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Cover Page

Order ID : Q2489

Project ID : Construction of Shafts 17B-18B - PN 220084

Client : Walsh Construction Company II, LLC

Lab Sample Number	Client Sample Number
Q2489-01	G4(0-6)
Q2489-02	G4(6-12)
Q2489-03	G3(0-6)
Q2489-04	G3(6-12)
Q2489-05	G2(0-6)
Q2489-06	G2(6-12)
Q2489-07	G1(0-6)
Q2489-08	G1(6-12)

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: 7/17/2025

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 #: **Q2489**

	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: **KETAN PATEL** **Date:** **07/17/2025**

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LAB CHRONICLE

OrderID:	Q2489	**OrderDate:**	7/2/2025 11:52:00 AM
Client:	Walsh Construction Company II, LLC	**Project:**	Construction of Shafts 17B-18B - PN 220084
Contact:	Jesse A. Sylvestri	**Location:**	--Select--

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2489-01	**G4(0-6)**	**TCLP**			**07/01/25**			**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25	
			TCLP Mercury	7470A		07/08/25	07/09/25	
			SPLP ICP Metals	6010D		07/09/25	07/17/25	
			SPLP Mercury	7470A		07/10/25	07/11/25	
Q2489-02	**G4(6-12)**	**TCLP**			**07/01/25**			**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25	
			TCLP Mercury	7470A		07/08/25	07/09/25	
			SPLP ICP Metals	6010D		07/09/25	07/17/25	
			SPLP Mercury	7470A		07/10/25	07/11/25	
Q2489-03	**G3(0-6)**	**TCLP**			**07/01/25**			**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25	
			TCLP Mercury	7470A		07/08/25	07/09/25	
			SPLP ICP Metals	6010D		07/09/25	07/17/25	
			SPLP Mercury	7470A		07/10/25	07/11/25	
Q2489-04	**G3(6-12)**	**TCLP**			**07/01/25**			**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25	
			TCLP Mercury	7470A		07/08/25	07/09/25	
			SPLP ICP Metals	6010D		07/09/25	07/17/25	
			SPLP Mercury	7470A		07/10/25	07/11/25	
Q2489-05	**G2(0-6)**	**TCLP**			**07/01/25**			**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25	
			TCLP Mercury	7470A		07/08/25	07/09/25	
			SPLP ICP Metals	6010D		07/09/25	07/17/25	
			SPLP Mercury	7470A		07/10/25	07/11/25	
Q2489-06	**G2(6-12)**	**TCLP**			**07/01/25**			**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25	

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LAB CHRONICLE

			TCLP Mercury	7470A		07/08/25	07/09/25
			SPLP ICP Metals	6010D		07/09/25	07/17/25
			SPLP Mercury	7470A		07/10/25	07/11/25
Q2489-07	**G1(0-6)**	**TCLP**			**07/01/25**		**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/10/25
			TCLP Mercury	7470A		07/08/25	07/09/25
			SPLP ICP Metals	6010D		07/09/25	07/17/25
			SPLP Mercury	7470A		07/10/25	07/11/25
Q2489-08	**G1(6-12)**	**TCLP**			**07/01/25**		**07/01/25**
			TCLP ICP Metals	6010D		07/07/25	07/16/25
			TCLP Mercury	7470A		07/08/25	07/09/25
			SPLP ICP Metals	6010D		07/09/25	07/17/25
			SPLP Mercury	7470A		07/10/25	07/11/25

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Hit Summary Sheet
SW-846

SDG No.: Q2489 **Order ID:** Q2489

Client: Walsh Construction Company II, LLC **Project ID:** Construction of Shafts 17B-18B - PN 2200

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : G4(0-6)								
Q2489-01	G4(0-6)	TCLP	Barium	329	J	72.8	500	ug/L
Q2489-01	G4(0-6)	TCLP	Cadmium	12.1	J	2.50	30.0	ug/L
Q2489-01	G4(0-6)	TCLP	Chromium	49.4	J	10.6	50.0	ug/L
Q2489-01	G4(0-6)	TCLP	Lead	588		11.5	60.0	ug/L
Q2489-01	G4(0-6)	TCLP	Selenium	57.6	J	48.2	100	ug/L
Client ID : G4(6-12)								
Q2489-02	G4(6-12)	TCLP	Barium	1160		72.8	500	ug/L
Q2489-02	G4(6-12)	TCLP	Lead	136		11.5	60.0	ug/L
Q2489-02	G4(6-12)	TCLP	Mercury	1.16	J	0.76	2.00	ug/L
Q2489-02	G4(6-12)	TCLP	Selenium	49.9	J	48.2	100	ug/L
Client ID : G3(0-6)								
Q2489-03	G3(0-6)	TCLP	Barium	267	J	72.8	500	ug/L
Q2489-03	G3(0-6)	TCLP	Cadmium	19.0	J	2.50	30.0	ug/L
Q2489-03	G3(0-6)	TCLP	Lead	1740		11.5	60.0	ug/L
Q2489-03	G3(0-6)	TCLP	Selenium	49.8	J	48.2	100	ug/L
Client ID : G3(6-12)								
Q2489-04	G3(6-12)	TCLP	Barium	1100		72.8	500	ug/L
Q2489-04	G3(6-12)	TCLP	Lead	447		11.5	60.0	ug/L
Q2489-04	G3(6-12)	TCLP	Mercury	1.06	J	0.76	2.00	ug/L
Q2489-04	G3(6-12)	TCLP	Selenium	51.5	J	48.2	100	ug/L
Client ID : G2(0-6)								
Q2489-05	G2(0-6)	TCLP	Barium	841		72.8	500	ug/L
Q2489-05	G2(0-6)	TCLP	Cadmium	12.8	J	2.50	30.0	ug/L
Q2489-05	G2(0-6)	TCLP	Lead	492		11.5	60.0	ug/L
Q2489-05	G2(0-6)	TCLP	Selenium	63.3	J	48.2	100	ug/L
Client ID : G2(6-12)								
Q2489-06	G2(6-12)	TCLP	Barium	1420		72.8	500	ug/L
Q2489-06	G2(6-12)	TCLP	Mercury	1.63	J	0.76	2.00	ug/L
Client ID : G1(0-6)								
Q2489-07	G1(0-6)	TCLP	Barium	884		72.8	500	ug/L
Q2489-07	G1(0-6)	TCLP	Cadmium	40.5		2.50	30.0	ug/L
Q2489-07	G1(0-6)	TCLP	Lead	721		11.5	60.0	ug/L
Client ID : G1(6-12)								

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Hit Summary Sheet
SW-846

SDG No.:	Q2489	**Order ID:**	Q2489
Client:	Walsh Construction Company II, LLC	**Project ID:**	Construction of Shafts 17B-18B - PN 2200

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2489-08	G1(6-12)	TCLP	Barium	3170		72.8	500	ug/L
Q2489-08	G1(6-12)	TCLP	Mercury	1.62	J	0.76	2.00	ug/L

SAMPLE DATA

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Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G4(0-6)	SDG No.:	Q2489
Lab Sample ID:	Q2489-01	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050
7440-39-3	Barium	329	JN	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050
7440-43-9	Cadmium	12.1	J	1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050
7440-47-3	Chromium	49.4	J	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050
7439-92-1	Lead	588	N	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:04	7470A	
7782-49-2	Selenium	57.6	J	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 22:40	6010D	SW3050

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

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

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

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Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G4(6-12)	SDG No.:	Q2489
Lab Sample ID:	Q2489-02	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050
7440-39-3	Barium	1160	N	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050
7439-92-1	Lead	136	N	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050
7439-97-6	Mercury	1.16	J	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:06	7470A	
7782-49-2	Selenium	49.9	J	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 22:45	6010D	SW3050

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

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N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G3(0-6)	SDG No.:	Q2489
Lab Sample ID:	Q2489-03	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050
7440-39-3	Barium	267	JN	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050
7440-43-9	Cadmium	19.0	J	1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050
7439-92-1	Lead	1740	N	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:09	7470A	
7782-49-2	Selenium	49.8	J	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 22:49	6010D	SW3050

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

U = Not Detected
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MDL = Method Detection Limit
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J = Estimated Value
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Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G3(6-12)	SDG No.:	Q2489
Lab Sample ID:	Q2489-04	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050
7440-39-3	Barium	1100	N	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050
7439-92-1	Lead	447	N	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050
7439-97-6	Mercury	1.06	J	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:14	7470A	
7782-49-2	Selenium	51.5	J	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 22:53	6010D	SW3050

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

U = Not Detected
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Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G2(0-6)	SDG No.:	Q2489
Lab Sample ID:	Q2489-05	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050
7440-39-3	Barium	841	N	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050
7440-43-9	Cadmium	12.8	J	1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050
7439-92-1	Lead	492	N	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:16	7470A	
7782-49-2	Selenium	63.3	J	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 22:58	6010D	SW3050

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

U = Not Detected
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Fax : 908 789 8922

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G2(6-12)	SDG No.:	Q2489
Lab Sample ID:	Q2489-06	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050
7440-39-3	Barium	1420	N	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050
7439-92-1	Lead	11.5	UN	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050
7439-97-6	Mercury	1.63	J	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:23	7470A	
7782-49-2	Selenium	48.2	U	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 23:02	6010D	SW3050

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

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

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

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G1(0-6)	SDG No.:	Q2489
Lab Sample ID:	Q2489-07	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050
7440-39-3	Barium	884	N	1	72.8	500	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050
7440-43-9	Cadmium	40.5		1	2.50	30.0	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050
7439-92-1	Lead	721	N	1	11.5	60.0	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:25	7470A	
7782-49-2	Selenium	48.2	U	1	48.2	100	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/10/25 23:06	6010D	SW3050

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

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

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

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Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	07/01/25
Project:	Construction of Shafts 17B-18B - PN 220084	Date Received:	07/01/25
Client Sample ID:	G1(6-12)	SDG No.:	Q2489
Lab Sample ID:	Q2489-08	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	25.6	U	1	25.6	100	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050
7440-39-3	Barium	3170	N	1	72.8	500	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050
7439-92-1	Lead	11.5	UN	1	11.5	60.0	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050
7439-97-6	Mercury	1.62	J	1	0.76	2.00	ug/L	07/08/25 08:10	07/09/25 12:27	7470A	
7782-49-2	Selenium	48.2	U	1	48.2	100	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	07/07/25 12:30	07/16/25 15:13	6010D	SW3050

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

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

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

METAL CALIBRATION DATA

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Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

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
ICV22	Mercury	4.06	4.0	102	90 - 110	CV	07/09/2025	11:43	LB136403

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

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
CCV70	Mercury	5.09	5.0	102	90 - 110	CV	07/09/2025	11:48	LB136403
CCV71	Mercury	4.91	5.0	98	90 - 110	CV	07/09/2025	12:18	LB136403
CCV72	Mercury	5.02	5.0	100	90 - 110	CV	07/09/2025	12:56	LB136403
CCV73	Mercury	4.90	5.0	98	90 - 110	CV	07/09/2025	13:31	LB136403

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	3860	4000	97	90 - 110	P	07/10/2025	17:52	LB136519
	Barium	7860	8000	98	90 - 110	P	07/10/2025	17:52	LB136519
	Cadmium	1910	2000	95	90 - 110	P	07/10/2025	17:52	LB136519
	Chromium	790	800	99	90 - 110	P	07/10/2025	17:52	LB136519
	Lead	3760	4000	94	90 - 110	P	07/10/2025	17:52	LB136519
	Selenium	3930	4000	98	90 - 110	P	07/10/2025	17:52	LB136519
	Silver	1040	1000	104	90 - 110	P	07/10/2025	17:52	LB136519

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	22.0	20.0	110	80 - 120	P	07/10/2025	18:01	LB136519
	Barium	99.7	100	100	80 - 120	P	07/10/2025	18:01	LB136519
	Cadmium	5.90	6.0	98	80 - 120	P	07/10/2025	18:01	LB136519
	Chromium	10.4	10.0	104	80 - 120	P	07/10/2025	18:01	LB136519
	Lead	10.9	12.0	91	80 - 120	P	07/10/2025	18:01	LB136519
	Selenium	23.3	20.0	116	80 - 120	P	07/10/2025	18:01	LB136519
	Silver	8.23	10.0	82	80 - 120	P	07/10/2025	18:01	LB136519

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	5090	5000	102	90 - 110	P	07/10/2025	18:40	LB136519
	Barium	9970	10000	100	90 - 110	P	07/10/2025	18:40	LB136519
	Cadmium	2520	2500	101	90 - 110	P	07/10/2025	18:40	LB136519
	Chromium	1020	1000	102	90 - 110	P	07/10/2025	18:40	LB136519
	Lead	4990	5000	100	90 - 110	P	07/10/2025	18:40	LB136519
	Selenium	5090	5000	102	90 - 110	P	07/10/2025	18:40	LB136519
	Silver	1250	1250	100	90 - 110	P	07/10/2025	18:40	LB136519
CCV02	Arsenic	5100	5000	102	90 - 110	P	07/10/2025	19:30	LB136519
	Barium	9740	10000	97	90 - 110	P	07/10/2025	19:30	LB136519
	Cadmium	2510	2500	100	90 - 110	P	07/10/2025	19:30	LB136519
	Chromium	1010	1000	101	90 - 110	P	07/10/2025	19:30	LB136519
	Lead	4980	5000	100	90 - 110	P	07/10/2025	19:30	LB136519
	Selenium	5120	5000	102	90 - 110	P	07/10/2025	19:30	LB136519
	Silver	1260	1250	101	90 - 110	P	07/10/2025	19:30	LB136519
CCV03	Arsenic	5000	5000	100	90 - 110	P	07/10/2025	20:22	LB136519
	Barium	9530	10000	95	90 - 110	P	07/10/2025	20:22	LB136519
	Cadmium	2460	2500	99	90 - 110	P	07/10/2025	20:22	LB136519
	Chromium	1000	1000	100	90 - 110	P	07/10/2025	20:22	LB136519
	Lead	4890	5000	98	90 - 110	P	07/10/2025	20:22	LB136519
	Selenium	4990	5000	100	90 - 110	P	07/10/2025	20:22	LB136519
	Silver	1240	1250	99	90 - 110	P	07/10/2025	20:22	LB136519
CCV04	Arsenic	4990	5000	100	90 - 110	P	07/10/2025	21:27	LB136519
	Barium	9610	10000	96	90 - 110	P	07/10/2025	21:27	LB136519
	Cadmium	2470	2500	99	90 - 110	P	07/10/2025	21:27	LB136519
	Chromium	1010	1000	101	90 - 110	P	07/10/2025	21:27	LB136519
	Lead	4880	5000	98	90 - 110	P	07/10/2025	21:27	LB136519
	Selenium	4990	5000	100	90 - 110	P	07/10/2025	21:27	LB136519
	Silver	1240	1250	99	90 - 110	P	07/10/2025	21:27	LB136519
CCV05	Arsenic	4990	5000	100	90 - 110	P	07/10/2025	22:25	LB136519
	Barium	9580	10000	96	90 - 110	P	07/10/2025	22:25	LB136519
	Cadmium	2460	2500	98	90 - 110	P	07/10/2025	22:25	LB136519
	Chromium	992	1000	99	90 - 110	P	07/10/2025	22:25	LB136519
	Lead	4880	5000	98	90 - 110	P	07/10/2025	22:25	LB136519
	Selenium	4970	5000	99	90 - 110	P	07/10/2025	22:25	LB136519

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Fax : 908 789 8922

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Silver	1230	1250	98	90 - 110	P	07/10/2025	22:25	LB136519
CCV06	Arsenic	4850	5000	97	90 - 110	P	07/10/2025	23:27	LB136519
	Barium	9580	10000	96	90 - 110	P	07/10/2025	23:27	LB136519
	Cadmium	2430	2500	97	90 - 110	P	07/10/2025	23:27	LB136519
	Chromium	984	1000	98	90 - 110	P	07/10/2025	23:27	LB136519
	Lead	4810	5000	96	90 - 110	P	07/10/2025	23:27	LB136519
	Selenium	4820	5000	96	90 - 110	P	07/10/2025	23:27	LB136519
	Silver	1210	1250	96	90 - 110	P	07/10/2025	23:27	LB136519

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	3900	4000	97	90 - 110	P	07/16/2025	13:21	LB136511
	Barium	7940	8000	99	90 - 110	P	07/16/2025	13:21	LB136511
	Cadmium	1920	2000	96	90 - 110	P	07/16/2025	13:21	LB136511
	Chromium	792	800	99	90 - 110	P	07/16/2025	13:21	LB136511
	Lead	3780	4000	94	90 - 110	P	07/16/2025	13:21	LB136511
	Selenium	3920	4000	98	90 - 110	P	07/16/2025	13:21	LB136511
	Silver	1040	1000	104	90 - 110	P	07/16/2025	13:21	LB136511

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	22.8	20.0	114	80 - 120	P	07/16/2025	13:53	LB136511
	Barium	103	100	103	80 - 120	P	07/16/2025	13:53	LB136511
	Cadmium	5.92	6.0	99	80 - 120	P	07/16/2025	13:53	LB136511
	Chromium	9.95	10.0	100	80 - 120	P	07/16/2025	13:53	LB136511
	Lead	11.2	12.0	93	80 - 120	P	07/16/2025	13:53	LB136511
	Selenium	18.1	20.0	91	80 - 120	P	07/16/2025	13:53	LB136511
	Silver	10.6	10.0	106	80 - 120	P	07/16/2025	13:53	LB136511

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	5050	5000	101	90 - 110	P	07/16/2025	14:53	LB136511
	Barium	10100	10000	101	90 - 110	P	07/16/2025	14:53	LB136511
	Cadmium	2470	2500	99	90 - 110	P	07/16/2025	14:53	LB136511
	Chromium	983	1000	98	90 - 110	P	07/16/2025	14:53	LB136511
	Lead	4910	5000	98	90 - 110	P	07/16/2025	14:53	LB136511
	Selenium	5060	5000	101	90 - 110	P	07/16/2025	14:53	LB136511
	Silver	1250	1250	100	90 - 110	P	07/16/2025	14:53	LB136511
CCV02	Arsenic	5020	5000	100	90 - 110	P	07/16/2025	15:39	LB136511
	Barium	10100	10000	101	90 - 110	P	07/16/2025	15:39	LB136511
	Cadmium	2450	2500	98	90 - 110	P	07/16/2025	15:39	LB136511
	Chromium	999	1000	100	90 - 110	P	07/16/2025	15:39	LB136511
	Lead	4900	5000	98	90 - 110	P	07/16/2025	15:39	LB136511
	Selenium	5050	5000	101	90 - 110	P	07/16/2025	15:39	LB136511
	Silver	1260	1250	101	90 - 110	P	07/16/2025	15:39	LB136511
CCV03	Arsenic	5060	5000	101	90 - 110	P	07/16/2025	16:25	LB136511
	Barium	10200	10000	102	90 - 110	P	07/16/2025	16:25	LB136511
	Cadmium	2490	2500	100	90 - 110	P	07/16/2025	16:25	LB136511
	Chromium	989	1000	99	90 - 110	P	07/16/2025	16:25	LB136511
	Lead	4960	5000	99	90 - 110	P	07/16/2025	16:25	LB136511
	Selenium	5090	5000	102	90 - 110	P	07/16/2025	16:25	LB136511
	Silver	1260	1250	101	90 - 110	P	07/16/2025	16:25	LB136511
CCV04	Arsenic	5040	5000	101	90 - 110	P	07/16/2025	17:32	LB136511
	Barium	10300	10000	103	90 - 110	P	07/16/2025	17:32	LB136511
	Cadmium	2470	2500	99	90 - 110	P	07/16/2025	17:32	LB136511
	Chromium	997	1000	100	90 - 110	P	07/16/2025	17:32	LB136511
	Lead	4940	5000	99	90 - 110	P	07/16/2025	17:32	LB136511
	Selenium	5060	5000	101	90 - 110	P	07/16/2025	17:32	LB136511
	Silver	1270	1250	101	90 - 110	P	07/16/2025	17:32	LB136511
CCV05	Arsenic	5070	5000	101	90 - 110	P	07/16/2025	18:28	LB136511
	Barium	10400	10000	104	90 - 110	P	07/16/2025	18:28	LB136511
	Cadmium	2470	2500	99	90 - 110	P	07/16/2025	18:28	LB136511
	Chromium	1000	1000	100	90 - 110	P	07/16/2025	18:28	LB136511
	Lead	4950	5000	99	90 - 110	P	07/16/2025	18:28	LB136511
	Selenium	5120	5000	102	90 - 110	P	07/16/2025	18:28	LB136511

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Silver	1280	1250	102	90 - 110	P	07/16/2025	18:28	LB136511
CCV06	Arsenic	5090	5000	102	90 - 110	P	07/16/2025	18:51	LB136511
	Barium	10200	10000	102	90 - 110	P	07/16/2025	18:51	LB136511
	Cadmium	2520	2500	101	90 - 110	P	07/16/2025	18:51	LB136511
	Chromium	1000	1000	100	90 - 110	P	07/16/2025	18:51	LB136511
	Lead	5010	5000	100	90 - 110	P	07/16/2025	18:51	LB136511
	Selenium	5070	5000	102	90 - 110	P	07/16/2025	18:51	LB136511
	Silver	1270	1250	102	90 - 110	P	07/16/2025	18:51	LB136511

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Fax : 908 789 8922

Metals

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CRDL STANDARD FOR AA & ICP

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

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	0.18	0.2	90	70 - 130	CV	07/09/2025	11:53	LB136403
CRI01	Arsenic	22.0	20.0	110	65 - 135	P	07/10/2025	18:09	LB136519
	Barium	101	100	101	65 - 135	P	07/10/2025	18:09	LB136519
	Cadmium	5.94	6.0	99	65 - 135	P	07/10/2025	18:09	LB136519
	Chromium	10.7	10.0	106	65 - 135	P	07/10/2025	18:09	LB136519
	Lead	11.2	12.0	93	65 - 135	P	07/10/2025	18:09	LB136519
	Selenium	24.0	20.0	120	65 - 135	P	07/10/2025	18:09	LB136519
	Silver	8.69	10.0	87	65 - 135	P	07/10/2025	18:09	LB136519
CRI01	Arsenic	20.1	20.0	101	65 - 135	P	07/16/2025	14:22	LB136511
	Barium	100	100	100	65 - 135	P	07/16/2025	14:22	LB136511
	Cadmium	5.84	6.0	97	65 - 135	P	07/16/2025	14:22	LB136511
	Chromium	9.85	10.0	98	65 - 135	P	07/16/2025	14:22	LB136511
	Lead	11.0	12.0	92	65 - 135	P	07/16/2025	14:22	LB136511
	Selenium	18.3	20.0	92	65 - 135	P	07/16/2025	14:22	LB136511
	Silver	10.4	10.0	104	65 - 135	P	07/16/2025	14:22	LB136511

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB22	Mercury	0.076	+/-0.2	U	0.20	CV	07/09/2025	11:46	LB136403

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB70	Mercury	0.076	+/-0.2	U	0.20	CV	07/09/2025	11:50	LB136403
CCB71	Mercury	0.076	+/-0.2	U	0.20	CV	07/09/2025	12:20	LB136403
CCB72	Mercury	0.076	+/-0.2	U	0.20	CV	07/09/2025	12:58	LB136403
CCB73	Mercury	0.076	+/-0.2	U	0.20	CV	07/09/2025	13:33	LB136403

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	18:05	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	18:05	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	18:05	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	18:05	LB136519
	Lead	2.30	+/-6	U	12.0	P	07/10/2025	18:05	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	18:05	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	18:05	LB136519

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	18:44	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	18:44	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	18:44	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	18:44	LB136519
	Lead	2.30	+/-6	U	12.0	P	07/10/2025	18:44	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	18:44	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	18:44	LB136519
CCB02	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	19:34	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	19:34	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	19:34	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	19:34	LB136519
	Lead	2.30	+/-6	U	12.0	P	07/10/2025	19:34	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	19:34	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	19:34	LB136519
CCB03	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	20:36	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	20:36	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	20:36	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	20:36	LB136519
	Lead	2.30	+/-6	U	12.0	P	07/10/2025	20:36	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	20:36	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	20:36	LB136519
CCB04	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	21:31	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	21:31	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	21:31	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	21:31	LB136519
	Lead	2.30	+/-6	U	12.0	P	07/10/2025	21:31	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	21:31	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	21:31	LB136519
CCB05	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	22:31	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	22:31	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	22:31	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	22:31	LB136519
	Lead	2.30	+/-6	U	12.0	P	07/10/2025	22:31	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	22:31	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	22:31	LB136519
CCB06	Arsenic	5.12	+/-10	U	20.0	P	07/10/2025	23:31	LB136519
	Barium	14.6	+/-50	U	100	P	07/10/2025	23:31	LB136519
	Cadmium	0.50	+/-3	U	6.00	P	07/10/2025	23:31	LB136519
	Chromium	2.12	+/-5	U	10.0	P	07/10/2025	23:31	LB136519

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	2.30	+/-6	U	12.0	P	07/10/2025	23:31	LB136519
	Selenium	9.64	+/-10	U	20.0	P	07/10/2025	23:31	LB136519
	Silver	1.62	+/-5	U	10.0	P	07/10/2025	23:31	LB136519

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	14:11	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	14:11	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	14:11	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	14:11	LB136511
	Lead	2.30	+/-6	U	12.0	P	07/16/2025	14:11	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	14:11	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	14:11	LB136511

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	14:57	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	14:57	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	14:57	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	14:57	LB136511
	Lead	2.30	+/-6	U	12.0	P	07/16/2025	14:57	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	14:57	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	14:57	LB136511
CCB02	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	15:43	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	15:43	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	15:43	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	15:43	LB136511
	Lead	2.30	+/-6	U	12.0	P	07/16/2025	15:43	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	15:43	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	15:43	LB136511
CCB03	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	16:30	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	16:30	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	16:30	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	16:30	LB136511
	Lead	2.30	+/-6	U	12.0	P	07/16/2025	16:30	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	16:30	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	16:30	LB136511
CCB04	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	17:40	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	17:40	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	17:40	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	17:40	LB136511
	Lead	2.30	+/-6	U	12.0	P	07/16/2025	17:40	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	17:40	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	17:40	LB136511
CCB05	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	18:35	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	18:35	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	18:35	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	18:35	LB136511
	Lead	2.30	+/-6	U	12.0	P	07/16/2025	18:35	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	18:35	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	18:35	LB136511
CCB06	Arsenic	5.12	+/-10	U	20.0	P	07/16/2025	18:56	LB136511
	Barium	14.6	+/-50	U	100	P	07/16/2025	18:56	LB136511
	Cadmium	0.50	+/-3	U	6.00	P	07/16/2025	18:56	LB136511
	Chromium	2.12	+/-5	U	10.0	P	07/16/2025	18:56	LB136511

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	2.30	+/-6	U	12.0	P	07/16/2025	18:56	LB136511
	Selenium	9.64	+/-10	U	20.0	P	07/16/2025	18:56	LB136511
	Silver	1.62	+/-5	U	10.0	P	07/16/2025	18:56	LB136511

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number

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Metals
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PREPARATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168728TB		**WATER**		**Batch Number:**	**PB168760**		**Prep Date:**	**07/08/2025**	
	Mercury	0.76	<2	U	2.00	CV	07/09/2025	13:12	LB136403
Sample ID	**Analyte**	**Result (ug/L)**	**Acceptance Limit**	**Conc Qual**	**CRQL ug/L**	**M**	**Analysis Date**	**Analysis Time**	**Run**
PB168760BL		**WATER**		**Batch Number:**	**PB168760**		**Prep Date:**	**07/08/2025**	
	Mercury	0.076	<0.2	U	0.20	CV	07/09/2025	12:00	LB136403

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Metals
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PREPARATION BLANK SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168728TB		**WATER**		**Batch Number:**	**PB168744**		**Prep Date:**	**07/07/2025**	
	Arsenic	25.6	<50	U	100	P	07/16/2025	15:08	LB136511
	Barium	72.8	<250	U	500	P	07/16/2025	15:08	LB136511
	Cadmium	2.50	<15	U	30.0	P	07/16/2025	15:08	LB136511
	Chromium	10.6	<25	U	50.0	P	07/16/2025	15:08	LB136511
	Lead	11.5	<30	U	60.0	P	07/16/2025	15:08	LB136511
	Selenium	48.2	<50	U	100	P	07/16/2025	15:08	LB136511
	Silver	8.10	<25	U	50.0	P	07/16/2025	15:08	LB136511

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168744BL		**WATER**		**Batch Number:**	**PB168744**		**Prep Date:**	**07/07/2025**	
	Arsenic	25.6	<50	U	100	P	07/10/2025	22:21	LB136519
	Barium	72.8	<250	U	500	P	07/10/2025	22:21	LB136519
	Cadmium	2.50	<15	U	30.0	P	07/10/2025	22:21	LB136519
	Chromium	10.6	<25	U	50.0	P	07/10/2025	22:21	LB136519
	Lead	11.5	<30	U	60.0	P	07/10/2025	22:21	LB136519
	Selenium	48.2	<50	U	100	P	07/10/2025	22:21	LB136519
	Silver	8.10	<25	U	50.0	P	07/10/2025	22:21	LB136519

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

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

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Arsenic	9.78			-20	20	07/10/2025	18:14	LB136519
	Barium	1.97	6.0	33	-94	106	07/10/2025	18:14	LB136519
	Cadmium	-0.15	1.0	15	-5	7	07/10/2025	18:14	LB136519
	Chromium	58.9	52.0	113	42	62	07/10/2025	18:14	LB136519
	Lead	-4.02			-12	12	07/10/2025	18:14	LB136519
	Selenium	-5.79			-20	20	07/10/2025	18:14	LB136519
	Silver	-0.013			-10	10	07/10/2025	18:14	LB136519
ICSAB01	Arsenic	105	104	101	88.4	120	07/10/2025	18:18	LB136519
	Barium	487	537	91	437	637	07/10/2025	18:18	LB136519
	Cadmium	952	972	98	826	1120	07/10/2025	18:18	LB136519
	Chromium	552	542	102	460	624	07/10/2025	18:18	LB136519
	Lead	39.5	49.0	81	37	61	07/10/2025	18:18	LB136519
	Selenium	48.9	46.0	106	26	66	07/10/2025	18:18	LB136519
	Silver	203	201	101	170	232	07/10/2025	18:18	LB136519
ICSA01	Arsenic	9.98			-20	20	07/16/2025	14:26	LB136511
	Barium	2.39	6.0	40	-94	106	07/16/2025	14:26	LB136511
	Cadmium	-0.36	1.0	36	-5	7	07/16/2025	14:26	LB136511
	Chromium	56.1	52.0	108	42	62	07/16/2025	14:26	LB136511
	Lead	-7.00			-12	12	07/16/2025	14:26	LB136511
	Selenium	9.85			-20	20	07/16/2025	14:26	LB136511
	Silver	1.35			-10	10	07/16/2025	14:26	LB136511
ICSAB01	Arsenic	104	104	100	88.4	120	07/16/2025	14:38	LB136511
	Barium	477	537	89	437	637	07/16/2025	14:38	LB136511
	Cadmium	913	972	94	826	1120	07/16/2025	14:38	LB136511
	Chromium	483	542	89	460	624	07/16/2025	14:38	LB136511
	Lead	38.4	49.0	78	37	61	07/16/2025	14:38	LB136511
	Selenium	60.4	46.0	131	26	66	07/16/2025	14:38	LB136511
	Silver	204	201	102	170	232	07/16/2025	14:38	LB136511

METAL
QC
DATA

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Fax : 908 789 8922

metals
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MATRIX SPIKE SUMMARY

client: Walsh Construction Company II, LLC **level:** low **sdg no.:** Q2489

contract: WALS01 **lab code:** ACE

matrix: Water **sample id:** Q2489-08 **client id:** G1(6-12)MS

Percent Solids for Sample: NA **Spiked ID:** Q2489-08MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	3330		100	U	4000	83		P
Barium	ug/L	75 - 125	3470		3170		1000	30	N	P
Cadmium	ug/L	75 - 125	778		30.0	U	1000	78		P
Chromium	ug/L	75 - 125	1520		50.0	U	2000	76		P
Lead	ug/L	75 - 125	3700		60.0	U	5000	74	N	P
Mercury	ug/L	75 - 125	34.0		1.62	J	40.0	81		CV
Selenium	ug/L	75 - 125	8340		100	U	10000	83		P
Silver	ug/L	75 - 125	299		50.0	U	380	79		P

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Fax : 908 789 8922

metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Walsh Construction Company II, LLC **level:** low **sdg no.:** Q2489

contract: WALS01 **lab code:** ACE

matrix: Water **sample id:** Q2489-08 **client id:** G1(6-12)MSD

Percent Solids for Sample: NA **Spiked ID:** Q2489-08MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	3400		100	U	4000	85		P
Barium	ug/L	75 - 125	3490		3170		1000	31	N	P
Cadmium	ug/L	75 - 125	791		30.0	U	1000	79		P
Chromium	ug/L	75 - 125	1560		50.0	U	2000	78		P
Lead	ug/L	75 - 125	3760		60.0	U	5000	75		P
Mercury	ug/L	75 - 125	34.1		1.62	J	40.0	81		CV
Selenium	ug/L	75 - 125	8560		100	U	10000	86		P
Silver	ug/L	75 - 125	305		50.0	U	380	80		P

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Metals
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POST DIGEST SPIKE SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Matrix: Water **Level:** LOW **Client ID:** G1(6-12)A

Sample ID: Q2489-08 **Spiked ID:** Q2489-08A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Barium	ug/L	75 - 125	4060		3170		1000	89		P
Lead	ug/L	75 - 125	4550		60.0	U	5000	91		P

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Walsh Construction Company II, LLC **Level:** LOW **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q2489-08 **Client ID:** G1(6-12)DUP

Percent Solids for Sample: NA **Duplicate ID** Q2489-08DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	100	U	100	U			P
Barium	ug/L	20	3170		3220		2		P
Cadmium	ug/L	20	30.0	U	30.0	U			P
Chromium	ug/L	20	50.0	U	50.0	U			P
Lead	ug/L	20	60.0	U	60.0	U			P
Mercury	ug/L	20	1.62	J	1.94	J	18		CV
Selenium	ug/L	20	100	U	100	U			P
Silver	ug/L	20	50.0	U	50.0	U			P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Walsh Construction Company II, LLC **Level:** LOW **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q2489-08MS **Client ID:** G1(6-12)MSD

Percent Solids for Sample: NA **Duplicate ID** Q2489-08MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	3330		3400		2		P
Barium	ug/L	20	3470		3490		1		P
Cadmium	ug/L	20	778		791		2		P
Chromium	ug/L	20	1520		1560		3		P
Lead	ug/L	20	3700		3760		2		P
Mercury	ug/L	20	34.0		34.1		0		CV
Selenium	ug/L	20	8340		8560		3		P
Silver	ug/L	20	299		305		2		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: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168744BS							
Arsenic	ug/L	4000	4000		100	80 - 120	P
Barium	ug/L	1000	1010		101	80 - 120	P
Cadmium	ug/L	1000	982		98	80 - 120	P
Chromium	ug/L	2000	2100		105	80 - 120	P
Lead	ug/L	5000	4900		98	80 - 120	P
Selenium	ug/L	10000	10100		101	80 - 120	P
Silver	ug/L	380	360		95	80 - 120	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168760BS							
Mercury	ug/L	4.0	3.61		90	80 - 120	CV

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

G1(6-12)L

Lab Name: Alliance **Contract:** WALS01

Lab Code: ACE **Lb No.:** lb136511 **Lab Sample ID :** Q2489-08L **SDG No.:** Q2489

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	100	U	500	U			P
Barium	3170		3250		2		P
Cadmium	30.0	U	150	U			P
Chromium	50.0	U	250	U			P
Lead	60.0	U	300	U			P
Mercury	1.62	J	5.09	J	214		CV
Selenium	100	U	500	U			P
Silver	50.0	U	250	U			P

METAL PREPARATION & INSTRUMENT DATA

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168744**						
PB168728TB	PB168728TB	MB	WATER	07/07/2025	5.0	25.0	
PB168744BL	PB168744BL	MB	WATER	07/07/2025	5.0	25.0	
PB168744BS	PB168744BS	LCS	WATER	07/07/2025	5.0	25.0	
Q2489-01	G4(0-6)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-02	G4(6-12)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-03	G3(0-6)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-04	G3(6-12)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-05	G2(0-6)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-06	G2(6-12)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-07	G1(0-6)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-08	G1(6-12)	SAM	WATER	07/07/2025	5.0	25.0	
Q2489-08DUP	G1(6-12)DUP	DUP	WATER	07/07/2025	5.0	25.0	
Q2489-08MS	G1(6-12)MS	MS	WATER	07/07/2025	5.0	25.0	
Q2489-08MSD	G1(6-12)MSD	MSD	WATER	07/07/2025	5.0	25.0	

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Walsh Construction Company II, LLC **SDG No.:** Q2489

Contract: WALS01 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB168760**						
PB168728TB	PB168728TB	MB	WATER	07/08/2025	3.0	30.0	
PB168760BL	PB168760BL	MB	WATER	07/08/2025	30.0	30.0	
PB168760BS	PB168760BS	LCS	WATER	07/08/2025	30.0	30.0	
Q2489-01	G4(0-6)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-02	G4(6-12)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-03	G3(0-6)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-04	G3(6-12)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-05	G2(0-6)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-06	G2(6-12)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-07	G1(0-6)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-08	G1(6-12)	SAM	WATER	07/08/2025	3.0	30.0	
Q2489-08DUP	G1(6-12)DUP	DUP	WATER	07/08/2025	3.0	30.0	
Q2489-08MS	G1(6-12)MS	MS	WATER	07/08/2025	3.0	30.0	
Q2489-08MSD	G1(6-12)MSD	MSD	WATER	07/08/2025	3.0	30.0	

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ANALYSIS RUN LOG

Client: Walsh Construction Company II, LLC **Contract:** WALS01

Lab code: ACE **Sdg no.:** Q2489

Instrument id number: **Method:** **Run number:** LB136403

Start date: 07/09/2025 **End date:** 07/09/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1126	HG
S0.2	S0.2	1	1128	HG
S2.5	S2.5	1	1131	HG
S5	S5	1	1133	HG
S7.5	S7.5	1	1136	HG
S10	S10	1	1138	HG
ICV22	ICV22	1	1143	HG
ICB22	ICB22	1	1146	HG
CCV70	CCV70	1	1148	HG
CCB70	CCB70	1	1150	HG
CRA	CRA	1	1153	HG
PB168760BL	PB168760BL	1	1200	HG
PB168760BS	PB168760BS	1	1202	HG
Q2489-01	G4(0-6)	1	1204	HG
Q2489-02	G4(6-12)	1	1206	HG
Q2489-03	G3(0-6)	1	1209	HG
Q2489-04	G3(6-12)	1	1214	HG
Q2489-05	G2(0-6)	1	1216	HG
CCV71	CCV71	1	1218	HG
CCB71	CCB71	1	1220	HG
Q2489-06	G2(6-12)	1	1223	HG
Q2489-07	G1(0-6)	1	1225	HG
Q2489-08	G1(6-12)	1	1227	HG
Q2489-08DUP	G1(6-12)DUP	1	1230	HG
Q2489-08MS	G1(6-12)MS	1	1232	HG
Q2489-08MSD	G1(6-12)MSD	1	1234	HG
CCV72	CCV72	1	1256	HG
CCB72	CCB72	1	1258	HG
PB168728TB	PB168728TB	1	1312	HG
Q2489-08L	G1(6-12)L	5	1314	HG
CCV73	CCV73	1	1331	HG
CCB73	CCB73	1	1333	HG

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ANALYSIS RUN LOG

Client: Walsh Construction Company II, LLC **Contract:** WALS01

Lab code: ACE **Sdg no.:** Q2489

Instrument id number: **Method:** **Run number:** LB136511

Start date: 07/16/2025 **End date:** 07/16/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1255	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1300	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1304	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1308	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1312	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1316	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1321	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1353	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1411	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1422	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1426	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1438	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1453	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1457	Ag,As,Ba,Cd,Cr,Pb,Se
PB168728TB	PB168728TB	1	1508	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-08	G1(6-12)	1	1513	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-08DUP	G1(6-12)DUP	1	1517	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-08L	G1(6-12)L	5	1522	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-08MS	G1(6-12)MS	1	1526	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-08MSD	G1(6-12)MSD	1	1530	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-08A	G1(6-12)A	1	1534	Ba,Pb
CCV02	CCV02	1	1539	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1543	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1625	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1630	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1732	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1740	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1828	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1835	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	1851	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1856	Ag,As,Ba,Cd,Cr,Pb,Se

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ANALYSIS RUN LOG

Client: Walsh Construction Company II, LLC **Contract:** WALS01

Lab code: ACE **Sdg no.:** Q2489

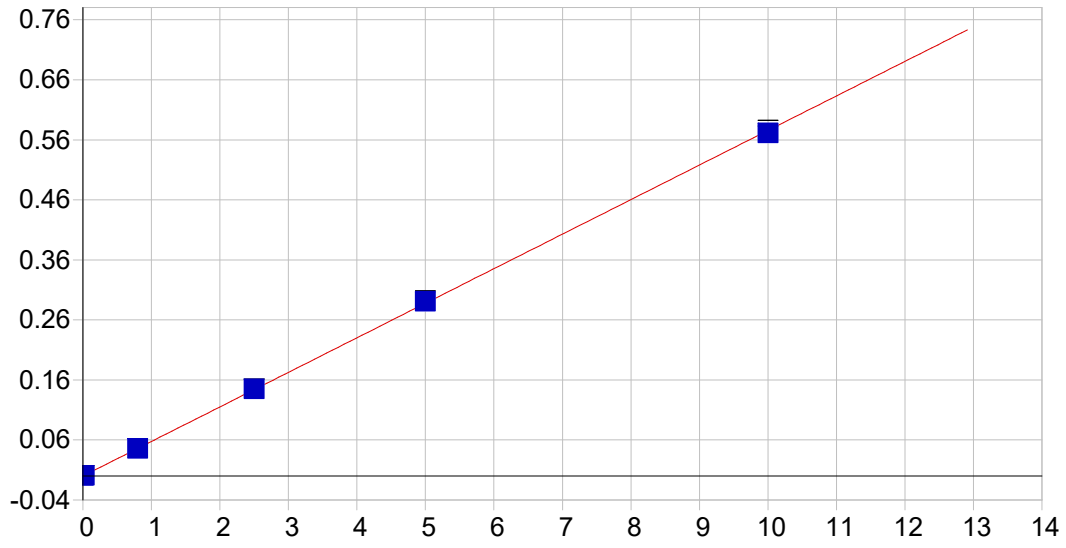
Instrument id number: **Method:** **Run number:** LB136519

Start date: 07/10/2025 **End date:** 07/10/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1727	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1731	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1736	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1740	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1744	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1748	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1752	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1801	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1805	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1809	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1814	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1818	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1840	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1844	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1930	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1934	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	2022	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	2036	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	2127	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	2131	Ag,As,Ba,Cd,Cr,Pb,Se
PB168744BS	PB168744BS	1	2217	Ag,As,Ba,Cd,Cr,Pb,Se
PB168744BL	PB168744BL	1	2221	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	2225	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	2231	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-01	G4(0-6)	1	2240	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-02	G4(6-12)	1	2245	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-03	G3(0-6)	1	2249	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-04	G3(6-12)	1	2253	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-05	G2(0-6)	1	2258	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-06	G2(6-12)	1	2302	Ag,As,Ba,Cd,Cr,Pb,Se
Q2489-07	G1(0-6)	1	2306	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	2327	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	2331	Ag,As,Ba,Cd,Cr,Pb,Se

METAL
RAW DATA

Reviewed By:
On:
Inst Id :P4
LB :LB136511



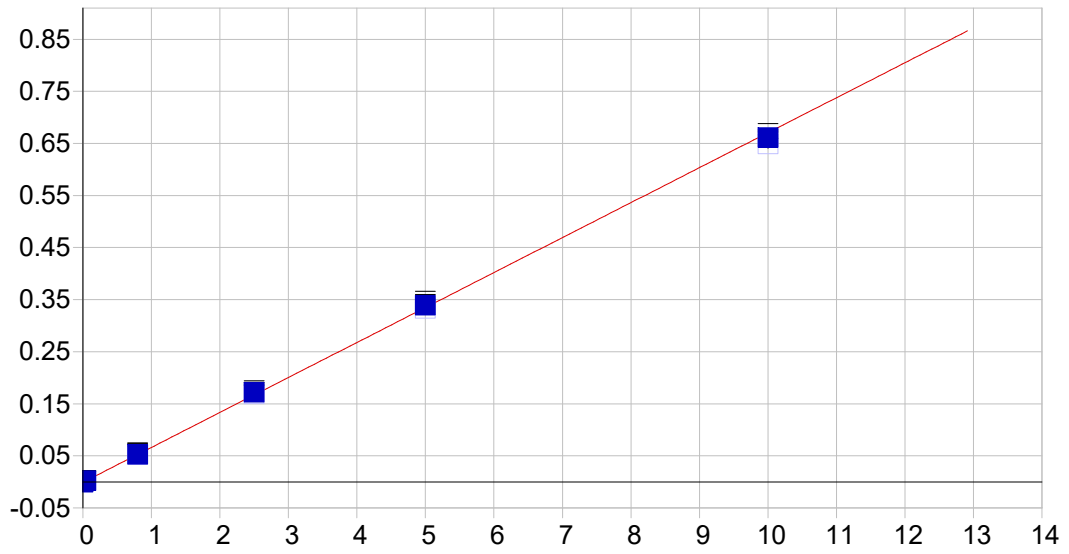
As 189.042 {479}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000090	Re-Slope:	1.000000
A1 (Gain):	0.057565	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999960	Status:	OK.
Std Error of Est:	0.000012		
Predicted MDL:	0.002187		
Predicted MQL:	0.007290		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00009	.000	1
S1	.02000	.02206	.002	10.3	.00117	.000	1
S3	2.5000	2.5180	.018	.721	.14472	.000	1
S4	5.0000	5.0546	.055	1.09	.29060	.001	1
S5	10.000	9.9283	-.072	-.717	.57087	.005	1
S2	.80000	.79700	-.003	-.375	.04574	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



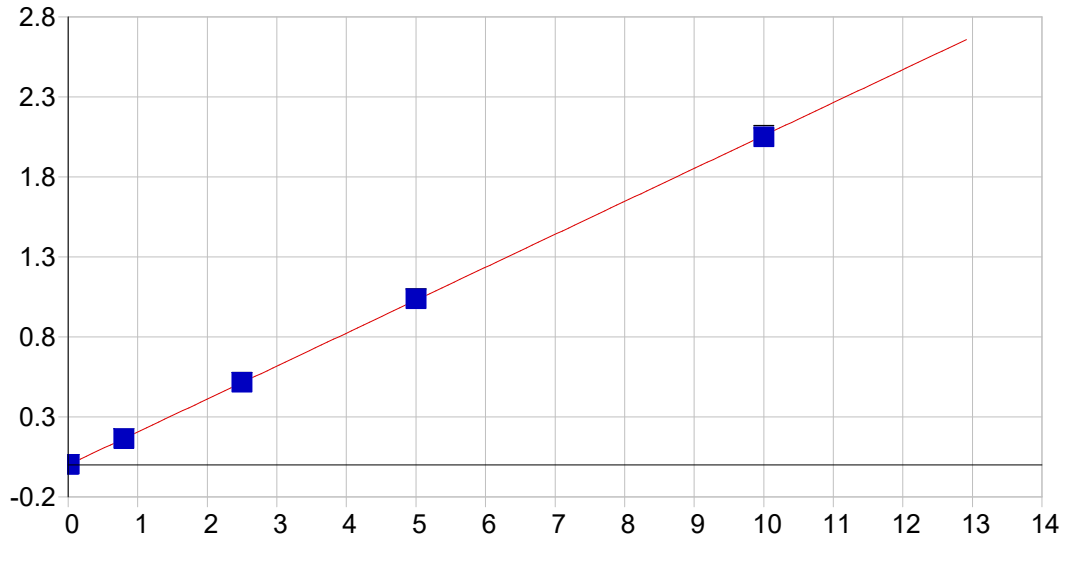
Tl 190.856 {477}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000944	Re-Slope:	1.000000
A1 (Gain):	0.067156	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999849	Status:	OK.
Std Error of Est:	0.000038		
Predicted MDL:	0.002117		
Predicted MQL:	0.007058		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00094	.000	1
S1	.04000	.04378	.004	9.46	.00182	.000	1
S3	2.5000	2.5751	.075	3.00	.16890	.003	1
S4	5.0000	5.0606	.061	1.21	.33273	.008	1
S5	10.000	9.8591	-.141	-1.41	.64881	.008	1
S2	.80000	.80162	.002	.202	.05190	.003	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



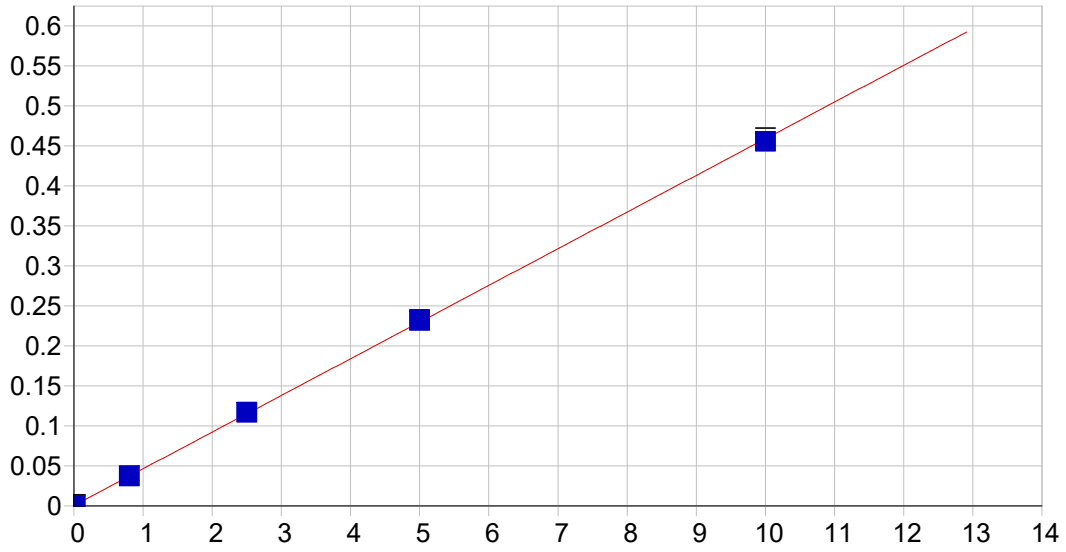
Pb 220.353 {453}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000089	Re-Slope:	1.000000
A1 (Gain):	0.205846	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.000028		
Predicted MDL:	0.001392		
Predicted MQL:	0.004640		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00009	.000	1
S1	.01200	.01454	.003	21.1	.00303	.000	1
S3	2.5000	2.5055	.006	.221	.51531	.001	1
S4	5.0000	5.0381	.038	.762	1.0361	.003	1
S5	10.000	9.9579	-.042	-.421	2.0478	.010	1
S2	.80000	.79601	-.004	-.499	.16377	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



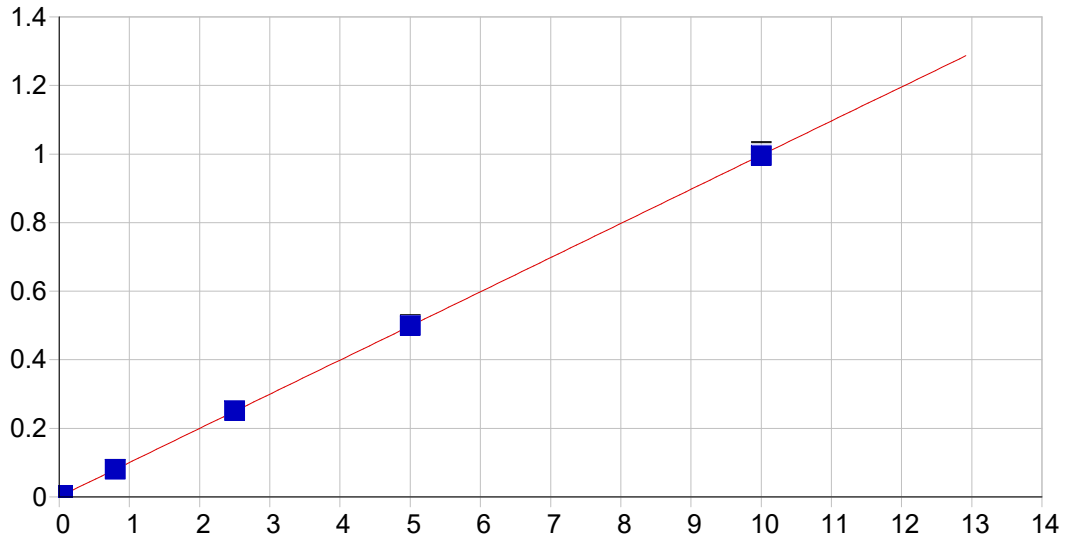
Se 196.090 {472}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000599	Re-Slope:	1.000000
A1 (Gain):	0.045853	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999955	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.004255		
Predicted MQL:	0.014184		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00060	.000	1
S1	.02000	.01747	-.003	-12.7	.00140	.000	1
S3	2.5000	2.5340	.034	1.36	.11675	.000	1
S4	5.0000	5.0424	.042	.847	.23172	.001	1
S5	10.000	9.9280	-.072	-.720	.45565	.004	1
S2	.80000	.79820	-.002	-.225	.03718	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



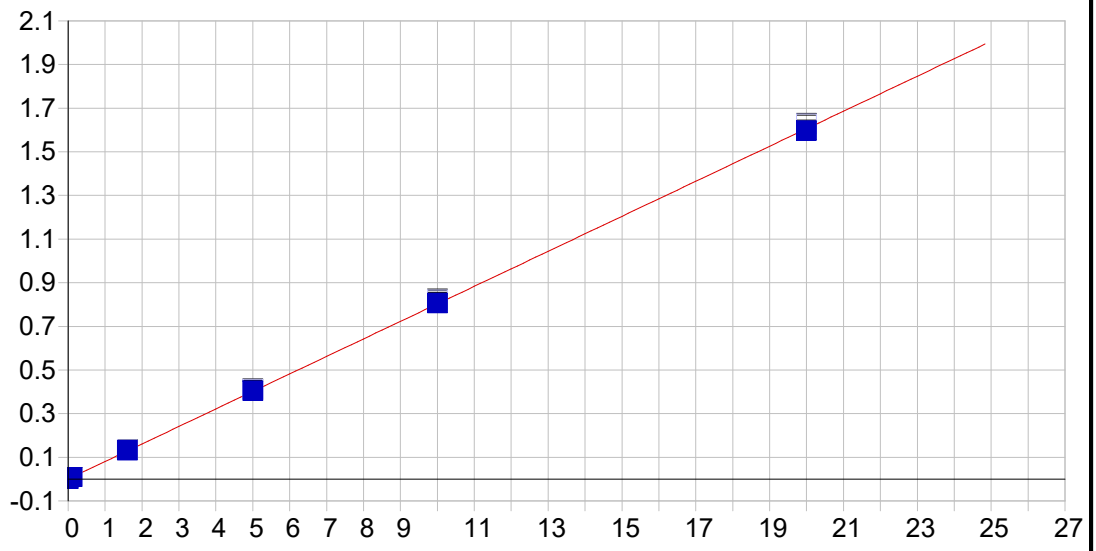
Sb 206.833 {463}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000708	Re-Slope:	1.000000
A1 (Gain):	0.099595	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999993	Status:	OK.
Std Error of Est:	0.000014		
Predicted MDL:	0.002022		
Predicted MQL:	0.006739		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00071	.000	1
S1	.05000	.05262	.003	5.24	.00596	.000	1
S3	2.5000	2.5131	.013	.525	.25168	.000	1
S4	5.0000	5.0050	.005	.100	.50053	.002	1
S5	10.000	9.9848	-.015	-.152	.99784	.010	1
S2	.80000	.79452	-.005	-.685	.08005	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



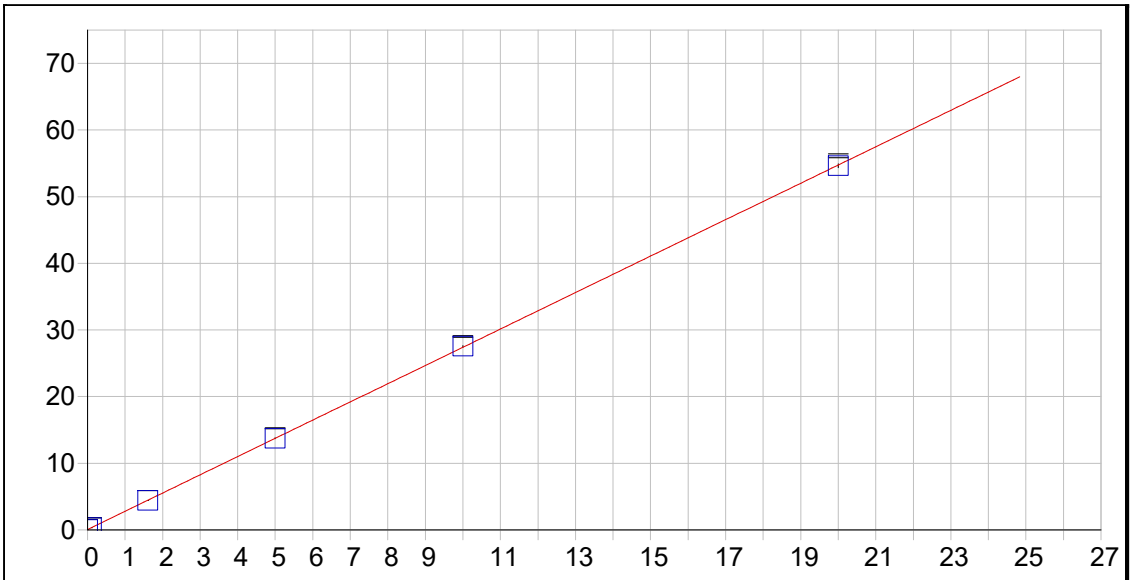
Al 396.152 { 85}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000535	Re-Slope:	1.000000
A1 (Gain):	0.080262	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999959	Status:	OK.
Std Error of Est:	0.000055		
Predicted MDL:	0.012421		
Predicted MQL:	0.041402		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00053	.001	1
S1	.10000	.11165	.012	11.7	.01012	.001	1
S3	5.0000	5.0356	.036	.713	.41249	.001	1
S4	10.000	10.037	.037	.366	.82166	.004	1
S5	20.000	19.882	-.118	-.589	1.6275	.004	1
S2	1.6000	1.6333	.033	2.08	.13412	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



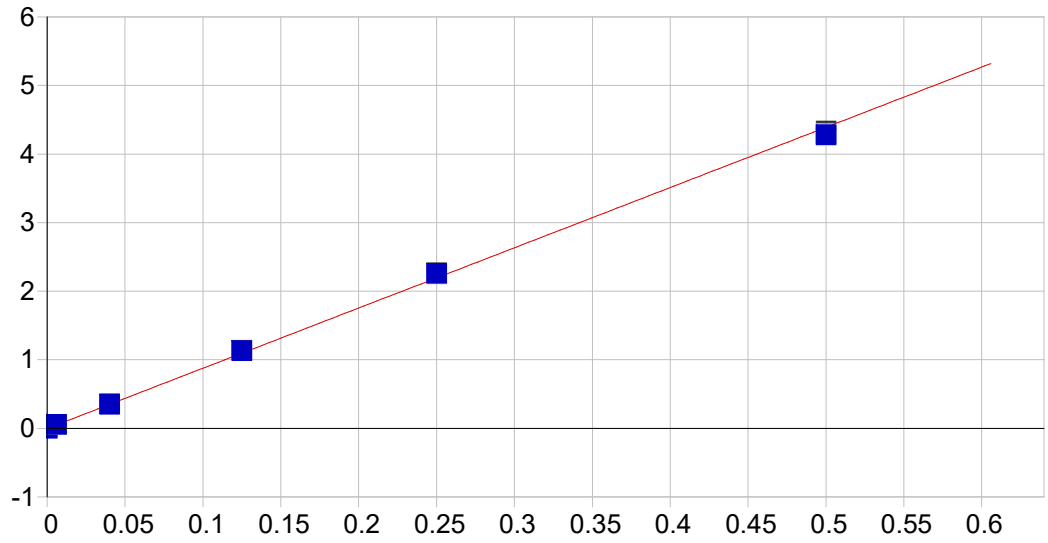
Ba 493.409 { 68}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.065295	Re-Slope:	1.000000
A1 (Gain):	2.734510	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000878		
Predicted MDL:	0.000862		
Predicted MQL:	0.002872		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.06528	.001	1
S1	.10000	.10475	.005	4.75	.35174	.004	1
S3	5.0000	5.0061	.006	.123	13.755	.065	1
S4	10.000	10.048	.048	.476	27.540	.126	1
S5	20.000	19.956	-.044	-.220	54.635	.273	1
S2	1.6000	1.5855	-.014	-.906	4.4009	.003	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



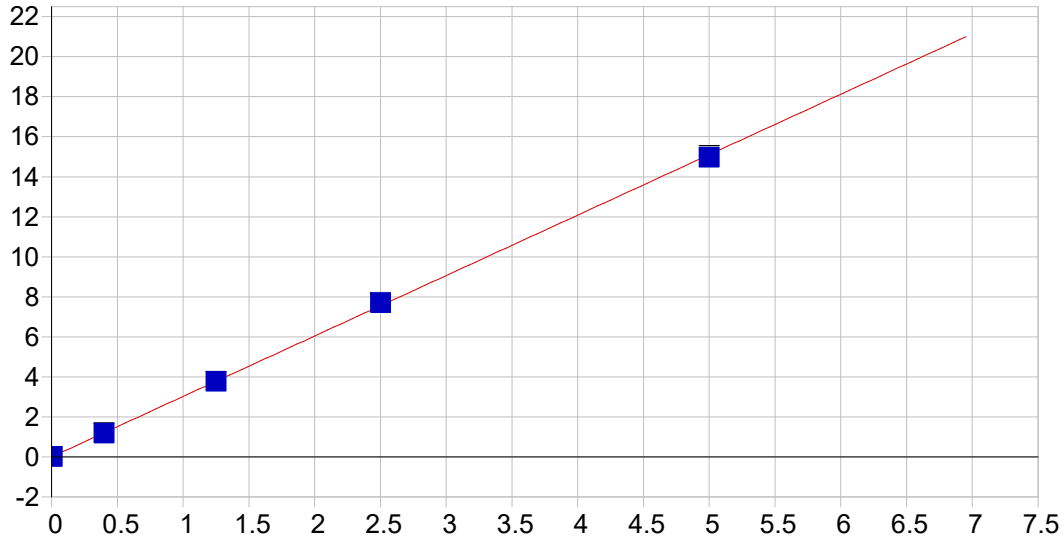
Be 234.861 {144}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002127	Re-Slope:	1.000000
A1 (Gain):	8.783717	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999622	Status:	OK.
Std Error of Est:	0.000691		
Predicted MDL:	0.000070		
Predicted MQL:	0.000234		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00213	.000	1
S1	.00600	.00642	.000	7.08	.05391	.000	1
S3	.12500	.12930	.004	3.44	1.1287	.004	1
S4	.25000	.25730	.007	2.92	2.2481	.011	1
S5	.50000	.48780	-.012	-2.44	4.2629	.050	1
S2	.04000	.04017	.000	.437	.34918	.002	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



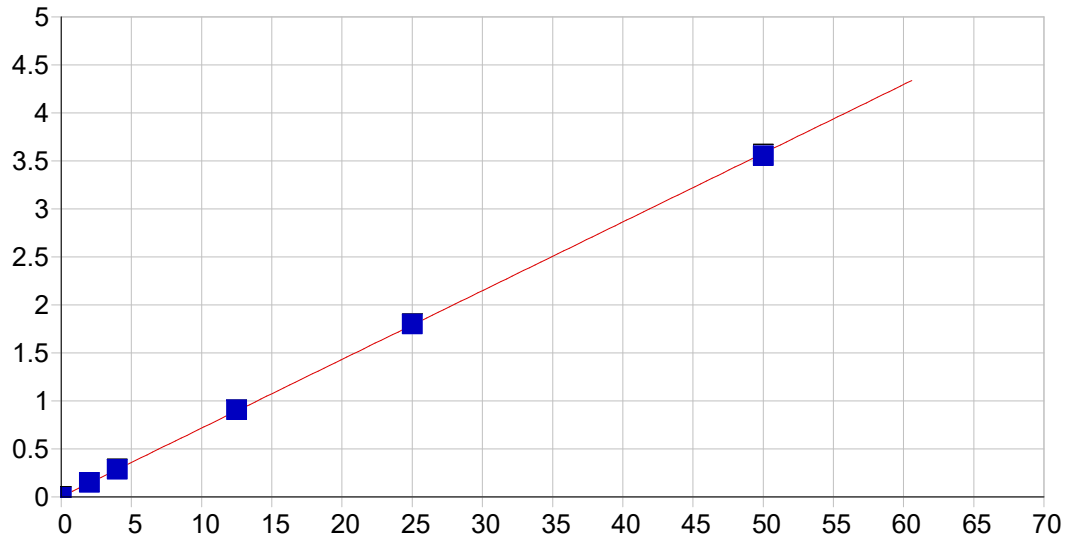
Cd 226.502 {449}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000805	Re-Slope:	1.000000
A1 (Gain):	3.020920	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999920	Status:	OK.
Std Error of Est:	0.000347		
Predicted MDL:	0.000080		
Predicted MQL:	0.000267		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00081	.000	1
S1	.00600	.00617	.000	2.88	.01791	.000	1
S3	1.2500	1.2505	.000	.039	3.7795	.002	1
S4	2.5000	2.5494	.049	1.98	7.7061	.011	1
S5	5.0000	4.9561	-.044	-.877	14.982	.078	1
S2	.40000	.39379	-.006	-1.55	1.1896	.003	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



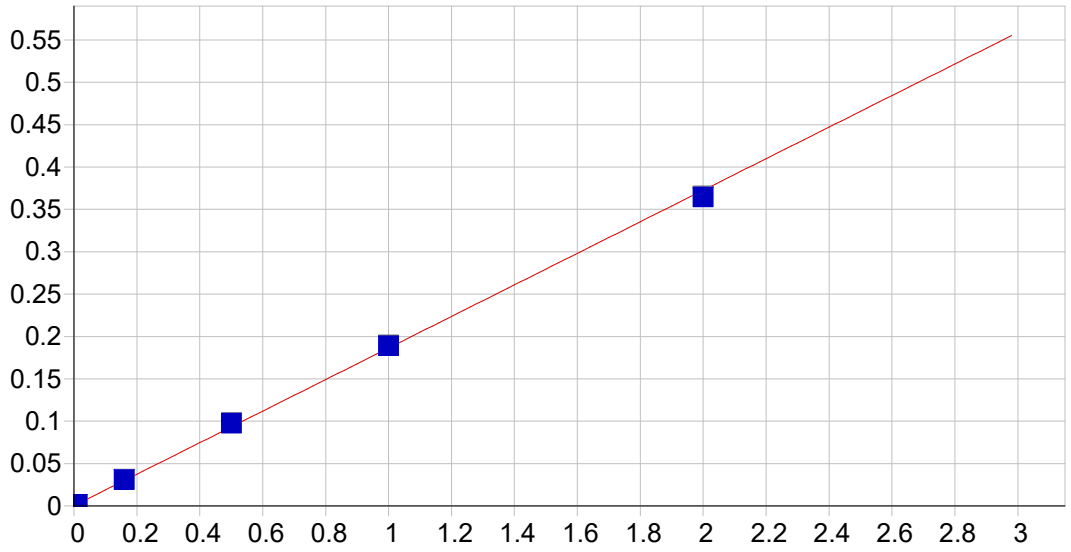
Ca 373.690 { 90}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001185	Re-Slope:	1.000000
A1 (Gain):	0.071563	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999950	Status:	OK.
Std Error of Est:	0.000378		
Predicted MDL:	0.011391		
Predicted MQL:	0.037968		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00011	-.000	.000	.00118	.001	1
S2	4.0000	4.0116	.012	.290	.28827	.002	1
S3	12.500	12.646	.146	1.17	.90621	.004	1
S4	25.000	25.128	.128	.511	1.7994	.007	1
S5	50.000	49.624	-.376	-.752	3.5524	.017	1
S1	2.0000	2.0903	.090	4.51	.15077	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



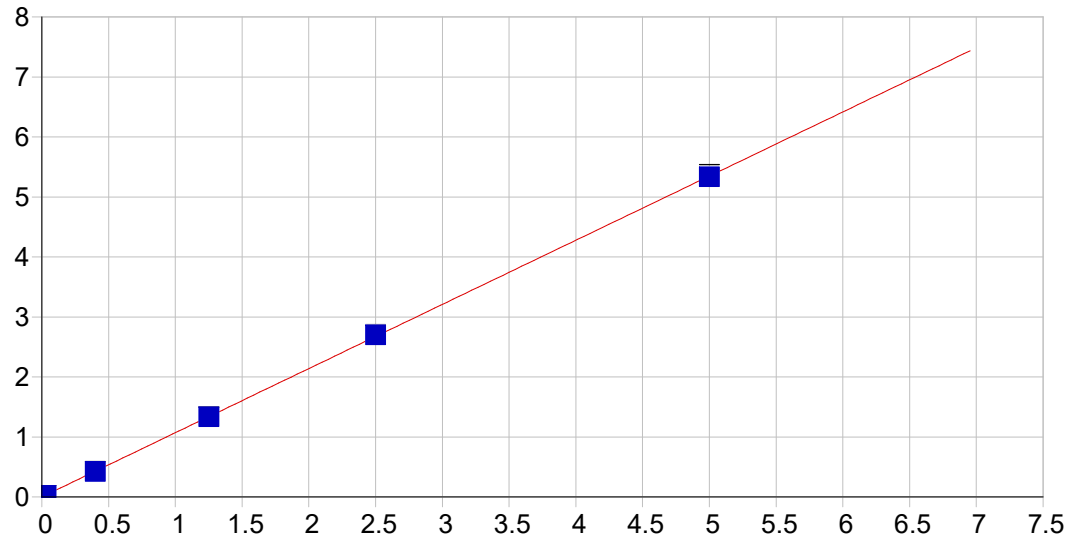
Cr 267.716 {126}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000151	Re-Slope:	1.000000
A1 (Gain):	0.186241	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999653	Status:	OK.
Std Error of Est:	0.000036		
Predicted MDL:	0.000427		
Predicted MQL:	0.001424		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00015	.000	1
S1	.01000	.01101	.001	10.1	.00220	.000	1
S3	.50000	.52332	.023	4.66	.09770	.000	1
S4	1.0000	1.0133	.013	1.33	.18904	.001	1
S5	2.0000	1.9563	-.044	-2.18	.36483	.001	1
S2	.16000	.16603	.006	3.77	.03110	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



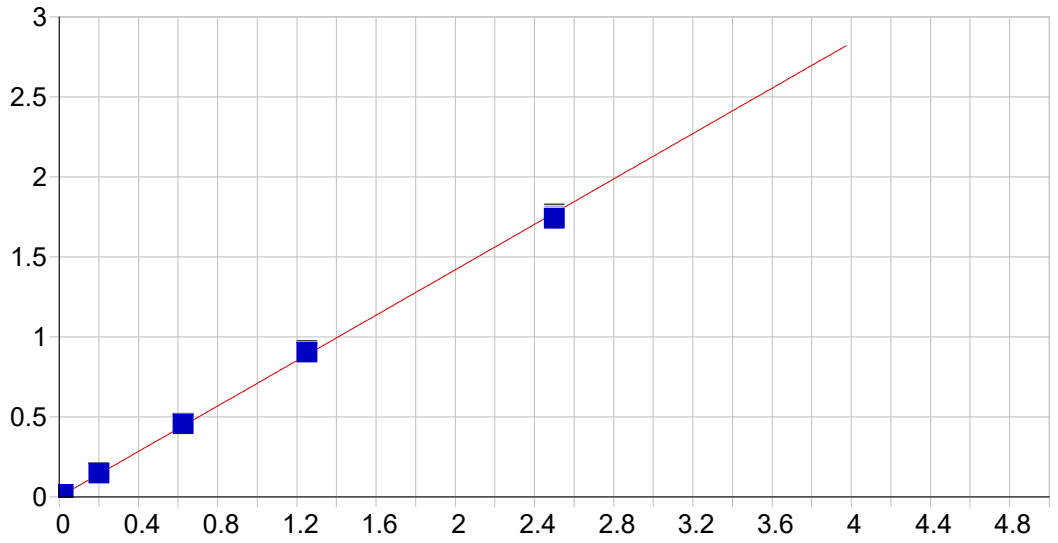
Co 228.616 {448}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000301	Re-Slope:	1.000000
A1 (Gain):	1.069394	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999978	Status:	OK.
Std Error of Est:	0.000144		
Predicted MDL:	0.000204		
Predicted MQL:	0.000681		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00030	.000	1
S1	.03000	.03127	.001	4.24	.03361	.000	1
S3	1.2500	1.2447	-.005	-.424	1.3336	.001	1
S4	2.5000	2.5235	.023	.939	2.7034	.007	1
S5	5.0000	4.9857	-.014	-.285	5.3411	.036	1
S2	.40000	.39483	-.005	-1.29	.42326	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



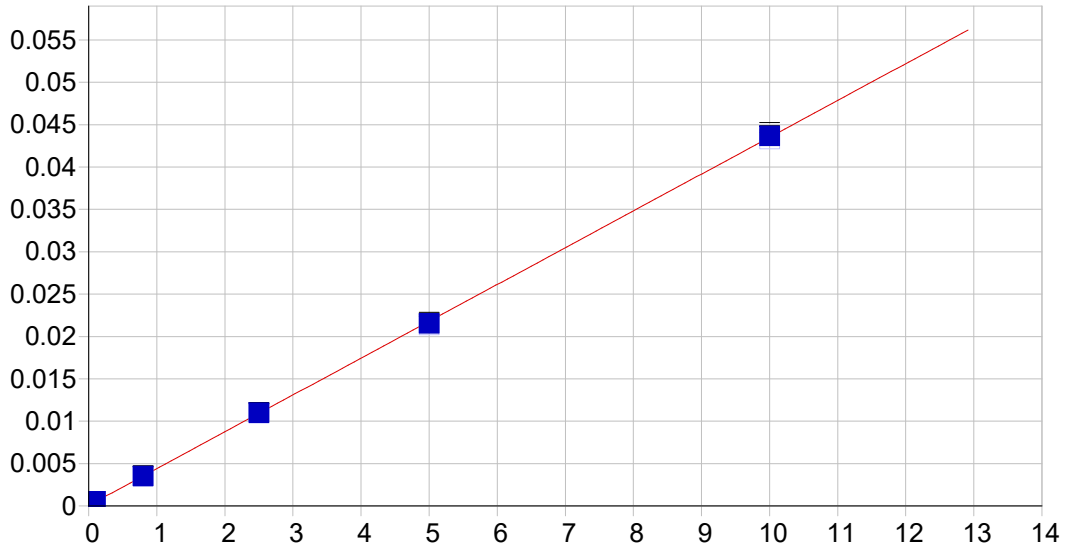
Cu 224.700 {450}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000540	Re-Slope:	1.000000
A1 (Gain):	0.709515	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999751	Status:	OK.
Std Error of Est:	0.000188		
Predicted MDL:	0.000430		
Predicted MQL:	0.001434		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00054	.000	1
S1	.02000	.02244	.002	12.2	.01662	.000	1
S3	.62500	.64164	.017	2.66	.45950	.001	1
S4	1.2500	1.2722	.022	1.78	.91059	.003	1
S5	2.5000	2.4515	-.048	-1.94	1.7547	.014	1
S2	.20000	.20715	.007	3.58	.14870	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



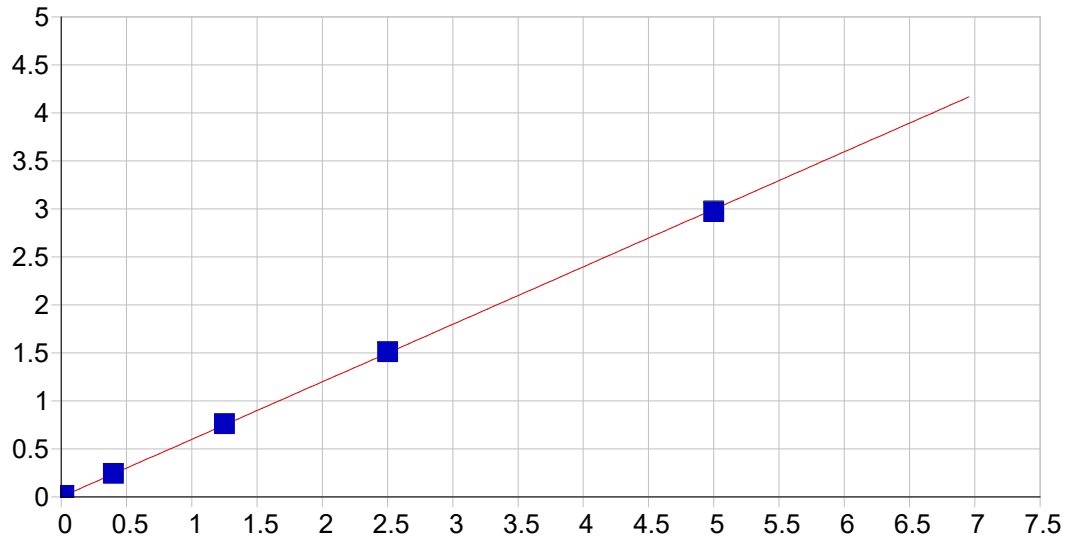
Fe 240.488 {140}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000060	Re-Slope:	1.000000
A1 (Gain):	0.004345	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999941	Status:	OK.
Std Error of Est:	0.000002		
Predicted MDL:	0.006439		
Predicted MQL:	0.021465		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00006	.000	1
S1	.10000	.11083	.011	10.8	.00054	.000	1
S3	2.5000	2.5182	.018	.729	.01091	.000	1
S4	5.0000	4.9437	-.056	-1.13	.02136	.000	1
S5	10.000	10.035	.035	.348	.04329	.000	1
S2	.80000	.79243	-.008	-.946	.00347	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



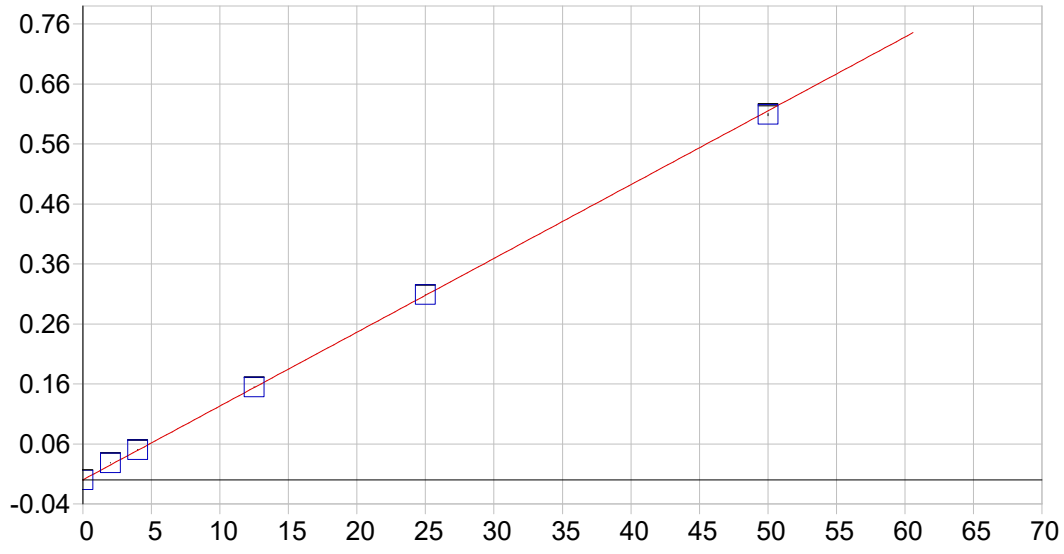
Mn 257.610 {131}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000380	Re-Slope:	1.000000
A1 (Gain):	0.599094	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999949	Status:	OK.
Std Error of Est:	0.000101		
Predicted MDL:	0.000538		
Predicted MQL:	0.001792		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00038	.000	1
S1	.02000	.02194	.002	9.68	.01353	.000	1
S3	1.2500	1.2666	.017	1.33	.75935	.004	1
S4	2.5000	2.5188	.019	.754	1.5097	.005	1
S5	5.0000	4.9584	-.042	-.833	2.9715	.007	1
S2	.40000	.40423	.004	1.06	.24260	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



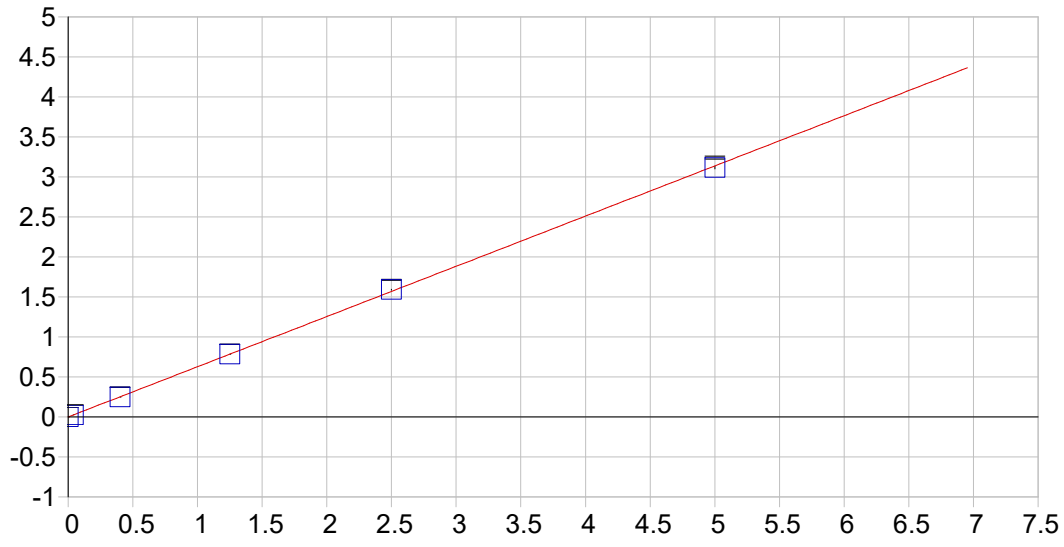
Mg 279.079 {121}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000178	Re-Slope:	1.000000
A1 (Gain):	0.012300	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999717	Status:	OK.
Std Error of Est:	0.000155		
Predicted MDL:	0.030121		
Predicted MQL:	0.100403		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00033	-.000	.000	.00017	.000	1
S2	4.0000	4.0570	.057	1.42	.05008	.000	1
S3	12.500	12.566	.066	.530	.15475	.001	1
S4	25.000	25.077	.077	.308	.30863	.000	1
S5	50.000	49.495	-.505	-1.01	.60898	.002	1
S1	2.0000	2.3045	.304	15.2	.02852	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



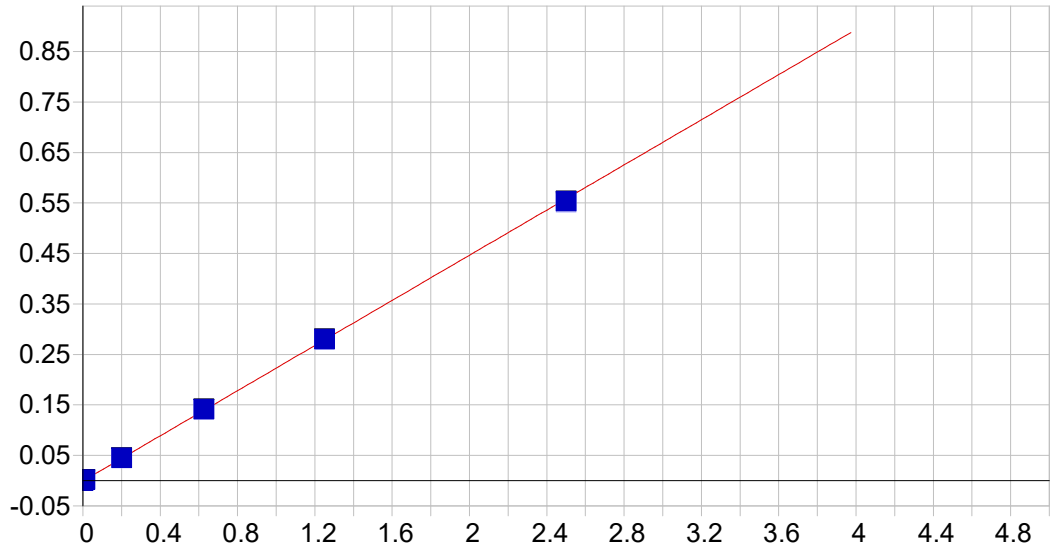
Ni 231.604 {446}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000324	Re-Slope:	1.000000
A1 (Gain):	0.627565	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999956	Status:	OK.
Std Error of Est:	0.000138		
Predicted MDL:	0.000369		
Predicted MQL:	0.001230		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00032	.000	1
S1	.04000	.04176	.002	4.40	.02588	.000	1
S3	1.2500	1.2511	.001	.085	.78480	.001	1
S4	2.5000	2.5342	.034	1.37	1.5900	.005	1
S5	5.0000	4.9667	-.033	-.666	3.1166	.019	1
S2	.40000	.39633	-.004	-.918	.24840	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



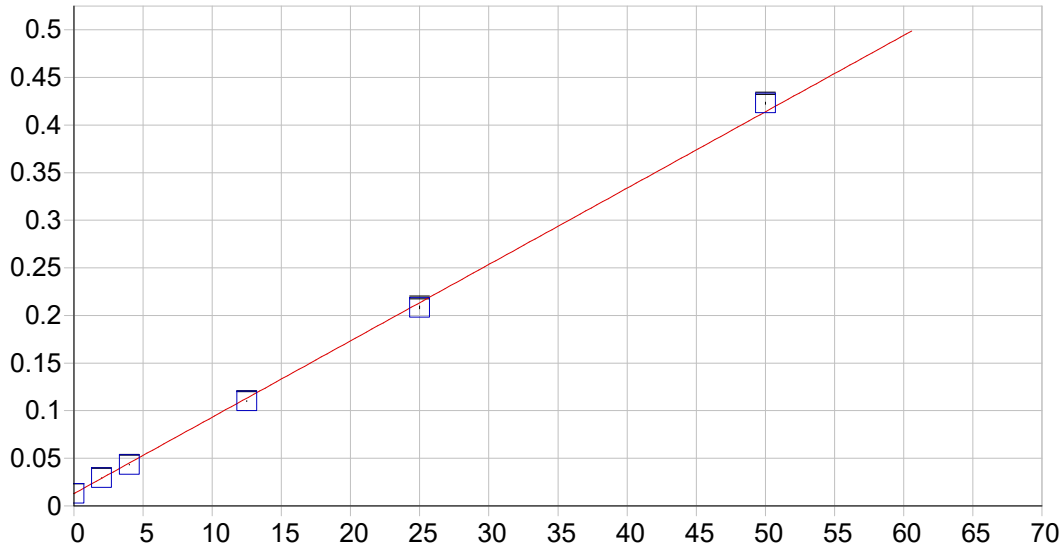
Ag 328.068 {103}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000677	Re-Slope:	1.000000
A1 (Gain):	0.223585	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999939	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.000586		
Predicted MQL:	0.001954		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00068	.000	1
S1	.01000	.01045	.000	4.46	.00164	.000	1
S3	.62500	.63680	.012	1.89	.14102	.000	1
S4	1.2500	1.2557	.006	.459	.27873	.001	1
S5	2.5000	2.4779	-.022	-.884	.55063	.000	1
S2	.20000	.20413	.004	2.06	.04475	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



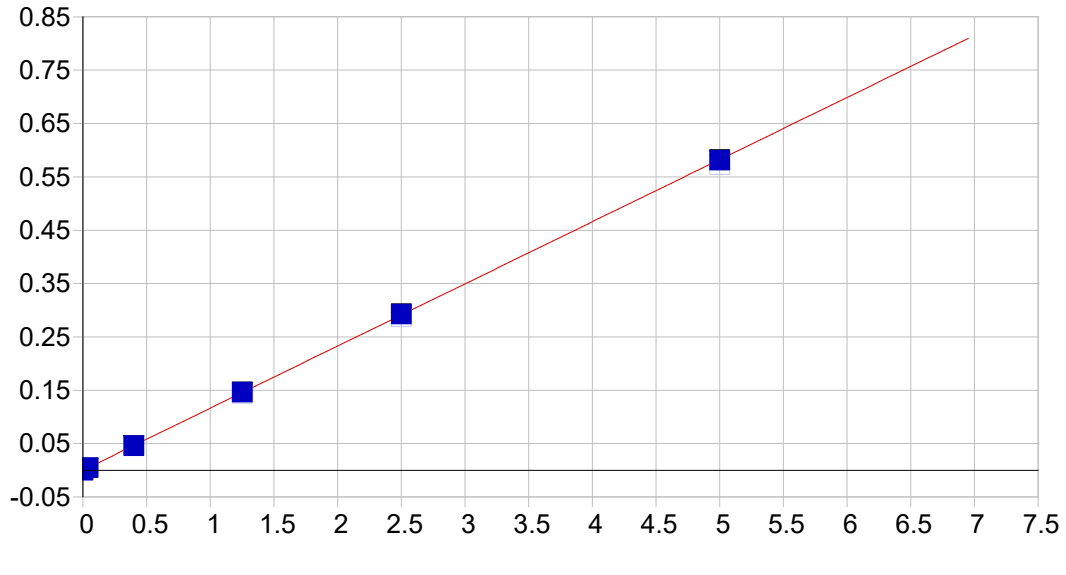
Na 589.592 { 57}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.012954	Re-Slope:	1.000000
A1 (Gain):	0.008020	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999647	Status:	OK.
Std Error of Est:	0.000113		
Predicted MDL:	0.021503		
Predicted MQL:	0.071678		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00010	.000	.000	.01295	.000	1
S2	4.0000	3.7915	-.209	-5.21	.04336	.000	1
S3	12.500	12.114	-.386	-3.09	.11011	.001	1
S4	25.000	24.388	-.612	-2.45	.20855	.002	1
S5	50.000	51.141	1.14	2.28	.42311	.001	1
S1	2.0000	2.0658	.066	3.29	.02952	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



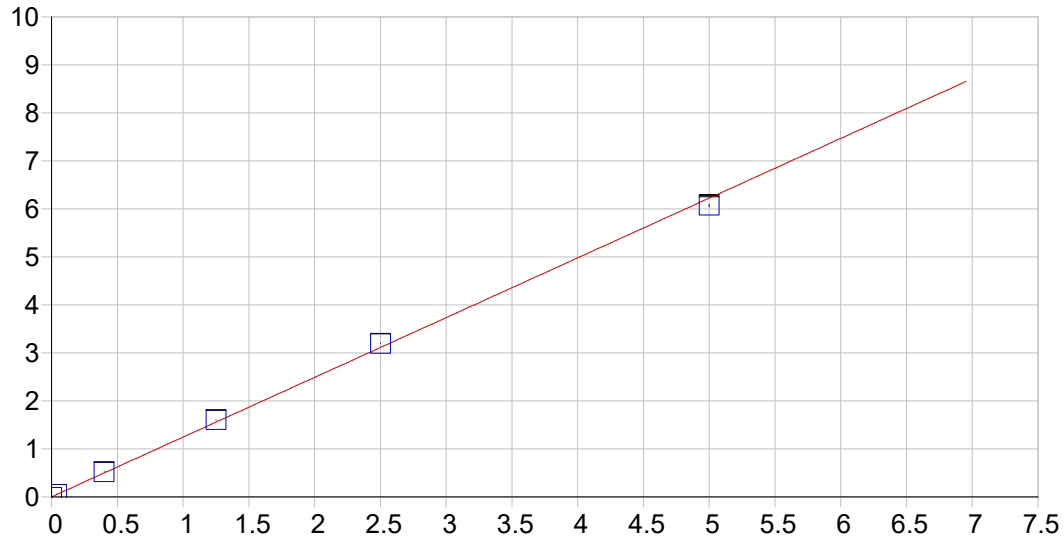
V 292.402 {115}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000105	Re-Slope:	1.000000
A1 (Gain):	0.116500	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999994	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.003493		
Predicted MQL:	0.011644		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00010	.000	1
S1	.04000	.04000	-.000	-.005	.00438	.000	1
S3	1.2500	1.2550	.005	.403	.14398	.001	1
S4	2.5000	2.5097	.010	.387	.28803	.001	1
S5	5.0000	4.9872	-.013	-.256	.57241	.001	1
S2	.40000	.39808	-.002	-.480	.04559	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



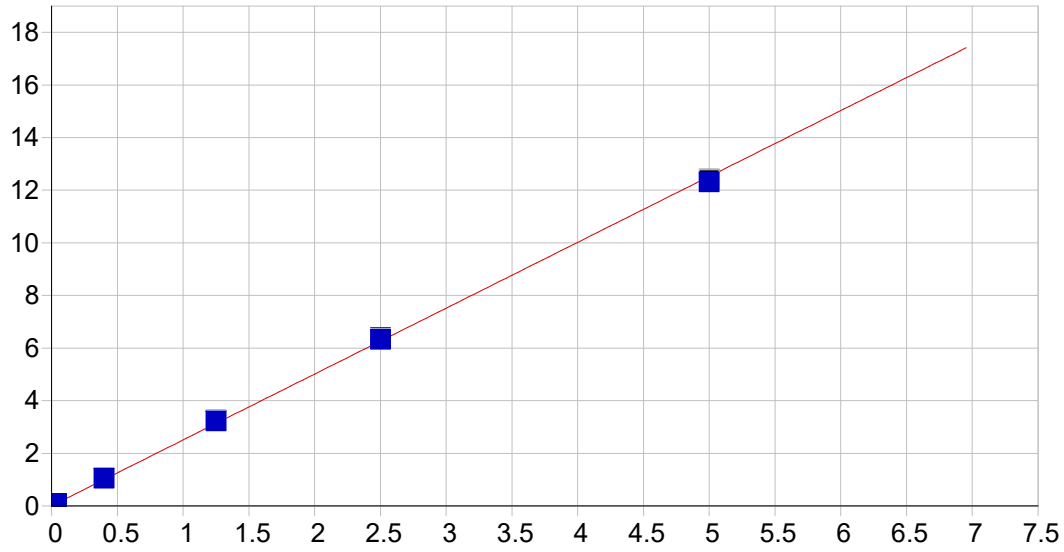
Zn 206.200 {464}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001786	Re-Slope:	1.000000
A1 (Gain):	1.244723	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999627	Status:	OK.
Std Error of Est:	0.000798		
Predicted MDL:	0.000147		
Predicted MQL:	0.000490		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00178	.000	1
S1	.04000	.04405	.004	10.1	.05662	.000	1
S3	1.2500	1.2869	.037	2.95	1.6036	.001	1
S4	2.5000	2.5655	.066	2.62	3.1952	.004	1
S5	5.0000	4.8775	-.122	-2.45	6.0729	.023	1
S2	.40000	.41599	.016	4.00	.51958	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



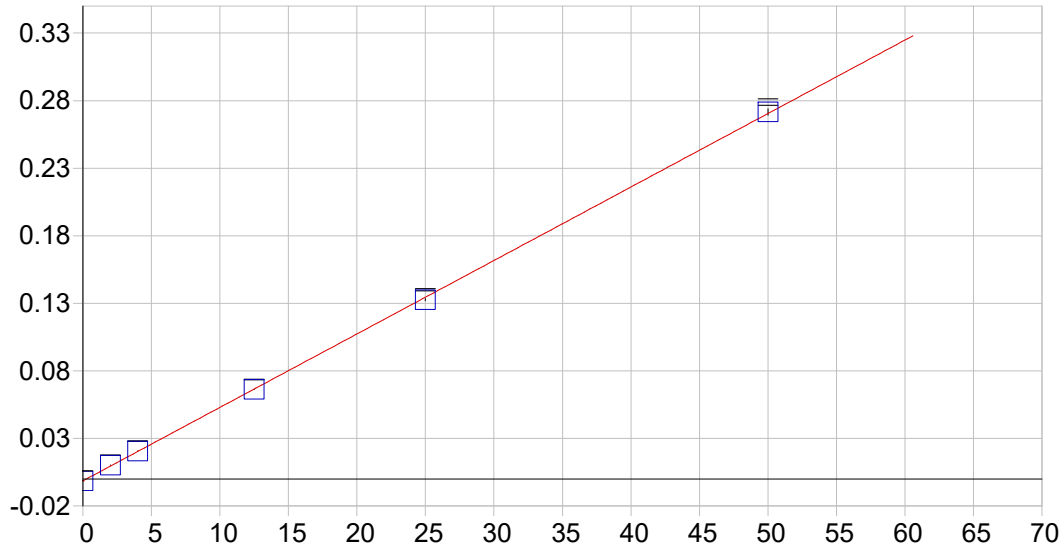
Zn 213.856 {158}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004411	Re-Slope:	1.000000
A1 (Gain):	2.503826	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999795	Status:	OK.
Std Error of Est:	0.001198		
Predicted MDL:	0.000247		
Predicted MQL:	0.000824		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00440	.000	1
S1	.04000	.04396	.004	9.90	.11518	.000	1
S3	1.2500	1.2880	.038	3.04	3.2511	.015	1
S4	2.5000	2.5250	.025	1.00	6.3702	.033	1
S5	5.0000	4.9170	-.083	-1.66	12.403	.022	1
S2	.40000	.41604	.016	4.01	1.0531	.002	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



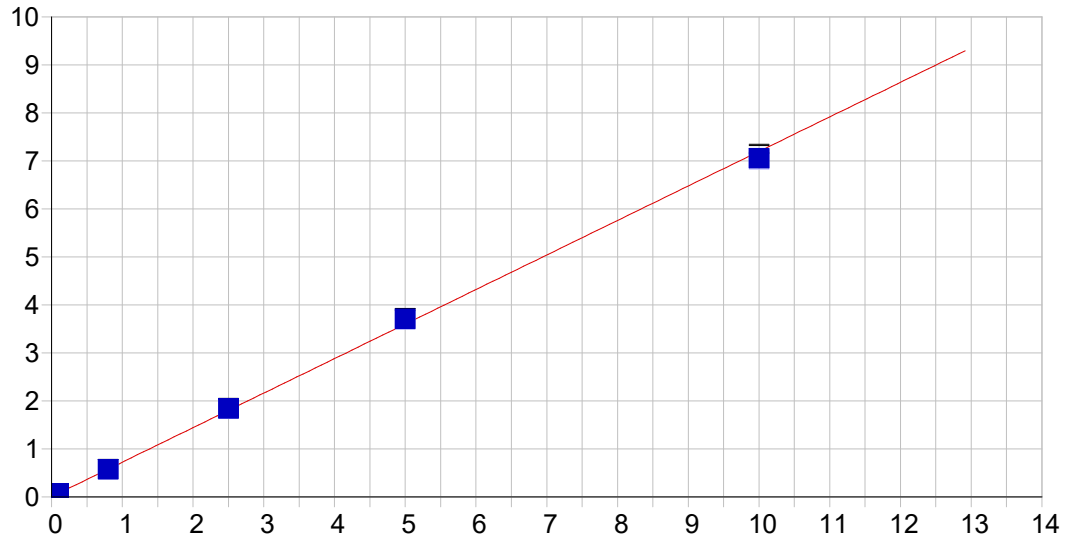
K 766.490 { 44}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001460	Re-Slope:	1.000000
A1 (Gain):	0.005438	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999922	Status:	OK.
Std Error of Est:	0.000036		
Predicted MDL:	0.038713		
Predicted MQL:	0.129044		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00013	-.000	.000	-.00146	.000	1
S2	4.0000	4.0466	.047	1.16	.02054	.000	1
S3	12.500	12.444	-.056	-.449	.06621	.000	1
S4	25.000	24.664	-.336	-1.35	.13266	.001	1
S5	50.000	50.217	.217	.433	.27161	.002	1
S1	2.0000	2.1293	.129	6.47	.01012	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



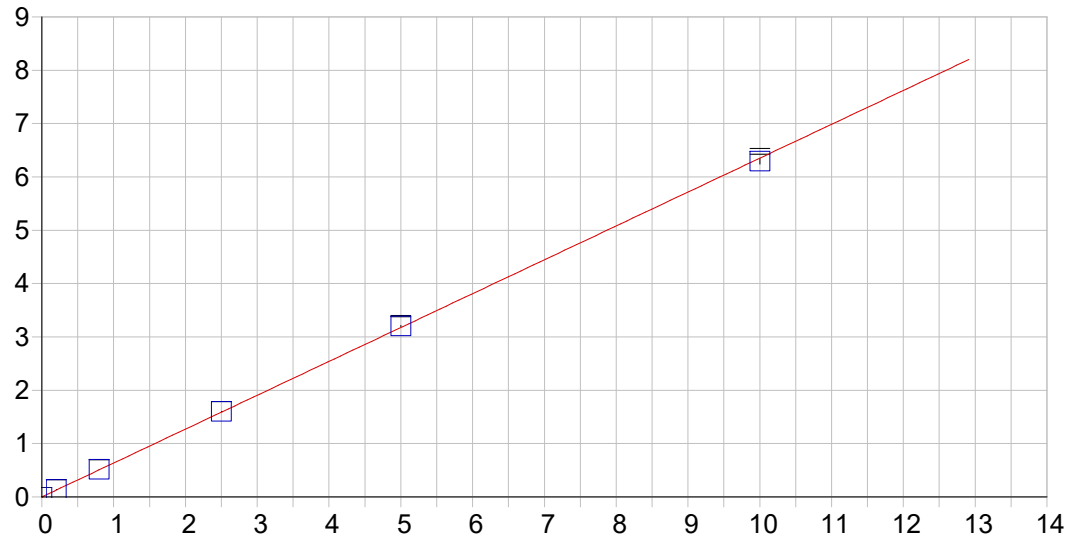
B 249.678 {135}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004097	Re-Slope:	1.000000
A1 (Gain):	0.719367	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999737	Status:	OK.
Std Error of Est:	0.000863		
Predicted MDL:	0.000898		
Predicted MQL:	0.002993		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00409	.000	1
S1	.10000	.10397	.004	3.97	.07847	.001	1
S3	2.5000	2.5541	.054	2.16	1.8349	.007	1
S4	5.0000	5.1466	.147	2.93	3.6934	.017	1
S5	10.000	9.8023	-.198	-1.98	7.0296	.085	1
S2	.80000	.79299	-.007	-.876	.57247	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



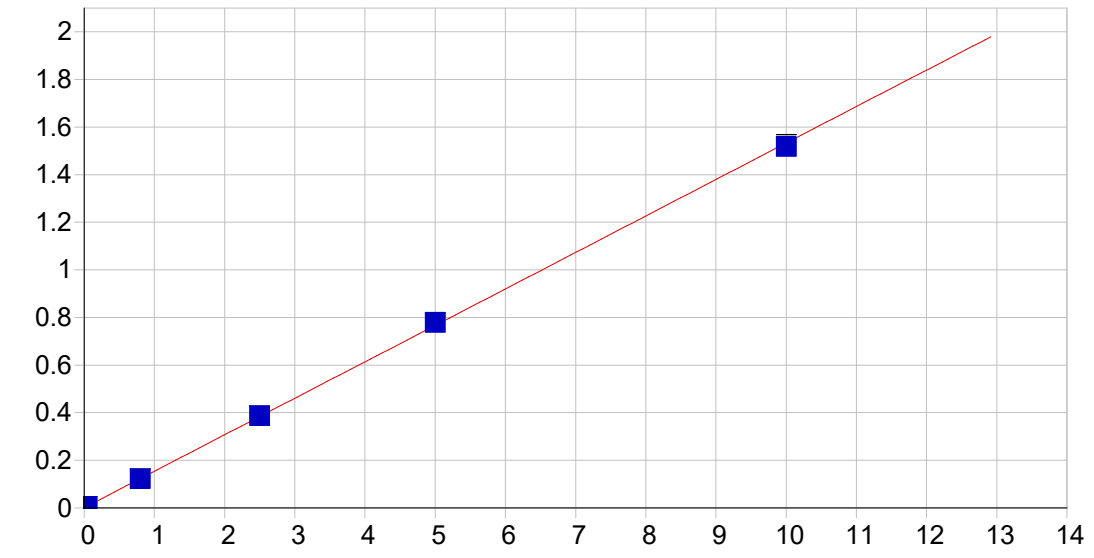
Mo 202.030 {467}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000431	Re-Slope:	1.000000
A1 (Gain):	0.635076	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000594		
Predicted MDL:	0.000293		
Predicted MQL:	0.000976		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00042	.000	1
S1	.20000	.21668	.017	8.34	.13804	.000	1
S3	2.5000	2.5217	.022	.869	1.6019	.002	1
S4	5.0000	5.0435	.043	.869	3.2034	.010	1
S5	10.000	9.9083	-.092	-.917	6.2930	.053	1
S2	.80000	.80980	.010	1.22	.51471	.002	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



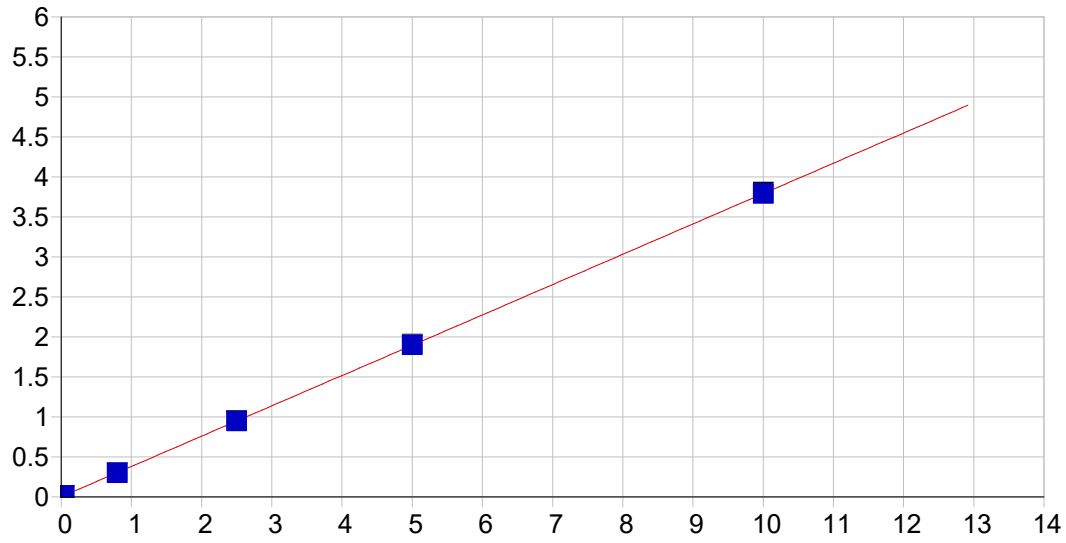
Sn 189.989 {478}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000751	Re-Slope:	1.000000
A1 (Gain):	0.153219	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999936	Status:	OK.
Std Error of Est:	0.000058		
Predicted MDL:	0.000676		
Predicted MQL:	0.002252		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00075	.000	1
S1	.04000	.04143	.001	3.56	.00709	.000	1
S3	2.5000	2.5206	.021	.825	.38657	.001	1
S4	5.0000	5.0771	.077	1.54	.77788	.001	1
S5	10.000	9.9033	-.097	-.967	1.5166	.009	1
S2	.80000	.79754	-.002	-.308	.12282	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



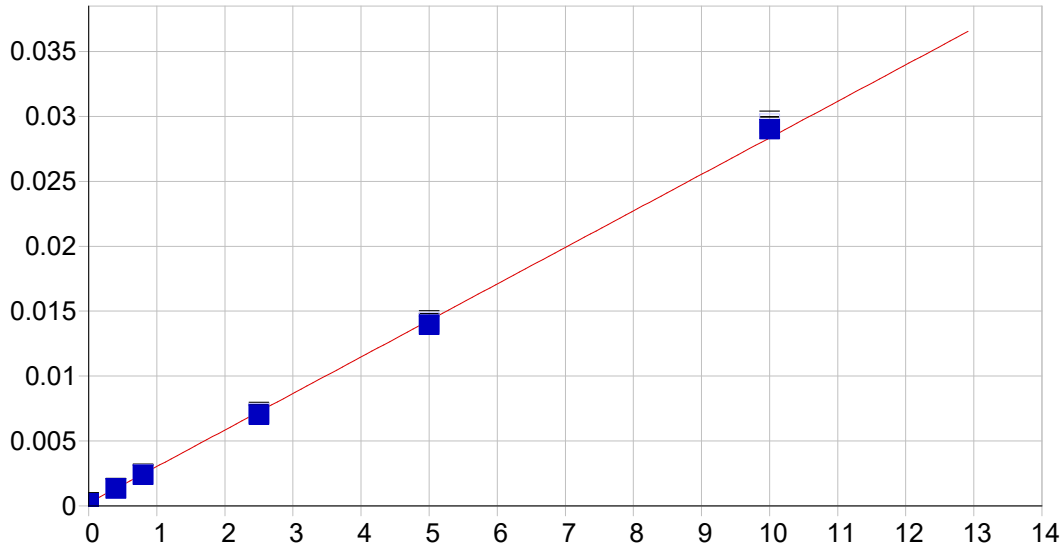
Ti 336.121 {100}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001033	Re-Slope:	1.000000
A1 (Gain):	0.378983	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.001592		
Predicted MQL:	0.005307		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00103	.000	1
S1	.04000	.04148	.001	3.69	.01674	.000	1
S3	2.5000	2.5018	.002	.072	.94883	.005	1
S4	5.0000	5.0103	.010	.206	1.8992	.009	1
S5	10.000	9.9994	-.001	-.006	3.7893	.017	1
S2	.80000	.78705	-.013	-1.62	.29920	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



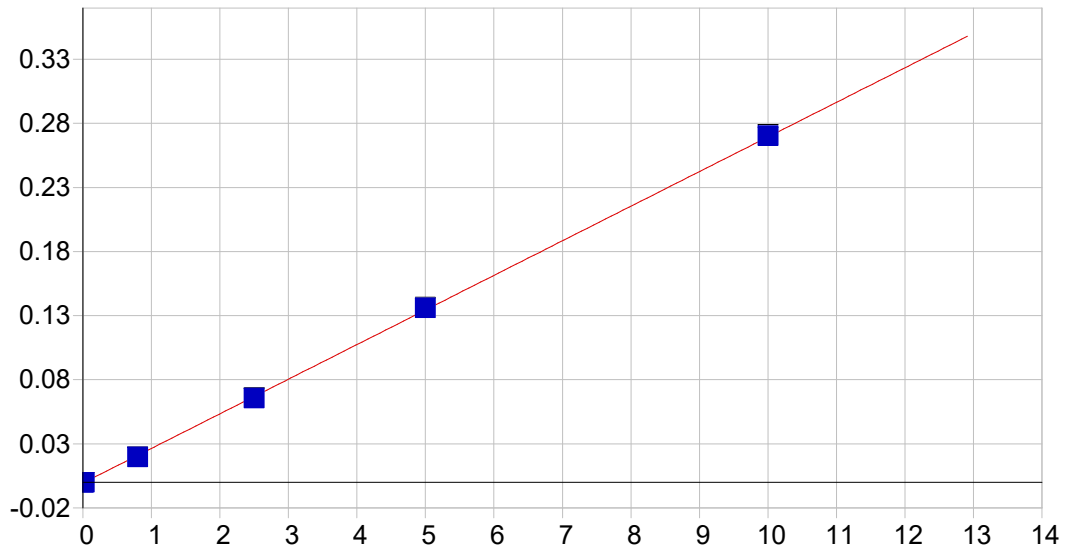
Si 288.158 {117}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000220	Re-Slope:	1.000000
A1 (Gain):	0.002813	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999689	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.015681		
Predicted MQL:	0.052271		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00022	.000	1
S1	.40000	.39588	-.004	-1.03	.00134	.000	1
S3	2.5000	2.4199	-.080	-3.21	.00713	.000	1
S4	5.0000	4.8798	-.120	-2.40	.01416	.000	1
S5	10.000	10.233	.233	2.33	.02943	.000	1
S2	.80000	.77124	-.029	-3.59	.00242	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



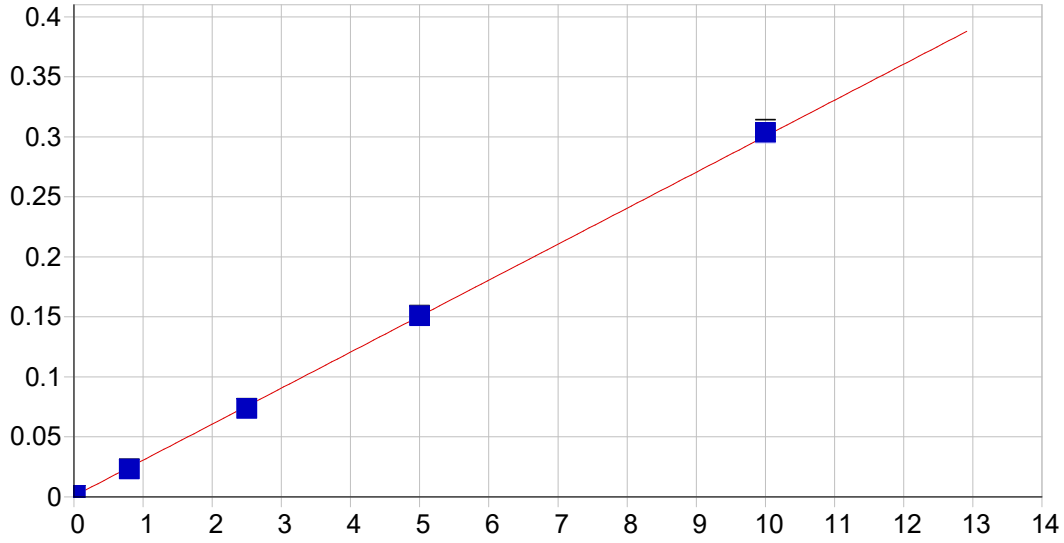
P 177.495 {490}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000577	Re-Slope:	1.000000
A1 (Gain):	0.027000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999864	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.002727		
Predicted MQL:	0.009092		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00058	.000	1
S1	.02000	.01914	-.001	-4.32	-.00006	.000	1
S3	2.5000	2.4524	-.048	-1.90	.06563	.000	1
S4	5.0000	5.0632	.063	1.26	.13610	.000	1
S5	10.000	10.035	.035	.353	.27033	.001	1
S2	.80000	.75003	-.050	-6.25	.01967	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



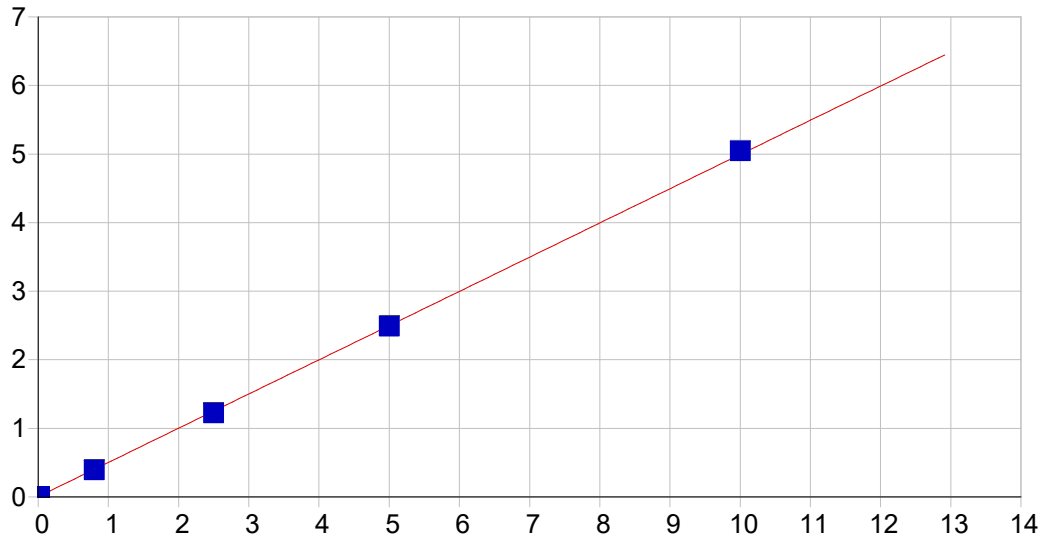
S 182.034 {485}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000627	Re-Slope:	1.000000
A1 (Gain):	0.029986	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999831	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.003063		
Predicted MQL:	0.010210		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00063	.000	1
S1	.02000	.01969	-.000	-1.56	.00119	.000	1
S3	2.5000	2.4337	-.066	-2.65	.07341	.000	1
S4	5.0000	5.0119	.012	.238	.15052	.001	1
S5	10.000	10.106	.106	1.06	.30288	.003	1
S2	.80000	.74902	-.051	-6.37	.02302	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



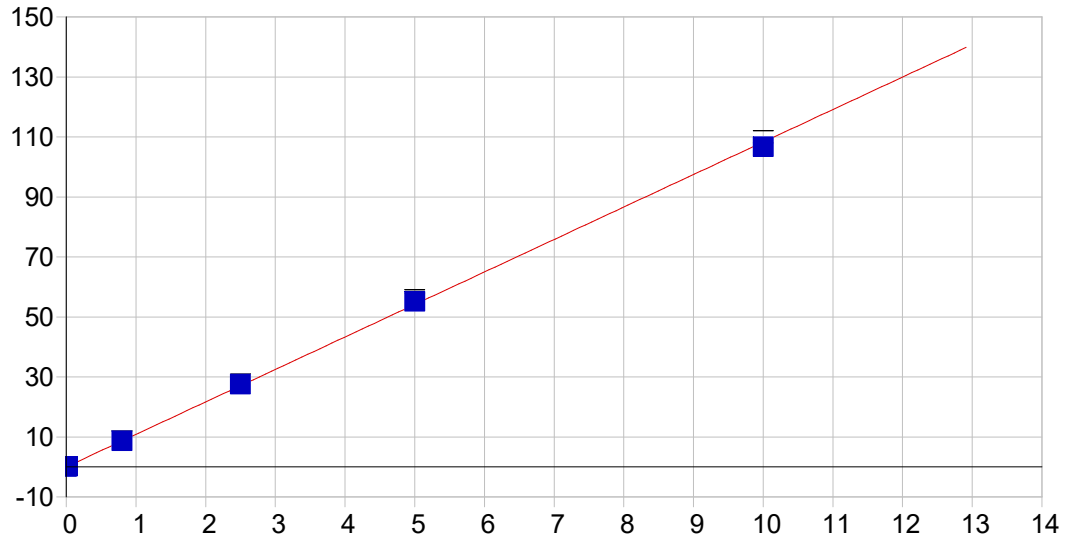
Li 670.784 { 50}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003575	Re-Slope:	1.000000
A1 (Gain):	0.498973	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999902	Status:	OK.
Std Error of Est:	0.000164		
Predicted MDL:	0.003888		
Predicted MQL:	0.012960		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00358	.001	1
S5	10.000	10.102	.102	1.02	5.0492	.004	1
S4	5.0000	4.9806	-.019	-.388	2.4913	.008	1
S3	2.5000	2.4420	-.058	-2.32	1.2233	.005	1
S1	.02000	.01661	-.003	-17.0	.01205	.001	1
S2	.80000	.77891	-.021	-2.64	.39263	.002	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511



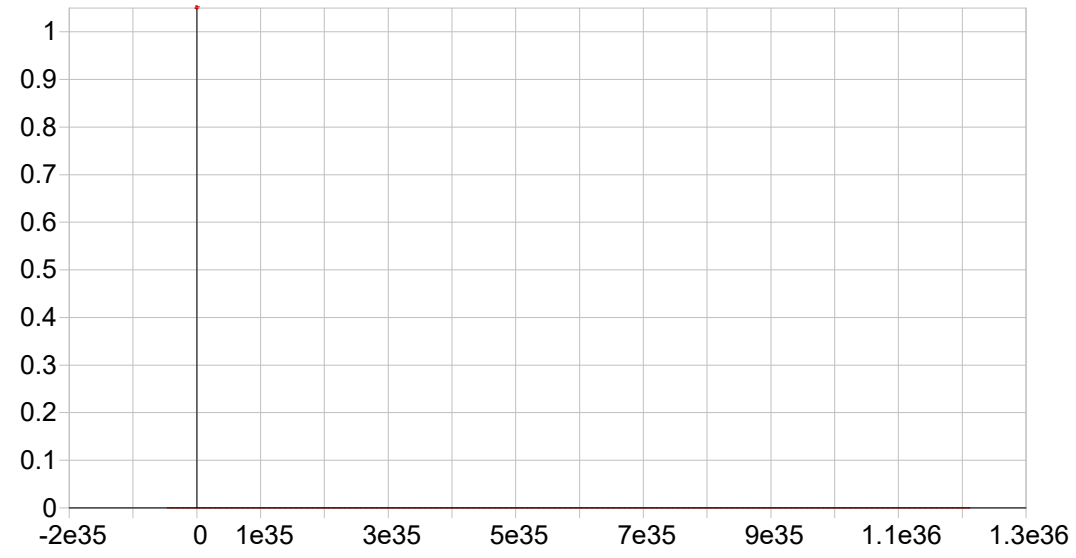
Sr 407.771 { 83}

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000024	Re-Slope:	1.000000
A1 (Gain):	10.828655	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999867	Status:	OK.
Std Error of Est:	0.004142		
Predicted MDL:	0.000096		
Predicted MQL:	0.000321		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00004	.001	1
S1	.02000	.02095	.001	4.74	.22785	.001	1
S3	2.5000	2.5467	.047	1.87	27.603	.153	1
S4	5.0000	5.0948	.095	1.90	55.222	.546	1
S5	10.000	9.8535	-.147	-1.47	106.80	2.04	1
S2	.80000	.80407	.004	.509	8.7153	.007	1

Reviewed By:
On:
Inst Id :P4
LB :LB136511

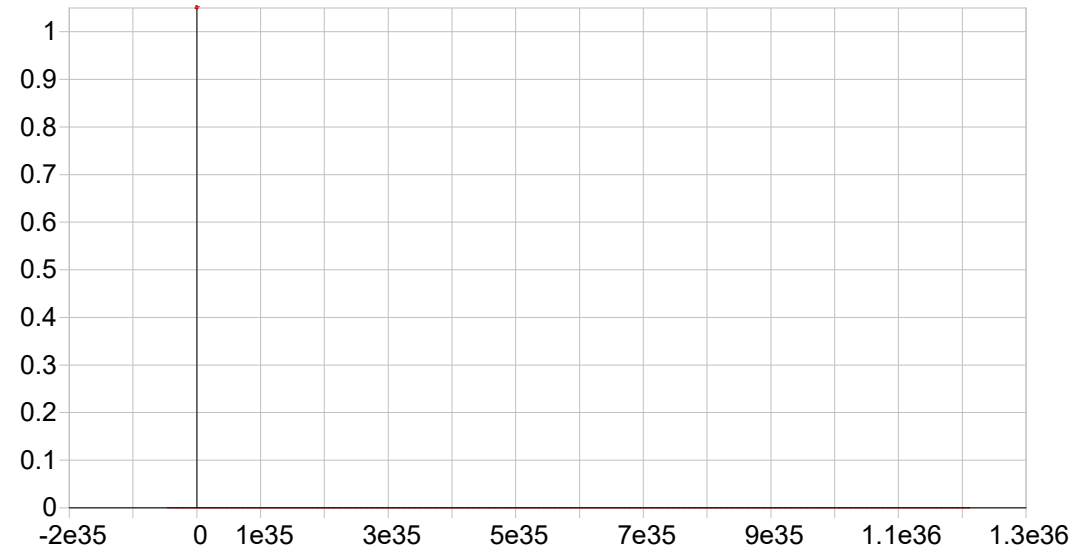


Y 224.306 {450}*

Date of Fit:	7/17/2025 3:00:43	Type of Fit:	Linear	Weighting:	1/Conc

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

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



Y 360.073 { 94}*

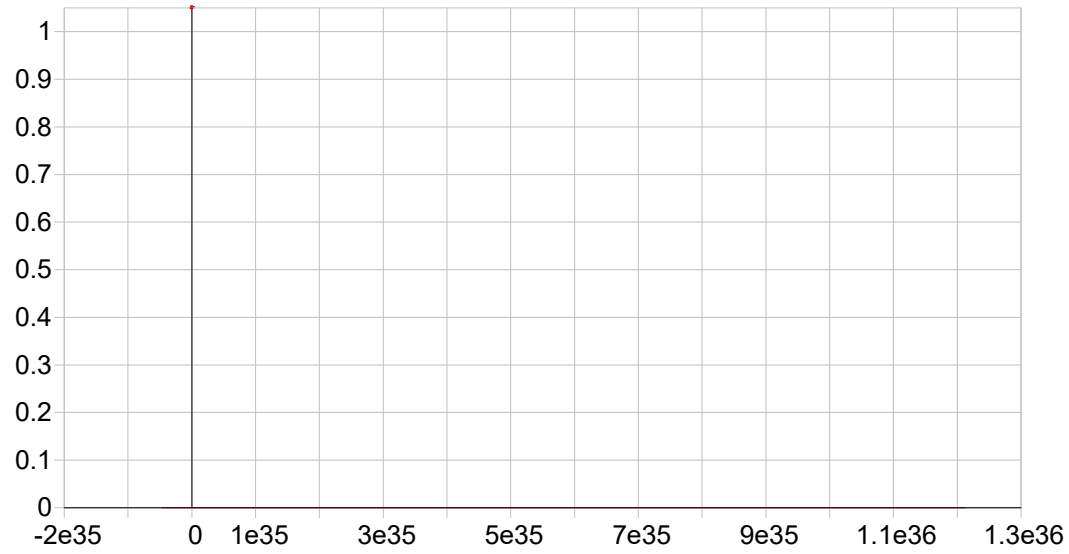
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:
On:
Inst Id :P4
LB :LB136511

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

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

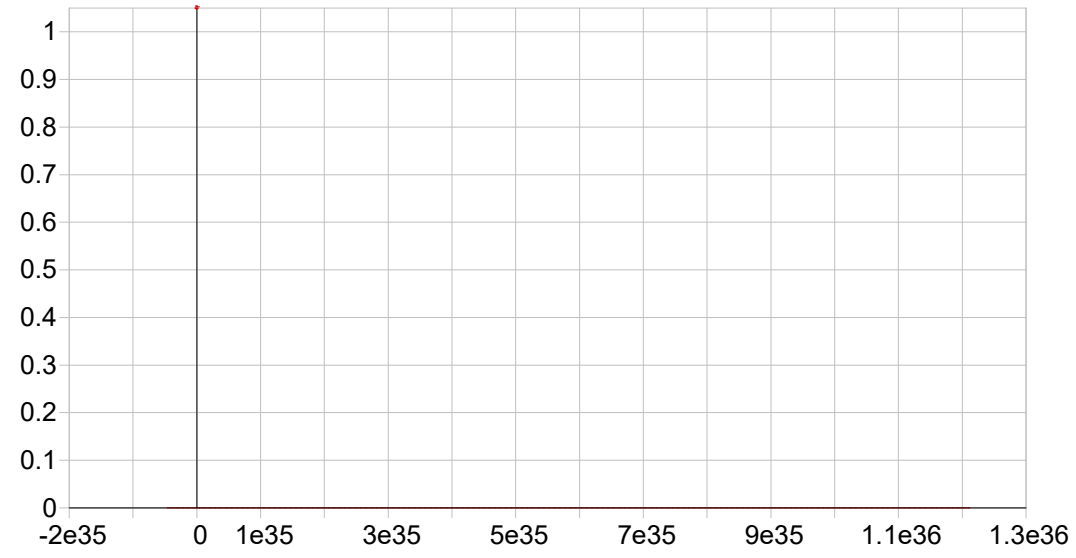


Y 371.030 { 91}*

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

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

Reviewed By:
On:
Inst Id :P4
LB :LB136511

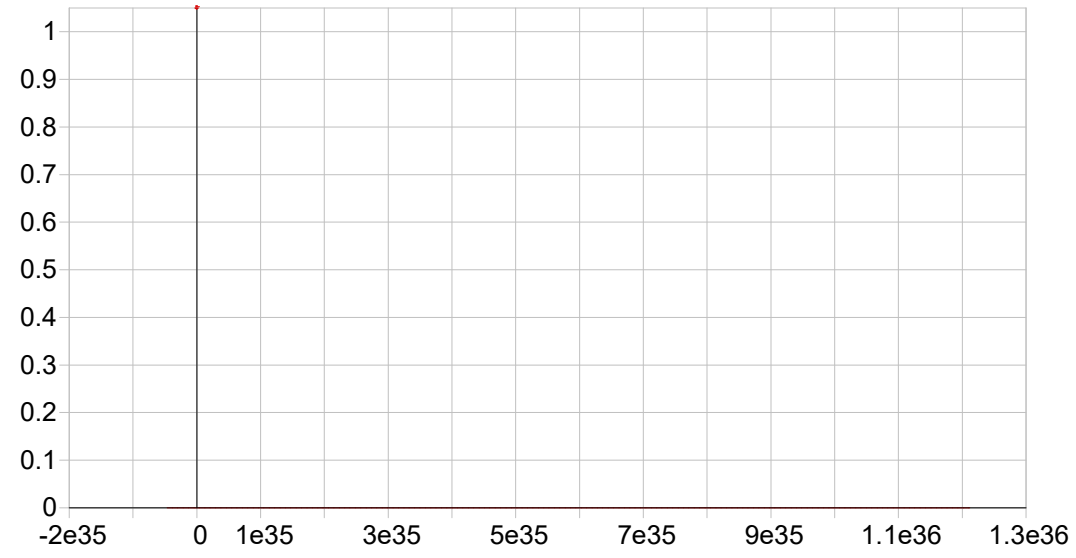


Y 224.306 {150}*

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

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

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



In 230.606 {446}*

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

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

Reviewed By:
On:
Inst Id :P4
LB :LB136511

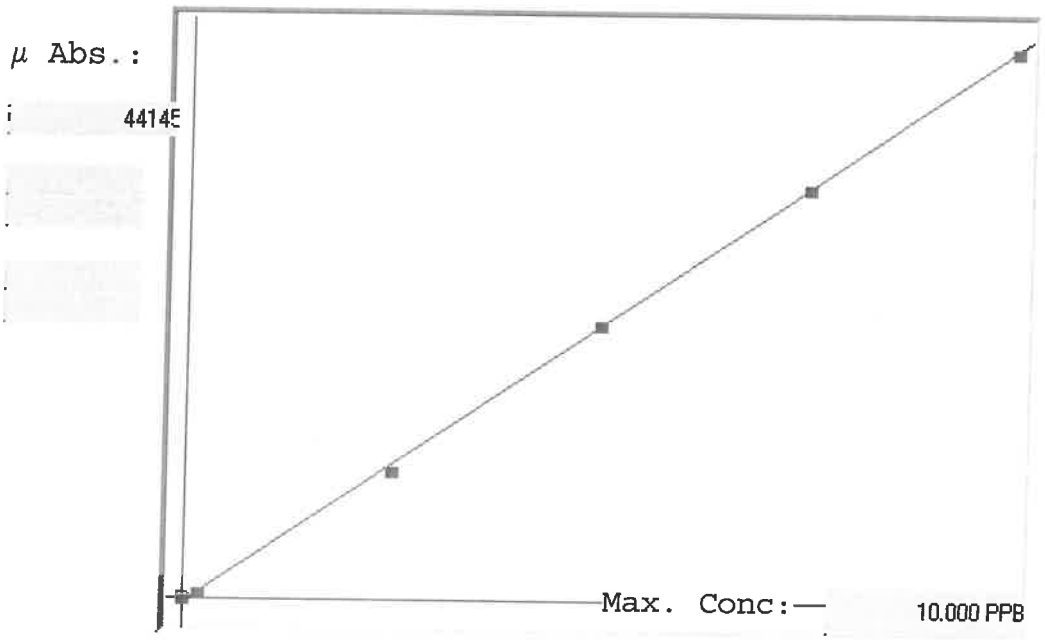
A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.000000		Status:	Warning	Zero Gain	
Std Error of Est:		0.000000					
Predicted MDL:		n/a					
Predicted MQL:		n/a					
Std. Name	**Stated Conc.**	**Found Conc.**	**Difference**	**% Diff.**	**(S)IR**	**Std Dev**	**Emphasis**

LB136403

7470A

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 2.2511e-004

C= 6.6536e-002

Rho= 0.9999104

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	%D
0.0	0.000	0.060	0.060	-29	0.000	-29	0				1
0.2	0.200	0.198	-0.002	583	0.0 %	583					1
2.5	2.500	2.401	-0.099	10370	0.0 %	10370					4
5.0	5.000	5.034	0.034	22069	0.0 %	22069					1
7.5	7.500	7.503	0.003	33035	0.0 %	33035					0
10.0	10.000	10.004	0.004	44145	0.0 %	44145					0

LB136403 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 09 Jul 2025 10:58:20

Sample ID	Extended ID	µ Abs	Conc	Stnd Conc	Method	Units	Date	Type	Type	B	C	Rho
0.0 - 1		-29	-	0.0000	7470A	PPB	09 Jul 2025 11:26:42	S	Std	-	-	-
0.2 - 1		583	-	0.2000	7470A	PPB	09 Jul 2025 11:28:59	S	Std	-	-	-
2.5 - 1		10370	-	2.5000	7470A	PPB	09 Jul 2025 11:31:32	S	Std	-	-	-
5.0 - 1		22069	-	5.0000	7470A	PPB	09 Jul 2025 11:33:49	S	Std	-	-	-
7.5 - 1		33035	-	7.5000	7470A	PPB	09 Jul 2025 11:36:06	S	Std	-	-	-
10.0 - 1		44145	-	10.0000	7470A	PPB	09 Jul 2025 11:38:24	S	Std	-	-	-
ICV22 - 1	ICV22	17742	4.0604		7470A	PPB	09 Jul 2025 11:43:56	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
ICB22 - 1	ICB22	-283	0.0073		7470A	PPB	09 Jul 2025 11:46:13	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCV70 - 1	CCV70	22327	5.0825		7470A	PPB	09 Jul 2025 11:48:35	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCB70 - 1	CCB70	-406	-0.0249		7470A	PPB	09 Jul 2025 11:50:50	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CRA - 1	CRA	499	0.1789		7470A	PPB	09 Jul 2025 11:53:08	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
HighStd - 1	HighStd	45280	10.2594		7470A	PPB	09 Jul 2025 11:55:26	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
ChkStd - 1	ChkStd	30698	6.9769		7470A	PPB	09 Jul 2025 11:57:43	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
PB168760BL - 1	PBW	-716	-0.0946		7470A	PPB	09 Jul 2025 12:00:01	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
PB168760BS - 1	LCSW	15755	3.6131		7470A	PPB	09 Jul 2025 12:02:20	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-01 - 1	G4(0-6)	-634	-0.0762		7470A	PPB	09 Jul 2025 12:04:37	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-02 - 1	G4(6-12)	221	0.1163		7470A	PPB	09 Jul 2025 12:06:55	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-03 - 1	G3(0-6)	-121	0.0393		7470A	PPB	09 Jul 2025 12:09:12	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-04 - 1	G3(6-12)	176	0.1062		7470A	PPB	09 Jul 2025 12:11:31	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-05 - 1	G2(0-6)	-140	0.0350		7470A	PPB	09 Jul 2025 12:13:49	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCV71 - 1	CCV71	21517	4.9102		7470A	PPB	09 Jul 2025 12:16:25	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCB71 - 1	CCB71	-382	-0.0150		7470A	PPB	09 Jul 2025 12:18:43	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-06 - 1	G2(6-12)	427	0.1627		7470A	PPB	09 Jul 2025 12:20:58	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-07 - 1	G1(0-6)	-175	0.0271		7470A	PPB	09 Jul 2025 12:23:16	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-08 - 1	G1(6-12)	423	0.1618		7470A	PPB	09 Jul 2025 12:25:32	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-08DUP - 1	G1(6-12)DUP	588	0.1944		7470A	PPB	09 Jul 2025 12:27:51	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-08MS - 1	G1(6-12)MS	14823	3.4033		7470A	PPB	09 Jul 2025 12:30:10	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-08MSD - 1	G1(6-12)MSD	14832	3.4053		7470A	PPB	09 Jul 2025 12:32:27	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
PB168766BL - 1	PBW	-354	-0.0132		7470A	PPB	09 Jul 2025 12:34:46	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
PB168766BS - 1	LCSW	18821	4.3033		7470A	PPB	09 Jul 2025 12:37:05	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2503-01 - 1	GCAP2W	346914	78.1595		7470A	PPB	09 Jul 2025 12:39:24	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2509-01 - 1	AUD-25-0110-0111	913	0.2721		7470A	PPB	09 Jul 2025 12:41:43	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCV72 - 1	CCV72	22011	5.0214		7470A	PPB	09 Jul 2025 12:48:24	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCB72 - 1	CCB72	-342	-0.0105		7470A	PPB	09 Jul 2025 12:56:43	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2509-01DUP - 1	AUD-25-0110-0111DUP	862	0.2606		7470A	PPB	09 Jul 2025 12:58:58	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2509-01MS - 1	AUD-25-0110-0111MS	10798	2.4975		7470A	PPB	09 Jul 2025 13:01:17	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2509-01MSD - 1	AUD-25-0110-0111MSD	10906	2.5216		7470A	PPB	09 Jul 2025 13:07:28	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
PB168728TB - 1	PB168728TB	-513	-0.0489		7470A	PPB	09 Jul 2025 13:09:43	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-08LX5 - 1		156	0.1017		7470A	PPB	09 Jul 2025 13:12:02	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2489-08A - 1		15410	3.5354		7470A	PPB	09 Jul 2025 13:14:21	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2509-01LX5 - 1		91	0.0870		7470A	PPB	09 Jul 2025 13:16:37	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2509-01A - 1		15395	3.5321		7470A	PPB	09 Jul 2025 13:18:55	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
Q2503-01DLX25 - 1		12589	2.9004		7470A	PPB	09 Jul 2025 13:21:14	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCV73 - 1	CCV73	21463	4.8980		7470A	PPB	09 Jul 2025 13:28:45	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
CCB73 - 1	CCB73	-215	0.0181		7470A	PPB	09 Jul 2025 13:31:01	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001
							09 Jul 2025 13:33:20	U	SMPL	2.25108e-004	6.65364e-002	9.99910e-001

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB168744

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

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

Start Digest Date: 07/07/2025 **Time :** 12:30 **Temp :** 96 °C

End Digest Date: 07/07/2025 **Time :** 15:32 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SKG.

Supervisor Signature: JGP

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6005
LFS-2	0.25	M6016
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP85156
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK #1 CELL#50 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/07/25 16:32	SKG. met. lab	JGP / Met lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB168744

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB168728TB	PB168728TB	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	12
PB168744BL	PBW744	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	13
PB168744BS	LCS744	<2	5	25	Colorless	Colorless	Clear	Clear	M6005,M6016	14
Q2489-01	G4(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	15
Q2489-02	G4(6-12)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	16
Q2489-03	G3(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	17
Q2489-04	G3(6-12)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	18
Q2489-05	G2(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	19
Q2489-06	G2(6-12)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	20
Q2489-07	G1(0-6)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	21
Q2489-08	G1(6-12)	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	22
Q2489-08MS	G1(6-12)MS	<2	5	25	Colorless	Colorless	Clear	Clear	M6005,M6016	24
Q2489-08MSD	G1(6-12)MSD	<2	5	25	Colorless	Colorless	Clear	Clear	M6005,M6016	25
Q2489-08DUP	G1(6-12)DUP	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	23

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB168728

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB168728TB	LEB728	09	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1
Q2489-01	G4(0-6)	01	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2489-02	G4(6-12)	02	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-1
Q2489-03	G3(0-6)	03	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2489-04	G3(6-12)	04	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-1
Q2489-05	G2(0-6)	05	100.04	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q2489-06	G2(6-12)	06	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q2489-07	G1(0-6)	07	100.02	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q2489-08	G1(6-12)	08	100.01	2000	N/A	N/A	N/A	6.0	1.5	T-1

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB168760

SOP ID : M7470A-Mercury-20

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : NA

pH Strip ID : M6069

Hood ID : #1

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

Start Digest Date: 07/08/2025 **Time :** 08:10 **Temp :** 94 °C

End Digest Date: 07/08/2025 **Time :** 10:10 **Temp :** 94 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: JZ

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP86312
CCV	30mL	MP86314
CRA	30mL	MP86316
Blank Spike	0.48mL	MP86305
Matrix Spike	0.48mL	MP86305

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.25mL	MP85892
KMnO4 (5%)	4.5mL	MP85893
K2S2O8 (5%)	2.4mL	MP85894
Hydroxylamine HCL (12%)	1.8mL	MP85895
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	MP86306
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP86307
2.5 ppb	S2.5	30mL	MP86308
5.0 ppb	S5.0	30mL	MP86309
7.5 ppb	S7.5	30mL	MP86310
10.0 ppb	S10.0	30mL	MP86311
ICV	ICV	30mL	MP86312
ICB	ICB	30mL	MP86313
CCV	CCV	30mL	MP86314
CCB	CCB	30mL	MP86315
CRI	CRI	30mL	MP86316
CHK STD	CHK STD	30mL	1MP86317

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
7/8/25 @ 16:46	MB - Dig. Lab	MB - Metal Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB168760

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB168728TB	PB168728TB	3	30	<2	N/A	3-1
~~PB168755TB~~	~~PB168755TB~~	~~3~~	~~30~~	~~<2~~	~~N/A~~	~~2~~
PB168760BL	PBW760	30	30	<2	N/A	3
PB168760BS	LCS760	30	30	<2	MP86305	4
Q2489-01	G4(0-6)	3	30	<2	N/A	5
Q2489-02	G4(6-12)	3	30	<2	N/A	6
Q2489-03	G3(0-6)	3	30	<2	N/A	7
Q2489-04	G3(6-12)	3	30	<2	N/A	8
Q2489-05	G2(0-6)	3	30	<2	N/A	9
Q2489-06	G2(6-12)	3	30	<2	N/A	10
Q2489-07	G1(0-6)	3	30	<2	N/A	11
Q2489-08	G1(6-12)	3	30	<2	N/A	12
Q2489-08DUP	G1(6-12)DUP	3	30	<2	N/A	13
Q2489-08MS	G1(6-12)MS	3	30	<2	MP86305	14
Q2489-08MSD	G1(6-12)MSD	3	30	<2	MP86305	15

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB168728

SOP ID : M1311-TCLP-16

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-1

TCLP Filter ID : 115525

Start Prep Date : 07/03/2025 **Time :** 15:00

End Prep Date : 07/04/2025 **Time :** 08:20

Combination Ratio : 20

ZHE Cleaning Batch : ~~N/A~~ 10

Initial Room Temperature: 24 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : JP

Standared Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP112795
HCL-TCLP,1N	N/A	WP112797
HNO3-TCLP,1N	N/A	WP112799
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1940,W1941,W1942	W3166,W1938,W1939,
1 Liter Amber	N/A	90924-08
120ml Plastic bottle	N/A	2738
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. TUMBLER T-1 checked,30 rpm. q2489-08 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/07/25 11:00	JP Tech Room	SKG RJ 1GHT
	Preparation Group	Analysis Group Inorg.

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 # LB136403

Review By	MOHAN	Review On	7/10/2025 9:48:52 AM
Supervise By	jaswal	Supervise On	7/10/2025 11:31:40 PM

STD. NAME	STD REF.#
ICAL Standard	MP86306,MP86307,MP86308,MP86309,MP86310,MP86311
ICV Standard	MP86312
CCV Standard	MP86314
ICSA Standard	
CRI Standard	MP86316
LCS Standard	
Chk Standard	MP86313,MP86315,MP86317,MP86335

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	07/09/25 11:26		MOHAN	OK
2	S0.2	S0.2	CAL2	07/09/25 11:28		MOHAN	OK
3	S2.5	S2.5	CAL3	07/09/25 11:31		MOHAN	OK
4	S5	S5	CAL4	07/09/25 11:33		MOHAN	OK
5	S7.5	S7.5	CAL5	07/09/25 11:36		MOHAN	OK
6	S10	S10	CAL6	07/09/25 11:38		MOHAN	OK
7	ICV22	ICV22	ICV	07/09/25 11:43		MOHAN	OK
8	ICB22	ICB22	ICB	07/09/25 11:46		MOHAN	OK
9	CCV70	CCV70	CCV	07/09/25 11:48		MOHAN	OK
10	CCB70	CCB70	CCB	07/09/25 11:50		MOHAN	OK
11	CRA	CRA	CRDL	07/09/25 11:53		MOHAN	OK
12	HighStd	HighStd	HIGH STD	07/09/25 11:55		MOHAN	OK
13	ChkStd	ChkStd	SAM	07/09/25 11:57		MOHAN	OK
14	PB168760BL	PB168760BL	MB	07/09/25 12:00		MOHAN	OK
15	PB168760BS	PB168760BS	LCS	07/09/25 12:02		MOHAN	OK
16	Q2489-01	G4(0-6)	SAM	07/09/25 12:04		MOHAN	OK
17	Q2489-02	G4(6-12)	SAM	07/09/25 12:06		MOHAN	OK
18	Q2489-03	G3(0-6)	SAM	07/09/25 12:09		MOHAN	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136403

Review By	MOHAN	Review On	7/10/2025 9:48:52 AM
Supervise By	jaswal	Supervise On	7/10/2025 11:31:40 PM

STD. NAME	STD REF.#
ICAL Standard	MP86306,MP86307,MP86308,MP86309,MP86310,MP86311
ICV Standard	MP86312
CCV Standard	MP86314
ICSA Standard	
CRI Standard	MP86316
LCS Standard	
Chk Standard	MP86313,MP86315,MP86317,MP86335

19	Q2489-04	G3(6-12)	SAM	07/09/25 12:14		MOHAN	OK
20	Q2489-05	G2(0-6)	SAM	07/09/25 12:16		MOHAN	OK
21	CCV71	CCV71	CCV	07/09/25 12:18		MOHAN	OK
22	CCB71	CCB71	CCB	07/09/25 12:20		MOHAN	OK
23	Q2489-06	G2(6-12)	SAM	07/09/25 12:23		MOHAN	OK
24	Q2489-07	G1(0-6)	SAM	07/09/25 12:25		MOHAN	OK
25	Q2489-08	G1(6-12)	SAM	07/09/25 12:27		MOHAN	OK
26	Q2489-08DUP	G1(6-12)DUP	DUP	07/09/25 12:30		MOHAN	OK
27	Q2489-08MS	G1(6-12)MS	MS	07/09/25 12:32		MOHAN	OK
28	Q2489-08MSD	G1(6-12)MSD	MSD	07/09/25 12:34		MOHAN	OK
29	PB168766BL	PB168766BL	MB	07/09/25 12:37		MOHAN	OK
30	PB168766BS	PB168766BS	LCS	07/09/25 12:39		MOHAN	OK
31	Q2503-01	GCAP2W	SAM	07/09/25 12:41	Hg is high	MOHAN	Dilution
32	Q2509-01	AUD-25-0110-0111	SAM	07/09/25 12:48		MOHAN	OK
33	CCV72	CCV72	CCV	07/09/25 12:56		MOHAN	OK
34	CCB72	CCB72	CCB	07/09/25 12:58		MOHAN	OK
35	Q2509-01DUP	AUD-25-0110-0111DU	DUP	07/09/25 13:01		MOHAN	OK
36	Q2509-01MS	AUD-25-0110-0111MS	MS	07/09/25 13:07		MOHAN	OK
37	Q2509-01MSD	AUD-25-0110-0111MS	MSD	07/09/25 13:09		MOHAN	OK
38	PB168728TB	PB168728TB	MB	07/09/25 13:12		MOHAN	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB136403

Review By	MOHAN	Review On	7/10/2025 9:48:52 AM
Supervise By	jaswal	Supervise On	7/10/2025 11:31:40 PM

STD. NAME	STD REF.#
ICAL Standard	MP86306,MP86307,MP86308,MP86309,MP86310,MP86311
ICV Standard	MP86312
CCV Standard	MP86314
ICSA Standard	
CRI Standard	MP86316
LCS Standard	
Chk Standard	MP86313,MP86315,MP86317,MP86335

39	Q2489-08L	G1(6-12)L	SD	07/09/25 13:14		MOHAN	OK
40	Q2489-08A	G1(6-12)A	PS	07/09/25 13:16		MOHAN	OK
41	Q2509-01L	AUD-25-0110-0111L	SD	07/09/25 13:18		MOHAN	OK
42	Q2509-01A	AUD-25-0110-0111A	PS	07/09/25 13:21		MOHAN	OK
43	Q2503-01DL	GCAP2WDL	SAM	07/09/25 13:28	25X for Hg	MOHAN	Confirms
44	CCV73	CCV73	CCV	07/09/25 13:31		MOHAN	OK
45	CCB73	CCB73	CCB	07/09/25 13:33		MOHAN	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136511

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	07/16/25 12:55		Jaswal	OK
2	S1	S1	CAL2	07/16/25 13:00		Jaswal	OK
3	S2	S2	CAL3	07/16/25 13:04		Jaswal	OK
4	S3	S3	CAL4	07/16/25 13:08		Jaswal	OK
5	S4	S4	CAL5	07/16/25 13:12		Jaswal	OK
6	S5	S5	CAL6	07/16/25 13:16		Jaswal	OK
7	ICV01	ICV01	ICV	07/16/25 13:21	ICV fail for Pb,Na (200.7) (95-105)	Jaswal	OK
8	LLICV01	LLICV01	LLICV	07/16/25 13:53		Jaswal	OK
9	ICB01	ICB01	ICB	07/16/25 14:11		Jaswal	OK
10	CRI01	CRI01	CRDL	07/16/25 14:22		Jaswal	OK
11	ICSA01	ICSA01	ICSA	07/16/25 14:26		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	07/16/25 14:38		Jaswal	OK
13	ICSADL	ICSADL	ICSA	07/16/25 14:43		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	07/16/25 14:47		Jaswal	OK
15	CCV01	CCV01	CCV	07/16/25 14:53	CCV fail for Na	Jaswal	OK
16	CCB01	CCB01	CCB	07/16/25 14:57		Jaswal	OK
17	PB168761TB	PB168761TB	MB	07/16/25 15:01		Jaswal	OK
18	PB168728TB	PB168728TB	MB	07/16/25 15:08		Jaswal	OK

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Fax : 908 789 8922

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136511

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	Q2489-08	G1(6-12)	SAM	07/16/25 15:13		Jaswal	OK
20	Q2489-08DUP	G1(6-12)DUP	DUP	07/16/25 15:17		Jaswal	OK
21	Q2489-08L	G1(6-12)L	SD	07/16/25 15:22		Jaswal	OK
22	Q2489-08MS	G1(6-12)MS	MS	07/16/25 15:26		Jaswal	OK
23	Q2489-08MSD	G1(6-12)MSD	MSD	07/16/25 15:30		Jaswal	OK
24	Q2489-08A	G1(6-12)A	PS	07/16/25 15:34		Jaswal	OK
25	CCV02	CCV02	CCV	07/16/25 15:39	CCV fail for Na	Jaswal	OK
26	CCB02	CCB02	CCB	07/16/25 15:43		Jaswal	OK
27	Q2593-02	002 35th AVE (MAY)	SAM	07/16/25 15:48		Jaswal	OK
28	Q2593-02DUP	002 35th AVE (MAY)D	DUP	07/16/25 15:57		Jaswal	OK
29	Q2593-02L	002 35th AVE (MAY)L	SD	07/16/25 16:01		Jaswal	OK
30	Q2593-02MS	002 35th AVE (MAY)M	MS	07/16/25 16:05		Jaswal	OK
31	Q2593-02MSD	002 35th AVE (MAY)M	MSD	07/16/25 16:09		Jaswal	OK
32	Q2593-02A	002 35th AVE (MAY)A	PS	07/16/25 16:13		Jaswal	OK
33	PB168843BL	PB168843BL	MB	07/16/25 16:17		Jaswal	OK
34	PB168843BS	PB168843BS	LCS	07/16/25 16:21		Jaswal	OK
35	CCV03	CCV03	CCV	07/16/25 16:25	CCV fail for Na	Jaswal	OK
36	CCB03	CCB03	CCB	07/16/25 16:30		Jaswal	OK
37	Q2578-03	WC-A5-01-C	SAM	07/16/25 16:46		Jaswal	OK
38	Q2578-07	WC-A2-09-C	SAM	07/16/25 16:50		Jaswal	OK

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Fax : 908 789 8922

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136511

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	

39	Q2578-11	WC-A2-10-C	SAM	07/16/25 16:54		Jaswal	OK
40	Q2578-15	WC-A2-11-C	SAM	07/16/25 16:59		Jaswal	OK
41	Q2578-19	WC-A2-12-C	SAM	07/16/25 17:05		Jaswal	OK
42	Q2579-03	WC-A2-13-C	SAM	07/16/25 17:10		Jaswal	OK
43	Q2579-07	WC-A2-14-C	SAM	07/16/25 17:14		Jaswal	OK
44	PB168803TB	PB168803TB	MB	07/16/25 17:18		Jaswal	OK
45	Q2561-07	AUD-25-0117	SAM	07/16/25 17:23		Jaswal	OK
46	Q2565-06	MOO-25-0194-0195	SAM	07/16/25 17:27		Jaswal	OK
47	CCV04	CCV04	CCV	07/16/25 17:32	CCV fail for Na	Jaswal	OK
48	CCB04	CCB04	CCB	07/16/25 17:40		Jaswal	OK
49	Q2565-07	MOO-25-0191	SAM	07/16/25 17:44		Jaswal	OK
50	Q2565-08	MOO-25-0196	SAM	07/16/25 17:49		Jaswal	OK
51	Q2565-09	MOO-25-0180	SAM	07/16/25 17:53		Jaswal	OK
52	Q2571-04	TP-18	SAM	07/16/25 17:58		Jaswal	OK
53	Q2571-08	TP-17	SAM	07/16/25 18:02		Jaswal	OK
54	Q2586-04	TP-16	SAM	07/16/25 18:06		Jaswal	OK
55	Q2586-04DUP	TP-16DUP	DUP	07/16/25 18:11		Jaswal	OK
56	Q2586-04L	TP-16L	SD	07/16/25 18:15		Jaswal	OK
57	Q2586-04MS	TP-16MS	MS	07/16/25 18:20		Jaswal	OK
58	Q2586-04MSD	TP-16MSD	MSD	07/16/25 18:24		Jaswal	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 # LB136511

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	

59	CCV05	CCV05	CCV	07/16/25 18:28	CCV fail for Na	Jaswal	OK
60	CCB05	CCB05	CCB	07/16/25 18:35		Jaswal	OK
61	Q2586-04A	TP-16A	PS	07/16/25 18:39		Jaswal	OK
62	PB168857BL	PB168857BL	MB	07/16/25 18:43		Jaswal	OK
63	PB168857BS	PB168857BS	LCS	07/16/25 18:47		Jaswal	OK
64	CCV06	CCV06	CCV	07/16/25 18:51	CCV fail for Na	Jaswal	OK
65	CCB06	CCB06	CCB	07/16/25 18:56		Jaswal	OK

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

Instrument ID:

Daily Analysis Runlog For Sequence/QCBatch ID

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

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB168728

SOP ID : M1311-TCLP-16

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-1

TCLP Filter ID : 115525

Start Prep Date : 07/03/2025 **Time :** 15:00

End Prep Date : 07/04/2025 **Time :** 08:20

Combination Ratio : 20

ZHE Cleaning Batch : ~~N/A~~ 10

Initial Room Temperature: 24 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : JZ

Standared Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP112795
HCL-TCLP,1N	N/A	WP112797
HNO3-TCLP,1N	N/A	WP112799
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1940,W1941,W1942	W3166,W1938,W1939,
1 Liter Amber	N/A	90924-08
120ml Plastic bottle	N/A	2738
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. TUMBLER T-1 checked,30 rpm. q2489-08 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/07/25 11:00	JP Tech Room	SKG. RJ 1GHT
	Preparation Group	**Analysis Group** INORG.

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB168728

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB168728TB	LEB728	09	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1
Q2489-01	G4(0-6)	01	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2489-02	G4(6-12)	02	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-1
Q2489-03	G3(0-6)	03	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2489-04	G3(6-12)	04	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-1
Q2489-05	G2(0-6)	05	100.04	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q2489-06	G2(6-12)	06	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q2489-07	G1(0-6)	07	100.02	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q2489-08	G1(6-12)	08	100.01	2000	N/A	N/A	N/A	6.0	1.5	T-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB168728TB	LEB728	N/A	N/A	N/A	N/A	N/A	N/A
Q2489-01	G4(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-02	G4(6-12)	N/A	N/A	N/A	N/A	100	N/A
Q2489-03	G3(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-04	G3(6-12)	N/A	N/A	N/A	N/A	100	N/A
Q2489-05	G2(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-06	G2(6-12)	N/A	N/A	N/A	N/A	100	N/A
Q2489-07	G1(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-08	G1(6-12)	N/A	N/A	N/A	N/A	100	N/A

Alliance TECHNICAL GROUP

TCLP Fluid Determination

PB168728

Hot Block ID : WC S-1 / WC S-2

Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB168728TB	LEB728	N/A	N/A	N/A	N/A	#1	4.93
Q2489-01	G4(0-6)	5.02	96.5	7.6	2.5	#1	4.93
Q2489-02	G4(6-12)	5.01	96.5	8.0	3.0	#1	4.93
Q2489-03	G3(0-6)	5.02	96.5	8.0	3.0	#1	4.93
Q2489-04	G3(6-12)	5.03	96.5	8.0	3.0	#1	4.93
Q2489-05	G2(0-6)	5.04	96.5	9.0	3.5	#1	4.93
Q2489-06	G2(6-12)	5.03	96.5	8.0	3.0	#1	4.93
Q2489-07	G1(0-6)	5.02	96.5	9.2	3.5	#1	4.93
Q2489-08	G1(6-12)	5.01	96.5	8.6	3.0	#1	4.93

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB168755

SOP ID : M1312-SPLP-10

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-2

TCLP Filter ID : 115525

Start Prep Date : 07/08/2025 **Time :** 14:00

End Prep Date : 07/09/2025 **Time :** 07:15

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 23 °C

Final Room Temperature: 22 °C

TCLP Technician Signature :

Supervisor By : 12

Standared Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
SPLP FLUID	WP112802	N/A
N/A	N/A	N/A
HNO3-TCLP,1N	N/A	WP112799
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	N/A	W3166,W1938,W1939,
1 Liter Amber	N/A	90924-08
120ml Plastic bottle	N/A	2738
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Tumbler T-2 checked,30 rpm. Matrix spikes are added after fiftration and before preservation. Particle size reduction is not required.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/09/25 11:00		Lab Room
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

SPLP EXTRACTION LOGPAGE

PB168755

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB168755TB	LEB755	19	N/A	2000	N/A	N/A	N/A	4.24	1.0	T-2
Q2489-01	G4(0-6)	11	100.02	2000	N/A	N/A	N/A	7.0	1.0	T-2
Q2489-02	G4(6-12)	12	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-2
Q2489-03	G3(0-6)	13	100.02	2000	N/A	N/A	N/A	7.0	1.5	T-2
Q2489-04	G3(6-12)	14	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q2489-05	G2(0-6)	15	100.04	2000	N/A	N/A	N/A	7.0	1.0	T-2
Q2489-06	G2(6-12)	16	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q2489-07	G1(0-6)	17	100.01	2000	N/A	N/A	N/A	7.0	1.0	T-2
Q2489-08	G1(6-12)	18	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB168755TB	LEB755	N/A	N/A	N/A	N/A	N/A	N/A
Q2489-01	G4(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-02	G4(6-12)	N/A	N/A	N/A	N/A	100	N/A
Q2489-03	G3(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-04	G3(6-12)	N/A	N/A	N/A	N/A	100	N/A
Q2489-05	G2(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-06	G2(6-12)	N/A	N/A	N/A	N/A	100	N/A
Q2489-07	G1(0-6)	N/A	N/A	N/A	N/A	100	N/A
Q2489-08	G1(6-12)	N/A	N/A	N/A	N/A	100	N/A

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SPLP Fluid Determination

PB168755

Hot Block ID : WC S-1 / WC S-2

Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB168755TB	LEB755	N/A	N/A	N/A	N/A	#1	4.24
Q2489-01	G4(0-6)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-02	G4(6-12)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-03	G3(0-6)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-04	G3(6-12)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-05	G2(0-6)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-06	G2(6-12)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-07	G1(0-6)	N/A	N/A	N/A	N/A	#1	4.24
Q2489-08	G1(6-12)	N/A	N/A	N/A	N/A	#1	4.24

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Prep Standard - Chemical Standard Summary

Order ID : Q2489

Test : TCLP ICP Metals,TCLP Mercury

Prepbatch ID : PB168744,PB168760,

Sequence ID/Qc Batch ID: LB136403,LB136511,LB136519,

Standard ID :
MP85156,MP85892,MP85893,MP85894,MP85895,MP86305,MP86306,MP86307,MP86308,MP86309,MP86310,MP86311,MP86312,MP86313,MP86314,MP86315,MP86316,MP86317,MP86335,

Chemical ID :
M4371,M4465,M4916,M5062,M5882,M5884,M6005,M6016,M6041,M6151,M6158,M6161,M6162,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP85156	04/07/2025	08/18/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP85892	06/05/2025	11/27/2025	Mohan Bera	None	None	Sarabjit Jaswal 06/14/2025

FROM 1600.00000ml of M6041 + 800.00000ml of M6162 = Final Quantity: 3200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP85893	06/05/2025	12/05/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/14/2025

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP85894	06/05/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/14/2025

FROM 100.00000ml of M4465 + 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
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP85895	06/05/2025	08/08/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 06/14/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP86305	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 07/09/2025

FROM 1.00000ml of M6162 + 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	MP86306	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 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	MP86307	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 247.30000ml of W3112 + 0.20000ml of MP86305 = 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	MP86308	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 245.00000ml of W3112 + 2.50000ml of MP86305 = 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	MP86309	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 242.50000ml of W3112 + 5.00000ml of MP86305 = 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	MP86310	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 240.00000ml of W3112 + 7.50000ml of MP86305 = 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	MP86311	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 237.50000ml of W3112 + 10.00000ml of MP86305 = 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	MP86312	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6161 + 2.50000ml of M6162 + 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)	MP86313	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 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)	MP86314	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6162 + 10.00000ml of MP86305 = 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)	MP86315	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6162 = 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)	MP86316	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 247.30000ml of W3112 + 0.20000ml of MP86305 = 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)	MP86317	07/08/2025	07/09/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 07/09/2025

FROM 2.50000ml of M6162 + 242.50000ml of W3112 + 7.00000ml of MP86305 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP86335	07/09/2025	07/10/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 07/16/2025

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-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 /	07/25/2019 / manojkumar	M4465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	T2-MEB723367	08/30/2026	04/15/2025 / JANVI	05/14/2024 / Jaswal	M6005

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	10/30/2025	04/30/2025 / mohan	05/14/2024 / Jaswal	M6016

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV 5 0415	07/31/2025	05/01/2025 / mohan	03/30/2024 / mohan	M6161

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24H0162012	11/27/2025	05/27/2025 / Sagar	04/27/2025 / Sagar	M6162

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

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Fair Lawn, NJ 07410
201.796.7100 tel
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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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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

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

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

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

Assay Information:

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2023

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

11.2 Lot Expiration Date

- March 17, 2028

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

M4371

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

Rec – 06.07.19

J.T.Baker® | avantor™

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

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

ThermoFisher SCIENTIFIC

M4913-16

MB

Certificate of Analysis

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

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

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

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

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

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

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

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Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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M5062
M5063
M3

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

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

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

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

Assay Information:

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

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

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

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

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

Chemical Compatibility - Stable in 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

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MT884
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

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

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

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

James T Ethier

Jamie Ethier
Vice President Global Quality

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

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

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
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

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

Test	Specification	Result

For Microelectronic Use

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

Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

m-5162

R. Date :- 04/27/2025

Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
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	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	0.1 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	< 1 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 1 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 1.0 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	< 1.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	13 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result

For Microelectronic Use

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

Jamie Croak
Director Quality Operations, Bioscience Production

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

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

ALLIANCE PROJECT NO. Q 2489
QUOTE NO. ~~2489~~ 25
COC Number 2046744

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Walsh Construction
ADDRESS: 150 Clove Rd, 11th Floor
CITY Little Falls STATE: NJ ZIP: 07424
ATTENTION: Benie Dion Gokcen
PHONE: 646-285-7234 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Construction of Shafts 7B+8B
PROJECT NO.: 220084 LOCATION: Queens, NY
PROJECT MANAGER: Jesse Sylvestri
e-mail: jsylvestri@walshgroup.com
PHONE: 201-681-9740 FAX:

CLIENT BILLING INFORMATION

BILL TO: Walsh Construction PO#:
ADDRESS: 150 Clove Rd, 11th Floor
CITY Little Falls STATE: NJ ZIP: 07424
ATTENTION: Jesse Sylvestri PHONE: 201-681-9740

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1: TCL VOCs + TICs, TCL SVOCs + TICs
2: TCL VOCs + TICs
3: TAL Metals + Mercury (CLP), TAL Cyanide, Total Cyanide, Tri + Hex Chromium
4: TPH
5: Pest/Herb/PCBs
6: SPLP Metals, Pest/Herb, SVOCs
7: TCLP Metals, Pest/Herb, SVOCs
8: NJ EPH (Low), TPH (Low)
9: RCRA Characteristics (Ignitability, Corrosivity, Reactivity)

* See add'l analyses in comments

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES F+E 1	E 2	E 3	E 4	E 5	E 6	E 7	E 8	E 9	COMMENTS
1.	G4(1.5)	Soil		X	7/1/25	1025	6	X									3x vials (terracore set)
2.	G4(10)			X		1045		X									+ 2x encores +
3.	G3(9)			X		1150		X									1x plastic
4.	G3(3)			X		1200		X									
5.	G2(2.5)			X		1325		X									
6.	G2(9)			X		1330		X									
7.	G1(4.5)			X		1430		X									3x vials (terracore set)
8.	G1(10)			X		1440		X									1x 8oz + 1x plastic + 1x encore
9.	G4(0-6)		X			1100	7		X	X	X	X	X	X	X	X	7x 8 oz jars
10.	G4(6-12)		X			1110			X	X	X	X	X	X	X	X	

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	7/1/25 1600	1. Benie DG
2. Benie DG	7-1-25 1600	2. 7-1-25 1600
3.	7-1-25 1818	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.3 °C
Comments: Full analyte list in B. Gokcen email on 6/26/25 to J. Hedvat
See Bottle Order # B2506068 & B2506069
Add'l analyses – Paint Filter, Organic Content by LOI, TS, TVS, Ammonia & Nitrogen, COD, O:I & Grease

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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

Alliance TECHNICAL GROUP

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

ALLIANCE PROJECT NO. / QUOTE NO. Q2489 M
COC Number 2047536

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Walsh Construction
ADDRESS: 150 Clove Rd, 11th Floor
CITY Little Falls STATE: NJ ZIP: 07424
ATTENTION: Bernie Dion Gokcan
PHONE: 646-285-7234 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Construction of Shafts 17B+18B
PROJECT NO.: 220084 LOCATION: Queens, NY
PROJECT MANAGER: Jesse Sylvestri
e-mail: jsylvestri@walshgroup.com
PHONE: 201-681-9740 FAX:

CLIENT BILLING INFORMATION

BILL TO: Walsh Construction PO#:
ADDRESS: 150 Clove Rd, 11th Floor
CITY Little Falls STATE: NJ ZIP: 07424
ATTENTION: Jesse Sylvestri PHONE: 201-681-9740

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1. TCL VOCs + TICs
2. TCL + STARS VOCs
3. TCL SVOCs + TICs
4. TAL Metals + Mercury (RCRA + Be, Cu, Ni, Zn, Ag, Tl)
5. Total Cyanide
6. TAL Hex Chromium
7. Pest/Herb/PCBs
8. SPLP Metals, TCLP Metals, VOCs, Pest/Herb
9. TCLP Metals, SVOCs, Metals, Pest/Herb
10. NJ GRP
11. TPH (NJEPH or GRO)
12. RCRA Characteristics (Reactivity, Corrosivity, Ignitability)

*see add'l analyses in comments

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES F+E	1	2	3	4	5	6	7	8	9	COMMENTS
1.	G3 (0-6)	Soil	X		7/1/25	1235	7			X	X	X	X	X	X	X	X	7x 8 oz jars
2.	G3 (6-12)	↓	↓		↓	1245	↓											
3.	G2 (0-6)					1350												
4.	G2 (6-12)					1400												
5.	G1 (0-6)					1410												
6.	G1 (6-12)	↓	↓		↓	1420	↓											
7.																		
8.																		
9.																		
10.																		

PRESERVATIVES

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

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	7/1/25 1600	1. Bernie DG
2. Bernie DG	7-1-25	2. 1600 7-1-25
3.	7/1/25 1818	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.9 °C

Comments: Full analyte list in B. Gokcan email on 6/26/25 to J. Heaney
See Bottle Order #B2506068 & B2506069
Add'l analyses - Paint Filter, Organic Content by LOI, TS, TVS, Ammonia & Nitrogen, COD, Oil & Grease

Page 2 of 2

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