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Cover Page

Order ID : Q1422

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number	Client Sample Number
Q1422-01	B-154-SB01
Q1422-02	B-154-SB02

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

Signature : _____

Date: 3/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

Alliance TECHNICAL GROUP

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1422**

	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:** **03/07/2025**

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LAB CHRONICLE

OrderID:	Q1422	**OrderDate:**	2/25/2025 10:47:00 AM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	**Location:**	H33,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1422-01	**B-154-SB01**	**SOIL**			**02/23/25**			**02/25/25**
			Mercury	7471B		02/25/25	02/26/25	
			Metals ICP-TAL	6010D		02/25/25	03/10/25	
Q1422-02	**B-154-SB02**	**SOIL**			**02/23/25**			**02/25/25**
			Mercury	7471B		02/25/25	02/26/25	
			Metals ICP-TAL	6010D		02/25/25	03/10/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1422 **Order ID:** Q1422

Client: Portal Partners Tri-Venture **Project ID:** Amtrak Sawtooth Bridges 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : B-154-SB01								
Q1422-01	B-154-SB01	SOIL	Aluminum	6540		2.37	4.92	mg/Kg
Q1422-01	B-154-SB01	SOIL	Arsenic	3.45		0.28	0.98	mg/Kg
Q1422-01	B-154-SB01	SOIL	Barium	52.8		0.63	4.92	mg/Kg
Q1422-01	B-154-SB01	SOIL	Beryllium	0.51		0.012	0.30	mg/Kg
Q1422-01	B-154-SB01	SOIL	Calcium	1300		2.75	98.4	mg/Kg
Q1422-01	B-154-SB01	SOIL	Chromium	11.5		0.053	0.49	mg/Kg
Q1422-01	B-154-SB01	SOIL	Cobalt	9.17		0.057	1.48	mg/Kg
Q1422-01	B-154-SB01	SOIL	Copper	34.9		0.46	0.98	mg/Kg
Q1422-01	B-154-SB01	SOIL	Iron	16800		2.65	4.92	mg/Kg
Q1422-01	B-154-SB01	SOIL	Lead	26.4		0.15	0.59	mg/Kg
Q1422-01	B-154-SB01	SOIL	Magnesium	3540		3.37	98.4	mg/Kg
Q1422-01	B-154-SB01	SOIL	Manganese	186		0.070	0.98	mg/Kg
Q1422-01	B-154-SB01	SOIL	Mercury	0.023		0.0070	0.016	mg/Kg
Q1422-01	B-154-SB01	SOIL	Nickel	17.1		0.089	1.97	mg/Kg
Q1422-01	B-154-SB01	SOIL	Potassium	1030		28.2	98.4	mg/Kg
Q1422-01	B-154-SB01	SOIL	Sodium	94.2	J	35.5	98.4	mg/Kg
Q1422-01	B-154-SB01	SOIL	Thallium	0.89	J	0.43	1.97	mg/Kg
Q1422-01	B-154-SB01	SOIL	Vanadium	16.3		0.27	1.97	mg/Kg
Q1422-01	B-154-SB01	SOIL	Zinc	39.7		0.11	1.97	mg/Kg
Client ID : B-154-SB02								
Q1422-02	B-154-SB02	SOIL	Aluminum	6540		2.44	5.07	mg/Kg
Q1422-02	B-154-SB02	SOIL	Arsenic	1.97		0.29	1.01	mg/Kg
Q1422-02	B-154-SB02	SOIL	Barium	40.7		0.65	5.07	mg/Kg
Q1422-02	B-154-SB02	SOIL	Beryllium	0.48		0.012	0.30	mg/Kg
Q1422-02	B-154-SB02	SOIL	Calcium	852		2.84	101	mg/Kg
Q1422-02	B-154-SB02	SOIL	Chromium	10.5		0.055	0.51	mg/Kg
Q1422-02	B-154-SB02	SOIL	Cobalt	6.40		0.059	1.52	mg/Kg
Q1422-02	B-154-SB02	SOIL	Copper	16.3		0.48	1.01	mg/Kg
Q1422-02	B-154-SB02	SOIL	Iron	12700		2.73	5.07	mg/Kg
Q1422-02	B-154-SB02	SOIL	Lead	8.93		0.15	0.61	mg/Kg
Q1422-02	B-154-SB02	SOIL	Magnesium	2070		3.48	101	mg/Kg
Q1422-02	B-154-SB02	SOIL	Manganese	148		0.072	1.01	mg/Kg
Q1422-02	B-154-SB02	SOIL	Nickel	10.9		0.091	2.03	mg/Kg
Q1422-02	B-154-SB02	SOIL	Potassium	571		29.1	101	mg/Kg
Q1422-02	B-154-SB02	SOIL	Sodium	60.6	J	36.6	101	mg/Kg
Q1422-02	B-154-SB02	SOIL	Vanadium	17.2		0.27	2.03	mg/Kg
Q1422-02	B-154-SB02	SOIL	Zinc	25.3		0.11	2.03	mg/Kg

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Hit Summary Sheet
SW-846

SDG No.:	Q1422	**Order ID:**	Q1422
Client:	Portal Partners Tri-Venture	**Project ID:**	Amtrak Sawtooth Bridges 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	02/23/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	02/25/25
Client Sample ID:	B-154-SB01	SDG No.:	Q1422
Lab Sample ID:	Q1422-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	88.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	6540		1	2.37	4.92	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-36-0	Antimony	0.15	UN	1	0.15	2.46	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-38-2	Arsenic	3.45		1	0.28	0.98	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-39-3	Barium	52.8		1	0.63	4.92	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-41-7	Beryllium	0.51		1	0.012	0.30	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-43-9	Cadmium	0.016	U	1	0.016	0.30	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-70-2	Calcium	1300		1	2.75	98.4	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-47-3	Chromium	11.5		1	0.053	0.49	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-48-4	Cobalt	9.17		1	0.057	1.48	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-50-8	Copper	34.9		1	0.46	0.98	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7439-89-6	Iron	16800		1	2.65	4.92	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7439-92-1	Lead	26.4		1	0.15	0.59	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7439-95-4	Magnesium	3540		1	3.37	98.4	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7439-96-5	Manganese	186		1	0.070	0.98	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7439-97-6	Mercury	0.023	N	1	0.0070	0.016	mg/Kg	02/25/25 13:30	02/26/25 12:28	SW7471B	
7440-02-0	Nickel	17.1		1	0.089	1.97	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-09-7	Potassium	1030		1	28.2	98.4	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7782-49-2	Selenium	0.33	UN	1	0.33	0.98	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-22-4	Silver	0.051	UN	1	0.051	0.49	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-23-5	Sodium	94.2	J	1	35.5	98.4	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-28-0	Thallium	0.89	J	1	0.43	1.97	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-62-2	Vanadium	16.3		1	0.27	1.97	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050
7440-66-6	Zinc	39.7		1	0.11	1.97	mg/Kg	02/25/25 10:05	03/10/25 15:18	SW6010	SW3050

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

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

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

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	02/23/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	02/25/25
Client Sample ID:	B-154-SB02	SDG No.:	Q1422
Lab Sample ID:	Q1422-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	87.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	6540		1	2.44	5.07	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-36-0	Antimony	0.15	UN	1	0.15	2.53	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-38-2	Arsenic	1.97		1	0.29	1.01	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-39-3	Barium	40.7		1	0.65	5.07	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-41-7	Beryllium	0.48		1	0.012	0.30	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-43-9	Cadmium	0.016	U	1	0.016	0.30	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-70-2	Calcium	852		1	2.84	101	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-47-3	Chromium	10.5		1	0.055	0.51	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-48-4	Cobalt	6.40		1	0.059	1.52	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-50-8	Copper	16.3		1	0.48	1.01	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7439-89-6	Iron	12700		1	2.73	5.07	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7439-92-1	Lead	8.93		1	0.15	0.61	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7439-95-4	Magnesium	2070		1	3.48	101	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7439-96-5	Manganese	148		1	0.072	1.01	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7439-97-6	Mercury	0.0070	UN	1	0.0070	0.015	mg/Kg	02/25/25 13:30	02/26/25 12:40	SW7471B	
7440-02-0	Nickel	10.9		1	0.091	2.03	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-09-7	Potassium	571		1	29.1	101	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7782-49-2	Selenium	0.34	UN	1	0.34	1.01	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-22-4	Silver	0.053	UN	1	0.053	0.51	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-23-5	Sodium	60.6	J	1	36.6	101	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-28-0	Thallium	0.45	U	1	0.45	2.03	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-62-2	Vanadium	17.2		1	0.27	2.03	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050
7440-66-6	Zinc	25.3		1	0.11	2.03	mg/Kg	02/25/25 10:05	03/10/25 15:22	SW6010	SW3050

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

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

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

METAL CALIBRATION DATA

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

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
ICV19	Mercury	3.63	4.0	91	90 - 110	CV	02/26/2025	11:10	LB134807

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

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
CCV25	Mercury	5.01	5.0	100	90 - 110	CV	02/26/2025	11:18	LB134807
CCV26	Mercury	4.86	5.0	97	90 - 110	CV	02/26/2025	11:48	LB134807
CCV27	Mercury	4.78	5.0	96	90 - 110	CV	02/26/2025	12:30	LB134807
CCV28	Mercury	4.73	5.0	95	90 - 110	CV	02/26/2025	12:46	LB134807

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2500	2500	100	90 - 110	P	03/10/2025	11:48	LB134965
	Antimony	1010	1000	100	90 - 110	P	03/10/2025	11:48	LB134965
	Arsenic	1030	1000	103	90 - 110	P	03/10/2025	11:48	LB134965
	Barium	537	520	103	90 - 110	P	03/10/2025	11:48	LB134965
	Beryllium	517	510	101	90 - 110	P	03/10/2025	11:48	LB134965
	Cadmium	503	510	99	90 - 110	P	03/10/2025	11:48	LB134965
	Calcium	9910	10000	99	90 - 110	P	03/10/2025	11:48	LB134965
	Chromium	531	520	102	90 - 110	P	03/10/2025	11:48	LB134965
	Cobalt	510	520	98	90 - 110	P	03/10/2025	11:48	LB134965
	Copper	524	510	103	90 - 110	P	03/10/2025	11:48	LB134965
	Iron	10400	10000	104	90 - 110	P	03/10/2025	11:48	LB134965
	Lead	1010	1000	101	90 - 110	P	03/10/2025	11:48	LB134965
	Magnesium	5800	6000	97	90 - 110	P	03/10/2025	11:48	LB134965
	Manganese	503	520	97	90 - 110	P	03/10/2025	11:48	LB134965
	Nickel	513	530	97	90 - 110	P	03/10/2025	11:48	LB134965
	Potassium	10200	9900	103	90 - 110	P	03/10/2025	11:48	LB134965
	Selenium	1040	1000	104	90 - 110	P	03/10/2025	11:48	LB134965
	Silver	257	250	103	90 - 110	P	03/10/2025	11:48	LB134965
	Sodium	9760	10000	98	90 - 110	P	03/10/2025	11:48	LB134965
	Thallium	1040	1000	104	90 - 110	P	03/10/2025	11:48	LB134965
	Vanadium	513	500	103	90 - 110	P	03/10/2025	11:48	LB134965
	Zinc	1040	1000	104	90 - 110	P	03/10/2025	11:48	LB134965

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	103	100	103	80 - 120	P	03/10/2025	11:52	LB134965
	Antimony	49.7	50.0	99	80 - 120	P	03/10/2025	11:52	LB134965
	Arsenic	17.9	20.0	90	80 - 120	P	03/10/2025	11:52	LB134965
	Barium	90.3	100	90	80 - 120	P	03/10/2025	11:52	LB134965
	Beryllium	5.54	6.0	92	80 - 120	P	03/10/2025	11:52	LB134965
	Cadmium	5.56	6.0	93	80 - 120	P	03/10/2025	11:52	LB134965
	Calcium	1900	2000	95	80 - 120	P	03/10/2025	11:52	LB134965
	Chromium	9.58	10.0	96	80 - 120	P	03/10/2025	11:52	LB134965
	Cobalt	28.0	30.0	93	80 - 120	P	03/10/2025	11:52	LB134965
	Copper	21.2	20.0	106	80 - 120	P	03/10/2025	11:52	LB134965
	Iron	108	100	108	80 - 120	P	03/10/2025	11:52	LB134965
	Lead	11.7	12.0	97	80 - 120	P	03/10/2025	11:52	LB134965
	Magnesium	1970	2000	99	80 - 120	P	03/10/2025	11:52	LB134965
	Manganese	19.2	20.0	96	80 - 120	P	03/10/2025	11:52	LB134965
	Nickel	37.4	40.0	93	80 - 120	P	03/10/2025	11:52	LB134965
	Potassium	1930	2000	97	80 - 120	P	03/10/2025	11:52	LB134965
	Selenium	18.2	20.0	91	80 - 120	P	03/10/2025	11:52	LB134965
	Silver	9.78	10.0	98	80 - 120	P	03/10/2025	11:52	LB134965
	Sodium	1800	2000	90	80 - 120	P	03/10/2025	11:52	LB134965
	Thallium	40.0	40.0	100	80 - 120	P	03/10/2025	11:52	LB134965
	Vanadium	35.7	40.0	89	80 - 120	P	03/10/2025	11:52	LB134965
	Zinc	40.5	40.0	101	80 - 120	P	03/10/2025	11:52	LB134965

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9760	10000	98	90 - 110	P	03/10/2025	12:27	LB134965
	Antimony	5060	5000	101	90 - 110	P	03/10/2025	12:27	LB134965
	Arsenic	4990	5000	100	90 - 110	P	03/10/2025	12:27	LB134965
	Barium	9500	10000	95	90 - 110	P	03/10/2025	12:27	LB134965
	Beryllium	247	250	99	90 - 110	P	03/10/2025	12:27	LB134965
	Cadmium	2440	2500	97	90 - 110	P	03/10/2025	12:27	LB134965
	Calcium	26100	25000	104	90 - 110	P	03/10/2025	12:27	LB134965
	Chromium	1000	1000	100	90 - 110	P	03/10/2025	12:27	LB134965
	Cobalt	2430	2500	97	90 - 110	P	03/10/2025	12:27	LB134965
	Copper	1240	1250	99	90 - 110	P	03/10/2025	12:27	LB134965
	Iron	4820	5000	96	90 - 110	P	03/10/2025	12:27	LB134965
	Lead	4900	5000	98	90 - 110	P	03/10/2025	12:27	LB134965
	Magnesium	25900	25000	104	90 - 110	P	03/10/2025	12:27	LB134965
	Manganese	2620	2500	105	90 - 110	P	03/10/2025	12:27	LB134965
	Nickel	2440	2500	98	90 - 110	P	03/10/2025	12:27	LB134965
	Potassium	24200	25000	97	90 - 110	P	03/10/2025	12:27	LB134965
	Selenium	5030	5000	101	90 - 110	P	03/10/2025	12:27	LB134965
	Silver	1220	1250	98	90 - 110	P	03/10/2025	12:27	LB134965
	Sodium	24100	25000	96	90 - 110	P	03/10/2025	12:27	LB134965
	Thallium	4960	5000	99	90 - 110	P	03/10/2025	12:27	LB134965
	Vanadium	2410	2500	96	90 - 110	P	03/10/2025	12:27	LB134965
	Zinc	2470	2500	99	90 - 110	P	03/10/2025	12:27	LB134965
CCV02	Aluminum	9920	10000	99	90 - 110	P	03/10/2025	13:21	LB134965
	Antimony	5190	5000	104	90 - 110	P	03/10/2025	13:21	LB134965
	Arsenic	5090	5000	102	90 - 110	P	03/10/2025	13:21	LB134965
	Barium	10200	10000	102	90 - 110	P	03/10/2025	13:21	LB134965
	Beryllium	231	250	93	90 - 110	P	03/10/2025	13:21	LB134965
	Cadmium	2470	2500	99	90 - 110	P	03/10/2025	13:21	LB134965
	Calcium	24300	25000	97	90 - 110	P	03/10/2025	13:21	LB134965
	Chromium	1000	1000	100	90 - 110	P	03/10/2025	13:21	LB134965
	Cobalt	2480	2500	99	90 - 110	P	03/10/2025	13:21	LB134965
	Copper	1270	1250	102	90 - 110	P	03/10/2025	13:21	LB134965
	Iron	5220	5000	104	90 - 110	P	03/10/2025	13:21	LB134965
	Lead	4950	5000	99	90 - 110	P	03/10/2025	13:21	LB134965

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	24000	25000	96	90 - 110	P	03/10/2025	13:21	LB134965
	Manganese	2420	2500	97	90 - 110	P	03/10/2025	13:21	LB134965
	Nickel	2490	2500	100	90 - 110	P	03/10/2025	13:21	LB134965
	Potassium	26700	25000	107	90 - 110	P	03/10/2025	13:21	LB134965
	Selenium	5150	5000	103	90 - 110	P	03/10/2025	13:21	LB134965
	Silver	1260	1250	101	90 - 110	P	03/10/2025	13:21	LB134965
	Sodium	26400	25000	106	90 - 110	P	03/10/2025	13:21	LB134965
	Thallium	5050	5000	101	90 - 110	P	03/10/2025	13:21	LB134965
	Vanadium	2470	2500	99	90 - 110	P	03/10/2025	13:21	LB134965
	Zinc	2550	2500	102	90 - 110	P	03/10/2025	13:21	LB134965
CCV03	Aluminum	10000	10000	100	90 - 110	P	03/10/2025	14:11	LB134965
	Antimony	5250	5000	105	90 - 110	P	03/10/2025	14:11	LB134965
	Arsenic	5180	5000	104	90 - 110	P	03/10/2025	14:11	LB134965
	Barium	10200	10000	102	90 - 110	P	03/10/2025	14:11	LB134965
	Beryllium	239	250	96	90 - 110	P	03/10/2025	14:11	LB134965
	Cadmium	2500	2500	100	90 - 110	P	03/10/2025	14:11	LB134965
	Calcium	24500	25000	98	90 - 110	P	03/10/2025	14:11	LB134965
	Chromium	1000	1000	100	90 - 110	P	03/10/2025	14:11	LB134965
	Cobalt	2510	2500	100	90 - 110	P	03/10/2025	14:11	LB134965
	Copper	1300	1250	104	90 - 110	P	03/10/2025	14:11	LB134965
	Iron	5200	5000	104	90 - 110	P	03/10/2025	14:11	LB134965
	Lead	5010	5000	100	90 - 110	P	03/10/2025	14:11	LB134965
	Magnesium	24300	25000	97	90 - 110	P	03/10/2025	14:11	LB134965
	Manganese	2420	2500	97	90 - 110	P	03/10/2025	14:11	LB134965
	Nickel	2520	2500	101	90 - 110	P	03/10/2025	14:11	LB134965
	Potassium	26600	25000	106	90 - 110	P	03/10/2025	14:11	LB134965
	Selenium	5240	5000	105	90 - 110	P	03/10/2025	14:11	LB134965
	Silver	1280	1250	102	90 - 110	P	03/10/2025	14:11	LB134965
	Sodium	25900	25000	104	90 - 110	P	03/10/2025	14:11	LB134965
	Thallium	5010	5000	100	90 - 110	P	03/10/2025	14:11	LB134965
	Vanadium	2500	2500	100	90 - 110	P	03/10/2025	14:11	LB134965
	Zinc	2590	2500	104	90 - 110	P	03/10/2025	14:11	LB134965
CCV04	Aluminum	9730	10000	97	90 - 110	P	03/10/2025	15:01	LB134965
	Antimony	5120	5000	102	90 - 110	P	03/10/2025	15:01	LB134965

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	5010	5000	100	90 - 110	P	03/10/2025	15:01	LB134965
	Barium	9950	10000	100	90 - 110	P	03/10/2025	15:01	LB134965
	Beryllium	226	250	90	90 - 110	P	03/10/2025	15:01	LB134965
	Cadmium	2420	2500	97	90 - 110	P	03/10/2025	15:01	LB134965
	Calcium	24000	25000	96	90 - 110	P	03/10/2025	15:01	LB134965
	Chromium	993	1000	99	90 - 110	P	03/10/2025	15:01	LB134965
	Cobalt	2440	2500	98	90 - 110	P	03/10/2025	15:01	LB134965
	Copper	1250	1250	100	90 - 110	P	03/10/2025	15:01	LB134965
	Iron	5240	5000	105	90 - 110	P	03/10/2025	15:01	LB134965
	Lead	4860	5000	97	90 - 110	P	03/10/2025	15:01	LB134965
	Magnesium	23700	25000	95	90 - 110	P	03/10/2025	15:01	LB134965
	Manganese	2360	2500	94	90 - 110	P	03/10/2025	15:01	LB134965
	Nickel	2440	2500	98	90 - 110	P	03/10/2025	15:01	LB134965
	Potassium	26800	25000	107	90 - 110	P	03/10/2025	15:01	LB134965
	Selenium	5050	5000	101	90 - 110	P	03/10/2025	15:01	LB134965
	Silver	1250	1250	100	90 - 110	P	03/10/2025	15:01	LB134965
	Sodium	26100	25000	104	90 - 110	P	03/10/2025	15:01	LB134965
	Thallium	4780	5000	96	90 - 110	P	03/10/2025	15:01	LB134965
	Vanadium	2450	2500	98	90 - 110	P	03/10/2025	15:01	LB134965
	Zinc	2510	2500	100	90 - 110	P	03/10/2025	15:01	LB134965
CCV05	Aluminum	9800	10000	98	90 - 110	P	03/10/2025	15:51	LB134965
	Antimony	5090	5000	102	90 - 110	P	03/10/2025	15:51	LB134965
	Arsenic	5000	5000	100	90 - 110	P	03/10/2025	15:51	LB134965
	Barium	9730	10000	97	90 - 110	P	03/10/2025	15:51	LB134965
	Beryllium	239	250	96	90 - 110	P	03/10/2025	15:51	LB134965
	Cadmium	2420	2500	97	90 - 110	P	03/10/2025	15:51	LB134965
	Calcium	23800	25000	95	90 - 110	P	03/10/2025	15:51	LB134965
	Chromium	983	1000	98	90 - 110	P	03/10/2025	15:51	LB134965
	Cobalt	2440	2500	98	90 - 110	P	03/10/2025	15:51	LB134965
	Copper	1250	1250	100	90 - 110	P	03/10/2025	15:51	LB134965
	Iron	4890	5000	98	90 - 110	P	03/10/2025	15:51	LB134965
	Lead	4850	5000	97	90 - 110	P	03/10/2025	15:51	LB134965
	Magnesium	24000	25000	96	90 - 110	P	03/10/2025	15:51	LB134965
	Manganese	2360	2500	94	90 - 110	P	03/10/2025	15:51	LB134965

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2450	2500	98	90 - 110	P	03/10/2025	15:51	LB134965
	Potassium	25000	25000	100	90 - 110	P	03/10/2025	15:51	LB134965
	Selenium	5020	5000	100	90 - 110	P	03/10/2025	15:51	LB134965
	Silver	1250	1250	100	90 - 110	P	03/10/2025	15:51	LB134965
	Sodium	24100	25000	96	90 - 110	P	03/10/2025	15:51	LB134965
	Thallium	4850	5000	97	90 - 110	P	03/10/2025	15:51	LB134965
	Vanadium	2450	2500	98	90 - 110	P	03/10/2025	15:51	LB134965
	Zinc	2500	2500	100	90 - 110	P	03/10/2025	15:51	LB134965
CCV06	Aluminum	9600	10000	96	90 - 110	P	03/10/2025	16:48	LB134965
	Antimony	5090	5000	102	90 - 110	P	03/10/2025	16:48	LB134965
	Arsenic	4980	5000	100	90 - 110	P	03/10/2025	16:48	LB134965
	Barium	9720	10000	97	90 - 110	P	03/10/2025	16:48	LB134965
	Beryllium	268	250	107	90 - 110	P	03/10/2025	16:48	LB134965
	Cadmium	2410	2500	96	90 - 110	P	03/10/2025	16:48	LB134965
	Calcium	23700	25000	95	90 - 110	P	03/10/2025	16:48	LB134965
	Chromium	977	1000	98	90 - 110	P	03/10/2025	16:48	LB134965
	Cobalt	2430	2500	97	90 - 110	P	03/10/2025	16:48	LB134965
	Copper	1250	1250	100	90 - 110	P	03/10/2025	16:48	LB134965
	Iron	5100	5000	102	90 - 110	P	03/10/2025	16:48	LB134965
	Lead	4830	5000	96	90 - 110	P	03/10/2025	16:48	LB134965
	Magnesium	23600	25000	94	90 - 110	P	03/10/2025	16:48	LB134965
	Manganese	2680	2500	107	90 - 110	P	03/10/2025	16:48	LB134965
	Nickel	2440	2500	97	90 - 110	P	03/10/2025	16:48	LB134965
	Potassium	26100	25000	104	90 - 110	P	03/10/2025	16:48	LB134965
	Selenium	5020	5000	100	90 - 110	P	03/10/2025	16:48	LB134965
	Silver	1240	1250	100	90 - 110	P	03/10/2025	16:48	LB134965
	Sodium	24900	25000	100	90 - 110	P	03/10/2025	16:48	LB134965
	Thallium	4890	5000	98	90 - 110	P	03/10/2025	16:48	LB134965
	Vanadium	2420	2500	97	90 - 110	P	03/10/2025	16:48	LB134965
	Zinc	2500	2500	100	90 - 110	P	03/10/2025	16:48	LB134965
CCV07	Aluminum	9380	10000	94	90 - 110	P	03/10/2025	17:39	LB134965
	Antimony	5010	5000	100	90 - 110	P	03/10/2025	17:39	LB134965
	Arsenic	4890	5000	98	90 - 110	P	03/10/2025	17:39	LB134965
	Barium	9380	10000	94	90 - 110	P	03/10/2025	17:39	LB134965

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

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	03/10/2025	17:39	LB134965
	Cadmium	2350	2500	94	90 - 110	P	03/10/2025	17:39	LB134965
	Calcium	22900	25000	92	90 - 110	P	03/10/2025	17:39	LB134965
	Chromium	942	1000	94	90 - 110	P	03/10/2025	17:39	LB134965
	Cobalt	2370	2500	95	90 - 110	P	03/10/2025	17:39	LB134965
	Copper	1220	1250	98	90 - 110	P	03/10/2025	17:39	LB134965
	Iron	4820	5000	96	90 - 110	P	03/10/2025	17:39	LB134965
	Lead	4710	5000	94	90 - 110	P	03/10/2025	17:39	LB134965
	Magnesium	23000	25000	92	90 - 110	P	03/10/2025	17:39	LB134965
	Manganese	2580	2500	103	90 - 110	P	03/10/2025	17:39	LB134965
	Nickel	2380	2500	95	90 - 110	P	03/10/2025	17:39	LB134965
	Potassium	24600	25000	98	90 - 110	P	03/10/2025	17:39	LB134965
	Selenium	4950	5000	99	90 - 110	P	03/10/2025	17:39	LB134965
	Silver	1190	1250	95	90 - 110	P	03/10/2025	17:39	LB134965
	Sodium	23300	25000	93	90 - 110	P	03/10/2025	17:39	LB134965
	Thallium	4820	5000	96	90 - 110	P	03/10/2025	17:39	LB134965
	Vanadium	2350	2500	94	90 - 110	P	03/10/2025	17:39	LB134965
	Zinc	2410	2500	96	90 - 110	P	03/10/2025	17:39	LB134965
CCV08	Aluminum	9210	10000	92	90 - 110	P	03/10/2025	18:29	LB134965
	Antimony	4880	5000	98	90 - 110	P	03/10/2025	18:29	LB134965
	Arsenic	4780	5000	96	90 - 110	P	03/10/2025	18:29	LB134965
	Barium	9560	10000	96	90 - 110	P	03/10/2025	18:29	LB134965
	Beryllium	259	250	103	90 - 110	P	03/10/2025	18:29	LB134965
	Cadmium	2320	2500	93	90 - 110	P	03/10/2025	18:29	LB134965
	Calcium	22900	25000	92	90 - 110	P	03/10/2025	18:29	LB134965
	Chromium	933	1000	93	90 - 110	P	03/10/2025	18:29	LB134965
	Cobalt	2340	2500	94	90 - 110	P	03/10/2025	18:29	LB134965
	Copper	1200	1250	96	90 - 110	P	03/10/2025	18:29	LB134965
	Iron	4930	5000	99	90 - 110	P	03/10/2025	18:29	LB134965
	Lead	4630	5000	93	90 - 110	P	03/10/2025	18:29	LB134965
	Magnesium	22900	25000	92	90 - 110	P	03/10/2025	18:29	LB134965
	Manganese	2610	2500	104	90 - 110	P	03/10/2025	18:29	LB134965
	Nickel	2350	2500	94	90 - 110	P	03/10/2025	18:29	LB134965
	Potassium	25100	25000	100	90 - 110	P	03/10/2025	18:29	LB134965

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV08	Selenium	4800	5000	96	90 - 110	P	03/10/2025	18:29	LB134965
	Silver	1200	1250	96	90 - 110	P	03/10/2025	18:29	LB134965
	Sodium	23800	25000	95	90 - 110	P	03/10/2025	18:29	LB134965
	Thallium	4760	5000	95	90 - 110	P	03/10/2025	18:29	LB134965
	Vanadium	2330	2500	93	90 - 110	P	03/10/2025	18:29	LB134965
	Zinc	2410	2500	96	90 - 110	P	03/10/2025	18:29	LB134965
CCV09	Aluminum	9210	10000	92	90 - 110	P	03/10/2025	18:46	LB134965
	Antimony	4910	5000	98	90 - 110	P	03/10/2025	18:46	LB134965
	Arsenic	4800	5000	96	90 - 110	P	03/10/2025	18:46	LB134965
	Barium	9700	10000	97	90 - 110	P	03/10/2025	18:46	LB134965
	Beryllium	253	250	101	90 - 110	P	03/10/2025	18:46	LB134965
	Cadmium	2320	2500	93	90 - 110	P	03/10/2025	18:46	LB134965
	Calcium	22900	25000	92	90 - 110	P	03/10/2025	18:46	LB134965
	Chromium	923	1000	92	90 - 110	P	03/10/2025	18:46	LB134965
	Cobalt	2340	2500	94	90 - 110	P	03/10/2025	18:46	LB134965
	Copper	1210	1250	97	90 - 110	P	03/10/2025	18:46	LB134965
	Iron	4910	5000	98	90 - 110	P	03/10/2025	18:46	LB134965
	Lead	4630	5000	93	90 - 110	P	03/10/2025	18:46	LB134965
	Magnesium	22700	25000	91	90 - 110	P	03/10/2025	18:46	LB134965
	Manganese	2540	2500	102	90 - 110	P	03/10/2025	18:46	LB134965
	Nickel	2350	2500	94	90 - 110	P	03/10/2025	18:46	LB134965
	Potassium	25300	25000	101	90 - 110	P	03/10/2025	18:46	LB134965
	Selenium	4840	5000	97	90 - 110	P	03/10/2025	18:46	LB134965
	Silver	1180	1250	95	90 - 110	P	03/10/2025	18:46	LB134965
	Sodium	24000	25000	96	90 - 110	P	03/10/2025	18:46	LB134965
	Thallium	4750	5000	95	90 - 110	P	03/10/2025	18:46	LB134965
	Vanadium	2340	2500	94	90 - 110	P	03/10/2025	18:46	LB134965
	Zinc	2360	2500	94	90 - 110	P	03/10/2025	18:46	LB134965

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

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	86	40 - 160	CV	02/26/2025	11:22	LB134807
CRI01	Aluminum	98.3	100	98	40 - 160	P	03/10/2025	12:01	LB134965
	Antimony	49.7	50.0	100	40 - 160	P	03/10/2025	12:01	LB134965
	Arsenic	18.2	20.0	91	40 - 160	P	03/10/2025	12:01	LB134965
	Barium	90.9	100	91	40 - 160	P	03/10/2025	12:01	LB134965
	Beryllium	5.47	6.0	91	40 - 160	P	03/10/2025	12:01	LB134965
	Cadmium	5.67	6.0	94	40 - 160	P	03/10/2025	12:01	LB134965
	Calcium	1900	2000	95	40 - 160	P	03/10/2025	12:01	LB134965
	Chromium	10.4	10.0	104	40 - 160	P	03/10/2025	12:01	LB134965
	Cobalt	28.3	30.0	94	40 - 160	P	03/10/2025	12:01	LB134965
	Copper	21.4	20.0	107	40 - 160	P	03/10/2025	12:01	LB134965
	Iron	111	100	111	40 - 160	P	03/10/2025	12:01	LB134965
	Lead	12.0	12.0	100	40 - 160	P	03/10/2025	12:01	LB134965
	Magnesium	1980	2000	99	40 - 160	P	03/10/2025	12:01	LB134965
	Manganese	19.3	20.0	96	40 - 160	P	03/10/2025	12:01	LB134965
	Nickel	37.9	40.0	95	40 - 160	P	03/10/2025	12:01	LB134965
	Potassium	1950	2000	97	40 - 160	P	03/10/2025	12:01	LB134965
	Selenium	21.0	20.0	105	40 - 160	P	03/10/2025	12:01	LB134965
	Silver	10.2	10.0	102	40 - 160	P	03/10/2025	12:01	LB134965
	Sodium	1810	2000	91	40 - 160	P	03/10/2025	12:01	LB134965
	Thallium	39.5	40.0	99	40 - 160	P	03/10/2025	12:01	LB134965
	Vanadium	36.7	40.0	92	40 - 160	P	03/10/2025	12:01	LB134965
	Zinc	41.3	40.0	103	40 - 160	P	03/10/2025	12:01	LB134965

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB19	Mercury	0.20	+/-0.20	U	0.20	CV	02/26/2025	11:15	LB134807

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB25	Mercury	0.20	+/-0.20	U	0.20	CV	02/26/2025	11:20	LB134807
CCB26	Mercury	0.20	+/-0.20	U	0.20	CV	02/26/2025	11:53	LB134807
CCB27	Mercury	0.20	+/-0.20	U	0.20	CV	02/26/2025	12:37	LB134807
CCB28	Mercury	0.20	+/-0.20	U	0.20	CV	02/26/2025	12:49	LB134807

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	100	P	03/10/2025	11:57	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	11:57	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	11:57	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	11:57	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	11:57	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	11:57	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	11:57	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	11:57	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	11:57	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	11:57	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	11:57	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	11:57	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	11:57	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	11:57	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	11:57	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	11:57	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	11:57	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	11:57	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	11:57	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	11:57	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	11:57	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	11:57	LB134965

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	100	P	03/10/2025	12:34	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	12:34	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	12:34	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	12:34	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	12:34	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	12:34	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	12:34	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	12:34	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	12:34	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	12:34	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	12:34	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	12:34	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	12:34	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	12:34	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	12:34	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	12:34	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	12:34	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	12:34	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	12:34	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	12:34	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	12:34	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	12:34	LB134965
CCB02	Aluminum	100	+/-100	U	100	P	03/10/2025	13:25	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	13:25	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	13:25	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	13:25	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	13:25	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	13:25	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	13:25	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	13:25	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	13:25	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	13:25	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	13:25	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	13:25	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	13:25	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	13:25	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	13:25	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	13:25	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	13:25	LB134965

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	13:25	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	13:25	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	13:25	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	13:25	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	13:25	LB134965
CCB03	Aluminum	100	+/-100	U	100	P	03/10/2025	14:15	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	14:15	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	14:15	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	14:15	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	14:15	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	14:15	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	14:15	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	14:15	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	14:15	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	14:15	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	14:15	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	14:15	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	14:15	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	14:15	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	14:15	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	14:15	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	14:15	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	14:15	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	14:15	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	14:15	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	14:15	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	14:15	LB134965
CCB04	Aluminum	100	+/-100	U	100	P	03/10/2025	15:05	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	15:05	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	15:05	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	15:05	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	15:05	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	15:05	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	15:05	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	15:05	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	15:05	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	15:05	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	15:05	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	15:05	LB134965

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	15:05	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	15:05	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	15:05	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	15:05	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	15:05	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	15:05	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	15:05	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	15:05	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	15:05	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	15:05	LB134965
CCB05	Aluminum	100	+/-100	U	100	P	03/10/2025	15:55	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	15:55	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	15:55	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	15:55	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	15:55	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	15:55	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	15:55	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	15:55	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	15:55	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	15:55	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	15:55	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	15:55	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	15:55	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	15:55	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	15:55	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	15:55	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	15:55	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	15:55	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	15:55	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	15:55	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	15:55	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	15:55	LB134965
CCB06	Aluminum	100	+/-100	U	100	P	03/10/2025	16:52	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	16:52	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	16:52	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	16:52	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	16:52	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	16:52	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	16:52	LB134965

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	16:52	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	16:52	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	16:52	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	16:52	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	16:52	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	16:52	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	16:52	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	16:52	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	16:52	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	16:52	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	16:52	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	16:52	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	16:52	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	16:52	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	16:52	LB134965
CCB07	Aluminum	100	+/-100	U	100	P	03/10/2025	17:44	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	17:44	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	17:44	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	17:44	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	17:44	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	17:44	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	17:44	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	17:44	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	17:44	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	17:44	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	17:44	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	17:44	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	17:44	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	17:44	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	17:44	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	17:44	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	17:44	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	17:44	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	17:44	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	17:44	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	17:44	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	17:44	LB134965
CCB08	Aluminum	100	+/-100	U	100	P	03/10/2025	18:33	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	18:33	LB134965

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	18:33	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	18:33	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	18:33	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	18:33	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	18:33	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	18:33	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	18:33	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	18:33	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	18:33	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	18:33	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	18:33	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	18:33	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	18:33	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	18:33	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	18:33	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	18:33	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	18:33	LB134965
	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	18:33	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	18:33	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	18:33	LB134965
CCB09	Aluminum	100	+/-100	U	100	P	03/10/2025	18:50	LB134965
	Antimony	50.0	+/-50.0	U	50.0	P	03/10/2025	18:50	LB134965
	Arsenic	20.0	+/-20.0	U	20.0	P	03/10/2025	18:50	LB134965
	Barium	100	+/-100	U	100	P	03/10/2025	18:50	LB134965
	Beryllium	6.00	+/-6.00	U	6.00	P	03/10/2025	18:50	LB134965
	Cadmium	6.00	+/-6.00	U	6.00	P	03/10/2025	18:50	LB134965
	Calcium	2000	+/-2000	U	2000	P	03/10/2025	18:50	LB134965
	Chromium	10.0	+/-10.0	U	10.0	P	03/10/2025	18:50	LB134965
	Cobalt	30.0	+/-30.0	U	30.0	P	03/10/2025	18:50	LB134965
	Copper	20.0	+/-20.0	U	20.0	P	03/10/2025	18:50	LB134965
	Iron	100	+/-100	U	100	P	03/10/2025	18:50	LB134965
	Lead	12.0	+/-12.0	U	12.0	P	03/10/2025	18:50	LB134965
	Magnesium	2000	+/-2000	U	2000	P	03/10/2025	18:50	LB134965
	Manganese	20.0	+/-20.0	U	20.0	P	03/10/2025	18:50	LB134965
	Nickel	40.0	+/-40.0	U	40.0	P	03/10/2025	18:50	LB134965
	Potassium	2000	+/-2000	U	2000	P	03/10/2025	18:50	LB134965
	Selenium	20.0	+/-20.0	U	20.0	P	03/10/2025	18:50	LB134965
	Silver	10.0	+/-10.0	U	10.0	P	03/10/2025	18:50	LB134965
	Sodium	2000	+/-2000	U	2000	P	03/10/2025	18:50	LB134965

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB09	Thallium	40.0	+/-40.0	U	40.0	P	03/10/2025	18:50	LB134965
	Vanadium	40.0	+/-40.0	U	40.0	P	03/10/2025	18:50	LB134965
	Zinc	40.0	+/-40.0	U	40.0	P	03/10/2025	18:50	LB134965

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Metals
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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB166864BL		**SOLID**		**Batch Number:**	**PB166864**		**Prep Date:**	**02/25/2025**	
	Mercury	0.013	<0.013	U	0.013	CV	02/26/2025	11:32	LB134807

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Metals
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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB166858BL		**SOLID**		**Batch Number:**	**PB166858**		**Prep Date:**	**02/25/2025**	
	Aluminum	4.41	<4.41	U	4.41	P	03/10/2025	16:33	LB134965
	Antimony	2.20	<2.20	U	2.20	P	03/10/2025	16:33	LB134965
	Arsenic	0.88	<0.88	U	0.88	P	03/10/2025	16:33	LB134965
	Barium	4.41	<4.41	U	4.41	P	03/10/2025	16:33	LB134965
	Beryllium	0.26	<0.26	U	0.26	P	03/10/2025	16:33	LB134965
	Cadmium	0.26	<0.26	U	0.26	P	03/10/2025	16:33	LB134965
	Calcium	88.1	<88.1	U	88.1	P	03/10/2025	16:33	LB134965
	Chromium	0.44	<0.44	U	0.44	P	03/10/2025	16:33	LB134965
	Cobalt	1.32	<1.32	U	1.32	P	03/10/2025	16:33	LB134965
	Copper	0.88	<0.88	U	0.88	P	03/10/2025	16:33	LB134965
	Iron	4.41	<4.41	U	4.41	P	03/10/2025	16:33	LB134965
	Lead	0.53	<0.53	U	0.53	P	03/10/2025	16:33	LB134965
	Magnesium	88.1	<88.1	U	88.1	P	03/10/2025	16:33	LB134965
	Manganese	0.88	<0.88	U	0.88	P	03/10/2025	16:33	LB134965
	Nickel	1.76	<1.76	U	1.76	P	03/10/2025	16:33	LB134965
	Potassium	88.1	<88.1	U	88.1	P	03/10/2025	16:33	LB134965
	Selenium	0.88	<0.88	U	0.88	P	03/10/2025	16:33	LB134965
	Silver	0.44	<0.44	U	0.44	P	03/10/2025	16:33	LB134965
	Sodium	88.1	<88.1	U	88.1	P	03/10/2025	16:33	LB134965
	Thallium	1.76	<1.76	U	1.76	P	03/10/2025	16:33	LB134965
	Vanadium	1.76	<1.76	U	1.76	P	03/10/2025	16:33	LB134965
	Zinc	0.42	<1.76	J	1.76	P	03/10/2025	16:33	LB134965

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	249000	255000	98	216000	294000	03/10/2025	12:05	LB134965
	Antimony	-1.69			-50	50	03/10/2025	12:05	LB134965
	Arsenic	3.58			-20	20	03/10/2025	12:05	LB134965
	Barium	1.50	6.0	25	-94	106	03/10/2025	12:05	LB134965
	Beryllium	1.23			-6	6	03/10/2025	12:05	LB134965
	Cadmium	-4.00	1.0	400	-5	7	03/10/2025	12:05	LB134965
	Calcium	230000	245000	94	208000	282000	03/10/2025	12:05	LB134965
	Chromium	59.3	52.0	114	42	62	03/10/2025	12:05	LB134965
	Cobalt	1.96			-30	30	03/10/2025	12:05	LB134965
	Copper	9.85	2.0	492	-18	22	03/10/2025	12:05	LB134965
	Iron	101000	101000	100	85600	116500	03/10/2025	12:05	LB134965
	Lead	6.57			-12	12	03/10/2025	12:05	LB134965
	Magnesium	246000	255000	96	216000	294000	03/10/2025	12:05	LB134965
	Manganese	3.05	7.0	44	-13	27	03/10/2025	12:05	LB134965
	Nickel	2.12	2.0	106	-38	42	03/10/2025	12:05	LB134965
	Potassium	80.0			0	0	03/10/2025	12:05	LB134965
	Selenium	-12.1			-20	20	03/10/2025	12:05	LB134965
	Silver	-0.43			-10	10	03/10/2025	12:05	LB134965
	Sodium	30.5			0	0	03/10/2025	12:05	LB134965
	Thallium	7.69			-40	40	03/10/2025	12:05	LB134965
	Vanadium	4.01			-40	40	03/10/2025	12:05	LB134965
	Zinc	2.96			-40	40	03/10/2025	12:05	LB134965
ICSAB01	Aluminum	248000	247000	100	209000	285000	03/10/2025	12:10	LB134965
	Antimony	630	618	102	525	711	03/10/2025	12:10	LB134965
	Arsenic	110	104	106	88.4	120	03/10/2025	12:10	LB134965
	Barium	483	537	90	437	637	03/10/2025	12:10	LB134965
	Beryllium	489	495	99	420	570	03/10/2025	12:10	LB134965
	Cadmium	1020	972	105	826	1120	03/10/2025	12:10	LB134965
	Calcium	233000	235000	99	199000	271000	03/10/2025	12:10	LB134965
	Chromium	581	542	107	460	624	03/10/2025	12:10	LB134965
	Cobalt	516	476	108	404	548	03/10/2025	12:10	LB134965
	Copper	518	511	101	434	588	03/10/2025	12:10	LB134965
	Iron	102000	99300	103	84400	114500	03/10/2025	12:10	LB134965
	Lead	56.3	49.0	115	37	61	03/10/2025	12:10	LB134965
	Magnesium	250000	248000	101	210000	286000	03/10/2025	12:10	LB134965
	Manganese	475	507	94	430	584	03/10/2025	12:10	LB134965
	Nickel	1020	954	107	810	1100	03/10/2025	12:10	LB134965
	Potassium	87.8			0	0	03/10/2025	12:10	LB134965
	Selenium	34.1	46.0	74	26	66	03/10/2025	12:10	LB134965
	Silver	221	201	110	170	232	03/10/2025	12:10	LB134965
	Sodium	58.9			0	0	03/10/2025	12:10	LB134965
	Thallium	108	108	100	68	148	03/10/2025	12:10	LB134965

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Vanadium	471	491	96	417	565	03/10/2025	12:10	LB134965
	Zinc	1070	952	112	809	1095	03/10/2025	12:10	LB134965

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metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q1422

contract: PORT06 **lab code:** CHEM **case no.:** Q1422 **sas no.:** Q1422

matrix: Solid **sample id:** Q1421-01 **client id:** P001-CLAY-CF01-01MS

Percent Solids for Sample: 70.3 **Spiked ID:** Q1421-02 **Percent Solids for Spike Sample:** 70.3

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	8730		6910		140	1300		P
Antimony	mg/Kg	75 - 125	13.5		3.23	U	55.8	24	N	P
Arsenic	mg/Kg	75 - 125	63.7		13.9		55.8	89		P
Barium	mg/Kg	75 - 125	67.9		53.2		13.9	106		P
Beryllium	mg/Kg	75 - 125	12.4		1.43		13.9	79		P
Cadmium	mg/Kg	75 - 125	12.0		0.39	U	13.9	86		P
Calcium	mg/Kg	75 - 125	4920		4470		69.7	644		P
Chromium	mg/Kg	75 - 125	41.9		15.4		27.9	95		P
Cobalt	mg/Kg	75 - 125	24.3		9.63		13.9	105		P
Copper	mg/Kg	75 - 125	37.9		17.4		20.9	98		P
Iron	mg/Kg	75 - 125	85600	D	70100	D	210	7399		P
Lead	mg/Kg	75 - 125	78.0		14.4		69.7	91		P
Magnesium	mg/Kg	75 - 125	3650		3020		140	449		P
Manganese	mg/Kg	75 - 125	569		492		13.9	560		P
Mercury	mg/Kg	80 - 120	0.52		0.030		0.4	122	N	CV
Nickel	mg/Kg	75 - 125	56.1		20.5		34.9	102		P
Potassium	mg/Kg	75 - 125	4140		3070		700	152		P
Selenium	mg/Kg	75 - 125	91.2		1.29	U	140	65	N	P
Silver	mg/Kg	75 - 125	2.78		0.65	U	5.2	54	N	P
Sodium	mg/Kg	75 - 125	293		102	J	210	91		P
Thallium	mg/Kg	75 - 125	120		5.31		140	82		P
Vanadium	mg/Kg	75 - 125	45.0		23.4		20.9	104		P
Zinc	mg/Kg	75 - 125	91.2		72.9		13.9	132		P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q1422

contract: PORT06 **lab code:** CHEM **case no.:** Q1422 **sas no.:** Q1422

matrix: Solid **sample id:** Q1421-01 **client id:** P001-CLAY-CF01-01MSD

Percent Solids for Sample: 70.3 **Spiked ID:** Q1421-03 **Percent Solids for Spike Sample:** 70.3

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	7930		6910		130	789		P
Antimony	mg/Kg	75 - 125	12.6		3.23	U	50.4	25	N	P
Arsenic	mg/Kg	75 - 125	58.4		13.9		50.4	88		P
Barium	mg/Kg	75 - 125	61.9		53.2		12.6	69		P
Beryllium	mg/Kg	75 - 125	11.3		1.43		12.6	78		P
Cadmium	mg/Kg	75 - 125	10.8		0.39	U	12.6	86		P
Calcium	mg/Kg	75 - 125	4470		4470		62.9	-5		P
Chromium	mg/Kg	75 - 125	38.6		15.4		25.2	92		P
Cobalt	mg/Kg	75 - 125	22.2		9.63		12.6	100		P
Copper	mg/Kg	75 - 125	33.9		17.4		18.9	88		P
Iron	mg/Kg	75 - 125	79700	D	70100	D	190	5059		P
Lead	mg/Kg	75 - 125	71.5		14.4		62.9	91		P
Magnesium	mg/Kg	75 - 125	3320		3020		130	226		P
Manganese	mg/Kg	75 - 125	517		492		12.6	203		P
Mercury	mg/Kg	80 - 120	0.48		0.030		0.38	117		CV
Nickel	mg/Kg	75 - 125	51.2		20.5		31.5	98		P
Potassium	mg/Kg	75 - 125	3830		3070		630	120		P
Selenium	mg/Kg	75 - 125	84.2		1.29	U	130	65	N	P
Silver	mg/Kg	75 - 125	2.75		0.65	U	4.7	58	N	P
Sodium	mg/Kg	75 - 125	271		102	J	190	89		P
Thallium	mg/Kg	75 - 125	112		5.31		130	82		P
Vanadium	mg/Kg	75 - 125	40.9		23.4		18.9	93		P
Zinc	mg/Kg	75 - 125	84.0		72.9		12.6	88		P

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Metals
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POST DIGEST SPIKE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Matrix: Solid **Level:** LOW **Client ID:** P001-CLAY-CF01-01A

Sample ID: Q1421-01 **Spiked ID:** Q1421-01A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	75 - 125	11.7		3.23	U	51.7	23		P
Mercury	mg/Kg	80 - 120	0.47		0.030		0.40	109		CV
Selenium	mg/Kg	75 - 125	84.1		1.29	U	130	65		P
Silver	mg/Kg	75 - 125	3.12		0.65	U	4.80	65		P

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Matrix: Solid **Sample ID:** Q1421-01 **Client ID:** P001-CLAY-CF01-01DUP

Percent Solids for Sample: 70.3 **Duplicate ID** Q1421-01DUP **Percent Solids for Spike Sample:** 70.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	6910		7130		3		P
Antimony	mg/Kg	20	3.23	U	3.11	U			P
Arsenic	mg/Kg	20	13.9		16.3		16		P
Barium	mg/Kg	20	53.2		49.9		6		P
Beryllium	mg/Kg	20	1.43		1.48		3		P
Cadmium	mg/Kg	20	0.39	U	0.37	U			P
Calcium	mg/Kg	20	4470		4330		3		P
Chromium	mg/Kg	20	15.4		15.8		3		P
Cobalt	mg/Kg	20	9.63		10.1		5		P
Copper	mg/Kg	20	17.4		19.1		9		P
Iron	mg/Kg	20	70100	D	72500	D	3		P
Lead	mg/Kg	20	14.4		15.7		9		P
Magnesium	mg/Kg	20	3020		3080		2		P
Manganese	mg/Kg	20	492		486		1		P
Mercury	mg/Kg	20	0.030		0.028		7		CV
Nickel	mg/Kg	20	20.5		22.0		7		P
Potassium	mg/Kg	20	3070		2910		5		P
Selenium	mg/Kg	20	1.29	U	1.24	U			P
Silver	mg/Kg	20	0.65	U	0.62	U			P
Sodium	mg/Kg	20	102	J	102	J	0		P
Thallium	mg/Kg	20	5.31		5.10		4		P
Vanadium	mg/Kg	20	23.4		24.8		6		P
Zinc	mg/Kg	20	72.9		70.6		3		P

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

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Matrix: Solid **Sample ID:** Q1421-02 **Client ID:** P001-CLAY-CF01-01MSD

Percent Solids for Sample: 70.3 **Duplicate ID** Q1421-03 **Percent Solids for Spike Sample:** 70.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	8730		7930		10		P
Antimony	mg/Kg	20	13.5		12.6		7		P
Arsenic	mg/Kg	20	63.7		58.4		9		P
Barium	mg/Kg	20	67.9		61.9		9		P
Beryllium	mg/Kg	20	12.4		11.3		9		P
Cadmium	mg/Kg	20	12.0		10.8		11		P
Calcium	mg/Kg	20	4920		4470		10		P
Chromium	mg/Kg	20	41.9		38.6		8		P
Cobalt	mg/Kg	20	24.3		22.2		9		P
Copper	mg/Kg	20	37.9		33.9		11		P
Iron	mg/Kg	20	85600	D	79700	D	7		P
Lead	mg/Kg	20	78.0		71.5		9		P
Magnesium	mg/Kg	20	3650		3320		9		P
Manganese	mg/Kg	20	569		517		10		P
Mercury	mg/Kg	20	0.52		0.48		8		CV
Nickel	mg/Kg	20	56.1		51.2		9		P
Potassium	mg/Kg	20	4140		3830		8		P
Selenium	mg/Kg	20	91.2		84.2		8		P
Silver	mg/Kg	20	2.78		2.75		1		P
Sodium	mg/Kg	20	293		271		8		P
Thallium	mg/Kg	20	120		112		7		P
Vanadium	mg/Kg	20	45.0		40.9		10		P
Zinc	mg/Kg	20	91.2		84.0		8		P

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166858BS							
Aluminum	mg/Kg	88.9	82.6		93	80 - 120	P
Antimony	mg/Kg	35.6	34.6		97	80 - 120	P
Arsenic	mg/Kg	35.6	33.7		95	80 - 120	P
Barium	mg/Kg	8.9	7.61		86	80 - 120	P
Beryllium	mg/Kg	8.9	9.22		104	80 - 120	P
Cadmium	mg/Kg	8.9	7.90		89	80 - 120	P
Calcium	mg/Kg	44.4	42.3	J	95	80 - 120	P
Chromium	mg/Kg	17.8	17.1		96	80 - 120	P
Cobalt	mg/Kg	8.9	8.25		93	80 - 120	P
Copper	mg/Kg	13.3	13.1		98	80 - 120	P
Iron	mg/Kg	130	126		97	80 - 120	P
Lead	mg/Kg	44.4	40.0		90	80 - 120	P
Magnesium	mg/Kg	88.9	78.9	J	89	80 - 120	P
Manganese	mg/Kg	8.9	9.23		104	80 - 120	P
Nickel	mg/Kg	22.2	20.7		93	80 - 120	P
Potassium	mg/Kg	440	404		92	80 - 120	P
Selenium	mg/Kg	88.9	80.5		91	80 - 120	P
Silver	mg/Kg	3.3	3.15		96	80 - 120	P
Sodium	mg/Kg	130	113		87	80 - 120	P
Thallium	mg/Kg	88.9	80.6		91	80 - 120	P
Vanadium	mg/Kg	13.3	12.2		92	80 - 120	P
Zinc	mg/Kg	8.9	8.56		96	80 - 120	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166864BS							
Mercury	mg/Kg	0.26	0.24		90	80 - 120	CV

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ICP SERIAL DILUTIONS

SAMPLE NO.

P001-CLAY-CF01-01L

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

Lab Code: CHEM **Lb No.:** lb134965 **Lab Sample ID :** Q1421-01L **SDG No.:** Q1422

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

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	6910		8630		25		P
Antimony	3.23	U	16.2	U			P
Arsenic	13.9		18.6		34		P
Barium	53.2		58.1		9		P
Beryllium	1.43		1.98		39		P
Cadmium	0.39	U	1.94	U			P
Calcium	4470		5410		21		P
Chromium	15.4		20.1		31		P
Cobalt	9.63		10.7		12		P
Copper	17.4		23.9		37		P
Iron	65400	OR	80200		23		P
Lead	14.4		16.8		17		P
Magnesium	3020		3850		27		P
Manganese	492		604		23		P
Mercury	0.030		0.10	U	100.0		CV
Nickel	20.5		24.7		21		P
Potassium	3070		3230		5		P
Selenium	1.29	U	6.47	U			P
Silver	0.65	U	3.23	U			P
Sodium	102	J	647	U	100.0		P
Thallium	5.31		7.11	J	34		P
Vanadium	23.4		31.3		34		P
Zinc	72.9		86.0		18		P

METAL PREPARATION & INSTRUMENT DATA

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q1422 **SAS No.:** Q1422

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

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

Case No.: Q1422 **SAS No.:** Q1422

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB166858**						
PB166858BL	PB166858BL	MB	SOLID	02/25/2025	2.27	100.0	100.00
PB166858BS	PB166858BS	LCS	SOLID	02/25/2025	2.25	100.0	100.00
Q1421-01DUP	P001-CLAY-CF01-01DUP	DUP	SOLID	02/25/2025	2.29	100.0	70.30
Q1421-02	P001-CLAY-CF01-01MS	MS	SOLID	02/25/2025	2.04	100.0	70.30
Q1421-03	P001-CLAY-CF01-01MSD	MSD	SOLID	02/25/2025	2.26	100.0	70.30
Q1422-01	B-154-SB01	SAM	SOLID	02/25/2025	2.30	100.0	88.40
Q1422-02	B-154-SB02	SAM	SOLID	02/25/2025	2.26	100.0	87.30

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SAMPLE PREPARATION SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q1422

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

Case No.: Q1422 **SAS No.:** Q1422

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB166864**						
PB166864BL	PB166864BL	MB	SOLID	02/25/2025	0.56	35.0	100.00
PB166864BS	PB166864BS	LCS	SOLID	02/25/2025	0.54	35.0	100.00
Q1421-01DUP	P001-CLAY-CF01-01DUP	DUP	SOLID	02/25/2025	0.51	35.0	70.30
Q1421-02	P001-CLAY-CF01-01MS	MS	SOLID	02/25/2025	0.50	35.0	70.30
Q1421-03	P001-CLAY-CF01-01MSD	MSD	SOLID	02/25/2025	0.52	35.0	70.30
Q1422-01	B-154-SB01	SAM	SOLID	02/25/2025	0.50	35.0	88.40
Q1422-02	B-154-SB02	SAM	SOLID	02/25/2025	0.54	35.0	87.30

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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1422 **Sas no.:** Q1422 **Sdg no.:** Q1422

Instrument id number: **Method:** **Run number:** LB134807

Start date: 02/26/2025 **End date:** 02/26/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1052	HG
S0.2	S0.2	1	1054	HG
S2.5	S2.5	1	1058	HG
S5	S5	1	1100	HG
S7.5	S7.5	1	1102	HG
S10	S10	1	1107	HG
ICV19	ICV19	1	1110	HG
ICB19	ICB19	1	1115	HG
CCV25	CCV25	1	1118	HG
CCB25	CCB25	1	1120	HG
CRA	CRA	1	1122	HG
PB166864BL	PB166864BL	1	1132	HG
PB166864BS	PB166864BS	1	1134	HG
CCV26	CCV26	1	1148	HG
CCB26	CCB26	1	1153	HG
Q1421-01DUP	P001-CLAY-CF01-01DUP	1	1207	HG
Q1421-02	P001-CLAY-CF01-01MS	1	1216	HG
Q1421-03	P001-CLAY-CF01-01MSD	1	1221	HG
Q1422-01	B-154-SB01	1	1228	HG
CCV27	CCV27	1	1230	HG
CCB27	CCB27	1	1237	HG
Q1422-02	B-154-SB02	1	1240	HG
Q1421-01L	P001-CLAY-CF01-01L	5	1242	HG
Q1421-01A	P001-CLAY-CF01-01A	1	1244	HG
CCV28	CCV28	1	1246	HG
CCB28	CCB28	1	1249	HG

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metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1422 **Sas no.:** Q1422 **Sdg no.:** Q1422

Instrument id number: **Method:** **Run number:** LB134965

Start date: 03/10/2025 **End date:** 03/10/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1117	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1122	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1126	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1130	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1134	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1138	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1148	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1152	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1157	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1201	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1205	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1210	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1227	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1234	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1321	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1325	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1411	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1415	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1421-01DUP	P001-CLAY-CF01-01DUP	1	1441	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1421-01L	P001-CLAY-CF01-01L	5	1445	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1421-02	P001-CLAY-CF01-01MS	1	1449	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1421-03	P001-CLAY-CF01-01MSD	1	1453	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1421-01A	P001-CLAY-CF01-01A	1	1457	Ag,Sb,Se
CCV04	CCV04	1	1501	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1505	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1422-01	B-154-SB01	1	1518	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1422-02	B-154-SB02	1	1522	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1551	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1555	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB166858BL	PB166858BL	1	1633	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB166858BS	PB166858BS	1	1644	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1648	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1652	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1421-01DUP	P001-CLAY-CF01-01DUP	2	1700	Fe
Q1421-02	P001-CLAY-CF01-01MS	2	1709	Fe
Q1421-03	P001-CLAY-CF01-01MSD	2	1713	Fe
CCV07	CCV07	1	1739	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	1744	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV08	CCV08	1	1829	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	1833	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV09	CCV09	1	1846	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

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

metals
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ANALYSIS RUN LOG

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

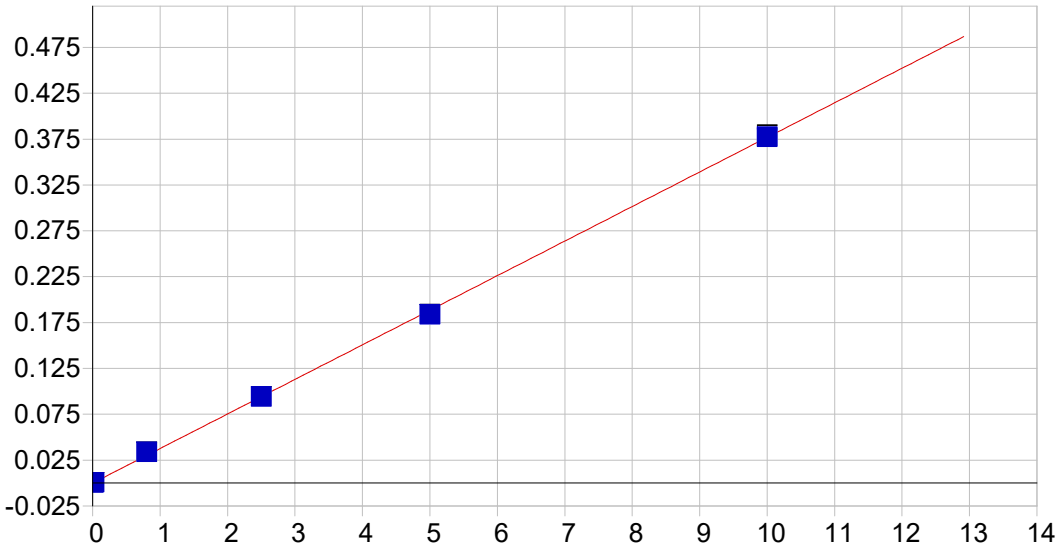
Lab code: CHEM **Case no.:** Q1422 **Sas no.:** Q1422 **Sdg no.:** Q1422

Instrument id number: **Method:** **Run number:** LB134965

Start date: 03/10/2025 **End date:** 03/10/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
CCB09	CCB09	1	1850	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

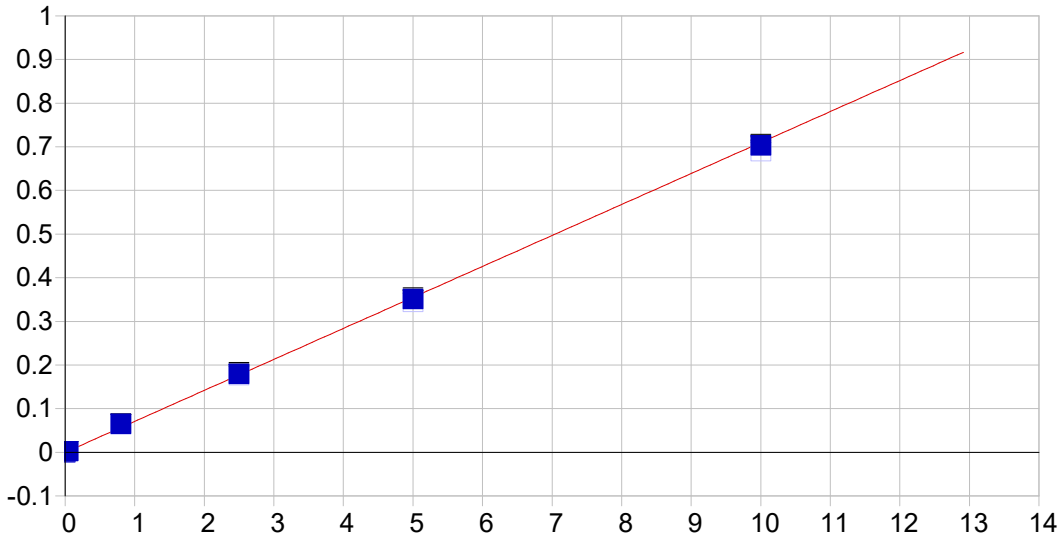


As 189.042 {479}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000051	Re-Slope:	1.000000
A1 (Gain):	0.037695	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999574	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.003272		
Predicted MQL:	0.010906		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00005	.000	1
S1	.02000	.02083	.001	4.13	.00073	.000	1
S3	2.5000	2.5002	.000	.008	.09409	.000	1
S4	5.0000	4.8800	-.120	-2.40	.18370	.000	1
S5	10.000	10.018	.018	.183	.37718	.002	1
S2	.80000	.90062	.101	12.6	.03387	.000	1

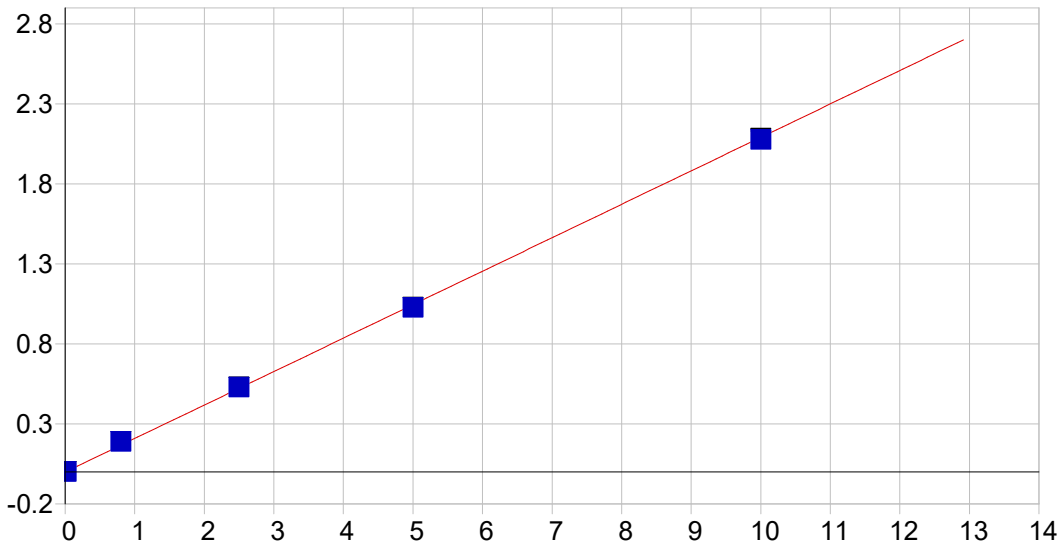


Tl 190.856 {477}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000127	Re-Slope:	1.000000
A1 (Gain):	0.070997	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999485	Status:	OK.
Std Error of Est:	0.000074		
Predicted MDL:	0.001782		
Predicted MQL:	0.005939		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00013	.000	1
S1	.04000	.04120	.001	3.00	.00261	.000	1
S3	2.5000	2.5336	.034	1.34	.17648	.003	1
S4	5.0000	4.9449	-.055	-1.10	.34440	.003	1
S5	10.000	9.9065	-.094	-.935	.69012	.003	1
S2	.80000	.91395	.114	14.2	.06371	.001	1

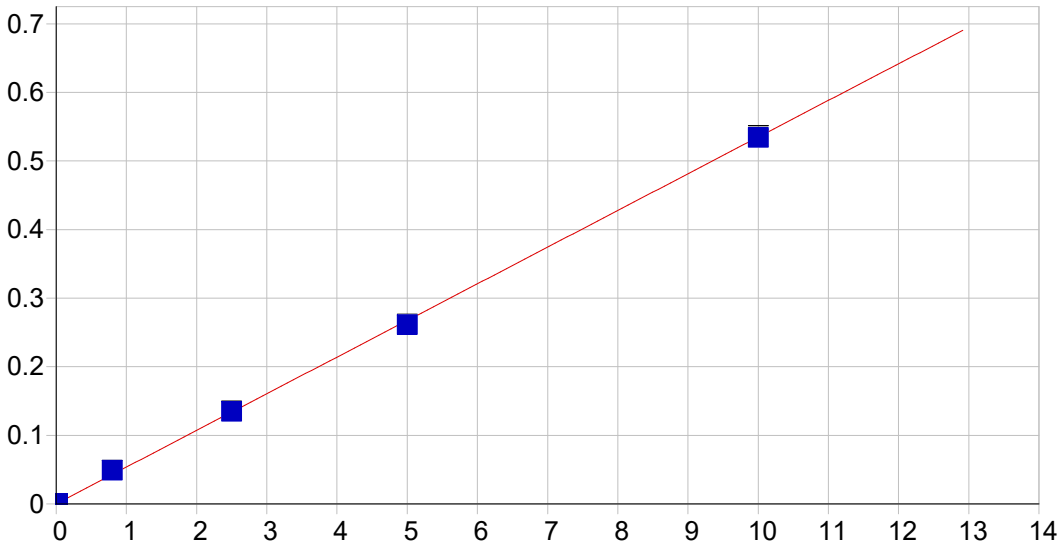


Pb 220.353 {453}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000219	Re-Slope:	1.000000
A1 (Gain):	0.209091	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999529	Status:	OK.
Std Error of Est:	0.000116		
Predicted MDL:	0.001499		
Predicted MQL:	0.004997		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00022	.000	1
S1	.01200	.01171	-.000	-2.38	.00218	.000	1
S3	2.5000	2.5320	.032	1.28	.52863	.001	1
S4	5.0000	4.9183	-.082	-1.63	1.0270	.001	1
S5	10.000	9.9400	-.060	-.600	2.0758	.007	1
S2	.80000	.90992	.110	13.7	.18985	.001	1

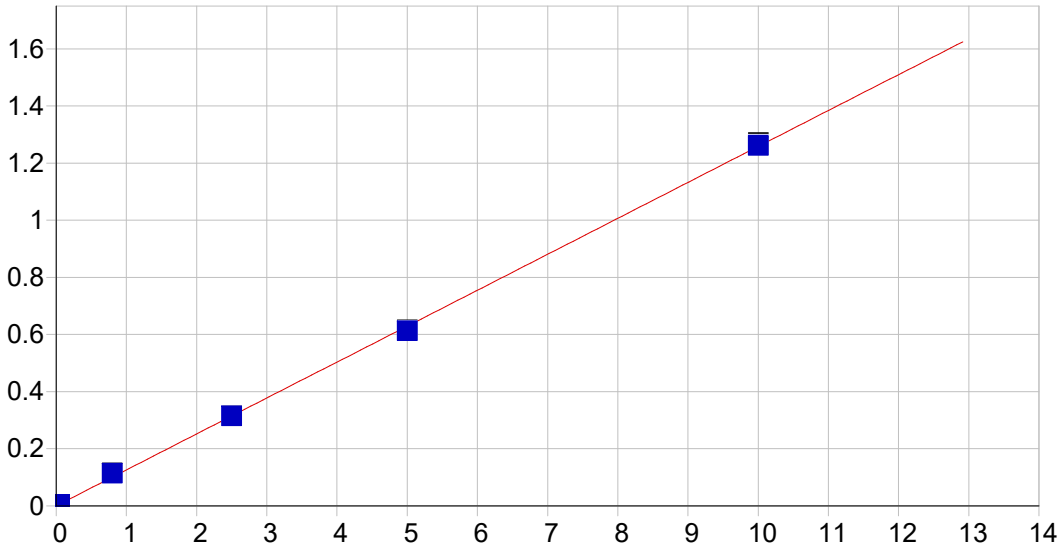


Se 196.090 {472}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000209	Re-Slope:	1.000000
A1 (Gain):	0.053453	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999517	Status:	OK.
Std Error of Est:	0.000039		
Predicted MDL:	0.003053		
Predicted MQL:	0.010177		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00021	.000	1
S1	.02000	.02116	.001	5.80	.00134	.000	1
S3	2.5000	2.5171	.017	.685	.13471	.001	1
S4	5.0000	4.8836	-.116	-2.33	.26116	.001	1
S5	10.000	9.9893	-.011	-.107	.53398	.003	1
S2	.80000	.90884	.109	13.6	.04877	.000	1

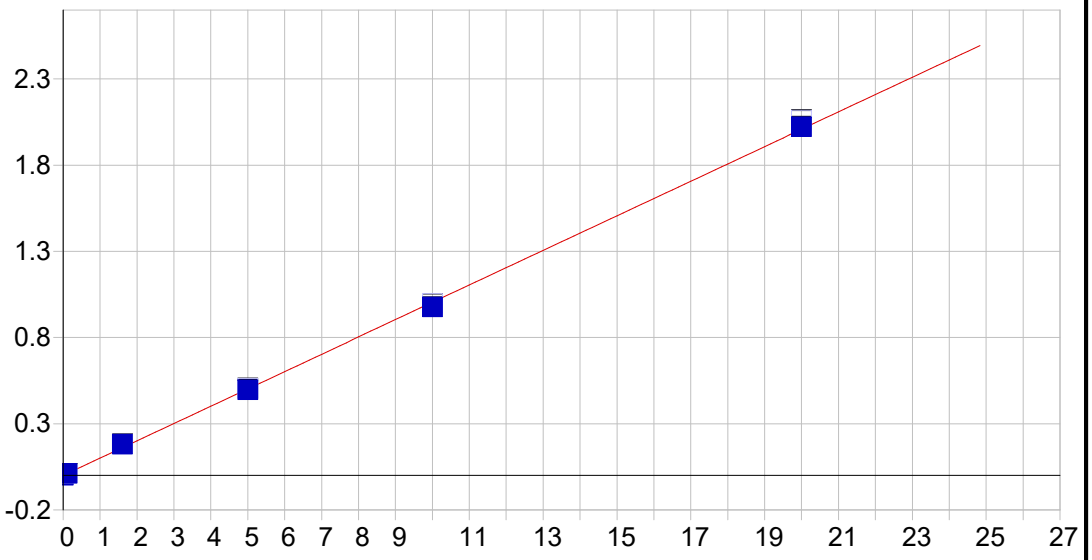


Sb 206.833 {463}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000272	Re-Slope:	1.000000
A1 (Gain):	0.125811	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999529	Status:	OK.
Std Error of Est:	0.000144		
Predicted MDL:	0.001960		
Predicted MQL:	0.006534		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00027	.000	1
S1	.05000	.05332	.003	6.64	.00699	.000	1
S3	2.5000	2.4986	-.001	-.056	.31548	.001	1
S4	5.0000	4.8681	-.132	-2.64	.61444	.001	1
S5	10.000	10.026	.026	.257	1.2650	.006	1
S2	.80000	.90435	.104	13.0	.11432	.000	1

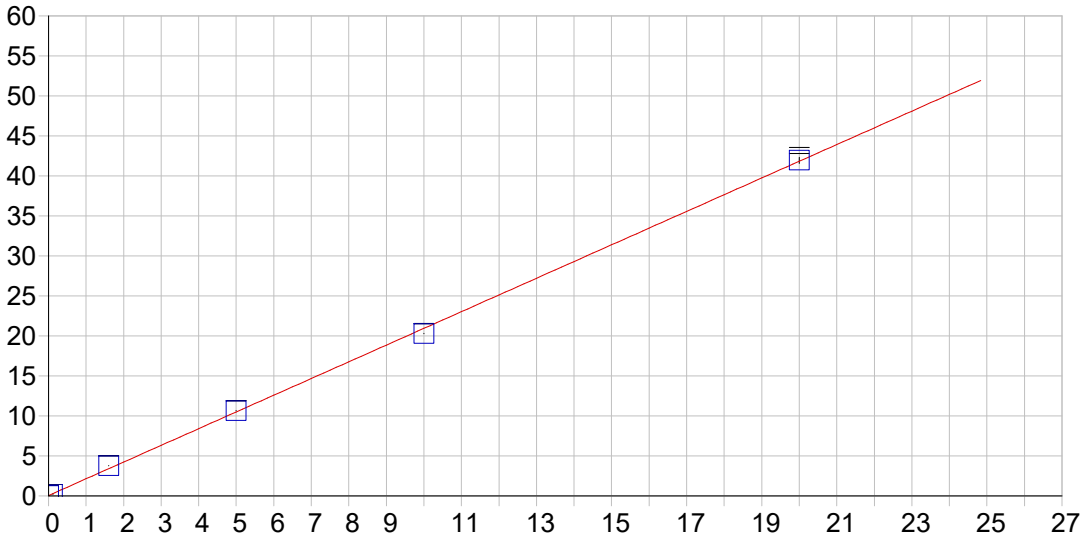


Al 396.152 { 85}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000229	Re-Slope:	1.000000
A1 (Gain):	0.100412	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999574	Status:	OK.
Std Error of Est:	0.000222		
Predicted MDL:	0.006156		
Predicted MQL:	0.020518		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00023	.000	1
S1	.10000	.10480	.005	4.80	.01153	.000	1
S3	5.0000	4.9309	-.069	-1.38	.50509	.002	1
S4	10.000	9.7308	-.269	-2.69	.99680	.001	1
S5	20.000	20.141	.141	.706	2.0616	.003	1
S2	1.6000	1.7921	.192	12.0	.18329	.001	1

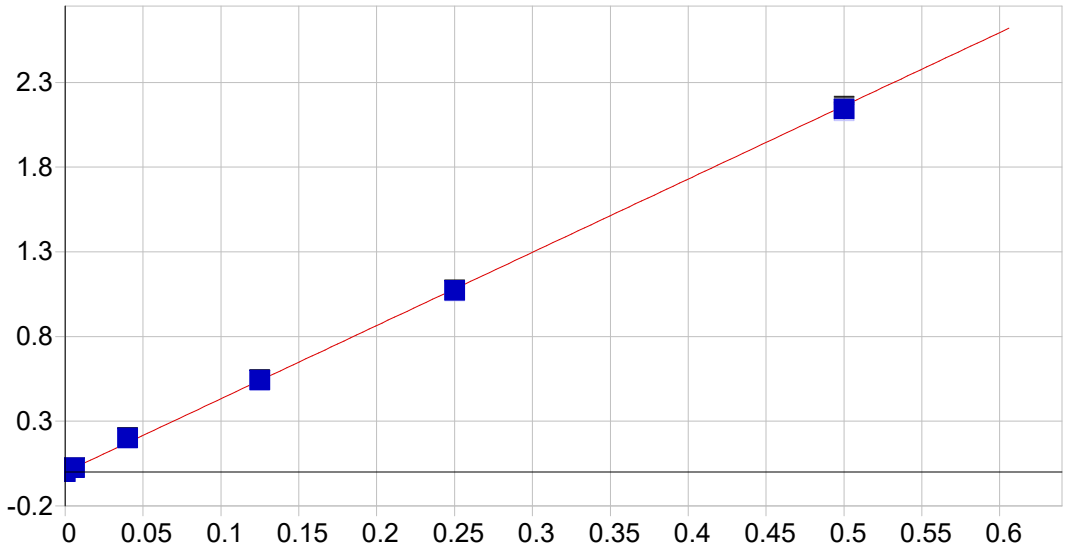


Ba 493.409 { 68}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.051330	Re-Slope:	1.000000
A1 (Gain):	2.088943	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999574	Status:	OK.
Std Error of Est:	0.004524		
Predicted MDL:	0.000988		
Predicted MQL:	0.003293		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.05131	.002	1
S1	.10000	.09746	-.003	-2.54	.25493	.001	1
S3	5.0000	5.0768	.077	1.54	10.656	.008	1
S4	10.000	9.6907	-.309	-3.09	20.295	.031	1
S5	20.000	20.055	.055	.274	41.945	.388	1
S2	1.6000	1.7804	.180	11.3	3.7705	.021	1

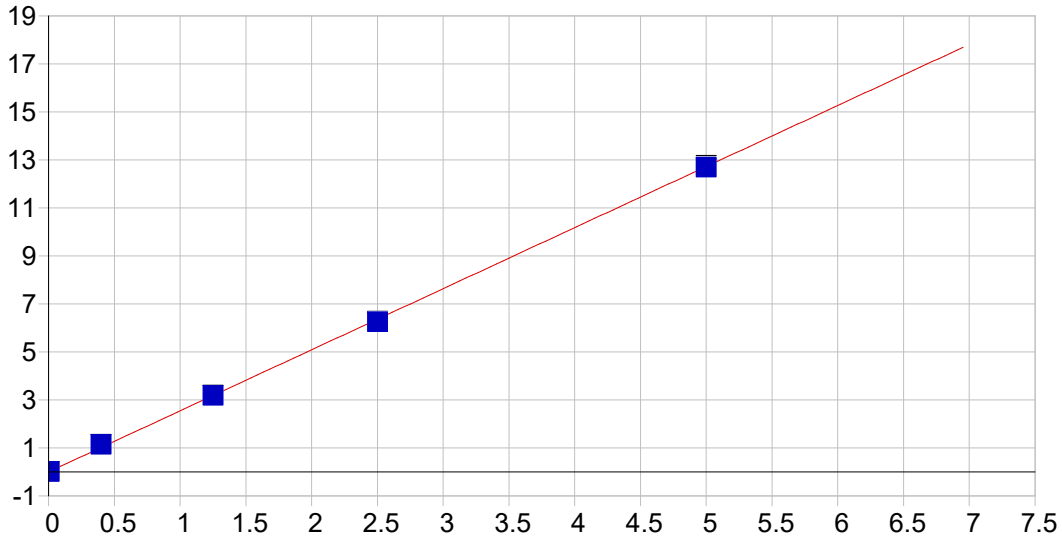


Be 234.861 {144}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000098	Re-Slope:	1.000000
A1 (Gain):	4.324234	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999425	Status:	OK.
Std Error of Est:	0.000420		
Predicted MDL:	0.000053		
Predicted MQL:	0.000177		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00009	.000	1
S1	.00600	.00585	-.000	-2.42	.02522	.000	1
S3	.12500	.12556	.001	.451	.54064	.001	1
S4	.25000	.24794	-.002	-.824	1.0674	.004	1
S5	.50000	.49536	-.005	-.927	2.1325	.019	1
S2	.04000	.04628	.006	15.7	.19943	.002	1

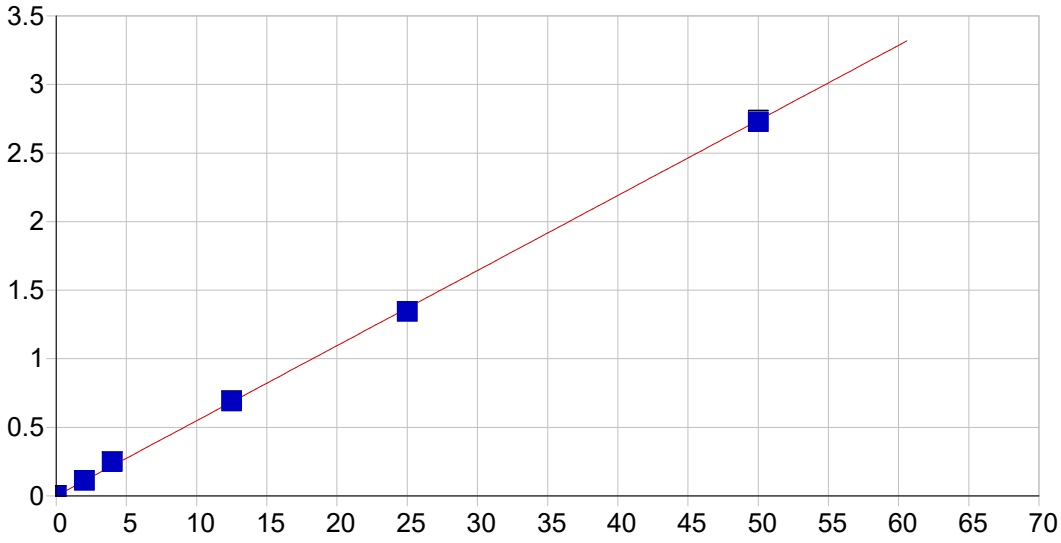


Cd 226.502 {449}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000157	Re-Slope:	1.000000
A1 (Gain):	2.544685	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999633	Status:	OK.
Std Error of Est:	0.000626		
Predicted MDL:	0.000085		
Predicted MQL:	0.000283		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00016	.000	1
S1	.00600	.00608	.000	1.35	.01540	.000	1
S3	1.2500	1.2522	.002	.177	3.1891	.006	1
S4	2.5000	2.4588	-.041	-1.65	6.2624	.014	1
S5	5.0000	4.9898	-.010	-.204	12.709	.067	1
S2	.40000	.44908	.049	12.3	1.1435	.000	1

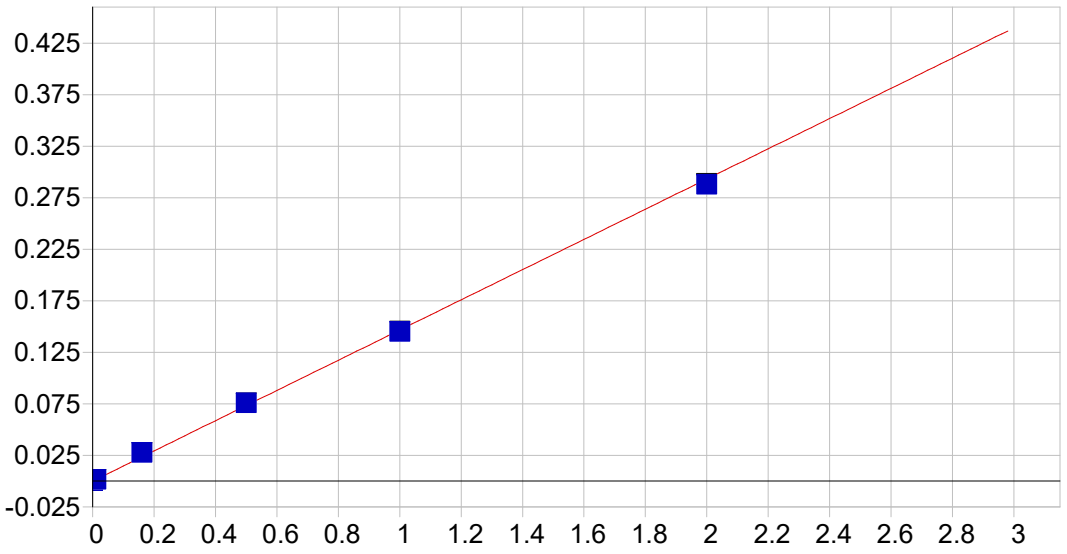


Ca 373.690 { 90}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000936	Re-Slope:	1.000000
A1 (Gain):	0.054739	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999556	Status:	OK.
Std Error of Est:	0.000863		
Predicted MDL:	0.009132		
Predicted MQL:	0.030441		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00027	-.000	.000	.00092	.000	1
S2	4.0000	4.5375	.538	13.4	.24932	.001	1
S3	12.500	12.605	.105	.840	.69093	.001	1
S4	25.000	24.537	-.463	-1.85	1.3441	.001	1
S5	50.000	49.793	-.207	-.414	2.7266	.013	1
S1	2.0000	2.0276	.028	1.38	.11193	.000	1

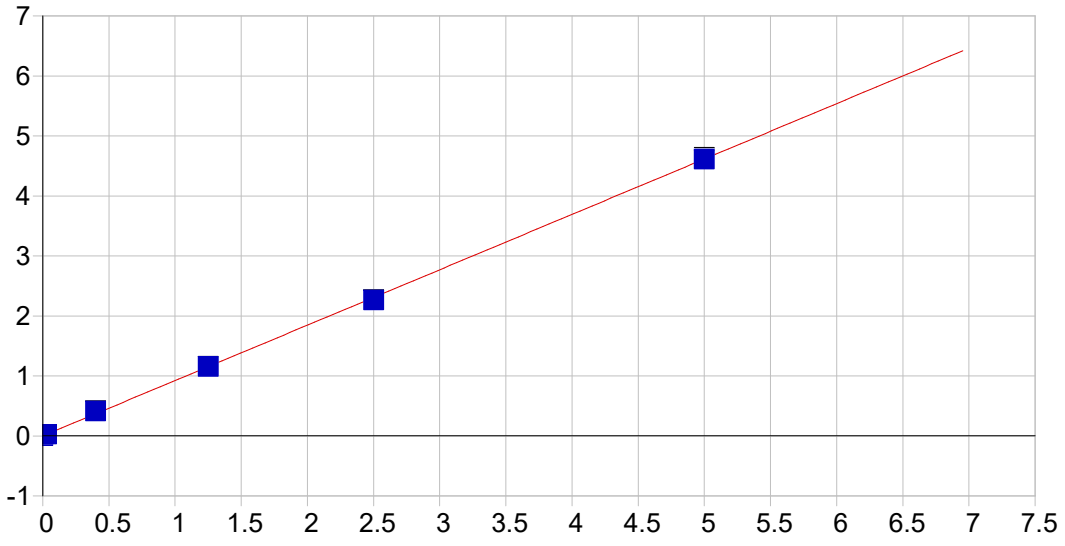


Cr 267.716 {126}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000031	Re-Slope:	1.000000
A1 (Gain):	0.146578	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999133	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.000496		
Predicted MQL:	0.001652		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00003	.000	1
S1	.01000	.01066	.001	6.55	.00159	.000	1
S3	.50000	.51696	.017	3.39	.07583	.000	1
S4	1.0000	.99006	-.010	-.994	.14520	.000	1
S5	2.0000	1.9640	-.036	-1.80	.28800	.001	1
S2	.16000	.18831	.028	17.7	.02764	.000	1

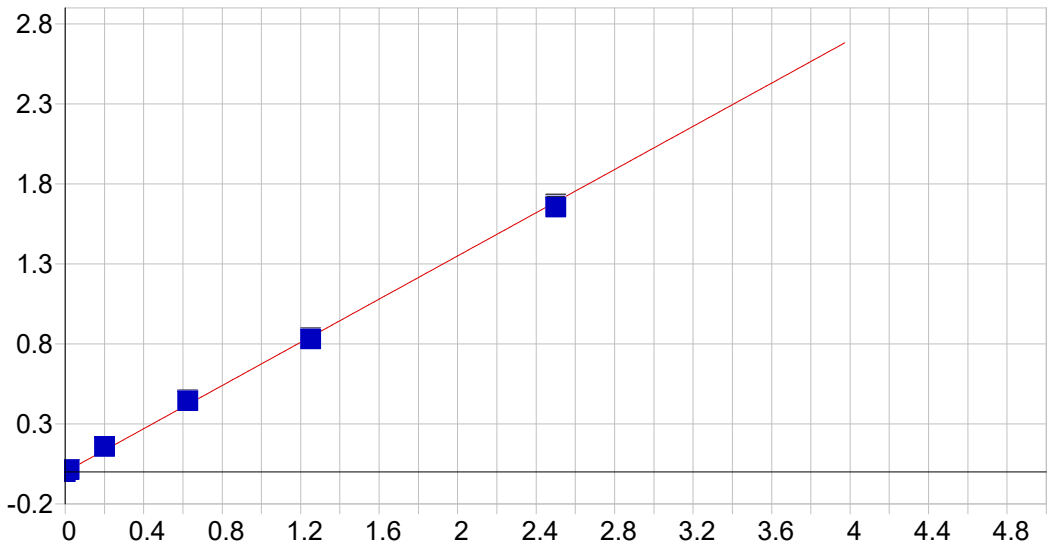


Co 228.616 {448}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000031	Re-Slope:	1.000000
A1 (Gain):	0.923011	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999611	Status:	OK.
Std Error of Est:	0.000524		
Predicted MDL:	0.000248		
Predicted MQL:	0.000826		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00003	.000	1
S1	.03000	.02992	-.000	-.276	.02753	.000	1
S3	1.2500	1.2520	.002	.157	1.1576	.002	1
S4	2.5000	2.4514	-.049	-1.94	2.2666	.006	1
S5	5.0000	4.9969	-.003	-.063	4.6200	.022	1
S2	.40000	.44986	.050	12.5	.41588	.000	1

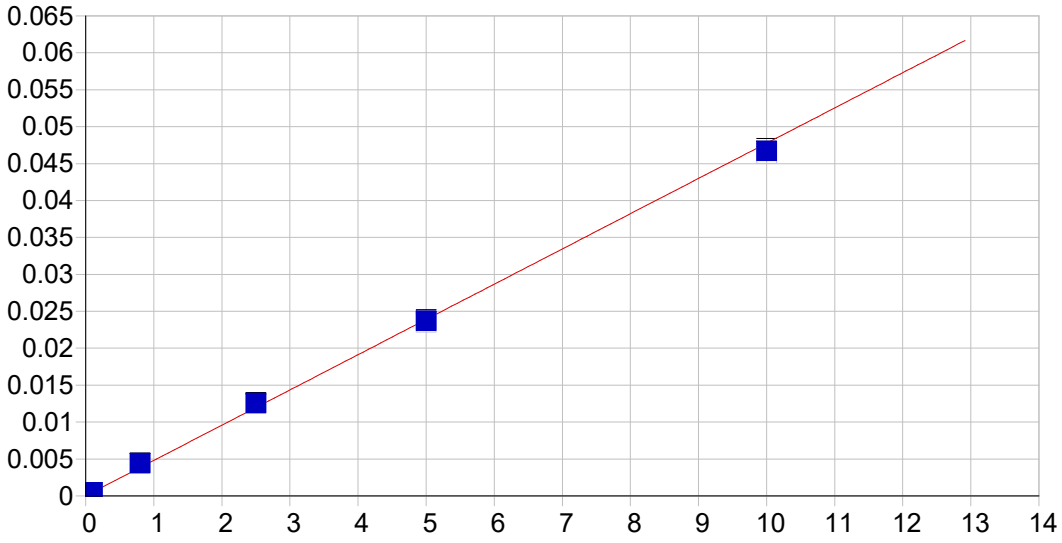


Cu 224.700 {450}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000354	Re-Slope:	1.000000
A1 (Gain):	0.675304	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999008	Status:	OK.
Std Error of Est:	0.000356		
Predicted MDL:	0.000430		
Predicted MQL:	0.001432		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00036	.000	1
S1	.02000	.02229	.002	11.4	.01483	.000	1
S3	.62500	.65943	.034	5.51	.44796	.001	1
S4	1.2500	1.2306	-.019	-1.55	.83667	.002	1
S5	2.5000	2.4488	-.051	-2.05	1.6653	.008	1
S2	.20000	.23391	.034	17.0	.15856	.000	1

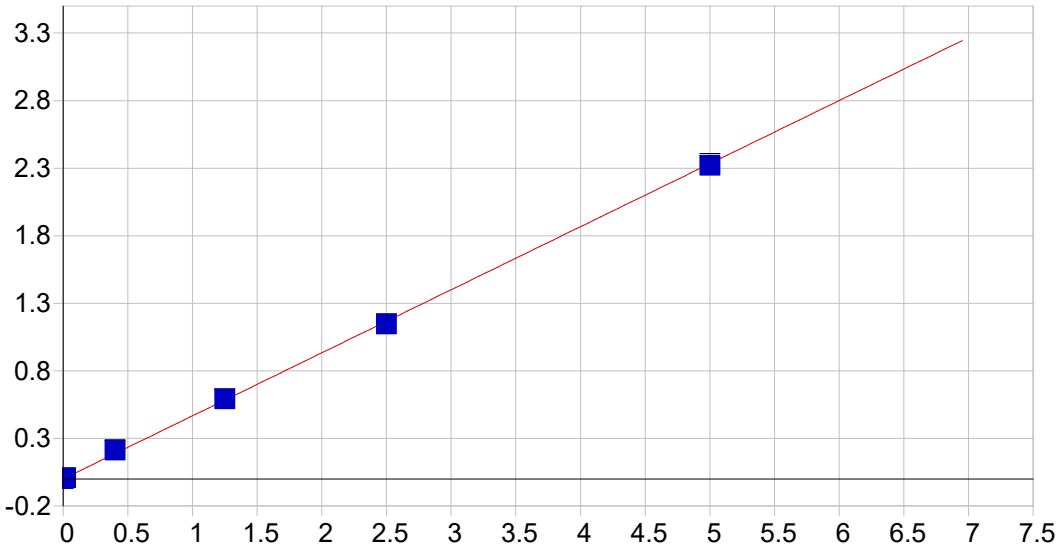


Fe 240.488 {140}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000029	Re-Slope:	1.000000
A1 (Gain):	0.004773	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999151	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.005053		
Predicted MQL:	0.016842		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00003	.000	1
S1	.10000	.10505	.005	5.05	.00052	.000	1
S3	2.5000	2.6279	.128	5.12	.01247	.000	1
S4	5.0000	4.9603	-.040	-.793	.02350	.000	1
S5	10.000	9.7836	-.216	-2.16	.04632	.000	1
S2	.80000	.92309	.123	15.4	.00440	.000	1

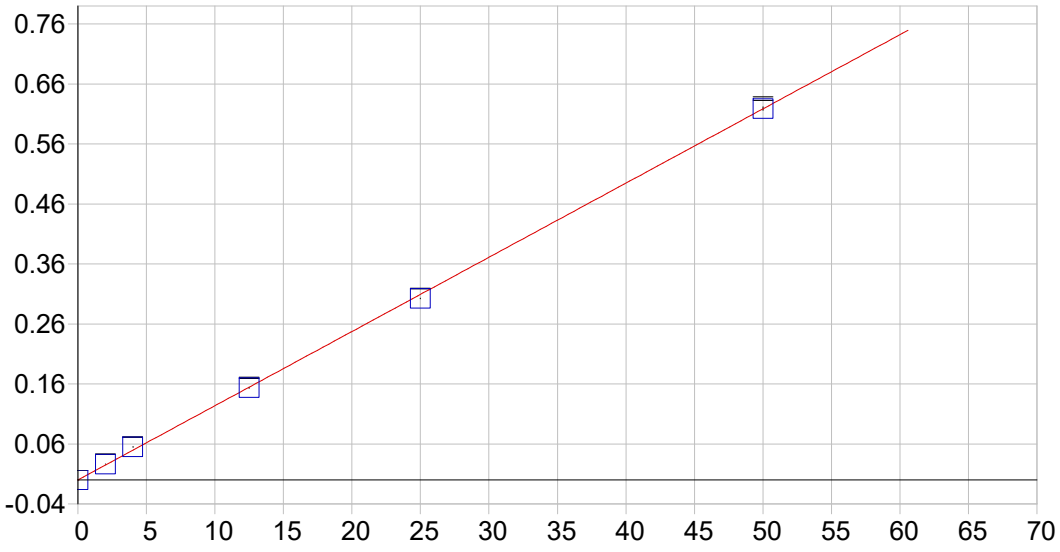


Mn 257.610 {131}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000093	Re-Slope:	1.000000
A1 (Gain):	0.466686	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999487	Status:	OK.
Std Error of Est:	0.000248		
Predicted MDL:	0.000390		
Predicted MQL:	0.001301		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00009	.000	1
S1	.02000	.02017	.000	.874	.00951	.000	1
S3	1.2500	1.2685	.019	1.48	.59221	.001	1
S4	2.5000	2.4526	-.047	-1.90	1.1449	.003	1
S5	5.0000	4.9718	-.028	-.563	2.3209	.014	1
S2	.40000	.45684	.057	14.2	.21333	.001	1

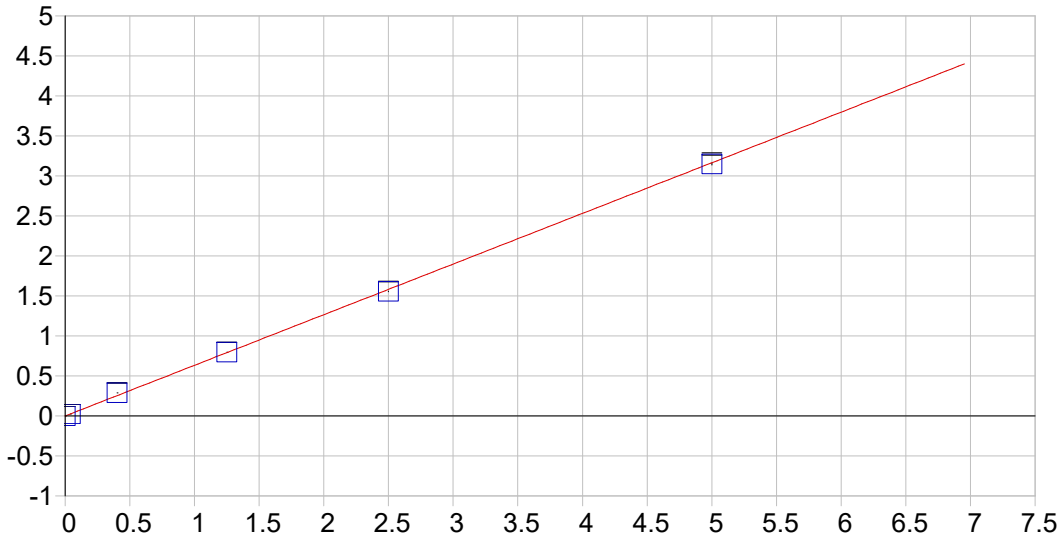


Mg 279.079 {121}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000046	Re-Slope:	1.000000
A1 (Gain):	0.012371	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999618	Status:	OK.
Std Error of Est:	0.000181		
Predicted MDL:	0.016621		
Predicted MQL:	0.055402		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00030	-.000	.000	-.00005	.000	1
S2	4.0000	4.4506	.451	11.3	.05501	.000	1
S3	12.500	12.424	-.076	-.609	.15365	.001	1
S4	25.000	24.457	-.543	-2.17	.30250	.001	1
S5	50.000	50.039	.039	.079	.61898	.003	1
S1	2.0000	2.1293	.129	6.47	.02629	.000	1

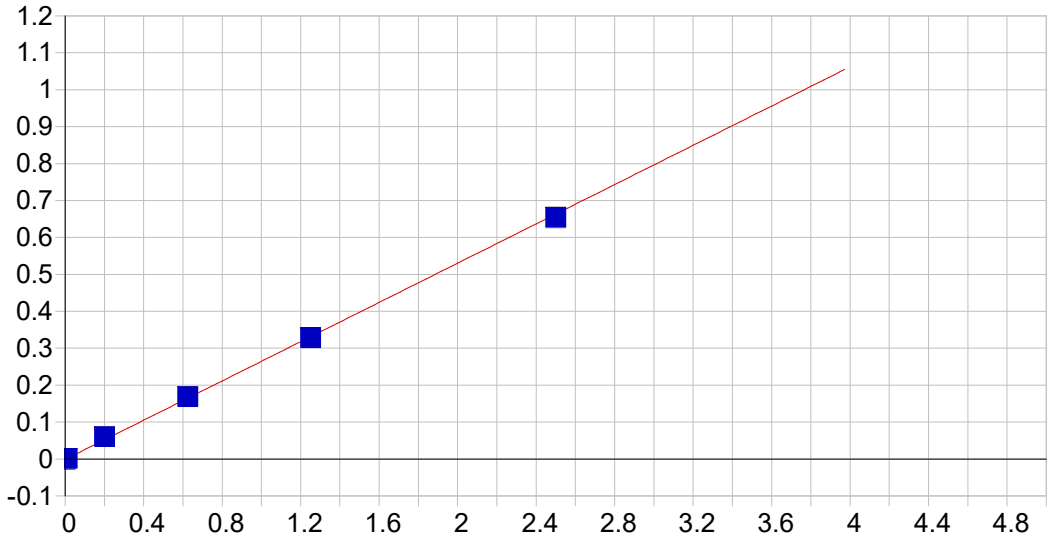


Ni 231.604 {446}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000206	Re-Slope:	1.000000
A1 (Gain):	0.632849	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999551	Status:	OK.
Std Error of Est:	0.000445		
Predicted MDL:	0.000339		
Predicted MQL:	0.001130		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00021	.000	1
S1	.04000	.04040	.000	1.01	.02536	.000	1
S3	1.2500	1.2599	.010	.791	.79711	.001	1
S4	2.5000	2.4591	-.041	-1.64	1.5560	.003	1
S5	5.0000	4.9762	-.024	-.475	3.1490	.014	1
S2	.40000	.45441	.054	13.6	.28736	.001	1

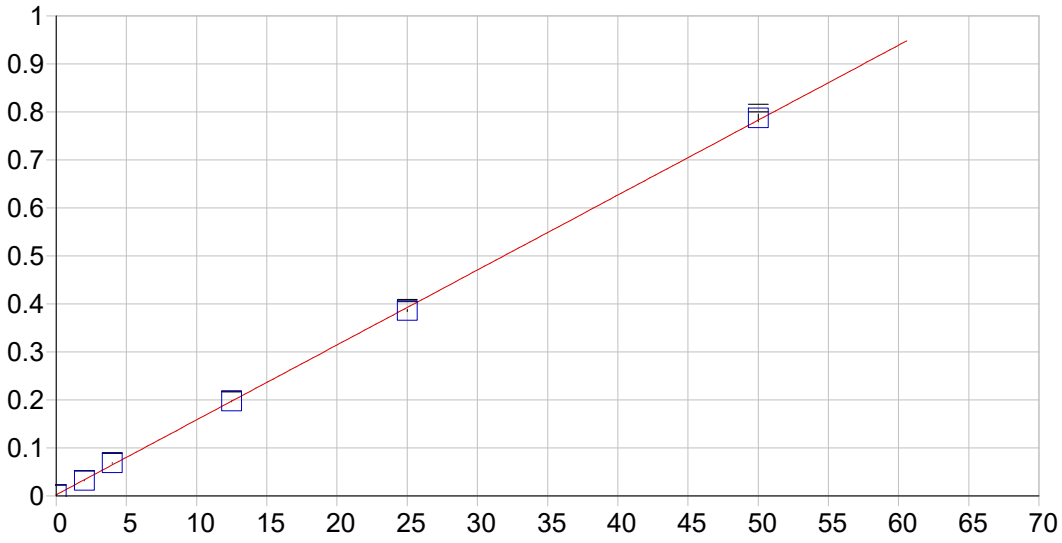


Ag 328.068 {103}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001385	Re-Slope:	1.000000
A1 (Gain):	0.265894	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999329	Status:	OK.
Std Error of Est:	0.000080		
Predicted MDL:	0.000386		
Predicted MQL:	0.001288		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00139	.000	1
S1	.01000	.01016	.000	1.60	.00130	.000	1
S3	.62500	.63836	.013	2.14	.16769	.000	1
S4	1.2500	1.2384	-.012	-.930	.32657	.000	1
S5	2.5000	2.4657	-.034	-1.37	.65160	.000	1
S2	.20000	.23238	.032	16.2	.06019	.000	1

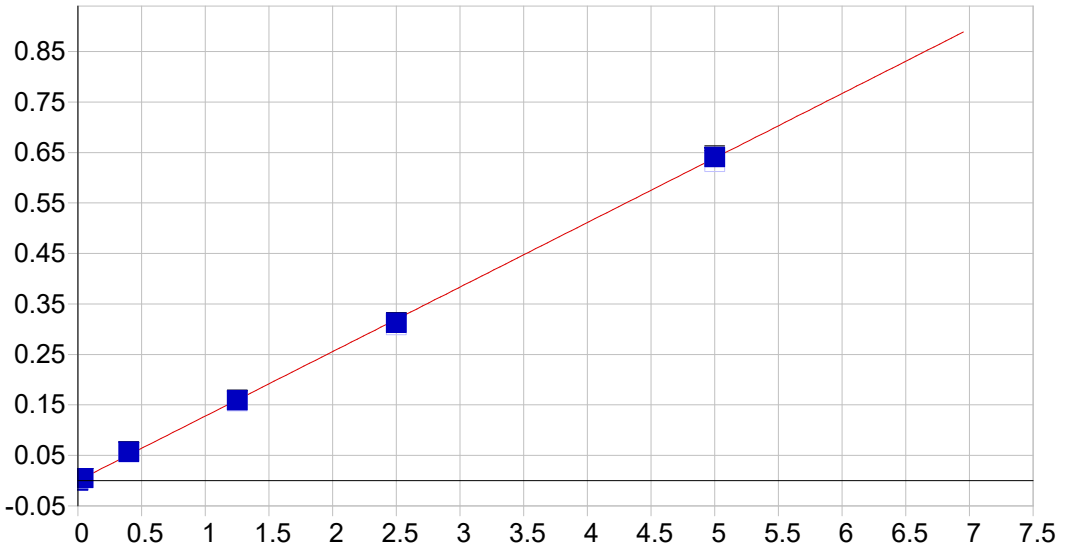


Na 589.592 { 57}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002358	Re-Slope:	1.000000
A1 (Gain):	0.015608	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999832	Status:	OK.
Std Error of Est:	0.000151		
Predicted MDL:	0.021584		
Predicted MQL:	0.071947		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00236	.000	1
S2	4.0000	4.2601	.260	6.50	.06885	.001	1
S3	12.500	12.478	-.022	-.179	.19711	.001	1
S4	25.000	24.589	-.411	-1.65	.38614	.002	1
S5	50.000	50.284	.284	.568	.78719	.008	1
S1	2.0000	1.8898	-.110	-5.51	.03185	.000	1

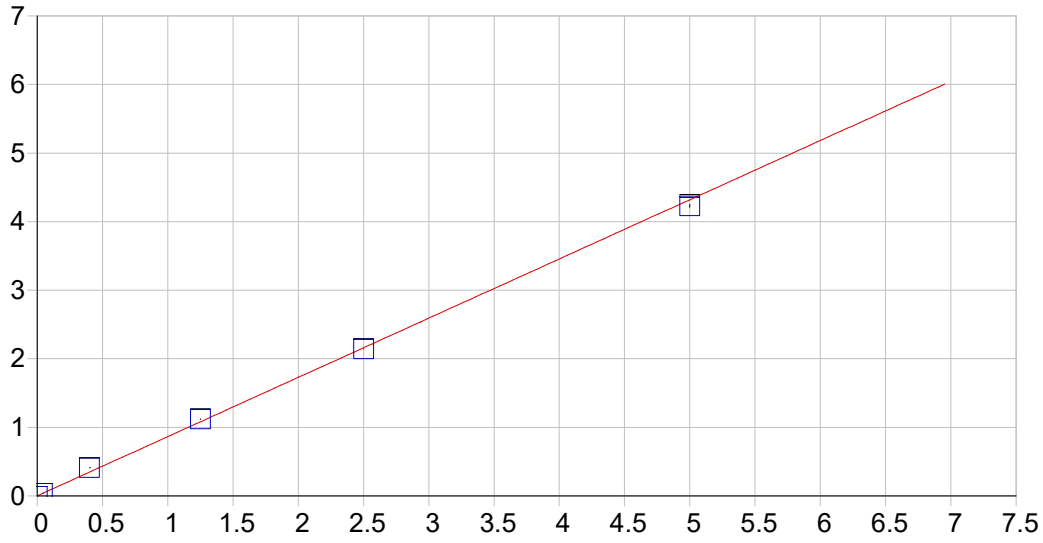


V 292.402 {115}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000077	Re-Slope:	1.000000
A1 (Gain):	0.127789	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999655	Status:	OK.
Std Error of Est:	0.000078		
Predicted MDL:	0.001766		
Predicted MQL:	0.005887		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00008	.000	1
S1	.04000	.03816	-.002	-4.59	.00476	.000	1
S3	1.2500	1.2459	-.004	-.331	.15696	.001	1
S4	2.5000	2.4467	-.053	-2.13	.30808	.001	1
S5	5.0000	5.0151	.015	.302	.63163	.002	1
S2	.40000	.44416	.044	11.0	.05609	.000	1

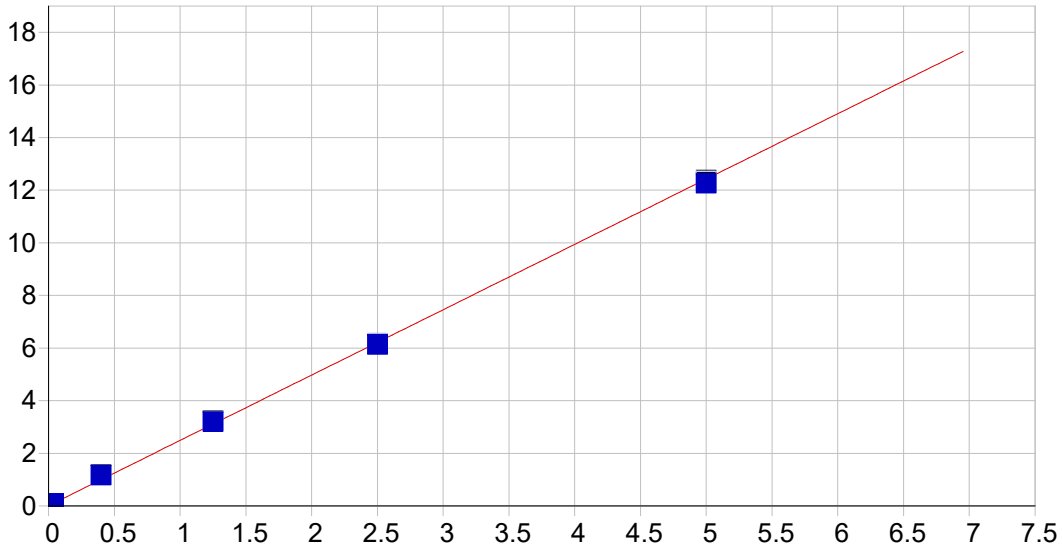


Zn 206.200 {464}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001376	Re-Slope:	1.000000
A1 (Gain):	0.863576	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999024	Status:	OK.
Std Error of Est:	0.000896		
Predicted MDL:	0.000203		
Predicted MQL:	0.000676		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00137	.000	1
S1	.04000	.04258	.003	6.44	.03814	.000	1
S3	1.2500	1.2953	.045	3.62	1.1199	.003	1
S4	2.5000	2.4811	-.019	-.755	2.1440	.003	1
S5	5.0000	4.8966	-.103	-2.07	4.2299	.023	1
S2	.40000	.47449	.074	18.6	.41114	.001	1

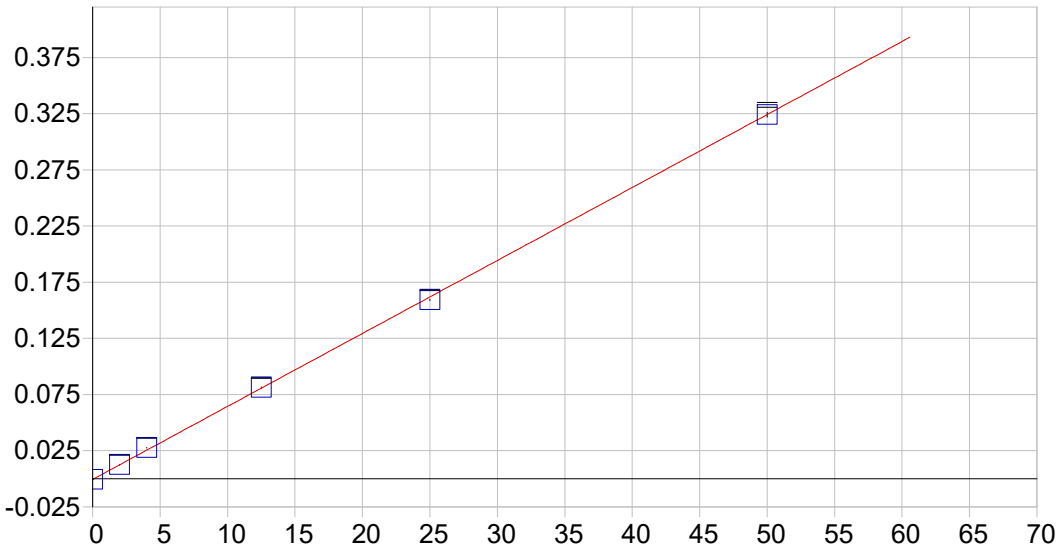


Zn 213.856 {158}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005754	Re-Slope:	1.000000
A1 (Gain):	2.483979	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999297	Status:	OK.
Std Error of Est:	0.002202		
Predicted MDL:	0.000328		
Predicted MQL:	0.001094		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00573	.000	1
S1	.04000	.04132	.001	3.29	.10908	.001	1
S3	1.2500	1.2843	.034	2.74	3.2174	.017	1
S4	2.5000	2.4674	-.033	-1.30	6.1780	.006	1
S5	5.0000	4.9314	-.069	-1.37	12.342	.046	1
S2	.40000	.46561	.066	16.4	1.1692	.008	1

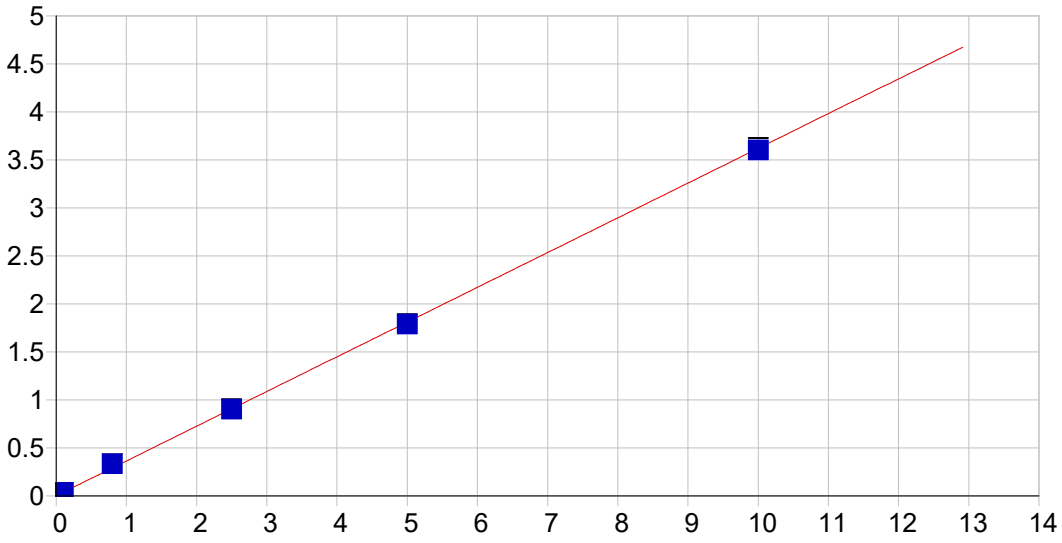


K 766.490 { 44}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000524	Re-Slope:	1.000000
A1 (Gain):	0.006498	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999811	Status:	OK.
Std Error of Est:	0.000067		
Predicted MDL:	0.034197		
Predicted MQL:	0.113990		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00017	-.000	.000	-.00052	.000	1
S2	4.0000	4.3325	.332	8.31	.02763	.000	1
S3	12.500	12.585	.085	.683	.08125	.001	1
S4	25.000	24.584	-.416	-1.66	.15921	.001	1
S5	50.000	49.978	-.022	-.045	.32421	.002	1
S1	2.0000	2.0203	.020	1.02	.01260	.000	1

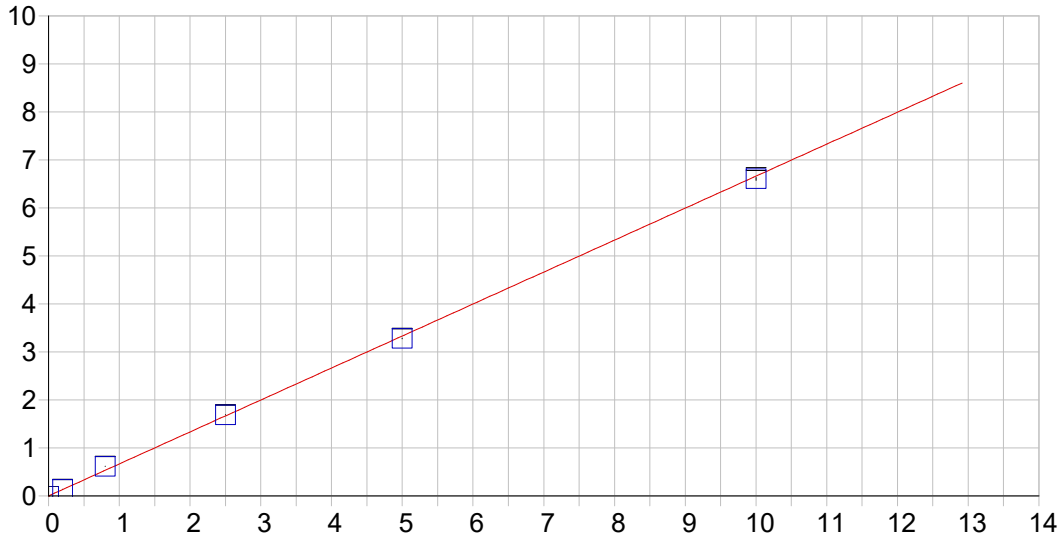


B 249.678 {135}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001910	Re-Slope:	1.000000
A1 (Gain):	0.361826	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999487	Status:	OK.
Std Error of Est:	0.000607		
Predicted MDL:	0.000760		
Predicted MQL:	0.002532		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00190	.000	1
S1	.10000	.10173	.002	1.73	.03853	.000	1
S3	2.5000	2.4881	-.012	-.478	.89948	.003	1
S4	5.0000	4.9397	-.060	-1.21	1.7839	.003	1
S5	10.000	9.9515	-.049	-.485	3.5919	.028	1
S2	.80000	.91907	.119	14.9	.33360	.002	1

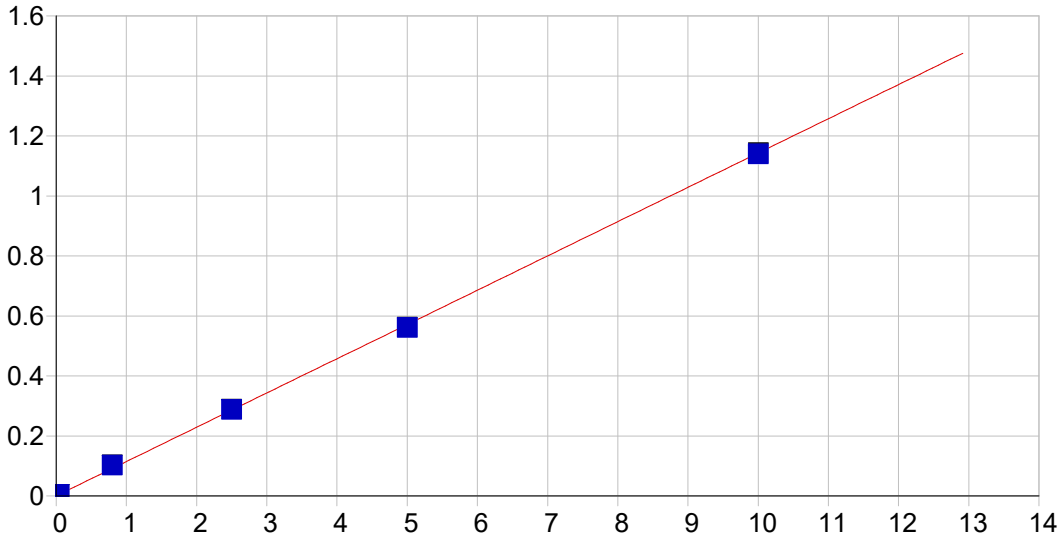


Mo 202.030 {467}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000213	Re-Slope:	1.000000
A1 (Gain):	0.666153	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999405	Status:	OK.
Std Error of Est:	0.001712		
Predicted MDL:	0.000275		
Predicted MQL:	0.000917		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00019	.000	1
S1	.20000	.20475	.005	2.37	.13661	.001	1
S3	2.5000	2.5335	.034	1.34	1.6879	.004	1
S4	5.0000	4.9218	-.078	-1.56	3.2789	.008	1
S5	10.000	9.9150	-.085	-.850	6.6051	.031	1
S2	.80000	.92498	.125	15.6	.61639	.001	1

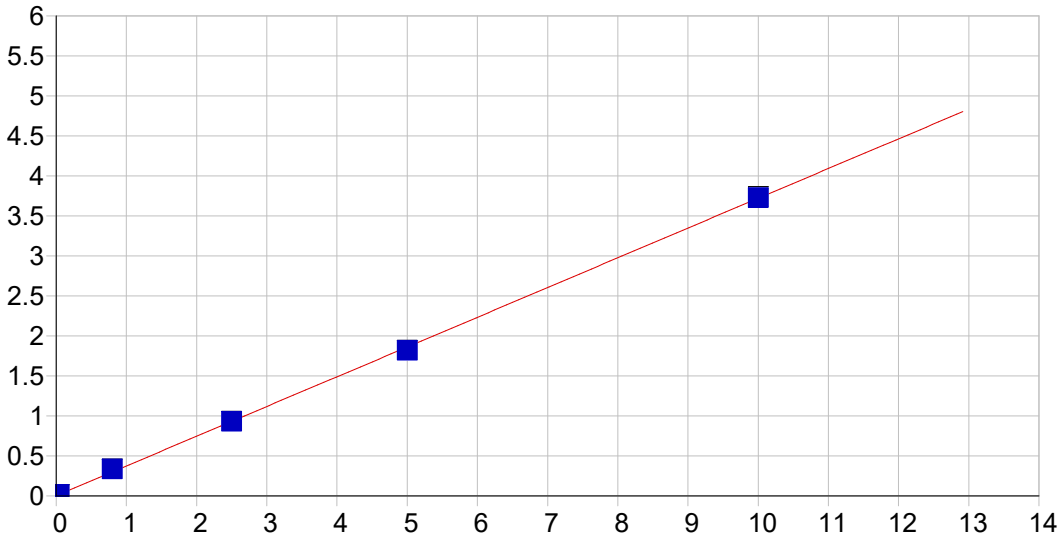


Sn 189.989 {478}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000189	Re-Slope:	1.000000
A1 (Gain):	0.114260	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999629	Status:	OK.
Std Error of Est:	0.000103		
Predicted MDL:	0.000859		
Predicted MQL:	0.002862		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00019	.000	1
S1	.04000	.03992	-.000	-.210	.00475	.000	1
S3	2.5000	2.5186	.019	.744	.28767	.001	1
S4	5.0000	4.9104	-.090	-1.79	.56067	.001	1
S5	10.000	9.9740	-.026	-.260	1.1387	.004	1
S2	.80000	.89702	.097	12.1	.10259	.000	1

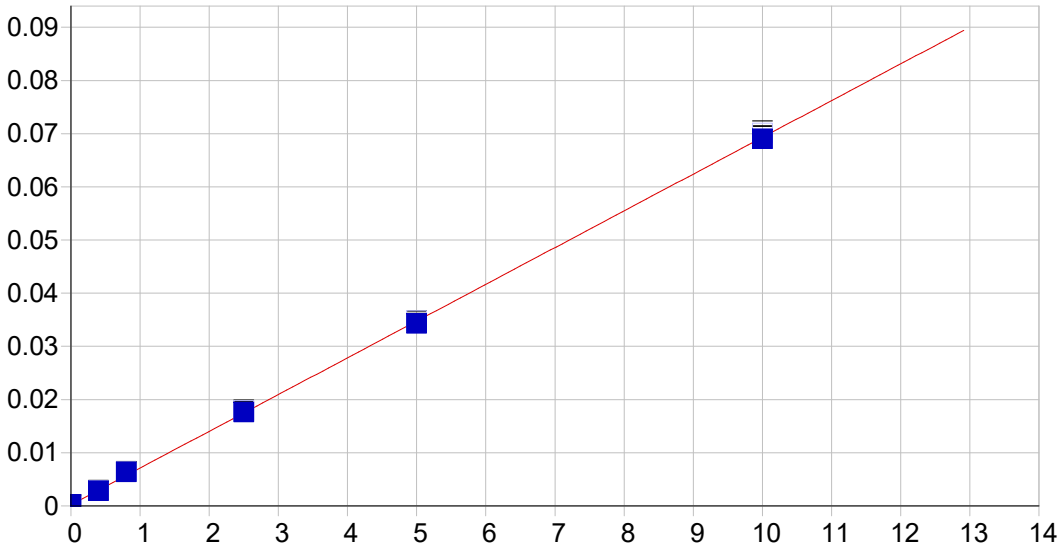


Ti 336.121 {100}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002132	Re-Slope:	1.000000
A1 (Gain):	0.371788	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999626	Status:	OK.
Std Error of Est:	0.000337		
Predicted MDL:	0.000829		
Predicted MQL:	0.002765		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00213	.000	1
S1	.04000	.03932	-.001	-1.70	.01674	.000	1
S3	2.5000	2.5002	.000	.007	.93133	.002	1
S4	5.0000	4.8846	-.115	-2.31	1.8175	.002	1
S5	10.000	10.022	.022	.222	3.7269	.014	1
S2	.80000	.89373	.094	11.7	.33430	.001	1

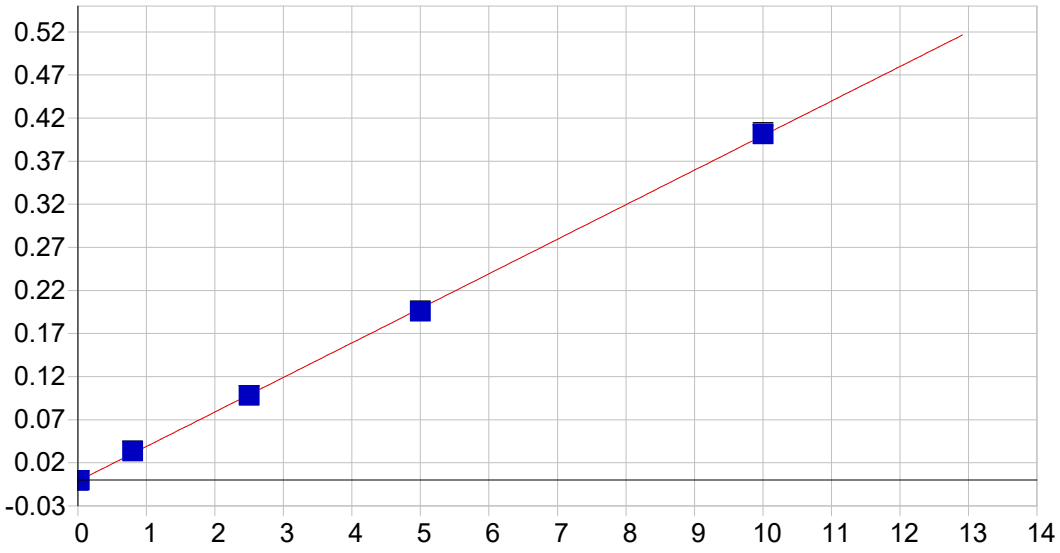


Si 288.158 {117}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000212	Re-Slope:	1.000000
A1 (Gain):	0.006909	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999664	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.007194		
Predicted MQL:	0.023981		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	.00021	.000	1
S1	.40000	.38241	-.018	-4.40	.00286	.000	1
S3	2.5000	2.5256	.026	1.02	.01792	.000	1
S4	5.0000	4.9346	-.065	-1.31	.03483	.000	1
S5	10.000	9.9638	-.036	-.362	.07009	.000	1
S2	.80000	.89337	.093	11.7	.00647	.000	1

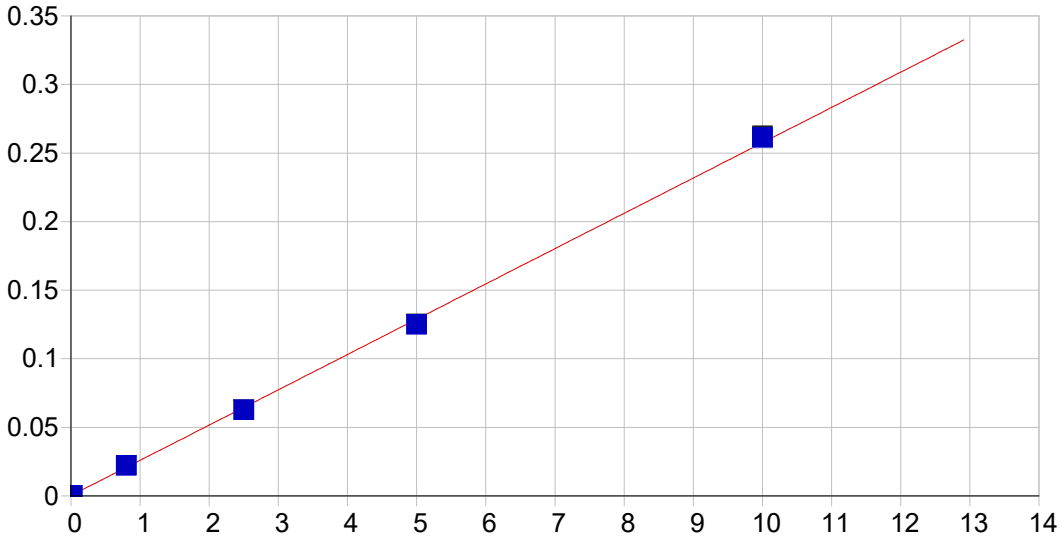


P 177.495 {490}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001180	Re-Slope:	1.000000
A1 (Gain):	0.040086	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999807	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.002613		
Predicted MQL:	0.008710		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00118	.000	1
S1	.02000	.01962	-.000	-1.91	-.00039	.000	1
S3	2.5000	2.4741	-.026	-1.04	.09798	.000	1
S4	5.0000	4.9150	-.085	-1.70	.19581	.000	1
S5	10.000	10.047	.047	.474	.40152	.001	1
S2	.80000	.86393	.064	7.99	.03345	.000	1

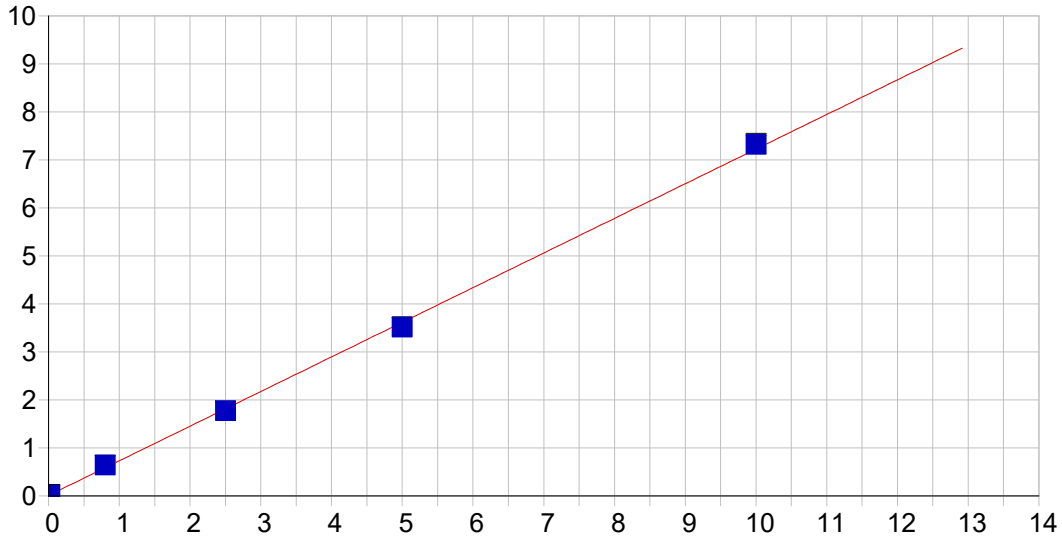


S 182.034 {485}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000206	Re-Slope:	1.000000
A1 (Gain):	0.025730	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999671	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.003539		
Predicted MQL:	0.011795		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00021	.000	1
S1	.02000	.02160	.002	7.99	.00074	.000	1
S3	2.5000	2.4355	-.064	-2.58	.06270	.000	1
S4	5.0000	4.8562	-.144	-2.88	.12482	.000	1
S5	10.000	10.152	.152	1.52	.26074	.001	1
S2	.80000	.85502	.055	6.88	.02215	.000	1

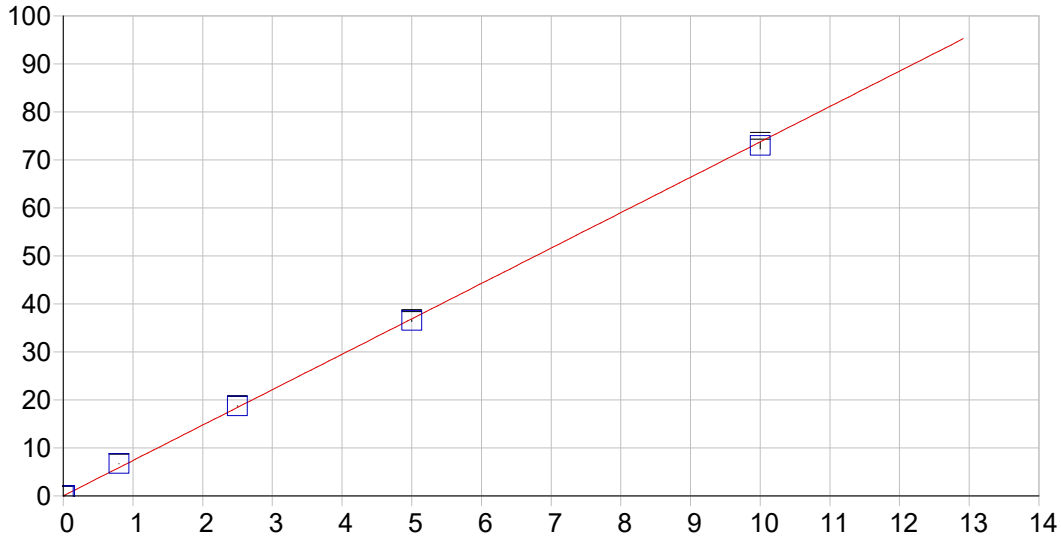


Li 670.784 { 50}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.009923	Re-Slope:	1.000000
A1 (Gain):	0.721515	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999624	Status:	OK.
Std Error of Est:	0.000464		
Predicted MDL:	0.001332		
Predicted MQL:	0.004442		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00992	.000	1
S5	10.000	10.135	.135	1.35	7.3258	.019	1
S4	5.0000	4.8573	-.143	-2.85	3.5163	.005	1
S3	2.5000	2.4409	-.059	-2.36	1.7720	.003	1
S1	.02000	.01719	-.003	-14.0	.02256	.001	1
S2	.80000	.86995	.070	8.74	.63789	.004	1

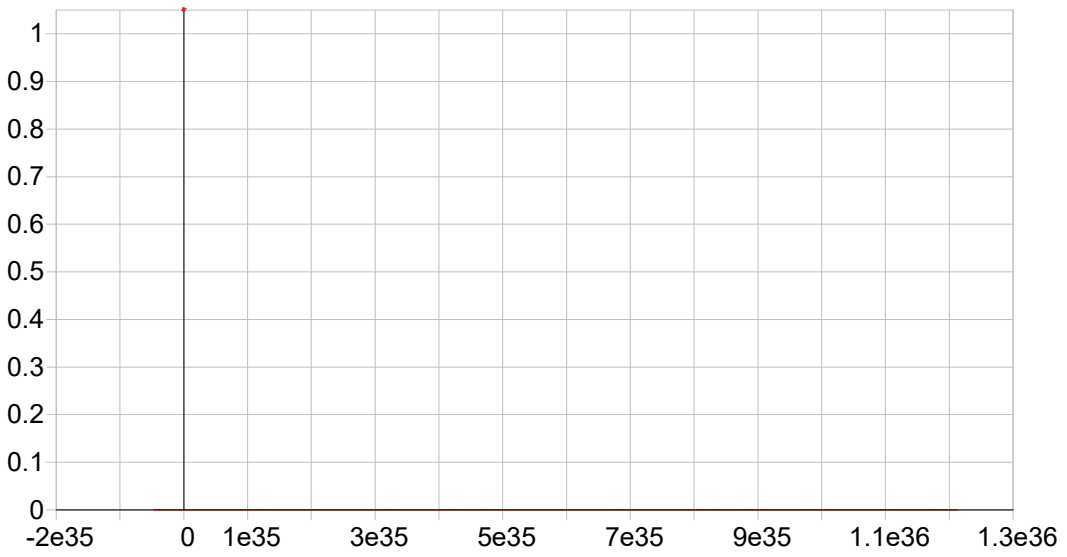


Sr 407.771 { 83}

Date of Fit:	3/10/2025 11:48:10	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000476	Re-Slope:	1.000000
A1 (Gain):	7.375086	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999527	Status:	OK.
Std Error of Est:	0.005314		
Predicted MDL:	0.000084		
Predicted MQL:	0.000281		

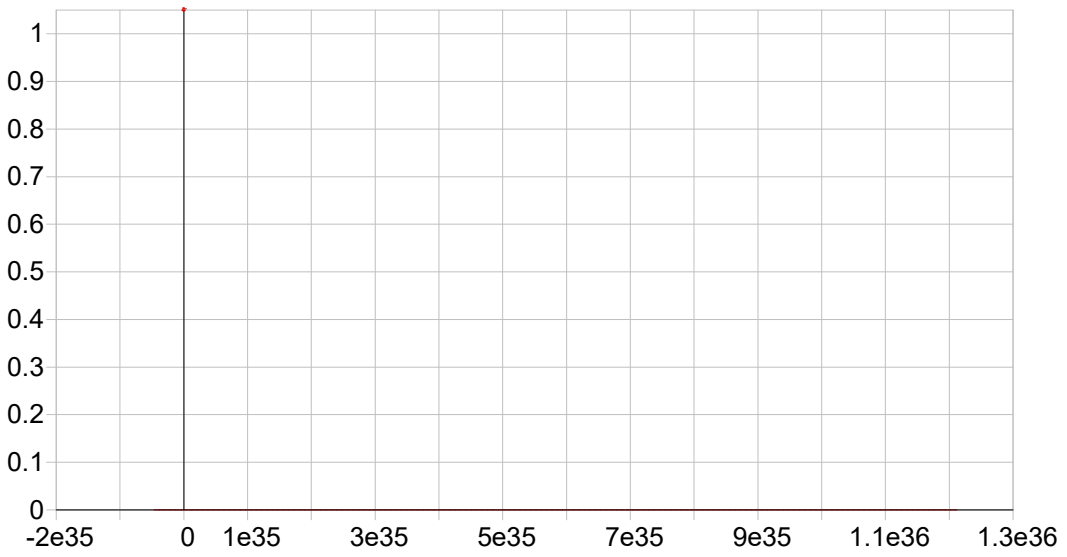
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00046	.000	1
S1	.02000	.01966	-.000	-1.71	.14545	.001	1
S3	2.5000	2.5411	.041	1.65	18.742	.053	1
S4	5.0000	4.9543	-.046	-.914	36.539	.200	1
S5	10.000	9.8949	-.105	-1.05	72.976	.699	1
S2	.80000	.90999	.110	13.7	6.7117	.038	1



Y 224.306 {450}*

Date of Fit:	3/10/2025 11:48:10	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				

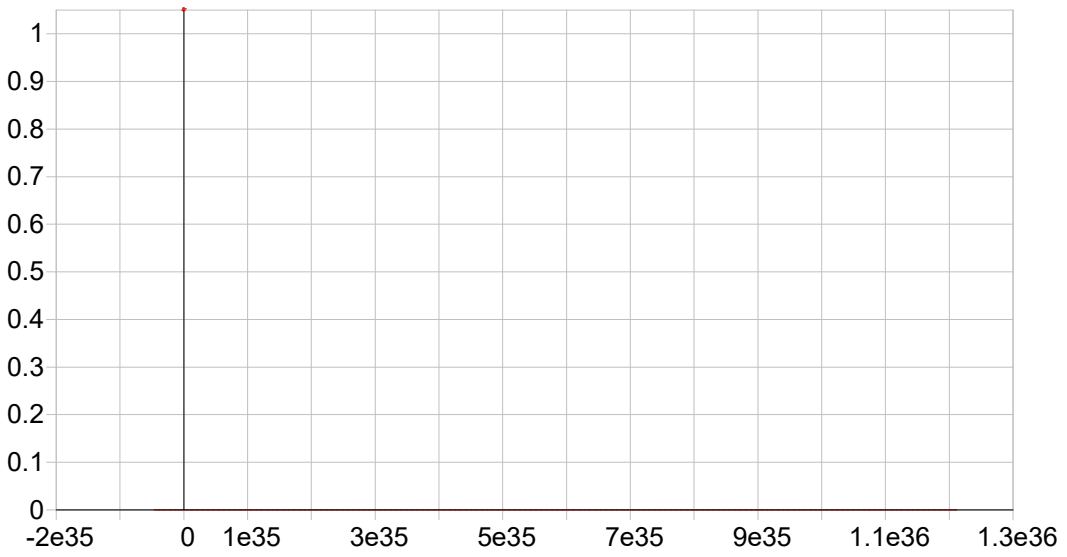
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 360.073 { 94}*

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

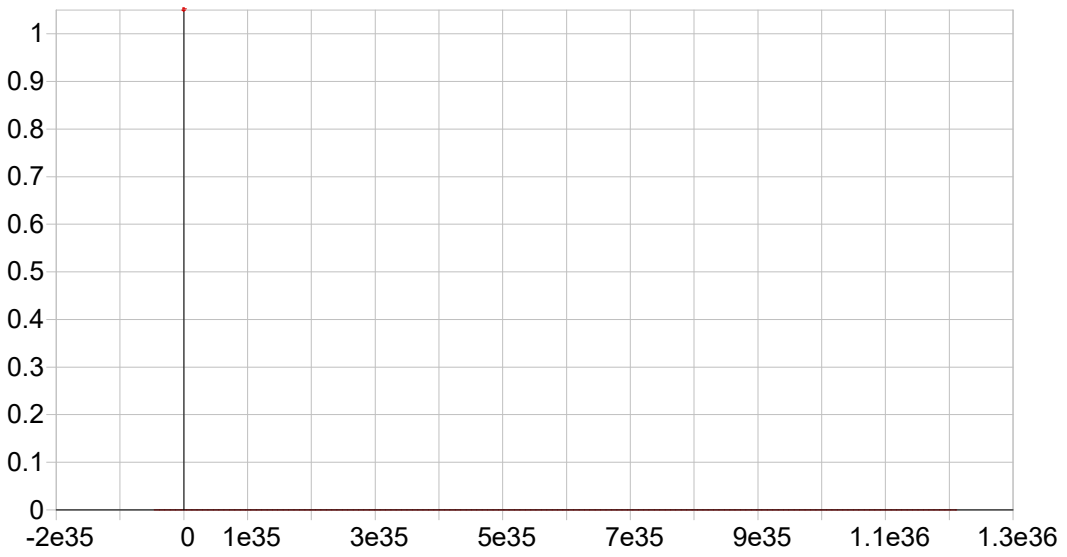
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 371.030 { 91}*

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

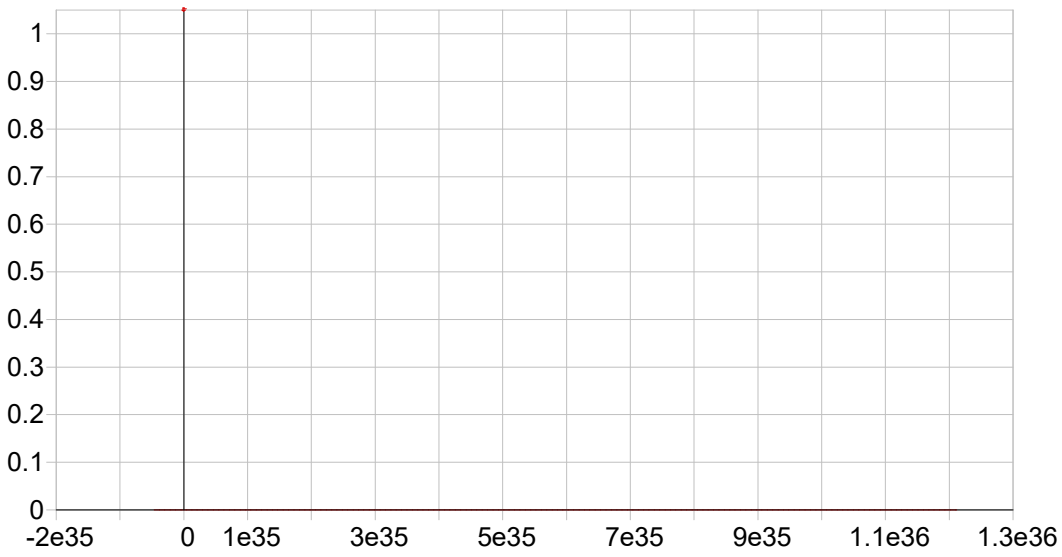
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 224.306 {150}*

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

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



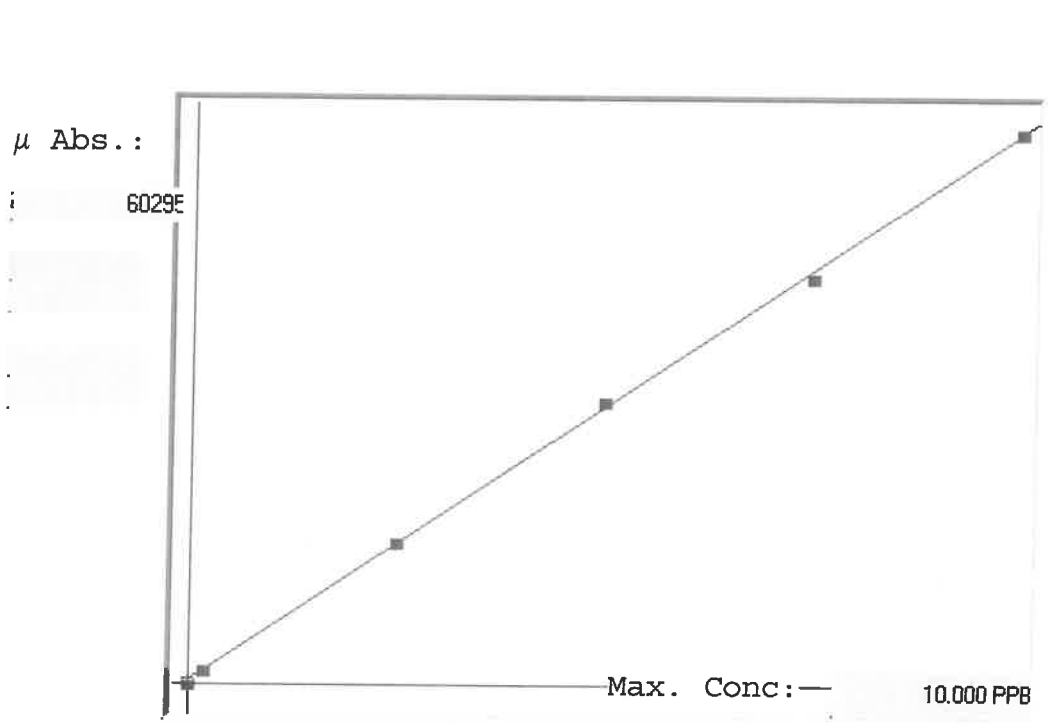
In 230.606 {446}*

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

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

LB134807

7471B / INSTRUMENT ID: CV1



A= 0.0000e+000
B= 1.6736e-004
C= -7.0874e-002
Rho= 0.9997719
Accept= Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	b/c)
0.0	0.000	-0.050	-0.050	122	0.000	122					1
0.2	0.200	0.189	-0.011	1554	0.0 %	1554					16
2.5	2.500	2.547	0.047	15643	0.0 %	15643					2
5.0	5.000	5.124	0.124	31038	0.0 %	31038					2
7.5	7.500	7.371	-0.129	44465	0.0 %	44465					2
10.0	10.000	10.020	0.020	60295	0.0 %	60295					6

Reviewed By:jaswal
On:3/4/2025 8:55:24 AM
Inst Id :CV1
LB :LB134807

LB134807 INSTRUMENT ID : CV1

Method: 7471B Operator: Admin Date of Analysis: 26 Feb 2025 10:36:26

Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S0	122	-	0.00000	7471B	PPB	26 Feb 2025 10:52:03	S	Std
0.2 - 1	S0.2	1554	-	0.20000	7471B	PPB	26 Feb 2025 10:54:19	S	Std
2.5 - 1	S2.5	15643	-	2.50000	7471B	PPB	26 Feb 2025 10:58:12	S	Std
5.0 - 1	S5	31038	-	5.00000	7471B	PPB	26 Feb 2025 11:00:29	S	Std
7.5 - 1	S7.5	44465	-	7.50000	7471B	PPB	26 Feb 2025 11:02:47	S	Std
10.0 - 1	S10	60295	-	10.00000	7471B	PPB	26 Feb 2025 11:07:59	S	Std
ICV19 - 1	ICV19	22136	3.6337		-7471B	PPB	26 Feb 2025 11:10:45	U	SMPL
ICB19 - 1	ICB19	99	-0.0543		-7471B	PPB	26 Feb 2025 11:15:51	U	SMPL
CCV25 - 1	CCV25	30370	5.0118		-7471B	PPB	26 Feb 2025 11:18:06	U	SMPL
CCB25 - 1	CCB25	-159	-0.0975		-7471B	PPB	26 Feb 2025 11:20:21	U	SMPL
CRA - 1	CRA	1456	0.1728		-7471B	PPB	26 Feb 2025 11:22:39	U	SMPL
HighStd - 1	HighStd	57631	9.5741		-7471B	PPB	26 Feb 2025 11:24:53	U	SMPL
ChkStd - 1	ChkStd	37524	6.2090		-7471B	PPB	26 Feb 2025 11:27:09	U	SMPL
PB166864BL - 1	PBS	175	-0.0416		-7471B	PPB	26 Feb 2025 11:32:18	U	SMPL
PB166864BS - 1	LCSS	22118	3.6307		-7471B	PPB	26 Feb 2025 11:34:34	U	SMPL
Q1415-01 - 1	B-163-SB01	1229	0.1348		-7471B	PPB	26 Feb 2025 11:36:51	U	SMPL
Q1415-02 - 1	B-172-SB01	673	0.0418		-7471B	PPB	26 Feb 2025 11:39:12	U	SMPL
Q1415-03 - 1	B-163-SB02	3150	0.4563		-7471B	PPB	26 Feb 2025 11:41:32	U	SMPL
Q1415-04 - 1	B-172-SB02	1293	0.1455		-7471B	PPB	26 Feb 2025 11:43:50	U	SMPL
Q1416-01 - 1	OK-01-022425	207	-0.0362		-7471B	PPB	26 Feb 2025 11:46:06	U	SMPL
CCV26 - 1	CCV26	29434	4.8551		-7471B	PPB	26 Feb 2025 11:48:22	U	SMPL
CCB26 - 1	CCB26	327	-0.0161		-7471B	PPB	26 Feb 2025 11:53:21	U	SMPL
Q1418-01 - 1	TR-06-02242025	2013	0.2660		-7471B	PPB	26 Feb 2025 11:55:37	U	SMPL
Q1420-01 - 1	TP-1-WC	3631	0.5368		-7471B	PPB	26 Feb 2025 11:57:52	U	SMPL
Q1420-05 - 1	TP-2-WC	1837	0.2366		-7471B	PPB	26 Feb 2025 12:00:08	U	SMPL
Q1421-01 - 1	P001-CLAY-CF01-01	2242	0.3043		-7471B	PPB	26 Feb 2025 12:02:25	U	SMPL
Q1421-01DUP - 1	P001-CLAY-CF01-01DUP	2144	0.2879		-7471B	PPB	26 Feb 2025 12:07:56	U	SMPL
Q1421-02 - 1	Q1421-01MS	31573	5.2131		-7471B	PPB	26 Feb 2025 12:16:29	U	SMPL
Q1421-03 - 1	Q1421-01MSD	30173	4.9788		-7471B	PPB	26 Feb 2025 12:21:24	U	SMPL
Q1421-07 - 1	P001-CLAY-CF01-02	491	0.0113		-7471B	PPB	26 Feb 2025 12:23:42	U	SMPL
Q1421-09 - 1	P001-CLAY-CF02-01	769	0.0578		-7471B	PPB	26 Feb 2025 12:26:02	U	SMPL
Q1422-01 - 1	B-154-SB01	2191	0.2958		-7471B	PPB	26 Feb 2025 12:28:18	U	SMPL
CCV27 - 1	CCV27	28956	4.7751		-7471B	PPB	26 Feb 2025 12:30:34	U	SMPL
CCB27 - 1	CCB27	147	-0.0463		-7471B	PPB	26 Feb 2025 12:37:47	U	SMPL
Q1422-02 - 1	B-154-SB02	708	0.0476		-7471B	PPB	26 Feb 2025 12:40:02	U	SMPL
Q1421-01LX5 - 1		239	-0.0309		-7471B	PPB	26 Feb 2025 12:42:18	U	SMPL
Q1421-01A - 1		28517	4.7017		-7471B	PPB	26 Feb 2025 12:44:34	U	SMPL
CCV28 - 1	CCV28	28686	4.7299		-7471B	PPB	26 Feb 2025 12:46:50	U	SMPL
CCB28 - 1	CCB28	-33	-0.0764		-7471B	PPB	26 Feb 2025 12:49:09	U	SMPL

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB166858

SOP ID : M3050B-Digestion-20

SDG No : N/A

Matrix : SOIL

Pippete ID: ICP A

Balance ID : M SC-2

Filter paper ID : N/A

pH Strip ID : N/A

Hood ID : #3

Block ID: 1. HOT BLOCK #2 2. N/A

Start Digest Date: 02/25/2025 **Time :** 10:05 **Temp :** 96 °C

End Digest Date: 02/25/2025 **Time :** 12:10 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. #2

Dig Technician Signature: SLG.

Supervisor Signature: JP

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	1.00	M6002
LFS-2	1.00	M6011
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
1:1 HNO3	10.00	MP84041
Conc. HNO3	5.00	M6126
30% H2O2	3.00	M6125
Conc. HCL	10.00	M6121
PTFE Boiling Stones	N/A	M5585
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK # 2 CELL 35 Temp :96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/25/25 13:20	SLG. met. dig	JB / MA DIG
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB166858

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
PB166858BL	PBS858	N/A	2.27	100	Colorless	Colorless	Fine	N/A	N/A	1
PB166858BS	LCS858	N/A	2.25	100	Colorless	Colorless	Fine	N/A	M6002,M6011	2
Q1416-01	OK-01-022425	N/A	2.43	100	Brown	Yellow	Medium	N/A	N/A	3
Q1418-01	TR-06-02242025	N/A	2.13	100	Brown	Yellow	Medium	N/A	N/A	4
Q1420-01	TP-1-WC	N/A	2.21	100	Brown	Yellow	Medium	N/A	N/A	5
Q1420-05	TP-2-WC	N/A	2.27	100	Brown	Yellow	Medium	N/A	N/A	6
Q1421-01	P001-CLAY-CF01-01	N/A	2.20	100	Black	Yellow	Medium	N/A	N/A	7
Q1421-01DUP	P001-CLAY-CF01-01DUP	N/A	2.29	100	Black	Yellow	Medium	N/A	N/A	8
Q1421-02	Q1421-01MS	N/A	2.04	100	Black	Yellow	Medium	N/A	M6002,M6011	9
Q1421-03	Q1421-01MSD	N/A	2.26	100	Black	Yellow	Medium	N/A	M6002,M6011	10
Q1421-07	P001-CLAY-CF01-02	N/A	2.31	100	Black	Yellow	Medium	N/A	N/A	11
Q1421-09	P001-CLAY-CF02-01	N/A	2.22	100	Black	Yellow	Medium	N/A	N/A	12
Q1422-01	B-154-SB01	N/A	2.30	100	Brown	Yellow	Medium	N/A	N/A	13
Q1422-02	B-154-SB02	N/A	2.26	100	Brown	Yellow	Medium	N/A	N/A	14

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB166858 **WorkList ID :** 187866 **Department :** Digestion **Date :** 02-25-2025 09:33:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1416-01	OK-01-022425	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG05	N41	02/24/2025	6010D
Q1418-01	TR-06-02242025	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG05	H41	02/24/2025	6010D
Q1420-01	TP-1-WC	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	N41	02/24/2025	6010D
Q1420-05	TP-2-WC	Solid	Metals ICP-TAL	Cool 4 deg C	PSEG03	N41	02/24/2025	6010D
Q1421-01	P001-CLAY-CF01-01	Solid	Metals ICP-TAL	Cool 4 deg C	ROYF02	H31	02/24/2025	6010D
Q1421-02	Q1421-01MS	Solid	Metals ICP-TAL	Cool 4 deg C	ROYF02	H31	02/24/2025	6010D
Q1421-03	Q1421-01MSD	Solid	Metals ICP-TAL	Cool 4 deg C	ROYF02	H31	02/24/2025	6010D
Q1421-07	P001-CLAY-CF01-02	Solid	Metals ICP-TAL	Cool 4 deg C	ROYF02	H31	02/24/2025	6010D
Q1421-09	P001-CLAY-CF02-01	Solid	Metals ICP-TAL	Cool 4 deg C	ROYF02	H31	02/24/2025	6010D
Q1422-01	B-154-SB01	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H33	02/23/2025	6010D
Q1422-02	B-154-SB02	Solid	Metals ICP-TAL	Cool 4 deg C	PORT06	H33	02/23/2025	6010D

Date/Time 02/25/25 9:55
Raw Sample Received by: SLD. met. div
Raw Sample Relinquished by: RM SM

Date/Time 02/25/25 10:55
Raw Sample Received by: RM SM
Raw Sample Relinquished by: SLD. met. div.

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB166864

SOP ID : M7471B-Mercury-18

SDG No : NA

Matrix : SOIL

Pippete ID: HG A

Balance ID : M SC-3

Filter paper ID : NA

pH Strip ID : NA

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 02/25/2025 **Time :** 13:30 **Temp :** 95 °C

End Digest Date: 02/25/2025 **Time :** 14:00 **Temp :** 94 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: JV

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP84626
CCV	30mL	MP84628
CRA	30mL	MP84630
Blank Spike	0.48mL	MP84619
Matrix Spike	0.48mL	MP84619

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	1.5mL	MP84632
KMnO4 (5%)	4.5mL	MP84564
Hydroxylamine HCL (12%)	2.0mL	MP84565
PTFE Boiling Stones	----------	M4583
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	30mL	MP84620
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP84621
2.5 ppb	S2.5	30mL	MP84622
5.0 ppb	S5.0	30mL	MP84623
7.5 ppb	S7.5	30mL	MP84624
10.0 ppb	S10.0	30mL	MP84625
ICV	ICV	30mL	MP84626
ICB	ICB	30mL	MP84627
CCV	CCV	30mL	MP84628
CCB	CCB	30mL	MP84629
CRI	CRI	30mL	MP84630
CHK STD	CHK STD	30mL	MP84631

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
2/25/25 @ 14:40	MB- Dig. Lab	MB- Metal Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB166864

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB166864BL	PBS864	0.56	35	NA	N/A	N/A
PB166864BS	LCS864	0.54	35	NA	MP84619	N/A
Q1415-01	B-163-SB01	0.50	35	NA	N/A	N/A
Q1415-02	B-172-SB01	0.51	35	NA	N/A	N/A
Q1415-03	B-163-SB02	0.52	35	NA	N/A	N/A
Q1415-04	B-172-SB02	0.51	35	NA	N/A	N/A
Q1416-01	OK-01-022425	0.53	35	NA	N/A	N/A
Q1418-01	TR-06-02242025	0.50	35	NA	N/A	N/A
Q1420-01	TP-1-WC	0.50	35	NA	N/A	N/A
Q1420-05	TP-2-WC	0.54	35	NA	N/A	N/A
Q1421-01	P001-CLAY-CF01-01	0.50	35	NA	N/A	N/A
Q1421-01DUP	P001-CLAY-CF01-01DUP	0.51	35	NA	N/A	N/A
Q1421-02	Q1421-01MS	0.50	35	NA	MP84619	N/A
Q1421-03	Q1421-01MSD	0.52	35	NA	MP84619	N/A
Q1421-07	P001-CLAY-CF01-02	0.52	35	NA	N/A	N/A
Q1421-09	P001-CLAY-CF02-01	0.54	35	NA	N/A	N/A
Q1422-01	B-154-SB01	0.50	35	NA	N/A	N/A
Q1422-02	B-154-SB02	0.54	35	NA	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 022525_7471 **WorkList ID :** 187874 **Department :** Digestion **Date :** 02-25-2025 10:24:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1421-01	P001-CLAY-CF01-01	Solid	Mercury	Cool 4 deg C	ROYF02	H31	02/24/2025	7471B
Q1421-02	Q1421-01MS	Solid	Mercury	Cool 4 deg C	ROYF02	H31	02/24/2025	7471B
Q1421-03	Q1421-01MSD	Solid	Mercury	Cool 4 deg C	ROYF02	H31	02/24/2025	7471B
Q1421-07	P001-CLAY-CF01-02	Solid	Mercury	Cool 4 deg C	ROYF02	H31	02/24/2025	7471B
Q1421-09	P001-CLAY-CF02-01	Solid	Mercury	Cool 4 deg C	ROYF02	H31	02/24/2025	7471B
Q1415-01	B-163-SB01	Solid	Mercury	Cool 4 deg C	PORT06	N31	02/22/2025	7471B
Q1415-02	B-172-SB01	Solid	Mercury	Cool 4 deg C	PORT06	N31	02/22/2025	7471B
Q1415-03	B-163-SB02	Solid	Mercury	Cool 4 deg C	PORT06	N31	02/22/2025	7471B
Q1415-04	B-172-SB02	Solid	Mercury	Cool 4 deg C	PORT06	N31	02/22/2025	7471B
Q1422-01	B-154-SB01	Solid	Mercury	Cool 4 deg C	PORT06	H33	02/23/2025	7471B
Q1422-02	B-154-SB02	Solid	Mercury	Cool 4 deg C	PORT06	H33	02/23/2025	7471B
Q1420-01	TP-1-WC	Solid	Mercury	Cool 4 deg C	PSEG03	N41	02/24/2025	7471B
Q1420-05	TP-2-WC	Solid	Mercury	Cool 4 deg C	PSEG03	N41	02/24/2025	7471B
Q1416-01	OK-01-022425	Solid	Mercury	Cool 4 deg C	PSEG05	N41	02/24/2025	7471B
Q1418-01	TR-06-02242025	Solid	Mercury	Cool 4 deg C	PSEG05	H41	02/24/2025	7471B

Date/Time 2/25/25 @ 13:45

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 2/25/25 @ 19:30

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/26/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 16:45
In Date: 02/25/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:00
Out Date: 02/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134794

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1422-01	B-154-SB01	1	1.15	8.52	9.67	8.68	88.4	
Q1422-02	B-154-SB02	2	1.16	8.49	9.65	8.57	87.3	
Q1426-02	50483	3	1.00	1.00	2.00	2.00	100.0	wipe sample
Q1427-01	VNJ-227	4	1.15	8.71	9.86	8.61	85.6	
Q1428-01	NB-07-022525	5	1.18	8.42	9.6	9.06	93.6	
Q1428-02	NB-07-022525-E2	6	1.17	8.50	9.67	9.04	92.6	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

VB 134794

WorkList Name : %1-022525 **WorkList ID :** 187856 **Department :** Wet-Chemistry **Date :** 02-25-2025 08:00:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1422-01	B-154-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	H33	02/23/2025	Chemtech -SO
Q1422-02	B-154-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	H33	02/23/2025	Chemtech -SO
Q1426-02	50483	Solid	Percent Solids	Cool 4 deg C	PORT06	H33	02/23/2025	Chemtech -SO
Q1427-01	VNJ-227	Solid	Percent Solids	Cool 4 deg C	PSEG03	H33	02/25/2025	Chemtech -SO
Q1428-01	NB-07-022525	Solid	Percent Solids	Cool 4 deg C	PSEG03	H21	02/25/2025	Chemtech -SO
Q1428-02	NB-07-022525-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H21	02/25/2025	Chemtech -SO
					PSEG05	H21	02/25/2025	Chemtech -SO

JB

Date/Time ~~02/26/25~~ 02/25/25 15:40

Raw Sample Received by: JB (WC)

Raw Sample Relinquished by: CP SDG

JB

Date/Time ~~02/26/25~~ 02/25/25 17:10

Raw Sample Received by: CP SDG

Raw Sample Relinquished by: JB (WC)

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134807

Review By	Mohan	Review On	3/4/2025 8:28:51 AM
Supervise By	jaswal	Supervise On	3/4/2025 8:55:24 AM

STD. NAME	STD REF.#
ICAL Standard	MP84620,MP84621,MP84622,MP84623,MP84624,MP84625
ICV Standard	MP84626
CCV Standard	MP84628
ICSA Standard	
CRI Standard	MP84630
LCS Standard	
Chk Standard	MP84627,MP84629,MP84631,MP84634

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/26/25 10:52		Mohan	OK
2	S0.2	S0.2	CAL2	02/26/25 10:54		Mohan	OK
3	S2.5	S2.5	CAL3	02/26/25 10:58		Mohan	OK
4	S5	S5	CAL4	02/26/25 11:00		Mohan	OK
5	S7.5	S7.5	CAL5	02/26/25 11:02		Mohan	OK
6	S10	S10	CAL6	02/26/25 11:07		Mohan	OK
7	ICV19	ICV19	ICV	02/26/25 11:10		Mohan	OK
8	ICB19	ICB19	ICB	02/26/25 11:15		Mohan	OK
9	CCV25	CCV25	CCV	02/26/25 11:18		Mohan	OK
10	CCB25	CCB25	CCB	02/26/25 11:20		Mohan	OK
11	CRA	CRA	CRDL	02/26/25 11:22		Mohan	OK
12	HighStd	HighStd	HIGH STD	02/26/25 11:24		Mohan	OK
13	ChkStd	ChkStd	SAM	02/26/25 11:27		Mohan	OK
14	PB166864BL	PB166864BL	MB	02/26/25 11:32		Mohan	OK
15	PB166864BS	PB166864BS	LCS	02/26/25 11:34		Mohan	OK
16	Q1415-01	B-163-SB01	SAM	02/26/25 11:36		Mohan	OK
17	Q1415-02	B-172-SB01	SAM	02/26/25 11:39		Mohan	OK
18	Q1415-03	B-163-SB02	SAM	02/26/25 11:41		Mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134807

Review By	Mohan	Review On	3/4/2025 8:28:51 AM
Supervise By	jaswal	Supervise On	3/4/2025 8:55:24 AM

STD. NAME	STD REF.#
ICAL Standard	MP84620,MP84621,MP84622,MP84623,MP84624,MP84625
ICV Standard	MP84626
CCV Standard	MP84628
ICSA Standard	
CRI Standard	MP84630
LCS Standard	
Chk Standard	MP84627,MP84629,MP84631,MP84634

19	Q1415-04	B-172-SB02	SAM	02/26/25 11:43		Mohan	OK
20	Q1416-01	OK-01-022425	SAM	02/26/25 11:46		Mohan	OK
21	CCV26	CCV26	CCV	02/26/25 11:48		Mohan	OK
22	CCB26	CCB26	CCB	02/26/25 11:53		Mohan	OK
23	Q1418-01	TR-06-02242025	SAM	02/26/25 11:55		Mohan	OK
24	Q1420-01	TP-1-WC	SAM	02/26/25 11:57		Mohan	OK
25	Q1420-05	TP-2-WC	SAM	02/26/25 12:00		Mohan	OK
26	Q1421-01	P001-CLAY-CF01-01	SAM	02/26/25 12:02		Mohan	OK
27	Q1421-01DUP	P001-CLAY-CF01-01D	DUP	02/26/25 12:07		Mohan	OK
28	Q1421-02	P001-CLAY-CF01-01M	MS	02/26/25 12:16		Mohan	OK
29	Q1421-03	P001-CLAY-CF01-01M	MSD	02/26/25 12:21		Mohan	OK
30	Q1421-07	P001-CLAY-CF01-02	SAM	02/26/25 12:23		Mohan	OK
31	Q1421-09	P001-CLAY-CF02-01	SAM	02/26/25 12:26		Mohan	OK
32	Q1422-01	B-154-SB01	SAM	02/26/25 12:28		Mohan	OK
33	CCV27	CCV27	CCV	02/26/25 12:30		Mohan	OK
34	CCB27	CCB27	CCB	02/26/25 12:37		Mohan	OK
35	Q1422-02	B-154-SB02	SAM	02/26/25 12:40		Mohan	OK
36	Q1421-01L	P001-CLAY-CF01-01L	SD	02/26/25 12:42		Mohan	OK
37	Q1421-01A	P001-CLAY-CF01-01A	PS	02/26/25 12:44		Mohan	OK
38	CCV28	CCV28	CCV	02/26/25 12:46		Mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134807

Review By	Mohan	Review On	3/4/2025 8:28:51 AM
Supervise By	jaswal	Supervise On	3/4/2025 8:55:24 AM

STD. NAME	STD REF.#
ICAL Standard	MP84620,MP84621,MP84622,MP84623,MP84624,MP84625
ICV Standard	MP84626
CCV Standard	MP84628
ICSA Standard	
CRI Standard	MP84630
LCS Standard	
Chk Standard	MP84627,MP84629,MP84631,MP84634

39	CCB28	CCB28	CCB	02/26/25 12:49		Mohan	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134965

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	03/10/25 11:17		Kareem	OK
2	S1	S1	CAL2	03/10/25 11:22		Kareem	OK
3	S2	S2	CAL3	03/10/25 11:26		Kareem	OK
4	S3	S3	CAL4	03/10/25 11:30		Kareem	OK
5	S4	S4	CAL5	03/10/25 11:34		Kareem	OK
6	S5	S5	CAL6	03/10/25 11:38		Kareem	OK
7	ICV01	ICV01	ICV	03/10/25 11:48		Kareem	OK
8	LLICV01	LLICV01	LLICV	03/10/25 11:52		Kareem	OK
9	ICB01	ICB01	ICB	03/10/25 11:57		Kareem	OK
10	CRI01	CRI01	CRDL	03/10/25 12:01		Kareem	OK
11	ICSA01	ICSA01	ICSA	03/10/25 12:05		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	03/10/25 12:10		Kareem	OK
13	ICSADL	ICSADL	ICSA	03/10/25 12:14		Kareem	OK
14	ICSABDL	ICSABDL	ICSAB	03/10/25 12:18		Kareem	OK
15	CCV01	CCV01	CCV	03/10/25 12:27		Kareem	OK
16	CCB01	CCB01	CCB	03/10/25 12:34		Kareem	OK
17	Q1489-16MSD	TP-4MSD	MSD	03/10/25 12:38		Kareem	OK
18	Q1489-16A	TP-4A	PS	03/10/25 12:42		Kareem	OK

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134965

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

19	Q1478-13	IDW-SO-COMP-0228	SAM	03/10/25 12:46		Kareem	OK
20	Q1481-01	WC-K1311	SAM	03/10/25 12:51		Kareem	OK
21	Q1489-12	TP-3	SAM	03/10/25 12:55		Kareem	OK
22	Q1489-16	TP-4	SAM	03/10/25 12:59		Kareem	OK
23	Q1489-16DUP	TP-4DUP	DUP	03/10/25 13:04		Kareem	OK
24	Q1489-16L	TP-4L	SD	03/10/25 13:08		Kareem	OK
25	Q1489-16MS	TP-4MS	MS	03/10/25 13:12		Kareem	OK
26	Q1415-05	FB02222025	SAM	03/10/25 13:17		Kareem	OK
27	CCV02	CCV02	CCV	03/10/25 13:21		Kareem	OK
28	CCB02	CCB02	CCB	03/10/25 13:25		Kareem	OK
29	Q1415-05DUP	FB02222025DUP	DUP	03/10/25 13:29		Kareem	OK
30	Q1415-05L	FB02222025L	SD	03/10/25 13:34		Kareem	OK
31	Q1415-05MS	FB02222025MS	MS	03/10/25 13:38		Kareem	OK
32	Q1415-05MSD	FB02222025MSD	MSD	03/10/25 13:42		Kareem	OK
33	Q1415-05A	FB02222025A	PS	03/10/25 13:46		Kareem	OK
34	Q1415-06	B-173-GW01	SAM	03/10/25 13:50		Kareem	OK
35	Q1421-04	P001-CLAY-CF01-01	SAM	03/10/25 13:55	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
36	Q1421-04DUP	P001-CLAY-CF01-01D	DUP	03/10/25 13:59	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
37	Q1421-04L	P001-CLAY-CF01-01L	SD	03/10/25 14:03	MS/MSD fail for more than 50% parameters	Kareem	Not Ok

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

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134965

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

38	Q1421-05	P001-CLAY-CF01-01M	MS	03/10/25 14:07	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
39	CCV03	CCV03	CCV	03/10/25 14:11		Kareem	OK
40	CCB03	CCB03	CCB	03/10/25 14:15		Kareem	OK
41	Q1421-06	P001-CLAY-CF01-01M	MSD	03/10/25 14:20	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
42	Q1421-04A	P001-CLAY-CF01-01A	PS	03/10/25 14:24	MS/MSD fail for more than 50% parameters	Kareem	Not Ok
43	Q1421-08	P001-CLAY-CF01-02	SAM	03/10/25 14:28		Kareem	OK
44	Q1421-10	P001-CLAY-CF02-01	SAM	03/10/25 14:32		Kareem	OK
45	Q1421-01	P001-CLAY-CF01-01	SAM	03/10/25 14:36	Fe high	Kareem	Dilution
46	Q1421-01DUP	P001-CLAY-CF01-01D	DUP	03/10/25 14:41	Fe high	Kareem	Dilution
47	Q1421-01L	P001-CLAY-CF01-01L	SD	03/10/25 14:45		Kareem	OK
48	Q1421-02	P001-CLAY-CF01-01M	MS	03/10/25 14:49	Fe high	Kareem	Dilution
49	Q1421-03	P001-CLAY-CF01-01M	MSD	03/10/25 14:53	Fe high	Kareem	Dilution
50	Q1421-01A	P001-CLAY-CF01-01A	PS	03/10/25 14:57		Kareem	OK
51	CCV04	CCV04	CCV	03/10/25 15:01		Kareem	OK
52	CCB04	CCB04	CCB	03/10/25 15:05		Kareem	OK
53	Q1421-07	P001-CLAY-CF01-02	SAM	03/10/25 15:10	Fe high, Ag (oversaturated)	Kareem	Dilution
54	Q1421-09	P001-CLAY-CF02-01	SAM	03/10/25 15:14		Kareem	OK
55	Q1422-01	B-154-SB01	SAM	03/10/25 15:18		Kareem	OK
56	Q1422-02	B-154-SB02	SAM	03/10/25 15:22		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134965

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

57	Q1429-01	OUTFALL-DSN-001	SAM	03/10/25 15:26		Kareem	OK
58	Q1429-01DUP	OUTFALL-DSN-001D	DUP	03/10/25 15:31		Kareem	OK
59	Q1429-01L	OUTFALL-DSN-001L	SD	03/10/25 15:35		Kareem	OK
60	Q1429-01MS	OUTFALL-DSN-001M	MS	03/10/25 15:39		Kareem	OK
61	Q1429-01MSD	OUTFALL-DSN-001M	MSD	03/10/25 15:43		Kareem	OK
62	Q1429-01A	OUTFALL-DSN-001A	PS	03/10/25 15:47		Kareem	OK
63	CCV05	CCV05	CCV	03/10/25 15:51		Kareem	OK
64	CCB05	CCB05	CCB	03/10/25 15:55		Kareem	OK
65	Q1429-02	OUTFALL-DSN-002	SAM	03/10/25 16:00		Kareem	OK
66	Q1415-02DL	B-172-SB01DL	SAM	03/10/25 16:04	2x for Mn	Kareem	Confirms
67	PB166968TB	PB166968TB	MB	03/10/25 16:08		Kareem	OK
68	PB166990BL	PB166990BL	MB	03/10/25 16:12		Kareem	OK
69	PB166990BS	PB166990BS	LCS	03/10/25 16:17		Kareem	OK
70	PB166878TB	PB166878TB	MB	03/10/25 16:21		Kareem	OK
71	PB166878BL	PB166878BL	MB	03/10/25 16:25		Kareem	OK
72	PB166878BS	PB166878BS	LCS	03/10/25 16:29		Kareem	OK
73	PB166858BL	PB166858BL	MB	03/10/25 16:33		Kareem	OK
74	PB166858BS	PB166858BS	LCS	03/10/25 16:44		Kareem	OK
75	CCV06	CCV06	CCV	03/10/25 16:48		Kareem	OK
76	CCB06	CCB06	CCB	03/10/25 16:52		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134965

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

77	Q1421-01DL	P001-CLAY-CF01-01D	SAM	03/10/25 16:56	2x for Fe	Kareem	Confirms
78	Q1421-01DUPDL	P001-CLAY-CF01-01D	DUP	03/10/25 17:00	2x for Fe	Kareem	Confirms
79	Q1421-01LDL	P001-CLAY-CF01-01L	SD	03/10/25 17:05	NOT REQUIRED	Kareem	Not Ok
80	Q1421-02DL	P001-CLAY-CF01-01M	MS	03/10/25 17:09	2x for Fe	Kareem	Confirms
81	Q1421-03DL	P001-CLAY-CF01-01M	MSD	03/10/25 17:13	2x for Fe	Kareem	Confirms
82	Q1421-01ADL	P001-CLAY-CF01-01A	PS	03/10/25 17:17	NOT REQUIRED	Kareem	Not Ok
83	Q1421-07DL	P001-CLAY-CF01-02D	SAM	03/10/25 17:21	2x for Fe,Ag	Kareem	Confirms
84	Q1421-09DL	P001-CLAY-CF02-01D	SAM	03/10/25 17:26	NOT USE	Kareem	Not Ok
85	PB166927TB	PB166927TB	MB	03/10/25 17:30		Kareem	OK
86	PB166859BL	PB166859BL	MB	03/10/25 17:34		Kareem	OK
87	CCV07	CCV07	CCV	03/10/25 17:39		Kareem	OK
88	CCB07	CCB07	CCB	03/10/25 17:44		Kareem	OK
89	PB166859BS	PB166859BS	LCS	03/10/25 17:48		Kareem	OK
90	Q1524-01	72-11930-343-COMP	SAM	03/10/25 17:52		Kareem	OK
91	Q1524-01DUP	72-11930-343-COMPD	DUP	03/10/25 17:56		Kareem	OK
92	Q1524-01L	72-11930-343-COMPL	SD	03/10/25 18:00		Kareem	OK
93	Q1524-01MS	72-11930-343-COMPM	MS	03/10/25 18:04		Kareem	OK
94	Q1524-01MSD	72-11930-343-COMPM	MSD	03/10/25 18:08		Kareem	OK
95	Q1524-01A	72-11930-343-COMPA	PS	03/10/25 18:12		Kareem	OK
96	Q1524-02	VNJ-241	SAM	03/10/25 18:16		Kareem	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB134965

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard	
ICV Standard	
CCV Standard	
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	

97	PB167039BL	PB167039BL	MB	03/10/25 18:20		Kareem	OK
98	PB167039BS	PB167039BS	LCS	03/10/25 18:25		Kareem	OK
99	CCV08	CCV08	CCV	03/10/25 18:29		Kareem	OK
100	CCB08	CCB08	CCB	03/10/25 18:33		Kareem	OK
101	LR1	LR1	HIGH STD	03/10/25 18:37		Kareem	OK
102	LR2	LR2	HIGH STD	03/10/25 18:42		Kareem	OK
103	CCV09	CCV09	CCV	03/10/25 18:46		Kareem	OK
104	CCB09	CCB09	CCB	03/10/25 18:50		Kareem	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1422

Test : Mercury,Metals ICP-TAL

Prepbatch ID : PB166858,PB166864,

Sequence ID/Qc Batch ID: LB134807,LB134965,

Standard ID :
MP84041,MP84564,MP84565,MP84619,MP84620,MP84621,MP84622,MP84623,MP84624,MP84625,MP84626,MP84627,MP84628,MP84629,MP84630,MP84631,MP84632,MP84634,

Chemical ID :
M4465,M4583,M4916,M5062,M5532,M5585,M5882,M6002,M6011,M6121,M6125,M6126,M6151,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP84041	01/14/2025	07/14/2025	Eman Mughal	None	None	Sarabjit Jaswal 01/16/2025

FROM 1250.00000ml of M6126 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP84564	02/18/2025	08/18/2025	Mohan Bera	None	None	Janvi Patel 02/19/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP84565	02/18/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel 02/19/2025

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP84619	02/25/2025	02/26/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 02/28/2025

FROM 1.00000ml of M6126 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP84620	02/25/2025	02/26/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP84621	02/25/2025	02/26/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84619 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP84622	02/25/2025	02/26/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84619 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP84623	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84619 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP84624	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84619 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP84625	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP84619 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP84626	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP84627	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP84628	02/26/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP84619 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP84629	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6126 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP84630	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84619 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP84631	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/28/2025

FROM 2.50000ml of M6126 + 240.50000ml of W3112 + 7.00000ml of MP84619 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
887	AQUA REGIA FOR HG ON 7471A	MP84632	02/25/2025	02/26/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/28/2025

FROM 150.00000ml of M6151 + 50.00000ml of M6126 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP84634	02/26/2025	02/27/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 02/28/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-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 #
Labpure	0919120 / Boiling Stones	26275770	07/07/2025	07/03/2020 / mohan	05/07/2020 / mohan	M4583

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	03/15/2025	01/02/2025 /	03/30/2023 / mohan	M5532

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	03/31/2025	01/20/2024 /	06/12/2023 / jaswal	M5585

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-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 #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	07/14/2025	01/14/2025 / Eman	05/14/2024 / Jaswal	M6002

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	U2-MEB731108	07/14/2025	01/14/2025 / Eman	05/14/2024 / Jaswal	M6011

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1403 / Hydrogen Peroxide, 30% 1 gal	820803	05/25/2025	11/26/2024 / Eman	11/22/2024 / Eman	M6125

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Certificate of Analysis

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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RD:05/14/2024

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	T2-MEB723367
Matrix:	5% (v/v) HNO3

Value / Analyte(s):	1 000 µg/mL ea: Potassium,	
	600 µg/mL ea: Phosphorus,	
	300 µg/mL ea: Sodium,	Iron,
	200 µg/mL ea: Magnesium, Cerium, Thallium,	Aluminum, Selenium,
	100 µg/mL ea: Lead,	Calcium,
	80 µg/mL ea: Arsenic,	
	70 µg/mL ea: Mercury,	
	50 µg/mL ea: Nickel,	
	40 µg/mL ea: Chromium,	
	30 µg/mL ea: Copper, Vanadium,	Boron,
	20 µg/mL ea: Zinc, Barium, Cadmium, Manganese,	Strontium, Beryllium, Cobalt, Lithium,
	7.5 µg/mL ea: Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.7 µg/mL	Arsenic, As	80.0 ± 0.7 µg/mL
Barium, Ba	20.00 ± 0.09 µg/mL	Beryllium, Be	20.00 ± 0.13 µg/mL
Boron, B	30.00 ± 0.18 µg/mL	Cadmium, Cd	20.00 ± 0.09 µg/mL
Calcium, Ca	100.0 ± 0.4 µg/mL	Cerium, Ce	200.0 ± 0.8 µg/mL
Chromium, Cr	40.00 ± 0.30 µg/mL	Cobalt, Co	20.00 ± 0.10 µg/mL
Copper, Cu	30.00 ± 0.13 µg/mL	Iron, Fe	300.0 ± 1.3 µg/mL
Lead, Pb	100.0 ± 0.4 µg/mL	Lithium, Li	20.00 ± 0.08 µg/mL
Magnesium, Mg	200.0 ± 0.8 µg/mL	Manganese, Mn	20.00 ± 0.08 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.00 ± 0.22 µg/mL
Phosphorus, P	600.0 ± 2.7 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Selenium, Se	200.0 ± 1.3 µg/mL	Silver, Ag	7.50 ± 0.03 µg/mL
Sodium, Na	300.0 ± 1.4 µg/mL	Strontium, Sr	20.01 ± 0.08 µg/mL
Thallium, Tl	200.0 ± 1.4 µg/mL	Vanadium, V	30.00 ± 0.13 µg/mL
Zinc, Zn	20.00 ± 0.09 µg/mL		

Density: 1.034 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Ce	ICP Assay	3110	090504
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 30, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 30, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-2
Lot Number:	U2-MEB731108
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica, 80 µg/mL ea: Antimony, 70 µg/mL ea: Tin, 40 µg/mL ea: Molybdenum, 20 µg/mL ea: Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.6 µg/mL	Molybdenum, Mo	40.03 ± 0.18 µg/mL
Silica, SiO2	200.2 ± 1.3 µg/mL	Tin, Sn	70.0 ± 0.4 µg/mL
Titanium, Ti	20.01 ± 0.13 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
SiO2	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

M45 P3
Expd Dt. 5 7 24
MB

SAINT-GOBAIN

Manufacturer:
Saint-Gobain Performance Plastics
11 Sicho Drive
Poestenkill, NY 12140

Certificate of Conformance

Part Number/ Revision:	D1069103 0	**Customer Part Number/ Revision:**	1069103 N/A
Description:	*PTFE BOILING STONES-450 GRAMS		
Lot Number:	26275770	**Lot Quantity:**	10 EA
Date of Manufacture (MM/DD/YY)	03/23/20	**Expiration Date: (MM/DD/YY)**	N/A
Post Processing Run Number: (Refer to the attached Certificate for Additional Detail)		N/A	

We certify the material listed above confirms in full with the following specifications:

All items have been manufactured, inspected, tested, and accepted in accordance with our Quality Management system, ISO 9001-2015. Documentation substantiating this certification is kept on record per the Company's retention policy and is available for review.
All materials and processes used in manufacturing conform to the materials and/or manufacturing specifications and notes indicated on the purchase order, drawing, specifications, quality assurance requirements, or other applicable documents effective on the date of manufacture.
Saint-Gobain does not warrant the product for any particular application and it is the responsibility of the user to conduct tests that are deemed necessary to determine the suitability of the product for any particular use. Saint-Gobain's sole responsibility shall be for failure to manufacture the product in accordance with specifications and requirements of the buyer, and from defects in material and workmanship. This warranty is expressly made in lieu of any and all other warranties and Saint-Gobain's sole liability shall be to replace any product not in conformance with the specification and requirements of the buyer.

Quality Approval:	Jonathan Kimble	**Date:**	05/13/20

ThermoFisher SCIENTIFIC

M4913-16

MB

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2026

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MSS28-37
MB

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

RD: 06/12/2023, M5581, M5582, M5583, M5584, M5585

JENSEN INERT PRODUCTS

MATERIAL CERTIFICATE OF COMPLIANCE

DATE: JUNE 12, 2023

CUSTOMER:	PCI SCIENTIFIC SUPPLY, INC
PURCHASE ORDER NO.	6054931
CATALOG NO.	BOI5021-450L
PRODUCT DESCRIPTION:	BOILING STONES, TFE, 454GMS
QUANTITY:	10 EACH
LOT NO.	W126678
SPECIFICATION (S):	Made from Virgin PTFE Resin

We certify that we have complied with the terms and conditions of the above Purchase Order and the Part Specifications in the manufacturing of the above product.

Laura Valencia

Laura Valencia
Quality Assurance Inspector

F:U:J:CF:PCISCI:COC-68118-BOI5021-061223

3773 NW 126th Avenue • Coral Springs, Florida 33065 • Fax (954) 344-2008 • 1-800 446-3781
Email: jensen@jenseninert.com Visit our Web Site at www.jenseninert.com

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6/21

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

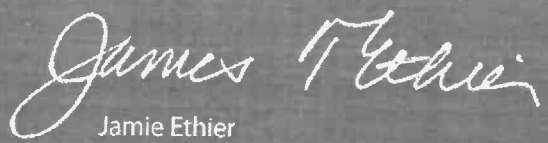
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

M6125 Receive -> 11/22/24

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

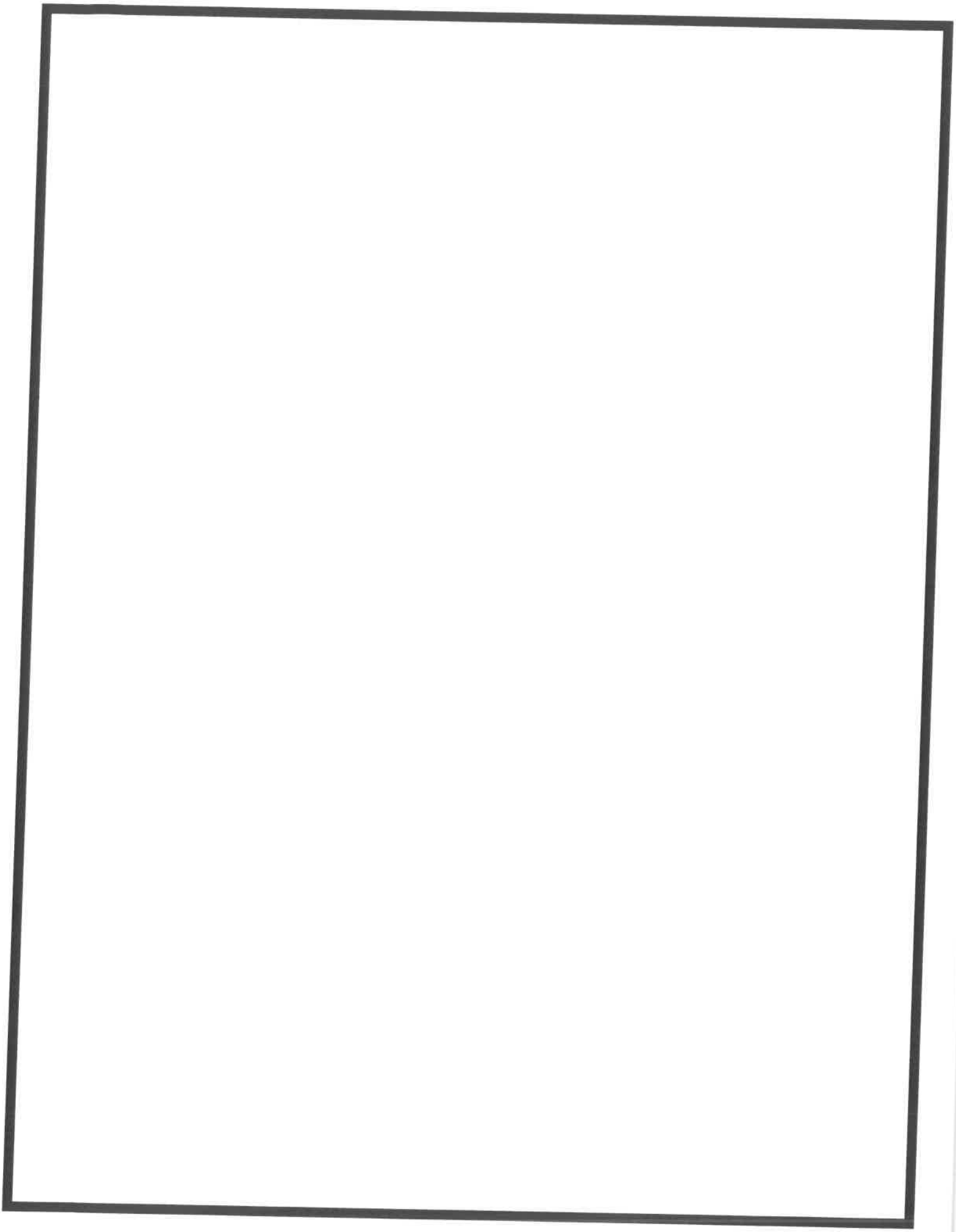
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

Phone: 215-295-5006
Fax: 215-295-0781

Hydrogen Peroxide 30%, ACS

Reagent Grade

SPECIFICATION	MAXIMUM LIMITS
Appearance	Colorless and free from suspended matter or sediment
Assay	29-32%
Color (APHA)	10
Residue after Evaporation	0.002%
Titratable Acid	0.0006 meq/g
Chloride (Cl)	3 ppm
Nitrate (NO_3)	2 ppm
Phosphate	2 ppm
Sulfate (SO_4)	5 ppm
Ammonium (NH_4)	5 ppm
Heavy Metals (as Pb)	1 ppm
Iron (Fe)	0.5 ppm



Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R-> 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q1422
COC Number 2046176

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Gannet Fleming
ADDRESS: 1010 Abrams ave
CITY Audobon STATE: PA ZIP: 19403
ATTENTION: Joe Krupansky
PHONE: 600-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak Replacement of SB
PROJECT NO.: 950000878 LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: JaQC@BEMSYS.com
PHONE: 610-300-9342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Chemtech PO#:
ADDRESS: 284 Sheffield
CITY Mountainside STATE: NJ ZIP: 07092
ATTENTION: Samantha Beasly PHONE: 908-728-3148

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☐ NYS ASP B
- ☐ Other _____
- ☐ EDD FORMAT BEM EDD

ANALYSIS

1 TCL VOCs + TO
2 TCL PAHs
3 Cr (III) Cr (VI)
4 TAL Metals
5 PCBs
6
7
8
9

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	B-154-SB01	S		X	2/23/25	1500	6	X	X	X	X	X	X				
2.	B-154-SB02	S		X	↓	1530	6	X	X	X	X	X	X				
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	2/24/25 4:50	1. 2.25.25 0700
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 5.7°C °C
Comments:

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1422 PORT06
Client Name : Portal Partners Tri-Venture
Client Contact : Joseph Krupansky
Invoice Name : Portal Partners Tri-Venture
Invoice Contact : Joseph Krupansky

Order Date : 2/25/2025 10:47:00 AM
Project Name : Amtrak Sawtooth Bridges 2
Receive DateTime : 2/25/2025 7:00:00 AM
Purchase Order :

Project Mgr :
Report Type : NJ Reduced
EDD Type : EXCEL NJCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1422-01	B-154-SB01	Solid	02/23/2025	15:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1422-02	B-154-SB02	Solid	02/23/2025	15:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days

Relinguished By :
Date / Time : 2/25/25 1105

Received By :
Date / Time : 02/25/25 11:05
Storage Area : VOA Refridgerator Room

Bgtt 6
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