DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name : Alliance Technical Group LLC

Client : Portal Partners Tri-Venture

Project Location : NJ

Project Number : 9500000878

Laboratory Sample ID(s) : P4718

Sampling Date(s) : 11/04/2024

List DKQP Methods Used (e.g., 8260,8270, et Cetra) **,1030,1311,1311 ZHE, 6010D, 7196A, 7470A, 7471B, 8081B, 8082A, 8151A ,8260-Low, 8260D, 8270E, 9012B, 9034, 9045D, NJEPH**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☐ Yes ☑ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☑ Yes ☐ No ☐ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☑ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☑ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☐ Yes ☑ No
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b)Were these reporting limits met?	☑ Yes ☐ No ☑ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☐ Yes ☑ No

Notes: For all questions to which the response was “No” (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is “No”, the data package does not meet the requirements for “Data of Known Quality.”

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Cover Page

Order ID : P4718

Project ID : Amtrak Sawtooth Bridges 2024

Client : Portal Partners Tri-Venture

Lab Sample Number	Client Sample Number
P4718-01	WB-307-SB01
P4718-02	WB-307-SB02
P4718-03	WB-307-SB02
P4718-04	WB-307-SW
P4718-05	TB-11042024

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

Signature : _____

Date: 11/21/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Portal Partners Tri-Venture
Project Name: Amtrak Sawtooth Bridges 2024
Project # N/A
Chemtech Project # P4718
Test Name: TCLP Mercury,TCLP ICP Metals

A. Number of Samples and Date of Receipt:
3 Solid samples were received on 11/05/2024.
2 Water samples were received on 11/05/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP Mercury,TCLP ICP Metals.

C. Analytical Techniques:
The analysis of TCLP ICP Metals was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of TCLP Mercury was based on method 7470A and TCLP extraction method was 1311.

D. QA/ QC Samples:

The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate (WB-307-SB02MSD) analysis met criteria for all samples except for Barium 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 met the acceptable requirements.

E. Additional Comments:

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

Signature_____

Alliance TECHNICAL GROUP

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P4718**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **SOHIL JODHANI** **Date:** **11/21/2024**

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LAB CHRONICLE

OrderID:	P4718	**OrderDate:**	11/5/2024 1:31:00 PM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	**Location:**	L21,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4718-01	**WB-307-SB01**	**SOIL**			**11/04/24**			**11/05/24**
			Mercury	7471B		11/07/24	11/07/24	
			Metals ICP-TAL	6010D		11/06/24	11/07/24	
P4718-02	**WB-307-SB02**	**SOIL**			**11/04/24**			**11/05/24**
			Mercury	7471B		11/07/24	11/07/24	
			Metals ICP-TAL	6010D		11/06/24	11/07/24	
P4718-03	**WB-307-SB02**	**TCLP**			**11/04/24**			**11/05/24**
			TCLP ICP Metals	6010D		11/07/24	11/19/24	
			TCLP Mercury	7470A		11/07/24	11/08/24	
P4718-04	**WB-307-SW**	**Water**			**11/04/24**			**11/05/24**
			Mercury	7470A		11/11/24	11/11/24	
			Metals ICP-TAL	6010D		11/07/24	11/08/24	

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Hit Summary Sheet
SW-846

SDG No.: P4718 **Order ID:** P4718

Client: Portal Partners Tri-Venture **Project ID:** Amtrak Sawtooth Bridges 2024

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : WB-307-SB02								
P4718-03	WB-307-SB02	TCLP	Barium	1850		62.8	500	ug/L
P4718-03	WB-307-SB02	TCLP	Chromium	16.1	J	6.60	50.0	ug/L



SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	11/04/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	11/05/24
Client Sample ID:	WB-307-SB02	SDG No.:	P4718
Lab Sample ID:	P4718-03	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	34.8	U	1	34.8	100	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050
7440-39-3	Barium	1850	N	1	62.8	500	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050
7440-43-9	Cadmium	0.94	U	1	0.94	30.0	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050
7440-47-3	Chromium	16.1	J	1	6.60	50.0	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050
7439-92-1	Lead	35.1	U	1	35.1	60.0	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	11/07/24 11:50	11/08/24 10:42	SW7470A	
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	11/07/24 12:30	11/19/24 21:09	SW6010	SW3050

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	TCLP-FULL				

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

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

METAL CALIBRATION DATA

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

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
ICV75	Mercury	3.66	4.0	92	90 - 110	CV	11/08/2024	10:19	LB133352

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

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
CCV51	Mercury	5.08	5.0	102	90 - 110	CV	11/08/2024	10:23	LB133352
CCV52	Mercury	4.97	5.0	99	90 - 110	CV	11/08/2024	10:53	LB133352
CCV53	Mercury	4.67	5.0	93	90 - 110	CV	11/08/2024	11:21	LB133352
CCV54	Mercury	4.56	5.0	91	90 - 110	CV	11/08/2024	11:32	LB133352

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	1000	1000	100	90 - 110	P	11/08/2024	13:59	LB133365
	Barium	513	520	99	90 - 110	P	11/08/2024	13:59	LB133365
	Cadmium	497	510	97	90 - 110	P	11/08/2024	13:59	LB133365
	Chromium	514	520	99	90 - 110	P	11/08/2024	13:59	LB133365
	Lead	999	1000	100	90 - 110	P	11/08/2024	13:59	LB133365
	Selenium	1000	1000	100	90 - 110	P	11/08/2024	13:59	LB133365
	Silver	251	250	100	90 - 110	P	11/08/2024	13:59	LB133365

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	19.5	20.0	98	80 - 120	P	11/08/2024	14:11	LB133365
	Barium	95.3	100	95	80 - 120	P	11/08/2024	14:11	LB133365
	Cadmium	6.34	6.0	106	80 - 120	P	11/08/2024	14:11	LB133365
	Chromium	9.48	10.0	95	80 - 120	P	11/08/2024	14:11	LB133365
	Lead	11.8	12.0	99	80 - 120	P	11/08/2024	14:11	LB133365
	Selenium	20.6	20.0	103	80 - 120	P	11/08/2024	14:11	LB133365
	Silver	10.6	10.0	106	80 - 120	P	11/08/2024	14:11	LB133365

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	4950	5000	99	90 - 110	P	11/08/2024	14:44	LB133365
	Barium	9530	10000	95	90 - 110	P	11/08/2024	14:44	LB133365
	Cadmium	2390	2500	96	90 - 110	P	11/08/2024	14:44	LB133365
	Chromium	1050	1000	105	90 - 110	P	11/08/2024	14:44	LB133365
	Lead	4870	5000	97	90 - 110	P	11/08/2024	14:44	LB133365
	Selenium	5020	5000	100	90 - 110	P	11/08/2024	14:44	LB133365
	Silver	1230	1250	99	90 - 110	P	11/08/2024	14:44	LB133365
CCV02	Arsenic	4950	5000	99	90 - 110	P	11/08/2024	15:29	LB133365
	Barium	9460	10000	95	90 - 110	P	11/08/2024	15:29	LB133365
	Cadmium	2360	2500	94	90 - 110	P	11/08/2024	15:29	LB133365
	Chromium	918	1000	92	90 - 110	P	11/08/2024	15:29	LB133365
	Lead	4800	5000	96	90 - 110	P	11/08/2024	15:29	LB133365
	Selenium	5080	5000	102	90 - 110	P	11/08/2024	15:29	LB133365
	Silver	1230	1250	98	90 - 110	P	11/08/2024	15:29	LB133365
CCV03	Arsenic	4980	5000	100	90 - 110	P	11/08/2024	16:23	LB133365
	Barium	9610	10000	96	90 - 110	P	11/08/2024	16:23	LB133365
	Cadmium	2380	2500	95	90 - 110	P	11/08/2024	16:23	LB133365
	Chromium	930	1000	93	90 - 110	P	11/08/2024	16:23	LB133365
	Lead	4840	5000	97	90 - 110	P	11/08/2024	16:23	LB133365
	Selenium	5130	5000	103	90 - 110	P	11/08/2024	16:23	LB133365
	Silver	1250	1250	100	90 - 110	P	11/08/2024	16:23	LB133365
CCV04	Arsenic	5190	5000	104	90 - 110	P	11/08/2024	17:16	LB133365
	Barium	9360	10000	94	90 - 110	P	11/08/2024	17:16	LB133365
	Cadmium	2420	2500	97	90 - 110	P	11/08/2024	17:16	LB133365
	Chromium	927	1000	93	90 - 110	P	11/08/2024	17:16	LB133365
	Lead	4940	5000	99	90 - 110	P	11/08/2024	17:16	LB133365
	Selenium	5360	5000	107	90 - 110	P	11/08/2024	17:16	LB133365
	Silver	1260	1250	101	90 - 110	P	11/08/2024	17:16	LB133365
CCV05	Arsenic	5110	5000	102	90 - 110	P	11/08/2024	18:04	LB133365
	Barium	9290	10000	93	90 - 110	P	11/08/2024	18:04	LB133365
	Cadmium	2430	2500	97	90 - 110	P	11/08/2024	18:04	LB133365
	Chromium	906	1000	91	90 - 110	P	11/08/2024	18:04	LB133365
	Lead	4940	5000	99	90 - 110	P	11/08/2024	18:04	LB133365
	Selenium	5280	5000	106	90 - 110	P	11/08/2024	18:04	LB133365

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Silver	1230	1250	99	90 - 110	P	11/08/2024	18:04	LB133365
CCV06	Arsenic	4970	5000	100	90 - 110	P	11/08/2024	18:55	LB133365
	Barium	9460	10000	95	90 - 110	P	11/08/2024	18:55	LB133365
	Cadmium	2360	2500	95	90 - 110	P	11/08/2024	18:55	LB133365
	Chromium	923	1000	92	90 - 110	P	11/08/2024	18:55	LB133365
	Lead	4830	5000	97	90 - 110	P	11/08/2024	18:55	LB133365
	Selenium	5100	5000	102	90 - 110	P	11/08/2024	18:55	LB133365
	Silver	1220	1250	98	90 - 110	P	11/08/2024	18:55	LB133365
CCV07	Arsenic	5060	5000	101	90 - 110	P	11/08/2024	19:47	LB133365
	Barium	9520	10000	95	90 - 110	P	11/08/2024	19:47	LB133365
	Cadmium	2400	2500	96	90 - 110	P	11/08/2024	19:47	LB133365
	Chromium	920	1000	92	90 - 110	P	11/08/2024	19:47	LB133365
	Lead	4910	5000	98	90 - 110	P	11/08/2024	19:47	LB133365
	Selenium	5210	5000	104	90 - 110	P	11/08/2024	19:47	LB133365
	Silver	1250	1250	100	90 - 110	P	11/08/2024	19:47	LB133365
CCV08	Arsenic	4620	5000	92	90 - 110	P	11/08/2024	20:48	LB133365
	Barium	9200	10000	92	90 - 110	P	11/08/2024	20:48	LB133365
	Cadmium	2370	2500	95	90 - 110	P	11/08/2024	20:48	LB133365
	Chromium	920	1000	92	90 - 110	P	11/08/2024	20:48	LB133365
	Lead	4790	5000	96	90 - 110	P	11/08/2024	20:48	LB133365
	Selenium	4670	5000	93	90 - 110	P	11/08/2024	20:48	LB133365
	Silver	1190	1250	95	90 - 110	P	11/08/2024	20:48	LB133365
CCV09	Arsenic	4610	5000	92	90 - 110	P	11/08/2024	21:50	LB133365
	Barium	9110	10000	91	90 - 110	P	11/08/2024	21:50	LB133365
	Cadmium	2310	2500	93	90 - 110	P	11/08/2024	21:50	LB133365
	Chromium	902	1000	90	90 - 110	P	11/08/2024	21:50	LB133365
	Lead	4710	5000	94	90 - 110	P	11/08/2024	21:50	LB133365
	Selenium	4690	5000	94	90 - 110	P	11/08/2024	21:50	LB133365
	Silver	1190	1250	95	90 - 110	P	11/08/2024	21:50	LB133365
CCV10	Arsenic	5340	5000	107	90 - 110	P	11/08/2024	23:24	LB133365
	Barium	9550	10000	96	90 - 110	P	11/08/2024	23:24	LB133365
	Cadmium	2430	2500	97	90 - 110	P	11/08/2024	23:24	LB133365
	Chromium	1000	1000	100	90 - 110	P	11/08/2024	23:24	LB133365
	Lead	4980	5000	100	90 - 110	P	11/08/2024	23:24	LB133365

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

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
CCV10	Selenium	4900	5000	98	90 - 110	P	11/08/2024	23:24	LB133365
	Silver	1270	1250	102	90 - 110	P	11/08/2024	23:24	LB133365

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	996	1000	100	90 - 110	P	11/19/2024	20:06	LB133525
	Barium	497	520	96	90 - 110	P	11/19/2024	20:06	LB133525
	Cadmium	500	510	98	90 - 110	P	11/19/2024	20:06	LB133525
	Chromium	523	520	100	90 - 110	P	11/19/2024	20:06	LB133525
	Lead	990	1000	99	90 - 110	P	11/19/2024	20:06	LB133525
	Selenium	1020	1000	102	90 - 110	P	11/19/2024	20:06	LB133525
	Silver	251	250	100	90 - 110	P	11/19/2024	20:06	LB133525

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	21.7	20.0	108	80 - 120	P	11/19/2024	20:10	LB133525
	Barium	101	100	101	80 - 120	P	11/19/2024	20:10	LB133525
	Cadmium	7.11	6.0	118	80 - 120	P	11/19/2024	20:10	LB133525
	Chromium	10.3	10.0	104	80 - 120	P	11/19/2024	20:10	LB133525
	Lead	11.9	12.0	100	80 - 120	P	11/19/2024	20:10	LB133525
	Selenium	18.5	20.0	92	80 - 120	P	11/19/2024	20:10	LB133525
	Silver	10.4	10.0	104	80 - 120	P	11/19/2024	20:10	LB133525

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	4810	5000	96	90 - 110	P	11/19/2024	20:38	LB133525
	Barium	9260	10000	93	90 - 110	P	11/19/2024	20:38	LB133525
	Cadmium	2420	2500	97	90 - 110	P	11/19/2024	20:38	LB133525
	Chromium	1010	1000	101	90 - 110	P	11/19/2024	20:38	LB133525
	Lead	4860	5000	97	90 - 110	P	11/19/2024	20:38	LB133525
	Selenium	4740	5000	95	90 - 110	P	11/19/2024	20:38	LB133525
	Silver	1250	1250	100	90 - 110	P	11/19/2024	20:38	LB133525
CCV02	Arsenic	4710	5000	94	90 - 110	P	11/19/2024	21:36	LB133525
	Barium	10200	10000	102	90 - 110	P	11/19/2024	21:36	LB133525
	Cadmium	2740	2500	109	90 - 110	P	11/19/2024	21:36	LB133525
	Chromium	1090	1000	109	90 - 110	P	11/19/2024	21:36	LB133525
	Lead	5290	5000	106	90 - 110	P	11/19/2024	21:36	LB133525
	Selenium	4570	5000	91	90 - 110	P	11/19/2024	21:36	LB133525
	Silver	1230	1250	98	90 - 110	P	11/19/2024	21:36	LB133525

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CRDL STANDARD FOR AA & ICP

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.19	0.2	95	40 - 160	CV	11/08/2024	10:28	LB133352
CRI01	Arsenic	20.1	20.0	100	40 - 160	P	11/08/2024	14:20	LB133365
	Barium	95.0	100	95	40 - 160	P	11/08/2024	14:20	LB133365
	Cadmium	6.16	6.0	103	40 - 160	P	11/08/2024	14:20	LB133365
	Chromium	9.24	10.0	92	40 - 160	P	11/08/2024	14:20	LB133365
	Lead	11.8	12.0	98	40 - 160	P	11/08/2024	14:20	LB133365
	Selenium	19.8	20.0	99	40 - 160	P	11/08/2024	14:20	LB133365
	Silver	10.3	10.0	103	40 - 160	P	11/08/2024	14:20	LB133365
CRI01	Arsenic	21.8	20.0	109	40 - 160	P	11/19/2024	20:19	LB133525
	Barium	99.9	100	100	40 - 160	P	11/19/2024	20:19	LB133525
	Cadmium	7.16	6.0	119	40 - 160	P	11/19/2024	20:19	LB133525
	Chromium	10.5	10.0	105	40 - 160	P	11/19/2024	20:19	LB133525
	Lead	11.3	12.0	94	40 - 160	P	11/19/2024	20:19	LB133525
	Selenium	17.2	20.0	86	40 - 160	P	11/19/2024	20:19	LB133525
	Silver	10.3	10.0	103	40 - 160	P	11/19/2024	20:19	LB133525

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB75	Mercury	0.20	+/-0.20	U	0.20	CV	11/08/2024	10:21	LB133352

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB51	Mercury	0.20	+/-0.20	U	0.20	CV	11/08/2024	10:25	LB133352
CCB52	Mercury	0.20	+/-0.20	U	0.20	CV	11/08/2024	10:56	LB133352
CCB53	Mercury	0.20	+/-0.20	U	0.20	CV	11/08/2024	11:23	LB133352
CCB54	Mercury	0.20	+/-0.20	U	0.20	CV	11/08/2024	11:34	LB133352

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	14:16	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	14:16	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	14:16	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	14:16	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	14:16	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	14:16	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	14:16	LB133365

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	14:50	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	14:50	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	14:50	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	14:50	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	14:50	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	14:50	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	14:50	LB133365
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	15:33	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	15:33	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	15:33	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	15:33	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	15:33	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	15:33	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	15:33	LB133365
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	16:28	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	16:28	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	16:28	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	16:28	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	16:28	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	16:28	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	16:28	LB133365
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	17:22	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	17:22	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	17:22	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	17:22	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	17:22	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	17:22	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	17:22	LB133365
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	18:08	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	18:08	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	18:08	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	18:08	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	18:08	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	18:08	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	18:08	LB133365
CCB06	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	18:59	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	18:59	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	18:59	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	18:59	LB133365

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	18:59	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	18:59	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	18:59	LB133365
CCB07	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	19:51	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	19:51	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	19:51	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	19:51	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	19:51	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	19:51	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	19:51	LB133365
CCB08	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	20:57	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	20:57	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	20:57	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	20:57	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	20:57	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	20:57	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	20:57	LB133365
CCB09	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	21:55	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	21:55	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	21:55	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	21:55	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	21:55	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	21:55	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	21:55	LB133365
CCB10	Arsenic	20.0	+/-20.0	U	20.0	P	11/08/2024	23:35	LB133365
	Barium	100	+/-100	U	100	P	11/08/2024	23:35	LB133365
	Cadmium	6.00	+/-6.00	U	6.00	P	11/08/2024	23:35	LB133365
	Chromium	10.0	+/-10.0	U	10.0	P	11/08/2024	23:35	LB133365
	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	23:35	LB133365
	Selenium	20.0	+/-20.0	U	20.0	P	11/08/2024	23:35	LB133365
	Silver	10.0	+/-10.0	U	10.0	P	11/08/2024	23:35	LB133365

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	11/19/2024	20:14	LB133525
	Barium	100	+/-100	U	100	P	11/19/2024	20:14	LB133525
	Cadmium	6.00	+/-6.00	U	6.00	P	11/19/2024	20:14	LB133525
	Chromium	10.0	+/-10.0	U	10.0	P	11/19/2024	20:14	LB133525
	Lead	12.0	+/-12.0	U	12.0	P	11/19/2024	20:14	LB133525
	Selenium	20.0	+/-20.0	U	20.0	P	11/19/2024	20:14	LB133525
	Silver	10.0	+/-10.0	U	10.0	P	11/19/2024	20:14	LB133525

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	11/19/2024	20:47	LB133525
	Barium	100	+/-100	U	100	P	11/19/2024	20:47	LB133525
	Cadmium	6.00	+/-6.00	U	6.00	P	11/19/2024	20:47	LB133525
	Chromium	10.0	+/-10.0	U	10.0	P	11/19/2024	20:47	LB133525
	Lead	12.0	+/-12.0	U	12.0	P	11/19/2024	20:47	LB133525
	Selenium	20.0	+/-20.0	U	20.0	P	11/19/2024	20:47	LB133525
	Silver	10.0	+/-10.0	U	10.0	P	11/19/2024	20:47	LB133525
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	11/19/2024	21:42	LB133525
	Barium	100	+/-100	U	100	P	11/19/2024	21:42	LB133525
	Cadmium	6.00	+/-6.00	U	6.00	P	11/19/2024	21:42	LB133525
	Chromium	10.0	+/-10.0	U	10.0	P	11/19/2024	21:42	LB133525
	Lead	12.0	+/-12.0	U	12.0	P	11/19/2024	21:42	LB133525
	Selenium	20.0	+/-20.0	U	20.0	P	11/19/2024	21:42	LB133525
	Silver	10.0	+/-10.0	U	10.0	P	11/19/2024	21:42	LB133525

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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB164694TB		**WATER**		**Batch Number:**	**PB164791**		**Prep Date:**	**11/07/2024**	
	Mercury	2.00	<2.00	U	2.00	CV	11/08/2024	11:25	LB133352

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB164791BL		**WATER**		**Batch Number:**	**PB164791**		**Prep Date:**	**11/07/2024**	
	Mercury	0.20	<0.20	U	0.20	CV	11/08/2024	10:38	LB133352

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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB164694TB		**WATER**		**Batch Number:**	**PB164768**		**Prep Date:**	**11/07/2024**	
	Arsenic	100	<100	U	100	P	11/08/2024	16:54	LB133365
	Barium	500	<500	U	500	P	11/08/2024	16:54	LB133365
	Cadmium	30.0	<30.0	U	30.0	P	11/08/2024	16:54	LB133365
	Chromium	50.0	<50.0	U	50.0	P	11/08/2024	16:54	LB133365
	Lead	60.0	<60.0	U	60.0	P	11/08/2024	16:54	LB133365
	Selenium	100	<100	U	100	P	11/08/2024	16:54	LB133365
	Silver	50.0	<50.0	U	50.0	P	11/08/2024	16:54	LB133365

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB164768BL		**WATER**		**Batch Number:**	**PB164768**		**Prep Date:**	**11/07/2024**	
	Arsenic	100	<100	U	100	P	11/08/2024	16:59	LB133365
	Barium	500	<500	U	500	P	11/08/2024	16:59	LB133365
	Cadmium	30.0	<30.0	U	30.0	P	11/08/2024	16:59	LB133365
	Chromium	50.0	<50.0	U	50.0	P	11/08/2024	16:59	LB133365
	Lead	60.0	<60.0	U	60.0	P	11/08/2024	16:59	LB133365
	Selenium	100	<100	U	100	P	11/08/2024	16:59	LB133365
	Silver	50.0	<50.0	U	50.0	P	11/08/2024	16:59	LB133365

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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Arsenic	5.52			-20	20	11/08/2024	14:24	LB133365
	Barium	1.84	6.0	31	-94	106	11/08/2024	14:24	LB133365
	Cadmium	6.11	1.0	611	-5	7	11/08/2024	14:24	LB133365
	Chromium	54.3	52.0	104	42	62	11/08/2024	14:24	LB133365
	Lead	9.97			-12	12	11/08/2024	14:24	LB133365
	Selenium	-14.4			-20	20	11/08/2024	14:24	LB133365
	Silver	-0.087			-10	10	11/08/2024	14:24	LB133365
ICSAB01	Arsenic	115	104	111	88.4	120	11/08/2024	14:30	LB133365
	Barium	496	537	92	437	637	11/08/2024	14:30	LB133365
	Cadmium	979	972	101	826	1120	11/08/2024	14:30	LB133365
	Chromium	521	542	96	460	624	11/08/2024	14:30	LB133365
	Lead	57.3	49.0	117	37	61	11/08/2024	14:30	LB133365
	Selenium	31.2	46.0	68	26	66	11/08/2024	14:30	LB133365
	Silver	198	201	98	170	232	11/08/2024	14:30	LB133365
ICSA01	Arsenic	7.44			-20	20	11/19/2024	20:23	LB133525
	Barium	4.72	6.0	79	-94	106	11/19/2024	20:23	LB133525
	Cadmium	5.53	1.0	553	-5	7	11/19/2024	20:23	LB133525
	Chromium	59.7	52.0	115	42	62	11/19/2024	20:23	LB133525
	Lead	9.28			-12	12	11/19/2024	20:23	LB133525
	Selenium	-19.2			-20	20	11/19/2024	20:23	LB133525
	Silver	-0.77			-10	10	11/19/2024	20:23	LB133525
ICSAB01	Arsenic	115	104	111	88.4	120	11/19/2024	20:27	LB133525
	Barium	493	537	92	437	637	11/19/2024	20:27	LB133525
	Cadmium	1030	972	106	826	1120	11/19/2024	20:27	LB133525
	Chromium	583	542	108	460	624	11/19/2024	20:27	LB133525
	Lead	57.7	49.0	118	37	61	11/19/2024	20:27	LB133525
	Selenium	30.0	46.0	65	26	66	11/19/2024	20:27	LB133525
	Silver	202	201	100	170	232	11/19/2024	20:27	LB133525

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metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** P4718

contract: PORT06 **lab code:** CHEM **case no.:** P4718 **sas no.:** P4718

matrix: Water **sample id:** P4718-03 **client id:** WB-307-SB02MS

Percent Solids for Sample: NA **Spiked ID:** P4718-03MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	4010		100	U	4000	100		P
Barium	ug/L	75 - 125	2780		1850		1000	94		P
Cadmium	ug/L	75 - 125	1120		30.0	U	1000	112		P
Chromium	ug/L	75 - 125	2340		16.1	J	2000	116		P
Lead	ug/L	75 - 125	5130		60.0	U	5000	103		P
Mercury	ug/L	75 - 125	33.6		2.00	U	40.0	84		CV
Selenium	ug/L	75 - 125	9590		100	U	10000	96		P
Silver	ug/L	75 - 125	362		50.0	U	380	95		P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** P4718

contract: PORT06 **lab code:** CHEM **case no.:** P4718 **sas no.:** P4718

matrix: Water **sample id:** P4718-03 **client id:** WB-307-SB02MSD

Percent Solids for Sample: NA **Spiked ID:** P4718-03MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	3850		100	U	4000	96		P
Barium	ug/L	75 - 125	2560		1850		1000	72	N	P
Cadmium	ug/L	75 - 125	1080		30.0	U	1000	108		P
Chromium	ug/L	75 - 125	2270		16.1	J	2000	113		P
Lead	ug/L	75 - 125	4900		60.0	U	5000	98		P
Mercury	ug/L	75 - 125	40.7		2.00	U	40.0	102		CV
Selenium	ug/L	75 - 125	9210		100	U	10000	92		P
Silver	ug/L	75 - 125	343		50.0	U	380	90		P

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Metals
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POST DIGEST SPIKE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Matrix: Water **Level:** LOW **Client ID:** WB-307-SB02A

Sample ID: P4718-03 **Spiked ID:** P4718-03A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Barium	ug/L	75 - 125	2690		1850		1000	84		P

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Matrix: Water **Sample ID:** P4718-03 **Client ID:** WB-307-SB02DUP

Percent Solids for Sample: NA **Duplicate ID** P4718-03DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	100	U	100	U			P
Barium	ug/L	20	1850		1790		3		P
Cadmium	ug/L	20	30.0	U	30.0	U			P
Chromium	ug/L	20	16.1	J	14.3	J	12		P
Lead	ug/L	20	60.0	U	60.0	U			P
Mercury	ug/L	20	2.00	U	2.00	U			CV
Selenium	ug/L	20	100	U	100	U			P
Silver	ug/L	20	50.0	U	50.0	U			P

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

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Matrix: Water **Sample ID:** P4718-03MS **Client ID:** WB-307-SB02MSD

Percent Solids for Sample: NA **Duplicate ID** P4718-03MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	4010		3850		4		P
Barium	ug/L	20	2780		2560		8		P
Cadmium	ug/L	20	1120		1080		4		P
Chromium	ug/L	20	2340		2270		3		P
Lead	ug/L	20	5130		4900		5		P
Mercury	ug/L	20	33.6		40.7		19		CV
Selenium	ug/L	20	9590		9210		4		P
Silver	ug/L	20	362		343		5		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: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB164768BS							
Arsenic	ug/L	4000	3890		97	80 - 120	P
Barium	ug/L	1000	956		96	80 - 120	P
Cadmium	ug/L	1000	901		90	80 - 120	P
Chromium	ug/L	2000	1800		90	80 - 120	P
Lead	ug/L	5000	4650		93	80 - 120	P
Selenium	ug/L	10000	9760		98	80 - 120	P
Silver	ug/L	380	363		96	80 - 120	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB164791BS							
Mercury	ug/L	4.0	4.19		105	80 - 120	CV

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ICP SERIAL DILUTIONS

SAMPLE NO.

WB-307-SB02L

Lab Name: Chemtech Consulting Group **Contract:** PORT06

Lab Code: CHEM **Lb No.:** lb133525 **Lab Sample ID :** P4718-03L **SDG No.:** P4718

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
Arsenic	100	U	500	U			P
Barium	1850		2020	J	9		P
Cadmium	30.0	U	150	U			P
Chromium	16.1	J	250	U	100.0		P
Lead	60.0	U	300	U			P
Mercury	2.00	U	10.0	U			CV
Selenium	100	U	500	U			P
Silver	50.0	U	250	U			P

METAL PREPARATION & INSTRUMENT DATA

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4718 **SAS No.:** P4718

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Method:**

Case No.: P4718 **SAS No.:** P4718

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB164768**						
P4718-03	WB-307-SB02	SAM	WATER	11/07/2024	5.0	25.0	
P4718-03DUP	WB-307-SB02DUP	DUP	WATER	11/07/2024	5.0	25.0	
P4718-03MS	WB-307-SB02MS	MS	WATER	11/07/2024	5.0	25.0	
P4718-03MSD	WB-307-SB02MSD	MSD	WATER	11/07/2024	5.0	25.0	
PB164694TB	PB164694TB	MB	WATER	11/07/2024	5.0	25.0	
PB164768BL	PB164768BL	MB	WATER	11/07/2024	5.0	25.0	
PB164768BS	PB164768BS	LCS	WATER	11/07/2024	5.0	25.0	

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SAMPLE PREPARATION SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4718

Contract: PORT06 **Lab Code:** CHEM **Method:**

Case No.: P4718 **SAS No.:** P4718

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB164791**						
P4718-03	WB-307-SB02	SAM	WATER	11/07/2024	3.0	30.0	
P4718-03DUP	WB-307-SB02DUP	DUP	WATER	11/07/2024	3.0	30.0	
P4718-03MS	WB-307-SB02MS	MS	WATER	11/07/2024	3.0	30.0	
P4718-03MSD	WB-307-SB02MSD	MSD	WATER	11/07/2024	3.0	30.0	
PB164694TB	PB164694TB	MB	WATER	11/07/2024	3.0	30.0	
PB164791BL	PB164791BL	MB	WATER	11/07/2024	30.0	30.0	
PB164791BS	PB164791BS	LCS	WATER	11/07/2024	30.0	30.0	

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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4718 **Sas no.:** P4718 **Sdg no.:** P4718

Instrument id number: **Method:** **Run number:** LB133352

Start date: 11/08/2024 **End date:** 11/08/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1004	HG
S0.2	S0.2	1	1007	HG
S2.5	S2.5	1	1009	HG
S5	S5	1	1011	HG
S7.5	S7.5	1	1013	HG
S10	S10	1	1016	HG
ICV75	ICV75	1	1019	HG
ICB75	ICB75	1	1021	HG
CCV51	CCV51	1	1023	HG
CCB51	CCB51	1	1025	HG
CRA	CRA	1	1028	HG
PB164791BL	PB164791BL	1	1038	HG
PB164791BS	PB164791BS	1	1040	HG
P4718-03	WB-307-SB02	1	1042	HG
P4718-03DUP	WB-307-SB02DUP	1	1044	HG
P4718-03MS	WB-307-SB02MS	1	1047	HG
P4718-03MSD	WB-307-SB02MSD	1	1049	HG
CCV52	CCV52	1	1053	HG
CCB52	CCB52	1	1056	HG
CCV53	CCV53	1	1121	HG
CCB53	CCB53	1	1123	HG
PB164694TB	PB164694TB	1	1125	HG
P4718-03L	WB-307-SB02L	5	1128	HG
CCV54	CCV54	1	1132	HG
CCB54	CCB54	1	1134	HG

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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4718 **Sas no.:** P4718 **Sdg no.:** P4718

Instrument id number: **Method:** **Run number:** LB133365

Start date: 11/08/2024 **End date:** 11/08/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1334	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1338	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1343	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1347	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1351	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1355	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1359	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1411	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1416	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1420	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1424	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1430	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1444	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1450	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1529	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1533	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1623	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1628	Ag,As,Ba,Cd,Cr,Pb,Se
PB164694TB	PB164694TB	1	1654	Ag,As,Ba,Cd,Cr,Pb,Se
PB164768BL	PB164768BL	1	1659	Ag,As,Ba,Cd,Cr,Pb,Se
PB164768BS	PB164768BS	1	1703	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1716	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1722	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1804	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1808	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	1855	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1859	Ag,As,Ba,Cd,Cr,Pb,Se
CCV07	CCV07	1	1947	Ag,As,Ba,Cd,Cr,Pb,Se
CCB07	CCB07	1	1951	Ag,As,Ba,Cd,Cr,Pb,Se
CCV08	CCV08	1	2048	Ag,As,Ba,Cd,Cr,Pb,Se
CCB08	CCB08	1	2057	Ag,As,Ba,Cd,Cr,Pb,Se
CCV09	CCV09	1	2150	Ag,As,Ba,Cd,Cr,Pb,Se
CCB09	CCB09	1	2155	Ag,As,Ba,Cd,Cr,Pb,Se
CCV10	CCV10	1	2324	Ag,As,Ba,Cd,Cr,Pb,Se
CCB10	CCB10	1	2335	Ag,As,Ba,Cd,Cr,Pb,Se

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

metals
- 14 -
ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4718 **Sas no.:** P4718 **Sdg no.:** P4718

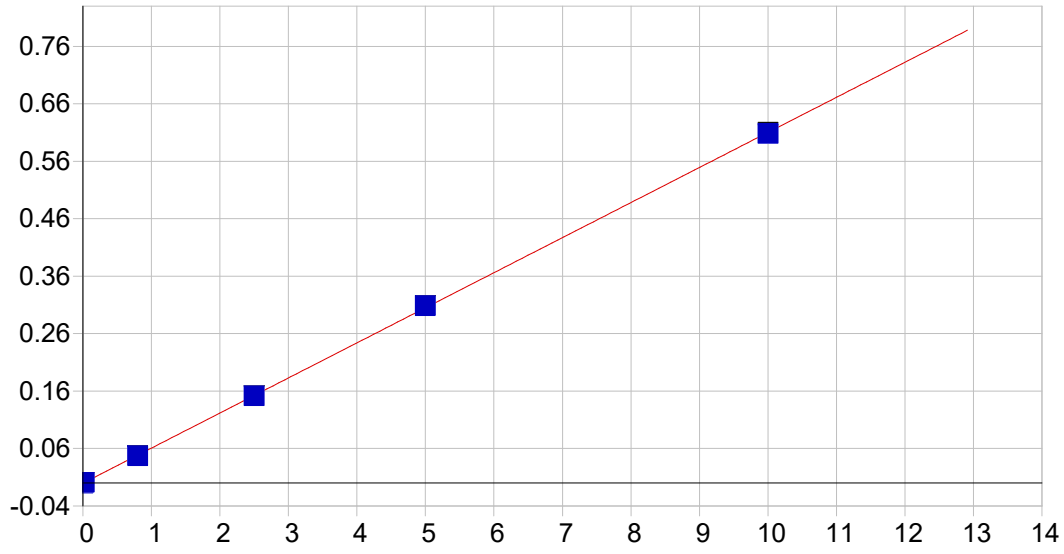
Instrument id number: **Method:** **Run number:** LB133525

Start date: 11/19/2024 **End date:** 11/19/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1940	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1945	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1949	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1953	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1958	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	2002	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	2006	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	2010	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	2014	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	2019	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	2023	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	2027	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	2038	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	2047	Ag,As,Ba,Cd,Cr,Pb,Se
P4718-03DUP	WB-307-SB02DUP	1	2056	Ag,As,Ba,Cd,Cr,Pb,Se
P4718-03L	WB-307-SB02L	5	2101	Ag,As,Ba,Cd,Cr,Pb,Se
P4718-03MS	WB-307-SB02MS	1	2105	Ag,As,Ba,Cd,Cr,Pb,Se
P4718-03	WB-307-SB02	1	2109	Ag,As,Ba,Cd,Cr,Pb,Se
P4718-03MSD	WB-307-SB02MSD	1	2114	Ag,As,Ba,Cd,Cr,Pb,Se
P4718-03A	WB-307-SB02A	1	2118	Ba
CCV02	CCV02	1	2136	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	2142	Ag,As,Ba,Cd,Cr,Pb,Se

METAL
RAW DATA

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



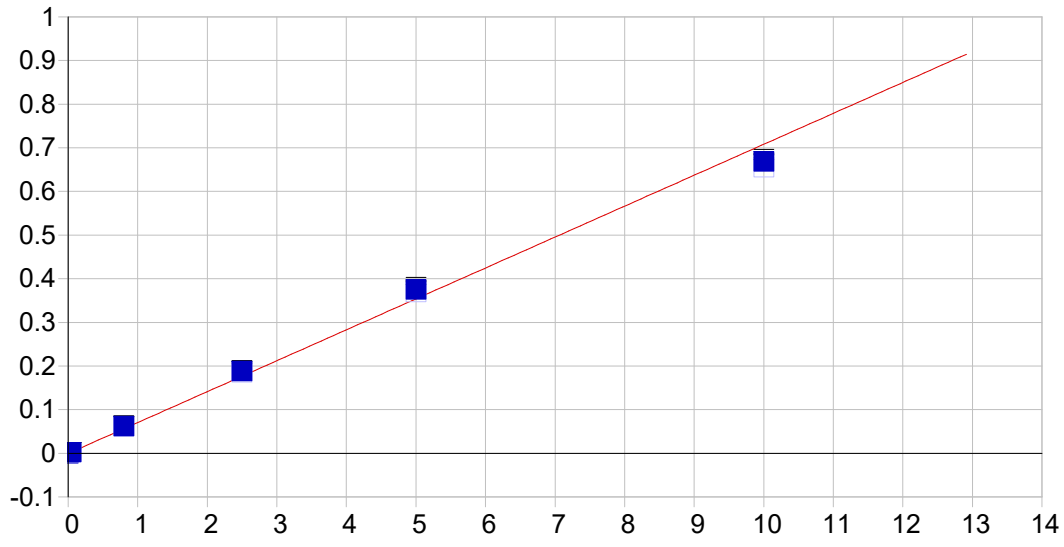
As 189.042 {479}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000216	Re-Slope:	1.000000
A1 (Gain):	0.061051	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999959	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.002249		
Predicted MQL:	0.007495		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00022	.000	1
S1	.02000	.02005	.000	.238	.00100	.000	1
S3	2.5000	2.4912	-.009	-.350	.15171	.000	1
S4	5.0000	5.0596	.060	1.19	.30835	.000	1
S5	10.000	9.9721	-.028	-.279	.60794	.002	1
S2	.80000	.77692	-.023	-2.88	.04716	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



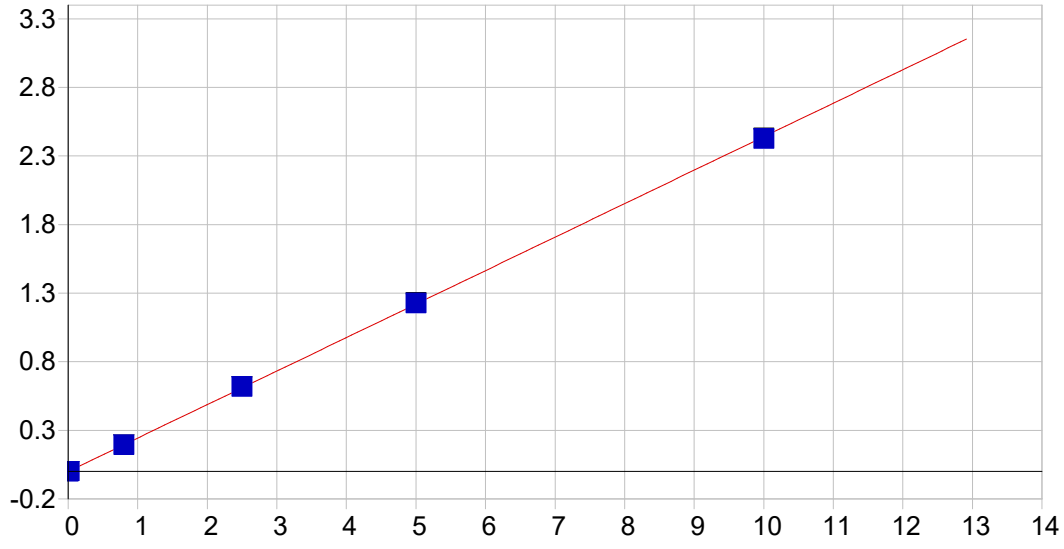
Tl 190.856 {477}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000461	Re-Slope:	1.000000
A1 (Gain):	0.070852	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998031	Status:	OK.
Std Error of Est:	0.000145		
Predicted MDL:	0.001674		
Predicted MQL:	0.005579		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00046	.000	1
S1	.04000	.04006	.000	.140	.00219	.000	1
S3	2.5000	2.6674	.167	6.69	.18526	.001	1
S4	5.0000	5.3064	.306	6.13	.36898	.005	1
S5	10.000	9.4426	-.557	-5.57	.65552	.005	1
S2	.80000	.88356	.084	10.4	.06110	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



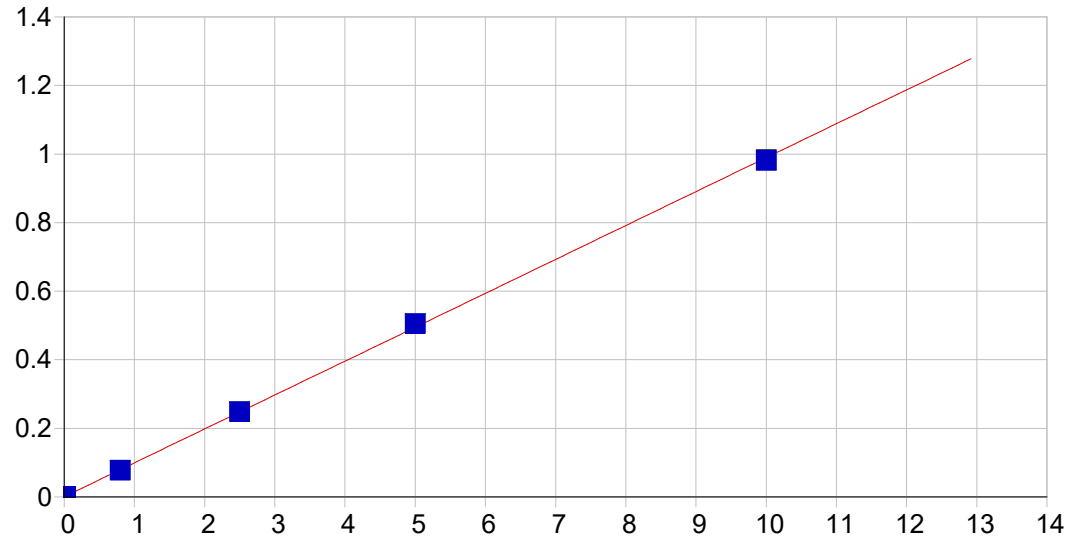
Pb 220.353 {453}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000176	Re-Slope:	1.000000
A1 (Gain):	0.244114	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999970	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.000988		
Predicted MQL:	0.003293		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00018	.000	1
S1	.01200	.01058	-.001	-11.8	.00235	.000	1
S3	2.5000	2.5331	.033	1.32	.61751	.001	1
S4	5.0000	5.0263	.026	.525	1.2255	.004	1
S5	10.000	9.9421	-.058	-.579	2.4241	.004	1
S2	.80000	.79998	-.000	-.003	.19489	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



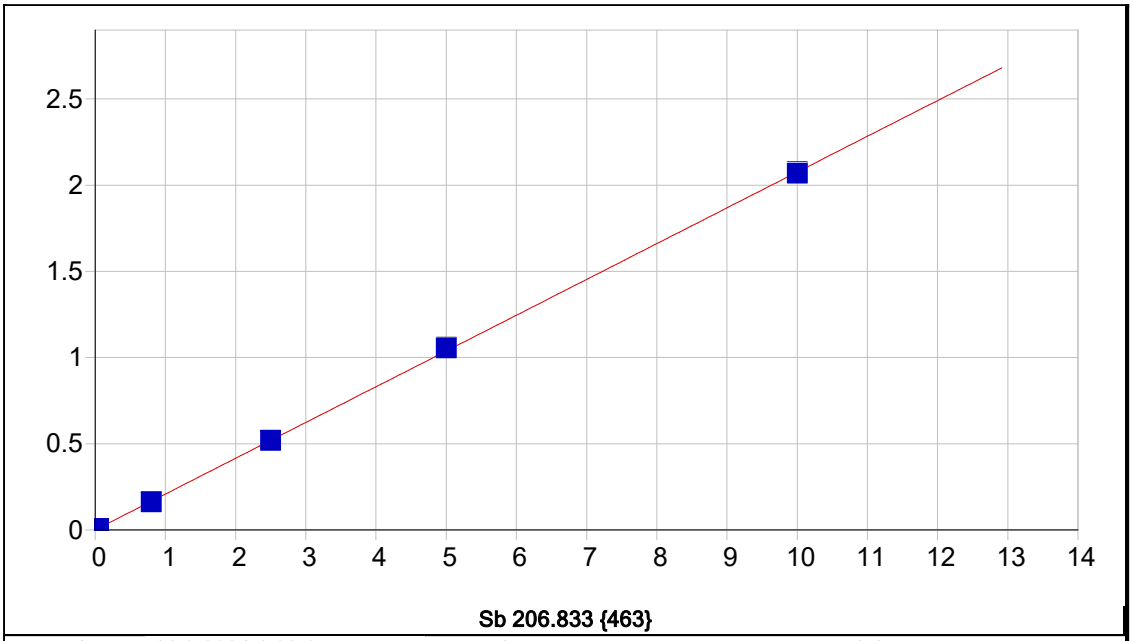
Se 196.090 {472}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000378	Re-Slope:	1.000000
A1 (Gain):	0.098899	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999911	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.001858		
Predicted MQL:	0.006195		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.02000	.01976	-.000	-1.18	.00233	.000	1
S3	2.5000	2.5050	.005	.202	.24806	.001	1
S4	5.0000	5.0991	.099	1.98	.50455	.001	1
S5	10.000	9.9185	-.082	-.815	.98105	.002	1
S2	.80000	.77760	-.022	-2.80	.07726	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



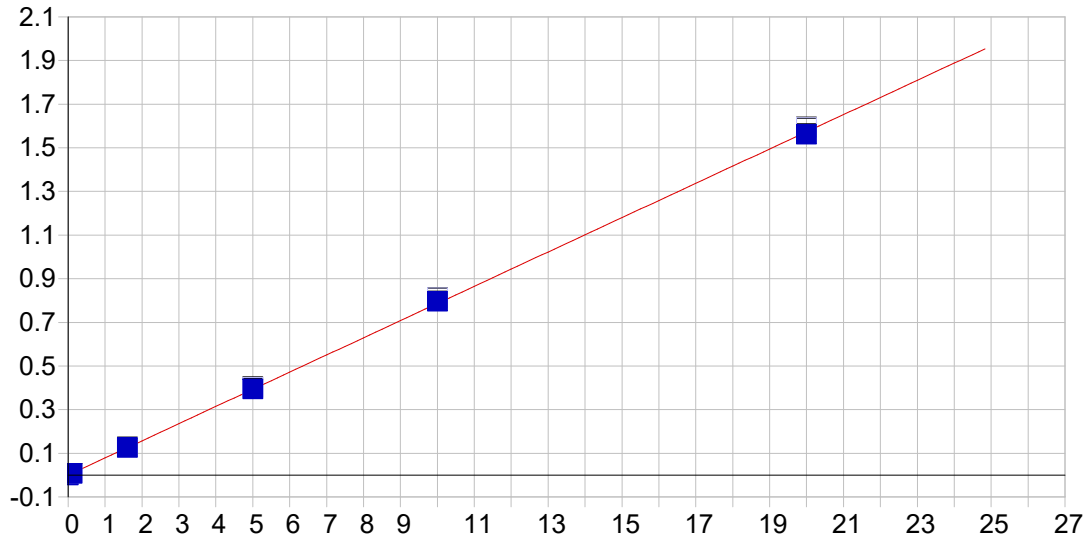
Sb 206.833 {463}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000407	Re-Slope:	1.000000
A1 (Gain):	0.207551	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999928	Status:	OK.
Std Error of Est:	0.000092		
Predicted MDL:	0.001077		
Predicted MQL:	0.003590		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00041	.000	1
S1	.05000	.04469	-.005	-10.6	.00970	.000	1
S3	2.5000	2.4940	-.006	-.240	.51945	.000	1
S4	5.0000	5.0761	.076	1.52	1.0568	.003	1
S5	10.000	9.9597	-.040	-.403	2.0732	.004	1
S2	.80000	.77551	-.024	-3.06	.16182	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



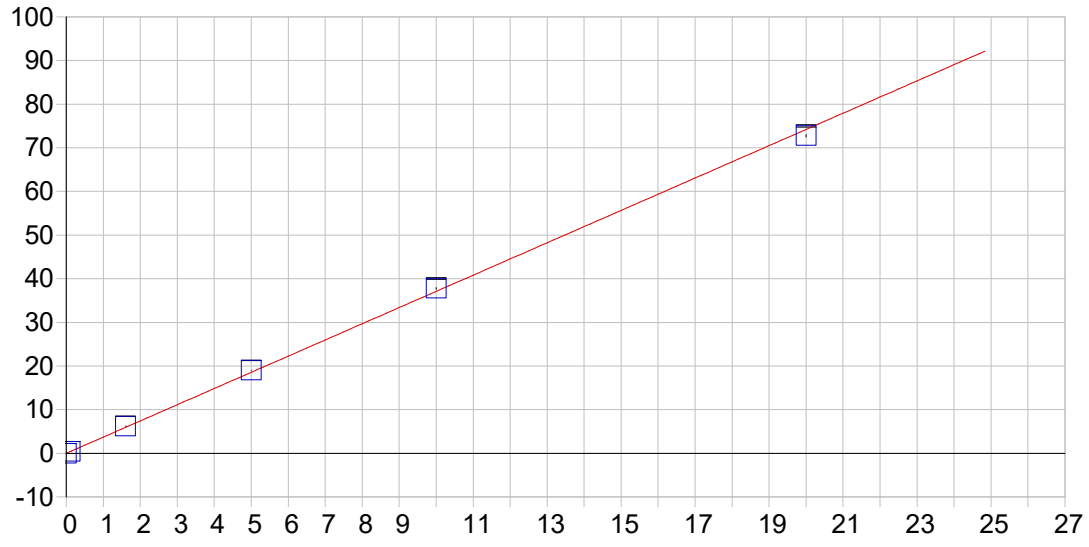
Al 396.152 { 85}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000132	Re-Slope:	1.000000
A1 (Gain):	0.078676	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999963	Status:	OK.
Std Error of Est:	0.000051		
Predicted MDL:	0.005202		
Predicted MQL:	0.017339		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00013	.000	1
S1	.10000	.10067	.001	.673	.00840	.000	1
S3	5.0000	5.0179	.018	.359	.40229	.002	1
S4	10.000	10.130	.130	1.30	.81208	.001	1
S5	20.000	19.856	-.144	-.721	1.5926	.002	1
S2	1.6000	1.5961	-.004	-.244	.12788	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



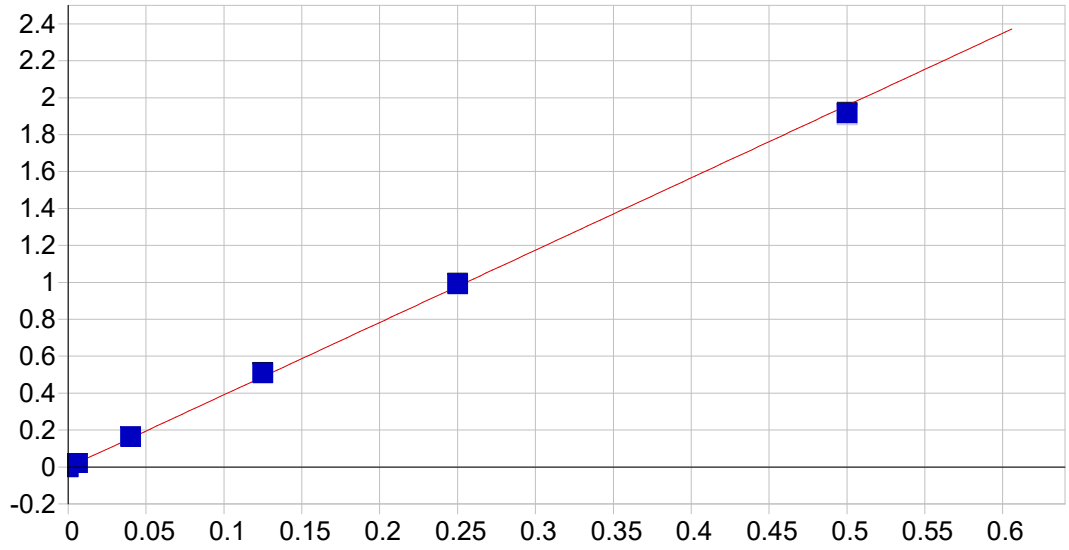
Ba 493.409 { 68}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.006340	Re-Slope:	1.000000
A1 (Gain):	3.710902	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999755	Status:	OK.
Std Error of Est:	0.006087		
Predicted MDL:	0.000370		
Predicted MQL:	0.001234		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00638	.001	1
S1	.10000	.10507	.005	5.07	.38356	.003	1
S3	5.0000	5.1238	.124	2.48	19.008	.034	1
S4	10.000	10.186	.186	1.86	37.794	.179	1
S5	20.000	19.610	-.390	-1.95	72.763	.277	1
S2	1.6000	1.6753	.075	4.70	6.2104	.022	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



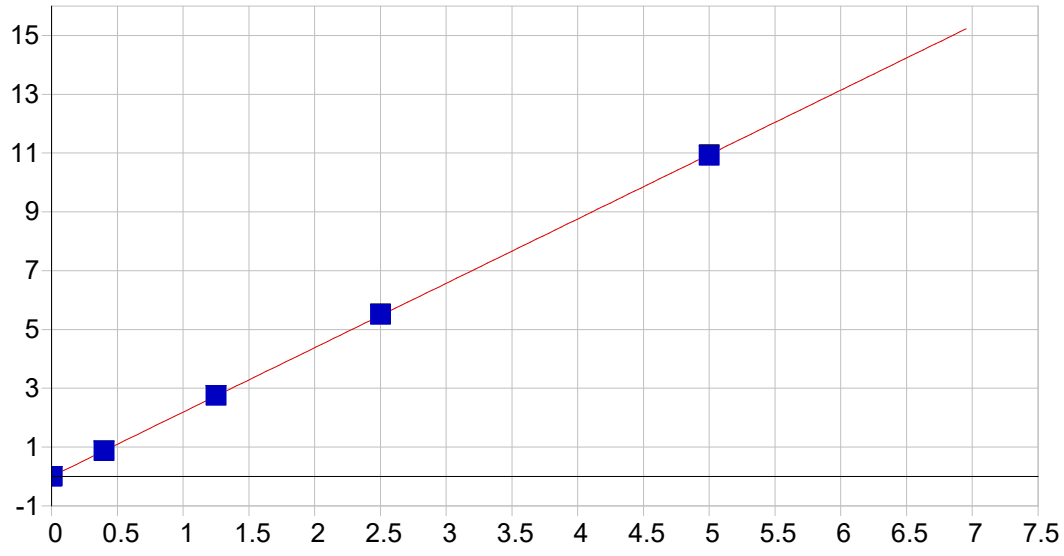
Be 234.861 {144}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000791	Re-Slope:	1.000000
A1 (Gain):	3.916383	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999661	Status:	OK.
Std Error of Est:	0.000292		
Predicted MDL:	0.000056		
Predicted MQL:	0.000185		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00079	.000	1
S1	.00600	.00589	-.000	-1.89	.02209	.000	1
S3	.12500	.13017	.005	4.14	.50682	.003	1
S4	.25000	.25354	.004	1.42	.98779	.003	1
S5	.50000	.48921	-.011	-2.16	1.9064	.006	1
S2	.04000	.04219	.002	5.47	.16373	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



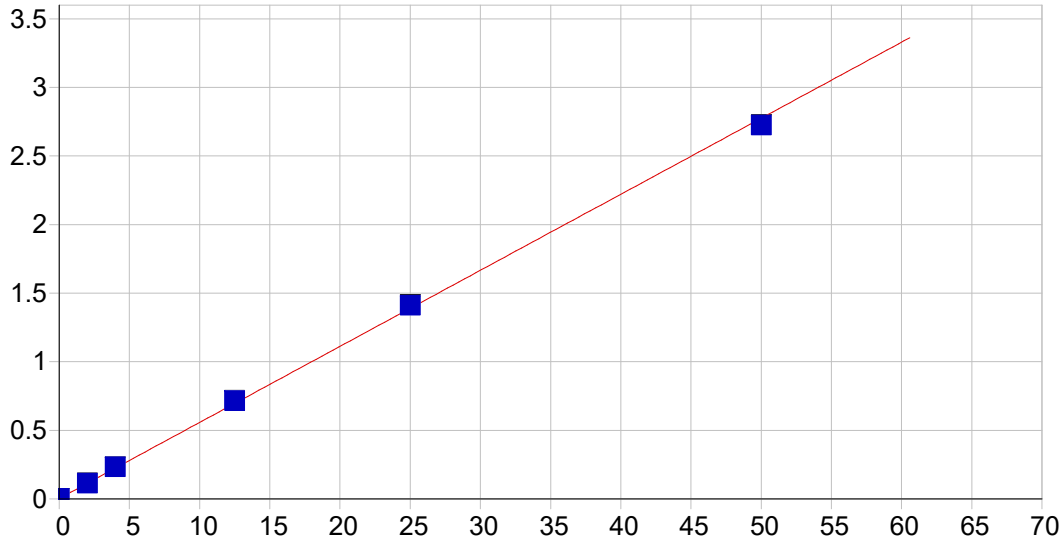
Cd 226.502 {449}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000170	Re-Slope:	1.000000
A1 (Gain):	2.190011	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999987	Status:	OK.
Std Error of Est:	0.000100		
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	-.00017	.000	1
S1	.00600	.00632	.000	5.29	.01372	.000	1
S3	1.2500	1.2562	.006	.494	2.7530	.006	1
S4	2.5000	2.5146	.015	.584	5.5111	.017	1
S5	5.0000	4.9829	-.017	-.341	10.921	.017	1
S2	.40000	.39598	-.004	-1.01	.86771	.003	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



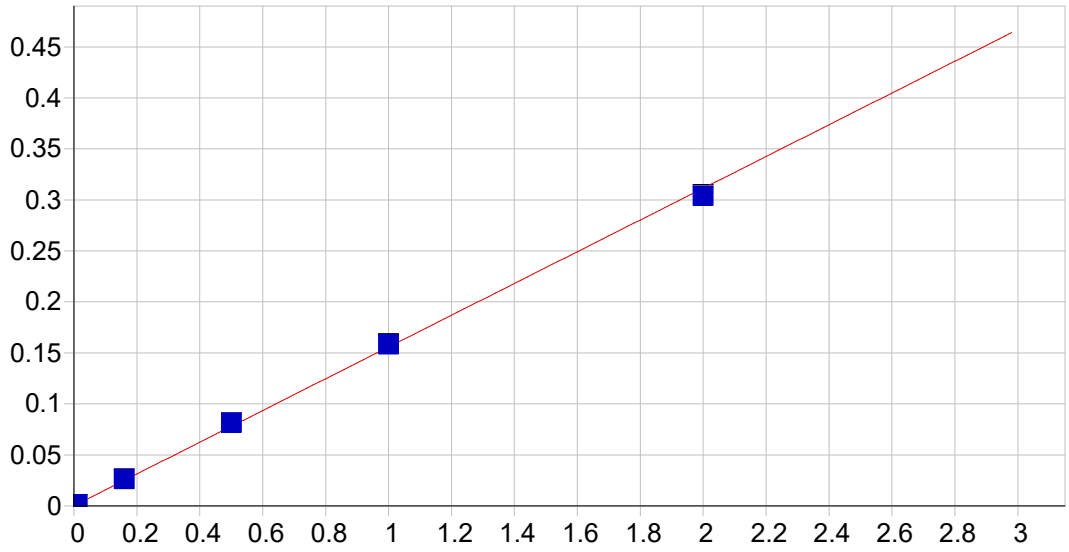
Ca 373.690 { 90}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003488	Re-Slope:	1.000000
A1 (Gain):	0.055439	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999797	Status:	OK.
Std Error of Est:	0.000591		
Predicted MDL:	0.007196		
Predicted MQL:	0.023987		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00012	-.000	.000	.00348	.000	1
S2	4.0000	4.1304	.130	3.26	.23247	.001	1
S3	12.500	12.869	.369	2.95	.71692	.001	1
S4	25.000	25.402	.402	1.61	1.4118	.004	1
S5	50.000	49.095	-.905	-1.81	2.7253	.005	1
S1	2.0000	2.0036	.004	.178	.11456	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



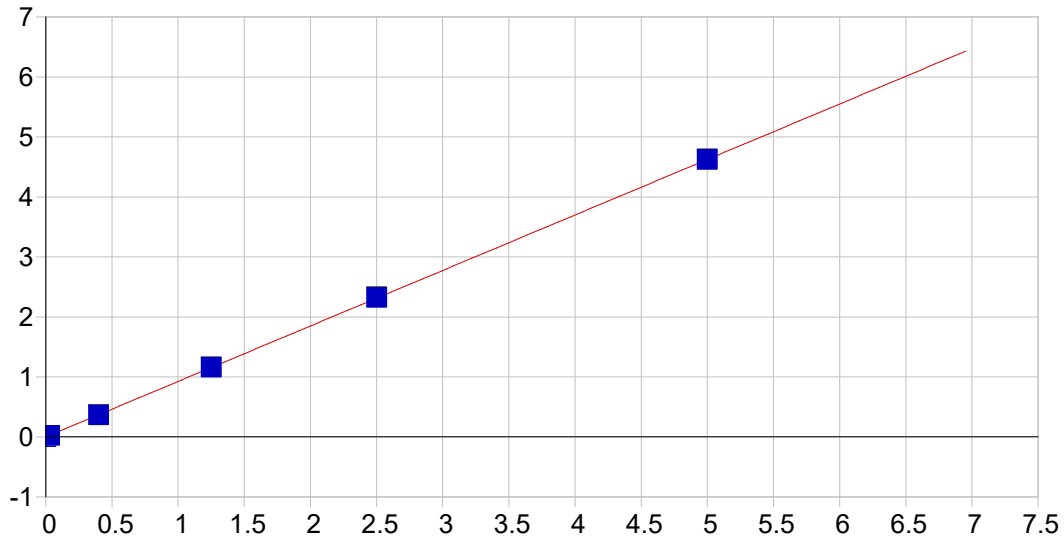
Cr 267.716 {126}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000198	Re-Slope:	1.000000
A1 (Gain):	0.155605	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999616	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.000424		
Predicted MQL:	0.001413		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00020	.000	1
S1	.01000	.00968	-.000	-3.16	.00171	.000	1
S3	.50000	.52280	.023	4.56	.08157	.000	1
S4	1.0000	1.0162	.016	1.62	.15838	.001	1
S5	2.0000	1.9532	-.047	-2.34	.30421	.001	1
S2	.16000	.16811	.008	5.07	.02636	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



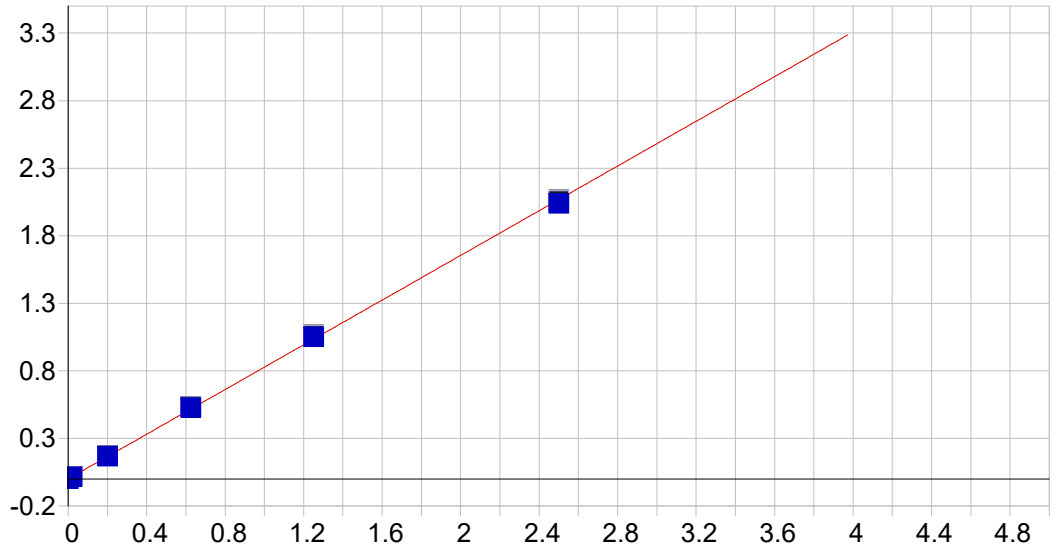
Co 228.616 {448}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000065	Re-Slope:	1.000000
A1 (Gain):	0.924697	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000099		
Predicted MDL:	0.000180		
Predicted MQL:	0.000601		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00006	.000	1
S1	.03000	.02792	-.002	-6.95	.02563	.000	1
S3	1.2500	1.2526	.003	.206	1.1601	.003	1
S4	2.5000	2.5095	.009	.378	2.3243	.008	1
S5	5.0000	4.9951	-.005	-.097	4.6268	.008	1
S2	.40000	.39490	-.005	-1.28	.36572	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



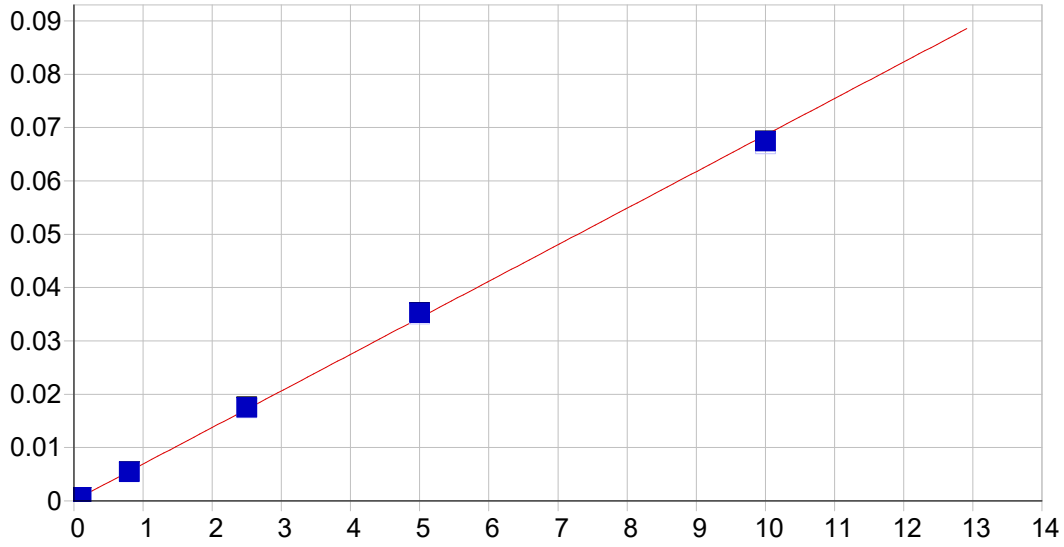
Cu 224.700 {450}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000033	Re-Slope:	1.000000
A1 (Gain):	0.827131	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999884	Status:	OK.
Std Error of Est:	0.000149		
Predicted MDL:	0.000351		
Predicted MQL:	0.001169		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00003	.000	1
S1	.02000	.01998	-.000	-.105	.01677	.000	1
S3	.62500	.63769	.013	2.03	.53241	.001	1
S4	1.2500	1.2695	.020	1.56	1.0600	.004	1
S5	2.5000	2.4651	-.035	-1.39	2.0587	.006	1
S2	.20000	.20265	.003	1.33	.16923	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



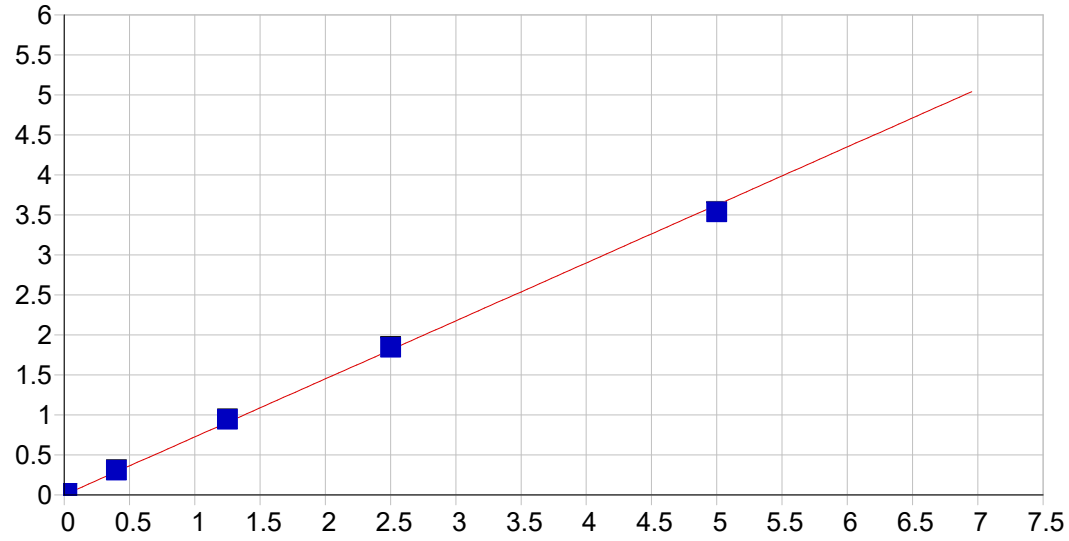
Fe 240.488 {140}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000063	Re-Slope:	1.000000
A1 (Gain):	0.006852	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999756	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.003472		
Predicted MQL:	0.011573		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00006	.000	1
S1	.10000	.08898	-.011	-11.0	.00066	.000	1
S3	2.5000	2.5495	.050	1.98	.01739	.000	1
S4	5.0000	5.1374	.137	2.75	.03497	.000	1
S5	10.000	9.8350	-.165	-1.65	.06687	.000	1
S2	.80000	.78908	-.011	-1.36	.00542	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



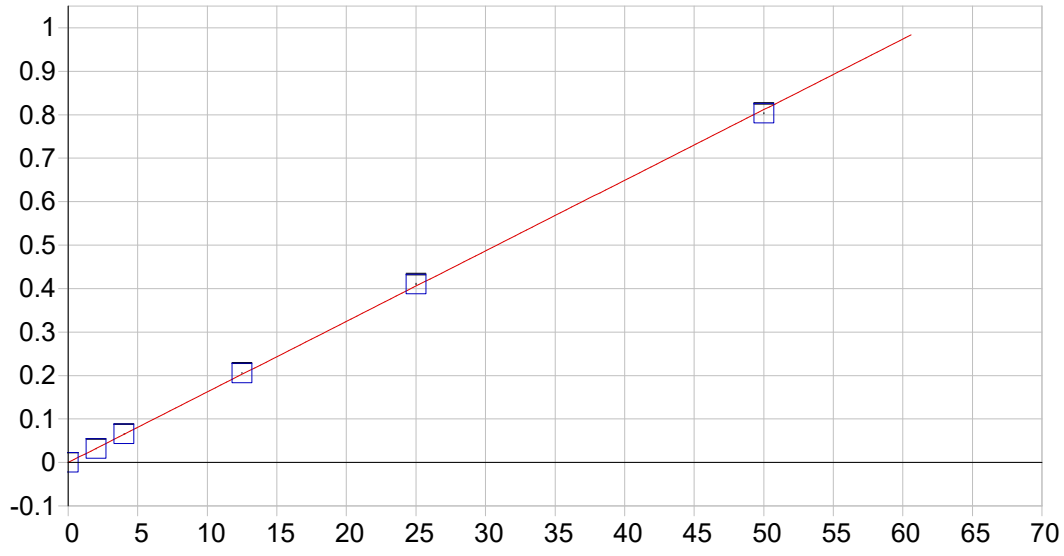
Mn 257.610 {131}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000180	Re-Slope:	1.000000
A1 (Gain):	0.724958	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999576	Status:	OK.
Std Error of Est:	0.000350		
Predicted MDL:	0.000246		
Predicted MQL:	0.000819		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00018	.000	1
S1	.02000	.02108	.001	5.41	.01547	.000	1
S3	1.2500	1.3016	.052	4.13	.94399	.003	1
S4	2.5000	2.5439	.044	1.75	1.8447	.008	1
S5	5.0000	4.8767	-.123	-2.47	3.5363	.007	1
S2	.40000	.42675	.027	6.69	.30961	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



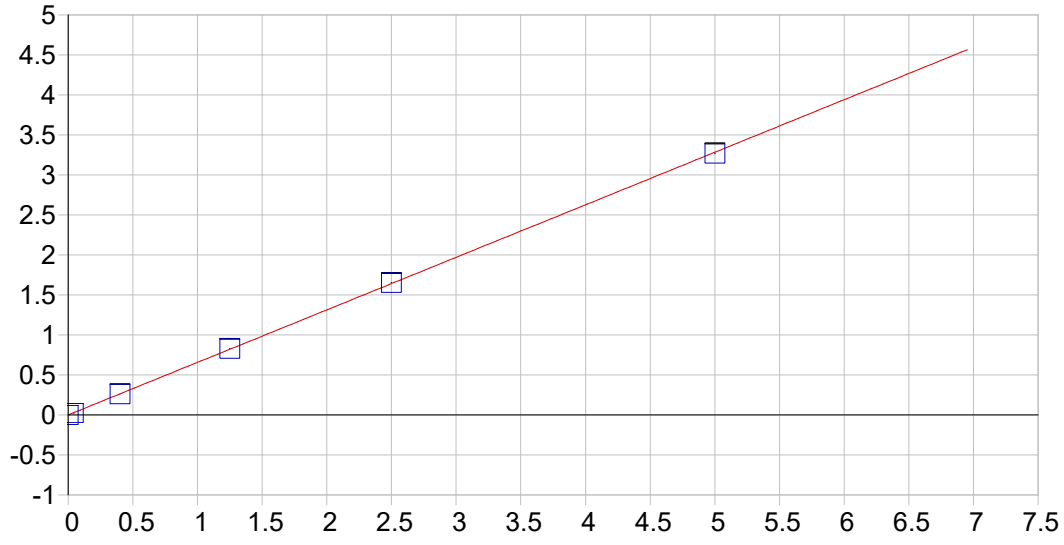
Mg 279.079 {121}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000177	Re-Slope:	1.000000
A1 (Gain):	0.016234	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999930	Status:	OK.
Std Error of Est:	0.000102		
Predicted MDL:	0.011191		
Predicted MQL:	0.037303		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	-.00018	.000	1
S2	4.0000	4.0684	.068	1.71	.06587	.000	1
S3	12.500	12.682	.182	1.46	.20570	.001	1
S4	25.000	25.291	.291	1.16	.41039	.002	1
S5	50.000	49.505	-.495	-.989	.80349	.002	1
S1	2.0000	1.9535	-.046	-2.32	.03154	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



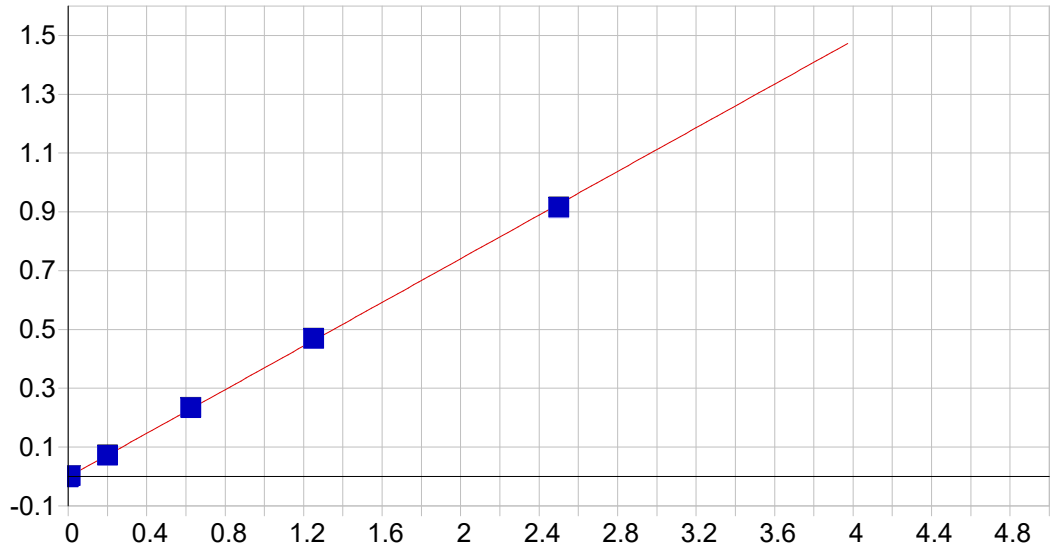
Ni 231.604 {446}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000115	Re-Slope:	1.000000
A1 (Gain):	0.656617	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.000286		
Predicted MQL:	0.000952		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00011	.000	1
S1	.04000	.03692	-.003	-7.71	.02413	.000	1
S3	1.2500	1.2613	.011	.901	.82805	.002	1
S4	2.5000	2.5139	.014	.557	1.6506	.005	1
S5	5.0000	4.9797	-.020	-.405	3.2697	.004	1
S2	.40000	.39816	-.002	-.461	.26132	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



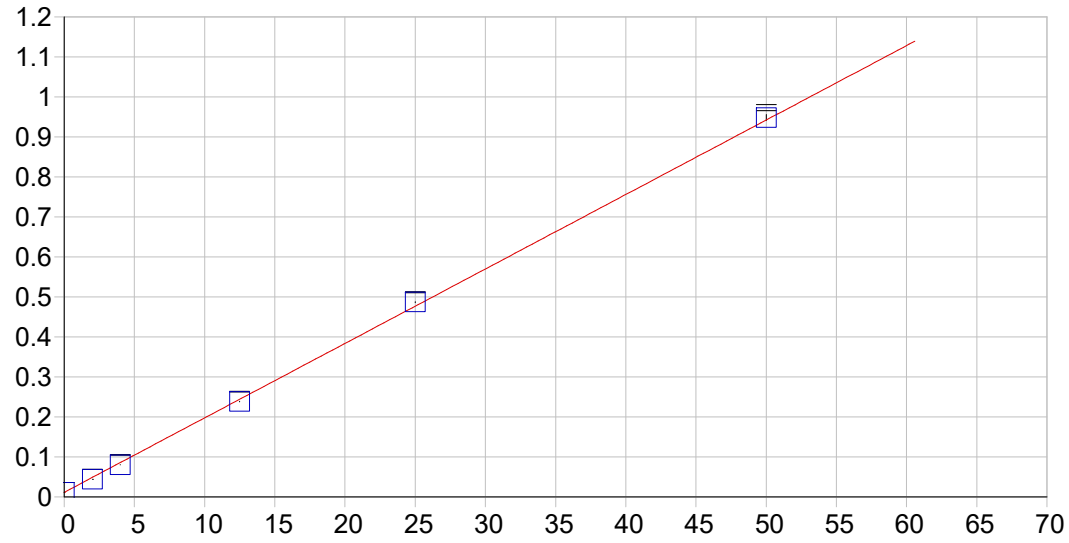
Ag 328.068 {103}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001635	Re-Slope:	1.000000
A1 (Gain):	0.371144	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999904	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.000278		
Predicted MQL:	0.000926		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00163	.000	1
S1	.01000	.00939	-.001	-6.11	.00182	.000	1
S3	.62500	.63595	.011	1.75	.23347	.000	1
S4	1.2500	1.2694	.019	1.55	.46765	.000	1
S5	2.5000	2.4707	-.029	-1.17	.91165	.001	1
S2	.20000	.19961	-.000	-.196	.07215	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



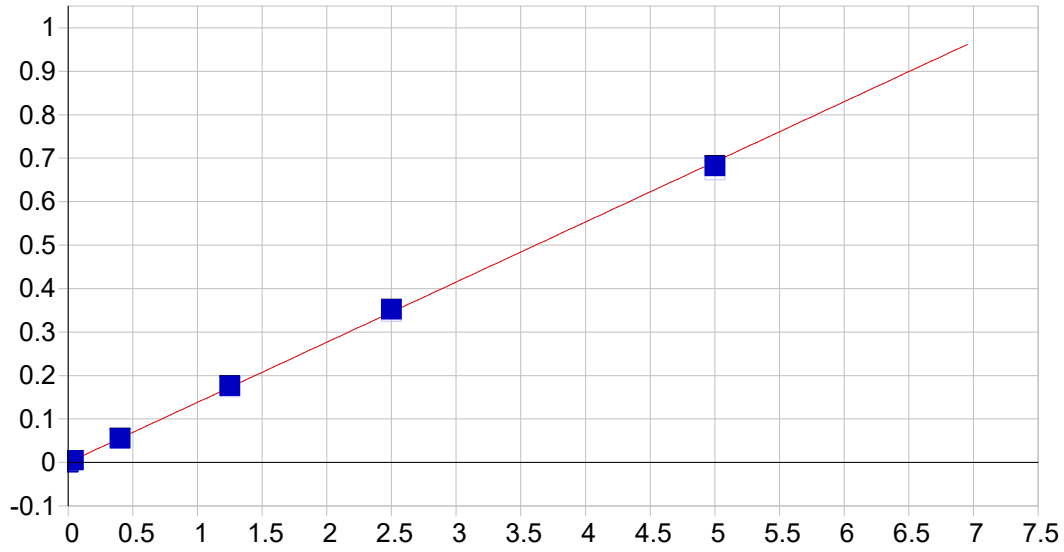
Na 589.592 { 57}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.011489	Re-Slope:	1.000000
A1 (Gain):	0.018612	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999568	Status:	OK.
Std Error of Est:	0.000289		
Predicted MDL:	0.007787		
Predicted MQL:	0.025955		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00041	.000	.000	.01150	.000	1
S2	4.0000	3.6906	-.309	-7.73	.08018	.000	1
S3	12.500	12.199	-.301	-2.41	.23853	.001	1
S4	25.000	25.538	.538	2.15	.48680	.001	1
S5	50.000	50.339	.339	.678	.94838	.007	1
S1	2.0000	1.7333	-.267	-13.3	.04375	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



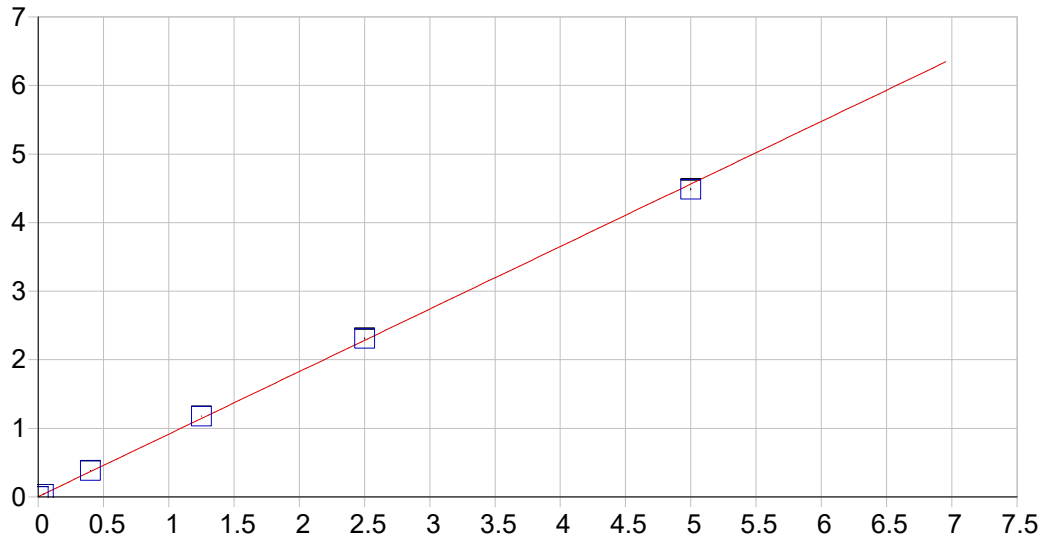
V 292.402 {115}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000003	Re-Slope:	1.000000
A1 (Gain):	0.138326	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999877	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.001354		
Predicted MQL:	0.004514		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00000	.000	1
S1	.04000	.03895	-.001	-2.62	.00518	.000	1
S3	1.2500	1.2725	.022	1.80	.17350	.001	1
S4	2.5000	2.5449	.045	1.80	.34699	.000	1
S5	5.0000	4.9312	-.069	-1.38	.67203	.001	1
S2	.40000	.40243	.002	.608	.05486	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



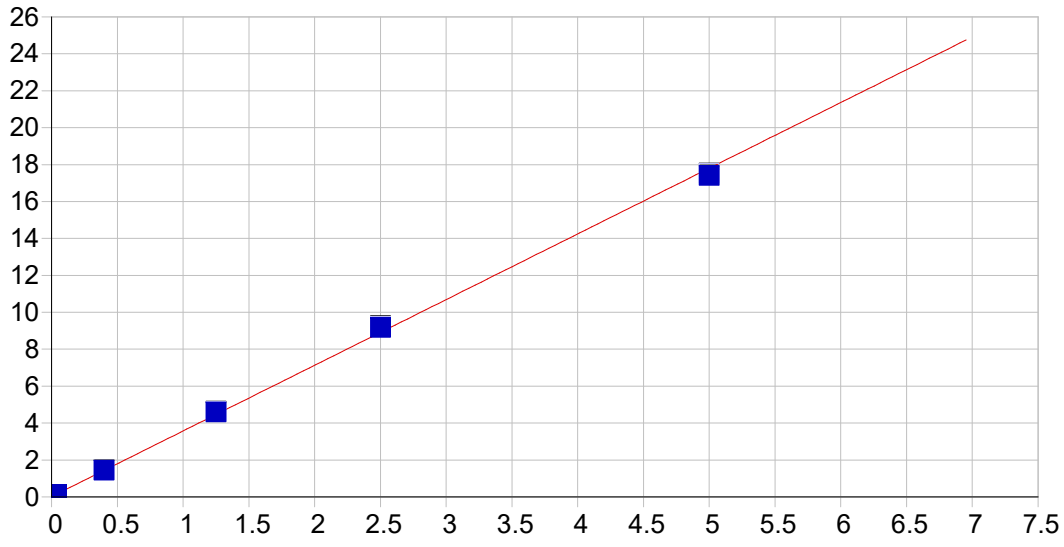
Zn 206.200 {464}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003653	Re-Slope:	1.000000
A1 (Gain):	0.911981	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999804	Status:	OK.
Std Error of Est:	0.000424		
Predicted MDL:	0.000198		
Predicted MQL:	0.000659		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00365	.000	1
S1	.04000	.03992	-.000	-.208	.04006	.000	1
S3	1.2500	1.2880	.038	3.04	1.1782	.001	1
S4	2.5000	2.5295	.030	1.18	2.3106	.009	1
S5	5.0000	4.9159	-.084	-1.68	4.4869	.012	1
S2	.40000	.41666	.017	4.16	.38364	.002	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



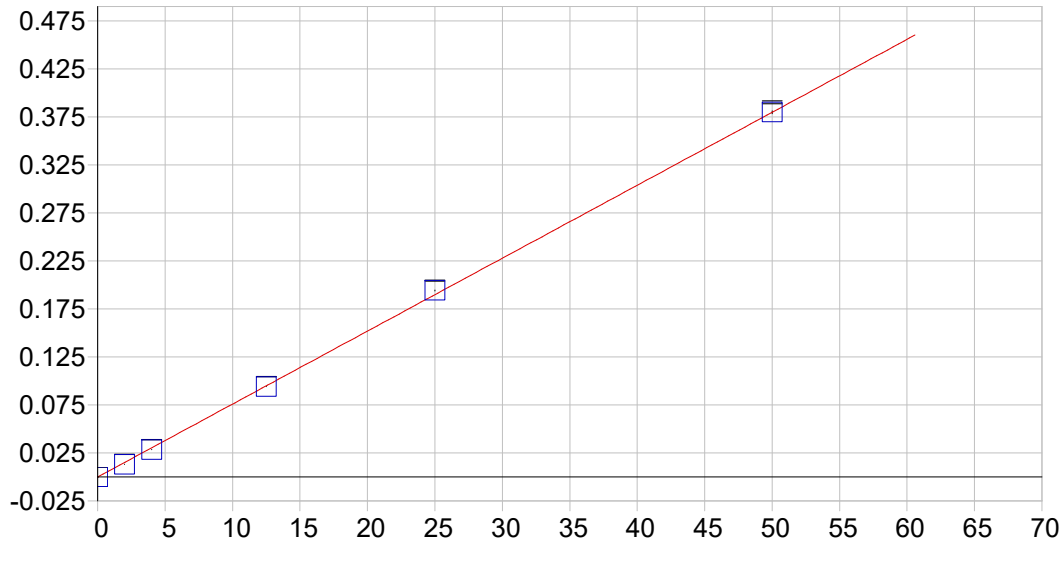
Zn 213.856 {158}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.014637	Re-Slope:	1.000000
A1 (Gain):	3.557930	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999682	Status:	OK.
Std Error of Est:	0.002122		
Predicted MDL:	0.000210		
Predicted MQL:	0.000699		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.01464	.000	1
S1	.04000	.03888	-.001	-2.81	.15396	.001	1
S3	1.2500	1.2880	.038	3.04	4.6281	.022	1
S4	2.5000	2.5738	.074	2.95	9.2340	.033	1
S5	5.0000	4.8870	-.113	-2.26	17.526	.023	1
S2	.40000	.40232	.002	.580	1.4560	.002	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



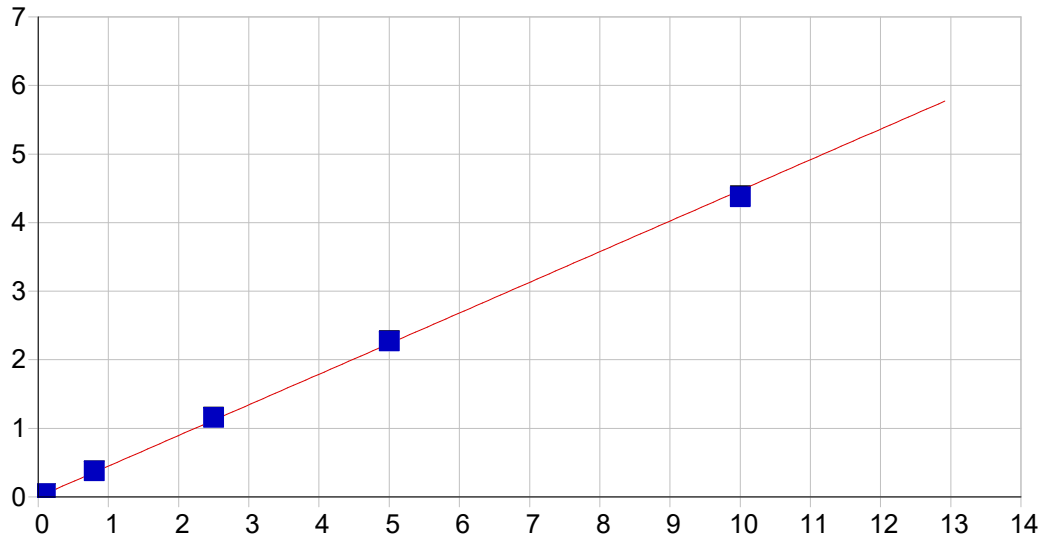
K 766.490 { 44}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000121	Re-Slope:	1.000000
A1 (Gain):	0.007598	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999668	Status:	OK.
Std Error of Est:	0.000104		
Predicted MDL:	0.021349		
Predicted MQL:	0.071164		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00035	.000	.000	-.00012	.000	1
S2	4.0000	3.7478	-.252	-6.30	.02836	.000	1
S3	12.500	12.407	-.093	-.743	.09415	.000	1
S4	25.000	25.582	.582	2.33	.19425	.000	1
S5	50.000	50.016	.016	.032	.37991	.002	1
S1	2.0000	1.7474	-.253	-12.6	.01316	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



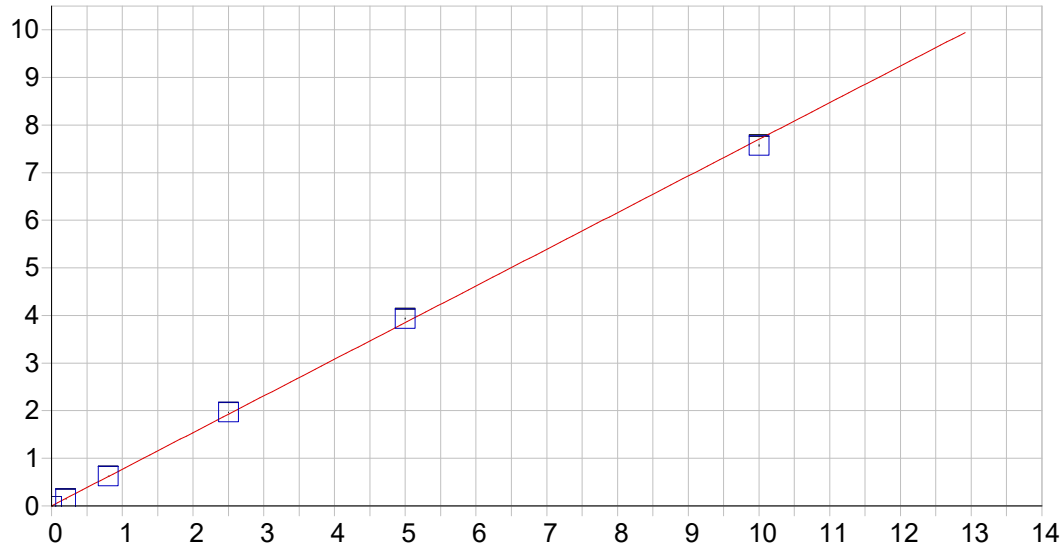
B 249.678 {135}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001733	Re-Slope:	1.000000
A1 (Gain):	0.446786	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999719	Status:	OK.
Std Error of Est:	0.000555		
Predicted MDL:	0.000598		
Predicted MQL:	0.001992		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00173	.000	1
S1	.10000	.10349	.003	3.49	.04778	.000	1
S3	2.5000	2.5841	.084	3.36	1.1541	.006	1
S4	5.0000	5.0781	.078	1.56	2.2662	.006	1
S5	10.000	9.7951	-.205	-2.05	4.3693	.013	1
S2	.80000	.83918	.039	4.90	.37597	.001	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



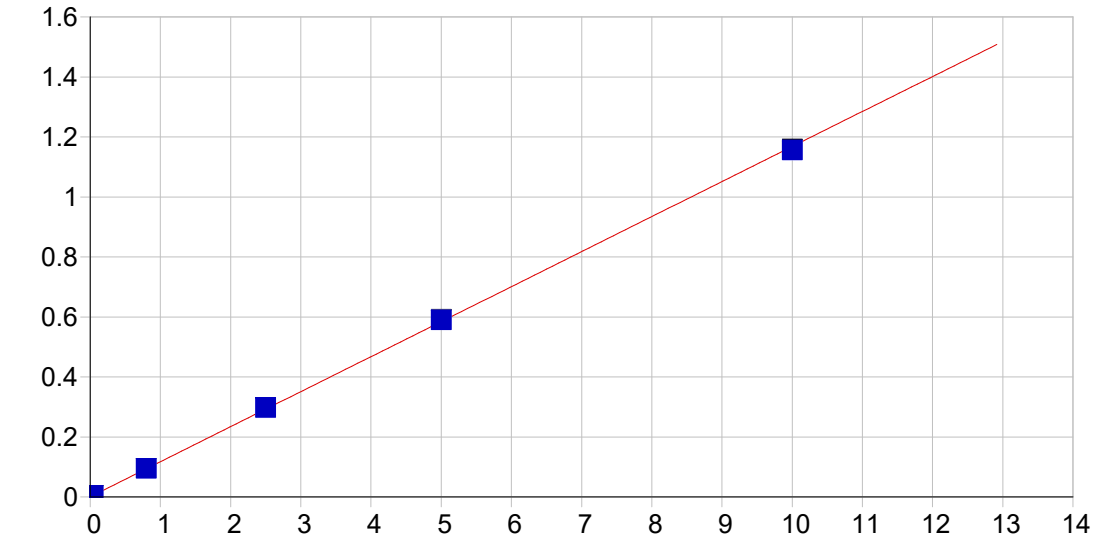
Mo 202.030 {467}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000344	Re-Slope:	1.000000
A1 (Gain):	0.770041	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999815	Status:	OK.
Std Error of Est:	0.001104		
Predicted MDL:	0.000241		
Predicted MQL:	0.000803		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00034	.000	1
S1	.20000	.19247	-.008	-3.77	.14855	.001	1
S3	2.5000	2.5551	.055	2.20	1.9679	.002	1
S4	5.0000	5.1088	.109	2.18	3.9343	.008	1
S5	10.000	9.8320	-.168	-1.68	7.5714	.015	1
S2	.80000	.81163	.012	1.45	.62534	.002	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



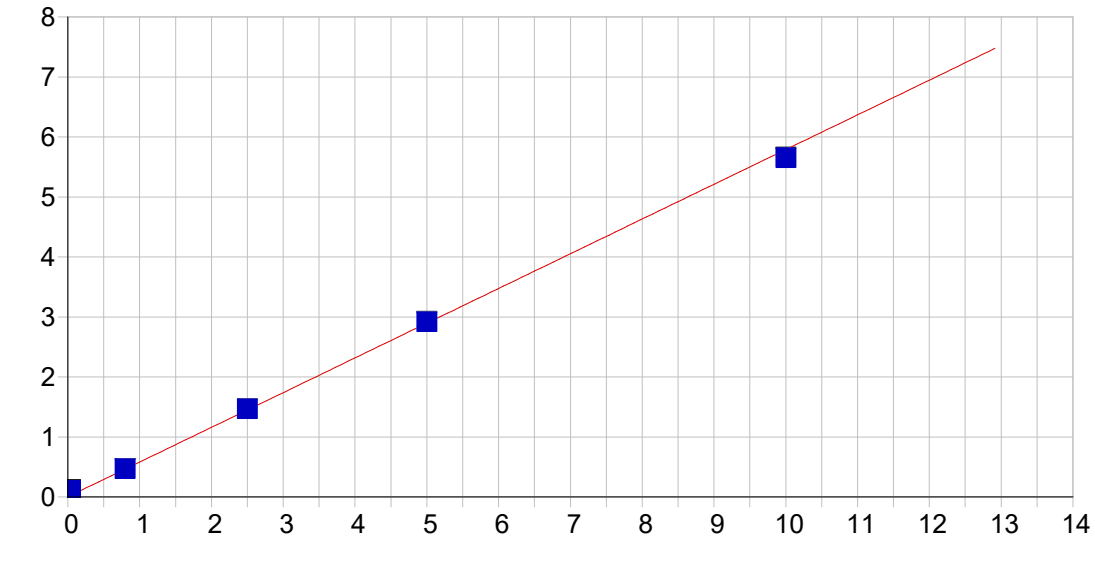
Sn 189.989 {478}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000561	Re-Slope:	1.000000
A1 (Gain):	0.116726	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999931	Status:	OK.
Std Error of Est:	0.000046		
Predicted MDL:	0.000732		
Predicted MQL:	0.002439		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00056	.000	1
S1	.04000	.03674	-.003	-8.15	.00484	.000	1
S3	2.5000	2.5416	.042	1.66	.29693	.001	1
S4	5.0000	5.0521	.052	1.04	.58968	.001	1
S5	10.000	9.9018	-.098	-.982	1.1552	.003	1
S2	.80000	.80777	.008	.971	.09475	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



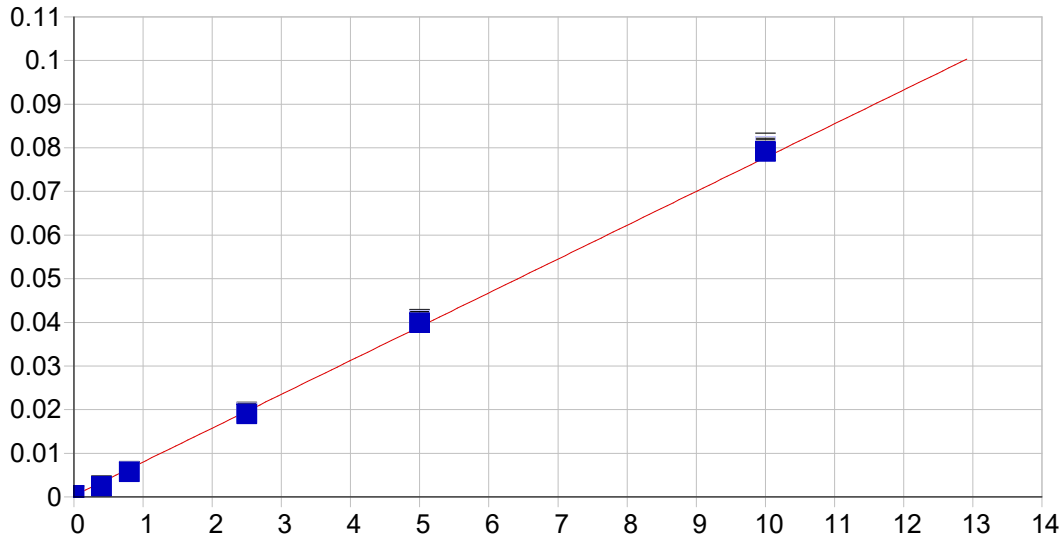
Ti 336.121 {100}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001787	Re-Slope:	1.000000
A1 (Gain):	0.578711	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.983994	Status:	OK.
Std Error of Est:	0.003473		
Predicted MDL:	0.000481		
Predicted MQL:	0.001604		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.00170	.000	1
S1	.04000	.19413	.154	385.	.11411	.001	1
S3	2.5000	2.5300	.030	1.20	1.4654	.003	1
S4	5.0000	5.0416	.042	.832	2.9184	.006	1
S5	10.000	9.7621	-.238	-2.38	5.6491	.012	1
S2	.80000	.81225	.012	1.53	.47168	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



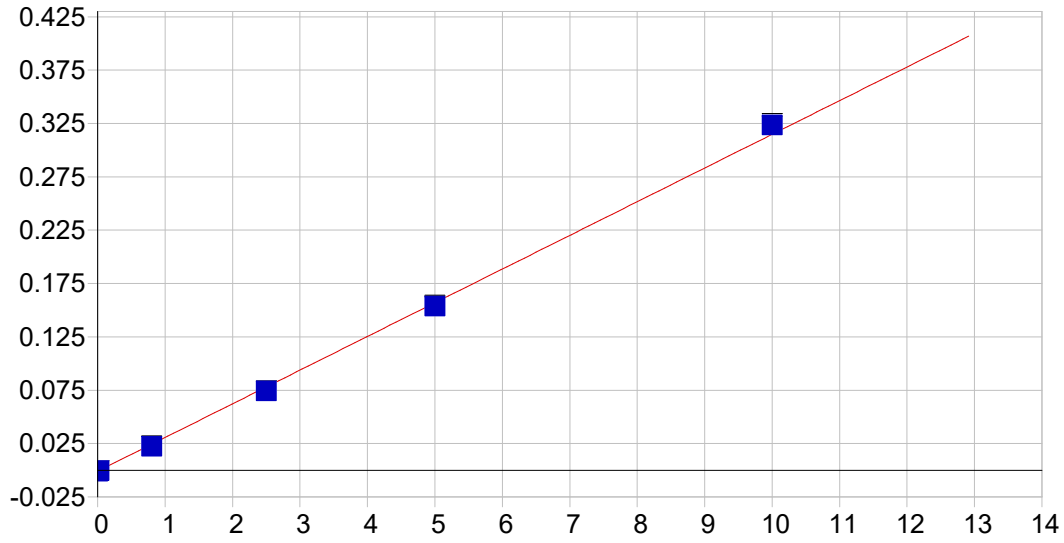
Si 288.158 {117}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000259	Re-Slope:	1.000000
A1 (Gain):	0.007749	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998572	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.005042		
Predicted MQL:	0.016806		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00016	.000	.000	.00026	.000	1
S1	.40000	.28085	-.119	-29.8	.00244	.000	1
S3	2.5000	2.4190	-.081	-3.24	.01930	.000	1
S4	5.0000	5.1127	.113	2.25	.04046	.000	1
S5	10.000	10.180	.180	1.80	.08031	.001	1
S2	.80000	.70571	-.094	-11.8	.00582	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



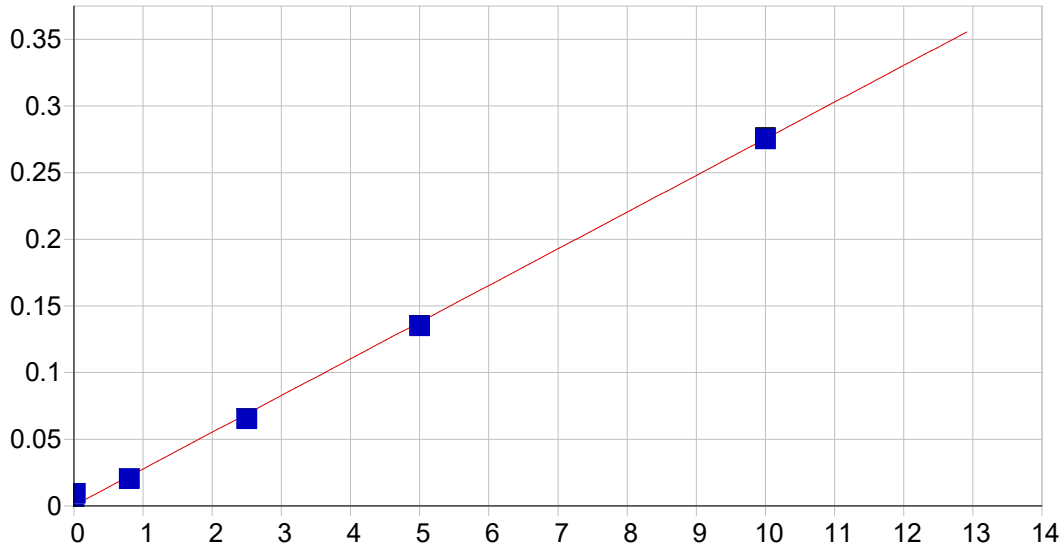
P 177.495 {490}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000889	Re-Slope:	1.000000
A1 (Gain):	0.031573	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999439	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.002432		
Predicted MQL:	0.008105		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00089	.000	1
S1	.02000	.01611	-.004	-19.5	-.00038	.000	1
S3	2.5000	2.3847	-.115	-4.61	.07439	.000	1
S4	5.0000	4.9008	-.099	-1.98	.15382	.001	1
S5	10.000	10.280	.280	2.80	.32362	.001	1
S2	.80000	.73879	-.061	-7.65	.02243	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



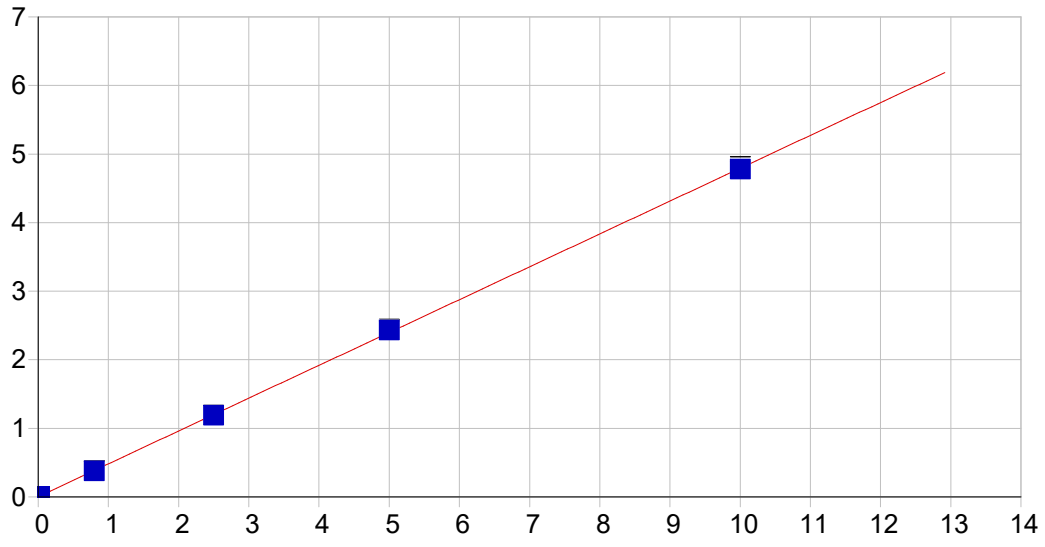
S 182.034 {485}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000266	Re-Slope:	1.000000
A1 (Gain):	0.027516	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.886778	Status:	OK.
Std Error of Est:	0.000335		
Predicted MDL:	0.002879		
Predicted MQL:	0.009598		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00031	-.000	.000	.00026	.000	1
S1	.02000	.33403	.314	1570.	.00943	.000	1
S3	2.5000	2.3653	-.135	-5.39	.06517	.000	1
S4	5.0000	4.8983	-.102	-2.03	.13469	.000	1
S5	10.000	10.001	.001	.008	.27473	.001	1
S2	.80000	.73411	-.066	-8.24	.02041	.000	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



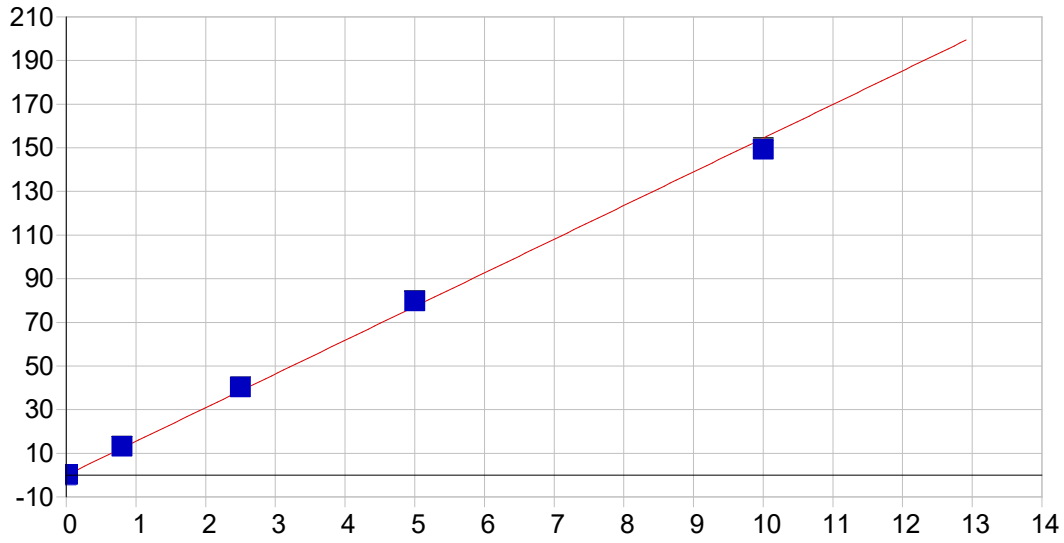
Li 670.784 { 50}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003223	Re-Slope:	1.000000
A1 (Gain):	0.478969	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999951	Status:	OK.
Std Error of Est:	0.000112		
Predicted MDL:	0.001642		
Predicted MQL:	0.005472		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00322	.000	1
S5	10.000	9.9713	-.029	-.287	4.7835	.035	1
S4	5.0000	5.0725	.072	1.45	2.4349	.011	1
S3	2.5000	2.4745	-.025	-1.02	1.1895	.002	1
S1	.02000	.01996	-.000	-.184	.01296	.001	1
S2	.80000	.78167	-.018	-2.29	.37796	.003	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



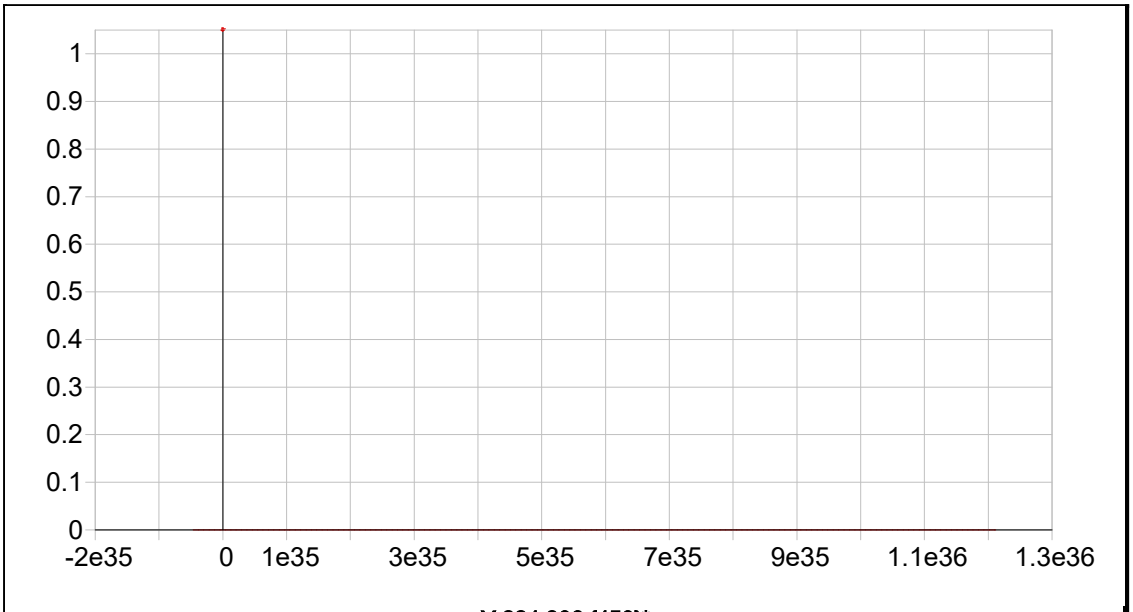
Sr 407.771 { 83}

Date of Fit:	11/9/2024 1:02:07	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000350	Re-Slope:	1.000000
A1 (Gain):	15.441032	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999325	Status:	OK.
Std Error of Est:	0.013317		
Predicted MDL:	0.000030		
Predicted MQL:	0.000101		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00039	.000	1
S1	.02000	.02052	.001	2.60	.31805	.002	1
S3	2.5000	2.6145	.114	4.58	40.408	.129	1
S4	5.0000	5.1633	.163	3.27	79.804	.250	1
S5	10.000	9.6700	-.330	-3.30	149.47	.557	1
S2	.80000	.85170	.052	6.46	13.163	.033	1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

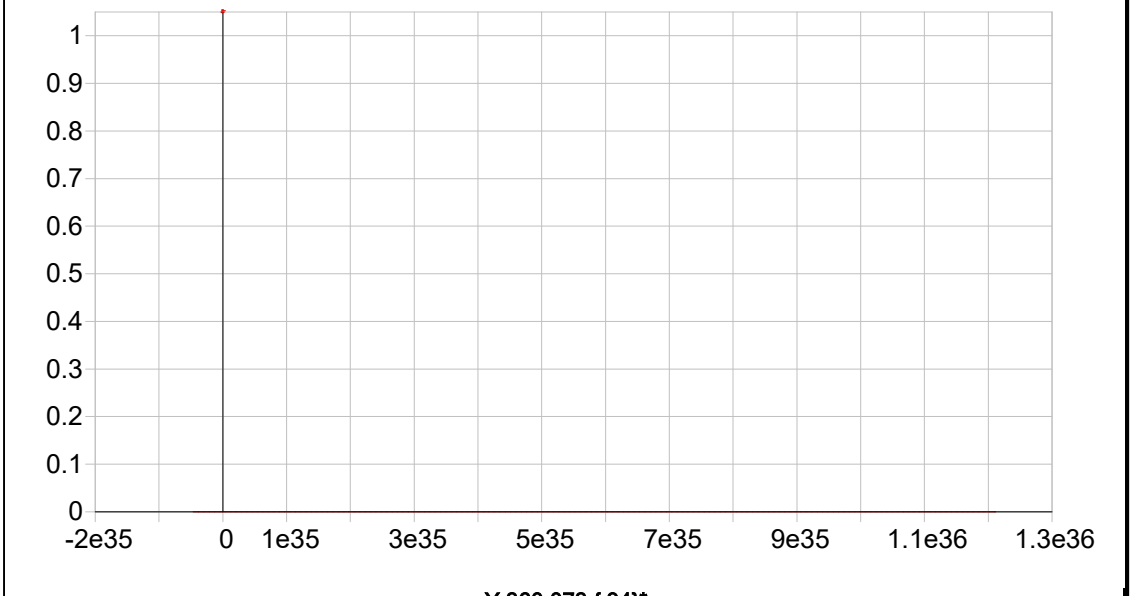


Y 224.306 {450}*

Date of Fit:	11/9/2024 1:02:07	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}*

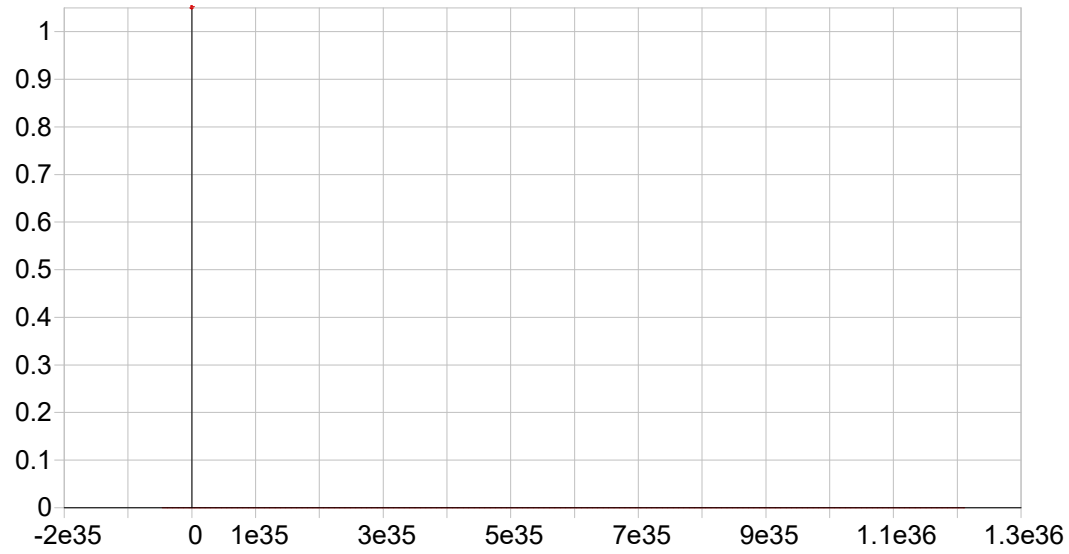
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

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

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



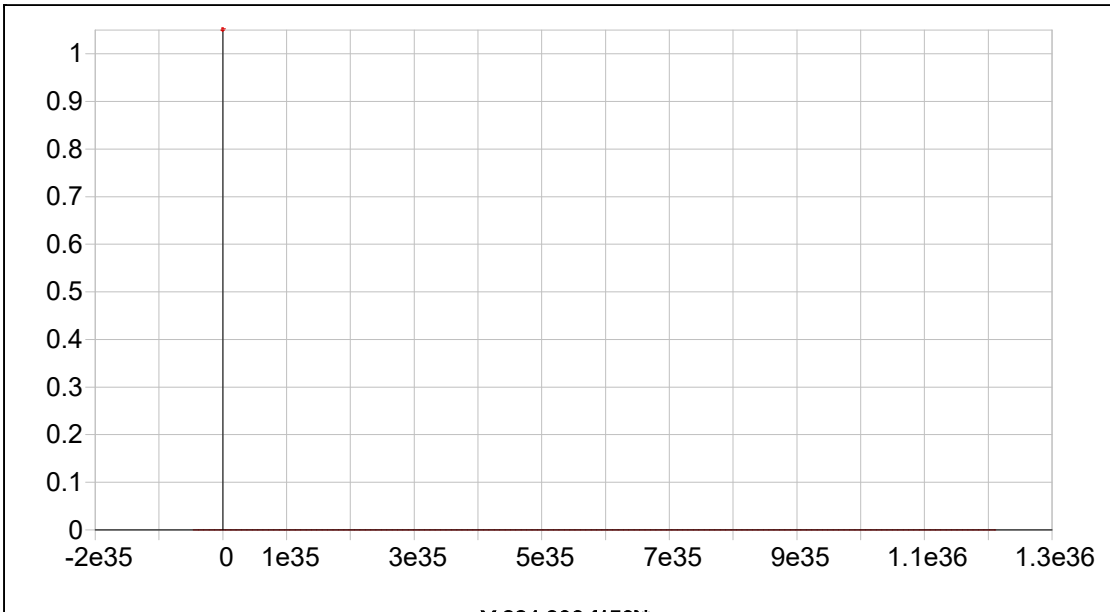
Y 371.030 { 91}*

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

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

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

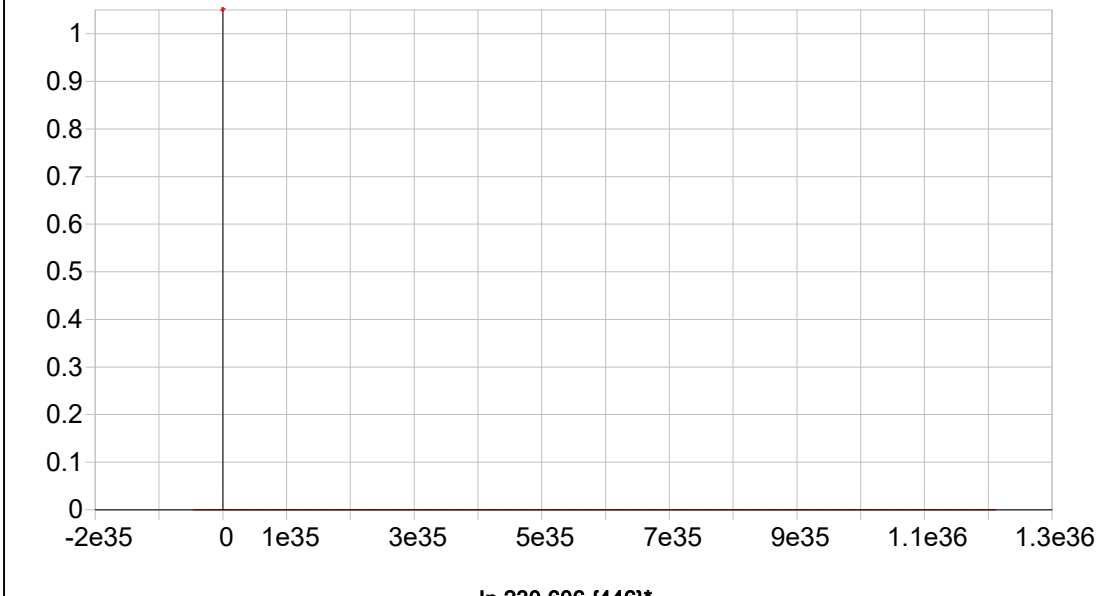
Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365



Y 224.306 {150}*

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

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



In 230.606 {446}*

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

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

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:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S0 Acquired: 11/8/2024 13:34:14 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	-.00022	-.00046	-.00018	.00038	.00041	-.00013	-.00638	-.00079
Stddev	.00003	.00004	.00017	.00008	.00023	.00012	.00132	.00016
%RSD	14.122	8.4669	98.865	20.670	55.511	89.525	20.731	20.527
#1	-.00019	-.00045	-.00038	.00032	.00042	.00000	-.00680	-.00070
#2	-.00020	-.00050	-.00006	.00034	.00063	-.00019	-.00745	-.00098
#3	-.00025	-.00043	-.00009	.00047	.00018	-.00021	-.00490	-.00070

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	-.00017	.00348	.00020	-.00006	.00003	.00006	.00018	-.00018
Stddev	.00012	.00018	.00003	.00016	.00017	.00001	.00006	.00012
%RSD	68.538	5.0811	14.309	247.42	516.46	19.640	34.652	65.086
#1	-.00004	.00359	.00018	-.00018	-.00015	.00008	.00014	-.00027
#2	-.00022	.00328	.00023	.00012	.00018	.00006	.00015	-.00005
#3	-.00025	.00358	.00018	-.00013	.00007	.00005	.00025	-.00021

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00011	-.00163	.01150	.00000	.01464	-.00012	.00173	.00034
Stddev	.00016	.00006	.00020	.00017	.00048	.00004	.00004	.00011
%RSD	144.84	3.7626	1.7109	6703.8	3.2874	32.826	2.2434	32.037
#1	.00007	-.00161	.01141	.00006	.01410	-.00010	.00175	.00045
#2	-.00018	-.00159	.01136	-.00019	.01478	-.00009	.00175	.00034
#3	-.00024	-.00171	.01172	.00014	.01503	-.00016	.00168	.00023

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	.00056	.00170	.00026	-.00089	.00026	.00322	-.00039
Stddev	.00003	.00013	.00002	.00003	.00002	.00021	.00020
%RSD	5.3303	7.6877	7.5719	3.4260	6.9270	6.6472	52.050
#1	.00055	.00185	.00028	-.00086	.00024	.00301	-.00016
#2	.00054	.00165	.00024	-.00088	.00027	.00321	-.00047
#3	.00059	.00160	.00026	-.00092	.00026	.00344	-.00055

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S0 Acquired: 11/8/2024 13:34:14 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	2921.6	64390.	13007.	2285.6	4812.8
Stddev	5.5	217.	49.	15.0	17.6
%RSD	.18742	.33700	.38001	.65677	.36672
#1	2915.7	64294.	12952.	2276.7	4793.8
#2	2922.7	64638.	13020.	2303.0	4828.6
#3	2926.5	64237.	13049.	2277.3	4816.0

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S1 Acquired: 11/8/2024 13:38:41 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	.00100	.00219	.00235	.00233	.00970	.00840	.38356	.02209
Stddev	.00014	.00006	.00012	.00004	.00003	.00043	.00258	.00025
%RSD	14.046	2.5454	5.1756	1.9174	.27370	5.1467	.67156	1.1149
#1	.00095	.00226	.00248	.00238	.00971	.00810	.38118	.02181
#2	.00116	.00217	.00234	.00234	.00973	.00889	.38629	.02229
#3	.00089	.00216	.00223	.00229	.00968	.00821	.38319	.02216

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	.01372	.11456	.00171	.02563	.01677	.00066	.01547	.03154
Stddev	.00009	.00083	.00004	.00004	.00004	.00001	.00027	.00052
%RSD	.67071	.72281	2.1084	.16196	.21650	2.0239	1.7700	1.6472
#1	.01365	.11361	.00168	.02559	.01673	.00066	.01516	.03098
#2	.01368	.11496	.00175	.02564	.01679	.00068	.01556	.03201
#3	.01383	.11512	.00169	.02567	.01679	.00066	.01568	.03162

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	.02413	.00182	.04375	.00518	.15396	.01316	.04778	.14855
Stddev	.00024	.00006	.00004	.00003	.00050	.00015	.00018	.00087
%RSD	.98200	3.2676	.09688	.54180	.32757	1.1470	.37414	.58229
#1	.02438	.00176	.04380	.00519	.15397	.01303	.04758	.14757
#2	.02391	.00188	.04373	.00515	.15344	.01332	.04793	.14920
#3	.02409	.00182	.04372	.00521	.15445	.01311	.04784	.14888

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	.00484	.11411	.00244	-.00038	.00943	.01296	.31805
Stddev	.00009	.00057	.00003	.00005	.00009	.00076	.00221
%RSD	1.7576	.49906	1.2534	12.388	.97928	5.8747	.69569
#1	.00475	.11361	.00246	-.00043	.00935	.01209	.31552
#2	.00490	.11473	.00241	-.00034	.00953	.01327	.31961
#3	.00489	.11400	.00246	-.00037	.00942	.01351	.31901

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S1 Acquired: 11/8/2024 13:38:41 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	2940.9	63982.	13238.	2265.2	4766.8
Stddev	8.8	152.	62.	3.9	9.1
%RSD	.29832	.23767	.46513	.17304	.18988
#1	2951.0	63881.	13308.	2269.6	4777.1
#2	2936.2	63908.	13216.	2262.0	4760.3
#3	2935.5	64157.	13191.	2263.9	4762.8

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S2 Acquired: 11/8/2024 13:43:04 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	.04716	.06110	.19489	.07726	.16182	.12788	6.2104	.16373
Stddev	.00025	.00043	.00117	.00035	.00102	.00033	.0225	.00006
%RSD	.53955	.70868	.60217	.45224	.62908	.25978	.36161	.03912
#1	.04701	.06135	.19372	.07709	.16068	.12754	6.2262	.16376
#2	.04702	.06060	.19490	.07703	.16211	.12792	6.2203	.16366
#3	.04746	.06134	.19607	.07766	.16266	.12820	6.1847	.16378

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	.86771	.23247	.02636	.36572	.16923	.00542	.30961	.06587
Stddev	.00263	.00088	.00010	.00106	.00099	.00001	.00098	.00014
%RSD	.30356	.37662	.38155	.29069	.58559	.25742	.31789	.20730
#1	.86604	.23304	.02625	.36467	.16853	.00544	.31066	.06573
#2	.86633	.23146	.02645	.36570	.16879	.00542	.30948	.06600
#3	.87074	.23291	.02638	.36680	.17036	.00541	.30870	.06587

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	.26132	.07215	.08018	.05486	1.4560	.02836	.37597	.62534
Stddev	.00105	.00019	.00040	.00034	.0021	.00015	.00053	.00176
%RSD	.40202	.26015	.49670	.62342	.14525	.51351	.14229	.28185
#1	.26029	.07214	.08057	.05472	1.4535	.02823	.37634	.62356
#2	.26128	.07197	.07978	.05525	1.4574	.02832	.37622	.62537
#3	.26239	.07235	.08019	.05462	1.4569	.02851	.37536	.62708

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	.09475	.47168	.00582	.02243	.02041	.37796	13.163
Stddev	.00045	.00012	.00002	.00011	.00004	.00343	.033
%RSD	.47013	.02517	.34342	.51236	.17660	.90678	.24822
#1	.09460	.47160	.00584	.02231	.02042	.38003	13.187
#2	.09441	.47181	.00582	.02254	.02037	.37986	13.177
#3	.09526	.47162	.00580	.02245	.02044	.37401	13.126

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S2 Acquired: 11/8/2024 13:43:04 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	2818.6	61603.	13238.	2154.7	4486.9
Stddev	18.1	231.	53.	8.5	25.5
%RSD	.64177	.37573	.39758	.39449	.56818
#1	2837.7	61372.	13179.	2147.2	4514.4
#2	2816.2	61835.	13253.	2163.9	4482.4
#3	2801.8	61601.	13281.	2152.9	4464.0

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S3 Acquired: 11/8/2024 13:47:13 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	.15171	.18526	.61751	.24806	.51945	.40229	19.008	.50682
Stddev	.00027	.00125	.00102	.00064	.00031	.00196	.034	.00302
%RSD	.18047	.67484	.16461	.25709	.06041	.48791	.18096	.59552
#1	.15180	.18669	.61795	.24764	.51974	.40006	19.010	.50614
#2	.15141	.18476	.61635	.24775	.51912	.40305	19.041	.51013
#3	.15193	.18435	.61823	.24880	.51950	.40376	18.972	.50421

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	2.7530	.71692	.08157	1.1601	.53241	.01739	.94399	.20570
Stddev	.0058	.00117	.00009	.0029	.00053	.00012	.00263	.00099
%RSD	.20906	.16268	.11392	.24794	.09934	.68738	.27811	.48169
#1	2.7547	.71558	.08168	1.1601	.53189	.01730	.94096	.20458
#2	2.7466	.71743	.08151	1.1573	.53241	.01734	.94549	.20648
#3	2.7577	.71774	.08152	1.1630	.53295	.01752	.94553	.20604

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	.82805	.23347	.23853	.17350	4.6281	.09415	1.1541	1.9679
Stddev	.00216	.00039	.00063	.00096	.0220	.00018	.0059	.0018
%RSD	.26140	.16877	.26447	.55471	.47494	.19115	.51493	.08891
#1	.82803	.23379	.23799	.17239	4.6452	.09405	1.1524	1.9677
#2	.82589	.23303	.23836	.17410	4.6033	.09404	1.1607	1.9662
#3	.83022	.23360	.23922	.17400	4.6358	.09436	1.1492	1.9697

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	.29693	1.4654	.01930	.07439	.06517	1.1895	40.408
Stddev	.00063	.0032	.00011	.00031	.00020	.0018	.129
%RSD	.21279	.21880	.57041	.41592	.29952	.15243	.32010
#1	.29718	1.4619	.01925	.07405	.06498	1.1884	40.259
#2	.29621	1.4682	.01922	.07447	.06516	1.1916	40.481
#3	.29740	1.4661	.01942	.07465	.06537	1.1886	40.485

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S3 Acquired: 11/8/2024 13:47:13 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	2679.0	58015.	13259.	1986.9	4215.4
Stddev	6.9	85.	48.	11.3	8.7
%RSD	.25803	.14690	.35918	.56809	.20590
#1	2686.9	58059.	13281.	1976.4	4223.3
#2	2675.7	58069.	13204.	1998.8	4216.9
#3	2674.3	57916.	13291.	1985.6	4206.1

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S4 Acquired: 11/8/2024 13:51:31 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	.30835	.36898	1.2255	.50455	1.0568	.81208	37.794	.98779
Stddev	.00021	.00470	.0037	.00117	.0032	.00090	.179	.00300
%RSD	.06722	1.2739	.30641	.23165	.30670	.11100	.47331	.30406
#1	.30849	.36592	1.2292	.50588	1.0604	.81107	37.592	.98974
#2	.30811	.36663	1.2254	.50367	1.0559	.81280	37.860	.98433
#3	.30845	.37440	1.2217	.50411	1.0541	.81238	37.931	.98931

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	5.5111	1.4118	.15838	2.3243	1.0600	.03497	1.8447	.41039
Stddev	.0169	.0041	.00074	.0075	.0041	.00007	.0084	.00187
%RSD	.30714	.29171	.46885	.32290	.38706	.19446	.45339	.45513
#1	5.5301	1.4113	.15864	2.3324	1.0641	.03504	1.8447	.41006
#2	5.5057	1.4079	.15895	2.3230	1.0600	.03491	1.8364	.40871
#3	5.4975	1.4161	.15754	2.3176	1.0559	.03497	1.8531	.41240

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	1.6506	.46765	.48680	.34699	9.2340	.19425	2.2662	3.9343
Stddev	.0048	.00049	.00096	.00050	.0331	.00047	.0061	.0083
%RSD	.28899	.10466	.19623	.14266	.35879	.24057	.26759	.21025
#1	1.6559	.46793	.48775	.34752	9.2204	.19469	2.2627	3.9419
#2	1.6492	.46794	.48584	.34654	9.2098	.19431	2.2626	3.9357
#3	1.6467	.46708	.48682	.34691	9.2717	.19376	2.2732	3.9255

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	.58968	2.9184	.04046	.15382	.13469	2.4349	79.804
Stddev	.00124	.0061	.00023	.00075	.00032	.0112	.250
%RSD	.20946	.20809	.57727	.48864	.23704	.46043	.31324
#1	.59093	2.9204	.04019	.15467	.13469	2.4407	79.619
#2	.58847	2.9116	.04057	.15324	.13437	2.4220	80.088
#3	.58965	2.9232	.04062	.15354	.13501	2.4421	79.703

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S4 Acquired: 11/8/2024 13:51:31 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	2538.6	55603.	13041.	1849.4	3950.6
Stddev	9.2	37.	39.	9.8	10.6
%RSD	.36364	.06582	.29820	.53060	.26832
#1	2532.7	55563.	13049.	1851.6	3945.7
#2	2533.8	55611.	13076.	1857.8	3943.3
#3	2549.2	55634.	12999.	1838.6	3962.7

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S5 Acquired: 11/8/2024 13:55:44 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	.60794	.65552	2.4241	.98105	2.0732	1.5926	72.763	1.9064
Stddev	.00176	.00543	.0040	.00160	.0041	.0025	.277	.0063
%RSD	.28883	.82898	.16317	.16315	.19813	.15540	.38032	.33134
#1	.60643	.65215	2.4236	.97985	2.0699	1.5933	73.061	1.9055
#2	.60752	.66178	2.4283	.98044	2.0719	1.5946	72.515	1.9131
#3	.60986	.65261	2.4205	.98287	2.0778	1.5898	72.713	1.9005

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.921	2.7253	.30421	4.6268	2.0587	.06687	3.5363	.80349
Stddev	.017	.0052	.00114	.0078	.0056	.00007	.0065	.00171
%RSD	.15367	.18958	.37582	.16910	.27168	.11004	.18449	.21313
#1	10.911	2.7247	.30332	4.6204	2.0537	.06681	3.5421	.80211
#2	10.940	2.7307	.30382	4.6355	2.0577	.06685	3.5376	.80540
#3	10.911	2.7204	.30550	4.6244	2.0648	.06695	3.5292	.80295

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	3.2697	.91165	.94838	.67203	17.526	.37991	4.3693	7.5714
Stddev	.0044	.00097	.00746	.00131	.023	.00154	.0128	.0154
%RSD	.13389	.10590	.78680	.19475	.13283	.40660	.29322	.20320
#1	3.2665	.91141	.95542	.67169	17.526	.38050	4.3730	7.5540
#2	3.2746	.91083	.94056	.67347	17.549	.37816	4.3799	7.5768
#3	3.2679	.91271	.94917	.67092	17.503	.38107	4.3551	7.5833

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	1.1552	5.6491	.08031	.32362	.27473	4.7835	149.47
Stddev	.0029	.0116	.00077	.00135	.00086	.0347	.56
%RSD	.24995	.20511	.95880	.41695	.31318	.72534	.37271
#1	1.1526	5.6613	.07952	.32231	.27374	4.8222	149.46
#2	1.1583	5.6479	.08037	.32355	.27517	4.7552	150.03
#3	1.1546	5.6382	.08105	.32500	.27529	4.7731	148.92

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: S5 Acquired: 11/8/2024 13:55:44 Type: Cal
Method: NON EPA-6010-200.7(v2466) 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	2471.8	55531.	13028.	1819.7	3757.6
Stddev	9.6	75.	43.	6.5	7.9
%RSD	.38723	.13442	.33383	.35691	.21055
#1	2480.4	55476.	12997.	1812.2	3766.4
#2	2473.7	55616.	13010.	1823.3	3755.2
#3	2461.5	55500.	13078.	1823.7	3751.2

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICV01 Acquired: 11/8/2024 13:59:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	1.004570	.9749593	.9992513	1.004306	.9794193	2.545800
Stddev	.006580	.0092673	.0010954	.001370	.0033107	.004669
%RSD	.6549873	.9505344	.1096204	.1364569	.3380307	.1834173
#1	.997773	.9770861	.9987278	1.003033	.9768459	2.542061
#2	1.005027	.9648134	1.000510	1.005757	.9782578	2.551034
#3	1.010909	.9829783	.998516	1.004127	.9831543	2.544305

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5125044	.5111655	.4967921	10.06587	.5139139	.5061873
Stddev	.0016518	.0011691	.0008198	.05827	.0006874	.0002220
%RSD	.3223011	.2287047	.1650178	.5788745	.1337623	.0438513
#1	.5143891	.5111804	.4961129	10.00224	.5146057	.5059311
#2	.5113081	.5099891	.4977027	10.11661	.5132309	.5063094
#3	.5118161	.5123271	.4965605	10.07877	.5139051	.5063214

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5209084	9.657425	.5190216	5.939606	.5091447	.2505306
Stddev	.0012815	.074161	.0024896	.035894	.0006338	.0006782
%RSD	.2460113	.7679170	.4796774	.6043149	.1244818	.2706952
#1	.5197264	9.641248	.5165201	5.902458	.5084377	.2506936
#2	.5207285	9.738339	.5214991	5.974098	.5093344	.2511124
#3	.5222703	9.592688	.5190457	5.942260	.5096620	.2497858

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 9.174193	.4962146	1.026568	9.545844	2.386465	2.441894
Stddev	.077545	.0004295	.004266	.041110	.005272	.005538
%RSD	.8452483	.0865491	.4155899	.4306555	.2208951	.2267791
#1	9.260438	.4958265	1.030376	9.568384	2.385619	2.437302
#2	9.151915	.4966760	1.027370	9.570754	2.381667	2.440338
#3	9.110226	.4961414	1.021957	9.498394	2.392108	2.448044

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICV01 Acquired: 11/8/2024 13:59:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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 2.348754	2.402417	F 1.794923	F .0038379	F -.007058	F .0002741
Stddev	.003035	.003137	.021627	.0017818	.001377	.0002962
%RSD	.1292258	.1305748	1.204917	46.42604	19.50533	108.0754
#1	2.347031	2.403554	1.798076	.0058941	-.007542	.0003053
#2	2.346972	2.404826	1.814801	.0028712	-.005505	.0005535
#3	2.352258	2.398870	1.771892	.0027484	-.008127	-.000037

Elem	Sr4077
Units	ppm
Avg	F -.008228
Stddev	.000050
%RSD	.6047795
#1	-.008234
#2	-.008274
#3	-.008175

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2668.043	59747.43	13425.98	1971.790	4295.415
Stddev	10.319	250.60	20.12	11.963	11.365
%RSD	.3867583	.4194284	.1498774	.6066910	.2645901
#1	2677.331	59565.85	13407.71	1964.488	4307.883
#2	2669.863	59643.12	13447.55	1965.287	4292.727
#3	2656.935	60033.34	13422.68	1985.596	4285.635

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: LLICV01 Acquired: 11/8/2024 14:11:56 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0194919	.0375704	.0118418	.0205979	.0483845	.1090093
Stddev	.0004601	.0004285	.0008155	.0011045	.0012843	.0049251
%RSD	2.360612	1.140420	6.886461	5.362372	2.654383	4.518014
#1	.0200175	.0371156	.0119957	.0195072	.0493499	.1097750
#2	.0192962	.0379665	.0109604	.0205706	.0488767	.1135066
#3	.0191619	.0376291	.0125694	.0217158	.0469269	.1037462

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0952841	.0056574	.0063374	1.969275	.0094751	.0282867
Stddev	.0002351	.0000562	.0000128	.004647	.0002543	.0001334
%RSD	.2467335	.9934795	.2025160	.2359931	2.684108	.4717905
#1	.0955151	.0056254	.0063517	1.964900	.0094996	.0284404
#2	.0952922	.0057223	.0063338	1.968771	.0092095	.0282199
#3	.0950451	.0056245	.0063269	1.974154	.0097164	.0281999

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0228276	.0935821	.0198040	1.951300	.0377552	.0106280
Stddev	.0002660	.0022637	.0001666	.007528	.0002070	.0001388
%RSD	1.165177	2.418984	.8413460	.3858105	.5483671	1.305683
#1	.0231115	.0941680	.0199100	1.959610	.0379911	.0105660
#2	.0225842	.0910830	.0196120	1.944934	.0376705	.0105311
#3	.0227870	.0954953	.0198900	1.949358	.0376039	.0107870

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.634064	.0385708	.0420779	1.874870	.1017318	.2000362
Stddev	.008680	.0015142	.0001817	.002274	.0005126	.0006128
%RSD	.5312192	3.925854	.4319164	.1212620	.5038674	.3063411
#1	1.635010	.0368854	.0422391	1.872601	.1016231	.1996451
#2	1.642233	.0390105	.0421137	1.877148	.1012823	.1997212
#3	1.624950	.0398166	.0418810	1.874862	.1022901	.2007425

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: LLICV01 Acquired: 11/8/2024 14:11:56 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0361372	F .1922366	F .3186678	F .0141743	F .3445606	.0160312
Stddev	.0003072	.0004247	.0023483	.0032203	.0022957	.0018010
%RSD	.8499706	.2209413	.7369119	22.71968	.6662595	11.23441
#1	.0358632	.1917551	.3178226	.0105525	.3471223	.0176953
#2	.0364692	.1923967	.3213218	.0152553	.3426894	.0162792
#3	.0360792	.1925580	.3168592	.0167150	.3438701	.0141190

Elem	Sr4077
Units	ppm
Avg	.0200956
Stddev	.0000527
%RSD	.2621906
#1	.0201508
#2	.0200903
#3	.0200458

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2606.318	59083.22	13387.72	1890.029	4366.669
Stddev	4.375	110.88	30.88	7.703	6.775
%RSD	.1678468	.1876599	.2306956	.4075614	.1551488
#1	2611.342	58975.96	13354.00	1881.494	4359.876
#2	2603.353	59076.31	13414.64	1892.127	4373.426
#3	2604.259	59197.39	13394.52	1896.466	4366.705

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICB01 Acquired: 11/8/2024 14:16:16 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000814	.0000356	.0003058	.0007772	-.001071	.0022604	-.003618
Stddev	.001454	.0023759	.0012415	.0007763	.000491	.0040022	.000275
%RSD	178.5906	6668.759	406.0431	99.89524	45.84594	177.0569	7.601942
#1	-.002081	-.000407	-.000838	.0006299	-.001290	.0022889	-.003713
#2	-.001136	.002602	.001626	.0000850	-.000508	.0062483	-.003833
#3	.000774	-.002088	.000130	.0016166	-.001413	-.001756	-.003308

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000027	-.000041	.0117247	-.000108	.0000822	.0000398	-.002331
Stddev	.000047	.000012	.0045492	.000393	.0000527	.0001653	.002573
%RSD	175.4786	28.23519	38.79988	363.4813	64.04663	414.9185	110.3692
#1	-.000012	-.000043	.0166615	.000180	.0000651	.0000578	-.002838
#2	-.000080	-.000052	.0077020	.000052	.0000402	-.000134	.000458
#3	.000011	-.000029	.0108107	-.000556	.0001413	.000195	-.004612

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000136	.0000996	-.000218	.0006382	-.156653	-.000791	.0002439
Stddev	.000178	.0076098	.000091	.0000687	.007761	.001143	.0002509
%RSD	130.7843	7640.711	41.91764	10.76983	4.954258	144.5387	102.8914
#1	-.000335	.0053454	-.000175	.0006925	-.164716	-.001587	-.000043
#2	.000007	-.008628	-.000156	.0005609	-.156009	.000519	.000350
#3	-.000080	.003582	-.000323	.0006612	-.149234	-.001304	.000424

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.025029	.0001357	.0001144	-.000204	.0002764	-.004796	-.006174
Stddev	.019690	.0000744	.0001075	.000928	.0006128	.003101	.002567
%RSD	78.66783	54.80530	93.92930	455.2963	221.7175	64.65971	41.58371
#1	-.003770	.0002074	.0002098	-.001073	-.000304	-.001822	-.003336
#2	-.028678	.0001408	-.000002	.000774	.000917	-.004556	-.006852
#3	-.042639	.0000589	.000135	-.000312	.000216	-.008010	-.008335

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICB01 Acquired: 11/8/2024 14:16:16 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0005568	-.002050	.0000103
Stddev	.0014293	.001111	.0000197
%RSD	256.6975	54.18705	190.3131
#1	-.000910	-.000914	.0000276
#2	.000635	-.003133	.0000145
#3	.001945	-.002102	-.000011

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2647.398	58883.80	13452.57	1911.477	4484.702
Stddev	4.073	152.58	37.15	13.771	6.408
%RSD	.1538599	.2591241	.2761475	.7204350	.1428753
#1	2647.218	59030.54	13456.68	1925.515	4486.174
#2	2651.558	58725.98	13413.54	1897.989	4490.246
#3	2643.417	58894.88	13487.49	1910.926	4477.687

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CRI01 Acquired: 11/8/2024 14:20:36 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0201072	.0372759	.0117512	.0197543	.0477765	.1038762
Stddev	.0015579	.0014418	.0013954	.0013658	.0008143	.0017441
%RSD	7.747911	3.867768	11.87434	6.914009	1.704398	1.679041
#1	.0185819	.0363806	.0129228	.0204577	.0476992	.1058898
#2	.0200438	.0389391	.0121234	.0181802	.0470037	.1028400
#3	.0216958	.0365081	.0102075	.0206250	.0486267	.1028987

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0949642	.0056201	.0061640	1.953668	.0092386	.0277576
Stddev	.0006485	.0000616	.0000650	.009374	.0003196	.0001974
%RSD	.6829308	1.096994	1.054385	.4797949	3.459057	.7109979
#1	.0942157	.0056877	.0061158	1.958948	.0090777	.0279115
#2	.0953573	.0055670	.0061383	1.942846	.0090315	.0275351
#3	.0953198	.0056056	.0062379	1.959212	.0096067	.0278261

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0213645	.0928966	.0195703	1.934481	.0367890	.0102793
Stddev	.0000796	.0013460	.0001657	.013004	.0002309	.0002015
%RSD	.3726543	1.448865	.8468573	.6722265	.6277234	1.960578
#1	.0212773	.0914282	.0194690	1.928696	.0367799	.0102428
#2	.0214332	.0940718	.0197616	1.925372	.0365628	.0104966
#3	.0213832	.0931899	.0194804	1.949373	.0370244	.0100985

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.598735	.0385171	.0418638	1.840529	.0992034	.1980813
Stddev	.011584	.0002478	.0002248	.006706	.0008886	.0004361
%RSD	.7245563	.6434850	.5369517	.3643636	.8957309	.2201425
#1	1.587104	.0382318	.0421194	1.842200	.0996588	.1975878
#2	1.598829	.0386786	.0417751	1.833145	.0981794	.1984144
#3	1.610271	.0386410	.0416969	1.846242	.0997720	.1982418

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CRI01 Acquired: 11/8/2024 14:20:36 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0359706	F .1904066	.3091172	F .0123653	F .3343927	.0168826
Stddev	.0008832	.0004984	.0073509	.0007933	.0025827	.0008288
%RSD	2.455405	.2617276	2.378042	6.415909	.7723460	4.909414
#1	.0357490	.1909720	.3013965	.0114743	.3373568	.0160655
#2	.0352193	.1902169	.3099229	.0129951	.3326267	.0168596
#3	.0369436	.1900310	.3160320	.0126264	.3331945	.0177227

Elem	Sr4077
Units	ppm
Avg	.0199465
Stddev	.0000519
%RSD	.2602165
#1	.0199999
#2	.0199434
#3	.0198962

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2676.674	59835.69	13467.68	1933.952	4518.100
Stddev	4.648	48.96	47.43	4.376	2.892
%RSD	.1736399	.0818272	.3521670	.2262927	.0640060
#1	2682.041	59863.06	13418.77	1930.888	4521.422
#2	2674.018	59864.85	13513.48	1938.964	4516.733
#3	2673.964	59779.16	13470.80	1932.005	4516.145

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSA01 Acquired: 11/8/2024 14:24:53 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0055244	-.000888	.0099702	-.014361	-.001652	263.9839
Stddev	.0010329	.001140	.0019688	.001990	.000604	.7125
%RSD	18.69694	128.3738	19.74722	13.85863	36.57617	.2698906
#1	.0047384	-.001942	.0109186	-.014148	-.001899	263.4759
#2	.0051405	.000322	.0077066	-.012485	-.000963	264.7983
#3	.0066943	-.001044	.0112853	-.016449	-.002093	263.6775

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018402	.0012918	.0061101	243.3676	.0542899	.0021080
Stddev	.0002408	.0001180	.0002294	.2910	.0006785	.0000731
%RSD	13.08698	9.134869	3.754802	.1195578	1.249870	3.469572
#1	.0018645	.0013906	.0061558	243.5075	.0550079	.0020329
#2	.0020679	.0013237	.0058612	243.5622	.0536592	.0021122
#3	.0015881	.0011611	.0063132	243.0331	.0542025	.0021790

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0142946	98.64811	.0036521	267.2971	.0026268	-.000087
Stddev	.0000338	.18170	.0004700	.0680	.0002564	.000186
%RSD	.2361605	.1841908	12.86927	.0254357	9.759045	213.0087
#1	.0143246	98.45431	.0032519	267.2310	.0028142	-.000214
#2	.0142581	98.67538	.0041697	267.3668	.0023347	.000126
#3	.0143011	98.81463	.0035347	267.2934	.0027317	-.000174

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0149784	.0089740	.0070380	.0177604	.0461764	.0000940
Stddev	.0110238	.0003277	.0004737	.0152733	.0007954	.0005939
%RSD	73.59800	3.651240	6.730645	85.99640	1.722489	631.7223
#1	.0022535	.0086310	.0075824	.0002222	.0453404	.0007464
#2	.0210561	.0092838	.0068123	.0249227	.0462650	-.000049
#3	.0216256	.0090072	.0067194	.0281364	.0469237	-.000415

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSA01 Acquired: 11/8/2024 14:24:53 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003445	-.000642	.0052732	-.002783	-.012855	F .0390289
Stddev	.001024	.000493	.0029789	.002804	.004724	.0013948
%RSD	29.72974	76.83487	56.49162	100.7589	36.74439	3.573762
#1	-.002612	-.001146	.0087096	-.005971	-.011815	.0374674
#2	-.003135	-.000160	.0034234	-.001677	-.018012	.0394676
#3	-.004588	-.000619	.0036866	-.000700	-.008738	.0401515

Elem	Sr4077
Units	ppm
Avg	.0048396
Stddev	.0004051
%RSD	8.370502
#1	.0052965
#2	.0046980
#3	.0045242

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2309.865	51003.22	12711.28	1640.400	3486.937
Stddev	5.009	43.64	51.06	7.137	7.321
%RSD	.2168323	.0855575	.4016993	.4350813	.2099587
#1	2307.775	51040.38	12661.33	1644.952	3482.682
#2	2315.580	51014.12	12709.14	1644.073	3495.390
#3	2306.241	50955.17	12763.38	1632.174	3482.737

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSAB01 Acquired: 11/8/2024 14:30:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.1151646	.0902440	.0572539	.0311879	.6223665	259.9963
Stddev	.0012231	.0015243	.0017624	.0019577	.0017137	2.3092
%RSD	1.062046	1.689094	3.078183	6.277151	.2753544	.8881707
#1	.1164799	.0919822	.0553229	.0289365	.6205842	261.4271
#2	.1149526	.0891351	.0587755	.0321375	.6225129	261.2296
#3	.1140614	.0896147	.0576635	.0324897	.6240022	257.3323

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4963016	.4927526	.9789206	236.8755	.5210912	.4984932
Stddev	.0021433	.0019454	.0012470	.4594	.0006789	.0007058
%RSD	.4318512	.3947939	.1273897	.1939304	.1302784	.1415879
#1	.4942635	.4919880	.9783888	236.5567	.5204655	.4980002
#2	.4985365	.4949641	.9780277	237.4020	.5209952	.4981777
#3	.4961049	.4913057	.9803454	236.6677	.5218130	.4993017

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4993937	95.67357	.4797237	259.8648	.9805531	.1978853
Stddev	.0004794	.21342	.0020879	.3148	.0011604	.0004981
%RSD	.0960037	.2230689	.4352326	.1211281	.1183360	.2517106
#1	.4993078	95.80524	.4785820	259.7192	.9805087	.1983987
#2	.4999103	95.42733	.4821335	260.2260	.9794156	.1974041
#3	.4989630	95.78813	.4784556	259.6491	.9817350	.1978530

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.036567	.4948421	1.091130	-.006027	.8798631	1.052285
Stddev	.026752	.0010450	.003955	.009527	.0043875	.002857
%RSD	73.16023	.2111688	.3625107	158.0866	.4986576	.2714991
#1	-.063909	.4936433	1.086578	-.016076	.8801117	1.054111
#2	-.035345	.4955602	1.093076	.002874	.8841211	1.053750
#3	-.010446	.4953228	1.093735	-.004877	.8753566	1.048992

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSAB01 Acquired: 11/8/2024 14:30:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	F .7811724	F .7854504	F .6551978	F .0029954	F -.013356	F .0390467
Stddev	.0011544	.0027777	.0073326	.0011113	.006773	.0008778
%RSD	.1477725	.3536492	1.119144	37.09936	50.71561	2.247976
#1	.7807212	.7822800	.6522710	.0038035	-.019042	.0400343
#2	.7824842	.7874564	.6497806	.0034545	-.015163	.0387505
#3	.7803118	.7866149	.6635418	.0017281	-.005862	.0383554

Elem	Sr4077
Units	ppm
Avg	F .0059344
Stddev	.0004561
%RSD	7.686095
#1	.0056204
#2	.0064576
#3	.0057251

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2244.896	51385.89	12821.57	1613.118	3431.231
Stddev	7.690	138.02	24.31	6.997	10.971
%RSD	.3425661	.2685991	.1896167	.4337724	.3197509
#1	2252.557	51287.07	12818.42	1621.056	3443.019
#2	2237.177	51543.59	12798.99	1607.845	3421.317
#3	2244.954	51327.01	12847.30	1610.453	3429.356

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSADLX20 Acquired: 11/8/2024 14:35:45 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0009402	.0006986	-.001291	.0011292	-.001237	12.89932	-.004649
Stddev	.0013990	.0003762	.001071	.0002664	.000518	.01405	.000350
%RSD	148.8015	53.85767	82.92184	23.58847	41.89078	.1089055	7.530694
#1	.0022384	.0009605	-.002317	.0008314	-.001250	12.90596	-.005043
#2	-.000542	.0002675	-.001375	.0013447	-.000712	12.90881	-.004533
#3	.001124	.0008678	-.000181	.0012116	-.001748	12.88318	-.004372

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001106	.0003985	12.30951	.0026056	-.000011	.0005996	4.836332
Stddev	.0000397	.0000558	.08318	.0001031	.000137	.0000680	.011253
%RSD	35.93356	14.00101	.6757194	3.954815	1206.051	11.34711	.2326757
#1	.0000848	.0004614	12.21349	.0026154	-.000057	.0006613	4.835784
#2	.0000906	.0003548	12.35936	.0024979	-.000120	.0006110	4.825363
#3	.0001564	.0003794	12.35568	.0027033	.000143	.0005266	4.847849

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001068	12.72342	.0003127	.0006413	-.178462	.0012926	.0008924
Stddev	.0002141	.09247	.0002456	.0002107	.009457	.0008258	.0001904
%RSD	200.4026	.7267921	78.55366	32.84844	5.299008	63.88290	21.33239
#1	.0002649	12.62016	.0005862	.0006788	-.184349	.0014790	.0007480
#2	.0001924	12.75152	.0001110	.0004144	-.183483	.0020093	.0008211
#3	-.000137	12.79859	.0002408	.0008307	-.167554	.0003896	.0011081

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.038540	.0016123	.0003011	-.002042	-.000107	-.009063	-.003181
Stddev	.000859	.0002189	.0001478	.000589	.000039	.000758	.002263
%RSD	2.230029	13.57545	49.10974	28.82384	36.76823	8.360059	71.12400
#1	-.039383	.0017777	.0001705	-.002248	-.000062	-.008190	-.005644
#2	-.038571	.0013641	.0004616	-.001378	-.000125	-.009452	-.001194
#3	-.037665	.0016950	.0002710	-.002500	-.000134	-.009548	-.002705

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSADLX20 Acquired: 11/8/2024 14:35:45 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000015	-.000402	.0003596
Stddev	.002194	.000759	.0000337
%RSD	14830.45	188.5295	9.379566
#1	.000115	-.000021	.0003465
#2	-.002271	.000090	.0003980
#3	.002111	-.001276	.0003345

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2555.136	57451.68	13515.71	1808.530	4223.202
Stddev	1.062	84.73	37.65	5.094	4.699
%RSD	.0415760	.1474782	.2785472	.2816542	.1112702
#1	2556.332	57434.33	13545.99	1813.889	4228.498
#2	2554.771	57376.97	13473.56	1803.752	4219.532
#3	2554.304	57543.74	13527.59	1807.948	4221.576

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSABDLX20 Acquired: 11/8/2024 14:40:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0064266	.0059006	.0016539	.0032497	.0287630	12.81309	.0210544
Stddev	.0026678	.0006021	.0005460	.0008851	.0005256	.01991	.0002618
%RSD	41.51197	10.20361	33.01075	27.23677	1.827501	.1553821	1.243564
#1	.0093146	.0061409	.0010501	.0033729	.0289427	12.79631	.0208355
#2	.0059113	.0052155	.0021128	.0023094	.0291752	12.83509	.0209833
#3	.0040541	.0063454	.0017988	.0040667	.0281710	12.80787	.0213444

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0260219	.0492731	12.33259	.0306246	.0248947	.0268896	4.819927
Stddev	.0000814	.0000959	.03536	.0003133	.0001958	.0001271	.026809
%RSD	.3126729	.1946886	.2867016	1.022983	.7863929	.4726790	.5562112
#1	.0260280	.0493668	12.35400	.0308872	.0249849	.0268744	4.818640
#2	.0259376	.0492775	12.29178	.0307086	.0250291	.0267708	4.847357
#3	.0261000	.0491751	12.35199	.0302778	.0246701	.0270237	4.793785

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0254487	12.75818	.0503983	.0098494	-.174902	.0243686	.0554091
Stddev	.0001400	.03664	.0003247	.0001497	.010474	.0008586	.0002834
%RSD	.5503337	.2872230	.6442964	1.520014	5.988575	3.523372	.5114794
#1	.0252934	12.79003	.0501648	.0097776	-.185382	.0253567	.0551198
#2	.0254871	12.71813	.0502609	.0100215	-.164434	.0238042	.0554212
#3	.0255655	12.76639	.0507691	.0097491	-.174889	.0239448	.0556862

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.041906	.0401222	.0426071	.0382368	.0404113	.0240232	-.004867
Stddev	.019968	.0007598	.0002041	.0007303	.0005677	.0039654	.002249
%RSD	47.64932	1.893710	.4791189	1.910040	1.404787	16.50660	46.20182
#1	-.026506	.0402782	.0427221	.0380097	.0409963	.0225394	-.002303
#2	-.034745	.0392966	.0427277	.0376470	.0403748	.0285165	-.005793
#3	-.064467	.0407919	.0423714	.0390537	.0398627	.0210137	-.006505

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: ICSABDLX20 Acquired: 11/8/2024 14:40:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000927	.0011521	.0004236
Stddev	.001929	.0003743	.0000294
%RSD	208.1024	32.48977	6.932663
#1	-.001301	.0007279	.0004263
#2	.001162	.0014360	.0003930
#3	-.002642	.0012924	.0004516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2592.775	57941.22	13467.62	1861.856	4272.727
Stddev	4.808	264.63	24.81	2.133	7.610
%RSD	.1854430	.4567281	.1841830	.1145382	.1780991
#1	2587.697	57792.43	13441.53	1863.395	4264.700
#2	2593.372	57784.47	13490.91	1859.422	4273.645
#3	2597.257	58246.76	13470.41	1862.752	4279.836

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV01 Acquired: 11/8/2024 14:44:16 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.945423	4.768815	4.867981	5.024258	5.044727	9.956482	9.532880
Stddev	.003292	.008141	.005681	.015365	.009190	.011452	.046147
%RSD	.0665618	.1707115	.1167072	.3058245	.1821784	.1150193	.4840854
#1	4.943265	4.760179	4.863099	5.020854	5.039088	9.945232	9.543425
#2	4.943791	4.776348	4.866626	5.010880	5.039760	9.956089	9.572843
#3	4.949211	4.769918	4.874217	5.041040	5.055332	9.968125	9.482373

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2411947	2.394185	24.13931	1.046181	2.424838	1.257263	4.848382
Stddev	.0011648	.003746	.10467	.002748	.006240	.002597	.024386
%RSD	.4829207	.1564816	.4335975	.2626394	.2573201	.2065471	.5029708
#1	.2402021	2.392617	24.02159	1.049353	2.423486	1.256960	4.822604
#2	.2424770	2.391477	24.22186	1.044613	2.419385	1.254831	4.871085
#3	.2409051	2.398461	24.17449	1.044575	2.431642	1.259998	4.851455

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.372355	24.24441	2.435495	1.234202	24.31948	2.447746	2.529829
Stddev	.008492	.18883	.003304	.001554	.20463	.005177	.000760
%RSD	.3579426	.7788583	.1356716	.1258992	.8414058	.2115148	.0300306
#1	2.363102	24.02664	2.433891	1.235093	24.55142	2.441868	2.529844
#2	2.379792	24.36272	2.433299	1.235104	24.16446	2.449738	2.530581
#3	2.374170	24.34387	2.439295	1.232407	24.24257	2.451631	2.529062

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.59632	4.817205	4.990905	4.791494	4.805671	4.850529	5.024989
Stddev	.13911	.014732	.010180	.007316	.002787	.029283	.027725
%RSD	.5655891	.3058297	.2039727	.1526887	.0579915	.6037060	.5517504
#1	24.74808	4.804444	4.988001	4.783626	4.804729	4.830294	5.006217
#2	24.47483	4.833328	4.982492	4.792765	4.808807	4.837185	5.011917
#3	24.56606	4.813842	5.002221	4.798091	4.803477	4.884107	5.056834

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV01 Acquired: 11/8/2024 14:44:16 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.723200	4.739812	4.930701
Stddev	.011242	.035221	.034438
%RSD	.2380259	.7430887	.6984421
#1	4.734419	4.779644	4.933089
#2	4.711934	4.727009	4.963882
#3	4.723246	4.712784	4.895131

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2490.688	56339.17	13337.41	1793.839	3952.143
Stddev	5.589	126.09	31.02	.464	7.128
%RSD	.2243777	.2237970	.2325727	.0258523	.1803668
#1	2489.445	56198.40	13347.91	1794.203	3950.479
#2	2496.794	56377.37	13302.51	1793.997	3959.956
#3	2485.826	56441.73	13361.82	1793.317	3945.993

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB01 Acquired: 11/8/2024 14:50:43 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0003213	.0000491	-.000672	.0016925	-.000522	.0085644	-.004267
Stddev	.0018357	.0012402	.000283	.0008375	.000560	.0005540	.000375
%RSD	571.3774	2523.869	42.10323	49.48223	107.2105	6.468317	8.784027
#1	.0019396	.0011472	-.000993	.0013235	.000124	.0079270	-.004693
#2	.0006976	.0002962	-.000561	.0011029	-.000833	.0089302	-.004117
#3	-.001673	-.001296	-.000461	.0026512	-.000858	.0088359	-.003990

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000004	-.000023	.0057873	-.000032	.0001207	-.000074	-.001247
Stddev	.000022	.000060	.0028036	.000144	.0001176	.000282	.002473
%RSD	541.0473	263.9549	48.44434	450.1003	97.43092	382.7324	198.2658
#1	.000022	-.000056	.0080300	.000005	-.000011	.000192	-.004090
#2	-.000015	.000046	.0026441	.000090	.000216	-.000371	.000400
#3	-.000019	-.000059	.0066878	-.000190	.000156	-.000043	-.000051

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000238	.0067300	-.000267	.0004749	-.194922	-.000747	.0005607
Stddev	.000017	.0112618	.000167	.0002313	.009740	.000422	.0000694
%RSD	7.347838	167.3381	62.70631	48.69872	4.997110	56.50082	12.38376
#1	-.000240	.0154053	-.000098	.0007399	-.205772	-.000686	.0006053
#2	-.000219	.0107817	-.000269	.0003704	-.192064	-.001196	.0004807
#3	-.000254	-.005997	-.000433	.0003143	-.186930	-.000359	.0005960

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.035979	.0023148	.0002928	.0000886	.0001808	-.009003	-.004427
Stddev	.014809	.0005575	.0001538	.0004041	.0000216	.002339	.001077
%RSD	41.16097	24.08319	52.51865	456.2679	11.97002	25.98105	24.32900
#1	-.023882	.0027303	.0004371	.0001830	.0001934	-.006335	-.003919
#2	-.031561	.0016812	.0003104	-.000354	.0001931	-.009974	-.005665
#3	-.052495	.0025328	.0001310	.000437	.0001558	-.010701	-.003699

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB01 Acquired: 11/8/2024 14:50:43 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.002119	-.002421	.0000452
Stddev	.003140	.000411	.0000030
%RSD	148.1883	16.98836	6.618119
#1	-.005744	-.002723	.0000430
#2	-.000308	-.001953	.0000440
#3	-.000304	-.002587	.0000486

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2695.529	58638.96	13753.45	1901.113	4642.137
Stddev	7.928	126.67	34.54	4.904	6.502
%RSD	.2941187	.2160249	.2511602	.2579391	.1400620
#1	2700.620	58782.34	13716.44	1895.907	4645.073
#2	2699.574	58542.19	13759.06	1901.790	4646.652
#3	2686.395	58592.36	13784.84	1905.644	4634.684

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4578-04DLX5 Acquired: 11/8/2024 14:55:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.2127785	.0025377	1.305662	-.008894	-.000465	26.16195
Stddev	.0025350	.0009710	.001173	.001940	.000152	.06663
%RSD	1.191369	38.26499	.0898396	21.80725	32.70943	.2546723
#1	.2117010	.0016984	1.307016	-.009621	-.000436	26.23283
#2	.2109602	.0036012	1.304986	-.010365	-.000630	26.10061
#3	.2156742	.0023135	1.304983	-.006696	-.000330	26.15240

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5143473	.0021709	.0106887	9.545721	.5289002	.0228533
Stddev	.0031310	.0000416	.0000171	.028903	.0009935	.0001473
%RSD	.6087398	1.914488	.1603208	.3027870	.1878333	.6443904
#1	.5174763	.0021724	.0107081	9.574717	.5299249	.0226873
#2	.5112143	.0022116	.0106828	9.516912	.5279413	.0229041
#3	.5143512	.0021286	.0106754	9.545533	.5288342	.0229684

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.295033	56.62934	.5794117	11.88124	.1419236	.0108173
Stddev	.002284	.18686	.0041670	.00867	.0002354	.0001676
%RSD	.1763663	.3299681	.7191754	.0729947	.1658946	1.549754
#1	1.296502	56.65272	.5825590	11.89098	.1416775	.0109463
#2	1.292402	56.43189	.5746861	11.87437	.1421467	.0106278
#3	1.296195	56.80341	.5809900	11.87837	.1419466	.0108777

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.408857	.0707267	1.832188	3.997531	.0517806	.0026338
Stddev	.039228	.0003344	.002493	.019189	.0002535	.0001855
%RSD	.4169280	.4727290	.1360710	.4800290	.4895919	7.042709
#1	9.450028	.0710089	1.833580	4.019225	.0515958	.0028422
#2	9.371914	.0708138	1.833674	3.982777	.0520696	.0024867
#3	9.404628	.0703574	1.829310	3.990593	.0516765	.0025727

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4578-04DLX5 Acquired: 11/8/2024 14:55:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.9579602	.7552061	4.070296	4.168734	F 19.29332	.0383758
Stddev	.0056914	.0036872	.011420	.004698	.08769	.0018771
%RSD	.5941155	.4882432	.2805718	.1126874	.4545050	4.891357
#1	.9588151	.7587599	4.079658	4.163622	19.30449	.0403127
#2	.9518898	.7513985	4.057572	4.169719	19.20058	.0365649
#3	.9631759	.7554600	4.073659	4.172861	19.37488	.0382498

Elem	Sr4077
Units	ppm
Avg	.0326411
Stddev	.0003332
%RSD	1.020747
#1	.0330070
#2	.0323552
#3	.0325610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2570.601	58032.93	14135.50	1819.777	4063.109
Stddev	4.718	87.61	26.57	3.405	5.404
%RSD	.1835486	.1509708	.1879976	.1871359	.1329903
#1	2575.027	58061.64	14108.54	1822.012	4068.904
#2	2565.636	57934.56	14136.29	1815.858	4058.208
#3	2571.139	58102.58	14161.67	1821.463	4062.217

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4719-03 Acquired: 11/8/2024 14:59:08 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007237	-.007472	.0110381	.0056547	.0007828	.0510572	.1709893
Stddev	.002685	.002208	.0014865	.0014585	.0011689	.0011472	.0014147
%RSD	37.10526	29.55224	13.46685	25.79362	149.3204	2.246894	.8273804
#1	-.008443	-.006851	.0098293	.0046915	-.000493	.0512764	.1724869
#2	-.009108	-.009924	.0126979	.0049397	.001802	.0520790	.1696753
#3	-.004160	-.005640	.0105872	.0073327	.001040	.0498162	.1708057

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000083	.0005171	82.68160	-.000693	.0037543	.0074139	.4421382
Stddev	.000074	.0000511	.86694	.000041	.0001567	.0001062	.0030408
%RSD	89.05630	9.889738	1.048523	5.943260	4.172790	1.432055	.6877528
#1	-.000114	.0005081	83.47823	-.000658	.0035799	.0073366	.4449954
#2	.000001	.0004710	81.75830	-.000739	.0038832	.0073700	.4389421
#3	-.000135	.0005721	82.80827	-.000684	.0037997	.0075349	.4424771

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3410727	3.609356	.0150878	.0005682	406.4938	.0001363	.1484477
Stddev	.0030914	.033917	.0002283	.0002578	3.6893	.0016994	.0017378
%RSD	.9063817	.9396939	1.513391	45.37417	.9075895	1246.449	1.170660
#1	.3439261	3.642017	.0148324	.0002961	402.7575	.0020716	.1502948
#2	.3377884	3.574309	.0152720	.0005997	406.5898	-.001113	.1468450
#3	.3415036	3.611741	.0151591	.0008089	410.1342	-.000550	.1482035

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.588180	.0227588	.0010205	-.003753	-.000641	3.701280	.0022834
Stddev	.015350	.0008799	.0002727	.001093	.000520	.050957	.0021052
%RSD	.9665073	3.866031	26.71913	29.12145	81.14359	1.376740	92.19651
#1	1.587916	.0235209	.0013314	-.004450	-.000077	3.743694	.0008473
#2	1.572964	.0217959	.0009082	-.004316	-.001102	3.644754	.0013029
#3	1.603660	.0229596	.0008219	-.002494	-.000744	3.715391	.0047001

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4719-03 Acquired: 11/8/2024 14:59:08 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.866318	.0163575	.2843414
Stddev	.006066	.0005858	.0022601
%RSD	.3250241	3.581162	.7948566
#1	1.861474	.0170234	.2865838
#2	1.873122	.0161276	.2820640
#3	1.864358	.0159216	.2843764

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2262.918	52349.81	13159.98	1585.518	3565.894
Stddev	15.199	440.61	105.28	16.685	20.097
%RSD	.6716611	.8416710	.7999873	1.052344	.5635916
#1	2279.193	51935.43	13071.95	1568.396	3586.565
#2	2249.091	52812.65	13276.60	1601.729	3546.424
#3	2260.472	52301.35	13131.40	1586.431	3564.694

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4720-05 Acquired: 11/8/2024 15:03:33 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008783	-.007930	.0253351	.0066674	-.000819	.0807080	.4514766
Stddev	.000664	.000735	.0012483	.0017191	.000416	.0043395	.0031803
%RSD	7.557371	9.261927	4.926963	25.78407	50.84426	5.376786	.7044137
#1	-.008767	-.007105	.0264564	.0070571	-.000387	.0848426	.4479730
#2	-.009455	-.008176	.0255588	.0047869	-.000853	.0761892	.4541811
#3	-.008128	-.008511	.0239901	.0081583	-.001217	.0810923	.4522757

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000132	.0015224	36.48308	.0007612	-.000509	.0118331	.0682359
Stddev	.000072	.0000794	.28858	.0001313	.000168	.0002025	.0014570
%RSD	54.64030	5.214089	.7909846	17.24347	32.88947	1.711393	2.135181
#1	-.000146	.0015213	36.18470	.0006400	-.000702	.0115997	.0698908
#2	-.000196	.0016023	36.76073	.0007431	-.000425	.0119622	.0676704
#3	-.000054	.0014436	36.50382	.0009006	-.000401	.0119375	.0671464

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1035430	1.675604	.0016279	.0006102	427.3164	.0008237	.3406806
Stddev	.0008228	.015220	.0001171	.0001538	1.5719	.0011907	.0021594
%RSD	.7946793	.9083142	7.193011	25.20444	.3678530	144.5511	.6338487
#1	.1026147	1.671677	.0017156	.0004642	427.8034	.0011797	.3414068
#2	.1041827	1.692403	.0014949	.0005957	428.5872	.0017959	.3423833
#3	.1038315	1.662733	.0016731	.0007708	425.5587	-.000504	.3382518

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.221532	.0122585	.0005779	-.002819	.0012812	.5096306	.2057539
Stddev	.013743	.0007542	.0001503	.000586	.0000917	.0007524	.0023904
%RSD	.6186217	6.152809	26.00089	20.80500	7.161341	.1476420	1.161773
#1	2.227550	.0120857	.0006189	-.003403	.0012363	.5096544	.2084881
#2	2.231240	.0116056	.0007035	-.002230	.0012204	.5103708	.2047135
#3	2.205807	.0130841	.0004114	-.002822	.0013867	.5088665	.2040600

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4720-05 Acquired: 11/8/2024 15:03:33 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3591747	.0049579	.1908607
Stddev	.0030295	.0009895	.0009970
%RSD	.8434521	19.95704	.5223684
#1	.3561596	.0053167	.1898390
#2	.3622184	.0038391	.1918310
#3	.3591462	.0057179	.1909121

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2272.479	51903.52	13240.15	1629.742	3590.424
Stddev	7.878	168.03	74.19	10.321	9.816
%RSD	.3466850	.3237335	.5603667	.6333007	.2733857
#1	2264.715	51800.27	13309.29	1618.274	3582.027
#2	2280.467	51812.89	13161.77	1632.667	3601.215
#3	2272.254	52097.41	13249.38	1638.285	3588.031

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4734-01 Acquired: 11/8/2024 15:07:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0479436	-.036739	.3205158	-.064623	.0162213	184.8910	.6192146
Stddev	.0022870	.001983	.0009477	.004193	.0008787	.0531	.0014827
%RSD	4.770166	5.397054	.2956745	6.487717	5.416779	.0287339	.2394552
#1	.0476485	-.038926	.3203364	-.061320	.0167657	184.8459	.6182706
#2	.0503638	-.035059	.3215404	-.069340	.0166906	184.8776	.6209236
#3	.0458184	-.036232	.3196707	-.063208	.0152076	184.9496	.6184496

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091354	.0446217	41.17491	.2752338	.1552126	.3477859	283.3120
Stddev	.0001232	.0004258	.18368	.0061232	.0001956	.0051554	5.7606
%RSD	1.348724	.9542224	.4461040	2.224721	.1260252	1.482344	2.033294
#1	.0092762	.0442245	41.37587	.2807626	.1550019	.3439459	288.2816
#2	.0090829	.0450713	41.13317	.2686527	.1552477	.3536453	276.9981
#3	.0090471	.0445693	41.01569	.2762862	.1553884	.3457666	284.6562

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.670016	39.99759	.2430005	.0022032	14.40393	.7126464	.5937285
Stddev	.012479	.24753	.0005536	.0001869	.21199	.0017415	.0104068
%RSD	.2672096	.6188575	.2278350	8.483181	1.471777	.2443690	1.752782
#1	4.680803	40.26443	.2423764	.0019962	14.53598	.7142791	.6012849
#2	4.672897	39.95285	.2431928	.0022538	14.15940	.7128466	.5818585
#3	4.656349	39.77548	.2434324	.0023596	14.51641	.7108135	.5980420

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.11638	.1827146	.0011842	.0029552	9.186921	7.591823	6.668492
Stddev	.14216	.0067061	.0004801	.0009620	.017454	.150727	.003819
%RSD	1.405289	3.670252	40.54625	32.55237	.1899846	1.985380	.0572643
#1	10.21044	.1875303	.0011956	.0026423	9.201528	7.713327	6.668059
#2	9.95284	.1750553	.0016585	.0040346	9.191643	7.423154	6.664909
#3	10.18586	.1855584	.0006984	.0021886	9.167592	7.638987	6.672509

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4734-01 Acquired: 11/8/2024 15:07:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.180051	.1097765	-.088560
Stddev	.012455	.0010519	.005832
%RSD	.5713343	.9582347	6.585532
#1	2.188676	.1103916	-.093419
#2	2.165771	.1085619	-.082092
#3	2.185705	.1103760	-.090168

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2858.666	66997.71	16299.09	2069.464	3704.271
Stddev	3.636	1171.38	82.12	34.431	4.394
%RSD	.1271802	1.748383	.5038014	1.663778	.1186165
#1	2855.453	66035.59	16213.91	2046.727	3705.816
#2	2857.932	68302.09	16305.61	2109.078	3699.313
#3	2862.612	66655.43	16377.75	2052.587	3707.684

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-01 Acquired: 11/8/2024 15:12:21 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000131	-.002848	.0324854	-.000015	.0005407	2.080192
Stddev	.002537	.002289	.0001140	.000561	.0008143	.003037
%RSD	1932.808	80.38089	.3508740	3831.946	150.5961	.1459790
#1	-.000294	-.003854	.0324291	-.000480	.0008316	2.079021
#2	.002483	-.000228	.0324106	.000608	.0011695	2.083640
#3	-.002583	-.004462	.0326166	-.000171	-.000379	2.077915

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1098382	.0002090	.0012811	80.67652	.0446186	.0030212
Stddev	.0004388	.0000386	.0000646	.11321	.0003476	.0000873
%RSD	.3994475	18.48679	5.042685	.1403215	.7790086	2.890430
#1	.1093671	.0001936	.0013314	80.54837	.0443574	.0029295
#2	.1099123	.0001804	.0013036	80.76295	.0450131	.0031033
#3	.1102352	.0002529	.0012082	80.71823	.0444853	.0030308

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1583997	9.902372	.2232827	25.15999	.0259702	.0008636
Stddev	.0007983	.078492	.0004498	.01843	.0002602	.0003154
%RSD	.5040052	.7926573	.2014432	.0732475	1.002049	36.52481
#1	.1580719	9.909232	.2228385	25.17801	.0256772	.0009385
#2	.1593098	9.977208	.2237378	25.14118	.0260586	.0005174
#3	.1578175	9.820674	.2232718	25.16077	.0261747	.0011347

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	162.1300	.0056951	.3103842	10.11354	.0753859	.0019562
Stddev	1.7140	.0002959	.0037821	.08491	.0009179	.0001170
%RSD	1.057206	5.195580	1.218523	.8395426	1.217591	5.979468
#1	162.8334	.0057875	.3121923	10.16575	.0744743	.0020338
#2	163.3805	.0059338	.3129228	10.15930	.0763099	.0018217
#3	160.1762	.0053640	.3060374	10.01557	.0753735	.0020133

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-01 Acquired: 11/8/2024 15:12:21 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.001025	.1177291	F 15.48300	1.734826	7.908319	.0199490
Stddev	.000914	.0019096	.09171	.011658	.007602	.0021877
%RSD	89.13783	1.622021	.5923533	.6720004	.0961212	10.96643
#1	-.001802	.1164633	15.50925	1.746058	7.915300	.0217062
#2	-.000018	.1199256	15.55873	1.735636	7.900220	.0174987
#3	-.001255	.1167985	15.38102	1.722784	7.909437	.0206420

Elem	Sr4077
Units	ppm
Avg	.3378492
Stddev	.0005769
%RSD	.1707453
#1	.3375621
#2	.3374723
#3	.3385133

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2358.242	54974.02	13526.27	1694.557	3753.079
Stddev	1.127	439.51	6.45	25.154	3.668
%RSD	.0477933	.7994944	.0476849	1.484382	.0977212
#1	2359.371	54846.27	13531.82	1676.283	3756.002
#2	2357.117	54612.54	13527.79	1684.143	3748.964
#3	2358.240	55463.26	13519.19	1723.245	3754.272

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-02 Acquired: 11/8/2024 15:16:40 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0012980	-.000958	.0286567	-.000618	-.000333	1.725304
Stddev	.0026131	.001283	.0006134	.001389	.001064	.008872
%RSD	201.3115	133.9725	2.140490	224.7925	319.3913	.5142102
#1	-.001538	-.001746	.0293147	-.002163	.000896	1.727698
#2	.003609	-.001650	.0285548	-.000219	-.000969	1.715481
#3	.001823	.000523	.0281007	.000528	-.000926	1.732733

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0941034	.0001635	.0010687	69.98612	.0159920	.0024690
Stddev	.0002789	.0000308	.0000509	.17732	.0002399	.0001128
%RSD	.2963462	18.85081	4.767692	.2533582	1.500366	4.569074
#1	.0941394	.0001987	.0010112	70.07423	.0160000	.0025041
#2	.0943625	.0001510	.0010865	69.78200	.0157482	.0023428
#3	.0938083	.0001409	.0011083	70.10211	.0162279	.0025600

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1867067	8.892849	.2006219	21.28943	.0114995	.0005415
Stddev	.0032410	.136735	.0008295	.06629	.0003063	.0001960
%RSD	1.735859	1.537587	.4134668	.3113823	2.663396	36.18991
#1	.1880256	9.024564	.2011504	21.24617	.0116130	.0003852
#2	.1830143	8.751593	.1996659	21.25637	.0111527	.0004778
#3	.1890803	8.902390	.2010495	21.36575	.0117329	.0007613

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	139.1929	.0040301	.2745589	8.974702	.0657211	.0016715
Stddev	2.0457	.0009525	.0046109	.113373	.0005370	.0001429
%RSD	1.469668	23.63575	1.679402	1.263248	.8171504	8.549613
#1	140.8655	.0049253	.2796557	9.071613	.0660945	.0015183
#2	136.9121	.0030291	.2706772	8.850026	.0651057	.0016951
#3	139.8012	.0041357	.2733438	9.002467	.0659632	.0018012

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-02 Acquired: 11/8/2024 15:16:40 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000926	.1068220	F 13.37327	1.564800	6.802158	.0175420
Stddev	.000612	.0033779	.17328	.024849	.140521	.0013448
%RSD	66.03470	3.162225	1.295716	1.588011	2.065826	7.666166
#1	-.001396	.1106223	13.52045	1.586435	6.893848	.0168942
#2	-.000235	.1041611	13.18229	1.537660	6.640379	.0190881
#3	-.001147	.1056826	13.41706	1.570307	6.872249	.0166438

Elem	Sr4077
Units	ppm
Avg	.2921261
Stddev	.0007346
%RSD	.2514637
#1	.2915233
#2	.2919108
#3	.2929443

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2352.514	54567.85	13596.63	1700.610	3769.493
Stddev	38.788	729.91	48.40	28.262	59.635
%RSD	1.648791	1.337618	.3559784	1.661847	1.582031
#1	2340.422	53905.50	13599.01	1671.466	3741.941
#2	2395.908	55350.40	13643.80	1727.897	3837.921
#3	2321.213	54447.66	13547.08	1702.468	3728.615

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-03 Acquired: 11/8/2024 15:20:59 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0046234	-.001425	.0408882	-.000481	.0007172	2.490488
Stddev	.0017216	.001560	.0005386	.000448	.0009927	.071107
%RSD	37.23620	109.4596	1.317200	93.20023	138.4214	2.855125
#1	.0064953	-.002152	.0411082	-.000997	.0004340	2.566627
#2	.0042670	-.002489	.0412819	-.000255	.0018207	2.425806
#3	.0031079	.000366	.0402745	-.000191	-.000103	2.479030

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1027352	.0002559	.0015213	78.54224	.0075988	.0034624
Stddev	.0023847	.0000195	.0000678	1.22776	.0002474	.0000737
%RSD	2.321191	7.618452	4.458765	1.563179	3.256218	2.129227
#1	.1053208	.0002667	.0014750	79.91220	.0078137	.0035458
#2	.1006222	.0002334	.0014898	77.54134	.0073283	.0034356
#3	.1022625	.0002676	.0015992	78.17320	.0076546	.0034059

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2512160	12.58506	.2744838	19.73189	.0122587	.0008800
Stddev	.0008678	.01994	.0042407	.27059	.0001141	.0002905
%RSD	.3454438	.1584590	1.544968	1.371335	.9304707	33.01455
#1	.2519857	12.59166	.2792038	20.04090	.0121545	.0009666
#2	.2502755	12.56266	.2709949	19.53737	.0122411	.0005561
#3	.2513868	12.60087	.2732526	19.61739	.0123806	.0011175

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	128.3576	.0074130	.6388641	11.13994	.0702133	.0018720
Stddev	.3228	.0010618	.0065634	.11885	.0006582	.0001271
%RSD	.2515212	14.32365	1.027349	1.066880	.9373948	6.788331
#1	128.4374	.0075330	.6314216	11.03600	.0706980	.0017390
#2	128.0023	.0062963	.6438241	11.11430	.0694640	.0019922
#3	128.6330	.0084098	.6413467	11.26951	.0704779	.0018848

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-03 Acquired: 11/8/2024 15:20:59 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0020668	.1618088	F 14.27300	2.164491	6.345214	.0222650
Stddev	.0008387	.0067134	.04101	.009664	.028271	.0001463
%RSD	40.58149	4.148950	.2873274	.4464593	.4455428	.6571201
#1	.0012192	.1690734	14.27917	2.174696	6.364746	.0222810
#2	.0028963	.1558337	14.22926	2.155480	6.312796	.0224026
#3	.0020849	.1605192	14.31058	2.163297	6.358099	.0221113

Elem	Sr4077
Units	ppm
Avg	.3086331
Stddev	.0055111
%RSD	1.785659
#1	.3135870
#2	.3026968
#3	.3096154

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2305.142	53773.05	13663.22	1630.752	3731.270
Stddev	7.810	560.49	142.19	17.520	9.045
%RSD	.3387954	1.042328	1.040695	1.074329	.2424236
#1	2312.170	54417.15	13516.67	1650.975	3737.352
#2	2306.522	53505.80	13800.61	1621.104	3735.582
#3	2296.735	53396.20	13672.39	1620.177	3720.875

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-04 Acquired: 11/8/2024 15:25:16 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0033870	-.003942	.0520968	-.000608	.0000716	3.295732
Stddev	.0006458	.000761	.0009407	.001167	.0011777	.020454
%RSD	19.06701	19.31340	1.805766	191.9926	1643.908	.6206189
#1	.0031194	-.003744	.0531765	-.001424	-.001007	3.305642
#2	.0029181	-.004783	.0516600	-.001128	.001328	3.309343
#3	.0041236	-.003300	.0514538	.000729	-.000106	3.272210

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1192822	.0002812	.0020031	90.11028	.0127457	.0045840
Stddev	.0006615	.0000197	.0000700	.84830	.0006096	.0002034
%RSD	.5545577	6.989198	3.495288	.9414049	4.783097	4.438068
#1	.1186067	.0002959	.0020636	89.84944	.0123719	.0047988
#2	.1199287	.0002888	.0020192	91.05837	.0124161	.0045589
#3	.1193110	.0002589	.0019264	89.42302	.0134492	.0043942

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2520564	14.87777	.3287145	21.86279	.0378593	.0007880
Stddev	.0009832	.09260	.0031785	.21393	.0002303	.0001301
%RSD	.3900676	.6223803	.9669488	.9785132	.6084433	16.51023
#1	.2519823	14.98117	.3267775	21.83575	.0381061	.0008133
#2	.2511124	14.80251	.3323828	22.08896	.0378221	.0009037
#3	.2530746	14.84963	.3269833	21.66367	.0376499	.0006471

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	141.5533	.0085606	.4311885	13.10098	.0805985	.0021975
Stddev	1.7095	.0015019	.0053021	.15421	.0005675	.0001184
%RSD	1.207656	17.54379	1.229648	1.177068	.7041372	5.385653
#1	143.4835	.0069052	.4367947	13.26372	.0807226	.0021214
#2	140.2304	.0089406	.4262546	12.95702	.0810936	.0023338
#3	140.9460	.0098359	.4305162	13.08220	.0799791	.0021371

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4757-04 Acquired: 11/8/2024 15:25:16 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0077845	.1690777	F 16.23801	2.588116	6.882079	.0261297
Stddev	.0006893	.0022917	.12331	.005422	.027288	.0007958
%RSD	8.855006	1.355396	.7593840	.2094926	.3965049	3.045499
#1	.0080774	.1697619	16.38024	2.582317	6.910347	.0266485
#2	.0082789	.1709493	16.16114	2.588972	6.879998	.0252135
#3	.0069971	.1665218	16.17264	2.593059	6.855891	.0265271

Elem	Sr4077
Units	ppm
Avg	.3532416
Stddev	.0025485
%RSD	.7214623
#1	.3524707
#2	.3560866
#3	.3511676

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2294.454	53679.19	13744.88	1614.028	3688.585
Stddev	5.326	492.49	78.27	22.256	7.400
%RSD	.2321319	.9174781	.5694414	1.378891	.2006058
#1	2300.573	53160.80	13761.66	1588.332	3692.026
#2	2291.930	54140.88	13659.58	1627.198	3693.637
#3	2290.859	53735.89	13813.40	1626.553	3680.092

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV02 Acquired: 11/8/2024 15:29:35 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.951378	5.013272	4.803684	5.082521	5.061170	9.832743	9.463857
Stddev	.019151	.039634	.022810	.019138	.016149	.018476	.053442
%RSD	.3867808	.7905731	.4748341	.3765409	.3190743	.1879028	.5646918
#1	4.972824	5.041669	4.829500	5.102733	5.072360	9.816980	9.476360
#2	4.935985	5.030156	4.786256	5.064678	5.042657	9.828175	9.405272
#3	4.945325	4.967993	4.795297	5.080153	5.068494	9.853075	9.509938

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2309063	2.362151	23.30884	.9184684	2.388756	1.257691	4.783235
Stddev	.0022454	.010316	.09903	.0044919	.009494	.004073	.011555
%RSD	.9724057	.4367132	.4248592	.4890629	.3974554	.3238518	.2415719
#1	.2332129	2.374049	23.39102	.9224875	2.399660	1.262081	4.769981
#2	.2287277	2.355706	23.19889	.9136194	2.382319	1.254035	4.788534
#3	.2307783	2.356698	23.33660	.9192983	2.384290	1.256956	4.791191

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.284395	23.38891	2.390306	1.227377	24.51941	2.391063	2.521324
Stddev	.009771	.13563	.011112	.002656	.05756	.007805	.010691
%RSD	.4277108	.5798707	.4648863	.2163758	.2347542	.3264043	.4240092
#1	2.290725	23.50848	2.403137	1.230419	24.48652	2.397122	2.532360
#2	2.273142	23.24153	2.384001	1.225519	24.58587	2.382256	2.520597
#3	2.289317	23.41671	2.383781	1.226192	24.48584	2.393811	2.511016

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.13619	4.635080	4.989933	4.738543	4.699186	4.926961	4.871345
Stddev	.07349	.035747	.011816	.020461	.009771	.047635	.014331
%RSD	.2923858	.7712302	.2367981	.4317889	.2079240	.9668144	.2941884
#1	25.05166	4.672381	5.003386	4.761011	4.706596	4.873479	4.865680
#2	25.17199	4.601121	4.981237	4.733633	4.688113	4.964827	4.860713
#3	25.18493	4.631739	4.985175	4.720984	4.702849	4.942578	4.887643

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV02 Acquired: 11/8/2024 15:29:35 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.695797	4.639142	4.835593
Stddev	.030166	.006272	.018118
%RSD	.6424097	.1352016	.3746889
#1	4.728404	4.638134	4.856403
#2	4.690106	4.633435	4.827055
#3	4.668882	4.645858	4.823322

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2414.964	54627.21	13430.54	1708.758	3864.469
Stddev	6.745	52.61	75.43	6.684	10.667
%RSD	.2793044	.0963152	.5615954	.3911851	.2760390
#1	2411.375	54593.33	13350.01	1707.425	3855.208
#2	2422.745	54600.48	13499.53	1702.840	3876.133
#3	2410.772	54687.82	13442.08	1716.008	3862.066

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB02 Acquired: 11/8/2024 15:33:46 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000769	.0004390	-.000755	.0007197	-.000321	.0090078	-.004672
Stddev	.001346	.0009271	.000201	.0007097	.000133	.0018121	.000337
%RSD	175.0276	211.2119	26.56015	98.61471	41.58285	20.11699	7.209662
#1	-.001272	.0014794	-.000554	-.000086	-.000195	.0069701	-.005044
#2	-.001791	.0001369	-.000955	.000992	-.000460	.0104385	-.004586
#3	.000756	-.000299	-.000757	.001253	-.000307	.0096147	-.004387

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000026	-.000010	-.003956	.0000501	.0000151	-.000145	.0012371
Stddev	.0000681	.000039	.001917	.0003225	.0001787	.000140	.0008327
%RSD	2603.226	389.8077	48.46177	644.1499	1186.995	96.86841	67.31132
#1	.0000353	.000032	-.003491	-.000298	-.000157	-.000022	.0004936
#2	.0000483	-.000045	-.002314	.000340	.000002	-.000114	.0021368
#3	-.000076	-.000016	-.006062	.000108	.000200	-.000298	.0010808

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000148	.0032960	.0000718	.0006178	-.082820	-.000273	.0002430
Stddev	.000082	.0065118	.0002314	.0001966	.011532	.000482	.0001377
%RSD	55.29369	197.5688	322.3565	31.81942	13.92457	176.5076	56.66809
#1	-.000146	.0051803	.0003161	.0003925	-.091582	.000177	.0000843
#2	-.000067	-.003950	-.000144	.0007072	-.087125	-.000781	.0003141
#3	-.000230	.008658	.000043	.0007539	-.069755	-.000215	.0003306

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.013476	.0037598	.0001357	-.000296	.0002930	-.002339	-.001550
Stddev	.010878	.0002583	.0002111	.000507	.0004160	.002709	.001231
%RSD	80.71595	6.870399	155.5682	170.8858	141.9568	115.8171	79.44142
#1	-.023100	.0040511	-.000077	.000257	.0006997	.000596	-.001839
#2	-.015655	.0036694	.000345	-.000736	.0003110	-.004745	-.000200
#3	-.001674	.0035588	.000138	-.000410	-.000132	-.002869	-.002610

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB02 Acquired: 11/8/2024 15:33:46 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000460	-.001413	.0000786
Stddev	.001799	.001041	.0000032
%RSD	390.9034	73.67870	4.059811
#1	-.001025	-.000729	.0000801
#2	-.001910	-.000899	.0000749
#3	.001554	-.002612	.0000807

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2604.302	58311.26	13676.06	1833.894	4484.493
Stddev	4.922	72.92	30.10	7.447	4.509
%RSD	.1889896	.1250487	.2201088	.4060815	.1005569
#1	2604.287	58271.09	13659.99	1825.785	4488.140
#2	2609.231	58395.43	13657.40	1835.472	4485.889
#3	2599.387	58267.26	13710.79	1840.426	4479.451

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03 Acquired: 11/8/2024 15:39:50 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007759	-.009968	.0007876	.0033828	-.000538	.0124226	.2808712
Stddev	.000281	.003704	.0007150	.0016343	.000891	.0060424	.0014595
%RSD	3.627285	37.16029	90.78780	48.31132	165.6271	48.64039	.5196287
#1	-.008060	-.013853	.0012507	.0021236	.000070	.0105390	.2795557
#2	-.007502	-.009574	-.000036	.0052296	-.000123	.0191824	.2806166
#3	-.007715	-.006477	.001148	.0027952	-.001561	.0075464	.2824412

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000071	.0003617	64.03450	.0012251	.0018337	.0062228	2.967572
Stddev	.000045	.0000773	.17634	.0004609	.0000745	.0004763	.011586
%RSD	63.58647	21.37312	.2753884	37.61952	4.062351	7.653582	.3904058
#1	-.000123	.0002766	63.84629	.0014240	.0018695	.0058383	2.957939
#2	-.000046	.0004277	64.19591	.0006982	.0017480	.0060744	2.980428
#3	-.000044	.0003807	64.06129	.0015531	.0018835	.0067555	2.964348

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.170345	10.81725	.0023221	.0004159	403.7092	-.000282	.0400427
Stddev	.012248	.06362	.0003016	.0000051	1.0257	.000656	.0004766
%RSD	.5643384	.5881065	12.98753	1.222165	.2540603	232.9533	1.190314
#1	2.157132	10.74633	.0026522	.0004204	402.6054	-.000510	.0404478
#2	2.172585	10.86928	.0022532	.0004104	403.8894	-.000793	.0401629
#3	2.181319	10.83615	.0020609	.0004169	404.6329	.000458	.0395175

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.758408	.0279065	.0003505	-.003692	-.000276	.4603098	-.000456
Stddev	.007335	.0004613	.0001113	.000430	.000301	.0016171	.003027
%RSD	.1951668	1.652895	31.76004	11.64836	109.2143	.3513011	664.4353
#1	3.765506	.0283731	.0002269	-.004154	-.000432	.4609235	-.003317
#2	3.750857	.0278955	.0003817	-.003621	-.000466	.4615302	.002714
#3	3.758860	.0274508	.0004430	-.003302	.000071	.4584757	-.000763

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03 Acquired: 11/8/2024 15:39:50 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4355264	.0111451	.1364014
Stddev	.0022213	.0012844	.0007139
%RSD	.5100270	11.52428	.5234127
#1	.4335148	.0125804	.1356256
#2	.4351540	.0101040	.1365478
#3	.4379103	.0107509	.1370308

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2271.638	52495.50	13436.92	1635.156	3558.819
Stddev	23.554	49.91	26.85	7.112	34.025
%RSD	1.036882	.0950712	.1998246	.4349361	.9560874
#1	2278.231	52482.78	13467.70	1636.550	3570.881
#2	2291.193	52453.18	13424.76	1641.467	3585.170
#3	2245.489	52550.54	13418.30	1627.450	3520.405

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03DUP Acquired: 11/8/2024 15:44:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006456	-.009952	.0005043	.0051473	-.000413	.0108885	.2741272
Stddev	.000442	.001058	.0011220	.0013786	.000915	.0065073	.0030135
%RSD	6.839806	10.63264	222.4659	26.78412	221.4338	59.76273	1.099322
#1	-.006270	-.010406	.0003273	.0062817	-.000271	.0044275	.2729094
#2	-.006960	-.010707	-.000519	.0055472	.000423	.0107969	.2719131
#3	-.006138	-.008743	.001704	.0036128	-.001391	.0174411	.2775590

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000098	.0003570	62.68699	.0012028	.0016259	.0059979	2.978253
Stddev	.000043	.0000212	.57870	.0002907	.0001551	.0002035	.006102
%RSD	43.46793	5.946475	.9231587	24.17121	9.538331	3.392735	.2048995
#1	-.000054	.0003503	62.66662	.0012207	.0015110	.0057671	2.984618
#2	-.000139	.0003808	62.11875	.0014842	.0018023	.0061515	2.977691
#3	-.000101	.0003399	63.27561	.0009035	.0015644	.0060751	2.972452

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.126076	10.61963	.0026251	.0005364	405.6032	.0008956	.0402921
Stddev	.020549	.08629	.0002196	.0003037	2.9870	.0007319	.0002506
%RSD	.9665049	.8125402	8.365416	56.62978	.7364317	81.72308	.6219326
#1	2.128468	10.61672	.0027180	.0004254	408.9126	.0003617	.0405295
#2	2.104437	10.53484	.0023743	.0003037	403.1070	.0005952	.0400302
#3	2.145325	10.70735	.0027829	.0008800	404.7900	.0017300	.0403167

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.862095	.0269340	.0008193	-.004147	.0003464	.4676250	.0016718
Stddev	.020491	.0004783	.0000878	.000703	.0005904	.0022925	.0032576
%RSD	.5305784	1.775846	10.72278	16.96279	170.4733	.4902453	194.8486
#1	3.857837	.0264018	.0008255	-.003397	-.000242	.4691294	.0054318
#2	3.844067	.0270723	.0007285	-.004792	.000343	.4687590	-.000303
#3	3.884381	.0273279	.0009039	-.004252	.000939	.4649865	-.000114

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03DUP Acquired: 11/8/2024 15:44:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4413680	.0120877	.1338466
Stddev	.0021468	.0005650	.0015136
%RSD	.4863896	4.673970	1.130844
#1	.4438285	.0124896	.1332605
#2	.4403982	.0114417	.1327137
#3	.4398772	.0123317	.1355656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2214.581	51418.81	13634.49	1577.176	3486.270
Stddev	7.082	258.85	85.81	16.690	4.907
%RSD	.3197851	.5034237	.6293568	1.058203	.1407551
#1	2221.970	51121.36	13610.14	1559.662	3490.557
#2	2213.920	51542.09	13729.85	1578.969	3487.334
#3	2207.853	51592.98	13563.50	1592.896	3480.918

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03LX5 Acquired: 11/8/2024 15:48:39 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003659	-.001540	-.000079	.0031170	-.000971	.0078208	.0523918
Stddev	.002112	.001109	.000809	.0007517	.000791	.0018711	.0002861
%RSD	57.71934	72.06076	1029.265	24.11695	81.41601	23.92499	.5460545
#1	-.003384	-.001115	-.000795	.0022561	-.000719	.0089299	.0522717
#2	-.001698	-.002799	-.000240	.0034511	-.000338	.0056605	.0527183
#3	-.005896	-.000705	.000799	.0036437	-.001857	.0088720	.0521853

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000219	.0000214	13.06972	.0001917	.0003220	.0010707	.5729582
Stddev	.0000219	.0000373	.09727	.0001977	.0001277	.0000612	.0052227
%RSD	99.89959	174.5005	.7442575	103.1773	39.65250	5.719658	.9115282
#1	.0000454	-.000017	12.96186	.0002427	.0004298	.0010628	.5682142
#2	.0000020	.000023	13.15078	-.000027	.0003552	.0011355	.5721059
#3	.0000183	.000058	13.09653	.000359	.0001810	.0010138	.5785546

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4481148	2.218014	.0005954	.0006563	72.82307	.0005079	.0078109
Stddev	.0018805	.024300	.0001779	.0001600	.66004	.0005191	.0002540
%RSD	.4196356	1.095567	29.87681	24.38651	.9063676	102.2135	3.251166
#1	.4461552	2.191519	.0007242	.0004797	73.56025	.0006199	.0076734
#2	.4499046	2.239261	.0003924	.0006975	72.62205	-.000058	.0076553
#3	.4482846	2.223263	.0006696	.0007917	72.28690	.000962	.0081040

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7212534	.0049663	.0000483	-.002044	.0001837	.0825760	-.003125
Stddev	.0132256	.0004294	.0000574	.000597	.0002143	.0050315	.002480
%RSD	1.833696	8.645295	118.8880	29.21654	116.6422	6.093200	79.35944
#1	.7300595	.0051786	.0001126	-.002160	.0001482	.0796734	-.000610
#2	.7276558	.0052482	.0000022	-.001397	-.000011	.0883859	-.005569
#3	.7060450	.0044722	.0000301	-.002574	.000414	.0796688	-.003197

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03LX5 Acquired: 11/8/2024 15:48:39 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0844386	.0018082	.0274184
Stddev	.0048864	.0003441	.0001387
%RSD	5.786899	19.03332	.5058451
#1	.0806654	.0014653	.0275680
#2	.0899582	.0018055	.0273930
#3	.0826922	.0021536	.0272941

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2484.511	56159.34	13821.69	1735.753	4056.114
Stddev	2.536	136.06	37.62	8.234	3.030
%RSD	.1020798	.2422709	.2721938	.4743625	.0747029
#1	2487.207	56044.57	13858.94	1733.774	4059.075
#2	2484.154	56123.83	13783.71	1728.689	4053.019
#3	2482.173	56309.64	13822.42	1744.796	4056.249

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03MS Acquired: 11/8/2024 15:52:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1413668	.3354971	.1606272	.3691145	.0635238	.0427315	.2779412
Stddev	.1205551	.2550674	.1306214	.2872471	.0583586	.0179090	.0039674
%RSD	85.27824	76.02672	81.31959	77.82058	91.86897	41.91041	1.427419
#1	.0327116	.1035331	.0423993	.1100143	.0126831	.0629212	.2816830
#2	.1203348	.2943043	.1386327	.3193293	.0506408	.0365116	.2783593
#3	.2710540	.6086539	.3008495	.6780000	.1272475	.0287618	.2737813

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016872	.0333572	62.81910	.0043372	.0353145	.0569336	2.972936
Stddev	.0004616	.0275662	.44761	.0006374	.0279598	.0423908	.030479
%RSD	27.35707	82.63938	.7125431	14.69710	79.17371	74.45646	1.025211
#1	.0013668	.0083813	63.18538	.0039094	.0099653	.0185409	3.006722
#2	.0014787	.0287558	62.95177	.0040323	.0306740	.0498340	2.947507
#3	.0022163	.0629345	62.32015	.0050698	.0653042	.1024259	2.964580

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.123727	10.67463	.0852350	.0019443	397.0798	.0050230	.0411016
Stddev	.020956	.10315	.0694358	.0003403	.2860	.0022279	.0008481
%RSD	.9867501	.9663544	81.46398	17.50486	.0720237	44.35372	2.063360
#1	2.138954	10.77146	.0223485	.0015531	397.1360	.0074762	.0413990
#2	2.132399	10.68630	.0736051	.0021072	396.7699	.0044668	.0401448
#3	2.099827	10.56614	.1597514	.0021725	397.3336	.0031259	.0417609

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.968327	.0299348	.0310821	.0415382	.0023004	.4644606	1.074099
Stddev	.083684	.0001440	.0289888	.0451128	.0015145	.0058415	.885398
%RSD	2.108810	.4808682	93.26546	108.6057	65.83497	1.257690	82.43174
#1	4.064310	.0297697	.0062001	.0037038	.0037914	.4699460	.275990
#2	3.930009	.0300003	.0241319	.0294459	.0023463	.4651172	.919801
#3	3.910662	.0300342	.0629142	.0914648	.0007635	.4583185	2.026504

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03MS Acquired: 11/8/2024 15:52:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4332820	.0159113	.1369663
Stddev	.0048525	.0020596	.0029975
%RSD	1.119951	12.94430	2.188513
#1	.4297946	.0170436	.1398923
#2	.4312277	.0135340	.1371044
#3	.4388239	.0171564	.1339021

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2283.205	52503.54	13593.82	1623.216	3567.589
Stddev	6.479	303.30	100.57	10.995	7.880
%RSD	.2837732	.5776682	.7398496	.6773465	.2208877
#1	2280.786	52196.93	13504.69	1616.994	3569.690
#2	2278.283	52803.41	13573.92	1635.911	3558.871
#3	2290.545	52510.28	13702.86	1616.743	3574.206

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03MSD Acquired: 11/8/2024 15:57:24 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3961133	.8501989	.4382423	.9651935	.2460705	.0886024	.2909568
Stddev	.1927068	.3865036	.2095850	.4536587	.1238150	.0159074	.0013394
%RSD	48.64940	45.46037	47.82402	47.00184	50.31689	17.95369	.4603450
#1	.2039940	.4635515	.2302686	.5158191	.1259394	.1063370	.2924787
#2	.3949438	.8504868	.4350559	.9567429	.2390052	.0755927	.2904346
#3	.5894021	1.236558	.6494024	1.423018	.3732668	.0838776	.2899572

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0154339	.0918304	64.47508	.0322885	.0948446	.1473089	3.122275
Stddev	.0057114	.0440027	.16065	.0115947	.0451948	.0678798	.029851
%RSD	37.00582	47.91738	.2491720	35.90964	47.65145	46.07989	.9560667
#1	.0100918	.0478900	64.42846	.0213014	.0498589	.0796527	3.156546
#2	.0147556	.0917060	64.34289	.0311563	.0944293	.1468639	3.101943
#3	.0214541	.1358951	64.65389	.0444077	.1402456	.2154101	3.108336

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.185377	10.99855	.2338709	.0085010	409.4711	.0136442	.0575398
Stddev	.010256	.02504	.1115717	.0026266	2.1530	.0014349	.0059967
%RSD	.4693138	.2277011	47.70656	30.89736	.5257911	10.51647	10.42186
#1	2.183910	10.98796	.1224922	.0058760	408.2216	.0152906	.0518322
#2	2.175933	10.98053	.2334857	.0084979	411.9571	.0126605	.0569985
#3	2.196287	11.02714	.3456347	.0111292	408.2346	.0129814	.0637889

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.345317	.0496633	.1222690	.1862308	.0063039	.4897676	2.985653
Stddev	.044828	.0075459	.0617569	.0976679	.0015041	.0088650	1.433716
%RSD	1.031628	15.19417	50.50909	52.44456	23.85995	1.810047	48.02020
#1	4.383352	.0424811	.0623282	.0921800	.0079621	.4999585	1.554812
#2	4.295894	.0489821	.1187841	.1793596	.0059223	.4855077	2.979920
#3	4.356706	.0575268	.1856945	.2871529	.0050273	.4838366	4.422227

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03MSD Acquired: 11/8/2024 15:57:24 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4357237	.0195619	.1450026
Stddev	.0030451	.0003144	.0012426
%RSD	.6988696	1.607108	.8569329
#1	.4365486	.0198689	.1464315
#2	.4323511	.0195763	.1441748
#3	.4382714	.0192406	.1444016

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2252.050	51856.07	13374.04	1617.869	3512.189
Stddev	2.200	174.48	20.06	3.987	12.599
%RSD	.0976822	.3364644	.1500140	.2464600	.3587241
#1	2253.997	51837.26	13385.54	1614.159	3525.510
#2	2249.664	51691.76	13350.88	1617.362	3500.464
#3	2252.489	52039.19	13385.71	1622.086	3510.592

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03A Acquired: 11/8/2024 16:01:47 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0536679	.1866828	.0650718	.1708692	.0416122	.0534480	.2837427
Stddev	.0581136	.1698234	.0652261	.1580360	.0366023	.0259555	.0016097
%RSD	108.2837	90.96898	100.2373	92.48944	87.96047	48.56203	.5673198
#1	.0088211	.0472720	.0144131	.0463360	.0125676	.0740266	.2855064
#2	.0328621	.1369585	.0421339	.1176197	.0295443	.0620288	.2823527
#3	.1193206	.3758180	.1386683	.3486519	.0827246	.0242888	.2833691

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011842	.0128599	64.12062	.0039125	.0144481	.0251120	3.054415
Stddev	.0001054	.0127891	.35539	.0003210	.0130673	.0198001	.046498
%RSD	8.900087	99.44924	.5542460	8.204980	90.44292	78.84723	1.522332
#1	.0013057	.0031949	63.81992	.0042829	.0046228	.0100375	3.107464
#2	.0011167	.0080228	64.02915	.0037382	.0094436	.0177625	3.035059
#3	.0011303	.0273620	64.51281	.0037163	.0292780	.0475359	3.020721

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.173048	10.90702	.0339790	.0013503	407.9730	.0057642	.0411392
Stddev	.010004	.05073	.0320283	.0001103	.2787	.0045266	.0004776
%RSD	.4603653	.4650819	94.25896	8.169468	.0683175	78.52926	1.160943
#1	2.171191	10.86734	.0097532	.0014493	407.8750	.0098955	.0414101
#2	2.164102	10.88954	.0218919	.0012314	408.2875	.0064715	.0414197
#3	2.183850	10.96417	.0702920	.0013703	407.7565	.0009256	.0405877

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.999067	.0286482	.0201056	.0245413	.0042145	.4788499	.4393250
Stddev	.108032	.0002971	.0182378	.0263322	.0025289	.0129982	.4427277
%RSD	2.701433	1.037111	90.71003	107.2977	60.00430	2.714465	100.7745
#1	4.114482	.0287670	.0062298	.0049622	.0070984	.4914083	.0993462
#2	3.982352	.0288675	.0133244	.0141843	.0031696	.4796891	.2786807
#3	3.900366	.0283101	.0407626	.0544773	.0023755	.4654525	.9399482

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-03A Acquired: 11/8/2024 16:01:47 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4417638	.0166578	.1396938
Stddev	.0016002	.0019302	.0020874
%RSD	.3622341	11.58737	1.494268
#1	.4429463	.0186071	.1420996
#2	.4399429	.0147473	.1386186
#3	.4424020	.0166192	.1383632

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2266.798	51953.86	13432.28	1606.886	3542.616
Stddev	4.405	118.71	33.01	7.255	7.379
%RSD	.1943491	.2284977	.2457648	.4514871	.2082908
#1	2266.734	51821.28	13467.64	1598.688	3547.200
#2	2262.424	51989.98	13426.91	1612.478	3534.104
#3	2271.235	52050.32	13402.27	1609.493	3546.543

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4722-04 Acquired: 11/8/2024 16:06:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006672	-.010378	.2348726	.0030754	.0057095	.1154095	.1983831
Stddev	.001055	.002229	.0011647	.0004660	.0005724	.0059232	.0015791
%RSD	15.80846	21.48097	.4958881	15.15332	10.02493	5.132360	.7959642
#1	-.007770	-.011478	.2360120	.0025463	.0051441	.1222217	.1965601
#2	-.005666	-.011843	.2349215	.0032550	.0056960	.1114739	.1992631
#3	-.006580	-.007812	.2336842	.0034249	.0062886	.1125330	.1993261

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000138	.0019064	181.3179	-.000861	.0043005	.0141424	.2703972
Stddev	.000058	.0000504	1.0984	.000078	.0002120	.0002238	.0009912
%RSD	41.86410	2.642252	.6057925	9.092344	4.929211	1.582505	.3665721
#1	-.000118	.0019071	180.0626	-.000952	.0044356	.0138856	.2710355
#2	-.000093	.0019565	182.1026	-.000817	.0040562	.0142960	.2692553
#3	-.000203	.0018557	181.7885	-.000815	.0044098	.0142455	.2709008

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4036363	3.173410	.0048448	.0001803	412.3553	.0008378	.3992489
Stddev	.0027033	.026605	.0003325	.0002017	3.5688	.0008080	.0035723
%RSD	.6697365	.8383867	6.862199	111.9113	.8654774	96.44722	.8947564
#1	.4010486	3.145347	.0044609	-.000042	416.0873	-.000035	.3999464
#2	.4064420	3.198267	.0050422	.000351	412.0029	.000987	.3953793
#3	.4034185	3.176617	.0050311	.000232	408.9758	.001560	.4024210

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.019557	.0156153	.0035238	.0083561	.0021332	2.862247	.0098778
Stddev	.022814	.0007111	.0004194	.0001023	.0001232	.013085	.0037148
%RSD	1.129637	4.553653	11.90117	1.224606	5.774087	.4571447	37.60790
#1	2.028943	.0149677	.0038543	.0082380	.0022526	2.869387	.0066971
#2	1.993547	.0155019	.0036652	.0084118	.0020065	2.847145	.0089756
#3	2.036180	.0163762	.0030520	.0084185	.0021405	2.870208	.0139606

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4722-04 Acquired: 11/8/2024 16:06:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.324806	.0395441	.6991047
Stddev	.009659	.0012036	.0039965
%RSD	.2905277	3.043770	.5716632
#1	3.325523	.0409046	.6944963
#2	3.314809	.0391099	.7016191
#3	3.334088	.0386178	.7011987

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2192.919	49997.00	13091.67	1539.940	3458.735
Stddev	8.598	227.08	64.23	12.004	14.926
%RSD	.3920784	.4541790	.4906290	.7795025	.4315415
#1	2194.726	49906.90	13159.23	1527.216	3457.521
#2	2183.561	50255.29	13031.39	1551.064	3444.453
#3	2200.469	49828.80	13084.38	1541.539	3474.231

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4722-09 Acquired: 11/8/2024 16:10:37 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007981	-.008014	.1842782	.0051174	.0025883	-.026109	.1484435
Stddev	.002080	.001592	.0002126	.0005171	.0001282	.007708	.0019522
%RSD	26.06585	19.86138	.1153906	10.10396	4.953385	29.52049	1.315127
#1	-.007664	-.009190	.1845227	.0051801	.0027197	-.017610	.1463844
#2	-.010201	-.006203	.1841361	.0045718	.0025816	-.028071	.1486786
#3	-.006077	-.008650	.1841759	.0056002	.0024635	-.032647	.1502675

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000135	.0016478	179.2253	-.001065	.0030142	.0131661	.0175708
Stddev	.000016	.0000467	2.0245	.000323	.0000475	.0000865	.0029261
%RSD	11.87808	2.835189	1.129560	30.31097	1.575366	.6567059	16.65343
#1	-.000154	.0016879	176.9003	-.000873	.0030269	.0132319	.0199739
#2	-.000127	.0016591	180.1770	-.000885	.0029616	.0130681	.0184261
#3	-.000125	.0015965	180.5984	-.001438	.0030540	.0131982	.0143123

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1904068	2.750696	.0026236	.0002611	406.3451	.0000166	.3314349
Stddev	.0015568	.027654	.0002445	.0001453	3.9579	.0007472	.0010442
%RSD	.8176208	1.005352	9.317261	55.63439	.9740352	4511.637	.3150499
#1	.1886870	2.719843	.0029056	.0003954	402.5905	-.000368	.3315574
#2	.1908137	2.773251	.0024714	.0001069	410.4791	-.000460	.3324124
#3	.1917198	2.758994	.0024938	.0002811	405.9658	.000878	.3303348

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.219294	.0141498	.0020240	-.005489	-.002725	2.250472	.0061485
Stddev	.017560	.0004728	.0003784	.000942	.000331	.002741	.0016439
%RSD	.7912378	3.341501	18.69679	17.16550	12.14594	.1217783	26.73579
#1	2.216527	.0136305	.0023678	-.005962	-.003056	2.249520	.0061220
#2	2.203282	.0142635	.0016185	-.006101	-.002394	2.248334	.0078054
#3	2.238073	.0145555	.0020855	-.004404	-.002727	2.253562	.0045181

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4722-09 Acquired: 11/8/2024 16:10:37 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.587940	.0399456	.6129182
Stddev	.005470	.0007082	.0072497
%RSD	.1524582	1.772933	1.182820
#1	3.590965	.0391685	.6050317
#2	3.591230	.0405547	.6144302
#3	3.581625	.0401137	.6192927

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2135.986	49299.05	13175.13	1495.485	3401.796
Stddev	12.103	13.05	113.08	1.010	13.685
%RSD	.5666451	.0264739	.8582862	.0675371	.4022732
#1	2144.466	49284.02	13304.73	1496.316	3412.708
#2	2141.367	49307.55	13124.13	1495.778	3406.238
#3	2122.125	49305.57	13096.53	1494.361	3386.442

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4722-14 Acquired: 11/8/2024 16:15:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.008269	-.008719	.0973884	.0045932	.0005350	.1466788
Stddev	.001050	.001658	.0004506	.0006672	.0003387	.0050995
%RSD	12.69212	19.01195	.4626941	14.52502	63.31378	3.476612
#1	-.008011	-.008919	.0978700	.0038332	.0008090	.1499389
#2	-.007373	-.006970	.0973182	.0048644	.0001563	.1408022
#3	-.009424	-.010267	.0969770	.0050821	.0006396	.1492953

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1187528	-.000100	.0041159	148.6765	-.000469	.0019027
Stddev	.0012287	.000030	.0000691	.8445	.000285	.0000500
%RSD	1.034666	30.13151	1.679954	.5679862	60.74219	2.625473
#1	.1176688	-.000111	.0040701	148.0129	-.000791	.0019563
#2	.1185021	-.000123	.0041954	148.3896	-.000367	.0018944
#3	.1200875	-.000066	.0040820	149.6270	-.000249	.0018575

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0237178	.1914576	.2951443	3.161605	.0092890	.0003441
Stddev	.0003412	.0031223	.0026733	.009326	.0002734	.0001206
%RSD	1.438641	1.630811	.9057571	.2949812	2.942796	35.05150
#1	.0233921	.1881971	.2928292	3.162970	.0093013	.0002679
#2	.0236888	.1917553	.2945337	3.151672	.0095560	.0004832
#3	.0240726	.1944204	.2980701	3.170174	.0090097	.0002813

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	445.5944	.0010785	.2487376	2.385005	.0172009	.0018706
Stddev	5.1856	.0010348	.0006140	.019462	.0000380	.0002131
%RSD	1.163757	95.94228	.2468535	.8160078	.2207127	11.39244
#1	451.5714	.0022566	.2489583	2.366310	.0171775	.0021158
#2	442.2934	.0003166	.2492107	2.405152	.0172447	.0017294
#3	442.9185	.0006624	.2480437	2.383554	.0171805	.0017667

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4722-14 Acquired: 11/8/2024 16:15:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.005680	.0039292	2.507109	.0211031	F 10.80918	.0320102
Stddev	.000517	.0003519	.006936	.0026026	.01804	.0010150
%RSD	9.105407	8.956932	.2766582	12.33292	.1669094	3.170825
#1	-.005084	.0043004	2.513891	.0238516	10.82299	.0325068
#2	-.005942	.0036004	2.507408	.0207815	10.81578	.0308425
#3	-.006014	.0038867	2.500029	.0186762	10.78877	.0326812

Elem	Sr4077
Units	ppm
Avg	.7124910
Stddev	.0086295
%RSD	1.211172
#1	.7063824
#2	.7087276
#3	.7223631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2174.474	50145.78	13242.11	1514.989	3433.144
Stddev	2.939	174.70	74.21	9.400	6.810
%RSD	.1351604	.3483784	.5604380	.6204347	.1983685
#1	2173.062	50111.69	13290.60	1513.667	3425.694
#2	2177.853	49990.65	13279.06	1506.321	3439.050
#3	2172.507	50335.01	13156.68	1524.980	3434.690

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4732-02 Acquired: 11/8/2024 16:19:26 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008564	-.007734	.0109798	.0064139	.0188431	.1200091	.1174769
Stddev	.002441	.001602	.0001606	.0010563	.0005031	.0060041	.0005462
%RSD	28.49792	20.71438	1.462393	16.46888	2.670091	5.003055	.4649761
#1	-.007167	-.007293	.0107960	.0058643	.0185006	.1148741	.1175635
#2	-.007143	-.006398	.0110925	.0076316	.0194208	.1185426	.1168925
#3	-.011383	-.009510	.0110510	.0057456	.0186080	.1266106	.1179746

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000068	-.000090	12.92294	-.000141	.0013896	.0096713	.0290423
Stddev	.000036	.000042	.05432	.000088	.0001764	.0000500	.0023463
%RSD	53.30289	47.39328	.4203512	62.28538	12.69258	.5173561	8.078757
#1	-.000042	-.000062	12.86173	-.000143	.0011984	.0096141	.0293649
#2	-.000109	-.000068	12.94168	-.000052	.0015459	.0097067	.0312106
#3	-.000051	-.000138	12.96541	-.000228	.0014244	.0096931	.0265515

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0245747	.5676446	.0009476	.0003745	410.7143	-.000116	.1550837
Stddev	.0004352	.0080295	.0002263	.0002112	3.9993	.000907	.0011079
%RSD	1.770867	1.414532	23.87976	56.39578	.9737398	781.3612	.7144014
#1	.0246789	.5640335	.0007562	.0003431	409.7912	.000001	.1546711
#2	.0240968	.5620546	.0008893	.0005996	415.0944	.000727	.1563387
#3	.0249483	.5768456	.0011974	.0001807	407.2572	-.001076	.1542413

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.073832	.0389112	.0009079	-.002886	-.000138	.2821432	.0078815
Stddev	.017931	.0002020	.0001605	.000378	.000230	.0047668	.0010942
%RSD	1.669854	.5190345	17.67461	13.09422	167.0548	1.689500	13.88338
#1	1.077227	.0390751	.0009205	-.003318	.000049	.2874377	.0088310
#2	1.054446	.0386856	.0007415	-.002614	-.000395	.2781926	.0066848
#3	1.089823	.0389729	.0010616	-.002728	-.000068	.2807993	.0081288

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4732-02 Acquired: 11/8/2024 16:19:26 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.7838916	.0026756	.0793841
Stddev	.0042012	.0005768	.0003534
%RSD	.5359403	21.55721	.4451784
#1	.7838205	.0021298	.0792084
#2	.7881279	.0032790	.0791530
#3	.7797265	.0026181	.0797909

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2251.012	51882.14	13385.92	1601.853	3590.874
Stddev	5.333	29.52	15.74	1.788	8.866
%RSD	.2369112	.0568964	.1176106	.1116146	.2468968
#1	2247.403	51915.96	13395.46	1600.384	3581.656
#2	2257.137	51861.55	13394.55	1601.331	3599.339
#3	2248.494	51868.92	13367.75	1603.844	3591.627

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV03 Acquired: 11/8/2024 16:23:53 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.983006	5.141580	4.844179	5.127576	5.110164	9.930927	9.613988
Stddev	.005119	.067688	.011360	.008215	.008771	.010200	.061277
%RSD	.1027365	1.316482	.2345133	.1602056	.1716457	.1027054	.6373696
#1	4.978450	5.217674	4.841818	5.136207	5.100368	9.927364	9.651832
#2	4.982022	5.118991	4.834185	5.119853	5.112837	9.942430	9.543291
#3	4.988546	5.088075	4.856534	5.126666	5.117289	9.922987	9.646841

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2341800	2.382947	23.58227	.9299697	2.411664	1.267812	4.879000
Stddev	.0002613	.001790	.06399	.0016626	.002239	.000850	.016371
%RSD	.1115694	.0751075	.2713510	.1787852	.0928391	.0670790	.3355476
#1	.2341831	2.381263	23.55614	.9289517	2.409391	1.267222	4.860292
#2	.2344398	2.382751	23.65520	.9318883	2.411734	1.267426	4.890705
#3	.2339172	2.384827	23.53549	.9290690	2.413868	1.268787	4.886004

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.390952	23.68473	2.412333	1.248813	25.08002	2.417251	2.556003
Stddev	.007136	.11654	.003134	.001598	.11431	.010878	.005925
%RSD	.2984475	.4920675	.1298984	.1279882	.4557935	.4500162	.2318050
#1	2.391649	23.59632	2.409075	1.248772	25.20431	2.411275	2.556421
#2	2.397714	23.81680	2.412598	1.250431	25.05637	2.429807	2.561707
#3	2.383493	23.64107	2.415326	1.247235	24.97938	2.410670	2.549880

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.61211	4.690146	5.047633	4.772787	4.747804	5.001376	4.916936
Stddev	.04947	.007174	.004337	.003867	.012257	.042474	.011895
%RSD	.1931610	.1529490	.0859222	.0810266	.2581619	.8492543	.2419140
#1	25.56873	4.692198	5.051095	4.774447	4.750104	4.952671	4.929514
#2	25.60161	4.696070	5.042768	4.775547	4.758748	5.030723	4.915426
#3	25.66599	4.682170	5.049035	4.768367	4.734560	5.020733	4.905868

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV03 Acquired: 11/8/2024 16:23:53 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.735586	4.686788	4.900711
Stddev	.004987	.011502	.038376
%RSD	.1053107	.2454159	.7830677
#1	4.736215	4.699864	4.907525
#2	4.740228	4.678233	4.859384
#3	4.730314	4.682266	4.935223

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2438.377	54599.74	13519.50	1711.192	3900.808
Stddev	3.548	122.86	50.83	6.617	4.192
%RSD	.1455111	.2250175	.3759962	.3866620	.1074660
#1	2435.690	54546.74	13482.74	1707.654	3898.433
#2	2442.399	54512.28	13498.25	1707.096	3905.648
#3	2437.043	54740.20	13577.51	1718.825	3898.342

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB03 Acquired: 11/8/2024 16:28:05 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000776	-.000371	-.000410	.0023705	.0000697	.0040354	-.004181
Stddev	.001907	.001978	.001048	.0010538	.0008357	.0026507	.000254
%RSD	245.7142	532.8152	255.9346	44.45253	1198.832	65.68500	6.064940
#1	-.001955	.000646	-.001593	.0028249	-.000430	.0012658	-.004462
#2	.001424	-.002650	-.000039	.0011658	.001034	.0042920	-.003968
#3	-.001797	.000891	.000403	.0031209	-.000395	.0065484	-.004114

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000503	-.000009	-.000937	.0000971	.0000029	-.000244	-.001179
Stddev	.0000207	.000045	.005530	.0002629	.0001002	.000212	.002135
%RSD	41.22271	523.4946	589.9388	270.8975	3429.871	86.60154	181.0352
#1	.0000600	.000043	-.004078	.0001086	-.000112	-.000340	.001252
#2	.0000644	-.000033	.005448	-.000171	.000051	-.000002	-.002041
#3	.0000265	-.000036	-.004183	.000354	.000070	-.000391	-.002748

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000211	-.004102	.0000020	.0006911	.1418112	-.000307	.0000970
Stddev	.000210	.005836	.0000633	.0002031	.0106294	.000547	.0000637
%RSD	99.93789	142.2674	3200.847	29.38299	7.495464	178.3824	65.62697
#1	-.000069	-.007053	.0000685	.0006014	.1295565	-.000697	.0000529
#2	-.000110	.002620	-.000005	.0005483	.1473457	-.000541	.0000681
#3	-.000452	-.007874	-.000058	.0009235	.1485314	.000318	.0001700

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0433529	.0030010	.0003007	.0001022	.0003558	-.002272	-.003496
Stddev	.0089947	.0003540	.0001468	.0009996	.0000714	.002576	.001415
%RSD	20.74771	11.79711	48.82331	977.6360	20.07537	113.4126	40.47415
#1	.0460023	.0033668	.0004666	.0005933	.0002869	-.000386	-.003088
#2	.0333310	.0029760	.0001876	.0007612	.0003508	-.005207	-.002330
#3	.0507253	.0026601	.0002479	-.001048	.0004295	-.001221	-.005070

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB03 Acquired: 11/8/2024 16:28:05 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003431	-.001212	.0000476
Stddev	.003286	.001061	.0000286
%RSD	95.77668	87.54643	59.94383
#1	-.001632	-.002227	.0000396
#2	-.001438	-.001299	.0000794
#3	-.007224	-.000110	.0000240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2564.128	58201.22	13462.94	1820.149	4394.196
Stddev	5.214	146.86	17.97	14.712	7.698
%RSD	.2033323	.2523349	.1334898	.8082938	.1751923
#1	2566.106	58038.21	13481.18	1803.701	4391.322
#2	2568.064	58323.21	13462.38	1832.055	4402.917
#3	2558.215	58242.23	13445.25	1824.690	4388.347

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4738-02 Acquired: 11/8/2024 16:32:25 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004217	-.005472	.0483003	.0028456	-.000855	.6002101	.2554351
Stddev	.002288	.000896	.0004863	.0016720	.000455	.0009278	.0005232
%RSD	54.24636	16.38148	1.006936	58.75731	53.26144	.1545777	.2048250
#1	-.002041	-.005748	.0484612	.0047672	-.001369	.6012514	.2559991
#2	-.004008	-.006197	.0486858	.0017226	-.000692	.5994713	.2549657
#3	-.006602	-.004470	.0477539	.0020470	-.000503	.5999076	.2553404

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000211	-.000056	1.149504	-.000680	.0060742	.0349568	.5442088
Stddev	.0000242	.000030	.004346	.000464	.0001824	.0001465	.0129110
%RSD	114.6299	52.88823	.3780842	68.24211	3.002773	.4191566	2.372441
#1	.0000015	-.000026	1.154036	-.000834	.0062512	.0348235	.5591056
#2	.0000137	-.000085	1.145372	-.000158	.0060845	.0349331	.5372693
#3	.0000481	-.000058	1.149105	-.001046	.0058868	.0351137	.5362515

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0514861	.3270506	.0009050	.0002560	475.0999	.0012339	.2272937
Stddev	.0001086	.0030840	.0002632	.0000986	3.7583	.0007093	.0006245
%RSD	.2108459	.9429810	29.08358	38.52620	.7910650	57.48307	.2747623
#1	.0515677	.3265388	.0006087	.0001422	478.7126	.0020118	.2265765
#2	.0515278	.3303586	.0011118	.0003082	471.2112	.0006231	.2277174
#3	.0513629	.3242546	.0009946	.0003175	475.3760	.0010668	.2275872

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6583916	.0862013	.0010870	.0032536	.0044054	.5330043	.1222963
Stddev	.0118958	.0004021	.0001684	.0005452	.0002678	.0030408	.0044752
%RSD	1.806802	.4664762	15.48716	16.75611	6.078698	.5704977	3.659328
#1	.6582346	.0860387	.0011530	.0037821	.0046555	.5324172	.1235790
#2	.6465751	.0866593	.0012123	.0032855	.0041229	.5302998	.1259902
#3	.6703652	.0859061	.0008957	.0026931	.0044377	.5362958	.1173198

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4738-02 Acquired: 11/8/2024 16:32:25 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.105302	.0009075	.0101697
Stddev	.011796	.0006753	.0000310
%RSD	.3798779	74.41529	.3049546
#1	3.116107	.0001283	.0101340
#2	3.107082	.0012716	.0101855
#3	3.092717	.0013227	.0101897

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2342.505	52109.21	12794.65	1674.627	3595.805
Stddev	1.796	140.03	38.05	3.386	2.775
%RSD	.0766881	.2687162	.2974029	.2022011	.0771734
#1	2344.180	51965.38	12829.64	1673.701	3598.872
#2	2340.608	52117.18	12754.14	1678.379	3593.467
#3	2342.726	52245.09	12800.18	1671.800	3595.077

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-04 Acquired: 11/8/2024 16:36:52 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007579	-.009555	.0021510	.0051383	-.000245	.6866099	.1637795
Stddev	.002465	.001314	.0006579	.0011962	.000708	.0028073	.0001519
%RSD	32.52784	13.74720	30.58729	23.28046	289.0269	.4088615	.0927640
#1	-.006211	-.008159	.0019005	.0042797	.000510	.6887100	.1636425
#2	-.006101	-.009739	.0016551	.0065046	-.000895	.6876982	.1639429
#3	-.010425	-.010767	.0028974	.0046305	-.000349	.6834214	.1637531

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001503	.0004491	8.405670	-.000400	.0084274	.0100916	6.961949
Stddev	.0000181	.0000404	.056080	.000255	.0000227	.0000644	.023639
%RSD	12.06860	9.004738	.6671635	63.79719	.2689537	.6379085	.3395478
#1	.0001555	.0004147	8.340915	-.000576	.0084099	.0101003	6.935556
#2	.0001653	.0004936	8.438184	-.000517	.0084193	.0100233	6.969114
#3	.0001301	.0004390	8.437911	-.000107	.0084530	.0101511	6.981177

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6358822	2.156539	.0028360	.0005995	397.1615	.0010860	.0650015
Stddev	.0071432	.024739	.0002200	.0002623	1.1599	.0001535	.0007274
%RSD	1.123353	1.147182	7.755917	43.75372	.2920515	14.13676	1.119111
#1	.6276340	2.130834	.0026070	.0006656	397.9433	.0009169	.0642531
#2	.6399904	2.180184	.0030457	.0008224	395.8288	.0012167	.0650455
#3	.6400223	2.158598	.0028553	.0003105	397.7125	.0011244	.0657060

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.626916	.0200019	.0003866	-.002134	.0193344	1.176795	.0183177
Stddev	.019513	.0005102	.0001066	.000891	.0007624	.001225	.0020242
%RSD	.5380142	2.550702	27.57569	41.75079	3.943251	.1041323	11.05072
#1	3.647677	.0194772	.0002803	-.002309	.0201932	1.176179	.0197887
#2	3.624118	.0204963	.0004935	-.001169	.0190724	1.178206	.0191554
#3	3.608953	.0200322	.0003862	-.002925	.0187374	1.176000	.0160091

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-04 Acquired: 11/8/2024 16:36:52 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9398085	.0017522	.0802308
Stddev	.0045981	.0010227	.0001720
%RSD	.4892559	58.36502	.2143590
#1	.9367368	.0028266	.0800930
#2	.9375940	.0007905	.0804236
#3	.9450948	.0016397	.0801760

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2249.434	51901.13	13482.37	1596.038	3594.718
Stddev	12.760	66.43	45.06	5.884	12.598
%RSD	.5672548	.1279974	.3341944	.3686925	.3504630
#1	2234.700	51824.45	13533.82	1596.896	3580.575
#2	2256.781	51941.18	13450.00	1601.447	3598.844
#3	2256.821	51937.76	13463.28	1589.772	3604.737

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-08 Acquired: 11/8/2024 16:41:18 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001188	-.007310	.0055411	-.001637	.0002910	.1330510	.2413279
Stddev	.002237	.002189	.0010229	.001117	.0008203	.0045375	.0009650
%RSD	188.2621	29.94860	18.45954	68.23419	281.9394	3.410326	.3998498
#1	-.003456	-.006154	.0048373	-.002875	-.000642	.1356810	.2421322
#2	-.001126	-.009835	.0067144	-.001333	.000618	.1278116	.2402579
#3	.001017	-.005941	.0050715	-.000704	.000897	.1356604	.2415935

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003110	.0019934	22.12181	-.000276	.0233662	.0033607	26.76779
Stddev	.0000266	.0000938	.09223	.000240	.0004412	.0004671	.11879
%RSD	8.536617	4.704671	.4169267	86.86155	1.888363	13.89959	.4437835
#1	.0002839	.0019106	22.03905	-.000463	.0228788	.0029458	26.76201
#2	.0003122	.0019743	22.10514	-.000360	.0237383	.0038667	26.65199
#3	.0003370	.0020953	22.22124	-.000006	.0234816	.0032696	26.88936

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.060695	2.172443	.0173715	.0006693	398.1552	.0015920	.0758023
Stddev	.013236	.014094	.0003222	.0000759	3.6170	.0002378	.0006057
%RSD	.3259569	.6487460	1.854911	11.33606	.9084392	14.93948	.7990064
#1	4.048524	2.175897	.0170026	.0006293	402.2906	.0013376	.0753285
#2	4.058774	2.156944	.0175980	.0006218	395.5811	.0018087	.0764847
#3	4.074786	2.184489	.0175139	.0007568	396.5939	.0016298	.0755937

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.988701	.0255143	-.000222	-.004000	.0022418	2.369090	.0089090
Stddev	.014417	.0005271	.000132	.000346	.0001985	.014655	.0017186
%RSD	.7249402	2.065823	59.30755	8.650326	8.855003	.6186108	19.29049
#1	1.997947	.0258446	-.000095	-.004318	.0024479	2.383330	.0101815
#2	1.972089	.0249064	-.000358	-.004049	.0022257	2.354052	.0095914
#3	1.996067	.0257918	-.000214	-.003632	.0020518	2.369888	.0069540

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-08 Acquired: 11/8/2024 16:41:18 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4182396	.0044049	.0987120
Stddev	.0033006	.0008758	.0001183
%RSD	.7891699	19.88310	.1197921
#1	.4144292	.0040452	.0988482
#2	.4200747	.0054033	.0986520
#3	.4202149	.0037662	.0986357

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2330.289	52260.69	13753.85	1631.940	3684.855
Stddev	12.025	190.60	17.65	6.741	21.011
%RSD	.5160113	.3647134	.1282959	.4130736	.5701972
#1	2343.215	52078.99	13770.80	1627.788	3709.113
#2	2328.216	52459.09	13755.18	1628.313	3673.090
#3	2319.435	52243.99	13735.58	1639.718	3672.363

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-12 Acquired: 11/8/2024 16:45:45 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0044315	-.008387	.0802410	.0026148	.0001095	.2570675	.3439156
Stddev	.0016865	.001793	.0009279	.0021872	.0008544	.0044760	.0065408
%RSD	38.05847	21.37750	1.156449	83.64405	779.9535	1.741176	1.901852
#1	.0028103	-.009382	.0801849	.0009083	-.000135	.2542654	.3363902
#2	.0061766	-.009462	.0793423	.0018559	-.000596	.2622296	.3482332
#3	.0043075	-.006317	.0811957	.0050804	.001059	.2547075	.3471232

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004333	.0009973	19.71123	-.001052	.0079813	.0124056	6.562713
Stddev	.0000853	.0000382	.29976	.000172	.0002946	.0003923	.033090
%RSD	19.69328	3.831260	1.520752	16.32118	3.690705	3.162278	.5042174
#1	.0005104	.0010349	19.37421	-.000971	.0078792	.0128510	6.583550
#2	.0003416	.0009585	19.81139	-.000935	.0077513	.0121115	6.580031
#3	.0004479	.0009986	19.94808	-.001249	.0083133	.0122542	6.524557

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.566064	3.319926	.0074689	.0003065	374.7236	.0001717	.2011890
Stddev	.022916	.060787	.0000945	.0001225	2.8876	.0005191	.0018610
%RSD	1.463311	1.830986	1.265578	39.96370	.7705836	302.2939	.9249904
#1	1.540126	3.258849	.0075702	.0004243	376.9674	-.000426	.2031756
#2	1.583571	3.320508	.0073831	.0001798	375.7377	.000431	.2009053
#3	1.574494	3.380420	.0074534	.0003154	371.4658	.000510	.1994862

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.784197	.0232215	.0005525	-.001189	.0076382	.8614924	.0070812
Stddev	.013930	.0005695	.0001070	.000733	.0005816	.0072166	.0007859
%RSD	.7807710	2.452352	19.37049	61.67411	7.614425	.8376891	11.09876
#1	1.797661	.0229804	.0005279	-.002035	.0072503	.8630006	.0076155
#2	1.785088	.0228122	.0006697	-.000725	.0083069	.8678358	.0074493
#3	1.769843	.0238719	.0004599	-.000807	.0073573	.8536409	.0061788

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-12 Acquired: 11/8/2024 16:45:45 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3434494	.0038708	.0756276
Stddev	.0043632	.0010039	.0015138
%RSD	1.270396	25.93549	2.001696
#1	.3394346	.0048835	.0738824
#2	.3480928	.0038530	.0765865
#3	.3428210	.0028759	.0764138

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2330.508	53616.23	13630.92	1656.586	3691.923
Stddev	9.161	339.39	164.98	12.712	7.152
%RSD	.3930703	.6330020	1.210359	.7673712	.1937144
#1	2327.640	53336.48	13819.77	1644.116	3688.686
#2	2323.125	53518.41	13558.26	1656.114	3686.963
#3	2340.760	53993.78	13514.75	1669.528	3700.121

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-16 Acquired: 11/8/2024 16:50:10 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009139	-.011080	.0011944	.0040080	-.000296	-.013515	.1798903
Stddev	.000912	.000339	.0005067	.0011140	.000657	.005351	.0002267
%RSD	9.976053	3.056851	42.42254	27.79531	222.1113	39.59220	.1260366
#1	-.009437	-.010949	.0009658	.0052876	-.000368	-.013954	.1800228
#2	-.008116	-.011465	.0008422	.0034828	.000394	-.018633	.1796286
#3	-.009865	-.010826	.0017751	.0032538	-.000914	-.007958	.1800197

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000144	.0009484	141.7434	-.000589	.0056114	.0085340	.0259809
Stddev	.000061	.0000258	.5250	.000246	.0001405	.0000691	.0020083
%RSD	42.35948	2.718476	.3703730	41.78847	2.503430	.8094879	7.729859
#1	-.000167	.0009288	141.2826	-.000776	.0057347	.0085167	.0278202
#2	-.000189	.0009387	141.6328	-.000310	.0054585	.0086100	.0238382
#3	-.000074	.0009776	142.3149	-.000682	.0056410	.0084751	.0262844

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.044395	2.582080	.0047419	.0004171	381.7052	-.000490	.0814396
Stddev	.004829	.017076	.0004596	.0001105	2.2400	.000295	.0006732
%RSD	.4623358	.6613457	9.692184	26.47838	.5868444	60.23412	.8266285
#1	1.043404	2.582204	.0042133	.0005368	383.4548	-.000819	.0812583
#2	1.040139	2.599094	.0049651	.0003953	379.1806	-.000250	.0808755
#3	1.049642	2.564941	.0050473	.0003192	382.4801	-.000400	.0821848

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.779204	.0635129	.0012086	-.005358	-.001838	4.210445	.0028598
Stddev	.009313	.0006960	.0002116	.000973	.000145	.008836	.0018096
%RSD	.3351034	1.095895	17.51164	18.16585	7.902364	.2098524	63.27818
#1	2.789477	.0634678	.0009713	-.004772	-.001671	4.200833	.0036617
#2	2.776822	.0628405	.0012769	-.006481	-.001935	4.218213	.0041299
#3	2.771314	.0642304	.0013777	-.004820	-.001908	4.212289	.0007878

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-16 Acquired: 11/8/2024 16:50:10 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.773910	.0278059	.4826999
Stddev	.007475	.0009380	.0008538
%RSD	.2694697	3.373236	.1768810
#1	2.765981	.0269525	.4830882
#2	2.774919	.0288101	.4817209
#3	2.780829	.0276551	.4832905

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2245.597	52368.71	13403.64	1605.856	3545.977
Stddev	4.132	121.85	55.09	1.197	3.626
%RSD	.1839852	.2326703	.4109767	.0745695	.1022566
#1	2246.232	52331.11	13403.24	1605.382	3548.575
#2	2249.374	52504.92	13458.92	1607.219	3547.523
#3	2241.184	52270.10	13348.75	1604.969	3541.835

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164694TB Acquired: 11/8/2024 16:54:36 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005029	-.008298	-.001664	.0052929	.0001494	.0073285	-.005294
Stddev	.001806	.000449	.000611	.0022342	.0000964	.0031694	.000272
%RSD	35.90539	5.415946	36.69414	42.21224	64.53145	43.24822	5.141653
#1	-.004842	-.008496	-.001778	.0054558	.0002123	.0104930	-.005016
#2	-.006921	-.008615	-.001004	.0029816	.0000384	.0041541	-.005306
#3	-.003324	-.007784	-.002209	.0074411	.0001974	.0073384	-.005560

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000151	-.000068	-.035937	-.000707	-.000128	.0002398	-.003321
Stddev	.000036	.000087	.001911	.000380	.000075	.0000899	.003784
%RSD	23.53774	128.1305	5.317131	53.67868	58.53606	37.48256	113.9673
#1	-.000135	-.000100	-.037788	-.001093	-.000154	.0003133	-.007191
#2	-.000192	-.000136	-.036050	-.000335	-.000044	.0002665	-.003143
#3	-.000126	.000031	-.033972	-.000693	-.000187	.0001396	.000372

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010873	-.009713	-.000209	.0006070	367.9765	-.000450	.0007267
Stddev	.0001062	.003296	.000164	.0002375	4.1512	.001252	.0000784
%RSD	9.764954	33.93405	78.74587	39.13153	1.128125	277.9858	10.79314
#1	.0011358	-.012817	-.000276	.0007723	369.5523	-.001591	.0006777
#2	.0011605	-.010068	-.000021	.0007139	363.2680	.000889	.0006854
#3	.0009655	-.006254	-.000328	.0003348	371.1090	-.000649	.0008172

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0170846	-.002024	.0003718	-.001480	.0005775	-.004150	-.005269
Stddev	.0104647	.000464	.0003615	.000305	.0001526	.003514	.001950
%RSD	61.25221	22.94177	97.23852	20.58082	26.42846	84.67946	37.01735
#1	.0062384	-.002051	.0000324	-.001784	.0004118	-.003772	-.003774
#2	.0178947	-.001547	.0003311	-.001175	.0006082	-.000840	-.004558
#3	.0271207	-.002474	.0007520	-.001481	.0007124	-.007838	-.007475

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164694TB Acquired: 11/8/2024 16:54:36 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0097902	-.001159	.0000227
Stddev	.0032190	.000596	.0000238
%RSD	32.87949	51.39867	104.9877
#1	.0083474	-.001745	.0000099
#2	.0134782	-.001181	.0000501
#3	.0075451	-.000553	.0000080

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2289.846	52503.29	13619.00	1614.221	3687.396
Stddev	16.084	252.94	56.13	13.164	19.568
%RSD	.7024065	.4817604	.4121285	.8155205	.5306794
#1	2308.096	52530.84	13655.47	1607.947	3709.963
#2	2277.738	52741.33	13554.37	1629.349	3677.108
#3	2283.703	52237.70	13647.17	1605.368	3675.119

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164768BL Acquired: 11/8/2024 16:59:05 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002467	.0006613	-.000701	.0016356	-.000351	.0042707	-.005178
Stddev	.001453	.0008674	.000839	.0011983	.000191	.0015190	.000664
%RSD	58.89316	131.1571	119.6741	73.26193	54.52885	35.56826	12.81863
#1	-.003958	-.000040	-.001595	.0005488	-.000447	.0027565	-.005465
#2	-.002389	.000393	.000070	.0029206	-.000475	.0042613	-.005650
#3	-.001055	.001631	-.000579	.0014373	-.000131	.0057945	-.004419

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000182	-.000074	-.000582	.0002180	.0000453	-.000353	-.003323
Stddev	.0000100	.000004	.001521	.0002653	.0001162	.000128	.002124
%RSD	54.97345	4.862395	261.5481	121.7067	256.3553	36.28086	63.92804
#1	.0000119	-.000070	-.002337	.0004413	-.000089	-.000489	-.004547
#2	.0000130	-.000077	.000266	.0002879	.000105	-.000234	-.000870
#3	.0000297	-.000075	.000327	-.000075	.000120	-.000337	-.004552

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000068	.0063217	.0000284	.0006900	.3067792	-.000559	.0000249
Stddev	.000172	.0043123	.0001061	.0001944	.0065262	.000441	.0000862
%RSD	253.7621	68.21461	373.9126	28.17048	2.127328	78.89657	346.1023
#1	-.000248	.0024689	.0000536	.0004738	.2992799	-.000681	.0000313
#2	-.000049	.0109799	.0001196	.0007461	.3098872	-.000925	.0001077
#3	.000094	.0055163	-.000088	.0008502	.3111704	-.000070	-.000064

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0558153	-.001905	.0001474	-.000015	.0001096	-.000735	-.003796
Stddev	.0245169	.000565	.0001615	.000237	.0003065	.005710	.001052
%RSD	43.92506	29.66462	109.5474	1614.640	279.7795	776.9539	27.70982
#1	.0609706	-.002213	-.000018	.000120	.0002396	-.004614	-.005001
#2	.0291307	-.002249	.000155	.000125	-.000241	.005821	-.003332
#3	.0773447	-.001253	.000305	-.000289	.000330	-.003412	-.003057

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164768BL Acquired: 11/8/2024 16:59:05 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001948	-.001771	-.000011
Stddev	.000623	.001135	.000014
%RSD	31.97322	64.07761	130.0698
#1	-.001975	-.001491	.000005
#2	-.001312	-.000803	-.000015
#3	-.002557	-.003020	-.000022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2537.048	57562.53	13598.83	1788.288	4401.832
Stddev	8.112	135.71	95.59	8.091	8.502
%RSD	.3197271	.2357592	.7029404	.4524338	.1931453
#1	2527.710	57471.82	13593.31	1783.245	4395.596
#2	2542.341	57718.54	13506.12	1797.620	4411.517
#3	2541.095	57497.23	13697.06	1783.998	4398.384

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164768BS Acquired: 11/8/2024 17:03:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7782794	2.006453	.9299962	1.952762	.7790537	2.041646
Stddev	.0027055	.016327	.0037129	.004088	.0013410	.071881
%RSD	.3476282	.8137469	.3992393	.2093503	.1721363	3.520714
#1	.7789690	1.989451	.9331415	1.954142	.7805812	2.119525
#2	.7752958	2.022009	.9309466	1.955981	.7785100	2.027566
#3	.7805733	2.007898	.9259004	1.948162	.7780700	1.977848

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1912393	.1962884	.1802039	1.004339	.3609689	.1857643
Stddev	.0067297	.0052527	.0008392	.028874	.0008710	.0008994
%RSD	3.518965	2.676001	.4656817	2.874909	.2412833	.4841517
#1	.1983680	.2019023	.1811041	1.032881	.3600655	.1866864
#2	.1903537	.1954698	.1800644	1.004990	.3618033	.1857172
#3	.1849964	.1914931	.1794432	.975145	.3610381	.1848894

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3043614	2.758144	.2027417	1.936958	.4660477	.0726361
Stddev	.0012388	.014654	.0065641	.073275	.0018912	.0002457
%RSD	.4070055	.5312933	3.237648	3.783010	.4057967	.3382855
#1	.3055977	2.743344	.2096989	1.999716	.4677951	.0724089
#2	.3043664	2.772647	.2018678	1.954726	.4663081	.0726026
#3	.3031202	2.758440	.1966583	1.856433	.4640397	.0728969

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.766158	.2989944	.2037531	9.425299	.2862332	.3972552
Stddev	.016077	.0100740	.0001271	.013811	.0083380	.0010378
%RSD	.5812054	3.369281	.0623886	.1465315	2.913006	.2612487
#1	2.756112	.3102528	.2036282	9.439112	.2950628	.3983305
#2	2.784700	.2958988	.2037487	9.411490	.2851427	.3962594
#3	2.757660	.2908314	.2038823	9.425294	.2784941	.3971758

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164768BS Acquired: 11/8/2024 17:03:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6389619	.1955646	F .6755205	5.366020	F -.014297	.1822295
Stddev	.0017894	.0071948	.0030646	.011285	.001474	.0058077
%RSD	.2800505	3.678997	.4536670	.2103127	10.30746	3.187048
#1	.6401799	.2035014	.6746261	5.379001	-.012649	.1884596
#2	.6397983	.1937222	.6789328	5.358537	-.014755	.1812635
#3	.6369074	.1894701	.6730026	5.360521	-.015488	.1769653

Elem	Sr4077
Units	ppm
Avg	.2033678
Stddev	.0075698
%RSD	3.722235
#1	.2116136
#2	.2017566
#3	.1967333

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2576.534	58613.14	13065.75	1830.859	4341.478
Stddev	4.603	66.48	407.78	6.898	10.780
%RSD	.1786430	.1134254	3.121007	.3767856	.2482969
#1	2571.748	58632.41	12625.20	1827.506	4332.847
#2	2576.925	58667.86	13142.05	1838.793	4338.027
#3	2580.929	58539.15	13429.99	1826.278	4353.561

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02 Acquired: 11/8/2024 17:07:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003910	-.002370	.0199721	.0040338	-.000949	.0826657	.0052383
Stddev	.002755	.002805	.0019496	.0020917	.000138	.0001128	.0003415
%RSD	70.46253	118.3450	9.761646	51.85351	14.48658	.1364379	6.519106
#1	-.006105	-.005574	.0182100	.0036556	-.001079	.0827958	.0050031
#2	-.000818	-.000355	.0220665	.0062889	-.000805	.0826068	.0056300
#3	-.004807	-.001182	.0196399	.0021571	-.000964	.0825946	.0050819

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000738	.0001304	12.31581	.0011585	.0003762	.3669953	.2291791
Stddev	.0000013	.0000514	.12724	.0005090	.0000603	.0030067	.0048822
%RSD	1.800143	39.39213	1.033126	43.93557	16.02273	.8192763	2.130316
#1	.0000744	.0001894	12.43355	.0007085	.0003208	.3657749	.2262671
#2	.0000723	.0000956	12.33306	.0017109	.0004404	.3647907	.2348156
#3	.0000748	.0001062	12.18083	.0010561	.0003673	.3704204	.2264547

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225123	3.677374	.0070670	.0007089	1400.983	.0001986	1.781060
Stddev	.0002810	.052898	.0003455	.0003083	10.859	.0003881	.002912
%RSD	1.247960	1.438469	4.889128	43.48648	.7750826	195.4384	.1634901
#1	.0228093	3.719080	.0067309	.0010490	1413.494	-.000178	1.777968
#2	.0222507	3.695169	.0074212	.0004478	1393.998	.000597	1.783750
#3	.0224771	3.617874	.0070488	.0006300	1395.458	.000177	1.781463

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.621886	.0156480	.0015012	-.002688	.0018946	5.542499	2.631751
Stddev	.049611	.0007367	.0003268	.000740	.0001032	.015311	.016677
%RSD	.7491994	4.707747	21.76664	27.53220	5.449207	.2762556	.6336780
#1	6.569756	.0164959	.0011883	-.002010	.0020130	5.527271	2.630744
#2	6.668521	.0151659	.0014750	-.002577	.0018230	5.557893	2.615600
#3	6.627381	.0152820	.0018403	-.003477	.0018480	5.542334	2.648908

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02 Acquired: 11/8/2024 17:07:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.652063	.0048463	.0462957
Stddev	.068798	.0007370	.0003073
%RSD	1.217221	15.20827	.6637094
#1	5.634439	.0056967	.0464350
#2	5.593791	.0043934	.0465087
#3	5.727959	.0044488	.0459435

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2117.018	47041.27	12898.81	1487.845	3197.045
Stddev	25.913	124.36	70.37	.748	37.593
%RSD	1.224010	.2643659	.5455282	.0502579	1.175882
#1	2123.169	47162.64	12838.98	1487.627	3208.211
#2	2139.302	47047.06	12881.12	1488.678	3227.791
#3	2088.584	46914.12	12976.33	1487.230	3155.134

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02DUP Acquired: 11/8/2024 17:11:50 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004079	-.003028	.0208105	.0038137	-.001374	.0811633	.0051083
Stddev	.001145	.002151	.0007093	.0024859	.000955	.0043649	.0002580
%RSD	28.07194	71.02685	3.408488	65.18359	69.50566	5.377926	5.049772
#1	-.004589	-.005451	.0204055	.0015382	-.000491	.0834137	.0054048
#2	-.004880	-.001346	.0203964	.0034360	-.001244	.0839439	.0049847
#3	-.002767	-.002286	.0216295	.0064668	-.002388	.0761325	.0049354

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000544	-.000016	12.35287	.0012966	.0001500	.3676255	.2230071
Stddev	.0000763	.000070	.20325	.0002371	.0000599	.0008886	.0022596
%RSD	140.3064	440.6331	1.645387	18.28628	39.90639	.2417059	1.013241
#1	-.000033	.000058	12.52622	.0010238	.0002153	.3668159	.2235292
#2	.000104	-.000080	12.40321	.0014525	.0000978	.3674844	.2249600
#3	.000092	-.000026	12.12918	.0014136	.0001369	.3685761	.2205322

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225428	3.694798	.0066835	.0006444	1376.712	.0012566	1.757101
Stddev	.0006240	.062818	.0001016	.0002011	10.664	.0010293	.002476
%RSD	2.768225	1.700171	1.519836	31.20578	.7745747	81.91479	.1408963
#1	.0232116	3.746119	.0067157	.0004239	1381.797	.0003337	1.755133
#2	.0224406	3.713529	.0067650	.0008177	1364.457	.0010694	1.759880
#3	.0219761	3.624745	.0065697	.0006915	1383.881	.0023666	1.756288

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.524253	.0154701	.0014062	-.002823	.0022625	5.434336	2.615713
Stddev	.039561	.0003444	.0001924	.000564	.0002829	.014081	.003391
%RSD	.6063646	2.226012	13.68324	19.97605	12.50353	.2591062	.1296440
#1	6.507036	.0154380	.0012035	-.002245	.0021115	5.450437	2.611828
#2	6.496218	.0158294	.0014288	-.003372	.0020872	5.424327	2.617230
#3	6.569504	.0151429	.0015864	-.002854	.0025889	5.428244	2.618080

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02DUP Acquired: 11/8/2024 17:11:50 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.657057	.0059665	.0463987
Stddev	.007989	.0008635	.0007925
%RSD	.1412153	14.47216	1.707998
#1	5.659284	.0068114	.0471595
#2	5.648191	.0060025	.0464587
#3	5.663695	.0050856	.0455779

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2101.182	47660.18	12798.71	1501.550	3186.704
Stddev	11.397	34.68	189.05	8.284	18.376
%RSD	.5424147	.0727730	1.477069	.5516967	.5766560
#1	2113.163	47694.61	12639.30	1504.839	3206.596
#2	2099.907	47660.68	12749.25	1507.684	3183.155
#3	2090.476	47625.25	13007.56	1492.127	3170.361

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV04 Acquired: 11/8/2024 17:16:12 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	5.186089	5.234352	4.939561	5.364266	5.294479	9.686918	9.362035
Stddev	.016198	.124976	.004043	.015352	.017416	.672054	.484031
%RSD	.3123302	2.387606	.0818497	.2861942	.3289445	6.937752	5.170147
#1	5.195785	5.353457	4.937872	5.371252	5.302515	9.995703	9.527031
#2	5.167389	5.245364	4.936636	5.346663	5.274496	8.915965	8.817078
#3	5.195092	5.104234	4.944175	5.374883	5.306425	10.14908	9.741996

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2273958	2.418621	22.82639	.9272651	2.452493	1.308358	4.864045
Stddev	.0123815	.003473	1.45793	.0043585	.003063	.002996	.068689
%RSD	5.444916	.1436086	6.387038	.4700404	.1248740	.2289895	1.412184
#1	.2327509	2.418593	23.43036	.9319964	2.450818	1.307838	4.916558
#2	.2132381	2.415162	21.16353	.9234136	2.450633	1.305656	4.786310
#3	.2361985	2.422109	23.88528	.9263853	2.456028	1.311580	4.889267

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.314973	23.01487	2.455722	1.262120	24.52533	2.349612	2.606189
Stddev	.159792	1.42598	.003113	.009291	.60821	.155436	.022990
%RSD	6.902526	6.195917	.1267504	.7361411	2.479931	6.615412	.8821191
#1	2.384843	23.55759	2.454841	1.272700	25.13915	2.413439	2.626902
#2	2.132147	21.39721	2.453145	1.258367	23.92289	2.172422	2.610210
#3	2.427931	24.08980	2.459180	1.255292	24.51395	2.462974	2.581454

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.79355	4.558378	5.168066	4.853234	4.604310	5.048822	5.027304
Stddev	.49205	.243758	.010957	.009395	.318664	.032672	.021589
%RSD	1.907657	5.347483	.2120119	.1935738	6.920988	.6471201	.4294371
#1	26.18859	4.675739	5.175733	4.864078	4.745180	5.076585	5.009016
#2	25.24238	4.278139	5.155517	4.848054	4.239489	5.012819	5.021777
#3	25.94968	4.721256	5.172948	4.847570	4.828262	5.057063	5.051120

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV04 Acquired: 11/8/2024 17:16:12 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.877941	4.511993	4.773466
Stddev	.007851	.356417	.241791
%RSD	.1609401	7.899322	5.065304
#1	4.886919	4.683997	4.895383
#2	4.874531	4.102195	4.494988
#3	4.872371	4.749788	4.930028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2342.121	53887.49	13869.04	1650.885	3775.952
Stddev	7.224	471.77	760.06	20.290	8.262
%RSD	.3084365	.8754730	5.480290	1.229026	.2187974
#1	2344.168	53378.09	13469.76	1634.443	3781.898
#2	2348.101	53975.00	14745.53	1644.652	3779.439
#3	2334.095	54309.38	13391.82	1673.560	3766.518

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB04 Acquired: 11/8/2024 17:22:18 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0009520	-.000534	-.000102	.0009992	-.000447	.0071684	-.004841
Stddev	.0003820	.001141	.000560	.0011259	.000640	.0031774	.000352
%RSD	40.12640	213.5638	547.7033	112.6837	143.2983	44.32489	7.275051
#1	.0008626	.000489	.000142	.0022992	-.001046	.0088987	-.005070
#2	.0006226	-.000327	.000295	.0003375	.000227	.0035014	-.005018
#3	.0013708	-.001765	-.000743	.0003608	-.000521	.0091052	-.004436

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000703	.0000391	.0003050	-.000132	.0001320	-.000294	-.002679
Stddev	.0000101	.0000614	.0026917	.000124	.0001574	.000376	.001811
%RSD	14.42671	156.9755	882.3874	93.71464	119.2767	127.5828	67.58408
#1	.0000811	.0000741	.0031926	-.000020	-.000035	-.000446	-.001404
#2	.0000611	-.000032	-.002135	-.000265	.000153	.000133	-.004752
#3	.0000686	.000075	-.000143	-.000111	.000278	-.000571	-.001882

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000008	.0061750	-.000228	.0004484	.1730651	-.000459	-.000083
Stddev	.000063	.0031377	.000261	.0000556	.0295699	.000890	.000186
%RSD	769.4900	50.81400	114.2573	12.40988	17.08599	194.0830	224.4279
#1	-.000081	.0047259	-.000326	.0005126	.1421537	.000388	-.000272
#2	.000024	.0097754	-.000425	.0004174	.1759611	-.001387	-.000076
#3	.000032	.0040236	.000067	.0004151	.2010804	-.000377	.000100

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0406792	.0006159	.0003363	.0003528	.0008104	-.003731	-.003346
Stddev	.0146947	.0005640	.0000714	.0008686	.0002740	.000997	.000696
%RSD	36.12330	91.58186	21.23120	246.1994	33.80650	26.72739	20.80534
#1	.0242867	.0005430	.0004090	.0012949	.0008749	-.004159	-.002807
#2	.0526698	.0000918	.0002663	.0001797	.0005099	-.002591	-.003098
#3	.0450810	.0012128	.0003337	-.000416	.0010463	-.004443	-.004132

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB04 Acquired: 11/8/2024 17:22:18 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003298	-.001301	.0000961
Stddev	.001384	.000925	.0000155
%RSD	41.95559	71.08377	16.14639
#1	-.004290	-.001122	.0001043
#2	-.003887	-.000479	.0000782
#3	-.001717	-.002303	.0001058

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2582.654	59723.84	13542.39	1861.746	4436.416
Stddev	8.512	930.46	158.74	22.404	9.678
%RSD	.3295993	1.557939	1.172183	1.203397	.2181601
#1	2592.085	59938.13	13391.94	1873.995	4446.318
#2	2575.541	60528.47	13708.29	1875.355	4426.978
#3	2580.335	58704.93	13526.96	1835.888	4435.952

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02LX5 Acquired: 11/8/2024 17:26:36 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002096	-.000482	.0036434	.0019304	-.001502	.0207051	-.002423
Stddev	.000140	.001693	.0008229	.0004814	.001380	.0005789	.000745
%RSD	6.673855	350.9580	22.58471	24.93562	91.93295	2.796062	30.76396
#1	-.002092	-.001397	.0032943	.0024384	-.003077	.0209548	-.003037
#2	-.002237	-.001521	.0045833	.0018717	-.000502	.0211174	-.001593
#3	-.001958	.001471	.0030527	.0014811	-.000926	.0200433	-.002638

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000579	.0000035	2.498208	.0001625	.0001316	.0779124	.0408540
Stddev	.0000245	.0000575	.191711	.0003271	.0001788	.0008294	.0033467
%RSD	42.30074	1643.957	7.673954	201.3386	135.8757	1.064543	8.191917
#1	.0000301	-.000029	2.655179	.0003272	.0000799	.0769811	.0409406
#2	.0000761	.000070	2.284544	-.000214	.0003305	.0781842	.0374649
#3	.0000676	-.000030	2.554903	.000374	-.000016	.0785717	.0441566

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043480	.7565743	.0013166	.0005084	261.3390	-.000006	.3371633
Stddev	.0003998	.0521159	.0003044	.0002207	4.7883	.000316	.0027680
%RSD	9.195153	6.888407	23.11885	43.41217	1.832213	5345.677	.8209675
#1	.0047591	.7939761	.0015225	.0002705	266.8674	-.000309	.3403454
#2	.0039605	.6970457	.0014603	.0005482	258.6467	-.000031	.3353128
#3	.0043244	.7787010	.0009669	.0007065	258.5028	.000322	.3358316

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.209529	.0034991	.0004004	-.000968	.0007120	1.004800	.4870695
Stddev	.025095	.0006530	.0002485	.000641	.0002562	.019115	.0048988
%RSD	2.074778	18.66279	62.05584	66.18091	35.98200	1.902351	1.005771
#1	1.203366	.0040161	.0005927	-.001648	.0005829	1.017221	.4814178
#2	1.188090	.0027652	.0001198	-.000879	.0010070	.982789	.4896891
#3	1.237132	.0037160	.0004887	-.000377	.0005460	1.014390	.4901015

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02LX5 Acquired: 11/8/2024 17:26:36 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.054999	-.000071	.0091501
Stddev	.009291	.001441	.0007639
%RSD	.8806952	2042.914	8.348651
#1	1.048182	.001251	.0098208
#2	1.051233	.000144	.0083186
#3	1.065582	-.001607	.0093110

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2352.515	52929.18	13588.38	1682.001	3709.535
Stddev	26.440	335.46	855.08	14.765	35.645
%RSD	1.123889	.6337883	6.292711	.8777952	.9609055
#1	2382.554	52558.64	12858.20	1664.956	3750.454
#2	2342.219	53016.68	14529.04	1690.220	3692.929
#3	2332.773	53212.21	13377.90	1690.828	3685.224

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02MS Acquired: 11/8/2024 17:31:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9538840	1.974578	1.029422	2.349656	.9183901	2.283371	.2081606
Stddev	.0023703	.007628	.003032	.003763	.0009246	.062493	.0047377
%RSD	.2484938	.3863123	.2945570	.1601521	.1006741	2.736877	2.276009
#1	.9514413	1.982999	1.032900	2.353980	.9190357	2.218383	.2034457
#2	.9561747	1.968131	1.028035	2.347125	.9173309	2.288702	.2081152
#3	.9540359	1.972604	1.027331	2.347863	.9188036	2.343027	.2129209

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2044794	.2096473	13.11358	.3817968	.2121916	.6632591	3.476033
Stddev	.0041705	.0011304	.27506	.0018326	.0011540	.0018127	.013363
%RSD	2.039567	.5391942	2.097499	.4800051	.5438524	.2733050	.3844349
#1	.1999816	.2109506	12.84047	.3798186	.2135223	.6653515	3.473604
#2	.2052384	.2090563	13.10973	.3834368	.2115870	.6621659	3.464051
#3	.2082184	.2089348	13.39055	.3821349	.2114655	.6622598	3.490444

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2229931	5.538376	.5262173	.0905558	1289.797	.3126291	1.928402
Stddev	.0050844	.126876	.0029345	.0002463	8.276	.0076503	.007255
%RSD	2.280079	2.290858	.5576625	.2720092	.6416213	2.447090	.3762035
#1	.2189377	5.412821	.5295652	.0903437	1281.326	.3060311	1.921872
#2	.2213443	5.535774	.5240906	.0904977	1290.202	.3108411	1.936211
#3	.2286973	5.666533	.5249961	.0908259	1297.863	.3210150	1.927124

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.09959	.2900239	.4300939	.6657359	.2030188	5.999958	9.795188
Stddev	.15886	.0063808	.0008420	.0029209	.0049285	.032106	.040020
%RSD	.8777257	2.200085	.1957755	.4387514	2.427601	.5351114	.4085721
#1	17.95088	.2834833	.4307852	.6690523	.1977258	5.965425	9.838566
#2	18.08094	.2903565	.4303404	.6635461	.2038546	6.005546	9.787298
#3	18.26696	.2962319	.4291562	.6646091	.2074759	6.028904	9.759700

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02MS Acquired: 11/8/2024 17:31:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.555585	.2028656	.2553155
Stddev	.028327	.0046177	.0066963
%RSD	.5098757	2.276228	2.622754
#1	5.586265	.1983172	.2488641
#2	5.530424	.2027299	.2548502
#3	5.550065	.2075496	.2622324

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2117.635	49202.69	12786.43	1527.915	3165.542
Stddev	.613	310.28	307.82	9.722	6.494
%RSD	.0289296	.6306160	2.407405	.6362595	.2051377
#1	2118.280	49536.28	13098.08	1538.798	3158.084
#2	2117.061	49149.06	12778.63	1524.855	3169.943
#3	2117.563	48922.71	12482.59	1520.092	3168.599

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02MSD Acquired: 11/8/2024 17:35:08 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9626313	2.013867	1.040490	2.384561	.9305767	2.244672	.2041950
Stddev	.0063616	.018724	.008074	.018540	.0080001	.024631	.0024712
%RSD	.6608527	.9297570	.7759824	.7774850	.8596959	1.097320	1.210195
#1	.9566140	1.992872	1.031255	2.364500	.9220003	2.216303	.2013432
#2	.9619911	2.028837	1.046215	2.401063	.9378375	2.257101	.2055373
#3	.9692887	2.019892	1.044000	2.388120	.9318922	2.260612	.2057045

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2016041	.2112913	12.79603	.3881725	.2138788	.6710554	3.558943
Stddev	.0023853	.0010875	.15356	.0029259	.0014688	.0048019	.023418
%RSD	1.183144	.5146835	1.200054	.7537604	.6867436	.7155702	.6580172
#1	.1992156	.2100469	12.62241	.3847940	.2121865	.6655711	3.533182
#2	.2016106	.2120588	12.85167	.3898854	.2146268	.6745044	3.578945
#3	.2039861	.2117684	12.91401	.3898379	.2148230	.6730908	3.564700

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2166917	5.411708	.5305900	.0922331	1335.363	.3063013	1.961735
Stddev	.0025607	.055093	.0029296	.0009329	10.577	.0042736	.015617
%RSD	1.181722	1.018031	.5521340	1.011508	.7920836	1.395221	.7960802
#1	.2137986	5.348483	.5272392	.0911785	1324.063	.3014870	1.944081
#2	.2176093	5.437217	.5326673	.0929509	1345.027	.3077701	1.973748
#3	.2186671	5.449423	.5318635	.0925698	1337.000	.3096469	1.967375

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.73596	.2861615	.4354973	.6736197	.1990362	6.186909	9.889961
Stddev	.17306	.0035183	.0030656	.0031803	.0020971	.082884	.065010
%RSD	.9236998	1.229464	.7039289	.4721251	1.053626	1.339668	.6573348
#1	18.57193	.2826957	.4319592	.6700283	.1966627	6.097786	9.843849
#2	18.91683	.2860589	.4373639	.6747511	.2006387	6.261679	9.964316
#3	18.71914	.2897299	.4371687	.6760795	.1998071	6.201263	9.861719

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02MSD Acquired: 11/8/2024 17:35:08 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.591016	.1969080	.2503168
Stddev	.042615	.0012107	.0029292
%RSD	.7622113	.6148673	1.170198
#1	5.547743	.1955173	.2469383
#2	5.632942	.1974798	.2521456
#3	5.592363	.1977270	.2518666

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2088.601	47565.46	13006.79	1500.875	3127.108
Stddev	12.762	457.73	165.44	16.010	16.588
%RSD	.6110184	.9623070	1.271957	1.066706	.5304522
#1	2103.207	48084.05	13192.29	1517.169	3145.358
#2	2079.604	47217.78	12953.57	1485.166	3112.948
#3	2082.992	47394.56	12874.50	1500.289	3123.017

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02A Acquired: 11/8/2024 17:39:15 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9805498	1.976014	1.036485	2.436015	.9470492	2.347324	.2150661
Stddev	.0026064	.019657	.002677	.007305	.0055575	.002232	.0010814
%RSD	.2658063	.9947975	.2582759	.2998842	.5868188	.0951032	.5028092
#1	.9797639	1.993970	1.033475	2.433652	.9437173	2.349851	.2163018
#2	.9784268	1.955012	1.037379	2.430183	.9439654	2.345619	.2146033
#3	.9834587	1.979061	1.038600	2.444209	.9534648	2.346503	.2142931

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2055846	.2114270	13.30629	.3848648	.2140161	.6784661	3.594693
Stddev	.0010580	.0006259	.08857	.0024222	.0005860	.0001251	.028908
%RSD	.5146315	.2960453	.6656058	.6293498	.2737967	.0184324	.8041980
#1	.2065805	.2107471	13.38772	.3866180	.2133797	.6783313	3.616950
#2	.2044738	.2119793	13.31917	.3821010	.2145332	.6784884	3.605108
#3	.2056995	.2115546	13.21199	.3858753	.2141356	.6785784	3.562019

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2267309	5.618924	.5314706	.0920867	1351.959	.3213612	1.985471
Stddev	.0022671	.032941	.0015001	.0002348	9.323	.0012966	.004831
%RSD	.9999219	.5862458	.2822510	.2549686	.6896138	.4034543	.2433389
#1	.2292370	5.654918	.5297591	.0923524	1350.415	.3225523	1.990912
#2	.2261334	5.611577	.5320955	.0920007	1343.504	.3215512	1.983821
#3	.2248224	5.590278	.5325572	.0919070	1361.958	.3199802	1.981681

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.07602	.2935342	.4401834	.6687460	.2085938	6.238704	9.784636
Stddev	.02504	.0025386	.0012005	.0015312	.0013228	.010691	.032651
%RSD	.1312432	.8648558	.2727188	.2289679	.6341370	.1713648	.3336938
#1	19.07366	.2964495	.4401834	.6669907	.2100082	6.232511	9.748333
#2	19.10215	.2918107	.4389829	.6698079	.2083860	6.251049	9.811599
#3	19.05225	.2923424	.4413838	.6694392	.2073873	6.232552	9.793975

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4762-02A Acquired: 11/8/2024 17:39:15 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.581910	.2089537	.2632508
Stddev	.021645	.0010232	.0012554
%RSD	.3877693	.4896963	.4768697
#1	5.557628	.2100530	.2645516
#2	5.599177	.2087791	.2631543
#3	5.588926	.2080290	.2620465

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2027.586	47328.21	12507.81	1447.952	3059.330
Stddev	12.042	27.21	58.16	8.485	22.524
%RSD	.5939115	.0574933	.4650110	.5859840	.7362321
#1	2038.225	47301.14	12441.77	1452.927	3084.514
#2	2030.021	47327.94	12530.26	1438.155	3052.364
#3	2014.513	47355.56	12551.40	1452.774	3041.112

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164782BL Acquired: 11/8/2024 17:43:22 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000293	.0000344	-.000770	.0020138	-.001144	.0035832	-.005515
Stddev	.000389	.0009190	.000782	.0004966	.000755	.0012018	.000181
%RSD	132.7142	2672.437	101.5502	24.66251	65.97002	33.53954	3.281216
#1	-.000199	.0001091	-.001670	.0025873	-.001217	.0030494	-.005664
#2	-.000720	.0009138	-.000390	.0017261	-.001859	.0049594	-.005568
#3	.000041	-.000920	-.000251	.0017280	-.000355	.0027407	-.005314

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000692	-.000064	-.002058	.0001507	-.000110	.0000805	-.002152
Stddev	.0000620	.000014	.001119	.0003181	.000079	.0000740	.003220
%RSD	89.66446	22.42066	54.37935	211.1057	71.90608	91.90900	149.6248
#1	-.000002	-.000048	-.002111	.0002439	-.000137	.0000977	.001545
#2	.000104	-.000066	-.003150	.0004117	-.000021	-.000001	-.004338
#3	.000106	-.000077	-.000914	-.000204	-.000172	.000144	-.003663

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000210	.0000219	-.000166	.0006489	.5343919	.0006749	-.000135
Stddev	.0000376	.0062091	.000116	.0001544	.0199212	.0012177	.000206
%RSD	179.0566	28322.79	69.87966	23.79236	3.727828	180.4357	152.0789
#1	.0000239	.0019171	-.000293	.0007731	.5122042	.0010364	-.000356
#2	-.000018	-.006914	-.000067	.0006976	.5507426	-.000683	-.000101
#3	.000057	.005063	-.000137	.0004761	.5402289	.001671	.000051

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0856704	-.001275	.0000253	-.000403	.0001733	-.007012	-.002076
Stddev	.0308548	.000276	.0001444	.000642	.0002585	.002177	.001858
%RSD	36.01571	21.60922	570.3225	159.2407	149.1140	31.04813	89.49512
#1	.0622568	-.001573	.0001561	-.000755	-.000123	-.008511	-.003162
#2	.0741207	-.001030	.0000496	-.000791	.000290	-.008010	.000069
#3	.1206339	-.001221	-.000130	.000338	.000353	-.004515	-.003134

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164782BL Acquired: 11/8/2024 17:43:22 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0001705	-.001503	.0000018
Stddev	.0031005	.001484	.0000186
%RSD	1818.928	98.74284	1023.962
#1	.0037461	-.002496	.0000198
#2	-.001774	.000203	-.000017
#3	-.001460	-.002216	.000003

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2497.807	57638.76	13855.82	1773.491	4308.524
Stddev	9.377	640.41	37.90	14.321	13.558
%RSD	.3753938	1.111067	.2735061	.8075125	.3146866
#1	2508.502	58372.63	13885.04	1789.795	4324.071
#2	2490.999	57350.50	13813.00	1767.737	4302.342
#3	2493.920	57193.14	13869.41	1762.942	4299.158

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164782BS Acquired: 11/8/2024 17:47:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7905786	2.023468	.9481535	1.986202	.7850258	1.976063
Stddev	.0012337	.028986	.0045276	.007594	.0033384	.034783
%RSD	.1560446	1.432504	.4775176	.3823377	.4252569	1.760214
#1	.7893086	2.001489	.9430574	1.983817	.7819155	1.935916
#2	.7906549	2.012596	.9496911	1.980087	.7846089	1.995119
#3	.7917724	2.056318	.9517121	1.994702	.7885530	1.997153

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1852959	.1913961	.1834911	.9720159	.3662842	.1892671
Stddev	.0029438	.0028192	.0008633	.0168647	.0015175	.0009419
%RSD	1.588707	1.472969	.4705039	1.735028	.4143008	.4976600
#1	.1818979	.1882248	.1828222	.9530178	.3646006	.1885643
#2	.1869175	.1923451	.1831853	.9778105	.3675466	.1888997
#3	.1870724	.1936183	.1844657	.9852195	.3667054	.1903373

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3086600	2.770248	.1889072	1.864583	.4737846	.0739982
Stddev	.0009120	.018561	.0031371	.046370	.0018945	.0001580
%RSD	.2954555	.6700214	1.660653	2.486899	.3998733	.2135748
#1	.3094892	2.753058	.1853421	1.814573	.4722069	.0739061
#2	.3076833	2.767758	.1901340	1.873021	.4732609	.0739078
#3	.3088075	2.789929	.1912456	1.906155	.4758859	.0741807

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.850621	.2902605	.2075151	9.511518	.2793236	.4007832
Stddev	.030577	.0044618	.0007457	.091052	.0054001	.0015205
%RSD	1.072638	1.537175	.3593473	.9572784	1.933271	.3793751
#1	2.815468	.2851939	.2069337	9.409724	.2733430	.3995795
#2	2.871051	.2919840	.2083559	9.585195	.2807857	.4002782
#3	2.865345	.2936034	.2072557	9.539635	.2838421	.4024919

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164782BS Acquired: 11/8/2024 17:47:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6475357	.1885572	F .6768954	5.464582	F -.009662	.1763286
Stddev	.0041532	.0035511	.0047514	.037182	.002735	.0038921
%RSD	.6413914	1.883311	.7019428	.6804266	28.30099	2.207297
#1	.6445607	.1845758	.6733902	5.430194	-.012500	.1718742
#2	.6457657	.1896983	.6749927	5.459513	-.007044	.1780393
#3	.6522807	.1913975	.6823033	5.504039	-.009443	.1790724

Elem	Sr4077
Units	ppm
Avg	.1972387
Stddev	.0031643
%RSD	1.604306
#1	.1935859
#2	.1989891
#3	.1991411

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2549.747	58313.49	13483.68	1817.041	4283.928
Stddev	4.238	80.62	158.50	6.119	7.713
%RSD	.1662076	.1382548	1.175459	.3367780	.1800410
#1	2546.734	58403.64	13663.49	1810.993	4287.965
#2	2554.593	58248.30	13423.30	1823.230	4288.785
#3	2547.915	58288.53	13364.25	1816.901	4275.035

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4732-01 Acquired: 11/8/2024 17:51:42 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0024351	-.002845	.1263682	-.017376	5.411974	25.01441
Stddev	.0012761	.002444	.0021794	.002135	.020503	.20885
%RSD	52.40504	85.88255	1.724662	12.28935	.3788385	.8349342
#1	.0035900	-.000798	.1258670	-.015098	5.406796	24.97639
#2	.0026502	-.002187	.1244831	-.019333	5.394557	24.82718
#3	.0010651	-.005551	.1287546	-.017697	5.434570	25.23966

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2579692	.0019685	.0077400	39.17279	.0891957	.0245212
Stddev	.0022674	.0000180	.0000590	.35538	.0012258	.0001778
%RSD	.8789554	.9139214	.7619773	.9072118	1.374308	.7248971
#1	.2565689	.0019480	.0077479	38.94586	.0878719	.0243619
#2	.2567534	.0019815	.0077946	38.99016	.0894235	.0244889
#3	.2605852	.0019761	.0076774	39.58235	.0902916	.0247129

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1146886	75.58049	1.973327	8.714512	.0530574	.0010751
Stddev	.0008201	.53980	.020737	.068859	.0003025	.0000528
%RSD	.7150424	.7142051	1.050859	.7901637	.5701890	4.913638
#1	.1140453	75.13965	1.960673	8.687004	.0528327	.0010728
#2	.1144084	75.41930	1.962048	8.663659	.0534014	.0011290
#3	.1156120	76.18252	1.997258	8.792873	.0529380	.0010234

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.37156	.0452990	2.012215	6.826750	.0719928	.0134507
Stddev	.07749	.0008883	.009632	.062789	.0007434	.0002845
%RSD	.5041436	1.960913	.4786877	.9197525	1.032604	2.115243
#1	15.34240	.0462494	2.001497	6.833262	.0713948	.0136643
#2	15.31287	.0451579	2.015000	6.760958	.0717585	.0131278
#3	15.45940	.0444897	2.020147	6.886029	.0728251	.0135602

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4732-01 Acquired: 11/8/2024 17:51:42 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0146499	.7455180	F 21.62231	.9758212	2.759106	.0295609
Stddev	.0013036	.0061744	.11886	.0066516	.014222	.0003603
%RSD	8.898463	.8282002	.5497073	.6816357	.5154498	1.218766
#1	.0142893	.7454710	21.61790	.9731604	2.743305	.0291947
#2	.0135646	.7393672	21.50572	.9709119	2.763133	.0295732
#3	.0160959	.7517157	21.74331	.9833912	2.770880	.0299149

Elem	Sr4077
Units	ppm
Avg	.1246982
Stddev	.0012913
%RSD	1.035561
#1	.1245421
#2	.1234920
#3	.1260605

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2558.895	58815.70	14295.50	1835.253	3998.204
Stddev	5.972	98.61	74.24	11.245	1.715
%RSD	.2333916	.1676664	.5193044	.6127130	.0428996
#1	2552.391	58898.43	14335.06	1822.872	3996.490
#2	2564.131	58842.11	14341.59	1844.832	3999.921
#3	2560.165	58706.58	14209.86	1838.054	3998.200

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4737-01 Acquired: 11/8/2024 17:55:52 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0360717	-.012061	.2472417	-.071906	-.000770	150.9113
Stddev	.0024345	.004487	.0017323	.002819	.000272	1.1215
%RSD	6.749080	37.20210	.7006388	3.921062	35.31437	.7431738
#1	.0386721	-.012436	.2472552	-.073090	-.001046	150.0216
#2	.0338466	-.016348	.2455027	-.073941	-.000502	150.5412
#3	.0356964	-.007398	.2489672	-.068688	-.000762	152.1711

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.602349	.0129567	.0520465	37.09058	.2615473	.1934086
Stddev	.010666	.0000697	.0004463	.33439	.0016208	.0010145
%RSD	.6656311	.5381909	.8575637	.9015605	.6196854	.5245507
#1	1.590036	.0128762	.0525306	36.70615	.2627892	.1945688
#2	1.608310	.0129947	.0516512	37.25145	.2597139	.1926881
#3	1.608703	.0129992	.0519577	37.31412	.2621388	.1929689

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3129741	296.9933	4.809183	69.93767	.3667882	-.000451
Stddev	.0021347	.7110	.046340	.72336	.0013694	.000163
%RSD	.6820723	.2394003	.9635642	1.034288	.3733571	36.06717
#1	.3154232	296.6729	4.755987	69.10308	.3683023	-.000625
#2	.3115074	296.4988	4.830782	70.32608	.3664259	-.000425
#3	.3119918	297.8081	4.840780	70.38386	.3656363	-.000303

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.491694	.3983568	.7387453	28.20206	.2212591	.0018381
Stddev	.004821	.0032188	.0035401	.06627	.0013079	.0001127
%RSD	.0877951	.8080154	.4792032	.2349806	.5911087	6.129304
#1	5.492962	.3952136	.7422652	28.22016	.2219661	.0017563
#2	5.495754	.4016462	.7387852	28.25741	.2197499	.0019666
#3	5.486365	.3982108	.7351853	28.12863	.2220613	.0017914

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4737-01 Acquired: 11/8/2024 17:55:52 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0096830	3.822927	F 13.57428	9.073128	.9874939	.3491896
Stddev	.0003524	.031161	.17445	.032336	.0105022	.0018862
%RSD	3.639234	.8151046	1.285117	.3563878	1.063515	.5401749
#1	.0093256	3.786982	13.39436	9.110463	.9977825	.3472314
#2	.0100302	3.839497	13.74268	9.054830	.9879086	.3493429
#3	.0096931	3.842303	13.58581	9.054090	.9767905	.3509945

Elem	Sr4077
Units	ppm
Avg	-.086704
Stddev	.001175
%RSD	1.354950
#1	-.087859
#2	-.085511
#3	-.086742

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3130.112	71459.51	17598.89	2223.790	3669.789
Stddev	16.903	260.03	119.27	11.951	19.158
%RSD	.5400234	.3638869	.6777113	.5374211	.5220567
#1	3113.174	71375.97	17735.60	2228.931	3648.771
#2	3146.981	71251.52	17516.09	2210.129	3686.274
#3	3130.182	71751.05	17544.99	2232.311	3674.323

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4738-01 Acquired: 11/8/2024 18:00:14 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007450	-.003798	.0218035	.0106750	.0007148	4.595238	.0240254
Stddev	.001661	.000738	.0004616	.0010220	.0012959	.020788	.0004179
%RSD	22.29849	19.43786	2.116907	9.573816	181.2939	.4523778	1.739593
#1	-.009279	-.004209	.0221326	.0102533	.0018027	4.571918	.0236333
#2	-.007038	-.004238	.0212759	.0099313	.0010606	4.611824	.0244651
#3	-.006034	-.002945	.0220021	.0118403	-.000719	4.601973	.0239777

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002289	.0005523	3.514442	.0107159	.0142906	.0163629	5.365842
Stddev	.0000334	.0000354	.011778	.0001481	.0001724	.0002321	.040827
%RSD	14.58882	6.417185	.3351455	1.382209	1.206707	1.418222	.7608660
#1	.0002643	.0005114	3.501061	.0108497	.0141022	.0161074	5.339100
#2	.0001980	.0005703	3.523242	.0107411	.0143292	.0164208	5.412836
#3	.0002244	.0005751	3.519023	.0105567	.0144405	.0165605	5.345591

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2347760	1.632215	.0067676	.0007529	567.3043	.0086470	.0630790
Stddev	.0012885	.021849	.0000835	.0000806	5.2500	.0003270	.0001921
%RSD	.5488113	1.338598	1.233962	10.69788	.9254378	3.781096	.3044540
#1	.2332889	1.609439	.0067031	.0006683	569.8502	.0088959	.0628573
#2	.2354813	1.634207	.0068620	.0008286	570.7960	.0087683	.0631896
#3	.2355579	1.653000	.0067377	.0007619	561.2667	.0082767	.0631902

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.420303	.0058727	.0031721	.0100689	.0882627	4.378120	.2873026
Stddev	.015090	.0002023	.0001278	.0003603	.0000616	.144395	.0018278
%RSD	1.062471	3.444513	4.028881	3.578763	.0697449	3.298111	.6361872
#1	1.437727	.0056443	.0030258	.0097948	.0883221	4.542979	.2852028
#2	1.411501	.0060294	.0032286	.0099347	.0881992	4.317282	.2885368
#3	1.411680	.0059444	.0032620	.0104770	.0882669	4.274099	.2881682

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4738-01 Acquired: 11/8/2024 18:00:14 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.624702	.0013466	.0112234
Stddev	.013610	.0009005	.0000243
%RSD	.2942988	66.87591	.2163457
#1	4.632452	.0004645	.0112513
#2	4.608986	.0022646	.0112115
#3	4.632667	.0013107	.0112073

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2197.452	51881.13	13269.41	1615.968	3412.833
Stddev	6.887	302.09	40.14	15.563	5.192
%RSD	.3134140	.5822648	.3024636	.9630572	.1521384
#1	2203.618	51762.05	13239.90	1610.604	3416.914
#2	2198.718	51656.73	13253.21	1603.797	3414.597
#3	2190.019	52224.61	13315.11	1633.503	3406.989

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV05 Acquired: 11/8/2024 18:04:37 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	5.107424	5.276257	4.940548	5.284687	5.225004	9.884493	9.293933
Stddev	.112062	.113270	.125224	.111577	.120751	.076412	.089861
%RSD	2.194104	2.146791	2.534626	2.111328	2.311018	.7730516	.9668815
#1	4.996856	5.147651	4.809545	5.165274	5.099226	9.798288	9.293496
#2	5.104494	5.319934	4.953043	5.302503	5.235782	9.943885	9.204291
#3	5.220923	5.361187	5.059057	5.386284	5.340005	9.911305	9.384012

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2340836	2.429686	23.46705	.9064138	2.459302	1.288498	4.745965
Stddev	.0015683	.061137	.10813	.0075888	.063166	.030261	.004475
%RSD	.6699760	2.516258	.4607696	.8372337	2.568456	2.348553	.0942862
#1	.2322800	2.365535	23.34300	.8976852	2.393315	1.257533	4.751089
#2	.2351259	2.436242	23.51676	.9101085	2.465386	1.289959	4.742826
#3	.2348451	2.487281	23.54138	.9114477	2.519207	1.318002	4.743980

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.276159	23.65031	2.459469	1.233966	23.36931	2.408472	2.544856
Stddev	.009521	.17022	.061793	.002273	.10161	.018978	.006493
%RSD	.4182848	.7197173	2.512443	.1841650	.4347979	.7879856	.2551265
#1	2.266574	23.45397	2.395365	1.231920	23.47257	2.386981	2.548181
#2	2.276287	23.74055	2.464385	1.236412	23.26944	2.415506	2.549012
#3	2.285614	23.75640	2.518657	1.233567	23.36592	2.422930	2.537374

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.84737	4.671789	5.153643	4.874601	4.692625	4.912559	4.997591
Stddev	.06679	.029790	.115756	.122173	.022798	.047096	.137232
%RSD	.2687914	.6376479	2.246099	2.506308	.4858321	.9586870	2.745967
#1	24.77239	4.637580	5.032728	4.748177	4.666642	4.864224	4.855144
#2	24.90047	4.692016	5.164766	4.883601	4.701956	4.915143	5.008695
#3	24.86926	4.685770	5.263437	4.992024	4.709278	4.958310	5.128933

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV05 Acquired: 11/8/2024 18:04:37 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.839001	4.546148	4.840295
Stddev	.110997	.016719	.017526
%RSD	2.293808	.3677536	.3620903
#1	4.729818	4.534336	4.820366
#2	4.835456	4.538830	4.853309
#3	4.951728	4.565278	4.847211

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2400.950	55593.81	13545.87	1706.230	3844.845
Stddev	45.590	61.56	39.74	17.316	80.694
%RSD	1.898826	.1107330	.2933421	1.014858	2.098762
#1	2449.234	55535.18	13591.07	1686.805	3931.231
#2	2394.974	55588.32	13516.46	1711.841	3831.893
#3	2358.644	55657.93	13530.07	1720.045	3771.410

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB05 Acquired: 11/8/2024 18:08:47 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000643	.0014435	-.000123	.0009760	-.000587	.0049438	-.004363
Stddev	.002587	.0007928	.000459	.0007238	.000869	.0034932	.000193
%RSD	402.4904	54.91898	374.2746	74.16516	148.1500	70.65816	4.424570
#1	-.002633	.0018553	.000006	.0014207	-.001479	.0048848	-.004152
#2	.002281	.0019456	-.000632	.0013665	.000258	.0084662	-.004531
#3	-.001576	.0005296	.000258	.0001408	-.000539	.0014805	-.004407

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000137	-.000045	.0036884	-.000031	.0000090	-.000377	.0041545
Stddev	.0000738	.000008	.0075153	.000357	.0000309	.000074	.0036681
%RSD	538.8979	17.86335	203.7530	1141.254	342.6088	19.64642	88.29060
#1	-.000062	-.000051	-.002718	-.000442	.0000176	-.000323	.0062800
#2	.000017	-.000036	.001822	.000204	-.000025	-.000345	-.000081
#3	.000086	-.000049	.011961	.000145	.000035	-.000461	.006265

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001487	.0039391	.0001894	.0007135	.1038626	-.000444	.0000249
Stddev	.0000599	.0117833	.0001009	.0002277	.0160003	.000709	.0000642
%RSD	40.25983	299.1392	53.28290	31.91383	15.40521	159.8008	257.8813
#1	.0000955	-.003967	.0001010	.0009085	.0881995	.000289	-.000035
#2	.0002136	.017482	.0001679	.0004632	.1032082	-.001127	.000093
#3	.0001371	-.001698	.0002993	.0007688	.1201799	-.000495	.000017

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0312293	.0019083	.0003317	.0001392	.0007505	.0009337	-.001837
Stddev	.0158028	.0001604	.0001149	.0006547	.0003475	.0033420	.000546
%RSD	50.60242	8.404287	34.64259	470.2516	46.30539	357.9340	29.74221
#1	.0151825	.0020831	.0003877	-.000589	.0010777	.0044408	-.002091
#2	.0317294	.0018739	.0001996	.000326	.0007881	.0005742	-.002209
#3	.0467762	.0017679	.0004080	.000680	.0003857	-.002214	-.001210

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB05 Acquired: 11/8/2024 18:08:47 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.002567	-.001559	.0001420
Stddev	.002300	.001348	.0000343
%RSD	89.59150	86.45798	24.13464
#1	-.002638	-.000458	.0001308
#2	-.000232	-.001156	.0001804
#3	-.004830	-.003062	.0001147

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2577.670	58268.36	13520.71	1829.301	4448.610
Stddev	10.594	130.06	36.60	16.405	14.125
%RSD	.4109945	.2232028	.2706894	.8967686	.3175138
#1	2589.211	58181.34	13497.16	1823.708	4464.244
#2	2575.413	58205.87	13502.10	1816.424	4444.818
#3	2568.387	58417.87	13562.87	1847.770	4436.768

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-01 Acquired: 11/8/2024 18:13:08 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0933444	-.017106	.3327695	-.087493	-.000058	233.6389
Stddev	.0011468	.001318	.0049239	.005253	.002961	.3730
%RSD	1.228513	7.704273	1.479663	6.003908	5087.519	.1596431
#1	.0946642	-.017503	.3379370	-.089789	-.002523	233.3723
#2	.0927766	-.018180	.3322393	-.091208	-.000877	234.0652
#3	.0925923	-.015635	.3281322	-.081483	.003226	233.4794

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8678221	.0147784	.0531271	19.51290	.3236866	.1744499
Stddev	.0007192	.0001156	.0016266	.05077	.0014551	.0034725
%RSD	.0828755	.7823097	3.061771	.2601822	.4495339	1.990523
#1	.8682614	.0146802	.0547420	19.46280	.3251383	.1780489
#2	.8682128	.0147492	.0531501	19.56432	.3236933	.1741814
#3	.8669921	.0149059	.0514890	19.51158	.3222281	.1711195

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5799082	371.5889	6.120109	68.26872	.3135773	.0003627
Stddev	.0128671	.8364	.003654	.15509	.0061736	.0001312
%RSD	2.218808	.2250918	.0597032	.2271759	1.968757	36.18108
#1	.5926578	371.8199	6.116957	68.09403	.3198726	.0002783
#2	.5801400	372.2855	6.124114	68.39021	.3133263	.0002959
#3	.5669268	370.6612	6.119256	68.32191	.3075331	.0005139

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.45386	.5493850	.9023151	25.11026	.2413318	.0038498
Stddev	.11322	.0019561	.0097702	.06849	.0008827	.0001014
%RSD	.6486549	.3560516	1.082797	.2727438	.3657519	2.634884
#1	17.50746	.5493369	.9036914	25.14255	.2418095	.0039640
#2	17.53033	.5513647	.9113242	25.15663	.2418727	.0037702
#3	17.32380	.5474534	.8919297	25.03160	.2403133	.0038152

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-01 Acquired: 11/8/2024 18:13:08 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0565223	5.581447	F 19.18239	6.979233	3.427947	.2965340
Stddev	.0017916	.001249	.07684	.124538	.059856	.0005551
%RSD	3.169737	.0223792	.4005839	1.784412	1.746132	.1871860
#1	.0585363	5.580173	19.14793	7.107115	3.486758	.2958955
#2	.0559250	5.581500	19.27043	6.972252	3.429985	.2969015
#3	.0551057	5.582669	19.12881	6.858332	3.367097	.2968051

Elem	Sr4077
Units	ppm
Avg	-.151096
Stddev	.000865
%RSD	.5722511
#1	-.151264
#2	-.151863
#3	-.150159

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2681.543	61111.43	15303.15	1918.546	3612.374
Stddev	35.254	311.73	37.01	21.554	58.715
%RSD	1.314687	.5101081	.2418316	1.123455	1.625377
#1	2646.845	60899.63	15260.45	1910.155	3554.872
#2	2680.455	60965.27	15325.96	1902.450	3610.018
#3	2717.328	61469.39	15323.04	1943.034	3672.231

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-05 Acquired: 11/8/2024 18:17:28 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0876319	-.034994	.6084226	-.095743	-.000847	194.8672
Stddev	.0052920	.003088	.0016079	.001636	.001345	.3868
%RSD	6.038845	8.824699	.2642765	1.709023	158.8045	.1985027
#1	.0904598	-.036280	.6095865	-.095759	-.000701	195.2714
#2	.0815268	-.031471	.6065879	-.097371	-.002258	194.5004
#3	.0909092	-.037232	.6090935	-.094099	.000419	194.8300

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.138417	.0161165	.0700894	52.55249	.3614752	.2235415
Stddev	.003188	.0000113	.0006193	.03977	.0020559	.0007130
%RSD	.2800153	.0702960	.8835078	.0756791	.5687384	.3189370
#1	1.138889	.0161043	.0707654	52.53446	.3628517	.2234535
#2	1.135019	.0161267	.0695495	52.59809	.3624620	.2228766
#3	1.141342	.0161185	.0699533	52.52493	.3591120	.2242943

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7053203	385.6528	17.92704	78.47011	.3940977	-.000732
Stddev	.0033640	3.7643	.09808	.14446	.0011540	.000870
%RSD	.4769541	.9760969	.5471019	.1840918	.2928182	118.9258
#1	.7090678	381.9138	17.81420	78.31386	.3953815	-.001619
#2	.7025610	389.4420	17.97514	78.59880	.3931467	.000121
#3	.7043322	385.6026	17.99179	78.49767	.3937649	-.000697

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.978064	.5947832	1.739646	29.29373	.2371751	.0055454
Stddev	.018717	.0013486	.007229	.03977	.0033277	.0001566
%RSD	.3130960	.2267404	.4155358	.1357680	1.403033	2.824698
#1	5.990928	.5946911	1.735428	29.28549	.2337415	.0055788
#2	5.956592	.5961756	1.735516	29.25872	.2403855	.0056826
#3	5.986673	.5934831	1.747993	29.33697	.2373983	.0053747

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-05 Acquired: 11/8/2024 18:17:28 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0509693	9.169489	F 19.01443	6.444675	F 20.65823	.3150179
Stddev	.0008083	.006185	.02463	.007994	.04688	.0007711
%RSD	1.585803	.0674552	.1295435	.1240465	.2269252	.2447844
#1	.0514616	9.165101	19.04098	6.436004	20.63509	.3149611
#2	.0514098	9.166802	19.01002	6.451752	20.62742	.3142767
#3	.0500365	9.176563	18.99231	6.446270	20.71218	.3158158

Elem	Sr4077
Units	ppm
Avg	-.093861
Stddev	.004298
%RSD	4.579528
#1	-.090080
#2	-.098536
#3	-.092967

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2938.697	67720.31	16731.32	2103.584	3618.601
Stddev	9.338	85.37	8.15	13.874	9.011
%RSD	.3177716	.1260640	.0486892	.6595541	.2490296
#1	2936.262	67703.74	16740.28	2109.760	3617.756
#2	2930.817	67644.44	16724.37	2113.298	3610.042
#3	2949.011	67812.75	16729.30	2087.695	3628.005

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-09 Acquired: 11/8/2024 18:21:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.1113246	-.029928	.9666056	-.073243	.0021083	156.5858
Stddev	.0017450	.006860	.0032943	.003550	.0002842	1.9288
%RSD	1.567481	22.92219	.3408083	4.847474	13.47749	1.231768
#1	.1113470	-.024988	.9687440	-.073695	.0022721	154.3587
#2	.1130583	-.027036	.9628120	-.069488	.0017802	157.6911
#3	.1095686	-.037761	.9682610	-.076546	.0022726	157.7077

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.030550	.0160050	.0538917	47.55100	.3163524	.1764649
Stddev	.025740	.0001247	.0002589	.39893	.0009410	.0008656
%RSD	1.267661	.7791791	.4805027	.8389485	.2974505	.4905217
#1	2.004015	.0158939	.0535927	47.11051	.3152761	.1774587
#2	2.055415	.0161399	.0540451	47.88794	.3167615	.1760604
#3	2.032221	.0159813	.0540372	47.65456	.3170196	.1758757

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4755761	298.2270	5.029180	80.75335	.3454707	.0021268
Stddev	.0015318	2.6470	.045655	.81935	.0003787	.0002788
%RSD	.3220908	.8875670	.9078035	1.014636	.1096173	13.10983
#1	.4745898	301.2813	4.981288	79.82218	.3459080	.0024319
#2	.4773408	296.6018	5.072209	81.36394	.3452511	.0020630
#3	.4747978	296.7978	5.034042	81.07393	.3452531	.0018853

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.591671	.5435092	1.549152	30.30193	.2119355	.0053281
Stddev	.054289	.0056428	.004940	.11357	.0053091	.0007380
%RSD	.7151067	1.038215	.3188998	.3748082	2.505041	13.85089
#1	7.634827	.5370271	1.554854	30.36138	.2180649	.0059429
#2	7.609470	.5473232	1.546440	30.37345	.2087784	.0045097
#3	7.530718	.5461772	1.546161	30.17097	.2089631	.0055316

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-09 Acquired: 11/8/2024 18:21:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0458746	6.880958	F 14.13776	8.172244	1.402198	.3276149
Stddev	.0009305	.076954	.05795	.025862	.011368	.0050900
%RSD	2.028391	1.118363	.4099201	.3164600	.8107428	1.553649
#1	.0457263	6.799860	14.07829	8.201724	1.403903	.3231849
#2	.0450272	6.952960	14.19406	8.161630	1.412618	.3331749
#3	.0468704	6.890053	14.14092	8.153377	1.390074	.3264848

Elem	Sr4077
Units	ppm
Avg	-.081337
Stddev	.005072
%RSD	6.235496
#1	-.087002
#2	-.077221
#3	-.079786

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3056.433	70620.42	17424.41	2164.969	3673.241
Stddev	4.689	500.30	94.03	22.286	7.983
%RSD	.1533987	.7084418	.5396266	1.029387	.2173243
#1	3051.052	70042.96	17525.59	2139.411	3664.072
#2	3059.639	70894.58	17339.73	2175.150	3678.646
#3	3058.609	70923.72	17407.89	2180.347	3677.006

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13 Acquired: 11/8/2024 18:26:17 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0496674	-.017210	.5724619	-.056079	.0018606	116.8944
Stddev	.0020108	.001689	.0021527	.003120	.0014667	.2668
%RSD	4.048547	9.816916	.3760406	5.564391	78.83265	.2282569
#1	.0473705	-.017523	.5745169	-.057889	.0026617	116.5981
#2	.0505212	-.018720	.5726456	-.057871	.0001677	116.9693
#3	.0511103	-.015385	.5702233	-.052476	.0027523	117.1157

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.024789	.0083003	.0354374	181.9585	.1791016	.1447535
Stddev	.003507	.0001209	.0000313	.7308	.0004759	.0002823
%RSD	.3421970	1.456883	.0884024	.4016335	.2657232	.1950195
#1	1.022094	.0082821	.0354130	181.2762	.1796354	.1450493
#2	1.023518	.0081895	.0354727	181.8697	.1789480	.1444870
#3	1.028754	.0084293	.0354265	182.7297	.1787215	.1447242

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5773051	237.9270	3.594739	58.98817	.2273011	.0012602
Stddev	.0014408	1.2487	.016039	.23634	.0005005	.0003061
%RSD	.2495754	.5248358	.4461758	.4006490	.2201788	24.29027
#1	.5783630	236.5567	3.582032	58.72574	.2275177	.0009071
#2	.5756641	238.2234	3.589425	59.05457	.2267288	.0014222
#3	.5778881	239.0008	3.612761	59.18421	.2276568	.0014512

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.18764	.5025907	1.307814	18.53194	1.556386	.0054548
Stddev	.05898	.0036574	.003860	.04448	.005538	.0003429
%RSD	.4156944	.7277180	.2951712	.2400404	.3558176	6.285199
#1	14.14307	.5003183	1.306907	18.48117	1.557365	.0053762
#2	14.16535	.5006441	1.312048	18.55056	1.550424	.0051582
#3	14.25452	.5068098	1.304489	18.56409	1.561369	.0058302

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13 Acquired: 11/8/2024 18:26:17 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0392995	4.361678	F 22.37377	5.951450	4.237137	.2106040
Stddev	.0013832	.013864	.08169	.012643	.003062	.0009178
%RSD	3.519512	.3178504	.3651182	.2124411	.0722690	.4357969
#1	.0382572	4.353320	22.27986	5.939138	4.235790	.2116609
#2	.0387726	4.354033	22.41301	5.964400	4.240642	.2100077
#3	.0408686	4.377681	22.42844	5.950811	4.234980	.2101433

Elem	Sr4077
Units	ppm
Avg	.5151282
Stddev	.0058921
%RSD	1.143821
#1	.5215300
#2	.5139225
#3	.5099322

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2579.912	60492.51	15258.95	1837.487	3554.172
Stddev	8.043	30.66	35.38	4.076	2.200
%RSD	.3117593	.0506807	.2318442	.2218319	.0619114
#1	2584.843	60464.28	15223.76	1841.462	3556.535
#2	2584.263	60488.13	15294.51	1833.317	3553.798
#3	2570.631	60525.12	15258.57	1837.682	3552.182

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13DUP Acquired: 11/8/2024 18:30:29 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0508205	-.014927	.5686713	-.060176	.0025719	118.0441
Stddev	.0027353	.005289	.0012722	.002718	.0007889	.6235
%RSD	5.382271	35.43473	.2237093	4.516561	30.67404	.5281999
#1	.0487072	-.008981	.5685117	-.062667	.0028140	117.8057
#2	.0498443	-.016693	.5700157	-.057277	.0032115	118.7517
#3	.0539100	-.019108	.5674864	-.060584	.0016904	117.5750

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.042825	.0084663	.0347297	183.9010	.1815744	.1443810
Stddev	.006168	.0001141	.0001121	.5213	.0005056	.0004597
%RSD	.5914656	1.347229	.3227931	.2834674	.2784304	.3184193
#1	1.042756	.0083450	.0348503	183.3483	.1810048	.1438627
#2	1.049027	.0085714	.0347099	184.3838	.1819700	.1447394
#3	1.036692	.0084824	.0346287	183.9708	.1817483	.1445410

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5640822	243.2587	3.644717	59.72107	.2261818	.0019893
Stddev	.0008432	.4081	.007440	.12805	.0006611	.0004101
%RSD	.1494796	.1677615	.2041222	.2144140	.2922999	20.61538
#1	.5632105	243.4375	3.639136	59.57396	.2254321	.0015384
#2	.5648936	242.7917	3.653163	59.78176	.2266815	.0020893
#3	.5641426	243.5468	3.641852	59.80749	.2264317	.0023401

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.62900	.5097099	1.310302	18.95149	1.580514	.0056175
Stddev	.10624	.0013492	.002140	.05927	.004397	.0001256
%RSD	.7262283	.2646985	.1633106	.3127674	.2782260	2.236139
#1	14.72880	.5101042	1.311138	18.99299	1.577580	.0056595
#2	14.64087	.5108180	1.311897	18.97787	1.585570	.0054763
#3	14.51732	.5082075	1.307870	18.88360	1.578393	.0057168

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13DUP Acquired: 11/8/2024 18:30:29 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0386473	4.439329	F 23.21572	5.921314	4.163648	.2145466
Stddev	.0010801	.017346	.02289	.014323	.016770	.0013894
%RSD	2.794762	.3907280	.0985779	.2418881	.4027726	.6475796
#1	.0376507	4.436312	23.19973	5.904993	4.156032	.2155407
#2	.0384962	4.457985	23.24193	5.931791	4.152037	.2151399
#3	.0397950	4.423689	23.20550	5.927159	4.182874	.2129591

Elem	Sr4077
Units	ppm
Avg	.5185021
Stddev	.0076092
%RSD	1.467538
#1	.5138298
#2	.5272824
#3	.5143940

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2637.837	59837.94	15195.04	1844.096	3615.151
Stddev	4.040	175.38	62.88	9.516	3.571
%RSD	.1531372	.2930880	.4138479	.5160198	.0987739
#1	2635.575	59690.43	15206.48	1834.647	3617.083
#2	2635.436	59791.53	15127.22	1843.963	3611.030
#3	2642.501	60031.86	15251.42	1853.677	3617.340

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13LX5 Acquired: 11/8/2024 18:34:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0105871	-.005041	.1241224	-.011214	-.000489	26.40100	.2324085
Stddev	.0019724	.000995	.0007746	.001680	.001245	.28976	.0033147
%RSD	18.63059	19.74220	.6241045	14.98306	254.4770	1.097533	1.426229
#1	.0097273	-.006164	.1233269	-.010115	-.000976	26.09172	.2285879
#2	.0128434	-.004267	.1248744	-.013148	.000925	26.44512	.2341209
#3	.0091905	-.004693	.1241659	-.010379	-.001416	26.66618	.2345167

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020773	.0055825	43.21201	.0429211	.0297124	.1384904	55.27777
Stddev	.0000175	.0001170	.58417	.0005433	.0001880	.0002436	.23467
%RSD	.8422708	2.095265	1.351876	1.265897	.6326811	.1759203	.4245364
#1	.0020946	.0055398	42.58724	.0435395	.0295193	.1387708	55.00710
#2	.0020776	.0054929	43.30416	.0427036	.0297232	.1383303	55.40192
#3	.0020596	.0057149	43.74463	.0425203	.0298948	.1383702	55.42428

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8793576	13.83916	.0478123	.0008098	2.870054	.1183857	.2988432
Stddev	.0113914	.18387	.0001945	.0000349	.007182	.0017537	.0004483
%RSD	1.295424	1.328601	.4068209	4.312431	.2502512	1.481342	.1500238
#1	.8662121	13.62935	.0476774	.0008291	2.868348	.1167838	.2984078
#2	.8855290	13.91595	.0480353	.0008309	2.877936	.1181139	.2988183
#3	.8863316	13.97219	.0477242	.0007695	2.863878	.1202595	.2993034

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.941290	.3941366	.0014791	.0048363	1.034010	4.860976	1.209192
Stddev	.024733	.0036946	.0002925	.0000761	.013817	.019848	.005990
%RSD	.6275363	.9373834	19.77879	1.573491	1.336237	.4083090	.4953374
#1	3.912837	.3904119	.0017013	.0048957	1.018347	4.839553	1.202413
#2	3.953393	.3941975	.0015884	.0047505	1.039217	4.864638	1.213768
#3	3.957642	.3978003	.0011477	.0048626	1.044467	4.878738	1.211394

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13LX5 Acquired: 11/8/2024 18:34:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.8539224	.0457721	.1203422
Stddev	.0031056	.0004650	.0015673
%RSD	.3636829	1.015849	1.302394
#1	.8564118	.0462683	.1185408
#2	.8549130	.0457017	.1210925
#3	.8504423	.0453464	.1213933

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2579.354	58318.44	13720.49	1847.004	4047.475
Stddev	12.767	70.52	105.64	4.660	9.835
%RSD	.4949652	.1209139	.7699598	.2522979	.2429859
#1	2564.911	58237.24	13834.84	1842.108	4037.450
#2	2589.134	58364.21	13700.11	1847.519	4057.108
#3	2584.017	58353.88	13626.53	1851.385	4047.869

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13MS Acquired: 11/8/2024 18:38:52 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7480864	1.789016	1.450305	1.615146	.6937164	119.3590
Stddev	.0061902	.020659	.004548	.002914	.0009708	.2736
%RSD	.8274762	1.154759	.3135995	.1804417	.1399347	.2292050
#1	.7473399	1.767785	1.446994	1.618422	.6925975	119.6745
#2	.7546160	1.809050	1.448431	1.614174	.6943349	119.1863
#3	.7423032	1.790213	1.455491	1.612842	.6942167	119.2164

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.208454	.1687680	.2147263	185.3490	.4837590	.3299332
Stddev	.002907	.0005480	.0008654	.2813	.0021861	.0012372
%RSD	.2405866	.3247210	.4030110	.1517800	.4518882	.3749711
#1	1.211808	.1693401	.2137606	185.3933	.4862644	.3291531
#2	1.206903	.1687161	.2149867	185.0482	.4822399	.3292869
#3	1.206651	.1682478	.2154316	185.6056	.4827727	.3313597

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8105834	237.1377	3.825458	61.44370	.6842205	.0667090
Stddev	.0017441	1.5093	.005732	.15274	.0022041	.0003841
%RSD	.2151690	.6364689	.1498473	.2485900	.3221280	.5757438
#1	.8086411	235.5590	3.825458	61.41823	.6827519	.0665966
#2	.8110936	237.2877	3.819726	61.30529	.6831547	.0663936
#3	.8120156	238.5664	3.831191	61.60758	.6867549	.0671367

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.72178	.7571499	1.457792	27.03367	1.796155	.3507412
Stddev	.03299	.0034731	.001424	.13416	.003128	.0004582
%RSD	.1972930	.4587019	.0976967	.4962714	.1741699	.1306444
#1	16.69536	.7609959	1.456535	26.91556	1.799621	.3502321
#2	16.71121	.7542427	1.459339	27.00590	1.795301	.3508709
#3	16.75876	.7562111	1.457502	27.17954	1.793542	.3511206

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13MS Acquired: 11/8/2024 18:38:52 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6690112	4.589111	F 22.58885	F 11.80656	4.173904	.3749924
Stddev	.0037529	.004696	.12259	.04068	.014784	.0019813
%RSD	.5609558	.1023263	.5426836	.3445934	.3542126	.5283576
#1	.6648830	4.594231	22.45905	11.76647	4.156864	.3771055
#2	.6699341	4.585005	22.60484	11.80541	4.181523	.3731765
#3	.6722166	4.588096	22.70265	11.84781	4.183325	.3746951

Elem	Sr4077
Units	ppm
Avg	.6943814
Stddev	.0010203
%RSD	.1469429
#1	.6945556
#2	.6953034
#3	.6932852

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2628.267	61013.15	14858.09	1866.425	3587.392
Stddev	3.018	212.58	48.62	12.728	5.033
%RSD	.1148384	.3484220	.3272159	.6819676	.1403087
#1	2625.668	61195.56	14803.83	1879.607	3591.226
#2	2627.555	61064.21	14897.67	1865.464	3589.258
#3	2631.577	60779.69	14872.78	1854.205	3581.692

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13MSD Acquired: 11/8/2024 18:42:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7536263	1.772921	1.453924	1.632081	.7029402	119.0799
Stddev	.0036144	.018407	.008200	.008839	.0011155	1.6056
%RSD	.4795984	1.038241	.5640223	.5415722	.1586916	1.348380
#1	.7541132	1.753216	1.444460	1.626400	.7018009	117.2277
#2	.7569725	1.775875	1.458933	1.627578	.7029896	120.0776
#3	.7497932	1.789673	1.458377	1.642265	.7040303	119.9343

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.191759	.1676765	.2157250	184.0435	.4836636	.3316062
Stddev	.015322	.0014119	.0005700	3.1187	.0013334	.0005021
%RSD	1.285665	.8420439	.2642210	1.694531	.2756838	.1514180
#1	1.174240	.1660632	.2151075	180.4531	.4821244	.3310841
#2	1.202656	.1686867	.2158365	185.5974	.4844012	.3320855
#3	1.198382	.1682795	.2162311	186.0799	.4844652	.3316490

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8172570	237.4245	3.767653	61.30786	.6878899	.0671778
Stddev	.0008867	2.1666	.062707	1.10958	.0025699	.0005660
%RSD	.1084930	.9125367	1.664361	1.809848	.3735868	.8425269
#1	.8177091	235.0630	3.695289	60.03091	.6849966	.0667472
#2	.8162354	237.8898	3.801631	61.85574	.6899073	.0669673
#3	.8178265	239.3206	3.806038	62.03693	.6887657	.0678189

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.73794	.7533694	1.463071	27.14934	1.786604	.3547587
Stddev	.04206	.0108590	.003860	.10687	.018601	.0003367
%RSD	.2512750	1.441392	.2638440	.3936549	1.041139	.0949034
#1	16.69272	.7410391	1.462442	27.02594	1.765699	.3547236
#2	16.77590	.7575620	1.467208	27.21141	1.801326	.3544409
#3	16.74519	.7615072	1.459565	27.21068	1.792787	.3551115

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13MSD Acquired: 11/8/2024 18:42:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6736447	4.562516	F 23.27672	F 11.76824	4.177820	.3666673
Stddev	.0019065	.061633	.16126	.02613	.017161	.0040646
%RSD	.2830061	1.350846	.6928089	.2220333	.4107620	1.108524
#1	.6715218	4.491587	23.11810	11.73964	4.159920	.3619941
#2	.6752108	4.603025	23.27154	11.77421	4.179411	.3693808
#3	.6742015	4.592935	23.44051	11.79086	4.194131	.3686269

Elem	Sr4077
Units	ppm
Avg	.6863194
Stddev	.0118097
%RSD	1.720721
#1	.6728940
#2	.6909619
#3	.6951024

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2603.155	60775.55	14997.91	1854.724	3568.752
Stddev	7.027	69.08	142.43	2.814	3.425
%RSD	.2699494	.1136584	.9496794	.1517009	.0959745
#1	2597.390	60827.32	15160.86	1851.541	3566.838
#2	2610.983	60802.22	14897.14	1856.879	3572.707
#3	2601.093	60697.12	14935.74	1855.752	3566.713

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13A Acquired: 11/8/2024 18:47:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7547354	1.767153	1.439959	1.632150	.7067308	120.5812
Stddev	.0023183	.028120	.003838	.006653	.0009641	.0349
%RSD	.3071672	1.591273	.2665166	.4076360	.1364234	.0289070
#1	.7532764	1.787208	1.440519	1.637651	.7073411	120.5732
#2	.7574086	1.779242	1.443486	1.624755	.7056193	120.5511
#3	.7535213	1.735010	1.435872	1.634043	.7072319	120.6194

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.208336	.1653859	.2144646	184.5832	.4763130	.3297805
Stddev	.004133	.0005138	.0005279	.5674	.0023576	.0005927
%RSD	.3420546	.3106679	.2461571	.3073904	.4949608	.1797359
#1	1.204437	.1659183	.2149749	184.9219	.4738729	.3302117
#2	1.207902	.1653465	.2144984	184.8995	.4764879	.3300252
#3	1.212669	.1648930	.2139207	183.9282	.4785783	.3291046

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8133721	236.8666	3.781415	61.45449	.6817194	.0664303
Stddev	.0020589	.8109	.008281	.18708	.0009897	.0003735
%RSD	.2531272	.3423522	.2190004	.3044190	.1451784	.5622239
#1	.8144373	235.9766	3.786724	61.62103	.6823782	.0660006
#2	.8109988	237.0594	3.785649	61.49037	.6821986	.0666141
#3	.8146800	237.5637	3.771873	61.25207	.6805813	.0666764

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.92991	.7567729	1.456549	27.45414	1.778055	.3536712
Stddev	.11912	.0014745	.004778	.20604	.007714	.0007729
%RSD	.7036170	.1948344	.3280287	.7505024	.4338200	.2185372
#1	16.82521	.7567435	1.460842	27.25804	1.782337	.3536223
#2	16.90498	.7582618	1.457405	27.43552	1.782677	.3529239
#3	17.05952	.7553133	1.451401	27.66887	1.769150	.3544674

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4739-13A Acquired: 11/8/2024 18:47:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6642025	4.628094	F 23.71465	F 11.57091	4.134876	.3734742
Stddev	.0016834	.006798	.11363	.00164	.010086	.0014418
%RSD	.2534439	.1468793	.4791624	.0141768	.2439184	.3860396
#1	.6658291	4.622454	23.60406	11.57222	4.143296	.3729166
#2	.6624676	4.635642	23.70880	11.57143	4.137633	.3723944
#3	.6643106	4.626186	23.83109	11.56907	4.123698	.3751115

Elem	Sr4077
Units	ppm
Avg	.6992838
Stddev	.0028091
%RSD	.4017043
#1	.7015134
#2	.7002091
#3	.6961288

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2580.776	60859.75	14962.75	1831.626	3551.701
Stddev	2.741	67.02	89.27	12.071	7.288
%RSD	.1061956	.1101287	.5966077	.6590305	.2051913
#1	2583.053	60803.87	14867.80	1820.253	3551.597
#2	2581.542	60934.06	14975.49	1830.335	3544.465
#3	2577.734	60841.32	15044.97	1844.291	3559.040

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164757BL Acquired: 11/8/2024 18:51:07 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000194	-.000590	-.001191	.0007527	-.000444	.0053073	-.004526
Stddev	.0007130	.001025	.000693	.0016961	.000260	.0034874	.000545
%RSD	3671.620	173.7851	58.18439	225.3484	58.56717	65.70943	12.05262
#1	.0000157	-.000541	-.000586	.0014209	-.000147	.0028212	-.005154
#2	-.000692	-.001639	-.001948	-.001176	-.000631	.0038069	-.004173
#3	.000734	.000410	-.001041	.002013	-.000554	.0092938	-.004250

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000205	-.000078	.0045044	.0000196	.0000921	-.000125	.0055367
Stddev	.0000267	.000017	.0037805	.0003155	.0000695	.000351	.0014999
%RSD	130.3630	21.87863	83.92934	1611.549	75.38597	281.7282	27.09012
#1	.0000075	-.000060	.0088626	-.000342	.0000520	.000257	.0039185
#2	.0000512	-.000094	.0021104	.000166	.0001723	-.000198	.0058112
#3	.0000028	-.000078	.0025401	.000235	.0000521	-.000434	.0068804

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000934	.0049970	-.000282	.0008736	-.103599	.0001778	.0001499
Stddev	.0001373	.0025830	.000059	.0002125	.024072	.0010707	.0002316
%RSD	147.0014	51.69204	21.01553	24.32013	23.23599	602.2591	154.4913
#1	.0002416	.0029389	-.000224	.0008987	-.128331	.0011994	-.000063
#2	-.000029	.0078955	-.000342	.0006497	-.102221	.0002700	.000116
#3	.000068	.0041564	-.000281	.0010724	-.080245	-.000936	.000397

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017570	.0025817	.0002772	-.000100	.0006404	.0066682	-.002737
Stddev	.0051182	.0001421	.0000439	.000155	.0002735	.0029099	.000490
%RSD	291.2970	5.502670	15.82193	156.2222	42.71245	43.63829	17.89099
#1	.0057847	.0026169	.0003278	.000070	.0008471	.0068330	-.002484
#2	.0034888	.0024253	.0002548	-.000235	.0007440	.0036794	-.003302
#3	-.004002	.0027028	.0002491	-.000134	.0003302	.0094922	-.002426

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164757BL Acquired: 11/8/2024 18:51:07 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000599	-.001798	-.000001
Stddev	.003851	.001103	.000019
%RSD	643.4633	61.33869	3552.628
#1	.002164	-.002947	-.000022
#2	.001039	-.001699	.000008
#3	-.004998	-.000748	.000013

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2614.685	58700.91	13771.01	1826.760	4526.273
Stddev	19.014	99.70	31.62	7.250	28.628
%RSD	.7272035	.1698465	.2296477	.3968661	.6324785
#1	2599.810	58618.52	13771.49	1818.675	4503.107
#2	2636.108	58672.47	13802.39	1828.921	4558.278
#3	2608.136	58811.74	13739.14	1832.683	4517.433

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV06 Acquired: 11/8/2024 18:55:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.973032	4.987696	4.832327	5.100525	5.066308	9.786154	9.460703
Stddev	.016798	.001293	.005138	.009651	.009545	.050296	.102976
%RSD	.3377773	.0259206	.1063336	.1892205	.1883932	.5139555	1.088456
#1	4.958441	4.987359	4.835899	5.090539	5.055293	9.728080	9.442254
#2	4.969258	4.986604	4.826439	5.101233	5.072138	9.815658	9.368199
#3	4.991395	4.989123	4.834644	5.109803	5.071492	9.814725	9.571656

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2364276	2.364460	23.48257	.9227121	2.401380	1.254936	4.699845
Stddev	.0007745	.002483	.19816	.0042552	.003165	.001430	.023156
%RSD	.3275702	.1050287	.8438570	.4611665	.1318074	.1139659	.4927016
#1	.2355739	2.364071	23.26471	.9269042	2.400989	1.253412	4.679455
#2	.2366241	2.362195	23.65208	.9183965	2.398428	1.255148	4.695059
#3	.2370850	2.367115	23.53092	.9228357	2.404723	1.256248	4.725020

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.290367	23.45581	2.401504	1.223636	23.92028	2.386386	2.532747
Stddev	.019414	.26485	.002637	.003034	.11162	.021473	.005047
%RSD	.8476321	1.129158	.1098044	.2479409	.4666277	.8998114	.1992724
#1	2.267950	23.15005	2.401986	1.225688	23.81762	2.361610	2.526929
#2	2.301434	23.60324	2.398659	1.220151	23.90413	2.399611	2.535951
#3	2.301716	23.61416	2.403867	1.225069	24.03910	2.397938	2.535361

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.51189	4.725685	5.002273	4.764395	4.683282	4.856506	4.976206
Stddev	.09427	.020913	.011318	.001378	.033088	.061834	.008537
%RSD	.3845929	.4425435	.2262494	.0289145	.7065104	1.273226	.1715492
#1	24.43455	4.705399	4.989268	4.764089	4.645158	4.789360	4.985679
#2	24.48423	4.747174	5.009889	4.763196	4.700179	4.869053	4.973831
#3	24.61690	4.724481	5.007662	4.765900	4.704511	4.911103	4.969109

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV06 Acquired: 11/8/2024 18:55:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	4.739007	4.634864	4.821011
Stddev	.008462	.033964	.013752
%RSD	.1785649	.7327968	.2852526
#1	4.730504	4.595885	4.806220
#2	4.739089	4.650609	4.823402
#3	4.747428	4.658098	4.833411

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2453.090	55866.26	13421.23	1756.504	3910.332
Stddev	2.356	39.42	68.37	9.738	5.919
%RSD	.0960406	.0705680	.5094096	.5543685	.1513727
#1	2454.967	55894.30	13486.33	1765.054	3904.211
#2	2450.446	55883.30	13350.01	1745.905	3916.026
#3	2453.857	55821.18	13427.37	1758.553	3910.759

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB06 Acquired: 11/8/2024 18:59:39 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.001439	-.000732	.0003308	.0003483	-.000529	.0066374	-.003587
Stddev	.002585	.001831	.0006192	.0008202	.000988	.0015625	.000311
%RSD	179.6106	250.1261	187.1799	235.5136	186.8611	23.54137	8.672715
#1	-.000777	.000413	-.000009	.0012829	.000608	.0051791	-.003941
#2	-.004291	-.002843	-.000044	-.000252	-.001007	.0082866	-.003360
#3	.000750	.000234	.001046	.000013	-.001187	.0064466	-.003459

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000577	.0000169	.0243930	.0000471	.0001525	.0000417	.0004135
Stddev	.0000257	.0000239	.0001877	.0004512	.0000378	.0002410	.0035470
%RSD	44.65211	141.0141	.7696564	957.8616	24.80881	578.6253	857.7458
#1	.0000422	.0000382	.0246071	-.000037	.0001280	.0000294	.0020797
#2	.0000874	-.000009	.0242568	.000534	.0001334	-.000193	-.003660
#3	.0000434	.000021	.0243151	-.000356	.0001961	.000289	.002821

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000400	.0064770	.0002454	.0007461	-.121524	-.000142	.0016652
Stddev	.0001970	.0097847	.0001310	.0001457	.041066	.001521	.0000588
%RSD	492.9750	151.0697	53.39592	19.52224	33.79279	1074.029	3.530798
#1	.0002529	.0129602	.0001350	.0007933	-.168934	.000748	.0015992
#2	.0000027	.0112489	.0003902	.0008624	-.098616	.000725	.0016846
#3	-.000136	-.004778	.0002110	.0005827	-.097021	-.001898	.0017119

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006410	.0047547	.0004828	-.000379	.0004593	.0042351	-.005820
Stddev	.021947	.0001587	.0002200	.000671	.0001432	.0021560	.000431
%RSD	342.3989	3.336688	45.56998	177.1339	31.17290	50.90753	7.402549
#1	-.030511	.0047838	.0005469	-.000608	.0003099	.0057992	-.005561
#2	-.001144	.0045835	.0006635	.000377	.0004726	.0051304	-.005581
#3	.012426	.0048967	.0002378	-.000905	.0005954	.0017757	-.006317

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB06 Acquired: 11/8/2024 18:59:39 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0057483	-.001579	.0000911
Stddev	.0016401	.001176	.0000239
%RSD	28.53219	74.46482	26.26156
#1	.0076036	-.002462	.0001185
#2	.0051501	-.002032	.0000741
#3	.0044913	-.000244	.0000807

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2605.573	60230.51	13659.33	1898.399	4475.482
Stddev	3.123	1563.60	28.14	48.963	8.208
%RSD	.1198583	2.596022	.2060431	2.579190	.1833903
#1	2602.328	62027.86	13681.76	1954.703	4468.120
#2	2605.833	59183.55	13668.47	1865.799	4473.995
#3	2608.558	59480.13	13627.75	1874.695	4484.331

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164757BS Acquired: 11/8/2024 19:03:59 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7863808	2.005408	.9419758	1.965596	.7789009	1.983995
Stddev	.0063946	.028330	.0073145	.012799	.0032606	.027071
%RSD	.8131736	1.412657	.7765053	.6511339	.4186162	1.364485
#1	.7835468	2.004625	.9434740	1.969843	.7777180	1.952787
#2	.7937028	2.034122	.9484252	1.975732	.7825878	1.998041
#3	.7818930	1.977479	.9340282	1.951214	.7763968	2.001157

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1839426	.1943684	.1819490	.9802538	.3615632	.1882771
Stddev	.0027204	.0030570	.0014682	.0179991	.0060895	.0015986
%RSD	1.478960	1.572796	.8069455	1.836168	1.684206	.8490790
#1	.1809014	.1908424	.1821339	.9594910	.3545356	.1882715
#2	.1861444	.1959857	.1833160	.9914396	.3652814	.1898785
#3	.1847821	.1962769	.1803971	.9898308	.3648725	.1866813

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3052753	2.708093	.1886819	1.886689	.4715683	.0730141
Stddev	.0027324	.052214	.0020379	.022452	.0039432	.0014500
%RSD	.8950712	1.928089	1.080079	1.189995	.8361829	1.985939
#1	.3060460	2.650960	.1865163	1.860924	.4725233	.0713528
#2	.3075395	2.753341	.1905621	1.902060	.4749462	.0736643
#3	.3022402	2.719977	.1889674	1.897083	.4672353	.0740253

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.481973	.2890202	.2050824	9.233718	.2852604	.3990053
Stddev	.048313	.0052482	.0042302	.139533	.0048193	.0028047
%RSD	1.946550	1.815858	2.062687	1.511124	1.689440	.7029288
#1	2.427090	.2830136	.2003732	9.075933	.2796957	.3990984
#2	2.500751	.2913280	.2063137	9.284372	.2880057	.4017623
#3	2.518077	.2927191	.2085604	9.340848	.2880799	.3961552

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164757BS Acquired: 11/8/2024 19:03:59 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6414690	.1871936	F .6590599	5.501692	F -.012306	.1728080
Stddev	.0067073	.0021055	.0069539	.057751	.001007	.0030261
%RSD	1.045609	1.124749	1.055119	1.049703	8.182111	1.751158
#1	.6401529	.1847902	.6530034	5.524029	-.011155	.1698195
#2	.6487367	.1887127	.6575224	5.544938	-.013027	.1758705
#3	.6355173	.1880779	.6666538	5.436108	-.012735	.1727340

Elem	Sr4077
Units	ppm
Avg	.1958315
Stddev	.0026848
%RSD	1.370996
#1	.1927628
#2	.1977476
#3	.1969840

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2583.069	59313.59	13388.35	1851.021	4334.228
Stddev	17.822	665.84	152.88	18.962	32.014
%RSD	.6899629	1.122575	1.141865	1.024399	.7386211
#1	2577.584	60077.33	13564.29	1870.868	4327.170
#2	2568.634	59008.31	13287.92	1849.107	4306.333
#3	2602.989	58855.13	13312.84	1833.089	4369.182

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01 Acquired: 11/8/2024 19:08:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0011393	-.004787	-.001042	.0017058	.0001022	.0062306
Stddev	.0017780	.001349	.000963	.0025215	.0001866	.0052527
%RSD	156.0605	28.17170	92.40977	147.8174	182.5303	84.30523
#1	.0022566	-.003302	-.001223	.0009569	-.000082	.0103438
#2	.0020723	-.005122	-.001901	-.000356	.000098	.0080345
#3	-.000911	-.005936	-.000001	.004517	.000291	.0003136

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1637106	.0000366	.0002840	144.3618	.0157200	.0004107
Stddev	.0009580	.0000632	.0000672	.3993	.0003352	.0001178
%RSD	.5851873	172.8929	23.66180	.2766257	2.132400	28.66577
#1	.1642104	.0000593	.0002616	144.7486	.0153339	.0005280
#2	.1626061	-.000035	.0002309	143.9510	.0158894	.0004118
#3	.1643154	.000085	.0003596	144.3858	.0159368	.0002925

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024109	.5271949	.0246348	52.65840	.1143037	.0006313
Stddev	.0001648	.0033136	.0001595	.07478	.0003801	.0001213
%RSD	6.835395	.6285317	.6474743	.1420058	.3325496	19.21144
#1	.0023781	.5245727	.0247045	52.74407	.1145139	.0004921
#2	.0022649	.5309191	.0244523	52.60622	.1145322	.0006877
#3	.0025896	.5260930	.0247476	52.62491	.1138649	.0007142

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	664.3006	.0375242	.0600371	39.51333	.5796178	.0134594
Stddev	2.8131	.0003129	.0001708	.05633	.0014743	.0003661
%RSD	.4234738	.8340020	.2844165	.1425620	.2543559	2.719951
#1	662.5730	.0375844	.0598401	39.46536	.5805244	.0137960
#2	662.7821	.0371855	.0601424	39.49927	.5779166	.0135124
#3	667.5467	.0378027	.0601289	39.57536	.5804122	.0130696

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01 Acquired: 11/8/2024 19:08:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.007058	-.002784	F 14.93909	.2993198	F 48.97102	.0483893
Stddev	.001610	.000681	.01781	.0014116	.08402	.0014158
%RSD	22.80834	24.45156	.1192209	.4716113	.1715613	2.925856
#1	-.005476	-.002010	14.92362	.2991993	49.02185	.0472269
#2	-.008694	-.003050	14.95856	.2979722	49.01717	.0479748
#3	-.007002	-.003291	14.93509	.3007878	48.87405	.0499660

Elem	Sr4077
Units	ppm
Avg	1.333922
Stddev	.013087
%RSD	.9810550
#1	1.318816
#2	1.341813
#3	1.341136

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2082.947	48555.12	12891.93	1478.149	3235.853
Stddev	3.012	144.10	39.60	13.028	2.825
%RSD	.1445856	.2967686	.3072017	.8813959	.0873186
#1	2086.321	48718.91	12905.73	1492.278	3237.494
#2	2081.991	48447.87	12922.78	1475.560	3232.590
#3	2080.530	48498.57	12847.27	1466.610	3237.474

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01DUP Acquired: 11/8/2024 19:12:32 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003055	-.004455	-.000846	.0019252	.0010666	.0005592
Stddev	.001413	.000556	.001440	.0004756	.0010225	.0047566
%RSD	46.26499	12.48382	170.2531	24.70151	95.86115	850.6221
#1	-.001869	-.003987	-.002310	.0016573	.0022057	.0060006
#2	-.002677	-.005070	-.000797	.0016441	.0002280	-.001515
#3	-.004618	-.004309	.000569	.0024743	.0007663	-.002809

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1627891	.0000413	.0002167	143.6114	.0157324	.0003946
Stddev	.0004511	.0000203	.0001618	.3268	.0000535	.0001412
%RSD	.2771182	49.15765	74.67750	.2275750	.3397957	35.79045
#1	.1629336	.0000251	.0001899	143.2590	.0157482	.0004579
#2	.1622835	.0000640	.0003902	143.6707	.0157762	.0004930
#3	.1631503	.0000347	.0000699	143.9046	.0156728	.0002328

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021272	.5346538	.0239893	52.32617	.1141297	.0005042
Stddev	.0005055	.0052598	.0004064	.25231	.0002963	.0002672
%RSD	23.76201	.9837716	1.694261	.4821888	.2595797	52.99861
#1	.0026279	.5385777	.0235277	52.03864	.1138004	.0006062
#2	.0021368	.5286772	.0241466	52.42922	.1142142	.0007054
#3	.0016171	.5367065	.0242935	52.51064	.1143746	.0002010

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	677.3720	.0360287	.0601627	39.78572	.5827803	.0134283
Stddev	2.1655	.0013143	.0005563	.04131	.0031758	.0003446
%RSD	.3196872	3.647978	.9246136	.1038414	.5449442	2.565975
#1	677.4671	.0370534	.0595205	39.80523	.5798931	.0138201
#2	679.4884	.0364859	.0604714	39.81366	.5861819	.0131725
#3	675.1606	.0345469	.0604962	39.73826	.5822657	.0132924

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01DUP Acquired: 11/8/2024 19:12:32 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.006731	-.002744	F 15.05369	.2976171	F 48.79650	.0473569
Stddev	.000990	.000145	.05462	.0033116	.03804	.0014162
%RSD	14.70601	5.272825	.3628552	1.112713	.0779601	2.990554
#1	-.006577	-.002911	14.99111	.2960192	48.81578	.0470817
#2	-.007789	-.002659	15.07811	.3014247	48.75267	.0488905
#3	-.005827	-.002661	15.09184	.2954075	48.82104	.0460984

Elem	Sr4077
Units	ppm
Avg	1.335903
Stddev	.007117
%RSD	.5327351
#1	1.327809
#2	1.338718
#3	1.341182

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2117.473	47841.97	12883.55	1480.808	3277.725
Stddev	7.984	169.64	62.40	11.914	6.874
%RSD	.3770682	.3545863	.4843303	.8045571	.2097223
#1	2108.810	48036.17	12955.60	1492.851	3269.787
#2	2119.075	47767.08	12846.90	1480.545	3281.735
#3	2124.536	47722.66	12848.16	1469.028	3281.652

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01LX5 Acquired: 11/8/2024 19:17:03 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000923	-.000203	-.000839	.0033152	-.000483	-.002288	.0298455
Stddev	.002389	.001597	.000723	.0006466	.001300	.008314	.0002395
%RSD	258.9272	784.9701	86.11758	19.50445	268.9795	363.4399	.8023939
#1	-.001019	.000427	-.000919	.0040571	-.001044	.006730	.0298326
#2	.001513	.000982	-.001519	.0028714	.001003	-.009650	.0296128
#3	-.003262	-.002020	-.000080	.0030172	-.001409	-.003943	.0300912

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000275	.0000343	29.42329	.0033445	.0000891	.0004054	.1002607
Stddev	.0000213	.0001023	.03755	.0001985	.0000534	.0001978	.0022714
%RSD	77.31243	298.0883	.1276263	5.935538	59.94628	48.77931	2.265497
#1	.0000177	.0001220	29.46608	.0034945	.0001212	.0005496	.1019009
#2	.0000519	-.000078	29.40801	.0034196	.0000274	.0004866	.0976682
#3	.0000129	.000059	29.39579	.0031194	.0001187	.0001800	.1012131

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048491	10.50816	.0228613	.0006593	116.3179	.0080644	.0109855
Stddev	.0000539	.02275	.0002835	.0000811	.7544	.0006353	.0001941
%RSD	1.110689	.2164872	1.240018	12.29380	.6485286	7.877629	1.766758
#1	.0048949	10.51878	.0231182	.0007459	117.1449	.0081603	.0108451
#2	.0048626	10.52367	.0229085	.0006466	115.6676	.0073866	.0112070
#3	.0047897	10.48205	.0225572	.0005853	116.1411	.0086462	.0109046

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.929237	.1255687	.0025663	-.002531	-.000125	2.647798	.0483932
Stddev	.046125	.0006407	.0001134	.000249	.000318	.006286	.0029567
%RSD	.6656647	.5102470	4.417626	9.850881	254.9480	.2374158	6.109796
#1	6.976161	.1259939	.0026954	-.002625	.000080	2.653904	.0513601
#2	6.883953	.1258804	.0025209	-.002249	-.000491	2.648143	.0483728
#3	6.927598	.1248318	.0024828	-.002720	.000037	2.641346	.0454468

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01LX5 Acquired: 11/8/2024 19:17:03 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	8.950570	.0082942	.2669914
Stddev	.042485	.0012575	.0012328
%RSD	.4746579	15.16087	.4617512
#1	8.914034	.0087072	.2682474
#2	8.940487	.0068821	.2657831
#3	8.997189	.0092932	.2669438

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2444.582	55197.69	13345.52	1741.940	3909.506
Stddev	16.580	113.14	38.20	3.090	21.992
%RSD	.6782259	.2049801	.2862486	.1774130	.5625345
#1	2446.482	55142.04	13314.90	1742.073	3917.550
#2	2460.129	55123.15	13333.32	1738.785	3926.344
#3	2427.133	55327.88	13388.33	1744.961	3884.624

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01MS Acquired: 11/8/2024 19:21:20 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.8939777	1.918836	.9690281	2.155031	.8787714	2.108928
Stddev	.0082110	.029122	.0065856	.020940	.0075020	.002903
%RSD	.9184749	1.517668	.6796123	.9716771	.8536977	.1376497
#1	.8849578	1.885806	.9617901	2.131813	.8702751	2.105577
#2	.8959578	1.929887	.9706276	2.160795	.8844826	2.110531
#3	.9010176	1.940815	.9746667	2.172485	.8815565	2.110676

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3618358	.1993489	.1963363	148.0047	.3816969	.2015734
Stddev	.0005536	.0008674	.0015677	.7756	.0003889	.0014507
%RSD	.1529908	.4350970	.7984522	.5240114	.1018827	.7196737
#1	.3614766	.1983500	.1946237	148.5147	.3812526	.1999377
#2	.3615574	.1999105	.1966849	148.3871	.3818622	.2020784
#3	.3624733	.1997863	.1977003	147.1121	.3819757	.2027040

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3051200	3.535690	.2125228	55.54130	.6103589	.0826128
Stddev	.0016999	.021956	.0008000	.26106	.0047062	.0000162
%RSD	.5571320	.6209915	.3764252	.4700298	.7710506	.0196425
#1	.3032475	3.556605	.2126422	55.75989	.6055342	.0825974
#2	.3055462	3.537641	.2132565	55.61177	.6106057	.0826297
#3	.3065663	3.512823	.2116699	55.25224	.6149369	.0826114

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	637.9565	.3374973	.2901972	49.01381	.8678048	.4312034
Stddev	6.2690	.0024340	.0008531	.18912	.0042740	.0039801
%RSD	.9826753	.7211882	.2939687	.3858586	.4925121	.9230211
#1	644.4778	.3390219	.2892693	49.21761	.8629330	.4269077
#2	637.4171	.3387798	.2903748	48.84395	.8709236	.4319366
#3	631.9746	.3346903	.2909475	48.97988	.8695579	.4347659

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01MS Acquired: 11/8/2024 19:21:20 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6930484	.1933008	F 15.16950	7.169494	F 48.96761	.2360939
Stddev	.0078066	.0008392	.08384	.054940	.44991	.0007660
%RSD	1.126412	.4341519	.5526712	.7663030	.9187939	.3244477
#1	.6844893	.1938792	15.25996	7.112070	48.44810	.2357577
#2	.6948788	.1936850	15.09441	7.174855	49.22883	.2369705
#3	.6997772	.1923383	15.15413	7.221557	49.22591	.2355536

Elem	Sr4077
Units	ppm
Avg	1.557614
Stddev	.011837
%RSD	.7599656
#1	1.554920
#2	1.570566
#3	1.547356

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2133.668	49453.31	12482.43	1541.588	3261.271
Stddev	18.568	129.87	31.07	7.085	28.346
%RSD	.8702569	.2626183	.2489078	.4595644	.8691590
#1	2155.083	49355.49	12518.07	1537.028	3293.772
#2	2123.880	49600.66	12461.04	1549.750	3248.373
#3	2122.042	49403.79	12468.20	1537.987	3241.669

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01MSD Acquired: 11/8/2024 19:25:35 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.8869327	1.834823	.9468272	2.135016	.8702988	2.067379
Stddev	.0019572	.020892	.0019708	.010186	.0059667	.010612
%RSD	.2206712	1.138659	.2081471	.4770913	.6855863	.5133299
#1	.8848226	1.813377	.9463319	2.123362	.8643541	2.057134
#2	.8872867	1.835977	.9489984	2.139469	.8702552	2.066679
#3	.8886887	1.855114	.9451513	2.142218	.8762872	2.078324

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3539569	.1928142	.1910337	144.3884	.3720884	.1958952
Stddev	.0004969	.0013423	.0002694	.2344	.0009181	.0005643
%RSD	.1403841	.6961750	.1410211	.1623153	.2467459	.2880439
#1	.3539472	.1929120	.1908379	144.6213	.3718453	.1957979
#2	.3544586	.1914257	.1913410	144.3913	.3713163	.1965018
#3	.3534649	.1941050	.1909224	144.1526	.3731036	.1953859

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2996111	3.492236	.2065904	54.16949	.5940261	.0821072
Stddev	.0009001	.014093	.0004329	.03790	.0001815	.0000865
%RSD	.3004096	.4035508	.2095508	.0699716	.0305599	.1053995
#1	.2987353	3.504532	.2070452	54.16374	.5939536	.0822071
#2	.2995645	3.495320	.2065429	54.20994	.5942326	.0820552
#3	.3005336	3.476857	.2061833	54.13478	.5938920	.0820594

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	647.4876	.3299357	.2876003	49.06413	.8424705	.4244146
Stddev	1.6035	.0005612	.0016086	.16843	.0039674	.0013549
%RSD	.2476502	.1701035	.5593177	.3432937	.4709278	.3192342
#1	649.0610	.3304992	.2894304	49.04454	.8409165	.4229456
#2	645.8556	.3293767	.2864100	49.24151	.8395153	.4246832
#3	647.5461	.3299311	.2869605	48.90635	.8469797	.4256151

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01MSD Acquired: 11/8/2024 19:25:35 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6709517	.1883191	F 15.15688	6.939806	F 47.79450	.2322083
Stddev	.0015200	.0000896	.04430	.012583	.11727	.0026775
%RSD	.2265429	.0475595	.2922915	.1813147	.2453626	1.153049
#1	.6720391	.1882176	15.18424	6.951788	47.66072	.2291174
#2	.6716010	.1883532	15.18063	6.940933	47.84320	.2338118
#3	.6692148	.1883867	15.10577	6.926698	47.87957	.2336958

Elem	Sr4077
Units	ppm
Avg	1.522658
Stddev	.007492
%RSD	.4920178
#1	1.520438
#2	1.516527
#3	1.531009

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2123.015	49339.39	12698.98	1514.009	3276.103
Stddev	8.115	73.84	34.56	5.937	7.193
%RSD	.3822517	.1496567	.2721730	.3921574	.2195524
#1	2131.051	49301.20	12719.53	1516.891	3284.072
#2	2123.171	49292.46	12718.33	1507.181	3274.148
#3	2114.823	49424.50	12659.08	1517.955	3270.090

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01A Acquired: 11/8/2024 19:29:50 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.8921361	1.845572	.9328175	2.158359	.8754092	2.094372
Stddev	.0028971	.015196	.0012950	.006975	.0019831	.039422
%RSD	.3247347	.8233936	.1388259	.3231838	.2265326	1.882262
#1	.8916204	1.857016	.9343122	2.158265	.8738845	2.136225
#2	.8952564	1.851370	.9321073	2.165380	.8776511	2.057944
#3	.8895316	1.828330	.9320329	2.151431	.8746921	2.088948

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3578472	.1892421	.1887522	143.4163	.3666509	.1935645
Stddev	.0082351	.0019808	.0003802	2.5591	.0016034	.0002878
%RSD	2.301284	1.046679	.2014145	1.784374	.4373045	.1486996
#1	.3673268	.1915233	.1890860	146.3693	.3682403	.1936863
#2	.3524603	.1879583	.1883384	142.0332	.3650339	.1937714
#3	.3537544	.1882448	.1888322	141.8464	.3666786	.1932358

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2997265	3.494316	.2060391	53.72280	.5876210	.0819810
Stddev	.0004935	.030492	.0049055	.90166	.0002740	.0004708
%RSD	.1646434	.8726115	2.380841	1.678350	.0466345	.5743294
#1	.2995328	3.529033	.2117014	54.75938	.5874032	.0823973
#2	.3002875	3.482035	.2030745	53.28882	.5875312	.0814700
#3	.2993593	3.471879	.2033415	53.12021	.5879287	.0820758

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	656.6956	.3289194	.2883410	49.88313	.8371712	.4255039
Stddev	3.5458	.0054691	.0002823	.41663	.0062149	.0011579
%RSD	.5399469	1.662747	.0979049	.8352221	.7423741	.2721175
#1	660.2457	.3348286	.2886590	50.33432	.8441948	.4264068
#2	656.6869	.3240356	.2881200	49.51295	.8349351	.4259065
#3	653.1541	.3278940	.2882440	49.80211	.8323837	.4241985

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4733-01A Acquired: 11/8/2024 19:29:50 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6637677	.1899566	F 15.24528	6.766007	F 47.13217	.2364077
Stddev	.0006286	.0036859	.08684	.018217	.09100	.0050572
%RSD	.0947028	1.940392	.5696004	.2692452	.1930785	2.139190
#1	.6631412	.1941769	15.34073	6.786970	47.23529	.2420520
#2	.6643984	.1883240	15.17094	6.754013	47.09811	.2322887
#3	.6637636	.1873690	15.22419	6.757038	47.06311	.2348824

Elem	Sr4077
Units	ppm
Avg	1.544408
Stddev	.032111
%RSD	2.079145
#1	1.580335
#2	1.518505
#3	1.534385

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2091.345	49032.73	12673.04	1476.735	3253.133
Stddev	5.603	114.72	156.21	1.981	2.325
%RSD	.2679037	.2339748	1.232592	.1341144	.0714690
#1	2095.389	48931.61	12492.67	1475.941	3253.592
#2	2084.949	49157.40	12763.82	1478.989	3250.612
#3	2093.695	49009.19	12762.62	1475.275	3255.193

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164758BL Acquired: 11/8/2024 19:34:06 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001154	-.001463	.0000475	.0005284	-.000374	-.000547	-.005107
Stddev	.001598	.001748	.0005704	.0002359	.000763	.004285	.000384
%RSD	138.5439	119.4695	1200.721	44.64831	203.8247	782.7196	7.509867
#1	-.002075	-.001045	-.000074	.0008006	-.000720	.003347	-.005487
#2	.000692	.000038	-.000453	.0004002	-.000903	-.005138	-.005115
#3	-.002079	-.003383	.000669	.0003843	.000500	.000148	-.004720

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000463	-.000023	.0024026	-.000025	.0000091	-.000217	-.001660
Stddev	.0000302	.000017	.0055403	.000251	.0001284	.000208	.000515
%RSD	65.13269	71.76487	230.5976	1014.948	1405.768	95.55516	31.03572
#1	.0000808	-.000024	-.003994	-.000306	.0000362	-.000118	-.002185
#2	.0000245	-.000039	.005508	.000177	.0001218	-.000456	-.001639
#3	.0000337	-.000006	.005693	.000054	-.000131	-.000078	-.001156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000079	.0055765	-.000039	.0006904	.1863419	.0001563	-.000209
Stddev	.000053	.0087819	.000127	.0001167	.0140103	.0000867	.000249
%RSD	66.91091	157.4802	328.7101	16.90946	7.518599	55.45866	118.6928
#1	-.000041	-.002357	.000108	.0005824	.1766168	.0002360	-.000286
#2	-.000139	.015013	-.000098	.0006746	.1800083	.0001689	.000068
#3	-.000056	.004073	-.000125	.0008143	.2024007	.0000640	-.000411

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0390371	.0003283	.0002484	-.000209	.0002945	-.004474	-.006078
Stddev	.0134443	.0000638	.0001251	.000150	.0002550	.002292	.001383
%RSD	34.43988	19.44672	50.36306	71.61930	86.59022	51.23882	22.75902
#1	.0479258	.0002870	.0001930	-.000076	.0004325	-.002047	-.007172
#2	.0456151	.0004019	.0001606	-.000180	.0004507	-.004772	-.006538
#3	.0235703	.0002962	.0003917	-.000371	.0000002	-.006602	-.004523

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164758BL Acquired: 11/8/2024 19:34:06 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0019983	-.001796	.0000155
Stddev	.0018139	.001143	.0000102
%RSD	90.77334	63.61924	65.88046
#1	.0029638	-.000990	.0000272
#2	-.000094	-.001294	.0000104
#3	.003125	-.003104	.0000088

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2578.070	58380.15	13506.05	1824.997	4456.054
Stddev	8.909	89.79	40.45	3.278	3.949
%RSD	.3455599	.1537996	.2995058	.1796229	.0886184
#1	2567.838	58322.95	13460.64	1822.621	4451.641
#2	2584.104	58483.64	13519.31	1828.737	4457.269
#3	2582.269	58333.86	13538.21	1823.633	4459.253

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164758BS Acquired: 11/8/2024 19:38:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7968579	2.014500	.9590939	1.988764	.7894644	2.012458
Stddev	.0024492	.019377	.0006653	.005530	.0029411	.001554
%RSD	.3073526	.9618531	.0693678	.2780787	.3725385	.0772109
#1	.7950317	1.993154	.9591335	1.983559	.7860993	2.010663
#2	.7959010	2.019367	.9584097	1.994571	.7907507	2.013351
#3	.7996411	2.030978	.9597385	1.988162	.7915432	2.013358

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1901866	.1986132	.1850797	1.011168	.3731436	.1917251
Stddev	.0005902	.0006826	.0001886	.017596	.0009013	.0001152
%RSD	.3103317	.3436632	.1018927	1.740185	.2415473	.0600646
#1	.1898371	.1986582	.1851751	.992125	.3722308	.1917753
#2	.1898546	.1979092	.1848625	1.014554	.3731671	.1915934
#3	.1908680	.1992721	.1852015	1.026826	.3740329	.1918067

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3092479	2.803238	.1941258	1.905859	.4796417	.0744208
Stddev	.0006819	.012551	.0015887	.024860	.0011981	.0000898
%RSD	.2205199	.4477278	.8183862	1.304416	.2497836	.1206887
#1	.3084669	2.789185	.1937861	1.901301	.4803822	.0743179
#2	.3097255	2.813334	.1927344	1.883593	.4782595	.0744613
#3	.3095514	2.807194	.1958569	1.932683	.4802834	.0744833

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.796970	.2953096	.2101329	9.612285	.2880272	.4034916
Stddev	.046125	.0006963	.0005391	.062938	.0008941	.0008770
%RSD	1.649118	.2357992	.2565714	.6547658	.3104094	.2173567
#1	2.745540	.2945236	.2096602	9.549873	.2890085	.4024929
#2	2.810695	.2955561	.2100184	9.675736	.2878142	.4038457
#3	2.834676	.2958492	.2107201	9.611246	.2872589	.4041362

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164758BS Acquired: 11/8/2024 19:38:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6531093	.1918440	F .6817466	5.612119	F -.007204	.1832799
Stddev	.0001069	.0008125	.0025991	.011793	.001826	.0022378
%RSD	.0163729	.4235110	.3812410	.2101315	25.33914	1.220981
#1	.6531735	.1919032	.6838564	5.602972	-.007265	.1807115
#2	.6531685	.1910035	.6788432	5.607956	-.008999	.1848099
#3	.6529858	.1926253	.6825402	5.625429	-.005349	.1843183

Elem	Sr4077
Units	ppm
Avg	.2024103
Stddev	.0003431
%RSD	.1694965
#1	.2021519
#2	.2022796
#3	.2027996

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2581.629	58182.92	13291.92	1844.998	4311.627
Stddev	10.820	102.42	53.98	4.441	11.036
%RSD	.4191113	.1760298	.4061387	.2406872	.2559489
#1	2593.543	58292.47	13261.29	1848.486	4322.385
#2	2578.931	58166.70	13354.25	1846.509	4312.164
#3	2572.413	58089.57	13260.21	1839.999	4300.333

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04 Acquired: 11/8/2024 19:42:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.006412	-.027703	.0012314	.0025783	.0028882	.7775422
Stddev	.006307	.003387	.0013280	.0029862	.0023016	.0049048
%RSD	98.35968	12.22648	107.8415	115.8202	79.69037	.6308056
#1	-.005518	-.029752	.0024022	.0013958	.0032078	.7718905
#2	-.013117	-.029564	-.000212	.0059747	.0050134	.7806849
#3	-.000600	-.023793	.001504	.0003645	.0004435	.7800512

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0687633	-.000025	.0003754	411.3793	.0035599	-.001084
Stddev	.0015336	.000104	.0000355	2.0448	.0008857	.000528
%RSD	2.230200	409.9559	9.452448	.4970536	24.88042	48.68041
#1	.0669989	.000040	.0003609	409.0712	.0042783	-.001669
#2	.0695151	.000030	.0004158	412.9642	.0038310	-.000938
#3	.0697758	-.000145	.0003494	412.1024	.0025703	-.000645

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0031221	1.042148	.1393802	1256.756	.0016234	.0003980
Stddev	.0002413	.021956	.0013544	9.557	.0002457	.0009481
%RSD	7.727459	2.106826	.9717540	.7604620	15.13678	238.2193
#1	.0030577	1.029383	.1378472	1247.289	.0013449	-.000679
#2	.0029195	1.029561	.1404149	1256.576	.0017156	.001107
#3	.0033890	1.067501	.1398785	1266.401	.0018097	.000766

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.0073096	.0396804	850.8123	4.285924	.0143147
Stddev	-----	.0007279	.0006985	11.9133	.028013	.0002198
%RSD	-----	9.957665	1.760315	1.400230	.6536136	1.535596
#1	^ -----	.0068805	.0402160	858.2759	4.253860	.0141165
#2	^ -----	.0081500	.0388904	837.0731	4.305656	.0142765
#3	^ -----	.0068983	.0399349	857.0879	4.298255	.0145512

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04 Acquired: 11/8/2024 19:42:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.008377	.0150159	6.173598	.6458488	F 1086.285	.4267394
Stddev	.001252	.0038993	.034436	.0047942	4.145	.0041498
%RSD	14.94264	25.96755	.5577874	.7423038	.3815965	.9724424
#1	-.008319	.0121854	6.156426	.6513592	1085.073	.4225481
#2	-.009657	.0133987	6.151126	.6426341	1082.880	.4308464
#3	-.007156	.0194636	6.213243	.6435532	1090.901	.4268238

Elem	Sr4077
Units	ppm
Avg	8.980490
Stddev	.096449
%RSD	1.073984
#1	8.870193
#2	9.048993
#3	9.022284

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1125.247	28325.47	9051.778	808.5309	1552.147
Stddev	6.230	145.17	48.082	5.4555	7.916
%RSD	.5536527	.5125040	.5311845	.6747429	.5100350
#1	1132.427	28335.58	9099.925	803.9815	1561.259
#2	1122.043	28465.31	9003.762	814.5792	1548.223
#3	1121.271	28175.51	9051.647	807.0322	1546.960

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV07 Acquired: 11/8/2024 19:47:09 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.061371	5.052034	4.907631	5.214132	5.179161	10.06217	9.517518
Stddev	.013324	.049996	.001986	.007467	.008787	.01072	.148717
%RSD	.2632479	.9896114	.0404706	.1432023	.1696668	.1065730	1.562563
#1	5.046152	5.003760	4.905798	5.208050	5.171603	10.07439	9.663479
#2	5.070934	5.103590	4.907354	5.211880	5.177077	10.05432	9.522884
#3	5.067027	5.048753	4.909741	5.222465	5.188803	10.05780	9.366190

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2425284	2.400152	24.01883	.9204770	2.442704	1.278420	4.709694
Stddev	.0004162	.002271	.06558	.0026766	.001457	.000885	.027383
%RSD	.1716147	.0946309	.2730319	.2907886	.0596660	.0692251	.5814206
#1	.2427578	2.397530	24.09344	.9179570	2.441546	1.277494	4.707382
#2	.2420479	2.401512	23.97033	.9201871	2.444341	1.279257	4.683540
#3	.2427794	2.401414	23.99272	.9232867	2.442225	1.278510	4.738159

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.310645	24.14109	2.440012	1.246221	24.63459	2.441017	2.584351
Stddev	.009283	.03043	.001698	.002074	.22431	.004497	.002290
%RSD	.4017284	.1260406	.0695954	.1664588	.9105418	.1842129	.0885914
#1	2.320509	24.17099	2.438057	1.244878	24.85087	2.442763	2.583000
#2	2.309346	24.14213	2.440854	1.245174	24.64987	2.444379	2.583059
#3	2.302081	24.11016	2.441124	1.248610	24.40304	2.435909	2.586995

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.95883	4.826358	5.110450	4.812839	4.748945	4.936156	5.038366
Stddev	.04409	.015335	.008302	.004706	.008585	.032326	.003988
%RSD	.1766375	.3177411	.1624432	.0977879	.1807765	.6548720	.0791570
#1	24.91002	4.843822	5.100865	4.807922	4.758574	4.901847	5.037763
#2	24.97071	4.815091	5.115128	4.817302	4.746168	4.940580	5.042621
#3	24.99577	4.820161	5.115357	4.813293	4.742091	4.966042	5.034713

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV07 Acquired: 11/8/2024 19:47:09 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.843201	4.604244	4.915062
Stddev	.001374	.024515	.037789
%RSD	.0283724	.5324414	.7688468
#1	4.843276	4.618714	4.950507
#2	4.844535	4.618080	4.875300
#3	4.841790	4.575939	4.919378

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2425.321	55174.43	13203.90	1702.780	3884.135
Stddev	.574	92.58	43.01	6.278	.406
%RSD	.0236483	.1677872	.3257164	.3686895	.0104438
#1	2424.843	55144.50	13155.79	1696.170	3884.587
#2	2425.957	55278.27	13217.28	1708.663	3884.015
#3	2425.161	55100.53	13238.63	1703.505	3883.803

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB07 Acquired: 11/8/2024 19:51:20 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000474	.0005910	.0002382	.0004463	.0005251	.0030741
Stddev	.002341	.0005140	.0005580	.0018596	.0008907	.0050155
%RSD	493.6805	86.97687	234.3045	416.6604	169.6240	163.1512
#1	.002097	.0011316	.0008676	.0019202	.0005528	.0059164
#2	-.001037	.0001085	-.000196	-.001643	-.000379	-.002717
#3	-.002483	.0005328	.000043	.001062	.001402	.006023

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005042	-.000005	-.000004	.0023984	-.000084	.0000484
Stddev	.000267	.000029	.000159	.0042360	.000179	.0000099
%RSD	5.289838	593.8783	3845.596	176.6147	212.3487	20.53160
#1	-.005161	.000003	-.000186	-.002407	.000065	.0000589
#2	-.004737	-.000037	.000110	.005590	-.000035	.0000471
#3	-.005229	.000019	.000063	.004012	-.000283	.0000392

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000150	-.001645	-.000027	.0210697	.0000894	.0008959
Stddev	.0000304	.000367	.000174	.0035361	.0001462	.0001964
%RSD	202.2205	22.30433	650.0307	16.78271	163.5957	21.92676
#1	-.000020	-.002067	-.000121	.0187601	-.000049	.0011157
#2	.000034	-.001405	-.000134	.0251406	.000243	.0008343
#3	.000031	-.001462	.000174	.0193085	.000074	.0007376

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9407534	.0001458	.0001244	.1424655	.0033650	.0004369
Stddev	.0407084	.0012235	.0001180	.0225310	.0004652	.0001372
%RSD	4.327214	839.4218	94.89535	15.81503	13.82445	31.40341
#1	.9043657	-.001258	.0000046	.1671754	.0038704	.0005912
#2	.9331766	.000987	.0002405	.1371608	.0029548	.0003284
#3	.9847179	.000708	.0001280	.1230601	.0032698	.0003912

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB07 Acquired: 11/8/2024 19:51:20 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000958	.0000694	.0007808	-.004576	F .0178026	-.002290
Stddev	.000535	.0001609	.0028135	.002842	.0012976	.000145
%RSD	55.80018	231.7697	360.3531	62.10752	7.289024	6.315633
#1	-.001572	.0002551	.0015049	-.002930	.0192978	-.002160
#2	-.000710	-.000016	.0031615	-.002941	.0169707	-.002265
#3	-.000593	-.000030	-.002324	-.007858	.0171393	-.002446

Elem	Sr4077
Units	ppm
Avg	.0001413
Stddev	.0000222
%RSD	15.72964
#1	.0001387
#2	.0001205
#3	.0001647

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2593.748	56635.04	13640.79	1779.883	4491.582
Stddev	2.141	19.74	20.52	8.285	3.577
%RSD	.0825515	.0348590	.1504435	.4655048	.0796291
#1	2591.532	56627.69	13625.22	1781.285	4495.267
#2	2593.907	56620.03	13633.09	1770.986	4488.125
#3	2595.806	56657.40	13664.04	1787.378	4491.355

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04DUP Acquired: 11/8/2024 19:55:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003729	-.025396	.0014252	.0004855	.0065479	.7898245
Stddev	.005721	.001882	.0041021	.0047277	.0031347	.0119624
%RSD	153.4291	7.410545	287.8318	973.8495	47.87356	1.514561
#1	-.008532	-.027157	-.001851	.0056552	.0082079	.7954853
#2	.002600	-.025618	.006026	-.003618	.0029323	.7979057
#3	-.005254	-.023413	.000100	-.000581	.0085034	.7760824

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0672373	-.000085	.0004444	402.5788	.0022979	-.001062
Stddev	.0003114	.000046	.0002640	3.9348	.0012720	.000513
%RSD	.4630540	53.83566	59.41094	.9774096	55.35373	48.31716
#1	.0670305	-.000130	.0001459	406.1491	.0037448	-.001616
#2	.0670862	-.000039	.0005400	398.3600	.0017931	-.000604
#3	.0675954	-.000085	.0006473	403.2274	.0013558	-.000965

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043958	1.022313	.1357060	1230.732	.0009364	.0008566
Stddev	.0003529	.018301	.0011736	7.722	.0004106	.0000175
%RSD	8.029008	1.790141	.8648436	.6274284	43.85324	2.038752
#1	.0047874	1.004095	.1369386	1239.425	.0008524	.0008382
#2	.0042979	1.040696	.1355775	1228.103	.0005742	.0008729
#3	.0041022	1.022148	.1346019	1224.667	.0013825	.0008588

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.0076698	.0391592	844.2893	4.214687	.0152749
Stddev	-----	.0018955	.0004601	5.7500	.028199	.0002464
%RSD	-----	24.71427	1.174952	.6810458	.6690672	1.613333
#1	^ -----	.0073356	.0387375	842.6256	4.239795	.0155358
#2	^ -----	.0097102	.0390902	839.5546	4.220086	.0152427
#3	^ -----	.0059636	.0396499	850.6877	4.184178	.0150461

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04DUP Acquired: 11/8/2024 19:55:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.006757	.0137186	6.240536	.6202950	F 1054.780	.4295154
Stddev	.001863	.0007910	.008093	.0062933	.816	.0022664
%RSD	27.56850	5.766184	.1296866	1.014559	.0773622	.5276631
#1	-.007597	.0135058	6.231824	.6249085	1054.869	.4282973
#2	-.004622	.0145943	6.247820	.6131260	1053.923	.4321303
#3	-.008051	.0130558	6.241965	.6228506	1055.548	.4281184

Elem	Sr4077
Units	ppm
Avg	8.854353
Stddev	.053601
%RSD	.6053622
#1	8.854222
#2	8.908019
#3	8.800818

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1113.845	28320.66	9095.728	798.2447	1549.476
Stddev	4.712	54.37	60.894	2.9414	5.933
%RSD	.4230599	.1919704	.6694747	.3684852	.3829254
#1	1115.916	28375.90	9036.391	801.4629	1552.280
#2	1117.167	28267.21	9092.725	797.5758	1553.488
#3	1108.452	28318.86	9158.067	795.6953	1542.660

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04LX5 Acquired: 11/8/2024 20:00:21 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0010928	-.005306	-.000950	.0024775	-.000766	.1124801
Stddev	.0005879	.001656	.000777	.0024518	.001352	.0017593
%RSD	53.80224	31.21849	81.76346	98.96213	176.6361	1.564075
#1	.0004199	-.004716	-.000426	.0006149	-.002135	.1105923
#2	.0015074	-.004025	-.000582	.0015623	-.000732	.1140738
#3	.0013509	-.007176	-.001843	.0052552	.000569	.1127740

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088305	.0000176	-.000055	92.43950	.0005529	-.000235
Stddev	.0004116	.0000249	.000074	1.56185	.0002252	.000131
%RSD	4.661061	141.0776	134.5952	1.689597	40.74095	55.94851
#1	.0088719	.0000126	.000005	94.20112	.0005489	-.000261
#2	.0092199	-.000004	-.000138	91.89321	.0003296	-.000351
#3	.0083998	.000045	-.000033	91.22416	.0007801	-.000092

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004215	.2020022	.0301173	292.9571	.0007986	.0004418
Stddev	.0002070	.0042524	.0005955	4.6168	.0001795	.0000771
%RSD	49.10585	2.105134	1.977330	1.575917	22.47703	17.45626
#1	.0001854	.2006452	.0307948	298.0858	.0006373	.0003539
#2	.0005716	.2067675	.0298804	291.6522	.0009920	.0004980
#3	.0005075	.1985939	.0296767	289.1332	.0007666	.0004735

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2019.270	.0015297	.0062464	111.6751	.9459739	.0028635
Stddev	40.811	.0013887	.0004080	.7495	.0179579	.0002342
%RSD	2.021053	90.78319	6.531837	.6711410	1.898351	8.179332
#1	2062.831	.0030781	.0066880	112.3504	.9655516	.0031028
#2	2013.057	.0011160	.0058833	111.8063	.9421029	.0028531
#3	1981.923	.0003948	.0061680	110.8687	.9302672	.0026348

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04LX5 Acquired: 11/8/2024 20:00:21 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003913	.0049290	.9279162	.0938139	F 231.3908	.0584992
Stddev	.000848	.0020330	.0067779	.0033674	1.0083	.0014776
%RSD	21.66863	41.24600	.7304422	3.589492	.4357593	2.525885
#1	-.003114	.0034823	.9356079	.0919398	230.5229	.0599398
#2	-.004803	.0072534	.9253226	.0977014	231.1526	.0585708
#3	-.003821	.0040513	.9228182	.0918004	232.4969	.0569871

Elem	Sr4077
Units	ppm
Avg	1.772716
Stddev	.039734
%RSD	2.241430
#1	1.812562
#2	1.772491
#3	1.733094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1997.898	43871.02	11734.59	1398.823	2873.835
Stddev	1.945	172.85	199.33	7.536	5.970
%RSD	.0973754	.3939967	1.698622	.5387670	.2077479
#1	1999.677	43768.75	11511.54	1395.870	2880.678
#2	1995.821	43773.72	11796.94	1393.209	2871.138
#3	1998.197	44070.59	11895.29	1407.388	2869.688

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MS Acquired: 11/8/2024 20:04:55 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	1.098971	1.628741	.8715341	2.734898	1.124864	3.337732
Stddev	.010833	.005149	.0029894	.028103	.010327	.048789
%RSD	.9857501	.3161037	.3430016	1.027585	.9180486	1.461728
#1	1.105082	1.626441	.8714933	2.762854	1.135574	3.337429
#2	1.105368	1.625143	.8685653	2.735192	1.124049	3.386672
#3	1.086463	1.634639	.8745436	2.706649	1.114968	3.289096

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2675299	.2296810	.1747574	419.1717	.3143644	.1839365
Stddev	.0023360	.0011053	.0002210	7.8759	.0020797	.0014878
%RSD	.8731710	.4812179	.1264346	1.878922	.6615537	.8088840
#1	.2655672	.2288379	.1747067	411.4238	.3133510	.1855248
#2	.2701137	.2309323	.1745662	427.1697	.3129856	.1837094
#3	.2669088	.2292729	.1749993	418.9216	.3167565	.1825752

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2509355	4.112253	.3080945	1283.994	.4417949	.1317263
Stddev	.0014555	.075872	.0039388	18.975	.0006163	.0013841
%RSD	.5800356	1.845034	1.278447	1.477792	.1394910	1.050713
#1	.2526132	4.032192	.3035579	1262.099	.4415499	.1304914
#2	.2501828	4.121473	.3106432	1295.635	.4413389	.1314653
#3	.2500104	4.183094	.3100824	1294.248	.4424960	.1332224

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2890634	.3531561	788.6435	4.562268	.3937047
Stddev	-----	.0036324	.0041984	4.6960	.026936	.0024649
%RSD	-----	1.256614	1.188831	.5954534	.5904052	.6260697
#1	^ -----	.2853188	.3491732	783.2772	4.533746	.3964920
#2	^ -----	.2892992	.3527540	792.0007	4.587272	.3928099
#3	^ -----	.2925721	.3575411	790.6526	4.565788	.3918122

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MS Acquired: 11/8/2024 20:04:55 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6110810	.2000275	6.892820	9.995382	F 1065.202	.6546473
Stddev	.0050056	.0043786	.028249	.026236	1.706	.0054370
%RSD	.8191454	2.189016	.4098384	.2624806	.1601528	.8305172
#1	.6114295	.1979795	6.894650	10.02406	1067.115	.6580259
#2	.6059102	.2050548	6.863700	9.98950	1064.649	.6575405
#3	.6159033	.1970481	6.920110	9.97259	1063.840	.6483755

Elem	Sr4077
Units	ppm
Avg	8.991638
Stddev	.099546
%RSD	1.107091
#1	8.943255
#2	9.106127
#3	8.925532

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1185.384	29283.59	8899.540	857.6812	1617.712
Stddev	14.743	222.53	74.122	12.0820	19.540
%RSD	1.243714	.7599299	.8328764	1.408685	1.207880
#1	1170.391	29492.54	8970.136	870.7186	1597.475
#2	1185.897	29308.65	8822.334	855.4630	1619.190
#3	1199.863	29049.59	8906.150	846.8619	1636.471

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MSD Acquired: 11/8/2024 20:09:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	1.140777	1.620006	.8671422	2.850079	1.182634	3.400776
Stddev	.007369	.009813	.0079713	.022810	.005755	.016110
%RSD	.6459774	.6057383	.9192659	.8003239	.4865834	.4737203
#1	1.149179	1.614884	.8728030	2.861595	1.185066	3.383597
#2	1.137743	1.631321	.8705975	2.864835	1.186774	3.403185
#3	1.135409	1.613815	.8580262	2.823807	1.176063	3.415546

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2708988	.2282832	.1739653	424.7799	.3122919	.1835876
Stddev	.0016301	.0010174	.0010616	2.7920	.0019109	.0007191
%RSD	.6017460	.4456861	.6102136	.6572926	.6118878	.3917006
#1	.2697141	.2294468	.1745635	426.0655	.3139727	.1838977
#2	.2702244	.2275608	.1745927	421.5766	.3126894	.1840996
#3	.2727579	.2278421	.1727396	426.6975	.3102135	.1827655

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2549290	4.244532	.3114451	1307.112	.4399125	.1357597
Stddev	.0030962	.033534	.0028273	11.045	.0023652	.0008768
%RSD	1.214522	.7900546	.9077928	.8449988	.5376445	.6458565
#1	.2543750	4.231579	.3123886	1307.728	.4403362	.1347597
#2	.2582648	4.219406	.3082667	1295.771	.4420371	.1363968
#3	.2521473	4.282610	.3136800	1317.835	.4373641	.1361225

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2896423	.3646027	825.9679	4.604394	.4040197
Stddev	-----	.0032422	.0031028	11.6067	.010667	.0025639
%RSD	-----	1.119372	.8510017	1.405225	.2316596	.6345991
#1	^ -----	.2883273	.3660830	812.8499	4.614476	.4062412
#2	^ -----	.2872642	.3610370	830.1490	4.593226	.4046037
#3	^ -----	.2933354	.3666881	834.9048	4.605481	.4012142

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MSD Acquired: 11/8/2024 20:09:27 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6116242	.2027906	7.140365	F 10.03289	F 1068.441	.6712553
Stddev	.0031911	.0031052	.050213	.04734	6.492	.0005937
%RSD	.5217346	1.531250	.7032206	.4718730	.6076146	.0884495
#1	.6132993	.2005831	7.101527	10.03494	1070.953	.6719374
#2	.6136290	.2014474	7.122500	10.07917	1073.302	.6708547
#3	.6079444	.2063414	7.197066	9.98455	1061.069	.6709738

Elem	Sr4077
Units	ppm
Avg	9.146564
Stddev	.021221
%RSD	.2320107
#1	9.158494
#2	9.122063
#3	9.159135

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.381	28146.34	8701.255	797.3388	1530.843
Stddev	11.724	106.29	36.186	7.4187	15.040
%RSD	1.055848	.3776195	.4158659	.9304355	.9824918
#1	1103.701	28260.18	8699.830	797.8835	1519.093
#2	1103.523	28129.12	8738.132	804.4702	1525.643
#3	1123.918	28049.72	8665.803	789.6627	1547.794

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04A Acquired: 11/8/2024 20:14:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	1.077202	1.569732	.8669944	2.692043	1.106999	3.314774
Stddev	.031185	.059312	.0350960	.047329	.018964	.068824
%RSD	2.895005	3.778487	4.048001	1.758122	1.713089	2.076295
#1	1.044432	1.517291	.8333760	2.648214	1.090276	3.300625
#2	1.080660	1.557804	.8642057	2.685687	1.103118	3.254124
#3	1.106513	1.634102	.9034015	2.742230	1.127603	3.389574

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2610748	.2210202	.1744205	402.4895	.3016824	.1825318
Stddev	.0053531	.0044775	.0076377	7.7269	.0035274	.0082020
%RSD	2.050404	2.025847	4.378884	1.919772	1.169245	4.493462
#1	.2600931	.2206573	.1673851	398.6794	.3046170	.1749467
#2	.2562804	.2167351	.1733324	397.4077	.3026613	.1814130
#3	.2668507	.2256681	.1825438	411.3815	.2977689	.1912358

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2482872	4.039710	.2951133	1234.478	.4385278	.1332291
Stddev	.0087571	.092199	.0056073	21.443	.0180717	.0034005
%RSD	3.526990	2.282321	1.900054	1.736995	4.120982	2.552358
#1	.2412310	4.026097	.2928814	1221.035	.4215652	.1340749
#2	.2455428	4.137958	.2909656	1223.192	.4364836	.1361268
#3	.2580877	3.955074	.3014929	1259.207	.4575346	.1294855

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.2801250	.3524660	809.6356	4.422690	.3903058
Stddev	-----	.0050954	.0095167	20.8246	.084104	.0125921
%RSD	-----	1.818974	2.700022	2.572095	1.901653	3.226209
#1	^ -----	.2769857	.3545906	803.6121	4.412997	.3787030
#2	^ -----	.2773853	.3607408	832.8080	4.343852	.3885183
#3	^ -----	.2860042	.3420666	792.4867	4.511220	.4036961

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04A Acquired: 11/8/2024 20:14:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6117566	.1922877	6.941892	9.728833	F 1053.269	.6579932
Stddev	.0306985	.0049329	.185353	.328780	42.460	.0150653
%RSD	5.018091	2.565393	2.670067	3.379438	4.031233	2.289580
#1	.5856793	.1912949	6.953467	9.420031	1014.941	.6574605
#2	.6040016	.1879266	7.121187	9.691982	1045.955	.6432013
#3	.6455890	.1976415	6.751023	10.07448	1098.910	.6733177

Elem	Sr4077
Units	ppm
Avg	8.701668
Stddev	.174482
%RSD	2.005157
#1	8.618050
#2	8.584732
#3	8.902223

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.622	28678.00	8979.420	818.1434	1634.531
Stddev	14.407	743.67	138.725	28.8390	26.196
%RSD	1.202967	2.593178	1.544922	3.524929	1.602641
#1	1208.680	28551.39	9027.564	816.6932	1656.684
#2	1202.857	28005.76	9087.659	790.0569	1641.291
#3	1181.330	29476.85	8823.037	847.6801	1605.618

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4736-02 Acquired: 11/8/2024 20:18:34 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.005001	-.003061	.0511640	.0031637	.0246302	1.687989
Stddev	.001553	.002393	.0011892	.0011034	.0004007	.032756
%RSD	31.05744	78.16454	2.324246	34.87692	1.626914	1.940530
#1	-.006679	-.002026	.0501470	.0042202	.0250676	1.652397
#2	-.004712	-.001360	.0508734	.0032520	.0242807	1.716870
#3	-.003613	-.005797	.0524715	.0020188	.0245423	1.694699

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1532125	.0002718	.0033801	18.30534	.0347673	.0054143
Stddev	.0028675	.0000352	.0001186	.33534	.0004101	.0000492
%RSD	1.871559	12.96641	3.508857	1.831945	1.179476	.9096996
#1	.1499331	.0002348	.0033848	17.93255	.0343245	.0054342
#2	.1552474	.0002756	.0032592	18.58242	.0348432	.0054505
#3	.1544571	.0003049	.0034963	18.40107	.0351341	.0053582

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2158499	16.82741	.1928874	4.676033	.0339443	.0022541
Stddev	.0017494	.10701	.0031772	.075711	.0005590	.0001117
%RSD	.8104879	.6359559	1.647167	1.619121	1.646769	4.956489
#1	.2138725	16.71048	.1896347	4.596818	.0335078	.0021595
#2	.2164809	16.85126	.1959832	4.747669	.0337507	.0022254
#3	.2171964	16.92048	.1930443	4.683614	.0345743	.0023774

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	318.0587	.0049147	.9135091	12.76279	.1050742	.0167505
Stddev	4.0549	.0009333	.0067995	.08230	.0019983	.0002780
%RSD	1.274902	18.98972	.7443306	.6448821	1.901850	1.659401
#1	313.6913	.0038413	.9071111	12.66776	.1028893	.0167421
#2	318.7804	.0055341	.9127671	12.80902	.1068094	.0164769
#3	321.7043	.0053688	.9206492	12.81159	.1055238	.0170326

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4736-02 Acquired: 11/8/2024 20:18:34 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0120698	.0563147	F 16.45728	6.016235	F 19.71401	.0205251
Stddev	.0004635	.0004641	.13339	.065247	.20808	.0007889
%RSD	3.840510	.8241529	.8105149	1.084511	1.055480	3.843693
#1	.0115400	.0560587	16.30572	5.946022	19.48620	.0197341
#2	.0124006	.0560350	16.50935	6.027682	19.76181	.0205293
#3	.0122687	.0568505	16.55679	6.075001	19.89403	.0213119

Elem	Sr4077
Units	ppm
Avg	.1327494
Stddev	.0024139
%RSD	1.818391
#1	.1300463
#2	.1346900
#3	.1335118

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2540.835	53216.69	12571.24	1780.126	3867.308
Stddev	16.685	152.92	179.96	6.475	26.825
%RSD	.6566723	.2873575	1.431555	.3637404	.6936278
#1	2559.758	53392.41	12763.67	1779.899	3896.860
#2	2534.506	53143.89	12407.09	1786.712	3860.568
#3	2528.240	53113.77	12542.96	1773.767	3844.495

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164759BL Acquired: 11/8/2024 20:22:53 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0001408	.0004583	-.000516	.0021167	.0000851	.0081745
Stddev	.0011515	.0011204	.000362	.0010718	.0000787	.0010315
%RSD	817.7939	244.4548	70.18460	50.63621	92.56357	12.61804
#1	.0005859	-.000628	-.000519	.0026001	.0001027	.0090716
#2	.0010034	.000394	-.000875	.0028616	-.000001	.0084044
#3	-.001167	.001610	-.000152	.0008883	.000154	.0070475

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007673	.0000355	.0000219	.0052190	-.000058	-.000031
Stddev	.0002049	.0000481	.0000499	.0031535	.000331	.000150
%RSD	26.70505	135.5553	228.1162	60.42275	574.0604	480.9461
#1	.0006764	.0000728	.0000099	.0078257	-.000362	-.000032
#2	.0006235	.0000523	.0000766	.0061175	-.000105	.000119
#3	.0010019	-.000019	-.000021	.0017138	.000294	-.000181

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000195	.0025095	-.000095	.0427491	-.000102	.0007856
Stddev	.000226	.0020710	.000103	.0098165	.000177	.0002690
%RSD	115.5347	82.52597	108.7749	22.96299	172.9045	34.23770
#1	-.000031	.0047718	-.000066	.0329641	-.000301	.0009615
#2	-.000452	.0007073	-.000009	.0426865	.000035	.0009194
#3	-.000103	.0020494	-.000210	.0525968	-.000039	.0004760

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.391967	-.000382	-.000174	.2939222	.0049642	.0000377
Stddev	.112320	.000605	.000056	.0147148	.0003283	.0002008
%RSD	4.695709	158.2232	32.19829	5.006345	6.612556	532.7021
#1	2.268888	-.001067	-.000196	.2866675	.0053140	.0002204
#2	2.418089	-.000159	-.000216	.2842436	.0046628	-.000177
#3	2.488924	.000079	-.000110	.3108556	.0049159	.000070

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164759BL Acquired: 11/8/2024 20:22:53 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000409	.0003515	.0008207	-.009972	F .0599139	.0009482
Stddev	.000213	.0004735	.0021782	.002104	.0011333	.0014923
%RSD	52.04661	134.7102	265.3871	21.10022	1.891547	157.3759
#1	-.000357	.0003257	-.000269	-.012110	.0586122	-.000679
#2	-.000643	.0008375	.003329	-.007904	.0604486	.002252
#3	-.000227	-.000109	-.000598	-.009901	.0606809	.001272

Elem	Sr4077
Units	ppm
Avg	.0002058
Stddev	.0000277
%RSD	13.47128
#1	.0001752
#2	.0002130
#3	.0002292

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2949.405	62842.03	13066.04	2082.802	4842.878
Stddev	2.468	218.87	9.04	9.867	9.111
%RSD	.0836845	.3482886	.0692025	.4737338	.1881304
#1	2946.568	62590.84	13076.45	2073.156	4832.394
#2	2950.593	62991.74	13060.07	2092.876	4847.361
#3	2951.055	62943.51	13061.61	2082.373	4848.879

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164759BS Acquired: 11/8/2024 20:27:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7508305	1.995619	.9722721	1.834328	.7428220	1.971042
Stddev	.0009754	.007133	.0006872	.008284	.0031894	.010028
%RSD	.1299079	.3574258	.0706798	.4515951	.4293700	.5087556
#1	.7512812	2.001926	.9717346	1.834065	.7391423	1.962483
#2	.7497113	1.987878	.9730464	1.826178	.7447947	1.968566
#3	.7514991	1.997052	.9720353	1.842739	.7445289	1.982075

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1839348	.2221564	.1909754	1.071067	.3860594	.1942203
Stddev	.0003888	.0011135	.0007356	.008511	.0035344	.0004203
%RSD	.2113726	.5012313	.3851719	.7946434	.9155119	.2164122
#1	.1837173	.2226533	.1902860	1.062431	.3829309	.1937390
#2	.1837033	.2208809	.1908905	1.071324	.3898933	.1944071
#3	.1843836	.2229349	.1917498	1.079448	.3853539	.1945149

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2932315	2.709319	.1994473	2.090771	.4868139	.0740840
Stddev	.0009866	.016578	.0013307	.007523	.0014037	.0004367
%RSD	.3364543	.6118744	.6672022	.3598411	.2883483	.5894161
#1	.2921662	2.699416	.1980598	2.082435	.4853286	.0736978
#2	.2934148	2.728457	.1995692	2.097058	.4869944	.0745578
#3	.2941136	2.700082	.2007129	2.092819	.4881186	.0739965

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 3.951931	.2992416	.2050400	8.804325	.3121720	.3954271
Stddev	.028377	.0019505	.0011070	.037892	.0014914	.0010379
%RSD	.7180559	.6517972	.5398874	.4303845	.4777584	.2624797
#1	3.923135	.2970043	.2058373	8.765678	.3130609	.3945648
#2	3.979870	.3001363	.2037761	8.805882	.3104501	.3951374
#3	3.952788	.3005842	.2055066	8.841415	.3130049	.3965790

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164759BS Acquired: 11/8/2024 20:27:13 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6801737	.1943335	F .6502220	5.763907	F .0375664	.1671457
Stddev	.0038470	.0011068	.0036045	.014255	.0037832	.0010101
%RSD	.5655921	.5695323	.5543561	.2473182	10.07078	.6043318
#1	.6764608	.1931842	.6501866	5.752264	.0419194	.1667712
#2	.6799181	.1944241	.6538440	5.759651	.0357080	.1663763
#3	.6841421	.1953922	.6466352	5.779805	.0350718	.1682895

Elem	Sr4077
Units	ppm
Avg	.1930655
Stddev	.0006293
%RSD	.3259678
#1	.1924309
#2	.1930762
#3	.1936894

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2806.374	58975.34	12383.13	1992.191	4509.071
Stddev	3.280	135.25	50.55	10.326	3.125
%RSD	.1168906	.2293313	.4082498	.5183001	.0693062
#1	2809.505	59018.59	12344.55	1980.307	4512.673
#2	2802.962	58823.76	12440.36	1997.303	4507.095
#3	2806.657	59083.68	12364.49	1998.963	4507.443

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: LR1 Acquired: 11/8/2024 20:38:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0279571	-.022846	.0498989	-.247816	-.003681	2172.019	.0172824
Stddev	.0097920	.004363	.0035300	.007939	.010181	3.485	.0004228
%RSD	35.02515	19.09794	7.074390	3.203455	276.6116	.1604557	2.446492
#1	.0278399	-.027547	.0484732	-.256319	-.002512	2171.283	.0168725
#2	.0182243	-.022066	.0539188	-.246530	-.014396	2168.961	.0172579
#3	.0378073	-.018926	.0473046	-.240599	.005866	2175.813	.0177170

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0125681	.1759305	1672.298	-.001180	.0424663	.0342412	939.0888
Stddev	.0001999	.0010915	5.139	.001166	.0001986	.0060583	5.9712
%RSD	1.590801	.6204360	.3073038	98.80834	.4675942	17.69293	.6358515
#1	.0127118	.1747493	1677.084	.000141	.0423730	.0275233	945.6785
#2	.0123398	.1761402	1666.867	-.002065	.0423315	.0359103	937.5512
#3	.0126527	.1769020	1672.944	-.001618	.0426943	.0392899	934.0368

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.107416	1873.099	.0147570	-.027285	2012.916	.0711136	.2803678
Stddev	.000229	6.361	.0011393	.001666	17.527	.0017860	.0009479
%RSD	.2130464	.3395785	7.720673	6.107188	.8707481	2.511439	.3380758
#1	-.107174	1880.441	.0158497	-.025369	2032.345	.0722032	.2813497
#2	-.107629	1869.254	.0148452	-.028083	1998.293	.0720851	.2802956
#3	-.107445	1869.603	.0135761	-.028402	2008.110	.0690525	.2794581

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1293.443	.2285480	-.006756	.0134374	-.038076	.1294179	.1403685
Stddev	14.483	.0066511	.001856	.0034602	.000189	.0059254	.0088516
%RSD	1.119738	2.910139	27.46759	25.75027	.4975329	4.578472	6.305964
#1	1308.151	.2342059	-.008703	.0164989	-.037947	.1259492	.1411469
#2	1292.985	.2302165	-.006557	.0141300	-.038293	.1362597	.1311534
#3	1279.195	.2212215	-.005007	.0096834	-.037986	.1260449	.1488052

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: LR1 Acquired: 11/8/2024 20:38:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.164638	.5201921	-.926747
Stddev	.004045	.0006513	.005987
%RSD	2.456984	.1251938	.6460023
#1	-.169107	.5200584	-.933372
#2	-.161227	.5208998	-.925142
#3	-.163581	.5196181	-.921726

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1660.271	37216.35	9846.386	1170.599	2248.061
Stddev	4.072	51.98	27.911	3.430	1.434
%RSD	.2452357	.1396804	.2834653	.2930032	.0637669
#1	1655.646	37166.98	9876.299	1168.403	2248.124
#2	1663.315	37270.61	9841.818	1174.551	2249.462
#3	1661.852	37211.46	9821.040	1168.841	2246.597

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: LR2 Acquired: 11/8/2024 20:42:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0118242	-.049010	230.8096	.0060641	-.001821	.1117137	^F *****
Stddev	.0030265	.002585	.1756	.0027775	.001048	.0040102	-----
%RSD	25.59613	5.274275	.0760682	45.80214	57.53693	3.589744	-----
#1	.0126458	-.047372	230.6268	.0072743	-.000741	.1079798	^ -----
#2	.0084717	-.051990	230.9769	.0028868	-.001889	.1112090	^ -----
#3	.0143552	-.047668	230.8253	.0080312	-.002833	.1159525	^ -----

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003269	-.007625	.3083927	.0102693	-.019841	269.0277	-.003820
Stddev	.000056	.000092	.0007733	.0004030	.000104	.8981	.005392
%RSD	1.722492	1.213041	.2507525	3.923790	.5236127	.3338147	141.1523
#1	-.003263	-.007624	.3084767	.0100773	-.019815	269.9866	-.009197
#2	-.003215	-.007718	.3091205	.0099983	-.019956	268.8902	-.003850
#3	-.003327	-.007533	.3075808	.0107323	-.019754	268.2063	.001587

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.97217	-.026157	45.55941	.0023177	1.053208	-.018104	38.41361
Stddev	.27373	.003392	.03482	.0003470	.004773	.000753	.27601
%RSD	.6369856	12.96853	.0764235	14.97180	.4532158	4.159343	.7185220
#1	42.81793	-.024871	45.53080	.0021548	1.051576	-.017886	38.52102
#2	43.28822	-.023597	45.59817	.0027162	1.058583	-.018942	38.61977
#3	42.81037	-.030005	45.54925	.0020820	1.049464	-.017485	38.10004

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3766292	.0011119	-.004427	-.005573	-.040946	-.011839	2.860381
Stddev	.0177724	.0000735	.000113	.000618	.000210	.001216	.015705
%RSD	4.718812	6.608771	2.546055	11.09157	.5121442	10.27490	.5490660
#1	.3711182	.0011968	-.004321	-.005999	-.040772	-.011775	2.874111
#2	.3965043	.0010685	-.004545	-.005855	-.040887	-.010656	2.863776
#3	.3622651	.0010705	-.004414	-.004864	-.041179	-.013086	2.843255

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: LR2 Acquired: 11/8/2024 20:42:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.007288	-.000869	.0019381
Stddev	.002633	.000183	.0000208
%RSD	36.12456	21.03169	1.072867
#1	-.007613	-.001071	.0019170
#2	-.009743	-.000715	.0019387
#3	-.004508	-.000821	.0019586

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2426.055	58450.62	12666.86	1861.191	4337.617
Stddev	9.874	143.54	64.78	4.328	5.811
%RSD	.4069837	.2455667	.5114366	.2325152	.1339713
#1	2417.021	58323.16	12703.36	1858.548	4333.933
#2	2424.550	58422.61	12592.06	1858.840	4334.601
#3	2436.595	58606.10	12705.16	1866.185	4344.316

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV08 Acquired: 11/8/2024 20:48:34 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.616722	4.807179	4.791205	4.666160	4.621111	9.426317
Stddev	.004309	.065157	.010431	.001745	.004811	.033084
%RSD	.0933339	1.355413	.2177142	.0373979	.1041109	.3509752
#1	4.617843	4.881553	4.784462	4.668166	4.615606	9.388188
#2	4.611963	4.760153	4.785932	4.664992	4.624507	9.443334
#3	4.620359	4.779830	4.803220	4.665322	4.623221	9.447429

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.196599	.2574319	2.367917	23.98577	.9201237	2.372450
Stddev	.017323	.0005153	.004942	.04645	.0018149	.006286
%RSD	.1883620	.2001819	.2086910	.1936574	.1972451	.2649604
#1	9.202200	.2577457	2.365792	23.93215	.9199846	2.368201
#2	9.177168	.2577129	2.364393	24.01134	.9183824	2.369477
#3	9.210428	.2568372	2.373565	24.01381	.9220042	2.379671

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.174931	4.517925	2.298115	24.60944	2.376123	1.192967
Stddev	.001493	.009666	.002777	.09248	.006229	.001539
%RSD	.1270437	.2139479	.1208396	.3758020	.2621459	.1289981
#1	1.173623	4.510282	2.295422	24.51504	2.372263	1.191350
#2	1.174614	4.514702	2.300969	24.61340	2.372798	1.194414
#3	1.176557	4.528791	2.297952	24.69988	2.383309	1.193136

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.18078	2.372001	2.376213	25.74665	4.931008	4.725030
Stddev	.11982	.008401	.004176	.09356	.012421	.004601
%RSD	.4955031	.3541576	.1757280	.3634020	.2518962	.0973758
#1	24.28996	2.362395	2.374465	25.64905	4.938229	4.728164
#2	24.19978	2.375639	2.373196	25.75534	4.938129	4.719748
#3	24.05260	2.377970	2.380979	25.83557	4.916665	4.727179

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV08 Acquired: 11/8/2024 20:48:34 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV08 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.715540	4.524666	F 4.403019	4.970487	4.613204	F 4.133384
Stddev	.012232	.010646	.049904	.015808	.024492	.016280
%RSD	.2593940	.2352869	1.133397	.3180444	.5309044	.3938741
#1	4.719557	4.513037	4.351821	4.957305	4.633673	4.128683
#2	4.701805	4.533932	4.405716	4.966144	4.586069	4.151498
#3	4.725258	4.527029	4.451519	4.988013	4.619869	4.119972

Elem	Sr4077
Units	ppm
Avg	4.547920
Stddev	.019920
%RSD	.4379954
#1	4.540762
#2	4.532569
#3	4.570430

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2712.554	57884.42	12896.71	1916.473	4183.716
Stddev	3.457	10.85	29.25	1.183	5.560
%RSD	.1274291	.0187468	.2268046	.0617457	.1328883
#1	2716.123	57887.46	12871.68	1915.288	4189.333
#2	2709.221	57872.38	12889.60	1917.655	4183.601
#3	2712.318	57893.44	12928.86	1916.477	4178.215

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB08 Acquired: 11/8/2024 20:57:42 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0011657	-.000291	.0009178	.0018927	-.000321	.0117278	-.000454
Stddev	.0015272	.001258	.0014404	.0004019	.000362	.0044263	.000318
%RSD	131.0110	431.5960	156.9400	21.23671	112.9838	37.74175	69.98376
#1	.0004349	-.001292	-.000443	.0022402	-.000607	.0089447	-.000804
#2	.0029209	.001121	.002426	.0019852	.000087	.0168318	-.000372
#3	.0001412	-.000703	.000770	.0014525	-.000441	.0094068	-.000185

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000487	.0000559	.0086707	-.000076	.0000860	.0005180	.0034190
Stddev	.0000326	.0001445	.0086966	.000472	.0000526	.0002007	.0028340
%RSD	66.88787	258.2344	100.2982	620.9081	61.19895	38.73862	82.89117
#1	.0000776	-.000104	.0010047	.000189	.0001447	.0003687	.0017868
#2	.0000134	.000095	.0181211	.000204	.0000430	.0004392	.0017787
#3	.0000551	.000177	.0068864	-.000620	.0000703	.0007461	.0066914

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001845	.0090901	.0003914	.0006094	.7201963	-.000234	-.000230
Stddev	.0002035	.0039297	.0001836	.0001464	.0412665	.001001	.000173
%RSD	110.3530	43.23112	46.91725	24.02934	5.729903	427.0090	75.27106
#1	.0000347	.0092222	.0005668	.0004667	.6792704	.000767	-.000369
#2	.0004162	.0050959	.0004070	.0007593	.7195233	-.001234	-.000036
#3	.0001024	.0129520	.0002005	.0006022	.7617953	-.000236	-.000285

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2658565	.0011807	.0001894	-.000034	.0005673	-.007905	-.008673
Stddev	.0419041	.0005142	.0002370	.000885	.0002296	.001562	.002717
%RSD	15.76193	43.55012	125.0943	2639.789	40.47003	19.76231	31.32386
#1	.2236143	.0006730	.0004628	.000107	.0003036	-.006147	-.006165
#2	.2665411	.0017012	.0000413	.000773	.0006753	-.008432	-.011559
#3	.3074141	.0011680	.0000643	-.000980	.0007228	-.009136	-.008294

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB08 Acquired: 11/8/2024 20:57:42 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0082360	-.001161	.0001181
Stddev	.0021626	.001157	.0000185
%RSD	26.25719	99.61378	15.69229
#1	.0086656	-.000233	.0001109
#2	.0058909	-.002457	.0001391
#3	.0101516	-.000794	.0001042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2846.431	61197.97	13361.48	1993.747	4736.770
Stddev	8.666	239.23	26.68	5.695	13.981
%RSD	.3044537	.3909160	.1996604	.2856376	.2951648
#1	2836.451	61366.45	13364.13	1997.981	4721.175
#2	2852.059	60924.14	13333.57	1995.989	4740.950
#3	2850.783	61303.31	13386.73	1987.273	4748.184

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164646BL Acquired: 11/8/2024 21:02:03 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000040	.0010872	.0004009	-.000031	-.000362	.0073798	-.000335
Stddev	.001205	.0005289	.0003182	.000877	.000075	.0042442	.000193
%RSD	3045.089	48.64583	79.37101	2872.858	20.77950	57.51056	57.69406
#1	-.000779	.0004776	.0000346	-.000693	-.000307	.0070932	-.000557
#2	.001351	.0014233	.0006088	-.000362	-.000332	.0032862	-.000240
#3	-.000691	.0013609	.0005593	.000964	-.000448	.0117600	-.000208

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000559	.0000291	-.033793	-.001225	-.000034	.0006490	-.007765
Stddev	.0000181	.0000246	.005739	.000304	.000104	.0001352	.000345
%RSD	32.42771	84.62223	16.98218	24.78280	304.1417	20.83573	4.442714
#1	.0000753	.0000567	-.036166	-.001013	.000083	.0007488	-.008163
#2	.0000394	.0000095	-.037964	-.001573	-.000115	.0007032	-.007573
#3	.0000530	.0000211	-.027248	-.001090	-.000069	.0004951	-.007558

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000163	.0148564	-.000259	.0006973	.6235548	-.000319	-.002527
Stddev	.000170	.0048467	.000123	.0002999	.0255722	.000764	.000119
%RSD	104.3353	32.62362	47.64135	43.00454	4.101033	239.2804	4.726444
#1	-.000165	.0092759	-.000400	.0009246	.5941613	.000562	-.002633
#2	-.000331	.0180122	-.000178	.0008099	.6358109	-.000779	-.002398
#3	.000008	.0172811	-.000197	.0003574	.6406921	-.000741	-.002550

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2002625	.0005170	.0000588	.0021857	.0004195	-.005052	-.009279
Stddev	.0129443	.0004155	.0002445	.0004175	.0001807	.004087	.002915
%RSD	6.463662	80.36900	416.1045	19.10120	43.06677	80.89827	31.41312
#1	.1861573	.0001457	-.000196	.0017044	.0006092	-.007160	-.010765
#2	.2115973	.0009658	.000291	.0024499	.0004000	-.007655	-.011152
#3	.2030328	.0004395	.000081	.0024027	.0002494	-.000341	-.005921

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164646BL Acquired: 11/8/2024 21:02:03 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0048172	-.001858	-.000001
Stddev	.0020454	.000553	.000006
%RSD	42.45993	29.76387	497.6874
#1	.0032135	-.001229	.000001
#2	.0071206	-.002269	-.000007
#3	.0041175	-.002077	.000003

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2980.182	63744.20	13558.60	2116.884	4933.745
Stddev	7.009	14.33	14.38	14.015	10.857
%RSD	.2352018	.0224748	.1060860	.6620486	.2200520
#1	2979.431	63755.31	13565.85	2106.055	4934.989
#2	2987.537	63728.03	13567.92	2111.883	4943.926
#3	2973.579	63749.25	13542.03	2132.713	4922.319

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164646BS Acquired: 11/8/2024 21:06:22 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7252266	1.929886	.9315700	1.778740	.7053910	1.909258
Stddev	.0013679	.024475	.0008162	.003905	.0038655	.003209
%RSD	.1886172	1.268198	.0876152	.2195360	.5479932	.1680876
#1	.7251299	1.916016	.9318938	1.776627	.7027868	1.907382
#2	.7266403	1.958145	.9306416	1.783246	.7098324	1.912964
#3	.7239097	1.915496	.9321746	1.776347	.7035536	1.907429

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1779691	.2116532	.1817071	.9790547	.3682215	.1856210
Stddev	.0005725	.0009524	.0002353	.0069103	.0011659	.0004094
%RSD	.3216890	.4500055	.1294704	.7058179	.3166380	.2205484
#1	.1783729	.2107611	.1817129	.9808172	.3678710	.1858058
#2	.1782207	.2115422	.1819394	.9714338	.3695225	.1851518
#3	.1773139	.2126562	.1814690	.9849131	.3672711	.1859054

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2821111	2.608539	.1937573	1.990484	.4643864	.0711566
Stddev	.0004618	.007141	.0005590	.012735	.0003203	.0003556
%RSD	.1636917	.2737513	.2884879	.6398124	.0689697	.4997493
#1	.2826109	2.614461	.1939896	1.999984	.4645013	.0715668
#2	.2820220	2.600609	.1941627	1.976013	.4646334	.0709351
#3	.2817003	2.610545	.1931197	1.995455	.4640245	.0709679

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.766514	.2886567	.1935147	8.453685	.2963103	.3723907
Stddev	.007416	.0018315	.0003995	.062059	.0015589	.0007878
%RSD	.2680740	.6344959	.2064678	.7341080	.5260976	.2115478
#1	2.766890	.2904837	.1934666	8.497729	.2945305	.3721589
#2	2.773736	.2868208	.1931414	8.480616	.2969675	.3732684
#3	2.758917	.2886655	.1939361	8.382709	.2974330	.3717449

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164646BS Acquired: 11/8/2024 21:06:22 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6408186	.1833903	F .6082665	5.574129	F -.004028	.1633561
Stddev	.0004111	.0005205	.0018326	.007230	.002559	.0015715
%RSD	.0641553	.2838301	.3012817	.1297109	63.52496	.9620162
#1	.6408402	.1830543	.6064032	5.565884	-.001074	.1648666
#2	.6403971	.1839899	.6100667	5.577115	-.005487	.1634717
#3	.6412185	.1831267	.6083296	5.579389	-.005525	.1617300

Elem	Sr4077
Units	ppm
Avg	.1867209
Stddev	.0006857
%RSD	.3672415
#1	.1872527
#2	.1869632
#3	.1859470

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2965.761	62740.01	13183.29	2112.185	4772.116
Stddev	7.106	184.98	29.63	13.933	5.850
%RSD	.2396062	.2948364	.2247693	.6596586	.1225914
#1	2961.862	62526.71	13190.66	2100.718	4766.591
#2	2961.457	62856.37	13208.54	2127.692	4771.512
#3	2973.963	62836.95	13150.67	2108.145	4778.245

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164645BL Acquired: 11/8/2024 21:10:23 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006808	.0010720	.0001649	.0010969	-.000676	.0013564	-.000209
Stddev	.0022165	.0013006	.0008922	.0005701	.000916	.0016534	.000640
%RSD	325.5788	121.3273	541.1521	51.96806	135.5856	121.9032	306.0378
#1	-.001555	.0021811	.0008480	.0011168	-.001568	.0008388	.000397
#2	.000720	-.000360	-.000845	.0016568	-.000723	.0032066	-.000146
#3	.002877	.001395	.000491	.0005172	.000263	.0000236	-.000878

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000648	.0000311	.0005237	-.000083	.0000625	-.000099	-.001611
Stddev	.0000395	.0000629	.0041903	.000188	.0000791	.000105	.001208
%RSD	61.01362	202.2129	800.0758	226.3991	126.6254	105.4867	74.99378
#1	.0000195	.0000476	-.004048	.000001	.0000669	-.000205	-.002301
#2	.0000827	.0000841	.004182	-.000299	-.000019	-.000097	-.000216
#3	.0000921	-.000038	.001437	.000049	.000139	.000004	-.002316

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000196	.0084058	.0001316	.0007275	.4498259	-.000481	-.000203
Stddev	.000164	.0009645	.0002148	.0001500	.0441781	.000972	.000190
%RSD	83.67904	11.47371	163.2589	20.61842	9.821149	201.8658	93.89306
#1	-.000362	.0087900	.0000505	.0006214	.4099879	-.000263	-.000346
#2	-.000191	.0091190	-.000031	.0008991	.4421513	.000362	-.000275
#3	-.000035	.0073085	.000375	.0006619	.4973384	-.001544	.000013

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1305169	-.000031	.0001174	-.000714	.0004583	-.006312	-.009438
Stddev	.0072634	.000258	.0001232	.000474	.0001103	.003752	.001391
%RSD	5.565102	820.0189	104.9677	66.34315	24.05921	59.44580	14.73979
#1	.1286604	.000068	.0001930	-.000293	.0005853	-.003144	-.010736
#2	.1385283	.000161	.0001839	-.000623	.0004031	-.010456	-.009610
#3	.1243619	-.000324	-.000025	-.001227	.0003866	-.005336	-.007969

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164645BL Acquired: 11/8/2024 21:10:23 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0030011	-.001691	-.000014
Stddev	.0018049	.001980	.000027
%RSD	60.14207	117.0595	189.3054
#1	.0018629	-.002210	.000011
#2	.0020582	-.003360	-.000044
#3	.0050822	.000496	-.000010

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2919.633	63644.83	13303.65	2078.903	4847.990
Stddev	10.750	110.98	65.93	6.494	11.594
%RSD	.3681896	.1743774	.4955705	.3123826	.2391594
#1	2926.339	63651.74	13274.41	2071.406	4855.717
#2	2925.326	63752.20	13257.41	2082.479	4853.594
#3	2907.234	63530.56	13379.15	2082.823	4834.658

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164645BS Acquired: 11/8/2024 21:14:42 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.7399549	1.913762	.9392173	1.825166	.7204642	1.910890
Stddev	.0030106	.034571	.0015480	.005622	.0010949	.004655
%RSD	.4068613	1.806443	.1648180	.3080011	.1519723	.2436180
#1	.7388034	1.890360	.9399558	1.820786	.7193529	1.906058
#2	.7376900	1.897456	.9374384	1.823206	.7204978	1.911265
#3	.7433713	1.953471	.9402578	1.831505	.7215419	1.915346

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1733709	.2095994	.1831450	1.007579	.3633557	.1867877
Stddev	.0007176	.0007245	.0002918	.007866	.0004175	.0003992
%RSD	.4139347	.3456767	.1593398	.7806695	.1148917	.2137207
#1	.1726145	.2088689	.1832558	.998499	.3633355	.1866730
#2	.1740421	.2103179	.1828140	1.012321	.3629487	.1864585
#3	.1734562	.2096114	.1833652	1.011916	.3637829	.1872318

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2868487	2.600512	.1894449	1.979825	.4690366	.0718285
Stddev	.0005504	.006610	.0011038	.013339	.0005032	.0001510
%RSD	.1918694	.2541746	.5826710	.6737371	.1072839	.2101940
#1	.2874717	2.598207	.1884001	1.967539	.4691653	.0719849
#2	.2864282	2.607966	.1905996	1.977923	.4684815	.0718171
#3	.2866463	2.595363	.1893350	1.994013	.4694629	.0716836

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.643332	.2884001	.1982821	8.482898	.2937874	.3780359
Stddev	.014692	.0023788	.0004883	.018147	.0014376	.0006049
%RSD	.5558067	.8248280	.2462616	.2139245	.4893470	.1600135
#1	2.632659	.2856636	.1978004	8.491943	.2922106	.3776251
#2	2.637249	.2895619	.1982694	8.462006	.2950254	.3777521
#3	2.660089	.2899747	.1987767	8.494745	.2941263	.3787306

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: PB164645BS Acquired: 11/8/2024 21:14:42 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.6409927	.1820987	F .6280417	5.496467	F -.005792	F .1565216
Stddev	.0030257	.0009932	.0012766	.020282	.002342	.0015645
%RSD	.4720346	.5454005	.2032702	.3690040	40.43067	.9995438
#1	.6392906	.1812520	.6269760	5.515212	-.007968	.1547158
#2	.6392013	.1831919	.6276925	5.474936	-.003314	.1574700
#3	.6444861	.1818521	.6294566	5.499252	-.006094	.1573789

Elem	Sr4077
Units	ppm
Avg	.1846321
Stddev	.0003752
%RSD	.2032019
#1	.1842023
#2	.1848001
#3	.1848939

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2821.581	60635.94	12973.91	1987.167	4578.416
Stddev	5.039	107.46	36.73	9.911	9.787
%RSD	.1785829	.1772253	.2831132	.4987602	.2137609
#1	2815.779	60549.47	13016.26	1991.565	4567.997
#2	2824.865	60756.25	12950.74	1994.117	4587.416
#3	2824.098	60602.10	12954.72	1975.817	4579.834

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04DLX10 Acquired: 11/8/2024 21:18:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0019348	-.001902	-.000460	.0025540	.0002009	.0799099
Stddev	.0022579	.000204	.000462	.0011434	.0012944	.0027068
%RSD	116.6969	10.74585	100.3331	44.76730	644.3148	3.387300
#1	-.000399	-.001933	.000004	.0037633	-.001164	.0825311
#2	.002095	-.001684	-.000920	.0024082	.001411	.0771249
#3	.004109	-.002090	-.000465	.0014905	.000355	.0800736

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049165	.0000530	-.000016	48.28117	.0000314	.0001735
Stddev	.0007692	.0000271	.000070	.27527	.0005814	.0000874
%RSD	15.64644	51.05369	438.9229	.5701493	1849.163	50.36906
#1	.0040797	.0000628	.000056	47.96400	-.000245	.0001290
#2	.0050767	.0000739	-.000019	48.45786	.000700	.0001174
#3	.0055930	.0000224	-.000084	48.42165	-.000361	.0002742

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000085	.1047945	.0154662	152.7730	.0007237	.0005018
Stddev	.000124	.0072103	.0004129	1.0955	.0001253	.0001930
%RSD	145.5500	6.880386	2.669636	.7170503	17.31531	38.46754
#1	-.000223	.1110892	.0150164	151.5097	.0008216	.0003770
#2	.000019	.0969280	.0158279	153.4593	.0005824	.0007242
#3	-.000052	.1063664	.0155544	153.3501	.0007669	.0004043

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1021.281	.0031573	.0014538	46.92520	.5023747	.0013292
Stddev	12.139	.0018660	.0002949	.70665	.0039016	.0002279
%RSD	1.188559	59.10019	20.28690	1.505916	.7766295	17.14578
#1	1011.999	.0049300	.0017924	46.40559	.4979365	.0010663
#2	1016.826	.0012103	.0012531	46.64014	.5052644	.0014510
#3	1035.017	.0033317	.0013159	47.72985	.5039231	.0014703

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04DLX10 Acquired: 11/8/2024 21:18:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003733	.0042312	.5039025	.0375746	F 113.1817	.0272437
Stddev	.000763	.0008500	.0353313	.0015149	3.4457	.0008915
%RSD	20.43827	20.08950	7.011538	4.031699	3.044371	3.272408
#1	-.004019	.0038801	.5126048	.0366719	109.9896	.0280611
#2	-.004311	.0036130	.4650331	.0393236	112.7209	.0273767
#3	-.002868	.0052005	.5340695	.0367285	116.8346	.0262931

Elem	Sr4077
Units	ppm
Avg	.8500414
Stddev	.0023130
%RSD	.2721080
#1	.8495360
#2	.8525653
#3	.8480228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2265.946	48858.55	11907.18	1636.856	3271.044
Stddev	64.168	780.35	47.38	23.727	89.620
%RSD	2.831821	1.597169	.3979183	1.449561	2.739785
#1	2334.526	49551.69	11949.12	1659.033	3361.701
#2	2255.949	49010.59	11855.78	1639.700	3268.932
#3	2207.364	48013.36	11916.63	1611.835	3182.499

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04DUPDLX10 Acquired: 11/8/2024 21:23:07 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0022070	-.002875	.0002330	.0005451	-.001352	.0310374
Stddev	.0033068	.001960	.0009795	.0009354	.001341	.0036158
%RSD	149.8301	68.17478	420.4523	171.5852	99.18339	11.64997
#1	.0036205	-.001954	-.000007	.0004195	-.000567	.0328333
#2	-.001572	-.005127	.001310	-.000321	-.000588	.0334036
#3	.004572	-.001545	-.000604	.001537	-.002900	.0268752

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050994	.0000795	.0000160	48.06735	-.000171	-.000065
Stddev	.0007389	.0000399	.0001850	.23761	.000391	.000254
%RSD	14.48997	50.22998	1154.598	.4943366	228.2934	390.8937
#1	.0059226	.0000444	.0000699	48.33873	-.000449	-.000350
#2	.0044935	.0001229	-.000190	47.89665	.000276	.000019
#3	.0048823	.0000712	.000168	47.96667	-.000341	.000137

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003670	.0922420	.0151379	151.4949	.0004958	.0003649
Stddev	.0005496	.0046943	.0003379	.9940	.0001927	.0002654
%RSD	149.7682	5.089126	2.232218	.6561538	38.87770	72.74269
#1	.0009648	.0880969	.0151272	152.5724	.0004225	.0003798
#2	.0002524	.0912895	.0154811	150.6137	.0003504	.0000923
#3	-.000116	.0973395	.0148055	151.2985	.0007144	.0006225

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1030.224	.0023174	.0014656	46.78398	.4996840	.0013228
Stddev	9.377	.0005466	.0002511	.24039	.0060345	.0001205
%RSD	.9102307	23.58474	17.13565	.5138273	1.207661	9.110646
#1	1040.703	.0019062	.0014345	46.52358	.5066053	.0012522
#2	1027.350	.0021084	.0017308	46.99742	.4969210	.0012542
#3	1022.620	.0029376	.0012315	46.83095	.4955256	.0014620

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04DUPDLX10 Acquired: 11/8/2024 21:23:07 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003897	.0015763	.3807527	.0350512	F 111.9835	.0243421
Stddev	.000541	.0006540	.0051927	.0018717	.0391	.0003746
%RSD	13.89229	41.49379	1.363799	5.339873	.0348843	1.538817
#1	-.004283	.0014087	.3808514	.0363393	111.9384	.0239105
#2	-.003278	.0022978	.3858954	.0329042	112.0047	.0245824
#3	-.004129	.0010223	.3755114	.0359099	112.0074	.0245334

Elem	Sr4077
Units	ppm
Avg	.8469684
Stddev	.0013506
%RSD	.1594676
#1	.8483220
#2	.8469625
#3	.8456208

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2358.504	49298.29	12002.56	1663.754	3371.648
Stddev	1.928	84.03	114.92	7.023	2.017
%RSD	.0817574	.1704462	.9574572	.4221451	.0598247
#1	2356.487	49201.28	11871.05	1658.035	3373.190
#2	2360.329	49348.36	12083.67	1661.633	3369.366
#3	2358.697	49345.23	12052.95	1671.593	3372.389

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04LDLX50 Acquired: 11/8/2024 21:27:32 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000932	-.000326	.0000790	.0015567	-.000782	.0073193
Stddev	.002046	.001721	.0003499	.0011063	.000287	.0044483
%RSD	219.4997	528.0743	442.7201	71.06830	36.68571	60.77510
#1	-.002552	.001272	-.000196	.0010329	-.000835	.0116877
#2	-.001611	-.002148	.000473	.0008096	-.001038	.0027952
#3	.001367	-.000102	-.000039	.0028277	-.000472	.0074749

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001590	.0000868	-.000071	9.747377	-.000238	.0000231
Stddev	.0003648	.0000578	.000057	.043882	.000451	.0000582
%RSD	229.3718	66.60015	79.89554	.4501905	189.7590	252.3989
#1	.0003554	.0001099	-.000006	9.789707	-.000606	-.000042
#2	.0003835	.0000210	-.000110	9.750333	.000265	.000041
#3	-.000262	.0001294	-.000096	9.702093	-.000372	.000070

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000063	.0166028	.0030811	29.50375	-.000017	.0005406
Stddev	.000320	.0036792	.0001510	.18365	.000209	.0001857
%RSD	507.9478	22.16039	4.901845	.6224627	1265.571	34.35720
#1	-.000039	.0205769	.0030959	29.67722	.000153	.0003701
#2	-.000395	.0159163	.0032243	29.52265	.000048	.0007385
#3	.000244	.0133151	.0029233	29.31139	-.000251	.0005132

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	200.8635	.0003348	-.000886	8.343977	.1036097	.0003836
Stddev	2.9836	.0006865	.000178	.106427	.0006546	.0001990
%RSD	1.485370	205.0409	20.03002	1.275496	.6317996	51.88841
#1	204.1109	.0000945	-.000761	8.250448	.1040492	.0003183
#2	198.2436	.0011092	-.001089	8.321704	.1039225	.0006071
#3	200.2361	-.000199	-.000809	8.459778	.1028573	.0002254

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04LDLX50 Acquired: 11/8/2024 21:27:32 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.002653	.0007341	.0616788	-.003602	F 20.11356	.0035428
Stddev	.000415	.0008244	.0063844	.000424	.09244	.0017555
%RSD	15.64748	112.3040	10.35098	11.77042	.4596048	49.55074
#1	-.002255	.0016741	.0543232	-.003261	20.14982	.0038364
#2	-.003083	.0001337	.0657825	-.004077	20.18237	.0051329
#3	-.002621	.0003946	.0649308	-.003470	20.00848	.0016590

Elem	Sr4077
Units	ppm
Avg	.1656642
Stddev	.0003988
%RSD	.2407493
#1	.1652991
#2	.1656037
#3	.1660899

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2660.517	57027.61	12841.55	1888.152	4040.641
Stddev	12.053	67.81	115.83	4.118	12.162
%RSD	.4530300	.1189000	.9019761	.2180877	.3009894
#1	2652.036	57104.08	12732.43	1887.365	4031.625
#2	2655.201	57003.92	12829.14	1892.606	4035.823
#3	2674.314	56974.83	12963.08	1884.484	4054.473

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MSDLX10 Acquired: 11/8/2024 21:31:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0815914	.1670638	.0937744	.2001093	.0759058	.2245844
Stddev	.0008900	.0024761	.0020420	.0034717	.0012140	.0054854
%RSD	1.090866	1.482130	2.177571	1.734924	1.599387	2.442484
#1	.0824955	.1656945	.0921496	.2025510	.0747107	.2277709
#2	.0815628	.1699221	.0931070	.1961350	.0758689	.2182504
#3	.0807160	.1655747	.0960666	.2016419	.0771379	.2277318

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0210571	.0203907	.0193581	46.10014	.0354142	.0192826
Stddev	.0003893	.0000993	.0000957	.28683	.0002264	.0002421
%RSD	1.848640	.4867948	.4941643	.6221868	.6392675	1.255512
#1	.0215063	.0204676	.0193612	46.30536	.0352645	.0194579
#2	.0208192	.0204258	.0192609	46.22267	.0356746	.0193835
#3	.0208458	.0202786	.0194522	45.77240	.0353034	.0190063

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0263593	.3702532	.0329133	145.7667	.0485862	.0085780
Stddev	.0003522	.0050683	.0001363	1.0119	.0002210	.0001145
%RSD	1.336005	1.368870	.4141732	.6941901	.4548082	1.335045
#1	.0259667	.3651438	.0327567	146.5832	.0487211	.0086144
#2	.0266473	.3752794	.0329779	146.0823	.0487063	.0084497
#3	.0264640	.3703364	.0330053	144.6346	.0483312	.0086699

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	983.2345	.0294110	.0227233	45.84441	.5068769	.0386234
Stddev	5.9298	.0006265	.0002958	.36330	.0038861	.0000209
%RSD	.6030952	2.130198	1.301846	.7924643	.7666815	.0540366
#1	990.0602	.0297974	.0230544	45.53627	.5107389	.0386080
#2	979.3526	.0286881	.0224851	45.75197	.5069247	.0386151
#3	980.2905	.0297474	.0226303	46.24501	.5029670	.0386471

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MSDLX10 Acquired: 11/8/2024 21:31:58 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0620366	.0191703	.4346477	.7510728	F 107.3500	.0398299
Stddev	.0004186	.0005479	.0046271	.0004786	.1932	.0003231
%RSD	.6748222	2.858261	1.064559	.0637194	.1799660	.8111566
#1	.0623785	.0188631	.4341676	.7506272	107.4866	.0395088
#2	.0621615	.0188449	.4302793	.7515787	107.1290	.0401550
#3	.0615697	.0198029	.4394961	.7510125	107.4345	.0398259

Elem	Sr4077
Units	ppm
Avg	.8265518
Stddev	.0011328
%RSD	.1370515
#1	.8255774
#2	.8262833
#3	.8277948

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2328.497	49605.79	12150.61	1660.714	3359.543
Stddev	22.764	148.31	108.31	14.875	23.348
%RSD	.9776366	.2989701	.8914042	.8956792	.6949651
#1	2341.330	49434.56	12044.17	1647.021	3365.928
#2	2341.948	49689.22	12146.97	1676.540	3379.034
#3	2302.214	49693.59	12260.70	1658.582	3333.667

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MSDDLX10 Acquired: 11/8/2024 21:36:23 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0845275	.1742898	.0953040	.2081721	.0794618	.2321365
Stddev	.0024618	.0047057	.0024932	.0022685	.0006487	.0109413
%RSD	2.912470	2.699914	2.616015	1.089703	.8163881	4.713285
#1	.0873646	.1696905	.0934226	.2075076	.0788322	.2446589
#2	.0832631	.1740838	.0943577	.2106985	.0801281	.2273252
#3	.0829548	.1790951	.0981318	.2063100	.0794250	.2244253

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196809	.0200241	.0195716	45.87434	.0360368	.0200119
Stddev	.0003808	.0000683	.0000974	.36497	.0002239	.0001144
%RSD	1.934803	.3413537	.4974581	.7955873	.6212871	.5715980
#1	.0195514	.0200078	.0195482	46.05333	.0358077	.0199463
#2	.0193818	.0199653	.0194881	45.45442	.0360478	.0199455
#3	.0201096	.0200991	.0196785	46.11525	.0362550	.0201440

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0274911	.3821267	.0329742	144.5392	.0491029	.0089794
Stddev	.0003639	.0005907	.0004866	1.1193	.0007372	.0001602
%RSD	1.323600	.1545832	1.475616	.7743996	1.501334	1.784036
#1	.0271489	.3821402	.0333514	144.6420	.0487419	.0088545
#2	.0278733	.3815294	.0324250	143.3720	.0486158	.0091600
#3	.0274511	.3827105	.0331463	145.6035	.0499510	.0089237

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1038.227	.0303340	.0232631	48.41081	.4999648	.0399397
Stddev	14.475	.0007867	.0002425	.19597	.0028499	.0000070
%RSD	1.394177	2.593459	1.042264	.4048116	.5700185	.0176101
#1	1054.723	.0296746	.0235179	48.62190	.5029647	.0399320
#2	1032.310	.0312048	.0232361	48.37588	.4972935	.0399459
#3	1027.649	.0301227	.0230352	48.23466	.4996362	.0399411

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04MSDDLX10 Acquired: 11/8/2024 21:36:23 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0633924	.0190989	.4542252	.7574191	F 109.8008	.0414790
Stddev	.0015689	.0005470	.0091587	.0040589	.6483	.0001642
%RSD	2.474958	2.863892	2.016326	.5358816	.5904151	.3958872
#1	.0632177	.0188304	.4464253	.7563410	109.4370	.0416686
#2	.0619181	.0187381	.4643100	.7540080	109.4163	.0413825
#3	.0650414	.0197282	.4519403	.7619081	110.5493	.0413859

Elem	Sr4077
Units	ppm
Avg	.8477434
Stddev	.0100338
%RSD	1.183593
#1	.8591032
#2	.8400903
#3	.8440366

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2243.137	49150.11	12419.12	1605.191	3270.572
Stddev	6.952	84.26	76.27	3.994	14.335
%RSD	.3099090	.1714384	.6140951	.2488168	.4383047
#1	2246.553	49245.45	12348.82	1601.069	3282.150
#2	2235.138	49119.22	12500.20	1609.044	3275.028
#3	2247.718	49085.64	12408.34	1605.459	3254.538

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04ADLX10 Acquired: 11/8/2024 21:40:49 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0867470	.1749572	.0940696	.2096473	.0816630	.2352210
Stddev	.0022361	.0036863	.0004254	.0026510	.0005264	.0014415
%RSD	2.577710	2.106997	.4522291	1.264511	.6445884	.6128342
#1	.0860738	.1789190	.0941651	.2122376	.0817392	.2349323
#2	.0849250	.1716283	.0944392	.2069395	.0821471	.2339457
#3	.0892424	.1743244	.0936046	.2097650	.0811026	.2367850

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0215898	.0205028	.0197323	47.40478	.0362502	.0198876
Stddev	.0006172	.0002258	.0001485	.46853	.0005743	.0000425
%RSD	2.858582	1.101094	.7524922	.9883661	1.584195	.2134884
#1	.0210449	.0202553	.0196021	46.91785	.0358717	.0199282
#2	.0214645	.0205555	.0198940	47.44403	.0369110	.0198911
#3	.0222600	.0206975	.0197007	47.85245	.0359680	.0198435

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0281873	.3964810	.0338216	148.9737	.0497136	.0089187
Stddev	.0002369	.0020780	.0002167	1.4722	.0003270	.0002166
%RSD	.8404459	.5241137	.6405802	.9882362	.6578426	2.428734
#1	.0280484	.3959863	.0336457	147.3400	.0493373	.0087150
#2	.0280528	.3946950	.0340636	149.3838	.0498740	.0088948
#3	.0284609	.3987617	.0337555	150.1975	.0499294	.0091462

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1075.314	.0308524	.0242396	49.54106	.5246402	.0404964
Stddev	7.584	.0022904	.0001105	.28974	.0052590	.0002944
%RSD	.7052955	7.423609	.4559999	.5848406	1.002404	.7269776
#1	1081.860	.0282749	.0243398	49.81749	.5186878	.0404390
#2	1077.080	.0316282	.0241211	49.23964	.5265757	.0402350
#3	1067.003	.0326542	.0242580	49.56605	.5286572	.0408153

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4718-04ADLX10 Acquired: 11/8/2024 21:40:49 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0639888	.0204206	.4734368	.7691175	F 112.1568	.0432426
Stddev	.0011839	.0007301	.0030883	.0067156	.2724	.0007629
%RSD	1.850178	3.575254	.6523094	.8731599	.2428724	1.764246
#1	.0653498	.0211745	.4769342	.7618300	111.9666	.0424315
#2	.0631972	.0197170	.4710850	.7704658	112.0349	.0433505
#3	.0634193	.0203702	.4722913	.7750567	112.4688	.0439458

Elem	Sr4077
Units	ppm
Avg	.8700741
Stddev	.0026576
%RSD	.3054425
#1	.8685935
#2	.8684866
#3	.8731422

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2221.108	47387.13	11925.12	1576.096	3230.061
Stddev	8.914	111.64	73.09	12.055	11.270
%RSD	.4013320	.2355870	.6128990	.7648764	.3489112
#1	2217.006	47260.28	12009.35	1562.225	3233.735
#2	2231.334	47430.63	11887.57	1582.019	3239.036
#3	2214.982	47470.46	11878.44	1584.045	3217.413

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV09 Acquired: 11/8/2024 21:50:12 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.608986	4.712732	4.710107	4.685461	4.623522	9.359207
Stddev	.015205	.036097	.009710	.014594	.011258	.008530
%RSD	.3298997	.7659461	.2061477	.3114736	.2434999	.0911394
#1	4.601022	4.729190	4.718810	4.670372	4.622523	9.368323
#2	4.599417	4.671340	4.699634	4.686508	4.612797	9.357878
#3	4.626519	4.737668	4.711876	4.699504	4.635247	9.351420

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.112053	.2513622	2.314161	23.64041	.9017686	2.328336
Stddev	.095801	.0003765	.005712	.03792	.0033690	.005623
%RSD	1.051368	.1497711	.2468452	.1604162	.3735968	.2415045
#1	9.222656	.2514937	2.318384	23.60555	.9027518	2.332114
#2	9.054985	.2516553	2.307661	23.68079	.9045365	2.321874
#3	9.058518	.2509376	2.316437	23.63488	.8980174	2.331020

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.158720	5.470325	2.269470	24.17678	2.327873	1.187923
Stddev	.002870	.030717	.004320	.05808	.005703	.003144
%RSD	.2476816	.5615285	.1903466	.2402502	.2449671	.2646604
#1	1.156522	5.437190	2.264563	24.14321	2.332228	1.191553
#2	1.157670	5.497851	2.272699	24.24385	2.321418	1.186154
#3	1.161966	5.475935	2.271148	24.14328	2.329972	1.186063

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.91182	2.349742	2.420787	25.76465	4.844928	4.673906
Stddev	.05438	.005010	.008238	.03213	.017386	.008741
%RSD	.2274204	.2132220	.3403210	.1246864	.3588424	.1870241
#1	23.97452	2.352848	2.429510	25.78612	4.861471	4.668865
#2	23.88339	2.352415	2.419715	25.72772	4.846505	4.668853
#3	23.87755	2.343962	2.413138	25.78011	4.826808	4.684000

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV09 Acquired: 11/8/2024 21:50:12 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV09 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.621561	F 4.487373	F 4.456035	4.927482	4.556484	F 4.138588
Stddev	.012828	.004525	.014696	.014390	.013598	.004010
%RSD	.2775754	.1008440	.3298059	.2920351	.2984378	.0968979
#1	4.629599	4.490522	4.439207	4.942269	4.559899	4.139514
#2	4.606767	4.489411	4.466348	4.913525	4.541504	4.134196
#3	4.628317	4.482188	4.462549	4.926651	4.568050	4.142055

Elem	Sr4077
Units	ppm
Avg	4.532765
Stddev	.037954
%RSD	.8373145
#1	4.576588
#2	4.511202
#3	4.510505

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2748.749	59002.69	13314.71	1940.209	4271.764
Stddev	6.091	55.63	16.35	5.755	7.168
%RSD	.2215855	.0942824	.1228219	.2966306	.1677880
#1	2754.321	58992.38	13305.75	1938.170	4267.333
#2	2749.681	58952.93	13304.79	1946.706	4280.034
#3	2742.247	59062.75	13333.58	1935.750	4267.926

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB09 Acquired: 11/8/2024 21:55:23 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010578	.0003343	-.000174	.0005800	-.000193	.0026910	-.002094
Stddev	.0014625	.0014010	.000448	.0001845	.000055	.0029582	.000433
%RSD	138.2553	419.0728	257.4334	31.80532	28.43443	109.9272	20.69050
#1	.0021262	-.000103	-.000551	.0006964	-.000255	.0049522	-.001594
#2	.0016563	-.000796	-.000293	.0003673	-.000149	-.000657	-.002322
#3	-.000609	.001902	.000321	.0006764	-.000176	.003778	-.002365

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000582	.0000003	.0023290	.0002437	.0001126	-.000221	-.001403
Stddev	.0000449	.0000491	.0024310	.0003050	.0000359	.000150	.001826
%RSD	77.14005	18278.71	104.3814	125.1272	31.90927	67.77154	130.0993
#1	.0000227	-.000029	-.000463	.0002135	.0000726	-.000275	.000292
#2	.0000432	.000057	.003978	-.000045	.0001422	-.000052	-.001165
#3	.0001087	-.000027	.003472	.000563	.0001229	-.000337	-.003336

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000020	.0035129	.0000801	.0008546	.2102194	-.000164	.0003064
Stddev	.000161	.0028658	.0002213	.0002760	.0398562	.000787	.0002237
%RSD	793.2998	81.57916	276.0959	32.29190	18.95933	479.9374	73.00629
#1	-.000205	.0015174	-.000096	.0005421	.1698497	.000730	.0005622
#2	.000060	.0067967	.000329	.0010648	.2112670	-.000751	.0002100
#3	.000084	.0022246	.000008	.0009570	.2495414	-.000470	.0001471

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0887371	.0033726	.0006082	-.000384	.0005129	-.004583	-.008740
Stddev	.0102989	.0009259	.0001763	.000643	.0002300	.003088	.001558
%RSD	11.60604	27.45337	28.98983	167.2906	44.85016	67.36786	17.82660
#1	.0947970	.0039928	.0008099	-.000130	.0003028	-.008116	-.010281
#2	.0768458	.0038167	.0005311	.000093	.0004772	-.002401	-.008776
#3	.0945686	.0023083	.0004835	-.001115	.0007587	-.003232	-.007165

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB09 Acquired: 11/8/2024 21:55:23 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB09 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0028633	-.001762	.0002000
Stddev	.0019604	.001704	.0000588
%RSD	68.46657	96.73614	29.41898
#1	.0014299	.000144	.0001398
#2	.0050972	-.002290	.0002029
#3	.0020626	-.003139	.0002573

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2765.327	59337.44	12973.17	1920.421	4615.315
Stddev	3.455	73.51	94.18	5.182	7.589
%RSD	.1249554	.1238785	.7259318	.2698567	.1644412
#1	2761.604	59256.55	12866.45	1918.702	4606.612
#2	2768.432	59355.63	13008.45	1926.245	4620.561
#3	2765.944	59400.15	13044.62	1916.317	4618.771

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01 Acquired: 11/8/2024 21:59:44 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.012907	-.008904	-.033295	.0386161	.0065046	-.048852
Stddev	.002433	.004366	.001753	.0055766	.0043637	.005851
%RSD	18.85288	49.03503	5.265467	14.44111	67.08689	11.97610
#1	-.012622	-.011032	-.032280	.0423856	.0080774	-.043511
#2	-.015470	-.011798	-.035319	.0322101	.0015725	-.055105
#3	-.010629	-.003882	-.032286	.0412527	.0098639	-.047939

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0114651	-.000585	-.006502	281.6474	.0586430	.2296123
Stddev	.0009971	.000192	.000280	16.1948	.0012413	.0029592
%RSD	8.697074	32.78689	4.312987	5.750027	2.116750	1.288791
#1	.0126131	-.000805	-.006474	292.9954	.0594982	.2329445
#2	.0108144	-.000496	-.006237	288.8453	.0572193	.2272908
#3	.0109680	-.000453	-.006795	263.1014	.0592116	.2286017

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.058663	.0313308	.0022829	6.017729	.2316871	.0205452
Stddev	.005965	.0039518	.0002557	.378148	.0014522	.0004751
%RSD	10.16748	12.61327	11.20144	6.283903	.6267839	2.312629
#1	-.065243	.0295287	.0022713	6.327450	.2320352	.0200875
#2	-.053610	.0286012	.0025442	6.129424	.2300925	.0205121
#3	-.057138	.0358624	.0020332	5.596315	.2329335	.0210360

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	-.032034	.2979857	248.7252	.4458665	5.898299
Stddev	-----	.003099	.0077874	32.9725	.0324419	.149021
%RSD	-----	9.673378	2.613347	13.25660	7.276142	2.526506
#1	^ -----	-.034346	.3069729	213.7453	.4569244	6.060679
#2	^ -----	-.033243	.2932332	253.1964	.4713339	5.767796
#3	^ -----	-.028513	.2937511	279.2340	.4093414	5.866422

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01 Acquired: 11/8/2024 21:59:44 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.045795	.0018884	1.961851	.0657888	F 5502.880	.3332441
Stddev	.002348	.0005791	.045113	.0104841	152.567	.0348627
%RSD	5.127736	30.66310	2.299536	15.93601	2.772486	10.46161
#1	-.046119	.0025418	1.923558	.0605707	5675.277	.3115084
#2	-.043302	.0014389	2.011583	.0589376	5448.080	.3734560
#3	-.047965	.0016845	1.950413	.0778580	5385.282	.3147678

Elem	Sr4077
Units	ppm
Avg	.4652347
Stddev	.0314793
%RSD	6.766336
#1	.4683432
#2	.4950444
#3	.4323164

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	857.5988	18156.66	5393.102	575.3413	884.9361
Stddev	61.8227	456.45	373.408	19.9659	62.4915
%RSD	7.208814	2.513949	6.923813	3.470268	7.061698
#1	786.2122	17776.18	5183.242	553.8113	812.8499
#2	893.2016	18662.77	5171.838	593.2464	923.7846
#3	893.3826	18031.03	5824.227	578.9663	918.1739

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01DLX25 Acquired: 11/8/2024 22:24:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0011250	-.002413	-.002206	.0033216	-.000092	-.010220
Stddev	.0016677	.001786	.001424	.0016089	.001282	.002748
%RSD	148.2455	74.00683	64.53754	48.43742	1393.600	26.88376
#1	-.000378	-.004456	-.002462	.0044215	.001382	-.013365
#2	.002919	-.001151	-.003485	.0014750	-.000948	-.008283
#3	.000834	-.001632	-.000672	.0040682	-.000709	-.009013

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038780	-.000016	-.000432	16.72947	.0023161	.0145960
Stddev	.0012002	.000072	.000177	.85944	.0002620	.0001566
%RSD	30.94884	443.2040	40.98509	5.137288	11.31188	1.072738
#1	.0034301	-.000090	-.000393	15.76699	.0020744	.0146174
#2	.0029661	.000055	-.000625	17.00128	.0022795	.0144298
#3	.0052377	-.000014	-.000277	17.42014	.0025946	.0147408

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001036	-.009192	-.000271	.4175373	.0154117	.0006668
Stddev	.0001579	.000177	.000142	.0153534	.0006171	.0004321
%RSD	152.4303	1.929310	52.53721	3.677127	4.004307	64.79807
#1	.0002225	-.009227	-.000427	.3998482	.0147097	.0003366
#2	.0001640	-.009349	-.000237	.4253576	.0156567	.0011558
#3	-.000076	-.008999	-.000148	.4274060	.0158688	.0005080

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2385.191	-.002065	.0046783	3.377132	.0188891	.3743952
Stddev	43.687	.000588	.0003130	.261742	.0011356	.0011033
%RSD	1.831597	28.48729	6.690892	7.750416	6.011864	.2947018
#1	2434.834	-.002706	.0048714	3.098676	.0175933	.3756448
#2	2368.133	-.001943	.0043171	3.414598	.0193631	.3739855
#3	2352.607	-.001548	.0048463	3.618122	.0197109	.3735552

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01DLX25 Acquired: 11/8/2024 22:24:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.005163	.0006245	.0415423	-.018369	F 1272.058	.0050632
Stddev	.000605	.0002388	.0060258	.000547	13.324	.0022323
%RSD	11.72680	38.23289	14.50516	2.977040	1.047463	44.08846
#1	-.004492	.0008756	.0482059	-.017892	1263.516	.0027017
#2	-.005668	.0004005	.0399448	-.018248	1265.246	.0053493
#3	-.005329	.0005973	.0364763	-.018966	1287.411	.0071387

Elem	Sr4077
Units	ppm
Avg	.0198946
Stddev	.0009554
%RSD	4.802431
#1	.0187979
#2	.0203399
#3	.0205462

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2342.004	44798.32	10885.60	1705.024	3000.503
Stddev	45.332	187.74	456.97	5.875	34.853
%RSD	1.935619	.4190877	4.197890	.3445474	1.161570
#1	2304.586	44581.65	11400.29	1698.294	2971.484
#2	2329.012	44900.39	10728.95	1709.128	2990.864
#3	2392.414	44912.92	10527.56	1707.648	3039.161

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01DUPDLX25 Acquired: 11/8/2024 22:29:21 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.000104	-.001690	-.001811	.0030792	-.000906	-.006433
Stddev	.001610	.001225	.001528	.0016422	.000494	.001908
%RSD	1546.315	72.46513	84.40383	53.33337	54.57578	29.66539
#1	-.001048	-.000400	-.002549	.0034784	-.001277	-.004230
#2	-.001020	-.002837	-.002830	.0044850	-.001096	-.007585
#3	.001755	-.001832	-.000053	.0012741	-.000345	-.007484

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098820	-.000032	-.000352	18.24645	.0027510	.0143394
Stddev	.0010841	.000077	.000117	.61249	.0002979	.0003078
%RSD	10.97024	241.4506	33.18268	3.356762	10.82722	2.146181
#1	.0108971	-.000111	-.000264	18.95317	.0030949	.0140523
#2	.0087401	-.000026	-.000309	17.86970	.0025854	.0143017
#3	.0100089	.000042	-.000485	17.91647	.0025727	.0146643

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001878	-.009863	-.000039	.4725395	.0155722	.0001269
Stddev	.0001771	.002902	.000187	.0270857	.0002537	.0002276
%RSD	94.30383	29.41944	480.0920	5.731937	1.628987	179.3810
#1	.0000369	-.007629	.000038	.5031402	.0153865	-.000122
#2	.0001438	-.008818	.000098	.4628362	.0154688	.000180
#3	.0003828	-.013143	-.000253	.4516419	.0158612	.000323

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2113.941	-.001499	.0046670	3.899591	.0217641	.3632847
Stddev	41.132	.000390	.0002540	.142589	.0004131	.0007263
%RSD	1.945730	26.05423	5.441578	3.656507	1.898296	.1999256
#1	2137.754	-.001053	.0048234	3.735368	.0219845	.3627448
#2	2137.623	-.001660	.0048036	3.971475	.0212875	.3629989
#3	2066.446	-.001783	.0043739	3.991931	.0220203	.3641104

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01DUPDLX25 Acquired: 11/8/2024 22:29:21 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.005762	.0007606	.0418981	-.022942	F 1268.837	.0060440
Stddev	.001062	.0005896	.0092567	.003912	11.217	.0006839
%RSD	18.42501	77.52098	22.09337	17.05289	.8840752	11.31514
#1	-.006976	.0014406	.0469440	-.022300	1259.284	.0067244
#2	-.005302	.0003916	.0475355	-.027136	1266.038	.0060510
#3	-.005007	.0004496	.0312149	-.019391	1281.189	.0053567

Elem	Sr4077
Units	ppm
Avg	.0204119
Stddev	.0006731
%RSD	3.297347
#1	.0211739
#2	.0201634
#3	.0198985

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2581.138	45127.66	10218.86	1814.473	3267.202
Stddev	43.909	59.91	335.71	15.757	42.483
%RSD	1.701132	.1327606	3.285241	.8683886	1.300291
#1	2534.529	45150.84	9831.34	1813.438	3221.581
#2	2587.163	45059.62	10404.12	1830.722	3274.397
#3	2621.724	45172.51	10421.13	1799.260	3305.629

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01LDLX125 Acquired: 11/8/2024 22:33:46 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0014121	-.001522	-.001066	-.000534	-.000873	.0014988
Stddev	.0012712	.000522	.000558	.000915	.000032	.0120005
%RSD	90.02510	34.28686	52.36482	171.4970	3.651749	800.6717
#1	.0026690	-.000942	-.001219	.000224	-.000910	.0134862
#2	.0001270	-.001955	-.001533	-.000274	-.000852	-.010515
#3	.0014402	-.001668	-.000448	-.001551	-.000857	.001525

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0155627	.0000276	-.000065	4.421266	-.001099	.0026284
Stddev	.0004232	.0000371	.000068	.044618	.000210	.0001060
%RSD	2.719520	134.1559	104.5409	1.009159	19.07790	4.033724
#1	.0156898	-.000012	-.000051	4.443069	-.000986	.0025610
#2	.0159078	.000033	-.000005	4.450790	-.000970	.0027506
#3	.0150905	.000062	-.000138	4.369939	-.001341	.0025737

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000356	-.010762	-.000332	.1180747	.0023459	.0000522
Stddev	.000157	.003259	.000114	.0049948	.0001616	.0003787
%RSD	43.95267	30.28452	34.28878	4.230218	6.890310	725.3527
#1	-.000199	-.013810	-.000405	.1165363	.0022051	.0000460
#2	-.000512	-.011149	-.000390	.1236577	.0025224	-.000323
#3	-.000358	-.007327	-.000201	.1140300	.0023103	.000434

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	510.3026	-.001063	-.001337	1.046266	.0054299	.0660963
Stddev	70.3180	.001428	.000376	.101079	.0007980	.0004679
%RSD	13.77966	134.3278	28.10459	9.660953	14.69645	.7079194
#1	591.1589	-.000158	-.000963	1.160130	.0054417	.0664157
#2	476.3028	-.000322	-.001333	1.011546	.0062219	.0663139
#3	463.4463	-.002709	-.001714	.967123	.0046260	.0655592

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01LDLX125 Acquired: 11/8/2024 22:33:46 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	-.003270	.0009886	.0002664	-.023361	F 258.1880	.0047550
Stddev	.000311	.0005289	.0101610	.002871	1.3094	.0016917
%RSD	9.521600	53.50512	3814.306	12.29106	.5071457	35.57702
#1	-.003525	.0007892	.0097805	-.026668	258.0124	.0033437
#2	-.003361	.0005883	.0014555	-.021910	259.5764	.0042910
#3	-.002923	.0015882	-.010437	-.021505	256.9753	.0066302

Elem	Sr4077
Units	ppm
Avg	.0046670
Stddev	.0000397
%RSD	.8500569
#1	.0046563
#2	.0047110
#3	.0046338

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3509.306	56683.86	9984.331	2291.143	4662.780
Stddev	13.501	6519.87	90.174	270.206	10.520
%RSD	.3847219	11.50216	.9031510	11.79350	.2256100
#1	3501.583	49170.70	9930.376	1980.200	4656.774
#2	3501.439	60024.55	9934.187	2424.320	4656.640
#3	3524.895	60856.33	10088.43	2468.909	4674.927

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01MSDLX25 Acquired: 11/8/2024 22:44:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0350010	.0798043	.0447860	.0818264	.0272371	.0724190
Stddev	.0026675	.0013273	.0009935	.0014260	.0014451	.0060992
%RSD	7.621193	1.663177	2.218397	1.742713	5.305611	8.422079
#1	.0330020	.0791697	.0443852	.0828291	.0286235	.0656809
#2	.0339712	.0813298	.0440556	.0824561	.0273479	.0740139
#3	.0380300	.0789135	.0459174	.0801939	.0257397	.0775624

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0184416	.0111073	.0096148	15.82782	.0199529	.0216619
Stddev	.0010245	.0001351	.0000928	.11872	.0004954	.0004372
%RSD	5.555632	1.216192	.9651125	.7500539	2.482942	2.018518
#1	.0172620	.0109630	.0095089	15.69090	.0194741	.0214355
#2	.0191097	.0111279	.0096821	15.90213	.0199213	.0221659
#3	.0189530	.0112308	.0096534	15.89042	.0204634	.0213843

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099762	.1090646	.0084180	.5085087	.0368110	.0036758
Stddev	.0002847	.0017951	.0001703	.0072792	.0006152	.0002348
%RSD	2.854151	1.645897	2.022953	1.431484	1.671215	6.388474
#1	.0097473	.1101333	.0085688	.5035845	.0361008	.0034647
#2	.0098862	.1069922	.0084519	.5168700	.0371519	.0036340
#3	.0102951	.1100684	.0082333	.5050714	.0371802	.0039288

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1800.286	.0095023	.0129478	2.774014	.0318089	.3195520
Stddev	63.255	.0019479	.0002095	.069557	.0003356	.0014146
%RSD	3.513627	20.49905	1.618217	2.507449	1.054988	.4426751
#1	1856.562	.0073391	.0127277	2.712867	.0317347	.3185235
#2	1812.471	.0100505	.0129708	2.759488	.0321753	.3211652
#3	1731.824	.0111174	.0131449	2.849687	.0315166	.3189673

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01MSDLX25 Acquired: 11/8/2024 22:44:57 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0282335	.0080514	.0553175	.3460303	F 1130.824	.0125213
Stddev	.0002971	.0002146	.0024836	.0031627	7.520	.0005694
%RSD	1.052209	2.664890	4.489623	.9139849	.6650177	4.547756
#1	.0279474	.0081925	.0548298	.3424420	1122.156	.0131531
#2	.0285404	.0081573	.0580087	.3484122	1135.597	.0120475
#3	.0282128	.0078045	.0531140	.3472368	1134.720	.0123634

Elem	Sr4077
Units	ppm
Avg	.0240638
Stddev	.0000414
%RSD	.1721682
#1	.0240194
#2	.0240706
#3	.0241014

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3037.701	51294.44	11098.32	2111.699	3780.744
Stddev	28.647	382.84	85.87	18.568	23.347
%RSD	.9430539	.7463604	.7736893	.8792801	.6175245
#1	3006.852	50990.25	11197.41	2091.725	3755.365
#2	3042.786	51168.75	11051.82	2114.937	3785.558
#3	3063.466	51724.33	11045.73	2128.434	3801.309

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01MSDDLX25 Acquired: 11/8/2024 22:53:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0374459	.0805971	.0420315	.0919122	.0313818	.0806027
Stddev	.0017045	.0004602	.0006748	.0012115	.0006306	.0018100
%RSD	4.551919	.5709520	1.605536	1.318102	2.009526	2.245598
#1	.0356956	.0801251	.0425562	.0932869	.0317270	.0791086
#2	.0375416	.0810445	.0422680	.0914493	.0317645	.0826154
#3	.0391005	.0806217	.0412702	.0910004	.0306540	.0800840

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0123587	.0105888	.0095013	15.88877	.0193751	.0220218
Stddev	.0007798	.0001755	.0000614	.31862	.0005181	.0002188
%RSD	6.309575	1.657578	.6461522	2.005319	2.674066	.9934634
#1	.0114596	.0103975	.0095570	15.57376	.0194936	.0222677
#2	.0128513	.0106265	.0095114	15.88167	.0188080	.0219488
#3	.0127651	.0107424	.0094355	16.21088	.0198236	.0218488

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0104425	.1166641	.0085893	.4937519	.0367780	.0043000
Stddev	.0003113	.0016039	.0002129	.0051075	.0007730	.0002774
%RSD	2.981456	1.374782	2.478128	1.034420	2.101871	6.451199
#1	.0107610	.1180622	.0083541	.4881332	.0365573	.0040925
#2	.0104277	.1149132	.0086450	.4950090	.0376374	.0041925
#3	.0101389	.1170169	.0087687	.4981134	.0361393	.0046151

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2003.759	.0090536	.0139578	2.937011	.0308511	.3385487
Stddev	86.479	.0009278	.0000676	.094679	.0009872	.0003894
%RSD	4.315843	10.24807	.4840021	3.223661	3.199711	.1150206
#1	2100.686	.0081135	.0138878	2.837619	.0298117	.3385769
#2	1976.093	.0090785	.0139629	2.947272	.0317760	.3381460
#3	1934.499	.0099687	.0140226	3.026142	.0309656	.3389233

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01MSDDLX25 Acquired: 11/8/2024 22:53:02 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0274909	.0081908	.0660915	.3533614	F 1113.003	.0133699
Stddev	.0009535	.0005310	.0008150	.0026349	3.040	.0013352
%RSD	3.468440	6.483361	1.233112	.7456671	.2731006	9.986525
#1	.0273316	.0083310	.0659829	.3559439	1112.271	.0127591
#2	.0285140	.0076037	.0669554	.3506770	1116.342	.0124494
#3	.0266270	.0086376	.0653363	.3534631	1110.396	.0149013

Elem	Sr4077
Units	ppm
Avg	.0257978
Stddev	.0003863
%RSD	1.497308
#1	.0255174
#2	.0256377
#3	.0262384

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2782.264	49793.79	11531.97	1904.167	3563.508
Stddev	18.365	481.97	126.95	20.923	18.663
%RSD	.6600791	.9679258	1.100835	1.098805	.5237134
#1	2766.784	49244.08	11670.16	1880.058	3546.679
#2	2802.556	50143.83	11505.20	1914.867	3583.579
#3	2777.451	49993.46	11420.53	1917.576	3560.267

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01ADLX25 Acquired: 11/8/2024 23:07:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0352327	.0704392	.0382151	.0796143	.0269450	.0696913
Stddev	.0021822	.0023756	.0013283	.0020836	.0014124	.0021596
%RSD	6.193779	3.372572	3.475897	2.617117	5.241784	3.098816
#1	.0375474	.0700869	.0393413	.0818857	.0273330	.0720446
#2	.0349377	.0729713	.0385537	.0791654	.0281229	.0692292
#3	.0332129	.0682594	.0367502	.0777917	.0253792	.0678002

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0113854	.0096558	.0082193	14.91372	.0175442	.0189435
Stddev	.0003680	.0001131	.0001553	.10951	.0001950	.0004194
%RSD	3.232550	1.171574	1.889335	.7342964	1.111688	2.213814
#1	.0115949	.0097861	.0083840	15.03833	.0174189	.0191371
#2	.0109605	.0095982	.0081983	14.83278	.0174448	.0192312
#3	.0116010	.0095830	.0080755	14.87005	.0177689	.0184623

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091201	.1083810	.0081912	.4610694	.0317772	.0040781
Stddev	.0003298	.0027992	.0001195	.0121134	.0007138	.0000972
%RSD	3.616347	2.582719	1.458896	2.627234	2.246297	2.382518
#1	.0094998	.1093715	.0082874	.4739550	.0320064	.0041057
#2	.0089554	.1105503	.0082287	.4499144	.0323483	.0039702
#3	.0089051	.1052213	.0080574	.4593389	.0309770	.0041585

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1928.334	.0094808	.0125078	2.560736	.0282413	.2985119
Stddev	40.141	.0003752	.0001252	.110869	.0002695	.0045959
%RSD	2.081621	3.957369	1.001227	4.329572	.9543468	1.539611
#1	1973.027	.0099063	.0126423	2.447767	.0285525	.3015071
#2	1916.625	.0091973	.0124866	2.565061	.0280877	.3008083
#3	1895.350	.0093389	.0123946	2.669379	.0280837	.2932204

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: P4681-01ADLX25 Acquired: 11/8/2024 23:07:41 Type: Unk
Method: NON EPA-6010-200.7(v2466) 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	.0231382	.0077165	.0572938	.3025503	F 983.7180	.0097547
Stddev	.0010379	.0003957	.0018919	.0038381	20.5093	.0003317
%RSD	4.485505	5.127961	3.302056	1.268598	2.084879	3.400508
#1	.0242201	.0079062	.0584165	.3056109	995.2321	.0094759
#2	.0230437	.0072617	.0551095	.3037961	995.8830	.0101216
#3	.0221508	.0079817	.0583553	.2982441	960.0388	.0096667

Elem	Sr4077
Units	ppm
Avg	.0245900
Stddev	.0001168
%RSD	.4749217
#1	.0247242
#2	.0245347
#3	.0245112

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3017.781	52336.89	12106.99	2001.004	3890.003
Stddev	40.768	444.28	164.10	34.854	56.596
%RSD	1.350936	.8488845	1.355407	1.741840	1.454919
#1	2971.297	51829.53	11918.59	1962.141	3829.553
#2	3034.580	52656.34	12218.73	2029.494	3898.721
#3	3047.465	52524.80	12183.66	2011.378	3941.734

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV10 Acquired: 11/8/2024 23:24:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV10 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.343399	4.927188	4.981061	4.899817	4.639552	10.06054
Stddev	.059400	.070828	.048472	.058539	.064507	.00527
%RSD	1.111650	1.437485	.9731264	1.194711	1.390361	.0524093
#1	5.324511	4.959058	4.958130	4.889961	4.605446	10.06663
#2	5.295739	4.846025	4.948309	4.846832	4.599258	10.05740
#3	5.409946	4.976482	5.036744	4.962658	4.713952	10.05759

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.546895	.2590495	2.425619	22.80671	1.002344	2.528933
Stddev	.084985	.0011571	.021609	.04916	.004611	.025839
%RSD	.8901844	.4466531	.8908776	.2155409	.4600699	1.021734
#1	9.567937	.2603849	2.415284	22.81202	1.003335	2.516241
#2	9.453366	.2583466	2.411118	22.75511	1.006380	2.511895
#3	9.619383	.2584169	2.450455	22.85300	.997318	2.558664

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.134985	5.150748	2.379426	24.12779	2.356825	1.269995
Stddev	.013764	.035136	.006319	.10236	.023816	.002983
%RSD	1.212691	.6821491	.2655568	.4242327	1.010531	.2348602
#1	1.128837	5.110523	2.374389	24.06070	2.343738	1.266553
#2	1.125367	5.166281	2.377373	24.07706	2.342422	1.271824
#3	1.150751	5.175441	2.386516	24.24560	2.384316	1.271608

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.07293	2.610706	2.688127	26.34815	4.890132	5.131306
Stddev	.37550	.003015	.003741	.11438	.021101	.062840
%RSD	1.440201	.1154986	.1391556	.4341073	.4314922	1.224633
#1	26.36497	2.609128	2.688016	26.27451	4.910787	5.111389
#2	26.20447	2.608808	2.684443	26.47992	4.868612	5.080838
#3	25.64936	2.614183	2.691922	26.29002	4.890998	5.201690

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCV10 Acquired: 11/8/2024 23:24:00 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV10 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 4.405894	F 3.997784	F 3.779517	4.608194	F 4.363590	F 3.357515
Stddev	.038523	.003293	.021888	.060931	.042955	.010842
%RSD	.8743481	.0823772	.5791193	1.322230	.9843876	.3229116
#1	4.389819	4.001046	3.754482	4.571492	4.350170	3.355444
#2	4.378012	3.997846	3.795038	4.574562	4.328947	3.369242
#3	4.449851	3.994460	3.789030	4.678529	4.411652	3.347857

Elem	Sr4077
Units	ppm
Avg	F 3.883724
Stddev	.008651
%RSD	.2227467
#1	3.873736
#2	3.888604
#3	3.888832

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3717.355	73112.82	15150.46	2631.512	5487.862
Stddev	47.002	203.35	32.08	18.792	65.953
%RSD	1.264387	.2781301	.2117383	.7141054	1.201802
#1	3730.312	73347.13	15135.28	2649.321	5509.391
#2	3756.519	72982.36	15187.31	2633.343	5540.361
#3	3665.234	73008.97	15128.79	2611.872	5413.835

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

Sample Name: CCB10 Acquired: 11/8/2024 23:35:04 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB10 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011321	.0009876	-.000173	.0003851	-.000667	.0023448
Stddev	.0018177	.0009634	.000148	.0008465	.000900	.0040938
%RSD	160.5559	97.55385	85.51015	219.7932	134.9252	174.5861
#1	.0014770	.0010359	-.000166	.0002293	-.000634	.0043056
#2	.0027527	.0000009	-.000029	-.000373	.000216	-.002361
#3	-.000833	.0019259	-.000325	.001299	-.001583	.005089

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038335	.0000644	.0000652	-.041974	-.001061	.0000484
Stddev	.0003045	.0000424	.0001099	.002423	.000246	.0000826
%RSD	7.943431	65.86107	168.5758	5.772436	23.21117	170.6800
#1	.0035282	.0000210	-.000029	-.043763	-.001234	-.000046
#2	.0038351	.0001057	.000039	-.042942	-.000779	.000086
#3	.0041372	.0000664	.000186	-.039217	-.001169	.000105

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000377	-.011642	-.000240	.0055869	-.000207	.0007790
Stddev	.000093	.001184	.000263	.0009392	.000154	.0002582
%RSD	24.53326	10.16777	109.4471	16.81110	74.08182	33.13929
#1	-.000293	-.010426	-.000031	.0065689	-.000060	.0010308
#2	-.000362	-.012791	-.000536	.0046973	-.000366	.0005149
#3	-.000476	-.011709	-.000154	.0054945	-.000196	.0007915

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7422814	.0003647	-.003086	.1690981	-.000490	-.000101
Stddev	.0538161	.0009610	.000138	.0097061	.000279	.000131
%RSD	7.250094	263.4976	4.466569	5.739917	56.96623	130.0808
#1	.6812163	-.000734	-.002929	.1755124	-.000649	-.000220
#2	.7628409	.000780	-.003138	.1579316	-.000654	.000040
#3	.7827871	.001048	-.003190	.1738502	-.000168	-.000122

Reviewed By:kareem
On:11/12/2024 2:08:18 PM
Inst Id :P4
LB :LB133365

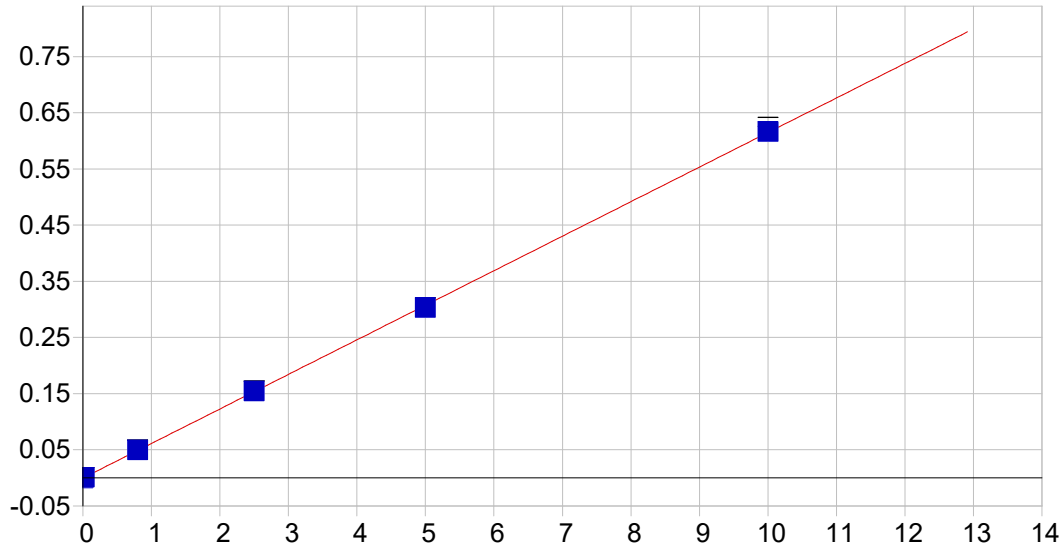
Sample Name: CCB10 Acquired: 11/8/2024 23:35:04 Type: Unk
Method: NON EPA-6010-200.7(v2466) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB10 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003797	.0001661	-.014240	F -.014613	F .0443108	-.000223
Stddev	.000220	.0001989	.005004	.000109	.0027079	.001187
%RSD	5.782716	119.7506	35.14121	.7444320	6.111244	532.7971
#1	-.003962	-.000012	-.016605	-.014511	.0463979	-.001484
#2	-.003548	.000130	-.017623	-.014601	.0452837	.000874
#3	-.003881	.000381	-.008492	-.014727	.0412509	-.000059

Elem	Sr4077
Units	ppm
Avg	.0000348
Stddev	.0000452
%RSD	129.7298
#1	-.000006
#2	.000026
#3	.000084

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3552.141	70371.06	13950.95	2508.308	5725.470
Stddev	3.240	99.28	11.07	25.351	11.532
%RSD	.0912102	.1410870	.0793596	1.010671	.2014090
#1	3554.744	70265.74	13953.72	2503.512	5729.331
#2	3553.166	70384.50	13938.76	2485.698	5712.504
#3	3548.512	70462.94	13960.38	2535.714	5734.577

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



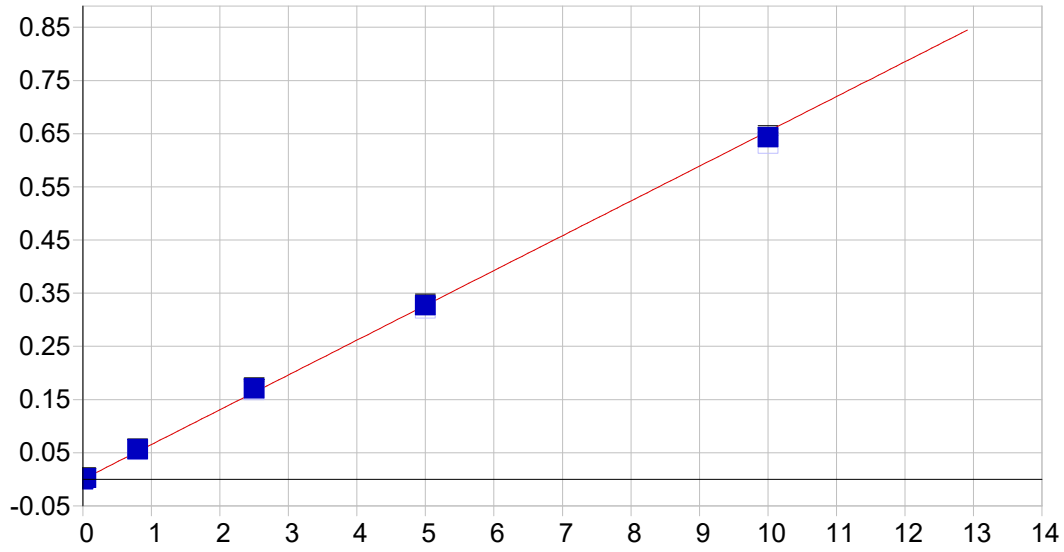
As 189.042 {479}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000279	Re-Slope:	1.000000
A1 (Gain):	0.061524	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999949	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.002574		
Predicted MQL:	0.008580		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00028	.000	1
S1	.02000	.02268	.003	13.4	.00111	.000	1
S3	2.5000	2.5202	.020	.809	.15461	.001	1
S4	5.0000	4.9320	-.068	-1.36	.30282	.000	1
S5	10.000	10.029	.029	.287	.61606	.008	1
S2	.80000	.81636	.016	2.04	.04989	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



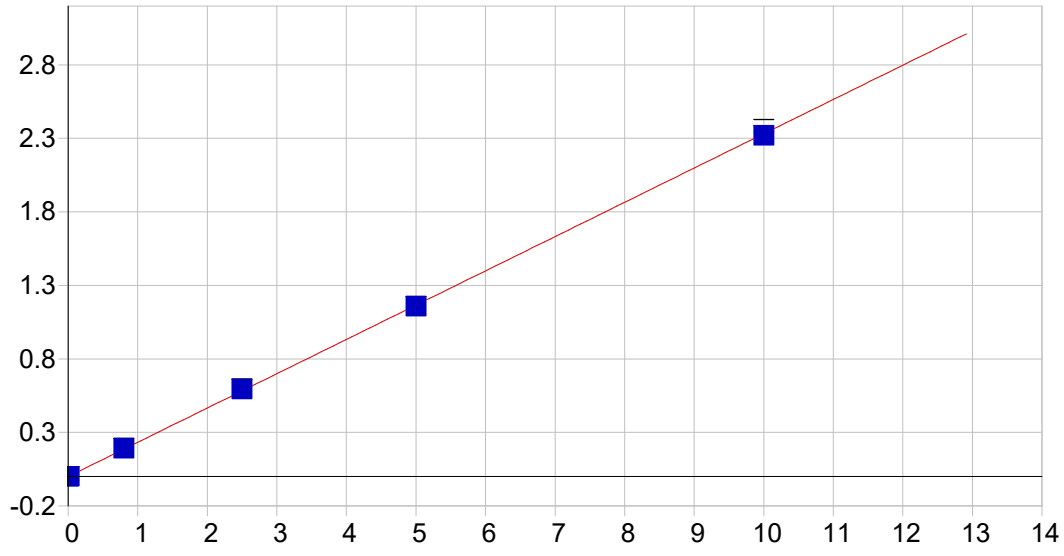
Tl 190.856 {477}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000018	Re-Slope:	1.000000
A1 (Gain):	0.065437	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999647	Status:	OK.
Std Error of Est:	0.000057		
Predicted MDL:	0.001947		
Predicted MQL:	0.006491		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00002	.000	1
S1	.04000	.04033	.000	.837	.00245	.000	1
S3	2.5000	2.6099	.110	4.40	.16775	.001	1
S4	5.0000	4.9980	-.002	-.040	.32101	.002	1
S5	10.000	9.8300	-.170	-1.70	.63118	.003	1
S2	.80000	.86174	.062	7.72	.05541	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



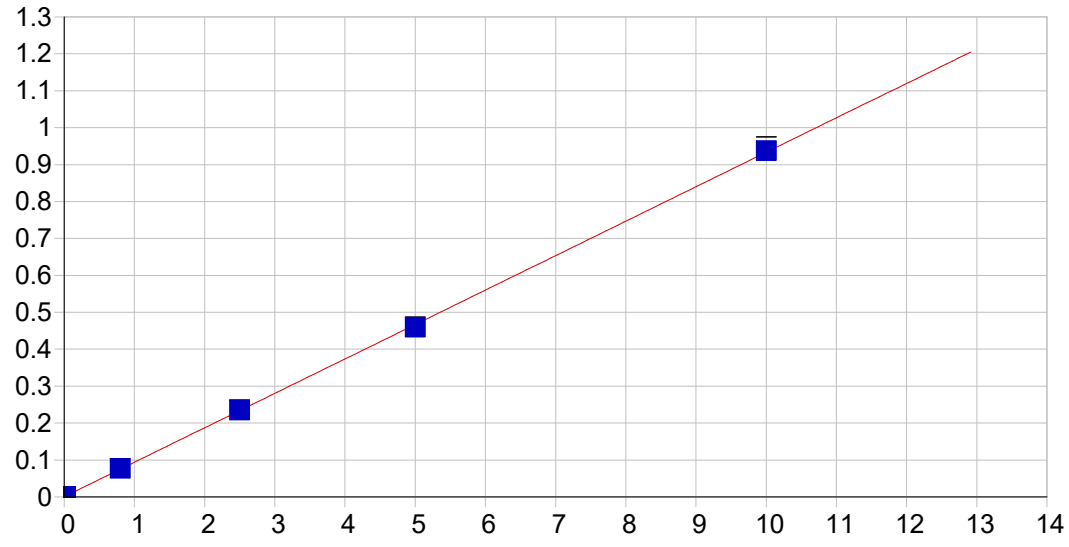
Pb 220.353 {453}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000356	Re-Slope:	1.000000
A1 (Gain):	0.233191	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999931	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.001146		
Predicted MQL:	0.003819		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00036	.000	1
S1	.01200	.01297	.001	8.09	.00261	.000	1
S3	2.5000	2.5544	.054	2.17	.59466	.000	1
S4	5.0000	4.9644	-.036	-.713	1.1560	.000	1
S5	10.000	9.9548	-.045	-.452	2.3184	.041	1
S2	.80000	.82555	.026	3.19	.19195	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



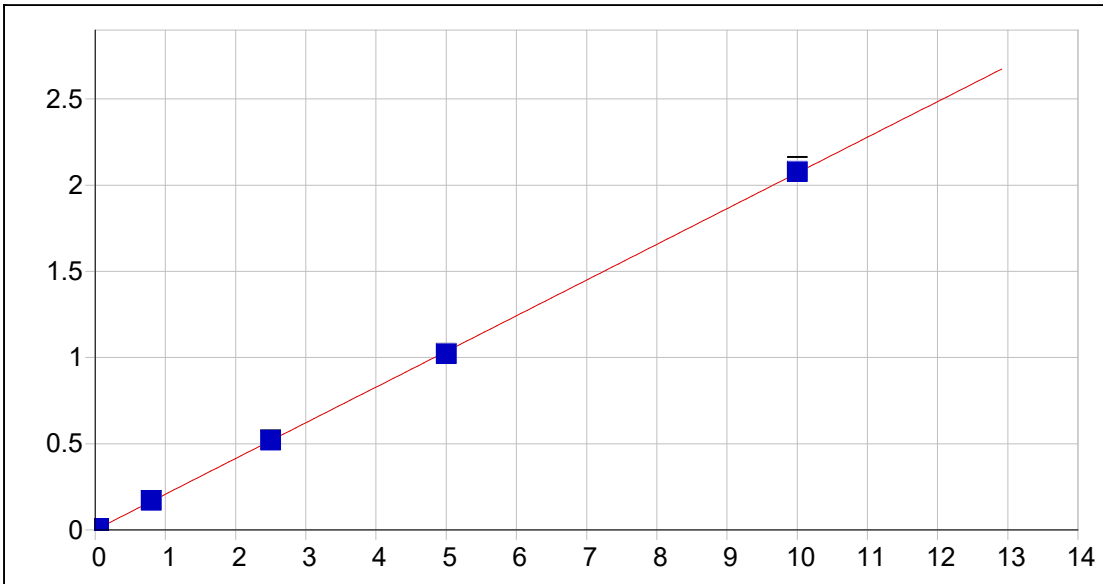
Se 196.090 {472}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000549	Re-Slope:	1.000000
A1 (Gain):	0.093273	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.002243		
Predicted MQL:	0.007476		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00055	.000	1
S1	.02000	.02103	.001	5.13	.00251	.000	1
S3	2.5000	2.5117	.012	.469	.23477	.001	1
S4	5.0000	4.9232	-.077	-1.54	.45963	.001	1
S5	10.000	10.045	.045	.453	.93727	.011	1
S2	.80000	.81877	.019	2.35	.07690	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



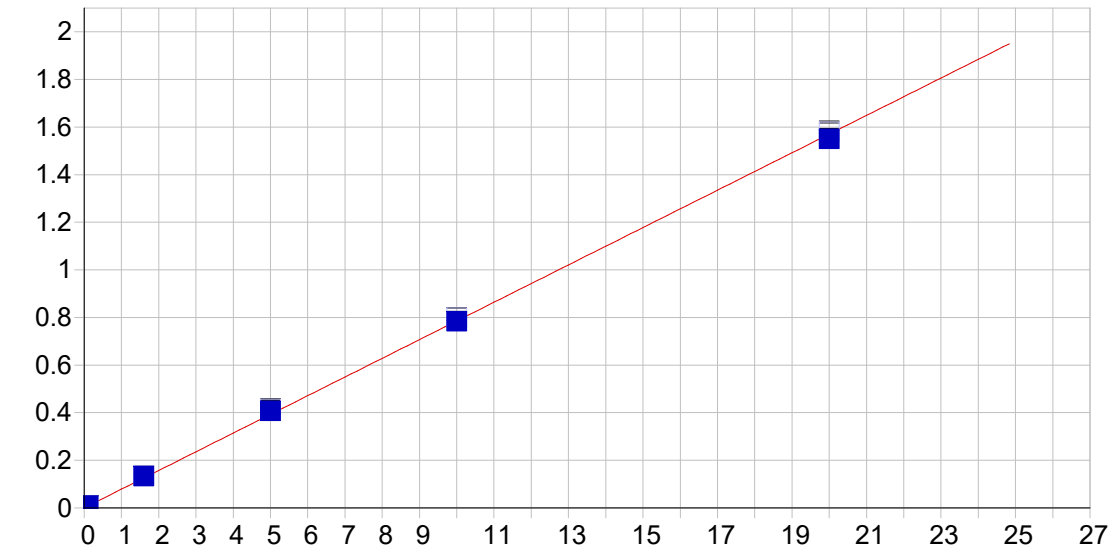
Sb 206.833 {463}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000288	Re-Slope:	1.000000
A1 (Gain):	0.207043	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999953	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.001229		
Predicted MQL:	0.004096		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00029	.000	1
S1	.05000	.05247	.002	4.94	.01117	.000	1
S3	2.5000	2.5113	.011	.454	.52165	.001	1
S4	5.0000	4.9318	-.068	-1.36	1.0242	.001	1
S5	10.000	10.034	.034	.342	2.0834	.026	1
S2	.80000	.82018	.020	2.52	.17055	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



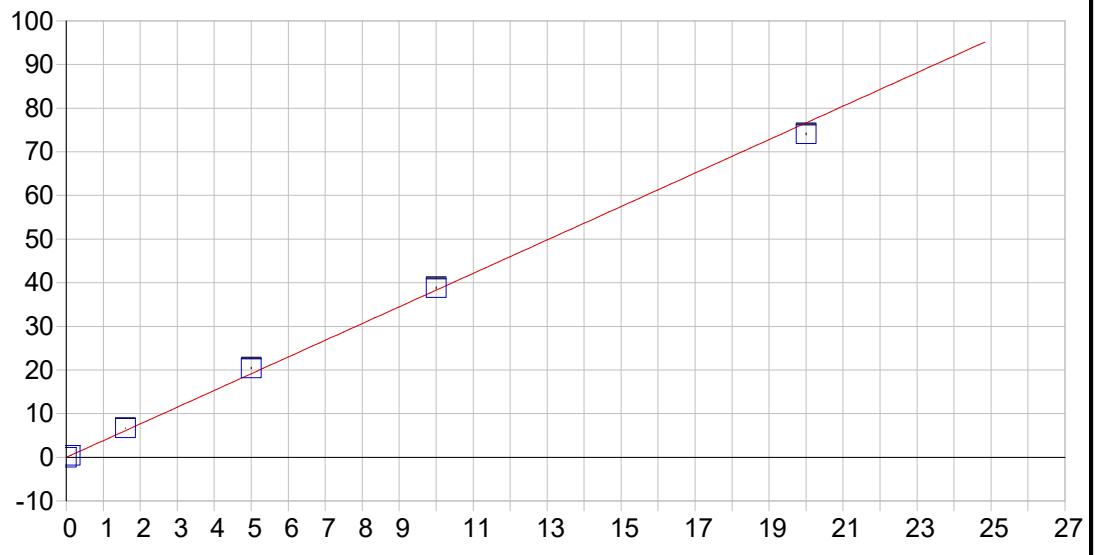
Al 396.152 { 85}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000331	Re-Slope:	1.000000
A1 (Gain):	0.078507	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999773	Status:	OK.
Std Error of Est:	0.000127		
Predicted MDL:	0.005659		
Predicted MQL:	0.018862		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00033	.000	1
S1	.10000	.11140	.011	11.4	.00969	.000	1
S3	5.0000	5.1927	.193	3.85	.41561	.001	1
S4	10.000	9.9736	-.026	-.264	.79856	.000	1
S5	20.000	19.732	-.268	-1.34	1.5799	.004	1
S2	1.6000	1.6891	.089	5.57	.13538	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



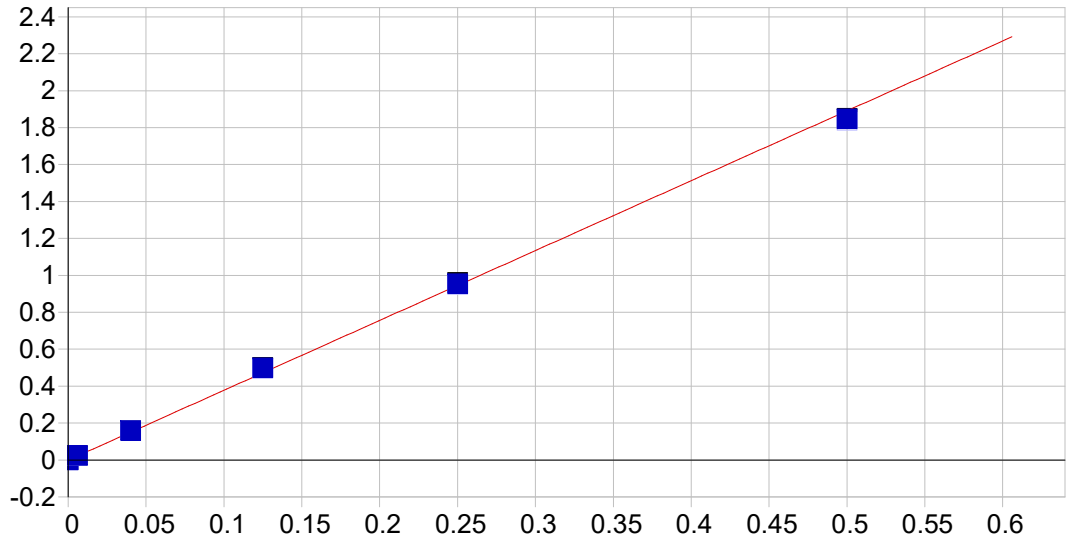
Ba 493.409 { 68}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.019174	Re-Slope:	1.000000
A1 (Gain):	3.832529	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999131	Status:	OK.
Std Error of Est:	0.011855		
Predicted MDL:	0.000404		
Predicted MQL:	0.001348		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	-.01930	.001	1
S1	.10000	.11758	.018	17.6	.43144	.001	1
S3	5.0000	5.3428	.343	6.86	20.457	.165	1
S4	10.000	10.142	.142	1.42	38.852	.225	1
S5	20.000	19.348	-.652	-3.26	74.132	.224	1
S2	1.6000	1.7494	.149	9.34	6.6856	.008	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



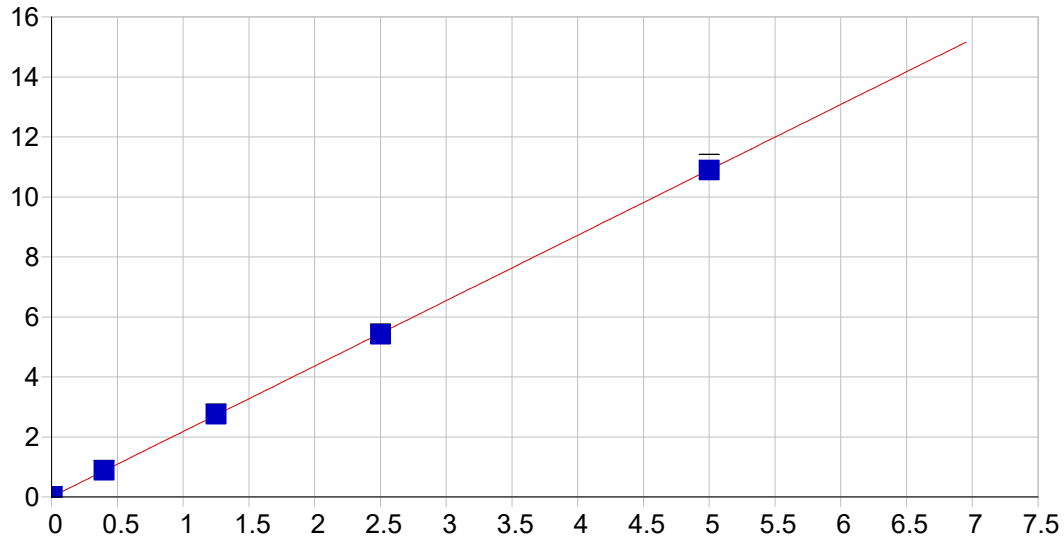
Be 234.861 {144}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000819	Re-Slope:	1.000000
A1 (Gain):	3.783377	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999571	Status:	OK.
Std Error of Est:	0.000318		
Predicted MDL:	0.000064		
Predicted MQL:	0.000213		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00082	.000	1
S1	.00600	.00627	.000	4.52	.02274	.000	1
S3	.12500	.13178	.007	5.43	.49564	.002	1
S4	.25000	.25238	.002	.951	.94978	.007	1
S5	.50000	.48844	-.012	-2.31	1.8386	.004	1
S2	.04000	.04213	.002	5.33	.15791	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



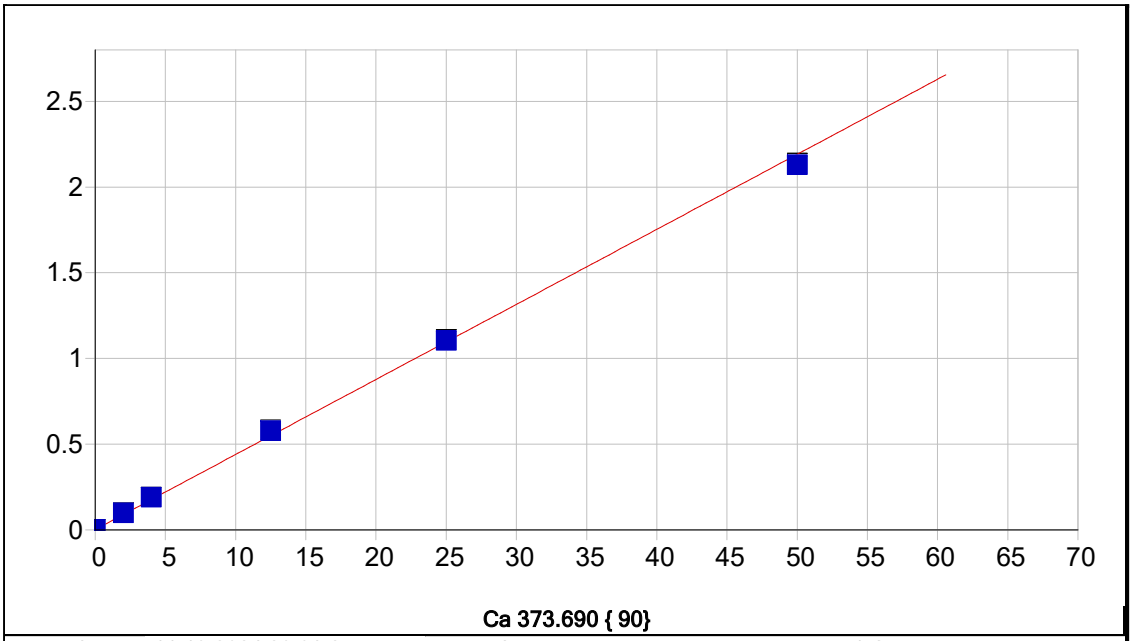
Cd 226.502 {449}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000085	Re-Slope:	1.000000
A1 (Gain):	2.180411	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.000175		
Predicted MDL:	0.000094		
Predicted MQL:	0.000314		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00008	.000	1
S1	.00600	.00758	.002	26.3	.01667	.000	1
S3	1.2500	1.2645	.015	1.16	2.7594	.001	1
S4	2.5000	2.4848	-.015	-.607	5.4222	.006	1
S5	5.0000	4.9953	-.005	-.094	10.900	.193	1
S2	.40000	.40373	.004	.931	.88103	.002	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



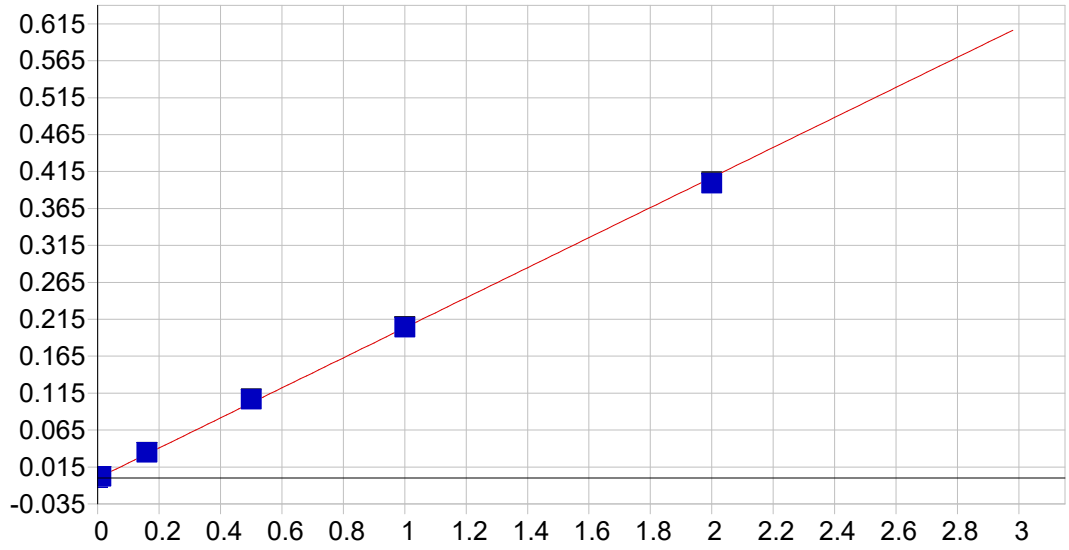
Ca 373.690 { 90}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002226	Re-Slope:	1.000000
A1 (Gain):	0.043774	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999351	Status:	OK.
Std Error of Est:	0.000834		
Predicted MDL:	0.009459		
Predicted MQL:	0.031529		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00043	-.000	.000	.00221	.000	1
S2	4.0000	4.2791	.279	6.98	.18954	.001	1
S3	12.500	13.175	.675	5.40	.57894	.003	1
S4	25.000	25.202	.202	.808	1.1054	.005	1
S5	50.000	48.618	-1.38	-2.76	2.1304	.009	1
S1	2.0000	2.2260	.226	11.3	.09967	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



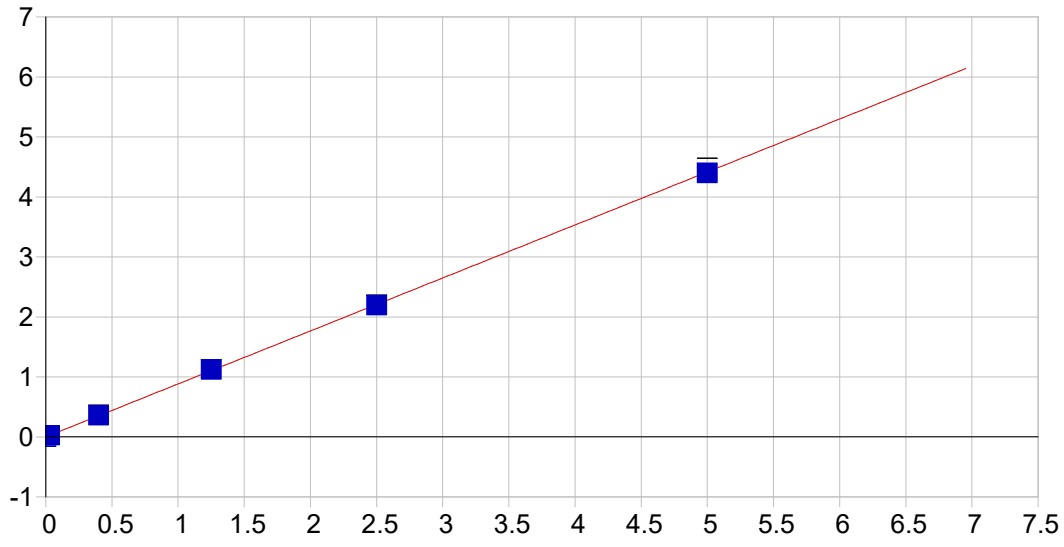
Cr 267.716 {126}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000010	Re-Slope:	1.000000
A1 (Gain):	0.203463	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999640	Status:	OK.
Std Error of Est:	0.000041		
Predicted MDL:	0.000399		
Predicted MQL:	0.001329		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.01000	.01068	.001	6.75	.00216	.000	1
S3	.50000	.52350	.023	4.70	.10653	.000	1
S4	1.0000	1.0041	.004	.406	.20434	.001	1
S5	2.0000	1.9610	-.039	-1.95	.39911	.002	1
S2	.16000	.17073	.011	6.71	.03474	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



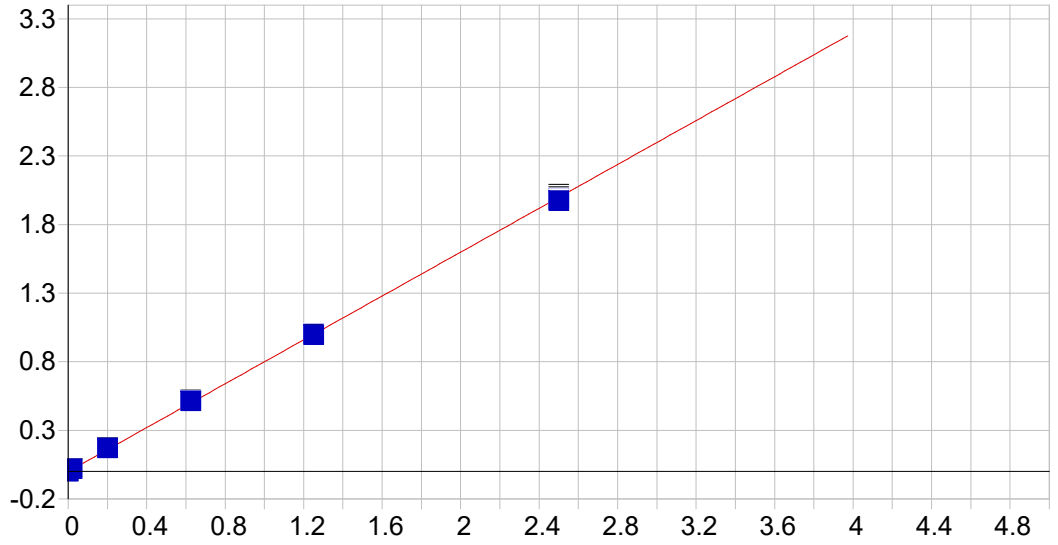
Co 228.616 {448}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000054	Re-Slope:	1.000000
A1 (Gain):	0.883077	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999954	Status:	OK.
Std Error of Est:	0.000172		
Predicted MDL:	0.000209		
Predicted MQL:	0.000695		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00006	.000	1
S1	.03000	.03179	.002	5.97	.02791	.000	1
S3	1.2500	1.2700	.020	1.60	1.1233	.000	1
S4	2.5000	2.4872	-.013	-.513	2.2000	.003	1
S5	5.0000	4.9806	-.019	-.388	4.4057	.078	1
S2	.40000	.41050	.010	2.62	.36305	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



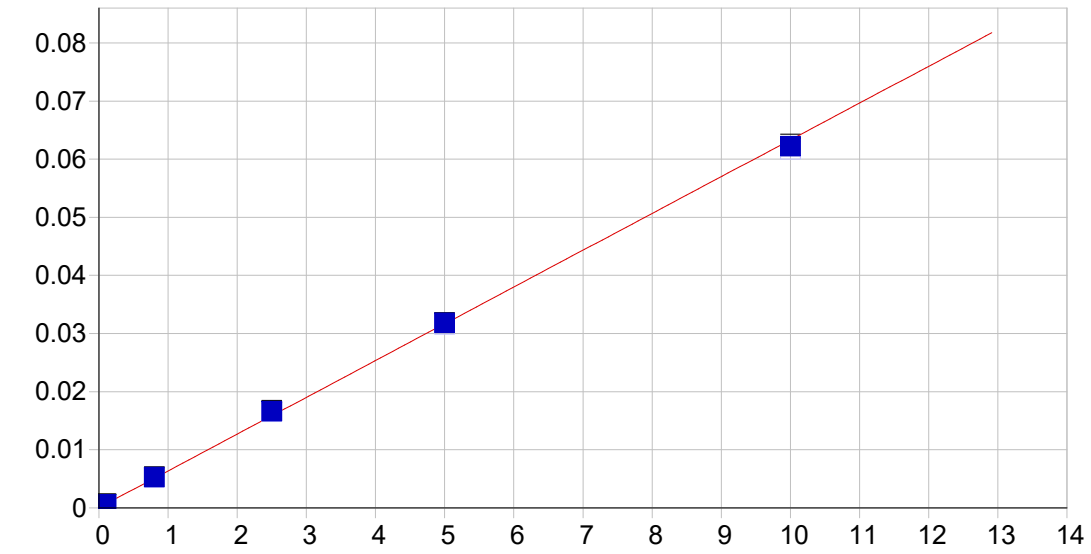
Cu 224.700 {450}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000054	Re-Slope:	1.000000
A1 (Gain):	0.799461	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999750	Status:	OK.
Std Error of Est:	0.000212		
Predicted MDL:	0.000411		
Predicted MQL:	0.001370		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00005	.000	1
S1	.02000	.02331	.003	16.5	.01889	.000	1
S3	.62500	.64385	.019	3.02	.51955	.001	1
S4	1.2500	1.2463	-.004	-.298	1.0059	.000	1
S5	2.5000	2.4687	-.031	-1.25	1.9927	.028	1
S2	.20000	.21285	.013	6.43	.17175	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



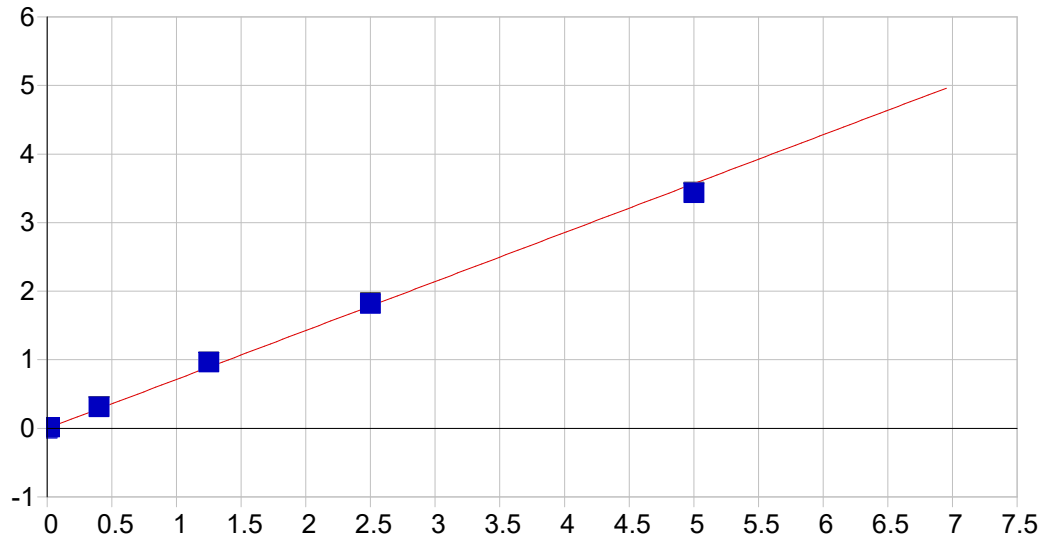
Fe 240.488 {140}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000040	Re-Slope:	1.000000
A1 (Gain):	0.006328	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999725	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.004110		
Predicted MQL:	0.013699		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00004	.000	1
S1	.10000	.10175	.002	1.75	.00068	.000	1
S3	2.5000	2.6219	.122	4.88	.01650	.000	1
S4	5.0000	5.0234	.023	.469	.03156	.000	1
S5	10.000	9.8268	-.173	-1.73	.06168	.000	1
S2	.80000	.82614	.026	3.27	.00522	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



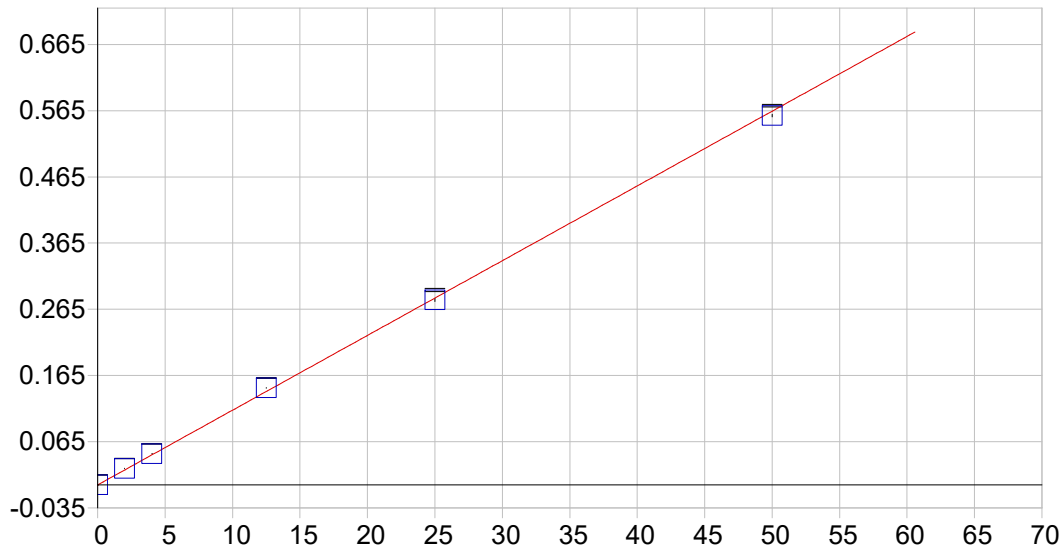
Mn 257.610 {131}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000062	Re-Slope:	1.000000
A1 (Gain):	0.713537	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998901	Status:	OK.
Std Error of Est:	0.000555		
Predicted MDL:	0.000270		
Predicted MQL:	0.000899		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00006	.000	1
S1	.02000	.02362	.004	18.1	.01692	.000	1
S3	1.2500	1.3487	.099	7.89	.96257	.004	1
S4	2.5000	2.5471	.047	1.88	1.8179	.011	1
S5	5.0000	4.8118	-.188	-3.76	3.4341	.010	1
S2	.40000	.43886	.039	9.72	.31326	.002	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



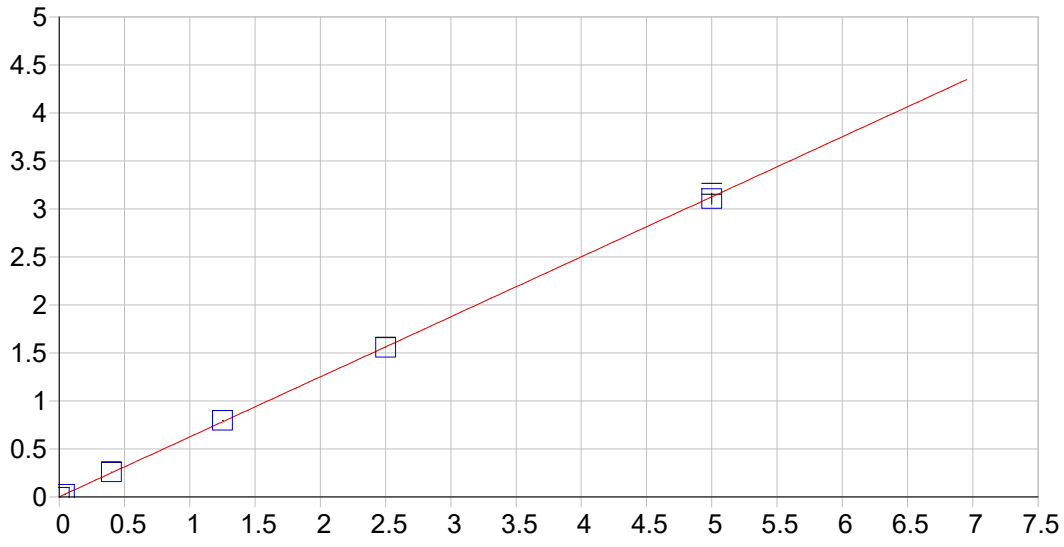
Mg 279.079 {121}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000248	Re-Slope:	1.000000
A1 (Gain):	0.011290	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999716	Status:	OK.
Std Error of Est:	0.000142		
Predicted MDL:	0.017477		
Predicted MQL:	0.058256		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00031	-.000	.000	-.00025	.000	1
S2	4.0000	4.1596	.160	3.99	.04671	.000	1
S3	12.500	12.969	.469	3.75	.14617	.001	1
S4	25.000	24.769	-.231	-.925	.27939	.002	1
S5	50.000	49.403	-.597	-1.19	.55751	.002	1
S1	2.0000	2.1993	.199	9.97	.02458	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



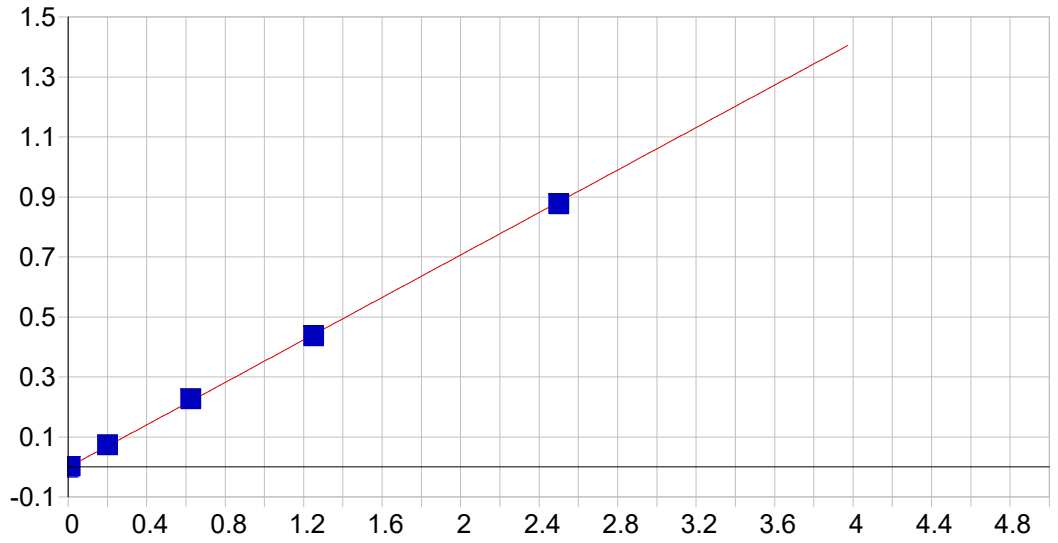
Ni 231.604 {446}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000072	Re-Slope:	1.000000
A1 (Gain):	0.625257	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999931	Status:	OK.
Std Error of Est:	0.000172		
Predicted MDL:	0.000330		
Predicted MQL:	0.001099		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00007	.000	1
S1	.04000	.04178	.002	4.45	.02619	.000	1
S3	1.2500	1.2752	.025	2.02	.79743	.000	1
S4	2.5000	2.4922	-.008	-.313	1.5583	.002	1
S5	5.0000	4.9676	-.032	-.648	3.1061	.057	1
S2	.40000	.41321	.013	3.30	.25844	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



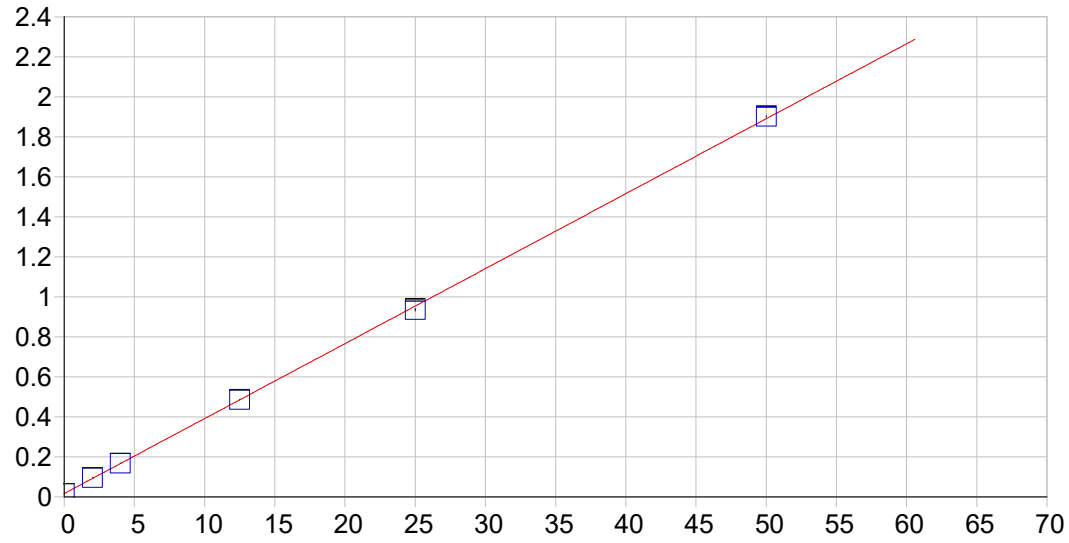
Ag 328.068 {103}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001506	Re-Slope:	1.000000
A1 (Gain):	0.353933	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999845	Status:	OK.
Std Error of Est:	0.000051		
Predicted MDL:	0.000322		
Predicted MQL:	0.001073		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00151	.000	1
S1	.01000	.01135	.001	13.5	.00249	.000	1
S3	.62500	.64337	.018	2.94	.22532	.001	1
S4	1.2500	1.2380	-.012	-.960	.43491	.000	1
S5	2.5000	2.4828	-.017	-.690	.87371	.001	1
S2	.20000	.20953	.010	4.77	.07237	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



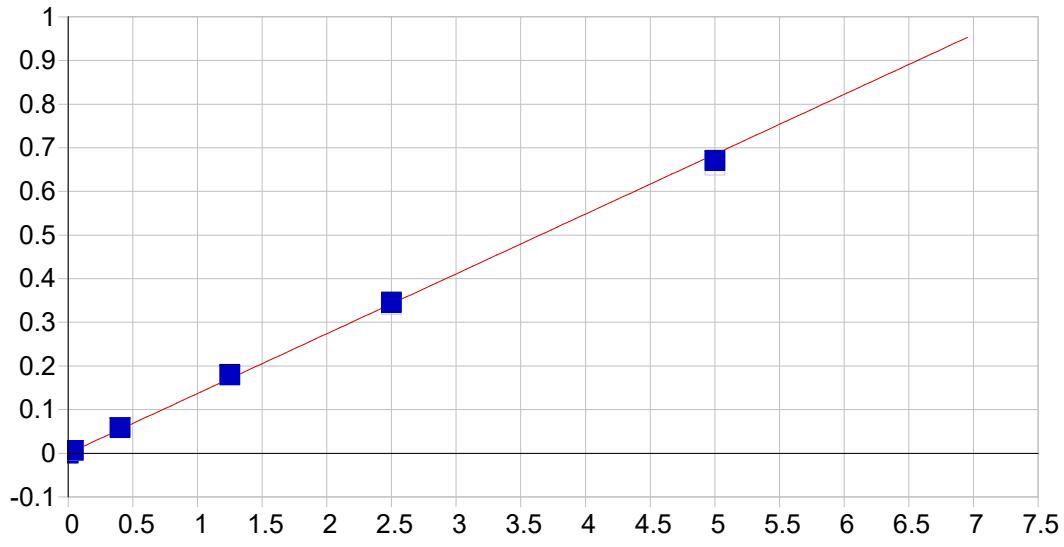
Na 589.592 { 57}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.016978	Re-Slope:	1.000000
A1 (Gain):	0.037478	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999906	Status:	OK.
Std Error of Est:	0.000272		
Predicted MDL:	0.004705		
Predicted MQL:	0.015682		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00010	-.000	.000	.01697	.000	1
S2	4.0000	4.0262	.026	.655	.16787	.000	1
S3	12.500	12.543	.043	.341	.48705	.002	1
S4	25.000	24.516	-.484	-1.94	.93578	.007	1
S5	50.000	50.305	.305	.611	1.9023	.003	1
S1	2.0000	2.1100	.110	5.50	.09606	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



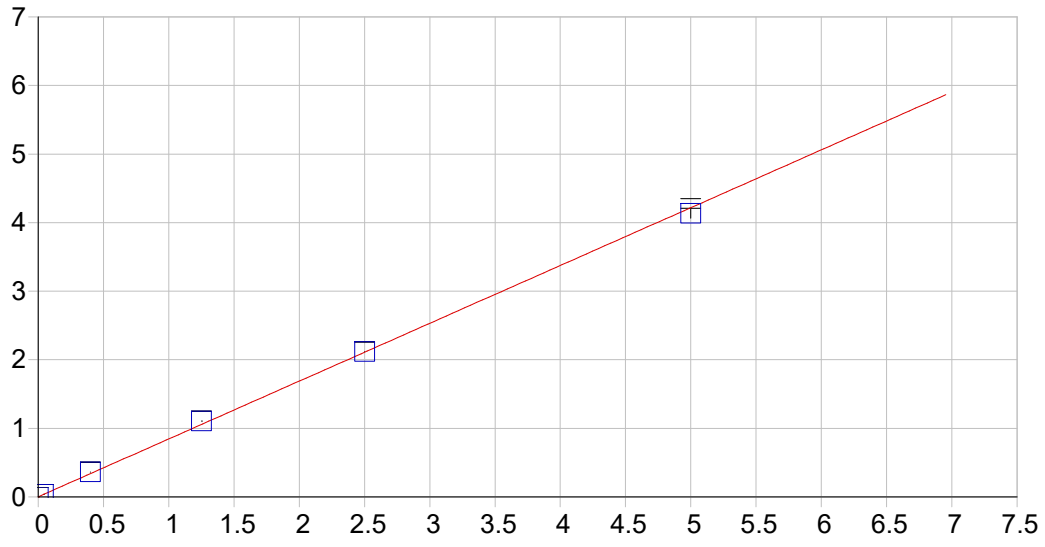
V 292.402 {115}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000165	Re-Slope:	1.000000
A1 (Gain):	0.137070	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999541	Status:	OK.
Std Error of Est:	0.000096		
Predicted MDL:	0.001488		
Predicted MQL:	0.004960		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00017	.000	1
S1	.04000	.04504	.005	12.6	.00580	.000	1
S3	1.2500	1.3123	.062	4.99	.17722	.001	1
S4	2.5000	2.5206	.021	.823	.34034	.001	1
S5	5.0000	4.8862	-.114	-2.28	.65959	.002	1
S2	.40000	.42596	.026	6.49	.05742	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



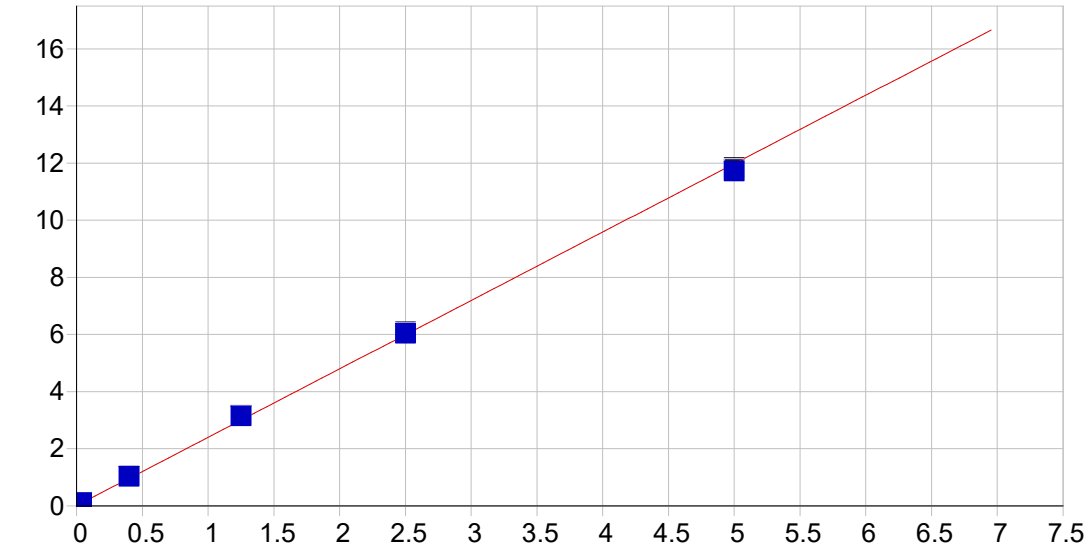
Zn 206.200 {464}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002217	Re-Slope:	1.000000
A1 (Gain):	0.843095	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999616	Status:	OK.
Std Error of Est:	0.000549		
Predicted MDL:	0.000242		
Predicted MQL:	0.000805		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00221	.000	1
S1	.04000	.04345	.003	8.64	.03885	.000	1
S3	1.2500	1.3101	.060	4.81	1.1068	.001	1
S4	2.5000	2.5093	.009	.373	2.1178	.003	1
S5	5.0000	4.9000	-.100	-2.00	4.1334	.069	1
S2	.40000	.42712	.027	6.78	.36232	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



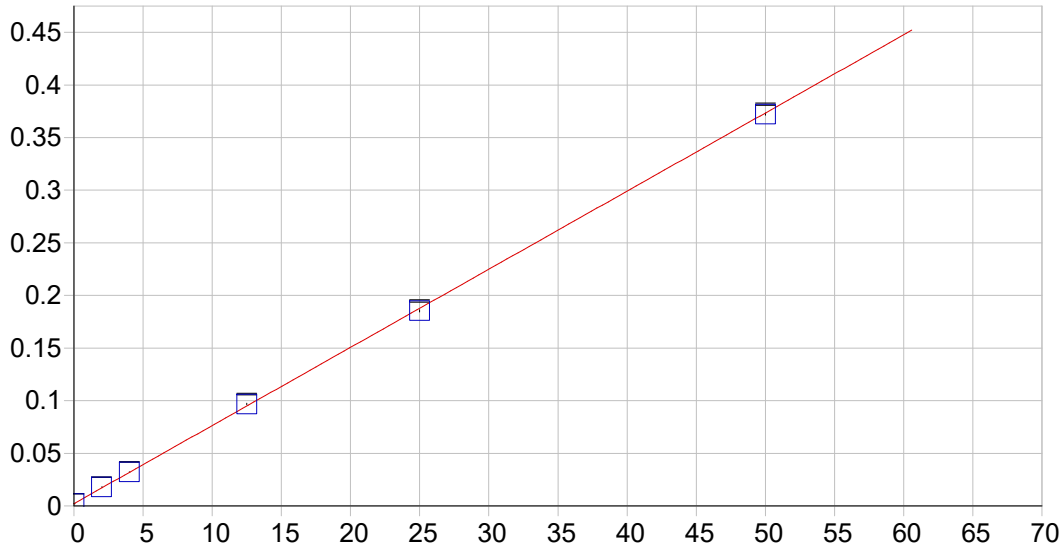
Zn 213.856 {158}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007482	Re-Slope:	1.000000
A1 (Gain):	2.394992	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999587	Status:	OK.
Std Error of Est:	0.001626		
Predicted MDL:	0.000326		
Predicted MQL:	0.001088		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00746	.000	1
S1	.04000	.04434	.004	10.9	.11435	.001	1
S3	1.2500	1.3101	.060	4.80	3.1659	.007	1
S4	2.5000	2.5177	.018	.706	6.0789	.013	1
S5	5.0000	4.8909	-.109	-2.18	11.804	.034	1
S2	.40000	.42704	.027	6.76	1.0369	.003	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



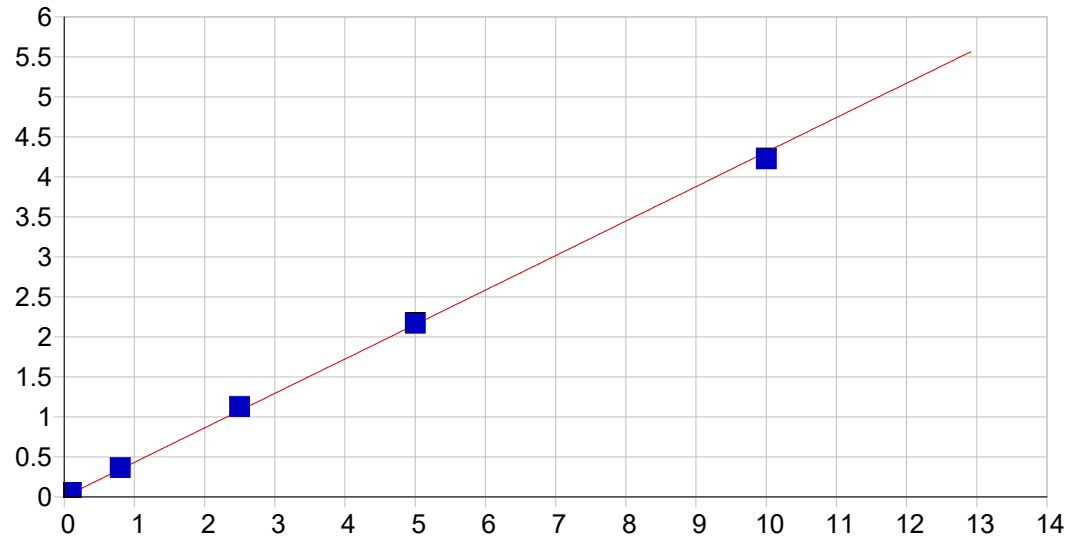
K 766.490 { 44}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002125	Re-Slope:	1.000000
A1 (Gain):	0.007426	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999894	Status:	OK.
Std Error of Est:	0.000057		
Predicted MDL:	0.024340		
Predicted MQL:	0.081133		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00018	-.000	.000	.00212	.000	1
S2	4.0000	4.0669	.067	1.67	.03232	.000	1
S3	12.500	12.750	.250	2.00	.09680	.001	1
S4	25.000	24.690	-.310	-1.24	.18547	.001	1
S5	50.000	49.856	-.144	-.287	.37234	.001	1
S1	2.0000	2.1371	.137	6.85	.01799	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



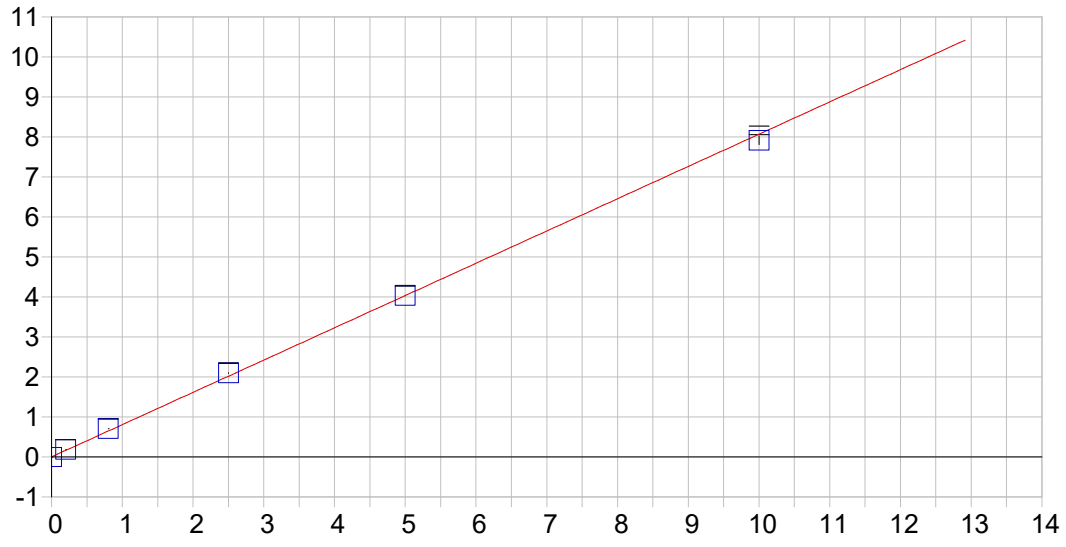
B 249.678 {135}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001240	Re-Slope:	1.000000
A1 (Gain):	0.430852	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999635	Status:	OK.
Std Error of Est:	0.000610		
Predicted MDL:	0.000684		
Predicted MQL:	0.002281		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00123	.000	1
S1	.10000	.11333	.013	13.3	.04988	.000	1
S3	2.5000	2.6177	.118	4.71	1.1270	.004	1
S4	5.0000	5.0260	.026	.520	2.1625	.015	1
S5	10.000	9.8028	-.197	-1.97	4.2164	.010	1
S2	.80000	.84024	.040	5.03	.36259	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



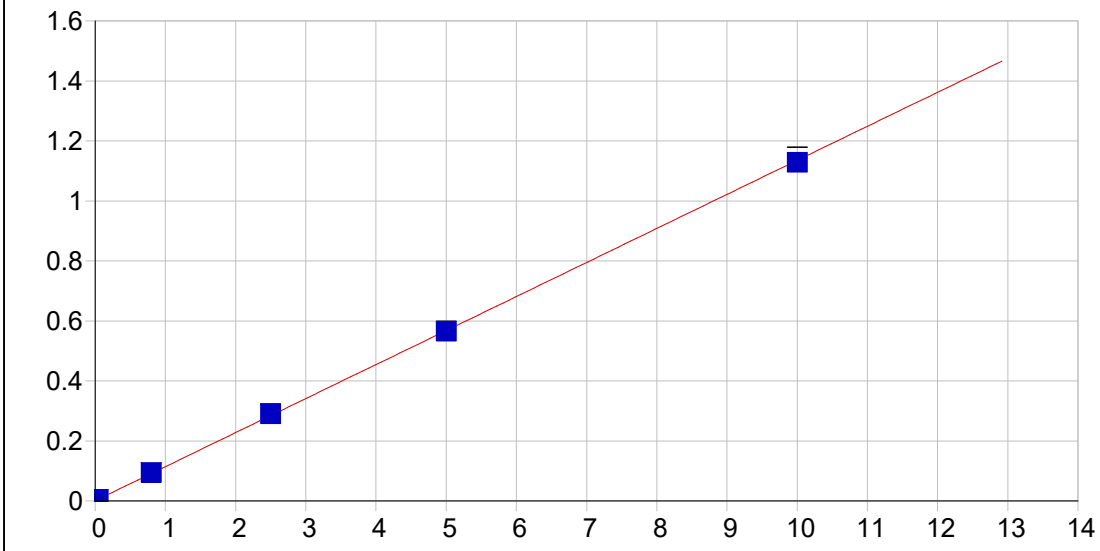
Mo 202.030 {467}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000210	Re-Slope:	1.000000
A1 (Gain):	0.806803	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999547	Status:	OK.
Std Error of Est:	0.001809		
Predicted MDL:	0.000266		
Predicted MQL:	0.000887		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00005	-.000	.000	.00017	.000	1
S1	.20000	.22583	.026	12.9	.18241	.000	1
S3	2.5000	2.5980	.098	3.92	2.0963	.007	1
S4	5.0000	4.9970	-.003	-.059	4.0318	.007	1
S5	10.000	9.8100	-.190	-1.90	7.9149	.110	1
S2	.80000	.86917	.069	8.65	.70146	.001	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



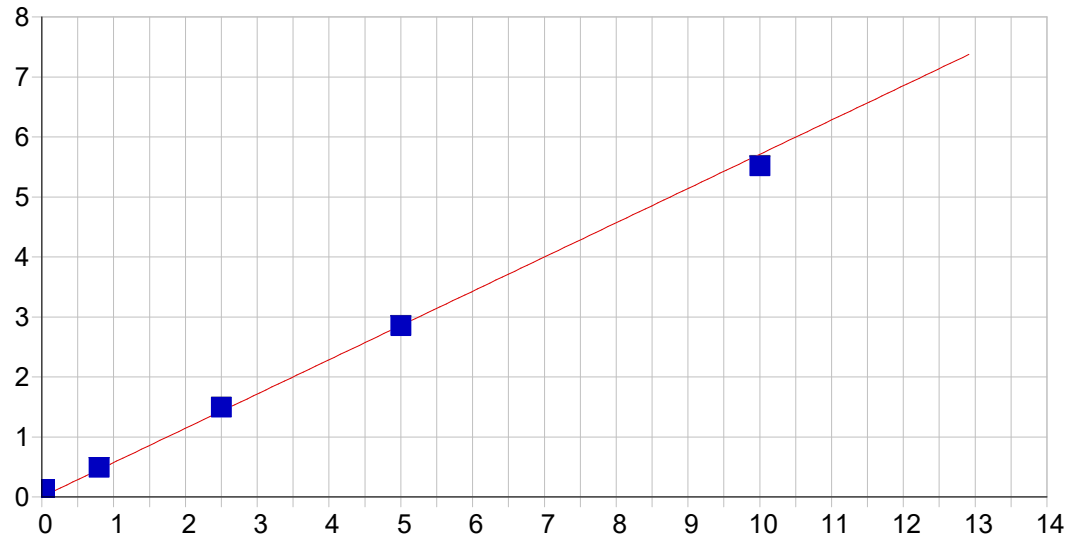
Sn 189.989 {478}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000672	Re-Slope:	1.000000
A1 (Gain):	0.113446	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999857	Status:	OK.
Std Error of Est:	0.000064		
Predicted MDL:	0.000854		
Predicted MQL:	0.002845		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00067	.000	1
S1	.04000	.05149	.011	28.7	.00651	.000	1
S3	2.5000	2.5479	.048	1.92	.28943	.000	1
S4	5.0000	4.9784	-.022	-.432	.56487	.001	1
S5	10.000	9.9406	-.059	-.594	1.1272	.018	1
S2	.80000	.82158	.022	2.70	.09378	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



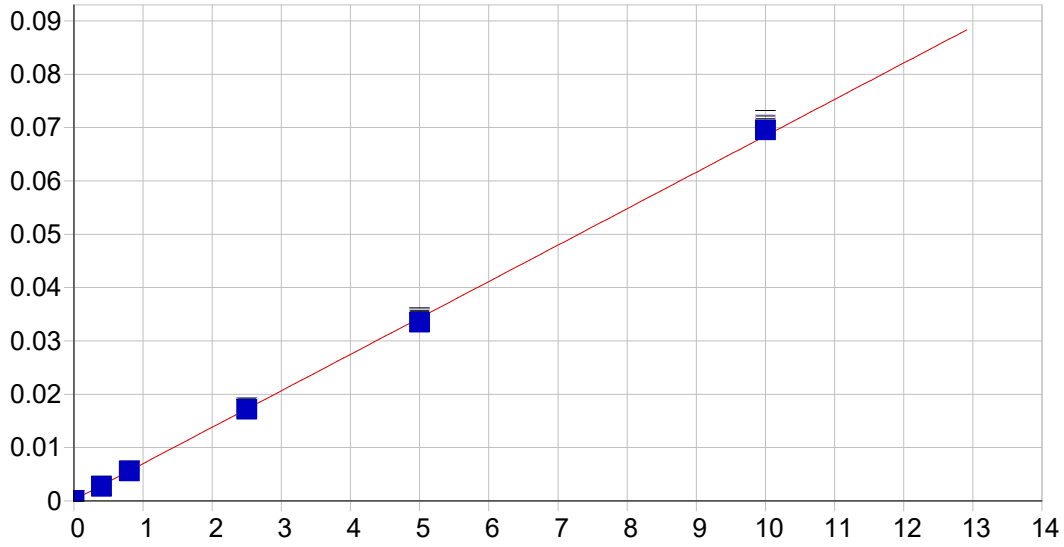
Ti 336.121 {100}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001829	Re-Slope:	1.000000
A1 (Gain):	0.570895	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.977123	Status:	OK.
Std Error of Est:	0.004118		
Predicted MDL:	0.000526		
Predicted MQL:	0.001753		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00019	-.000	.000	.00172	.000	1
S1	.04000	.22411	.184	460.	.12975	.001	1
S3	2.5000	2.6116	.112	4.46	1.4922	.002	1
S4	5.0000	4.9919	-.008	-.162	2.8507	.007	1
S5	10.000	9.6604	-.340	-3.40	5.5148	.010	1
S2	.80000	.85207	.052	6.51	.48810	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



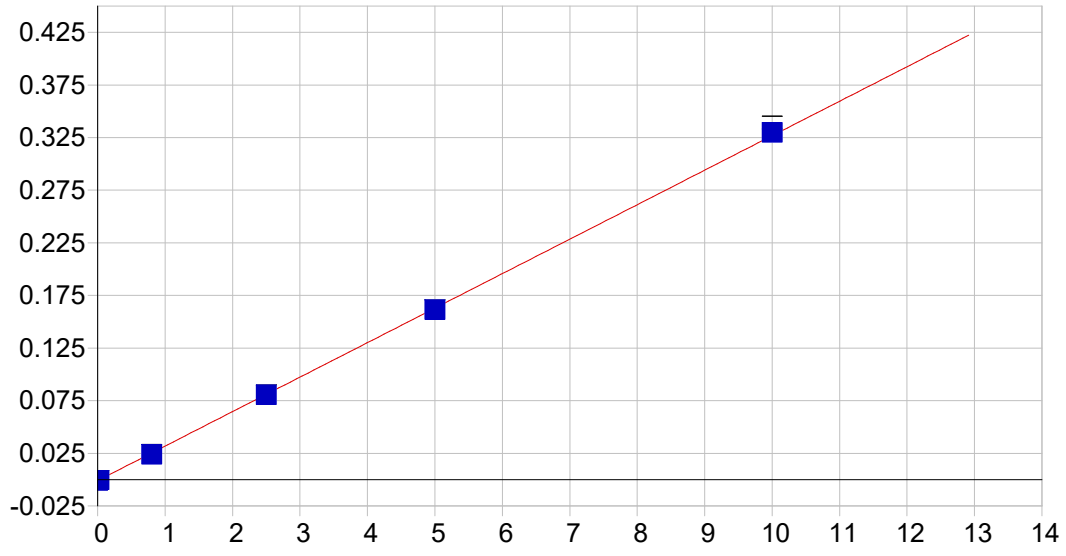
Si 288.158 {117}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000169	Re-Slope:	1.000000
A1 (Gain):	0.006827	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999812	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.006267		
Predicted MQL:	0.020890		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00004	.000	.000	.00017	.000	1
S1	.40000	.37428	-.026	-6.43	.00273	.000	1
S3	2.5000	2.4928	-.007	-.288	.01744	.000	1
S4	5.0000	4.8824	-.118	-2.35	.03401	.000	1
S5	10.000	10.162	.162	1.62	.07057	.001	1
S2	.80000	.78824	-.012	-1.47	.00563	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



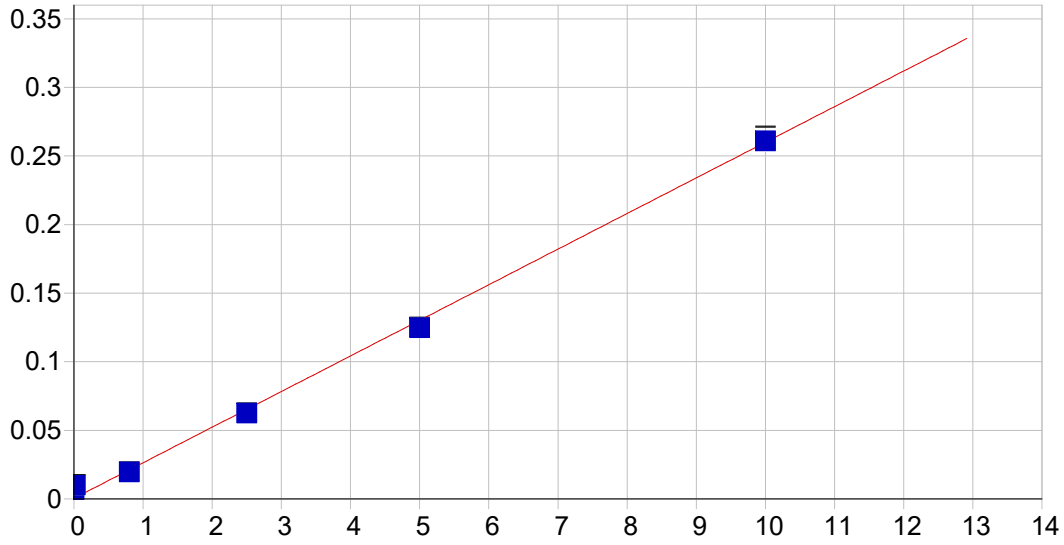
P 177.495 {490}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000960	Re-Slope:	1.000000
A1 (Gain):	0.032777	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999905	Status:	OK.
Std Error of Est:	0.000011		
Predicted MDL:	0.002690		
Predicted MQL:	0.008967		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00096	.000	1
S1	.02000	.01780	-.002	-11.0	-.00038	.000	1
S3	2.5000	2.4878	-.012	-.489	.08057	.000	1
S4	5.0000	4.9567	-.043	-.865	.16148	.000	1
S5	10.000	10.097	.097	.965	.32992	.006	1
S2	.80000	.76115	-.039	-4.86	.02398	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



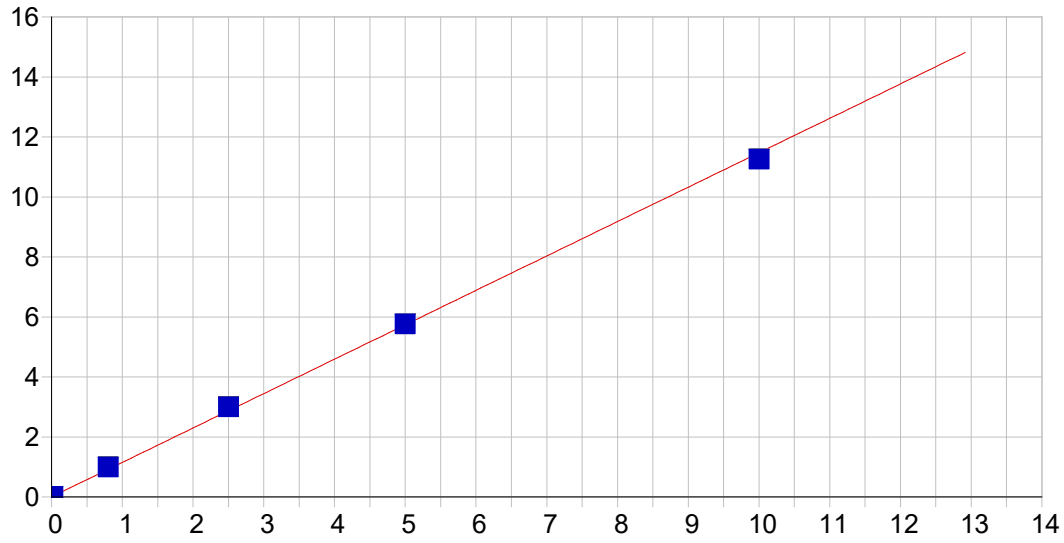
S 182.034 {485}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000410	Re-Slope:	1.000000
A1 (Gain):	0.025960	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.863157	Status:	OK.
Std Error of Est:	0.000355		
Predicted MDL:	0.003449		
Predicted MQL:	0.011498		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00035	-.000	.000	.00040	.000	1
S1	.02000	.37246	.352	1760.	.01006	.000	1
S3	2.5000	2.3925	-.107	-4.30	.06235	.000	1
S4	5.0000	4.7939	-.206	-4.12	.12452	.000	1
S5	10.000	10.040	.040	.404	.26038	.003	1
S2	.80000	.73478	-.065	-8.15	.01943	.000	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



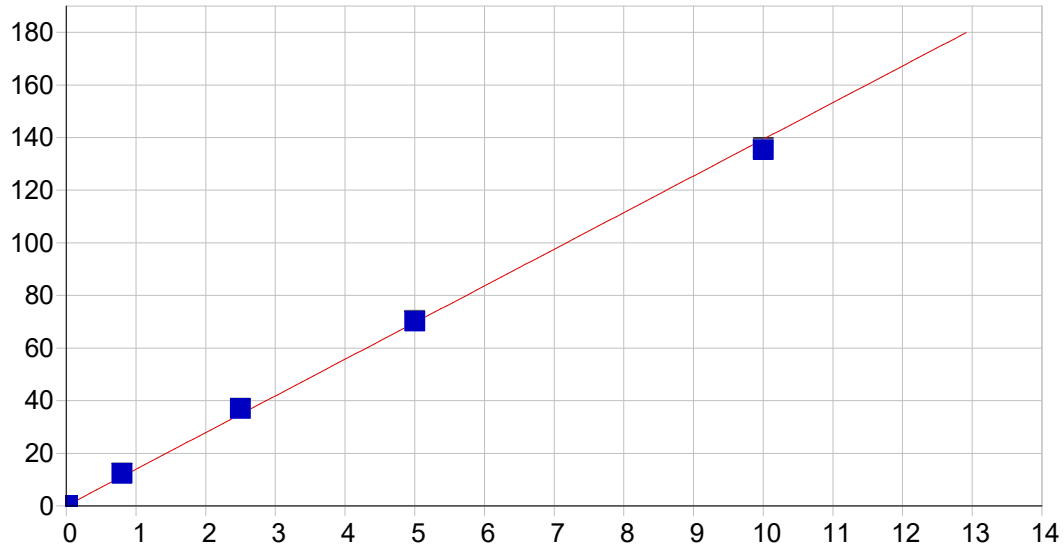
Li 670.784 { 50}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002629	Re-Slope:	1.000000
A1 (Gain):	1.146988	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999635	Status:	OK.
Std Error of Est:	0.000727		
Predicted MDL:	0.000716		
Predicted MQL:	0.002386		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00262	.000	1
S5	10.000	9.8069	-.193	-1.93	11.261	.002	1
S4	5.0000	5.0212	.021	.423	5.7670	.015	1
S3	2.5000	2.6091	.109	4.36	2.9978	.013	1
S1	.02000	.02235	.002	11.8	.02868	.000	1
S2	.80000	.86045	.060	7.56	.99038	.002	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



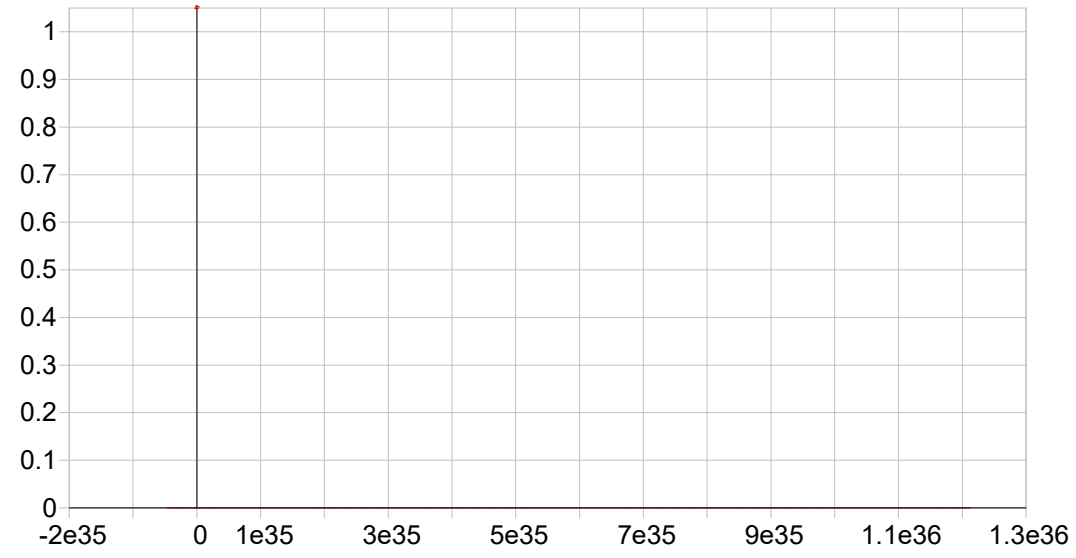
Sr 407.771 { 83}

Date of Fit:	11/19/2024 20:06:25	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001442	Re-Slope:	1.000000
A1 (Gain):	13.933771	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999267	Status:	OK.
Std Error of Est:	0.012519		
Predicted MDL:	0.000035		
Predicted MQL:	0.000118		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00137	.000	1
S1	.02000	.02246	.002	12.3	.31584	.000	1
S3	2.5000	2.6525	.152	6.10	36.995	.111	1
S4	5.0000	5.0390	.039	.780	70.283	.217	1
S5	10.000	9.7203	-.280	-2.80	135.58	.511	1
S2	.80000	.88580	.086	10.7	12.355	.003	1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

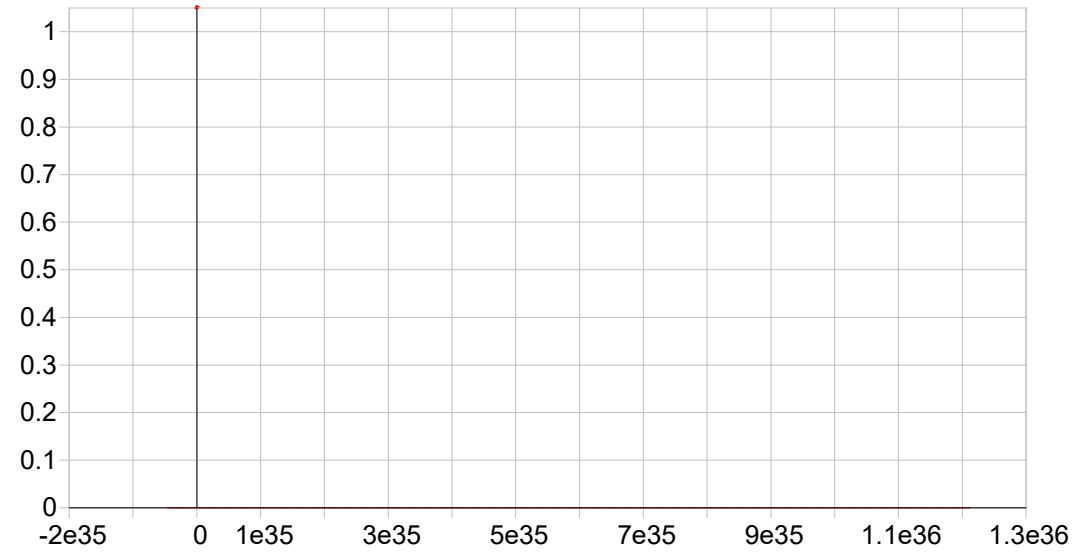


Y 224.306 {450}*

Date of Fit:	11/18/2024 12:31:27	Type of Fit:	Linear	Weighting:	1/Conc

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

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



Y 360.073 { 94}*

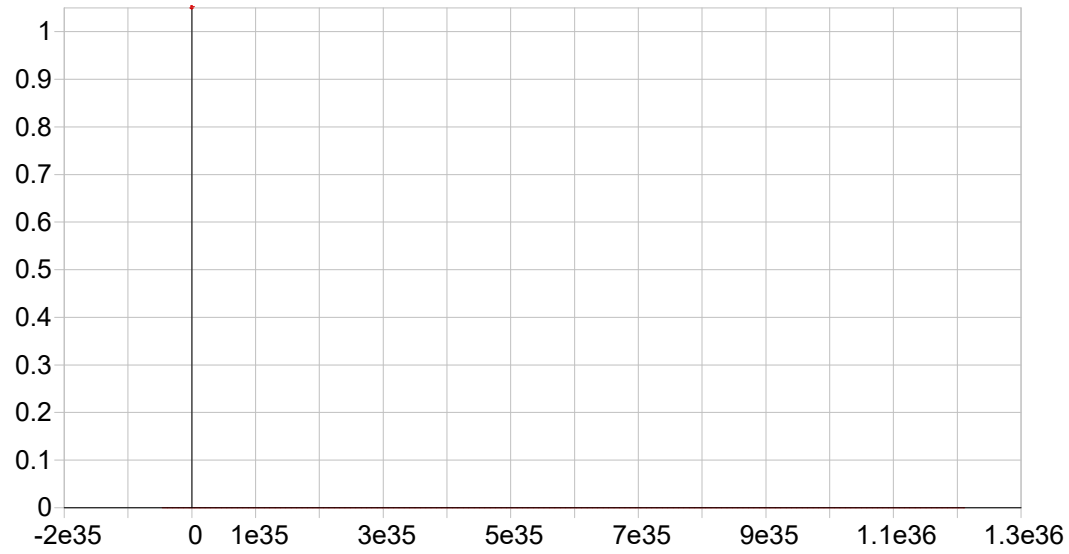
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

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

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



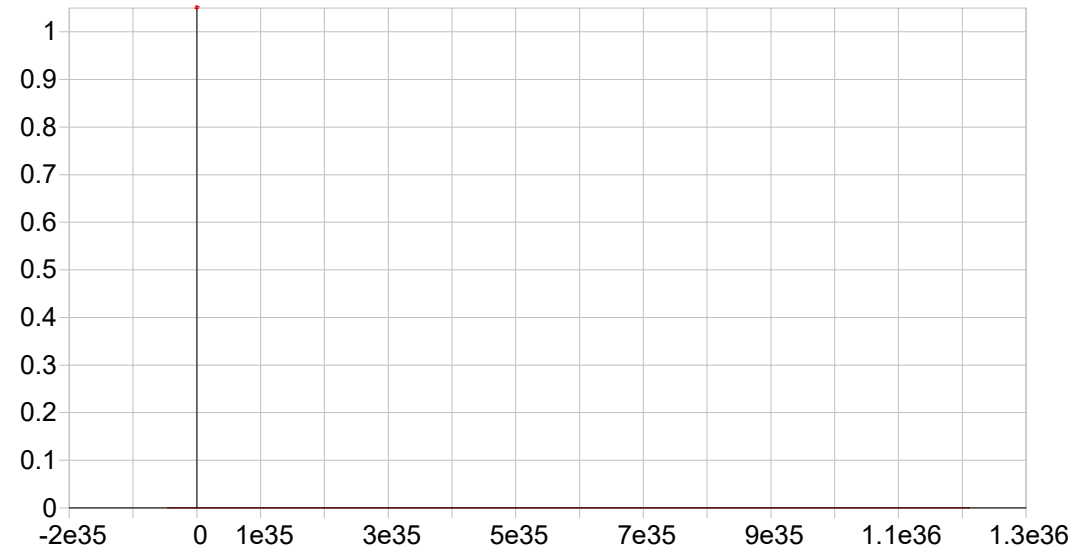
Y 371.030 { 91}*

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

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

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

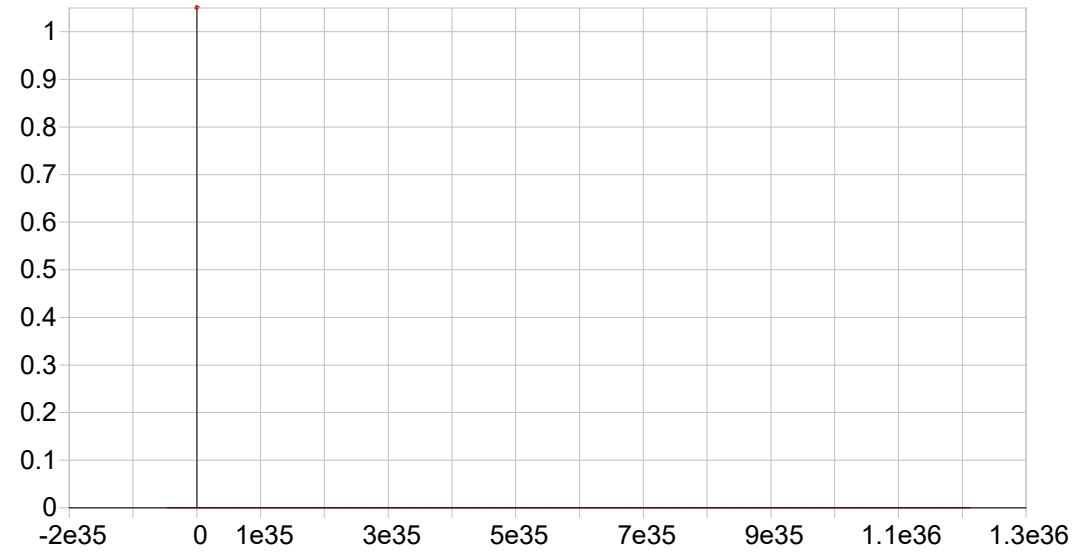
Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525



Y 224.306 {150}*

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

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



In 230.606 {446}*

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

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

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

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

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S0 Acquired: 11/19/2024 19:40:58 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	-.00028	-.00002	-.00036	.00055	.00029	.00033	-.01930	-.00082
Stddev	.00006	.00012	.00030	.00011	.00011	.00019	.00122	.00016
%RSD	22.490	632.97	83.677	19.287	39.419	58.927	6.3220	19.809
#1	-.00026	.00011	-.00035	.00053	.00040	.00055	-.02059	-.00073
#2	-.00035	-.00005	-.00065	.00066	.00029	.00025	-.01817	-.00101
#3	-.00023	-.00012	-.00006	.00045	.00017	.00018	-.01913	-.00073

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00008	.00221	-.00001	-.00006	.00005	.00004	.00006	-.00025
Stddev	.00006	.00047	.00003	.00017	.00027	.00000	.00017	.00013
%RSD	70.681	21.474	262.59	293.95	548.43	10.964	298.94	52.008
#1	.00015	.00210	.00001	.00007	.00003	.00004	.00009	-.00038
#2	.00004	.00180	-.00004	.00000	.00033	.00004	.00021	-.00026
#3	.00006	.00273	.00000	-.00024	-.00021	.00003	-.00013	-.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	.00007	-.00151	.01697	-.00017	.00746	.00212	.00123	.00017
Stddev	.00006	.00008	.00047	.00018	.00012	.00013	.00007	.00018
%RSD	88.652	5.2379	2.7804	110.23	1.6048	6.2430	6.0783	106.24
#1	.00002	-.00149	.01647	-.00004	.00758	.00202	.00124	.00000
#2	.00014	-.00159	.01706	-.00038	.00746	.00208	.00115	.00037
#3	.00005	-.00144	.01740	-.00009	.00734	.00227	.00130	.00015

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	.00067	.00172	.00017	-.00096	.00040	.00262	.00137
Stddev	.00002	.00010	.00001	.00005	.00004	.00045	.00029
%RSD	3.6569	5.5573	7.9011	5.2944	10.315	17.320	21.576
#1	.00065	.00163	.00018	-.00090	.00040	.00216	.00166
#2	.00070	.00172	.00016	-.00098	.00036	.00265	.00136
#3	.00067	.00182	.00017	-.00099	.00044	.00306	.00107

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S0 Acquired: 11/19/2024 19:40:58 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	2454.1	55867.	11326.	1910.4	4145.7
Stddev	2.1	52.	23.	6.4	1.1
%RSD	.08376	.09230	.20399	.33634	.02618
#1	2451.8	55866.	11317.	1909.6	4145.0
#2	2454.7	55815.	11308.	1917.3	4145.2
#3	2455.8	55918.	11352.	1904.5	4147.0

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S1 Acquired: 11/19/2024 19:45:21 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	.00111	.00245	.00261	.00251	.01117	.00969	.43144	.02274
Stddev	.00008	.00009	.00024	.00008	.00012	.00046	.00115	.00019
%RSD	7.2628	3.6538	9.1765	3.0813	1.0333	4.7131	.26768	.81792
#1	.00117	.00255	.00261	.00249	.01109	.00933	.43154	.02252
#2	.00102	.00242	.00238	.00245	.01130	.01020	.43024	.02284
#3	.00115	.00238	.00286	.00260	.01113	.00953	.43254	.02285

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	.01667	.09967	.00216	.02791	.01889	.00068	.01692	.02458
Stddev	.00003	.00081	.00004	.00013	.00010	.00001	.00013	.00030
%RSD	.20491	.81530	1.9321	.46797	.54724	.95415	.77957	1.2082
#1	.01666	.09883	.00217	.02806	.01898	.00067	.01687	.02446
#2	.01671	.09972	.00212	.02783	.01878	.00068	.01707	.02436
#3	.01664	.10045	.00220	.02784	.01891	.00067	.01682	.02492

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	.02619	.00249	.09606	.00580	.11435	.01799	.04988	.18241
Stddev	.00025	.00002	.00053	.00020	.00058	.00002	.00046	.00026
%RSD	.96686	.68762	.55267	3.3807	.51025	.10234	.91915	.14128
#1	.02649	.00251	.09630	.00581	.11462	.01797	.04948	.18265
#2	.02603	.00248	.09642	.00600	.11475	.01801	.04979	.18245
#3	.02607	.00248	.09545	.00560	.11368	.01800	.05038	.18214

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	.00651	.12975	.00273	-.00038	.01006	.02868	.31584
Stddev	.00008	.00089	.00002	.00007	.00012	.00006	.00042
%RSD	1.1538	.68288	.59360	17.360	1.1778	.20060	.13276
#1	.00645	.12950	.00272	-.00037	.01015	.02862	.31630
#2	.00659	.12902	.00272	-.00031	.00992	.02872	.31549
#3	.00648	.13074	.00275	-.00044	.01010	.02871	.31573

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S1 Acquired: 11/19/2024 19:45:21 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	2456.1	55737.	11589.	1887.3	4116.1
Stddev	13.9	168.	11.	10.3	22.7
%RSD	.56766	.30117	.09854	.54376	.55191
#1	2446.6	55625.	11588.	1876.6	4099.9
#2	2449.6	55655.	11601.	1888.3	4106.3
#3	2472.1	55930.	11579.	1897.0	4142.1

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S2 Acquired: 11/19/2024 19:49:40 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	.04989	.05541	.19195	.07690	.17055	.13538	6.6856	.15791
Stddev	.00018	.00094	.00044	.00053	.00019	.00052	.0076	.00062
%RSD	.35714	1.6931	.22751	.69360	.11149	.38266	.11367	.39013
#1	.05007	.05643	.19148	.07741	.17074	.13595	6.6870	.15774
#2	.04989	.05459	.19235	.07634	.17036	.13523	6.6924	.15859
#3	.04972	.05520	.19203	.07695	.17054	.13494	6.6774	.15740

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	.88103	.18954	.03474	.36305	.17175	.00522	.31326	.04671
Stddev	.00206	.00097	.00010	.00067	.00031	.00008	.00169	.00010
%RSD	.23401	.51423	.28306	.18457	.18120	1.4444	.53983	.20578
#1	.87918	.18847	.03466	.36236	.17175	.00515	.31134	.04671
#2	.88067	.18978	.03485	.36307	.17206	.00522	.31395	.04681
#3	.88325	.19037	.03470	.36370	.17143	.00530	.31450	.04662

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	.25844	.07237	.16787	.05742	1.0369	.03232	.36259	.70146
Stddev	.00051	.00008	.00029	.00017	.0025	.00017	.00126	.00135
%RSD	.19651	.10887	.17136	.29976	.24430	.51209	.34867	.19175
#1	.25785	.07228	.16796	.05731	1.0394	.03218	.36117	.70301
#2	.25878	.07240	.16810	.05762	1.0343	.03228	.36297	.70074
#3	.25867	.07244	.16755	.05733	1.0371	.03251	.36361	.70063

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	.09378	.48810	.00563	.02398	.01943	.99038	12.355
Stddev	.00008	.00041	.00005	.00012	.00013	.00242	.003
%RSD	.08982	.08395	.93507	.49803	.67825	.24434	.02536
#1	.09381	.48780	.00560	.02409	.01954	.98991	12.352
#2	.09369	.48857	.00561	.02385	.01929	.99300	12.359
#3	.09385	.48795	.00569	.02401	.01946	.98823	12.355

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S2 Acquired: 11/19/2024 19:49:40 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	2517.8	57105.	11956.	1952.0	4150.3
Stddev	8.2	46.	5.	8.2	8.3
%RSD	.32711	.07996	.04442	.41999	.19992
#1	2511.1	57058.	11952.	1942.9	4143.8
#2	2515.3	57110.	11954.	1954.5	4147.4
#3	2527.0	57149.	11962.	1958.7	4159.6

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S3 Acquired: 11/19/2024 19:53:46 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	.15461	.16775	.59466	.23477	.52165	.41561	20.457	.49564
Stddev	.00065	.00145	.00034	.00101	.00139	.00065	.165	.00210
%RSD	.42317	.86724	.05746	.43167	.26578	.15750	.80603	.42318
#1	.15532	.16908	.59467	.23577	.52306	.41523	20.602	.49768
#2	.15447	.16798	.59431	.23479	.52161	.41523	20.492	.49349
#3	.15403	.16620	.59499	.23374	.52029	.41637	20.278	.49575

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	2.7594	.57894	.10653	1.1233	.51955	.01650	.96257	.14617
Stddev	.0006	.00259	.00040	.0003	.00121	.00015	.00398	.00062
%RSD	.02264	.44695	.37111	.02940	.23352	.90572	.41336	.42246
#1	2.7593	.57595	.10694	1.1231	.52092	.01632	.95898	.14579
#2	2.7600	.58037	.10651	1.1237	.51911	.01658	.96685	.14584
#3	2.7588	.58048	.10615	1.1231	.51861	.01659	.96188	.14689

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	.79743	.22532	.48705	.17722	3.1659	.09680	1.1270	2.0963
Stddev	.00049	.00061	.00153	.00095	.0066	.00071	.0041	.0069
%RSD	.06168	.27025	.31373	.53504	.20944	.72874	.36413	.32798
#1	.79702	.22579	.48635	.17619	3.1621	.09639	1.1317	2.1026
#2	.79729	.22555	.48880	.17742	3.1735	.09761	1.1244	2.0973
#3	.79798	.22463	.48599	.17805	3.1620	.09640	1.1248	2.0889

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	.28943	1.4922	.01744	.08057	.06235	2.9978	36.995
Stddev	.00024	.0019	.00009	.00005	.00010	.0127	.111
%RSD	.08209	.13076	.54341	.06000	.16407	.42461	.29912
#1	.28970	1.4905	.01734	.08051	.06244	3.0053	37.089
#2	.28935	1.4943	.01749	.08058	.06237	3.0050	37.023
#3	.28924	1.4920	.01751	.08061	.06224	2.9831	36.873

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S3 Acquired: 11/19/2024 19:53:46 Type: Cal
Method: NON EPA-6010-200.7(v2475) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2525.7	56401.	11997.	1955.1	4029.2
Stddev	9.1	236.	27.	11.5	8.9
%RSD	.36180	.41860	.22420	.59032	.22036
#1	2516.0	56534.	11994.	1967.0	4019.1
#2	2527.0	56128.	11972.	1944.0	4032.5
#3	2534.2	56541.	12025.	1954.1	4035.9

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S4 Acquired: 11/19/2024 19:58:01 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	.30282	.32101	1.1560	.45963	1.0242	.79856	38.852	.94978
Stddev	.00007	.00243	.0003	.00051	.0010	.00016	.225	.00673
%RSD	.02230	.75545	.02802	.11045	.10110	.01942	.57975	.70883
#1	.30290	.32351	1.1558	.46022	1.0244	.79845	39.101	.95749
#2	.30277	.31867	1.1558	.45931	1.0231	.79874	38.794	.94679
#3	.30280	.32085	1.1564	.45937	1.0251	.79849	38.662	.94506

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	5.4222	1.1054	.20434	2.2000	1.0059	.03156	1.8179	.27939
Stddev	.0063	.0054	.00059	.0034	.0004	.00007	.0105	.00243
%RSD	.11640	.48530	.28805	.15526	.03956	.22024	.57991	.87131
#1	5.4178	1.1101	.20435	2.1973	1.0056	.03163	1.8287	.28115
#2	5.4193	1.0995	.20493	2.1990	1.0058	.03156	1.8076	.27661
#3	5.4294	1.1066	.20375	2.2039	1.0064	.03149	1.8172	.28041

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	1.5583	.43491	.93578	.34034	6.0789	.18547	2.1625	4.0318
Stddev	.0025	.00042	.00662	.00115	.0125	.00107	.0148	.0074
%RSD	.16008	.09753	.70751	.33694	.20591	.57437	.68637	.18248
#1	1.5560	.43451	.92900	.34095	6.0728	.18435	2.1794	4.0322
#2	1.5581	.43535	.94223	.33901	6.0705	.18647	2.1518	4.0243
#3	1.5609	.43486	.93610	.34104	6.0933	.18558	2.1563	4.0390

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	.56487	2.8507	.03401	.16148	.12452	5.7670	70.283
Stddev	.00098	.0067	.00028	.00008	.00043	.0153	.217
%RSD	.17361	.23391	.81118	.04976	.34867	.26594	.30809
#1	.56455	2.8583	.03370	.16154	.12492	5.7798	70.197
#2	.56409	2.8477	.03413	.16139	.12406	5.7712	70.123
#3	.56597	2.8460	.03422	.16151	.12459	5.7500	70.529

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S4 Acquired: 11/19/2024 19:58:01 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	2458.3	55849.	11978.	1930.2	3843.3
Stddev	3.8	99.	63.	7.4	6.6
%RSD	.15317	.17815	.52422	.38380	.17276
#1	2458.9	55956.	11908.	1937.1	3847.0
#2	2461.7	55760.	12028.	1931.2	3847.2
#3	2454.3	55829.	11998.	1922.4	3835.6

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S5 Acquired: 11/19/2024 20:02:14 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	.61606	.63118	2.3184	.93727	2.0834	1.5799	74.132	1.8386
Stddev	.00814	.00282	.0406	.01070	.0265	.0036	.224	.0036
%RSD	1.3217	.44685	1.7504	1.1415	1.2705	.22714	.30242	.19554
#1	.61158	.63101	2.2939	.93129	2.0685	1.5758	73.960	1.8370
#2	.61114	.62845	2.2961	.93091	2.0678	1.5820	74.049	1.8428
#3	.62546	.63408	2.3653	.94963	2.1140	1.5820	74.385	1.8362

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.900	2.1304	.39911	4.4057	1.9927	.06168	3.4341	.55751
Stddev	.193	.0090	.00184	.0784	.0277	.00037	.0102	.00192
%RSD	1.7706	.42203	.46007	1.7801	1.3919	.60140	.29773	.34480
#1	10.784	2.1206	.39725	4.3585	1.9757	.06126	3.4253	.55534
#2	10.794	2.1324	.40092	4.3624	1.9777	.06184	3.4318	.55901
#3	11.123	2.1382	.39917	4.4962	2.0247	.06195	3.4453	.55817

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	3.1061	.87371	1.9023	.65959	11.804	.37234	4.2164	7.9149
Stddev	.0566	.00113	.0034	.00153	.034	.00099	.0097	.1097
%RSD	1.8229	.12948	.17660	.23164	.28519	.26497	.22976	1.3855
#1	3.0727	.87265	1.8986	.65790	11.836	.37133	4.2261	7.8524
#2	3.0741	.87490	1.9050	.66002	11.769	.37239	4.2163	7.8509
#3	3.1715	.87358	1.9033	.66086	11.809	.37331	4.2067	8.0415

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	1.1272	5.5148	.07057	.32992	.26038	11.261	135.58
Stddev	.0183	.0098	.00079	.00604	.00346	.002	.51
%RSD	1.6230	.17824	1.1219	1.8320	1.3295	.01685	.37705
#1	1.1148	5.5043	.06973	.32744	.25860	11.263	136.11
#2	1.1186	5.5164	.07068	.32551	.25818	11.259	135.09
#3	1.1483	5.5238	.07131	.33681	.26437	11.262	135.54

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: S5 Acquired: 11/19/2024 20:02:14 Type: Cal
Method: NON EPA-6010-200.7(v2475) 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	2461.6	56676.	12567.	1968.2	3775.8
Stddev	28.1	90.	11.	15.2	52.3
%RSD	1.1397	.15851	.08647	.77340	1.3840
#1	2478.8	56778.	12554.	1953.1	3808.2
#2	2476.9	56639.	12573.	1983.6	3803.7
#3	2429.3	56609.	12573.	1967.8	3715.5

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICV01 Acquired: 11/19/2024 20:06:25 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.9958427	1.017279	.9897179	1.017091	.9776688	2.519536
Stddev	.0013488	.008127	.0008170	.004644	.0003409	.006559
%RSD	.1354442	.7988467	.0825445	.4566441	.0348642	.2603108
#1	.9961929	1.022256	.9887763	1.012583	.9773873	2.517623
#2	.9943533	1.007902	.9902374	1.016828	.9780478	2.526839
#3	.9969819	1.021681	.9901401	1.021861	.9775713	2.514147

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4969102	.5008835	.5000526	9.911641	.5225840	.5003062
Stddev	.0019487	.0017423	.0012063	.002046	.0006867	.0005728
%RSD	.3921661	.3478350	.2412350	.0206416	.1313974	.1144959
#1	.4976642	.5024806	.4993774	9.911411	.5233238	.4997536
#2	.4983693	.5011442	.4993351	9.909719	.5219670	.5002678
#3	.4946972	.4990255	.5014453	9.913792	.5224612	.5008973

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5167708	9.783890	.5052926	5.922445	.5019866	.2507081
Stddev	.0004485	.014433	.0010637	.008966	.0004111	.0003769
%RSD	.0867868	.1475165	.2105205	.1513930	.0818963	.1503369
#1	.5162952	9.774199	.5062904	5.914338	.5019092	.2510451
#2	.5171861	9.800477	.5054139	5.920922	.5016197	.2503011
#3	.5168312	9.776992	.5041734	5.932075	.5024309	.2507781

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.618913	.4933239	1.029817	9.578057	2.356645	2.424253
Stddev	.015416	.0010045	.002247	.021004	.006414	.001714
%RSD	.1602704	.2036151	.2182261	.2192884	.2721749	.0706986
#1	9.606396	.4924600	1.028440	9.556115	2.363651	2.422418
#2	9.614210	.4944261	1.028601	9.580081	2.355224	2.424528
#3	9.636133	.4930855	1.032411	9.597975	2.351061	2.425813

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICV01 Acquired: 11/19/2024 20:06:25 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	2.322443	2.343388	F 1.903776	F .0042456	F -.011007	F -.001826
Stddev	.003958	.006556	.002049	.0007931	.000656	.000048
%RSD	.1704342	.2797467	.1076209	18.68134	5.961228	2.636191
#1	2.318418	2.342629	1.902403	.0036209	-.010704	-.001878
#2	2.322580	2.350289	1.906131	.0051379	-.010556	-.001783
#3	2.326331	2.337244	1.902794	.0039780	-.011760	-.001818

Elem	Sr4077
Units	ppm
Avg	F -.008427
Stddev	.000021
%RSD	.2475167
#1	-.008405
#2	-.008446
#3	-.008430

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2699.948	60882.21	13271.88	2148.087	4395.490
Stddev	6.864	120.99	40.82	.624	7.493
%RSD	.2542134	.1987261	.3075412	.0290266	.1704684
#1	2702.059	60795.35	13225.87	2147.706	4398.463
#2	2692.277	61020.40	13285.99	2148.806	4386.967
#3	2705.509	60830.88	13303.76	2147.748	4401.040

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: LLICV01 Acquired: 11/19/2024 20:10:27 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0217002	.0382840	.0119406	.0184506	.0487345	.0991627
Stddev	.0006282	.0006344	.0002047	.0008865	.0009571	.0089786
%RSD	2.894752	1.657144	1.714190	4.804846	1.963989	9.054355
#1	.0209779	.0384108	.0117701	.0177535	.0491570	.1094658
#2	.0220038	.0388454	.0118840	.0194483	.0476388	.0950107
#3	.0221190	.0375957	.0121676	.0181499	.0494076	.0930117

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1013283	.0058573	.0071083	2.060830	.0103460	.0289494
Stddev	.0004500	.0000153	.0000121	.004393	.0003524	.0003881
%RSD	.4441283	.2608462	.1708546	.2131634	3.406154	1.340462
#1	.1009908	.0058730	.0071209	2.055832	.0107468	.0292361
#2	.1018393	.0058565	.0070966	2.064080	.0102065	.0291044
#3	.1011549	.0058425	.0071074	2.062577	.0100847	.0285078

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0213242	.0945205	.0207025	2.063709	.0383484	.0104055
Stddev	.0001198	.0025222	.0002074	.022514	.0001089	.0001279
%RSD	.5619840	2.668407	1.001615	1.090971	.2840657	1.228851
#1	.0212971	.0953156	.0207335	2.051577	.0384374	.0102579
#2	.0214553	.0965494	.0208927	2.049863	.0382269	.0104787
#3	.0212203	.0916966	.0204814	2.089688	.0383808	.0104799

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.783222	.0426286	.0446624	1.849043	.1181876	.2077712
Stddev	.017861	.0012860	.0002612	.028748	.0008260	.0005830
%RSD	1.001590	3.016769	.5849510	1.554731	.6988941	.2805937
#1	1.762954	.0435801	.0447150	1.818008	.1191013	.2083049
#2	1.790052	.0431401	.0448933	1.854359	.1179678	.2078598
#3	1.796659	.0411655	.0443788	1.874762	.1174937	.2071491

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: LLICV01 Acquired: 11/19/2024 20:10:27 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0477824	F .2002457	.3513933	.0167602	F .3405909	.0185723
Stddev	.0006773	.0011580	.0054023	.0012717	.0023019	.0003075
%RSD	1.417444	.5783073	1.537400	7.587319	.6758559	1.655454
#1	.0483085	.1998005	.3557509	.0175702	.3432230	.0182740
#2	.0480206	.2015603	.3453488	.0152945	.3395959	.0185547
#3	.0470182	.1993764	.3530803	.0174158	.3389539	.0188881

Elem	Sr4077
Units	ppm
Avg	.0211868
Stddev	.0000623
%RSD	.2939504
#1	.0211184
#2	.0212401
#3	.0212020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2693.402	59588.85	12587.31	2101.941	4469.695
Stddev	15.531	75.19	45.24	12.072	19.872
%RSD	.5766155	.1261887	.3594121	.5743300	.4445836
#1	2676.113	59513.32	12542.41	2095.482	4448.202
#2	2697.922	59589.55	12586.64	2094.473	4473.484
#3	2706.171	59663.70	12632.89	2115.869	4487.400

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICB01 Acquired: 11/19/2024 20:14:44 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0000696	-.001766	-.000257	-.000712	-.000483	.0007883	-.000208
Stddev	.0015836	.001632	.000385	.001220	.000331	.0030478	.000563
%RSD	2273.546	92.39970	150.0169	171.4026	68.54092	386.6493	270.7570
#1	-.000656	-.003310	.000169	.000337	-.000103	-.001194	-.000276
#2	-.001022	-.000058	-.000357	-.000421	-.000708	-.000738	-.000734
#3	.001886	-.001932	-.000582	-.002051	-.000637	.004298	.000386

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000117	-.000141	-.022909	-.000168	-.000073	-.000094	-.005925
Stddev	.0000235	.000066	.006829	.000389	.000063	.000133	.003948
%RSD	200.4451	46.77608	29.80961	230.8740	87.10739	140.9098	66.63269
#1	.0000110	-.000131	-.015042	-.000390	-.000016	-.000247	-.001367
#2	-.000011	-.000212	-.026380	.000281	-.000141	-.000031	-.008131
#3	.000036	-.000081	-.027306	-.000395	-.000062	-.000005	-.008277

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000015	.0099951	-.000168	.0003692	-.199032	.0014793	-.001406
Stddev	.000154	.0064985	.000259	.0001252	.014565	.0007629	.000105
%RSD	1031.211	65.01688	154.5432	33.91281	7.317793	51.56817	7.459034
#1	-.000112	.0076626	-.000449	.0003807	-.211438	.0006151	-.001515
#2	-.000096	.0049848	-.000116	.0004883	-.202663	.0017641	-.001397
#3	.000163	.0173380	.000062	.0002387	-.182995	.0020589	-.001306

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.093574	.0108372	.0000574	.0091638	.0002346	.0009007	-.003447
Stddev	.024694	.0003374	.0001200	.0004107	.0004839	.0064440	.000548
%RSD	26.39012	3.113519	209.2757	4.482200	206.2528	715.4752	15.89764
#1	-.116197	.0109266	.0001925	.0087065	.0005506	-.005173	-.004072
#2	-.097296	.0111209	-.000037	.0095015	.0004757	.007660	-.003219
#3	-.067230	.0104641	.000016	.0092833	-.000322	.000215	-.003049

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICB01 Acquired: 11/19/2024 20:14:44 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	-.009154	-.000857	-.000085
Stddev	.000861	.000275	.000027
%RSD	9.407841	32.11653	31.76229
#1	-.008775	-.001015	-.000116
#2	-.010140	-.000539	-.000064
#3	-.008548	-.001017	-.000076

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2775.487	61790.27	13005.34	2197.884	4673.562
Stddev	8.082	88.58	15.25	5.844	9.202
%RSD	.2911792	.1433585	.1172881	.2658764	.1968996
#1	2770.194	61690.13	12992.35	2198.948	4670.417
#2	2784.790	61858.39	13022.14	2191.582	4683.924
#3	2771.478	61822.28	13001.52	2203.123	4666.344

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CRI01 Acquired: 11/19/2024 20:19:05 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0217589	.0372536	.0113313	.0172165	.0487582	.1019713
Stddev	.0016526	.0009739	.0008928	.0017801	.0008946	.0018502
%RSD	7.594967	2.614241	7.879406	10.33959	1.834796	1.814438
#1	.0221246	.0379055	.0111096	.0151646	.0488344	.1028348
#2	.0199541	.0377212	.0105702	.0183473	.0478279	.1032319
#3	.0231980	.0361341	.0123141	.0181377	.0496122	.0998472

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0999023	.0058598	.0071553	2.044695	.0104676	.0292239
Stddev	.0006516	.0000664	.0000609	.011962	.0001455	.0001615
%RSD	.6522540	1.132433	.8517393	.5850014	1.390314	.5525972
#1	.1004762	.0058630	.0072119	2.054881	.0103018	.0291644
#2	.0991939	.0057920	.0070908	2.031524	.0105741	.0291007
#3	.1000369	.0059246	.0071633	2.047681	.0105268	.0294067

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0213295	.0921136	.0205974	2.069437	.0388087	.0103394
Stddev	.0000746	.0011634	.0002706	.017561	.0003119	.0000309
%RSD	.3497887	1.262965	1.313965	.8485661	.8037001	.2989885
#1	.0213259	.0933701	.0208951	2.079039	.0391038	.0103167
#2	.0212568	.0918969	.0205311	2.049169	.0384824	.0103268
#3	.0214059	.0910739	.0203661	2.080103	.0388401	.0103746

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.718903	.0412564	.0418135	1.796406	.1119803	.2073184
Stddev	.011454	.0004674	.0000667	.015160	.0015416	.0002240
%RSD	.6663577	1.132813	.1596463	.8438923	1.376624	.1080633
#1	1.707535	.0417796	.0418499	1.780476	.1136876	.2072078
#2	1.718733	.0408802	.0418542	1.798085	.1106904	.2075762
#3	1.730441	.0411095	.0417365	1.810655	.1115630	.2071712

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CRI01 Acquired: 11/19/2024 20:19:05 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0476792	F .1980904	.3426305	.0156646	F .3392706	.0181571
Stddev	.0009343	.0020460	.0031784	.0031740	.0031432	.0003323
%RSD	1.959520	1.032876	.9276591	20.26234	.9264694	1.830327
#1	.0472363	.1992519	.3390239	.0190460	.3412582	.0185116
#2	.0487525	.1957280	.3450228	.0127495	.3356467	.0178525
#3	.0470487	.1992914	.3438448	.0151984	.3409067	.0181071

Elem	Sr4077
Units	ppm
Avg	.0209348
Stddev	.0001807
%RSD	.8631412
#1	.0210542
#2	.0207269
#3	.0210233

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2696.751	60249.28	12653.99	2154.416	4447.136
Stddev	3.778	136.60	82.16	13.228	2.377
%RSD	.1400869	.2267189	.6492480	.6139921	.0534586
#1	2697.982	60334.30	12582.39	2148.776	4447.731
#2	2692.512	60091.71	12743.68	2144.943	4444.517
#3	2699.760	60321.81	12635.91	2169.529	4449.159

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICSA01 Acquired: 11/19/2024 20:23:23 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0074353	.0106207	.0092805	-.019150	-.004189	265.6201
Stddev	.0010913	.0005197	.0011886	.001031	.002380	.7730
%RSD	14.67733	4.893550	12.80700	5.381361	56.82464	.2910195
#1	.0083387	.0101937	.0105344	-.020037	-.006384	265.0385
#2	.0062228	.0111994	.0091368	-.019393	-.004523	265.3246
#3	.0077445	.0104689	.0081704	-.018020	-.001659	266.4973

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047224	.0013477	.0055315	247.4742	.0597470	.0023254
Stddev	.0002676	.0001149	.0000840	2.0503	.0004368	.0002503
%RSD	5.667653	8.524159	1.518807	.8284889	.7310729	10.76458
#1	.0049111	.0012186	.0056215	245.7964	.0595018	.0025093
#2	.0044161	.0014386	.0055177	246.8665	.0602513	.0024265
#3	.0048400	.0013860	.0054552	249.7596	.0594879	.0020403

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020576	101.1660	.0033820	279.8573	.0019356	-.000774
Stddev	.0014658	.7485	.0001430	2.5120	.0005253	.000377
%RSD	71.23871	.7398654	4.227217	.8975948	27.13918	48.65206
#1	.0036514	100.3277	.0034971	277.8443	.0019003	-.001115
#2	.0017538	101.4030	.0032220	279.0553	.0014288	-.000838
#3	.0007675	101.7673	.0034270	282.6724	.0024776	-.000370

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.061168	.0101108	.0059956	.0359124	.0517475	-.000608
Stddev	.019791	.0006209	.0002531	.0089783	.0012545	.000184
%RSD	32.35436	6.141129	4.220555	25.00044	2.424293	30.24853
#1	-.083575	.0094565	.0059676	.0425570	.0502995	-.000654
#2	-.053856	.0101841	.0062615	.0256983	.0524354	-.000765
#3	-.046075	.0106919	.0057578	.0394818	.0525076	-.000406

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICSA01 Acquired: 11/19/2024 20:23:23 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0052110	-.001162	.0156901	.0035730	F -.021356	F -.041856
Stddev	.0002643	.000136	.0068835	.0018240	.002770	.000950
%RSD	5.071236	11.66226	43.87154	51.05051	12.96909	2.270863
#1	.0050668	-.001023	.0125105	.0024742	-.019402	-.042028
#2	.0050502	-.001170	.0109712	.0025663	-.020140	-.040832
#3	.0055160	-.001294	.0235887	.0056786	-.024525	-.042709

Elem	Sr4077
Units	ppm
Avg	.0063677
Stddev	.0003922
%RSD	6.159218
#1	.0067271
#2	.0059494
#3	.0064265

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2346.623	51536.58	12125.98	1857.074	3457.103
Stddev	13.306	75.53	30.64	5.312	15.691
%RSD	.5670186	.1465617	.2526757	.2860642	.4538827
#1	2338.604	51520.19	12135.90	1850.944	3447.686
#2	2339.282	51470.59	12150.43	1860.344	3448.407
#3	2361.982	51618.97	12091.61	1859.934	3475.217

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICSAB01 Acquired: 11/19/2024 20:27:46 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.1154310	.1049521	.0576850	.0299576	.6135660	262.9336
Stddev	.0011206	.0022590	.0010359	.0033164	.0017132	.7314
%RSD	.9708253	2.152460	1.795697	11.07015	.2792122	.2781513
#1	.1141647	.1073145	.0570552	.0276406	.6127940	262.1857
#2	.1162948	.1028130	.0588805	.0284756	.6123748	262.9676
#3	.1158336	.1047289	.0571192	.0337565	.6155294	263.6473

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4934328	.5107024	1.030198	244.4395	.5825214	.5150418
Stddev	.0033336	.0018130	.003349	.9493	.0018240	.0013383
%RSD	.6755929	.3550052	.3250797	.3883574	.3131152	.2598414
#1	.4897187	.5088828	1.028211	243.3452	.5835136	.5144504
#2	.4944137	.5107156	1.028319	244.9303	.5804164	.5141010
#3	.4961658	.5125087	1.034065	245.0429	.5836341	.5165739

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4831456	99.96675	.4873663	278.6893	1.014348	.2020030
Stddev	.0011337	.26213	.0033070	1.6259	.002913	.0003138
%RSD	.2346432	.2622171	.6785537	.5834114	.2871309	.1553312
#1	.4821708	99.74221	.4841467	276.9821	1.013728	.2018240
#2	.4828763	99.90323	.4871979	278.8664	1.011795	.2018196
#3	.4843896	100.2548	.4907544	280.2194	1.017520	.2023653

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.078823	.5007619	1.093556	-.050701	.9447726	.9672493
Stddev	.018412	.0011769	.003958	.017512	.0056894	.0037901
%RSD	23.35897	.2350135	.3619490	34.53963	.6021993	.3918405
#1	-.096618	.4994447	1.091592	-.058173	.9395115	.9631274
#2	-.080001	.5011312	1.098112	-.063238	.9439958	.9680367
#3	-.059850	.5017098	1.090965	-.030693	.9508105	.9705838

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: ICSAB01 Acquired: 11/19/2024 20:27:46 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.9733884	.9300963	F .8390051	F .0096162	F -.024222	F -.041832
Stddev	.0035252	.0050537	.0054713	.0015658	.002915	.000630
%RSD	.3621591	.5433500	.6521201	16.28247	12.03301	1.505019
#1	.9696829	.9243463	.8435511	.0108168	-.023771	-.041246
#2	.9737820	.9321093	.8329326	.0078452	-.021559	-.042497
#3	.9767003	.9338332	.8405315	.0101865	-.027335	-.041753

Elem	Sr4077
Units	ppm
Avg	F .0075236
Stddev	.0001156
%RSD	1.535916
#1	.0074491
#2	.0076567
#3	.0074650

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2313.011	51663.52	12210.78	1848.305	3424.539
Stddev	6.173	111.66	20.20	4.732	12.433
%RSD	.2669016	.2161331	.1654370	.2560141	.3630515
#1	2314.525	51574.06	12228.67	1851.484	3429.791
#2	2318.287	51788.66	12214.80	1842.867	3433.484
#3	2306.222	51627.85	12188.87	1850.564	3410.342

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCV01 Acquired: 11/19/2024 20:38:39 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	4.812796	4.827509	4.860757	4.743672	4.854475	9.757123	9.257960
Stddev	.017923	.036757	.021099	.013107	.020270	.012694	.038643
%RSD	.3723963	.7614069	.4340655	.2763054	.4175486	.1301011	.4174021
#1	4.792664	4.823394	4.842599	4.731323	4.831245	9.765425	9.300532
#2	4.818705	4.866150	4.855768	4.757424	4.863609	9.742510	9.225097
#3	4.827017	4.792982	4.883903	4.742270	4.868570	9.763434	9.248252

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2431694	2.424390	24.01748	1.013860	2.418512	1.222041	4.924750
Stddev	.0009862	.009166	.05150	.001796	.009506	.005243	.042701
%RSD	.4055444	.3780869	.2144303	.1771704	.3930645	.4290052	.8670626
#1	.2441040	2.417846	24.00167	1.013027	2.410756	1.216091	4.878207
#2	.2421388	2.420458	23.97574	1.015921	2.415663	1.224052	4.933928
#3	.2432655	2.434866	24.07503	1.012631	2.429117	1.225980	4.962116

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.345722	24.72895	2.421840	1.246845	25.02329	2.424141	2.517877
Stddev	.014938	.05838	.010559	.000743	.09907	.007646	.006965
%RSD	.6368306	.2360820	.4360097	.0595876	.3959002	.3154155	.2766294
#1	2.339089	24.73263	2.415083	1.246010	24.96061	2.415976	2.514124
#2	2.335248	24.66882	2.416429	1.247093	25.13750	2.431132	2.525914
#3	2.362828	24.78540	2.434008	1.247432	24.97176	2.425316	2.513593

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.47732	4.792134	4.876193	4.864679	4.712401	5.064626	4.731313
Stddev	.04412	.021635	.017365	.014145	.012871	.034433	.032162
%RSD	.1802606	.4514793	.3561247	.2907794	.2731341	.6798817	.6797617
#1	24.44953	4.806381	4.856142	4.854180	4.712210	5.024888	4.696397
#2	24.45422	4.767238	4.886131	4.859093	4.699627	5.085658	4.737815
#3	24.52819	4.802783	4.886306	4.880765	4.725367	5.083331	4.759727

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCV01 Acquired: 11/19/2024 20:38:39 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	4.644504	4.688545	5.024420
Stddev	.016470	.011942	.028154
%RSD	.3546224	.2547020	.5603385
#1	4.632012	4.695541	5.054933
#2	4.638331	4.674757	4.999451
#3	4.663169	4.695339	5.018877

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2596.825	56652.50	12955.29	2044.944	4053.195
Stddev	10.303	73.58	44.66	5.248	13.938
%RSD	.3967498	.1298744	.3446998	.2566288	.3438660
#1	2608.687	56713.74	12920.30	2049.615	4067.165
#2	2591.684	56570.88	13005.59	2039.266	4053.128
#3	2590.105	56672.86	12939.98	2045.952	4039.290

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCB01 Acquired: 11/19/2024 20:47:46 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0019446	-.001768	.0002689	-.001293	-.000976	-.004818	-.001783
Stddev	.0010946	.000907	.0003876	.001414	.000391	.001967	.000330
%RSD	56.29043	51.28395	144.1433	109.3811	40.12729	40.81851	18.49616
#1	.0013599	-.001369	.0002365	-.002165	-.000551	-.006959	-.002136
#2	.0012665	-.002805	.0006717	-.002052	-.001323	-.003091	-.001483
#3	.0032075	-.001129	-.000101	.000339	-.001053	-.004405	-.001729

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000539	-.000051	-.007583	.0002200	-.000003	-.000451	-.004851
Stddev	.0000144	.000038	.004112	.0001558	.000088	.000267	.001129
%RSD	26.70476	74.56498	54.23054	70.83228	2547.692	59.26300	23.26765
#1	.0000388	-.000007	-.003596	.0003835	-.000017	-.000367	-.005719
#2	.0000674	-.000069	-.007342	.0000732	.000091	-.000750	-.005259
#3	.0000555	-.000077	-.011809	.0002034	-.000085	-.000236	-.003575

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001488	.0102843	-.000131	.0003538	-.242122	.0003155	-.000047
Stddev	.0002551	.0020951	.000200	.0001458	.011700	.0006476	.000073
%RSD	171.4386	20.37224	152.0383	41.19598	4.832211	205.2387	154.8489
#1	.0000415	.0109599	-.000222	.0005215	-.253789	.0009115	-.000036
#2	.0004401	.0119582	-.000270	.0002827	-.242187	.0004087	.000020
#3	-.000035	.0079347	.000098	.0002573	-.230390	-.000374	-.000125

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.181747	.0066361	-.000032	-.003791	.0003116	.0025014	-.002305
Stddev	.019195	.0006691	.000162	.000253	.0001934	.0061134	.001491
%RSD	10.56161	10.08246	511.7704	6.665199	62.07141	244.3936	64.66291
#1	-.203706	.0072367	-.000116	-.003684	.0002763	.0032516	-.004009
#2	-.173372	.0059149	-.000134	-.004079	.0005201	.0082051	-.001243
#3	-.168162	.0067568	.000155	-.003609	.0001382	-.003952	-.001663

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCB01 Acquired: 11/19/2024 20:47:46 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	-.008835	-.001041	-.000104
Stddev	.000473	.000514	.000017
%RSD	5.348619	49.39923	16.44386
#1	-.009254	-.001629	-.000121
#2	-.008323	-.000814	-.000103
#3	-.008927	-.000679	-.000087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2676.186	58719.18	13100.71	2157.937	4537.995
Stddev	3.616	56.24	26.59	10.221	5.589
%RSD	.1351052	.0957707	.2029782	.4736467	.1231499
#1	2676.821	58783.78	13090.14	2154.392	4541.258
#2	2679.442	58692.56	13081.03	2169.458	4541.185
#3	2672.294	58681.19	13130.96	2149.960	4531.542

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03DUP Acquired: 11/19/2024 20:56:44 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016874	-.009674	.0001777	.0007782	.0010667	-.023602	.3581733
Stddev	.0008835	.002688	.0019169	.0009464	.0002843	.006897	.0069525
%RSD	52.35478	27.78332	1078.444	121.6138	26.64735	29.22269	1.941111
#1	.0007267	-.007536	-.001848	.0003594	.0013909	-.030978	.3507127
#2	.0024647	-.008796	.000419	.0018617	.0008602	-.017312	.3644713
#3	.0018709	-.012691	.001963	.0001135	.0009490	-.022516	.3593358

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000410	.0001216	154.0455	.0028522	.0021629	-.001020	.1836635
Stddev	.000092	.0000362	3.3087	.0000710	.0000707	.000273	.0041830
%RSD	22.38840	29.73685	2.147852	2.487682	3.267353	26.78833	2.277543
#1	-.000324	.0001387	150.4673	.0027869	.0022444	-.000724	.1820562
#2	-.000506	.0001461	156.9942	.0029277	.0021185	-.001262	.1884118
#3	-.000399	.0000801	154.6749	.0028420	.0021258	-.001075	.1805226

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.607960	13.88760	.0052283	-.000326	350.6931	.0022147	.1400550
Stddev	.080251	.36397	.0001339	.000211	2.8559	.0004716	.0008161
%RSD	2.224275	2.620808	2.561425	64.59026	.8143546	21.29153	.5827043
#1	3.520979	13.50087	.0050943	-.000112	347.3969	.0023075	.1397653
#2	3.679126	14.22345	.0053621	-.000333	352.2547	.0017037	.1409764
#3	3.623775	13.93849	.0052286	-.000534	352.4276	.0026330	.1394232

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.938592	.0947394	.0012566	-.005443	-.002537	.4550807	.0194902
Stddev	.050606	.0016680	.0000963	.000513	.000384	.0024678	.0012491
%RSD	.8521594	1.760656	7.665491	9.426692	15.13142	.5422851	6.408979
#1	5.883046	.0931696	.0012486	-.006025	-.002980	.4539584	.0180482
#2	5.950648	.0964908	.0011645	-.005053	-.002309	.4579102	.0201840
#3	5.982082	.0945579	.0013566	-.005253	-.002321	.4533735	.0202384

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03DUP Acquired: 11/19/2024 20:56:44 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.822035	-.026995	.2826195
Stddev	.001506	.000990	.0047314
%RSD	.0826569	3.668221	1.674112
#1	1.820304	-.025918	.2774881
#2	1.822757	-.027201	.2868093
#3	1.823043	-.027866	.2835610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3090.791	58730.97	12655.59	2461.991	4347.656
Stddev	6.477	91.75	232.26	14.233	5.448
%RSD	.2095669	.1562175	1.835241	.5781292	.1253003
#1	3087.330	58831.26	12889.80	2477.104	4346.876
#2	3086.779	58710.37	12425.33	2460.028	4342.641
#3	3098.264	58651.27	12651.64	2448.841	4353.452

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03LX5 Acquired: 11/19/2024 21:01:10 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029540	-.001804	.0007324	-.001461	-.000114	-.010635	.0806796
Stddev	.0015539	.001536	.0006616	.000704	.000377	.003563	.0009505
%RSD	52.60415	85.13673	90.33443	48.19870	330.4022	33.50178	1.178095
#1	.0019725	-.001792	.0002706	-.002094	-.000547	-.013320	.0796930
#2	.0021439	-.000274	.0014904	-.001586	.000145	-.006593	.0807565
#3	.0047456	-.003346	.0004363	-.000702	.000060	-.011991	.0815893

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000028	.0000126	31.02195	.0004696	.0004560	-.000517	.0323652
Stddev	.000032	.0000277	.19157	.0003582	.0001570	.000182	.0025024
%RSD	114.1944	219.4646	.6175178	76.29372	34.43537	35.27525	7.731771
#1	-.000002	-.000004	30.80344	.0006684	.0004960	-.000668	.0345402
#2	-.000019	-.000003	31.10144	.0006842	.0002829	-.000570	.0296302
#3	-.000064	.000045	31.16098	.0000560	.0005892	-.000314	.0329252

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7424072	2.817112	.0011342	-.000158	64.16585	.0011475	.0263306
Stddev	.0036400	.021788	.0003607	.000151	.19096	.0002749	.0001454
%RSD	.4902941	.7734121	31.80486	95.44094	.2976014	23.95664	.5523029
#1	.7388748	2.807014	.0008374	-.000219	64.04387	.0014597	.0262175
#2	.7422010	2.842116	.0015357	-.000270	64.06775	.0010413	.0262798
#3	.7461460	2.802205	.0010294	.000014	64.38592	.0009416	.0264947

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9571440	.0229899	.0003872	-.005159	-.000495	.0888316	-.002751
Stddev	.0168287	.0008912	.0000572	.000569	.000137	.0024081	.002285
%RSD	1.758219	3.876510	14.78221	11.02819	27.66098	2.710888	83.05551
#1	.9384234	.0240190	.0003596	-.005511	-.000343	.0890673	-.001100
#2	.9710165	.0224818	.0004530	-.005463	-.000609	.0863143	-.001795
#3	.9619922	.0224689	.0003491	-.004502	-.000532	.0911132	-.005358

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03LX5 Acquired: 11/19/2024 21:01:10 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3519912	-.005991	.0551895
Stddev	.0012524	.000453	.0002643
%RSD	.3558029	7.561235	.4789608
#1	.3515481	-.006043	.0549178
#2	.3534049	-.005514	.0554458
#3	.3510206	-.006416	.0552048

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3409.422	65978.55	13002.82	2770.860	4920.602
Stddev	3.409	79.79	29.35	12.499	1.484
%RSD	.0999992	.1209290	.2257203	.4510807	.0301681
#1	3413.282	65952.00	13028.70	2778.981	4919.061
#2	3408.163	66068.23	12970.93	2777.132	4920.723
#3	3406.821	65915.43	13008.82	2756.467	4922.022

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03MS Acquired: 11/19/2024 21:05:31 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8021053	1.864433	1.025281	1.917132	.7394567	1.962808	.5564039
Stddev	.0026939	.022068	.005331	.005976	.0012709	.004394	.0004456
%RSD	.3358539	1.183604	.5199485	.3117359	.1718668	.2238431	.0800827
#1	.8036169	1.882797	1.027175	1.923341	.7408252	1.958266	.5560054
#2	.7989951	1.870549	1.029407	1.911420	.7383136	1.967037	.5568850
#3	.8037039	1.839953	1.019262	1.916635	.7392312	1.963121	.5563213

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2473345	.2246185	160.7930	.4681131	.2136345	.2660771	3.297779
Stddev	.0016275	.0008346	1.0374	.0007297	.0007192	.0007271	.018689
%RSD	.6580172	.3715714	.6451628	.1558783	.3366747	.2732467	.5667228
#1	.2454896	.2249525	159.7133	.4680109	.2138204	.2666561	3.287250
#2	.2485669	.2252344	160.8837	.4674399	.2142426	.2663140	3.286729
#3	.2479469	.2236686	161.7821	.4688885	.2128406	.2652611	3.319357

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.981147	16.49502	.5360497	.0723989	355.0766	.3250109	.3542234
Stddev	.018772	.12820	.0014358	.0030514	.7028	.0010193	.0020288
%RSD	.4715293	.7771909	.2678515	4.214715	.1979234	.3136071	.5727339
#1	3.964454	16.37792	.5359658	.0691970	355.2781	.3240490	.3531721
#2	3.977518	16.47513	.5375257	.0752735	354.2951	.3249046	.3529360
#3	4.001469	16.63199	.5346577	.0727261	355.6567	.3260791	.3565620

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.28652	.4076535	.4007416	.7667763	.1985960	1.251437	6.689788
Stddev	.09734	.0032866	.0000710	.0037880	.0003624	.008276	.037203
%RSD	.6367471	.8062172	.0177049	.4940163	.1824973	.6613019	.5561161
#1	15.39770	.4040724	.4008224	.7697591	.1990008	1.260304	6.693998
#2	15.21667	.4105318	.4006896	.7680554	.1983015	1.243917	6.724707
#3	15.24518	.4083563	.4007127	.7625143	.1984858	1.250091	6.650659

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03MS Acquired: 11/19/2024 21:05:31 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.830430	.1499146	.4943623
Stddev	.007946	.0005456	.0018202
%RSD	.4340892	.3639142	.3681822
#1	1.836787	.1505180	.4922623
#2	1.832980	.1494560	.4954860
#3	1.821522	.1497699	.4953387

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2978.398	57636.62	11949.07	2395.348	4189.604
Stddev	9.788	300.90	27.95	15.822	6.092
%RSD	.3286340	.5220726	.2339276	.6605333	.1454063
#1	2980.251	57330.83	11973.07	2378.955	4190.743
#2	2987.126	57932.39	11955.77	2410.530	4195.047
#3	2967.815	57646.65	11918.38	2396.560	4183.023

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03 Acquired: 11/19/2024 21:09:43 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001505	-.010393	-.000111	.0019372	.0014484	-.029679	.3690118
Stddev	.0016739	.000988	.000714	.0004332	.0007944	.008906	.0052027
%RSD	1112.359	9.502436	644.5511	22.36155	54.84343	30.00701	1.409901
#1	.0004406	-.009670	-.000654	.0024367	.0009630	-.039275	.3631131
#2	-.001649	-.011518	-.000377	.0016635	.0010171	-.028085	.3709756
#3	.001660	-.009992	.000698	.0017115	.0023651	-.021678	.3729469

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000432	.0000336	156.8273	.0032121	.0018228	-.000805	.1916244
Stddev	.000008	.0000230	2.7210	.0002652	.0001038	.000163	.0026349
%RSD	1.800501	68.57583	1.734999	8.256068	5.691498	20.20055	1.375042
#1	-.000440	.0000316	153.7420	.0030482	.0018769	-.000741	.1940346
#2	-.000433	.0000576	157.8559	.0035180	.0017032	-.000990	.1920272
#3	-.000424	.0000116	158.8841	.0030699	.0018883	-.000684	.1888112

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.671236	14.02565	.0049452	-.000549	368.5473	.0018402	.1456317
Stddev	.056470	.24764	.0002687	.000146	3.6383	.0006038	.0005344
%RSD	1.538166	1.765621	5.432827	26.54296	.9872021	32.81466	.3669539
#1	3.607145	13.75602	.0052552	-.000563	364.3469	.0025216	.1458452
#2	3.692886	14.07801	.0048003	-.000397	370.5797	.0016275	.1460263
#3	3.713677	14.24293	.0047800	-.000687	370.7154	.0013715	.1450235

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.223502	.0951723	.0016569	-.005246	-.002787	.4850728	.0243471
Stddev	.037237	.0013347	.0002790	.000382	.000379	.0009477	.0025688
%RSD	.5983237	1.402435	16.84141	7.274785	13.59783	.1953723	10.55079
#1	6.196694	.0936750	.0015374	-.004822	-.002371	.4847467	.0253844
#2	6.266019	.0956046	.0019758	-.005354	-.003113	.4861405	.0214219
#3	6.207793	.0962373	.0014575	-.005562	-.002876	.4843312	.0262351

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03 Acquired: 11/19/2024 21:09:43 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.817900	-.027320	.2925583
Stddev	.034388	.000446	.0046441
%RSD	1.891611	1.632218	1.587403
#1	1.851665	-.026844	.2873803
#2	1.819112	-.027389	.2939394
#3	1.782922	-.027727	.2963551

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3081.189	56598.98	12426.39	2375.507	4340.857
Stddev	76.917	324.81	156.96	23.547	98.291
%RSD	2.496345	.5738830	1.263143	.9912317	2.264317
#1	2992.816	56599.42	12607.63	2364.666	4228.194
#2	3117.697	56273.95	12336.25	2359.334	4385.295
#3	3133.054	56923.57	12335.28	2402.522	4409.081

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03MSD Acquired: 11/19/2024 21:14:09 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7696750	1.791435	.9803548	1.841265	.6983695	1.865976	.5123172
Stddev	.0027845	.029845	.0016667	.005966	.0011965	.017097	.0029665
%RSD	.3617787	1.665980	.1700074	.3239951	.1713254	.9162483	.5790362
#1	.7720176	1.770731	.9812205	1.836215	.6971677	1.850718	.5110019
#2	.7665964	1.777929	.9814104	1.839734	.6983803	1.884454	.5157139
#3	.7704110	1.825645	.9784334	1.847847	.6995605	1.862756	.5102357

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2372433	.2155204	152.4453	.4545905	.2040029	.2518833	3.107574
Stddev	.0007023	.0003638	.3359	.0021324	.0000931	.0000668	.007145
%RSD	.2960287	.1687817	.2203321	.4690835	.0456312	.0265187	.2299064
#1	.2364366	.2156795	152.0579	.4540905	.2040907	.2518085	3.103368
#2	.2375757	.2157775	152.6552	.4527526	.2039053	.2519042	3.103531
#3	.2377178	.2151042	152.6228	.4569285	.2040125	.2519371	3.115823

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.717363	15.99332	.5114073	.0685520	336.1135	.3064296	.3364169
Stddev	.012546	.02926	.0007476	.0028711	.6733	.0015139	.0013063
%RSD	.3374982	.1829417	.1461898	4.188156	.2003193	.4940326	.3883083
#1	3.704902	15.98204	.5120674	.0710634	335.3546	.3062177	.3362061
#2	3.729992	15.97137	.5115591	.0691706	336.3469	.3080383	.3352288
#3	3.717194	16.02653	.5105954	.0654221	336.6391	.3050329	.3378159

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.29720	.3880551	.3801543	.7341998	.1853682	1.196061	6.326543
Stddev	.04655	.0021796	.0006640	.0038505	.0008703	.012406	.030382
%RSD	.3256043	.5616767	.1746750	.5244465	.4695089	1.037228	.4802368
#1	14.30147	.3855770	.3798708	.7338902	.1848015	1.203198	6.310048
#2	14.34147	.3896747	.3796791	.7381957	.1863702	1.181736	6.307976
#3	14.24866	.3889138	.3809130	.7305134	.1849327	1.203250	6.361605

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03MSD Acquired: 11/19/2024 21:14:09 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.738593	.1389269	.4723656
Stddev	.003864	.0017979	.0019490
%RSD	.2222324	1.294121	.4125987
#1	1.741627	.1388571	.4710283
#2	1.734243	.1407586	.4746018
#3	1.739908	.1371649	.4714667

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3186.474	60584.86	12653.61	2589.897	4464.052
Stddev	1.735	135.16	25.87	4.496	6.110
%RSD	.0544389	.2230851	.2044594	.1735821	.1368686
#1	3186.658	60495.96	12677.09	2584.719	4457.885
#2	3188.110	60740.40	12625.87	2592.807	4464.170
#3	3184.655	60518.23	12657.87	2592.164	4470.103

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03A Acquired: 11/19/2024 21:18:18 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8030685	1.850023	1.025112	1.934684	.7329783	1.938684	.5379520
Stddev	.0021635	.016389	.002264	.005406	.0036003	.012381	.0028266
%RSD	.2694004	.8858793	.2208356	.2794413	.4911893	.6386356	.5254282
#1	.8052231	1.836932	1.027721	1.939536	.7362800	1.929929	.5366373
#2	.8030861	1.844733	1.023945	1.935660	.7335153	1.952849	.5411965
#3	.8008963	1.868403	1.023669	1.928856	.7291397	1.933272	.5360223

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2444760	.2248509	158.9069	.4694689	.2135222	.2641188	3.235090
Stddev	.0016142	.0001950	.7400	.0018128	.0002206	.0012414	.003869
%RSD	.6602611	.0867254	.4656516	.3861417	.1033094	.4700292	.1195954
#1	.2432411	.2250481	158.2052	.4701082	.2132700	.2652285	3.234635
#2	.2463025	.2248463	159.6799	.4674231	.2136793	.2643498	3.231469
#3	.2438843	.2246582	158.8356	.4708755	.2136174	.2627781	3.239167

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.886353	16.64765	.5351557	.0728002	348.7097	.3202035	.3524187
Stddev	.018405	.15163	.0006133	.0008489	2.1831	.0029697	.0053104
%RSD	.4735924	.9108001	.1145954	1.166069	.6260409	.9274407	1.506846
#1	3.875332	16.47483	.5348430	.0718271	346.6266	.3211987	.3502799
#2	3.907600	16.75836	.5358623	.0733889	348.5219	.3225477	.3485112
#3	3.876125	16.70976	.5347619	.0731846	350.9806	.3168640	.3584650

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.85436	.4037575	.3962144	.7654950	.1932199	1.237696	6.593057
Stddev	.04208	.0041972	.0013961	.0012398	.0008218	.012058	.006197
%RSD	.2833132	1.039548	.3523592	.1619576	.4253342	.9742225	.0939959
#1	14.86848	.3990151	.3967450	.7640738	.1922740	1.234470	6.588486
#2	14.80703	.4052629	.3972674	.7660571	.1936262	1.227580	6.590574
#3	14.88757	.4069945	.3946308	.7663542	.1937594	1.251039	6.600111

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4718-03A Acquired: 11/19/2024 21:18:18 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.817646	.1457165	.4927337
Stddev	.000305	.0010421	.0012136
%RSD	.0168017	.7151430	.2463065
#1	1.817419	.1450306	.4919413
#2	1.817993	.1469156	.4941309
#3	1.817525	.1452031	.4921289

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3038.900	58971.73	12218.78	2482.300	4261.126
Stddev	14.471	174.20	71.25	3.797	15.242
%RSD	.4761861	.2953996	.5831581	.1529818	.3577063
#1	3026.516	58954.10	12263.40	2480.816	4245.720
#2	3035.377	59154.08	12136.61	2486.616	4261.460
#3	3054.807	58807.01	12256.34	2479.469	4276.199

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4341-01DLX10 Acquired: 11/19/2024 21:22:25 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	-.007172	.0387046	.0031145	.1867710	.0119542	.0514256
Stddev	.001432	.0024419	.0005105	.0017356	.0013873	.0044367
%RSD	19.96157	6.309169	16.38976	.9292656	11.60537	8.627488
#1	-.007775	.0358849	.0037009	.1849592	.0111539	.0488263
#2	-.008203	.0401186	.0028733	.1869351	.0135561	.0565485
#3	-.005537	.0401103	.0027694	.1884187	.0111525	.0489020

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138969	.0007452	-.001510	1.094199	.0069189	.0015770
Stddev	.0005213	.0000128	.000054	.005121	.0000773	.0000512
%RSD	3.751052	1.714210	3.578406	.4680162	1.117425	3.249800
#1	.0144630	.0007430	-.001564	1.098191	.0069451	.0015594
#2	.0137911	.0007590	-.001456	1.088425	.0069797	.0015369
#3	.0134367	.0007337	-.001508	1.095980	.0068319	.0016347

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0189741	32.76970	.2046404	.0996507	.0048181	.0011400
Stddev	.0001729	.10804	.0012892	.0052493	.0001524	.0000199
%RSD	.9112910	.3297016	.6300046	5.267750	3.163598	1.745891
#1	.0191135	32.74751	.2061289	.0940273	.0049401	.0011227
#2	.0190282	32.67447	.2039158	.1044216	.0048670	.0011618
#3	.0187806	32.88711	.2038764	.1005031	.0046473	.0011355

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.835887	.0035493	.5981968	510.2137	-.010854	.0099609
Stddev	.059542	.0005506	.0020175	1.9393	.001032	.0001272
%RSD	.6738632	15.51380	.3372664	.3801003	9.510507	1.277369
#1	8.767531	.0034408	.5999595	510.4595	-.012044	.0099896
#2	8.863677	.0030611	.5959963	508.1632	-.010316	.0098217
#3	8.876453	.0041462	.5986346	512.0184	-.010202	.0100713

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: P4341-01DLX10 Acquired: 11/19/2024 21:22:25 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.1041402	.0008078	.2556702	F 149.7650	2.592881	.0011941
Stddev	.0026522	.0003178	.0094545	1.2282	.017369	.0003166
%RSD	2.546754	39.33485	3.697926	.8201121	.6698766	26.51600
#1	.1051641	.0009199	.2449066	150.5830	2.592723	.0013484
#2	.1011287	.0004492	.2626321	150.3593	2.610328	.0014041
#3	.1061279	.0010543	.2594718	148.3526	2.575591	.0008299

Elem	Sr4077
Units	ppm
Avg	-.027933
Stddev	.000116
%RSD	.4137215
#1	-.027898
#2	-.027839
#3	-.028062

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2763.746	55483.74	12920.78	2274.088	4465.298
Stddev	28.491	64.24	89.13	13.291	22.233
%RSD	1.030873	.1157820	.6898569	.5844721	.4979008
#1	2772.512	55472.32	12818.27	2265.223	4467.609
#2	2786.823	55552.93	12980.00	2289.370	4486.285
#3	2731.902	55425.98	12964.08	2267.670	4442.000

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: LR1 Acquired: 11/19/2024 21:26:56 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0535214	.1239152	.0278444	-.212492	-.004396	2052.573	.0248639
Stddev	.0071532	.0093221	.0068530	.005820	.003460	7.563	.0002865
%RSD	13.36511	7.522951	24.61166	2.738773	78.70326	.3684640	1.152311
#1	.0581376	.1244013	.0223407	-.208062	-.001866	2050.436	.0249404
#2	.0452815	.1143595	.0256723	-.219083	-.008339	2060.974	.0245470
#3	.0571451	.1329846	.0355202	-.210332	-.002984	2046.308	.0251045

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138053	.0996150	1765.994	.0005759	.0403466	-.096913	981.7816
Stddev	.0002196	.0027108	2.218	.0006583	.0010011	.008279	11.8645
%RSD	1.590924	2.721287	.1256162	114.2984	2.481355	8.542511	1.208469
#1	.0135554	.0964948	1764.338	.0000340	.0399218	-.105160	994.2703
#2	.0138930	.1009584	1768.515	.0003853	.0396279	-.088603	970.6595
#3	.0139676	.1013917	1765.130	.0013085	.0414901	-.096975	980.4151

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.116535	1758.450	.0180031	-.038891	1983.709	.0855260	.1568364
Stddev	.001156	8.352	.0016857	.002402	4.750	.0010153	.0025512
%RSD	.9918912	.4749631	9.363605	6.177411	.2394316	1.187129	1.626639
#1	-.115834	1768.091	.0193343	-.036585	1985.541	.0843736	.1540118
#2	-.115903	1753.825	.0161076	-.041380	1978.316	.0862887	.1589730
#3	-.117869	1753.433	.0185675	-.038709	1987.269	.0859158	.1575244

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1338.548	.3162476	-.009244	.0180099	-.039027	.1337288	.0784403
Stddev	4.066	.0202544	.000668	.0005337	.000531	.0020981	.0050514
%RSD	.3037943	6.404606	7.225477	2.963334	1.359491	1.568905	6.439871
#1	1340.082	.3366356	-.009502	.0186261	-.038608	.1320804	.0754160
#2	1333.938	.2961295	-.008486	.0177076	-.038850	.1330153	.0842718
#3	1341.624	.3159778	-.009744	.0176960	-.039623	.1360905	.0756330

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: LR1 Acquired: 11/19/2024 21:26:56 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.195884	-.290756	-.969483
Stddev	.003970	.001109	.011904
%RSD	2.026928	.3812574	1.227875
#1	-.196152	-.291308	-.982053
#2	-.191787	-.291481	-.958381
#3	-.199714	-.289480	-.968016

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2293.084	43703.38	10524.39	1759.564	2697.862
Stddev	9.617	123.50	45.22	9.581	12.289
%RSD	.4193715	.2825963	.4296817	.5444901	.4555266
#1	2300.763	43735.46	10576.00	1767.204	2706.910
#2	2296.191	43807.67	10505.50	1762.672	2702.806
#3	2282.298	43566.99	10491.68	1748.815	2683.871

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: LR2 Acquired: 11/19/2024 21:31:53 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0153459	-.019942	244.8799	.0072877	-.003546	.0867057	^F *****
Stddev	.0003550	.002371	.9475	.0010222	.001039	.0041872	-----
%RSD	2.313514	11.89053	.3869045	14.02634	29.29988	4.829244	-----
#1	.0155454	-.018307	243.8768	.0082970	-.004538	.0883146	^ -----
#2	.0155564	-.022661	245.0033	.0073130	-.003635	.0898498	^ -----
#3	.0149360	-.018858	245.7596	.0062531	-.002466	.0819526	^ -----

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004140	-.006222	.3325262	.0141501	-.014491	252.0028	.0119864
Stddev	.000073	.000067	.0031814	.0001729	.000313	.4030	.0027282
%RSD	1.759825	1.073890	.9567302	1.221644	2.156965	.1599164	22.76119
#1	-.004161	-.006223	.3296677	.0141551	-.014584	252.0157	.0138659
#2	-.004200	-.006154	.3319573	.0139748	-.014746	251.5935	.0088571
#3	-.004059	-.006288	.3359537	.0143205	-.014142	252.3992	.0132360

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	44.16946	.0491802	47.87004	.0010885	.4074216	-.017624	37.28535
Stddev	.13006	.0119425	.27452	.0000387	.0149428	.001102	.91995
%RSD	.2944519	24.28322	.5734691	3.551868	3.667649	6.254643	2.467330
#1	44.27011	.0564928	47.77076	.0011043	.3975179	-.016375	37.72084
#2	44.02261	.0556491	47.65898	.0010445	.4246097	-.018039	37.90669
#3	44.21565	.0353988	48.18039	.0011168	.4001373	-.018460	36.22851

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2262796	-.000352	-.007386	-.001407	-.037645	-.000507	3.433326
Stddev	.0098598	.000683	.000744	.000869	.000206	.004155	.021237
%RSD	4.357343	193.8343	10.06630	61.74221	.5480265	819.8843	.6185613
#1	.2287422	.000303	-.007649	-.002278	-.037848	.004118	3.431712
#2	.2154219	-.001059	-.006547	-.001402	-.037650	-.001712	3.412942
#3	.2346746	-.000301	-.007963	-.000541	-.037436	-.003927	3.455324

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: LR2 Acquired: 11/19/2024 21:31:53 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.009734	-.001574	.0020710
Stddev	.005086	.000534	.0000160
%RSD	52.24606	33.90522	.7735087
#1	-.015363	-.000970	.0020798
#2	-.008370	-.001981	.0020525
#3	-.005470	-.001771	.0020807

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3082.150	68141.60	13437.61	2742.062	5138.102
Stddev	13.311	580.37	45.61	35.606	29.684
%RSD	.4318716	.8517076	.3394518	1.298527	.5777263
#1	3089.735	68258.40	13394.33	2756.503	5160.408
#2	3089.934	67511.71	13433.25	2701.503	5149.487
#3	3066.780	68654.68	13485.24	2768.179	5104.411

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCV02 Acquired: 11/19/2024 21:36:23 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.714020	4.917306	5.292310	4.569382	5.316707	9.405003
Stddev	.005917	.095716	.010612	.013267	.003561	.000875
%RSD	.1255124	1.946510	.2005098	.2903414	.0669687	.0092993
#1	4.718629	5.027819	5.280077	4.584691	5.319172	9.406013
#2	4.707348	4.863368	5.297821	4.562207	5.312625	9.404503
#3	4.716081	4.860732	5.299032	4.561247	5.318323	9.404493

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.17217	.2399407	2.735314	26.48487	1.087535	2.568045
Stddev	.09368	.0009697	.004104	.13904	.000063	.004997
%RSD	.9209833	.4041249	.1500403	.5249846	.0058275	.1945928
#1	10.15551	.2389621	2.730796	26.33124	1.087469	2.562466
#2	10.27307	.2409012	2.736336	26.60207	1.087595	2.569558
#3	10.08793	.2399589	2.738811	26.52129	1.087543	2.572111

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.130616	4.684015	2.435173	24.07940	2.599843	1.229650
Stddev	.001983	.009124	.004176	.21276	.004520	.000809
%RSD	.1753496	.1947956	.1714832	.8835665	.1738560	.0657929
#1	1.128522	4.673937	2.430587	23.83383	2.594792	1.228718
#2	1.130861	4.686393	2.438756	24.19615	2.601229	1.230170
#3	1.132465	4.691715	2.436176	24.20822	2.603507	1.230061

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.58275	2.486992	2.327320	24.15965	5.498796	4.548198
Stddev	.11284	.006166	.015665	.09925	.019309	.003671
%RSD	.4410953	.2479368	.6731003	.4108284	.3511467	.0807071
#1	25.71034	2.480144	2.337396	24.24379	5.478034	4.551756
#2	25.49605	2.488730	2.309272	24.05018	5.516214	4.544424
#3	25.54187	2.492103	2.335291	24.18497	5.502141	4.548412

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCV02 Acquired: 11/19/2024 21:36:23 Type: Unk
Method: NON EPA-6010-200.7(v2475) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.372640	4.574049	4.624935	5.015165	4.938613	F 3.906338
Stddev	.002688	.002230	.024180	.011535	.021217	.019646
%RSD	.0500375	.0487575	.5228212	.2300095	.4296065	.5029189
#1	5.375165	4.576184	4.606351	5.018010	4.956097	3.928564
#2	5.372941	4.571735	4.616180	5.002473	4.915009	3.891292
#3	5.369814	4.574229	4.652273	5.025011	4.944733	3.899159

Elem	Sr4077
Units	ppm
Avg	4.780322
Stddev	.020261
%RSD	.4238475
#1	4.757325
#2	4.788099
#3	4.795543

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3408.155	65952.68	13236.95	2796.220	4853.831
Stddev	6.120	27.88	27.22	11.222	9.270
%RSD	.1795817	.0422707	.2056323	.4013133	.1909849
#1	3409.067	65923.55	13260.58	2784.914	4856.591
#2	3413.768	65979.11	13207.18	2807.356	4861.407
#3	3401.629	65955.37	13243.08	2796.389	4843.494

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCB02 Acquired: 11/19/2024 21:42:06 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	.0022873	.0002762	.0006291	-.000628	.0007844	-.000825	.0097620
Stddev	.0012381	.0001985	.0005242	.000492	.0004044	.005183	.0003278
%RSD	54.12695	71.86412	83.31317	78.34672	51.55813	628.0191	3.357804
#1	.0023404	.0003942	.0001171	-.001129	.0004622	-.004442	.0100784
#2	.0010235	.0003874	.0011646	-.000146	.0006529	.005112	.0097838
#3	.0034979	.0000470	.0006057	-.000609	.0012383	-.003146	.0094239

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001043	-.000099	.0068716	.0001133	.0000524	-.000025	-.004924
Stddev	.0000414	.000039	.0082895	.0002489	.0000112	.000209	.001060
%RSD	39.66680	39.31633	120.6335	219.5958	21.42932	825.7994	21.53517
#1	.0001066	-.000124	-.001882	.0003981	.0000575	.000106	-.003730
#2	.0001444	-.000054	.014601	.0000043	.0000602	-.000266	-.005287
#3	.0000618	-.000119	.007896	-.000062	.0000395	.000084	-.005756

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004430	-.001216	-.000222	-.000395	-.025604	.0015709	-.000365
Stddev	.0001451	.015269	.000119	.000316	.018480	.0005549	.000235
%RSD	32.75634	1256.085	53.44902	80.04475	72.17644	35.32209	64.48006
#1	.0003551	.009821	-.000131	-.000691	-.044083	.0013149	-.000634
#2	.0006105	.005174	-.000356	-.000433	-.025605	.0022075	-.000198
#3	.0003634	-.018641	-.000179	-.000062	-.007123	.0011902	-.000262

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072648	.0046761	-.000009	-.003521	.0005206	.0058975	-.009121
Stddev	.0258068	.0003259	.000156	.000469	.0002755	.0039955	.002240
%RSD	355.2331	6.970274	1730.205	13.30700	52.91757	67.74855	24.56326
#1	-.018284	.0044284	-.000186	-.003667	.0007984	.0021602	-.009851
#2	.006756	.0045545	.000110	-.002997	.0002476	.0054233	-.006607
#3	.033322	.0050453	.000049	-.003900	.0005156	.0101088	-.010906

Reviewed By:mohan
On:11/21/2024 1:10:00 AM
Inst Id :P4
LB :LB133525

Sample Name: CCB02 Acquired: 11/19/2024 21:42:06 Type: Unk
Method: NON EPA-6010-200.7(v2475) 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	-.007231	-.000339	-.000084
Stddev	.002968	.000400	.000009
%RSD	41.04477	118.1648	10.99054
#1	-.003890	-.000571	-.000080
#2	-.009563	.000123	-.000077
#3	-.008240	-.000568	-.000094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3549.073	67994.12	13085.08	2881.432	5446.926
Stddev	4.417	67.45	31.72	12.904	2.111
%RSD	.1244515	.0991961	.2424042	.4478175	.0387516
#1	3546.428	67916.56	13058.72	2869.396	5448.927
#2	3554.172	68026.84	13076.23	2879.845	5447.130
#3	3546.618	68038.98	13120.28	2895.056	5444.720

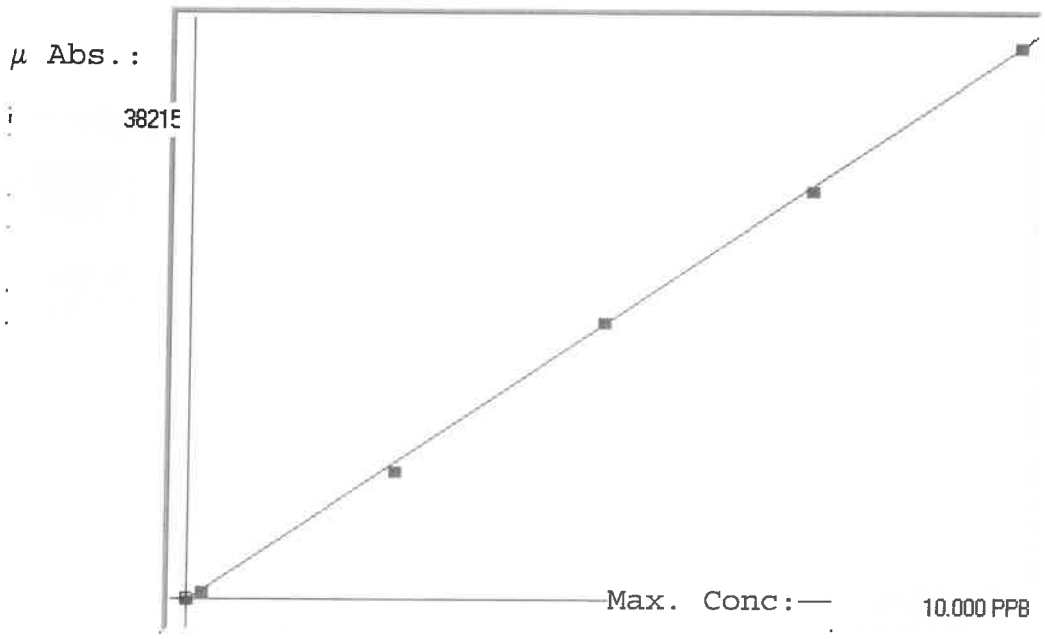
Reviewed By:mohan
On:11/8/2024 9:52:17 PM
Inst Id :CV1
LB :LB133352

LB133352

7470A

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 2.6139e-004

C= 4.2402e-002

Rho= 0.9998343

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%D
0.0	0.000	0.067	0.067	93	0.000	93	0				1
0.2	0.200	0.203	0.003	614	0.0 %	614					3
2.5	2.500	2.382	-0.118	8950	0.0 %	8950					-5
5.0	5.000	5.070	0.070	19234	0.0 %	19234					1
7.5	7.500	7.447	-0.053	28329	0.0 %	28329					-1
10.0	10.000	10.031	0.031	38215	0.0 %	38215					0

Reviewed By:mohan
On:11/8/2024 9:52:17 PM
Inst Id :CV1
LB :LB133352

LB133352 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 08 Nov 2024 09:40:21

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S0	93	-	0.00000	7470A	PPB	08 Nov 2024 10:04:53	S	Std
0.2 - 1	S0.2	614	-	0.20000	7470A	PPB	08 Nov 2024 10:07:10	S	Std
2.5 - 1	S2.5	8950	-	2.50000	7470A	PPB	08 Nov 2024 10:09:27	S	Std
5.0 - 1	S5	19234	-	5.00000	7470A	PPB	08 Nov 2024 10:11:43	S	Std
7.5 - 1	S7.5	28329	-	7.50000	7470A	PPB	08 Nov 2024 10:13:59	S	Std
10.0 - 1	S10	38215	-	10.00000	7470A	PPB	08 Nov 2024 10:16:17	S	Std
ICV75 - 1	ICV75	13850	3.6626	-	7470A	PPB	08 Nov 2024 10:19:04	U	SMPL
ICB75 - 1	ICB75	-223	-0.0159	-	7470A	PPB	08 Nov 2024 10:21:18	U	SMPL
CCV51 - 1	CCV51	19260	5.0767	-	7470A	PPB	08 Nov 2024 10:23:35	U	SMPL
CCB51 - 1	CCB51	-209	-0.0122	-	7470A	PPB	08 Nov 2024 10:25:49	U	SMPL
CRA - 1	CRA	564	0.1898	-	7470A	PPB	08 Nov 2024 10:28:06	U	SMPL
HighStd - 1	HighStd	36747	9.6476	-	7470A	PPB	08 Nov 2024 10:30:21	U	SMPL
ChkStd - 1	ChkStd	25382	6.6770	-	7470A	PPB	08 Nov 2024 10:35:46	U	SMPL
PB164791BL - 1	PBW	-362	-0.0522	-	7470A	PPB	08 Nov 2024 10:38:01	U	SMPL
PB164791BS - 1	LCSW	15875	4.1919	-	7470A	PPB	08 Nov 2024 10:40:19	U	SMPL
P4718-03 - 1	WB-307-SB02	-255	-0.0243	-	7470A	PPB	08 Nov 2024 10:42:34	U	SMPL
P4718-03DUP - 1	WB-307-SB02DUP	-92	0.0184	-	7470A	PPB	08 Nov 2024 10:44:52	U	SMPL
P4718-03MS - 1	WB-307-SB02MS	12687	3.3586	-	7470A	PPB	08 Nov 2024 10:47:09	U	SMPL
P4718-03MSD - 1	WB-307-SB02MSD	15411	4.0707	-	7470A	PPB	08 Nov 2024 10:49:26	U	SMPL
P4719-03 - 1	BAYAVE-STOCKPILE	-195	-0.0086	-	7470A	PPB	08 Nov 2024 10:51:42	U	SMPL
CCV52 - 1	CCV52	18837	4.9662	-	7470A	PPB	08 Nov 2024 10:53:59	U	SMPL
CCB52 - 1	CCB52	-279	-0.0305	-	7470A	PPB	08 Nov 2024 10:56:15	U	SMPL
P4720-05 - 1	JC-701-COMP-01	-108	0.0142	-	7470A	PPB	08 Nov 2024 10:58:31	U	SMPL
P4722-04 - 1	WC-1(0-6)	-61	0.0265	-	7470A	PPB	08 Nov 2024 11:00:46	U	SMPL
P4722-09 - 1	WC-2(0-6)	-98	0.0168	-	7470A	PPB	08 Nov 2024 11:03:02	U	SMPL
P4722-14 - 1	WC-3(0-6)	-42	0.0314	-	7470A	PPB	08 Nov 2024 11:05:18	U	SMPL
P4732-02 - 1	PPE-COMP	94	0.0670	-	7470A	PPB	08 Nov 2024 11:07:33	U	SMPL
P4738-02 - 1	72-12018	-10	0.0398	-	7470A	PPB	08 Nov 2024 11:09:50	U	SMPL
P4739-04 - 1	TP-14	65	0.0594	-	7470A	PPB	08 Nov 2024 11:12:06	U	SMPL
P4739-08 - 1	BP-G2	157	0.0834	-	7470A	PPB	08 Nov 2024 11:14:23	U	SMPL
P4739-12 - 1	BP-B2	-254	-0.0240	-	7470A	PPB	08 Nov 2024 11:16:40	U	SMPL
P4739-16 - 1	TP-11	9	0.0448	-	7470A	PPB	08 Nov 2024 11:18:57	U	SMPL
CCV53 - 1	CCV53	17701	4.6692	-	7470A	PPB	08 Nov 2024 11:21:12	U	SMPL
CCB53 - 1	CCB53	-253	-0.0237	-	7470A	PPB	08 Nov 2024 11:23:27	U	SMPL
PB164694TB - 1	PB164694TB	-114	0.0126	-	7470A	PPB	08 Nov 2024 11:25:44	U	SMPL
P4718-03LX5 - 1		-90	0.0189	-	7470A	PPB	08 Nov 2024 11:28:00	U	SMPL
P4718-03A - 1		14079	3.7225	-	7470A	PPB	08 Nov 2024 11:30:15	U	SMPL
CCV54 - 1	CCV54	17291	4.5621	-	7470A	PPB	08 Nov 2024 11:32:30	U	SMPL
CCB54 - 1	CCB54	-218	-0.0146	-	7470A	PPB	08 Nov 2024 11:34:48	U	SMPL

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB164768

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: 11/07/2024 **Time :** 12:30 **Temp :** 96 °C

End Digest Date: 11/07/2024 **Time :** 15:45 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: JSP

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	M6117
1:1 HCL	5.00	MP83105
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 #50: 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/7/24 16:00	JSP / Mutdig	
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB164768

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
P4718-03	WB-307-SB02	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	30
P4718-03DUP	WB-307-SB02DUP	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	31
P4718-03MS	WB-307-SB02MS	<2	5	25	Colorless	Colorless	Clear	Clear	M6000,M6009	32
P4718-03MSD	WB-307-SB02MSD	<2	5	25	Colorless	Colorless	Clear	Clear	M6000,M6009	33
P4719-03	BAYAVE-STOCKPILE	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	34
P4720-05	JC-701-COMP-01	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	35
P4722-04	WC-1(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	36
P4722-09	WC-2(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	37
P4722-14	WC-3(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	38
P4732-02	PPE-COMP	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	39
P4738-02	72-12018	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	40
P4739-04	TP-14	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	41
P4739-08	BP-G2	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	42
P4739-12	BP-B2	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	43
P4739-16	TP-11	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	44
PB164694TB	PB164694TB	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	45
PB164768BL	PBW768	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	46
PB164768BS	LCS768	<2	5	25	Colorless	Colorless	Clear	Clear	M6000,M6009	47

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB164694

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
P4718-03	WB-307-SB02	01	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-1
P4719-03	BAYAVE-STOCKPILE	02	100.03	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4720-05	JC-701-COMP-01	03	100.04	2000	N/A	N/A	N/A	3.5	1.0	T-1
P4722-04	WC-1(0-6)	04	100.03	2000	N/A	N/A	N/A	7.2	1.5	T-1
P4722-09	WC-2(0-6)	05	100.02	2000	N/A	N/A	N/A	7.0	1.0	T-1
P4722-14	WC-3(0-6)	06	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-1
P4732-02	PPE-COMP	07	100.00	2000	N/A	N/A	N/A	6.0	1.0	T-1
P4738-02	72-12018	08	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-1
P4739-04	TP-14	09	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4739-08	BP-G2	10	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
P4739-12	BP-B2	11	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-2
P4739-16	TP-11	12	100.04	2000	N/A	N/A	N/A	8.2	1.5	T-2
PB164694TB	LEB694	13	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB164791

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: 11/07/2024 **Time :** 11:50 **Temp :** 95 °C

End Digest Date: 11/07/2024 **Time :** 13:50 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: [signature]

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP83113
CCV	30mL	MP83115
CRA	30mL	MP83117
Blank Spike	0.48mL	MP83106
Matrix Spike	0.48mL	MP83106

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP82651
KMnO4 (5%)	4.5mL	MP82652
K2S2O8 (5%)	2.5mL	MP82653
Hydroxylamine HCL (12%)	2.0mL	MP82654
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	MP83107
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP83108
2.5 ppb	S2.5	30mL	MP83109
5.0 ppb	S5.0	30mL	MP83110
7.5 ppb	S7.5	30mL	MP83111
10.0 ppb	S10.0	30mL	MP83112
ICV	ICV	30mL	MP83113
ICB	ICB	30mL	MP83114
CCV	CCV	30mL	MP83115
CCB	CCB	30mL	MP83116
CRI	CRI	30mL	MP83117
CHK STD	CHK STD	30mL	MP83118

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/07/24 @14:26	MB - Dig. Lab	MB - Metal Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB164791

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
P4718-03	WB-307-SB02	3	30	<2	N/A	3-1
P4718-03DUP	WB-307-SB02DUP	3	30	<2	N/A	2
P4718-03MS	WB-307-SB02MS	3	30	<2	MP83106	3
P4718-03MSD	WB-307-SB02MSD	3	30	<2	MP83106	4
P4719-03	BAYAVE-STOCKPILE	3	30	<2	N/A	5
P4720-05	JC-701-COMP-01	3	30	<2	N/A	6
P4722-04	WC-1(0-6)	3	30	<2	N/A	7
P4722-09	WC-2(0-6)	3	30	<2	N/A	8
P4722-14	WC-3(0-6)	3	30	<2	N/A	9
P4732-02	PPE-COMP	3	30	<2	N/A	10
P4738-02	72-12018	3	30	<2	N/A	11
P4739-04	TP-14	3	30	<2	N/A	12
P4739-08	BP-G2	3	30	<2	N/A	13
P4739-12	BP-B2	3	30	<2	N/A	14
P4739-16	TP-11	3	30	<2	N/A	15
PB164694TB	PB164694TB	3	30	<2	N/A	16
PB164791BL	PBW791	30	30	<2	N/A	17
PB164791BS	LCS791	30	30	<2	MP83106	18

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB164694

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-4

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-1 / T-2

TCLP Filter ID : 114771

Start Prep Date : 11/06/2024 **Time :** 16:45

End Prep Date : 11/07/2024 **Time :** 09:35

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 24 °C

Final Room Temperature: 23 °C

TCLP Technician Signature : JP

Supervisor By : SJ

Standared Name	MLS USED	STD REF. # FROM LOG
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

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP108622
HCL-TCLP,1N	N/A	WP108584
HNO3-TCLP,1N	N/A	WP108585
pH Strips	N/A	W1931,W1934,W2350,W2755
pH Strips	N/A	W1937,W1938,W1939,W1940,W1941,W1942
1 Liter Amber	N/A	23091
120ml Plastic bottle	N/A	21029
1:1 HNO3	MP81119	N/A

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. TUMBLER T-1 / T-2 checked,30 rpm. p4718-03 is used for MS-MSD. Particle size reduction is not required.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/07/24 11:00	JP / Cold Room	JP / [illegible]
	Preparation Group	Analysis Group

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 # LB133352

Review By	jaswal	Review On	11/8/2024 9:50:44 PM
Supervise By	mohan	Supervise On	11/8/2024 9:52:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP83107,MP83108,MP83109,MP83110,MP83111,MP83112
ICV Standard	MP83113
CCV Standard	MP83115
ICSA Standard	
CRI Standard	MP83117
LCS Standard	
Chk Standard	MP83114,MP83116,MP83118,MP83159

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/08/24 10:04		Mohan	OK
2	S0.2	S0.2	CAL2	11/08/24 10:07		Mohan	OK
3	S2.5	S2.5	CAL3	11/08/24 10:09		Mohan	OK
4	S5	S5	CAL4	11/08/24 10:11		Mohan	OK
5	S7.5	S7.5	CAL5	11/08/24 10:13		Mohan	OK
6	S10	S10	CAL6	11/08/24 10:16		Mohan	OK
7	ICV75	ICV75	ICV	11/08/24 10:19		Mohan	OK
8	ICB75	ICB75	ICB	11/08/24 10:21		Mohan	OK
9	CCV51	CCV51	CCV	11/08/24 10:23		Mohan	OK
10	CCB51	CCB51	CCB	11/08/24 10:25		Mohan	OK
11	CRA	CRA	CRDL	11/08/24 10:28		Mohan	OK
12	HighStd	HighStd	HIGH STD	11/08/24 10:30		Mohan	OK
13	ChkStd	ChkStd	SAM	11/08/24 10:35		Mohan	OK
14	PB164791BL	PB164791BL	MB	11/08/24 10:38		Mohan	OK
15	PB164791BS	PB164791BS	LCS	11/08/24 10:40		Mohan	OK
16	P4718-03	WB-307-SB02	SAM	11/08/24 10:42		Mohan	OK
17	P4718-03DUP	WB-307-SB02DUP	DUP	11/08/24 10:44		Mohan	OK
18	P4718-03MS	WB-307-SB02MS	MS	11/08/24 10:47		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 # LB133352

Review By	jaswal	Review On	11/8/2024 9:50:44 PM
Supervise By	mohan	Supervise On	11/8/2024 9:52:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP83107,MP83108,MP83109,MP83110,MP83111,MP83112
ICV Standard	MP83113
CCV Standard	MP83115
ICSA Standard	
CRI Standard	MP83117
LCS Standard	
Chk Standard	MP83114,MP83116,MP83118,MP83159

19	P4718-03MSD	WB-307-SB02MSD	MSD	11/08/24 10:49		Mohan	OK
20	P4719-03	BAYAVE-STOCKPILE	SAM	11/08/24 10:51		Mohan	OK
21	CCV52	CCV52	CCV	11/08/24 10:53		Mohan	OK
22	CCB52	CCB52	CCB	11/08/24 10:56		Mohan	OK
23	P4720-05	JC-701-COMP-01	SAM	11/08/24 10:58		Mohan	OK
24	P4722-04	WC-1(0-6)	SAM	11/08/24 11:00		Mohan	OK
25	P4722-09	WC-2(0-6)	SAM	11/08/24 11:03		Mohan	OK
26	P4722-14	WC-3(0-6)	SAM	11/08/24 11:05		Mohan	OK
27	P4732-02	PPE-COMP	SAM	11/08/24 11:07		Mohan	OK
28	P4738-02	72-12018	SAM	11/08/24 11:09		Mohan	OK
29	P4739-04	TP-14	SAM	11/08/24 11:12		Mohan	OK
30	P4739-08	BP-G2	SAM	11/08/24 11:14		Mohan	OK
31	P4739-12	BP-B2	SAM	11/08/24 11:16		Mohan	OK
32	P4739-16	TP-11	SAM	11/08/24 11:18		Mohan	OK
33	CCV53	CCV53	CCV	11/08/24 11:21		Mohan	OK
34	CCB53	CCB53	CCB	11/08/24 11:23		Mohan	OK
35	PB164694TB	PB164694TB	MB	11/08/24 11:25		Mohan	OK
36	P4718-03L	WB-307-SB02L	SD	11/08/24 11:28		Mohan	OK
37	P4718-03A	WB-307-SB02A	PS	11/08/24 11:30		Mohan	OK
38	CCV54	CCV54	CCV	11/08/24 11:32		Mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133352

Review By	jaswal	Review On	11/8/2024 9:50:44 PM
Supervise By	mohan	Supervise On	11/8/2024 9:52:17 PM

STD. NAME	STD REF.#
ICAL Standard	MP83107,MP83108,MP83109,MP83110,MP83111,MP83112
ICV Standard	MP83113
CCV Standard	MP83115
ICSA Standard	
CRI Standard	MP83117
LCS Standard	
Chk Standard	MP83114,MP83116,MP83118,MP83159

39	CCB54	CCB54	CCB	11/08/24 11:34		Mohan	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/08/24 13:34		Kareem	OK
2	S1	S1	CAL2	11/08/24 13:38		Kareem	OK
3	S2	S2	CAL3	11/08/24 13:43		Kareem	OK
4	S3	S3	CAL4	11/08/24 13:47		Kareem	OK
5	S4	S4	CAL5	11/08/24 13:51		Kareem	OK
6	S5	S5	CAL6	11/08/24 13:55		Kareem	OK
7	ICV01	ICV01	ICV	11/08/24 13:59	ICV fail for Na (200.7)	Kareem	OK
8	LLICV01	LLICV01	LLICV	11/08/24 14:11		Kareem	OK
9	ICB01	ICB01	ICB	11/08/24 14:16		Kareem	OK
10	CRI01	CRI01	CRDL	11/08/24 14:20		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/08/24 14:24		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/08/24 14:30		Kareem	OK
13	ICSADL	ICSADL	ICSA	11/08/24 14:35		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	11/08/24 14:40		Kareem	OK
15	CCV01	CCV01	CCV	11/08/24 14:44		Kareem	OK
16	CCB01	CCB01	CCB	11/08/24 14:50		Kareem	OK
17	P4578-04DL	WB-305-TOP-1DL	SAM	11/08/24 14:55	5x for Cr	Kareem	Confirms
18	P4719-03	BAYAVE-STOCKPILE	SAM	11/08/24 14:59		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

19	P4720-05	JC-701-COMP-01	SAM	11/08/24 15:03		Kareem	OK
20	P4734-01	EO-03-11062024	SAM	11/08/24 15:07		Kareem	OK
21	P4757-01	001-WILLETS-PT-BL	SAM	11/08/24 15:12		Kareem	OK
22	P4757-02	002-35TH-AVE(SEP)	SAM	11/08/24 15:16		Kareem	OK
23	P4757-03	001-WILLETS-PT-BL	SAM	11/08/24 15:20		Kareem	OK
24	P4757-04	002-35TH-AVE(OCT)	SAM	11/08/24 15:25		Kareem	OK
25	CCV02	CCV02	CCV	11/08/24 15:29		Kareem	OK
26	CCB02	CCB02	CCB	11/08/24 15:33		Kareem	OK
27	P4718-03	WB-307-SB02	SAM	11/08/24 15:39	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
28	P4718-03DUP	WB-307-SB02DUP	DUP	11/08/24 15:44	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
29	P4718-03L	WB-307-SB02L	SD	11/08/24 15:48	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
30	P4718-03MS	WB-307-SB02MS	MS	11/08/24 15:52	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
31	P4718-03MSD	WB-307-SB02MSD	MSD	11/08/24 15:57	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
32	P4718-03A	WB-307-SB02A	PS	11/08/24 16:01	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
33	P4722-04	WC-1(0-6)	SAM	11/08/24 16:06		Kareem	OK
34	P4722-09	WC-2(0-6)	SAM	11/08/24 16:10		Kareem	OK
35	P4722-14	WC-3(0-6)	SAM	11/08/24 16:15		Kareem	OK
36	P4732-02	PPE-COMP	SAM	11/08/24 16:19		Kareem	OK

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Fax : 908 789 8922

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

37	CCV03	CCV03	CCV	11/08/24 16:23		Kareem	OK
38	CCB03	CCB03	CCB	11/08/24 16:28		Kareem	OK
39	P4738-02	72-12018	SAM	11/08/24 16:32		Kareem	OK
40	P4739-04	TP-14	SAM	11/08/24 16:36		Kareem	OK
41	P4739-08	BP-G2	SAM	11/08/24 16:41		Kareem	OK
42	P4739-12	BP-B2	SAM	11/08/24 16:45		Kareem	OK
43	P4739-16	TP-11	SAM	11/08/24 16:50		Kareem	OK
44	PB164694TB	PB164694TB	MB	11/08/24 16:54		Kareem	OK
45	PB164768BL	PB164768BL	MB	11/08/24 16:59		Kareem	OK
46	PB164768BS	PB164768BS	LCS	11/08/24 17:03	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
47	P4762-02	EFF-WW	SAM	11/08/24 17:07		Kareem	OK
48	P4762-02DUP	EFF-WWDUP	DUP	11/08/24 17:11		Kareem	OK
49	CCV04	CCV04	CCV	11/08/24 17:16		Kareem	OK
50	CCB04	CCB04	CCB	11/08/24 17:22		Kareem	OK
51	P4762-02L	EFF-WWL	SD	11/08/24 17:26		Kareem	OK
52	P4762-02MS	EFF-WWMS	MS	11/08/24 17:31	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
53	P4762-02MSD	EFF-WWMSD	MSD	11/08/24 17:35	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

54	P4762-02A	EFF-WWA	PS	11/08/24 17:39	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
55	PB164782BL	PB164782BL	MB	11/08/24 17:43		Kareem	OK
56	PB164782BS	PB164782BS	LCS	11/08/24 17:47	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
57	P4732-01	PPE-COMP	SAM	11/08/24 17:51		Kareem	OK
58	P4737-01	TP2	SAM	11/08/24 17:55		Kareem	OK
59	P4738-01	72-12018	SAM	11/08/24 18:00		Kareem	OK
60	CCV05	CCV05	CCV	11/08/24 18:04		Kareem	OK
61	CCB05	CCB05	CCB	11/08/24 18:08		Kareem	OK
62	P4739-01	TP-14	SAM	11/08/24 18:13		Kareem	OK
63	P4739-05	BP-G2	SAM	11/08/24 18:17		Kareem	OK
64	P4739-09	BP-B2	SAM	11/08/24 18:21		Kareem	OK
65	P4739-13	TP-11	SAM	11/08/24 18:26		Kareem	OK
66	P4739-13DUP	TP-11DUP	DUP	11/08/24 18:30		Kareem	OK
67	P4739-13L	TP-11L	SD	11/08/24 18:34		Kareem	OK
68	P4739-13MS	TP-11MS	MS	11/08/24 18:38	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
69	P4739-13MSD	TP-11MSD	MSD	11/08/24 18:42	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

70	P4739-13A	TP-11A	PS	11/08/24 18:47	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
71	PB164757BL	PB164757BL	MB	11/08/24 18:51		Kareem	OK
72	CCV06	CCV06	CCV	11/08/24 18:55		Kareem	OK
73	CCB06	CCB06	CCB	11/08/24 18:59		Kareem	OK
74	PB164757BS	PB164757BS	LCS	11/08/24 19:03	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
75	P4733-01	402	SAM	11/08/24 19:08		Kareem	OK
76	P4733-01DUP	402DUP	DUP	11/08/24 19:12		Kareem	OK
77	P4733-01L	402L	SD	11/08/24 19:17		Kareem	OK
78	P4733-01MS	402MS	MS	11/08/24 19:21	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
79	P4733-01MSD	402MSD	MSD	11/08/24 19:25	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
80	P4733-01A	402A	PS	11/08/24 19:29	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
81	PB164758BL	PB164758BL	MB	11/08/24 19:34		Kareem	OK
82	PB164758BS	PB164758BS	LCS	11/08/24 19:38	0.1 ML OF M6001 AND M6010WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
83	P4718-04	WB-307-SW	SAM	11/08/24 19:42	Na (Oversaturated)	Kareem	Dilution
84	CCV07	CCV07	CCV	11/08/24 19:47		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

85	CCB07	CCB07	CCB	11/08/24 19:51		Kareem	OK
86	P4718-04DUP	WB-307-SWDUP	DUP	11/08/24 19:55	Na (Oversaturated)	Kareem	Dilution
87	P4718-04L	WB-307-SWL	SD	11/08/24 20:00	Na high	Kareem	Dilution
88	P4718-04MS	WB-307-SWMS	MS	11/08/24 20:04	Na (Oversaturated)	Kareem	Dilution
89	P4718-04MSD	WB-307-SWMSD	MSD	11/08/24 20:09	Na (Oversaturated)	Kareem	Dilution
90	P4718-04A	WB-307-SWA	PS	11/08/24 20:14	Na (Oversaturated)	Kareem	Dilution
91	P4736-02	COMP	SAM	11/08/24 20:18		Kareem	OK
92	PB164759BL	PB164759BL	MB	11/08/24 20:22	NOT USE - fail for Na	Kareem	Not Ok
93	PB164759BS	PB164759BS	LCS	11/08/24 20:27	NOT USE - fail for Na	Kareem	Not Ok
94	LR1	LR1	HIGH STD	11/08/24 20:38		Kareem	OK
95	LR2	LR2	HIGH STD	11/08/24 20:42		Kareem	OK
96	CCV08	CCV08	CCV	11/08/24 20:48		Kareem	OK
97	CCB08	CCB08	CCB	11/08/24 20:57		Kareem	OK
98	PB164646BL	PB164646BL	MB	11/08/24 21:02		Kareem	OK
99	PB164646BS	PB164646BS	LCS	11/08/24 21:06		Kareem	OK
100	PB164645BL	PB164645BL	MB	11/08/24 21:10	NOT USE	Kareem	Not Ok
101	PB164645BS	PB164645BS	LCS	11/08/24 21:14	NOT USE	Kareem	Not Ok
102	P4718-04DL	WB-307-SWDL	SAM	11/08/24 21:18	10x for Na	Kareem	Confirms
103	P4718-04DUPDL	WB-307-SWDUPDL	DUP	11/08/24 21:23	10x for Na	Kareem	Confirms
104	P4718-04LDL	WB-307-SWLDL	SD	11/08/24 21:27	50x for Na	Kareem	Confirms

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133365

Review By	jaswal	Review On	11/12/2024 1:04:50 PM
Supervise By	kareem	Supervise On	11/12/2024 2:08:18 PM

STD. NAME	STD REF.#
ICAL Standard	MP83078,MP83079,MP83080,MP83081,MP83082,MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086,MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091,MP83092

105	P4718-04MSDL	WB-307-SWMSDL	MS	11/08/24 21:31	10x for Na	Kareem	Confirms
106	P4718-04MSDDL	WB-307-SWMSDDL	MSD	11/08/24 21:36	10x for Na	Kareem	Confirms
107	P4718-04ADL	WB-307-SWADL	PS	11/08/24 21:40	10x for Na	Kareem	Confirms
108	CCV09	CCV09	CCV	11/08/24 21:50		Kareem	OK
109	CCB09	CCB09	CCB	11/08/24 21:55		Kareem	OK
110	P4681-01	Q4-WW	SAM	11/08/24 21:59	NOT USE	Kareem	Not Ok
111	P4681-01DL	Q4-WWDL	SAM	11/08/24 22:24	Straight 25x Dilution for all elements	Kareem	OK
112	P4681-01DUPDL	Q4-WWDUPDL	DUP	11/08/24 22:29	Straight 25x Dilution for all elements	Kareem	OK
113	P4681-01LDL	Q4-WWLDL	SD	11/08/24 22:33	Straight 125x Dilution for all elements	Kareem	OK
114	P4681-01MSDL	Q4-WWMSDL	MS	11/08/24 22:44	Straight 25x Dilution for all elements	Kareem	OK
115	P4681-01MSDDL	Q4-WWMSDDL	MSD	11/08/24 22:53	Straight 25x Dilution for all elements	Kareem	OK
116	P4681-01ADL	Q4-WWADL	PS	11/08/24 23:07	Straight 25x Dilution for all elements	Kareem	OK
117	CCV10	CCV10	CCV	11/08/24 23:24		Kareem	OK
118	CCB10	CCB10	CCB	11/08/24 23:35		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133525

Review By	kareem	Review On	11/20/2024 11:34:50 AM
Supervise By	mohan	Supervise On	11/21/2024 1:10:00 AM

STD. NAME	STD REF.#
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084
ICV Standard	mp83085
CCV Standard	MP83088
ICSA Standard	MP83086 MP83087
CRI Standard	mp83084
LCS Standard	
Chk Standard	MP83091 MP83092

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/19/24 19:40		Kareem	OK
2	S1	S1	CAL2	11/19/24 19:45		Kareem	OK
3	S2	S2	CAL3	11/19/24 19:49		Kareem	OK
4	S3	S3	CAL4	11/19/24 19:53		Kareem	OK
5	S4	S4	CAL5	11/19/24 19:58		Kareem	OK
6	S5	S5	CAL6	11/19/24 20:02		Kareem	OK
7	ICV01	ICV01	ICV	11/19/24 20:06		Kareem	OK
8	LLICV01	LLICV01	LLICV	11/19/24 20:10		Kareem	OK
9	ICB01	ICB01	ICB	11/19/24 20:14		Kareem	OK
10	CRI01	CRI01	CRDL	11/19/24 20:19		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/19/24 20:23		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/19/24 20:27		Kareem	OK
13	CCV01	CCV01	CCV	11/19/24 20:38		Kareem	OK
14	CCB01	CCB01	CCB	11/19/24 20:47		Kareem	OK
15	P4718-03DUP	WB-307-SB02DUP	DUP	11/19/24 20:56		Kareem	OK
16	P4718-03L	WB-307-SB02L	SD	11/19/24 21:01		Kareem	OK
17	P4718-03MS	WB-307-SB02MS	MS	11/19/24 21:05	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
18	P4718-03	WB-307-SB02	SAM	11/19/24 21:09		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB133525

Review By	kareem	Review On	11/20/2024 11:34:50 AM
Supervise By	mohan	Supervise On	11/21/2024 1:10:00 AM

STD. NAME	STD REF.#
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084
ICV Standard	mp83085
CCV Standard	MP83088
ICSA Standard	MP83086 MP83087
CRI Standard	mp83084
LCS Standard	
Chk Standard	MP83091 MP83092

19	P4718-03MSD	WB-307-SB02MSD	MSD	11/19/24 21:14	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
20	P4718-03A	WB-307-SB02A	PS	11/19/24 21:18	0.1ML OF M6010 AND M6001 WERE ADDED TO 10 ML OF THE SAMPLE	Kareem	OK
21	P4341-01DL	10324-0DL	SAM	11/19/24 21:22	NOT USE	Kareem	Not Ok
22	LR1	LR1	HIGH STD	11/19/24 21:26		Kareem	OK
23	LR2	LR2	HIGH STD	11/19/24 21:31		Kareem	OK
24	CCV02	CCV02	CCV	11/19/24 21:36		Kareem	OK
25	CCB02	CCB02	CCB	11/19/24 21:42		Kareem	OK

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TCLP EXTRACTION LOGPAGE

PB164694

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-4

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-1 / T-2

TCLP Filter ID : 114771

Start Prep Date : 11/06/2024 **Time :** 16:45

End Prep Date : 11/07/2024 **Time :** 09:35

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 24 °C

Final Room Temperature: 23 °C

TCLP Technician Signature :

Supervisor By : SJ

Standared Name	MLS USED	STD REF. # FROM LOG
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

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP108622
HCL-TCLP,1N	N/A	WP108584
HNO3-TCLP,1N	N/A	WP108585
pH Strips	N/A	W1931,W1934,W2350,W2755
pH Strips	N/A	W1937,W1938,W1939,W1940,W1941,W1942
1 Liter Amber	N/A	23091
120ml Plastic bottle	N/A	21029
1:1 HNO3	MP81119	N/A

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. TUMBLER T-1 / T-2 checked,30 rpm. p4718-03 is used for MS-MSD. Particle size reduction is not required.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/07/24 11:00	SD / Cold Room	/ Metals
	Preparation Group	Analysis Group / GC

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TCLP EXTRACTION LOGPAGE

PB164694

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
P4718-03	WB-307-SB02	01	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-1
P4719-03	BAYAVE-STOCKPILE	02	100.03	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4720-05	JC-701-COMP-01	03	100.04	2000	N/A	N/A	N/A	3.5	1.0	T-1
P4722-04	WC-1(0-6)	04	100.03	2000	N/A	N/A	N/A	7.2	1.5	T-1
P4722-09	WC-2(0-6)	05	100.02	2000	N/A	N/A	N/A	7.0	1.0	T-1
P4722-14	WC-3(0-6)	06	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-1
P4732-02	PPE-COMP	07	100.00	2000	N/A	N/A	N/A	6.0	1.0	T-1
P4738-02	72-12018	08	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-1
P4739-04	TP-14	09	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4739-08	BP-G2	10	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
P4739-12	BP-B2	11	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-2
P4739-16	TP-11	12	100.04	2000	N/A	N/A	N/A	8.2	1.5	T-2
PB164694TB	LEB694	13	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
P4718-03	WB-307-SB02	N/A	N/A	N/A	N/A	100	N/A
P4719-03	BAYAVE-STOCKPILE	N/A	N/A	N/A	N/A	100	N/A
P4720-05	JC-701-COMP-01	N/A	N/A	N/A	N/A	100	N/A
P4722-04	WC-1(0-6)	N/A	N/A	N/A	N/A	100	N/A
P4722-09	WC-2(0-6)	N/A	N/A	N/A	N/A	100	N/A
P4722-14	WC-3(0-6)	N/A	N/A	N/A	N/A	100	N/A
P4732-02	PPE-COMP	N/A	N/A	N/A	N/A	100	N/A
P4738-02	72-12018	N/A	N/A	N/A	N/A	100	N/A
P4739-04	TP-14	N/A	N/A	N/A	N/A	100	N/A
P4739-08	BP-G2	N/A	N/A	N/A	N/A	100	N/A
P4739-12	BP-B2	N/A	N/A	N/A	N/A	100	N/A
P4739-16	TP-11	N/A	N/A	N/A	N/A	100	N/A
PB164694TB	LEB694	N/A	N/A	N/A	N/A	N/A	N/A

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TCLP Fluid Determination

PB164694

Hot Block ID : WC S-1 /WC S-2

Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
P4718-03	WB-307-SB02	5.02	96.5	8.4	3.0	#1	4.94
P4719-03	BAYAVE-STOCKPILE	5.01	96.5	8.4	3.0	#1	4.94
P4720-05	JC-701-COMP-01	5.02	96.5	6.0	2.0	#1	4.94
P4722-04	WC-1(0-6)	5.03	96.5	9.4	4.0	#1	4.94
P4722-09	WC-2(0-6)	5.02	96.5	9.0	3.5	#1	4.94
P4722-14	WC-3(0-6)	5.01	96.5	8.6	3.5	#1	4.94
P4732-02	PPE-COMP	5.00	96.5	8.4	3.0	#1	4.94
P4738-02	72-12018	5.02	96.5	7.0	2.5	#1	4.94
P4739-04	TP-14	5.03	96.5	7.2	2.5	#1	4.94
P4739-08	BP-G2	5.04	96.5	8.0	3.0	#1	4.94
P4739-12	BP-B2	5.02	96.5	7.6	2.5	#1	4.94
P4739-16	TP-11	5.01	96.5	10.0	4.0	#1	4.94
PB164694TB	LEB694	N/A	N/A	N/A	N/A	#1	4.94

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Prep Standard - Chemical Standard Summary

Order ID : P4718

Test : TCLP ICP Metals,TCLP Mercury

Prepbatch ID : PB164768,PB164791,

Sequence ID/Qc Batch ID: LB133352,LB133365,LB133365,LB133365,LB133365,LB133525,

Standard ID :
MP82651,MP82652,MP82653,MP82654,MP83078,MP83078 MP83079 MP73080 MP83081 MP83082 MP83084,MP83080,MP83083,MP83085,MP83086,MP83086 MP83087,MP83088,MP83091,MP83091 MP83092,MP83105,MP83106,MP83107,MP83108,MP83109,MP83110,MP83111,MP83112,MP83113,MP83114,MP831 15,MP83116,MP83117,MP83118,MP83159,

Chemical ID :
M4371,M4465,M4916,M5062,M5130,M5192,M5218,M5223,M5288,M5295,M5296,M5390,M5394,M5429,M5467,M5498 ,M5501,M5515,M5658,M5673,M5697,M5698,M5747,M5748,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M581 4,M5815,M5816,M5817,M5818,M5819,M5820,M5875,M5882,M5953,M5962,M5970,M5978,M5982,M5984,M5985,M60 00,M6009,M6021,M6023,M6028,M6030,M6033,M6080,M6111,M6115,M6116,M6117,mp83084,mp83085,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	MP82651	09/30/2024	03/25/2025	Mohan Bera	None	None	Sarabjit Jaswal 10/04/2024

FROM 1600.00000ml of M5673 + 800.00000ml of M6080 = Final Quantity: 3200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP82652	09/30/2024	04/03/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/04/2024

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 %	MP82653	09/30/2024	04/03/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/04/2024

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	MP82654	09/30/2024	04/03/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/04/2024

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5501 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP83078	11/06/2024	12/06/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 125.00000ml of M6111 + 2350.00000ml of W3112 + 25.00000ml of M6117 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP83080	11/06/2024	12/06/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 50.00000ml of MP83078 + 50.00000ml of MP83079 = 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
2950	ICP AES S1/CRI STOCK STD	MP83083	11/06/2024	12/06/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 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 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 M5498 + 1.00000ml of M5769 + 1.00000ml of M5806 + 1.00000ml of M5978 + 2.00000ml of M5816 + 2.00000ml of M5818 + 77.68000ml of MP83078 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
912	ICP AES ICV SOLN	MP83085	11/06/2024	12/06/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.25000ml of M5218 + 0.25000ml of M5982 + 10.00000ml of M5295 + 89.77500ml of MP83078 = 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	MP83086	11/06/2024	11/19/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 25.00000ml of M5130 + 225.00000ml of MP83078 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP83088	11/06/2024	12/06/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 50.00000ml of MP83078 + 50.00000ml of MP83079 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP83091	11/06/2024	12/06/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 11/07/2024

FROM 1.00000ml of M5984 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6117 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP83105	11/07/2024	12/06/2024	Janvi Patel	None	None	Sarabjit Jaswal 11/07/2024

FROM 1000.00000ml of M6111 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP83106	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 1.00000ml of M6116 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP83107	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP83108	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 247.30000ml of W3112 + 0.20000ml of MP83106 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP83109	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 245.00000ml of W3112 + 2.50000ml of MP83106 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP83110	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 242.50000ml of W3112 + 5.00000ml of MP83106 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP83111	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 240.00000ml of W3112 + 7.50000ml of MP83106 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP83112	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 237.50000ml of W3112 + 10.00000ml of MP83106 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP83113	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M5953 + 2.50000ml of M6116 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP83114	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP83115	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 485.00000ml of W3112 + 5.00000ml of M6116 + 10.00000ml of MP83106 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP83116	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 495.00000ml of W3112 + 5.00000ml of M6115 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP83117	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 247.30000ml of W3112 + 0.20000ml of MP83106 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP83118	11/07/2024	11/08/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 11/07/2024

FROM 2.50000ml of M6116 + 240.50000ml of W3112 + 7.00000ml of MP83106 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP83159	11/08/2024	11/09/2024	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 11/08/2024

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6111 = 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 /	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	11/19/2024	05/20/2024 /	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	11/19/2024	05/20/2024 /	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	02/20/2020 / 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	11/28/2022 / bin	09/19/2022 / bin	M5394

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	07/24/2023 / mohan	04/14/2023 / mohan	M5501

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	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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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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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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	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 #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	01/01/2025	07/01/2024 / mohan	03/30/2023 / mohan	M5953

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

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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.	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	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	02/20/2029	08/05/2024 / kareem	06/14/2024 / Jaswal	M5984

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGIN10-5 / INDIUM 1 x 500 ml	U2-IN729349	02/21/2028	10/08/2024 / Jaswal	06/14/2024 / Jaswal	M5985

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/30/2026	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6000

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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-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	01/25/2019 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/07/2024 / Jaswal	01/03/2024 / Jaswal	M6033

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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-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2025	10/02/2024 / Janvi	09/02/2024 / Janvi	M6080

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)	22F0762009	05/09/2027	11/04/2024 / Eman	09/29/2024 / Janvi	M6111

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	05/04/2025	11/02/2024 / Janvi	09/29/2024 / Eman	M6115

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	05/03/2025	11/04/2024 / Janvi	09/29/2024 / Eman	M6116

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	05/06/2025	11/06/2024 / Janvi	09/29/2024 / Eman	M6117

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Certificate of Analysis

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R 8/5/24

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

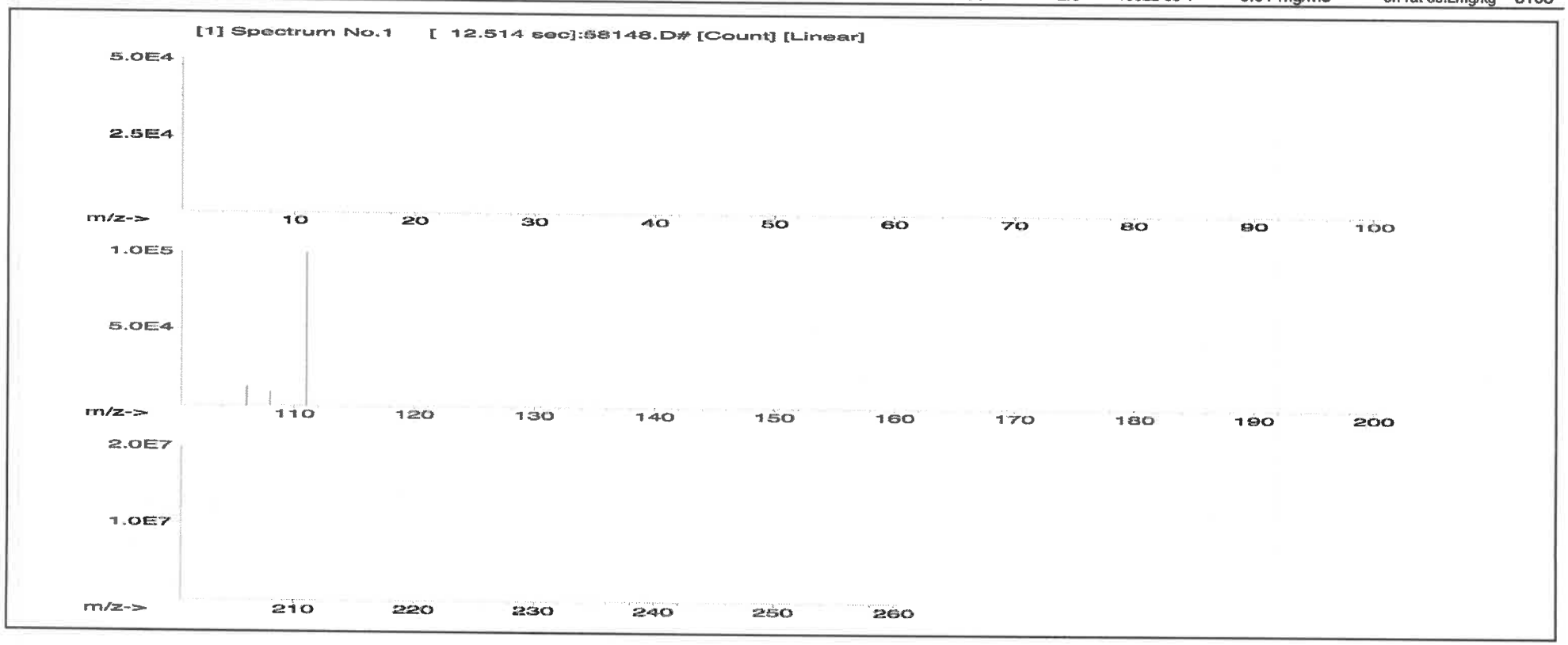
CERTIFIED WEIGHT REPORT:

Part Number:	**57048**		**Lot #**		
Lot Number:	**070124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Cadmium (Cd)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	070124
Reviewed By:	Pedro L. Rentas	070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

M5296 OP: 09/19/2022 BH

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	S2-MEB711673
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 6 µg/mL**	**Molybdenum, Mo**	**1 000 ± 6 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 6 µg/mL**
Titanium, Ti	**1 000 ± 7 µg/mL**		

Density: 1.030 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 250 µg/mL ea: Silver, Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**2 000 ± 7 µg/mL**	**Barium, Ba**	**2 000 ± 9 µg/mL**
Beryllium, Be	**50.00 ± 0.26 µg/mL**	**Calcium, Ca**	**5 000 ± 22 µg/mL**
Chromium, Cr	**200.0 ± 1.0 µg/mL**	**Cobalt, Co**	**500.0 ± 2.4 µg/mL**
Copper, Cu	**250.0 ± 1.0 µg/mL**	**Iron, Fe**	**1 000 ± 4 µg/mL**
Magnesium, Mg	**5 000 ± 20 µg/mL**	**Manganese, Mn**	**500.0 ± 2.0 µg/mL**
Nickel, Ni	**500.0 ± 2.2 µg/mL**	**Potassium, K**	**5 000 ± 19 µg/mL**
Silver, Ag	**250.0 ± 1.1 µg/mL**	**Sodium, Na**	**5 000 ± 18 µg/mL**
Vanadium, V	**499.7 ± 2.2 µg/mL**	**Zinc, Zn**	**500.0 ± 2.2 µg/mL**

Density: 1.118 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

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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

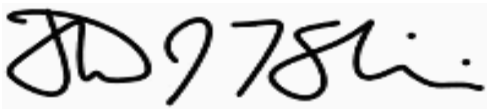
- Sealed TCT Bag Open Date: _____

- 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.

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- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 13, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 13, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

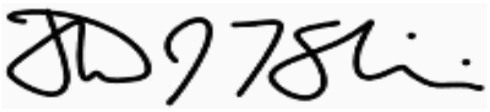
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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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



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RD:05/14/2024

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Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 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

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- 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.

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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 HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

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:

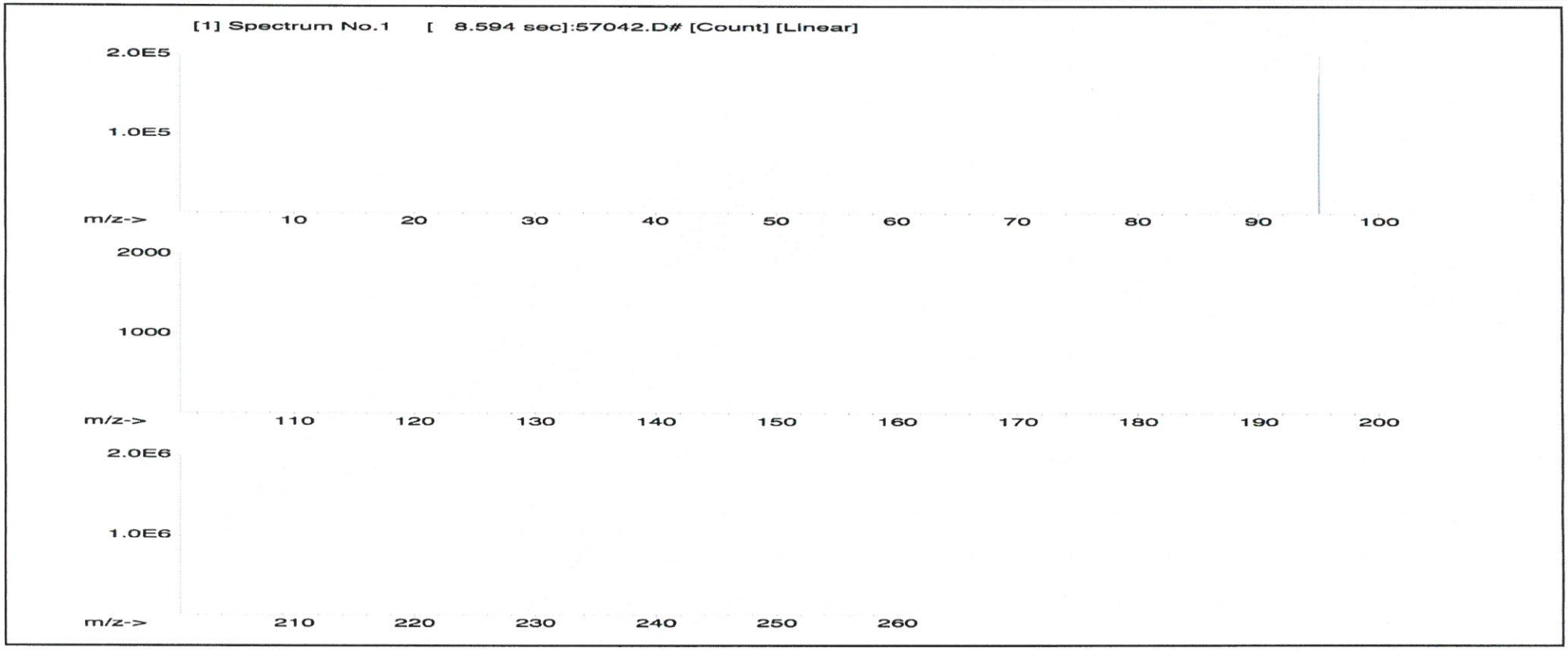
Part Number: 57042
Lot Number: 051722
Description: Molybdenum (Mo)

	Lot #	Solvent:	
	MKBQ8597V	Ammonium hydroxide	
	0.5%	15.0 (mL)	Ammonium hydroxide

Expiration Date: 051725
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Volume shown below was diluted to (mL): 3000.41 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	051722
Reviewed By:	Pedro L. Rentas	051722

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium molybdate (Mo)	58142	022222	0.1000	300.0	0.084	1000	10001.0	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	T	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-QC-4
Lot Number:	S2-MEB711674
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 7 µg/mL**	**Molybdenum, Mo**	**1 000 ± 5 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 5 µg/mL**
Titanium, Ti	**1 001 ± 6 µg/mL**		

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

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.

V15200 R: 04/24/22 (BP)

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800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

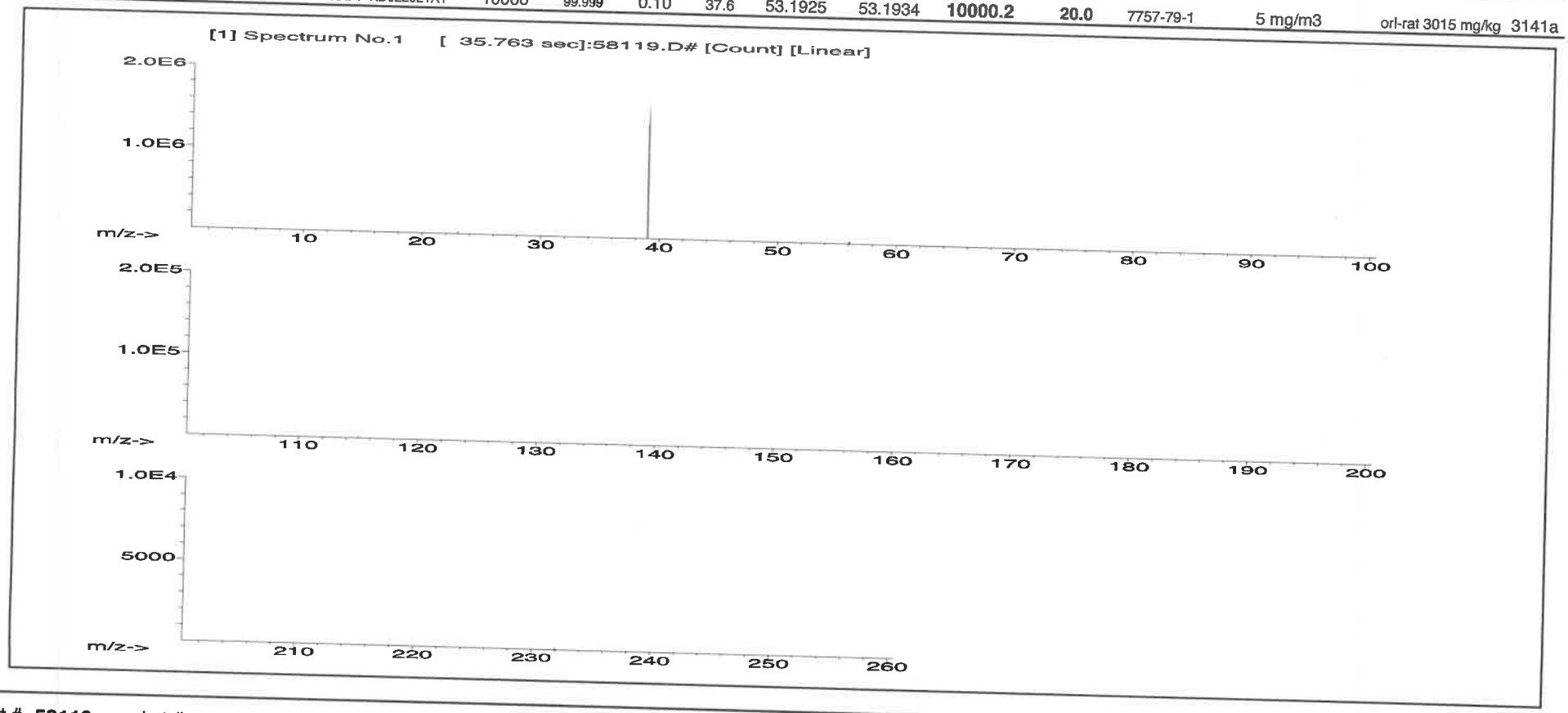
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

		Lot #	
Solvent:	20510011		Nitric Acid
2%	40.0 (mL)		Nitric Acid
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	071122
Reviewed By:	Pedro L. Rentas	071122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	**10000.2**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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800-368-1131
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R: 09/08/22 (BH)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

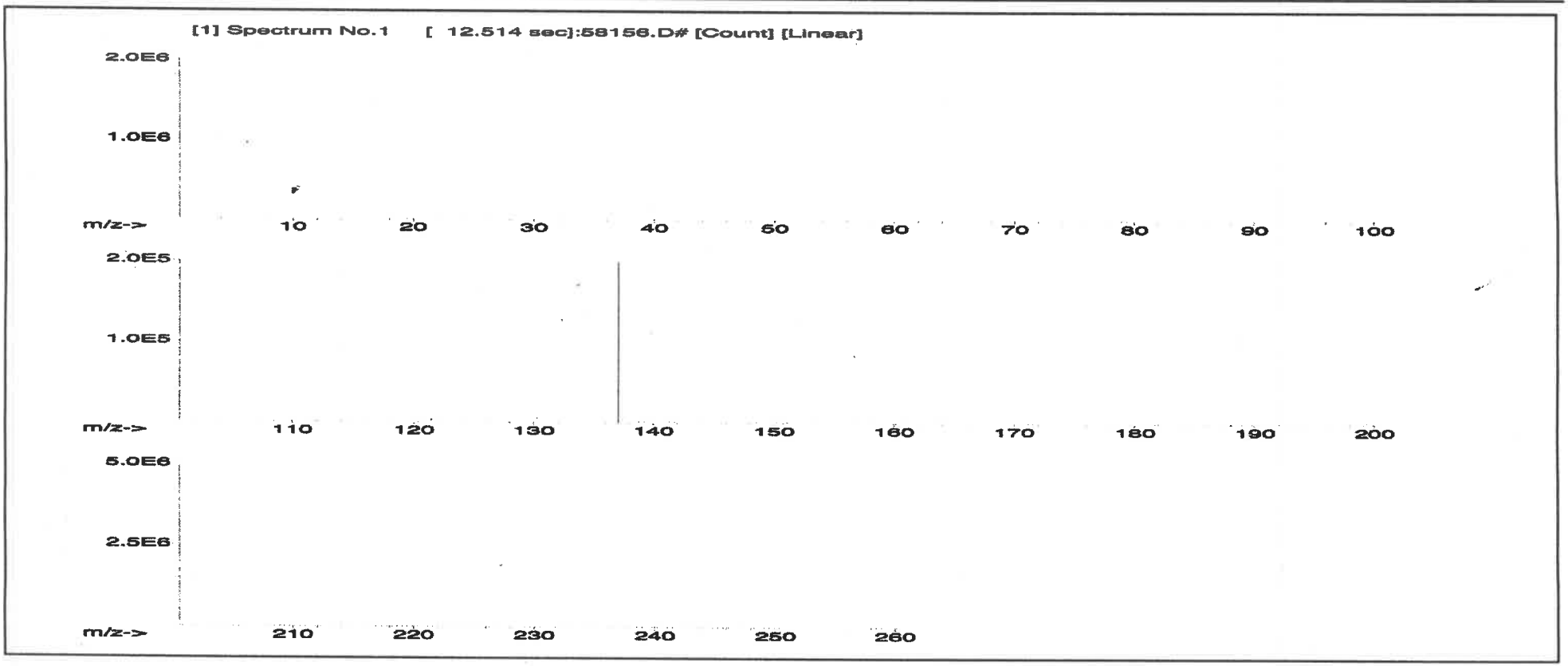
CERTIFIED WEIGHT REPORT:

		Lot #		
Part Number:	**57056**	**Solvent:**	20510011	Nitric Acid
Lot Number:	**072122**			
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 Reference Material CRM

M5429 R1 01/26/23 BH

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AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

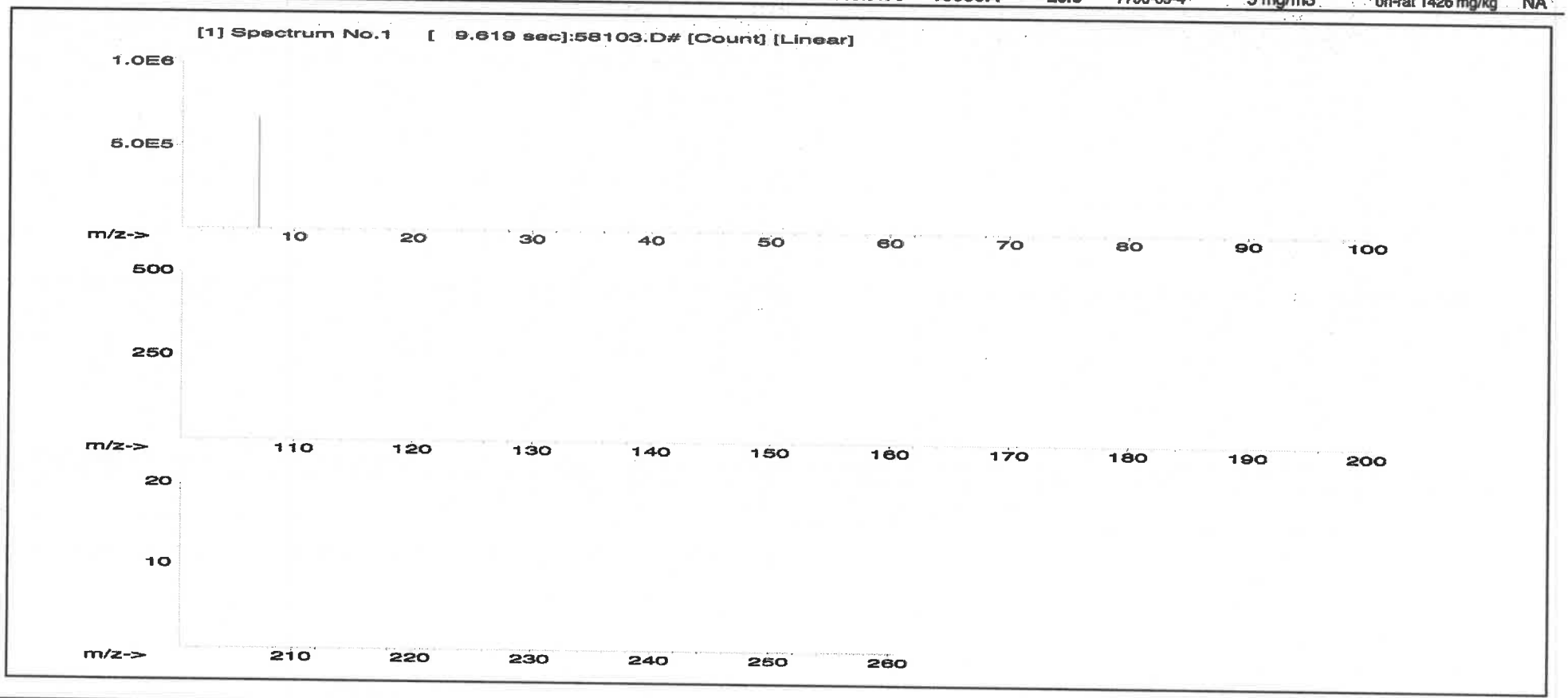
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	070622
Reviewed By:	Pedro L. Rentas	070622

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	IN019	LIZ042018A1	10000	99.999	0.10	10.0	100.0134	100.0173	**10000.4**	**20.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
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Certified Reference Material CRM

M5467 R: 03/01/23 (LA)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 020623
Description: Cerium (Ce)

Expiration Date: 020626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

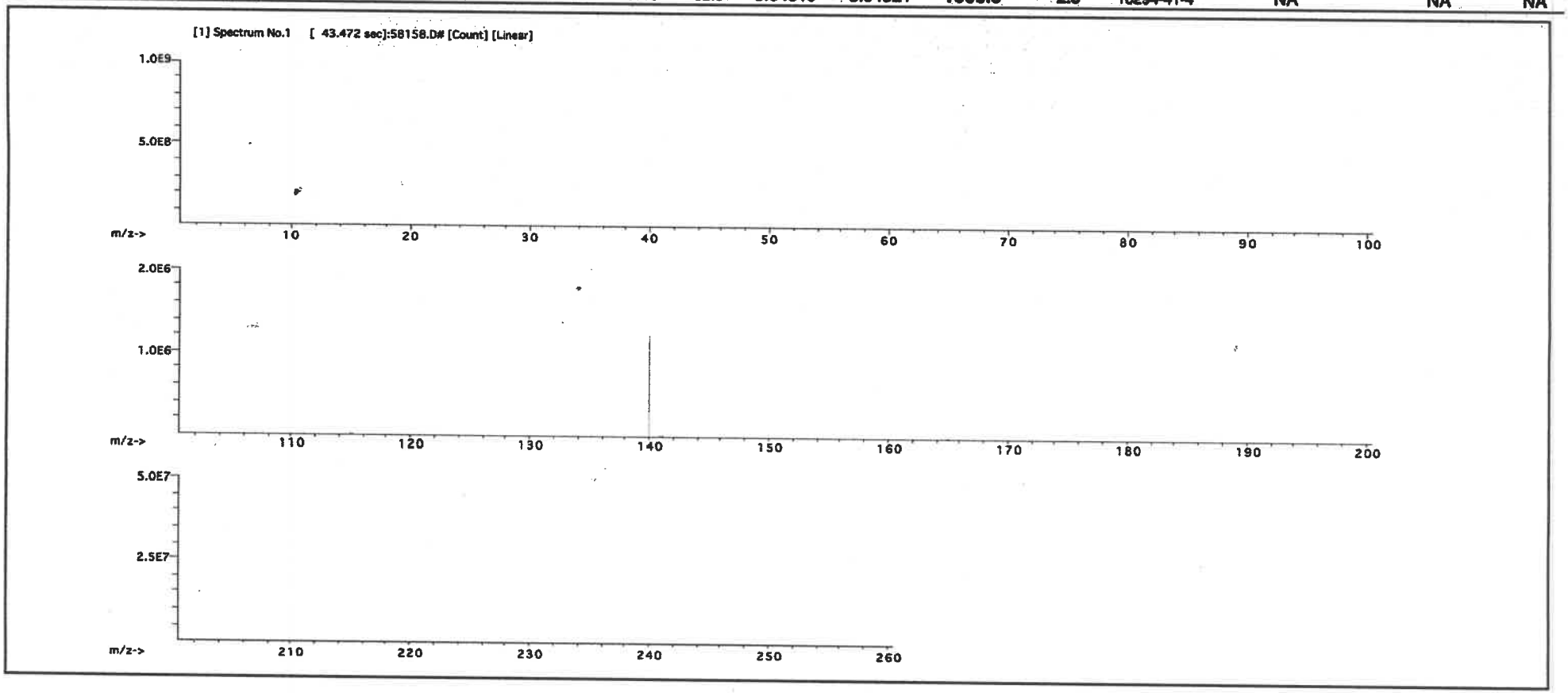
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	020623
Reviewed By:	Pedro L. Rentas	020623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04921	**1000.0**	**2.0**	10294-41-4	NA	NA	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	T	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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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IN5497 - IN5498 R: 03/17/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

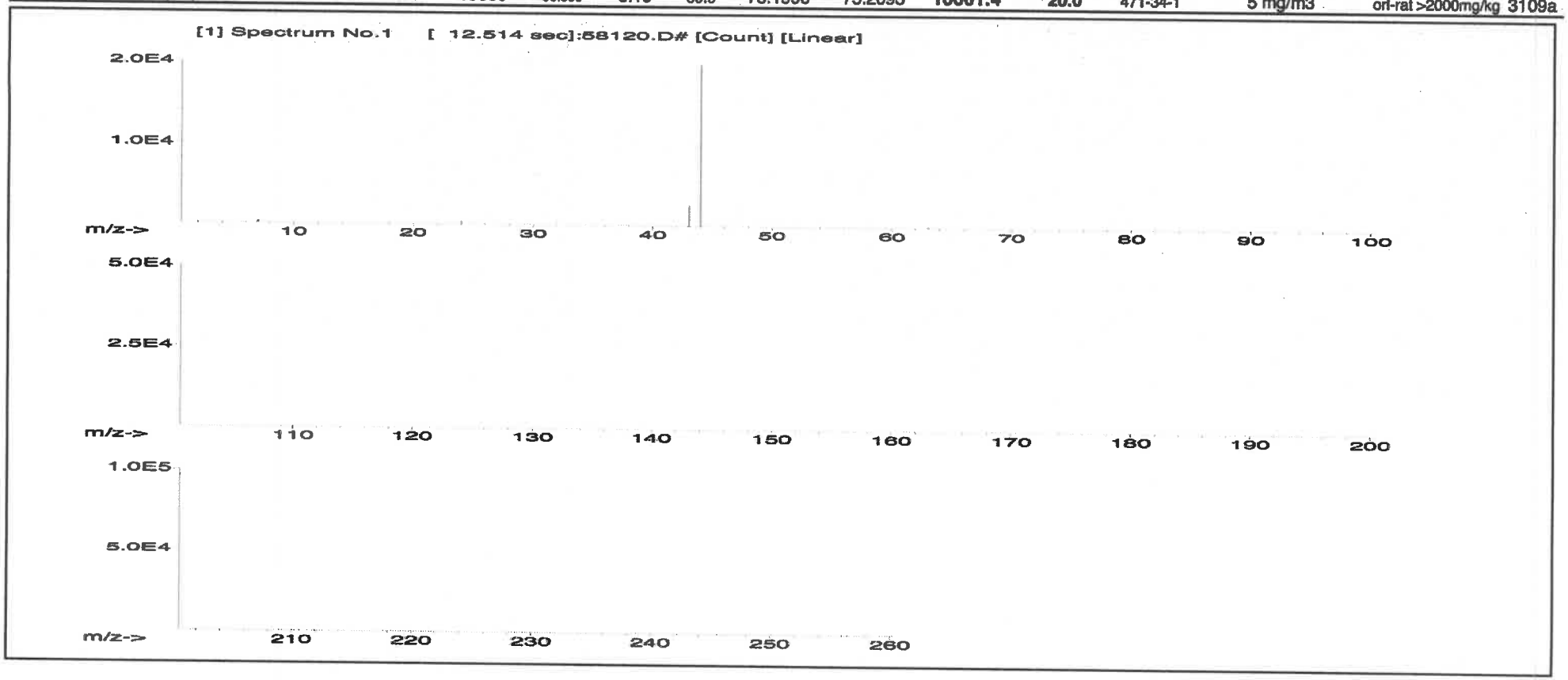
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



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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).

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

M5493 - M5708
Added 4/14/23
JMG

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 2

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 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

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M5514 - M5515 R: 03/17/22

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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 ± 0.12 Flask Uncertainty

	Lot #		
Solvent:	20510011	Nitric Acid	
7.0%	350.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

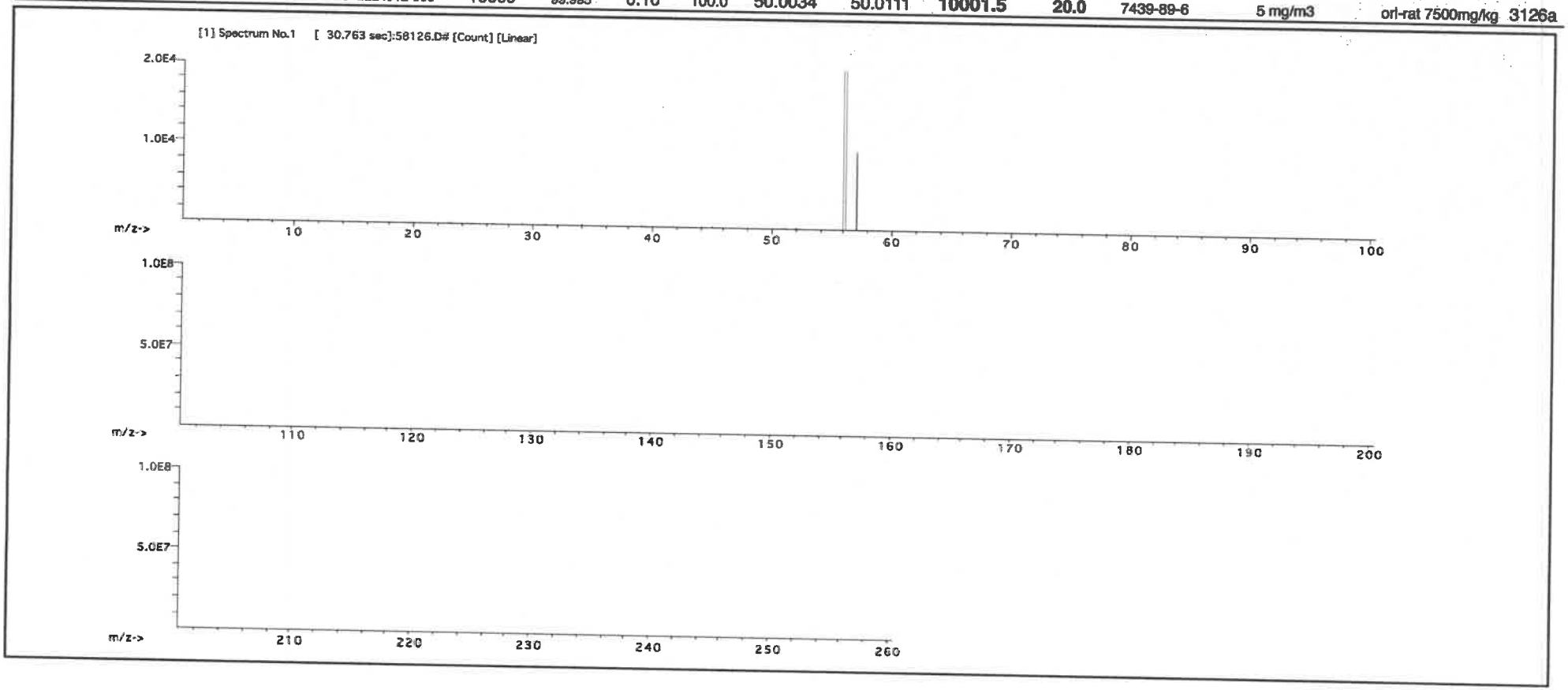
Giovanni Esposito

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



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:

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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M5658 R ! 8/25/23

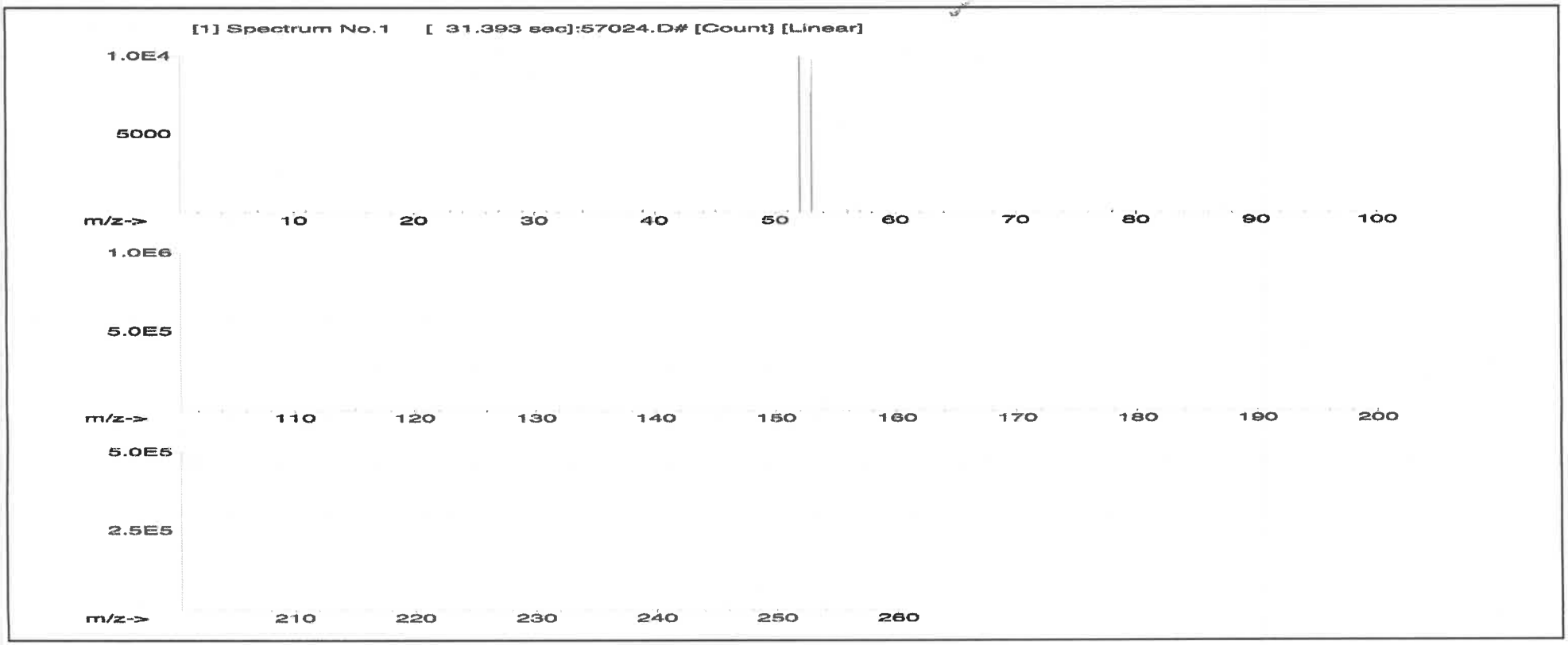
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CERTIFIED WEIGHT REPORT:

		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



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:

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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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Certified Reference Material CRM

M5697 R: 10/27/23

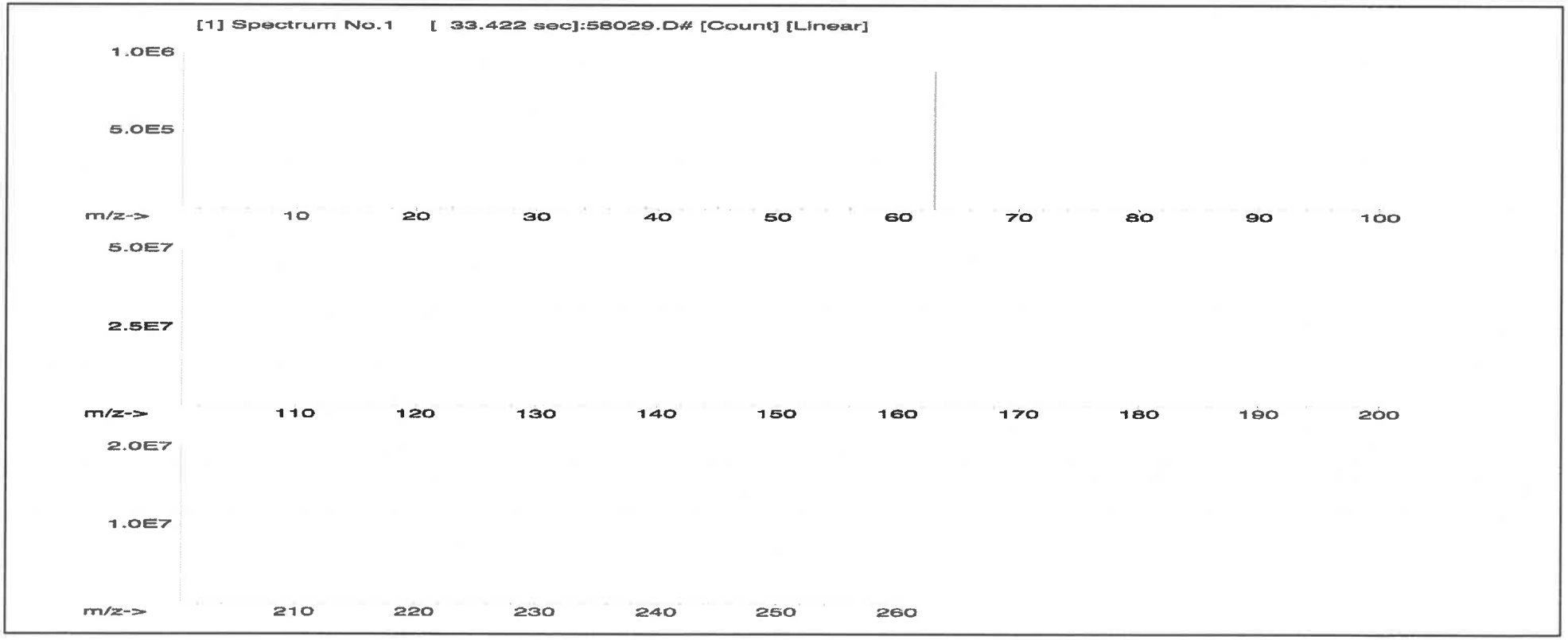
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
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Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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M5648 R: 10/27/23

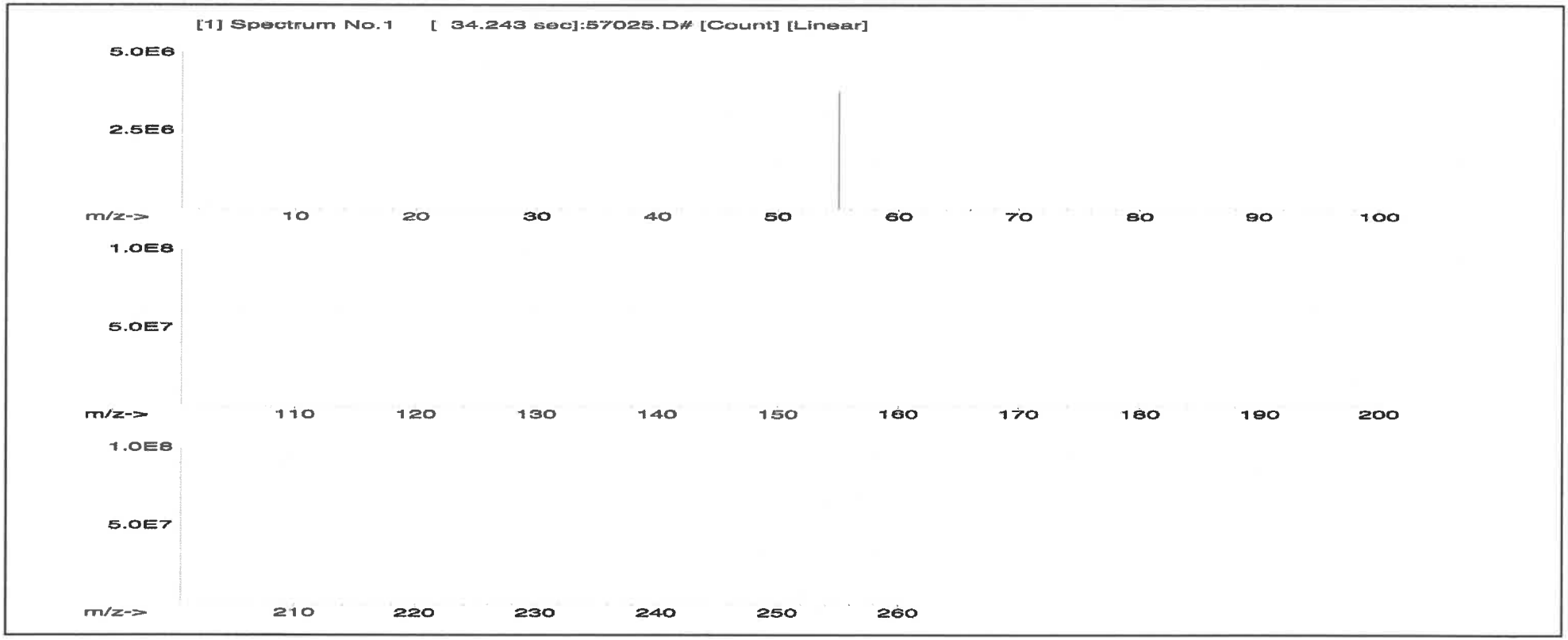
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CERTIFIED WEIGHT REPORT:

		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



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

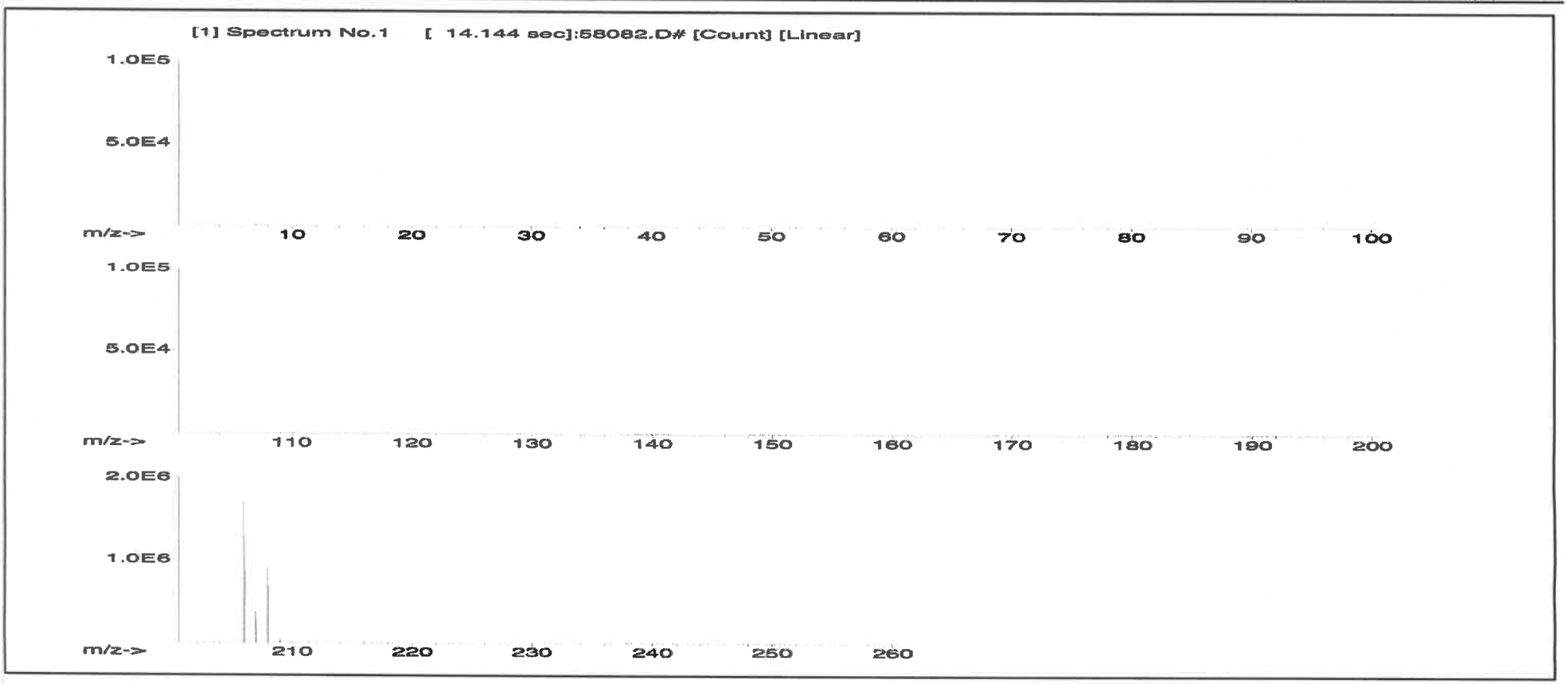
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* All 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

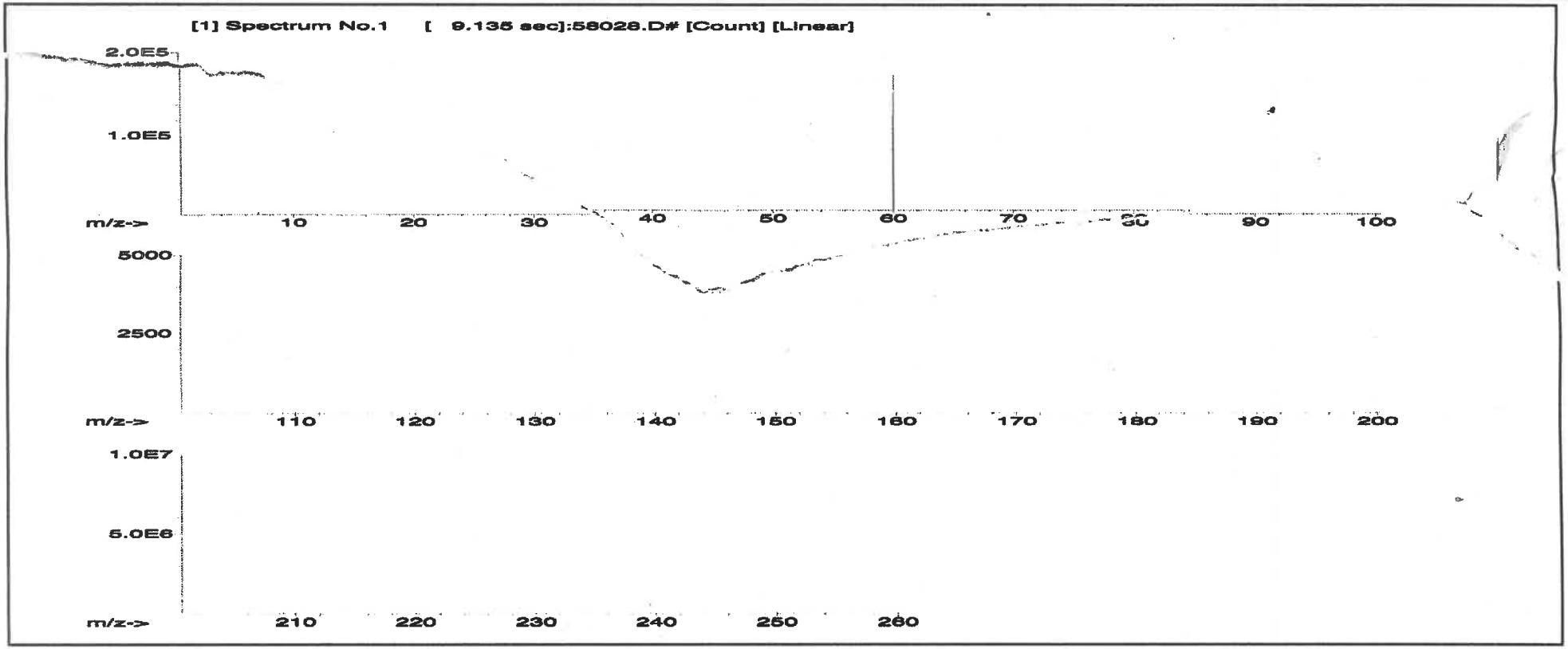
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CERTIFIED WEIGHT REPORT:

		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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* 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

M5768, M5769 (BP) R: 1/3/24

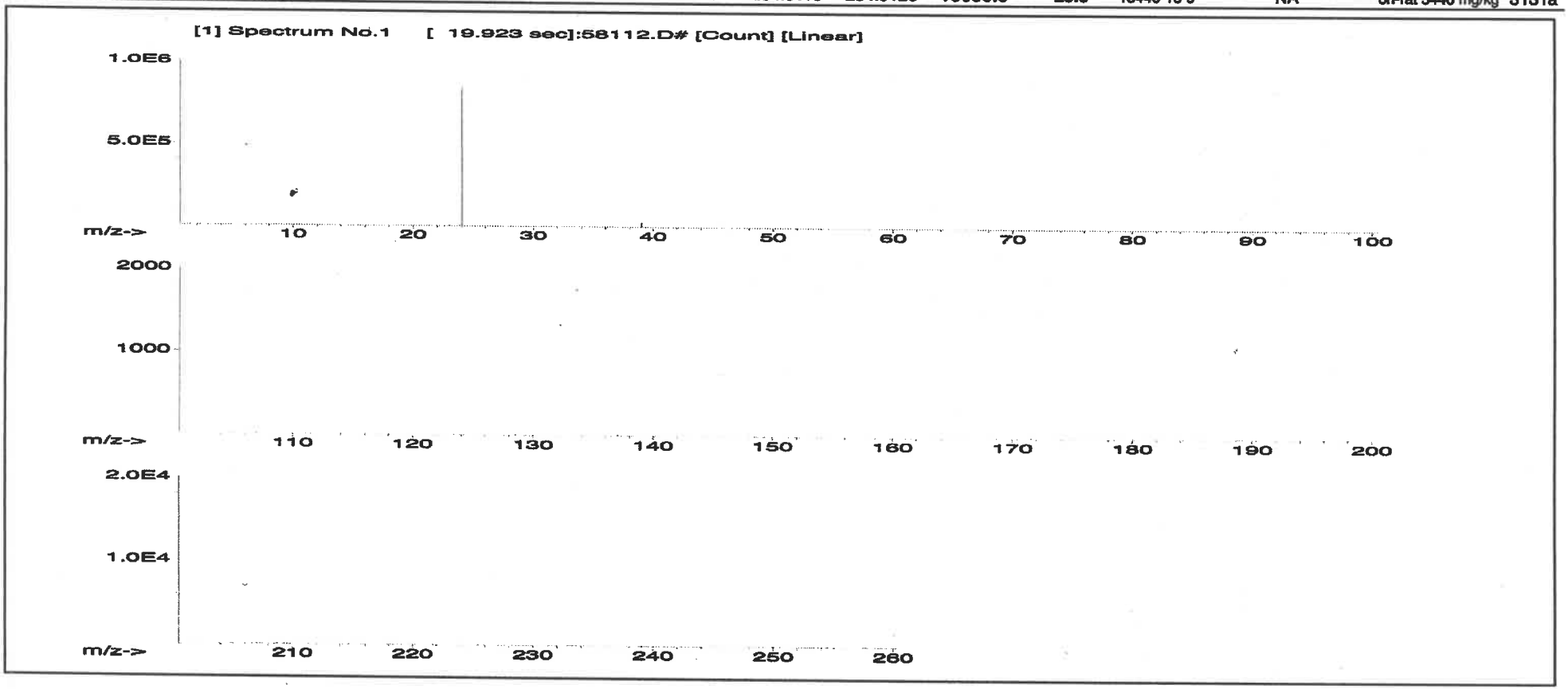
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid
		5E-05	Balance Uncertainty

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 02/09/24 M5798

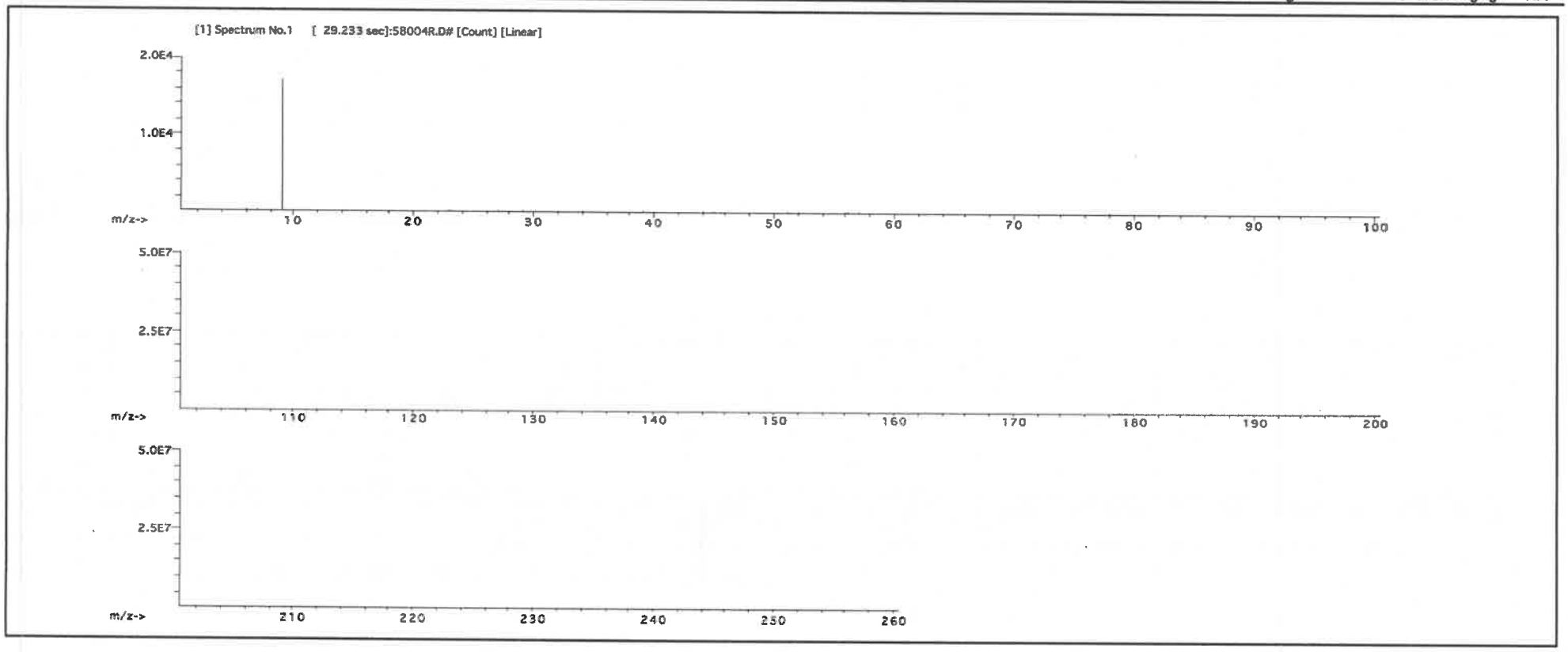
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CERTIFIED WEIGHT REPORT:

		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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

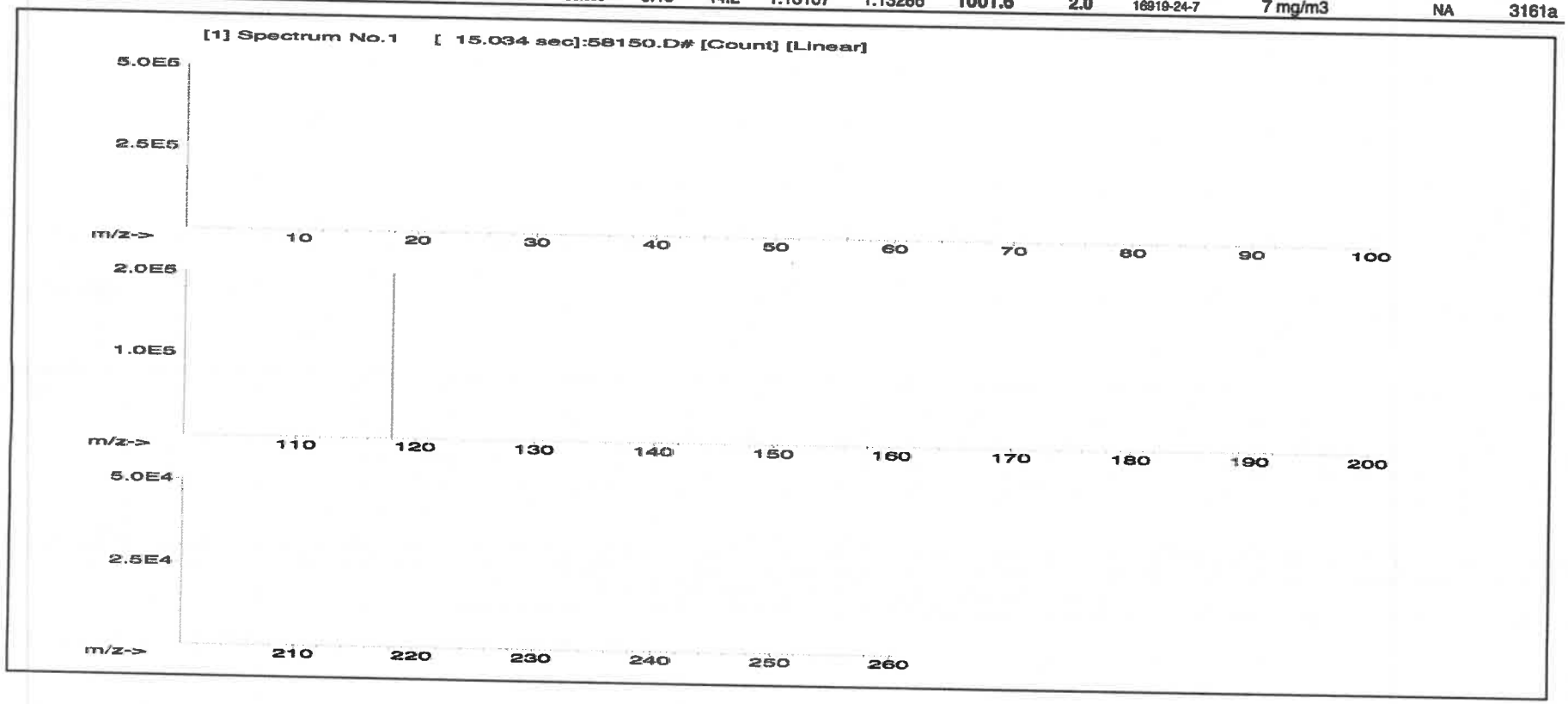
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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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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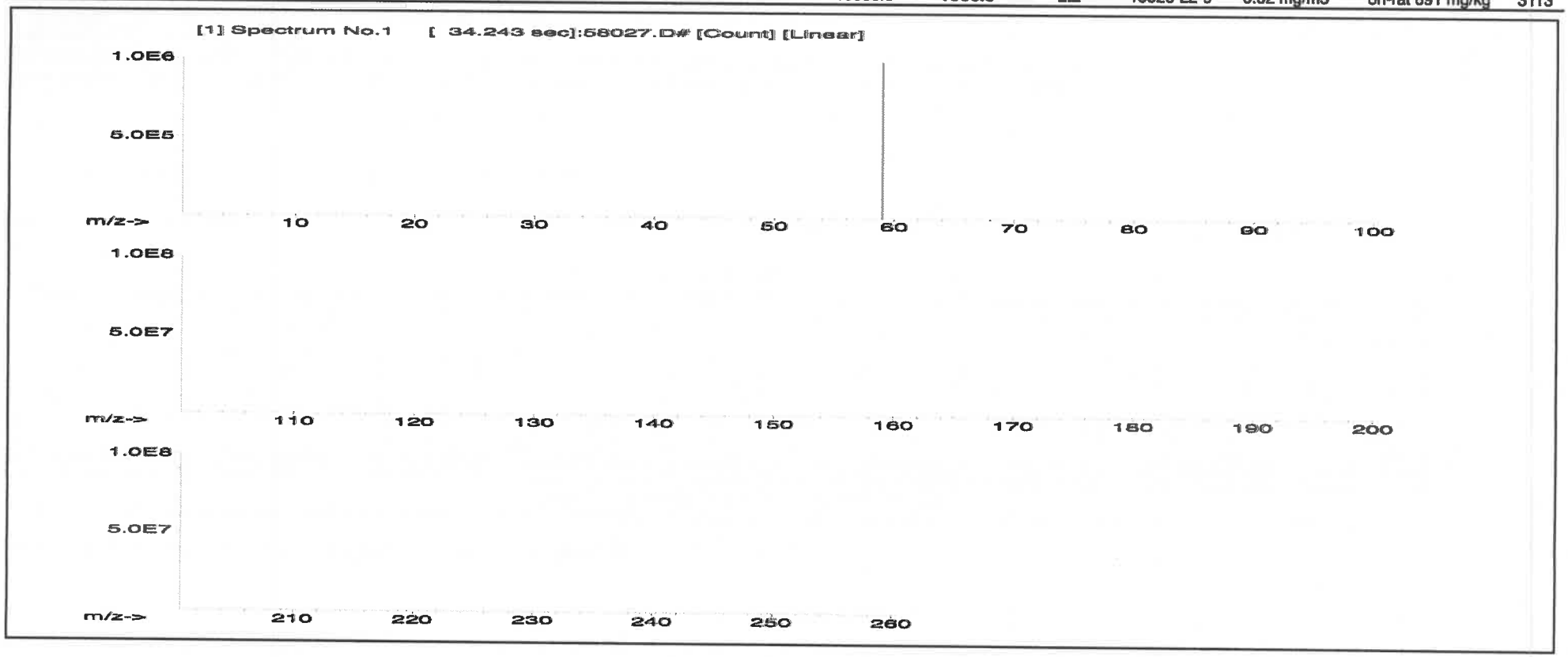
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CERTIFIED WEIGHT REPORT:

		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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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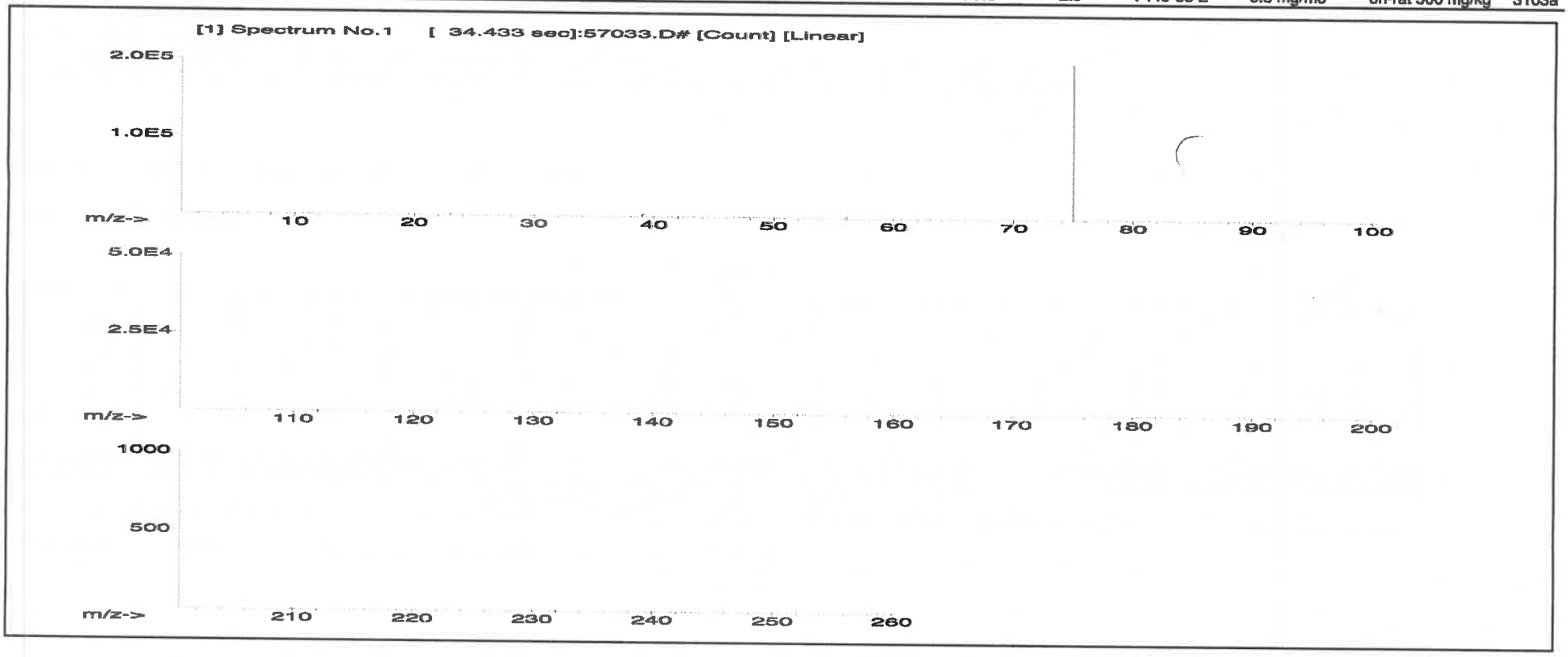
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CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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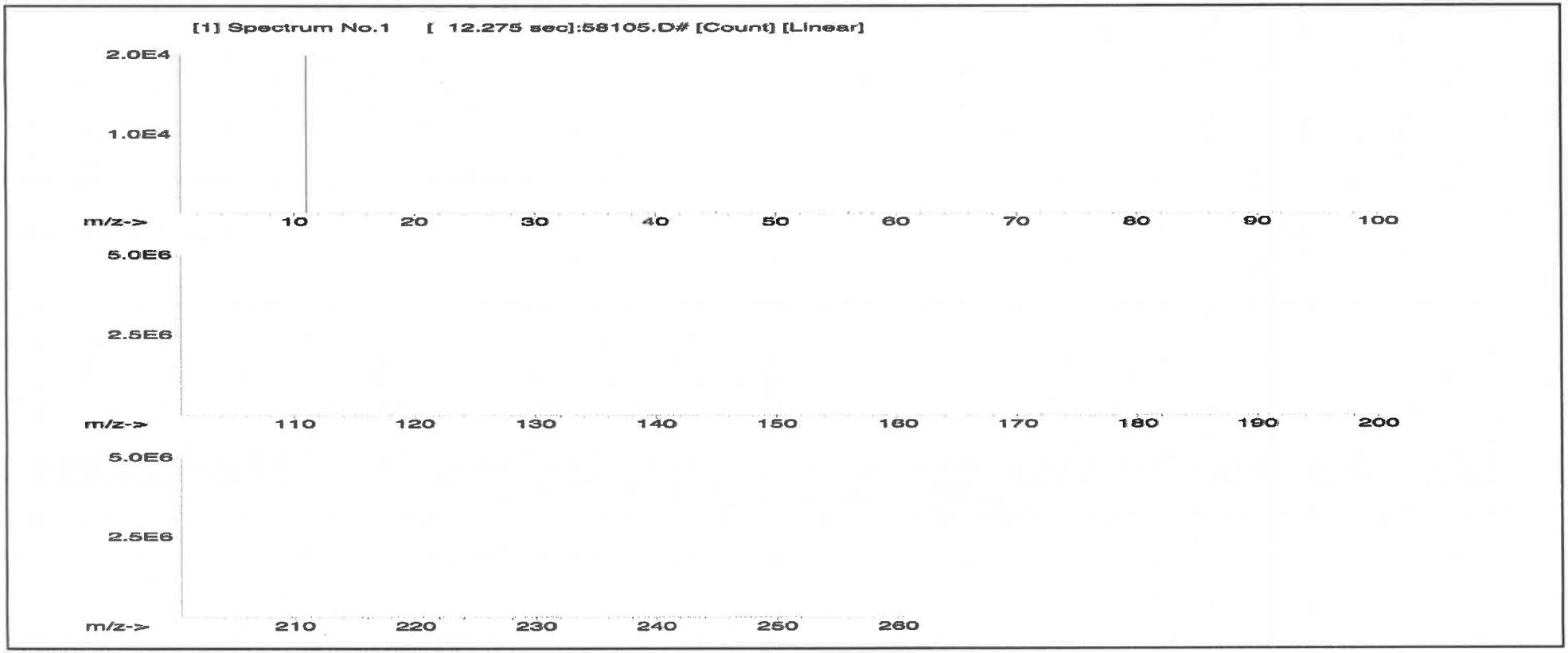
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CERTIFIED WEIGHT REPORT:

Part Number:	**57005**		**Solvent:**	MKBQ8597V	Ammonium hydroxide
Lot Number:	**071123**				
Description:	**Boron (B)**		2.0%	40.0 (mL)	Ammonium hydroxide
Expiration Date:	071126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	1999.48	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Boric acid (B)	IN018	BV092016A1	1000	99.9999	0.10	17.3	11.55772	11.56201	**1000.4**	**2.0**	10043-35-3	2 mg/m3	orl-rat 2660 mg/kg	3107



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	T	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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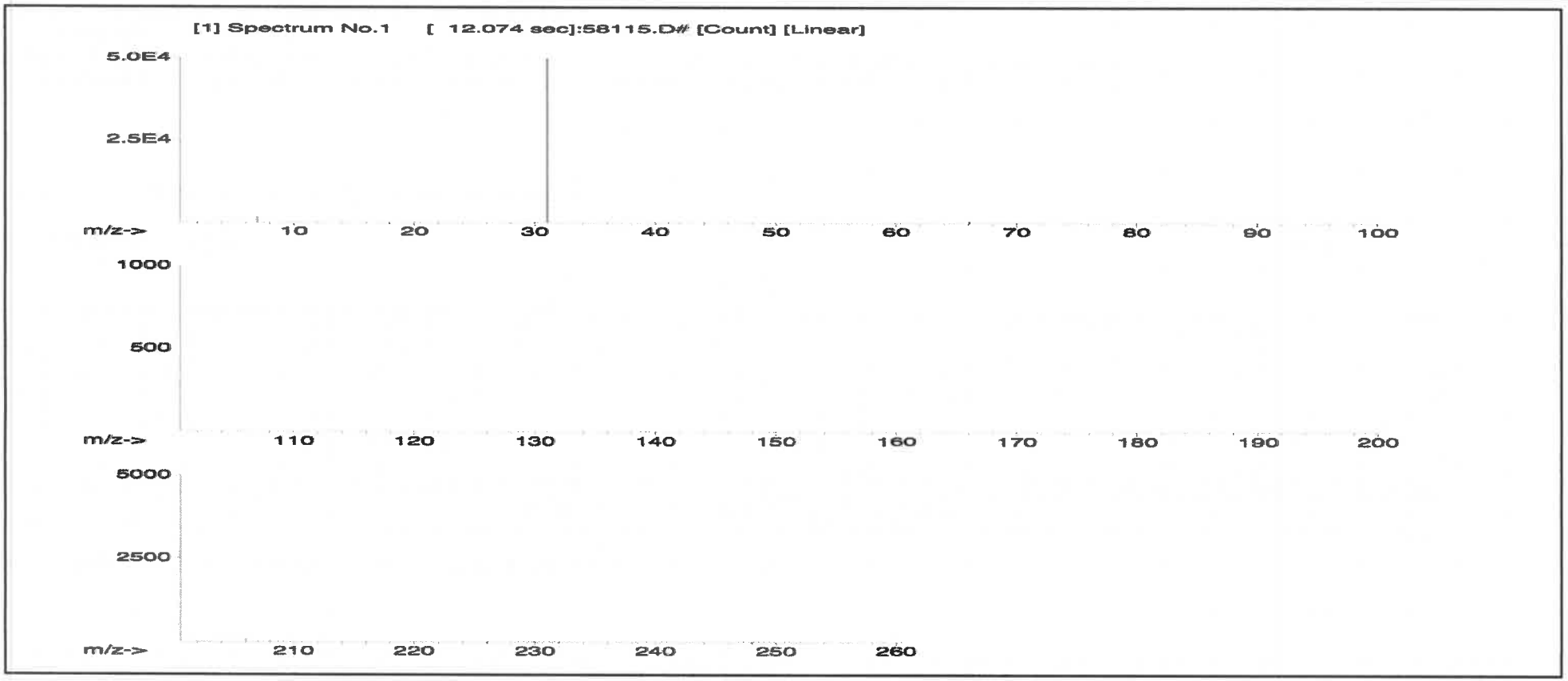
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CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	**57115**	**Solvent:**	21110221	Nitric Acid
Lot Number:	**041723**			
Description:	**Phosphorous (P)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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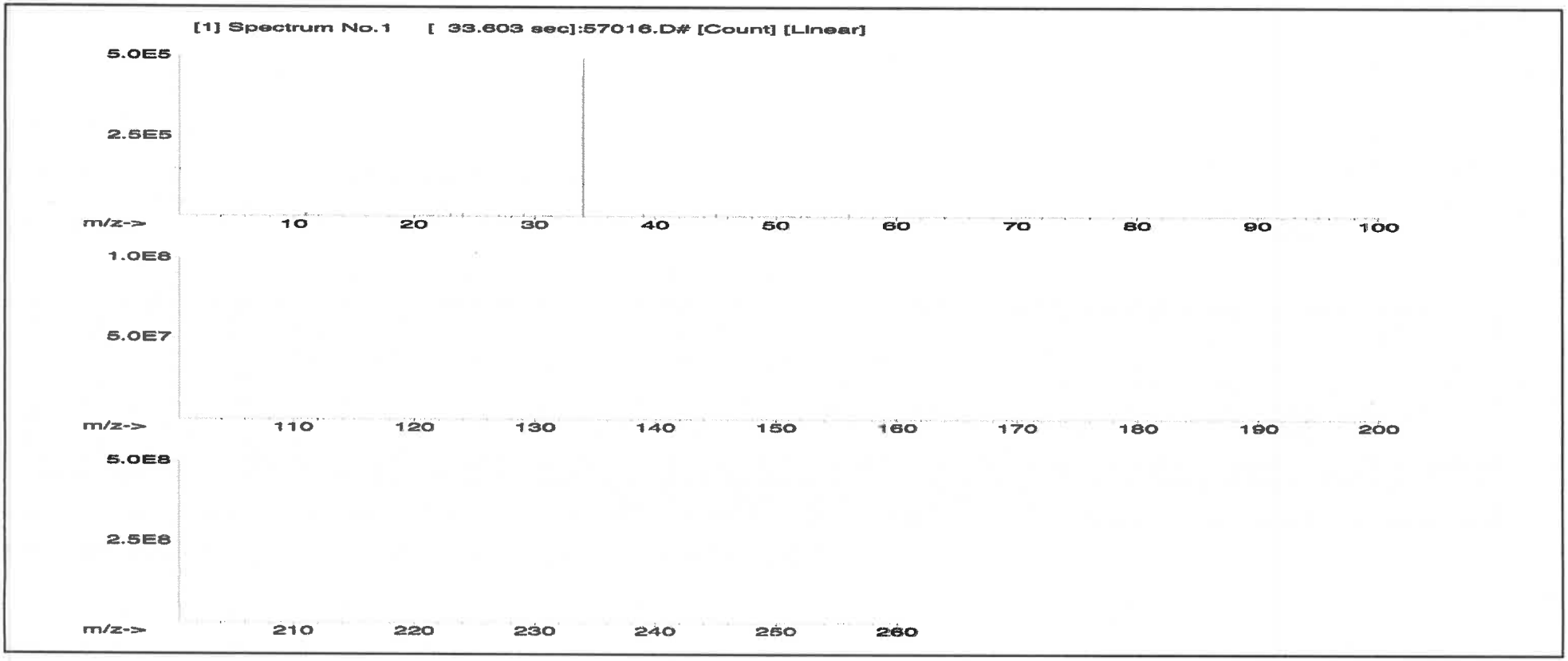
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CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	**Lot #** 122923	ASTM Type 1 Water
Lot Number:	**122923**			
Description:	**Sulfur (S)**			
Expiration Date:	122926			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



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:

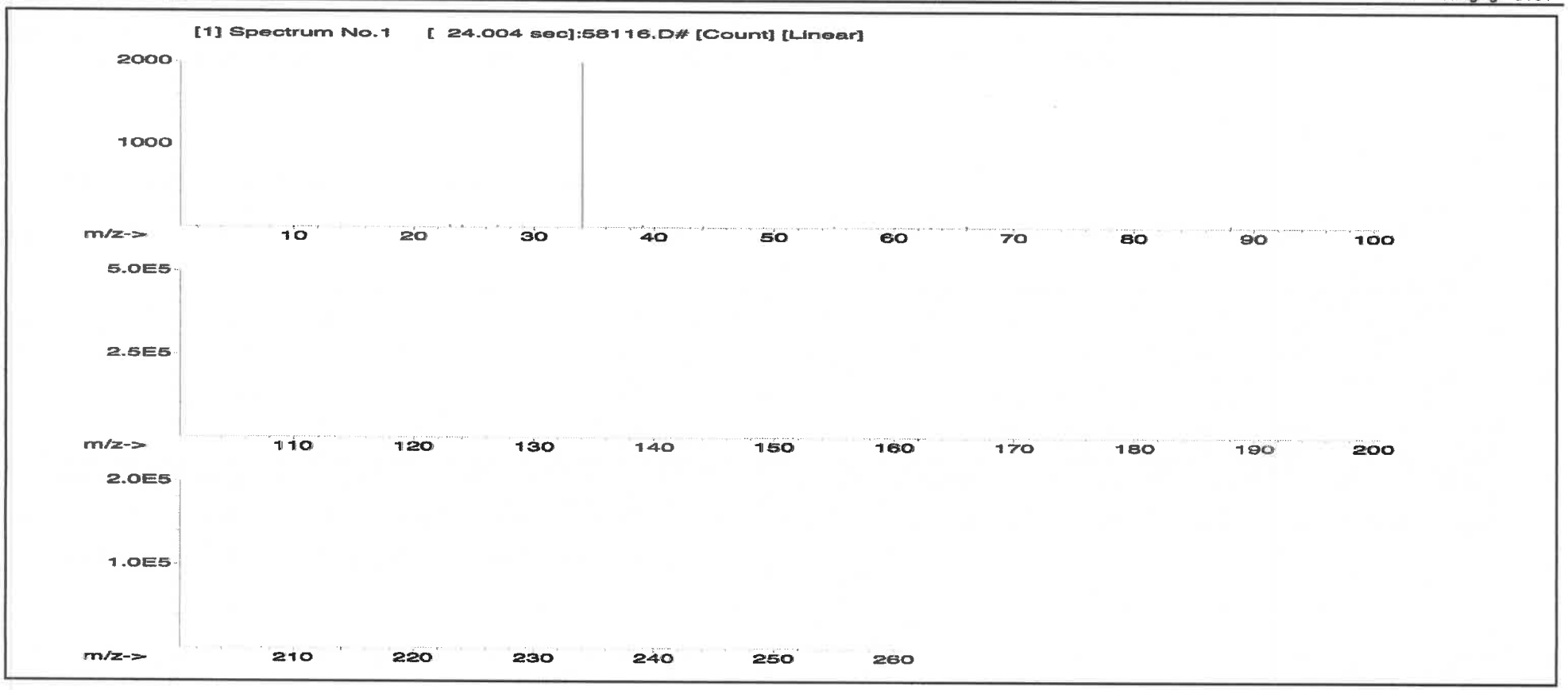
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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).

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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

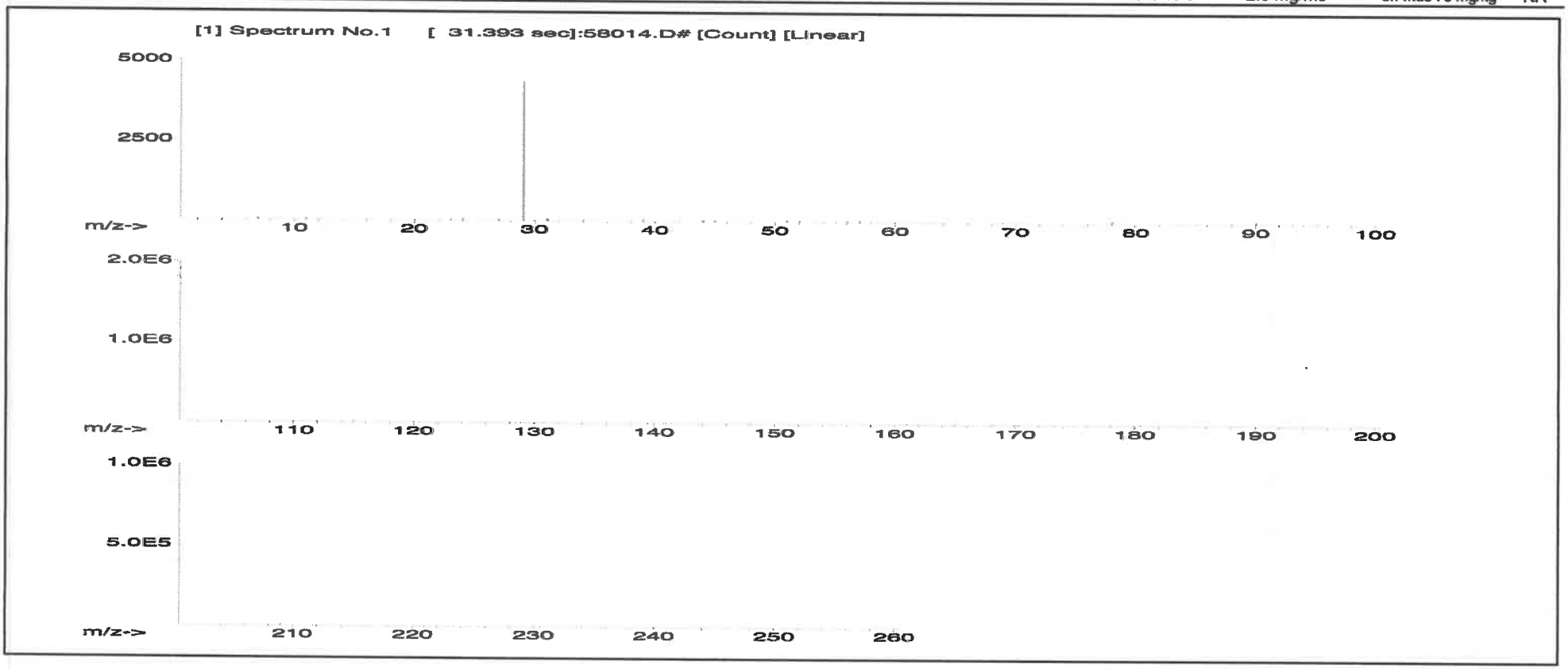
Aleah O'Brady

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



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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 M5819

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

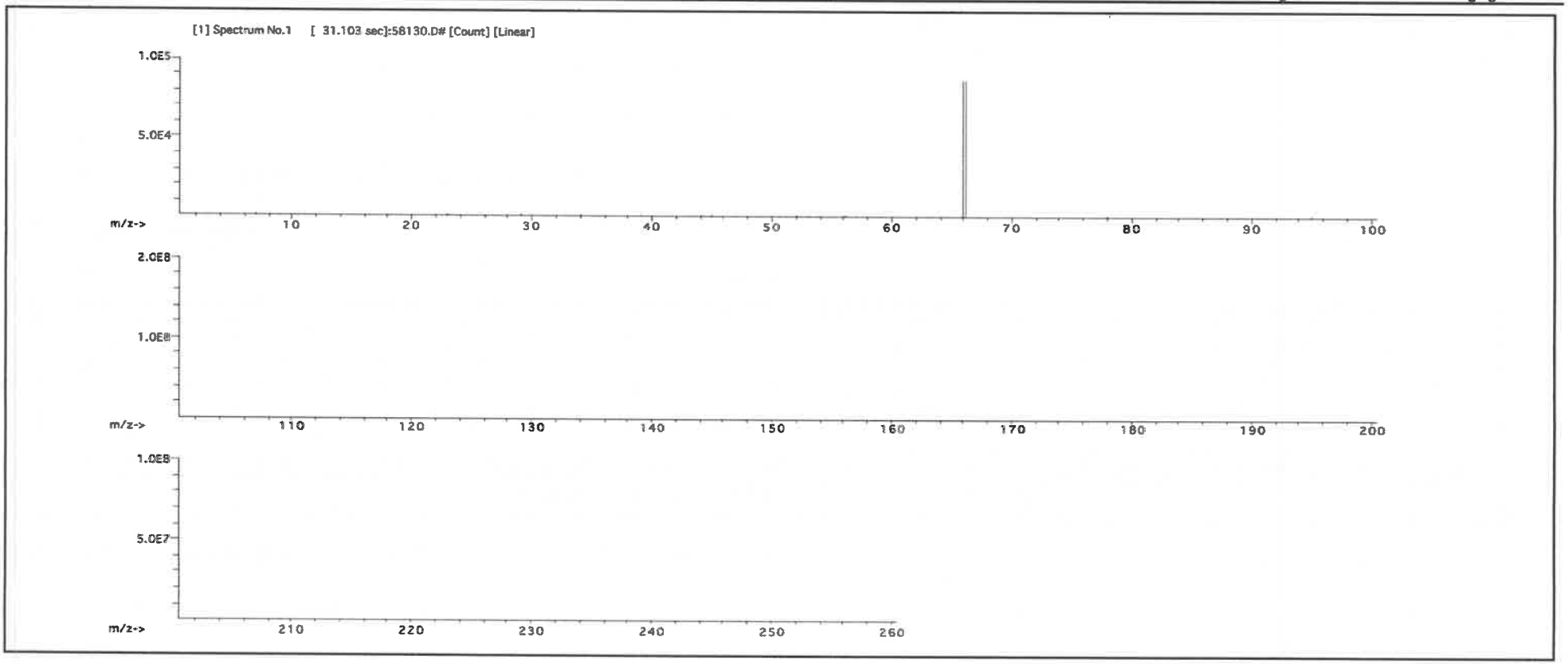
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

		Lot #		
Solvent:	24002546	Nitric Acid		
	2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



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:

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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* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 M5820

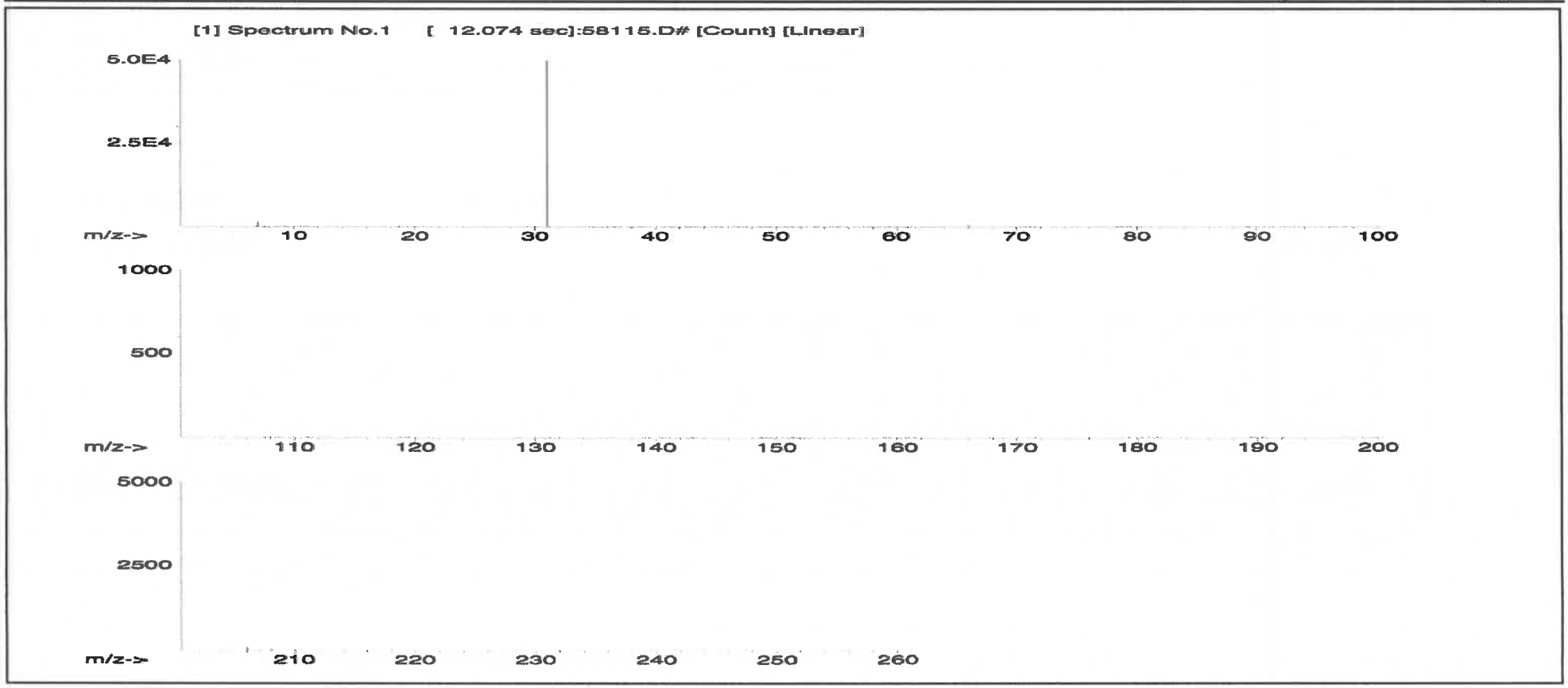
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CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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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).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MSS28 - 37 MB MSS53 MB 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.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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M5962 R! 06/14/24.

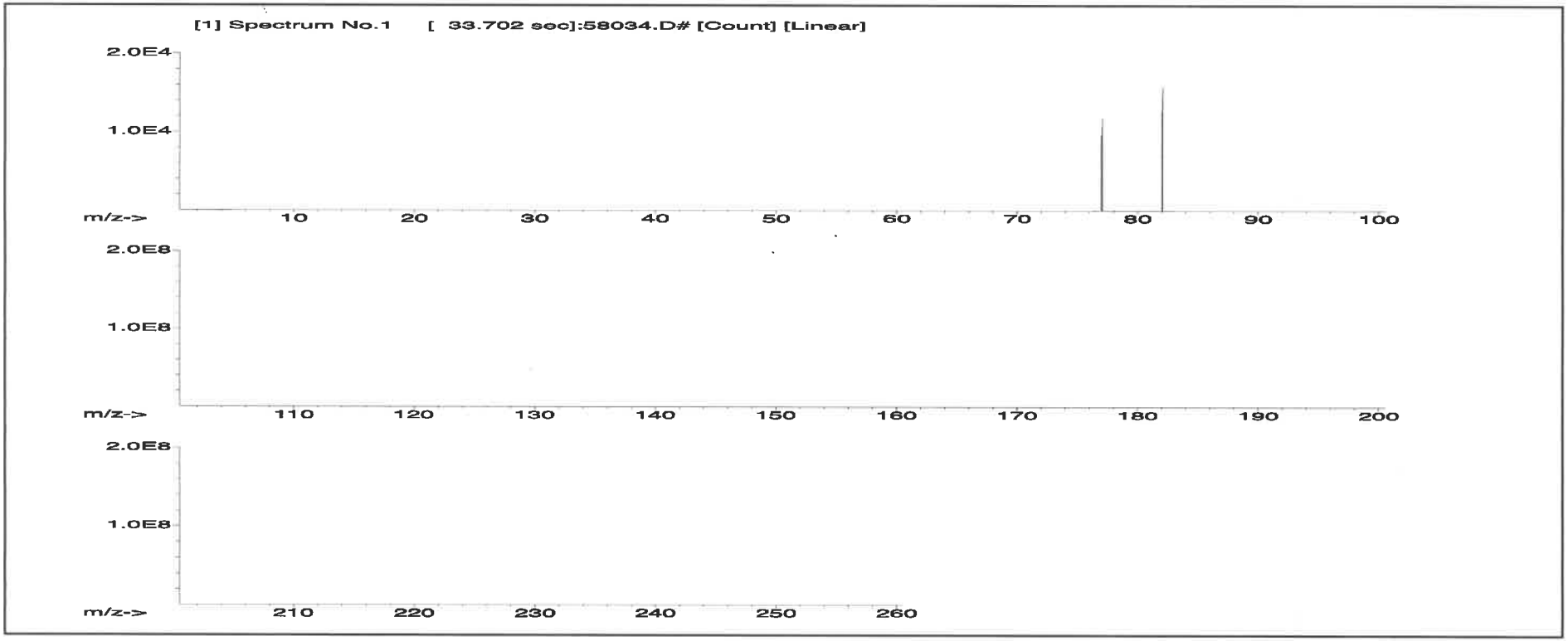
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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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M5970, M5971 R: 7/01/24

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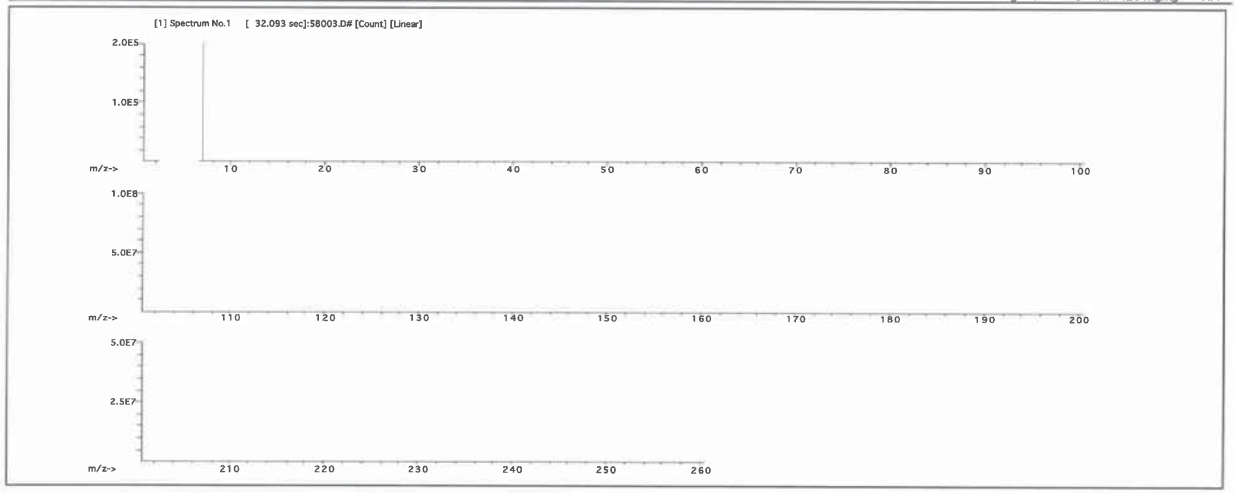
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05 Balance Uncertainty	
Volume shown below was diluted to (mL):	250.11	0.016 Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

M5978, M5979

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO_3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$w_i = (1/u_{char\ i}^2) / (\Sigma(1/u_{char\ i}^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma(w_i)^2\ (u_{char\ i})^2]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

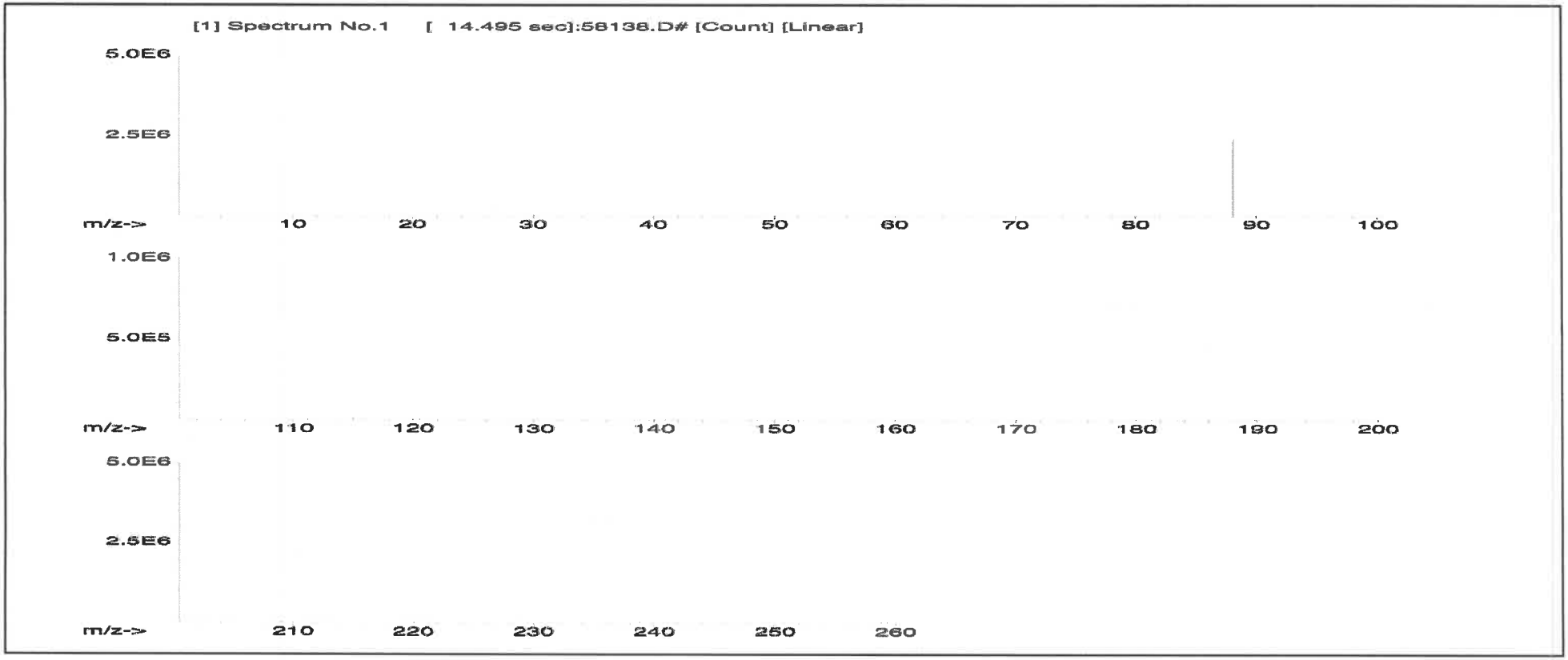
45982 R: 6/11/24

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).

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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:

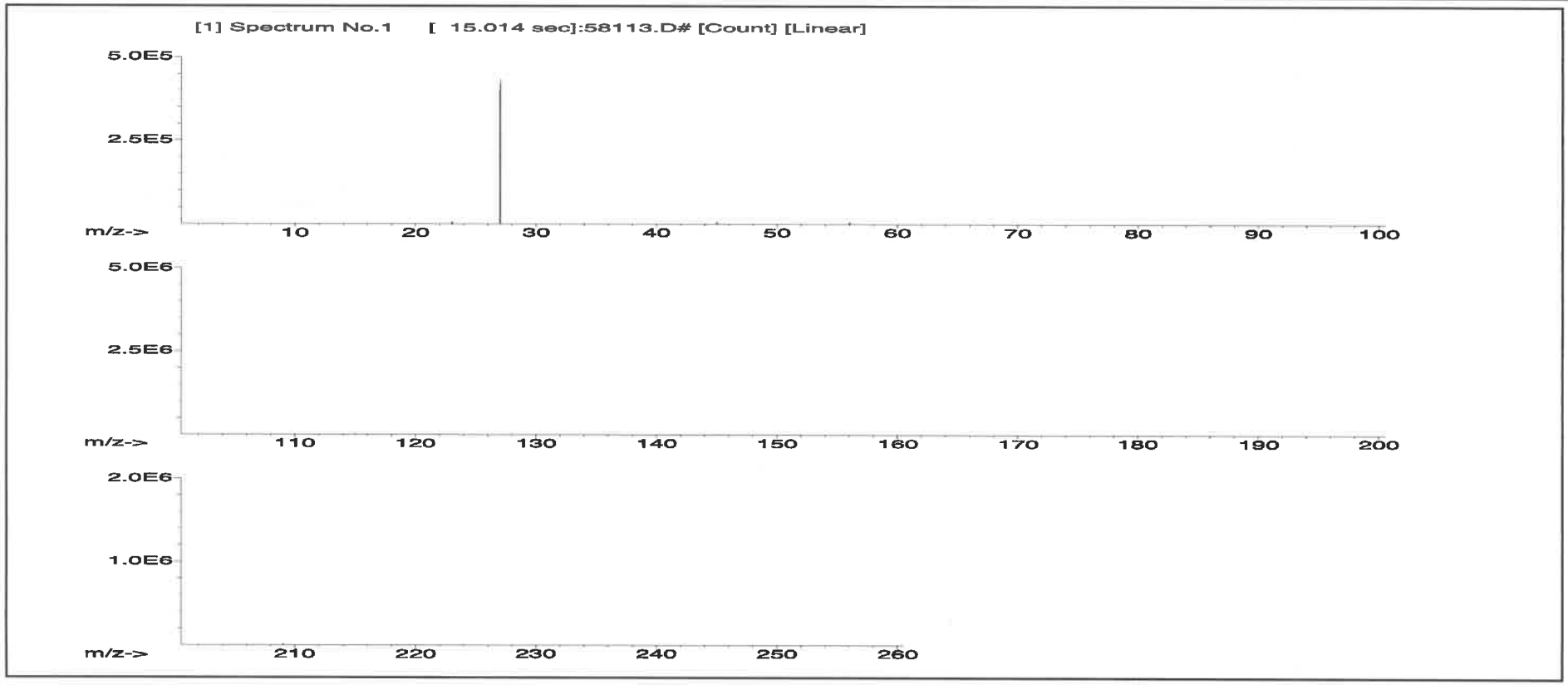
Part Number:	**58113**		**Solvent:**	20510011	Nitric Acid
Lot Number:	**011623**				
Description:	**Aluminum (Al)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
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®

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

R: 9/2/24.

Certificate of Analysis

M6080, M6081, M6082, M6083, M6084

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
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

M6109
M6110
M6111

Received date 9/29/24 Met dig.

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009
Manufactured Date: 2022-05-10
Retest Date: 2027-05-09
Revision No.: 0

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 ppm
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 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	0.8 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	14.9 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	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 - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	1.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	0.7 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

M6112
M6113
M6114
M6115
M6116
M6117

Receive:
9/29/24
Met dig

avantor™ | J.T.Baker®

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

avantor™ | J.T.Baker®

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

Nitric Acid 69%
CMOS

M6112
M6113
M6114
M6115
M6116
M6117

Receive:
9/29/24
Met dig

avantor™ | J.T.Baker®

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

avantor™ | J.T.Baker®

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

Nitric Acid 69%
CMOS

M6112
M6113
M6114
M6115
M6116
M6117

Receive:
9/29/24
Met dig

avantor™ | J.T.Baker®

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

avantor™ | J.T.Baker®

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

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Certified Reference Material CRM

R: 01/03/24 M5806, M5807

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AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 122223
Description: Sodium (Na)

Expiration Date: 122226
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

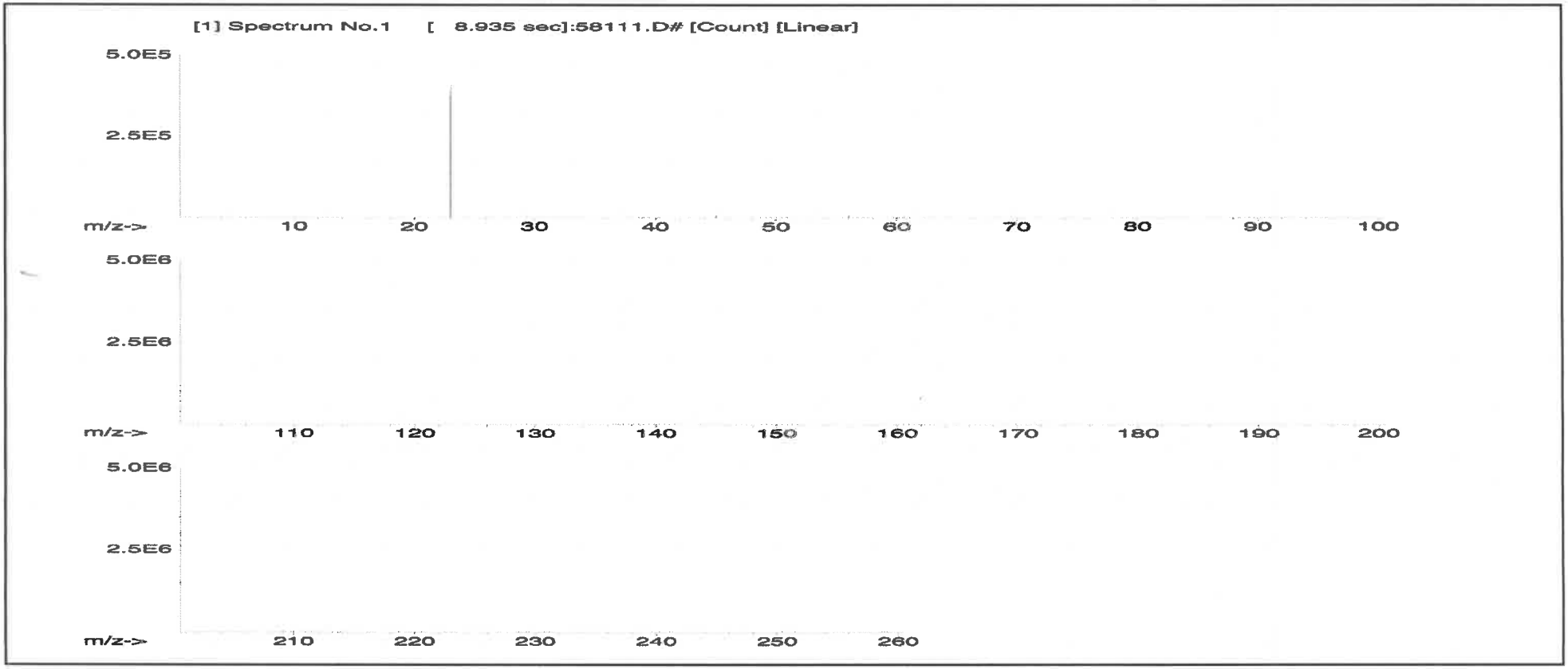
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	122223
Reviewed By:	Pedro L. Rentas	122223

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5479	**10000.7**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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AR-1539 Certificate Number
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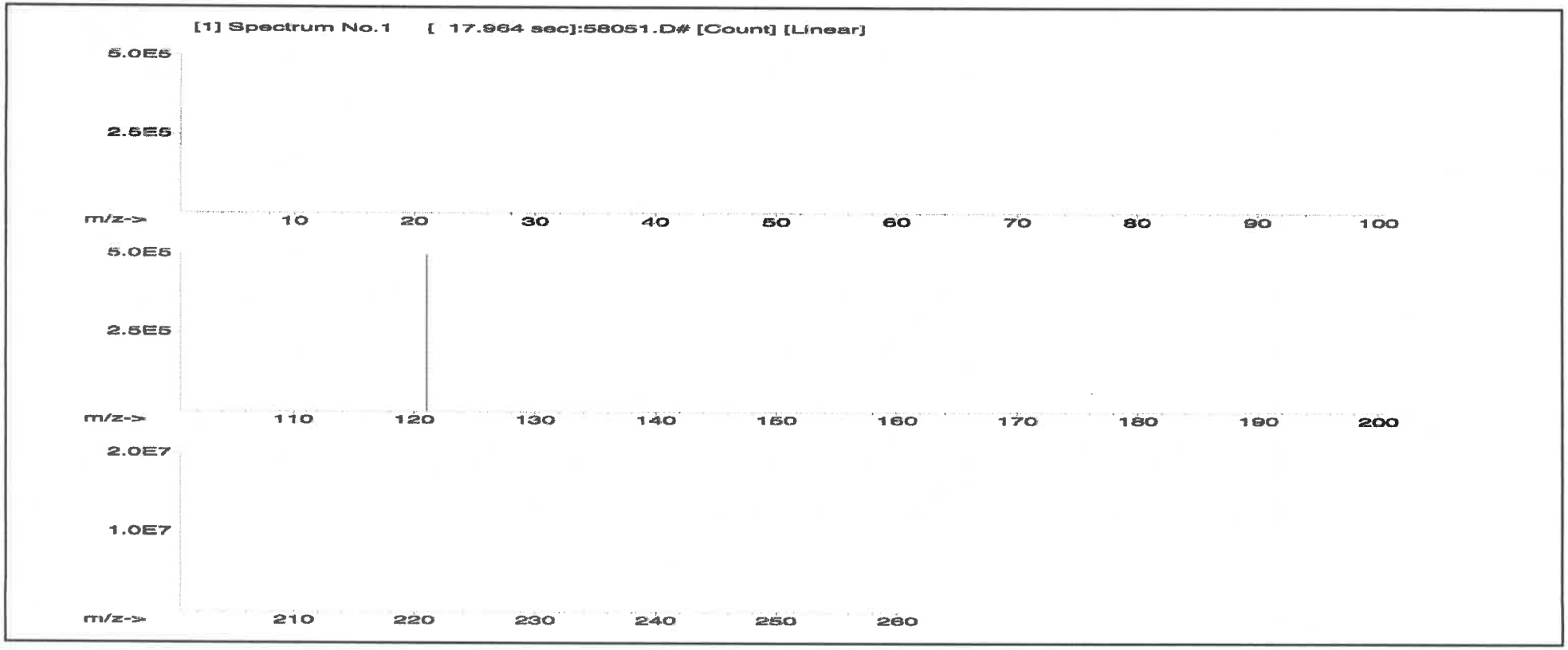
R: 01/03/24 M5802, M5803

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M6030

R: 8/5/24

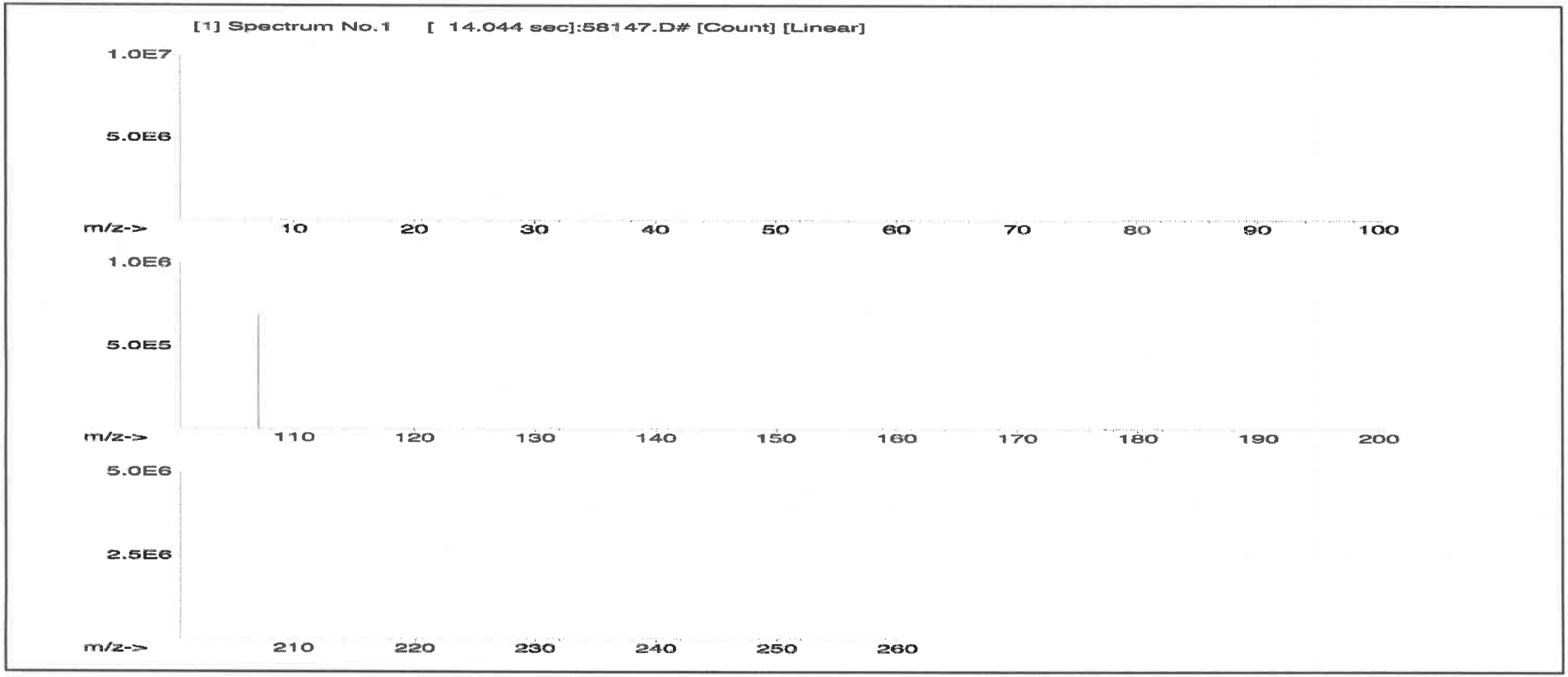
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57047**		**Lot #**		
Lot Number:	**122823**	**Solvent:**	24002546	Nitric Acid	
Description:	**Silver (Ag)**	2%	80.0 (mL)	Nitric Acid	
Expiration Date:	122826				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.30	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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M6023

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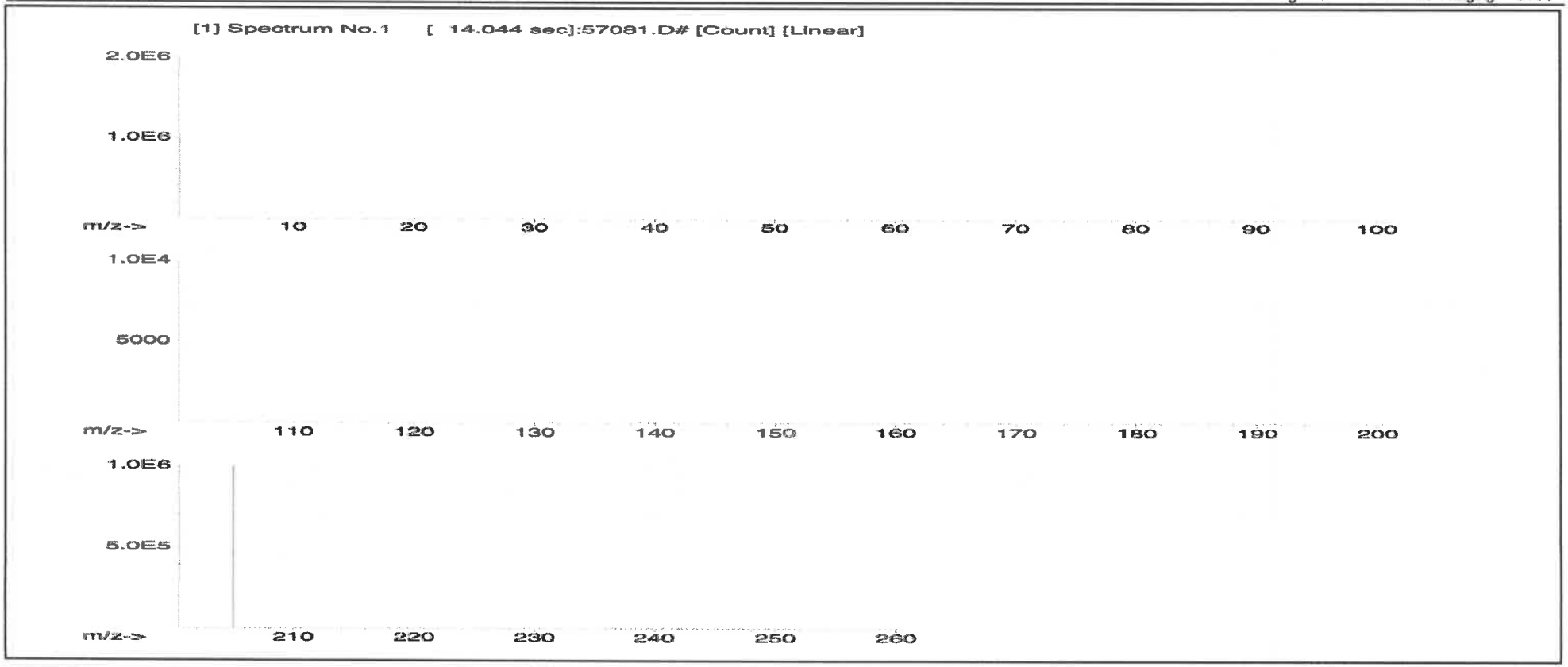
CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

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M6021

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Bc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

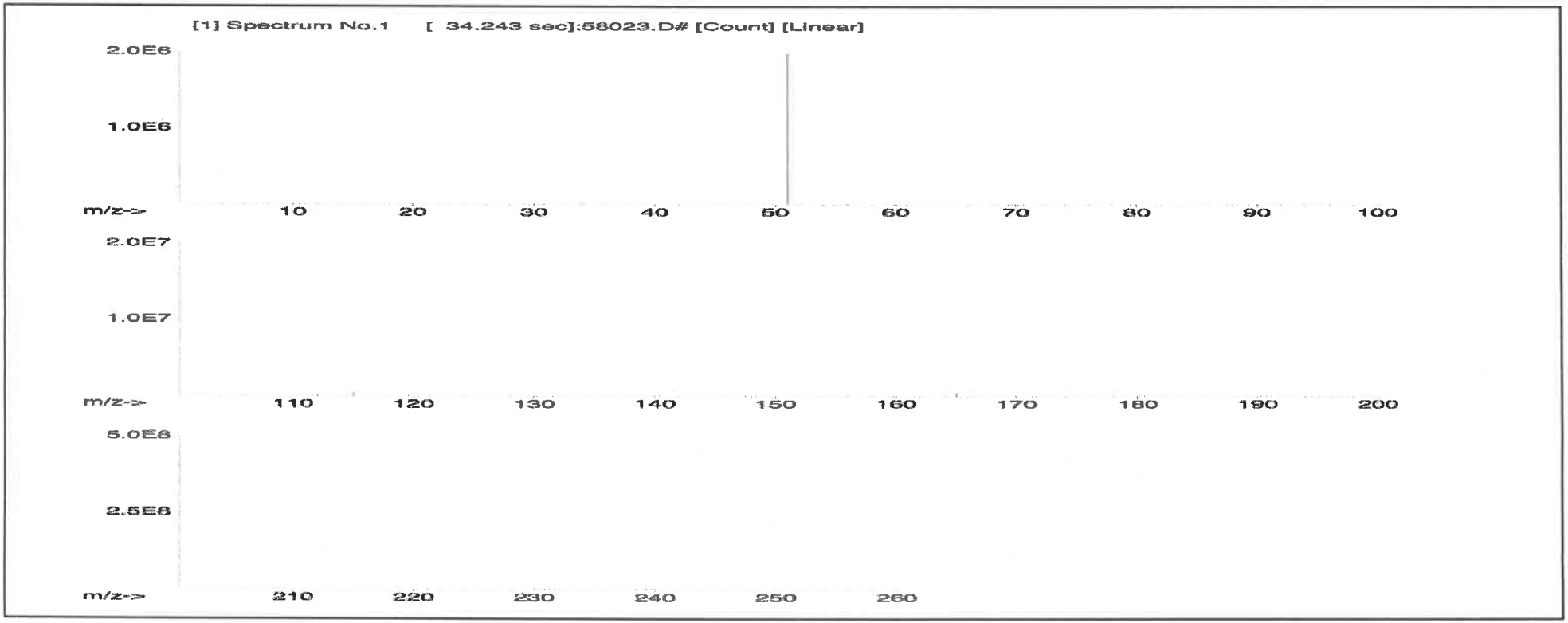
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

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SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. / QUOTE NO. P4718

COC Number 2042034

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Glannett Fleming
ADDRESS: 1010 Adams Avenue
CITY Audobon STATE: PA ZIP: 19403
ATTENTION: Joe Krupansky
PHONE: 610-301-8362 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak's Dep. of SB
PROJECT NO.: 95000008.19 LOCATION: Kearny NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@bamays-corb.
PHONE: 610-301-8362 FAX:

CLIENT BILLING INFORMATION

BILL TO: Chemtech PO#:
ADDRESS: 284 Sheffield St.
CITY Mountainside STATE: NJ ZIP: 07092
ATTENTION: Samantha PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☒ NJ Reduced
- ☐ US EPA CLP
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other _____
- ☐ EDD FORMAT BEM EDD.

ANALYSIS

1 TCA VOC+TO
2 TCL PAH
3 TAL Metals
4 PCB's
5 Cr(III), Cr(VI)
6 EPH
7 TOX
8 FUNA TCLP
9 RCRA Reactivity

PRESERVATIVES

A B F

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 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
1.		WB-307-SW	GW		X	11/04	8:20	7	X	X	X	X	X	X			
2.		WB-307-SB01	S	X		11/04	9:45	10	X	X	X	X	X	X			
3.		WB-307-SB02	S	X		11/04	10:45	10	X	X	X	X	X	X	X	X	X
4.		TB-11042024															
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Yasmeda	11/6/24 11:19	1.
2.		2.
3.	11.3.2024 12:15	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 4.0 °C
Comments: No, ICE.

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other _____
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

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CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4718 PORT06
Client Name : Portal Partners Tri-Venture
Client Contact : Joseph Krupansky
Invoice Name : Portal Partners Tri-Venture
Invoice Contact : Joseph Krupansky

Order Date : 11/5/2024 1:31:00 PM
Project Name : Amtrak Sawtooth Bridges 2
Receive DateTime : 11/5/2024 12:15:00 PM
Purchase Order :

Project Mgr :
Report Type : NJ Reduced
EDD Type : EXCEL NJCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4718-01	WB-307-SB01	Solid	11/04/2024	09:45					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4718-02	WB-307-SB02	Solid	11/04/2024	09:45					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4718-04	WB-307-SW	Water	11/04/2024	08:20					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4718-05	TB-11042024	Water	11/04/2024	00:00					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days

Relinguished By :
Date / Time : 11.5.2024 1427

Received By :
Date / Time : 11-5-2024 14:27

Storage Area : **VOA Refridgerator Room**