

Cover Page

Order ID : P4103

Project ID : North Point

Client : ENTACT

Lab Sample Number

P4103-01
P4103-02
P4103-03
P4103-04
P4103-05
P4103-06
P4103-07
P4103-08
P4103-09
P4103-10
P4103-11
P4103-12
P4103-13
P4103-14
P4103-15
P4103-16
P4103-17
P4103-18

Client Sample Number

WC-22A
WC-22A
WC-22A
WC-14-5-7.5A
WC-14-5-7.5A
WC-14-5-7.5A
WC-14-5-7.5B
WC-14-5-7.5B
WC-14-5-7.5B
WC-14-7.5-10A
WC-14-7.5-10A
WC-14-7.5-10A
WC-14-7.5-10B
WC-14-7.5-10B
WC-14-7.5-10B
WC-23
WC-23
WC-23

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: 10/2/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4103

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: NILESH PRAJAPATI

Date: 10/02/2024

LAB CHRONICLE

OrderID:	P4103	OrderDate:	9/18/2024 3:16:00 PM
Client:	ENTACT	Project:	North Point
Contact:	Chris Lawrence	Location:	J11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4103-01	WC-22A	SOIL			09/17/24			09/18/24
			Mercury	7471B		09/20/24	09/20/24	
			Metals ICP-Group1	6010D		09/20/24	09/23/24	
P4103-02	WC-22A	TCLP			09/17/24			09/18/24
			TCLP Mercury	7470A		09/20/24	09/21/24	
			TCLPMetals Group2	6010D		09/20/24	09/23/24	
P4103-04	WC-14-5-7.5A	SOIL			09/17/24			09/18/24
			Mercury	7471B		09/20/24	09/20/24	
			Metals ICP-Group1	6010D		09/20/24	09/23/24	
P4103-05	WC-14-5-7.5A	TCLP			09/17/24			09/18/24
			TCLP Mercury	7470A		09/20/24	09/21/24	
			TCLPMetals Group2	6010D		09/20/24	09/23/24	
P4103-07	WC-14-5-7.5B	SOIL			09/17/24			09/18/24
			Mercury	7471B		09/20/24	09/20/24	
			Metals ICP-Group1	6010D		09/20/24	09/23/24	
P4103-08	WC-14-5-7.5B	TCLP			09/17/24			09/18/24
			TCLP Mercury	7470A		09/20/24	09/21/24	
			TCLPMetals Group2	6010D		09/20/24	09/23/24	
P4103-10	WC-14-7.5-10A	SOIL			09/17/24			09/18/24
			Mercury	7471B		09/20/24	09/20/24	
			Metals ICP-Group1	6010D		09/20/24	09/23/24	
P4103-11	WC-14-7.5-10A	TCLP			09/17/24			09/18/24
			TCLP Mercury	7470A		09/20/24	09/21/24	
			TCLPMetals Group2	6010D		09/20/24	09/23/24	
P4103-13	WC-14-7.5-10B	SOIL			09/17/24			09/18/24

LAB CHRONICLE

P4103-14	WC-14-7.5-10B	TCLP	Mercury	7471B	09/20/24	09/20/24	09/17/24	09/18/24
			Metals ICP-Group1	6010D	09/20/24	09/23/24		
P4103-16	WC-23	SOIL	TCLP Mercury	7470A	09/20/24	09/21/24	09/17/24	09/18/24
			TCLPMetals Group2	6010D	09/20/24	09/24/24		
P4103-17	WC-23	TCLP	Mercury	7471B	09/20/24	09/20/24	09/17/24	09/18/24
			Metals ICP-Group1	6010D	09/20/24	09/23/24		
			TCLP Mercury	7470A	09/20/24	09/21/24		
			TCLPMetals Group2	6010D	09/20/24	09/23/24		

Hit Summary Sheet
SW-846

SDG No.: P4103

Order ID: P4103

Client: ENTACT

Project ID: North Point

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : WC-22A								
P4103-02	WC-22A	TCLP	Barium	1410		62.8	500	ug/L
P4103-02	WC-22A	TCLP	Cadmium	2.25	J	0.94	30.0	ug/L
P4103-02	WC-22A	TCLP	Lead	84.2		35.1	60.0	ug/L
P4103-02	WC-22A	TCLP	Nickel	36.4	J	8.50	200	ug/L
P4103-02	WC-22A	TCLP	Zinc	791		17.5	200	ug/L
Client ID : WC-14-5-7.5A								
P4103-05	WC-14-5-7.5A	TCLP	Barium	529		62.8	500	ug/L
P4103-05	WC-14-5-7.5A	TCLP	Nickel	9.09	J	8.50	200	ug/L
P4103-05	WC-14-5-7.5A	TCLP	Zinc	37.0	J	17.5	200	ug/L
Client ID : WC-14-5-7.5B								
P4103-08	WC-14-5-7.5B	TCLP	Barium	1600		62.8	500	ug/L
P4103-08	WC-14-5-7.5B	TCLP	Chromium	20.5	J	6.60	50.0	ug/L
P4103-08	WC-14-5-7.5B	TCLP	Nickel	48.0	J	8.50	200	ug/L
P4103-08	WC-14-5-7.5B	TCLP	Zinc	615		17.5	200	ug/L
Client ID : WC-14-7.5-10A								
P4103-11	WC-14-7.5-10A	TCLP	Barium	2780		62.8	500	ug/L
P4103-11	WC-14-7.5-10A	TCLP	Beryllium	2.50	J	1.30	30.0	ug/L
P4103-11	WC-14-7.5-10A	TCLP	Nickel	99.0	J	8.50	200	ug/L
P4103-11	WC-14-7.5-10A	TCLP	Zinc	803		17.5	200	ug/L
Client ID : WC-14-7.5-10B								
P4103-14	WC-14-7.5-10B	TCLP	Barium	3070		62.8	500	ug/L
P4103-14	WC-14-7.5-10B	TCLP	Cadmium	2.15	J	0.94	30.0	ug/L
P4103-14	WC-14-7.5-10B	TCLP	Nickel	36.7	J	8.50	200	ug/L
P4103-14	WC-14-7.5-10B	TCLP	Zinc	2370		17.5	200	ug/L
Client ID : WC-23								
P4103-17	WC-23	TCLP	Barium	2290		62.8	500	ug/L
P4103-17	WC-23	TCLP	Nickel	32.6	J	8.50	200	ug/L
P4103-17	WC-23	TCLP	Zinc	1030		17.5	200	ug/L



SAMPLE DATA

Report of Analysis

Client:	ENTACT	Date Collected:	09/17/24
Project:	North Point	Date Received:	09/18/24
Client Sample ID:	WC-22A	SDG No.:	P4103
Lab Sample ID:	P4103-02	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	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-39-3	Barium	1410		1	62.8	500	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-41-7	Beryllium	1.30	U	1	1.30	30.0	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-43-9	Cadmium	2.25	J	1	0.94	30.0	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-47-3	Chromium	6.60	U	1	6.60	50.0	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-50-8	Copper	70.7	U	1	70.7	100	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7439-92-1	Lead	84.2		1	35.1	60.0	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	09/20/24 13:00	09/21/24 21:38	SW7470A	
7440-02-0	Nickel	36.4	J	1	8.50	200	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	09/20/24 13:30	09/23/24 15:53	SW6010	SW3050
7440-66-6	Zinc	791		1	17.5	200	ug/L	09/20/24 13:30	09/23/24 15:53	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

Report of Analysis

Client:	ENTACT	Date Collected:	09/17/24
Project:	North Point	Date Received:	09/18/24
Client Sample ID:	WC-14-5-7.5A	SDG No.:	P4103
Lab Sample ID:	P4103-05	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	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-39-3	Barium	529		1	62.8	500	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-41-7	Beryllium	1.30	U	1	1.30	30.0	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-43-9	Cadmium	0.94	U	1	0.94	30.0	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-47-3	Chromium	6.60	U	1	6.60	50.0	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-50-8	Copper	70.7	U	1	70.7	100	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7439-92-1	Lead	35.1	U	1	35.1	60.0	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	09/20/24 13:00	09/21/24 21:40	SW7470A	
7440-02-0	Nickel	9.09	J	1	8.50	200	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050
7440-66-6	Zinc	37.0	J	1	17.5	200	ug/L	09/20/24 13:30	09/23/24 15:57	SW6010	SW3050

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

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 N = Spiked sample recovery not within control limits

Report of Analysis

Client:	ENTACT	Date Collected:	09/17/24
Project:	North Point	Date Received:	09/18/24
Client Sample ID:	WC-14-5-7.5B	SDG No.:	P4103
Lab Sample ID:	P4103-08	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	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-39-3	Barium	1600		1	62.8	500	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-41-7	Beryllium	1.30	U	1	1.30	30.0	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-43-9	Cadmium	0.94	U	1	0.94	30.0	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-47-3	Chromium	20.5	J	1	6.60	50.0	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-50-8	Copper	70.7	U	1	70.7	100	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7439-92-1	Lead	35.1	U	1	35.1	60.0	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	09/20/24 13:00	09/21/24 21:42	SW7470A	
7440-02-0	Nickel	48.0	J	1	8.50	200	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050
7440-66-6	Zinc	615		1	17.5	200	ug/L	09/20/24 13:30	09/23/24 16:01	SW6010	SW3050

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

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Report of Analysis

Client:	ENTACT	Date Collected:	09/17/24
Project:	North Point	Date Received:	09/18/24
Client Sample ID:	WC-14-7.5-10A	SDG No.:	P4103
Lab Sample ID:	P4103-11	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	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-39-3	Barium	2780		1	62.8	500	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-41-7	Beryllium	2.50	J	1	1.30	30.0	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-43-9	Cadmium	0.94	U	1	0.94	30.0	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-47-3	Chromium	6.60	U	1	6.60	50.0	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-50-8	Copper	70.7	U	1	70.7	100	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7439-92-1	Lead	35.1	U	1	35.1	60.0	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	09/20/24 13:00	09/21/24 21:45	SW7470A	
7440-02-0	Nickel	99.0	J	1	8.50	200	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050
7440-66-6	Zinc	803		1	17.5	200	ug/L	09/20/24 13:30	09/23/24 16:06	SW6010	SW3050

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

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Report of Analysis

Client:	ENTACT	Date Collected:	09/17/24
Project:	North Point	Date Received:	09/18/24
Client Sample ID:	WC-14-7.5-10B	SDG No.:	P4103
Lab Sample ID:	P4103-14	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	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-39-3	Barium	3070		1	62.8	500	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-41-7	Beryllium	1.30	U	1	1.30	30.0	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-43-9	Cadmium	2.15	J	1	0.94	30.0	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-47-3	Chromium	6.60	U	1	6.60	50.0	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-50-8	Copper	70.7	U	1	70.7	100	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7439-92-1	Lead	35.1	U	1	35.1	60.0	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	09/20/24 13:00	09/21/24 21:52	SW7470A	
7440-02-0	Nickel	36.7	J	1	8.50	200	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	09/20/24 13:30	09/24/24 17:07	SW6010	SW3050
7440-66-6	Zinc	2370		1	17.5	200	ug/L	09/20/24 13:30	09/24/24 17:07	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

Report of Analysis

Client:	ENTACT	Date Collected:	09/17/24
Project:	North Point	Date Received:	09/18/24
Client Sample ID:	WC-23	SDG No.:	P4103
Lab Sample ID:	P4103-17	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	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-39-3	Barium	2290		1	62.8	500	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-41-7	Beryllium	1.30	U	1	1.30	30.0	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-43-9	Cadmium	0.94	U	1	0.94	30.0	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-47-3	Chromium	6.60	U	1	6.60	50.0	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-50-8	Copper	70.7	U	1	70.7	100	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7439-92-1	Lead	35.1	U	1	35.1	60.0	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7439-97-6	Mercury	0.81	U	1	0.81	2.00	ug/L	09/20/24 13:00	09/21/24 21:54	SW7470A	
7440-02-0	Nickel	32.6	J	1	8.50	200	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7782-49-2	Selenium	58.8	U	1	58.8	100	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-22-4	Silver	5.80	U	1	5.80	50.0	ug/L	09/20/24 13:30	09/23/24 16:15	SW6010	SW3050
7440-66-6	Zinc	1030		1	17.5	200	ug/L	09/20/24 13:30	09/23/24 16:15	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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
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
ICV01	Mercury	4.06	4.0	102	90 - 110	CV	09/21/2024	21:15	LB132543

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
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
CCV01	Mercury	5.27	5.0	106	90 - 110	CV	09/21/2024	21:20	LB132543
CCV02	Mercury	5.04	5.0	101	90 - 110	CV	09/21/2024	21:47	LB132543
CCV03	Mercury	4.86	5.0	97	90 - 110	CV	09/21/2024	22:14	LB132543
CCV04	Mercury	5.26	5.0	105	90 - 110	CV	09/21/2024	22:23	LB132543

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT SDG No.: P4103
Contract: ENTA05 Lab Code: CHEM Case No.: P4103 SAS No.: P4103
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	950	1000	95	90 - 110	P	09/23/2024	12:49	LB132557
	Barium	503	520	97	90 - 110	P	09/23/2024	12:49	LB132557
	Beryllium	521	510	102	90 - 110	P	09/23/2024	12:49	LB132557
	Cadmium	522	510	102	90 - 110	P	09/23/2024	12:49	LB132557
	Chromium	531	520	102	90 - 110	P	09/23/2024	12:49	LB132557
	Copper	532	510	104	90 - 110	P	09/23/2024	12:49	LB132557
	Lead	967	1000	97	90 - 110	P	09/23/2024	12:49	LB132557
	Nickel	522	530	98	90 - 110	P	09/23/2024	12:49	LB132557
	Selenium	968	1000	97	90 - 110	P	09/23/2024	12:49	LB132557
	Silver	271	250	108	90 - 110	P	09/23/2024	12:49	LB132557
	Zinc	1050	1000	105	90 - 110	P	09/23/2024	12:49	LB132557

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT SDG No.: P4103
Contract: ENTA05 Lab Code: CHEM Case No.: P4103 SAS No.: P4103
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	17.6	20.0	88	80 - 120	P	09/23/2024	12:58	LB132557
	Barium	94.2	100	94	80 - 120	P	09/23/2024	12:58	LB132557
	Beryllium	6.11	6.0	102	80 - 120	P	09/23/2024	12:58	LB132557
	Cadmium	5.81	6.0	97	80 - 120	P	09/23/2024	12:58	LB132557
	Chromium	8.78	10.0	88	80 - 120	P	09/23/2024	12:58	LB132557
	Copper	21.7	20.0	108	80 - 120	P	09/23/2024	12:58	LB132557
	Lead	12.9	12.0	108	80 - 120	P	09/23/2024	12:58	LB132557
	Nickel	38.7	40.0	97	80 - 120	P	09/23/2024	12:58	LB132557
	Selenium	17.6	20.0	88	80 - 120	P	09/23/2024	12:58	LB132557
	Silver	10.8	10.0	108	80 - 120	P	09/23/2024	12:58	LB132557
	Zinc	36.3	40.0	91	80 - 120	P	09/23/2024	12:58	LB132557

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
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	4510	5000	90	90 - 110	P	09/23/2024	13:38	LB132557
	Barium	9340	10000	93	90 - 110	P	09/23/2024	13:38	LB132557
	Beryllium	249	250	100	90 - 110	P	09/23/2024	13:38	LB132557
	Cadmium	2600	2500	104	90 - 110	P	09/23/2024	13:38	LB132557
	Chromium	913	1000	91	90 - 110	P	09/23/2024	13:38	LB132557
	Copper	1280	1250	102	90 - 110	P	09/23/2024	13:38	LB132557
	Lead	5140	5000	103	90 - 110	P	09/23/2024	13:38	LB132557
	Nickel	2470	2500	99	90 - 110	P	09/23/2024	13:38	LB132557
	Selenium	4540	5000	91	90 - 110	P	09/23/2024	13:38	LB132557
	Silver	1210	1250	97	90 - 110	P	09/23/2024	13:38	LB132557
	Zinc	2470	2500	99	90 - 110	P	09/23/2024	13:38	LB132557
CCV02	Arsenic	4760	5000	95	90 - 110	P	09/23/2024	13:51	LB132557
	Barium	9580	10000	96	90 - 110	P	09/23/2024	13:51	LB132557
	Beryllium	257	250	103	90 - 110	P	09/23/2024	13:51	LB132557
	Cadmium	2340	2500	94	90 - 110	P	09/23/2024	13:51	LB132557
	Chromium	944	1000	94	90 - 110	P	09/23/2024	13:51	LB132557
	Copper	1220	1250	98	90 - 110	P	09/23/2024	13:51	LB132557
	Lead	4720	5000	94	90 - 110	P	09/23/2024	13:51	LB132557
	Nickel	2380	2500	95	90 - 110	P	09/23/2024	13:51	LB132557
	Selenium	4800	5000	96	90 - 110	P	09/23/2024	13:51	LB132557
	Silver	1240	1250	100	90 - 110	P	09/23/2024	13:51	LB132557
	Zinc	2520	2500	101	90 - 110	P	09/23/2024	13:51	LB132557
CCV03	Arsenic	4860	5000	97	90 - 110	P	09/23/2024	14:47	LB132557
	Barium	9950	10000	100	90 - 110	P	09/23/2024	14:47	LB132557
	Beryllium	264	250	105	90 - 110	P	09/23/2024	14:47	LB132557
	Cadmium	2380	2500	95	90 - 110	P	09/23/2024	14:47	LB132557
	Chromium	932	1000	93	90 - 110	P	09/23/2024	14:47	LB132557
	Copper	1240	1250	100	90 - 110	P	09/23/2024	14:47	LB132557
	Lead	4810	5000	96	90 - 110	P	09/23/2024	14:47	LB132557
	Nickel	2420	2500	97	90 - 110	P	09/23/2024	14:47	LB132557
	Selenium	4900	5000	98	90 - 110	P	09/23/2024	14:47	LB132557
	Silver	1220	1250	98	90 - 110	P	09/23/2024	14:47	LB132557
	Zinc	2480	2500	99	90 - 110	P	09/23/2024	14:47	LB132557
CCV04	Arsenic	4870	5000	97	90 - 110	P	09/23/2024	15:37	LB132557

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT SDG No.: P4103
Contract: ENTA05 Lab Code: CHEM Case No.: P4103 SAS No.: P4103
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	272	250	109	90 - 110	P	09/23/2024	18:04	LB132557
	Cadmium	2420	2500	97	90 - 110	P	09/23/2024	18:04	LB132557
	Chromium	936	1000	94	90 - 110	P	09/23/2024	18:04	LB132557
	Copper	1250	1250	100	90 - 110	P	09/23/2024	18:04	LB132557
	Lead	4900	5000	98	90 - 110	P	09/23/2024	18:04	LB132557
	Nickel	2460	2500	99	90 - 110	P	09/23/2024	18:04	LB132557
	Selenium	5010	5000	100	90 - 110	P	09/23/2024	18:04	LB132557
	Silver	1250	1250	100	90 - 110	P	09/23/2024	18:04	LB132557
	Zinc	2520	2500	101	90 - 110	P	09/23/2024	18:04	LB132557



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Client:	<u>ENTACT</u>	SDG No.:	<u>P4103</u>				
Contract:	<u>ENTA05</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4103</u>	SAS No.:	<u>P4103</u>
Initial Calibration Source:	<u>EPA</u>						
Continuing Calibration Source:	Inorganic Ventures						

Sample ID	Analyte	Result	True Value	%	Acceptance	M	Analysis Date	Analysis Time	Run Number
		ug/L		Recovery	Window (%R)				
ICV01	Arsenic	974	1000	97	90 - 110	P	09/24/2024	13:34	LB132578
	Barium	493	520	95	90 - 110	P	09/24/2024	13:34	LB132578
	Beryllium	510	510	100	90 - 110	P	09/24/2024	13:34	LB132578
	Cadmium	492	510	96	90 - 110	P	09/24/2024	13:34	LB132578
	Chromium	551	520	106	90 - 110	P	09/24/2024	13:34	LB132578
	Copper	533	510	104	90 - 110	P	09/24/2024	13:34	LB132578
	Lead	981	1000	98	90 - 110	P	09/24/2024	13:34	LB132578
	Nickel	526	530	99	90 - 110	P	09/24/2024	13:34	LB132578
	Selenium	991	1000	99	90 - 110	P	09/24/2024	13:34	LB132578
	Silver	269	250	108	90 - 110	P	09/24/2024	13:34	LB132578
	Zinc	1090	1000	109	90 - 110	P	09/24/2024	13:34	LB132578



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Client:	<u>ENTACT</u>	SDG No.:	<u>P4103</u>				
Contract:	<u>ENTA05</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4103</u>	SAS No.:	<u>P4103</u>
Initial Calibration Source:	<u>EPA</u>						
Continuing Calibration Source:	Inorganic Ventures						

Sample ID	Analyte	Result	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L							
LLICV01	Arsenic	19.6	20.0	98	80 - 120	P	09/24/2024	13:38	LB132578
	Barium	95.2	100	95	80 - 120	P	09/24/2024	13:38	LB132578
	Beryllium	6.09	6.0	102	80 - 120	P	09/24/2024	13:38	LB132578
	Cadmium	6.18	6.0	103	80 - 120	P	09/24/2024	13:38	LB132578
	Chromium	10.3	10.0	103	80 - 120	P	09/24/2024	13:38	LB132578
	Copper	22.6	20.0	113	80 - 120	P	09/24/2024	13:38	LB132578
	Lead	12.5	12.0	104	80 - 120	P	09/24/2024	13:38	LB132578
	Nickel	40.0	40.0	100	80 - 120	P	09/24/2024	13:38	LB132578
	Selenium	18.9	20.0	94	80 - 120	P	09/24/2024	13:38	LB132578
	Silver	10.2	10.0	102	80 - 120	P	09/24/2024	13:38	LB132578
	Zinc	46.0	40.0	115	80 - 120	P	09/24/2024	13:38	LB132578

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
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	4860	5000	97	90 - 110	P	09/24/2024	14:25	LB132578
	Barium	9590	10000	96	90 - 110	P	09/24/2024	14:25	LB132578
	Beryllium	240	250	96	90 - 110	P	09/24/2024	14:25	LB132578
	Cadmium	2470	2500	99	90 - 110	P	09/24/2024	14:25	LB132578
	Chromium	1020	1000	102	90 - 110	P	09/24/2024	14:25	LB132578
	Copper	1230	1250	98	90 - 110	P	09/24/2024	14:25	LB132578
	Lead	4930	5000	98	90 - 110	P	09/24/2024	14:25	LB132578
	Nickel	2460	2500	98	90 - 110	P	09/24/2024	14:25	LB132578
	Selenium	4800	5000	96	90 - 110	P	09/24/2024	14:25	LB132578
	Silver	1260	1250	100	90 - 110	P	09/24/2024	14:25	LB132578
	Zinc	2540	2500	102	90 - 110	P	09/24/2024	14:25	LB132578
CCV02	Arsenic	5080	5000	102	90 - 110	P	09/24/2024	15:17	LB132578
	Barium	10000	10000	100	90 - 110	P	09/24/2024	15:17	LB132578
	Beryllium	247	250	99	90 - 110	P	09/24/2024	15:17	LB132578
	Cadmium	2550	2500	102	90 - 110	P	09/24/2024	15:17	LB132578
	Chromium	1040	1000	104	90 - 110	P	09/24/2024	15:17	LB132578
	Copper	1270	1250	102	90 - 110	P	09/24/2024	15:17	LB132578
	Lead	5080	5000	102	90 - 110	P	09/24/2024	15:17	LB132578
	Nickel	2540	2500	101	90 - 110	P	09/24/2024	15:17	LB132578
	Selenium	5070	5000	101	90 - 110	P	09/24/2024	15:17	LB132578
	Silver	1280	1250	103	90 - 110	P	09/24/2024	15:17	LB132578
	Zinc	2580	2500	103	90 - 110	P	09/24/2024	15:17	LB132578
CCV03	Arsenic	5010	5000	100	90 - 110	P	09/24/2024	16:08	LB132578
	Barium	9810	10000	98	90 - 110	P	09/24/2024	16:08	LB132578
	Beryllium	246	250	98	90 - 110	P	09/24/2024	16:08	LB132578
	Cadmium	2460	2500	99	90 - 110	P	09/24/2024	16:08	LB132578
	Chromium	1000	1000	100	90 - 110	P	09/24/2024	16:08	LB132578
	Copper	1260	1250	101	90 - 110	P	09/24/2024	16:08	LB132578
	Lead	4930	5000	99	90 - 110	P	09/24/2024	16:08	LB132578
	Nickel	2470	2500	99	90 - 110	P	09/24/2024	16:08	LB132578
	Selenium	5030	5000	101	90 - 110	P	09/24/2024	16:08	LB132578
	Silver	1260	1250	101	90 - 110	P	09/24/2024	16:08	LB132578
	Zinc	2530	2500	101	90 - 110	P	09/24/2024	16:08	LB132578
CCV04	Arsenic	5020	5000	100	90 - 110	P	09/24/2024	16:58	LB132578



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Client:	<u>ENTACT</u>	SDG No.:	<u>P4103</u>				
Contract:	<u>ENTA05</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4103</u>	SAS No.:	<u>P4103</u>
Initial Calibration Source:	<u>EPA</u>						
Continuing Calibration Source:	Inorganic Ventures						

Sample ID	Analyte	Result	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number	
		ug/L								
CCV04	Barium	9880	10000	99	90 - 110	P	09/24/2024	16:58	LB132578	
	Beryllium	255	250	102	90 - 110	P	09/24/2024	16:58	LB132578	
	Cadmium	2510	2500	100	90 - 110	P	09/24/2024	16:58	LB132578	
	Chromium	1020	1000	102	90 - 110	P	09/24/2024	16:58	LB132578	
	Copper	1260	1250	101	90 - 110	P	09/24/2024	16:58	LB132578	
	Lead	5010	5000	100	90 - 110	P	09/24/2024	16:58	LB132578	
	Nickel	2500	2500	100	90 - 110	P	09/24/2024	16:58	LB132578	
	Selenium	5050	5000	101	90 - 110	P	09/24/2024	16:58	LB132578	
	Silver	1290	1250	103	90 - 110	P	09/24/2024	16:58	LB132578	
	Zinc	2570	2500	103	90 - 110	P	09/24/2024	16:58	LB132578	
CCV05	Arsenic	5230	5000	104	90 - 110	P	09/24/2024	17:49	LB132578	
	Barium	10000	10000	100	90 - 110	P	09/24/2024	17:49	LB132578	
	Beryllium	256	250	102	90 - 110	P	09/24/2024	17:49	LB132578	
	Cadmium	2570	2500	103	90 - 110	P	09/24/2024	17:49	LB132578	
	Chromium	1020	1000	102	90 - 110	P	09/24/2024	17:49	LB132578	
	Copper	1300	1250	104	90 - 110	P	09/24/2024	17:49	LB132578	
	Lead	5100	5000	102	90 - 110	P	09/24/2024	17:49	LB132578	
	Nickel	2560	2500	102	90 - 110	P	09/24/2024	17:49	LB132578	
	Selenium	5280	5000	106	90 - 110	P	09/24/2024	17:49	LB132578	
	Silver	1260	1250	100	90 - 110	P	09/24/2024	17:49	LB132578	
	Zinc	2520	2500	101	90 - 110	P	09/24/2024	17:49	LB132578	
	CCV06	Arsenic	4880	5000	98	90 - 110	P	09/24/2024	18:26	LB132578
		Barium	9620	10000	96	90 - 110	P	09/24/2024	18:26	LB132578
Beryllium		261	250	105	90 - 110	P	09/24/2024	18:26	LB132578	
Cadmium		2450	2500	98	90 - 110	P	09/24/2024	18:26	LB132578	
Chromium		1020	1000	102	90 - 110	P	09/24/2024	18:26	LB132578	
Copper		1230	1250	99	90 - 110	P	09/24/2024	18:26	LB132578	
Lead		4880	5000	98	90 - 110	P	09/24/2024	18:26	LB132578	
Nickel		2440	2500	98	90 - 110	P	09/24/2024	18:26	LB132578	
Selenium		4890	5000	98	90 - 110	P	09/24/2024	18:26	LB132578	
Silver		1270	1250	102	90 - 110	P	09/24/2024	18:26	LB132578	
Zinc		2500	2500	100	90 - 110	P	09/24/2024	18:26	LB132578	
CCV07		Arsenic	4920	5000	98	90 - 110	P	09/24/2024	18:50	LB132578
	Barium	9890	10000	99	90 - 110	P	09/24/2024	18:50	LB132578	

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ENTACT SDG No.: P4103
Contract: ENTA05 Lab Code: CHEM Case No.: P4103 SAS No.: P4103
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	259	250	104	90 - 110	P	09/24/2024	18:50	LB132578
	Cadmium	2480	2500	99	90 - 110	P	09/24/2024	18:50	LB132578
	Chromium	1040	1000	104	90 - 110	P	09/24/2024	18:50	LB132578
	Copper	1250	1250	100	90 - 110	P	09/24/2024	18:50	LB132578
	Lead	4940	5000	99	90 - 110	P	09/24/2024	18:50	LB132578
	Nickel	2470	2500	99	90 - 110	P	09/24/2024	18:50	LB132578
	Selenium	4920	5000	98	90 - 110	P	09/24/2024	18:50	LB132578
	Silver	1280	1250	102	90 - 110	P	09/24/2024	18:50	LB132578
	Zinc	2740	2500	110	90 - 110	P	09/24/2024	18:50	LB132578



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

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
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	0.17	0.2	84	40 - 160	CV	09/21/2024	21:24	LB132543
CRI01	Arsenic	17.5	20.0	88	40 - 160	P	09/23/2024	13:07	LB132557
	Barium	95.5	100	96	40 - 160	P	09/23/2024	13:07	LB132557
	Beryllium	6.20	6.0	103	40 - 160	P	09/23/2024	13:07	LB132557
	Cadmium	5.83	6.0	97	40 - 160	P	09/23/2024	13:07	LB132557
	Chromium	9.20	10.0	92	40 - 160	P	09/23/2024	13:07	LB132557
	Copper	22.2	20.0	111	40 - 160	P	09/23/2024	13:07	LB132557
	Lead	14.4	12.0	120	40 - 160	P	09/23/2024	13:07	LB132557
	Nickel	38.9	40.0	97	40 - 160	P	09/23/2024	13:07	LB132557
	Selenium	18.1	20.0	91	40 - 160	P	09/23/2024	13:07	LB132557
	Silver	12.5	10.0	125	40 - 160	P	09/23/2024	13:07	LB132557
	Zinc	35.7	40.0	89	40 - 160	P	09/23/2024	13:07	LB132557
CRI01	Arsenic	19.9	20.0	99	40 - 160	P	09/24/2024	14:00	LB132578
	Barium	94.3	100	94	40 - 160	P	09/24/2024	14:00	LB132578
	Beryllium	6.04	6.0	101	40 - 160	P	09/24/2024	14:00	LB132578
	Cadmium	6.05	6.0	101	40 - 160	P	09/24/2024	14:00	LB132578
	Chromium	10.7	10.0	107	40 - 160	P	09/24/2024	14:00	LB132578
	Copper	22.8	20.0	114	40 - 160	P	09/24/2024	14:00	LB132578
	Lead	14.7	12.0	123	40 - 160	P	09/24/2024	14:00	LB132578
	Nickel	39.7	40.0	99	40 - 160	P	09/24/2024	14:00	LB132578
	Selenium	17.4	20.0	87	40 - 160	P	09/24/2024	14:00	LB132578
	Silver	12.4	10.0	124	40 - 160	P	09/24/2024	14:00	LB132578
	Zinc	47.3	40.0	118	40 - 160	P	09/24/2024	14:00	LB132578



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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	ENTACT				SDG No.:	P4103			
Contract:	ENTA05	Lab Code:	CHEM		Case No.:	P4103	SAS No.:	P4103	
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Mercury	0.20	+/-0.20	U	0.20	CV	09/21/2024	21:17	LB132543

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Mercury	0.20	+/-0.20	U	0.20	CV	09/21/2024	21:22	LB132543
CCB02	Mercury	0.20	+/-0.20	U	0.20	CV	09/21/2024	21:49	LB132543
CCB03	Mercury	0.20	+/-0.20	U	0.20	CV	09/21/2024	22:16	LB132543
CCB04	Mercury	0.20	+/-0.20	U	0.20	CV	09/21/2024	22:26	LB132543

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103

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	09/23/2024	13:03	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	13:03	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	13:03	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	13:03	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	13:03	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	13:03	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	13:03	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	13:03	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	13:03	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	13:03	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	13:03	LB132557

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT		SDG No.: P4103							
Contract: ENTA05	Lab Code: CHEM	Case No.: P4103	SAS No.: P4103						
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	09/23/2024	13:43	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	13:43	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	13:43	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	13:43	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	13:43	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	13:43	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	13:43	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	13:43	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	13:43	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	13:43	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	13:43	LB132557
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	13:55	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	13:55	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	13:55	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	13:55	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	13:55	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	13:55	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	13:55	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	13:55	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	13:55	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	13:55	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	13:55	LB132557
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	14:52	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	14:52	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	14:52	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	14:52	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	14:52	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	14:52	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	14:52	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	14:52	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	14:52	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	14:52	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	14:52	LB132557
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	15:42	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	15:42	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	15:42	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	15:42	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	15:42	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	15:42	LB132557

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT		SDG No.: P4103							
Contract: ENTA05	Lab Code: CHEM	Case No.: P4103	SAS No.: P4103						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	15:42	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	15:42	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	15:42	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	15:42	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	15:42	LB132557
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	16:37	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	16:37	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	16:37	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	16:37	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	16:37	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	16:37	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	16:37	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	16:37	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	16:37	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	16:37	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	16:37	LB132557
	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	17:30	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	17:30	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	17:30	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	17:30	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	17:30	LB132557
CCB06	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	17:30	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	17:30	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	17:30	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	17:30	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	17:30	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	17:30	LB132557
	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	18:08	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	18:08	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	18:08	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	18:08	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	18:08	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	18:08	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	18:08	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	18:08	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	18:08	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	18:08	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	18:08	LB132557
CCB07	Arsenic	20.0	+/-20.0	U	20.0	P	09/23/2024	18:08	LB132557
	Barium	100	+/-100	U	100	P	09/23/2024	18:08	LB132557
	Beryllium	6.00	+/-6.00	U	6.00	P	09/23/2024	18:08	LB132557
	Cadmium	6.00	+/-6.00	U	6.00	P	09/23/2024	18:08	LB132557
	Chromium	10.0	+/-10.0	U	10.0	P	09/23/2024	18:08	LB132557
	Copper	20.0	+/-20.0	U	20.0	P	09/23/2024	18:08	LB132557
	Lead	12.0	+/-12.0	U	12.0	P	09/23/2024	18:08	LB132557
	Nickel	40.0	+/-40.0	U	40.0	P	09/23/2024	18:08	LB132557
	Selenium	20.0	+/-20.0	U	20.0	P	09/23/2024	18:08	LB132557
	Silver	10.0	+/-10.0	U	10.0	P	09/23/2024	18:08	LB132557
	Zinc	40.0	+/-40.0	U	40.0	P	09/23/2024	18:08	LB132557

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103

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	09/24/2024	13:56	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	13:56	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	13:56	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	13:56	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	13:56	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	13:56	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	13:56	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	13:56	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	13:56	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	13:56	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	13:56	LB132578

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT		SDG No.: P4103							
Contract: ENTA05	Lab Code: CHEM	Case No.: P4103	SAS No.: P4103						
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	09/24/2024	14:29	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	14:29	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	14:29	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	14:29	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	14:29	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	14:29	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	14:29	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	14:29	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	14:29	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	14:29	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	14:29	LB132578
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	09/24/2024	15:21	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	15:21	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	15:21	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	15:21	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	15:21	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	15:21	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	15:21	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	15:21	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	15:21	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	15:21	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	15:21	LB132578
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	09/24/2024	16:12	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	16:12	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	16:12	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	16:12	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	16:12	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	16:12	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	16:12	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	16:12	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	16:12	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	16:12	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	16:12	LB132578
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	09/24/2024	17:02	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	17:02	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	17:02	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	17:02	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	17:02	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	17:02	LB132578

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: ENTACT		SDG No.: P4103							
Contract: ENTA05	Lab Code: CHEM	Case No.: P4103	SAS No.: P4103						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	17:02	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	17:02	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	17:02	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	17:02	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	17:02	LB132578
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	09/24/2024	17:54	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	17:54	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	17:54	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	17:54	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	17:54	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	17:54	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	17:54	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	17:54	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	17:54	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	17:54	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	17:54	LB132578
	Arsenic	20.0	+/-20.0	U	20.0	P	09/24/2024	18:38	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	18:38	LB132578
CCB06	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	18:38	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	18:38	LB132578
	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	18:38	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	18:38	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	18:38	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	18:38	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	18:38	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	18:38	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	18:38	LB132578
	Arsenic	20.0	+/-20.0	U	20.0	P	09/24/2024	18:55	LB132578
	Barium	100	+/-100	U	100	P	09/24/2024	18:55	LB132578
	Beryllium	6.00	+/-6.00	U	6.00	P	09/24/2024	18:55	LB132578
	Cadmium	6.00	+/-6.00	U	6.00	P	09/24/2024	18:55	LB132578
CCB07	Chromium	10.0	+/-10.0	U	10.0	P	09/24/2024	18:55	LB132578
	Copper	20.0	+/-20.0	U	20.0	P	09/24/2024	18:55	LB132578
	Lead	12.0	+/-12.0	U	12.0	P	09/24/2024	18:55	LB132578
	Nickel	40.0	+/-40.0	U	40.0	P	09/24/2024	18:55	LB132578
	Selenium	20.0	+/-20.0	U	20.0	P	09/24/2024	18:55	LB132578
	Silver	10.0	+/-10.0	U	10.0	P	09/24/2024	18:55	LB132578
	Zinc	40.0	+/-40.0	U	40.0	P	09/24/2024	18:55	LB132578

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: ENTACT

SDG No.: P4103

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB163511TB		WATER		Batch Number:	PB163584		Prep Date:	09/20/2024	
	Mercury	2.00	<2.00	U	2.00	CV	09/21/2024	22:21	LB132543
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB163584BL		WATER		Batch Number:	PB163584		Prep Date:	09/20/2024	
	Mercury	0.20	<0.20	U	0.20	CV	09/21/2024	21:31	LB132543

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: ENTACT

SDG No.: P4103

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB163511TB		WATER		Batch Number:	PB163580		Prep Date:	09/20/2024	
	Arsenic	100	<100	U	100	P	09/23/2024	17:43	LB132557
	Barium	500	<500	U	500	P	09/23/2024	17:43	LB132557
	Beryllium	30.0	<30.0	U	30.0	P	09/23/2024	17:43	LB132557
	Cadmium	30.0	<30.0	U	30.0	P	09/23/2024	17:43	LB132557
	Chromium	50.0	<50.0	U	50.0	P	09/23/2024	17:43	LB132557
	Copper	100	<100	U	100	P	09/23/2024	17:43	LB132557
	Lead	60.0	<60.0	U	60.0	P	09/23/2024	17:43	LB132557
	Nickel	200	<200	U	200	P	09/23/2024	17:43	LB132557
	Selenium	100	<100	U	100	P	09/23/2024	17:43	LB132557
	Silver	50.0	<50.0	U	50.0	P	09/23/2024	17:43	LB132557
	Zinc	200	<200	U	200	P	09/23/2024	17:43	LB132557
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB163580BL		WATER		Batch Number:	PB163580		Prep Date:	09/20/2024	
	Arsenic	100	<100	U	100	P	09/23/2024	17:56	LB132557
	Barium	500	<500	U	500	P	09/23/2024	17:56	LB132557
	Beryllium	30.0	<30.0	U	30.0	P	09/23/2024	17:56	LB132557
	Cadmium	30.0	<30.0	U	30.0	P	09/23/2024	17:56	LB132557
	Chromium	50.0	<50.0	U	50.0	P	09/23/2024	17:56	LB132557
	Copper	100	<100	U	100	P	09/23/2024	17:56	LB132557
	Lead	60.0	<60.0	U	60.0	P	09/23/2024	17:56	LB132557
	Nickel	200	<200	U	200	P	09/23/2024	17:56	LB132557
	Selenium	100	<100	U	100	P	09/23/2024	17:56	LB132557
	Silver	50.0	<50.0	U	50.0	P	09/23/2024	17:56	LB132557
	Zinc	200	<200	U	200	P	09/23/2024	17:56	LB132557

Metals
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INTERFERENCE CHECK SAMPLE

Client:	ENTACT	SDG No.:	P4103
Contract:	ENTA05	Lab Code:	CHEM
ICS Source:	EPA	Case No.:	P4103
		SAS No.:	P4103
		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	-9.99			-20	20	09/23/2024	13:17	LB132557
	Barium	3.73	6.0	62	-94	106	09/23/2024	13:17	LB132557
	Beryllium	2.04			-6	6	09/23/2024	13:17	LB132557
	Cadmium	1.99	1.0	199	-5	7	09/23/2024	13:17	LB132557
	Chromium	53.8	52.0	104	42	62	09/23/2024	13:17	LB132557
	Copper	-16.1	2.0	805	-18	22	09/23/2024	13:17	LB132557
	Lead	6.84			-12	12	09/23/2024	13:17	LB132557
	Nickel	3.11	2.0	156	-38	42	09/23/2024	13:17	LB132557
	Selenium	-10.8			-20	20	09/23/2024	13:17	LB132557
	Silver	-2.60			-10	10	09/23/2024	13:17	LB132557
	Zinc	-2.25			-40	40	09/23/2024	13:17	LB132557
ICSAB01	Arsenic	93.0	104	89	88.4	120	09/23/2024	13:22	LB132557
	Barium	500	537	93	437	637	09/23/2024	13:22	LB132557
	Beryllium	520	495	105	420	570	09/23/2024	13:22	LB132557
	Cadmium	919	972	94	826	1120	09/23/2024	13:22	LB132557
	Chromium	527	542	97	460	624	09/23/2024	13:22	LB132557
	Copper	494	511	97	434	588	09/23/2024	13:22	LB132557
	Lead	52.2	49.0	106	37	61	09/23/2024	13:22	LB132557
	Nickel	983	954	103	810	1100	09/23/2024	13:22	LB132557
	Selenium	35.7	46.0	78	26	66	09/23/2024	13:22	LB132557
	Silver	212	201	106	170	232	09/23/2024	13:22	LB132557
	Zinc	1060	952	111	809	1095	09/23/2024	13:22	LB132557
ICSA01	Arsenic	-15.4			-20	20	09/24/2024	14:04	LB132578
	Barium	5.16	6.0	86	-94	106	09/24/2024	14:04	LB132578
	Beryllium	4.72			-6	6	09/24/2024	14:04	LB132578
	Cadmium	5.48	1.0	548	-5	7	09/24/2024	14:04	LB132578
	Chromium	53.1	52.0	102	42	62	09/24/2024	14:04	LB132578
	Copper	4.10	2.0	205	-18	22	09/24/2024	14:04	LB132578
	Lead	8.04			-12	12	09/24/2024	14:04	LB132578
	Nickel	3.21	2.0	160	-38	42	09/24/2024	14:04	LB132578
	Selenium	-17.2			-20	20	09/24/2024	14:04	LB132578
	Silver	-8.22			-10	10	09/24/2024	14:04	LB132578
	Zinc	2.01			-40	40	09/24/2024	14:04	LB132578
ICSAB01	Arsenic	106	104	102	88.4	120	09/24/2024	14:14	LB132578
	Barium	512	537	95	437	637	09/24/2024	14:14	LB132578
	Beryllium	489	495	99	420	570	09/24/2024	14:14	LB132578
	Cadmium	992	972	102	826	1120	09/24/2024	14:14	LB132578
	Chromium	584	542	108	460	624	09/24/2024	14:14	LB132578
	Copper	506	511	99	434	588	09/24/2024	14:14	LB132578
	Lead	55.9	49.0	114	37	61	09/24/2024	14:14	LB132578
	Nickel	1040	954	109	810	1100	09/24/2024	14:14	LB132578
	Selenium	40.6	46.0	88	26	66	09/24/2024	14:14	LB132578

Metals

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INTERFERENCE CHECK SAMPLE

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Silver	226	201	112	170	232	09/24/2024	14:14	LB132578
	Zinc	888	952	93	809	1095	09/24/2024	14:14	LB132578



METAL

QC

DATA

metals
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MATRIX SPIKE SUMMARY

client: ENTACT **level:** low **sdg no.:** P4103
contract: ENTA05 **lab code:** CHEM **case no.:** P4103 **sas no.:** P4103
matrix: Water **sample id:** P4123-01 **client id:** 910-BMS
Percent Solids for Sample: NA **Spiked ID:** P4123-01MS **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	3620		100	U	4000	90		P
Barium	ug/L	75 - 125	3530		2510		1000	101		P
Beryllium	ug/L	75 - 125	881		1.85	J	1000	88		P
Cadmium	ug/L	75 - 125	889		1.26	J	1000	89		P
Chromium	ug/L	75 - 125	1930		7.51	J	2000	96		P
Copper	ug/L	75 - 125	1530		106		1500	95		P
Lead	ug/L	75 - 125	4390		60.0	U	5000	88		P
Mercury	ug/L	75 - 125	41.1		2.00	U	40.0	103		CV
Nickel	ug/L	75 - 125	2430		26.2	J	2500	96		P
Selenium	ug/L	75 - 125	9010		100	U	10000	90		P
Silver	ug/L	75 - 125	380		50.0	U	380	100		P
Zinc	ug/L	75 - 125	2970		1930		1000	104		P

metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: ENTACT **level:** low **sdg no.:** P4103
contract: ENTA05 **lab code:** CHEM **case no.:** P4103 **sas no.:** P4103
matrix: Water **sample id:** P4123-01 **client id:** 910-BMSD
Percent Solids for Sample: NA **Spiked ID:** P4123-01MSD **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	3490		100	U	4000	87		P
Barium	ug/L	75 - 125	3510		2510		1000	99		P
Beryllium	ug/L	75 - 125	1050		1.85	J	1000	105		P
Cadmium	ug/L	75 - 125	880		1.26	J	1000	88		P
Chromium	ug/L	75 - 125	1960		7.51	J	2000	98		P
Copper	ug/L	75 - 125	1510		106		1500	93		P
Lead	ug/L	75 - 125	4350		60.0	U	5000	87		P
Mercury	ug/L	75 - 125	38.2		2.00	U	40.0	96		CV
Nickel	ug/L	75 - 125	2400		26.2	J	2500	95		P
Selenium	ug/L	75 - 125	8690		100	U	10000	87		P
Silver	ug/L	75 - 125	384		50.0	U	380	101		P
Zinc	ug/L	75 - 125	2950		1930		1000	102		P

Metals
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Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
Matrix: **Level:** LOW **Client ID:**
Sample ID: **Spiked ID:**

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: ENTACT **Level:** LOW **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
Matrix: Water **Sample ID:** P4123-01 **Client ID:** 910-BDUP
Percent Solids for Sample: NA **Duplicate ID** P4123-01DUP **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	2510		2530		1		P
Beryllium	ug/L	20	1.85	J	2.18	J	16		P
Cadmium	ug/L	20	1.26	J	1.56	J	21		P
Chromium	ug/L	20	7.51	J	7.41	J	1		P
Copper	ug/L	20	106		104		2		P
Lead	ug/L	20	60.0	U	60.0	U			P
Mercury	ug/L	20	2.00	U	2.00	U			CV
Nickel	ug/L	20	26.2	J	26.6	J	2		P
Selenium	ug/L	20	100	U	100	U			P
Silver	ug/L	20	50.0	U	50.0	U			P
Zinc	ug/L	20	1930		1940		1		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: ENTACT **Level:** LOW **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103
Matrix: Water **Sample ID:** P4123-01MS **Client ID:** 910-BMSD
Percent Solids for Sample: NA **Duplicate ID** P4123-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	3620		3490		4		P
Barium	ug/L	20	3530		3510		1		P
Beryllium	ug/L	20	881		1050		18		P
Cadmium	ug/L	20	889		880		1		P
Chromium	ug/L	20	1930		1960		2		P
Copper	ug/L	20	1530		1510		1		P
Lead	ug/L	20	4390		4350		1		P
Mercury	ug/L	20	41.1		38.2		7		CV
Nickel	ug/L	20	2430		2400		1		P
Selenium	ug/L	20	9010		8690		4		P
Silver	ug/L	20	380		384		1		P
Zinc	ug/L	20	2970		2950		1		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: ENTACT **SDG No.:** P4103
Contract: ENTA05 **Lab Code:** CHEM **Case No.:** P4103 **SAS No.:** P4103

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB163580BS							
Arsenic	ug/L	4000	3720		93	80 - 120	P
Barium	ug/L	1000	999		100	80 - 120	P
Beryllium	ug/L	1000	1160		116	80 - 120	P
Cadmium	ug/L	1000	930		93	80 - 120	P
Chromium	ug/L	2000	1930		96	80 - 120	P
Copper	ug/L	1500	1570		105	80 - 120	P
Lead	ug/L	5000	4730		95	80 - 120	P
Nickel	ug/L	2500	2530		101	80 - 120	P
Selenium	ug/L	10000	9530		95	80 - 120	P
Silver	ug/L	380	385		101	80 - 120	P
Zinc	ug/L	1000	1010		101	80 - 120	P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB163584BS Mercury	ug/L	4.0	4.21		105	80 - 120	CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

910-BL

Lab Name: Chemtech Consulting Group

Contract: ENTA05

Lab Code: CHEM **Lb No.:** lb132557 **Lab Sample ID :** P4123-01L **SDG No.:** P4103

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
		C		C			
Arsenic	100	U	500	U			P
Barium	2510		2670		6		P
Beryllium	1.85	J	150	U	100.0		P
Cadmium	1.26	J	150	U	100.0		P
Chromium	7.51	J	250	U	100.0		P
Copper	106		500	U	100.0		P
Lead	60.0	U	300	U			P
Mercury	2.00	U	10.0	U			CV
Nickel	26.2	J	1000	U	100.0		P
Selenium	100	U	500	U			P
Silver	50.0	U	250	U			P
Zinc	1930		1800		7		P



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

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
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

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
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

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
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

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
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: ENTACT

SDG No.: P4103

Contract: ENTA05

Lab Code: CHEM

Case No.: P4103

SAS No.: P4103

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
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000



METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>ENTACT</u>	SDG No.:	<u>P4103</u>
Contract:	<u>ENTA05</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>P4103</u>
		SAS No.:	<u>P4103</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB163580							
P4103-02	WC-22A	SAM	WATER	09/20/2024	5.0	25.0	
P4103-05	WC-14-5-7.5A	SAM	WATER	09/20/2024	5.0	25.0	
P4103-08	WC-14-5-7.5B	SAM	WATER	09/20/2024	5.0	25.0	
P4103-11	WC-14-7.5-10A	SAM	WATER	09/20/2024	5.0	25.0	
P4103-14	WC-14-7.5-10B	SAM	WATER	09/20/2024	5.0	25.0	
P4103-17	WC-23	SAM	WATER	09/20/2024	5.0	25.0	
P4123-01DUP	910-BDUP	DUP	WATER	09/20/2024	5.0	25.0	
P4123-01MS	910-BMS	MS	WATER	09/20/2024	5.0	25.0	
P4123-01MSD	910-BMSD	MSD	WATER	09/20/2024	5.0	25.0	
PB163511TB	PB163511TB	MB	WATER	09/20/2024	5.0	25.0	
PB163580BL	PB163580BL	MB	WATER	09/20/2024	5.0	25.0	
PB163580BS	PB163580BS	LCS	WATER	09/20/2024	5.0	25.0	

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>ENTACT</u>	SDG No.:	<u>P4103</u>
Contract:	<u>ENTA05</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>P4103</u>
		SAS No.:	<u>P4103</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB163584							
P4103-02	WC-22A	SAM	WATER	09/20/2024	3.0	30.0	
P4103-05	WC-14-5-7.5A	SAM	WATER	09/20/2024	3.0	30.0	
P4103-08	WC-14-5-7.5B	SAM	WATER	09/20/2024	3.0	30.0	
P4103-11	WC-14-7.5-10A	SAM	WATER	09/20/2024	3.0	30.0	
P4103-14	WC-14-7.5-10B	SAM	WATER	09/20/2024	3.0	30.0	
P4103-17	WC-23	SAM	WATER	09/20/2024	3.0	30.0	
P4123-01DUP	910-BDUP	DUP	WATER	09/20/2024	3.0	30.0	
P4123-01MS	910-BMS	MS	WATER	09/20/2024	3.0	30.0	
P4123-01MSD	910-BMSD	MSD	WATER	09/20/2024	3.0	30.0	
PB163511TB	PB163511TB	MB	WATER	09/20/2024	3.0	30.0	
PB163584BL	PB163584BL	MB	WATER	09/20/2024	30.0	30.0	
PB163584BS	PB163584BS	LCS	WATER	09/20/2024	30.0	30.0	

metals
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ANALYSIS RUN LOG

Client: ENTACT **Contract:** ENTA05

Lab code: CHEM **Case no.:** P4103 **Sas no.:** P4103 **Sdg no.:** P4103

Instrument id number: **Method:** **Run number:** LB132543

Start date: 09/21/2024 **End date:** 09/21/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	2058	HG
S0.2	S0.2	1	2100	HG
S2.5	S2.5	1	2102	HG
S5	S5	1	2105	HG
S7.5	S7.5	1	2107	HG
S10	S10	1	2112	HG
ICV01	ICV01	1	2115	HG
ICB01	ICB01	1	2117	HG
CCV01	CCV01	1	2120	HG
CCB01	CCB01	1	2122	HG
CRA	CRA	1	2124	HG
PB163584BL	PB163584BL	1	2131	HG
PB163584BS	PB163584BS	1	2133	HG
P4103-02	WC-22A	1	2138	HG
P4103-05	WC-14-5-7.5A	1	2140	HG
P4103-08	WC-14-5-7.5B	1	2142	HG
P4103-11	WC-14-7.5-10A	1	2145	HG
CCV02	CCV02	1	2147	HG
CCB02	CCB02	1	2149	HG
P4103-14	WC-14-7.5-10B	1	2152	HG
P4103-17	WC-23	1	2154	HG
P4123-01DUP	910-BDUP	1	2205	HG
P4123-01MS	910-BMS	1	2207	HG
P4123-01MSD	910-BMSD	1	2210	HG
CCV03	CCV03	1	2214	HG
CCB03	CCB03	1	2216	HG
P4123-01L	910-BL	5	2219	HG
PB163511TB	PB163511TB	1	2221	HG
CCV04	CCV04	1	2223	HG
CCB04	CCB04	1	2226	HG

metals
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ANALYSIS RUN LOG

Client: ENTACT **Contract:** ENTA05

Lab code: CHEM **Case no.:** P4103 **Sas no.:** P4103 **Sdg no.:** P4103

Instrument id number: **Method:** **Run number:** LB132557

Start date: 09/23/2024 **End date:** 09/23/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1208	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S1	S1	1	1213	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S2	S2	1	1217	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S3	S3	1	1221	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S4	S4	1	1225	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S5	S5	1	1230	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICV01	ICV01	1	1249	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1258	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICB01	ICB01	1	1303	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CRI01	CRI01	1	1307	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1317	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1322	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV01	CCV01	1	1338	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB01	CCB01	1	1343	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV02	CCV02	1	1351	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB02	CCB02	1	1355	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV03	CCV03	1	1447	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB03	CCB03	1	1452	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV04	CCV04	1	1537	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB04	CCB04	1	1542	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4103-02	WC-22A	1	1553	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4103-05	WC-14-5-7.5A	1	1557	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4103-08	WC-14-5-7.5B	1	1601	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4103-11	WC-14-7.5-10A	1	1606	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4103-17	WC-23	1	1615	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV05	CCV05	1	1633	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB05	CCB05	1	1637	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4123-01DUP	910-BDUP	1	1713	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4123-01L	910-BL	5	1717	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4123-01MS	910-BMS	1	1721	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV06	CCV06	1	1726	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB06	CCB06	1	1730	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4123-01MSD	910-BMSD	1	1734	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB163511TB	PB163511TB	1	1743	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB163580BL	PB163580BL	1	1756	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB163580BS	PB163580BS	1	1800	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV07	CCV07	1	1804	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB07	CCB07	1	1808	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn

metals
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ANALYSIS RUN LOG

Client: ENTACT **Contract:** ENTA05

Lab code: CHEM **Case no.:** P4103 **Sas no.:** P4103 **Sdg no.:** P4103

Instrument id number: **Method:** **Run number:** LB132578

Start date: 09/24/2024 **End date:** 09/24/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1251	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S1	S1	1	1255	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S2	S2	1	1300	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S3	S3	1	1304	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S4	S4	1	1308	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S5	S5	1	1312	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICV01	ICV01	1	1334	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1338	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICB01	ICB01	1	1356	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CRI01	CRI01	1	1400	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1404	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1414	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV01	CCV01	1	1425	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB01	CCB01	1	1429	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV02	CCV02	1	1517	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB02	CCB02	1	1521	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV03	CCV03	1	1608	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB03	CCB03	1	1612	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV04	CCV04	1	1658	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB04	CCB04	1	1702	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
P4103-14	WC-14-7.5-10B	1	1707	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV05	CCV05	1	1749	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB05	CCB05	1	1754	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV06	CCV06	1	1826	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB06	CCB06	1	1838	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV07	CCV07	1	1850	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB07	CCB07	1	1855	Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn



METAL RAW DATA

Sample Name: S0 Acquired: 9/23/2024 12:08:59 Type: Cal
Method: NON EPA-6010-200.7(v2417) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00006	.00035	-.00022	.00024	.00017	.00073	.04130	-.00136
Stddev	.00008	.00004	.00009	.00011	.00004	.00031	.00103	.00037
%RSD	147.98	11.151	38.770	44.761	25.557	43.210	2.4948	27.038
#1	-.00012	.00037	-.00013	.00033	.00022	.00104	.04041	-.00110
#2	.00004	.00037	-.00030	.00012	.00016	.00041	.04243	-.00179
#3	-.00008	.00030	-.00024	.00028	.00014	.00073	.04107	-.00121
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	-.00019	.00507	.00012	.00009	-.00038	.00000	.00058	-.00014
Stddev	.00005	.00042	.00004	.00013	.00019	.00001	.00024	.00024
%RSD	27.378	8.2945	31.641	136.77	49.617	314.25	40.481	167.59
#1	-.00019	.00501	.00016	.00000	-.00036	.00001	.00032	.00012
#2	-.00014	.00468	.00008	.00004	-.00020	-.00001	.00066	-.00019
#3	-.00024	.00552	.00012	.00024	-.00057	.00001	.00077	-.00035
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	-.00006	-.00103	.00280	.00003	.02839	-.00008	.00303	-.00017
Stddev	.00007	.00004	.00008	.00029	.00115	.00021	.00005	.00009
%RSD	121.94	3.5470	2.7294	854.76	4.0618	248.91	1.6243	51.751
#1	-.00013	-.00098	.00286	.00010	.02926	-.00032	.00308	-.00010
#2	-.00003	-.00104	.00271	.00028	.02883	.00004	.00301	-.00027
#3	-.00001	-.00105	.00283	-.00028	.02708	.00004	.00299	-.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	.00107	.00212	.00013	-.00129	.00036	.01304	-.00058	
Stddev	.00005	.00052	.00004	.00002	.00006	.00197	.00117	
%RSD	4.5575	24.548	33.133	1.4452	16.620	15.068	203.11	
#1	.00102	.00268	.00016	-.00128	.00037	.01328	-.00154	
#2	.00112	.00166	.00008	-.00131	.00042	.01488	.00073	
#3	.00108	.00201	.00013	-.00129	.00030	.01097	-.00093	

Sample Name: S0 Acquired: 9/23/2024 12:08:59 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	2876.8	56135.	6119.0	2366.4	4576.9
Stddev	2.8	112.	15.4	7.8	2.3
%RSD	.09604	.19945	.25157	.33120	.05098
#1	2879.9	56165.	6102.9	2358.7	4574.8
#2	2874.7	56011.	6133.6	2366.0	4579.4
#3	2875.9	56229.	6120.5	2374.4	4576.5

Sample Name: S1 Acquired: 9/23/2024 12:13:21 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	.00058	.00163	.00238	.00163	.00866	.01029	.36394	.03784
Stddev	.00004	.00001	.00013	.00003	.00009	.00026	.00078	.00057
%RSD	7.7721	.47762	5.5300	1.7821	1.0521	2.4821	.21546	1.5076
#1	.00059	.00162	.00237	.00166	.00876	.01058	.36394	.03748
#2	.00062	.00163	.00225	.00161	.00857	.01011	.36316	.03754
#3	.00053	.00164	.00251	.00162	.00866	.01018	.36473	.03850
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	.01371	.15843	.00161	.02501	.01653	.00054	.01461	.04876
Stddev	.00010	.00117	.00004	.00011	.00015	.00002	.00018	.00035
%RSD	.70059	.74105	2.8008	.44269	.88370	4.4029	1.2076	.72718
#1	.01360	.15734	.00160	.02492	.01649	.00055	.01443	.04851
#2	.01376	.15967	.00156	.02513	.01640	.00055	.01464	.04916
#3	.01377	.15828	.00165	.02497	.01669	.00051	.01478	.04859
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	.03120	.00226	.03259	.00508	.12961	.01224	.04734	.12619
Stddev	.00014	.00009	.00013	.00015	.00158	.00011	.00024	.00024
%RSD	.45544	3.9557	.39098	2.9023	1.2218	.93635	.50236	.19292
#1	.03104	.00235	.03273	.00522	.12826	.01225	.04712	.12646
#2	.03126	.00217	.03248	.00508	.12922	.01235	.04759	.12611
#3	.03130	.00228	.03258	.00493	.13136	.01212	.04731	.12599
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	.00512	.02444	.00125	-.00069	.00937	.01265	.37581	
Stddev	.00006	.00016	.00004	.00008	.00008	.00080	.00198	
%RSD	1.1764	.63890	3.2095	11.616	.86117	6.3493	.52794	
#1	.00515	.02437	.00126	-.00061	.00935	.01358	.37360	
#2	.00505	.02461	.00121	-.00071	.00946	.01213	.37637	
#3	.00516	.02432	.00129	-.00077	.00931	.01225	.37745	

Sample Name: S1 Acquired: 9/23/2024 12:13:21 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	2912.6	56599.	6325.1	2340.6	4654.5
Stddev	3.1	174.	27.0	2.2	5.3
%RSD	.10521	.30755	.42698	.09281	.11454
#1	2913.8	56447.	6345.3	2342.6	4655.1
#2	2914.9	56560.	6294.4	2338.3	4659.5
#3	2909.1	56789.	6335.5	2340.9	4648.9

Sample Name: S2 Acquired: 9/23/2024 12:17:40 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	.03063	.03276	.16072	.06329	.14282	.14293	5.3379	.26226
Stddev	.00011	.00032	.00049	.00009	.00022	.00044	.0097	.00113
%RSD	.36682	.98285	.30530	.14927	.15649	.30848	.18182	.43032
#1	.03056	.03312	.16068	.06333	.14276	.14259	5.3300	.26356
#2	.03058	.03250	.16024	.06336	.14306	.14278	5.3351	.26154
#3	.03076	.03265	.16122	.06318	.14263	.14343	5.3488	.26167
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	.95398	.32353	.02391	.34796	.16463	.00434	.28886	.09161
Stddev	.00131	.00154	.00006	.00081	.00063	.00003	.00114	.00025
%RSD	.13760	.47546	.26452	.23205	.38005	.68101	.39405	.27526
#1	.95298	.32238	.02387	.34812	.16414	.00433	.28787	.09135
#2	.95348	.32294	.02399	.34708	.16533	.00433	.28861	.09165
#3	.95546	.32528	.02388	.34867	.16441	.00438	.29010	.09185
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	.32926	.05560	.06231	.05329	1.0765	.02457	.39468	.52590
Stddev	.00033	.00026	.00045	.00070	.0006	.00019	.00257	.00067
%RSD	.10110	.47051	.71460	1.3120	.05452	.78041	.65194	.12695
#1	.32888	.05588	.06187	.05301	1.0770	.02453	.39759	.52585
#2	.32948	.05536	.06230	.05277	1.0768	.02440	.39372	.52526
#3	.32942	.05554	.06276	.05409	1.0759	.02478	.39272	.52659
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	.08946	.47620	.00294	.02242	.02030	.01083	15.146	
Stddev	.00020	.00324	.00003	.00019	.00005	.00117	.026	
%RSD	.22333	.68071	1.0319	.82990	.22923	10.813	.17413	
#1	.08964	.47395	.00297	.02229	.02034	.00953	15.130	
#2	.08925	.47473	.00293	.02233	.02030	.01115	15.131	
#3	.08949	.47992	.00291	.02263	.02025	.01181	15.176	

Sample Name: S2 Acquired: 9/23/2024 12:17:40 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	2721.8	56934.	6249.5	2310.5	4267.2
Stddev	4.6	122.	15.9	5.7	8.6
%RSD	.16835	.21457	.25481	.24535	.20254
#1	2725.0	56965.	6233.0	2305.4	4266.9
#2	2724.0	57038.	6250.6	2316.6	4276.0
#3	2716.6	56800.	6264.8	2309.4	4258.7

Sample Name: S3 Acquired: 9/23/2024 12:21:43 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	.09609	.09864	.49798	.19684	.44392	.45845	16.956	.89401
Stddev	.00028	.00067	.00015	.00019	.00025	.00239	.048	.00498
%RSD	.28631	.68158	.03107	.09676	.05733	.52127	.28558	.55655
#1	.09624	.09855	.49791	.19706	.44417	.45578	16.919	.88911
#2	.09625	.09936	.49816	.19674	.44393	.45916	16.938	.89906
#3	.09577	.09802	.49788	.19672	.44366	.46040	17.011	.89386
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	2.9429	1.0503	.07253	1.0768	.50949	.01321	.92841	.29359
Stddev	.0037	.0083	.00027	.0010	.00058	.00011	.00409	.00148
%RSD	.12524	.78868	.37878	.09305	.11423	.84285	.44036	.50387
#1	2.9469	1.0408	.07226	1.0778	.51016	.01313	.92407	.29210
#2	2.9423	1.0543	.07281	1.0758	.50912	.01316	.92896	.29363
#3	2.9396	1.0558	.07252	1.0768	.50919	.01334	.93218	.29505
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	1.0142	.17534	.18633	.17077	3.3396	.07834	1.3323	1.6251
Stddev	.0004	.00001	.00079	.00051	.0096	.00012	.0048	.0011
%RSD	.04274	.00693	.42392	.29927	.28879	.15042	.35899	.06532
#1	1.0141	.17534	.18707	.17018	3.3369	.07848	1.3268	1.6262
#2	1.0138	.17535	.18550	.17104	3.3504	.07827	1.3355	1.6242
#3	1.0147	.17533	.18642	.17108	3.3317	.07828	1.3346	1.6247
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	.27463	1.5541	.00886	.07295	.06291	.01292	48.324	
Stddev	.00027	.0096	.00005	.00027	.00002	.00207	.220	
%RSD	.09834	.61487	.59205	.36853	.03637	16.038	.45604	
#1	.27444	1.5435	.00890	.07292	.06291	.01406	48.139	
#2	.27494	1.5567	.00880	.07323	.06289	.01053	48.567	
#3	.27452	1.5621	.00887	.07269	.06294	.01416	48.265	

Sample Name: S3 Acquired: 9/23/2024 12:21:43 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	2654.3	55123.	5726.1	2201.4	4162.3
Stddev	2.3	18.	17.0	2.5	1.5
%RSD	.08540	.03287	.29730	.11413	.03724
#1	2654.9	55106.	5744.0	2199.4	4163.8
#2	2656.2	55122.	5710.1	2204.2	4162.2
#3	2651.8	55142.	5724.1	2200.7	4160.7

Sample Name: S4 Acquired: 9/23/2024 12:25:50 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	.18469	.19423	.95139	.37708	.85902	.90536	33.660	1.7324
Stddev	.00011	.00238	.00078	.00144	.00203	.00616	.190	.0059
%RSD	.05768	1.2229	.08172	.38076	.23612	.68004	.56324	.33879
#1	.18480	.19659	.95051	.37873	.86135	.89896	33.534	1.7297
#2	.18459	.19425	.95196	.37611	.85765	.91124	33.878	1.7392
#3	.18469	.19184	.95170	.37640	.85806	.90588	33.568	1.7284
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	5.6399	2.0743	.13510	2.0643	.96921	.02539	1.8220	.57542
Stddev	.0040	.0178	.00056	.0032	.00148	.00025	.0094	.00347
%RSD	.07027	.85949	.41740	.15492	.15265	1.0000	.51675	.60241
#1	5.6443	2.0547	.13453	2.0678	.97091	.02511	1.8111	.57166
#2	5.6367	2.0788	.13512	2.0633	.96857	.02544	1.8272	.57848
#3	5.6386	2.0895	.13566	2.0617	.96817	.02561	1.8276	.57612
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	1.9358	.33444	.35890	.33660	6.3672	.15308	2.6083	3.1469
Stddev	.0019	.00065	.00211	.00283	.0134	.00087	.0050	.0048
%RSD	.09651	.19557	.58805	.83954	.21066	.56625	.18973	.15176
#1	1.9379	.33413	.35646	.33338	6.3821	.15219	2.6069	3.1524
#2	1.9345	.33519	.36020	.33867	6.3633	.15314	2.6138	3.1436
#3	1.9350	.33399	.36003	.33776	6.3562	.15392	2.6042	3.1448
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	.52773	3.0879	.01714	.14109	.12106	.01481	95.940	
Stddev	.00065	.0220	.00020	.00039	.00059	.00156	.975	
%RSD	.12273	.71162	1.1637	.27865	.48794	10.537	1.0166	
#1	.52847	3.0637	.01692	.14151	.12174	.01656	94.844	
#2	.52740	3.0933	.01718	.14100	.12069	.01356	96.262	
#3	.52731	3.1067	.01731	.14074	.12075	.01431	96.713	

Sample Name: S4 Acquired: 9/23/2024 12:25:50 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	2616.1	54964.	5550.4	2121.3	4094.0
Stddev	2.8	161.	12.3	5.7	5.6
%RSD	.10717	.29375	.22200	.26884	.13581
#1	2613.6	55150.	5559.0	2116.4	4089.0
#2	2615.5	54861.	5536.3	2119.9	4093.0
#3	2619.1	54880.	5555.9	2127.6	4100.0

Sample Name: S5 Acquired: 9/23/2024 12:30:01 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	.39741	.39941	2.0437	.80377	1.8199	2.0186	75.011	3.8684
Stddev	.00180	.01341	.0013	.00435	.0072	.0040	.188	.0202
%RSD	.45239	3.3567	.06212	.54107	.39456	.19724	.25095	.52236
#1	.39604	.40008	2.0436	.80202	1.8169	2.0161	74.831	3.8661
#2	.39674	.38568	2.0424	.80057	1.8148	2.0232	75.207	3.8896
#3	.39944	.41247	2.0450	.80872	1.8281	2.0165	74.995	3.8494
Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	12.064	4.5745	.27748	4.3912	2.0121	.05304	4.0118	1.2805
Stddev	.006	.0214	.00069	.0011	.0032	.00039	.0106	.0033
%RSD	.04612	.46859	.24795	.02528	.15841	.73935	.26298	.25748
#1	12.068	4.5504	.27729	4.3903	2.0100	.05272	4.0003	1.2771
#2	12.058	4.5916	.27690	4.3909	2.0105	.05292	4.0210	1.2836
#3	12.066	4.5814	.27824	4.3924	2.0158	.05348	4.0143	1.2809
Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.0950	.70021	.77982	.74996	13.102	.33293	5.8143	6.6017
Stddev	.0014	.00049	.00360	.00257	.044	.00186	.0300	.0273
%RSD	.03341	.07036	.46154	.34240	.33586	.55833	.51673	.41275
#1	4.0947	.69968	.77740	.74701	13.054	.33164	5.8237	6.5881
#2	4.0939	.70066	.77810	.75169	13.141	.33209	5.8386	6.5838
#3	4.0965	.70028	.78396	.75119	13.109	.33506	5.7807	6.6330
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	1.1209	6.9300	.03594	.31353	.26904	9.0049	209.72	
Stddev	.0037	.0258	.00046	.00091	.00118	.0209	1.06	
%RSD	.33008	.37269	1.2668	.28957	.43809	.23179	.50329	
#1	1.1219	6.9041	.03553	.31360	.26853	9.0001	208.50	
#2	1.1168	6.9558	.03587	.31259	.26820	9.0278	210.22	
#3	1.1241	6.9301	.03643	.31440	.27038	8.9868	210.42	

Sample Name: S5 Acquired: 9/23/2024 12:30:01 Type: Cal
Method: NON EPA-6010-200.7(v2417) 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	2487.6	52726.	5038.7	2011.2	3801.9
Stddev	4.8	123.	17.7	9.9	1.6
%RSD	.19449	.23348	.35100	.49182	.04101
#1	2492.6	52760.	5035.0	2021.4	3802.8
#2	2487.5	52828.	5023.2	2001.7	3800.1
#3	2482.9	52589.	5058.0	2010.4	3802.7

Sample Name: ICV01 Acquired: 9/23/2024 12:49:01 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.9502146	1.015522	.9672433	.9680191	1.000186	2.465889
Stddev	.0026702	.010101	.0024676	.0040364	.002871	.010171
%RSD	.2810092	.9946237	.2551175	.4169733	.2870735	.4124668

#1	.9474813	1.004587	.9644372	.9667662	1.003321	2.469836
#2	.9528168	1.017475	.9690746	.9647577	.997684	2.454337
#3	.9503459	1.024504	.9682180	.9725333	.999554	2.473496

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5034642	.5212747	.5217902	10.33121	.5309747	.5208011
Stddev	.0007438	.0028818	.0002895	.03192	.0013541	.0001773
%RSD	.1477264	.5528404	.0554840	.3089759	.2550117	.0340510

#1	.5026991	.5218479	.5217578	10.31399	.5306479	.5209373
#2	.5041846	.5181493	.5220945	10.31160	.5324623	.5208653
#3	.5035088	.5238268	.5215182	10.36804	.5298140	.5206005

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5316347	10.40781	.5139765	5.734635	.5216658	.2711477
Stddev	.0008005	.03669	.0022848	.020729	.0004635	.0001430
%RSD	.1505765	.3525237	.4445288	.3614719	.0888527	.0527404

#1	.5311298	10.36840	.5117961	5.734469	.5222010	.2713005
#2	.5312166	10.44097	.5137803	5.713989	.5213971	.2711258
#3	.5325577	10.41407	.5163530	5.755446	.5213993	.2710170

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.754926	.4770082	1.049978	10.13123	2.604331	F 2.768988
Stddev	.043291	.0012420	.002341	.04523	.012494	.003653
%RSD	.4437877	.2603696	.2229542	.4464382	.4797310	.1319156

#1	9.747697	.4757356	1.049569	10.10310	2.601606	2.764801
#2	9.801377	.4782171	1.052496	10.18340	2.593425	2.771522
#3	9.715705	.4770717	1.047869	10.10718	2.617962	2.770643

Sample Name: ICV01 Acquired: 9/23/2024 12:49:01 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	2.600425	2.641407	F 2.095020	F .0000445	F -.009719	F -.002690
Stddev	.001629	.005030	.021879	.0024978	.003689	.003459
%RSD	.0626583	.1904207	1.044321	5614.325	37.95788	128.5830
#1	2.602305	2.638753	2.090237	-.002018	-.006104	-.006517
#2	2.599552	2.638260	2.118895	-.000670	-.013479	.000214
#3	2.599418	2.647208	2.075929	.002822	-.009575	-.001768

Elem	Sr4077
Units	ppm
Avg	F -.009202
Stddev	.000057
%RSD	.6141736
#1	-.009163
#2	-.009267
#3	-.009177

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2703.375	53788.35	5557.057	2053.740	4408.827
Stddev	3.294	156.51	19.725	1.920	5.371
%RSD	.1218488	.2909762	.3549594	.0934953	.1218196
#1	2702.596	53702.54	5545.026	2051.553	4406.329
#2	2700.540	53693.51	5579.822	2054.516	4405.161
#3	2706.988	53969.00	5546.324	2055.150	4414.992

Sample Name: LLICV01 Acquired: 9/23/2024 12:58:12 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.0175613	.0352555	.0129377	.0176010	.0480623	.0988806
Stddev	.0004092	.0019340	.0006804	.0019853	.0005696	.0060232
%RSD	2.329969	5.485791	5.259282	11.27927	1.185221	6.091422

#1	.0180025	.0364432	.0121749	.0157183	.0475259	.0949074
#2	.0174871	.0330238	.0131561	.0174097	.0486602	.1058109
#3	.0171943	.0362995	.0134822	.0196750	.0480008	.0959236

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0941951	.0061086	.0058058	1.913017	.0087804	.0290414
Stddev	.0007331	.0000122	.0000535	.022565	.0004081	.0000762
%RSD	.7783116	.1988390	.9220662	1.179562	4.647946	.2622912

#1	.0933532	.0061113	.0058590	1.886986	.0084428	.0290121
#2	.0945396	.0061192	.0058063	1.927035	.0086645	.0289841
#3	.0946926	.0060954	.0057519	1.925029	.0092340	.0291278

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0216676	.1011460	.0189401	2.004444	.0387378	.0107872
Stddev	.0004833	.0030190	.0002984	.017469	.0003157	.0001242
%RSD	2.230615	2.984779	1.575449	.8715243	.8150312	1.151568

#1	.0220008	.0985316	.0187523	1.986589	.0388003	.0109241
#2	.0218886	.1004562	.0187838	2.021500	.0383954	.0107558
#3	.0211132	.1044501	.0192842	2.005244	.0390175	.0106817

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.705518	.0368316	.0363273	1.758379	.0963776	.1975073
Stddev	.010226	.0028428	.0005676	.021289	.0006206	.0012406
%RSD	.5995559	7.718420	1.562513	1.210743	.6439035	.6281161

#1	1.706801	.0335941	.0358337	1.737670	.0961329	.1963507
#2	1.694712	.0389197	.0369475	1.757264	.0970832	.1973538
#3	1.715042	.0379811	.0362007	1.780205	.0959166	.1988175

Sample Name: LLICV01 Acquired: 9/23/2024 12:58:12 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.0430929	.0374768	F .2751833	.0169854	F .3574021	F -.006172
Stddev	.0007947	.0004515	.0065122	.0012093	.0007234	.002383
%RSD	1.844059	1.204722	2.366512	7.119865	.2024142	38.60310
#1	.0439957	.0375346	.2683784	.0158429	.3565952	-.008674
#2	.0427836	.0369992	.2813570	.0182520	.3576184	-.003930
#3	.0424994	.0378966	.2758144	.0168615	.3579928	-.005912

Elem	Sr4077
Units	ppm
Avg	.0195151
Stddev	.0001725
%RSD	.8838208
#1	.0193184
#2	.0195868
#3	.0196402

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2661.971	56919.25	5558.505	2165.599	4337.924
Stddev	2.827	66.93	11.926	6.869	10.179
%RSD	.1061901	.1175851	.2145566	.3171861	.2346458
#1	2660.154	56869.05	5572.246	2157.744	4328.235
#2	2660.530	56995.24	5550.853	2168.579	4337.007
#3	2665.228	56893.46	5552.414	2170.475	4348.531

Sample Name: ICB01 Acquired: 9/23/2024 13:03:31 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.000653	-.002095	-.000543	.0010754	.0007178	.0021648	-.000208
Stddev	.001307	.001352	.000816	.0014999	.0003660	.0039164	.000929
%RSD	200.2585	64.55389	150.4155	139.4644	50.99734	180.9112	446.9736

#1	-.000974	-.000977	-.001432	.0019074	.0005167	.0063913	.000852
#2	.000785	-.003598	-.000368	.0019749	.0004963	.0014450	-.000881
#3	-.001769	-.001709	.000172	-.000656	.0011403	-.001342	-.000594

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000476	.0000501	.0167126	-.000438	-.000037	.0002394	.0044655
Stddev	.0000529	.0000372	.0060342	.000095	.000286	.0002403	.0016074
%RSD	111.1095	74.25660	36.10551	21.57526	782.5695	100.4039	35.99480

#1	.0000237	.0000135	.0196418	-.000329	-.000366	.0001678	.0048133
#2	.0000109	.0000490	.0207230	-.000488	.000117	.0000429	.0027128
#3	.0001083	.0000879	.0097730	-.000497	.000140	.0005074	.0058706

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003076	-.006482	.0001341	.0004884	-.089356	.0004279	-.004891
Stddev	.0002252	.014250	.0001453	.0001281	.010832	.0010961	.000156
%RSD	73.21800	219.8202	108.3504	26.21724	12.12261	256.1699	3.194099

#1	.0003036	-.002078	.0000962	.0005113	-.094597	.0003019	-.004848
#2	.0005347	-.022415	.0002946	.0003505	-.076900	-.000600	-.004762
#3	.0000844	.005045	.0000115	.0006035	-.096571	.001582	-.005065

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.090980	.0018497	.0000103	-.001158	.0009059	-.011565	-.003301
Stddev	.032349	.0002210	.0002567	.000150	.0002579	.017026	.001653
%RSD	35.55650	11.94613	2479.169	12.98101	28.46722	147.2160	50.09012

#1	-.112522	.0017762	.0000187	-.001007	.0006513	.006106	-.001667
#2	-.053781	.0016747	-.000250	-.001158	.0008995	-.012939	-.004973
#3	-.106636	.0020980	.000263	-.001308	.0011670	-.027863	-.003263

Sample Name: ICB01 Acquired: 9/23/2024 13:03:31 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002138	-.003673	-.000075
Stddev	.001945	.002063	.000029
%RSD	90.95540	56.17009	38.20485

#1	-.001290	-.005508	-.000077
#2	-.000761	-.004072	-.000103
#3	-.004364	-.001440	-.000046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2749.137	55541.23	5539.856	2129.057	4570.272
Stddev	2.122	42.00	13.190	2.241	.766
%RSD	.0771720	.0756172	.2380954	.1052761	.0167696

#1	2746.911	55549.61	5554.606	2128.324	4570.821
#2	2751.136	55578.41	5535.768	2131.574	4570.599
#3	2749.364	55495.68	5529.194	2127.275	4569.396

Sample Name: CRI01 Acquired: 9/23/2024 13:07:52 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.0174996	.0353847	.0143793	.0181273	.0500666	.0966658
Stddev	.0002952	.0018308	.0018211	.0006097	.0007349	.0201882
%RSD	1.686788	5.173897	12.66507	3.363390	1.467912	20.88457
#1	.0172633	.0361973	.0164172	.0180902	.0496742	.1199108
#2	.0174050	.0366686	.0129112	.0175370	.0496112	.0865659
#3	.0178305	.0332883	.0138095	.0187547	.0509145	.0835208
Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0954808	.0062022	.0058343	1.933446	.0092029	.0291811
Stddev	.0013973	.0000558	.0000487	.003768	.0005068	.0001525
%RSD	1.463464	.8988221	.8354988	.1948714	5.507366	.5224793
#1	.0944887	.0061387	.0058368	1.929143	.0090738	.0293101
#2	.0970788	.0062248	.0057843	1.935045	.0087732	.0290128
#3	.0948749	.0062431	.0058817	1.936151	.0097619	.0292202
Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221938	.1016106	.0189992	1.990724	.0389424	.0125177
Stddev	.0001435	.0040517	.0001132	.002699	.0001316	.0002449
%RSD	.6467044	3.987530	.5955915	.1355594	.3379964	1.956197
#1	.0223419	.1060825	.0191285	1.993836	.0389906	.0123819
#2	.0220553	.0981838	.0189182	1.989309	.0390431	.0128004
#3	.0221842	.1005655	.0189509	1.989027	.0387935	.0123708
Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.694147	.0360938	.0357228	1.782481	.0954155	.1983241
Stddev	.015844	.0006795	.0001224	.011352	.0004483	.0005184
%RSD	.9352470	1.882493	.3426312	.6368747	.4698423	.2614055
#1	1.701488	.0362613	.0358078	1.769675	.0958249	.1978010
#2	1.675964	.0366738	.0355825	1.786458	.0954850	.1983336
#3	1.704991	.0353462	.0357781	1.791310	.0949365	.1988377

Sample Name: CRI01 Acquired: 9/23/2024 13:07:52 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.0315203	.0379725	F .2748914	.0155159	F .3678458	F -.003131
Stddev	.0007155	.0005012	.0158259	.0011022	.0038540	.005517
%RSD	2.269954	1.319845	5.757139	7.103503	1.047735	176.2000
#1	.0309192	.0373952	.2879688	.0142434	.3670380	.002694
#2	.0323117	.0382951	.2794068	.0161323	.3644598	-.008276
#3	.0313300	.0382274	.2572986	.0161720	.3720398	-.003811

Elem	Sr4077
Units	ppm
Avg	.0195611
Stddev	.0000826
%RSD	.4224078
#1	.0194680
#2	.0196259
#3	.0195894

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2629.690	56834.18	5496.504	2159.023	4273.424
Stddev	4.502	26.40	24.105	1.152	11.196
%RSD	.1711954	.0464567	.4385509	.0533697	.2619920
#1	2625.042	56805.34	5508.347	2158.793	4263.091
#2	2629.999	56857.16	5468.769	2158.002	4271.862
#3	2634.030	56840.03	5512.398	2160.272	4285.319

Sample Name: ICSA01 Acquired: 9/23/2024 13:17:52 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.009988	.0062378	.0068438	-.010850	-.000309	243.7196
Stddev	.003937	.0023180	.0021687	.003792	.001036	.6606
%RSD	39.42173	37.16062	31.68864	34.94583	335.1591	.2710527

#1	-.014449	.0059545	.0081496	-.011121	.000886	242.9736
#2	-.008517	.0040744	.0043403	-.006930	-.000876	243.9544
#3	-.006998	.0086843	.0080413	-.014499	-.000938	244.2307

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0037269	.0020383	.0019858	239.6576	.0537509	.0018056
Stddev	.0004100	.0001174	.0000746	1.8254	.0002975	.0001041
%RSD	11.00046	5.759342	3.759102	.7616554	.5535599	5.767608

#1	.0041957	.0021541	.0020186	237.6094	.0540810	.0018706
#2	.0034356	.0019194	.0019003	240.2509	.0535033	.0018606
#3	.0035494	.0020413	.0020384	241.1125	.0536684	.0016855

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.016111	106.1580	.0018388	241.9523	.0031119	-.002601
Stddev	.000637	.3653	.0003074	.7305	.0001985	.000307
%RSD	3.953591	.3441029	16.71922	.3019069	6.378987	11.79956

#1	-.015379	105.7753	.0020210	241.3978	.0029541	-.002891
#2	-.016543	106.1958	.0014838	241.6791	.0033348	-.002280
#3	-.016410	106.5029	.0020115	242.7800	.0030468	-.002633

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.030754	.0043941	-.002251	-.077716	-.070015	.0001536
Stddev	.001278	.0019823	.000279	.007769	.001662	.0002017
%RSD	4.155009	45.11314	12.37694	9.996266	2.373340	131.3012

#1	-.029914	.0035941	-.002573	-.080101	-.068693	.0000918
#2	-.032225	.0066513	-.002088	-.069035	-.071880	.0003789
#3	-.030125	.0029367	-.002092	-.084013	-.069472	-.000010

Sample Name: ICSA01 Acquired: 9/23/2024 13:17:52 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.003787	-.004037	.0109037	-.001761	F -.022762	F .0380481
Stddev	.001163	.000251	.0115344	.002694	.002154	.0017659
%RSD	30.70788	6.228257	105.7843	152.9464	9.463516	4.641251
#1	-.002582	-.003766	.0046724	-.004473	-.021805	.0396224
#2	-.003877	-.004263	.0038252	.000915	-.025229	.0383833
#3	-.004903	-.004082	.0242136	-.001726	-.021252	.0361386

Elem	Sr4077
Units	ppm
Avg	-.006482
Stddev	.000077
%RSD	1.182166
#1	-.006537
#2	-.006395
#3	-.006515

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2318.783	47545.76	5438.217	1798.729	3615.208
Stddev	3.594	61.13	10.082	10.042	3.881
%RSD	.1550076	.1285651	.1853910	.5582633	.1073437
#1	2314.715	47483.66	5448.810	1794.652	3612.559
#2	2320.108	47547.74	5428.739	1791.367	3613.402
#3	2321.527	47605.87	5437.100	1810.168	3619.662

Sample Name: ICSAB01 Acquired: 9/23/2024 13:22:07 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.0930007	.0914971	.0522133	.0357449	.6150098	248.9755
Stddev	.0072482	.0006361	.0023715	.0048410	.0045954	1.2574
%RSD	7.793724	.6951849	4.542021	13.54330	.7472089	.5050382

#1	.0976629	.0919297	.0510671	.0412621	.6118287	247.6614
#2	.0846501	.0917948	.0506325	.0337648	.6129223	249.0978
#3	.0966890	.0907667	.0549402	.0322078	.6202784	250.1673

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4996057	.5203253	.9193124	240.4796	.5265639	.4984299
Stddev	.0029110	.0015581	.0006224	.7542	.0010628	.0005115
%RSD	.5826603	.2994384	.0676986	.3136402	.2018386	.1026252

#1	.4966392	.5200929	.9199843	239.7108	.5263012	.4980529
#2	.4997199	.5219865	.9187556	241.2183	.5277334	.4982247
#3	.5024579	.5188965	.9191974	240.5097	.5256570	.4990122

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4937649	92.56757	.4890145	245.9176	.9834329	.2124395
Stddev	.0004834	.46761	.0020001	1.0016	.0020307	.0003158
%RSD	.0978936	.5051574	.4090050	.4072992	.2064888	.1486402

#1	.4932078	92.18600	.4867091	244.9286	.9841941	.2127567
#2	.4940151	92.42750	.4900483	245.8930	.9811316	.2124367
#3	.4940719	93.08921	.4902861	246.9313	.9849730	.2121252

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.041749	.4704365	1.058073	-.107511	.9230533	.9073799
Stddev	.007042	.0010248	.004016	.023733	.0019405	.0009945
%RSD	16.86659	.2178341	.3795364	22.07525	.2102273	.1096049

#1	-.049667	.4693045	1.055620	-.085299	.9208391	.9066774
#2	-.039395	.4707043	1.055892	-.132518	.9238632	.9085179
#3	-.036187	.4713008	1.062707	-.104717	.9244578	.9069445

Sample Name: ICSAB01 Acquired: 9/23/2024 13:22:07 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.8578058	.8724226	F .6622013	F .0018352	F -.021657	F .0471005
Stddev	.0007533	.0048847	.0191054	.0026461	.003084	.0046399
%RSD	.0878114	.5599036	2.885132	144.1879	14.24135	9.851008
#1	.8569688	.8668211	.6568489	.0034269	-.023651	.0462078
#2	.8580195	.8757959	.6463430	-.001219	-.023215	.0521219
#3	.8584292	.8746509	.6834120	.003298	-.018104	.0429718

Elem	Sr4077
Units	ppm
Avg	F .0066809
Stddev	.0004474
%RSD	6.696138
#1	.0063326
#2	.0071854
#3	.0065248

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2325.151	51280.14	5060.676	1883.940	3627.229
Stddev	2.655	83.02	12.896	10.531	.851
%RSD	.1141648	.1618973	.2548345	.5589880	.0234589
#1	2326.314	51207.38	5052.029	1888.409	3626.251
#2	2322.114	51370.57	5054.500	1891.500	3627.636
#3	2327.027	51262.48	5075.499	1871.912	3627.799

Sample Name: ICSADLX20 Acquired: 9/23/2024 13:29:27 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.004796	-.002525	.0002202	-.001526	.0000170	12.43044	.0007290
Stddev	.001633	.003583	.0015489	.000331	.0008621	.05479	.0005514
%RSD	34.05762	141.8734	703.3039	21.69857	5064.823	.4407923	75.63900
#1	-.006198	.001611	-.000997	-.001868	-.000962	12.45681	.0001541
#2	-.003002	-.004661	.001964	-.001206	.000349	12.36745	.0012535
#3	-.005187	-.004526	-.000305	-.001505	.000664	12.46706	.0007795
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002372	.0003135	12.82706	.0025665	.0000196	-.004324	4.754905
Stddev	.0000775	.0000368	.04037	.0004560	.0000698	.000460	.041723
%RSD	32.69273	11.73730	.3147339	17.76842	356.7217	10.63176	.8774754
#1	.0002510	.0003555	12.78131	.0025022	-.000022	-.003904	4.706757
#2	.0003068	.0002978	12.85770	.0030513	.000100	-.004815	4.777508
#3	.0001536	.0002871	12.84218	.0021461	-.000020	-.004253	4.780449
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006736	12.56606	.0005091	.0000964	-.100852	-.000330	-.003638
Stddev	.0003891	.04893	.0000813	.0002464	.003288	.003747	.000108
%RSD	57.76832	.3893620	15.97216	255.5650	3.260022	1134.152	2.980972
#1	.0002344	12.52622	.0005309	.0002894	-.104528	-.003549	-.003706
#2	.0009755	12.55130	.0004191	-.000181	-.098193	-.001225	-.003513
#3	.0008108	12.62067	.0005773	.000181	-.099834	.003783	-.003695
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.165502	-.007963	.0002679	-.002509	.0003561	-.012108	-.003476
Stddev	.023612	.000345	.0004630	.000344	.0005387	.012628	.003463
%RSD	14.26706	4.331183	172.8181	13.73045	151.3071	104.2984	99.62883
#1	-.173846	-.008332	.0007945	-.002828	.0001801	-.017696	.000488
#2	-.183809	-.007909	-.000075	-.002143	.0009608	-.020978	-.005005
#3	-.138851	-.007648	.000084	-.002555	-.000073	.002350	-.005911

Sample Name: ICSADLX20 Acquired: 9/23/2024 13:29:27 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002157	.0003838	.0003184
Stddev	.001147	.0019771	.0000369
%RSD	53.16958	515.0870	11.57297
#1	-.003434	.0024346	.0003603
#2	-.001216	-.001510	.0003044
#3	-.001821	.000227	.0002907

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2719.866	54814.60	5117.100	2085.603	4468.896
Stddev	6.698	103.78	28.464	8.022	7.378
%RSD	.2462517	.1893243	.5562536	.3846310	.1650916
#1	2716.208	54695.57	5086.788	2085.811	4463.584
#2	2727.596	54862.13	5121.254	2077.479	4477.320
#3	2715.793	54886.10	5143.259	2093.519	4465.784

Sample Name: ICSABDLX20 Acquired: 9/23/2024 13:33:44 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.0026320	.0035196	.0021367	.0007372	.0308292	12.21378	.0247065
Stddev	.0023633	.0019288	.0013486	.0017469	.0002383	.02707	.0008216
%RSD	89.79142	54.80200	63.11748	236.9695	.7728484	.2216184	3.325597

#1	.0053609	.0013148	.0010868	.0000261	.0307904	12.18268	.0248830
#2	.0012559	.0043494	.0036576	-.000542	.0310845	12.22658	.0238110
#3	.0012793	.0048947	.0016656	.002727	.0306128	12.23206	.0254256

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0278681	.0562769	12.72885	.0284861	.0256890	.0252200	4.839238
Stddev	.0001623	.0000926	.08377	.0006569	.0001777	.0003594	.029757
%RSD	.5825227	.1645499	.6581082	2.306117	.6916542	1.424983	.6149187

#1	.0277091	.0561867	12.63251	.0288803	.0258836	.0248531	4.805045
#2	.0278616	.0562723	12.78457	.0288503	.0255355	.0255713	4.859276
#3	.0280336	.0563717	12.76945	.0277278	.0256479	.0252354	4.853392

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0262615	12.34445	.0560012	.0112255	-.095860	.0217294	.0496920
Stddev	.0004132	.06615	.0001411	.0004498	.004473	.0008481	.0006159
%RSD	1.573360	.5358675	.2519207	4.006477	4.666098	3.902762	1.239447

#1	.0258485	12.26816	.0559395	.0110513	-.092115	.0225590	.0501807
#2	.0266749	12.38589	.0561626	.0108889	-.100813	.0217653	.0498951
#3	.0262611	12.37929	.0559014	.0117363	-.094654	.0208640	.0490002

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.133691	.0383483	.0471384	.0424066	.0451293	.0302501	-.007667
Stddev	.038274	.0006131	.0003680	.0006818	.0005244	.0028442	.001103
%RSD	28.62889	1.598871	.7806863	1.607784	1.161888	9.402263	14.39066

#1	-.119127	.0378862	.0470350	.0421466	.0448156	.0270817	-.008603
#2	-.177109	.0381148	.0468332	.0431802	.0457346	.0310856	-.007947
#3	-.104836	.0390438	.0475471	.0418931	.0448377	.0325829	-.006451

Sample Name: ICSABDLX20 Acquired: 9/23/2024 13:33:44 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.000652	-.004243	.0001897
Stddev	.004289	.004648	.0000343
%RSD	658.2149	109.5589	18.08067

#1	.002723	-.009194	.0001662
#2	-.005478	.000026	.0001738
#3	.000799	-.003560	.0002290

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2612.875	55873.69	5356.421	2102.856	4237.678
Stddev	2.670	192.26	13.090	9.537	7.299
%RSD	.1022011	.3441035	.2443779	.4535166	.1722294

#1	2615.887	55757.62	5365.822	2094.037	4244.969
#2	2610.797	55767.82	5341.471	2101.555	4230.372
#3	2611.942	56095.61	5361.971	2112.977	4237.695

Sample Name: CCV01 Acquired: 9/23/2024 13:38:00 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.508834	4.878184	5.139861	4.537427	4.666536	9.242861
Stddev	.007214	.052671	.009019	.003308	.019570	.021426
%RSD	.1599866	1.079716	.1754706	.0728968	.4193728	.2318072

#1	4.500932	4.928521	5.131010	4.539020	4.649213	9.227391
#2	4.510504	4.882576	5.139534	4.533624	4.662630	9.267316
#3	4.515066	4.823455	5.149039	4.539637	4.687765	9.233877

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.344801	.2494236	2.602734	24.30450	.9131692	2.278935
Stddev	.080481	.0007450	.007109	.15634	.0046882	.007566
%RSD	.8612343	.2987027	.2731257	.6432706	.5133957	.3319930

#1	9.297168	.2496211	2.596706	24.14277	.9105965	2.272046
#2	9.299513	.2500500	2.600922	24.45484	.9185805	2.277725
#3	9.437722	.2485997	2.610573	24.31588	.9103307	2.287032

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.281425	4.700815	2.362907	22.75439	2.473209	1.209408
Stddev	.006635	.011408	.014877	.14599	.008588	.001866
%RSD	.5178012	.2426847	.6296224	.6415895	.3472494	.1543220

#1	1.275812	4.690566	2.345745	22.59066	2.468007	1.211554
#2	1.279717	4.698773	2.372159	22.80153	2.468497	1.208500
#3	1.288748	4.713106	2.370815	22.87099	2.483121	1.208169

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.61504	2.287083	2.465789	23.53591	4.879293	4.784236
Stddev	.04905	.008235	.004704	.05395	.012298	.008800
%RSD	.2169081	.3600607	.1907880	.2292217	.2520479	.1839278

#1	22.57325	2.277577	2.466476	23.52307	4.875302	4.779852
#2	22.60284	2.291658	2.470113	23.48954	4.893091	4.778490
#3	22.66905	2.292015	2.460780	23.59512	4.869485	4.794366

Sample Name: CCV01 Acquired: 9/23/2024 13:38:00 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.521483	4.808882	4.559938	4.644564	F 4.286114	F -.001153
Stddev	.001895	.027425	.020400	.014159	.005914	.003691
%RSD	.0419176	.5702945	.4473855	.3048588	.1379796	320.2533
#1	4.523469	4.777215	4.536569	4.629069	4.292652	-.003950
#2	4.521287	4.824584	4.574190	4.647791	4.281138	.003031
#3	4.519694	4.824848	4.569055	4.656831	4.284551	-.002538

Elem	Sr4077
Units	ppm
Avg	4.774419
Stddev	.019128
%RSD	.4006351
#1	4.755013
#2	4.774987
#3	4.793256

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2616.313	52465.33	5147.202	1977.235	4192.237
Stddev	7.732	111.43	15.488	5.042	10.314
%RSD	.2955209	.2123909	.3008920	.2549895	.2460225
#1	2624.057	52367.59	5147.230	1971.557	4201.799
#2	2616.289	52441.74	5131.700	1978.963	4193.604
#3	2608.594	52586.67	5162.675	1981.186	4181.308

Sample Name: CCB01 Acquired: 9/23/2024 13:43:16 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.003874	-.001737	.0009199	.0000206	.0000405	.0036214	-.000322
Stddev	.001454	.000979	.0006897	.0016302	.0003818	.0123953	.001030
%RSD	37.54485	56.38344	74.96995	7922.140	942.5704	342.2767	320.1832

#1	-.005551	-.000797	.0010450	-.001455	.0000759	.0065035	-.001510
#2	-.003102	-.001663	.0001763	.001770	.0004034	.0143217	.000285
#3	-.002968	-.002751	.0015385	-.000253	-.000358	-.009961	.000261

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000750	.0000470	.0204176	-.000149	-.000083	-.000081	-.000582
Stddev	.0000484	.0000592	.0101917	.000304	.000143	.000174	.003645
%RSD	64.48176	126.0465	49.91625	204.3155	172.2108	215.7713	626.2707

#1	.0000613	-.000018	.0200123	-.000392	.000056	-.000267	.001508
#2	.0001288	.000060	.0308059	-.000248	-.000075	-.000052	-.004790
#3	.0000350	.000099	.0104346	.000193	-.000229	.000077	.001537

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000132	-.007767	.0002136	.0007428	-.109657	-.000508	-.006115
Stddev	.000243	.013019	.0001163	.0000677	.004967	.002279	.000502
%RSD	184.5548	167.6154	54.43712	9.115642	4.529428	448.1679	8.216812

#1	-.000074	.007056	.0001702	.0006999	-.108177	-.001036	-.006582
#2	.000078	-.013011	.0003453	.0008208	-.115196	.001988	-.005583
#3	-.000399	-.017346	.0001252	.0007077	-.105599	-.002478	-.006181

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.120899	.0033327	.0004364	-.000828	.0005822	-.002675	-.003376
Stddev	.011474	.0003200	.0003873	.000556	.0007883	.007833	.002047
%RSD	9.490475	9.601660	88.74151	67.17607	135.3953	292.8546	60.62056

#1	-.107656	.0029633	.0008646	-.000226	.0012060	.004242	-.005670
#2	-.127886	.0035113	.0003338	-.000935	.0008445	-.011180	-.002721
#3	-.127153	.0035236	.0001107	-.001323	-.000304	-.001086	-.001737

Sample Name: CCB01 Acquired: 9/23/2024 13:43:16 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002609	-.002355	.0000360
Stddev	.001372	.001435	.0000332
%RSD	52.58795	60.95294	92.26658

#1	-.002020	-.004012	.0000285
#2	-.004177	-.001503	.0000723
#3	-.001630	-.001550	.0000072

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2598.456	57928.79	5257.416	2130.255	4293.646
Stddev	4.001	185.02	16.924	7.834	11.030
%RSD	.1539809	.3193966	.3219084	.3677444	.2568970

#1	2596.144	57743.01	5243.774	2121.832	4288.610
#2	2596.147	57930.30	5276.355	2131.610	4286.033
#3	2603.076	58113.05	5252.120	2137.323	4306.295

Sample Name: P4126-01 Acquired: 9/23/2024 13:47:36 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003790	-.012760	.1182947	-.011367	.0030400	32.45704	.1363130
Stddev	.0034564	.002238	.0011129	.000977	.0015740	.16973	.0019384
%RSD	912.0870	17.53882	.9407433	8.596339	51.77678	.5229385	1.422005

#1	-.001678	-.015342	.1188353	-.011435	.0014511	32.29243	.1343718
#2	-.001555	-.011380	.1190340	-.010358	.0045987	32.44724	.1363187
#3	.004369	-.011558	.1170148	-.012309	.0030700	32.63146	.1382485

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047941	.0024729	99.66286	.0945109	.0238875	.0541017	100.5262
Stddev	.0000773	.0001197	.54255	.0005096	.0004349	.0002833	.3706
%RSD	1.612145	4.839018	.5443818	.5391969	1.820616	.5237337	.3686918

#1	.0048639	.0025837	99.08796	.0942546	.0239213	.0541111	100.1788
#2	.0048074	.0024890	99.73472	.0941803	.0234367	.0543803	100.4834
#3	.0047110	.0023460	100.1659	.0950978	.0243046	.0538138	100.9163

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4956210	54.59498	.0375632	-.003220	1.272509	.1448279	.1629465
Stddev	.0033630	.45666	.0002010	.000116	.012702	.0018072	.0003928
%RSD	.6785373	.8364418	.5350094	3.609964	.9981493	1.247830	.2410613

#1	.4918077	54.10200	.0377730	-.003274	1.259704	.1443322	.1628267
#2	.4968919	54.67939	.0373724	-.003300	1.272719	.1433203	.1626274
#3	.4981632	55.00354	.0375444	-.003087	1.285104	.1468312	.1633852

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.954565	-.096432	.0033717	-.000452	.9500714	4.698068	2.002362
Stddev	.025618	.001613	.0001018	.000581	.0054756	.025591	.007656
%RSD	1.310667	1.672703	3.018700	128.5439	.5763313	.5447070	.3823611

#1	1.982794	-.096784	.0033759	-.001091	.9437733	4.675126	1.998387
#2	1.932795	-.094672	.0034712	.000044	.9537021	4.693411	2.011188
#3	1.948107	-.097840	.0032678	-.000309	.9527389	4.725668	1.997511

Sample Name: P4126-01 Acquired: 9/23/2024 13:47:36 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.153210	.0452807	-.031878
Stddev	.006268	.0009797	.000134
%RSD	.5435596	2.163650	.4188607
#1	1.160249	.0443631	-.031745
#2	1.148230	.0463125	-.031876
#3	1.151151	.0451664	-.032012

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2483.932	55663.43	5513.296	2031.578	3838.713
Stddev	4.011	83.33	9.351	6.100	3.144
%RSD	.1614703	.1497034	.1695994	.3002796	.0819052
#1	2479.831	55592.93	5524.092	2034.818	3837.215
#2	2484.118	55641.97	5508.028	2024.542	3836.597
#3	2487.847	55755.39	5507.769	2035.376	3842.325

Sample Name: CCV02 Acquired: 9/23/2024 13:51:48 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	4.759779	5.010046	4.718729	4.803273	4.890042	9.578865
Stddev	.008367	.087424	.015816	.002160	.012392	.047234
%RSD	.1757853	1.744965	.3351645	.0449722	.2534182	.4931029

#1	4.752290	5.031237	4.701900	4.802192	4.881623	9.534087
#2	4.758237	5.084927	4.721001	4.805760	4.884230	9.574288
#3	4.768809	4.913975	4.733285	4.801867	4.904272	9.628221

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.580917	.2565981	2.337087	24.93606	.9442067	2.373630
Stddev	.031784	.0002543	.005756	.15179	.0018420	.007961
%RSD	.3317419	.0990948	.2462687	.6087075	.1950851	.3354021

#1	9.598251	.2566588	2.331843	24.84921	.9420950	2.366390
#2	9.544235	.2568165	2.336173	24.84765	.9450417	2.372345
#3	9.600266	.2563189	2.343245	25.11133	.9454833	2.382156

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.221845	4.827739	2.434056	23.49452	2.375987	1.243658
Stddev	.004414	.019769	.014771	.16969	.008158	.000369
%RSD	.3612547	.4094964	.6068338	.7222323	.3433419	.0296968

#1	1.218910	4.811973	2.419376	23.29994	2.368665	1.243837
#2	1.219704	4.821325	2.433876	23.61174	2.374515	1.243233
#3	1.226921	4.849919	2.448916	23.57188	2.384780	1.243903

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.42860	2.359845	2.523658	24.19037	5.053689	4.949665
Stddev	.15523	.016965	.007239	.13868	.010371	.007985
%RSD	.6625528	.7189128	.2868503	.5733053	.2052244	.1613232

#1	23.32639	2.340840	2.525768	24.14798	5.048892	4.943576
#2	23.35219	2.365234	2.515598	24.07782	5.065590	4.946713
#3	23.60722	2.373461	2.529607	24.34530	5.046584	4.958706

Sample Name: CCV02 Acquired: 9/23/2024 13:51:48 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	4.718795	4.948847	4.669076	4.864660	4.549670	F -.000047
Stddev	.009013	.032567	.055109	.018837	.007081	.000469
%RSD	.1910030	.6580790	1.180299	.3872309	.1556274	1004.129
#1	4.708391	4.931441	4.619171	4.843627	4.541616	.000388
#2	4.723790	4.928681	4.659836	4.870377	4.554915	.000016
#3	4.724205	4.986419	4.728221	4.879977	4.552478	-.000544

Elem	Sr4077
Units	ppm
Avg	4.906195
Stddev	.008748
%RSD	.1782985
#1	4.915582
#2	4.898271
#3	4.904734

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2549.251	52265.45	5103.239	1973.028	4064.978
Stddev	5.609	124.03	2.214	10.102	7.363
%RSD	.2200284	.2373048	.0433821	.5120143	.1811413
#1	2551.050	52277.00	5105.475	1966.442	4070.412
#2	2553.740	52383.29	5101.048	1984.659	4067.924
#3	2542.963	52136.05	5103.194	1967.983	4056.598

Sample Name: CCB02 Acquired: 9/23/2024 13:55:59 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.003646	-.001847	.0009710	-.000635	-.000010	.0002646	-.000588
Stddev	.001146	.000774	.0013399	.000672	.000674	.0039772	.000747
%RSD	31.41839	41.91021	137.9905	105.7718	6674.735	1503.239	127.1562

#1	-.004437	-.001059	.0018968	.000118	.000348	-.004255	.000273
#2	-.004169	-.002607	-.000565	-.001174	-.000787	.003232	-.000963
#3	-.002333	-.001876	.001581	-.000851	.000409	.001816	-.001073

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000435	.0000840	.0071090	-.000061	-.000193	-.000360	.0005372
Stddev	.0000736	.0000691	.0108634	.000476	.000257	.000292	.0013863
%RSD	168.9878	82.27803	152.8128	777.3436	133.5416	81.20061	258.0374

#1	.0001198	.0000097	-.004076	-.000585	-.000289	-.000222	.0011271
#2	.0000378	.0000958	.017620	.000344	-.000388	-.000162	-.001046
#3	-.000027	.0001464	.007783	.000058	.000099	-.000695	.001531

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002785	-.008467	.0000738	.0002875	-.105962	-.000721	-.006035
Stddev	.0003912	.015589	.0000734	.0000939	.009742	.000869	.000276
%RSD	140.4633	184.1161	99.46941	32.67048	9.193630	120.4894	4.567960

#1	.0001665	-.015125	.0000734	.0002088	-.106960	-.000633	-.006331
#2	.0007135	.009345	.0000006	.0002622	-.115167	-.001630	-.005987
#3	-.000044	-.019620	.0001473	.0003915	-.095760	.000100	-.005786

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.105907	.0063685	.0005230	-.000504	.0004977	-.001144	-.005996
Stddev	.011332	.0005661	.0003349	.001005	.0004406	.005893	.003977
%RSD	10.69973	8.888938	64.03501	199.4202	88.53021	514.9297	66.32960

#1	-.100596	.0057785	.0005673	-.000625	.0000131	-.002315	-.007810
#2	-.098205	.0069071	.0001681	-.001442	.0006057	-.006364	-.001435
#3	-.118918	.0064199	.0008335	.000556	.0008743	.005246	-.008743

Sample Name: CCB02 Acquired: 9/23/2024 13:55:59 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002318	-.006311	-.000019
Stddev	.000575	.000630	.000070
%RSD	24.79031	9.988160	378.9568
#1	-.002704	-.006926	.000037
#2	-.001658	-.005667	.000005
#3	-.002594	-.006341	-.000097

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2589.959	56149.19	5392.700	2118.737	4229.307
Stddev	6.191	145.96	32.660	9.409	8.014
%RSD	.2390278	.2599580	.6056369	.4440841	.1894869
#1	2583.425	56101.10	5410.810	2117.467	4220.058
#2	2590.715	56033.34	5354.997	2110.028	4233.677
#3	2595.737	56313.14	5412.292	2128.717	4234.186

Sample Name: LR1 Acquired: 9/23/2024 14:04:24 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.075315	.0083447	.0209807	-.175428	-.001080	2119.906	.0143605
Stddev	.008813	.0169578	.0040156	.005202	.004103	16.707	.0004762
%RSD	11.70176	203.2162	19.13943	2.965129	379.7905	.7880956	3.315832

#1	-.082447	.0100626	.0164061	-.175539	-.004127	2101.071	.0139818
#2	-.078035	.0243781	.0226123	-.170172	.003585	2125.710	.0142046
#3	-.065462	-.009407	.0239235	-.180573	-.002700	2132.937	.0148951

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0164796	.0639824	1668.501	-.000699	.0389923	.1388710	1086.833
Stddev	.0002835	.0006674	21.936	.001066	.0009719	.0022107	.840
%RSD	1.720352	1.043066	1.314697	152.4218	2.492447	1.591930	.0773041

#1	.0162507	.0646758	1674.432	-.001644	.0401123	.1410143	1086.306
#2	.0163913	.0639270	1644.209	-.000910	.0384919	.1390001	1086.390
#3	.0167967	.0633445	1686.860	.000456	.0383725	.1365985	1087.802

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.122600	1775.813	.0327690	-.054635	1869.942	.0283481	.1333689
Stddev	.000993	13.072	.0000878	.000809	2.360	.0018585	.0030012
%RSD	.8097385	.7360958	.2678673	1.481265	.1262246	6.555895	2.250329

#1	-.123594	1766.911	.0327327	-.054750	1869.293	.0304883	.1299181
#2	-.122597	1769.708	.0328692	-.055381	1872.559	.0274143	.1353707
#3	-.121609	1790.820	.0327053	-.053774	1867.974	.0271416	.1348180

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1468.324	-1.02678	-.007859	-.000835	-.064934	.1325300	.0745800
Stddev	6.487	.02298	.001171	.000460	.000551	.0065279	.0118863
%RSD	.4417807	2.238409	14.89427	55.11905	.8487906	4.925622	15.93770

#1	1475.346	-1.00244	-.006718	-.000624	-.065544	.1254246	.0627815
#2	1462.555	-1.02979	-.007803	-.000517	-.064472	.1339034	.0744062
#3	1467.072	-1.04811	-.009057	-.001362	-.064787	.1382619	.0865522

Sample Name: LR1 Acquired: 9/23/2024 14:04:24 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.244601	.4999973	-1.07461
Stddev	.007470	.0035583	.00069
%RSD	3.054086	.7116641	.0643905
#1	-.242887	.4972782	-1.07422
#2	-.252779	.4986891	-1.07421
#3	-.238137	.5040245	-1.07541

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1587.952	34796.75	4340.021	1220.761	2297.868
Stddev	1.420	64.24	33.984	5.313	1.843
%RSD	.0894144	.1846160	.7830450	.4352142	.0801909
#1	1586.379	34788.14	4367.003	1226.894	2298.960
#2	1588.338	34864.85	4351.207	1217.557	2295.741
#3	1589.138	34737.24	4301.854	1217.832	2298.903

Sample Name: LR2 Acquired: 9/23/2024 14:09:21 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025986	.0275423	270.3746	.0035219	-.003417	.0396050	90.64388
Stddev	.0047804	.0020703	1.0663	.0037936	.001638	.0049087	.99194
%RSD	183.9597	7.516630	.3943661	107.7141	47.92344	12.39407	1.094331

#1	.0003454	.0273331	270.4373	.0003943	-.005132	.0447897	90.77040
#2	.0080892	.0255846	269.2784	.0077419	-.001870	.0389962	91.56650
#3	-.000639	.0297092	271.4081	.0024296	-.003248	.0350292	89.59475

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003131	-.006024	.2833142	.0173947	-.041571	226.2559	.0029552
Stddev	.000015	.000051	.0102489	.0003267	.000240	1.2948	.0021278
%RSD	.4795223	.8500540	3.617519	1.878068	.5785153	.5722695	72.00269

#1	-.003124	-.005965	.2951188	.0170411	-.041294	225.8933	.0005114
#2	-.003121	-.006054	.2781392	.0174577	-.041729	225.1811	.0039573
#3	-.003148	-.006053	.2766846	.0176853	-.041689	227.6933	.0043970

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.34654	-.071086	45.46274	.0019231	.1804930	-.013455	33.25150
Stddev	.21365	.008851	.17302	.0002462	.0143057	.000954	.01205
%RSD	.5045198	12.45067	.3805702	12.80447	7.925900	7.090026	.0362394

#1	42.24671	-.061080	45.43109	.0018336	.1952758	-.014265	33.26109
#2	42.59183	-.074287	45.30773	.0017341	.1794854	-.012403	33.25544
#3	42.20108	-.077891	45.64939	.0022016	.1667177	-.013697	33.23797

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2555089	-.000554	-.003926	-.013921	-.053794	-.023791	.9970909
Stddev	.0704276	.000518	.000254	.001242	.000292	.008164	.0165637
%RSD	27.56367	93.47300	6.458335	8.920172	.5436172	34.31344	1.661206

#1	.3321892	-.000082	-.003838	-.012954	-.053565	-.014495	1.006289
#2	.2406240	-.000472	-.004212	-.015321	-.054124	-.029790	.977969
#3	.1937135	-.001108	-.003728	-.013488	-.053694	-.027089	1.007014

Sample Name: LR2 Acquired: 9/23/2024 14:09:21 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0086440	-.004575	.0020443
Stddev	.0011761	.003442	.0000561
%RSD	13.60534	75.22211	2.743609
#1	.0077021	-.008503	.0020828
#2	.0099621	-.003139	.0019799
#3	.0082679	-.002085	.0020702

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2318.439	53193.02	5240.185	1855.038	4193.732
Stddev	17.727	101.18	9.840	8.890	20.569
%RSD	.7646034	.1902150	.1877710	.4792092	.4904664
#1	2333.076	53115.04	5237.463	1847.131	4203.748
#2	2323.512	53307.36	5231.993	1853.324	4207.373
#3	2298.728	53156.67	5251.099	1864.660	4170.073

Sample Name: P4103-01 Acquired: 9/23/2024 14:14:58 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0535040	-.027201	.8052601	-.024926	.0123156	44.18312	.4406057
Stddev	.0020475	.001860	.0004630	.000410	.0011943	.17352	.0020113
%RSD	3.826882	6.838824	.0574929	1.645438	9.697433	.3927270	.4564926

#1	.0514807	-.025062	.8048848	-.025127	.0112516	44.06058	.4394595
#2	.0555750	-.028444	.8051181	-.024454	.0120878	44.10709	.4394295
#3	.0534561	-.028097	.8057775	-.025196	.0136074	44.38167	.4429281

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0108992	.0053172	15.42211	.1726961	.0628331	.3124457	240.7234
Stddev	.0000539	.0000567	.07577	.0002179	.0001774	.0015323	.8190
%RSD	.4941747	1.066205	.4913318	.1261772	.2823090	.4904300	.3402053

#1	.0108721	.0053632	15.33511	.1724608	.0628259	.3111340	240.2325
#2	.0108642	.0053345	15.45757	.1728910	.0626594	.3120731	240.2690
#3	.0109612	.0052538	15.47365	.1727365	.0630140	.3141299	241.6688

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.619636	17.17399	.1456642	-.005572	.6805890	.3109934	.8366171
Stddev	.007767	.04116	.0005184	.000430	.0138850	.0052285	.0028109
%RSD	.4795395	.2396502	.3558815	7.710866	2.040146	1.681237	.3359781

#1	1.612619	17.15427	.1452755	-.005154	.6647479	.3069108	.8391762
#2	1.618309	17.14640	.1462528	-.006012	.6863676	.3091830	.8336087
#3	1.627981	17.22129	.1454643	-.005549	.6906515	.3168866	.8370665

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.082435	-.239063	.0100096	.0225039	1.313745	5.729153	3.859021
Stddev	.009191	.002735	.0004748	.0014514	.007560	.020362	.021267
%RSD	.1297691	1.144233	4.742971	6.449623	.5754711	.3554180	.5510930

#1	7.072584	-.241718	.0102354	.0233495	1.305265	5.715213	3.834545
#2	7.083942	-.239217	.0094641	.0208280	1.316186	5.719725	3.869533
#3	7.090779	-.236254	.0103293	.0233342	1.319783	5.752521	3.872984

Sample Name: P4103-01 Acquired: 9/23/2024 14:14:58 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.364310	.1644968	-.182543
Stddev	.019319	.0016403	.000663
%RSD	.5742449	.9971806	.3634520
#1	3.342074	.1641093	-.182280
#2	3.373877	.1630849	-.182051
#3	3.376979	.1662962	-.183298

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2767.751	56006.74	5540.321	2086.353	4231.610
Stddev	7.481	157.13	2.260	8.583	9.983
%RSD	.2702914	.2805566	.0407965	.4113761	.2359244
#1	2759.826	55856.84	5538.105	2076.781	4220.122
#2	2774.690	56170.22	5542.623	2093.363	4236.530
#3	2768.738	55993.17	5540.236	2088.916	4238.179

Sample Name: P4103-04 Acquired: 9/23/2024 14:19:02 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055659	-.028251	.3124833	-.027345	.0013528	67.14232	1.335712
Stddev	.0014243	.001684	.0014848	.002951	.0002124	.15961	.004159
%RSD	25.58930	5.961348	.4751745	10.79137	15.69781	.2377171	.3113472

#1	.0050081	-.028321	.3107894	-.027051	.0011681	67.06232	1.333065
#2	.0045050	-.026533	.3135597	-.024552	.0015848	67.03854	1.333565
#3	.0071847	-.029899	.3131008	-.030432	.0013054	67.32611	1.340505

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0133020	.0095855	52.10434	.2079269	.1379108	.2342497	234.1086
Stddev	.0001426	.0002564	.30454	.0008915	.0003049	.0013204	2.1731
%RSD	1.071627	2.674828	.5844851	.4287590	.2211080	.5636522	.9282321

#1	.0134144	.0098286	51.87650	.2071456	.1377700	.2357577	231.6028
#2	.0131417	.0093176	51.98628	.2077372	.1382606	.2333014	235.4760
#3	.0133500	.0096104	52.45024	.2088980	.1377016	.2336901	235.2469

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.988183	34.54474	.3409846	-.007031	1.153822	.2879800	.7555695
Stddev	.025233	.19832	.0006706	.000403	.020987	.0050088	.0004082
%RSD	.5058649	.5740875	.1966715	5.736800	1.818884	1.739288	.0540220

#1	4.974071	34.37910	.3402398	-.007491	1.130505	.2855629	.7552482
#2	4.973162	34.49063	.3411734	-.006740	1.159761	.2846382	.7560288
#3	5.017315	34.76450	.3415405	-.006861	1.171199	.2937390	.7554314

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.25337	-.189685	.0117168	.0021719	2.217566	9.458822	5.975972
Stddev	.12347	.004649	.0001630	.0009873	.009675	.112642	.023866
%RSD	1.097175	2.450818	1.391077	45.45833	.4363070	1.190868	.3993645

#1	11.11483	-.194127	.0116996	.0033025	2.211425	9.330392	5.956002
#2	11.35180	-.184854	.0115631	.0017336	2.212553	9.540858	5.969510
#3	11.29346	-.190073	.0118878	.0014797	2.228719	9.505216	6.002403

Sample Name: P4103-04 Acquired: 9/23/2024 14:19:02 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.463757	.2933298	.0392516
Stddev	.004621	.0027311	.0018025
%RSD	.3157144	.9310733	4.592130
#1	1.458629	.2928360	.0409703
#2	1.467599	.2908792	.0373756
#3	1.465043	.2962741	.0394089

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3230.484	64741.51	6767.694	2396.705	4175.221
Stddev	2.720	65.64	48.575	4.352	.297
%RSD	.0842064	.1013913	.7177438	.1815912	.0071080
#1	3227.349	64816.53	6727.196	2400.334	4174.915
#2	3232.218	64694.65	6821.550	2397.902	4175.242
#3	3231.885	64713.34	6754.336	2391.880	4175.508

Sample Name: P4103-07 Acquired: 9/23/2024 14:23:08 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197988	-.033577	.5475863	-.028332	.0055588	75.33355	.7456129
Stddev	.0037627	.001430	.0011740	.001278	.0008342	.20787	.0025177
%RSD	19.00468	4.258297	.2144019	4.512479	15.00688	.2759380	.3376683

#1	.0154557	-.032072	.5473546	-.028685	.0046142	75.11822	.7428320
#2	.0220748	-.033742	.5465453	-.029396	.0058673	75.34937	.7462691
#3	.0218659	-.034917	.5488588	-.026914	.0061947	75.53306	.7477374

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0136013	.0144359	63.61957	.4522389	.1441478	.2935556	218.8734
Stddev	.0001296	.0002250	.24620	.0031559	.0002652	.0005889	1.5134
%RSD	.9525348	1.558324	.3869882	.6978376	.1839988	.2006272	.6914702

#1	.0134575	.0146900	63.34594	.4487539	.1444217	.2941561	217.1284
#2	.0137088	.0142623	63.68961	.4530593	.1441294	.2935319	219.6631
#3	.0136378	.0143553	63.82316	.4549036	.1438922	.2929789	219.8286

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.861482	37.01427	.3613825	-.007944	1.402145	.3100911	.9417479
Stddev	.017106	.18726	.0006490	.000300	.007875	.0037315	.0015742
%RSD	.3518750	.5059156	.1796007	3.781039	.5616200	1.203367	.1671597

#1	4.843668	36.82273	.3606331	-.008265	1.394700	.3068336	.9424598
#2	4.862998	37.02314	.3617475	-.007670	1.410388	.3141624	.9399435
#3	4.877780	37.19694	.3617669	-.007897	1.401346	.3092773	.9428404

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.86252	-.230437	.1278742	.0124838	2.485394	5.001143	6.200166
Stddev	.12676	.002813	.0004098	.0007015	.009764	.037099	.044279
%RSD	1.166962	1.220851	.3204484	5.618945	.3928574	.7418151	.7141614

#1	10.71689	-.233279	.1274398	.0122489	2.474120	4.960465	6.156997
#2	10.94808	-.230377	.1279288	.0119300	2.491052	5.033115	6.198024
#3	10.92259	-.227654	.1282539	.0132726	2.491011	5.009850	6.245478

Sample Name: P4103-07 Acquired: 9/23/2024 14:23:08 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.361967	.2741881	.0199625
Stddev	.012542	.0008642	.0006161
%RSD	.3730529	.3151892	3.086281
#1	3.347581	.2733457	.0206686
#2	3.370605	.2741461	.0195345
#3	3.367715	.2750726	.0196844

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3081.161	67583.10	6502.740	2477.052	3790.356
Stddev	2.887	235.34	2.828	5.383	5.584
%RSD	.0937037	.3482173	.0434921	.2173240	.1473234
#1	3079.740	67814.43	6500.174	2470.914	3792.647
#2	3084.483	67343.96	6502.274	2480.969	3794.430
#3	3079.260	67590.92	6505.773	2479.275	3783.991

Sample Name: P4103-10 Acquired: 9/23/2024 14:27:11 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002601	-.034207	.1892715	-.032140	.0035708	73.10116	1.414207
Stddev	.005209	.004326	.0014832	.001644	.0022377	.30514	.003763
%RSD	200.2579	12.64603	.7836384	5.113534	62.66760	.4174237	.2660947

#1	-.006653	-.032060	.1886801	-.032754	.0010322	72.75542	1.411698
#2	-.004425	-.039186	.1881752	-.030278	.0044225	73.21522	1.412389
#3	.003274	-.031374	.1909592	-.033389	.0052575	73.33284	1.418534

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0158022	.0137358	35.23504	.2695365	.1797839	.2374677	266.0449
Stddev	.0001400	.0002534	.18331	.0010136	.0004828	.0009245	1.5418
%RSD	.8858375	1.844716	.5202398	.3760446	.2685305	.3893077	.5795074

#1	.0156611	.0138985	35.05295	.2707015	.1793946	.2376909	264.5435
#2	.0159410	.0134438	35.23263	.2690509	.1796330	.2382602	265.9671
#3	.0158044	.0138650	35.41954	.2688570	.1803241	.2364521	267.6241

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.851323	36.06054	.3909782	-.010750	1.412649	.2886943	.7467746
Stddev	.034250	.33569	.0003707	.000273	.004055	.0019032	.0002649
%RSD	.5853456	.9309196	.0948184	2.535066	.2870799	.6592350	.0354695

#1	5.815118	35.67296	.3910740	-.011064	1.410077	.2906298	.7468518
#2	5.855640	36.24953	.3905689	-.010594	1.410545	.2886281	.7464797
#3	5.883210	36.25914	.3912916	-.010590	1.417324	.2868252	.7469923

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.81065	-.329133	.0191572	.0002375	1.807094	7.261292	5.090813
Stddev	.06235	.003397	.0005215	.0012027	.005428	.029521	.016015
%RSD	.5279346	1.032053	2.722425	506.3524	.3003473	.4065487	.3145819

#1	11.81090	-.333055	.0192556	.0015732	1.802894	7.237768	5.087068
#2	11.74818	-.327239	.0196225	-.000101	1.805165	7.251688	5.077002
#3	11.87288	-.327106	.0185934	-.000759	1.813222	7.294418	5.108368

Sample Name: P4103-10 Acquired: 9/23/2024 14:27:11 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4714345	.3582203	-.091691
Stddev	.0028404	.0027555	.001050
%RSD	.6024930	.7692197	1.145323
#1	.4745355	.3553077	-.090616
#2	.4689592	.3585674	-.091743
#3	.4708087	.3607858	-.092714

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3068.063	67035.77	6391.393	2461.550	3905.864
Stddev	.460	61.10	4.917	3.499	5.450
%RSD	.0149875	.0911502	.0769360	.1421267	.1395268
#1	3068.537	67027.54	6396.962	2465.369	3901.193
#2	3067.618	67100.57	6387.650	2460.782	3911.851
#3	3068.035	66979.20	6389.567	2458.500	3904.548

Sample Name: P4103-13 Acquired: 9/23/2024 14:31:16 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0159364	-.029970	.2829508	-.028142	.0039826	81.20074	.7435331
Stddev	.0014742	.003479	.0010152	.000958	.0008848	.35266	.0027365
%RSD	9.250326	11.60675	.3587769	3.404648	22.21542	.4343023	.3680437

#1	.0157780	-.032850	.2817831	-.027434	.0033865	80.79498	.7403740
#2	.0145478	-.030954	.2834449	-.029232	.0035621	81.37383	.7450527
#3	.0174834	-.026105	.2836242	-.027760	.0049992	81.43340	.7451727

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0164584	.0115176	36.26509	.2130085	.1367441	.2190673	235.7428
Stddev	.0000650	.0003807	.19621	.0009317	.0001435	.0013500	1.2895
%RSD	.3952561	3.305616	.5410333	.4373967	.1049732	.6162344	.5470082

#1	.0164757	.0119571	36.04319	.2119346	.1368950	.2204558	234.2602
#2	.0163865	.0113035	36.41562	.2136009	.1367280	.2189867	236.3643
#3	.0165132	.0112921	36.33647	.2134900	.1366092	.2177594	236.6038

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.969161	32.81511	.2619351	-.008375	1.532569	.3382850	.7766413
Stddev	.022433	.18682	.0007043	.000463	.012579	.0043942	.0012977
%RSD	.5651745	.5693113	.2688748	5.528653	.8207540	1.298963	.1670919

#1	3.943265	32.60151	.2627120	-.008897	1.523415	.3332446	.7778268
#2	3.981586	32.89576	.2613385	-.008214	1.527379	.3403003	.7752548
#3	3.982633	32.94805	.2617549	-.008014	1.546912	.3413101	.7768422

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.21375	-.264144	.0060370	.0020411	2.189990	6.185435	4.597753
Stddev	.06461	.000873	.0001439	.0006191	.012311	.024349	.015822
%RSD	.5289923	.3303806	2.382967	30.32958	.5621470	.3936506	.3441169

#1	12.14011	-.265033	.0061991	.0016318	2.176093	6.159071	4.615982
#2	12.24025	-.263288	.0059875	.0017383	2.194345	6.190157	4.589698
#3	12.26090	-.264112	.0059245	.0027533	2.199531	6.207077	4.587581

Sample Name: P4103-13 Acquired: 9/23/2024 14:31:16 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.538544	.2900905	-.051886
Stddev	.032125	.0040739	.000893
%RSD	.5800235	1.404337	1.720632
#1	5.572321	.2920211	-.050856
#2	5.534936	.2928401	-.052436
#3	5.508375	.2854102	-.052365

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3207.688	65218.87	6359.488	2422.226	4073.566
Stddev	8.892	63.15	11.662	4.146	9.969
%RSD	.2772245	.0968331	.1833860	.1711532	.2447229
#1	3197.971	65188.70	6359.622	2417.846	4062.796
#2	3209.674	65176.46	6347.760	2426.089	4082.470
#3	3215.420	65291.45	6371.084	2422.743	4075.431

Sample Name: P4103-16 Acquired: 9/23/2024 14:35:21 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005527	-.019624	.2773183	-.028036	.0043116	97.77364	.8028356
Stddev	.004821	.001786	.0017032	.003502	.0003534	.80556	.0072886
%RSD	87.22610	9.100215	.6141678	12.49255	8.196992	.8239003	.9078639

#1	-.007141	-.018162	.2790153	-.031104	.0042528	96.84442	.7944850
#2	-.009333	-.019094	.2756090	-.024220	.0039913	98.27489	.8061031
#3	-.000106	-.021614	.2773306	-.028785	.0046908	98.20160	.8079188

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0129010	.0089545	43.44586	.1952646	.1299533	.7065786	238.3204
Stddev	.0001872	.0002366	.50196	.0011245	.0004677	.0036386	1.7096
%RSD	1.451378	2.641838	1.155359	.5758666	.3598635	.5149649	.7173704

#1	.0127002	.0092226	42.88692	.1939844	.1304710	.7105469	236.9993
#2	.0130709	.0088659	43.59246	.1957171	.1298275	.7057900	237.7106
#3	.0129319	.0087751	43.85819	.1960924	.1295614	.7033989	240.2514

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.030787	56.04557	.2739389	-.009033	1.573186	.2932681	.7306780
Stddev	.080068	.45314	.0008184	.000281	.012864	.0039973	.0020525
%RSD	.9970096	.8085281	.2987691	3.114802	.8176999	1.363020	.2808986

#1	7.939063	55.52240	.2746596	-.009270	1.581709	.2890472	.7283111
#2	8.066608	56.29948	.2730491	-.009108	1.558388	.2937610	.7319656
#3	8.086691	56.31484	.2741079	-.008722	1.579459	.2969961	.7317573

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.53925	-.243495	.0075249	.0009713	3.040163	7.947796	4.818600
Stddev	.09676	.004023	.0000737	.0003346	.031907	.008416	.022290
%RSD	.4711022	1.652064	.9797534	34.44721	1.049529	.1058886	.4625888

#1	20.46839	-.239152	.0075207	.0011621	3.003334	7.941717	4.842856
#2	20.49987	-.247093	.0074534	.0005850	3.057680	7.957401	4.813927
#3	20.64949	-.244240	.0076007	.0011669	3.059474	7.944271	4.799016

Sample Name: P4103-16 Acquired: 9/23/2024 14:35:21 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.517663	.4690853	-.082305
Stddev	.009015	.0039656	.001164
%RSD	.5939999	.8453924	1.414625
#1	1.528071	.4654563	-.082627
#2	1.512304	.4733183	-.081013
#3	1.512614	.4684815	-.083274

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2948.216	58894.24	5726.588	2181.274	4071.320
Stddev	3.814	94.99	35.695	7.041	3.320
%RSD	.1293817	.1612836	.6233216	.3227955	.0815342
#1	2943.826	58908.72	5766.760	2177.565	4070.944
#2	2950.720	58981.16	5698.513	2189.394	4074.812
#3	2950.103	58792.85	5714.492	2176.863	4068.205

Sample Name: P4126-01DUP Acquired: 9/23/2024 14:39:27 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014607	-.011336	.1208852	-.010861	.0022794	33.64422	.1437670
Stddev	.0052492	.002164	.0012552	.002852	.0013111	.26622	.0003991
%RSD	359.3633	19.09058	1.038296	26.25736	57.51793	.7912889	.2776322

#1	.0022908	-.012801	.1211914	-.010468	.0037850	33.34019	.1433362
#2	.0062454	-.008850	.1219589	-.008226	.0013895	33.75685	.1441243
#3	-.004154	-.012356	.1195052	-.013889	.0016637	33.83561	.1438406

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051195	.0022844	106.5100	.0970880	.0241501	.0541674	104.6576
Stddev	.0000794	.0000466	1.0719	.0002280	.0004198	.0007445	.2931
%RSD	1.551376	2.038510	1.006387	.2347824	1.738184	1.374441	.2800173

#1	.0051088	.0022606	105.2751	.0968253	.0237009	.0549541	104.4171
#2	.0052038	.0022547	107.1990	.0972054	.0245324	.0540744	104.5718
#3	.0050460	.0023381	107.0561	.0972333	.0242170	.0534738	104.9840

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5200988	56.54541	.0381222	-.003379	1.400597	.1489222	.1703586
Stddev	.0053831	.56020	.0003954	.000043	.013052	.0041887	.0020006
%RSD	1.035014	.9907062	1.037146	1.274193	.9318810	2.812691	1.174327

#1	.5149456	55.91475	.0379976	-.003419	1.395699	.1444147	.1708468
#2	.5196652	56.98534	.0378042	-.003334	1.415390	.1496571	.1681591
#3	.5256856	56.73615	.0385649	-.003383	1.390703	.1526948	.1720699

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.071767	-.112937	.0032689	-.000168	1.009950	4.881348	2.076939
Stddev	.025464	.002230	.0009085	.000590	.011332	.022988	.011239
%RSD	1.229074	1.974205	27.79313	351.6928	1.122024	.4709315	.5411119

#1	2.096959	-.112017	.0024802	-.000664	.997041	4.860149	2.064776
#2	2.046040	-.115479	.0042623	-.000324	1.018257	4.878112	2.086938
#3	2.072301	-.111314	.0030641	.000484	1.014552	4.905782	2.079104

Sample Name: P4126-01DUP Acquired: 9/23/2024 14:39:27 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.176465	.0547949	-.033078
Stddev	.006267	.0057164	.000399
%RSD	.5326861	10.43233	1.206200
#1	1.169257	.0500828	-.033369
#2	1.179523	.0611540	-.032623
#3	1.180616	.0531480	-.033241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2484.015	53123.04	5196.581	1939.770	3840.006
Stddev	6.559	183.05	21.994	11.865	7.267
%RSD	.2640565	.3445804	.4232415	.6116573	.1892490
#1	2479.542	52916.51	5216.342	1928.807	3837.810
#2	2491.545	53187.36	5172.885	1952.367	3848.118
#3	2480.958	53265.25	5200.515	1938.135	3834.091

Sample Name: P4126-01LX5 Acquired: 9/23/2024 14:43:38 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004476	-.005463	.0249150	-.001050	.0003433	6.976483	.0284059
Stddev	.003636	.002480	.0009014	.002583	.0010162	.016194	.0005230
%RSD	81.22841	45.39938	3.617956	246.0896	295.9859	.2321240	1.841081

#1	-.008441	-.006421	.0239809	.000846	-.000746	6.992933	.0286797
#2	-.001298	-.007322	.0249845	-.003992	.001265	6.960558	.0287352
#3	-.003689	-.002647	.0257797	-.000004	.000511	6.975959	.0278029

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011482	.0002160	21.96137	.0207813	.0045386	.0104999	22.34672
Stddev	.0000386	.0000271	.08650	.0001514	.0000801	.0007243	.12469
%RSD	3.359120	12.55774	.3938588	.7287246	1.765125	6.898554	.5579607

#1	.0011051	.0001906	21.98205	.0206064	.0044751	.0112586	22.20624
#2	.0011796	.0002128	21.86640	.0208681	.0045119	.0098157	22.44425
#3	.0011598	.0002446	22.03565	.0208694	.0046286	.0104254	22.38968

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1087770	11.84464	.0076030	-.000048	.2321237	.0282768	.0306136
Stddev	.0006032	.04622	.0001554	.000143	.0119231	.0006972	.0005483
%RSD	.5544919	.3901795	2.043927	297.8631	5.136511	2.465534	1.790878

#1	.1093327	11.84461	.0077289	.000111	.2197060	.0277539	.0310966
#2	.1081355	11.79845	.0074293	-.000165	.2434813	.0280081	.0300177
#3	.1088627	11.89088	.0076507	-.000090	.2331836	.0290683	.0307267

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3674644	-.025259	.0009335	-.002036	.2065506	1.010840	.3851430
Stddev	.0252197	.000459	.0004167	.000332	.0013324	.003721	.0018976
%RSD	6.863165	1.816883	44.63322	16.31829	.6450841	.3680782	.4926888

#1	.3956526	-.025688	.0005493	-.001668	.2070036	1.006593	.3831548
#2	.3597027	-.025314	.0008749	-.002125	.2050507	1.012405	.3853397
#3	.3470378	-.024775	.0013764	-.002315	.2075974	1.013522	.3869346

Sample Name: P4126-01LX5 Acquired: 9/23/2024 14:43:38 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2152380	.0083885	-.007648
Stddev	.0002605	.0026474	.000187
%RSD	.1210357	31.55951	2.441035
#1	.2155381	.0111654	-.007470
#2	.2151048	.0081070	-.007842
#3	.2150710	.0058932	-.007632

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2717.303	54141.98	5345.864	2050.391	4429.977
Stddev	3.404	210.88	34.144	3.479	4.022
%RSD	.1252777	.3894896	.6386958	.1696935	.0907948
#1	2713.438	54111.73	5307.066	2046.523	4434.601
#2	2719.853	53947.86	5371.330	2051.387	4427.291
#3	2718.620	54366.35	5359.197	2053.264	4428.038

Sample Name: CCV03 Acquired: 9/23/2024 14:47:56 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.859420	5.071162	4.813199	4.896254	4.983771	9.736815
Stddev	.012160	.046091	.006256	.008530	.004680	.219646
%RSD	.2502356	.9088845	.1299692	.1742181	.0939141	2.255831
#1	4.850186	5.123727	4.807858	4.895346	4.980639	9.849456
#2	4.854878	5.052098	4.811657	4.905201	4.989151	9.877289
#3	4.873198	5.037661	4.820081	4.888214	4.981523	9.483699
Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.948499	.2634997	2.381654	25.89831	.9321105	2.419154
Stddev	.150404	.0044139	.002325	.53641	.0064771	.004645
%RSD	1.511821	1.675111	.0976121	2.071228	.6948817	.1919984
#1	10.06035	.2666608	2.379491	26.23728	.9246827	2.414566
#2	10.00763	.2653817	2.381360	26.17778	.9365820	2.419042
#3	9.77752	.2584568	2.384113	25.27986	.9350667	2.423854
Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.243278	4.640608	2.485925	23.82783	2.423552	1.224401
Stddev	.002233	.045394	.054896	.51659	.004149	.010662
%RSD	.1796192	.9781837	2.208257	2.168016	.1712109	.8707627
#1	1.245636	4.594877	2.510720	24.09165	2.419392	1.212262
#2	1.243002	4.685657	2.524050	24.15925	2.423572	1.232246
#3	1.241196	4.641291	2.423006	23.23260	2.427691	1.228695
Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.20043	2.400547	2.477031	23.37110	5.196889	5.053869
Stddev	.25703	.053040	.022555	.27130	.082548	.005029
%RSD	1.107880	2.209517	.9105825	1.160823	1.588408	.0995032
#1	22.97211	2.433243	2.451236	23.18825	5.244430	5.052996
#2	23.47881	2.429049	2.486815	23.68281	5.244665	5.059278
#3	23.15038	2.339349	2.493043	23.24223	5.101571	5.049335

Sample Name: CCV03 Acquired: 9/23/2024 14:47:56 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.801044	5.102479	F 4.428721	5.042580	4.642884	F -.002958
Stddev	.012461	.118276	.067664	.011062	.000362	.003003
%RSD	.2595513	2.318006	1.527844	.2193789	.0077865	101.5039
#1	4.787641	5.171894	4.350774	5.029834	4.642654	-.001851
#2	4.803210	5.169631	4.463053	5.048228	4.642698	-.000667
#3	4.812280	4.965912	4.472337	5.049680	4.643301	-.006358

Elem	Sr4077
Units	ppm
Avg	5.102716
Stddev	.072321
%RSD	1.417297
#1	5.123737
#2	5.162197
#3	5.022213

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2565.141	55418.85	5075.957	2051.402	4095.906
Stddev	.525	418.52	102.056	20.179	6.475
%RSD	.0204807	.7551897	2.010586	.9836582	.1580902
#1	2565.525	55865.59	5001.422	2074.226	4100.330
#2	2565.355	55035.88	5034.175	2035.932	4098.915
#3	2564.542	55355.06	5192.275	2044.049	4088.474

Sample Name: CCB03 Acquired: 9/23/2024 14:52:07 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002910	-.001018	-.000540	-.000074	.0006980	.0009612	.0001137
Stddev	.002434	.000414	.000676	.001739	.0009291	.0093342	.0005559
%RSD	83.63673	40.65511	125.0806	2362.091	133.1094	971.0921	489.0980

#1	-.000102	-.001495	-.000127	.001449	-.000307	.0004357	.0004862
#2	-.004221	-.000766	-.001320	.000298	.001525	-.008099	.0003801
#3	-.004408	-.000792	-.000174	-.001968	.000876	.010547	-.000525

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000976	.0000967	.0169167	-.000594	.0000578	-.000022	.0030712
Stddev	.0000263	.0000115	.0125157	.000356	.0000579	.000112	.0018406
%RSD	26.95803	11.93238	73.98412	59.93012	100.2900	515.8954	59.93096

#1	.0000948	.0000848	.0184624	-.000306	.0000960	.000108	.0051395
#2	.0000728	.0001079	.0285877	-.000484	.0000862	-.000084	.0016138
#3	.0001252	.0000973	.0037000	-.000992	-.000009	-.000089	.0024601

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002723	-.017745	-.000147	.0004038	-.070372	-.000847	-.005897
Stddev	.0002618	.008501	.000143	.0003823	.015604	.000800	.000189
%RSD	96.13580	47.90592	96.66474	94.67948	22.17317	94.39660	3.205754

#1	.0001043	-.022856	-.000305	.0003453	-.084436	-.001076	-.005681
#2	.0005740	-.007932	-.000110	.0008119	-.073094	.000042	-.006033
#3	.0001387	-.022447	-.000028	.0000541	-.053586	-.001508	-.005978

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.081663	.0014784	.0005125	-.000619	.0010873	-.002496	-.006145
Stddev	.019752	.0011601	.0001091	.000743	.0016842	.005814	.001448
%RSD	24.18746	78.46821	21.28270	120.0669	154.8959	232.9205	23.56847

#1	-.100363	.0007170	.0003887	-.000355	.0029774	-.006498	-.005119
#2	-.083621	.0028135	.0005946	-.001457	.0005390	.004173	-.007801
#3	-.061005	.0009046	.0005542	-.000044	-.000254	-.005163	-.005514

Sample Name: CCB03 Acquired: 9/23/2024 14:52:07 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.001861	-.005476	-.000078
Stddev	.000901	.003696	.000016
%RSD	48.42408	67.50136	20.55887

#1	-.002723	-.008069	-.000060
#2	-.001934	-.007115	-.000086
#3	-.000925	-.001243	-.000089

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2662.976	55882.87	5222.353	2093.731	4411.370
Stddev	2.028	31.97	7.616	4.246	4.335
%RSD	.0761525	.0572140	.1458432	.2028093	.0982595

#1	2664.913	55853.18	5223.003	2090.007	4406.365
#2	2663.149	55916.72	5229.623	2092.831	4413.851
#3	2660.868	55878.70	5214.432	2098.355	4413.894

Sample Name: P4126-01MS Acquired: 9/23/2024 14:56:58 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6745471	1.818167	.9789062	1.600826	.7277792	37.60519	.3343074
Stddev	.0033041	.028044	.0019283	.007077	.0006947	.17489	.0014471
%RSD	.4898257	1.542418	.1969899	.4420834	.0954492	.4650665	.4328766

#1	.6742720	1.840565	.9810770	1.606957	.7271411	37.47091	.3326365
#2	.6713892	1.786715	.9773916	1.593081	.7285192	37.54170	.3351257
#3	.6779802	1.827222	.9782500	1.602438	.7276774	37.80295	.3351601

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1713011	.1714322	111.2829	.4636373	.2122765	.3210787	112.5311
Stddev	.0002790	.0001429	.6710	.0010565	.0003556	.0003815	.3648
%RSD	.1629024	.0833669	.6029601	.2278645	.1674988	.1188115	.3242183

#1	.1710026	.1714942	110.5585	.4645897	.2126356	.3213068	112.3222
#2	.1713452	.1712688	111.4070	.4638212	.2122695	.3206383	112.3187
#3	.1715555	.1715337	111.8832	.4625010	.2119246	.3212910	112.9524

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7333659	61.38083	.5012438	.0693867	4.141372	.4293330	.3949467
Stddev	.0046511	.36890	.0003617	.0001526	.024243	.0007369	.0030655
%RSD	.6342074	.6010089	.0721621	.2198732	.5853878	.1716426	.7761874

#1	.7292678	61.11438	.5014009	.0694371	4.141326	.4284871	.3984634
#2	.7324088	61.22623	.5008301	.0692153	4.117152	.4298360	.3935383
#3	.7384210	61.80188	.5015004	.0695077	4.165639	.4296758	.3928385

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.81246	.1613489	.3881052	.6214759	1.240730	5.824110	7.667655
Stddev	.05876	.0001333	.0010818	.0012354	.005444	.019188	.014958
%RSD	.4974798	.0826261	.2787252	.1987900	.4387509	.3294599	.1950743

#1	11.79402	.1611987	.3883268	.6229023	1.234921	5.821018	7.684825
#2	11.76513	.1613947	.3869297	.6207804	1.241557	5.806655	7.657447
#3	11.87824	.1614533	.3890589	.6207450	1.245713	5.844656	7.660693

Sample Name: P4126-01MS Acquired: 9/23/2024 14:56:58 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.095319	.3815180	.1494942
Stddev	.005232	.0009342	.0009479
%RSD	.4776251	.2448543	.6340539
#1	1.100978	.3818510	.1484696
#2	1.090659	.3822401	.1496731
#3	1.094320	.3804630	.1503399

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2672.546	53382.30	5198.915	1965.899	4146.676
Stddev	4.814	109.57	8.525	4.872	8.278
%RSD	.1801351	.2052600	.1639757	.2478436	.1996380
#1	2667.032	53269.72	5205.728	1960.585	4137.124
#2	2675.911	53488.59	5201.662	1966.953	4151.122
#3	2674.697	53388.60	5189.355	1970.157	4151.781

Sample Name: P4126-01MSD Acquired: 9/23/2024 15:00:57 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7167497	1.867431	1.034037	1.717548	.7658909	41.27248	.3489805
Stddev	.0024727	.020259	.004109	.001502	.0014068	.29418	.0029117
%RSD	.3449877	1.084860	.3973597	.0874338	.1836794	.7127823	.8343509
#1	.7155059	1.883723	1.031087	1.715916	.7643619	40.94580	.3456190
#2	.7151458	1.844747	1.032293	1.717855	.7661804	41.35519	.3506023
#3	.7195974	1.873823	1.038730	1.718872	.7671304	41.51646	.3507202
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1691746	.1817890	116.8609	.4732480	.2239853	.3466290	119.3164
Stddev	.0006643	.0004493	1.1670	.0016410	.0001034	.0007688	.6293
%RSD	.3926754	.2471768	.9986622	.3467514	.0461625	.2217885	.5274097
#1	.1684076	.1818585	115.5158	.4713613	.2240821	.3475166	118.6625
#2	.1695512	.1813089	117.4629	.4740388	.2238764	.3461730	119.3688
#3	.1695651	.1821995	117.6040	.4743438	.2239974	.3461974	119.9178
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7652459	64.64197	.5312666	.0686762	4.122865	.4474443	.3747973
Stddev	.0073646	.72399	.0010716	.0006105	.020702	.0056019	.0013131
%RSD	.9623848	1.119999	.2017022	.8888784	.5021203	1.251982	.3503349
#1	.7569545	63.86122	.5307228	.0679781	4.103864	.4422168	.3732907
#2	.7677551	64.77352	.5305759	.0689411	4.119806	.4533575	.3756981
#3	.7710279	65.29116	.5325010	.0691095	4.144927	.4467586	.3754030
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.91776	.1522500	.3977908	.6575027	1.368315	7.129347	8.483284
Stddev	.02247	.0013210	.0005985	.0016568	.012459	.022870	.020138
%RSD	.1885389	.8676795	.1504569	.2519903	.9105720	.3207902	.2373847
#1	11.89568	.1534018	.3971072	.6577992	1.353996	7.104414	8.472166
#2	11.91701	.1508080	.3982205	.6589913	1.376682	7.134278	8.471156
#3	11.94060	.1525403	.3980448	.6557177	1.374267	7.149350	8.506530

Sample Name: P4126-01MSD Acquired: 9/23/2024 15:00:57 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.216164	.3854170	.1502936
Stddev	.005985	.0020668	.0017141
%RSD	.4920877	.5362539	1.140528
#1	1.213681	.3836158	.1483931
#2	1.211821	.3849618	.1507649
#3	1.222991	.3876735	.1517228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2521.582	55227.11	5308.761	2028.237	3858.624
Stddev	2.349	31.95	21.124	1.969	.640
%RSD	.0931439	.0578458	.3979002	.0970683	.0165735
#1	2521.636	55204.49	5332.975	2026.929	3858.738
#2	2519.206	55213.18	5294.116	2027.281	3857.935
#3	2523.903	55263.65	5299.190	2030.501	3859.199

Sample Name: P4126-01A Acquired: 9/23/2024 15:04:57 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6779095	1.786077	1.002798	1.627280	.7421879	47.12535	.3610791
Stddev	.0039409	.017711	.002634	.003357	.0022603	.21811	.0007414
%RSD	.5813326	.9916098	.2627042	.2063014	.3045512	.4628276	.2053234

#1	.6736582	1.771433	1.005417	1.627058	.7432393	46.87700	.3602708
#2	.6786296	1.781037	1.002828	1.624039	.7395934	47.28574	.3612390
#3	.6814407	1.805762	1.000149	1.630742	.7437311	47.21332	.3617274

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1740014	.1748942	125.3921	.4795485	.2195240	.3345798	130.4304
Stddev	.0008497	.0001531	1.2814	.0016735	.0005719	.0003445	.3145
%RSD	.4883326	.0875459	1.021914	.3489762	.2605238	.1029558	.2410944

#1	.1730470	.1750153	124.0173	.4778968	.2201833	.3349153	130.1704
#2	.1742812	.1749452	125.6060	.4795059	.2191622	.3342270	130.3410
#3	.1746758	.1747221	126.5531	.4812430	.2192264	.3345970	130.7799

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8102687	69.16863	.5178261	.0683255	4.230418	.4566666	.3901534
Stddev	.0076626	.53317	.0003330	.0001883	.026891	.0025443	.0013265
%RSD	.9456864	.7708314	.0643076	.2756370	.6356666	.5571443	.3400035

#1	.8015307	68.61454	.5178462	.0685429	4.213352	.4547247	.3888396
#2	.8134336	69.21327	.5181485	.0682209	4.261417	.4557283	.3901284
#3	.8158419	69.67807	.5174834	.0682127	4.216486	.4595467	.3914923

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.38003	.1560862	.3910572	.6323636	1.607211	9.967544	8.085385
Stddev	.02682	.0008119	.0006371	.0017418	.009788	.047900	.014544
%RSD	.2166344	.5201489	.1629227	.2754417	.6090342	.4805559	.1798822

#1	12.34931	.1563867	.3915624	.6304531	1.612165	10.01892	8.091446
#2	12.39204	.1551669	.3903414	.6327745	1.595936	9.95959	8.095918
#3	12.39875	.1567049	.3912676	.6338632	1.613532	9.92412	8.068791

Sample Name: P4126-01A Acquired: 9/23/2024 15:04:57 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.183094	.3928723	.1435506
Stddev	.002444	.0037438	.0014869
%RSD	.2065720	.9529353	1.035785
#1	1.185739	.3929745	.1418639
#2	1.180920	.3965640	.1441164
#3	1.182622	.3890784	.1446715

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2618.650	53700.38	5151.630	1959.864	4017.298
Stddev	2.202	79.21	20.538	2.292	5.067
%RSD	.0840917	.1475036	.3986717	.1169309	.1261197
#1	2617.002	53609.22	5174.870	1959.214	4012.076
#2	2621.151	53752.44	5144.097	1962.410	4017.623
#3	2617.796	53739.47	5135.922	1957.967	4022.194

Sample Name: P3956-02 Acquired: 9/23/2024 15:08:55 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003299	-.001478	.0071504	.0001993	-.000326	.0997912	.0171495
Stddev	.002425	.001794	.0004688	.0009243	.000982	.0046810	.0007936
%RSD	73.52347	121.3910	6.556769	463.7492	301.1424	4.690774	4.627634

#1	-.001648	-.003549	.0070288	.0006991	.000753	.0965536	.0164985
#2	-.006083	-.000441	.0067544	-.000867	-.000563	.1051583	.0169166
#3	-.002165	-.000443	.0076681	.000766	-.001168	.0976617	.0180335

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001199	.0003400	23.52545	.0046322	.0009340	.4983246	.5754524
Stddev	.0000636	.0000319	.04724	.0002661	.0000169	.0004967	.0058153
%RSD	53.07516	9.396771	.2007905	5.744007	1.805937	.0996728	1.010561

#1	.0001504	.0003629	23.56754	.0049330	.0009146	.4984529	.5819917
#2	.0001624	.0003536	23.53446	.0045364	.0009431	.4977764	.5708612
#3	.0000467	.0003035	23.47436	.0044274	.0009444	.4987446	.5735045

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1009648	5.885920	.0047680	.0004750	39.42431	.0011552	.4726904
Stddev	.0007387	.001392	.0003342	.0007036	.16852	.0022336	.0006463
%RSD	.7316658	.0236513	7.009289	148.1303	.4274646	193.3545	.1367333

#1	.1017822	5.885914	.0044392	.0005654	39.33976	.0006607	.4734348
#2	.1003448	5.884530	.0051074	.0011289	39.31480	.0035946	.4723655
#3	.1007676	5.887314	.0047573	-.000269	39.61837	-.000790	.4722710

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.30021	.0134276	.0006123	-.009080	.0015547	3.309813	2.129211
Stddev	.08260	.0002001	.0002027	.000407	.0001847	.025537	.000868
%RSD	.2638958	1.490432	33.10061	4.486520	11.87867	.7715399	.0407760

#1	31.24146	.0132087	.0008409	-.009547	.0014087	3.281939	2.128803
#2	31.26452	.0136011	.0004545	-.008801	.0017623	3.315419	2.128622
#3	31.39466	.0134732	.0005416	-.008891	.0014931	3.332080	2.130208

Sample Name: P3956-02 Acquired: 9/23/2024 15:08:55 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	6.342835	.0026250	.0954603
Stddev	.023429	.0048550	.0003443
%RSD	.3693820	184.9484	.3606791
#1	6.339366	.0081247	.0953282
#2	6.367806	-.001066	.0952017
#3	6.321334	.000816	.0958512

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2593.358	55691.05	5333.636	2074.229	4226.384
Stddev	9.294	134.77	10.273	7.940	11.786
%RSD	.3583653	.2419901	.1926080	.3827969	.2788699
#1	2600.173	55824.53	5343.270	2083.067	4236.333
#2	2597.130	55693.60	5322.825	2067.698	4229.452
#3	2582.772	55555.03	5334.813	2071.921	4213.368

Sample Name: P3956-02DUP Acquired: 9/23/2024 15:13:09 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004120	-.000497	.0065221	.0004295	-.000791	.0988858	.0159639
Stddev	.005291	.000233	.0008393	.0004553	.001233	.0054365	.0009794
%RSD	128.4308	46.85883	12.86940	106.0009	155.7826	5.497790	6.135311

#1	-.004215	-.000228	.0056553	-.000086	-.001470	.1035126	.0167862
#2	-.009362	-.000634	.0073311	.000598	.000632	.1002466	.0162253
#3	.001218	-.000629	.0065798	.000776	-.001535	.0928981	.0148803

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001856	.0002419	23.06837	.0046027	.0008109	.4915141	.6030377
Stddev	.0000620	.0000247	.29555	.0003813	.0001285	.0027107	.0041409
%RSD	33.43420	10.21739	1.281183	8.284772	15.84859	.5514978	.6866794

#1	.0002489	.0002508	22.73368	.0048545	.0006627	.4885374	.6069938
#2	.0001249	.0002139	23.17797	.0047897	.0008776	.4921642	.6033856
#3	.0001828	.0002608	23.29346	.0041640	.0008923	.4938406	.5987339

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0976904	5.754132	.0049286	.0004520	41.57339	.0003468	.4809879
Stddev	.0006196	.040493	.0002500	.0000598	.09207	.0025229	.0026875
%RSD	.6342338	.7037140	5.072180	13.22388	.2214655	727.5028	.5587493

#1	.0969753	5.708997	.0047768	.0003981	41.47379	-.002044	.4830366
#2	.0980664	5.766124	.0052171	.0004417	41.65539	.002984	.4819821
#3	.0980295	5.787274	.0047919	.0005163	41.59099	.000101	.4779449

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.95001	.0122399	.0004251	-.009633	.0009420	3.487017	2.072653
Stddev	.07527	.0007623	.0002827	.000780	.0013030	.018964	.004494
%RSD	.2284219	6.228373	66.50115	8.099492	138.3152	.5438479	.2168449

#1	32.87557	.0120899	.0001116	-.008797	-.000487	3.473915	2.077507
#2	33.02608	.0130661	.0005030	-.009761	.002064	3.478373	2.071816
#3	32.94839	.0115637	.0006606	-.010341	.001250	3.508763	2.068636

Sample Name: P3956-02DUP Acquired: 9/23/2024 15:13:09 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	6.124126	.0024104	.0947395
Stddev	.025974	.0016546	.0012151
%RSD	.4241223	68.64544	1.282548
#1	6.100116	.0040699	.0933373
#2	6.151696	.0024004	.0953985
#3	6.120566	.0007608	.0954827

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2633.830	53783.13	5564.823	2021.700	4309.641
Stddev	15.129	36.09	50.025	6.886	19.541
%RSD	.5744146	.0671121	.8989541	.3406249	.4534299
#1	2649.274	53821.11	5621.034	2018.794	4329.272
#2	2633.180	53779.01	5548.240	2016.743	4309.461
#3	2619.036	53749.27	5525.195	2029.563	4290.190

Sample Name: P3956-02LX5 Acquired: 9/23/2024 15:17:25 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004715	-.000221	.0017127	-.000236	-.000275	.0110731	.0021514
Stddev	.001003	.001783	.0012356	.001588	.000954	.0063786	.0014092
%RSD	21.27490	806.6822	72.14196	673.9596	346.8484	57.60417	65.50245

#1	-.005590	.001259	.0016455	-.000343	.000787	.0151567	.0005678
#2	-.004933	.000279	.0029805	-.001767	-.000554	.0037229	.0026192
#3	-.003620	-.002201	.0005121	.001403	-.001058	.0143398	.0032672

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000783	.0001496	3.489220	.0007549	.0002027	.1181307	.0862702
Stddev	.0000381	.0000185	.487823	.0002400	.0001111	.0041780	.0155600
%RSD	48.62972	12.33006	13.98085	31.79276	54.80233	3.536735	18.03637

#1	.0001204	.0001650	2.995480	.0008970	.0000808	.1135564	.0720731
#2	.0000680	.0001546	3.501278	.0008899	.0002292	.1190904	.0838322
#3	.0000464	.0001292	3.970902	.0004778	.0002982	.1217453	.1029052

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0148755	.8694756	.0012681	.0007305	5.314588	-.001865	.0856621
Stddev	.0024919	.1292359	.0001174	.0000537	.774368	.001399	.0061897
%RSD	16.75168	14.86365	9.258950	7.348249	14.57061	74.99540	7.225702

#1	.0122828	.7422550	.0011800	.0007384	4.535164	-.002612	.0789564
#2	.0150910	.8655353	.0014014	.0007798	5.324801	-.000251	.0868731
#3	.0172526	1.000637	.0012229	.0006733	6.083799	-.002731	.0911568

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.121227	.0017579	.0004143	-.002502	.0008791	.4590748	.4752031
Stddev	.544486	.0004950	.0000150	.000184	.0010957	.0745815	.0203217
%RSD	13.21176	28.15896	3.617868	7.349486	124.6337	16.24606	4.276423

#1	3.572570	.0011952	.0004280	-.002642	.0018581	.3862167	.4529057
#2	4.129664	.0019524	.0003983	-.002571	-.000304	.4557396	.4800200
#3	4.661445	.0021261	.0004166	-.002294	.001084	.5352680	.4926836

Sample Name: P3956-02LX5 Acquired: 9/23/2024 15:17:25 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.376127	-.005957	.0142428
Stddev	.051566	.004067	.0020593
%RSD	3.747195	68.28283	14.45865

#1	1.321008	-.010446	.0121665
#2	1.384183	-.002516	.0142773
#3	1.423192	-.004909	.0162847

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.233	55273.49	5174.558	2065.588	4494.144
Stddev	3.354	160.16	16.798	4.430	2.866
%RSD	.1241744	.2897562	.3246364	.2144766	.0637618

#1	2701.482	55303.61	5164.048	2065.887	4497.356
#2	2697.761	55100.40	5165.694	2061.016	4491.850
#3	2704.455	55416.44	5193.932	2069.861	4493.225

Sample Name: P3956-02MS Acquired: 9/23/2024 15:21:44 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7394051	1.972166	.9149228	1.849231	.7994347	2.039406	.2121703
Stddev	.0024862	.018299	.0005409	.009741	.0020178	.012276	.0023847
%RSD	.3362409	.9278740	.0591196	.5267760	.2524022	.6019263	1.123960
#1	.7396468	1.982938	.9151206	1.840305	.7971939	2.028774	.2094715
#2	.7417615	1.982522	.9143109	1.859621	.8000019	2.052841	.2130459
#3	.7368068	1.951037	.9153370	1.847766	.8011081	2.036604	.2139933
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1856803	.1785116	24.58897	.3939566	.1952307	.7755884	3.512459
Stddev	.0005371	.0002931	.06890	.0017335	.0006911	.0019601	.006149
%RSD	.2892745	.1641788	.2801907	.4400125	.3540074	.2527209	.1750722
#1	.1861884	.1788426	24.52315	.3957969	.1947745	.7735082	3.515293
#2	.1851183	.1784071	24.66058	.3937185	.1948917	.7774008	3.516681
#3	.1857342	.1782851	24.58318	.3923546	.1960259	.7758562	3.505404
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2972920	7.812093	.4896076	.0788952	43.30706	.2842498	.6951759
Stddev	.0016512	.053207	.0002884	.0003490	.05822	.0017628	.0056598
%RSD	.5554152	.6810857	.0589066	.4423632	.1344380	.6201591	.8141587
#1	.2954188	7.769514	.4895962	.0792639	43.37389	.2823541	.7017108
#2	.2979204	7.871740	.4893250	.0788516	43.26731	.2845558	.6918315
#3	.2985367	7.795026	.4899015	.0785700	43.27999	.2858396	.6919856
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.85033	.2670005	.4117121	.6545193	.1975985	4.113288	7.956503
Stddev	.14147	.0011002	.0008312	.0009403	.0008733	.020679	.008710
%RSD	.3380407	.4120421	.2018984	.1436597	.4419704	.5027444	.1094734
#1	42.01210	.2658236	.4111464	.6555823	.1978544	4.136389	7.965778
#2	41.78913	.2680032	.4126665	.6537966	.1966258	4.096505	7.955234
#3	41.74976	.2671746	.4113234	.6541789	.1983153	4.106968	7.948497

Sample Name: P3956-02MS Acquired: 9/23/2024 15:21:44 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.852898	.3432048	.2914789
Stddev	.006863	.0059777	.0014464
%RSD	.1172526	1.741714	.4962329
#1	5.859238	.3390043	.2898111
#2	5.853846	.3405617	.2922349
#3	5.845611	.3500484	.2923906

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2694.203	53732.73	5216.815	2033.712	4385.976
Stddev	11.004	259.56	11.670	11.972	17.216
%RSD	.4084361	.4830554	.2237083	.5886932	.3925313
#1	2706.812	53443.82	5229.901	2019.951	4402.823
#2	2689.261	53808.14	5207.485	2041.742	4386.693
#3	2686.536	53946.24	5213.059	2039.442	4368.413

Sample Name: P3956-02MSD Acquired: 9/23/2024 15:25:41 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7781918	2.026895	.9401515	1.954251	.8278843	2.021349	.2134733
Stddev	.0020555	.017181	.0016225	.006567	.0021669	.011093	.0005794
%RSD	.2641385	.8476447	.1725771	.3360469	.2617345	.5488049	.2713973

#1	.7801399	2.025850	.9410571	1.961827	.8294810	2.011542	.2128256
#2	.7760435	2.010261	.9411190	1.950179	.8254177	2.019118	.2139423
#3	.7783920	2.044575	.9382783	1.950746	.8287544	2.033389	.2136519

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1780474	.1837763	24.27918	.3902445	.2003090	.7968525	3.499533
Stddev	.0005648	.0001935	.12436	.0004110	.0002687	.0017315	.006816
%RSD	.3171937	.1052923	.5122116	.1053257	.1341287	.2172941	.1947544

#1	.1774025	.1839894	24.14558	.3897900	.2006099	.7980325	3.500370
#2	.1784537	.1837281	24.39158	.3903534	.2000931	.7976603	3.492338
#3	.1782860	.1836115	24.30038	.3905901	.2002240	.7948647	3.505892

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2959971	7.672402	.5031062	.0775375	42.42078	.2880990	.6760696
Stddev	.0008759	.021363	.0001551	.0003520	.15125	.0019340	.0017556
%RSD	.2959131	.2784424	.0308210	.4540225	.3565422	.6713068	.2596752

#1	.2950223	7.656277	.5030312	.0778509	42.43673	.2861849	.6744003
#2	.2967179	7.664297	.5032844	.0776050	42.26219	.2880598	.6759080
#3	.2962512	7.696631	.5030028	.0771566	42.56343	.2900524	.6779004

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.01522	.2578443	.4176279	.6753836	.1980176	4.033973	8.421833
Stddev	.08366	.0012923	.0006202	.0020691	.0020599	.014400	.033837
%RSD	.2039726	.5011828	.1485138	.3063545	1.040245	.3569578	.4017817

#1	41.05940	.2586720	.4181137	.6775477	.1957653	4.038299	8.411045
#2	40.91873	.2585055	.4178407	.6751781	.1984814	4.017906	8.394706
#3	41.06754	.2563552	.4169292	.6734249	.1998060	4.045714	8.459750

Sample Name: P3956-02MSD Acquired: 9/23/2024 15:25:41 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	6.181799	.3324818	.2926810
Stddev	.012548	.0027545	.0013912
%RSD	.2029816	.8284595	.4753213
#1	6.190090	.3299077	.2911781
#2	6.167363	.3321508	.2929410
#3	6.187944	.3353868	.2939238

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.257	55792.22	5416.221	2079.812	4192.944
Stddev	2.062	51.59	25.856	8.154	3.057
%RSD	.0796170	.0924652	.4773751	.3920483	.0729102
#1	2590.619	55842.63	5440.787	2088.841	4195.642
#2	2588.037	55739.53	5389.244	2077.610	4193.565
#3	2592.114	55794.49	5418.631	2072.985	4189.624

Sample Name: P3956-02A Acquired: 9/23/2024 15:29:40 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7536475	2.014504	.9279145	1.901698	.8158448	2.060758	.2133562
Stddev	.0047340	.035502	.0094246	.019852	.0071553	.014487	.0017527
%RSD	.6281473	1.762331	1.015675	1.043932	.8770408	.7030040	.8214964
#1	.7578692	2.038776	.9328121	1.912530	.8196572	2.053147	.2115153
#2	.7545439	2.030979	.9338820	1.913778	.8202865	2.051662	.2150048
#3	.7485293	1.973758	.9170495	1.878786	.8075905	2.077464	.2135486
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1849595	.1811847	24.30876	.3929009	.1980054	.7811699	3.444349
Stddev	.0004935	.0016589	.14295	.0005591	.0019971	.0084714	.015619
%RSD	.2668207	.9156045	.5880516	.1423067	1.008593	1.084451	.4534711
#1	.1848608	.1822783	24.14381	.3923272	.1992153	.7858573	3.429798
#2	.1845228	.1819999	24.39652	.3934442	.1991006	.7862617	3.460853
#3	.1854949	.1792759	24.38595	.3929314	.1957003	.7713907	3.442396
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2973721	7.755601	.4955559	.0782726	41.81681	.2876796	.6806891
Stddev	.0029541	.011657	.0042315	.0003313	.06109	.0027808	.0010191
%RSD	.9934025	.1503039	.8538882	.4232671	.1460897	.9666263	.1497089
#1	.2939857	7.742227	.4977869	.0781956	41.79521	.2906143	.6811716
#2	.2987102	7.763604	.4982050	.0786356	41.88576	.2873407	.6813772
#3	.2994204	7.760973	.4906758	.0779865	41.76945	.2850838	.6795184
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.41901	.2694862	.4183920	.6658962	.1991921	3.967232	8.125775
Stddev	.05174	.0017608	.0044592	.0060075	.0017321	.012207	.100487
%RSD	.1280139	.6533895	1.065806	.9021694	.8695751	.3076934	1.236644
#1	40.37660	.2686414	.4202909	.6674237	.1975913	3.977500	8.192107
#2	40.47666	.2683070	.4215875	.6709924	.1989540	3.953736	8.175058
#3	40.40377	.2715102	.4132976	.6592723	.2010309	3.970462	8.010161

Sample Name: P3956-02A Acquired: 9/23/2024 15:29:40 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.903011	.3485540	.2923287
Stddev	.052166	.0027202	.0010206
%RSD	.8837175	.7804330	.3491168
#1	5.935886	.3512411	.2911503
#2	5.930284	.3486191	.2929259
#3	5.842861	.3458018	.2929099

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2669.406	55400.89	5248.273	2073.299	4347.031
Stddev	21.113	40.59	7.095	3.198	36.308
%RSD	.7909197	.0732638	.1351862	.1542232	.8352467
#1	2659.514	55363.66	5256.250	2069.876	4327.687
#2	2655.055	55394.85	5245.902	2073.810	4324.490
#3	2693.649	55444.16	5242.668	2076.210	4388.916

Sample Name: PB163546BL Acquired: 9/23/2024 15:33:38 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003712	-.000542	.0005781	-.002171	.0009744	.0036421	-.000562
Stddev	.003624	.003228	.0006839	.001038	.0009220	.0035158	.001176
%RSD	97.62849	595.4215	118.3056	47.81105	94.61975	96.53019	209.1284

#1	-.003302	.002944	-.000207	-.002961	.0010295	.0074894	-.000816
#2	-.000311	-.001144	.000898	-.000996	.0018677	.0005963	-.001591
#3	-.007524	-.003426	.001043	-.002557	.0000261	.0028406	.000720

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000560	-.000036	.0038870	-.000170	-.000229	-.000246	.0015190
Stddev	.0000118	.000048	.0067957	.000477	.000093	.000119	.0018126
%RSD	21.05551	133.9958	174.8326	281.0082	40.89966	48.55400	119.3301

#1	.0000432	-.000036	.0007005	.000357	-.000273	-.000376	.0002569
#2	.0000664	-.000084	.0116904	-.000295	-.000121	-.000141	.0035960
#3	.0000584	.000012	-.000730	-.000571	-.000292	-.000220	.0007040

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000064	.0052088	.0001064	.0005135	-.080052	-.001348	-.007094
Stddev	.000497	.0236179	.0002960	.0002247	.004493	.003209	.000378
%RSD	771.9137	453.4231	278.0871	43.75166	5.612945	238.0745	5.327675

#1	.000205	-.020689	.0004412	.0004192	-.083482	.001195	-.007004
#2	-.000638	.010757	-.000120	.0003514	-.074966	-.004953	-.006770
#3	.000240	.025559	-.000002	.0007700	-.081708	-.000285	-.007509

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.092018	-.002491	.0004523	-.001065	.0006683	-.006812	-.006945
Stddev	.045536	.000555	.0002663	.001042	.0001148	.001301	.001439
%RSD	49.48591	22.27576	58.87986	97.86226	17.17115	19.09583	20.72430

#1	-.144570	-.002104	.0002134	-.002167	.0006813	-.007821	-.005766
#2	-.064261	-.002242	.0004042	-.000095	.0007760	-.005344	-.008549
#3	-.067222	-.003127	.0007395	-.000933	.0005476	-.007272	-.006520

Sample Name: PB163546BL Acquired: 9/23/2024 15:33:38 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.003180	-.004522	-.000042
Stddev	.001616	.003216	.000040
%RSD	50.82504	71.11831	93.93787

#1	-.001688	-.002737	-.000022
#2	-.004896	-.002594	-.000017
#3	-.002954	-.008234	-.000088

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2578.343	55916.38	5209.902	2088.131	4225.452
Stddev	1.375	52.80	15.455	4.856	3.041
%RSD	.0533114	.0944343	.2966474	.2325390	.0719670

#1	2576.770	55874.05	5210.154	2092.871	4221.961
#2	2579.311	55975.55	5225.230	2088.356	4227.525
#3	2578.948	55899.55	5194.323	2083.167	4226.870

Sample Name: CCV04 Acquired: 9/23/2024 15:37:59 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.872169	5.137636	4.863188	4.915591	5.054252	10.13602
Stddev	.006060	.102504	.003424	.020904	.004860	.07013
%RSD	.1243754	1.995159	.0704088	.4252685	.0961496	.6918957

#1	4.868505	5.225843	4.864589	4.925408	5.053611	10.05587
#2	4.879164	5.161883	4.865690	4.929780	5.059401	10.16608
#3	4.868839	5.025183	4.859286	4.891585	5.049745	10.18611

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.13262	.2368712	2.395564	26.58889	.9684895	2.445731
Stddev	.07468	.0006650	.002026	.18615	.0049330	.002367
%RSD	.7370012	.2807597	.0845521	.7001225	.5093530	.0967798

#1	10.11117	.2361576	2.395631	26.38989	.9642459	2.445705
#2	10.21568	.2374737	2.397555	26.75876	.9739020	2.448110
#3	10.07102	.2369821	2.393506	26.61801	.9673207	2.443376

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.254471	4.842116	2.558401	24.51309	2.444507	1.303679
Stddev	.003007	.034709	.013491	.15264	.002945	.000757
%RSD	.2396967	.7168176	.5273166	.6226739	.1204926	.0580868

#1	1.252096	4.806046	2.542949	24.33715	2.445441	1.302989
#2	1.257852	4.845020	2.564414	24.59194	2.446872	1.303558
#3	1.253466	4.875282	2.567841	24.61018	2.441208	1.304489

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.72431	2.474780	2.651936	24.87676	4.756334	5.169296
Stddev	.08142	.008080	.006980	.09743	.016783	.008889
%RSD	.3431988	.3264752	.2631939	.3916614	.3528518	.1719650

#1	23.63841	2.465798	2.644283	24.76788	4.738248	5.171385
#2	23.73415	2.477088	2.653573	24.90665	4.771405	5.176956
#3	23.80036	2.481455	2.657952	24.95574	4.759350	5.159549

Sample Name: CCV04 Acquired: 9/23/2024 15:37:59 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.837762	5.263201	4.693671	4.981219	4.581822	F -.000501
Stddev	.013057	.036272	.023248	.016962	.020590	.002434
%RSD	.2699027	.6891703	.4953161	.3405239	.4493953	485.4482
#1	4.850741	5.222123	4.669111	4.994002	4.590439	-.003309
#2	4.837917	5.290821	4.696565	4.987679	4.596703	.001019
#3	4.824628	5.276658	4.715337	4.961976	4.558323	.000786

Elem	Sr4077
Units	ppm
Avg	5.218513
Stddev	.033786
%RSD	.6474292
#1	5.202827
#2	5.257291
#3	5.195421

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2561.087	51090.16	4765.578	1901.213	4117.104
Stddev	3.714	58.49	19.650	5.145	7.078
%RSD	.1450297	.1144761	.4123224	.2706212	.1719226
#1	2561.314	51091.58	4776.996	1897.684	4113.579
#2	2557.264	51030.97	4742.889	1907.117	4112.481
#3	2564.682	51147.92	4776.850	1898.838	4125.253

Sample Name: CCB04 Acquired: 9/23/2024 15:42:09 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002702	-.002249	.0002921	-.002128	-.001063	.0015246	-.001384
Stddev	.002283	.001775	.0004723	.000497	.000664	.0068783	.000580
%RSD	84.51114	78.90541	161.6691	23.33911	62.47331	451.1698	41.92634

#1	-.005205	-.000786	.0001311	-.001956	-.000572	-.002976	-.000714
#2	-.002167	-.001738	.0008239	-.001741	-.001818	-.001893	-.001704
#3	-.000733	-.004224	-.000079	-.002688	-.000798	.009442	-.001733

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000001	.0000417	.0195084	-.000380	-.000175	-.000125	.0021460
Stddev	.000018	.0000544	.0054842	.000358	.000070	.000404	.0022862
%RSD	2101.480	130.4803	28.11188	94.20239	39.72929	324.3789	106.5312

#1	.000007	-.000019	.0163863	.000031	-.000255	.000008	-.000395
#2	.000012	.000060	.0162981	-.000623	-.000126	-.000578	.002797
#3	-.000022	.000085	.0258407	-.000546	-.000144	.000197	.004036

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001386	-.006900	.0003227	.0004126	-.084641	-.001380	-.006221
Stddev	.0005797	.012747	.0000442	.0001778	.008578	.004654	.000130
%RSD	418.3517	184.7294	13.69710	43.08775	10.13402	337.1514	2.091090

#1	-.000519	-.009127	.0002797	.0003276	-.082084	.003106	-.006071
#2	.000574	.006813	.0003204	.0006169	-.094206	-.001062	-.006304
#3	.000362	-.018387	.0003680	.0002933	-.077632	-.006186	-.006288

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.051733	.0022095	.0004000	-.000815	.0003525	-.006941	-.005716
Stddev	.017549	.0009017	.0002312	.000619	.0002789	.012894	.001949
%RSD	33.92168	40.80822	57.79582	75.84639	79.12450	185.7554	34.09371

#1	-.032502	.0024265	.0002102	-.001214	.0001301	.002512	-.003482
#2	-.055821	.0029829	.0003322	-.001129	.0006655	-.001706	-.006598
#3	-.066878	.0012191	.0006574	-.000103	.0002620	-.021629	-.007067

Sample Name: CCB04 Acquired: 9/23/2024 15:42:09 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002500	-.005323	-.000048
Stddev	.001615	.000932	.000067
%RSD	64.60517	17.50622	139.1597
#1	-.001818	-.004577	.000028
#2	-.004345	-.005025	-.000097
#3	-.001338	-.006368	-.000075

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2675.949	51978.83	5338.889	1982.816	4480.485
Stddev	10.157	104.86	21.999	3.173	16.319
%RSD	.3795618	.2017443	.4120575	.1600335	.3642333
#1	2664.250	51868.37	5322.656	1980.867	4461.719
#2	2681.084	52077.01	5330.084	1986.478	4491.348
#3	2682.514	51991.13	5363.927	1981.104	4488.389

Sample Name: PB163546BS Acquired: 9/23/2024 15:49:04 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.7430374	1.965465	.9268478	1.889910	.7947525	1.956632
Stddev	.0030347	.013014	.0008010	.006968	.0008743	.016570
%RSD	.4084157	.6621313	.0864162	.3686772	.1100046	.8468860

#1	.7417115	1.951236	.9269194	1.897918	.7951907	1.938150
#2	.7408914	1.976764	.9276105	1.886584	.7953210	1.970161
#3	.7465095	1.968395	.9260134	1.885229	.7937458	1.961584

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1941435	.1835098	.1833752	1.092479	.3863855	.1977302
Stddev	.0010975	.0016739	.0000902	.013478	.0012391	.0003748
%RSD	.5653018	.9121755	.0491656	1.233677	.3206812	.1895750

#1	.1937116	.1827957	.1833014	1.091860	.3860025	.1972990
#2	.1933276	.1823114	.1834757	1.079322	.3877708	.1979779
#3	.1953912	.1854224	.1833486	1.106256	.3853831	.1979137

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3109158	2.754553	.2003012	1.880735	.4981745	.0762415
Stddev	.0008591	.016575	.0013195	.021057	.0004266	.0003240
%RSD	.2763069	.6017207	.6587438	1.119612	.0856352	.4249698

#1	.3112814	2.735463	.1997054	1.874578	.4976854	.0758854
#2	.3099344	2.765285	.1993848	1.863443	.4983684	.0765189
#3	.3115317	2.762910	.2018135	1.904184	.4984697	.0763201

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.622565	.2819925	.2034861	8.967868	.3012107	.4031893
Stddev	.005179	.0013403	.0002492	.027216	.0007559	.0009254
%RSD	.1974751	.4752875	.1224568	.3034882	.2509479	.2295201

#1	2.625363	.2809099	.2037541	8.971251	.3014311	.4039925
#2	2.625743	.2815761	.2032615	8.993235	.3003691	.4033980
#3	2.616589	.2834916	.2034426	8.939119	.3018319	.4021773

Sample Name: PB163546BS Acquired: 9/23/2024 15:49:04 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.6634149	.1962498	F .6181192	6.086696	F -.009814	F .3380527
Stddev	.0022651	.0019413	.0040631	.008309	.002660	.0033297
%RSD	.3414258	.9891865	.6573343	.1365056	27.09964	.9849511
#1	.6608409	.1941898	.6222774	6.087649	-.012172	.3416750
#2	.6643003	.1965144	.6141584	6.077952	-.006931	.3373578
#3	.6651035	.1980452	.6179216	6.094487	-.010340	.3351254

Elem	Sr4077
Units	ppm
Avg	.1969390
Stddev	.0009623
%RSD	.4886219
#1	.1964282
#2	.1963397
#3	.1980489

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2593.154	55707.01	5040.790	2095.244	4237.830
Stddev	8.900	102.53	31.813	9.361	6.993
%RSD	.3432089	.1840466	.6311104	.4467884	.1650046
#1	2586.780	55629.18	5049.721	2084.437	4234.001
#2	2589.360	55668.66	5067.183	2100.449	4233.589
#3	2603.322	55823.18	5005.466	2100.847	4245.901

Sample Name: P4103-02 Acquired: 9/23/2024 15:53:05 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.013069	-.002779	.0168401	.0036948	-.000032	.0209442	.2829592
Stddev	.001499	.001086	.0003380	.0016186	.000785	.0123863	.0011707
%RSD	11.47097	39.09584	2.007011	43.80716	2429.492	59.13975	.4137237

#1	-.014724	-.003705	.0164543	.0030755	-.000551	.0183242	.2842134
#2	-.012683	-.003049	.0169818	.0024773	-.000417	.0344309	.2818954
#3	-.011801	-.001583	.0170841	.0055315	.000871	.0100774	.2827687

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000076	.0004507	20.42322	-.000636	.0035046	.0081556	.0196616
Stddev	.000070	.0000575	.03098	.000302	.0001049	.0002045	.0030950
%RSD	92.68195	12.75621	.1516756	47.45362	2.992948	2.507665	15.74113

#1	.000001	.0004193	20.45012	-.000289	.0033841	.0081911	.0209737
#2	-.000090	.0004157	20.38935	-.000782	.0035748	.0079357	.0161268
#3	-.000137	.0005170	20.43018	-.000836	.0035551	.0083400	.0218845

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3925782	8.120012	.0072809	.0005237	311.2983	.0005858	.1581134
Stddev	.0015260	.013548	.0001917	.0001560	1.4954	.0021940	.0005660
%RSD	.3887127	.1668524	2.633391	29.78651	.4803821	374.5323	.3579561

#1	.3924650	8.132810	.0070827	.0003550	310.9403	.0020404	.1581999
#2	.3911119	8.105821	.0072944	.0006627	310.0143	.0016548	.1575092
#3	.3941576	8.121406	.0074655	.0005533	312.9402	-.001938	.1586312

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6794456	.0430150	.0004371	-.009297	.0002537	.6179173	.0013512
Stddev	.0269162	.0004087	.0000777	.000469	.0008482	.0074805	.0009463
%RSD	3.961488	.9501711	17.78156	5.044143	334.3977	1.210606	70.03542

#1	.6511785	.0434806	.0004900	-.009498	.0010531	.6189135	.0021661
#2	.6823897	.0427154	.0004733	-.009632	-.000636	.6248498	.0003133
#3	.7047687	.0428490	.0003478	-.008761	.000344	.6099885	.0015743

Sample Name: P4103-02 Acquired: 9/23/2024 15:53:05 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.7432098	.0021531	.0448496
Stddev	.0048740	.0016488	.0000983
%RSD	.6558040	76.57482	.2192411
#1	.7449866	.0004493	.0447968
#2	.7376967	.0037406	.0449630
#3	.7469461	.0022695	.0447889

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2453.436	50065.30	5109.728	1881.683	3896.659
Stddev	1.515	91.67	20.099	9.609	4.878
%RSD	.0617525	.1831050	.3933496	.5106740	.1251884
#1	2452.185	49971.63	5087.208	1870.926	3891.221
#2	2453.001	50154.83	5125.848	1889.418	3898.108
#3	2455.120	50069.45	5116.127	1884.704	3900.649

Sample Name: P4103-05 Acquired: 9/23/2024 15:57:31 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012852	-.008975	-.000438	.0029671	.0042308	-.041294	.1057350
Stddev	.002668	.002888	.001345	.0011888	.0009921	.025545	.0008790
%RSD	20.75963	32.17399	307.1532	40.06542	23.44916	61.86200	.8313194

#1	-.012920	-.012162	.000038	.0016108	.0041762	-.062288	.1047248
#2	-.010150	-.008233	.000605	.0034623	.0032672	-.048741	.1063251
#3	-.015485	-.006531	-.001956	.0038283	.0052491	-.012853	.1061550

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000154	-.000135	139.0230	-.001050	-.000356	.0014642	.0279876
Stddev	.000025	.000124	.7350	.000654	.000159	.0001259	.0046532
%RSD	16.07521	91.90739	.5287022	62.28482	44.66654	8.599111	16.62604

#1	-.000126	-.000214	138.2840	-.000509	-.000175	.0015088	.0302284
#2	-.000170	.000008	139.0310	-.000865	-.000419	.0015617	.0226379
#3	-.000166	-.000200	139.7540	-.001777	-.000473	.0013220	.0310964

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0755642	3.316205	.0018176	.0005052	256.6028	.0040973	.0074031
Stddev	.0002483	.029502	.0002466	.0001835	1.9482	.0014693	.0001339
%RSD	.3285912	.8896275	13.56662	36.32457	.7592153	35.85989	1.809040

#1	.0752896	3.300324	.0015627	.0004244	257.3158	.0037783	.0072545
#2	.0756300	3.298046	.0018350	.0007152	258.0941	.0028138	.0074406
#3	.0757730	3.350246	.0020550	.0003759	254.3986	.0056999	.0075144

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.195741	.0681763	.0052775	-.011708	-.004405	3.356504	.0146977
Stddev	.012767	.0014951	.0000828	.000396	.000395	.026807	.0016107
%RSD	.5814471	2.193035	1.568102	3.381475	8.975237	.7986683	10.95905

#1	2.201406	.0667288	.0052121	-.012148	-.004816	3.326038	.0150633
#2	2.204696	.0697149	.0053706	-.011593	-.004027	3.376481	.0129356
#3	2.181122	.0680852	.0052499	-.011382	-.004372	3.366993	.0160941

Sample Name: P4103-05 Acquired: 9/23/2024 15:57:31 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	7.828827	.0242053	.5803018
Stddev	.045020	.0035771	.0024986
%RSD	.5750568	14.77799	.4305719
#1	7.785095	.0263310	.5778994
#2	7.826353	.0200755	.5801195
#3	7.875033	.0262095	.5828866

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2419.744	51012.93	5082.120	1886.236	3837.290
Stddev	2.589	103.35	15.105	5.396	2.770
%RSD	.1069758	.2025920	.2972154	.2860663	.0721863
#1	2419.188	50928.21	5071.354	1881.924	3836.168
#2	2422.565	50982.49	5099.387	1892.287	3840.445
#3	2417.479	51128.07	5075.618	1884.498	3835.257

Sample Name: P4103-08 Acquired: 9/23/2024 16:01:57 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011487	-.005732	.0045088	.0007182	.0020221	-.033447	.3200829
Stddev	.005641	.002190	.0012818	.0025907	.0009400	.012240	.0009947
%RSD	49.10847	38.20085	28.42855	360.7072	46.48609	36.59374	.3107714

#1	-.017821	-.007652	.0056432	.0004541	.0027440	-.019625	.3195324
#2	-.009634	-.003347	.0031183	-.001730	.0009592	-.042913	.3212312
#3	-.007005	-.006197	.0047648	.003431	.0023632	-.037803	.3194852

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000236	.0001384	131.2987	.0040962	.0029072	.0010645	.0733377
Stddev	.000091	.0000497	.6924	.0006258	.0000882	.0002361	.0027035
%RSD	38.40452	35.90417	.5273144	15.27635	3.035008	22.18077	3.686385

#1	-.000327	.0000820	130.7003	.0047856	.0028053	.0011914	.0760370
#2	-.000146	.0001575	132.0570	.0039386	.0029610	.0007920	.0733460
#3	-.000236	.0001756	131.1389	.0035643	.0029552	.0012100	.0706300

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.377959	2.404028	.0096042	.0003523	266.3222	-.000915	.1229970
Stddev	.009113	.017444	.0004038	.0003704	3.4913	.000566	.0016461
%RSD	.6613118	.7256275	4.204455	105.1359	1.310926	61.81912	1.338309

#1	1.370237	2.394390	.0098916	.0007723	262.3270	-.000287	.1211825
#2	1.388010	2.424165	.0097785	.0002118	267.8524	-.001383	.1243944
#3	1.375631	2.393529	.0091425	.0000727	268.7870	-.001075	.1234141

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.906412	.0453829	.0029696	-.011193	-.003992	1.749101	-.002023
Stddev	.036456	.0016408	.0003212	.000866	.000592	.019522	.001296
%RSD	1.912275	3.615504	10.81526	7.733610	14.82403	1.116109	64.07901

#1	1.865990	.0435219	.0033260	-.011262	-.004674	1.732966	-.002753
#2	1.936799	.0466216	.0028799	-.010295	-.003694	1.743537	-.000526
#3	1.916448	.0460050	.0027027	-.012022	-.003609	1.770802	-.002790

Sample Name: P4103-08 Acquired: 9/23/2024 16:01:57 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.335396	.0227763	.5145991
Stddev	.006457	.0036337	.0020822
%RSD	.2764897	15.95395	.4046216
#1	2.328148	.0259107	.5128632
#2	2.340534	.0187934	.5169077
#3	2.337507	.0236246	.5140264

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2402.334	51851.14	5054.046	1921.242	3789.220
Stddev	5.001	620.37	14.126	20.618	7.876
%RSD	.2081900	1.196448	.2795052	1.073149	.2078573
#1	2405.046	52563.01	5063.712	1944.986	3793.822
#2	2405.393	51426.01	5037.834	1907.868	3793.711
#3	2396.562	51564.38	5060.592	1910.871	3780.125

Sample Name: P4103-11 Acquired: 9/23/2024 16:06:24 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.013800	-.003813	.0023101	.0032403	-.000518	.0329029	.5561304
Stddev	.003388	.001796	.0008356	.0012792	.000435	.0081526	.0019893
%RSD	24.55107	47.10462	36.16901	39.47847	83.95228	24.77794	.3577065

#1	-.017665	-.001815	.0017251	.0018637	-.000788	.0389596	.5540039
#2	-.011341	-.005295	.0032671	.0034647	-.000016	.0236333	.5564412
#3	-.012394	-.004330	.0019382	.0043924	-.000751	.0361157	.5579460

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005009	.0001505	14.80845	-.000139	.0170555	-.000933	9.688608
Stddev	.0000364	.0000938	.08004	.000341	.0002515	.000180	.035696
%RSD	7.268586	62.32848	.5404990	244.2279	1.474439	19.30621	.3684315

#1	.0005386	.0001301	14.71893	.000254	.0167669	-.001109	9.651356
#2	.0004660	.0000685	14.83333	-.000345	.0171725	-.000749	9.722512
#3	.0004982	.0002527	14.87310	-.000327	.0172273	-.000939	9.691955

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.017325	1.175975	.0198068	.0002901	288.8077	-.002840	.1606987
Stddev	.011552	.019696	.0000429	.0001467	.5798	.001326	.0007365
%RSD	.3828702	1.674890	.2168113	50.57750	.2007532	46.69808	.4583387

#1	3.005381	1.153433	.0197681	.0003869	289.3910	-.002319	.1603256
#2	3.018153	1.189860	.0198530	.0001213	288.8007	-.004348	.1615471
#3	3.028441	1.184632	.0197994	.0003620	288.2314	-.001853	.1602233

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7878130	.0348738	-.000027	-.008332	.0004064	.5523452	-.002088
Stddev	.0377427	.0014232	.000064	.000918	.0002831	.0055570	.003341
%RSD	4.790826	4.080852	233.8634	11.01560	69.65699	1.006078	160.0018

#1	.7508692	.0334762	-.000098	-.008967	.0001974	.5460603	-.001241
#2	.8263070	.0348241	.000027	-.008749	.0002932	.5566084	-.005770
#3	.7862627	.0363212	-.000011	-.007280	.0007285	.5543669	.000748

Sample Name: P4103-11 Acquired: 9/23/2024 16:06:24 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3150961	.0007718	.0841228
Stddev	.0062084	.0025681	.0003478
%RSD	1.970309	332.7430	.4134794
#1	.3093023	.0032601	.0837457
#2	.3216492	-.001869	.0844311
#3	.3143369	.000924	.0841916

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2497.208	50891.88	5071.448	1897.634	3966.895
Stddev	11.256	8.93	11.692	6.551	27.616
%RSD	.4507427	.0175564	.2305450	.3452345	.6961698
#1	2510.178	50897.75	5078.421	1892.611	3998.538
#2	2489.989	50881.60	5077.972	1895.246	3947.655
#3	2491.458	50896.30	5057.949	1905.044	3954.491

Sample Name: P4103-04RE Acquired: 9/23/2024 16:10:49 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.010849	-.001661	.0001160	.0064694	.0013842	.0594061	.6324847
Stddev	.003167	.000922	.0003877	.0009990	.0005199	.0108009	.0021237
%RSD	29.19220	55.53818	334.0903	15.44170	37.56131	18.18139	.3357696

#1	-.013497	-.001097	.0000583	.0066538	.0019624	.0504722	.6305346
#2	-.007341	-.002725	.0005293	.0053910	.0009553	.0714094	.6321721
#3	-.011710	-.001159	-.000240	.0073633	.0012347	.0563365	.6347473

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000029	.0003740	12.42140	-.000107	.0050185	.0082467	.5902715
Stddev	.000064	.0000461	.07802	.000187	.0000837	.0000973	.0031594
%RSD	222.9712	12.33792	.6280873	174.2144	1.668323	1.180044	.5352495

#1	.000045	.0004091	12.33144	-.000029	.0050917	.0081825	.5896295
#2	-.000071	.0003217	12.47057	-.000321	.0049272	.0083587	.5874823
#3	-.000061	.0003911	12.46218	.000028	.0050367	.0081990	.5937026

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.392016	1.529405	.0073947	.0005119	285.6400	-.000130	.4803149
Stddev	.013486	.006117	.0001429	.0002976	1.1508	.001069	.0029885
%RSD	.5637774	.3999577	1.931921	58.13984	.4028721	822.1573	.6221880

#1	2.377163	1.524198	.0072298	.0001706	286.9059	-.001364	.4836503
#2	2.395393	1.527874	.0074809	.0007173	284.6573	.000506	.4794135
#3	2.403493	1.536141	.0074734	.0006479	285.3567	.000468	.4778809

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7266443	.1670364	.0003151	-.009518	.0019892	.6662810	.0004007
Stddev	.0273929	.0006809	.0003075	.000340	.0002651	.0170038	.0028216
%RSD	3.769780	.4076140	97.59781	3.570797	13.32647	2.552047	704.2331

#1	.6952626	.1662633	.0005258	-.009449	.0016844	.6799279	.0019285
#2	.7457649	.1675469	.0004573	-.009887	.0021176	.6716827	.0021288
#3	.7389053	.1672988	-.000038	-.009218	.0021657	.6472325	-.002855

Sample Name: P4103-04RE Acquired: 9/23/2024 16:10:49 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.345397	-.002680	.0823565
Stddev	.008658	.002055	.0001470
%RSD	.6435174	76.69537	.1785391
#1	1.336616	-.001896	.0821937
#2	1.345649	-.005011	.0823959
#3	1.353926	-.001131	.0824798

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2429.954	49382.60	4963.606	1870.601	3861.126
Stddev	2.265	42.84	2.512	12.251	9.085
%RSD	.0932258	.0867474	.0505984	.6549246	.2353020
#1	2432.381	49414.21	4964.014	1856.456	3871.091
#2	2427.896	49333.84	4960.916	1877.549	3858.984
#3	2429.585	49399.74	4965.889	1877.799	3853.302

Sample Name: P4103-17 Acquired: 9/23/2024 16:15:14 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011224	-.004159	.0002931	.0027284	.0001695	.0314891	.4570861
Stddev	.001691	.000921	.0008398	.0007865	.0007362	.0049973	.0008004
%RSD	15.06878	22.14235	286.5407	28.82669	434.2342	15.87004	.1751060

#1	-.012370	-.004148	-.000586	.0030778	-.000680	.0351795	.4561783
#2	-.012020	-.005085	.001087	.0018277	.000624	.0334857	.4573902
#3	-.009281	-.003244	.000378	.0032797	.000564	.0258021	.4576899

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000739	.0000906	16.03881	-.000473	.0123249	.0058475	2.079631
Stddev	.0000260	.0000657	.06729	.000459	.0000473	.0001232	.015769
%RSD	35.17023	72.53829	.4195514	97.11237	.3842101	2.107171	.7582659

#1	.0000679	.0000506	15.97381	-.000437	.0122808	.0059436	2.061730
#2	.0000514	.0000548	16.03445	-.000033	.0123191	.0057086	2.085692
#3	.0001023	.0001665	16.10818	-.000949	.0123749	.0058904	2.091470

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.598475	2.110022	.0065242	.0003084	322.3946	.0011574	.2068046
Stddev	.006183	.021069	.0001024	.0002118	1.2517	.0022410	.0004256
%RSD	.3868205	.9985102	1.569279	68.66242	.3882433	193.6232	.2057936

#1	1.591401	2.092161	.0064199	.0005530	320.9557	.0012840	.2071208
#2	1.601175	2.133257	.0066246	.0001855	322.9962	-.001144	.2069723
#3	1.602848	2.104647	.0065282	.0001868	323.2319	.003332	.2063207

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.922423	.0719439	.0002450	-.009770	.0004838	.9723846	-.000784
Stddev	.036406	.0005405	.0001164	.001470	.0006436	.0058597	.001018
%RSD	1.893776	.7512836	47.50126	15.04688	133.0394	.6026098	129.8740

#1	1.921311	.0714982	.0003660	-.011393	-.000060	.9781345	-.001875
#2	1.886585	.0717884	.0001340	-.008528	.001194	.9664210	-.000617
#3	1.959372	.0725451	.0002349	-.009389	.000317	.9725984	.000141

Sample Name: P4103-17 Acquired: 9/23/2024 16:15:14 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.006144	-.003275	.1323086
Stddev	.002507	.006358	.0003703
%RSD	.2491354	194.1448	.2799082
#1	1.005801	-.004711	.1319730
#2	1.008805	-.008792	.1322469
#3	1.003827	.003678	.1327060

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2455.671	51537.85	5033.336	1947.735	3880.415
Stddev	6.927	29.37	6.962	6.575	6.834
%RSD	.2820950	.0569924	.1383275	.3375697	.1761108
#1	2451.923	51509.31	5029.375	1944.098	3872.922
#2	2451.426	51536.25	5041.375	1943.782	3882.017
#3	2463.665	51567.99	5029.257	1955.325	3886.305

Sample Name: P4120-02 Acquired: 9/23/2024 16:19:39 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.015093	-.006232	.0009600	-.001441	.0008898	.0961498	.2848699
Stddev	.002640	.004117	.0006809	.002627	.0011222	.0067042	.0015140
%RSD	17.49275	66.06559	70.92632	182.3486	126.1181	6.972635	.5314862

#1	-.012280	-.010874	.0016000	-.003292	.0017061	.1034656	.2833153
#2	-.015483	-.003023	.0002445	.001566	-.000390	.0946840	.2849546
#3	-.017517	-.004798	.0010354	-.002597	.001353	.0902997	.2863398

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000173	-.000175	201.2413	.0051562	-.000507	.0346557	.0125836
Stddev	.000032	.000100	1.5317	.0001274	.000081	.0001931	.0025533
%RSD	18.49333	56.89694	.7611326	2.471419	15.98346	.5572478	20.29099

#1	-.000182	-.000069	199.5980	.0052455	-.000429	.0346892	.0152977
#2	-.000137	-.000267	201.4964	.0050102	-.000501	.0344480	.0122238
#3	-.000199	-.000188	202.6294	.0052127	-.000591	.0348298	.0102292

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011038	.0004794	-.000305	.0000620	291.2799	.0000240	.0288397
Stddev	.0005171	.0075236	.000162	.0001872	1.4138	.0036257	.0001803
%RSD	46.84160	1569.504	53.06649	301.7823	.4853821	15122.84	.6251946

#1	.0006662	-.008003	-.000425	.0001743	289.6800	-.002157	.0286600
#2	.0009709	.003096	-.000370	.0001659	291.7988	-.001981	.0290206
#3	.0016743	.006345	-.000121	-.000154	292.3610	.004209	.0288384

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.77372	.0126975	.0016974	-.012517	-.005470	.1187668	.0028222
Stddev	.05333	.0007244	.0000304	.000648	.000575	.0153018	.0010342
%RSD	.3872176	5.704654	1.790774	5.175089	10.51079	12.88387	36.64377

#1	13.73471	.0133763	.0017325	-.013218	-.004914	.1032239	.0016975
#2	13.83450	.0119349	.0016794	-.011941	-.005433	.1338154	.0037320
#3	13.75195	.0127812	.0016803	-.012391	-.006062	.1192611	.0030370

Sample Name: P4120-02 Acquired: 9/23/2024 16:19:39 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.546330	.0576988	1.935687
Stddev	.002899	.0017100	.018047
%RSD	.1874451	2.963732	.9323367
#1	1.543410	.0583865	1.916319
#2	1.549207	.0557520	1.938710
#3	1.546374	.0589579	1.952032

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2320.476	49317.23	4711.272	1830.597	3647.091
Stddev	4.300	75.49	25.151	.656	7.032
%RSD	.1853033	.1530605	.5338533	.0358113	.1928243
#1	2323.684	49286.99	4735.681	1829.924	3655.203
#2	2322.155	49403.14	4712.697	1830.634	3643.365
#3	2315.590	49261.55	4685.439	1831.234	3642.706

Sample Name: P4120-04 Acquired: 9/23/2024 16:24:15 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009484	-.006785	-.000224	.0018586	.0011763	.1927435	.1665837
Stddev	.005659	.001020	.000524	.0012438	.0005626	.0062813	.0015572
%RSD	59.67415	15.03611	234.4983	66.92290	47.82459	3.258880	.9348064

#1	-.002968	-.007871	.000072	.0015440	.0014305	.1978859	.1649148
#2	-.013174	-.005847	.000086	.0032295	.0005315	.1857427	.1668385
#3	-.012310	-.006637	-.000829	.0008023	.0015670	.1946019	.1679979

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000159	-.000166	170.2380	.0068200	-.000591	.0264449	.0109864
Stddev	.000059	.000053	.9775	.0003606	.000096	.0003518	.0008569
%RSD	37.20109	31.85736	.5741846	5.287289	16.18351	1.330225	7.799238

#1	-.000206	-.000215	169.2242	.0064151	-.000584	.0265300	.0119315
#2	-.000093	-.000174	170.3150	.0069386	-.000690	.0260584	.0102602
#3	-.000179	-.000110	171.1746	.0071064	-.000499	.0267464	.0107676

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008349	.0073463	.0000038	.0000473	320.8270	-.002279	.0131077
Stddev	.0003192	.0175357	.0002932	.0001475	1.7017	.001774	.0002015
%RSD	38.23295	238.7020	7828.754	311.9389	.5304257	77.86132	1.537585

#1	.0009144	.0261823	-.000277	-.000003	319.1120	-.002524	.0131654
#2	.0011069	.0043627	-.000021	-.000068	322.5152	-.003918	.0132742
#3	.0004835	-.008506	.000308	.000213	320.8536	-.000395	.0128837

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.77142	.0108013	.0016092	-.012045	-.005082	.4640479	-.000048
Stddev	.08057	.0003053	.0001376	.001116	.000449	.0126700	.000722
%RSD	.7480400	2.826775	8.553458	9.263014	8.836407	2.730322	1490.672

#1	10.67985	.0104519	.0017677	-.013028	-.005571	.4575005	.000767
#2	10.80291	.0109354	.0015401	-.012274	-.004985	.4786520	-.000308
#3	10.83148	.0110166	.0015198	-.010832	-.004689	.4559912	-.000605

Sample Name: P4120-04 Acquired: 9/23/2024 16:24:15 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.703977	.0469948	1.512291
Stddev	.010380	.0023898	.008258
%RSD	.3838767	5.085288	.5460907
#1	2.704445	.0468951	1.503372
#2	2.693371	.0446563	1.513829
#3	2.714115	.0494329	1.519673

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2448.985	49242.03	5095.547	1840.885	3873.534
Stddev	.846	51.33	12.858	4.952	3.141
%RSD	.0345258	.1042324	.2523374	.2689844	.0810878
#1	2448.022	49286.45	5081.637	1844.916	3870.341
#2	2449.604	49185.84	5106.997	1835.358	3873.640
#3	2449.331	49253.80	5098.008	1842.382	3876.620

Sample Name: P4120-06 Acquired: 9/23/2024 16:28:42 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.013401	-.006023	.0020291	.0019680	.0018387	.1988314	.2943426
Stddev	.002899	.000640	.0015013	.0017405	.0005106	.0105112	.0005612
%RSD	21.63234	10.62514	73.98913	88.43901	27.77136	5.286461	.1906659

#1	-.010178	-.006612	.0036564	.0037922	.0012657	.2075892	.2939836
#2	-.015796	-.005342	.0017329	.0017866	.0022455	.2017299	.2949893
#3	-.014229	-.006113	.0006980	.0003253	.0020048	.1871751	.2940548

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000224	-.000127	212.0915	.0047704	-.000704	.0035346	.0140018
Stddev	.000018	.000088	.9980	.0006940	.000177	.0004151	.0026927
%RSD	7.875884	69.52238	.4705745	14.54859	25.21029	11.74369	19.23132

#1	-.000242	-.000027	211.1803	.0047156	-.000508	.0040138	.0160031
#2	-.000208	-.000158	211.9361	.0041054	-.000855	.0033074	.0150619
#3	-.000221	-.000195	213.1582	.0054902	-.000749	.0032828	.0109404

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004390	.0008142	-.000075	.0001910	312.1723	.0007131	.0248812
Stddev	.0004328	.0134086	.000134	.0000899	.9824	.0015343	.0003148
%RSD	98.59307	1646.865	178.7283	47.06551	.3147005	215.1473	1.265405

#1	-.000060	-.014359	-.000045	.0001840	311.4045	.0023899	.0252364
#2	.000668	.005732	-.000221	.0001048	311.8331	.0003702	.0246363
#3	.000709	.011069	.000041	.0002842	313.2794	-.000621	.0247711

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.631898	.0105312	.0015673	-.012654	-.005970	.1685028	.0022168
Stddev	.026455	.0001991	.0003252	.000721	.000475	.0060687	.0020074
%RSD	.7284117	1.890718	20.75038	5.694055	7.961636	3.601513	90.55462

#1	3.602174	.0106211	.0011990	-.012648	-.006171	.1721570	.0013590
#2	3.652865	.0103029	.0018150	-.011937	-.005427	.1614975	.0045105
#3	3.640654	.0106694	.0016879	-.013378	-.006311	.1718540	.0007807

Sample Name: P4120-06 Acquired: 9/23/2024 16:28:42 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.485622	.0632988	1.771514
Stddev	.004164	.0007095	.013630
%RSD	.2802688	1.120909	.7694007
#1	1.484409	.0628171	1.759771
#2	1.490257	.0641136	1.768311
#3	1.482199	.0629656	1.786460

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2412.452	50365.25	4835.763	1862.228	3789.021
Stddev	2.710	109.08	14.496	8.485	5.831
%RSD	.1123491	.2165723	.2997577	.4556560	.1538879
#1	2410.424	50262.42	4831.225	1855.129	3782.546
#2	2411.401	50353.68	4851.984	1859.928	3793.858
#3	2415.530	50479.65	4824.079	1871.626	3790.658

Sample Name: CCV05 Acquired: 9/23/2024 16:33:18 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.837425	5.084966	4.835202	4.881773	4.932218	9.678413
Stddev	.030623	.112800	.050725	.037097	.045520	.059114
%RSD	.6330408	2.218312	1.049085	.7599109	.9229124	.6107835

#1	4.817263	5.189971	4.813476	4.877348	4.903216	9.745064
#2	4.822348	4.965722	4.798958	4.847087	4.908755	9.657846
#3	4.872663	5.099206	4.893172	4.920885	4.984682	9.632329

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.820438	.2320720	2.392971	26.30815	.9373472	2.426630
Stddev	.047487	.0008330	.023326	.09483	.0007355	.025560
%RSD	.4835562	.3589247	.9747578	.3604511	.0784716	1.053331

#1	9.820907	.2328476	2.380278	26.39174	.9381260	2.412469
#2	9.867688	.2311916	2.378744	26.20510	.9366642	2.411285
#3	9.772717	.2321768	2.419890	26.32760	.9372515	2.456137

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.237536	4.574173	2.492511	24.02489	2.434207	1.237660
Stddev	.009474	.003830	.003560	.11293	.025064	.000741
%RSD	.7655155	.0837216	.1428218	.4700624	1.029643	.0598775

#1	1.232651	4.572189	2.495556	24.15492	2.421562	1.237550
#2	1.231503	4.578588	2.488597	23.95137	2.417984	1.236980
#3	1.248455	4.571743	2.493380	23.96838	2.463074	1.238450

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.14355	2.385534	2.505237	23.17122	5.400680	5.017213
Stddev	.04301	.016236	.008463	.11864	.004577	.043085
%RSD	.1858524	.6806056	.3378043	.5120053	.0847490	.8587513

#1	23.19243	2.404197	2.503500	23.12274	5.405374	5.003216
#2	23.11149	2.374656	2.497777	23.08450	5.396230	4.982866
#3	23.12672	2.377750	2.514433	23.30642	5.400437	5.065556

Sample Name: CCV05 Acquired: 9/23/2024 16:33:18 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.819028	5.109389	F 4.298297	5.165881	4.686187	F .0029867
Stddev	.045008	.016795	.025217	.053451	.039285	.0025632
%RSD	.9339632	.3287047	.5866671	1.034691	.8383236	85.82080
#1	4.802660	5.127790	4.279589	5.178322	4.685493	.0003008
#2	4.784495	5.094887	4.288328	5.107306	4.647253	.0032529
#3	4.869930	5.105490	4.326974	5.212014	4.725814	.0054064

Elem	Sr4077
Units	ppm
Avg	5.056596
Stddev	.012932
%RSD	.2557513
#1	5.057780
#2	5.068895
#3	5.043112

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2554.531	53743.07	4821.740	2016.640	4054.300
Stddev	22.114	116.53	26.910	4.011	38.172
%RSD	.8656719	.2168357	.5580892	.1988794	.9415138
#1	2568.619	53613.57	4790.669	2017.580	4078.717
#2	2565.930	53839.49	4837.026	2020.098	4073.870
#3	2529.043	53776.13	4837.525	2012.243	4010.312

Sample Name: CCB05 Acquired: 9/23/2024 16:37:29 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002043	-.002245	.0001835	.0012000	-.000555	-.001053	.0015759
Stddev	.001758	.001495	.0005739	.0026624	.000586	.008618	.0011024
%RSD	86.05176	66.62168	312.7334	221.8684	105.5724	818.3237	69.95367

#1	-.003020	-.002277	.0007656	.0005120	-.000494	.007390	.0015691
#2	-.000013	-.003724	-.000382	-.001051	-.000002	-.009837	.0026816
#3	-.003094	-.000733	.000167	.004139	-.001169	-.000713	.0004769

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000863	.0000167	.0163023	-.000381	-.000015	-.000249	.0014194
Stddev	.0000333	.0000417	.0067697	.000323	.000142	.000174	.0021506
%RSD	38.56719	249.2450	41.52617	84.74506	980.0929	69.59311	151.5159

#1	.0000481	.0000495	.0155098	-.000031	-.000120	-.000348	-.000654
#2	.0001015	.0000309	.0234333	-.000669	-.000072	-.000049	.003640
#3	.0001092	-.000030	.0099636	-.000444	.000148	-.000352	.001272

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004321	-.005430	.0000050	.0006662	.0413736	-.001500	-.006973
Stddev	.0003959	.005464	.0000774	.0001355	.0101372	.001879	.000307
%RSD	91.63092	100.6346	1549.120	20.34241	24.50162	125.2593	4.404550

#1	-.000022	-.008844	.0000746	.0008065	.0297407	-.001248	-.006930
#2	.000611	.000872	-.000078	.0005361	.0483164	-.003492	-.007300
#3	.000707	-.008317	.000019	.0006559	.0460639	.000240	-.006690

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0692052	.0021680	.0005008	-.000773	-.000151	-.006506	-.005725
Stddev	.0367823	.0007864	.0001799	.000867	.000804	.007655	.001248
%RSD	53.14963	36.27315	35.92889	112.0505	532.0647	117.6614	21.80441

#1	.0300404	.0026061	.0004373	-.000747	.000513	-.002556	-.005693
#2	.0745565	.0026378	.0007038	-.001653	.000078	-.001633	-.004494
#3	.1030188	.0012602	.0003611	.000079	-.001044	-.015330	-.006990

Sample Name: CCB05 Acquired: 9/23/2024 16:37:29 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.003480	-.003519	-.000023
Stddev	.003108	.000456	.000062
%RSD	89.30813	12.94319	263.1355

#1	.000070	-.004004	-.000019
#2	-.005710	-.003101	.000036
#3	-.004798	-.003453	-.000087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2617.237	56338.91	5202.608	2119.480	4283.337
Stddev	2.292	122.13	23.263	4.944	4.961
%RSD	.0875906	.2167702	.4471476	.2332717	.1158118

#1	2619.858	56214.26	5178.486	2124.575	4283.481
#2	2616.246	56344.13	5204.434	2114.702	4288.224
#3	2615.606	56458.34	5224.905	2119.163	4278.305

Sample Name: P4120-08 Acquired: 9/23/2024 16:41:50 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009325	-.003817	.0002235	.0014131	.0020683	.1830074	.0929178
Stddev	.003293	.001032	.0009254	.0016573	.0008375	.0049049	.0011897
%RSD	35.30933	27.04005	414.0421	117.2864	40.49216	2.680154	1.280339

#1	-.005919	-.004031	.0003606	.0001715	.0026724	.1885485	.0928888
#2	-.009565	-.002695	.0010727	.0007726	.0011123	.1792223	.0917429
#3	-.012491	-.004726	-.000763	.0032951	.0024204	.1812513	.0941217

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000132	-.000147	145.7834	.0052936	-.000595	.0042091	.0843456
Stddev	.000075	.000101	.8231	.0002868	.000140	.0002302	.0006641
%RSD	56.49271	68.63831	.5645938	5.417893	23.60997	5.469473	.7873547

#1	-.000218	-.000194	145.9897	.0054776	-.000447	.0043999	.0845462
#2	-.000090	-.000215	144.8768	.0049631	-.000611	.0042741	.0836043
#3	-.000088	-.000031	146.4837	.0054401	-.000727	.0039534	.0848862

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008692	.0125473	-.000212	.0003519	279.2688	.0009761	.0071554
Stddev	.0002391	.0169087	.000253	.0000839	1.3919	.0036143	.0002353
%RSD	27.51108	134.7602	119.1648	23.84189	.4984006	370.2641	3.289028

#1	.0010175	-.004092	-.000352	.0002825	279.5457	-.001665	.0070584
#2	.0005933	.029713	.000080	.0003281	280.5013	-.000502	.0069840
#3	.0009968	.012021	-.000365	.0004452	277.7592	.005095	.0074237

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.489444	.0154548	.0015867	-.012207	-.004113	.8261010	.0061009
Stddev	.035440	.0019615	.0000473	.000985	.001189	.0046877	.0015666
%RSD	1.423624	12.69168	2.983763	8.072505	28.91117	.5674482	25.67913

#1	2.456398	.0177180	.0015499	-.011203	-.003122	.8296163	.0079079
#2	2.526872	.0144010	.0015700	-.012245	-.003786	.8279080	.0051241
#3	2.485063	.0142456	.0016401	-.013173	-.005432	.8207787	.0052706

Sample Name: P4120-08 Acquired: 9/23/2024 16:41:50 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	3.937833	.0356375	1.012709
Stddev	.018486	.0012484	.004252
%RSD	.4694545	3.502970	.4198435
#1	3.937809	.0370706	1.013218
#2	3.956331	.0347862	1.008226
#3	3.919358	.0350558	1.016684

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2375.613	51664.40	5063.781	1911.395	3743.983
Stddev	4.779	118.01	28.862	10.049	8.502
%RSD	.2011593	.2284126	.5699693	.5257343	.2270935
#1	2371.117	51552.53	5033.921	1908.027	3734.625
#2	2375.090	51787.72	5091.529	1922.695	3746.092
#3	2380.632	51652.96	5065.895	1903.462	3751.233

Sample Name: P4120-10 Acquired: 9/23/2024 16:46:35 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012933	-.009001	.0005968	.0011684	.0012043	.1364741	.0823840
Stddev	.002528	.000326	.0009144	.0016674	.0009009	.0181840	.0005728
%RSD	19.54511	3.623680	153.2124	142.7061	74.80927	13.32412	.6952296
#1	-.010016	-.008870	.0000382	.0025001	.0012637	.1430885	.0818477
#2	-.014309	-.009373	.0001002	-.000702	.0020740	.1504250	.0829873
#3	-.014475	-.008761	.0016521	.001707	.0002751	.1159087	.0823170
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000104	-.000189	139.9726	.0068895	-.000438	.0054214	.0088774
Stddev	.000066	.000049	1.3226	.0006849	.000238	.0001359	.0025620
%RSD	63.37773	26.19468	.9449057	9.941528	54.21597	2.507504	28.86044
#1	-.000166	-.000246	138.4474	.0071393	-.000164	.0054482	.0088890
#2	-.000112	-.000164	140.6674	.0074144	-.000563	.0052740	.0063095
#3	-.000035	-.000156	140.8030	.0061147	-.000587	.0055419	.0114336
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012973	.0142990	-.000227	.0001619	271.6772	.0008318	.0350004
Stddev	.0006819	.0020344	.000067	.0003039	2.8174	.0011578	.0001990
%RSD	52.56737	14.22766	29.45150	187.7368	1.037035	139.1956	.5686535
#1	.0008785	.0140021	-.000304	-.000098	269.0241	-.000499	.0352138
#2	.0020841	.0164656	-.000195	.000496	271.3733	.001605	.0349676
#3	.0009291	.0124294	-.000182	.000087	274.6342	.001389	.0348198
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.386301	.0112427	.0017587	-.011961	-.003766	.4781548	.0068471
Stddev	.019580	.0017050	.0001690	.000496	.000928	.0038059	.0028056
%RSD	.2334747	15.16504	9.609047	4.145348	24.64863	.7959560	40.97473
#1	8.404779	.0111558	.0018951	-.011486	-.002887	.4747791	.0038264
#2	8.388344	.0129895	.0015696	-.011921	-.004737	.4774058	.0093713
#3	8.365779	.0095829	.0018113	-.012476	-.003674	.4822795	.0073436

Sample Name: P4120-10 Acquired: 9/23/2024 16:46:35 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.263850	.0387165	1.206002
Stddev	.044579	.0060248	.005557
%RSD	.8468984	15.56144	.4608207

#1	5.305408	.0455700	1.199616
#2	5.216765	.0363244	1.208644
#3	5.269377	.0342551	1.209745

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2406.891	50190.03	4985.986	1872.397	3797.679
Stddev	7.788	117.88	20.511	3.962	8.822
%RSD	.3235601	.2348702	.4113783	.2115794	.2323005

#1	2398.106	50318.70	5008.889	1874.327	3788.792
#2	2409.621	50164.16	4969.311	1867.841	3806.435
#3	2412.947	50087.23	4979.756	1875.025	3797.811

Sample Name: P4120-12 Acquired: 9/23/2024 16:51:01 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.017425	-.009707	-.000461	.0009575	.0010761	.1145437	.0797361
Stddev	.001843	.002144	.000494	.0019889	.0002948	.0127733	.0014085
%RSD	10.57905	22.08853	107.2679	207.7126	27.39230	11.15148	1.766418

#1	-.019116	-.007335	-.000600	-.000701	.0008764	.1288217	.0782661
#2	-.017699	-.010281	.000088	.000411	.0014147	.1042013	.0810736
#3	-.015460	-.011507	-.000870	.003162	.0009373	.1106081	.0798687

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000169	-.000092	141.8444	.0066745	-.000350	.0052496	.0024600
Stddev	.000010	.000077	1.0115	.0003752	.000151	.0003732	.0052788
%RSD	5.866136	83.46948	.7130960	5.620999	43.16065	7.109091	214.5836

#1	-.000176	-.000105	140.6957	.0066957	-.000467	.0052098	-.000363
#2	-.000173	-.000162	142.2357	.0070386	-.000404	.0056410	-.000807
#3	-.000158	-.000010	142.6017	.0062891	-.000179	.0048978	.008550

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005559	.1614923	-.000059	.0005282	298.5762	.0014661	.0047409
Stddev	.0003875	.0249380	.000136	.0006645	.5189	.0040092	.0003784
%RSD	69.70583	15.44221	233.0521	125.8158	.1738009	273.4554	7.981075

#1	.0002876	.1414047	-.000215	-.000195	298.3153	.0051884	.0043050
#2	.0010001	.1536679	.000036	.001112	298.2396	-.002779	.0049339
#3	.0003799	.1894042	.000004	.000667	299.1739	.001989	.0049839

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.477063	.0260198	.0018946	-.011270	-.003589	1.366427	.0079098
Stddev	.008524	.0009250	.0002559	.000177	.000881	.012058	.0012026
%RSD	.1903955	3.555050	13.50921	1.574542	24.53818	.8824707	15.20443

#1	4.468890	.0255321	.0021748	-.011339	-.003023	1.362654	.0067640
#2	4.485899	.0254406	.0016733	-.011403	-.003139	1.356706	.0078032
#3	4.476401	.0270866	.0018355	-.011069	-.004603	1.379920	.0091622

Sample Name: P4120-12 Acquired: 9/23/2024 16:51:01 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	5.199465	.0322772	1.003446
Stddev	.010734	.0026228	.006133
%RSD	.2064536	8.125982	.6112158
#1	5.203053	.0353036	.997012
#2	5.187396	.0306634	1.004100
#3	5.207946	.0308647	1.009226

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2485.407	50489.63	5120.698	1878.699	3946.343
Stddev	3.847	112.07	18.520	10.413	4.747
%RSD	.1547814	.2219656	.3616760	.5542740	.1202959
#1	2485.157	50375.20	5140.594	1888.772	3951.435
#2	2489.373	50494.50	5103.959	1867.976	3945.554
#3	2481.691	50599.18	5117.540	1879.349	3942.039

Sample Name: P4120-14 Acquired: 9/23/2024 16:55:28 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012403	-.005687	.0636851	.0023760	.0012901	1.417205	.1467929
Stddev	.003369	.001241	.0012203	.0007192	.0011925	.016536	.0017020
%RSD	27.16494	21.81284	1.916208	30.26935	92.43774	1.166785	1.159442

#1	-.014612	-.006996	.0647634	.0031172	.0017346	1.436265	.1485531
#2	-.008525	-.004529	.0639317	.0023295	.0021965	1.408663	.1466697
#3	-.014072	-.005536	.0623604	.0016811	-.000061	1.406688	.1451558

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004049	.0000401	42.31944	.0075031	.0044911	.0156312	5.964230
Stddev	.0000231	.0000909	.46913	.0002277	.0001628	.0003714	.021676
%RSD	5.703953	226.7025	1.108535	3.034833	3.625789	2.375855	.3634393

#1	.0003961	.0000780	42.84125	.0072485	.0044952	.0153306	5.975796
#2	.0003875	.0001060	41.93258	.0075737	.0046519	.0155168	5.939223
#3	.0004311	-.000064	42.18449	.0076872	.0043263	.0160464	5.977670

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2736852	4.435261	.0290493	.0000117	250.8069	.0042291	.2403576
Stddev	.0020957	.046656	.0001806	.0002710	.4470	.0003085	.0016256
%RSD	.7657459	1.051941	.6216545	2326.999	.1782200	7.295775	.6763333

#1	.2760122	4.465077	.0289516	-.000118	250.7115	.0044519	.2421836
#2	.2719465	4.381493	.0289387	-.000170	251.2938	.0038769	.2398213
#3	.2730970	4.459212	.0292577	.000323	250.4152	.0043584	.2390679

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.263612	.0255268	.0015803	-.007920	.0238476	2.154091	.0707032
Stddev	.012638	.0009055	.0001831	.000301	.0007814	.012584	.0026095
%RSD	1.000148	3.547190	11.58741	3.800340	3.276636	.5841706	3.690742

#1	1.265307	.0249580	.0016642	-.008266	.0245912	2.165493	.0704938
#2	1.275317	.0265710	.0017065	-.007719	.0239182	2.140590	.0682048
#3	1.250212	.0250515	.0013703	-.007774	.0230333	2.156190	.0734111

Sample Name: P4120-14 Acquired: 9/23/2024 16:55:28 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.9295542	.0076255	.1207683
Stddev	.0051113	.0035308	.0016202
%RSD	.5498670	46.30231	1.341545

#1	.9339242	.0097620	.1225689
#2	.9308047	.0035501	.1194282
#3	.9239337	.0095644	.1203079

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2534.622	51872.15	5234.050	1926.997	4036.450
Stddev	14.272	221.25	73.964	13.187	22.094
%RSD	.5630843	.4265294	1.413131	.6843470	.5473650

#1	2519.067	51618.93	5150.244	1914.617	4012.822
#2	2537.687	52028.10	5290.204	1925.510	4039.933
#3	2547.113	51969.41	5261.702	1940.866	4056.597

Sample Name: P4121-01 Acquired: 9/23/2024 16:59:53 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098741	-.006095	.8117644	.0028764	.0042226	.0631638	.2749293
Stddev	.0040132	.001989	.0025291	.0014521	.0008094	.0030999	.0024862
%RSD	40.64356	32.62902	.3115526	50.48510	19.16698	4.907717	.9042977
#1	.0145065	-.004819	.8114340	.0039661	.0037214	.0646223	.2723617
#2	.0074501	-.005078	.8094168	.0034352	.0037901	.0596037	.2751009
#3	.0076657	-.008386	.8144425	.0012278	.0051563	.0652655	.2773252
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000059	.0007273	12.32852	.0123663	.0018885	.0564111	.1054788
Stddev	.000043	.0000467	.12302	.0002811	.0001641	.0001543	.0006554
%RSD	73.66216	6.414470	.9978546	2.273425	8.691836	.2735223	.6213642
#1	-.000019	.0007647	12.24190	.0125662	.0020658	.0565145	.1053393
#2	-.000105	.0006750	12.27434	.0124878	.0018579	.0564851	.1049044
#3	-.000053	.0007422	12.46934	.0120448	.0017418	.0562338	.1061927
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1270172	2.250650	.0516879	.0004047	223.9251	-.001427	.7157207
Stddev	.0011608	.018178	.0001077	.0001414	.7642	.000687	.0026791
%RSD	.9138870	.8076897	.2084328	34.94452	.3412896	48.11616	.3743297
#1	.1266313	2.230505	.0517028	.0003179	224.7016	-.000651	.7179238
#2	.1260985	2.265829	.0517874	.0005679	223.9000	-.001675	.7127383
#3	.1283218	2.255616	.0515735	.0003283	223.1738	-.001956	.7164999
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.66457	.1476773	.0056185	-.007835	.0024224	1.705965	.0822384
Stddev	.05205	.0018534	.0003180	.000656	.0012369	.019428	.0010540
%RSD	.2518992	1.255029	5.659793	8.375368	51.05922	1.138819	1.281618
#1	20.72329	.1473248	.0053179	-.007270	.0010658	1.686058	.0826903
#2	20.62411	.1460255	.0055861	-.007679	.0034874	1.724875	.0810338
#3	20.64631	.1496816	.0059514	-.008555	.0027141	1.706961	.0829912

Sample Name: P4121-01 Acquired: 9/23/2024 16:59:53 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	2.478639	.0207072	.1244586
Stddev	.014141	.0067084	.0011652
%RSD	.5705180	32.39633	.9361970
#1	2.464258	.0131857	.1235445
#2	2.479132	.0228639	.1240606
#3	2.492527	.0260718	.1257706

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2496.857	51484.75	5182.937	1902.087	4054.746
Stddev	6.905	151.47	33.580	7.534	7.902
%RSD	.2765476	.2941958	.6478990	.3960717	.1948833
#1	2489.909	51310.07	5203.992	1893.724	4051.345
#2	2503.719	51564.58	5200.609	1904.196	4063.779
#3	2496.942	51579.60	5144.212	1908.342	4049.114

Sample Name: P4121-02 Acquired: 9/23/2024 17:04:17 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.014267	-.006817	.0152204	.0032356	.0007130	.0177086	.1395435
Stddev	.001311	.000298	.0006041	.0020178	.0009265	.0056926	.0007460
%RSD	9.187479	4.374738	3.969103	62.36405	129.9478	32.14588	.5346079

#1	-.013356	-.007067	.0146753	.0040357	.0017519	.0241911	.1390725
#2	-.015769	-.006487	.0151159	.0009404	-.000028	.0154097	.1391542
#3	-.013674	-.006897	.0158699	.0047307	.000415	.0135249	.1404036

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000146	-.000052	.3189688	-.000217	-.000100	.0294829	.0236581
Stddev	.000056	.000068	.0089104	.000470	.000189	.0001965	.0050002
%RSD	38.15577	129.9819	2.793493	216.7586	188.8495	.6666158	21.13503

#1	-.000127	-.000098	.3096801	-.000103	-.000268	.0296895	.0180024
#2	-.000209	-.000085	.3274452	.000186	-.000137	.0294609	.0274917
#3	-.000102	.000026	.3197810	-.000734	.000105	.0292983	.0254802

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046468	.0444399	.0004377	.0003971	188.1813	-.002943	.3480628
Stddev	.0002322	.0176980	.0002610	.0002080	1.3573	.002489	.0007564
%RSD	4.997764	39.82456	59.63462	52.37843	.7212647	84.56123	.2173040

#1	.0048463	.0240288	.0005676	.0002365	187.2913	-.002235	.3484671
#2	.0043919	.0537739	.0001372	.0003227	187.5092	-.005709	.3485310
#3	.0047023	.0555170	.0006082	.0006320	189.7435	-.000885	.3471902

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1586040	.0345956	.0004851	-.007356	.0016966	.0404082	.0326811
Stddev	.0410297	.0002173	.0002751	.000362	.0007895	.0144753	.0055229
%RSD	25.86926	.6280331	56.71349	4.922184	46.53179	35.82258	16.89939

#1	.2056276	.0344550	.0006260	-.007532	.0025037	.0380472	.0380722
#2	.1300905	.0344859	.0001680	-.007596	.0016601	.0272586	.0329360
#3	.1400938	.0348458	.0006611	-.006940	.0009260	.0559188	.0270352

Sample Name: P4121-02 Acquired: 9/23/2024 17:04:17 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.7962589	-.006101	.0033131
Stddev	.0031929	.002189	.0000164
%RSD	.4009864	35.87736	.4935325
#1	.7950005	-.008324	.0033223
#2	.7998892	-.003948	.0032943
#3	.7938869	-.006031	.0033228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2464.102	52901.91	5140.175	1966.380	3961.032
Stddev	8.294	185.48	21.548	5.634	4.763
%RSD	.3366119	.3506129	.4192013	.2865384	.1202433
#1	2454.936	52693.35	5123.625	1960.194	3955.901
#2	2466.278	52964.04	5132.359	1971.219	3961.882
#3	2471.091	53048.36	5164.539	1967.728	3965.313

Sample Name: P4123-01 Acquired: 9/23/2024 17:08:45 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012055	-.004910	.0006121	.0031752	.0005266	.7625512	.5029490
Stddev	.003590	.001803	.0003578	.0008569	.0009985	.0076545	.0028271
%RSD	29.78174	36.71207	58.44567	26.98575	189.5990	1.003797	.5621015

#1	-.015102	-.006276	.0001990	.0022475	.0008139	.7711205	.4999428
#2	-.012964	-.005589	.0008219	.0033411	.0013500	.7563913	.5033500
#3	-.008097	-.002867	.0008154	.0039370	-.000584	.7601419	.5055541

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003708	.0002513	16.06941	.0015017	.0035884	.0212347	.4501611
Stddev	.0000768	.0000893	.03460	.0005824	.0000899	.0001494	.0084372
%RSD	20.72044	35.51591	.2153093	38.77873	2.505409	.7036315	1.874252

#1	.0004223	.0001483	16.03030	.0013073	.0034989	.0210753	.4429186
#2	.0002825	.0003048	16.09605	.0021564	.0035875	.0213716	.4594255
#3	.0004076	.0003008	16.08187	.0010415	.0036787	.0212574	.4481393

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1488183	12.51063	.0052436	.0006599	224.0584	.0028911	.3860043
Stddev	.0006626	.01159	.0003025	.0001995	1.8673	.0009378	.0027522
%RSD	.4452650	.0926411	5.768053	30.23122	.8334036	32.43842	.7130044

#1	.1486069	12.49780	.0055901	.0004418	221.9080	.0032256	.3830809
#2	.1482871	12.52033	.0051088	.0007047	224.9964	.0036159	.3863865
#3	.1495608	12.51376	.0050320	.0008331	225.2707	.0018319	.3885454

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.798895	.1718147	.0005312	-.009168	.0285636	6.438504	.0932034
Stddev	.098120	.0010054	.0001935	.000140	.0010645	.077037	.0026128
%RSD	1.692042	.5851649	36.41991	1.528019	3.726761	1.196503	2.803367

#1	5.699470	.1723805	.0006621	-.009247	.0296087	6.360868	.0945608
#2	5.801560	.1724097	.0003090	-.009250	.0274807	6.439718	.0901912
#3	5.895655	.1706539	.0006225	-.009006	.0286015	6.514927	.0948581

Sample Name: P4123-01 Acquired: 9/23/2024 17:08:45 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.981051	.0183484	.0943428
Stddev	.005384	.0011007	.0004657
%RSD	.2717976	5.998846	.4936647
#1	1.984701	.0173353	.0938073
#2	1.974867	.0195196	.0945667
#3	1.983586	.0181902	.0946542

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2487.284	51235.36	4951.936	1909.189	3995.828
Stddev	3.850	33.97	40.610	2.217	2.397
%RSD	.1547807	.0663092	.8200879	.1161236	.0599996
#1	2484.152	51268.63	4909.354	1907.950	3994.151
#2	2486.120	51200.72	4956.219	1911.749	3994.758
#3	2491.582	51236.73	4990.235	1907.868	3998.574

Sample Name: P4123-01DUP Acquired: 9/23/2024 17:13:10 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009620	-.006077	.0010933	.0035793	.0005964	.7358086	.5055092
Stddev	.001148	.001175	.0013396	.0006809	.0008237	.0146314	.0015521
%RSD	11.93628	19.34188	122.5277	19.02274	138.1241	1.988482	.3070321

#1	-.010944	-.004743	.0024398	.0028477	.0013383	.7308479	.5037184
#2	-.008887	-.006962	.0010796	.0036957	.0007407	.7522754	.5064652
#3	-.009031	-.006526	-.000239	.0041945	-.000290	.7243025	.5063439

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004363	.0003112	16.04578	.0014818	.0034615	.0207104	.4656625
Stddev	.0001225	.0000150	.06817	.0001674	.0000382	.0004920	.0026319
%RSD	28.06688	4.828082	.4248160	11.29498	1.102434	2.375588	.5651999

#1	.0005410	.0003235	15.96764	.0013608	.0034652	.0212539	.4660956
#2	.0003016	.0003156	16.09299	.0016728	.0034217	.0202954	.4628408
#3	.0004663	.0002944	16.07673	.0014118	.0034978	.0205820	.4680510

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1482413	12.35749	.0053173	.0003316	229.0686	.0047266	.3887319
Stddev	.0015748	.08983	.0000687	.0002330	1.7464	.0006804	.0009249
%RSD	1.062292	.7268919	1.292763	70.24906	.7623978	14.39390	.2379335

#1	.1464282	12.25498	.0053140	.0002720	227.0554	.0039534	.3881601
#2	.1492671	12.42247	.0053877	.0005886	229.9737	.0049932	.3882365
#3	.1490288	12.39501	.0052503	.0001343	230.1766	.0052333	.3897990

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.986590	.1657952	.0005867	-.009442	.0275361	6.651787	.0938298
Stddev	.043338	.0008964	.0001673	.000568	.0013265	.021631	.0022645
%RSD	.7239127	.5406559	28.51555	6.019069	4.817235	.3251923	2.413429

#1	5.942951	.1658565	.0005044	-.009714	.0260884	6.626872	.0921450
#2	6.029620	.1648697	.0007792	-.008789	.0278265	6.662723	.0929404
#3	5.987199	.1666593	.0004766	-.009823	.0286932	6.665767	.0964040

Sample Name: P4123-01DUP Acquired: 9/23/2024 17:13:10 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.904959	.0171478	.0944546
Stddev	.005829	.0013635	.0001917
%RSD	.3059894	7.951546	.2028994
#1	1.899494	.0182866	.0943892
#2	1.911094	.0156369	.0946704
#3	1.904289	.0175200	.0943042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2537.433	50516.36	5127.100	1899.711	4097.146
Stddev	4.125	36.49	5.182	8.386	5.305
%RSD	.1625851	.0722425	.1010625	.4414379	.1294915
#1	2532.701	50474.83	5122.009	1908.442	4091.296
#2	2540.272	50530.94	5132.368	1891.718	4101.645
#3	2539.326	50543.31	5126.924	1898.972	4098.497

Sample Name: P4123-01LX5 Acquired: 9/23/2024 17:17:34 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006234	-.004288	.0006668	-.000522	-.000420	.1571201	.1066128
Stddev	.001048	.002464	.0009212	.002421	.000737	.0049890	.0002410
%RSD	16.81741	57.46801	138.1580	463.9607	175.3954	3.175256	.2260638
#1	-.007192	-.004261	.0007466	.002092	-.001110	.1622519	.1065801
#2	-.005114	-.001837	-.000292	-.000970	-.000509	.1522874	.1063897
#3	-.006397	-.006765	.001546	-.002687	.000357	.1568210	.1068684
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001597	.0000730	3.360292	-.000038	.0005555	.0043215	.1019754
Stddev	.0000446	.0000621	.026332	.000561	.0000204	.0002345	.0048168
%RSD	27.90457	85.00737	.7836345	1474.577	3.679200	5.426997	4.723490
#1	.0001621	.0000088	3.344480	.000600	.0005569	.0041225	.0992530
#2	.0002031	.0000775	3.345706	-.000260	.0005344	.0045801	.1075370
#3	.0001140	.0001328	3.390690	-.000454	.0005752	.0042619	.0991363
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0308614	2.566556	.0011062	.0004543	46.96657	-.001239	.0720225
Stddev	.0004927	.014862	.0002728	.0003718	.40206	.000739	.0005914
%RSD	1.596581	.5790612	24.66467	81.83659	.8560591	59.62898	.8211796
#1	.0303826	2.570991	.0014099	.0008706	46.51030	-.001862	.0713570
#2	.0308348	2.549981	.0010268	.0003368	47.26897	-.000423	.0722229
#3	.0313669	2.578694	.0008819	.0001554	47.12045	-.001432	.0724878
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.204097	.0363500	.0002664	-.004330	.0076563	1.330809	.0133744
Stddev	.034318	.0009795	.0000998	.000369	.0004130	.005294	.0018205
%RSD	2.850088	2.694601	37.47143	8.528549	5.394710	.3978135	13.61204
#1	1.202153	.0368120	.0001600	-.004079	.0073744	1.325814	.0127903
#2	1.170793	.0370131	.0002811	-.004754	.0074641	1.336359	.0119176
#3	1.239346	.0352250	.0003580	-.004158	.0081304	1.330255	.0154153

Sample Name: P4123-01LX5 Acquired: 9/23/2024 17:17:34 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.4051278	.0002699	.0196878
Stddev	.0029902	.0030858	.0001578
%RSD	.7380966	1143.145	.8013392
#1	.4058840	-.000017	.0195246
#2	.4018320	-.002662	.0196993
#3	.4076673	.003489	.0198395

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2642.202	53263.48	5258.591	2010.704	4309.969
Stddev	1.775	128.75	6.864	10.187	5.241
%RSD	.0671832	.2417200	.1305352	.5066623	.1216071
#1	2640.979	53411.89	5250.699	2022.376	4312.763
#2	2644.238	53196.71	5263.172	2003.599	4313.221
#3	2641.388	53181.83	5261.902	2006.137	4303.922

Sample Name: P4123-01MS Acquired: 9/23/2024 17:21:54 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7235645	1.627258	.8772484	1.802367	.7751805	2.674006	.7054306
Stddev	.0009029	.008663	.0040548	.008634	.0027001	.012181	.0011954
%RSD	.1247855	.5323439	.4622166	.4790552	.3483192	.4555251	.1694626
#1	.7226128	1.636795	.8810404	1.812071	.7782979	2.662932	.7044305
#2	.7236714	1.619878	.8729740	1.799496	.7735823	2.672032	.7051066
#3	.7244091	1.625101	.8777309	1.795533	.7736612	2.687053	.7067546
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1762601	.1777593	17.33984	.3856640	.1980103	.3066612	3.337518
Stddev	.0002584	.0004753	.08989	.0007471	.0010160	.0010978	.023813
%RSD	.1465952	.2673982	.5183838	.1937096	.5130773	.3579894	.7134980
#1	.1762702	.1782819	17.24001	.3850464	.1989994	.3078518	3.310763
#2	.1759968	.1773527	17.41435	.3864944	.1969695	.3064429	3.345400
#3	.1765133	.1776433	17.36515	.3854512	.1980620	.3056889	3.356390
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3465177	14.43460	.4858722	.0759604	228.2884	.2900626	.5938575
Stddev	.0021906	.03964	.0011229	.0001965	2.2890	.0034594	.0005552
%RSD	.6321882	.2746373	.2311022	.2586302	1.002660	1.192650	.0934830
#1	.3439970	14.39581	.4870157	.0757476	225.7212	.2893010	.5942707
#2	.3479606	14.43295	.4847712	.0759990	230.1166	.2870475	.5940753
#3	.3475955	14.47505	.4858298	.0761348	229.0273	.2938394	.5932264
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.18419	.4410525	.4178668	.6436546	.2241182	7.106598	5.973521
Stddev	.01588	.0007921	.0012373	.0025296	.0008113	.013396	.010539
%RSD	.0981108	.1795991	.2961048	.3930058	.3619762	.1885073	.1764296
#1	16.19126	.4419479	.4190841	.6465739	.2245207	7.096626	5.982443
#2	16.16601	.4404431	.4179058	.6421123	.2231845	7.121825	5.961893
#3	16.19531	.4407664	.4166104	.6422775	.2246496	7.101342	5.976228

Sample Name: P4123-01MS Acquired: 9/23/2024 17:21:54 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.930253	.3511137	.2912534
Stddev	.007109	.0043466	.0004064
%RSD	.3682852	1.237954	.1395263
#1	1.936607	.3520326	.2908024
#2	1.931577	.3463811	.2913666
#3	1.922575	.3549275	.2915912

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2495.613	50712.88	4887.841	1876.231	3998.772
Stddev	9.228	55.44	6.391	3.768	12.212
%RSD	.3697655	.1093173	.1307487	.2008486	.3053917
#1	2485.814	50659.97	4881.235	1874.600	3985.145
#2	2496.887	50708.13	4893.992	1880.540	4008.725
#3	2504.137	50770.54	4888.295	1873.553	4002.445

Sample Name: CCV06 Acquired: 9/23/2024 17:26:03 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.118151	4.835897	5.028555	5.239665	5.186727	9.955290
Stddev	.015308	.023228	.009448	.006747	.004805	.023383
%RSD	.2990957	.4803300	.1878955	.1287708	.0926386	.2348821
#1	5.134043	4.822556	5.029982	5.243670	5.191315	9.979292
#2	5.116908	4.862718	5.037209	5.243449	5.181731	9.953997
#3	5.103503	4.822416	5.018475	5.231875	5.187135	9.932580
Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.11723	.2320405	2.497171	26.67499	.9578887	2.525098
Stddev	.04456	.0013705	.000454	.14813	.0035781	.002612
%RSD	.4403927	.5906113	.0181987	.5553269	.3735386	.1034261
#1	10.08386	.2333056	2.497260	26.82565	.9572830	2.524336
#2	10.16783	.2322314	2.497575	26.66978	.9546522	2.528005
#3	10.10001	.2305846	2.496679	26.52952	.9617310	2.522951
Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.290907	4.672309	2.537166	24.49699	2.532640	1.260928
Stddev	.000962	.011695	.013957	.17486	.003057	.002558
%RSD	.0744856	.2503068	.5501149	.7137958	.1206883	.2028799
#1	1.292011	4.659720	2.549086	24.64579	2.531969	1.260697
#2	1.290250	4.674370	2.540598	24.54077	2.535976	1.258493
#3	1.290461	4.682836	2.521812	24.30440	2.529974	1.263594
Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.68101	2.449141	2.543742	24.01613	5.459056	5.245867
Stddev	.12254	.011221	.012773	.14306	.029475	.001399
%RSD	.5402598	.4581494	.5021364	.5956733	.5399221	.0266746
#1	22.56202	2.462019	2.529142	23.86169	5.490874	5.247041
#2	22.67419	2.443932	2.552856	24.04260	5.453610	5.246241
#3	22.80681	2.441471	2.549227	24.14411	5.432685	5.244318

Sample Name: CCV06 Acquired: 9/23/2024 17:26:03 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.081816	5.212788	F 4.439538	5.381872	5.032795	F -.006429
Stddev	.007273	.023941	.042609	.013852	.008671	.002057
%RSD	.1431132	.4592684	.9597687	.2573839	.1722982	32.00593
#1	5.073973	5.239413	4.390347	5.367756	5.039450	-.005767
#2	5.083138	5.205913	4.464990	5.382417	5.035945	-.004783
#3	5.088337	5.193036	4.463277	5.395444	5.022988	-.008735

Elem	Sr4077
Units	ppm
Avg	5.169498
Stddev	.023920
%RSD	.4627176
#1	5.196778
#2	5.159604
#3	5.152113

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2502.536	54449.56	4915.934	2033.002	3951.929
Stddev	3.376	107.81	38.368	8.653	7.337
%RSD	.1348895	.1979940	.7804777	.4256199	.1856573
#1	2499.581	54411.75	4874.225	2042.914	3950.839
#2	2501.813	54571.18	4923.852	2029.132	3945.198
#3	2506.215	54365.76	4949.725	2026.959	3959.750

Sample Name: CCB06 Acquired: 9/23/2024 17:30:15 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001407	-.004566	.0002487	-.002971	.0007263	-.002627
Stddev	.001939	.001080	.0006284	.000978	.0012778	.003610
%RSD	137.7725	23.65217	252.7346	32.93365	175.9439	137.4131

#1	.000829	-.004159	.0009706	-.002078	.0005430	.001275
#2	-.002628	-.005790	-.000049	-.004017	.0020858	-.005847
#3	-.002423	-.003748	-.000175	-.002818	-.000450	-.003310

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021513	.0000673	.0001393	.0119988	-.000274	-.000120
Stddev	.0000364	.0000347	.0000176	.0050065	.000211	.000178
%RSD	1.689733	51.56706	12.60292	41.72518	76.91670	148.8249

#1	.0021415	.0000948	.0001190	.0100080	-.000032	-.000098
#2	.0021916	.0000283	.0001482	.0082940	-.000374	-.000308
#3	.0021209	.0000787	.0001505	.0176946	-.000417	.000047

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000215	-.000472	.0002615	-.004324	.0001742	.0003579
Stddev	.000371	.005896	.0002541	.005949	.0001565	.0001917
%RSD	172.9650	1249.605	97.16118	137.5979	89.84296	53.56966

#1	.000056	.004887	.0004113	.002542	.0003549	.0003399
#2	-.000638	.000485	.0004052	-.007951	.0000829	.0001758
#3	-.000061	-.006788	-.000032	-.007563	.0000848	.0005580

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0237349	-.001664	-.007062	.1732831	.0039898	.0005970
Stddev	.0112728	.001519	.000361	.0380365	.0003802	.0000694
%RSD	47.49449	91.27552	5.118712	21.95048	9.529639	11.61915

#1	.0178288	-.000420	-.006887	.1557584	.0039606	.0005175
#2	.0166424	-.001216	-.007477	.1471680	.0043838	.0006448
#3	.0367335	-.003358	-.006821	.2169229	.0036251	.0006288

Sample Name: CCB06 Acquired: 9/23/2024 17:30:15 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000546	.0009183	-.003364	-.003918	.0007464	F -.010556
Stddev	.000794	.0002581	.010718	.002623	.0035031	.002190
%RSD	145.5569	28.10216	318.6054	66.96079	469.3431	20.74348
#1	-.001279	.0009544	-.015288	-.004290	.0034439	-.010606
#2	.000298	.0006442	-.000271	-.006336	.0020080	-.008341
#3	-.000656	.0011565	.005468	-.001128	-.003213	-.012720

Elem	Sr4077
Units	ppm
Avg	-.000004
Stddev	.000039
%RSD	1044.374
#1	-.000046
#2	.000029
#3	.000006

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2706.231	52962.58	5165.312	2052.414	4431.996
Stddev	4.420	73.97	14.446	3.411	6.293
%RSD	.1633368	.1396657	.2796732	.1662024	.1419894
#1	2702.261	52978.92	5159.329	2051.412	4424.780
#2	2705.439	53027.02	5181.789	2056.214	4436.345
#3	2710.995	52881.81	5154.819	2049.616	4434.863

Sample Name: P4123-01MSD Acquired: 9/23/2024 17:34:55 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6974316	1.615644	.8691762	1.738339	.7605929	2.652366	.7018612
Stddev	.0009862	.003776	.0029305	.005755	.0023464	.012218	.0023751
%RSD	.1414067	.2337015	.3371542	.3310900	.3084935	.4606386	.3384055
#1	.6963345	1.613716	.8658384	1.732659	.7595475	2.647840	.6996767
#2	.6982446	1.613222	.8703635	1.744167	.7589509	2.643056	.7015174
#3	.6977159	1.619995	.8713267	1.738190	.7632803	2.666200	.7043894
Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2103472	.1759929	17.16293	.3918966	.1966505	.3015068	3.378362
Stddev	.0009919	.0004152	.11818	.0030494	.0010290	.0010401	.030011
%RSD	.4715316	.2358951	.6885774	.7781244	.5232482	.3449628	.8883203
#1	.2092586	.1756336	17.08548	.3950191	.1962250	.3003440	3.412347
#2	.2105832	.1758977	17.10436	.3889260	.1959026	.3018282	3.355503
#3	.2111998	.1764474	17.29896	.3917447	.1978240	.3023482	3.367236
Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3439338	14.48978	.4805890	.0768400	239.3159	.2918594	.5905095
Stddev	.0015204	.06443	.0016933	.0002345	.7066	.0033581	.0020794
%RSD	.4420681	.4446415	.3523385	.3051218	.2952434	1.150592	.3521310
#1	.3422751	14.42490	.4794573	.0770249	238.8613	.2948037	.5913812
#2	.3452614	14.49070	.4797740	.0765763	238.9565	.2882020	.5920112
#3	.3442651	14.55375	.4825357	.0769189	240.1299	.2925725	.5881362
Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.24657	.4405584	.4194187	.6386492	.2243088	7.166693	5.904255
Stddev	.08491	.0022160	.0011989	.0018691	.0024222	.025031	.010315
%RSD	.5226237	.5030008	.2858405	.2926637	1.079829	.3492693	.1747065
#1	16.33459	.4380471	.4180802	.6385240	.2215577	7.175000	5.903009
#2	16.16516	.4413888	.4197818	.6368459	.2252477	7.186514	5.894620
#3	16.23994	.4422392	.4203940	.6405778	.2261209	7.138564	5.915137

Sample Name: P4123-01MSD Acquired: 9/23/2024 17:34:55 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.833679	.3405530	.2901976
Stddev	.005151	.0020667	.0011827
%RSD	.2809051	.6068756	.4075653
#1	1.834241	.3390495	.2891695
#2	1.828270	.3429098	.2899329
#3	1.838526	.3396998	.2914902

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2593.636	50670.66	4938.652	1904.298	4164.510
Stddev	3.429	246.73	15.891	8.758	9.982
%RSD	.1322093	.4869383	.3217679	.4599005	.2396812
#1	2596.120	50385.85	4956.704	1895.971	4167.438
#2	2595.064	50819.34	4932.477	1903.492	4172.700
#3	2589.724	50806.80	4926.776	1913.431	4153.392

Sample Name: P4123-01A Acquired: 9/23/2024 17:39:05 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7148879	1.651826	.8861017	1.779362	.7676250	2.652139	.7056256
Stddev	.0042532	.012070	.0040062	.004769	.0016461	.008527	.0046672
%RSD	.5949455	.7306879	.4521171	.2680127	.2144349	.3215231	.6614245

#1	.7152471	1.665745	.8896425	1.782745	.7688102	2.643318	.7006199
#2	.7104665	1.644265	.8817531	1.773907	.7683192	2.652760	.7063993
#3	.7189501	1.645466	.8869096	1.781433	.7657456	2.660338	.7098576

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2124844	.1792065	17.48420	.3954376	.1990535	.3065108	3.481660
Stddev	.0004836	.0004399	.02565	.0013442	.0006278	.0003655	.010169
%RSD	.2275857	.2454787	.1466917	.3399171	.3153664	.1192400	.2920841

#1	.2129166	.1793692	17.45893	.3939174	.1991311	.3068788	3.489758
#2	.2125744	.1787084	17.51020	.3959265	.1983906	.3061479	3.470247
#3	.2119621	.1795420	17.48345	.3964688	.1996388	.3065056	3.484975

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3478778	14.44506	.4897806	.0781322	242.6326	.2893015	.6037597
Stddev	.0016584	.15612	.0014852	.0004903	.6253	.0029907	.0023164
%RSD	.4767133	1.080786	.3032451	.6274938	.2577074	1.033747	.3836703

#1	.3459767	14.27849	.4905190	.0785544	242.0611	.2861357	.6045727
#2	.3490270	14.46864	.4880709	.0775945	243.3005	.2920791	.6011463
#3	.3486299	14.58805	.4907520	.0782478	242.5363	.2896898	.6055600

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.68969	.4412618	.4196119	.6460809	.2281441	7.311101	6.096073
Stddev	.03595	.0020563	.0022427	.0008378	.0000738	.030263	.021504
%RSD	.2154238	.4659991	.5344596	.1296721	.0323259	.4139347	.3527563

#1	16.64861	.4422250	.4214913	.6464099	.2281005	7.293978	6.113418
#2	16.71542	.4426597	.4171293	.6451286	.2282292	7.293281	6.072012
#3	16.70503	.4389007	.4202150	.6467044	.2281026	7.346044	6.102788

Sample Name: P4123-01A Acquired: 9/23/2024 17:39:05 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.894209	.3342755	.2923939
Stddev	.010343	.0041548	.0011037
%RSD	.5460576	1.242929	.3774524
#1	1.903294	.3390180	.2911861
#2	1.882952	.3312763	.2926458
#3	1.896382	.3325323	.2933499

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2540.677	49336.85	4937.664	1864.316	4065.304
Stddev	5.839	123.72	14.470	3.419	8.951
%RSD	.2298357	.2507564	.2930526	.1834062	.2201727
#1	2535.073	49200.11	4928.753	1861.128	4057.449
#2	2546.726	49369.42	4929.878	1867.927	4075.048
#3	2540.231	49441.02	4954.360	1863.892	4063.415

Sample Name: PB163511TB Acquired: 9/23/2024 17:43:16 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.008868	-.007781	-.000973	.0040878	.0000767	.0084207
Stddev	.002258	.003821	.000307	.0034401	.0002981	.0082063
%RSD	25.46565	49.10857	31.53120	84.15509	388.4475	97.45505

#1	-.010385	-.010541	-.000716	.0070690	.0000619	-.000805
#2	-.006273	-.009382	-.000891	.0003237	-.000214	.014906
#3	-.009947	-.003420	-.001313	.0048707	.000382	.011162

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003060	-.000123	-.000129	-.051457	-.000613	-.000091
Stddev	.0006662	.000050	.000029	.010597	.000197	.000095
%RSD	217.7356	40.55921	22.50842	20.59401	32.10402	105.2002

#1	.0000298	-.000178	-.000152	-.041473	-.000707	-.000147
#2	-.000178	-.000079	-.000140	-.050322	-.000387	-.000145
#3	.001066	-.000113	-.000096	-.062576	-.000745	.000019

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001591	.0043340	.0010045	-.018634	.0001508	.0001427
Stddev	.0000377	.0031483	.0003457	.014037	.0001310	.0001962
%RSD	23.67054	72.64115	34.41435	75.32670	86.86921	137.5323

#1	.0001174	.0077594	.0013782	-.020883	.0000075	.0003667
#2	.0001906	.0015670	.0006962	-.003609	.0002644	.0000603
#3	.0001693	.0036756	.0009391	-.031411	.0001805	.0000011

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 287.2977	-.001903	-.007994	-.004116	.0003675	.0003062
Stddev	2.0696	.002139	.000319	.031810	.0008807	.0002599
%RSD	.7203747	112.3997	3.994132	772.9089	239.6526	84.85152

#1	285.8649	-.000547	-.007627	-.031242	.0009514	.0001351
#2	286.3578	-.004369	-.008207	-.011999	.0007966	.0001784
#3	289.6705	-.000794	-.008149	.030894	-.000646	.0006052

Sample Name: PB163511TB Acquired: 9/23/2024 17:43:16 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.008217	.0014954	.0023040	-.002809	F .0108484	F -.016244
Stddev	.000541	.0005355	.0079275	.000762	.0011617	.001718
%RSD	6.585817	35.80913	344.0807	27.13896	10.70857	10.57536
#1	-.007593	.0009985	-.001140	-.003403	.0099016	-.017963
#2	-.008499	.0014251	.011371	-.003074	.0104988	-.014527
#3	-.008559	.0020626	-.003319	-.001950	.0121447	-.016242

Elem	Sr4077
Units	ppm
Avg	-.000084
Stddev	.000048
%RSD	57.34798
#1	-.000043
#2	-.000137
#3	-.000071

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2454.456	52241.78	4807.718	1938.362	3893.165
Stddev	5.556	82.96	7.696	13.014	11.899
%RSD	.2263633	.1588088	.1600744	.6714124	.3056275
#1	2450.430	52292.59	4799.167	1935.963	3887.407
#2	2452.144	52286.72	4814.087	1926.715	3885.241
#3	2460.795	52146.05	4809.901	1952.410	3906.847

Sample Name: PB163580BL Acquired: 9/23/2024 17:56:14 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002600	-.003637	.0006097	.0004664	-.000506	.0036412
Stddev	.001188	.000570	.0012697	.0005743	.000564	.0095136
%RSD	45.67600	15.66618	208.2481	123.1259	111.5549	261.2794

#1	-.001237	-.003691	.0015838	.0009943	-.000534	-.004755
#2	-.003152	-.004178	-.000826	.0005502	.000072	.013974
#3	-.003411	-.003043	.001072	-.000145	-.001056	.001705

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010029	.0001001	.0000596	-.015433	.0001532	-.000015
Stddev	.0010261	.0000065	.0000209	.007344	.0001422	.000173
%RSD	102.3110	6.461239	35.09339	47.58695	92.81041	1155.891

#1	-.000099	.0001027	.0000636	-.023437	.0000515	.000165
#2	.001176	.0000928	.0000783	-.009004	.0003156	-.000030
#3	.001931	.0001049	.0000370	-.013859	.0000924	-.000181

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000029	-.001155	.0000792	.0074532	.0000254	.0005281
Stddev	.000266	.002366	.0007423	.0129007	.0002380	.0004711
%RSD	931.1222	204.9650	937.1284	173.0892	934.9699	89.21296

#1	-.000131	-.002854	-.000672	.0124693	-.000093	.0008383
#2	.000274	-.002158	.000097	.0170924	.000299	-.000014
#3	-.000229	.001548	.000812	-.007202	-.000130	.000760

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0593261	.0005960	-.008922	.1131914	-.001101	.0001046
Stddev	.0034515	.0009617	.000153	.0242976	.000197	.0001381
%RSD	5.817824	161.3434	1.719211	21.46591	17.84414	132.0082

#1	.0562442	.0001440	-.008961	.0876360	-.001082	.0002641
#2	.0586787	.0017005	-.008753	.1159408	-.001307	.0000256
#3	.0630554	-.000056	-.009052	.1359973	-.000915	.0000242

Sample Name: PB163580BL Acquired: 9/23/2024 17:56:14 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.003192	.0015278	-.004862	-.005365	-.002286	F -.015156
Stddev	.000451	.0006678	.005297	.000761	.002473	.002081
%RSD	14.12111	43.71012	108.9491	14.18949	108.1849	13.72833
#1	-.002846	.0008932	.000752	-.004545	-.004000	-.016699
#2	-.003702	.0022244	-.009771	-.005499	.000549	-.012789
#3	-.003029	.0014658	-.005567	-.006050	-.003407	-.015979

Elem	Sr4077
Units	ppm
Avg	-.000056
Stddev	.000021
%RSD	36.96135
#1	-.000079
#2	-.000045
#3	-.000042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.960	53422.35	5123.565	2025.072	4447.190
Stddev	3.436	20.97	37.949	3.977	6.099
%RSD	.1279211	.0392484	.7406669	.1963689	.1371523
#1	2683.348	53429.50	5161.729	2026.941	4443.482
#2	2684.680	53438.81	5085.836	2027.769	4443.859
#3	2689.852	53398.75	5123.129	2020.505	4454.230

Sample Name: PB163580BS Acquired: 9/23/2024 18:00:35 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.7443570	1.811660	.9466401	1.905602	.7911436	1.964340
Stddev	.0030529	.009188	.0004852	.003671	.0022775	.003136
%RSD	.4101408	.5071517	.0512498	.1926328	.2878696	.1596531

#1	.7416983	1.818806	.9460813	1.901374	.7917640	1.960752
#2	.7436817	1.801296	.9469545	1.907451	.7886202	1.965710
#3	.7476910	1.814879	.9468844	1.907980	.7930466	1.966559

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1998907	.2311362	.1859655	1.117561	.3855502	.2018693
Stddev	.0008738	.0004874	.0002781	.006814	.0007839	.0001122
%RSD	.4371472	.2108600	.1495268	.6096761	.2033330	.0555617

#1	.1990443	.2308748	.1862745	1.109986	.3849307	.2017400
#2	.1998382	.2308353	.1858867	1.123189	.3864316	.2019402
#3	.2007895	.2316985	.1857353	1.119508	.3852884	.2019277

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3130476	2.738251	.2048670	1.921155	.5060932	.0770810
Stddev	.0005075	.012059	.0002708	.018271	.0007046	.0004013
%RSD	.1621209	.4403729	.1321903	.9510294	.1392319	.5206620

#1	.3125879	2.724328	.2051282	1.925816	.5059637	.0766784
#2	.3135922	2.745089	.2048855	1.901005	.5068536	.0774810
#3	.3129628	2.745337	.2045875	1.936644	.5054623	.0770838

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.644904	.2876953	.2022980	9.196682	.3132715	.4087849
Stddev	.018759	.0005876	.0007673	.065708	.0027473	.0001841
%RSD	.7092419	.2042410	.3793104	.7144745	.8769732	.0450359

#1	2.628789	.2883255	.2020305	9.121517	.3128118	.4089364
#2	2.640427	.2871625	.2017003	9.243221	.3107830	.4088384
#3	2.665496	.2875980	.2031633	9.225306	.3162196	.4085800

Sample Name: PB163580BS Acquired: 9/23/2024 18:00:35 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	.6695893	.2018117	F .5905183	6.077724	F -.011007	F .3205204
Stddev	.0013285	.0013744	.0117661	.000903	.001023	.0034027
%RSD	.1984075	.6810569	1.992498	.0148514	9.290378	1.061630
#1	.6681533	.2003793	.6028779	6.076763	-.011098	.3235177
#2	.6698399	.2031198	.5794528	6.077854	-.009942	.3212218
#3	.6707747	.2019359	.5892243	6.078554	-.011981	.3168216

Elem	Sr4077
Units	ppm
Avg	.2013841
Stddev	.0003309
%RSD	.1643344
#1	.2010021
#2	.2015692
#3	.2015812

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2661.187	56195.59	4924.754	2095.501	4341.851
Stddev	2.620	68.25	13.731	6.765	7.518
%RSD	.0984666	.1214467	.2788256	.3228319	.1731546
#1	2658.706	56150.92	4912.739	2089.122	4335.136
#2	2660.929	56274.15	4939.721	2102.595	4340.443
#3	2663.927	56161.70	4921.800	2094.785	4349.973

Sample Name: CCV07 Acquired: 9/23/2024 18:04:38 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.925367	4.694474	4.901721	5.009194	5.021171	9.705766
Stddev	.003154	.045804	.002355	.018207	.000991	.017872
%RSD	.0640442	.9756996	.0480411	.3634741	.0197444	.1841413
#1	4.922836	4.742114	4.901041	5.025945	5.020620	9.700235
#2	4.928901	4.690549	4.899781	5.011821	5.020577	9.691312
#3	4.924365	4.650759	4.904341	4.989816	5.022315	9.725750
Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.07378	.2722461	2.420542	26.70827	.9364616	2.459237
Stddev	.08947	.0007648	.001782	.09030	.0032927	.000794
%RSD	.8881194	.2809352	.0736277	.3381161	.3516079	.0322660
#1	9.97516	.2731131	2.422509	26.60940	.9398170	2.458569
#2	10.14973	.2716672	2.419034	26.72902	.9332355	2.459027
#3	10.09645	.2719579	2.420083	26.78640	.9363324	2.460114
Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.251957	4.657710	2.509949	23.99994	2.464137	1.247641
Stddev	.001184	.020178	.007805	.16128	.000568	.002045
%RSD	.0945907	.4332257	.3109731	.6720135	.0230384	.1639384
#1	1.252304	4.635225	2.500957	23.81375	2.464156	1.245966
#2	1.252929	4.674243	2.513913	24.09644	2.463559	1.247037
#3	1.250638	4.663662	2.514976	24.08964	2.464694	1.249921
Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.29906	2.401636	2.518308	23.86880	5.317546	5.143959
Stddev	.13670	.010553	.002486	.16626	.015225	.010998
%RSD	.5867102	.4394015	.0987028	.6965399	.2863203	.2138075
#1	23.14126	2.391233	2.520375	23.67683	5.334113	5.152983
#2	23.37487	2.412333	2.515550	23.96499	5.304167	5.147186
#3	23.38106	2.401344	2.518999	23.96459	5.314359	5.131709

Sample Name: CCV07 Acquired: 9/23/2024 18:04:38 Type: Unk
Method: NON EPA-6010-200.7(v2417) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.934911	5.192901	F 4.360368	5.192031	4.783768	F -.014451
Stddev	.010693	.018939	.055273	.008210	.023915	.000709
%RSD	.2166839	.3646998	1.267633	.1581198	.4999106	4.907376
#1	4.943580	5.173584	4.297220	5.201468	4.811381	-.014969
#2	4.938190	5.193684	4.383917	5.188097	4.769731	-.014742
#3	4.922962	5.211436	4.399967	5.186529	4.770193	-.013643

Elem	Sr4077
Units	ppm
Avg	5.142896
Stddev	.034460
%RSD	.6700541
#1	5.110747
#2	5.138665
#3	5.179276

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2557.846	54306.47	4945.085	2010.598	4055.381
Stddev	3.357	104.98	18.627	3.695	5.123
%RSD	.1312597	.1933099	.3766683	.1837936	.1263251
#1	2554.188	54369.81	4925.499	2014.746	4049.737
#2	2558.564	54364.30	4962.575	2007.655	4059.737
#3	2560.787	54185.29	4947.181	2009.394	4056.669

Sample Name: CCB07 Acquired: 9/23/2024 18:08:50 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.003741	-.002997	.0014686	-.001703	.0005895	-.002046
Stddev	.001170	.001790	.0003807	.001053	.0003894	.003115
%RSD	31.26317	59.75051	25.92348	61.84300	66.05063	152.2592

#1	-.004017	-.004682	.0011797	-.000489	.0002971	-.001932
#2	-.002458	-.003191	.0019000	-.002254	.0004399	.001010
#3	-.004748	-.001117	.0013260	-.002367	.0010315	-.005216

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019422	.0001256	.0000568	-.023613	-.000114	.0000855
Stddev	.0016667	.0000617	.0001097	.004935	.000257	.0001775
%RSD	85.81531	49.11675	193.1121	20.90140	225.0895	207.5957

#1	.0014461	.0001955	-.000031	-.019889	-.000410	.0000350
#2	.0038006	.0000790	.000180	-.029211	.000010	-.000061
#3	.0005798	.0001022	.000022	-.021738	.000057	.000283

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000442	.0062600	-.000164	-.005785	.0001759	.0002207
Stddev	.000373	.0034797	.000231	.018182	.0001086	.0002169
%RSD	84.30604	55.58638	140.6534	314.3121	61.72301	98.27677

#1	-.000222	.0102779	-.000055	-.021981	.0001196	.0001747
#2	-.000232	.0042360	-.000008	-.009255	.0001071	.0004569
#3	-.000873	.0042659	-.000430	.013882	.0003011	.0000305

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.045354	-.002318	-.008758	.1328426	.0053374	.0004823
Stddev	.004004	.001465	.000098	.0159624	.0016919	.0003274
%RSD	8.827957	63.22951	1.121870	12.01604	31.69977	67.88606

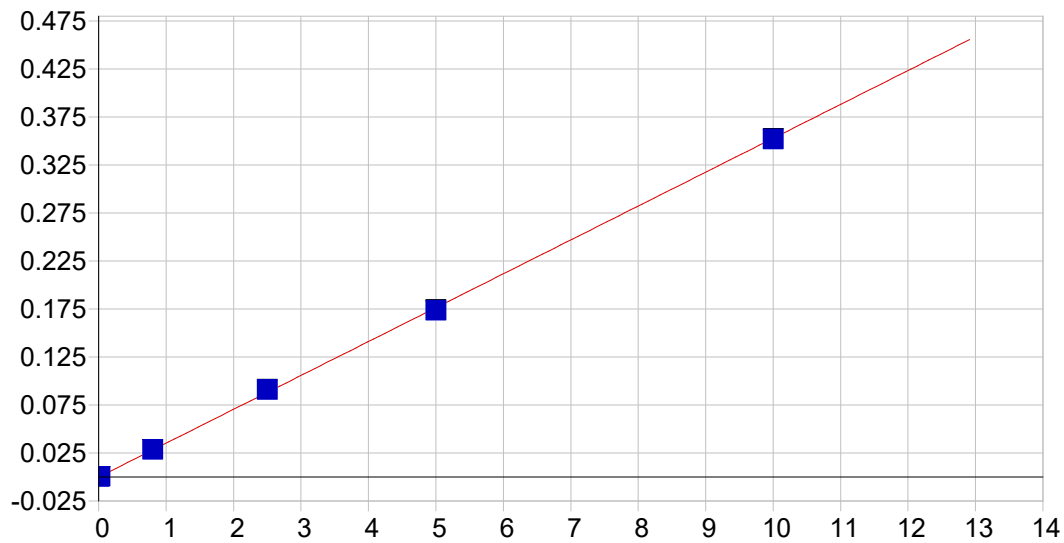
#1	-.045186	-.003378	-.008860	.1197812	.0065289	.0008563
#2	-.049440	-.002930	-.008664	.1281105	.0034008	.0003432
#3	-.041437	-.000645	-.008751	.1506360	.0060824	.0002474

Sample Name: CCB07 Acquired: 9/23/2024 18:08:50 Type: Unk
Method: NON EPA-6010-200.7(v2417) 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	-.002428	.0006857	-.003305	-.006625	-.002444	F -.020299
Stddev	.000702	.0007667	.008166	.003628	.002575	.001808
%RSD	28.91748	111.7979	247.0711	54.76172	105.3757	8.908801
#1	-.003193	.0012188	.004805	-.003193	.000357	-.018478
#2	-.001812	-.000193	-.011527	-.006260	-.004708	-.020323
#3	-.002281	.001031	-.003194	-.010421	-.002980	-.022095

Elem	Sr4077
Units	ppm
Avg	-.000016
Stddev	.000010
%RSD	62.64638
#1	-.000004
#2	-.000022
#3	-.000022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2649.325	52163.06	5235.091	2012.231	4345.193
Stddev	5.711	77.16	33.511	4.106	7.815
%RSD	.2155571	.1479196	.6401147	.2040475	.1798448
#1	2646.940	52194.26	5226.114	2016.547	4338.454
#2	2655.842	52219.73	5206.984	2011.773	4353.759
#3	2645.194	52075.19	5272.176	2008.373	4343.365

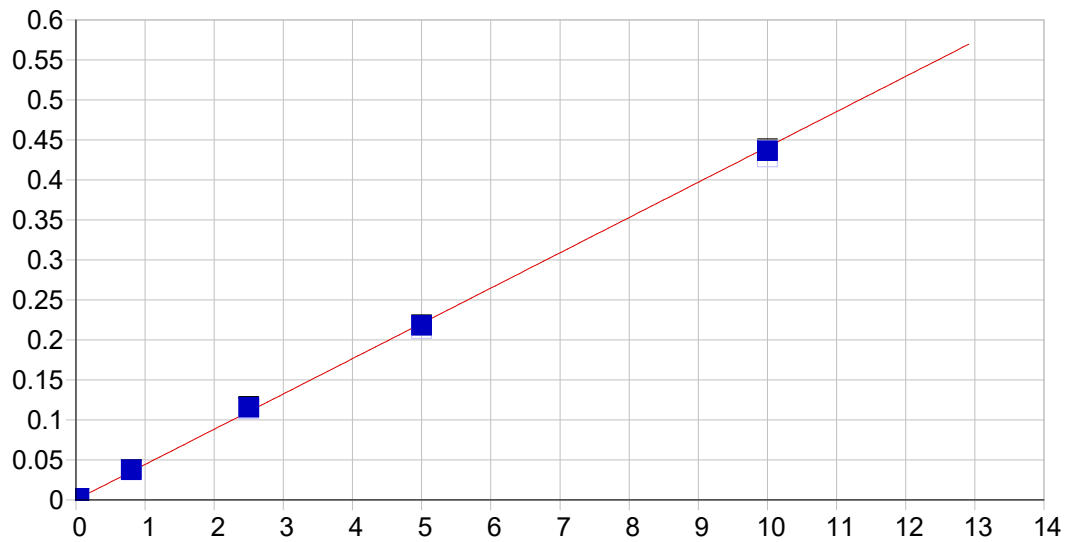


As 189.042 {479}

Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset): -0.000111 Re-Slope: 1.000000
A1 (Gain): 0.035293 Y-int: 0.000000
A2 (Curvature): 0.000000
n (Exponent): 1.000000
Correlation: 0.999880 Status: OK.
Std Error of Est: 0.000013
Predicted MDL: 0.003756
Predicted MQL: 0.012521

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00011	.000	1
S1	.02000	.02029	.000	1.45	.00060	.000	1
S3	2.5000	2.5827	.083	3.31	.09094	.000	1
S4	5.0000	4.9199	-.080	-1.60	.17334	.001	1
S5	10.000	9.9807	-.019	-.193	.35175	.001	1
S2	.80000	.81641	.016	2.05	.02867	.000	1

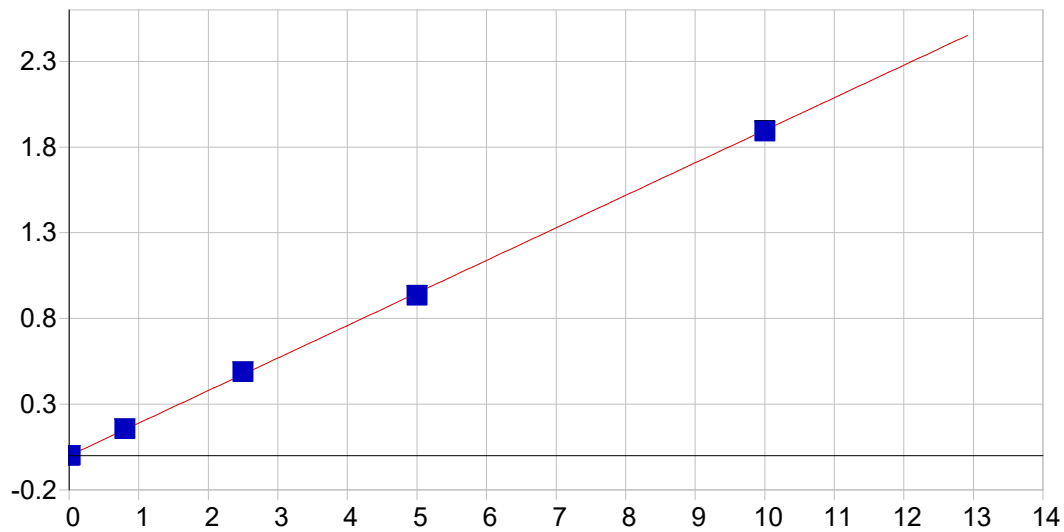


TI 190.856 {477}

Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset): 0.000175 Re-Slope: 1.000000
A1 (Gain): 0.044099 Y-int: 0.000000
A2 (Curvature): 0.000000
n (Exponent): 1.000000
Correlation: 0.999709 Status: OK.
Std Error of Est: 0.000035
Predicted MDL: 0.002392
Predicted MQL: 0.007972

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00017	.000	1
S1	.04000	.03836	-.002	-4.09	.00175	.000	1
S3	2.5000	2.6148	.115	4.59	.11345	.001	1
S4	5.0000	4.9438	-.056	-1.12	.21413	.001	1
S5	10.000	9.8927	-.107	-1.07	.42831	.002	1
S2	.80000	.85022	.050	6.28	.03702	.000	1

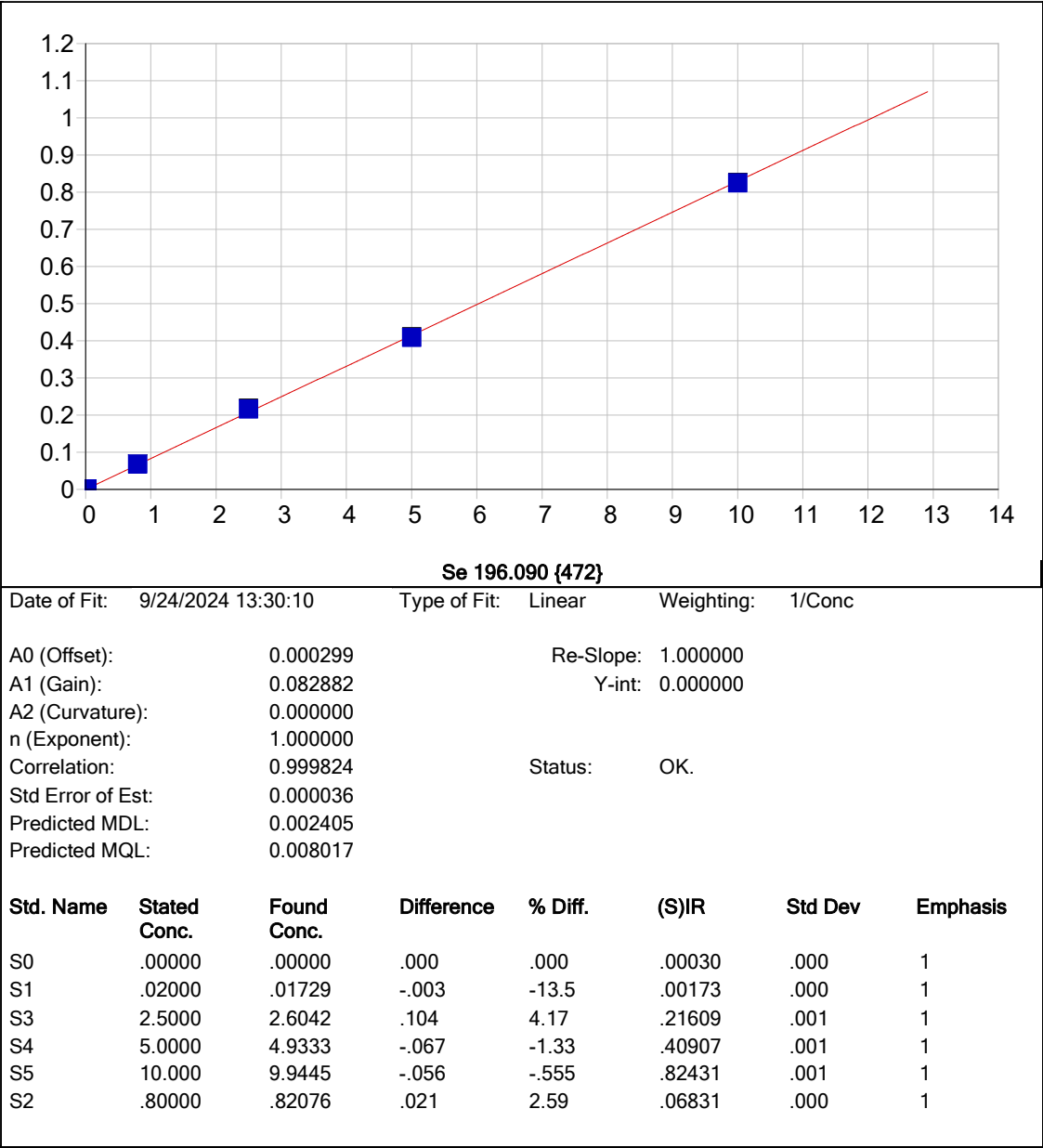


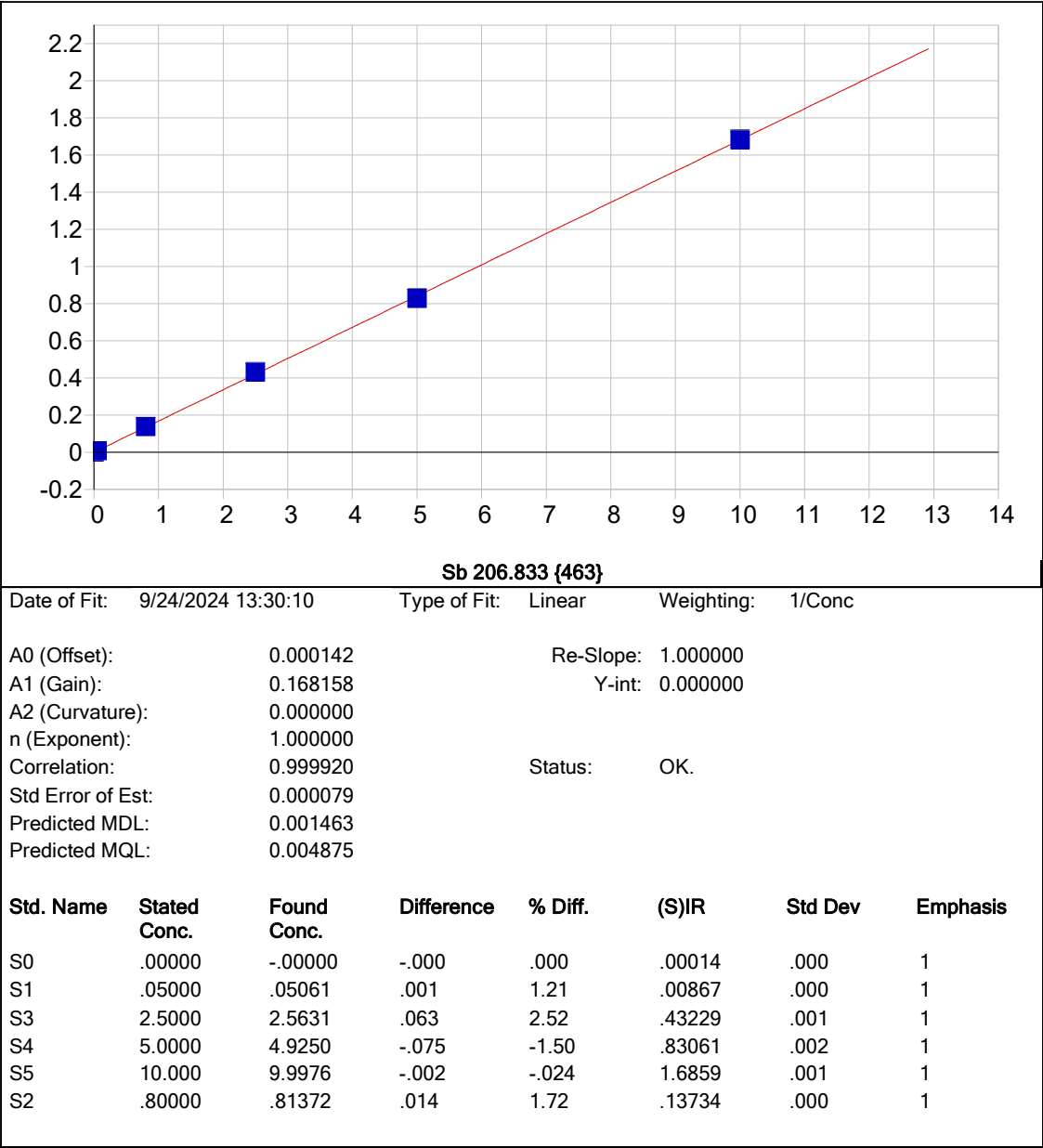
Pb 220.353 {453}

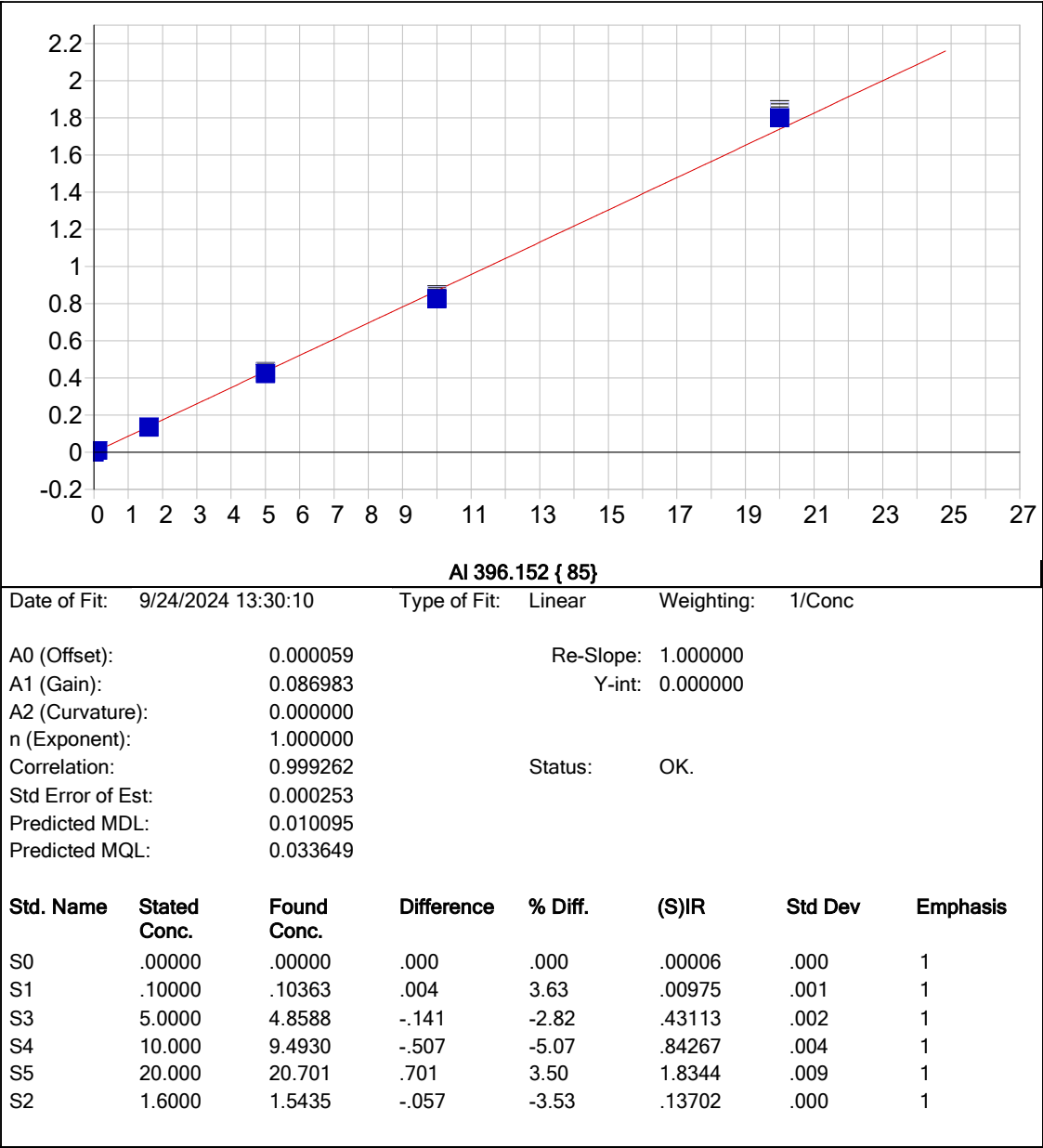
Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

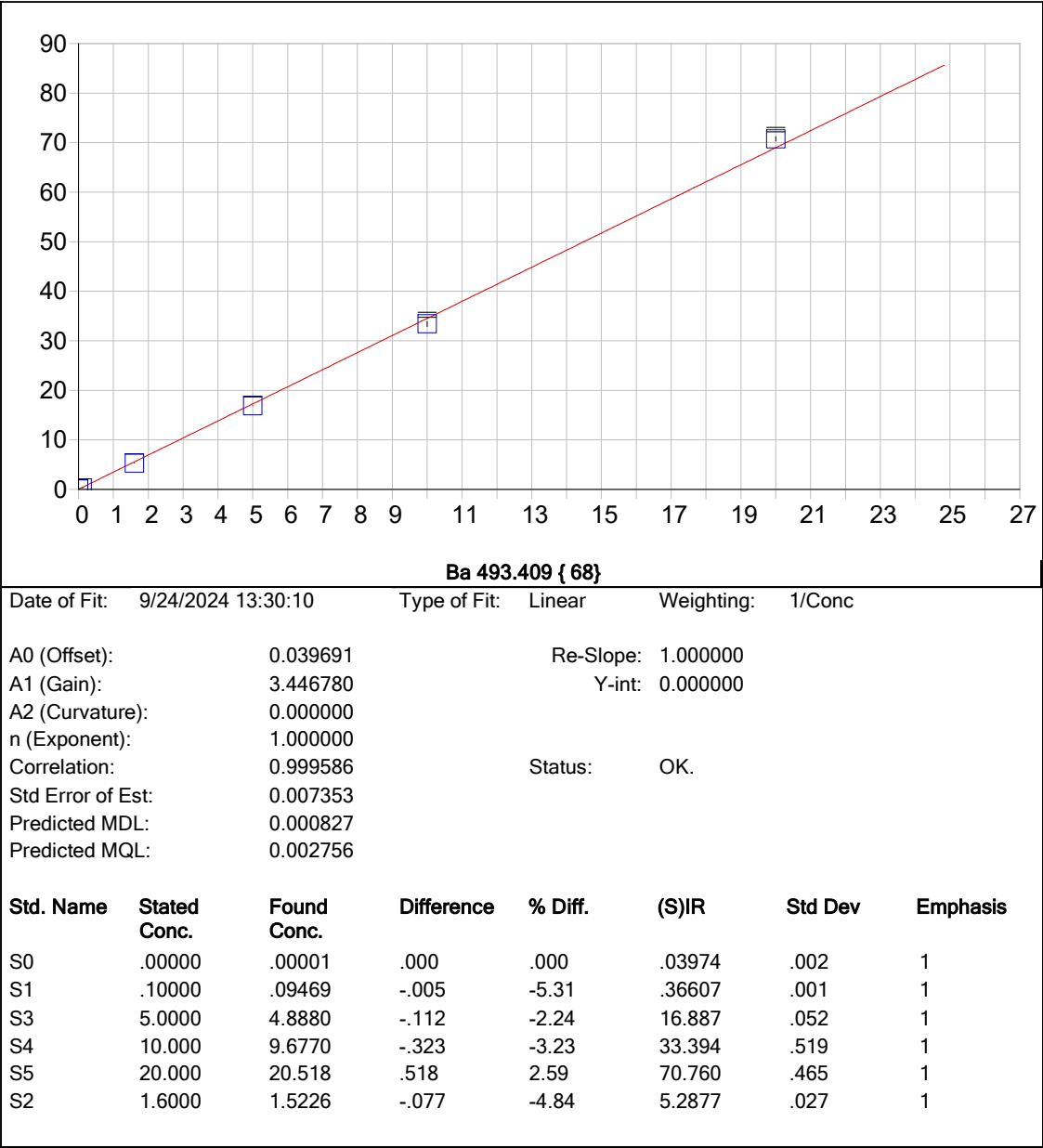
A0 (Offset): -0.000219 Re-Slope: 1.000000
A1 (Gain): 0.189818 Y-int: 0.000000
A2 (Curvature): 0.000000
n (Exponent): 1.000000
Correlation: 0.999872 Status: OK.
Std Error of Est: 0.000055
Predicted MDL: 0.001385
Predicted MQL: 0.004618

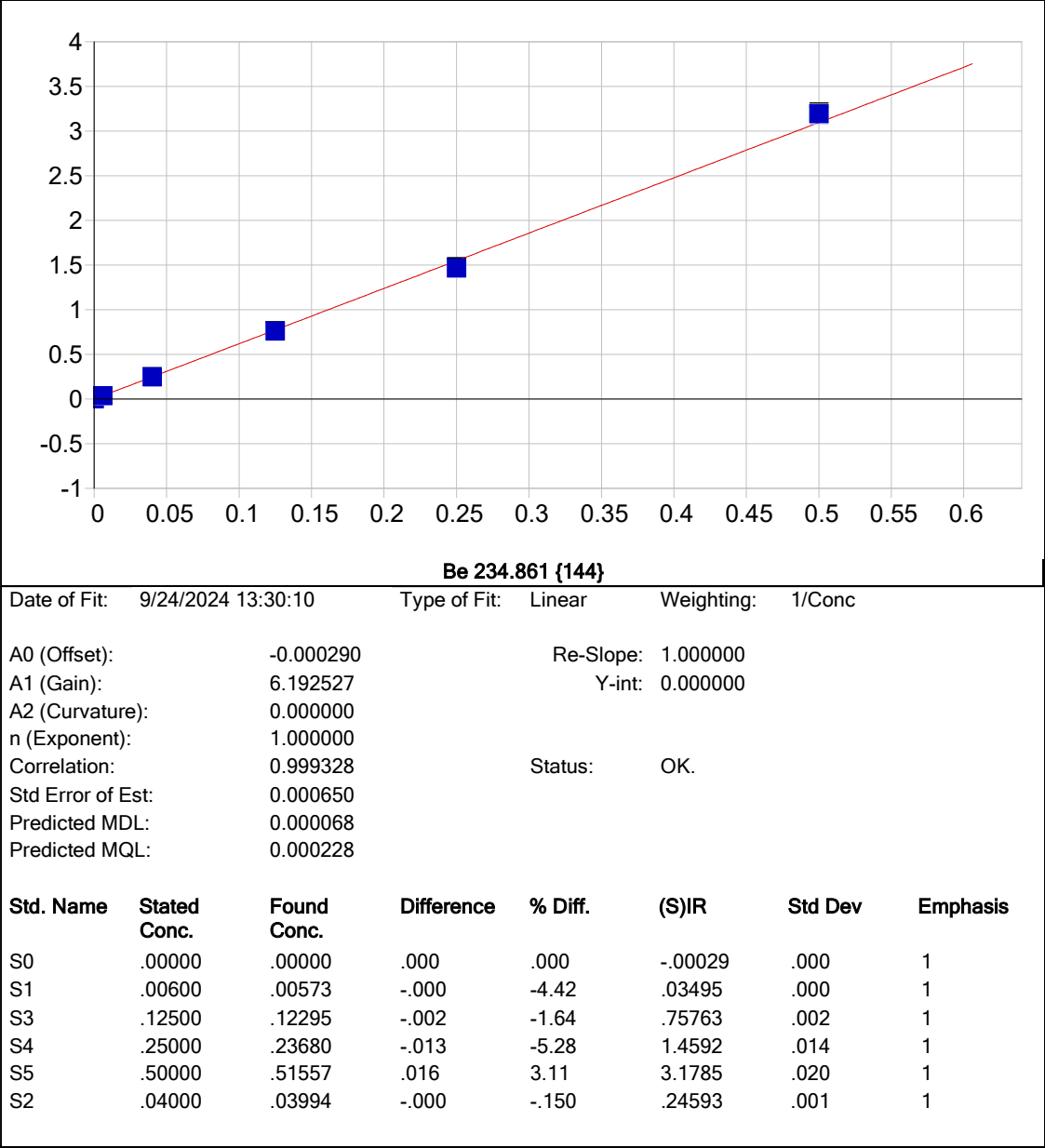
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00022	.000	1
S1	.01200	.01403	.002	16.9	.00240	.000	1
S3	2.5000	2.5775	.078	3.10	.48851	.002	1
S4	5.0000	4.9217	-.078	-1.57	.93296	.002	1
S5	10.000	9.9757	-.024	-.243	1.8913	.002	1
S2	.80000	.82303	.023	2.88	.15584	.001	1

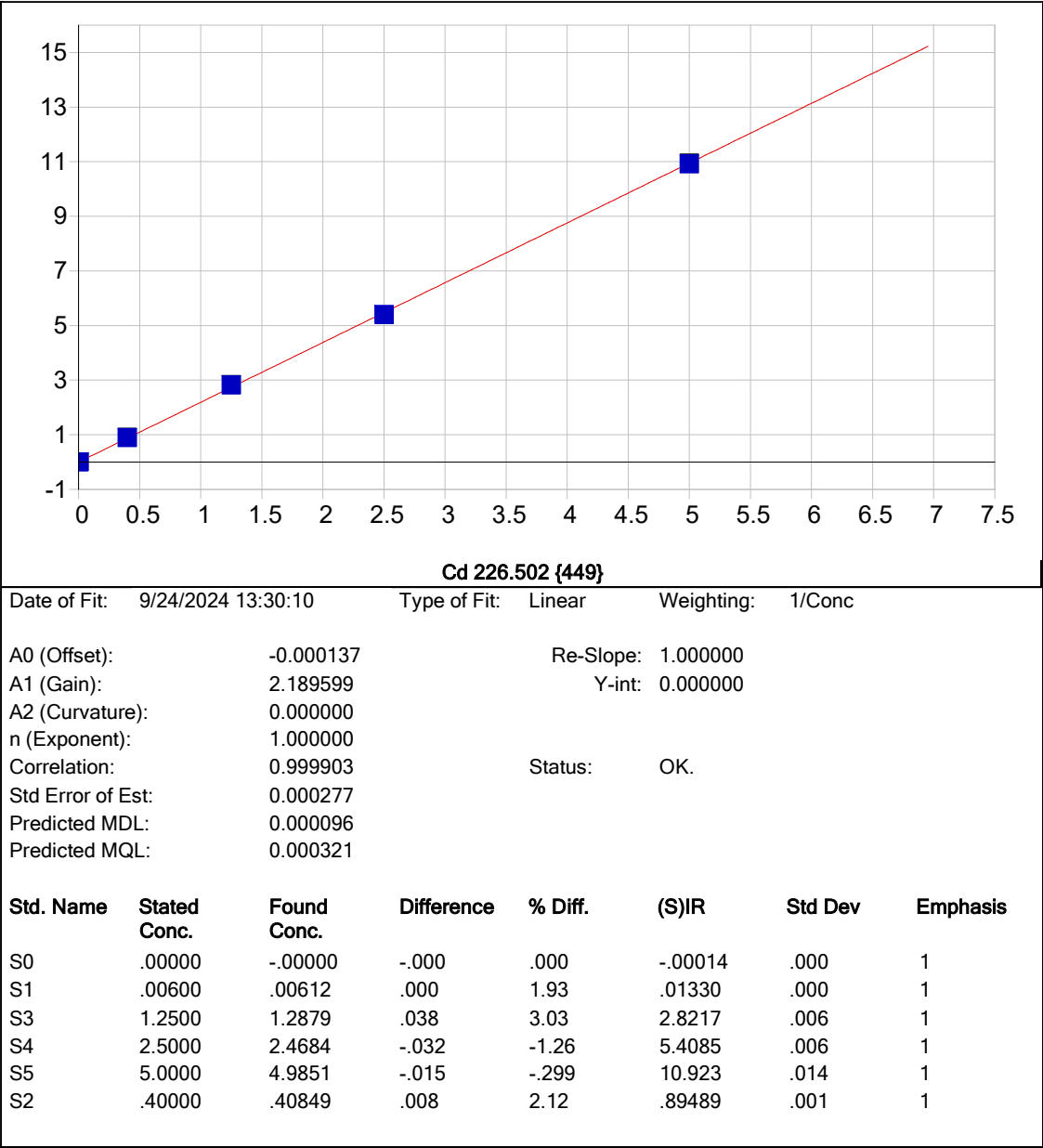


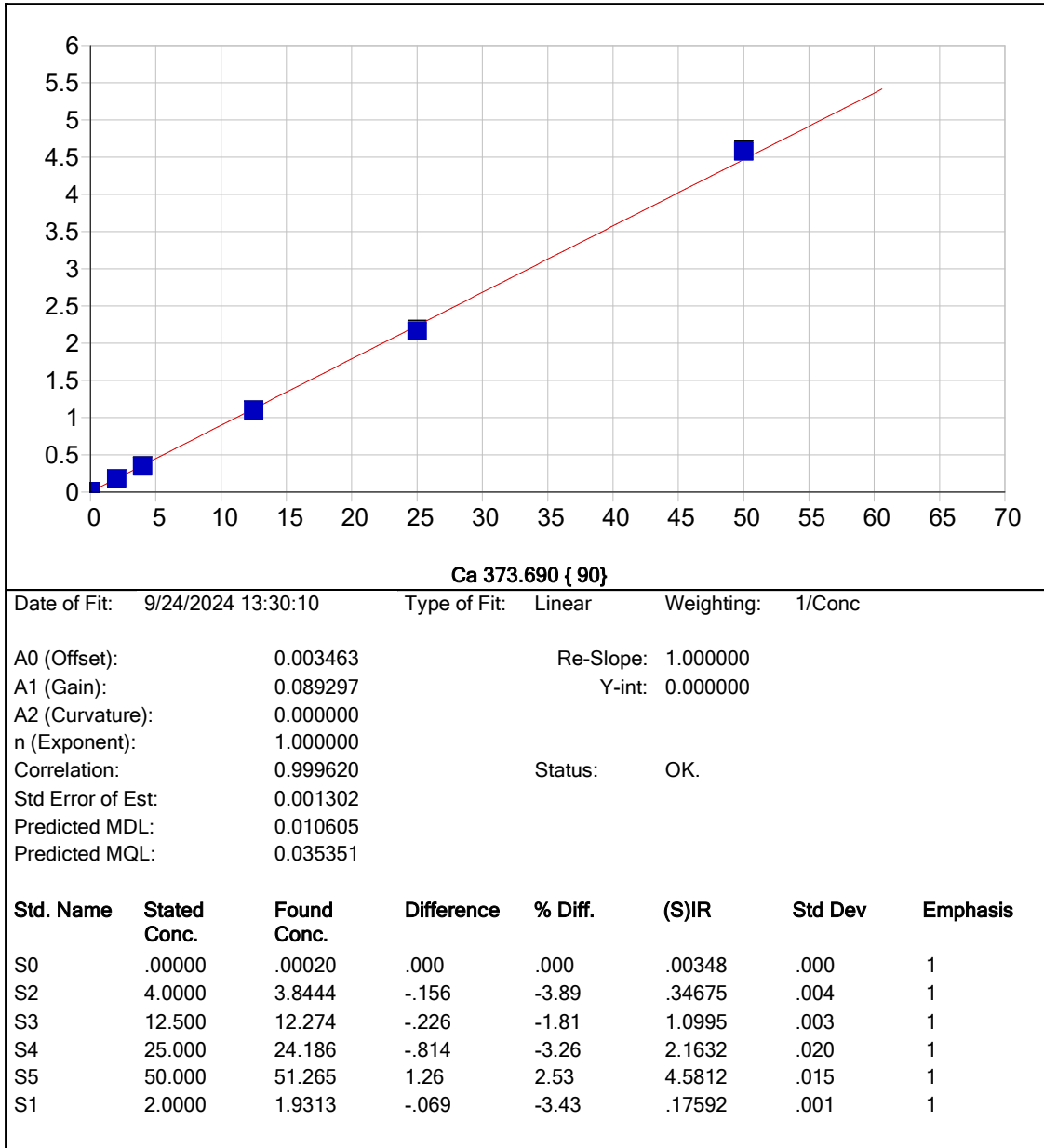


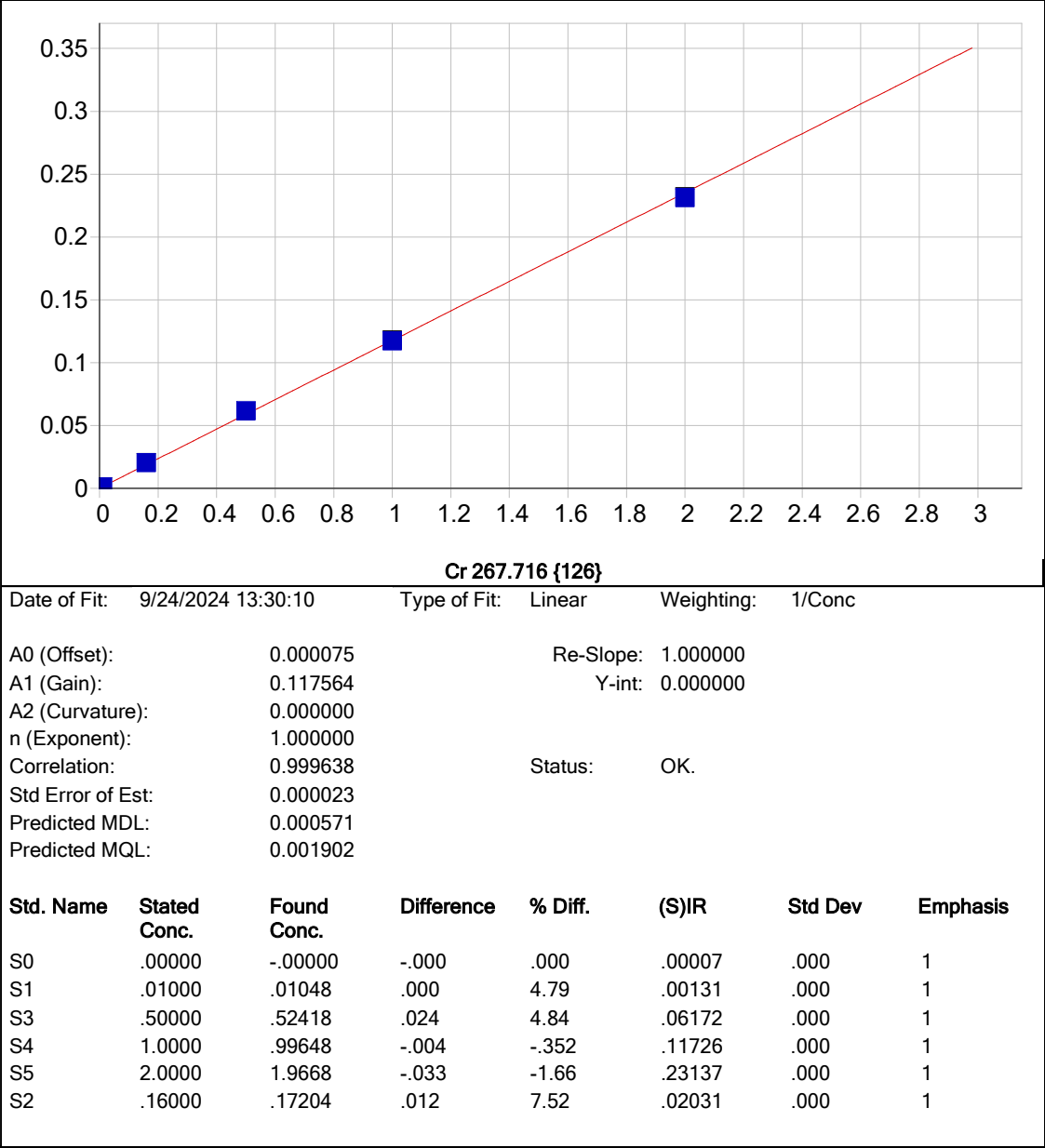


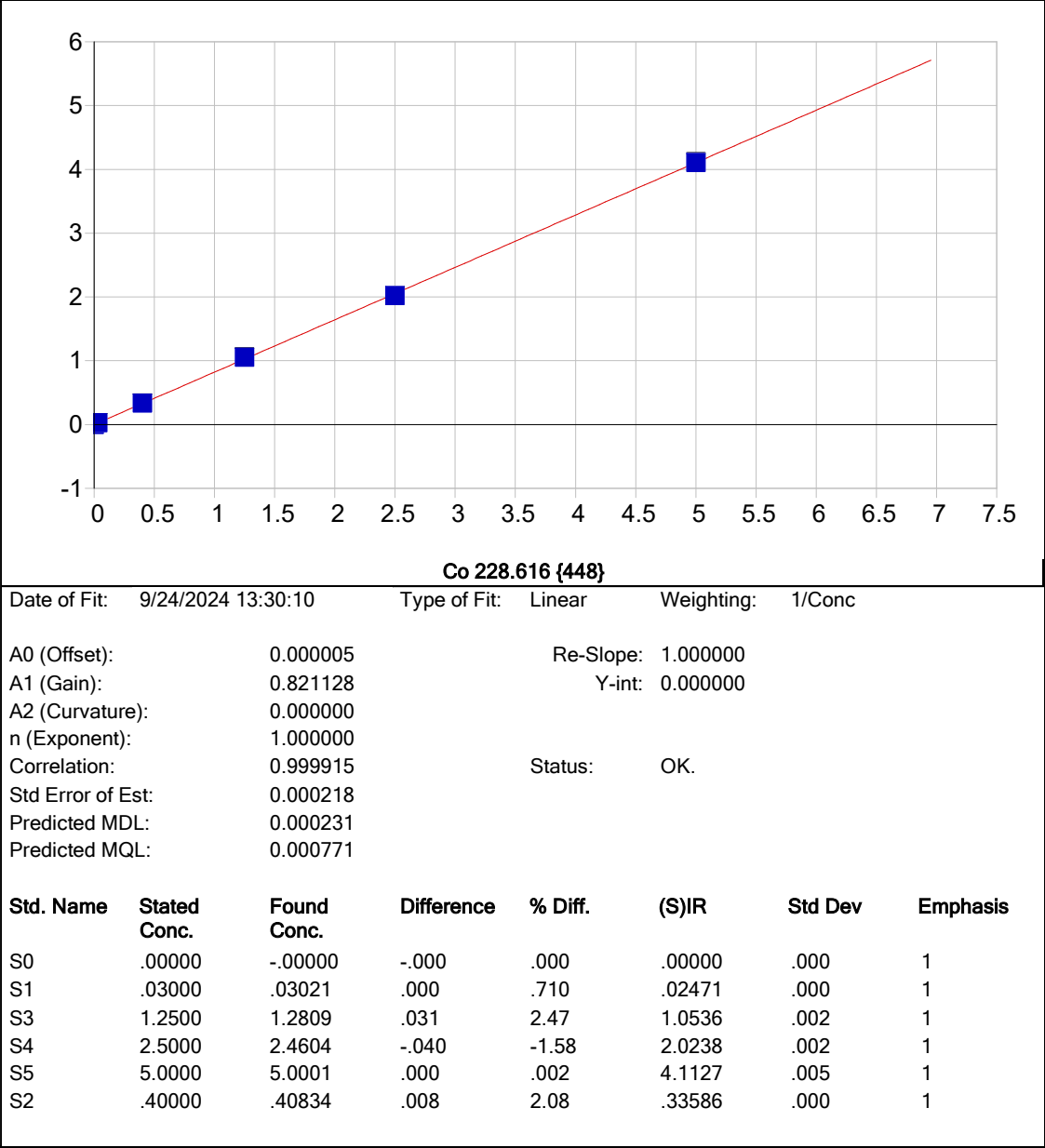


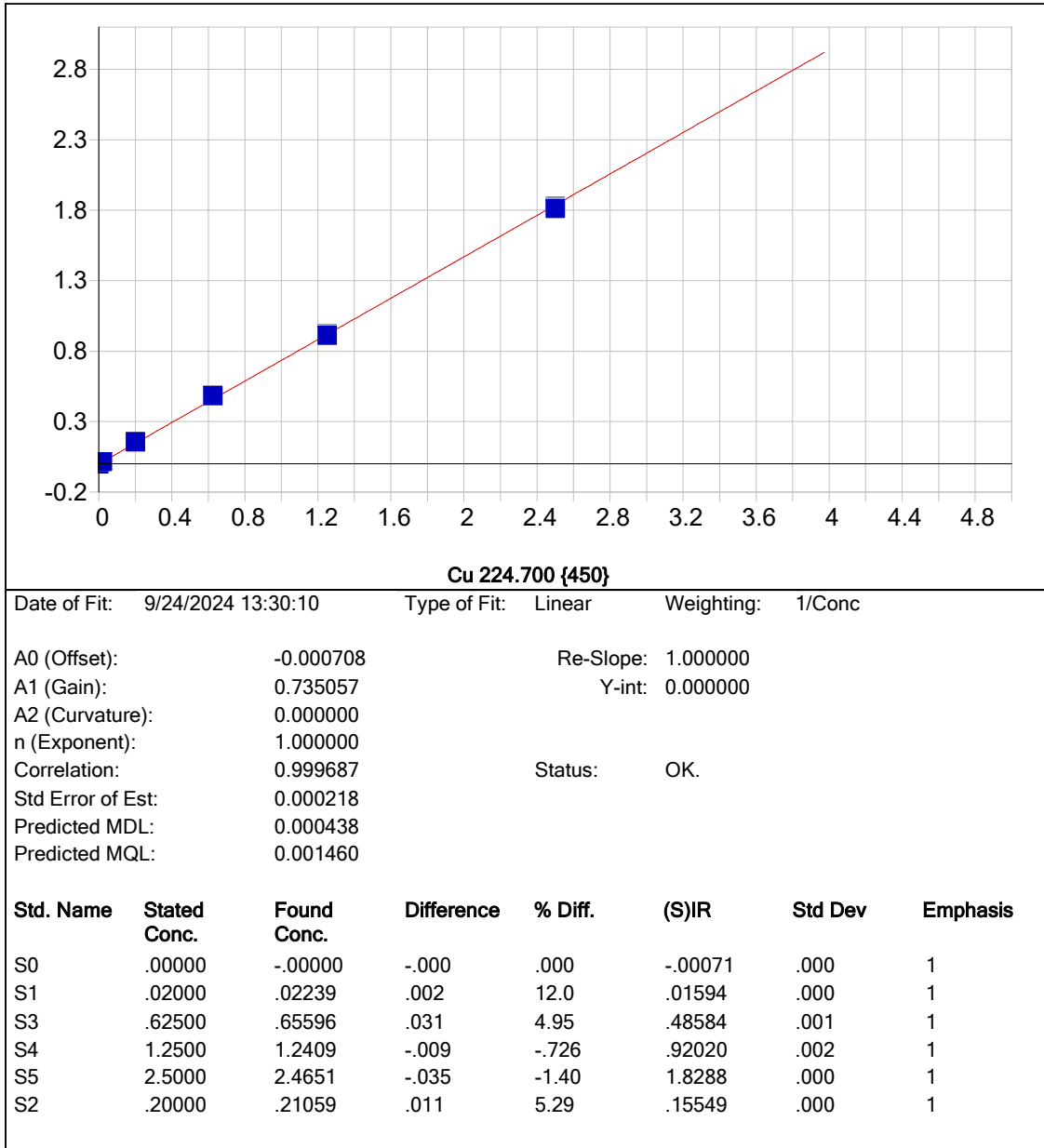


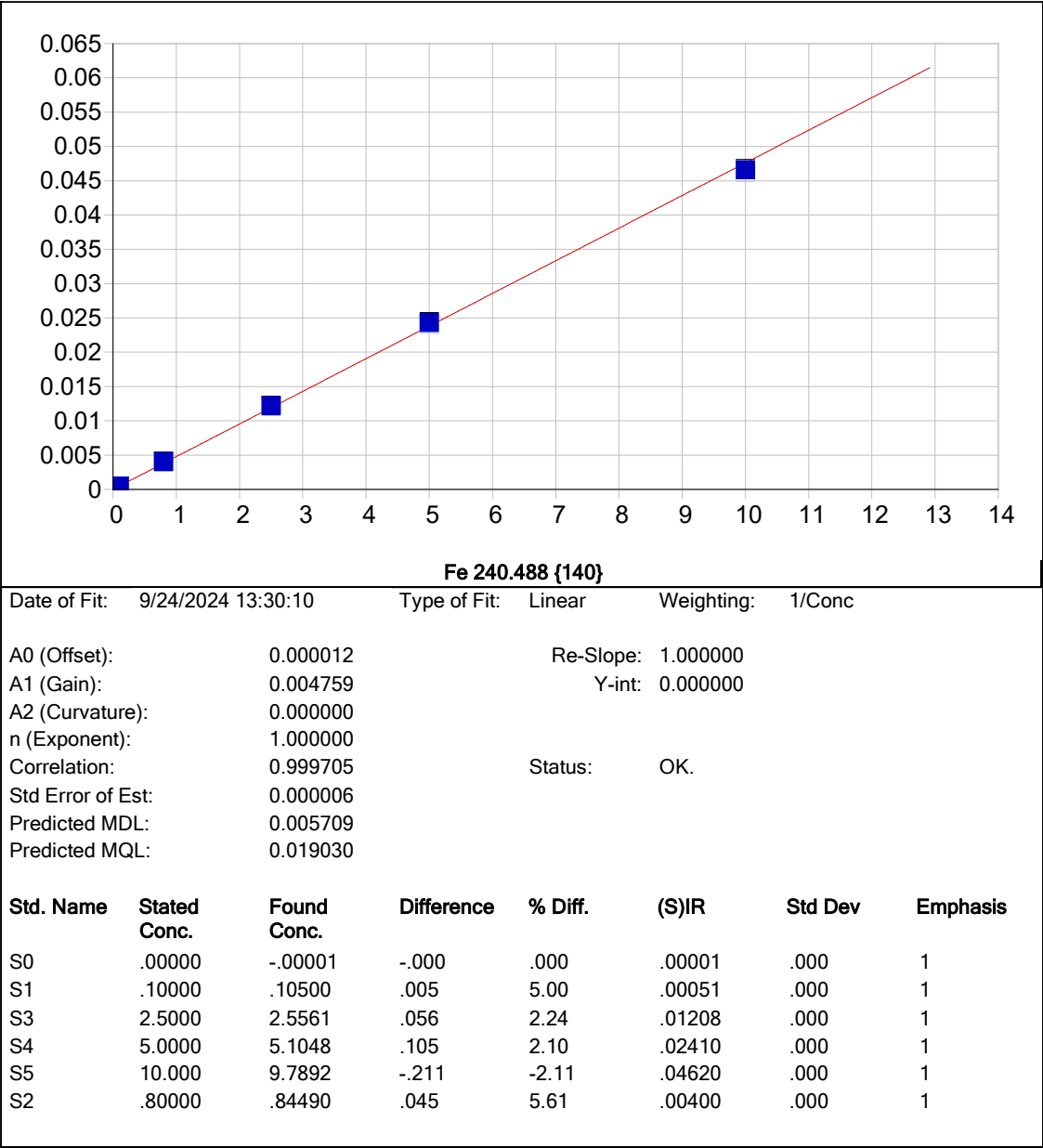


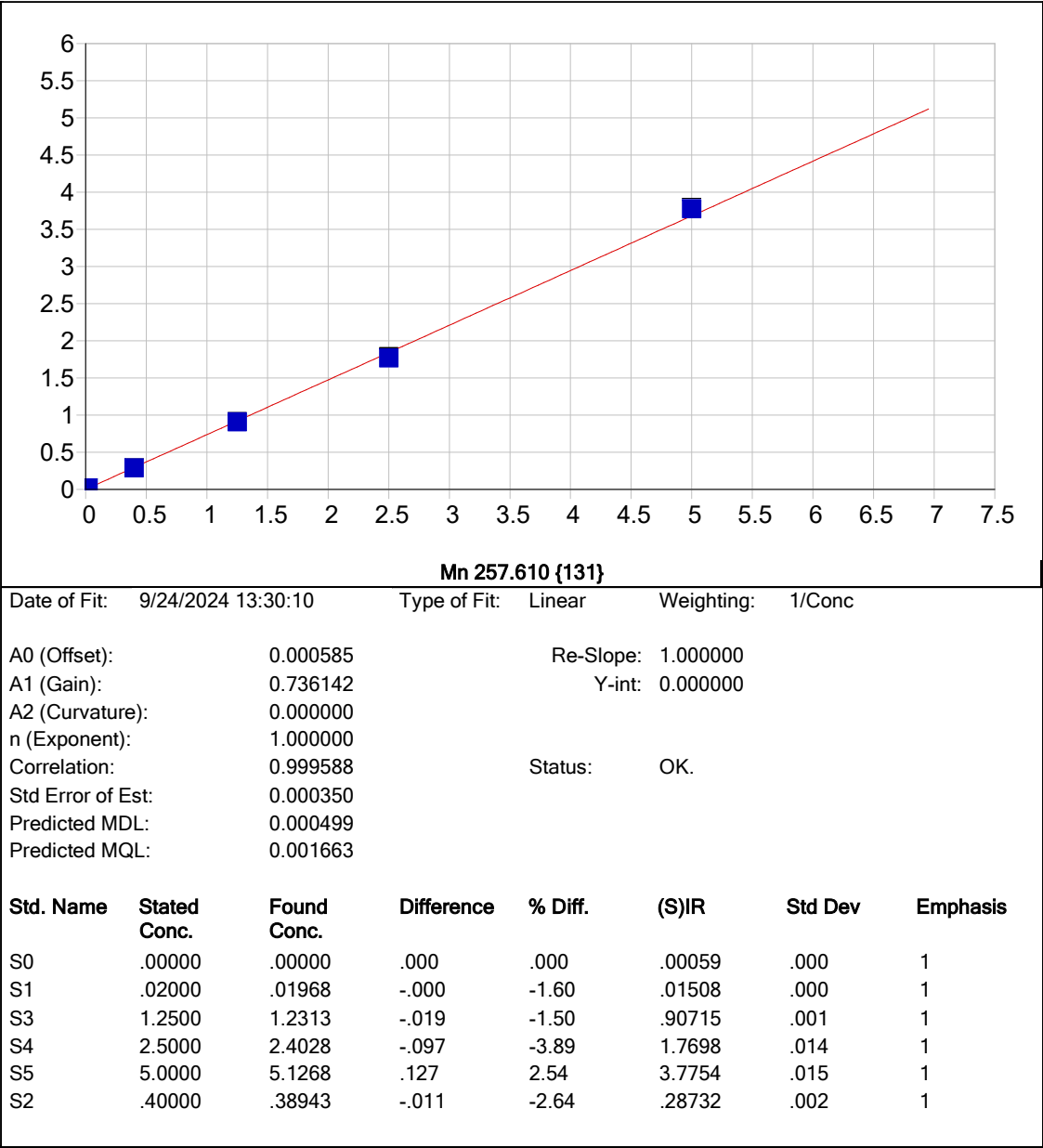


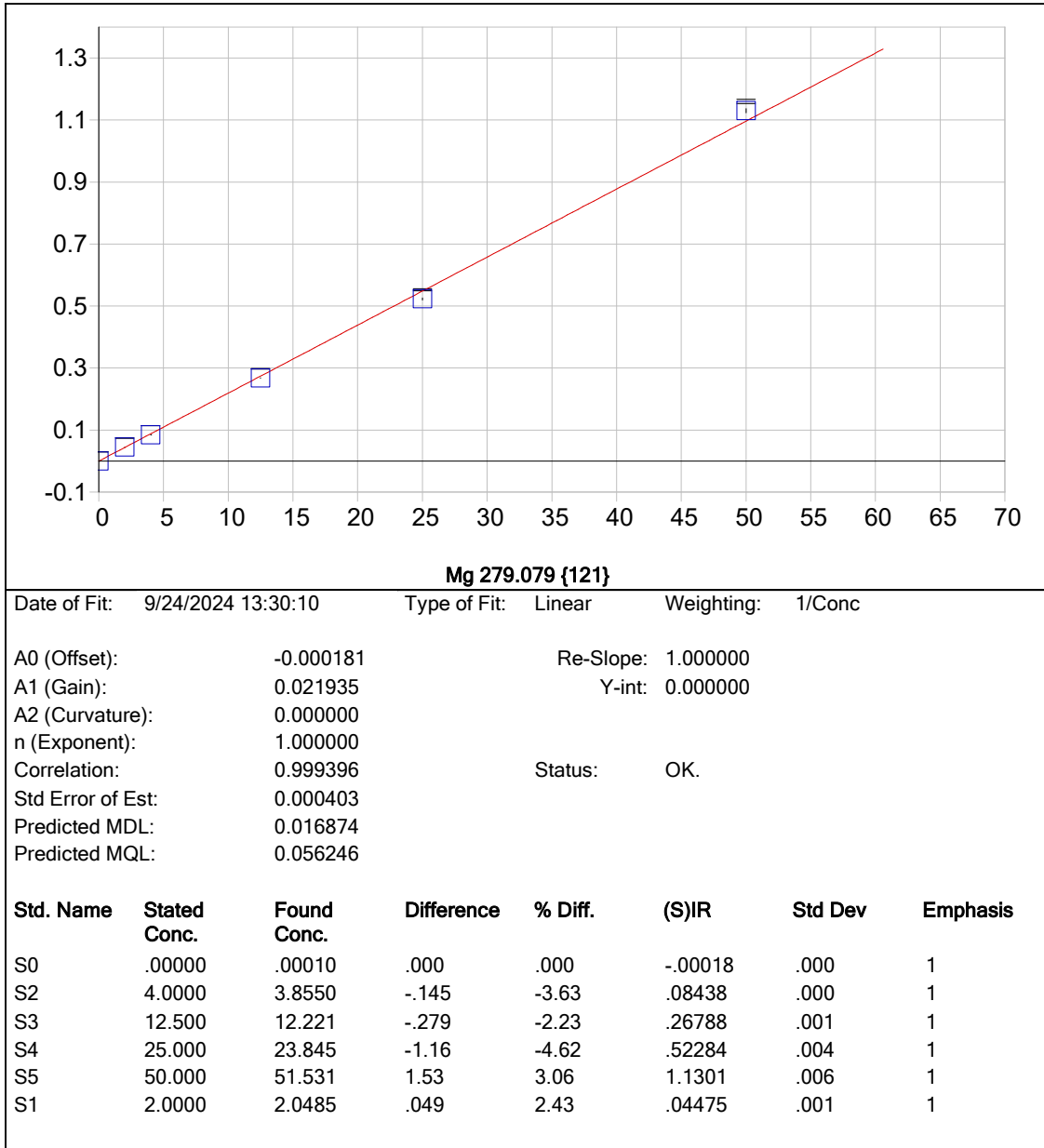


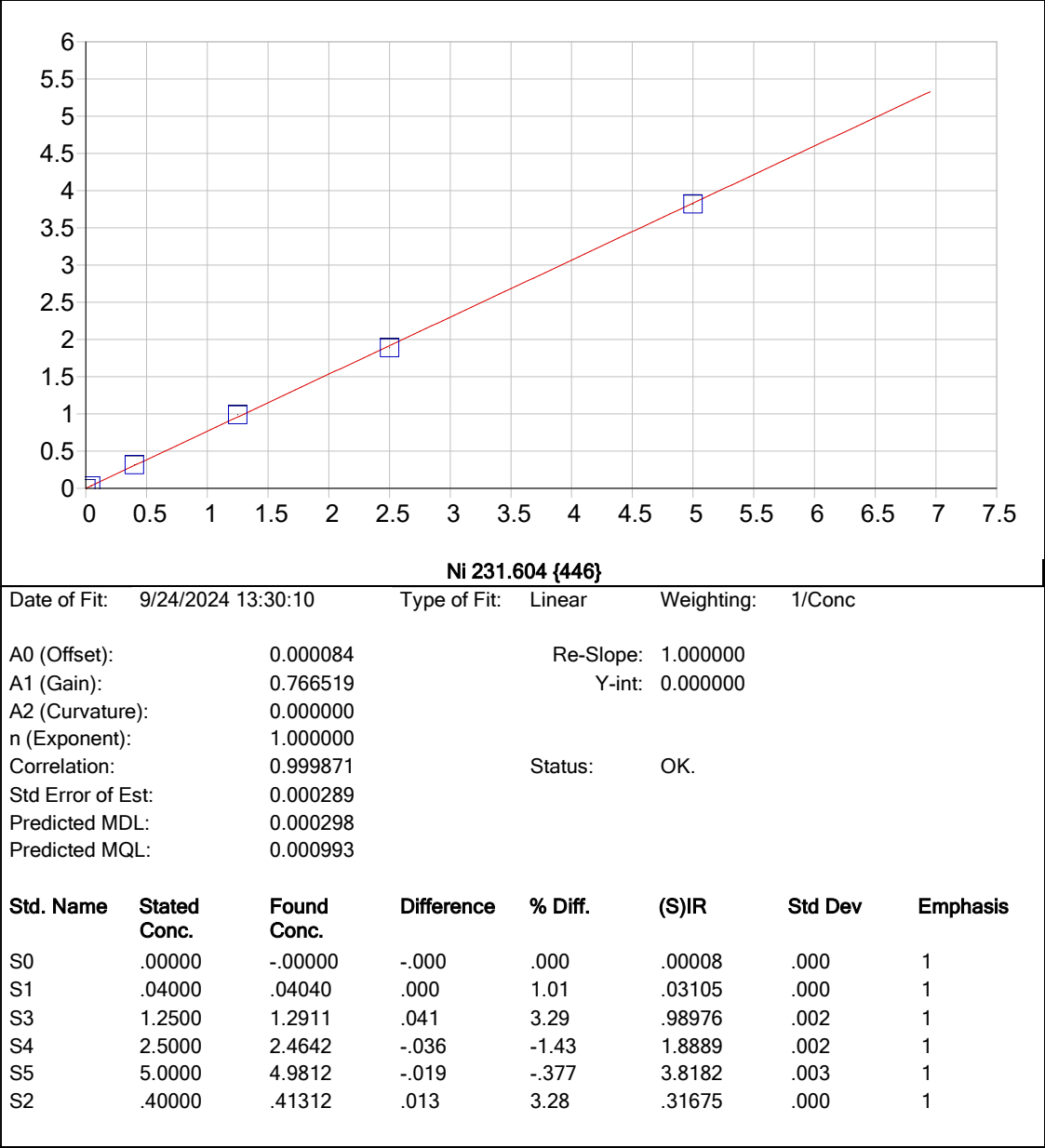


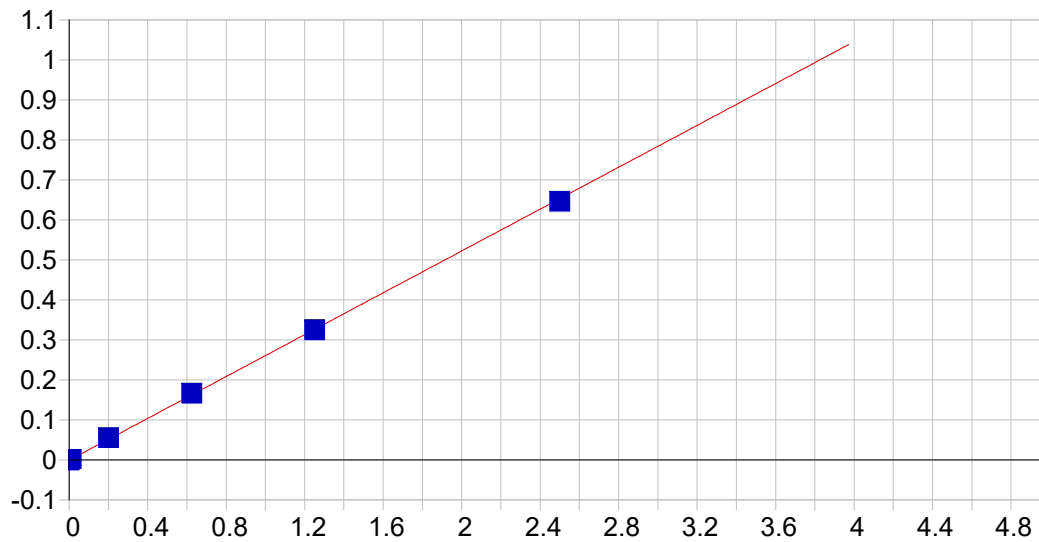










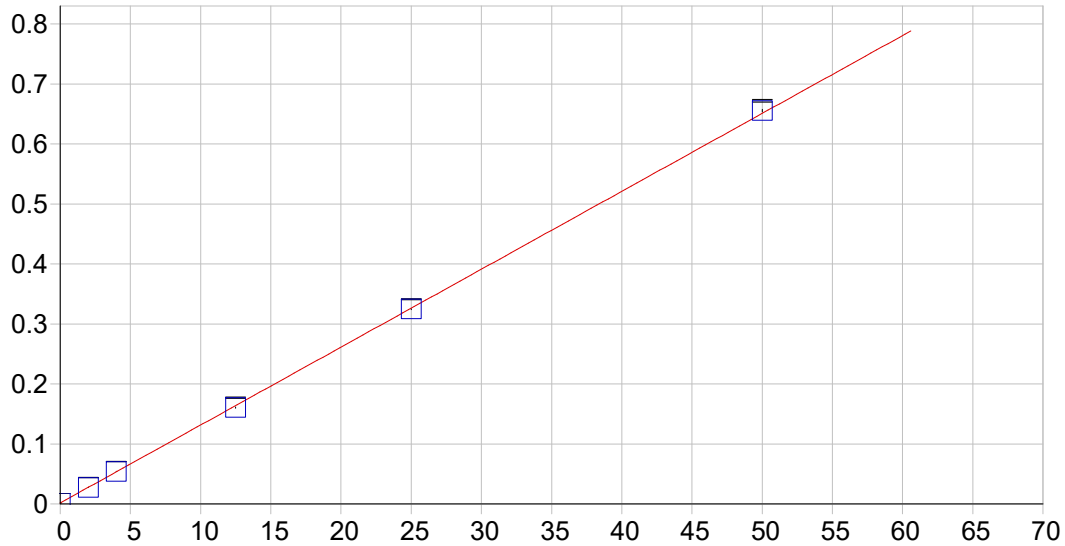


Ag 328.068 {103}

Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset):	-0.000872	Re-Slope:	1.000000
A1 (Gain):	0.261609	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999728	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.000406		
Predicted MQL:	0.001354		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00087	.000	1
S1	.01000	.01280	.003	28.0	.00246	.000	1
S3	.62500	.63992	.015	2.39	.16591	.000	1
S4	1.2500	1.2447	-.005	-.420	.32351	.000	1
S5	2.5000	2.4732	-.027	-1.07	.64363	.000	1
S2	.20000	.21431	.014	7.15	.05499	.000	1

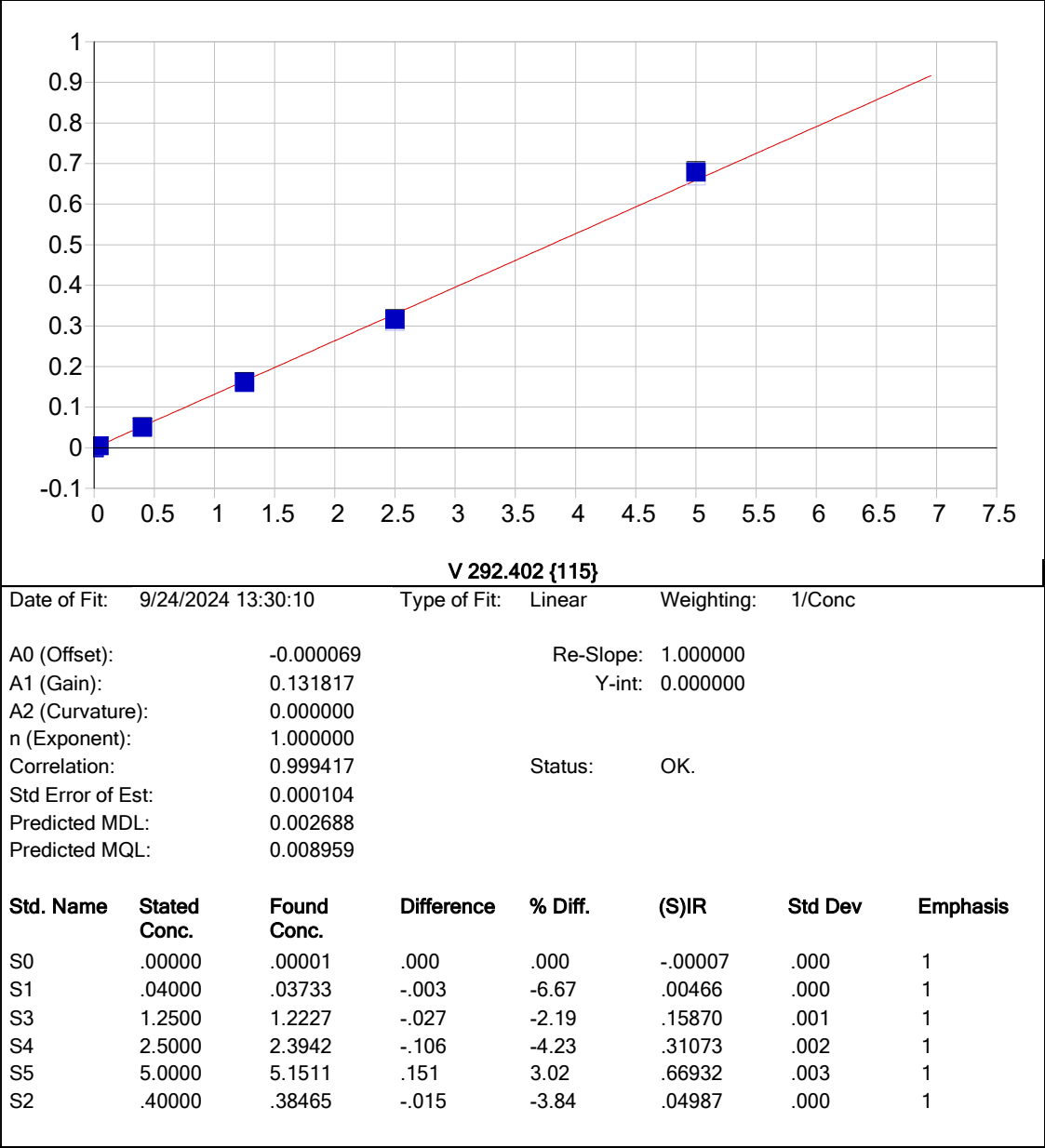


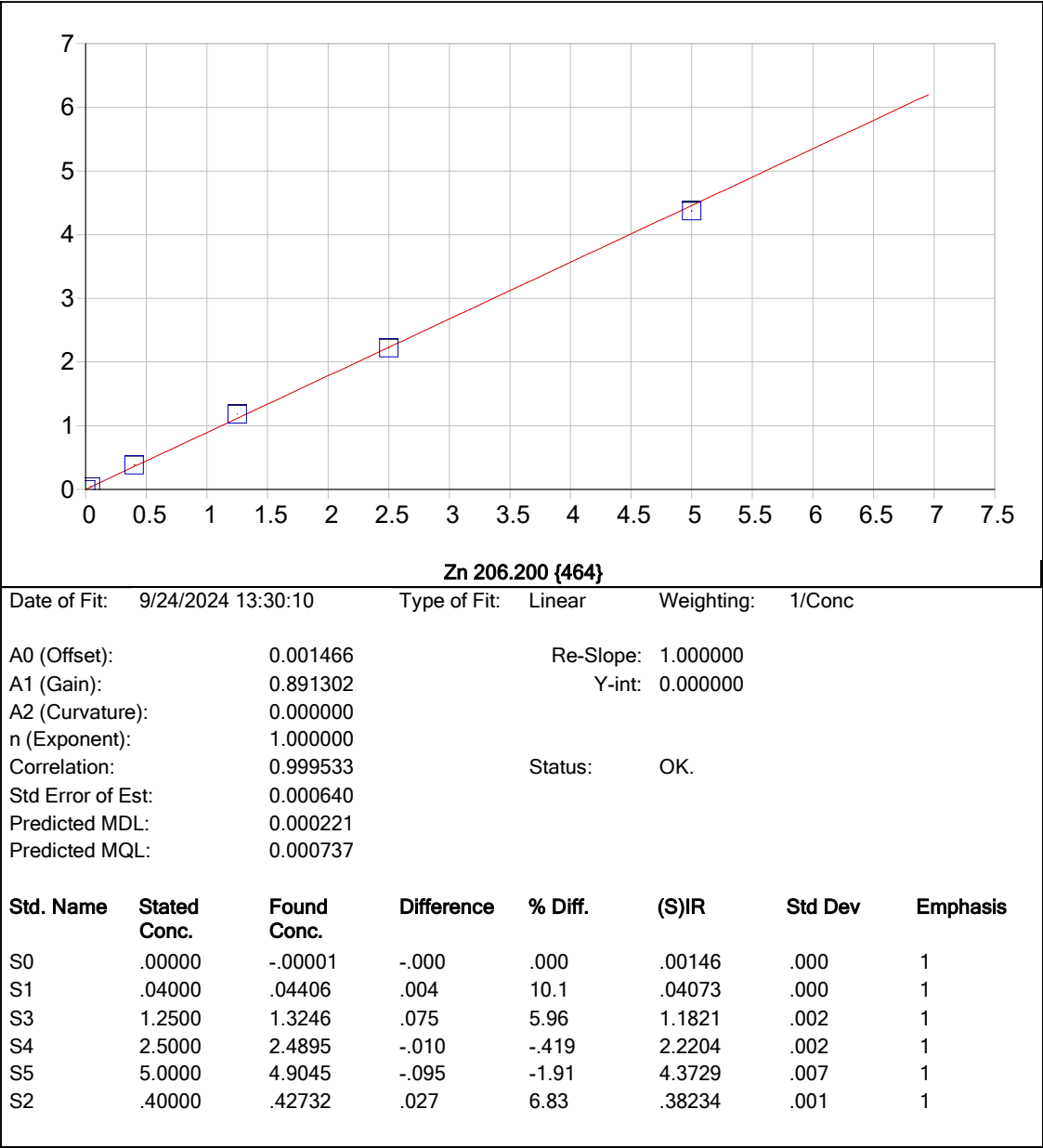
Na 589.592 { 57}

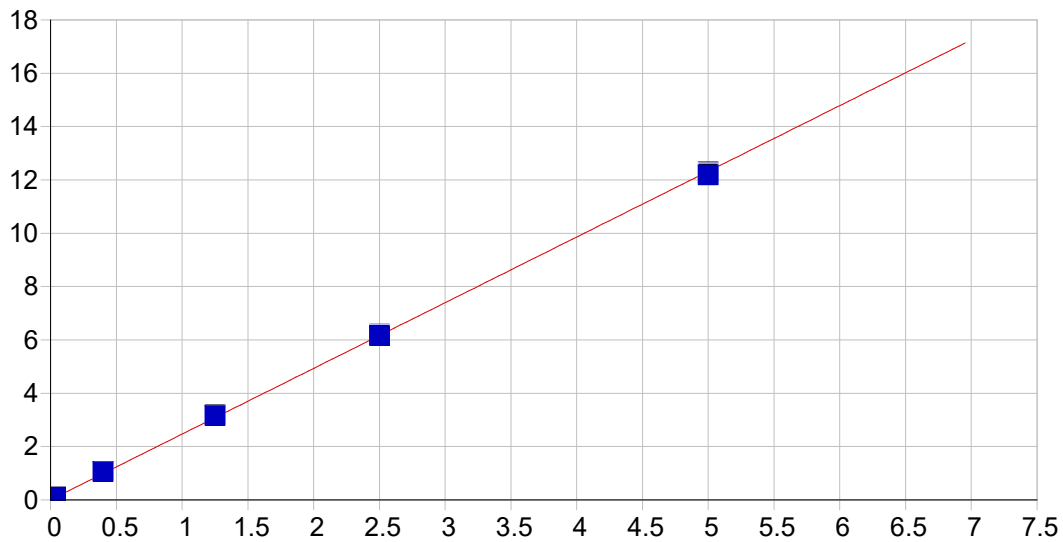
Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset): 0.001645 Re-Slope: 1.000000
A1 (Gain): 0.012985 Y-int: 0.000000
A2 (Curvature): 0.000000
n (Exponent): 1.000000
Correlation: 0.999953 Status: OK.
Std Error of Est: 0.000067
Predicted MDL: 0.013464
Predicted MQL: 0.044881

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00005	.000	.000	.00165	.000	1
S2	4.0000	4.0355	.035	.887	.05405	.000	1
S3	12.500	12.251	-.249	-1.99	.16073	.001	1
S4	25.000	24.881	-.119	-.476	.32472	.001	1
S5	50.000	50.361	.361	.722	.65557	.002	1
S1	2.0000	1.9714	-.029	-1.43	.02724	.000	1





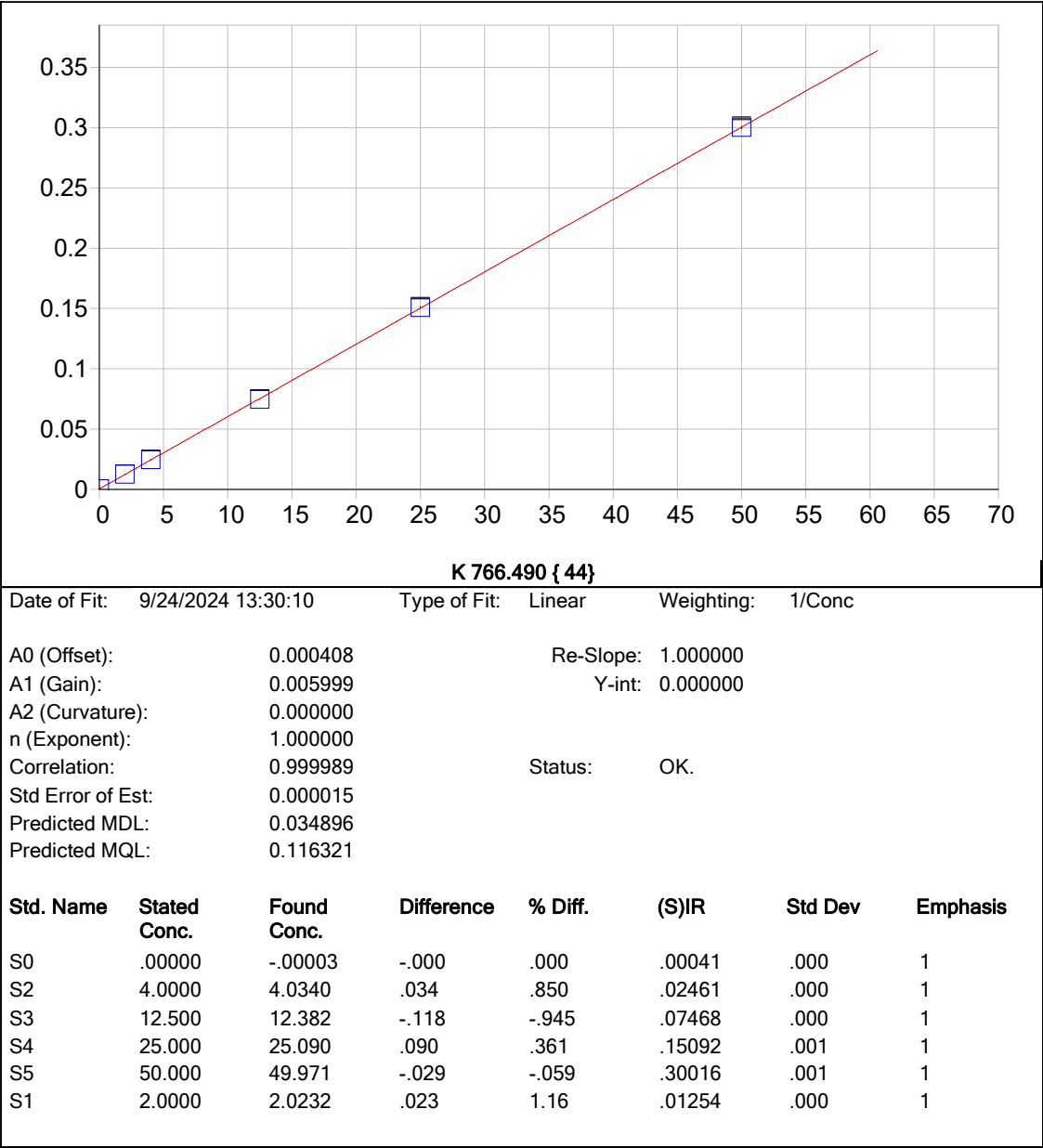


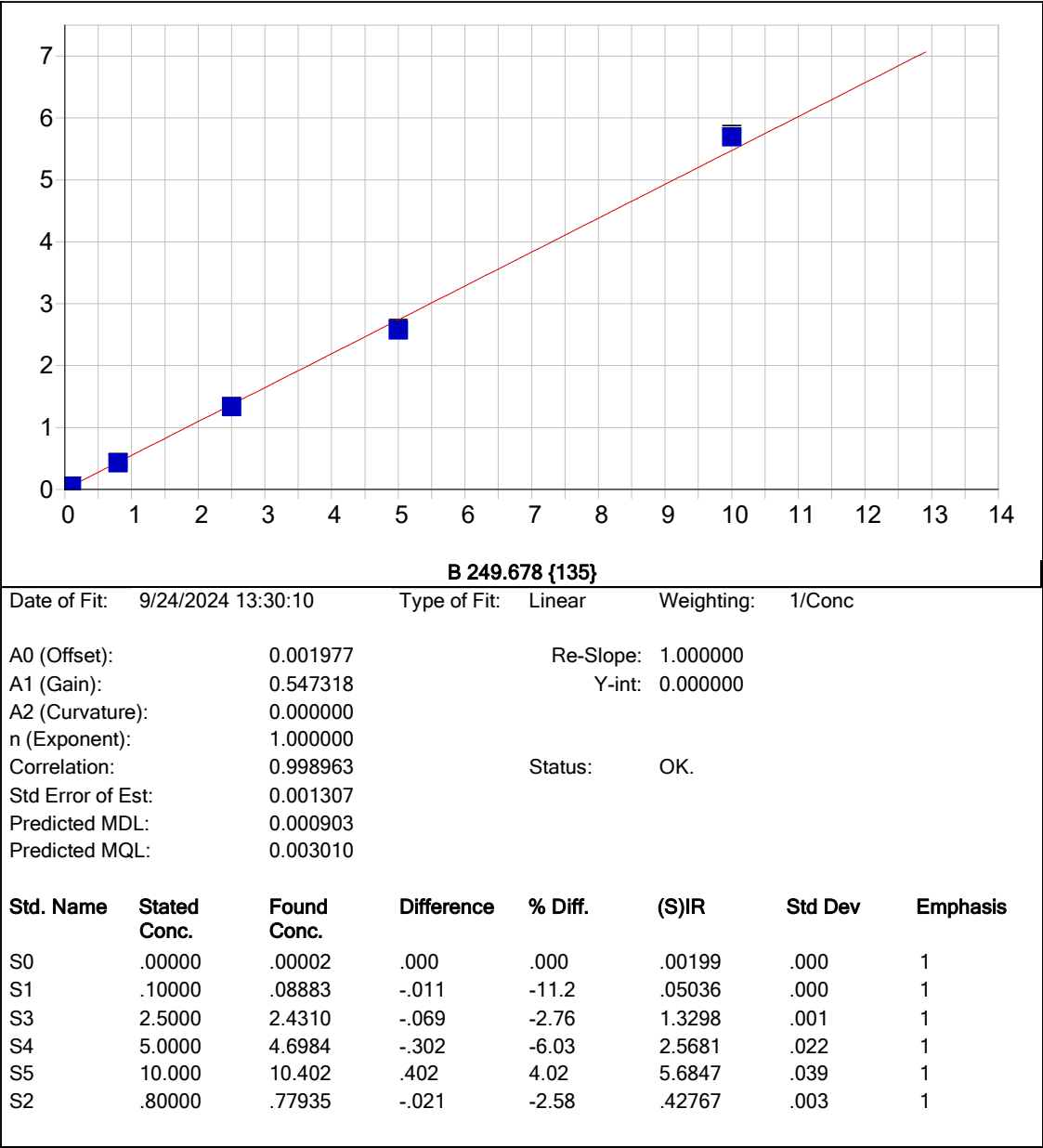
Zn 213.856 {158}

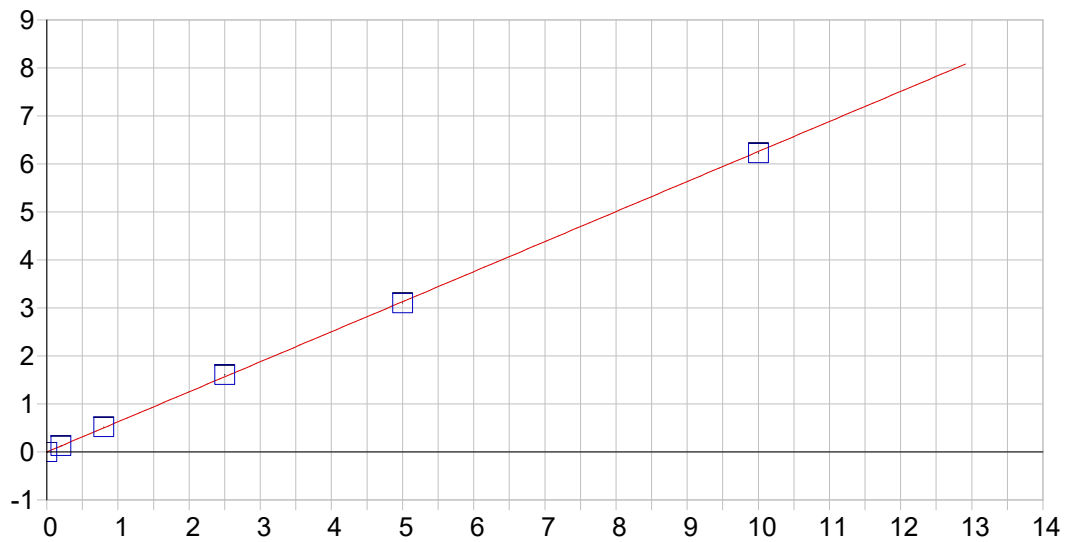
Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset):	0.005223	Re-Slope:	1.000000
A1 (Gain):	2.463459	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999793	Status:	OK.
Std Error of Est:	0.001185		
Predicted MDL:	0.000301		
Predicted MQL:	0.001003		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00520	.000	1
S1	.04000	.04410	.004	10.2	.11454	.001	1
S3	1.2500	1.2803	.030	2.42	3.1806	.007	1
S4	2.5000	2.4971	-.003	-.118	6.1994	.015	1
S5	5.0000	4.9403	-.060	-1.19	12.261	.043	1
S2	.40000	.42823	.028	7.06	1.0670	.004	1





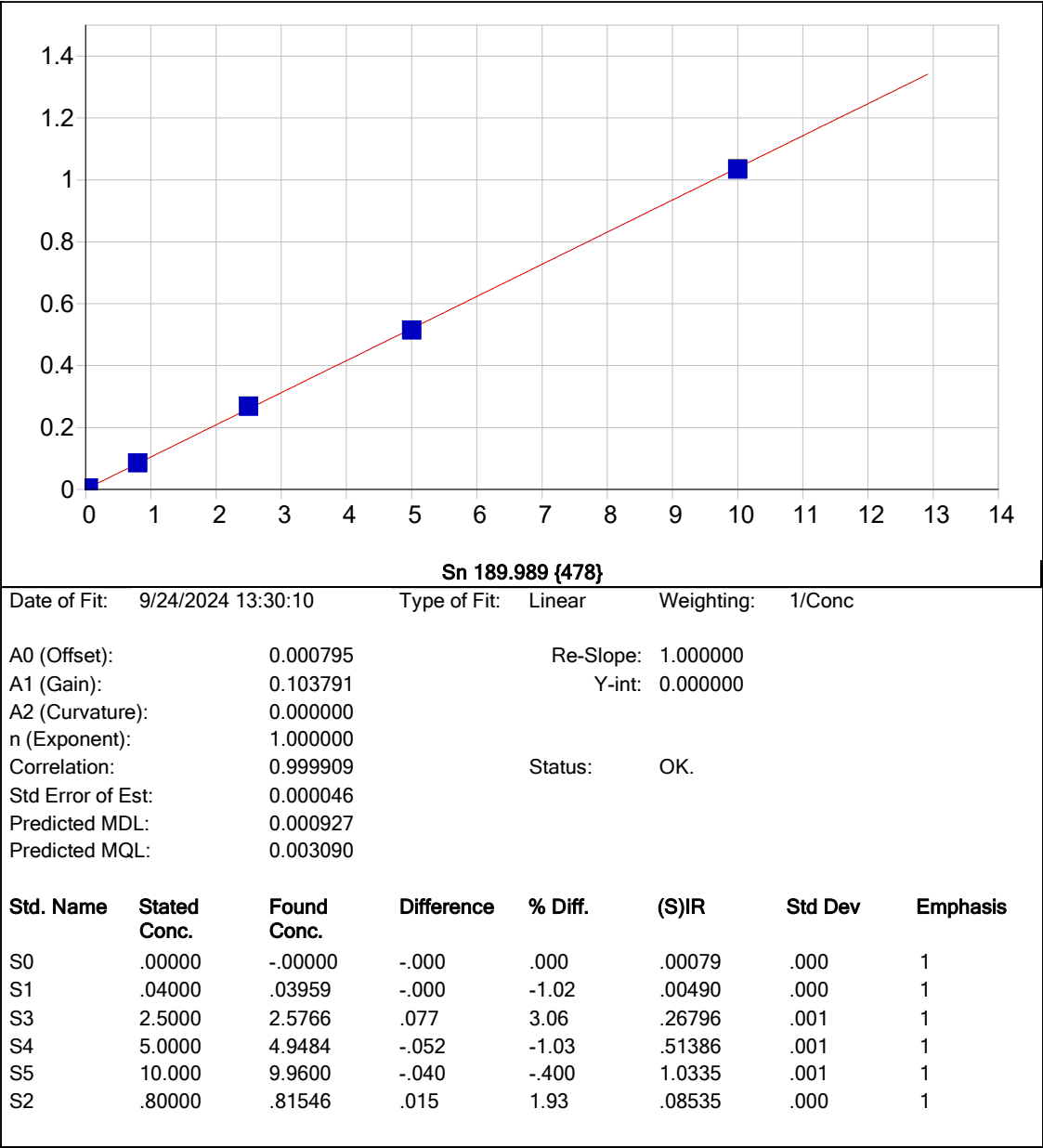


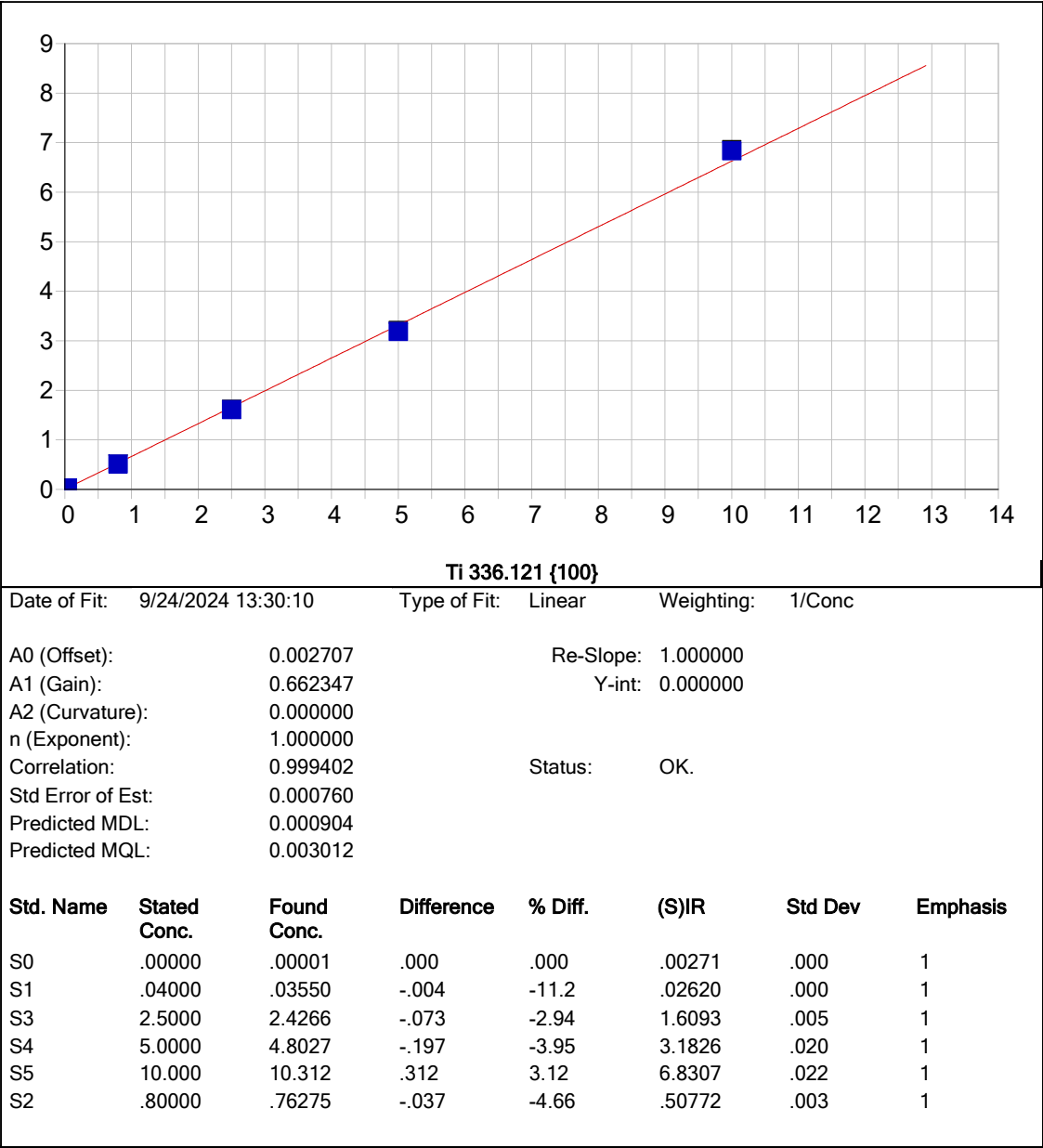
Mo 202.030 {467}

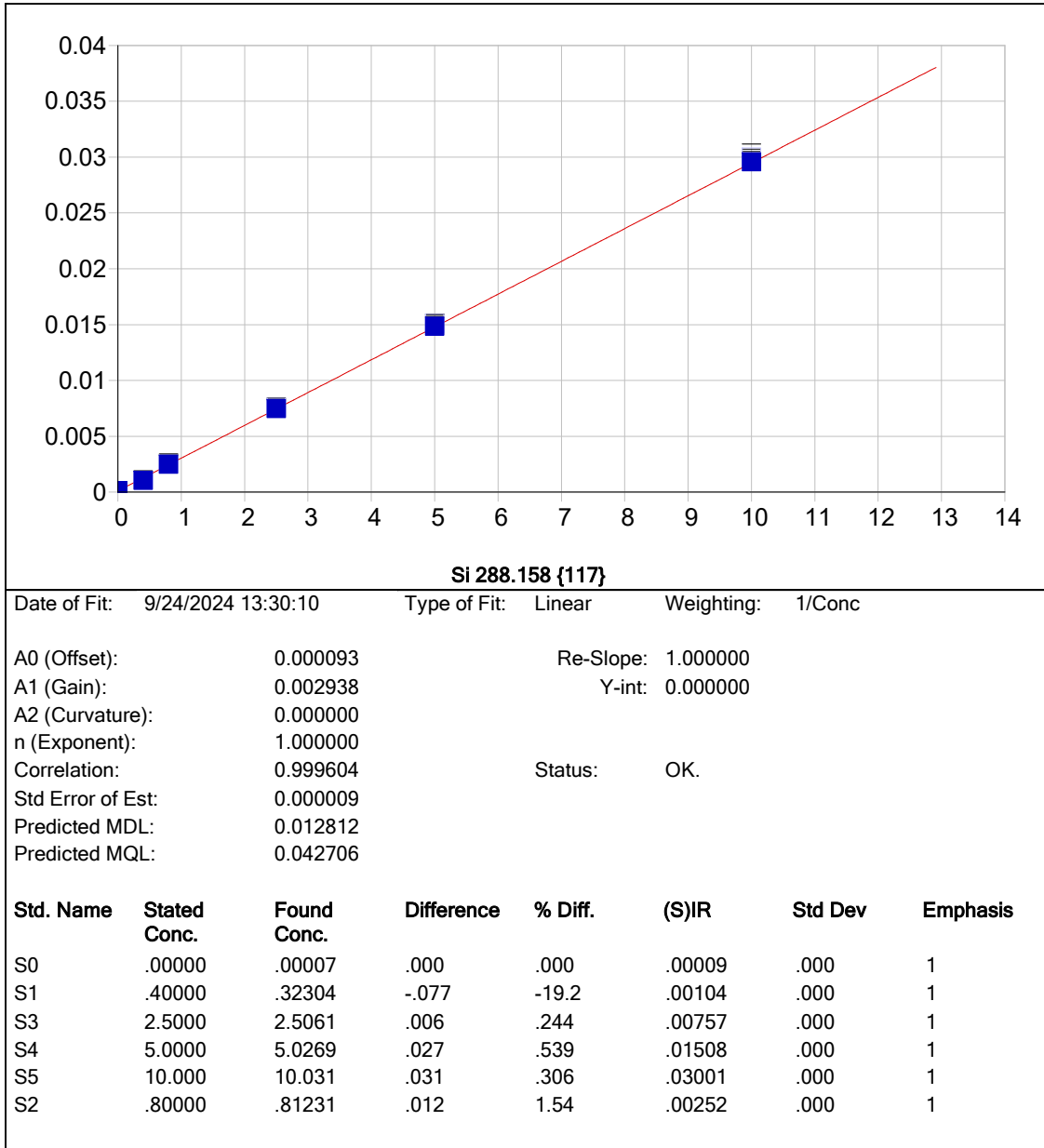
Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

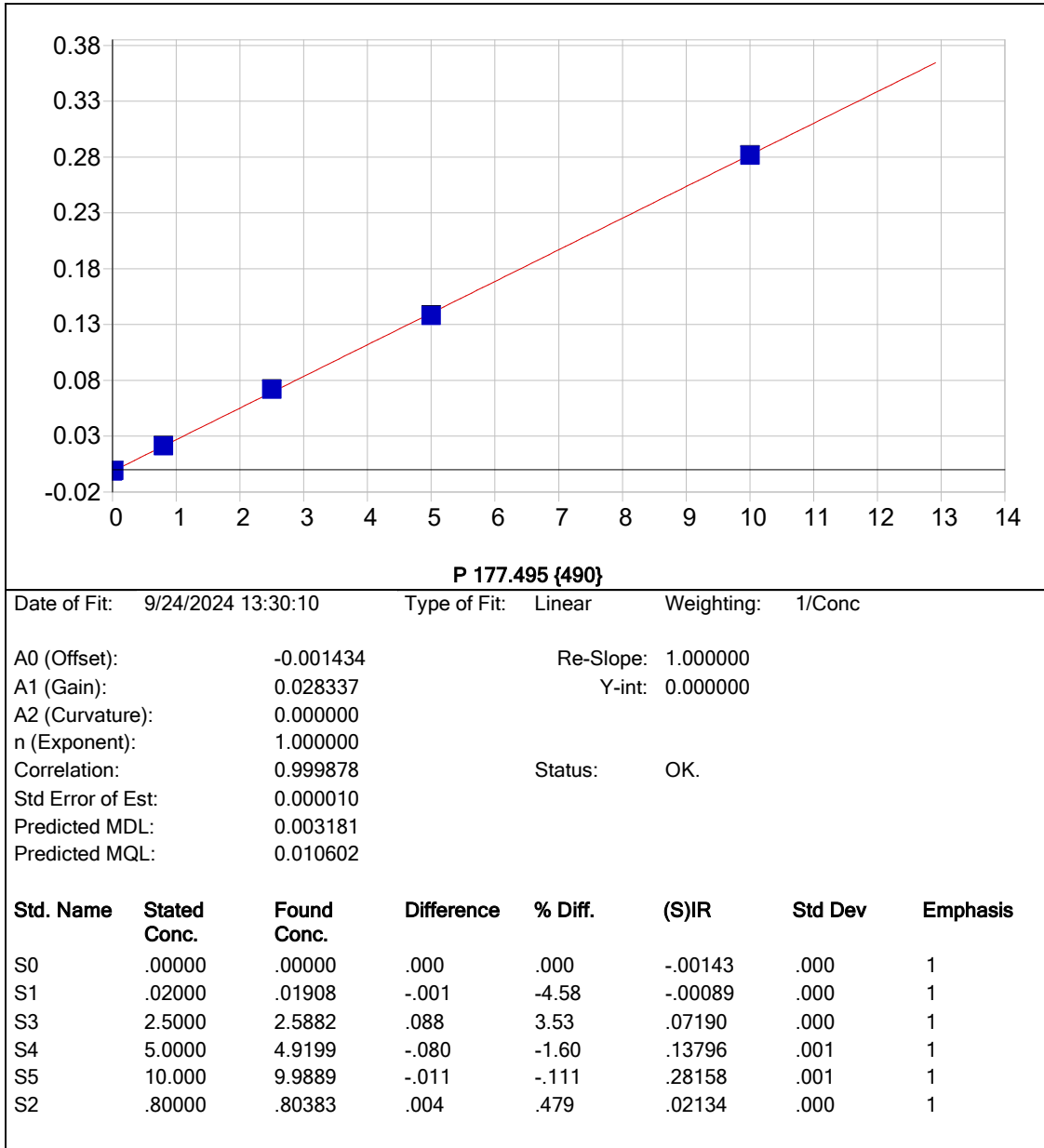
A0 (Offset): 0.000055 Re-Slope: 1.000000
A1 (Gain): 0.625826 Y-int: 0.000000
A2 (Curvature): 0.000000
n (Exponent): 1.000000
Correlation: 0.999915 Status: OK.
Std Error of Est: 0.000609
Predicted MDL: 0.000321
Predicted MQL: 0.001070

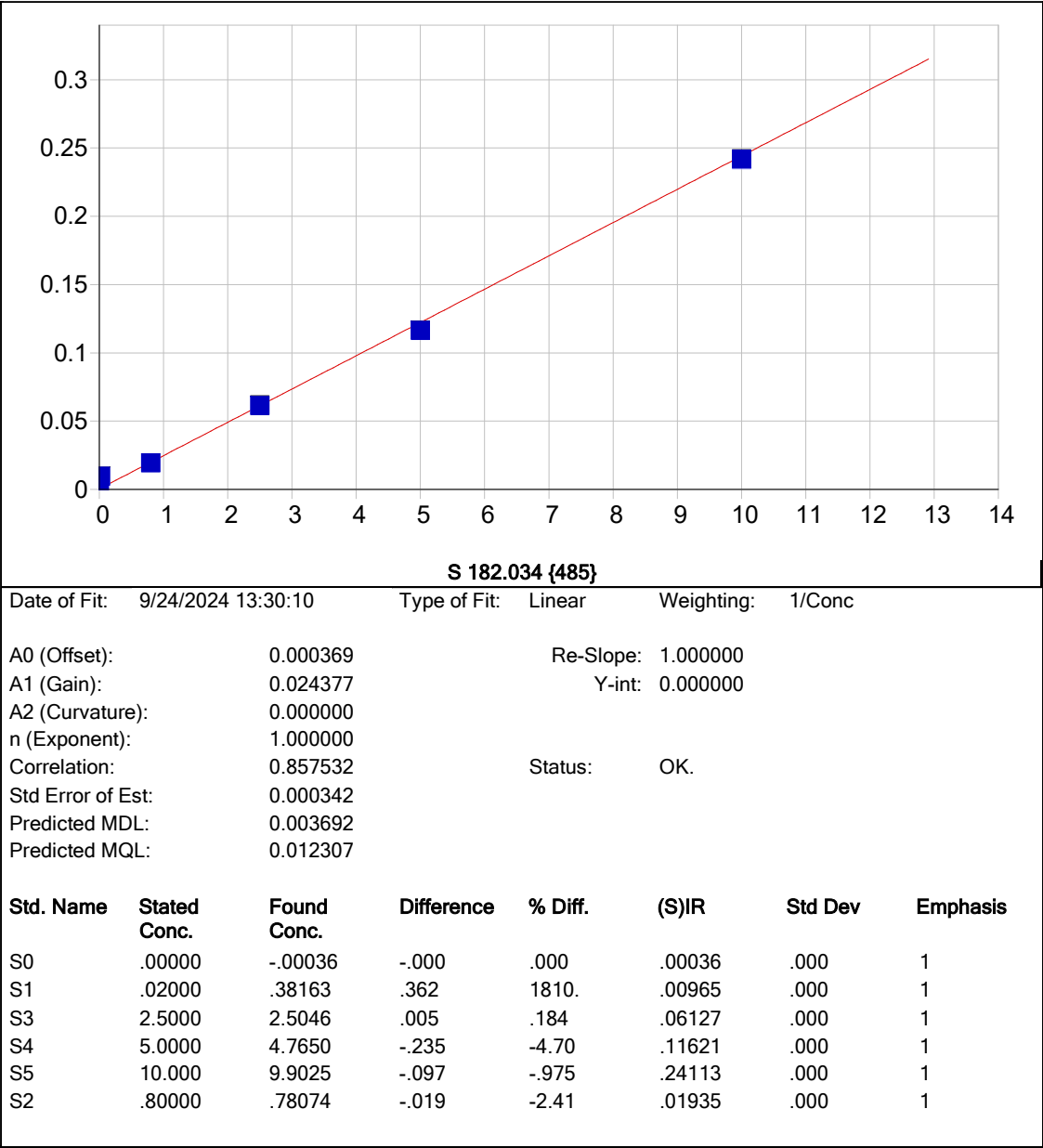
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00005	.000	1
S1	.20000	.19892	-.001	-.539	.12455	.000	1
S3	2.5000	2.5652	.065	2.61	1.6054	.005	1
S4	5.0000	4.9582	-.042	-.836	3.1030	.006	1
S5	10.000	9.9513	-.049	-.487	6.2278	.007	1
S2	.80000	.82635	.026	3.29	.51721	.001	1

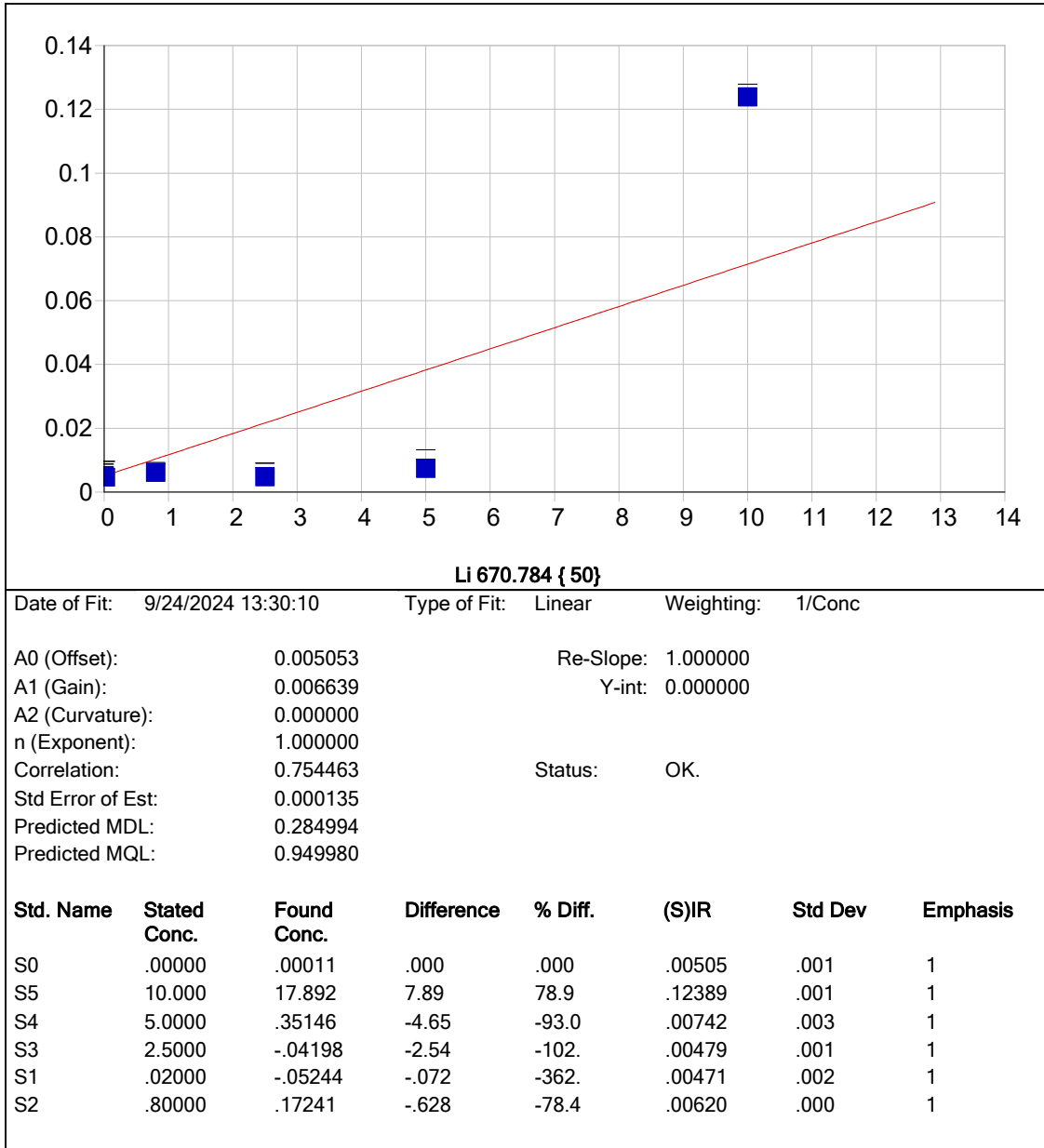


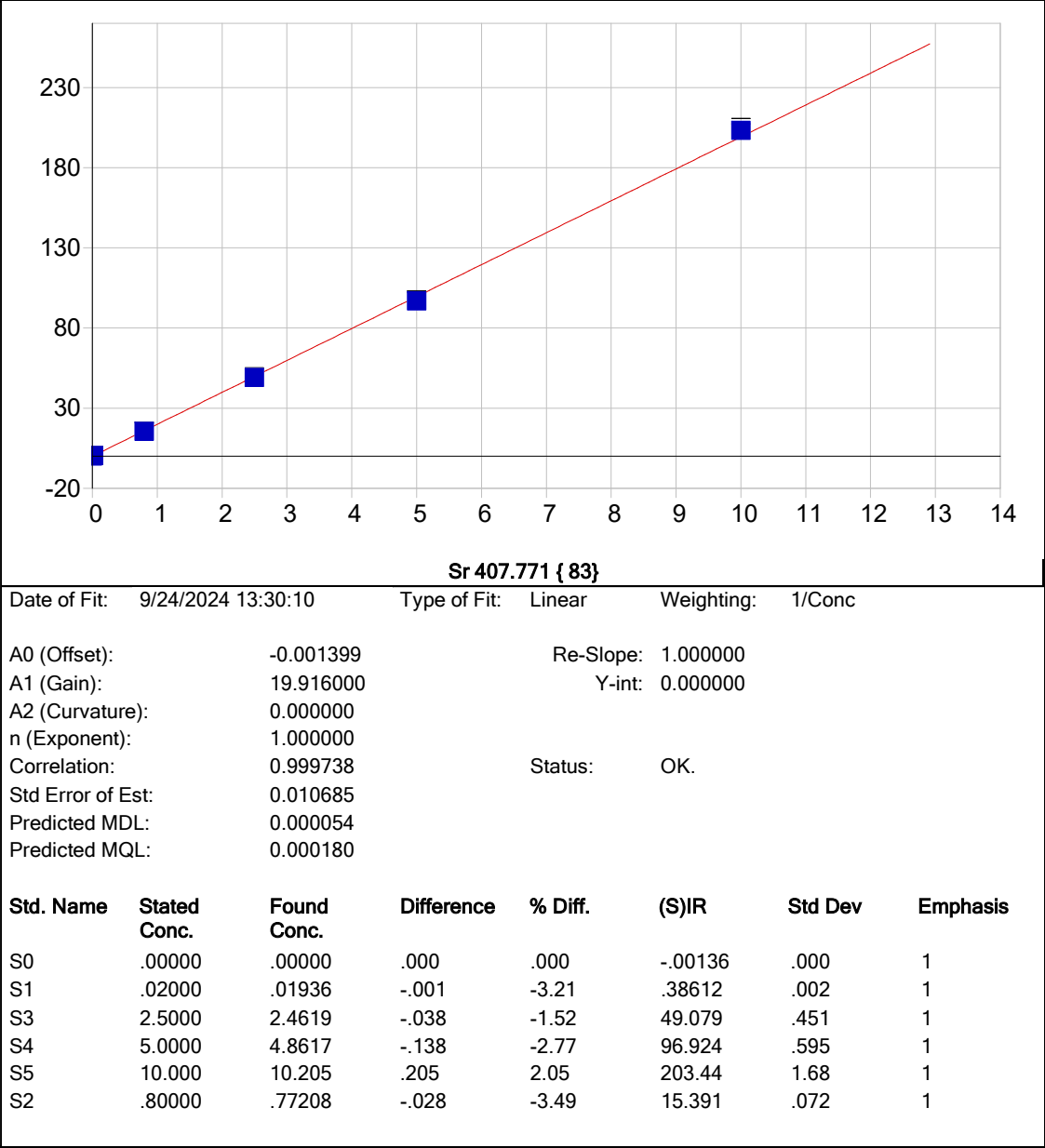


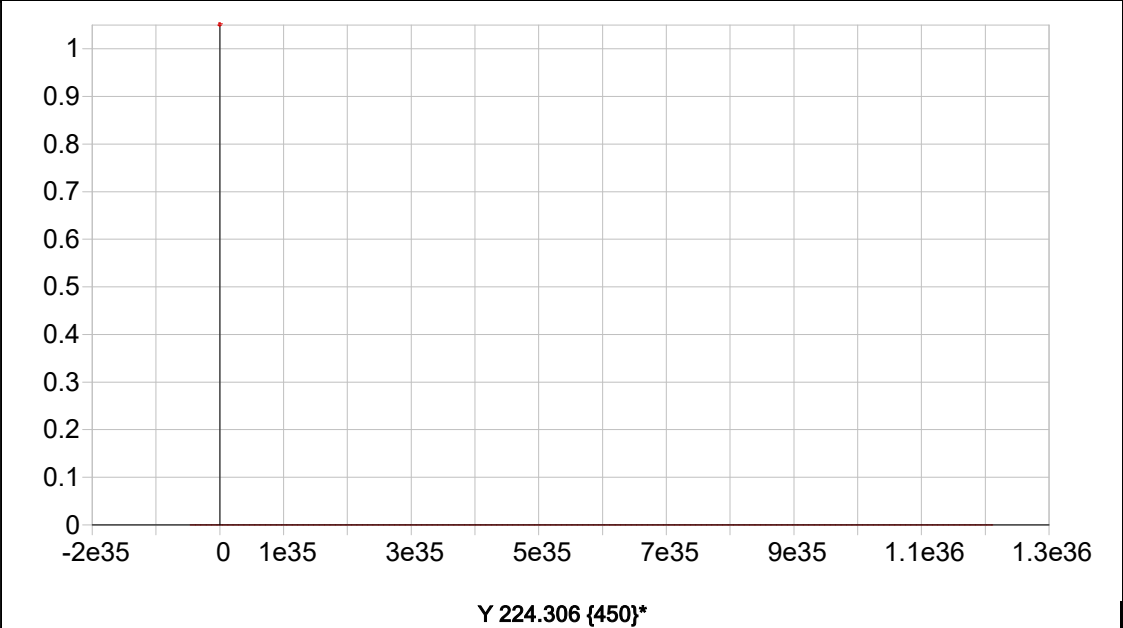








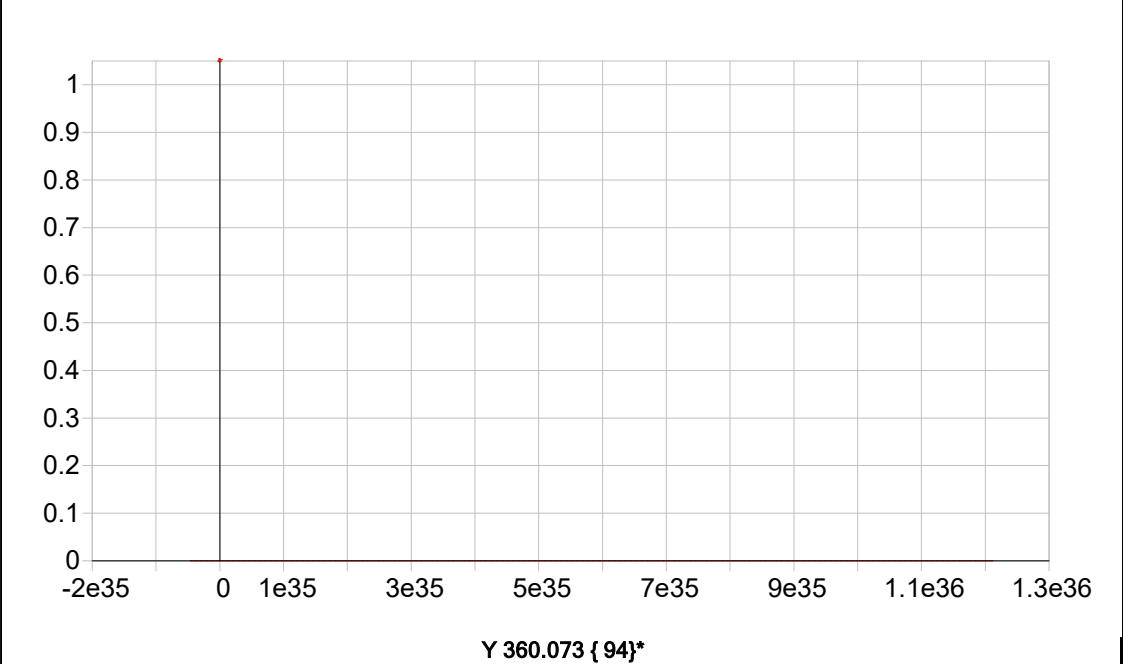




Date of Fit: 9/24/2024 13:30:10 Type of Fit: Linear Weighting: 1/Conc

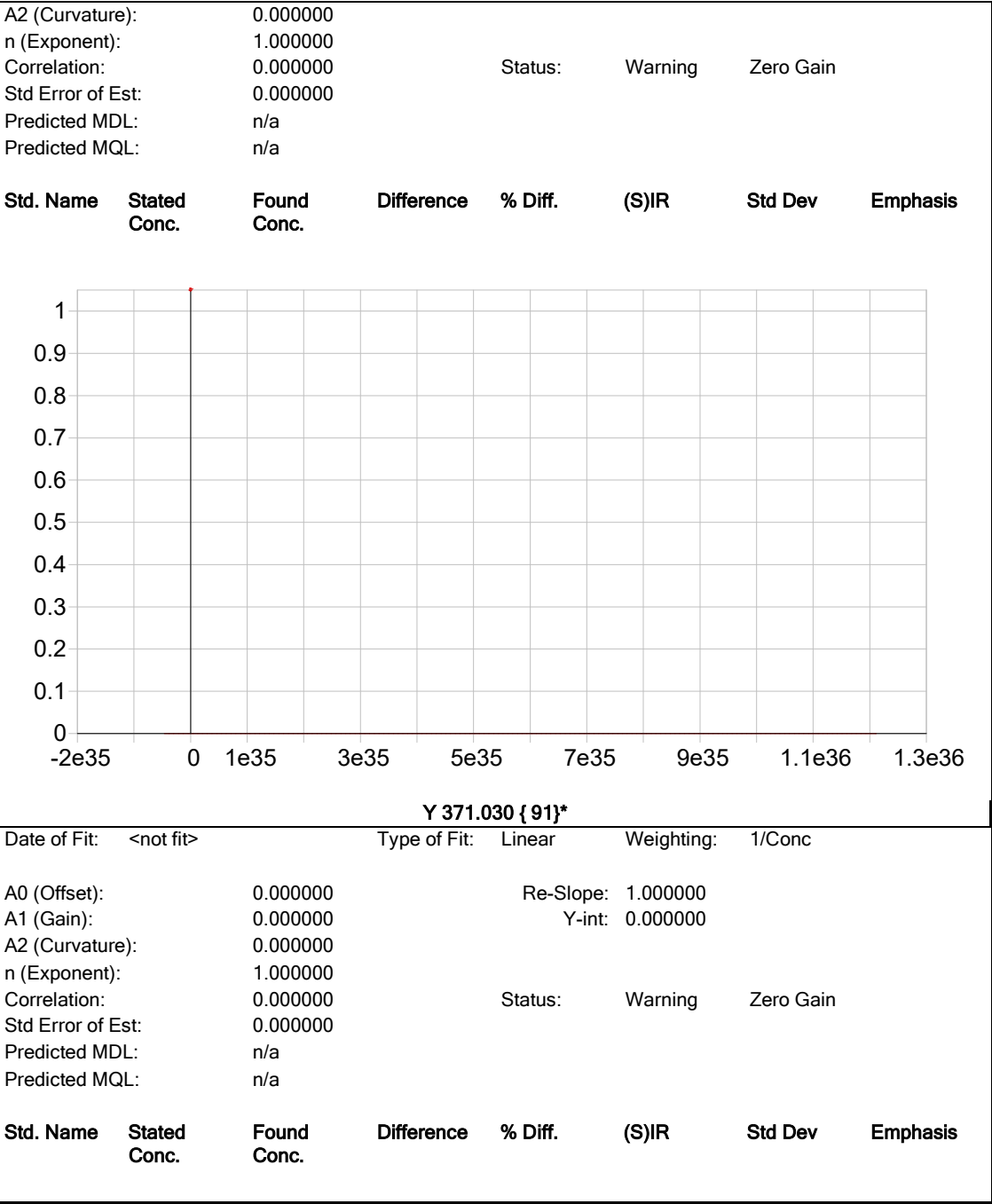
A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

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



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

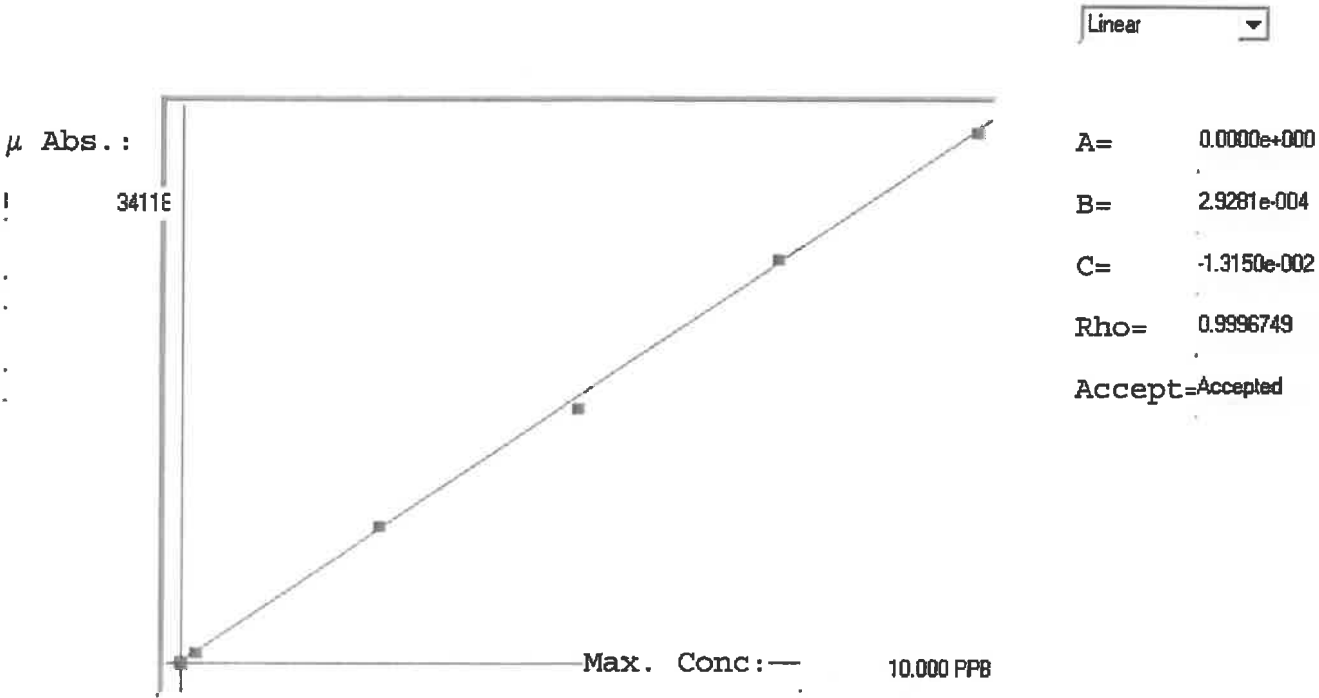
A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000



A2 (Curvature):		0.000000		Status:	Warning	Zero Gain	
n (Exponent):		1.000000					
Correlation:		0.000000					
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

LB132543, ANALYSIS DATE:09-21-24, INSTRUMENT ID:CV1

7470A



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%D
0.0	0.000	-0.002	-0.002	38	0.000	38	0				2
0.2	0.200	0.204	0.004	741	0.0 %	741					3
2.5	2.500	2.586	0.086	8877	0.0 %	8877					-4
5.0	5.000	4.821	-0.179	16509	0.0 %	16509					2
7.5	7.500	7.614	0.114	26049	0.0 %	26049					0
10.0	10.000	9.977	-0.023	34118	0.0 %	34118					

LB132543, INSTRUMENT ID:CV1

Method: 7470A Operator: Admin Date of Analysis: 21 Sep 2024 20:55:16

Sample ID	Extended ID	µ Abs.	Conc.	Std Conc	Method	Units	Date	Type	Type
0.0 - 1		38	-	0.0000	7470A	PPB	21 Sep 2024 20:58:13	S	Std
0.2 - 1		741	-	0.2000	7470A	PPB	21 Sep 2024 21:00:30	S	Std
2.5 - 1		8877	-	2.5000	7470A	PPB	21 Sep 2024 21:02:47	S	Std
5.0 - 1		16509	-	5.0000	7470A	PPB	21 Sep 2024 21:05:04	S	Std
7.5 - 1		26049	-	7.5000	7470A	PPB	21 Sep 2024 21:07:22	S	Std
10.0 - 1		34118	-	10.0000	7470A	PPB	21 Sep 2024 21:12:51	S	Std
ICV01 - 1	ICV01	13908	4.0593	-	7470A	PPB	21 Sep 2024 21:15:40	U	SMPL
ICB01 - 1	ICB01	-151	-0.0574	-	7470A	PPB	21 Sep 2024 21:17:55	U	SMPL
CCV01 - 1	CCV01	18059	5.2747	-	7470A	PPB	21 Sep 2024 21:20:11	U	SMPL
CCB01 - 1	CCB01	-200	-0.0717	-	7470A	PPB	21 Sep 2024 21:22:26	U	SMPL
CRA - 1	CRA	622	0.1690	-	7470A	PPB	21 Sep 2024 21:24:43	U	SMPL
HighStd - 1	HighStd	33900	9.9131	-	7470A	PPB	21 Sep 2024 21:26:57	U	SMPL
ChkStd - 1	ChkStd	24844	7.2614	-	7470A	PPB	21 Sep 2024 21:29:12	U	SMPL
PB163584BL - 1	PBW	174	0.0378	-	7470A	PPB	21 Sep 2024 21:31:31	U	SMPL
PB163584BS - 1	LCSW	14409	4.2060	-	7470A	PPB	21 Sep 2024 21:33:49	U	SMPL
P4099-01 - 1	GAS-TRANSMISSION-DEBRIS	2405	0.6911	-	7470A	PPB	21 Sep 2024 21:36:04	U	SMPL
P4103-02 - 1	WC-22A	-284	-0.0963	-	7470A	PPB	21 Sep 2024 21:38:22	U	SMPL
P4103-05 - 1	WC-14-5-7.5A	14	-0.0091	-	7470A	PPB	21 Sep 2024 21:40:41	U	SMPL
P4103-08 - 1	WC-14-5-7.5B	50	0.0015	-	7470A	PPB	21 Sep 2024 21:42:57	U	SMPL
P4103-11 - 1	WC-14-7.5-10A	48	0.0009	-	7470A	PPB	21 Sep 2024 21:45:12	U	SMPL
CCV02 - 1	CCV02	17244	5.0361	-	7470A	PPB	21 Sep 2024 21:47:28	U	SMPL
CCB02 - 1	CCB02	-106	-0.0442	-	7470A	PPB	21 Sep 2024 21:49:43	U	SMPL
P4103-14 - 1	WC-14-7.5-10B	38	-0.0020	-	7470A	PPB	21 Sep 2024 21:52:00	U	SMPL
P4103-17 - 1	WC-23	27	-0.0052	-	7470A	PPB	21 Sep 2024 21:54:15	U	SMPL
P4120-14 - 1	RB24085	108	0.0185	-	7470A	PPB	21 Sep 2024 21:56:30	U	SMPL
P4121-01 - 1	COMP-1	13	-0.0093	-	7470A	PPB	21 Sep 2024 21:58:45	U	SMPL
P4121-02 - 1	COMP-2	43	-0.0006	-	7470A	PPB	21 Sep 2024 22:01:01	U	SMPL
P4123-01 - 1	910-B	68	0.0068	-	7470A	PPB	21 Sep 2024 22:03:19	U	SMPL
P4123-01DUP - 1	910-BDUP	73	0.0082	-	7470A	PPB	21 Sep 2024 22:05:34	U	SMPL
P4123-01MS - 1	910-BMS	14088	4.1120	-	7470A	PPB	21 Sep 2024 22:07:51	U	SMPL
P4123-01MSD - 1	910-BMSD	13099	3.8224	-	7470A	PPB	21 Sep 2024 22:10:08	U	SMPL
P4123-01A - 1	910-BA	13758	4.0153	-	7470A	PPB	21 Sep 2024 22:12:25	U	SMPL
CCV03 - 1	CCV03	16631	4.8566	-	7470A	PPB	21 Sep 2024 22:14:42	U	SMPL
CCB03 - 1	CCB03	61	0.0047	-	7470A	PPB	21 Sep 2024 22:16:59	U	SMPL
P412-01LX5 - 1		154	0.0319	-	7470A	PPB	21 Sep 2024 22:19:16	U	SMPL
PB163511TB - 1		68	0.0068	-	7470A	PPB	21 Sep 2024 22:21:31	U	SMPL
CCV04 - 1	CCV04	18018	5.2627	-	7470A	PPB	21 Sep 2024 22:23:47	U	SMPL
CCB04 - 1	CCB04	-109	-0.0451	-	7470A	PPB	21 Sep 2024 22:26:02	U	SMPL

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
P4099-01	GAS-TRANSMISSION-DEBRIS	01	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
P4103-02	WC-22A	02	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4103-05	WC-14-5-7.5A	03	100.02	2000	N/A	N/A	N/A	8.2	1.5	T-1
P4103-08	WC-14-5-7.5B	04	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-1
P4103-11	WC-14-7.5-10A	05	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4103-14	WC-14-7.5-10B	06	100.04	2000	N/A	N/A	N/A	5.6	1.0	T-1
P4103-17	WC-23	07	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4120-02	T1	08	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-04	T2	09	100.01	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-06	SF-6-A	10	100.03	2000	N/A	N/A	N/A	10.5	1.5	T-1
P4120-08	SF-6-B	11	100.04	2000	N/A	N/A	N/A	10.5	1.5	T-2
P4120-10	COMP-1	12	100.03	2000	N/A	N/A	N/A	10.5	1.0	T-2
P4120-12	COMP-2	13	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-2
P4120-14	RB24085	14	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-2
P4121-01	COMP-1	15	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-2
P4121-02	COMP-2	16	100.03	2000	N/A	N/A	N/A	5.0	1.0	T-2
P4123-01	910-B	17	100.02	2000	N/A	N/A	N/A	5.5	1.5	T-2
PB163511TB	LEB511	18	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2

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
P4099-01	GAS-TRANSMISSION-DEBRIS	01	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
P4103-02	WC-22A	02	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4103-05	WC-14-5-7.5A	03	100.02	2000	N/A	N/A	N/A	8.2	1.5	T-1
P4103-08	WC-14-5-7.5B	04	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-1
P4103-11	WC-14-7.5-10A	05	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4103-14	WC-14-7.5-10B	06	100.04	2000	N/A	N/A	N/A	5.6	1.0	T-1
P4103-17	WC-23	07	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4120-02	T1	08	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-04	T2	09	100.01	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-06	SF-6-A	10	100.03	2000	N/A	N/A	N/A	10.5	1.5	T-1
P4120-08	SF-6-B	11	100.04	2000	N/A	N/A	N/A	10.5	1.5	T-2
P4120-10	COMP-1	12	100.03	2000	N/A	N/A	N/A	10.5	1.0	T-2
P4120-12	COMP-2	13	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-2
P4120-14	RB24085	14	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-2
P4121-01	COMP-1	15	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-2
P4121-02	COMP-2	16	100.03	2000	N/A	N/A	N/A	5.0	1.0	T-2
P4123-01	910-B	17	100.02	2000	N/A	N/A	N/A	5.5	1.5	T-2
PB163511TB	LEB511	18	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2

SOP ID : M7470A-Mercury-19

SDG No : N/A

Matrix : WATER

Pipette ID: HG A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HG HOT BLOCK #3 2. N/A

Start Digest Date: 09/20/2024 Time : 13:00 Temp : 95 °C

End Digest Date: 09/20/2024 Time : 15:00 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG. #3

Dig Technician Signature: *[Signature]*

Supervisor Signature: *[Signature]*

Temp : 1. 96°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
ICV	30ml	MP82400
CCV	30ml	MP82402
CRA	30ml	MP82404
Blank Spike	0.48ml	MP82393
Matrix Spike	0.48ml	MP82393

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5ml	MP81818
KMN04	4.5ml	MP81819
K2S2O8	2.5ml	MP81820
Hydroxylamine HCL	2.0ml	MP81821
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	MP82394
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP82395
2.5 ppb	S2.5	30mL	MP82396
5.0 ppb	S5.0	30mL	MP82397
7.5 ppb	S7.5	30mL	MP82398
10.0 ppb	S10.0	30mL	MP82399
ICV	ICV	30mL	MP82400
ICB	ICB	30mL	MP82401
CCV	CCV	30mL	MP82402
CCB	CCB	30mL	MP82403
CRI	CRI	30mL	MP82404
CHK STD	CHK STD	30mL	MP82405

Extraction Conformance/Non-Conformance Comments:

N/A		
Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
9/20/24 12:30	JP dig lab	SA (meta lab)
	Preparation Group	Analysis Group

9/20/24

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
P4099-01	GAS-TRANSMISSION-DEBRIS	3	30	<2	N/A	1
P4103-02	WC-22A	3	30	<2	N/A	2
P4103-05	WC-14-5-7.5A	3	30	<2	N/A	3
P4103-08	WC-14-5-7.5B	3	30	<2	N/A	4
P4103-11	WC-14-7.5-10A	3	30	<2	N/A	5
P4103-14	WC-14-7.5-10B	3	30	<2	N/A	6
P4103-17	WC-23	3	30	<2	N/A	7
P4120-14	RB24085	3	30	<2	N/A	8
P4121-01	COMP-1	3	30	<2	N/A	9
P4121-02	COMP-2	3	30	<2	N/A	10
P4123-01	910-B	3	30	<2	N/A	11
P4123-01DUP	910-BDUP	3	30	<2	N/A	12
P4123-01MS	910-BMS	3	30	<2	MP82393	13
P4123-01MSD	910-BMSD	3	30	<2	MP82393	14
PB163511TB	PB163511TB	3	30	<2	N/A	15
PB163584BL	PBW584	3	30	<2	N/A	16
PB163584BS	LCS584	3	30	<2	MP82393	17

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
P4099-01	GAS-TRANSMISSION-DEBRIS	01	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
P4103-02	WC-22A	02	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4103-05	WC-14-5-7.5A	03	100.02	2000	N/A	N/A	N/A	8.2	1.5	T-1
P4103-08	WC-14-5-7.5B	04	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-1
P4103-11	WC-14-7.5-10A	05	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4103-14	WC-14-7.5-10B	06	100.04	2000	N/A	N/A	N/A	5.6	1.0	T-1
P4103-17	WC-23	07	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4120-02	T1	08	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-04	T2	09	100.01	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-06	SF-6-A	10	100.03	2000	N/A	N/A	N/A	10.5	1.5	T-1
P4120-08	SF-6-B	11	100.04	2000	N/A	N/A	N/A	10.5	1.5	T-2
P4120-10	COMP-1	12	100.03	2000	N/A	N/A	N/A	10.5	1.0	T-2
P4120-12	COMP-2	13	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-2
P4120-14	RB24085	14	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-2
P4121-01	COMP-1	15	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-2
P4121-02	COMP-2	16	100.03	2000	N/A	N/A	N/A	5.0	1.0	T-2
P4123-01	910-B	17	100.02	2000	N/A	N/A	N/A	5.5	1.5	T-2
PB163511TB	LEB511	18	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB132543

Review By	mohan	Review On	9/23/2024 12:09:37 AM
Supervise By	jaswal	Supervise On	9/23/2024 12:10:08 AM
STD. NAME	STD REF.#		
ICAL Standard	MP82410,MP82411,MP82412,MP82413,MP82414,MP82415		
ICV Standard	MP82416		
CCV Standard	MP82418		
ICSA Standard			
CRI Standard	MP82424		
LCS Standard			
Chk Standard	MP82422,MP82423		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	09/21/24 20:58		Mohan	OK
2	S0.2	S0.2	CAL2	09/21/24 21:00		Mohan	OK
3	S2.5	S2.5	CAL3	09/21/24 21:02		Mohan	OK
4	S5	S5	CAL4	09/21/24 21:05		Mohan	OK
5	S7.5	S7.5	CAL5	09/21/24 21:07		Mohan	OK
6	S10	S10	CAL6	09/21/24 21:12		Mohan	OK
7	ICV01	ICV01	ICV	09/21/24 21:15		Mohan	OK
8	ICB01	ICB01	ICB	09/21/24 21:17		Mohan	OK
9	CCV01	CCV01	CCV	09/21/24 21:20		Mohan	OK
10	CCB01	CCB01	CCB	09/21/24 21:22		Mohan	OK
11	CRA	CRA	CRDL	09/21/24 21:24		Mohan	OK
12	HighStd	HighStd	HIGH STD	09/21/24 21:26		Mohan	OK
13	ChkStd	ChkStd	SAM	09/21/24 21:29		Mohan	OK
14	PB163584BL	PB163584BL	MB	09/21/24 21:31		Mohan	OK
15	PB163584BS	PB163584BS	LCS	09/21/24 21:33		Mohan	OK
16	P4099-01	GAS-TRANSMISSION	SAM	09/21/24 21:36		Mohan	OK
17	P4103-02	WC-22A	SAM	09/21/24 21:38		Mohan	OK
18	P4103-05	WC-14-5-7.5A	SAM	09/21/24 21:40		Mohan	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB132543

Review By	mohan	Review On	9/23/2024 12:09:37 AM
Supervise By	jaswal	Supervise On	9/23/2024 12:10:08 AM
STD. NAME	STD REF.#		
ICAL Standard	MP82410,MP82411,MP82412,MP82413,MP82414,MP82415		
ICV Standard	MP82416		
CCV Standard	MP82418		
ICSA Standard			
CRI Standard	MP82424		
LCS Standard			
Chk Standard	MP82422,MP82423		

19	P4103-08	WC-14-5-7.5B	SAM	09/21/24 21:42		Mohan	OK
20	P4103-11	WC-14-7.5-10A	SAM	09/21/24 21:45		Mohan	OK
21	CCV02	CCV02	CCV	09/21/24 21:47		Mohan	OK
22	CCB02	CCB02	CCB	09/21/24 21:49		Mohan	OK
23	P4103-14	WC-14-7.5-10B	SAM	09/21/24 21:52		Mohan	OK
24	P4103-17	WC-23	SAM	09/21/24 21:54		Mohan	OK
25	P4120-14	RB24085	SAM	09/21/24 21:56		Mohan	OK
26	P4121-01	COMP-1	SAM	09/21/24 21:58		Mohan	OK
27	P4121-02	COMP-2	SAM	09/21/24 22:01		Mohan	OK
28	P4123-01	910-B	SAM	09/21/24 22:03		Mohan	OK
29	P4123-01DUP	910-BDUP	DUP	09/21/24 22:05		Mohan	OK
30	P4123-01MS	910-BMS	MS	09/21/24 22:07		Mohan	OK
31	P4123-01MSD	910-BMSD	MSD	09/21/24 22:10		Mohan	OK
32	P4123-01A	910-BA	PS	09/21/24 22:12		Mohan	OK
33	CCV03	CCV03	CCV	09/21/24 22:14		Mohan	OK
34	CCB03	CCB03	CCB	09/21/24 22:16		Mohan	OK
35	P4123-01L	910-BL	SD	09/21/24 22:19		Mohan	OK
36	PB163511TB	PB163511TB	MB	09/21/24 22:21		Mohan	OK
37	CCV04	CCV04	CCV	09/21/24 22:23		Mohan	OK
38	CCB04	CCB04	CCB	09/21/24 22:26		Mohan	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132557

Review By	kareem	Review On	9/26/2024 11:58:17 AM
Supervise By		Supervise On	
STD. NAME	STD REF.#		
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484		
ICV Standard	MP82485		
CCV Standard	MP82488		
ICSA Standard	MP82486 MP82487		
CRI Standard	MP82487		
LCS Standard			
Chk Standard	MP82491 MP82492		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	09/23/24 12:08		Kareem	OK
2	S1	S1	CAL2	09/23/24 12:13		Kareem	OK
3	S2	S2	CAL3	09/23/24 12:17		Kareem	OK
4	S3	S3	CAL4	09/23/24 12:21		Kareem	OK
5	S4	S4	CAL5	09/23/24 12:25		Kareem	OK
6	S5	S5	CAL6	09/23/24 12:30		Kareem	OK
7	ICV01	ICV01	ICV	09/23/24 12:49	ICV fail for Ag (200.7) (95-105)	Kareem	OK
8	LLICV01	LLICV01	LLICV	09/23/24 12:58		Kareem	OK
9	ICB01	ICB01	ICB	09/23/24 13:03		Kareem	OK
10	CRI01	CRI01	CRDL	09/23/24 13:07		Kareem	OK
11	ICSA01	ICSA01	ICSA	09/23/24 13:17		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	09/23/24 13:22		Kareem	OK
13	ICSADL	ICSADL	ICSA	09/23/24 13:29		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	09/23/24 13:33		Kareem	OK
15	CCV01	CCV01	CCV	09/23/24 13:38		Kareem	OK
16	CCB01	CCB01	CCB	09/23/24 13:43		Kareem	OK
17	P4126-01	NB-08-09192024	SAM	09/23/24 13:47		Kareem	OK
18	CCV02	CCV02	CCV	09/23/24 13:51		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132557

Review By	kareem	Review On	9/26/2024 11:58:17 AM
Supervise By		Supervise On	
STD. NAME	STD REF.#		
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484		
ICV Standard	MP82485		
CCV Standard	MP82488		
ICSA Standard	MP82486 MP82487		
CRI Standard	MP82487		
LCS Standard			
Chk Standard	MP82491 MP82492		

19	CCB02	CCB02	CCB	09/23/24 13:55		Kareem	OK
20	LR1	LR1	HIGH STD	09/23/24 14:04		Kareem	OK
21	LR2	LR2	HIGH STD	09/23/24 14:09		Kareem	OK
22	P4103-01	WC-22A	SAM	09/23/24 14:14		Kareem	OK
23	P4103-04	WC-14-5-7.5A	SAM	09/23/24 14:19		Kareem	OK
24	P4103-07	WC-14-5-7.5B	SAM	09/23/24 14:23		Kareem	OK
25	P4103-10	WC-14-7.5-10A	SAM	09/23/24 14:27		Kareem	OK
26	P4103-13	WC-14-7.5-10B	SAM	09/23/24 14:31		Kareem	OK
27	P4103-16	WC-23	SAM	09/23/24 14:35		Kareem	OK
28	P4126-01DUP	NB-08-09192024DUP	DUP	09/23/24 14:39		Kareem	OK
29	P4126-01L	NB-08-09192024L	SD	09/23/24 14:43		Kareem	OK
30	CCV03	CCV03	CCV	09/23/24 14:47		Kareem	OK
31	CCB03	CCB03	CCB	09/23/24 14:52		Kareem	OK
32	P4126-01MS	NB-08-09192024MS	MS	09/23/24 14:56	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
33	P4126-01MSD	NB-08-09192024MSD	MSD	09/23/24 15:00	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
34	P4126-01A	NB-08-09192024A	PS	09/23/24 15:04	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
35	P3956-02	EFF-WW	SAM	09/23/24 15:08		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132557

Review By	kareem	Review On	9/26/2024 11:58:17 AM
Supervise By		Supervise On	

STD. NAME	STD REF.#
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484
ICV Standard	MP82485
CCV Standard	MP82488
ICSA Standard	MP82486 MP82487
CRI Standard	MP82487
LCS Standard	
Chk Standard	MP82491 MP82492

36	P3956-02DUP	EFF-WWDUP	DUP	09/23/24 15:13		Kareem	OK
37	P3956-02L	EFF-WWL	SD	09/23/24 15:17		Kareem	OK
38	P3956-02MS	EFF-WWMS	MS	09/23/24 15:21	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
39	P3956-02MSD	EFF-WWMSD	MSD	09/23/24 15:25	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
40	P3956-02A	EFF-WWA	PS	09/23/24 15:29	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
41	PB163546BL	PB163546BL	MB	09/23/24 15:33		Kareem	OK
42	CCV04	CCV04	CCV	09/23/24 15:37		Kareem	OK
43	CCB04	CCB04	CCB	09/23/24 15:42		Kareem	OK
44	PB163546BS	PB163546BS	LCS	09/23/24 15:49	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
45	P4103-02	WC-22A	SAM	09/23/24 15:53		Kareem	OK
46	P4103-05	WC-14-5-7.5A	SAM	09/23/24 15:57		Kareem	OK
47	P4103-08	WC-14-5-7.5B	SAM	09/23/24 16:01		Kareem	OK
48	P4103-11	WC-14-7.5-10A	SAM	09/23/24 16:06		Kareem	OK
49	P4103-04RE	WC-14-5-7.5ARE	SAM	09/23/24 16:10	NOT USE	Kareem	Not Ok
50	P4103-17	WC-23	SAM	09/23/24 16:15		Kareem	OK
51	P4120-02	T1	SAM	09/23/24 16:19		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132557

Review By	kareem	Review On	9/26/2024 11:58:17 AM
Supervise By		Supervise On	
STD. NAME	STD REF.#		
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484		
ICV Standard	MP82485		
CCV Standard	MP82488		
ICSA Standard	MP82486 MP82487		
CRI Standard	MP82487		
LCS Standard			
Chk Standard	MP82491 MP82492		

52	P4120-04	T2	SAM	09/23/24 16:24		Kareem	OK
53	P4120-06	SF-6-A	SAM	09/23/24 16:28		Kareem	OK
54	CCV05	CCV05	CCV	09/23/24 16:33		Kareem	OK
55	CCB05	CCB05	CCB	09/23/24 16:37		Kareem	OK
56	P4120-08	SF-6-B	SAM	09/23/24 16:41		Kareem	OK
57	P4120-10	COMP-1	SAM	09/23/24 16:46		Kareem	OK
58	P4120-12	COMP-2	SAM	09/23/24 16:51		Kareem	OK
59	P4120-14	RB24085	SAM	09/23/24 16:55		Kareem	OK
60	P4121-01	COMP-1	SAM	09/23/24 16:59		Kareem	OK
61	P4121-02	COMP-2	SAM	09/23/24 17:04		Kareem	OK
62	P4123-01	910-B	SAM	09/23/24 17:08		Kareem	OK
63	P4123-01DUP	910-BDUP	DUP	09/23/24 17:13		Kareem	OK
64	P4123-01L	910-BL	SD	09/23/24 17:17		Kareem	OK
65	P4123-01MS	910-BMS	MS	09/23/24 17:21	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
66	CCV06	CCV06	CCV	09/23/24 17:26		Kareem	OK
67	CCB06	CCB06	CCB	09/23/24 17:30		Kareem	OK
68	P4123-01MSD	910-BMSD	MSD	09/23/24 17:34	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132557

Review By	kareem	Review On	9/26/2024 11:58:17 AM
Supervise By		Supervise On	

STD. NAME	STD REF.#
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484
ICV Standard	MP82485
CCV Standard	MP82488
ICSA Standard	MP82486 MP82487
CRI Standard	MP82487
LCS Standard	
Chk Standard	MP82491 MP82492

69	P4123-01A	910-BA	PS	09/23/24 17:39	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
70	PB163511TB	PB163511TB	MB	09/23/24 17:43		Kareem	OK
71	PB163580BL	PB163580BL	MB	09/23/24 17:56		Kareem	OK
72	PB163580BS	PB163580BS	LCS	09/23/24 18:00	0.1ml of m6001 and m6010 were added to 10ml of the sample	Kareem	OK
73	CCV07	CCV07	CCV	09/23/24 18:04		Kareem	OK
74	CCB07	CCB07	CCB	09/23/24 18:08		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132578

Review By	mohan	Review On	9/25/2024 4:26:44 AM
Supervise By	kareem	Supervise On	9/26/2024 12:16:35 PM
STD. NAME	STD REF.#		
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484		
ICV Standard	MP82485		
CCV Standard	MP82488		
ICSA Standard	MP82486 MP82487		
CRI Standard	mp82484		
LCS Standard			
Chk Standard	MP82491 MP82492		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	09/24/24 12:51		Kareem	OK
2	S1	S1	CAL2	09/24/24 12:55		Kareem	OK
3	S2	S2	CAL3	09/24/24 13:00		Kareem	OK
4	S3	S3	CAL4	09/24/24 13:04		Kareem	OK
5	S4	S4	CAL5	09/24/24 13:08		Kareem	OK
6	S5	S5	CAL6	09/24/24 13:12		Kareem	OK
7	ICV01	ICV01	ICV	09/24/24 13:34		Kareem	OK
8	LLICV01	LLICV01	LLICV	09/24/24 13:38		Kareem	OK
9	ICB01	ICB01	ICB	09/24/24 13:56		Kareem	OK
10	CRI01	CRI01	CRDL	09/24/24 14:00		Kareem	OK
11	ICSA01	ICSA01	ICSA	09/24/24 14:04		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	09/24/24 14:14		Kareem	OK
13	CCV01	CCV01	CCV	09/24/24 14:25		Kareem	OK
14	CCB01	CCB01	CCB	09/24/24 14:29		Kareem	OK
15	P4138-02	LIBERTY-AVE-TP-CO	SAM	09/24/24 14:33		Kareem	OK
16	P4139-05	350	SAM	09/24/24 14:38		Kareem	OK
17	P4139-06	371	SAM	09/24/24 14:42		Kareem	OK
18	P4140-01	MOO-23-00305	SAM	09/24/24 14:47		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132578

Review By	mohan	Review On	9/25/2024 4:26:44 AM
Supervise By	kareem	Supervise On	9/26/2024 12:16:35 PM

STD. NAME	STD REF.#
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484
ICV Standard	MP82485
CCV Standard	MP82488
ICSA Standard	MP82486 MP82487
CRI Standard	mp82484
LCS Standard	
Chk Standard	MP82491 MP82492

19	P4144-02	1-3-SBG	SAM	09/24/24 14:51		Kareem	OK
20	P4144-04	4-6-SBG	SAM	09/24/24 14:55		Kareem	OK
21	P4144-04DUP	4-6-SBGDUP	DUP	09/24/24 15:00		Kareem	OK
22	P4144-04L	4-6-SBGL	SD	09/24/24 15:04		Kareem	OK
23	P4144-04MS	4-6-SBGMS	MS	09/24/24 15:09	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
24	P4144-04MSD	4-6-SBGMSD	MSD	09/24/24 15:13	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
25	CCV02	CCV02	CCV	09/24/24 15:17		Kareem	OK
26	CCB02	CCB02	CCB	09/24/24 15:21		Kareem	OK
27	P4144-04A	4-6-SBGA	PS	09/24/24 15:25	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
28	PB163591TB	PB163591TB	MB	09/24/24 15:30		Kareem	OK
29	P4123-04	910-A	SAM	09/24/24 15:34		Kareem	OK
30	P4140-02	306-307	SAM	09/24/24 15:38		Kareem	OK
31	PB163590TB	PB163590TB	MB	09/24/24 15:43		Kareem	OK
32	PB163623BL	PB163623BL	MB	09/24/24 15:47		Kareem	OK
33	PB163623BS	PB163623BS	LCS	09/24/24 15:52	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
34	P4138-01	LIBERTY-AVE-TP-CO	SAM	09/24/24 15:56		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB132578

Review By	mohan	Review On	9/25/2024 4:26:44 AM
Supervise By	kareem	Supervise On	9/26/2024 12:16:35 PM
STD. NAME	STD REF.#		
ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484		
ICV Standard	MP82485		
CCV Standard	MP82488		
ICSA Standard	MP82486 MP82487		
CRI Standard	mp82484		
LCS Standard			
Chk Standard	MP82491 MP82492		

35	P4138-01DUP	LIBERTY-AVE-TP-CO	DUP	09/24/24 16:00		Kareem	OK
36	P4138-01L	LIBERTY-AVE-TP-CO	SD	09/24/24 16:04		Kareem	OK
37	CCV03	CCV03	CCV	09/24/24 16:08		Kareem	OK
38	CCB03	CCB03	CCB	09/24/24 16:12		Kareem	OK
39	P4138-01MS	LIBERTY-AVE-TP-CO	MS	09/24/24 16:17	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
40	P4138-01MSD	LIBERTY-AVE-TP-CO	MSD	09/24/24 16:20	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
41	P4138-01A	LIBERTY-AVE-TP-CO	PS	09/24/24 16:24	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
42	P4139-01	350	SAM	09/24/24 16:28		Kareem	OK
43	P4139-02	371	SAM	09/24/24 16:33		Kareem	OK
44	P4142-01	OR-02-09202024	SAM	09/24/24 16:37		Kareem	OK
45	P4146-01	CL-02-092024	SAM	09/24/24 16:41		Kareem	OK
46	P4148-01	STOCK-PILE	SAM	09/24/24 16:45		Kareem	OK
47	P4149-13	COMP-6	SAM	09/24/24 16:49		Kareem	OK
48	P4149-14	COMP-7	SAM	09/24/24 16:54		Kareem	OK
49	CCV04	CCV04	CCV	09/24/24 16:58		Kareem	OK
50	CCB04	CCB04	CCB	09/24/24 17:02		Kareem	OK
51	P4103-14	WC-14-7.5-10B	SAM	09/24/24 17:07		Kareem	OK

Instrument ID: P4

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ICAL Standard	MP82441 MP82476 MP82477 MP82478 MP82479 MP82484
ICV Standard	MP82485
CCV Standard	MP82488
ICSA Standard	MP82486 MP82487
CRI Standard	mp82484
LCS Standard	
Chk Standard	MP82491 MP82492

52	PB163545BL	PB163545BL	MB	09/24/24 17:11		Kareem	OK
53	PB163545BS	PB163545BS	LCS	09/24/24 17:15	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
54	P3989-08	TP-3	SAM	09/24/24 17:19		Kareem	OK
55	P3989-08DUP	TP-3DUP	DUP	09/24/24 17:24		Kareem	OK
56	P3989-08L	TP-3L	SD	09/24/24 17:28		Kareem	OK
57	P3989-08MS	TP-3MS	MS	09/24/24 17:33	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
58	P3989-08MSD	TP-3MSD	MSD	09/24/24 17:37	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
59	P3989-08A	TP-3A	PS	09/24/24 17:41	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
60	P4149-15	COMP-8	SAM	09/24/24 17:45		Kareem	OK
61	CCV05	CCV05	CCV	09/24/24 17:49		Kareem	OK
62	CCB05	CCB05	CCB	09/24/24 17:54		Kareem	OK
63	LR1	LR1	HIGH STD	09/24/24 17:59		Kareem	OK
64	LR2	LR2	HIGH STD	09/24/24 18:04		Kareem	OK
65	PB163601BL	PB163601BL	MB	09/24/24 18:09		Kareem	OK
66	PB163601BS	PB163601BS	LCS	09/24/24 18:14	0.1ml of m6010 and m6001 were added to 10ml of sample	Kareem	OK
67	P4144-01DL	1-3-SBGDL	SAM	09/24/24 18:18	10X for Cr,Fe,Zn, Ag	Kareem	Confirms

Instrument ID: P4

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ICV Standard	MP82485		
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ICSA Standard	MP82486 MP82487		
CRI Standard	mp82484		
LCS Standard			
Chk Standard	MP82491 MP82492		

68	P4144-03DL	4-6-SBGDL	SAM	09/24/24 18:22	10X for Cr,Fe,Zn, Ag	Kareem	Confirms
69	CCV06	CCV06	CCV	09/24/24 18:26		Kareem	OK
70	CCB06	CCB06	CCB	09/24/24 18:38		Kareem	OK
71	P4144-01	1-3-SBG	SAM	09/24/24 18:42	Cr,Fe,Zn High , Ag Oversaturated	Kareem	Dilution
72	P4144-03	4-6-SBG	SAM	09/24/24 18:46	Cr,Fe,Zn High , Ag Oversaturated	Kareem	Dilution
73	CCV07	CCV07	CCV	09/24/24 18:50		Kareem	OK
74	CCB07	CCB07	CCB	09/24/24 18:55		Kareem	OK

SOP ID : M1311-TCLP-14
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
Pipette ID : WC
Tumbler ID : T-1 / T-2
TCLP Filter ID : 114771

Start Prep Date : 09/19/2024 **Time :** 17:00
End Prep Date : 09/20/2024 **Time :** 10:15
Combination Ratio : 20
ZHE Cleaning Batch : N/A
Initial Room Temperature: 24 °C
Final Room Temperature: 22 °C
TCLP Technician Signature : *JP*
Supervisor By : *12*

Standardized 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 filtration and before preservation. TUMBLER T-1 /T-2 checked,30 rpm. p4123-01 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
09/20/24 11:00	<i>JP</i> ICC2R Room	<i>JP</i> 15x1
	Preparation Group TCLP	Analysis Group <i>1 net p. 14</i>

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
P4099-01	GAS-TRANSMISSION-DEBRIS	01	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
P4103-02	WC-22A	02	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4103-05	WC-14-5-7.5A	03	100.02	2000	N/A	N/A	N/A	8.2	1.5	T-1
P4103-08	WC-14-5-7.5B	04	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-1
P4103-11	WC-14-7.5-10A	05	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4103-14	WC-14-7.5-10B	06	100.04	2000	N/A	N/A	N/A	5.6	1.0	T-1
P4103-17	WC-23	07	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
P4120-02	T1	08	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-04	T2	09	100.01	2000	N/A	N/A	N/A	11.0	1.0	T-1
P4120-06	SF-6-A	10	100.03	2000	N/A	N/A	N/A	10.5	1.5	T-1
P4120-08	SF-6-B	11	100.04	2000	N/A	N/A	N/A	10.5	1.5	T-2
P4120-10	COMP-1	12	100.03	2000	N/A	N/A	N/A	10.5	1.0	T-2
P4120-12	COMP-2	13	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-2
P4120-14	RB24085	14	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-2
P4121-01	COMP-1	15	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-2
P4121-02	COMP-2	16	100.03	2000	N/A	N/A	N/A	5.0	1.0	T-2
P4123-01	910-B	17	100.02	2000	N/A	N/A	N/A	5.5	1.5	T-2
PB163511TB	LEB511	18	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
P4099-01	GAS-TRANSMISSION-DEBRIS	N/A	N/A	N/A	N/A	100	N/A
P4103-02	WC-22A	N/A	N/A	N/A	N/A	100	N/A
P4103-05	WC-14-5-7.5A	N/A	N/A	N/A	N/A	100	N/A
P4103-08	WC-14-5-7.5B	N/A	N/A	N/A	N/A	100	N/A
P4103-11	WC-14-7.5-10A	N/A	N/A	N/A	N/A	100	N/A
P4103-14	WC-14-7.5-10B	N/A	N/A	N/A	N/A	100	N/A
P4103-17	WC-23	N/A	N/A	N/A	N/A	100	N/A
P4120-02	T1	N/A	N/A	N/A	N/A	100	N/A
P4120-04	T2	N/A	N/A	N/A	N/A	100	N/A
P4120-06	SF-6-A	N/A	N/A	N/A	N/A	100	N/A
P4120-08	SF-6-B	N/A	N/A	N/A	N/A	100	N/A
P4120-10	COMP-1	N/A	N/A	N/A	N/A	100	N/A
P4120-12	COMP-2	N/A	N/A	N/A	N/A	100	N/A
P4120-14	RB24085	N/A	N/A	N/A	N/A	100	N/A
P4121-01	COMP-1	N/A	N/A	N/A	N/A	100	N/A
P4121-02	COMP-2	N/A	N/A	N/A	N/A	100	N/A
P4123-01	910-B	N/A	N/A	N/A	N/A	100	N/A
PB163511TB	LEB511	N/A	N/A	N/A	N/A	N/A	N/A

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
P4099-01	GAS-TRANSMISSION-DEBRIS	5.02	96.5	9.0	3.5	#1	4.94
P4103-02	WC-22A	5.03	96.5	7.2	2.5	#1	4.94
P4103-05	WC-14-5-7.5A	5.02	96.5	10.0	4.0	#1	4.94
P4103-08	WC-14-5-7.5B	5.03	96.5	9.3	3.5	#1	4.94
P4103-11	WC-14-7.5-10A	5.02	96.5	7.4	2.5	#1	4.94
P4103-14	WC-14-7.5-10B	5.01	96.5	8.0	3.0	#1	4.94
P4103-17	WC-23	5.02	96.5	8.4	3.5	#1	4.94
P4120-02	T1	5.03	96.5	11.5	4.5	#1	4.94
P4120-04	T2	5.04	96.5	11.5	4.5	#1	4.94
P4120-06	SF-6-A	5.03	96.5	11.0	4.0	#1	4.94
P4120-08	SF-6-B	5.02	96.5	11.0	4.5	#1	4.94
P4120-10	COMP-1	5.03	96.5	11.0	4.5	#1	4.94
P4120-12	COMP-2	5.02	96.5	11.5	4.5	#1	4.94
P4120-14	RB24085	5.02	96.5	8.6	3.5	#1	4.94
P4121-01	COMP-1	5.02	96.5	6.2	2.0	#1	4.94
P4121-02	COMP-2	5.02	96.5	7.2	2.5	#1	4.94
P4123-01	910-B	5.02	96.5	7.6	2.5	#1	4.94
PB163511TB	LEB511	N/A	N/A	N/A	N/A	#1	4.94

Prep Standard - Chemical Standard Summary

Order ID : P4103

Test : TCLP Mercury,TCLP Metals Group2

Prepbatch ID : PB163580,PB163584,

Sequence ID/Qc Batch ID: LB132543, LB132557, LB132557, LB132557, LB132557, LB132578,

Standard ID :

MP81818,MP81819,MP81820,MP81821,MP82127,MP82393,MP82400,MP82402,MP82404,MP82409,MP82410,MP82411,MP82412,MP82413,MP82414,MP82415,MP82416,MP82418,MP82422,MP82423,MP82424,MP82441 MP82476 MP82477 MP82478 MP82479 MP82484,MP82485,MP82486 MP82487,MP82488,MP82491 MP82492,

Chemical ID :

M4251,M4399,M4465,M4916,M5062,M5130,M5218,M5223,M5295,M5296,M5394,M5429,M5613,M5802,M5815,M5816,M5817,M5820,M5875,M5882,M5953,M5963,M5965,M5970,M5982,M6000,M6009,M6037,M6040,mp82484,W 3112,

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3965	2:1 H2SO4 : HNO3	MP81818	08/13/2024	01/04/2025	Mohan Bera	None	None	Sarabjit Jaswal
								08/13/2024

FROM 1600.00000ml of M5613 + 800.00000ml of M5963 = Final Quantity: 3200.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP81819	08/13/2024	02/13/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal
								08/13/2024

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP81820	08/13/2024	02/13/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal
08/13/2024								

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP81821	08/13/2024	02/14/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal
08/13/2024								

FROM 2000.00000ml of W3112 + 240.00000gram of M4251 + 240.00000gram of M4399 = Final Quantity: 2000.000 ml

Metals STANDARD PREPARATION LOG

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170	1:1HCL	MP82127	09/03/2024	02/08/2025	Janvi Patel	None	None	Sarabjit Jaswal
								09/03/2024

FROM 1250.00000ml of M6040 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP82393	09/20/2024	09/21/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal
								09/20/2024

FROM 1.00000ml of M6037 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1346	Hg ICV SOLUTION	MP82400	09/20/2024	09/21/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M5953 + 2.50000ml of M6037 + 245.00000ml of W3112 = Final Quantity: 250.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1358	CCV (Hg 5.0 PPB SOLUTION)	MP82402	09/20/2024	09/21/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 09/20/2024
<u>FROM</u>	485.00000ml of W3112 + 5.00000ml of M6037 + 10.00000ml of MP82393 = Final Quantity: 500.000 ml							

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP82409	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 09/23/2024
<u>FROM</u>	1.00000ml of M6037 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml							

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1340	Hg 0.00 PPB STD	MP82410	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG	Sarabjit Jaswal

A)

FROM 2.50000ml of M6037 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1341	Hg 0.2 PPB STD	MP82411	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG	Sarabjit Jaswal

A)

FROM 2.50000ml of M6037 + 247.30000ml of W3112 + 0.20000ml of MP82409 = Final Quantity: 250.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1342	Hg 2.5 PPB STD	MP82412	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG	Sarabjit Jaswal
A) FROM 2.50000ml of M6037 + 245.00000ml of W3112 + 2.50000ml of MP82409 = Final Quantity: 250.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1343	Hg 5.0 PPB STD	MP82413	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M6037 + 242.50000ml of W3112 + 5.00000ml of MP82409 = Final Quantity: 250.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1344	Hg 7.5 PPB STD	MP82414	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
A) FROM 2.50000ml of M6037 + 240.00000ml of W3112 + 7.50000ml of MP82409 = Final Quantity: 250.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1345	Hg 10.0 PPB STD	MP82415	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M6037 + 237.50000ml of W3112 + 10.00000ml of MP82409 = Final Quantity: 250.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1346	Hg ICV SOLUTION	MP82416	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M5953 + 2.50000ml of M6037 + 245.00000ml of W3112 = Final Quantity: 250.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1358	CCV (Hg 5.0 PPB SOLUTION)	MP82418	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 09/23/2024
<u>FROM</u>	485.00000ml of W3112 + 5.00000ml of M6037 + 10.00000ml of MP82409 = Final Quantity: 500.000 ml							

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
68	STANNOUS CHLORIDE SOLUTION	MP82422	09/21/2024	09/22/2024	Mohan Bera	None	None	Sarabjit Jaswal
								09/23/2024

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6040 = Final Quantity: 500.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
104	5% RINSING HCL	MP82423	09/21/2024	09/22/2024	Mohan Bera	None	None	Sarabjit Jaswal
								09/23/2024

FROM 100.00000ml of M6040 + 1900.00000ml of W3112 = Final Quantity: 2000.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP82424	09/21/2024	09/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 09/23/2024
<u>FROM</u>	2.50000ml of M6037 + 247.30000ml of W3112 + 0.20000ml of MP82409 = Final Quantity: 250.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
912	ICP AES ICV SOLN	MP82485	09/24/2024	10/23/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 09/24/2024
<u>FROM</u>	0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.02500ml of M5982 + 0.25000ml of M5218 + 10.00000ml of M5295 + 89.77500ml of MP82441 = Final Quantity: 100.000 ml							

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
911	ICP AES CCV SOLN	MP82488	09/24/2024	10/23/2024	Kareem Khairalla	None	None	Sarabjit Jaswal 09/24/2024
FROM 50.00000ml of MP82441 + 50.00000ml of MP82476 = Final Quantity: 100.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	12/19/2018 / mohan	12/05/2018 / mohan	M4251

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000187425	08/16/2024	08/16/2019 / RICHARD	07/08/2019 / RICHARD	M4399

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

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 #
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 #
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

CHEMICAL RECEIPT LOG BOOK

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)	0000265056	11/05/2025	07/13/2023 / mohan	07/07/2023 / mohan	M5613

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

CHEMICAL RECEIPT LOG BOOK

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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24B1362001	01/04/2025	07/09/2024 / Al-Terek	07/03/2024 / Al-Terek	M5963

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	01/04/2025	07/05/2024 / Jaswal	07/03/2024 / Al-Terek	M5965

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

CHEMICAL RECEIPT LOG BOOK

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	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/30/2026	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6000

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	U2-MEB731108	03/17/2028	08/13/2024 / Jaswal	05/14/2024 / Jaswal	M6009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	02/02/2025	08/24/2024 / Janvi	08/01/2024 / Janvi	M6037

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)	24D1562005	02/08/2025	08/09/2024 / Janvi	08/01/2024 / Janvi	M6040

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 / lwona	07/03/2024 / lwona	W3112

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.

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™



M 5613
MS

Material No.: 9673-33
Batch No.: 0000265056
Manufactured Date: 2020/05/12
Retest Date: 2025/05/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.5
Appearance	Passes Test	PT
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	< 1
ACS – Substances Reducing Permanganate (as SO ₂)	<= 2 ppm	< 2
Ammonium (NH ₄)	<= 1 ppm	< 1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Nitrate (NO ₃)	<= 0.2 ppm	< 0.1
Phosphate (PO ₄)	<= 0.5 ppm	< 0.1
Trace Impurities – Aluminum (Al)	<= 30.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 4 ppb	< 2
Trace Impurities – Barium (Ba)	<= 10.0 ppb	< 1.0
Trace Impurities – Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 2.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	< 1.0
Trace Impurities – Chromium (Cr)	<= 6.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 0.5 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 10.0 ppb	< 1.0
Trace Impurities – Germanium (Ge)	<= 10.0 ppb	< 10.0
Trace Impurities – Gold (Au)	<= 10.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 500 ppb	< 100

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

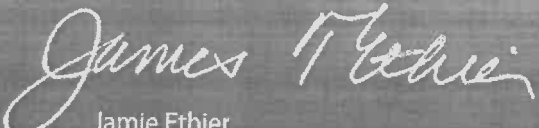
Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Test	Specification	Result
Trace Impurities – Iron (Fe)	<= 50.0 ppb	3.3
Trace Impurities – Lead (Pb)	<= 0.5 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 10.0 ppb	< 1.0
Trace Impurities – Magnesium (Mg)	<= 7.0 ppb	< 0.2
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 2.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 10.0 ppb	< 1.0
Trace Impurities – Potassium (K)	<= 500.0 ppb	< 2.0
Trace Impurities – Selenium (Se)	<= 50.0 ppb	17.8
Trace Impurities – Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 500.0 ppb	1.5
Trace Impurities – Strontium (Sr)	<= 5.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 10.0 ppb	< 5.0
Trace Impurities – Thallium (Tl)	<= 20.0 ppb	< 5.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 10.0 ppb	< 1.0
Trace Impurities – Vanadium (V)	<= 10.0 ppb	< 1.0
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities – Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Laboratory, Research or Manufacturing Use

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
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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).



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 °C)

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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2(u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = 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





Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	CLPP-CAL-1	
Lot Number:	T2-MEB714417	
Matrix:	5% (v/v) HNO ₃	
Value / Analyte(s):	5 000 µg/mL ea:	Potassium, Sodium,
	Calcium, Magnesium,	
	2 000 µg/mL ea:	Barium,
	Aluminum,	
	1 000 µg/mL ea:	
	Iron,	
	500 µg/mL ea:	Vanadium, Cobalt,
	Nickel, Zinc, Manganese,	
	250 µg/mL ea:	Copper,
	Silver,	
	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 °C)

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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2(u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





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1.0 ACCREDITATION / REGISTRATION

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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 °C)

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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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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

January 13, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 13, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





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RD:05/14/2024

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO ₃

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,	Aluminum,
	Cerium,	Selenium,
	Thallium,	
	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,	Boron,
	Vanadium,	
	20 µg/mL ea:	
	Zinc,	Strontium,
	Barium,	Beryllium,
	Cadmium,	Cobalt,
	Manganese,	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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty (z)} = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum ((w_i)^2 (u_{\text{char } i}^2))]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty (z)} = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; info@inorganicventures.com; inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 30, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Refine your results. Redefine your industry.

RD:05/14/2024

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).



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, SiO ₂	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
SiO ₂	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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (z) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{ITS}}^2 + u_{\text{TS}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ITS} = long term stability standard uncertainty (storage)

u_{TS} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (z) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{ITS}}^2 + u_{\text{TS}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ITS} = long term stability standard uncertainty (storage)

u_{TS} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 17, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

M4251
NB



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 ₂ OH · HCl) (by KMnO ₄ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titration 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



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

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

M4399



avantortm

Supplied - 07.08.19

Material No.: 3624-05
Batch No.: 0000187425
Manufactured Date: 2017/08/03
Retest Date: 2024/08/01

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	$\geq 99.0 \%$	99.8
pH of 5% Solution at 25°C	5.0 – 9.0	5.8
ACS – Insoluble Matter	$\leq 0.005 \%$	0.003
Iodide (I)	$\leq 0.002 \%$	< 0.002
Bromide (Br)	$\leq 0.01 \%$	< 0.01
Chlorate and Nitrate (as NO_3)	$\leq 0.003 \%$	< 0.003
ACS – Phosphate (PO_4)	$\leq 5 \text{ ppm}$	< 5
Sulfate (SO_4)	$\leq 0.004 \%$	< 0.004
Barium (Ba)	Passes Test	PT
ACS – Heavy Metals (as Pb)	$\leq 5 \text{ ppm}$	< 5
Iron (Fe)	$\leq 2 \text{ ppm}$	< 2
Calcium (Ca)	$\leq 0.002 \%$	< 0.002
Magnesium (Mg)	$\leq 0.001 \%$	< 0.001
Potassium (K)	$\leq 0.005 \%$	< 0.005

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

PS 08.16.19

ISO

Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600

Avantor Performance Materials, LLC.

3477 Corporate Parkway, Center Valley, PA 18034, U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

M4913-16

MS

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.

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

MS062
MS063
MB

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).



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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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.

$$w_i = (1/u_{char i}^2) / (\sum (1/(u_{char i}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum ((w_i)^2 (u_{char i}^2))]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	0.000011	M	Eu	<	0.000201	O	Na	0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al	0.000001	O	Fe	0.000001	M	Nb	<	0.000201	O	Si	0.000005	M	Zr	<	0.000201	
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201		
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007		
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201		
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201		
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201		
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216		
O	Ca	0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201			
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402		
M	Ce	<	0.000201	O	K	0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508			
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201		
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058		
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201		
M	Cu	<	0.000402	O	Mg	0.000001	O	S	<	0.053950	M	W	<	0.000604			
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201		
M	Er	<	0.000201	M	Mo	0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO₃. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO₃ / LDPE container, stable in 10% HNO₃ packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO₃ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO₃ / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxide (Soluble in HNO₃); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va, 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **September 22, 2026**

- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





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,





Instructions for QATS Reference Material: ICP-AES ICS

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 HNO₃. 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 HNO₃. Analyze this ICSAB solution by ICP-AES.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

ICSA
M5126
M5127
M5128
M5129
M5130

ICSB
M5219
M5220
M5221
M5222
M5223

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).



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 °C)

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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2(u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = 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





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,



Instructions for QATS Reference Material: ICP-AES ICS

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 HNO₃. 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 HNO₃. Analyze this ICSAB solution by ICP-AES.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

ICSA
M5126
M5127
M5128
M5129
M5130

ICSB
M5219
M5220
M5221
M5222
M5223



R: 4/20/21

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

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
M15292
M15293
M15294
M15295

(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.





QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

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



Certified Reference Material CRM

M5429 R1 0126/23 (B)

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

Solvent: 20510011 Nitric Acid

Lithium (Li)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

2% 20.0 Nitric Acid (mL)

5E-05 Balance Uncertainty
0.058 Flask Uncertainty
1000.12
Weight shown below was diluted to (mL):

Lot #

57103

070622

Formulated By:	Lawrence Barry	070622
Reviewed By:	Pedro L. Rentas	070622

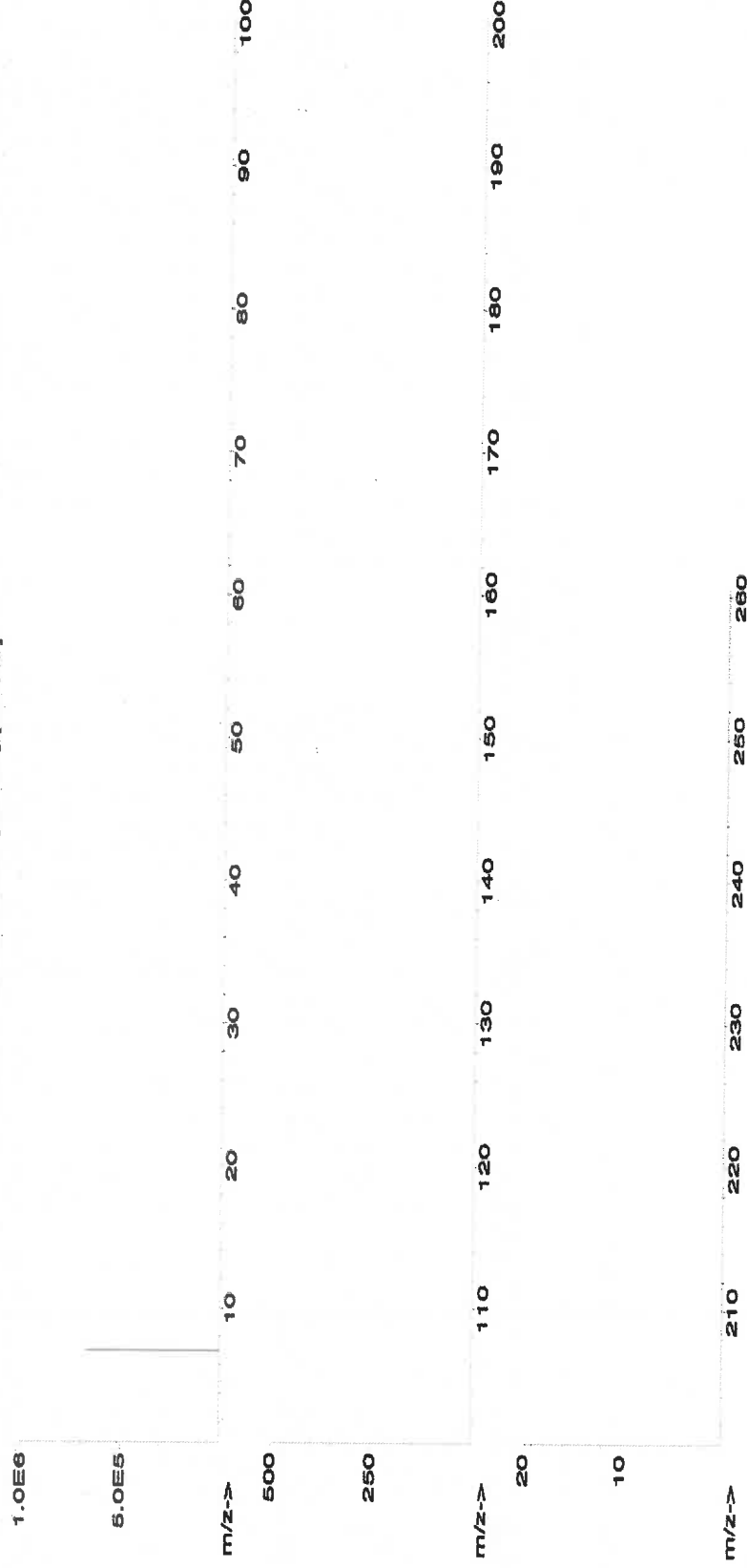
SDS Information

Expanded Uncertainty	(Solvent Safety Info. On Attached pg.)	NIST
+/- (µg/mL)	CAS#	SRM
20.0	7790-69-4	LD50
5 mg/m3	of-rat 1426 mg/kg	NA

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Conc. (µg/mL)	Actual

1. Lithium nitrate (Li)	IN019	L2042019A1	10000	99.999	0.10	10.0	100.0134	100.0173	10000.4	20.0	7790-69-4	5 mg/m3	of-rat 1426 mg/kg	NA

[1] Spectrum No.1 [9.619 sec]:58103.D# [Count] [Linear]





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	<0.02	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.2	Ho	<0.02	La	<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	<0.02	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57115
Lot Number: 041723
Description: Phosphorous (P)

Solvent: 21110221 Nitric Acid

Lot #

R102109124 M5815

Expiration Date: 041726
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

2% 40.0 (mL) Nitric Acid

Weight shown below was diluted to (mL): 2000.02 0.058 Balance Uncertainty Flask Uncertainty

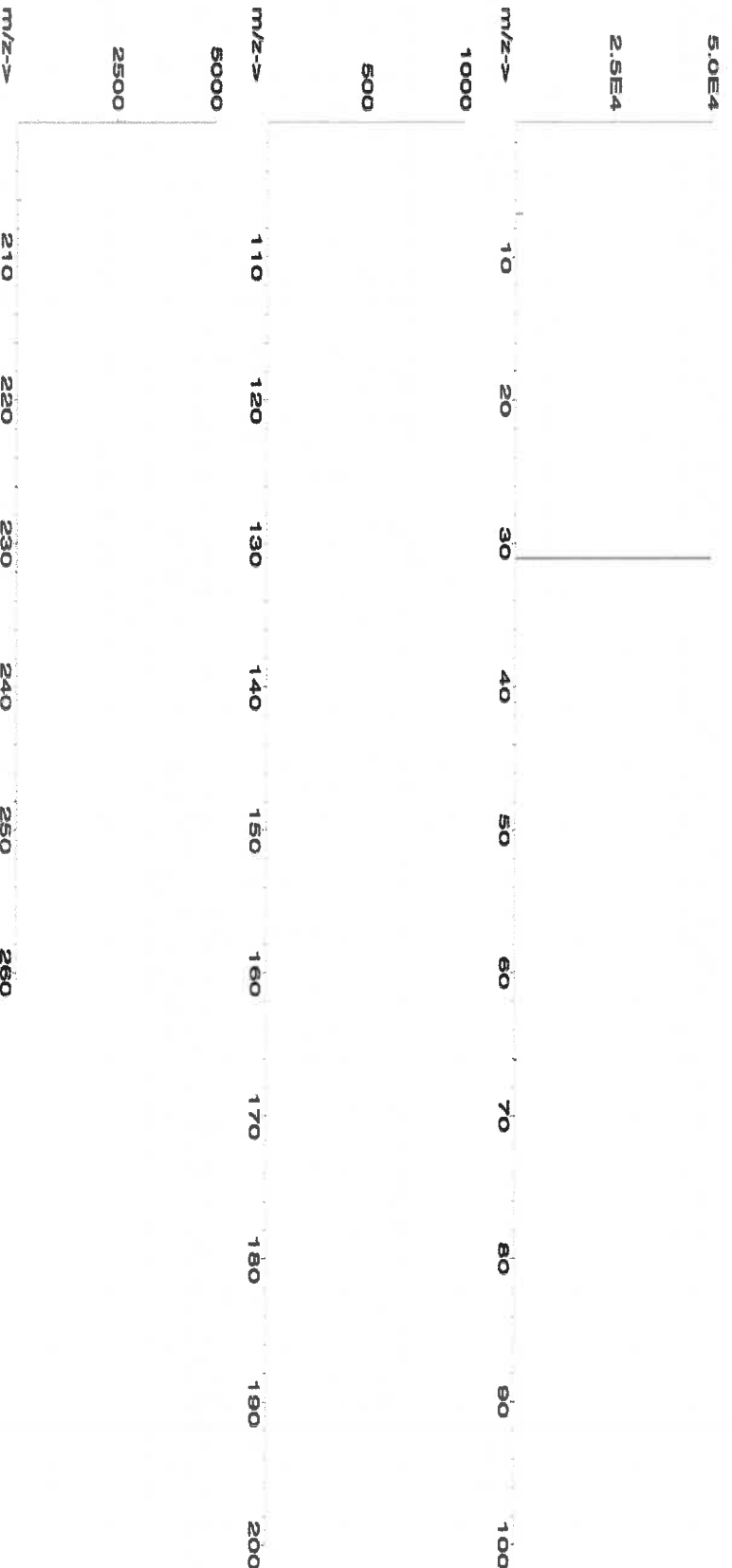
Formulated By: Lawrence Barry	041723
Reviewed By: Pedro L. Rentas	041723

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium dihydrogen phosphate (P) IN008 PVR2019A1 10000 99.999 0.10 27.5 72.7287 72.7289 10000.0 20.0 7722-76-1 5 mg/m3 or-hal >2000mg/kg 3186

[1] Spectrum No.1 [12.074 sec]:58115.D# [Count] [Linear]





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	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * 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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57016
122923
Sulfur (S)

Lot #

ASTM Type 1 Water

Formulated By:	Benson Chan
Reviewed By:	Pedro L. Rentas
122923	

Expiration Date:

122926

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6L7B

Weight shown below was diluted to (mL):

4000.0

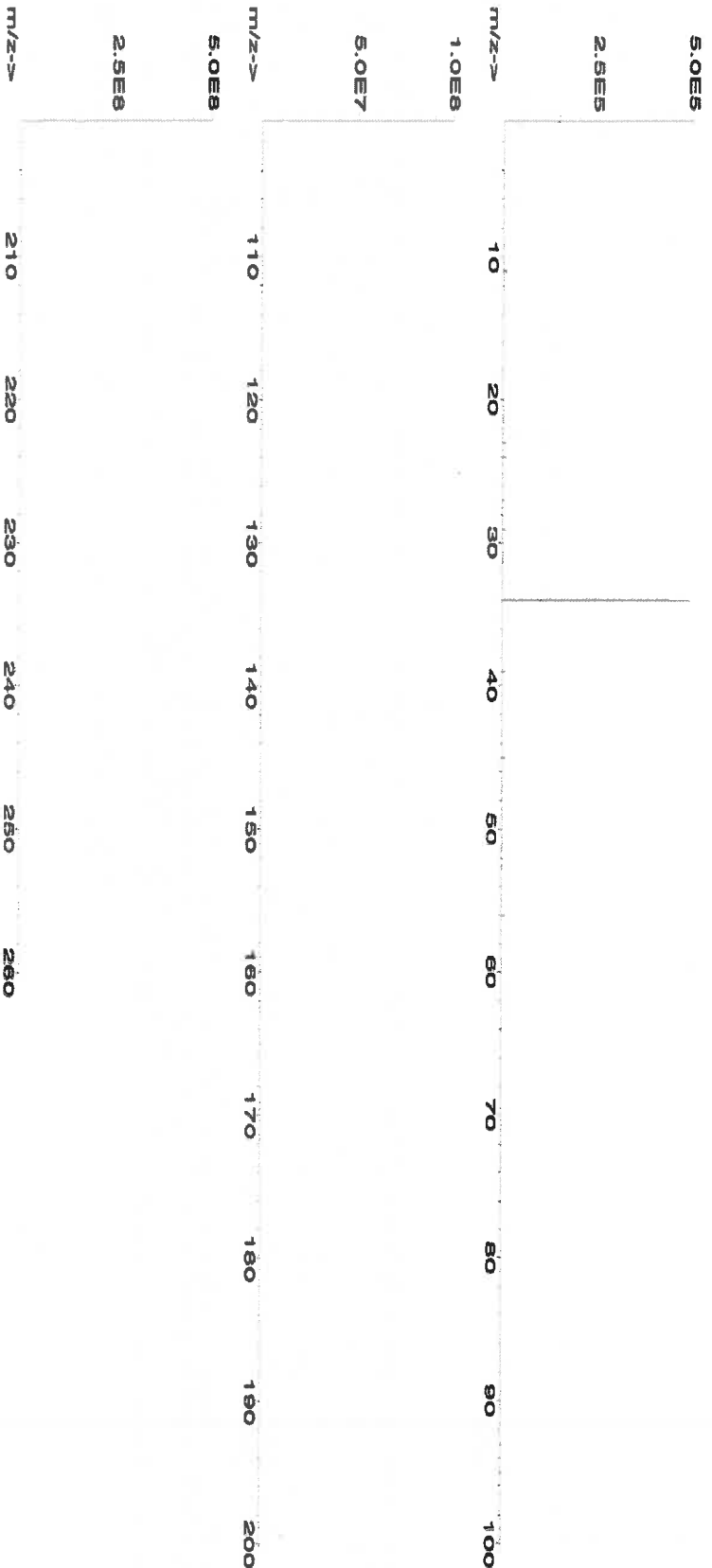
SE-05 Balance Uncertainty
0.06 Flask Uncertainty

Compound

RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium sulfate (S) IN117 SLBR725V 1000 99.9 0.10 24.3 16.4979 16.4980 1000.0 2.0 7783-20-2 NA 0.01-0.02 4250mg/kg 3181

[1] Spectrum No. 1 [33.603 sec]:57016.D# [Count] [Linear]





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	Ba	<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	Ru	<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	S	<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	Ta	<0.02	Ti	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **57116**
Lot Number: **071123**
Description: **Sulfur (S)**

Lot #
Solvent: 071123 ASTM Type 1 Water

Formulated By:	Lawrence Barry
	071123
Reviewed By:	Pedro L. Rentas
	071123

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48 5E-05 Balance Uncertainty 0.058 Flask Uncertainty

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty		CAS#	OSHA PEL (TWA)	LD50	NIST SRM
									+/- (µg/mL)	(µg/mL)				

SDS Information

1. Ammonium sulfate (S) IN117 SLBR725V 10000 99.9 0.10 24.3 82.4675 82.4692 10000.1 20.0 7783-20-2 NA oral-rat 4250mg/kg 3181

[1] Spectrum No. 1 [24.004 sec]:58116.D# [Count] [Linear]





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	Pt	<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	Ti	<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

Physical Characterization:

(T)= Target analyte

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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- * Standards are certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57015
Lot Number: 091123
Description: Phosphorous (P)

Solvent: 24002546 Nitric Acid

Lot #

R: 02109124 M5820

Formulated By: Lawrence Barry 091123

Reviewed By: Pedro L. Rentas 091123

2% 40.0 (mL) Nitric Acid

Expiration Date: 091126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6LJB

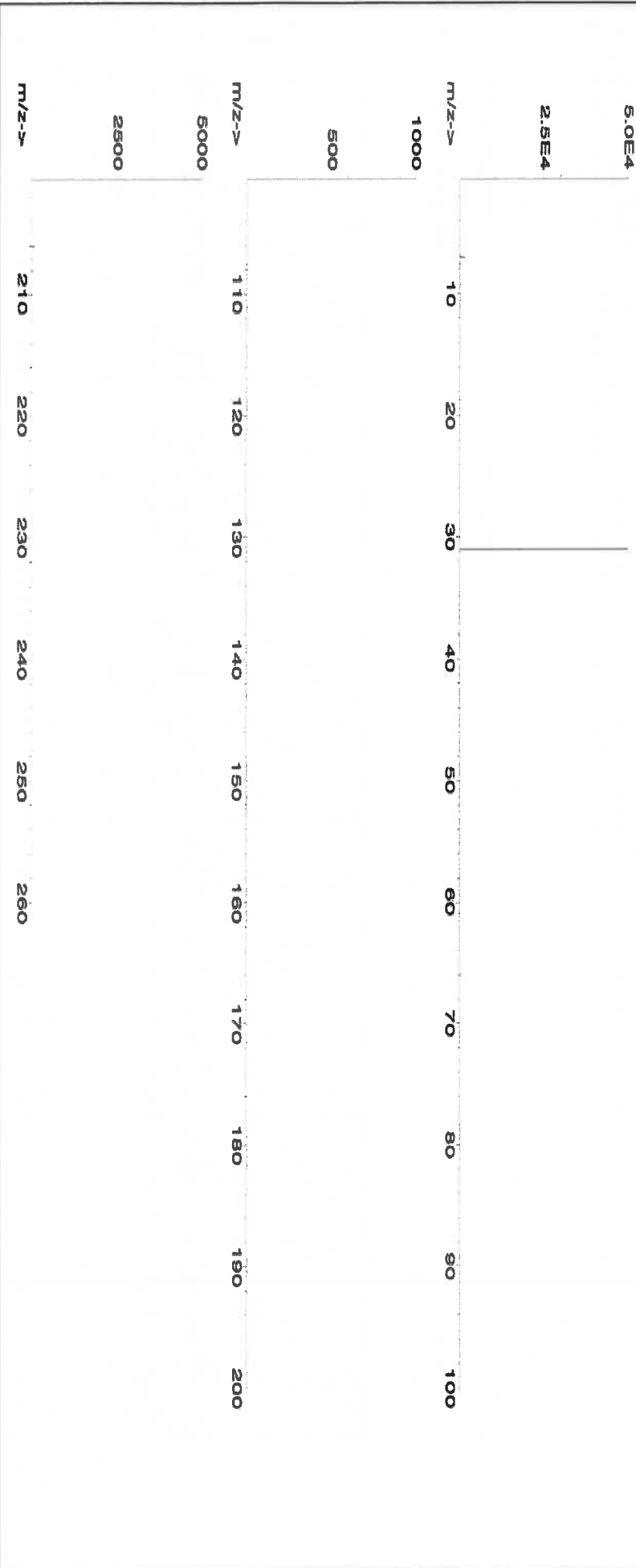
Weight shown below was diluted to (mL): 2000.02 0.058 Balance Uncertainty Flask Uncertainty

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)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium dihydrogen phosphate (P) IN008 PVO62019A1 1000 99.999 0.10 27.5 7.2729 7.2730 1000.0 2.0 7722-76-1 5 mg/m3 xH-rat >2000mg/kg 3186

[1] Spectrum No.1 [12.074 sec]:58115.D# [Count] [Linear]





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	Tc	<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	Sa	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
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- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
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QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

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.



M5528-32
M5953
3/30/23

(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.





QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

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 ($\mu\text{g/L}$) (after 10-fold dilution)	Concentration ($\mu\text{g/L}$) (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 ($\mu\text{g/L}$) (after 100-fold dilution)	Analyte	Concentration ($\mu\text{g/L}$) (after 100-fold dilution)
Hg	4.0	CN ⁻	99

Nitric Acid 69%
CMOS

avantor™



MS963 MS964 MS965
MS966 MS967 MS968

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



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

 **avantorsTM**

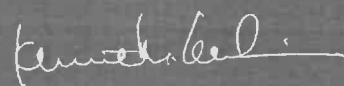


Material No.: 9606-03
Batch No.: 24B1362001

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

avantor™



MS963 MS964 MS965
MS966 MS967 MS968

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



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

 **avantorsTM**

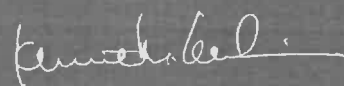


Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Ken Koehnlein
Sr. Manager, Quality Assurance

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com



Certified Reference Material CRM

M5970 M5971

R. J. 10/12/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 06/127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11
SE-05 Balance Uncertainty: 0.016
Fisk Uncertainty:

Lot # 24002546
Solvent: Nitric Acid

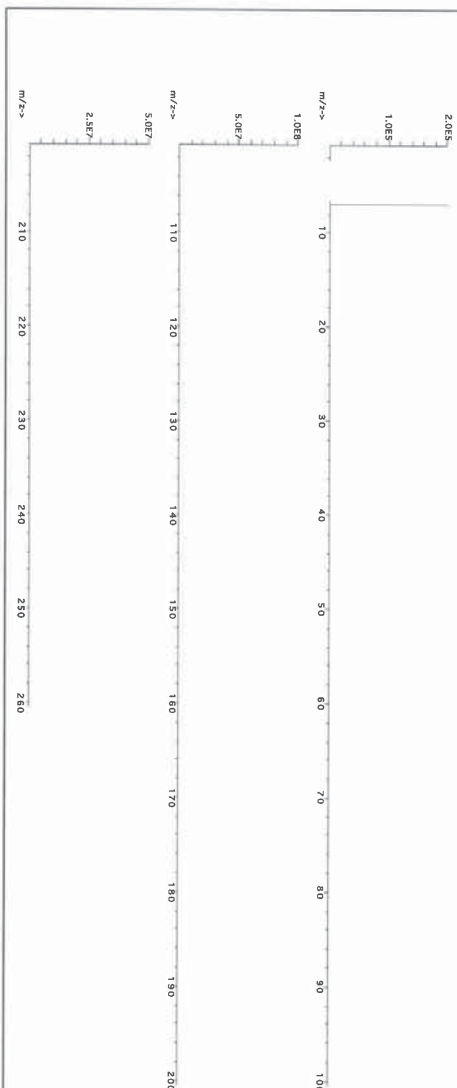
2.0% 5.0 (mL) Nitric Acid

Microvial Capable	
Formulated By:	Giovanni Esposito
Reviewed By:	Petro L. Parias
CAS#	OSHA PEL (TWA)
LD50	
SN#	062124

Compound		Part		Lot		Dilution		Initial		Uncertainty		Nominal		Initial		Final		Expanded		SDS Information		NIST	
Number	Factor	Number	Factor	Number	Factor	Vol. (mL)	Pipette (mL)	Conc. (µg/mL)	Conc. (µg/mL)	Vol. (mL)	Pipette (mL)	Conc. (µg/mL)	Conc. (µg/mL)	Vol. (mL)	Pipette (mL)	Conc. (µg/mL)	Conc. (µg/mL)	Uncertainty	± (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	SN#

1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	1000.0	2.0	7790-68-4	5 mg/m3	01-Hal 1428 mg/kg	NA

[1] Spectrum No. 1 [32.093 sec; 15000.0Hz Count [Lines]





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	T	<0.02	Ni	<0.02	Pb	<0.02	Sc	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ce	<0.2	Er	<0.02	Hg	<0.02	Mg	<0.02	Nb	<0.02	Nd	<0.02	Rb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Co	<0.02	Eu	<0.02	In	<0.02	La	<0.02	Os	<0.02	Pd	<0.02	Sr	<0.02	Rh	<0.02	Ag	<0.02	Ti	<0.02	V	<0.02
Ba	<0.02	Cr	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pt	<0.02	Pb	<0.02	Sn	<0.02	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cy	<0.02	Ga	<0.02	La	<0.2	Hg	<0.2	P	<0.02	Se	<0.02	Sm	<0.02	Sr	<0.02	S	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Fe	<0.02	Ge	<0.02	Ta	<0.02	Mo	<0.02	K	<0.02	Pt	<0.02	Sn	<0.02	Sc	<0.02	Ta	<0.02	Tl	<0.02	Zn	<0.02
B	<0.02	Ca	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Se	<0.02	So	<0.02	Ta	<0.02	Ti	<0.02	Tl	<0.02	Zr	<0.02

(T) = Target analyte

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

[Signature]

- * 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 certified (+/-) 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).



Certified Reference Material CRM



45982

R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57038
031524
Strontium (Sr)

Solvent: 24002546 Nitric Acid

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

031527
Ambient (20 °C)
1000
6UTB
5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Weight shown below was diluted to (mL): 2000.07

Lot #

2% 40.0 Nitric Acid
(mL)

Formulated By:	Benson Chan	031524
Reviewed By:	Pedro L. Rentas	031524

SDS Information

Expanded

Uncertainty

(Solvent Safety Info. On Attached pg.)

+/- (µg/mL)

LD50

CAS#

OSHA PEL (TWA)

Actual

Conc. (µg/mL)

Actual

Weight (g)

Target

Weight (g)

Assay

Purity (%)

Purity (%)

Nominal

Conc. (µg/mL)

Lot

Number

RM#

IN017

SR2022018A1

1000

89.997

0.10

41.2

4.85470

4.85502

1000.1

2.0

10042-76-9

NA

orl-rat >2000mg/kg

3153a

1. Strontium nitrate (Sr)

[1] Spectrum No.1 [14.495 sec]:58136.D# [Count] [Linear]

5.0E6

2.5E6

m/z-->

1.0E6

5.0E5

m/z-->

5.0E6

2.5E6

m/z-->



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	Pt	<0.02	Se	<0.2	Tb	<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
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Ti	<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
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<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
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
																W	<0.02
																U	<0.02
																V	<0.02
																Yb	<0.02
																Y	<0.02
																Zn	<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 certified (+/-) 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).

2024 JUN 7 10:01 AM

Nitric Acid 69%
CMOS

avantor™



Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Draw
date: 1. - 08/01/2023

M6034, M6037
M6035, M6038,
M6036, 1

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



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™**



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 INTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**



Material No.: 9530-33
Batch No.: 24D1562005
Manufactured Date: 2024-03-18
Retest Date: 2029-03-17
Revision No.: 0

Received! — 08/01/2024
pater
m6039
m6040

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	1.192
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	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	2.2 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	31.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	0.2 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	3 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantorsm**



Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.2 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	0.2 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 1.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.0 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	< 0.4 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	< 0.2 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™**



Material No.: 9530-33
Batch No.: 24D1562005

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



Jamie Croak
Director Quality Operations, Bioscience Production



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57051
120523
Antimony (Sb)

Lot #
Solvent:

24002546
Nitric Acid

2.0%
60.0
Nitric Acid
(mL)

Expiration Date:

120526

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6U7B

Volume shown below was diluted to (mL):

3000.41

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

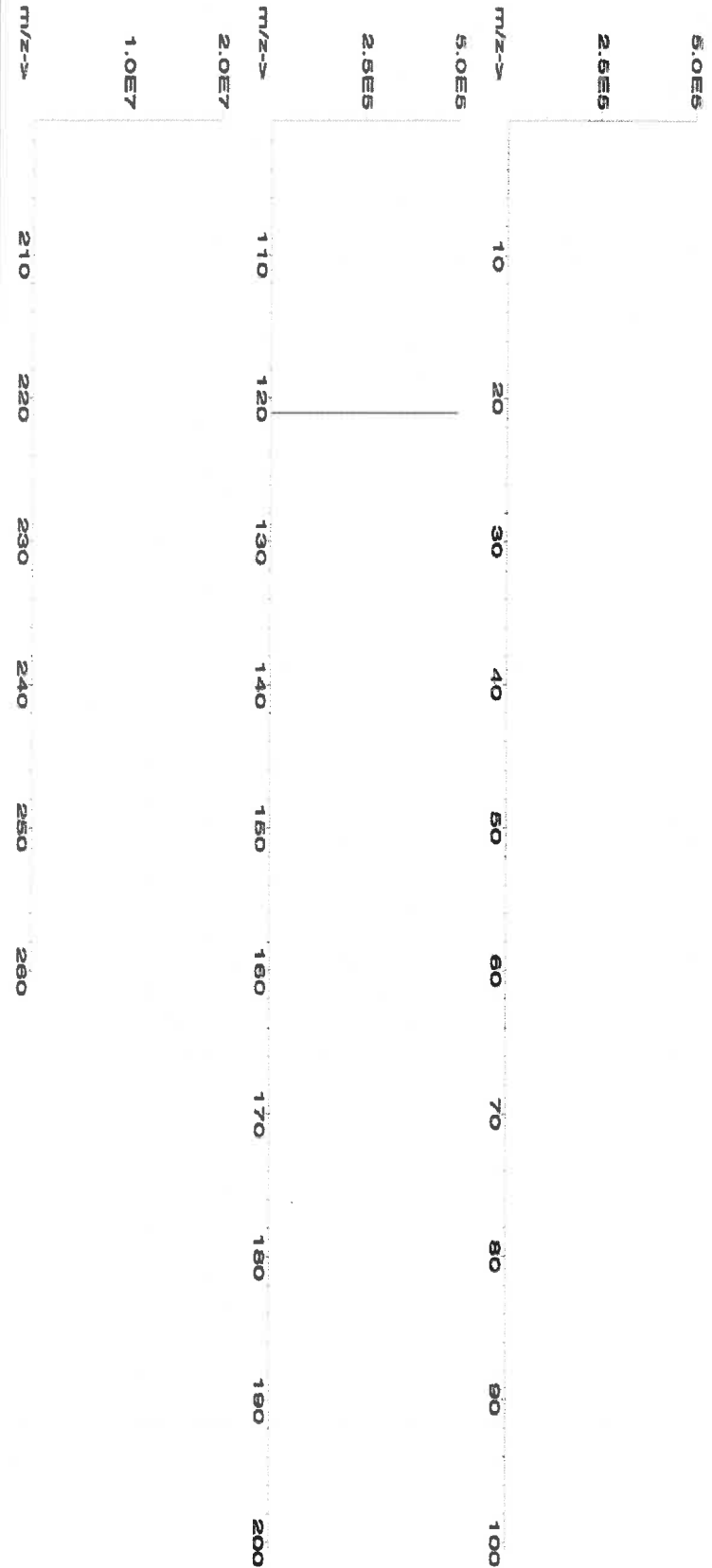
Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Rientas	120523

SDS Information

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)	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 or-rel 7000 mg/kg 3102a

[1] Spectrum No.1 [17.964 sec]:58051.D# [Count] [Linear]





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	Pt	<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 certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



SHIPPING DOCUMENTS



CHAIN OF CUSTODY RECORD

NO. 1 OF 5

P4103

COMPANY INFORMATION			PROJECT INFORMATION				REQUESTED ANALYSIS/METHOD											COMMENTS		
LOCATION	ATTN	ADDRESS	PROJECT	BILLING INFORMATION	BILL TO	ADDRESS	PHONE	FAX	PO#	NUMBER OF CONTAINERS	TCL + 20 SVOCs (8270)	TAL Metals + Boron & Tin (6010/7471)	Full TCLP + TCLP Cu, Ni & Zn (1311/8270/8081/8151/6010/7471)	RCRA Characteristics I/C/R (1030/9045/D/Ch 7 rev3)	PCBs (8082); Hex Chromium (7196)	Ammonia-Nitrogen (ASTM/SM4500H); COD (ASTM/5220D); Oil & Grease (ASTM/1664);	Total Solids (ASTM/SM2540G); Total Volatile Solids (160.4)		TCL+10 VOCs (8260); TCLP VOCs (1311/8260); TPH DRO & GRO (8015)	Tox (9020 or 9023)
ENTACT LLC	Wyatt Seel	150 Bay Street, Suite 801 Jersey City, NJ	North Point		ENTACT LLC	999 Oakmont Plaza Drive Suite 300 Westmont, IL 60559	419-266-4671		E9306											
SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	SAMPLE TYPE	CONTAINER TYPE														
WC-22A	Waste characterization	9/17	11:40	Soil	C	8/4oz Jar	9	X	X	X	X	X	X	X	X	X	X	X	X	See Full List Attached
WC-14_5_7.5A	Waste characterization	9/17	11:50	Soil	C	8/4oz Jar	9	X	X	X	X	X	X	X	X	X	X	X	X	See Full List Attached
WC-14_5_7.5B	Waste characterization	9/17	13:30	Soil	C	8/4oz Jar	9	X	X	X	X	X	X	X	X	X	X	X	X	See Full List Attached
WC-14_7.5_10A	Waste characterization	9/17	12:35	Soil	C	8/4oz Jar	9	X	X	X	X	X	X	X	X	X	X	X	X	See Full List Attached
WC-14_7.5_10B	Waste characterization	9/17	14:20	Soil	C	8/4oz Jar	9	X	X	X	X	X	X	X	X	X	X	X	X	See Full List Attached
WC-23	Waste characterization	9/17	14:45	Soil	C	8/4oz Jar	9	X	X	X	X	X	X	X	X	X	X	X	X	See Full List Attached
SAMPLER	W. Seel	SHIPMENT	courier	AIRBILL																
REQUIRED TURNAROUND		☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS ☐ 10 DAYS ☐ ROUTINE ☐ OTHER: _____																		
1. RELINQUISHED BY		DATE	2. RELINQUISHED BY		DATE	3. RELINQUISHED BY		DATE												
SIGNATURE: <i>Wyatt Seel</i>		09-18-24	SIGNATURE:			SIGNATURE:														
PRINTED NAME/COMPANY: Wyatt Seel		14:10	PRINTED NAME/COMPANY:			PRINTED NAME/COMPANY:														
1. RECEIVED BY		DATE	2. RECEIVED BY		DATE	3. RECEIVED BY		DATE												
SIGNATURE: <i>Benova</i>		9-18-24	SIGNATURE:			SIGNATURE:														
PRINTED NAME/COMPANY: Benova		14:10	PRINTED NAME/COMPANY:			PRINTED NAME/COMPANY:														

Parameter	Test Method
TCL + 10 VOCs	8270D
TCL + 20 SVOCs	8260B
TAL Metals (+Boron, Tin)	6010/7471
Hexavalent Chromium (Cr+6)	7196
Total Cyanide	9014
TCLP VOCs	1311/8260B
TCLP SVOCs	1311/8270D
TCLP Metals (+ Beryllium, Copper, Nickel, Zinc)	1311/6010/7471
TCLP Pesticides/Herbicides	1311/8080/8151
RCRA Characteristics (Ignitability, Corrosivity, Reactive Sulfide/Cyanide)	SW 846 1030 SW 846/9045D SW 846 7.3.3.2 Rev. 3
PCBs	8082A
TPH/DRO & GRO	8015D
TOX	9020 or 9023
Paint Filter	9095



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 (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4103 ENTA05

Client Name : ENTACT

Client Contact : Chris Lawrence

Invoice Name : ENTACT

Invoice Contact : Chris Lawrence

Order Date : 9/18/2024 3:16:00 PM

North Point

Project Name : CMC-CTV2 #E9322

Receive Date/Time : 9/18/2024 2:10:00 PM

Purchase Order :

Project Mgr :

Report Type : Level 1

EDD Type : Excel NJ

Hard Copy Date :

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4103-01	WC-22A	Solid	09/17/2024	11:40					
					VOC-TCLVOA-10		8260D	5 Bus. Days	
P4103-07	WC-14-5-7.5B	Solid	09/17/2024	13:30					
					VOC-TCLVOA-10		8260D	5 Bus. Days	
P4103-10	WC-14-7.5-10A	Solid	09/17/2024	12:35					
					VOC-TCLVOA-10		8260D	5 Bus. Days	
P4103-13	WC-14-7.5-10B	Solid	09/17/2024	14:20					
					VOC-TCLVOA-10		8260D	5 Bus. Days	
P4103-16	WC-23	Solid	09/17/2024	14:45					
p4103-04	WC-14-5-7.5A	solid	09/17/2024	11:50am	VOC-TCLVOA-10		8260D	5 Bus. Days	
					VOC-TCLVOA-10		8260D	5 Bus. Days	

Relinquished By : ch

Date / Time : 9-18-24 16:25

Received By : JC

Date / Time : 9/18/24 16:25

Storage Area : VOA Refridgerator Room