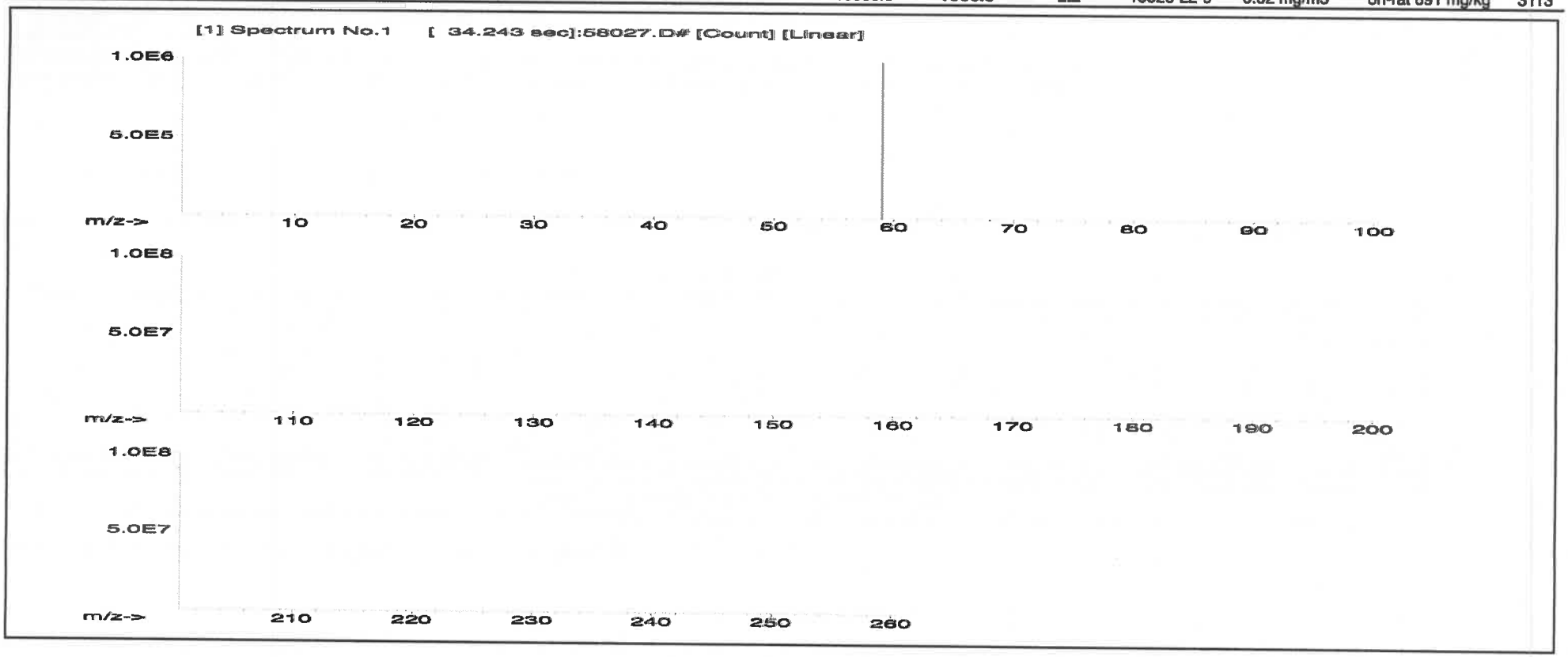
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By: Lawrence Barry 091923

Reviewed By: Pedro L. Rentas 091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	**2.2**	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 M5801 BH

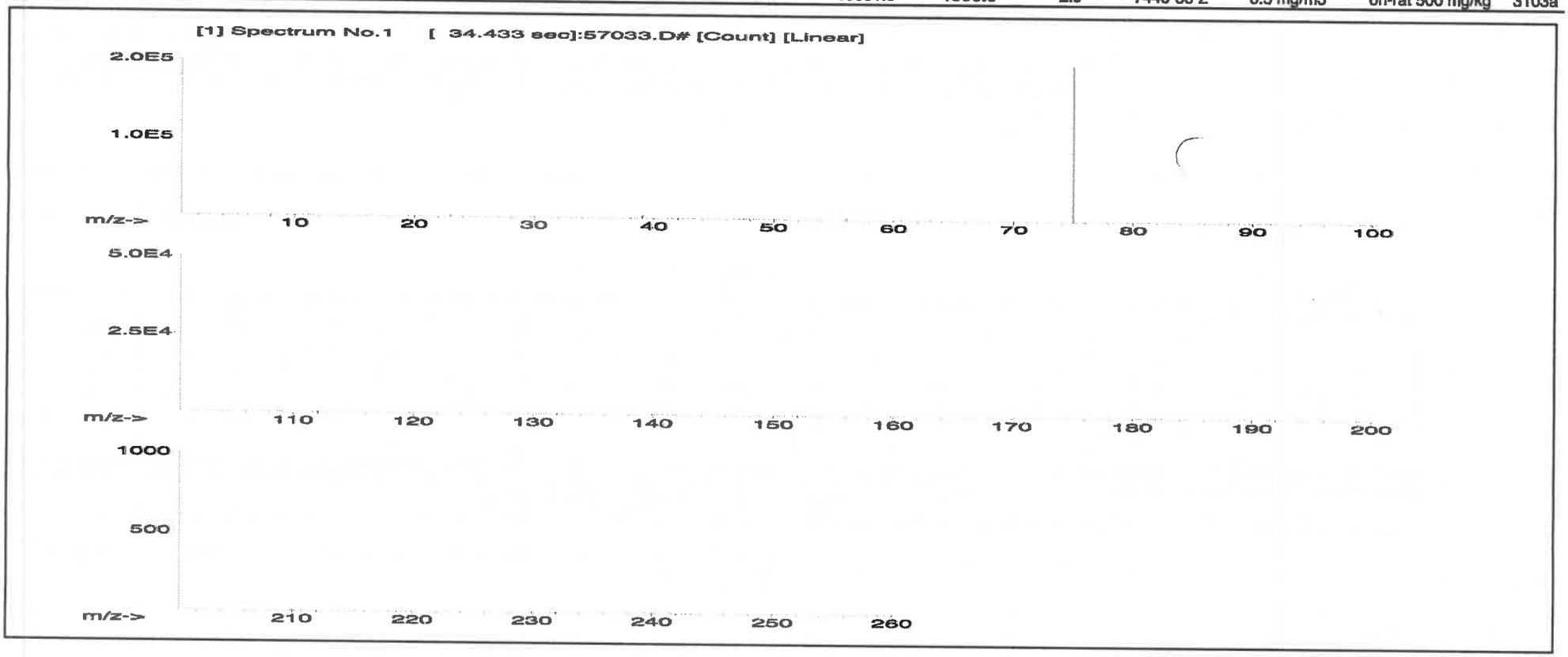
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CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**				
Lot Number:	**111323**	24002546	Nitric Acid		
Description:	**Arsenic (As)**				
		2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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A: 02/09/24 M.5814

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CERTIFIED WEIGHT REPORT:

Part Number: 57005
Lot Number: 071123
Description: Boron (B)

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

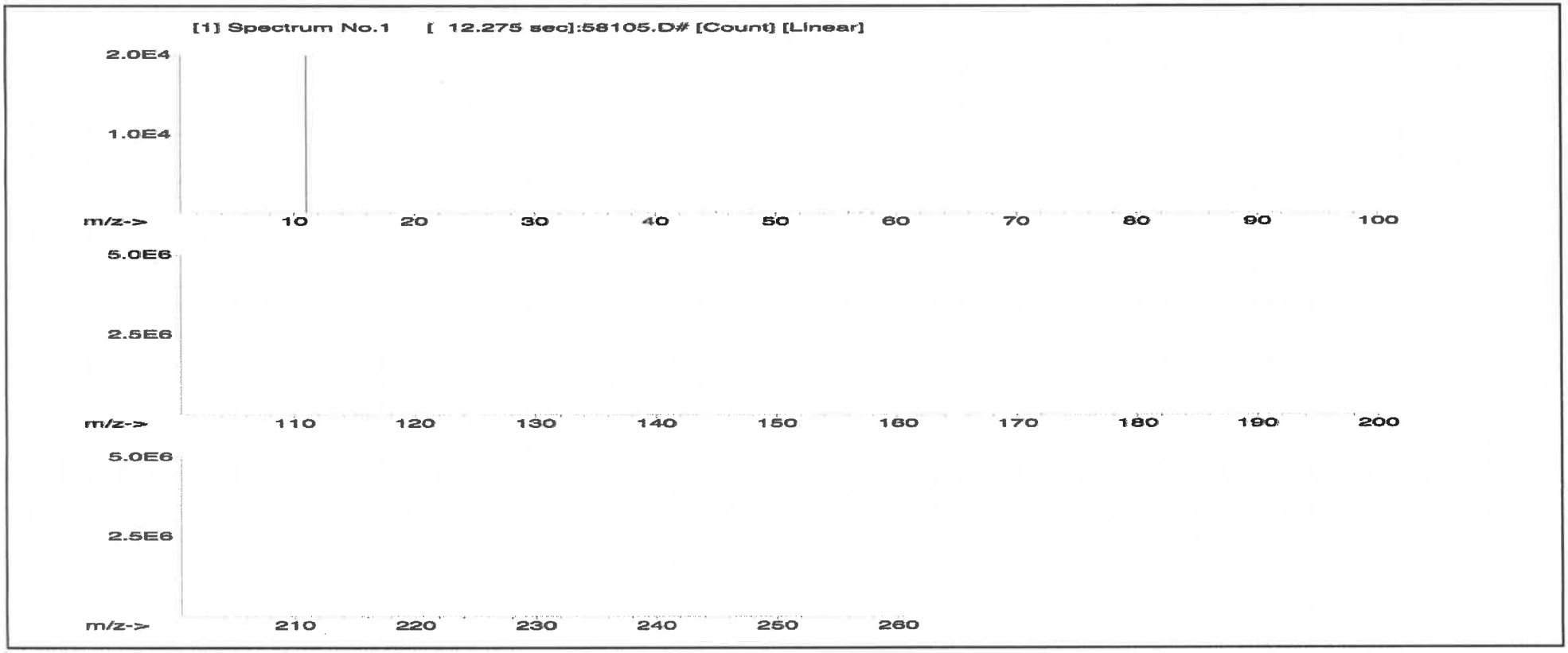
	Lot #			
Solvent:	MKBQ8597V	Ammonium hydroxide		
	2.0%	40.0 (mL)	Ammonium hydroxide	

5E-05 Balance Uncertainty

Formulated By: Benson Chan 071123

Reviewed By: Pedro L. Rentas 071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Boric acid (B)	IN018	BV092016A1	1000	99.9999	0.10	17.3	11.55772	11.56201	**1000.4**	**2.0**	10043-35-3	2 mg/m3	orl-rat 2660 mg/kg	3107



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	T	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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CERTIFIED WEIGHT REPORT:

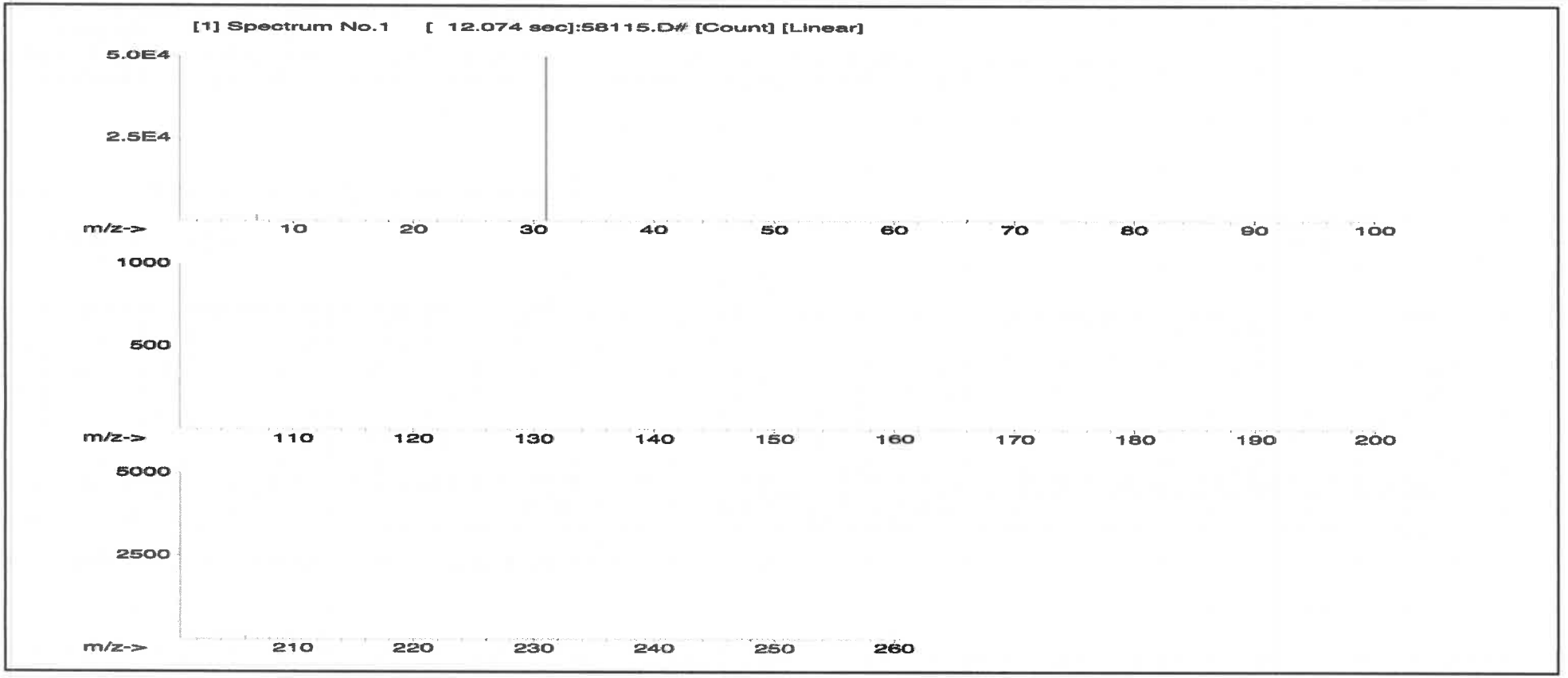
Part Number: 57115
Lot Number: 041723
Description: Phosphorous (P)

Expiration Date: 041726
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #	
Solvent:	21110221	Nitric Acid
2%	40.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number: 57016
Lot Number: 122923
Description: Sulfur (S)

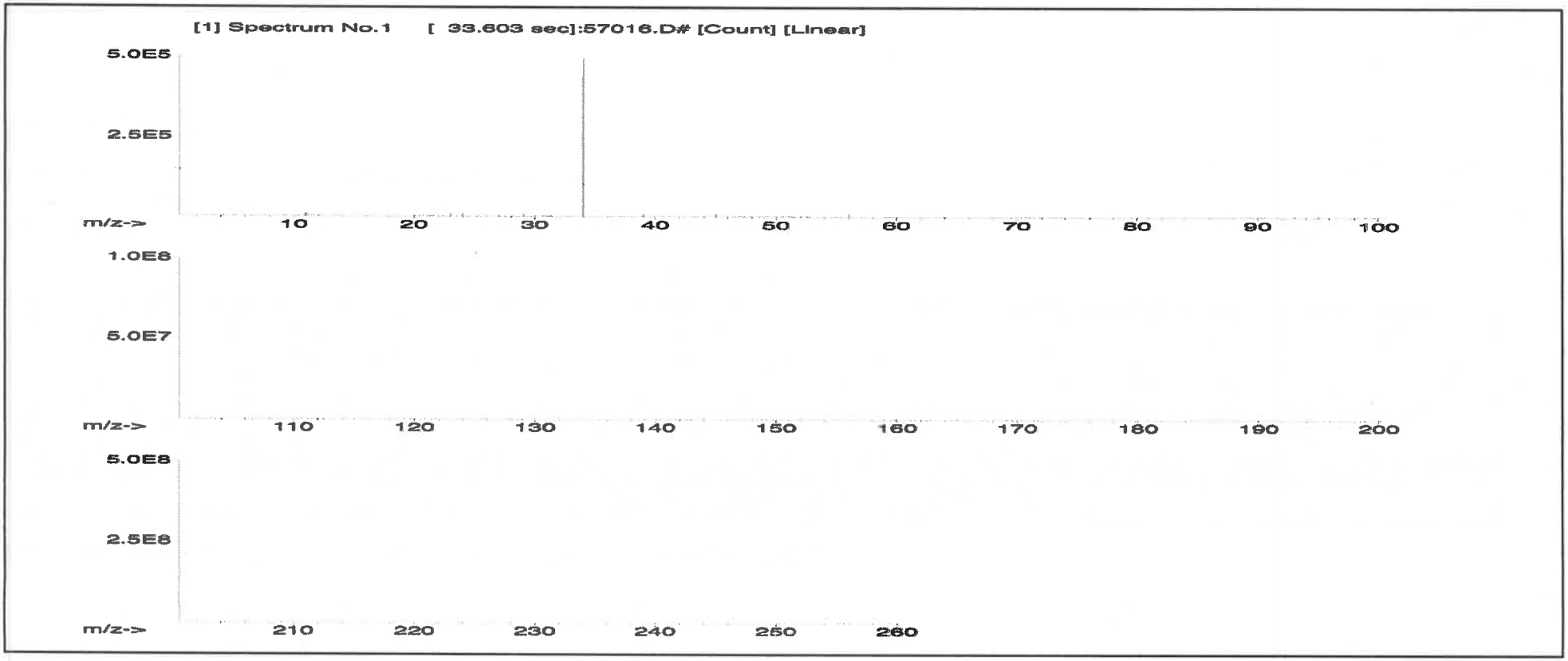
Expiration Date: 122926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 4000.0

Lot #		
Solvent:	122923	ASTM Type 1 Water
	5E-05	Balance Uncertainty
	0.06	Flask Uncertainty

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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CERTIFIED WEIGHT REPORT:

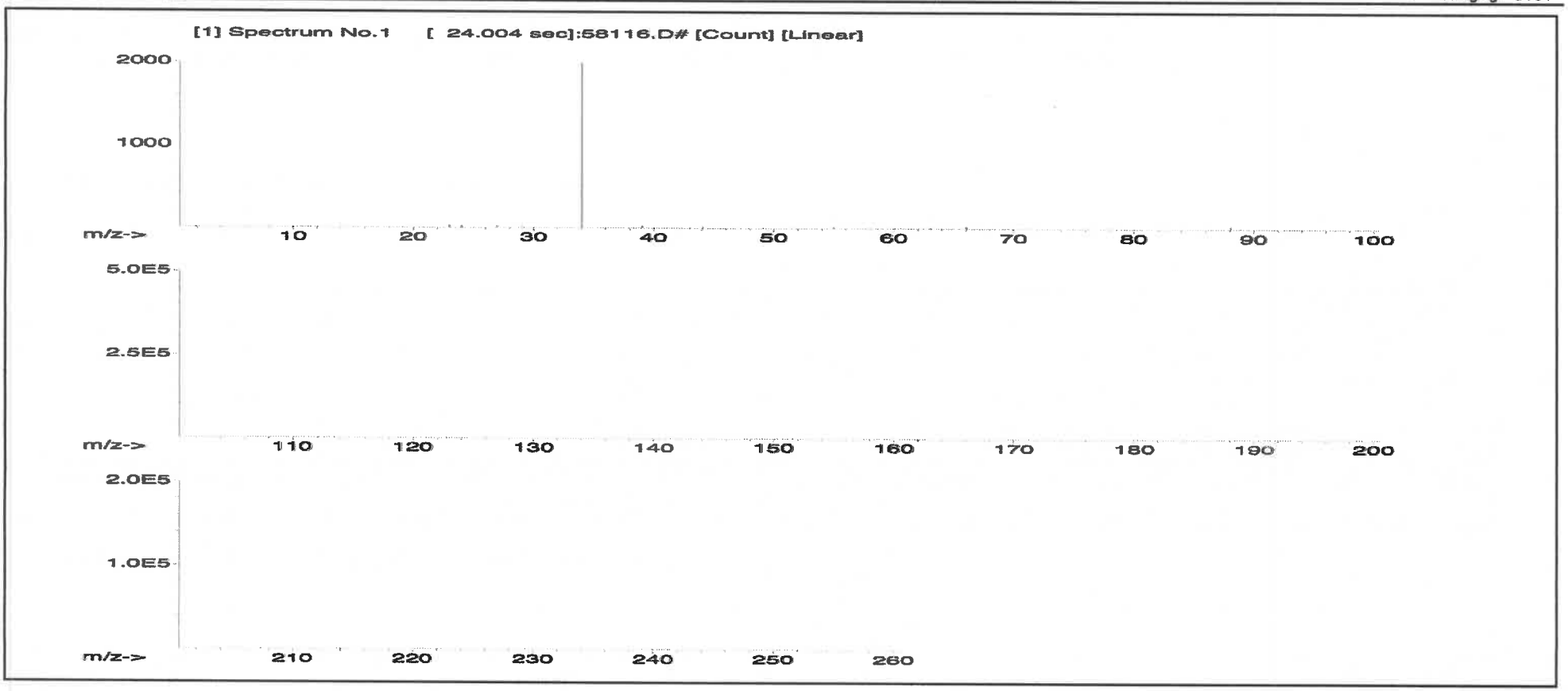
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Lot #
Solvent: 071123 ASTM Type 1 Water

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	ori-rat 4250mg/kg	3181



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Certified Reference Material CRM

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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<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).

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Certified Reference Material CRM

R: 02/09/24 M.5818

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CERTIFIED WEIGHT REPORT:

Part Number: 57014
Lot Number: 122023
Description: Silicon (Si)

Expiration Date: 122026
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1999.48 ± 0.058 Flask Uncertainty

Solvent: 24002546 Nitric Acid

2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

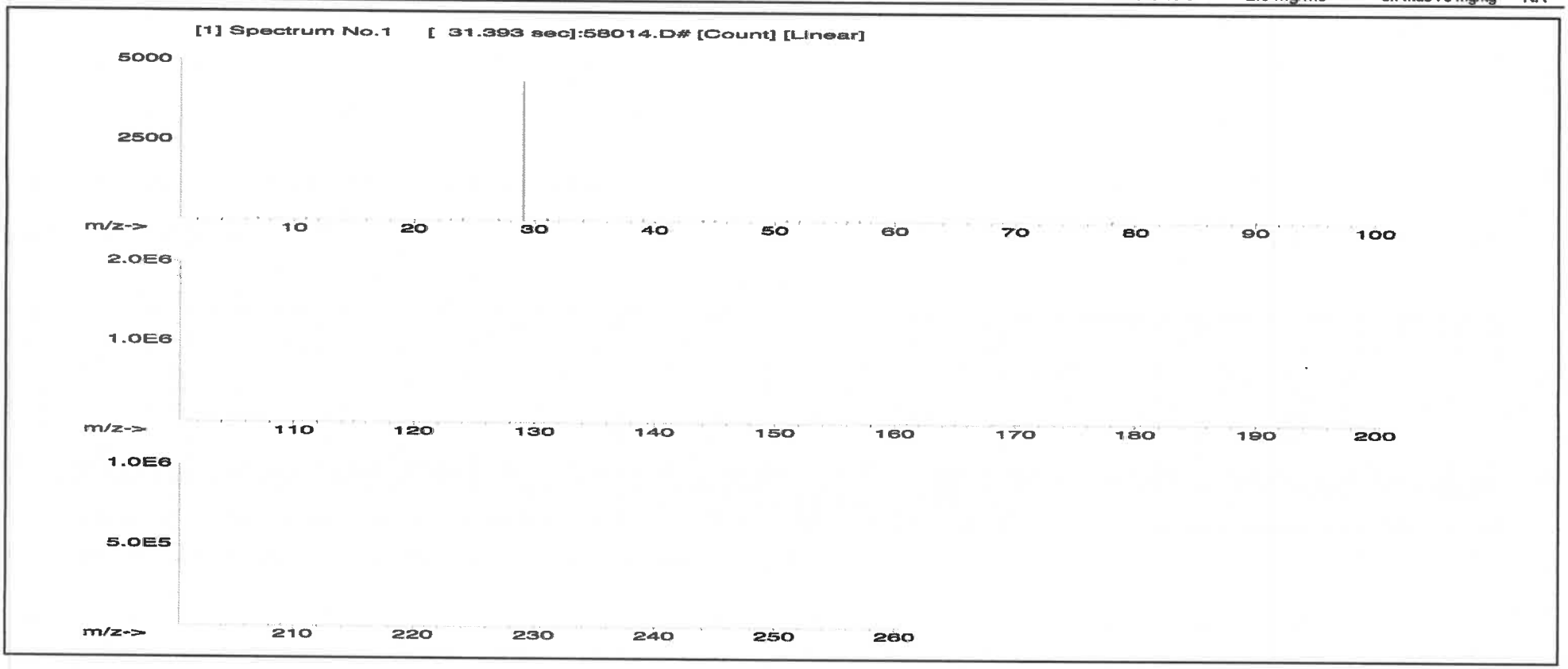
Aleah O'Brady

Formulated By: Aleah O'Brady 122023

Pedro Rentas

Reviewed By: Pedro L. Rentas 122023

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 hexafluorosilicate (Si)	IN009	SID082022A1	1000	99.999	0.10	14.4	13.8854	13.8855	**1000.0**	**2.0**	16919-19-0	2.5 mg/m3	orl-mus 70 mg/kg	NA



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass 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	T	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 02/09/24 M5819

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CERTIFIED WEIGHT REPORT:

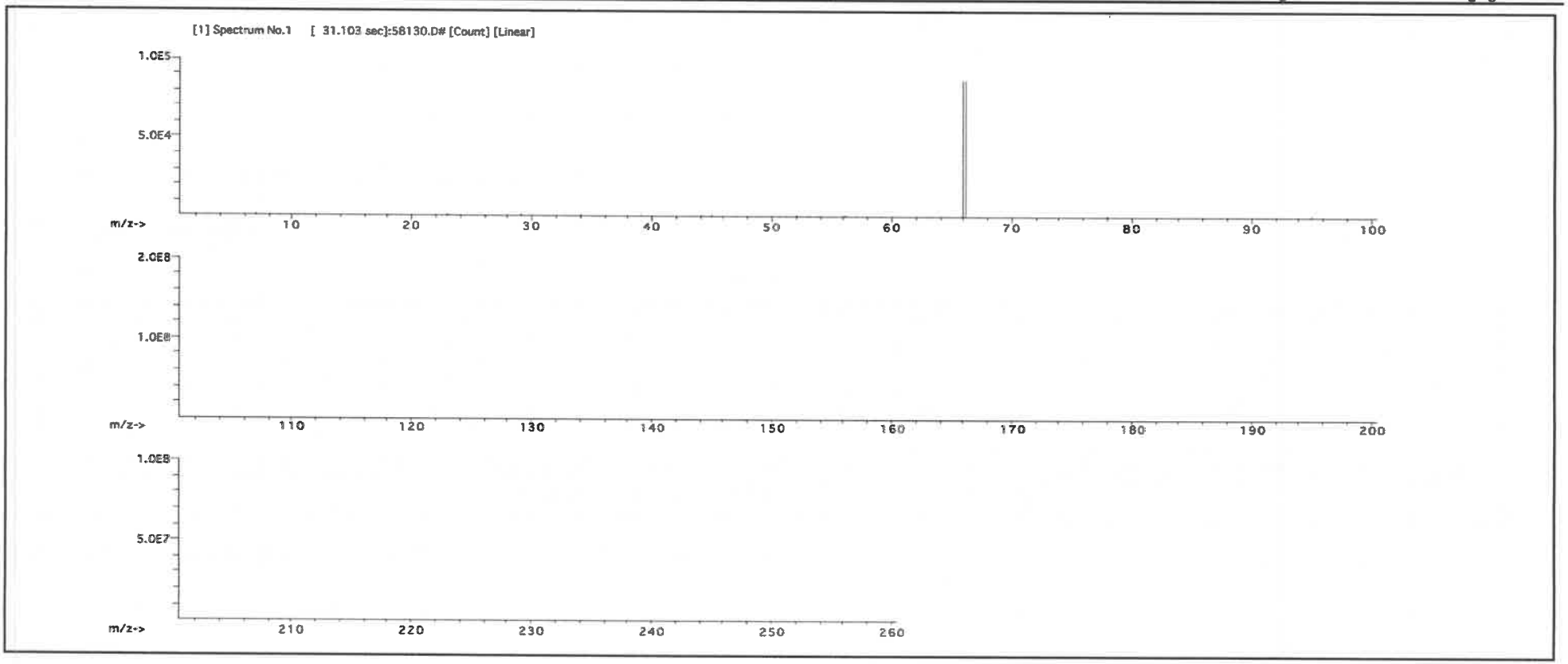
Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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Certified by:

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Certified Reference Material CRM

R: 02/09/24 M5820

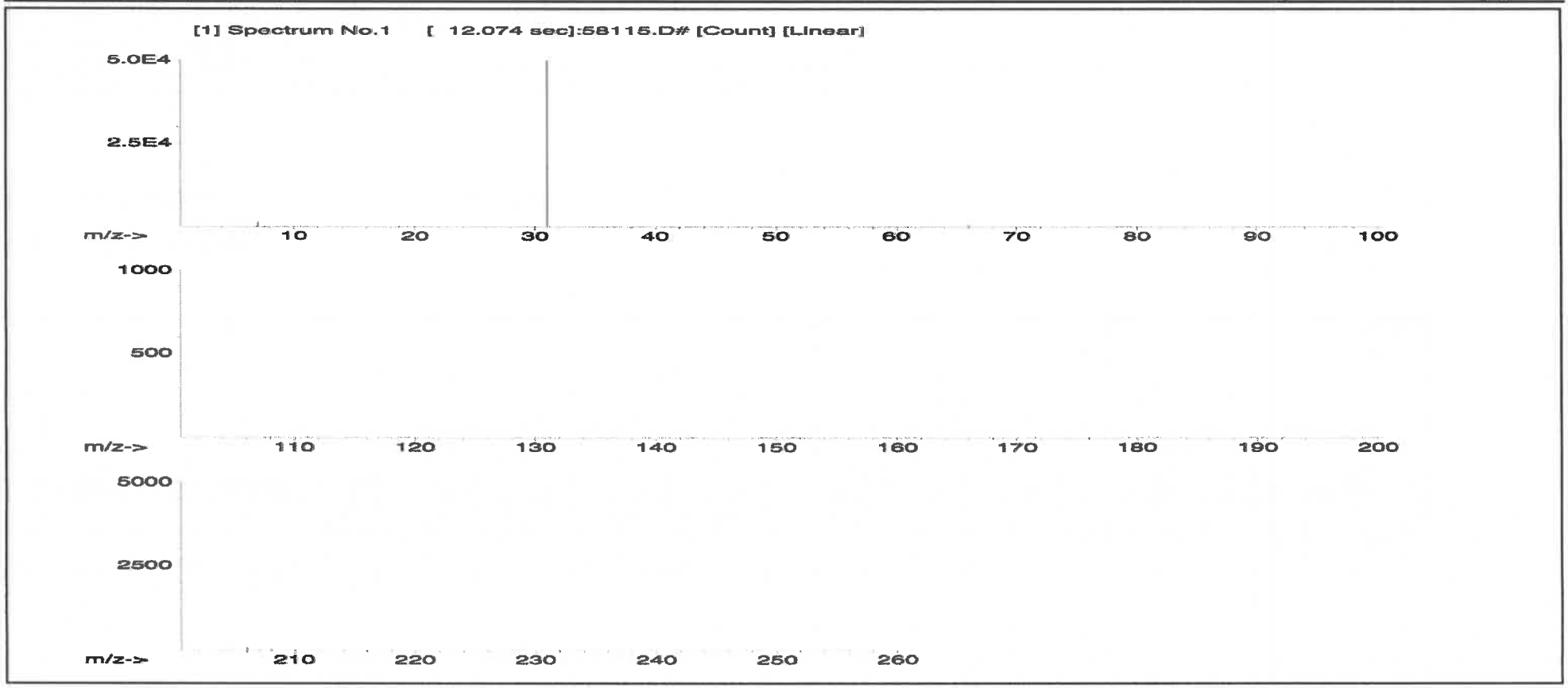
ANAB ISO 17034 Accredited
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CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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Certified Reference Material CRM

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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MF884
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

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.

MSS28-32 MSB MSS53 MSB 3/30/23

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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.

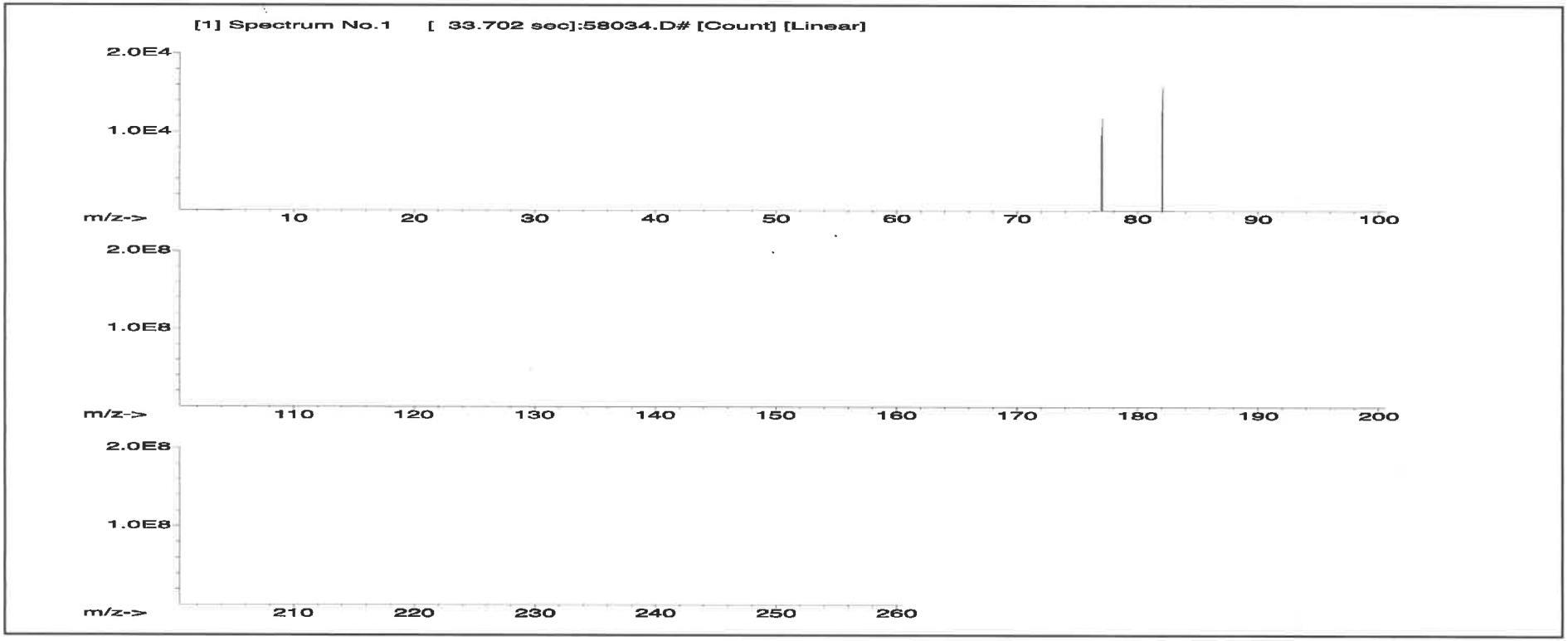
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

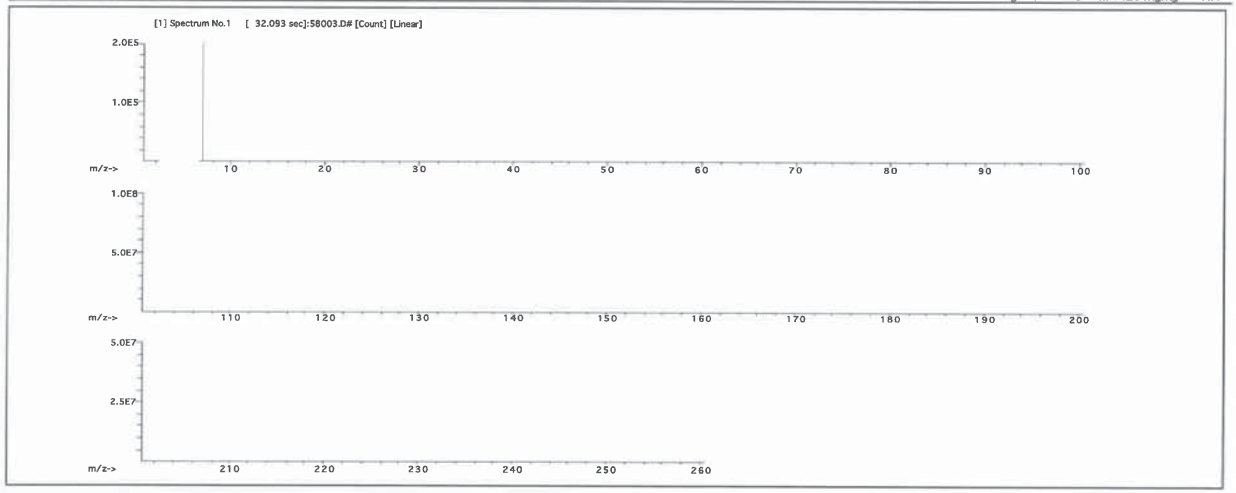
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57003**	24002546	Nitric Acid		
Lot Number:	**062124**				
Description:	**Lithium (Li)**	2.0%	5.0 (mL)	Nitric Acid	
Expiration Date:	062127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	250.11	0.016	Flask Uncertainty		

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

MS978, MS979

INORGANIC VENTURES

Certificate of Analysis

Refine your results. Redefine your industry.

300 Technology Drive
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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

R: 2/22/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 865.01 — ACCREDITED Reference Material Producer Certificate 865.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	TI Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**1002 ± 4 µg/mL**
	ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/MM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{Char\,i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{Char\,i})^2 \,/\, (\Sigma(1/u_{Char\,i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char} + u^2_{Lb} + u^2_{lts} + u^2_{ts})^{½}$

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_{Lb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)\,(u_{Char\,a})$$

X_a = mean of Assay Method A with

$u_{Char\,a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char\,a} + u^2_{Lb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{Char\,a}$ = the errors from characterization

u_{Lb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form In Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 for months in 1% 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

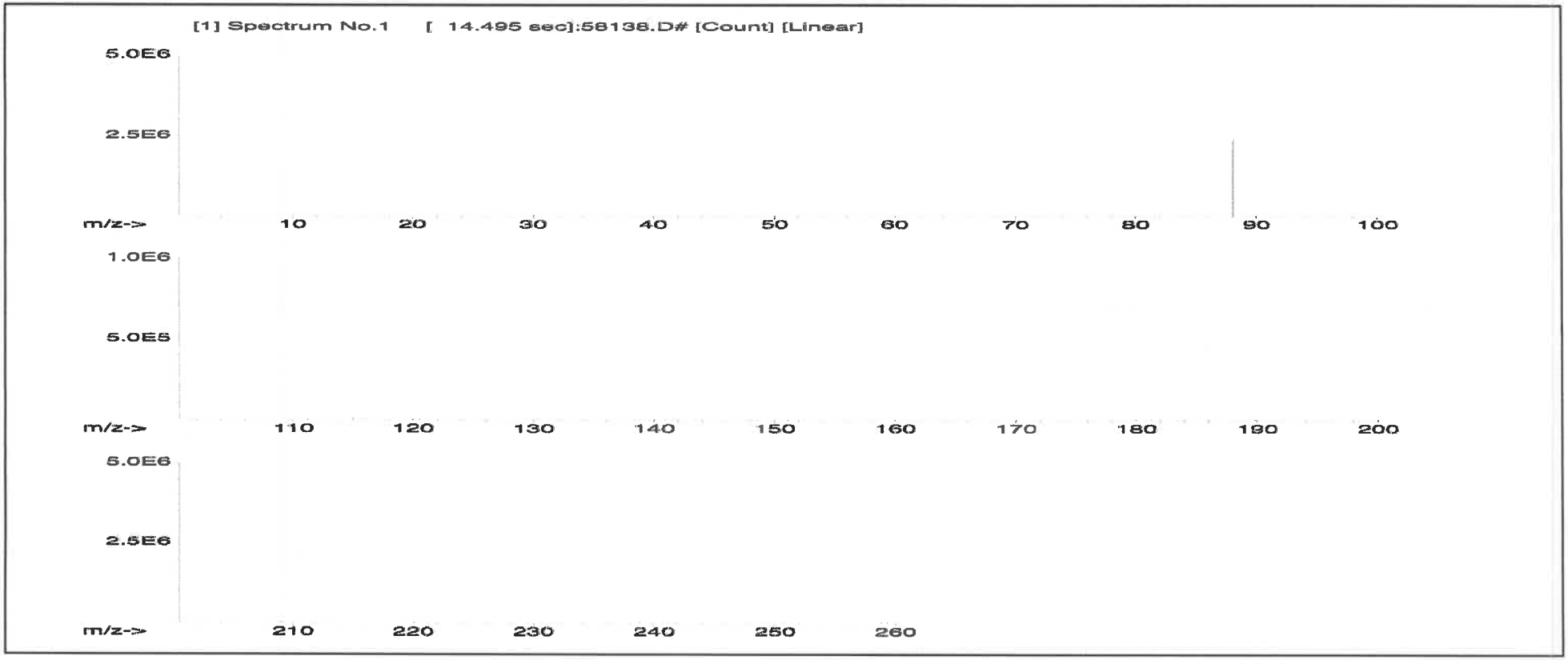
45982 R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:	**57038**			**Lot #**	
Lot Number:	**031524**		**Solvent:**	24002546	Nitric Acid
Description:	**Strontium (Sr)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	031527				
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		

Formulated By:	Benson Chan 031524
Reviewed By:	Pedro L. Rentas 031524

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85502	**1000.1**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

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
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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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M6033

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

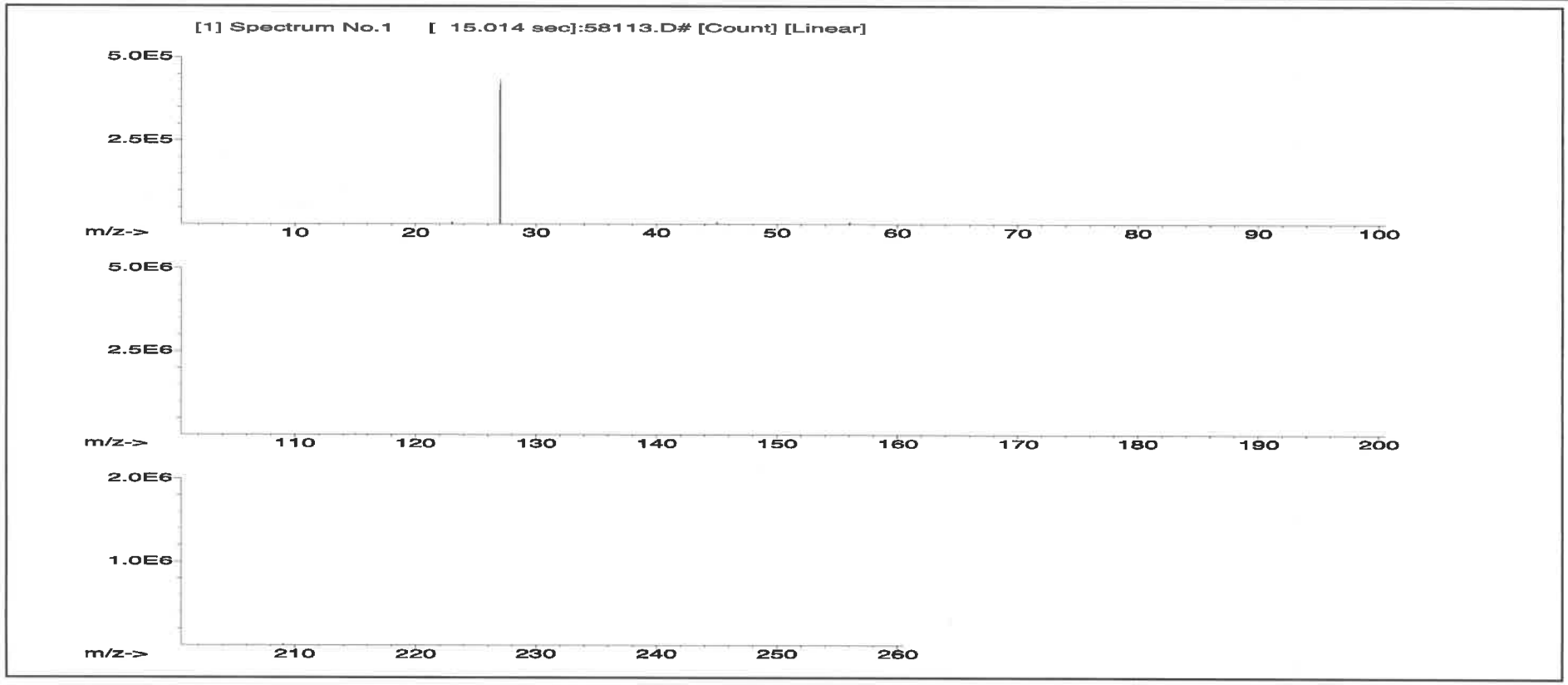
Part Number:	**58113**		**Solvent:**	20510011	Nitric Acid
Lot Number:	**011623**				
Description:	**Aluminum (Al)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Lot #

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



Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

M6119

Recieve -> 10/9/24
Met dig

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.6 %
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	< 0.2 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	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

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Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	3 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	1 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 16|13|24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS – Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

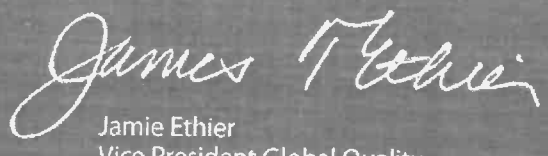
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

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www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M5806, M5807

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CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 122223
Description: Sodium (Na)

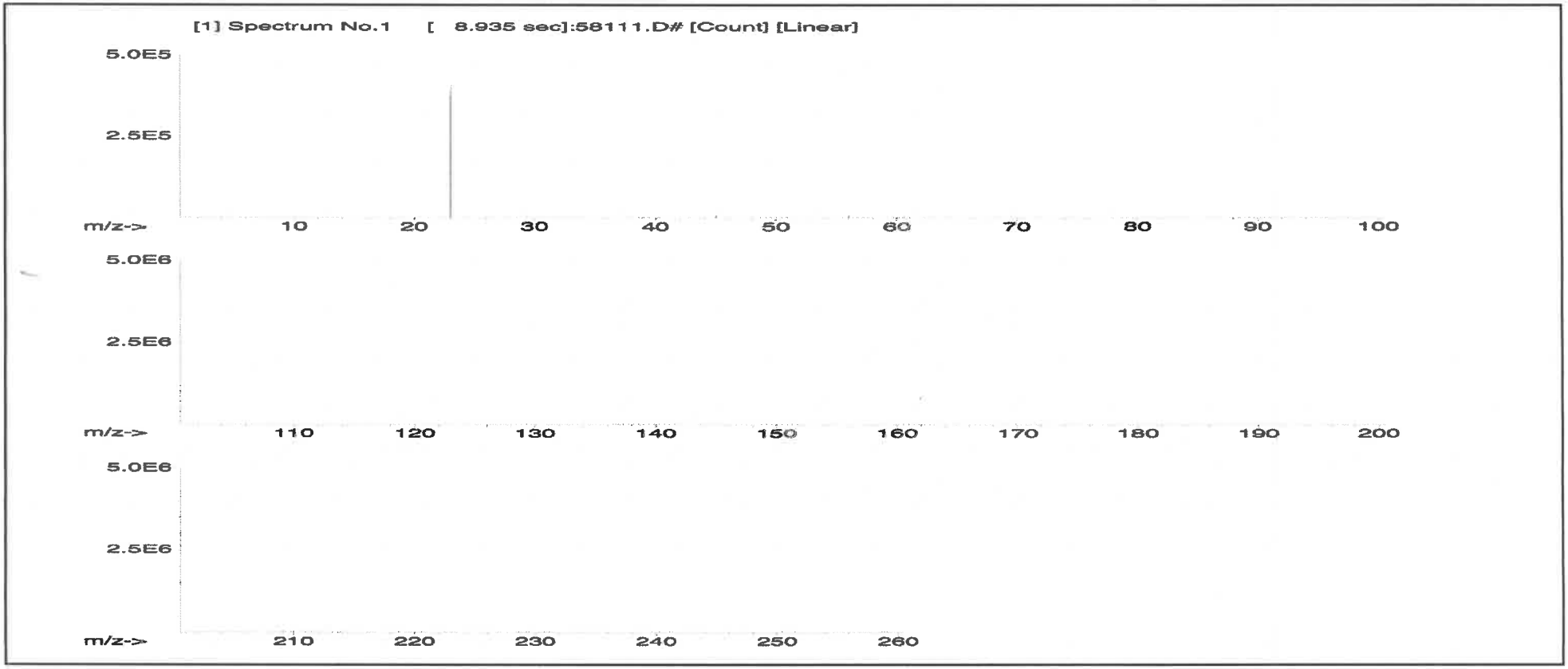
Expiration Date: 122226
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	Lot #			
Solvent:	24002546	Nitric Acid		
2%	60.0 (mL)	Nitric Acid		
			5E-05	Balance Uncertainty
			0.06	Flask 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



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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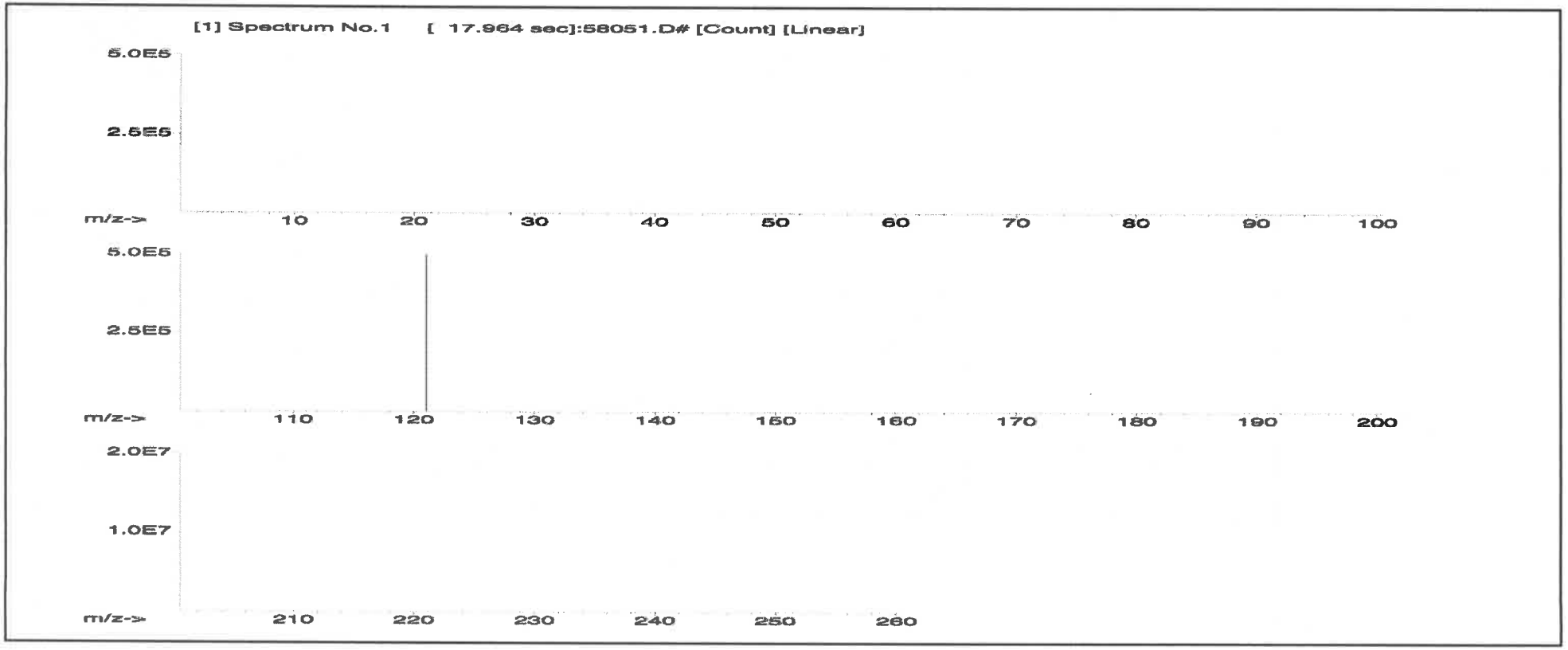
R: 01/03/24 M5802, M5803

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**120523**			
Description:	**Antimony (Sb)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	120526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Rentas	120523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Antimony (Sb)	58151	100923	0.1000	300.0	0.084	1000	10001.4	**1000.0**	2.1	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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Certified Reference Material CRM

M6030

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

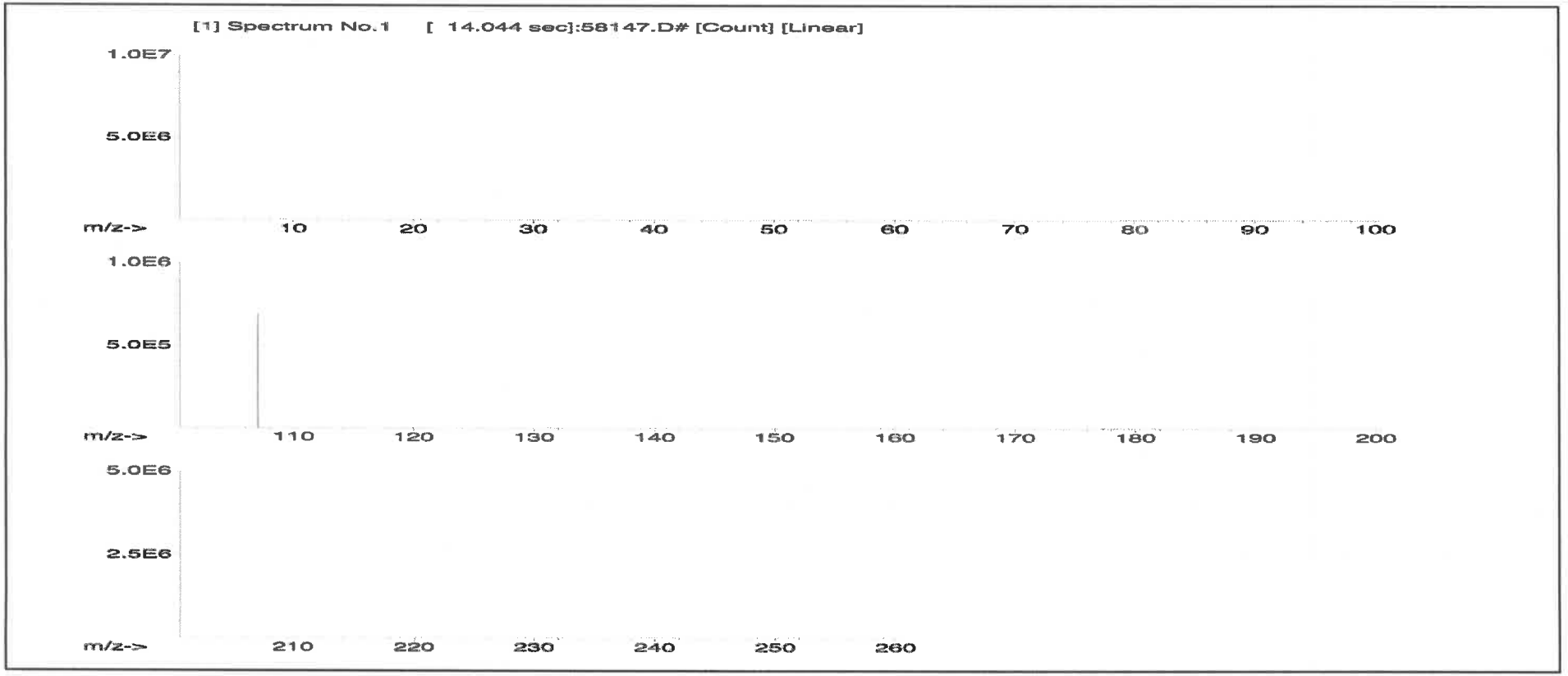
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

		Lot #	
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
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CERTIFIED WEIGHT REPORT:

Part Number: 57081
Lot Number: 062724
Description: Thallium (Tl)

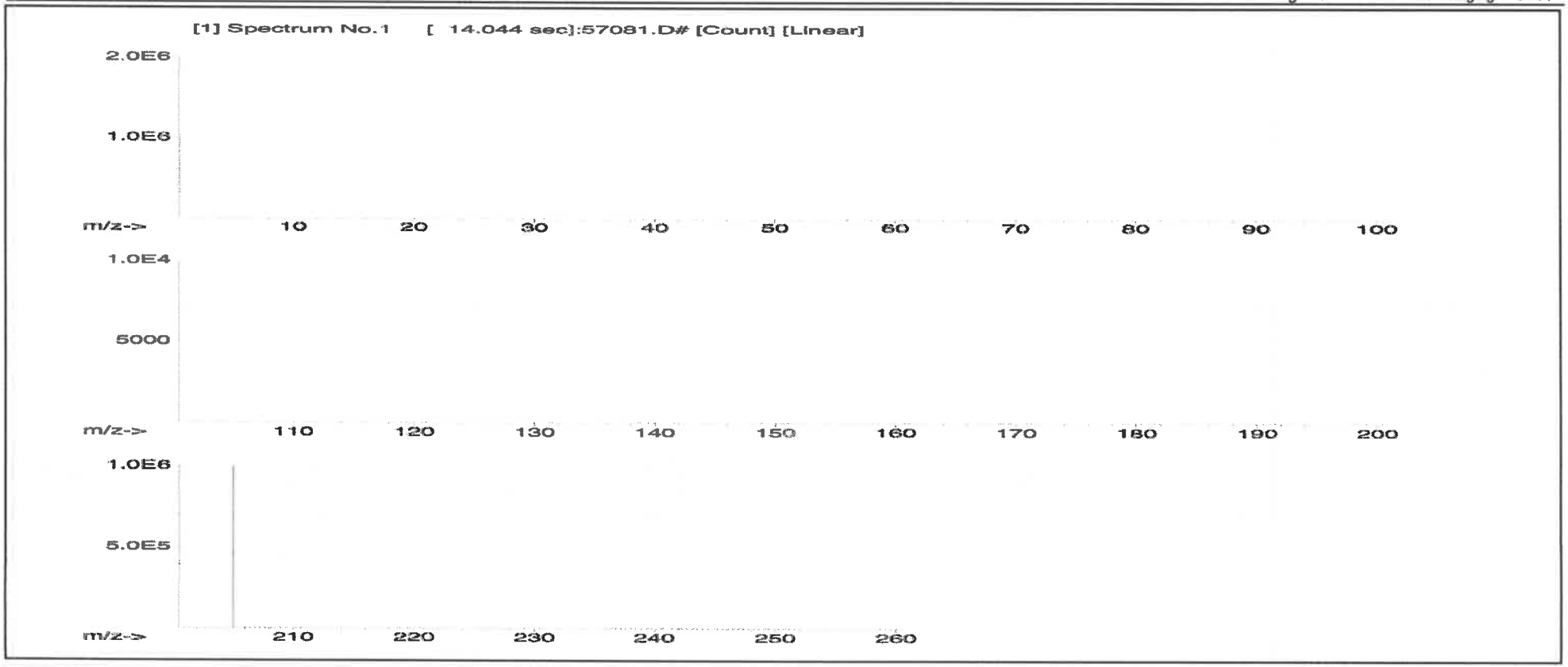
Expiration Date: 062727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.1

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.10	Flask Uncertainty	

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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AR-1539 Certificate Number
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	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:



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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

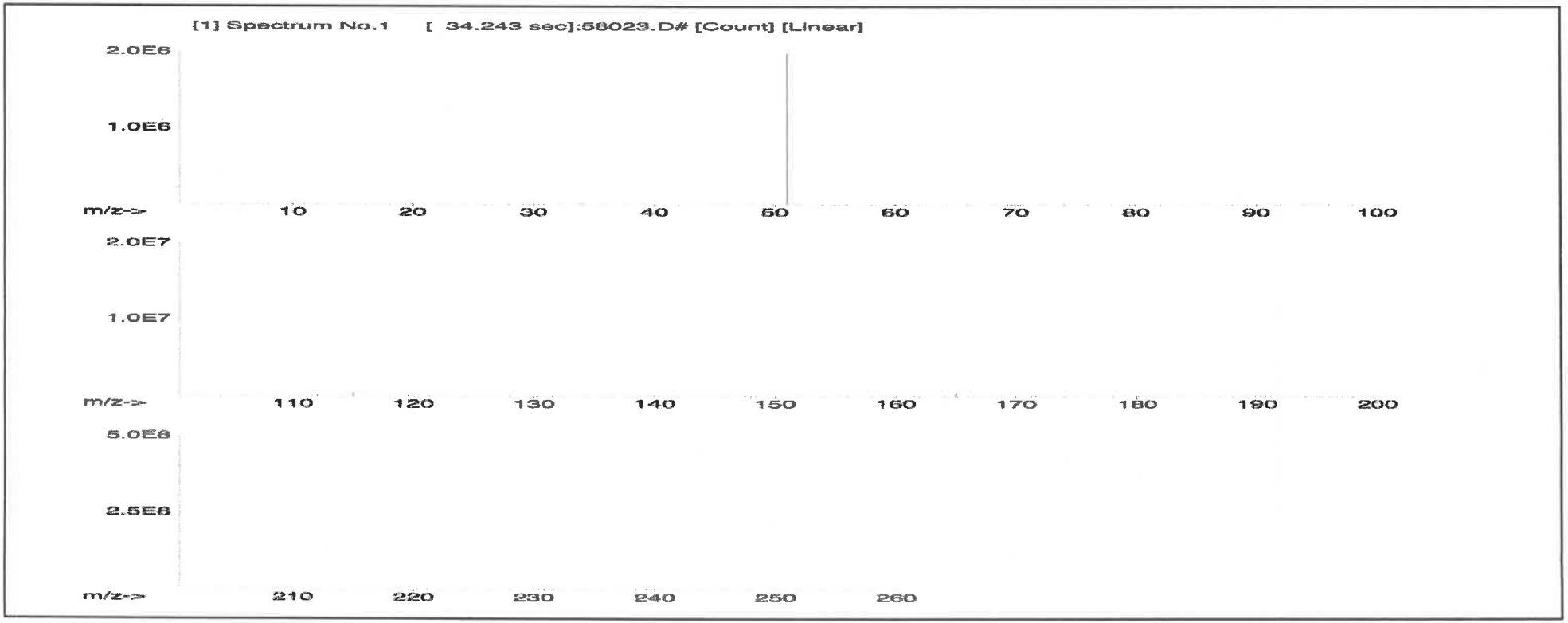
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: P5283

COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Tetra Tech	PROJECT NAME: NWIRP Bethpage	BILL TO: SEE CONTRACT PO#
ADDRESS: 4433 Corporation Ln, Suite 300	PROJECT #: 112G08005-WE13 LOCATION: GW IDW	ADDRESS:
CITY: Virginia Beach STATE: VA ZIP: 23462	PROJECT MANAGER: Dave Brayack	CITY: STATE: ZIP:
ATTENTION: Ernie Wu	E-MAIL: david.brayack@tetratech.com	ATTENTION: PHONE:
PHONE: 757-466-4901 FAX: 757-461-4148	PHONE: 757-466-4909 FAX: 757-461-4148	

DATA TURNAROUND INFORMATION

FAX:_____24hr_____ DAYS*
HARD COPY:_____24hr_____DAYS*
EDD_____24hr_____DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD Format_____
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other_____

ANALYSIS

	1	2	3	4	5	6	7	8	9
	VOC's (EPA 624)	pH	Total Metals	PCB's (EPA 8082)					

PRESERVATIVES

	A		B						
	1	2	3	4	5	6	7	8	9

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	1	2	3	4	5	6	7	8	9	COMMENTS
1.	TT-TB-20241213	QA		X	12/13/24	9:00	2	2									Trip Blank
2.	TT-RW10A-IDWGW-20241213	AQ		X	12/13/24	10:15	6	3	1	1	1						Refer to COC For Name
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME		
RELINQUISHED BY SAMPLER 1.	12/13/24 1300	RECEIVED BY 1.	1300 12-13-24
RELINQUISHED BY 2.	DATE/TIME	RECEIVED BY 2.	
RELINQUISHED BY 3.	DATE/TIME 12-13-24	RECEIVED FOR LAB BY 3.	

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.1c
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?:_____
Comments:
24hr TAT - CTO-WE13 Drilling GW IDW Sampling - RW10A

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

Alliance TECHNICAL GROUP

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5283 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 12/13/2024 1:07:00 PM
Project Name : CTO WE13
Receive DateTime : 12/13/2024 ~~12:00:00~~ AM 13:05
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P5283-01	TT-TB-20241213	Water	12/13/2024	09:00					
					VOCMS Group4		624.1		1 Bus. Day
P5283-02	TT-RW10A-IDWGW-20241213	Water	12/13/2024	10:15					
					VOCMS Group4		624.1		1 Bus. Day

Relinquished By : [signature]
Date / Time : 12-16-24 9:55

Received By : [signature]
Date / Time : 12-16-24 9:55

Storage Area : VOA Refridgerator Room