

Hit Summary Sheet SW-846

SDG No.:	Q2177	Order ID:	Q2177
Client:	Portal Partners Tri-Venture	Project ID:	Amtrak Sawtooth Bridges 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : B-187-SB01								
Q2177-03	B-187-SB01	TCLP	Barium	985		72.8	500	ug/L
Q2177-03	B-187-SB01	TCLP	Chromium	17.7	J	10.6	50.0	ug/L
Q2177-03	B-187-SB01	TCLP	Lead	581		11.5	60.0	ug/L
Client ID : B-187-SB02								
Q2177-05	B-187-SB02	TCLP	Barium	1000		72.8	500	ug/L
Q2177-05	B-187-SB02	TCLP	Lead	29.5	J	11.5	60.0	ug/L
Client ID : B-202-SB01								
Q2177-07	B-202-SB01	TCLP	Barium	804		72.8	500	ug/L
Q2177-07	B-202-SB01	TCLP	Lead	201		11.5	60.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	05/31/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/02/25
Client Sample ID:	B-187-SB01	SDG No.:	Q2177
Lab Sample ID:	Q2177-03	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	06/03/25 12:30	06/04/25 18:23	6010D	SW3050
7440-39-3	Barium	985	N*	1	72.8	500	ug/L	06/03/25 12:30	06/04/25 18:23	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	06/03/25 12:30	06/04/25 18:23	6010D	SW3050
7440-47-3	Chromium	17.7	J	1	10.6	50.0	ug/L	06/03/25 12:30	06/04/25 18:23	6010D	SW3050
7439-92-1	Lead	581		1	11.5	60.0	ug/L	06/03/25 12:30	06/04/25 18:23	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	06/03/25 13:30	06/04/25 11:18	7470A	
7782-49-2	Selenium	48.2	U	1	48.2	100	ug/L	06/03/25 12:30	06/04/25 18:23	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	06/03/25 12:30	06/04/25 18:23	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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	05/31/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/02/25
Client Sample ID:	B-187-SB02	SDG No.:	Q2177
Lab Sample ID:	Q2177-05	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	06/03/25 12:30	06/04/25 18:47	6010D	SW3050
7440-39-3	Barium	1000	N*	1	72.8	500	ug/L	06/03/25 12:30	06/04/25 18:47	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	06/03/25 12:30	06/04/25 18:47	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	06/03/25 12:30	06/04/25 18:47	6010D	SW3050
7439-92-1	Lead	29.5	J	1	11.5	60.0	ug/L	06/03/25 12:30	06/04/25 18:47	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	06/03/25 13:30	06/04/25 11:20	7470A	
7782-49-2	Selenium	48.2	U	1	48.2	100	ug/L	06/03/25 12:30	06/04/25 18:47	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	06/03/25 12:30	06/04/25 18:47	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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	05/31/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	06/02/25
Client Sample ID:	B-202-SB01	SDG No.:	Q2177
Lab Sample ID:	Q2177-07	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	06/03/25 12:30	06/04/25 18:51	6010D	SW3050
7440-39-3	Barium	804	N*	1	72.8	500	ug/L	06/03/25 12:30	06/04/25 18:51	6010D	SW3050
7440-43-9	Cadmium	2.50	U	1	2.50	30.0	ug/L	06/03/25 12:30	06/04/25 18:51	6010D	SW3050
7440-47-3	Chromium	10.6	U	1	10.6	50.0	ug/L	06/03/25 12:30	06/04/25 18:51	6010D	SW3050
7439-92-1	Lead	201		1	11.5	60.0	ug/L	06/03/25 12:30	06/04/25 18:51	6010D	SW3050
7439-97-6	Mercury	0.76	U	1	0.76	2.00	ug/L	06/03/25 13:30	06/04/25 11:22	7470A	
7782-49-2	Selenium	48.2	U	1	48.2	100	ug/L	06/03/25 12:30	06/04/25 18:51	6010D	SW3050
7440-22-4	Silver	8.10	U	1	8.10	50.0	ug/L	06/03/25 12:30	06/04/25 18:51	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



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

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Portal Partners Tri-Venture				SDG No.:	Q2177				
Contract:	PORT06	Lab Code:	CHEM		Case No.:	Q2177		SAS No.:	Q2177	
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number	
ICB26	Mercury	0.076	+/-0.2	U	0.20	CV	06/04/2025	10:30	LB135995	

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB95	Mercury	0.076	+/-0.2	U	0.20	CV	06/04/2025	10:34	LB135995
CCB96	Mercury	0.076	+/-0.2	U	0.20	CV	06/04/2025	11:04	LB135995
CCB97	Mercury	0.076	+/-0.2	U	0.20	CV	06/04/2025	11:31	LB135995
CCB98	Mercury	0.076	+/-0.2	U	0.20	CV	06/04/2025	11:55	LB135995

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177

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	06/04/2025	16:10	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	16:10	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	16:10	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	16:10	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	16:10	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	16:10	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	16:10	LB136011

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture		SDG No.: Q2177							
Contract: PORT06	Lab Code: CHEM	Case No.: Q2177	SAS No.: Q2177						
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	06/04/2025	16:52	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	16:52	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	16:52	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	16:52	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	16:52	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	16:52	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	16:52	LB136011
CCB02	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	17:39	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	17:39	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	17:39	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	17:39	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	17:39	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	17:39	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	17:39	LB136011
CCB03	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	18:42	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	18:42	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	18:42	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	18:42	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	18:42	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	18:42	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	18:42	LB136011
CCB04	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	19:30	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	19:30	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	19:30	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	19:30	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	19:30	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	19:30	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	19:30	LB136011
CCB05	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	20:16	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	20:16	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	20:16	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	20:16	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	20:16	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	20:16	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	20:16	LB136011
CCB06	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	21:02	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	21:02	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	21:02	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	21:02	LB136011

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177

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	06/04/2025	21:02	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	21:02	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	21:02	LB136011
CCB07	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	21:45	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	21:45	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	21:45	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	21:45	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	21:45	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	21:45	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	21:45	LB136011
CCB08	Arsenic	5.12	+/-10	U	20.0	P	06/04/2025	22:10	LB136011
	Barium	14.6	+/-50	U	100	P	06/04/2025	22:10	LB136011
	Cadmium	0.50	+/-3	U	6.00	P	06/04/2025	22:10	LB136011
	Chromium	2.12	+/-5	U	10.0	P	06/04/2025	22:10	LB136011
	Lead	2.30	+/-6	U	12.0	P	06/04/2025	22:10	LB136011
	Selenium	9.64	+/-10	U	20.0	P	06/04/2025	22:10	LB136011
	Silver	1.62	+/-5	U	10.0	P	06/04/2025	22:10	LB136011

Metals
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PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168224TB		WATER		Batch Number:	PB168262		Prep Date:	06/03/2025	
	Mercury	0.76	<2	U	2.00	CV	06/04/2025	11:43	LB135995
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168262BL		WATER		Batch Number:	PB168262		Prep Date:	06/03/2025	
	Mercury	0.076	<0.2	U	0.20	CV	06/04/2025	10:43	LB135995

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168224TB		WATER		Batch Number:	PB168256		Prep Date:	06/03/2025	
	Arsenic	25.6	<50	U	100	P	06/04/2025	18:05	LB136011
	Barium	72.8	<250	U	500	P	06/04/2025	18:05	LB136011
	Cadmium	2.50	<15	U	30.0	P	06/04/2025	18:05	LB136011
	Chromium	10.6	<25	U	50.0	P	06/04/2025	18:05	LB136011
	Lead	11.5	<30	U	60.0	P	06/04/2025	18:05	LB136011
	Selenium	48.2	<50	U	100	P	06/04/2025	18:05	LB136011
	Silver	8.10	<25	U	50.0	P	06/04/2025	18:05	LB136011
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168256BL		WATER		Batch Number:	PB168256		Prep Date:	06/03/2025	
	Arsenic	25.6	<50	U	100	P	06/04/2025	19:34	LB136011
	Barium	72.8	<250	U	500	P	06/04/2025	19:34	LB136011
	Cadmium	2.50	<15	U	30.0	P	06/04/2025	19:34	LB136011
	Chromium	10.6	<25	U	50.0	P	06/04/2025	19:34	LB136011
	Lead	11.5	<30	U	60.0	P	06/04/2025	19:34	LB136011
	Selenium	48.2	<50	U	100	P	06/04/2025	19:34	LB136011
	Silver	8.10	<25	U	50.0	P	06/04/2025	19:34	LB136011



METAL CALIBRATION DATA

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
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
ICV26	Mercury	3.93	4.0	98	90 - 110	CV	06/04/2025	10:25	LB135995

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2177

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177

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
CCV95	Mercury	4.86	5.0	97	90 - 110	CV	06/04/2025	10:32	LB135995
CCV96	Mercury	4.82	5.0	96	90 - 110	CV	06/04/2025	11:02	LB135995
CCV97	Mercury	4.75	5.0	95	90 - 110	CV	06/04/2025	11:29	LB135995
CCV98	Mercury	4.66	5.0	93	90 - 110	CV	06/04/2025	11:53	LB135995

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	1000	1000	100	90 - 110	P	06/04/2025	15:49	LB136011
	Barium	552	520	106	90 - 110	P	06/04/2025	15:49	LB136011
	Cadmium	500	510	98	90 - 110	P	06/04/2025	15:49	LB136011
	Chromium	518	520	100	90 - 110	P	06/04/2025	15:49	LB136011
	Lead	976	1000	98	90 - 110	P	06/04/2025	15:49	LB136011
	Selenium	1000	1000	100	90 - 110	P	06/04/2025	15:49	LB136011
	Silver	234	250	94	90 - 110	P	06/04/2025	15:49	LB136011

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
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	18.1	20.0	90	80 - 120	P	06/04/2025	16:06	LB136011
	Barium	88.2	100	88	80 - 120	P	06/04/2025	16:06	LB136011
	Cadmium	5.84	6.0	97	80 - 120	P	06/04/2025	16:06	LB136011
	Chromium	10.2	10.0	102	80 - 120	P	06/04/2025	16:06	LB136011
	Lead	11.3	12.0	94	80 - 120	P	06/04/2025	16:06	LB136011
	Selenium	23.1	20.0	115	80 - 120	P	06/04/2025	16:06	LB136011
	Silver	9.80	10.0	98	80 - 120	P	06/04/2025	16:06	LB136011

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture SDG No.: Q2177
Contract: PORT06 Lab Code: CHEM Case No.: Q2177 SAS No.: Q2177
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	5030	5000	101	90 - 110	P	06/04/2025	16:45	LB136011
	Barium	9780	10000	98	90 - 110	P	06/04/2025	16:45	LB136011
	Cadmium	2510	2500	100	90 - 110	P	06/04/2025	16:45	LB136011
	Chromium	993	1000	99	90 - 110	P	06/04/2025	16:45	LB136011
	Lead	5010	5000	100	90 - 110	P	06/04/2025	16:45	LB136011
	Selenium	5070	5000	101	90 - 110	P	06/04/2025	16:45	LB136011
	Silver	1230	1250	99	90 - 110	P	06/04/2025	16:45	LB136011
CCV02	Arsenic	4960	5000	99	90 - 110	P	06/04/2025	17:35	LB136011
	Barium	9200	10000	92	90 - 110	P	06/04/2025	17:35	LB136011
	Cadmium	2460	2500	98	90 - 110	P	06/04/2025	17:35	LB136011
	Chromium	985	1000	98	90 - 110	P	06/04/2025	17:35	LB136011
	Lead	4910	5000	98	90 - 110	P	06/04/2025	17:35	LB136011
	Selenium	5060	5000	101	90 - 110	P	06/04/2025	17:35	LB136011
	Silver	1230	1250	98	90 - 110	P	06/04/2025	17:35	LB136011
CCV03	Arsenic	4790	5000	96	90 - 110	P	06/04/2025	18:37	LB136011
	Barium	9130	10000	91	90 - 110	P	06/04/2025	18:37	LB136011
	Cadmium	2390	2500	95	90 - 110	P	06/04/2025	18:37	LB136011
	Chromium	953	1000	95	90 - 110	P	06/04/2025	18:37	LB136011
	Lead	4750	5000	95	90 - 110	P	06/04/2025	18:37	LB136011
	Selenium	4850	5000	97	90 - 110	P	06/04/2025	18:37	LB136011
	Silver	1190	1250	96	90 - 110	P	06/04/2025	18:37	LB136011
CCV04	Arsenic	4700	5000	94	90 - 110	P	06/04/2025	19:26	LB136011
	Barium	9070	10000	91	90 - 110	P	06/04/2025	19:26	LB136011
	Cadmium	2360	2500	94	90 - 110	P	06/04/2025	19:26	LB136011
	Chromium	944	1000	94	90 - 110	P	06/04/2025	19:26	LB136011
	Lead	4700	5000	94	90 - 110	P	06/04/2025	19:26	LB136011
	Selenium	4750	5000	95	90 - 110	P	06/04/2025	19:26	LB136011
	Silver	1170	1250	94	90 - 110	P	06/04/2025	19:26	LB136011
CCV05	Arsenic	4700	5000	94	90 - 110	P	06/04/2025	20:12	LB136011
	Barium	9550	10000	96	90 - 110	P	06/04/2025	20:12	LB136011
	Cadmium	2350	2500	94	90 - 110	P	06/04/2025	20:12	LB136011
	Chromium	942	1000	94	90 - 110	P	06/04/2025	20:12	LB136011
	Lead	4720	5000	94	90 - 110	P	06/04/2025	20:12	LB136011
	Selenium	4730	5000	94	90 - 110	P	06/04/2025	20:12	LB136011

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** Q2177

Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177

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	1190	1250	95	90 - 110	P	06/04/2025	20:12	LB136011
CCV06	Arsenic	4620	5000	92	90 - 110	P	06/04/2025	20:58	LB136011
	Barium	9410	10000	94	90 - 110	P	06/04/2025	20:58	LB136011
	Cadmium	2320	2500	93	90 - 110	P	06/04/2025	20:58	LB136011
	Chromium	930	1000	93	90 - 110	P	06/04/2025	20:58	LB136011
	Lead	4650	5000	93	90 - 110	P	06/04/2025	20:58	LB136011
	Selenium	4630	5000	92	90 - 110	P	06/04/2025	20:58	LB136011
	Silver	1160	1250	93	90 - 110	P	06/04/2025	20:58	LB136011
CCV07	Arsenic	4710	5000	94	90 - 110	P	06/04/2025	21:41	LB136011
	Barium	9600	10000	96	90 - 110	P	06/04/2025	21:41	LB136011
	Cadmium	2370	2500	95	90 - 110	P	06/04/2025	21:41	LB136011
	Chromium	945	1000	94	90 - 110	P	06/04/2025	21:41	LB136011
	Lead	4730	5000	95	90 - 110	P	06/04/2025	21:41	LB136011
	Selenium	4690	5000	94	90 - 110	P	06/04/2025	21:41	LB136011
	Silver	1190	1250	95	90 - 110	P	06/04/2025	21:41	LB136011
CCV08	Arsenic	4620	5000	92	90 - 110	P	06/04/2025	22:06	LB136011
	Barium	9210	10000	92	90 - 110	P	06/04/2025	22:06	LB136011
	Cadmium	2330	2500	93	90 - 110	P	06/04/2025	22:06	LB136011
	Chromium	937	1000	94	90 - 110	P	06/04/2025	22:06	LB136011
	Lead	4670	5000	93	90 - 110	P	06/04/2025	22:06	LB136011
	Selenium	4580	5000	92	90 - 110	P	06/04/2025	22:06	LB136011
	Silver	1170	1250	94	90 - 110	P	06/04/2025	22:06	LB136011



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

Metals

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CRDL STANDARD FOR AA & ICP

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
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	0.22	0.2	111	70 - 130	CV	06/04/2025	10:36	LB135995
CRI01	Arsenic	18.7	20.0	93	65 - 135	P	06/04/2025	16:15	LB136011
	Barium	86.6	100	87	65 - 135	P	06/04/2025	16:15	LB136011
	Cadmium	5.99	6.0	100	65 - 135	P	06/04/2025	16:15	LB136011
	Chromium	10.8	10.0	108	65 - 135	P	06/04/2025	16:15	LB136011
	Lead	11.2	12.0	93	65 - 135	P	06/04/2025	16:15	LB136011
	Selenium	20.9	20.0	105	65 - 135	P	06/04/2025	16:15	LB136011
	Silver	10.0	10.0	100	65 - 135	P	06/04/2025	16:15	LB136011

Metals
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INTERFERENCE CHECK SAMPLE

Client: Portal Partners Tri-Venture **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
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	1.52			-20	20	06/04/2025	16:26	LB136011
	Barium	0.52	6.0	9	-94	106	06/04/2025	16:26	LB136011
	Cadmium	0.92	1.0	92	-5	7	06/04/2025	16:26	LB136011
	Chromium	46.0	52.0	88	42	62	06/04/2025	16:26	LB136011
	Lead	-0.74			-12	12	06/04/2025	16:26	LB136011
	Selenium	1.80			-20	20	06/04/2025	16:26	LB136011
	Silver	4.01			-10	10	06/04/2025	16:26	LB136011
ICSAB01	Arsenic	106	104	102	88.4	120	06/04/2025	16:32	LB136011
	Barium	469	537	87	437	637	06/04/2025	16:32	LB136011
	Cadmium	1000	972	103	826	1120	06/04/2025	16:32	LB136011
	Chromium	556	542	103	460	624	06/04/2025	16:32	LB136011
	Lead	47.6	49.0	97	37	61	06/04/2025	16:32	LB136011
	Selenium	56.4	46.0	123	26	66	06/04/2025	16:32	LB136011
	Silver	219	201	109	170	232	06/04/2025	16:32	LB136011



METAL QC DATA

metals
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MATRIX SPIKE SUMMARY

client: <u>Portal Partners Tri-Venture</u>	level: <u>low</u>	sdg no.: <u>Q2177</u>
contract: <u>PORT06</u>	lab code: <u>CHEM</u>	case no.: <u>Q2177</u> sas no.: <u>Q2177</u>
matrix: <u>Water</u>	sample id: <u>Q2185-08</u>	client id: <u>TP01-MHA-WCMS</u>
Percent Solids for Sample: NA	Spiked ID: Q2185-08MS	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	3810		100	U	4000	95		P
Barium	ug/L	75 - 125	3220		2770		1000	45	N	P
Cadmium	ug/L	75 - 125	955		30.0	U	1000	96		P
Chromium	ug/L	75 - 125	1930		50.0	U	2000	96		P
Lead	ug/L	75 - 125	4550		25.1	J	5000	90		P
Mercury	ug/L	75 - 125	41.3		2.00	U	40.0	103		CV
Selenium	ug/L	75 - 125	9550		100	U	10000	96		P
Silver	ug/L	75 - 125	349		50.0	U	380	92		P

metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Portal Partners Tri-Venture</u>	level: <u>low</u>	sdg no.: <u>Q2177</u>
contract: <u>PORT06</u>	lab code: <u>CHEM</u>	case no.: <u>Q2177</u> sas no.: <u>Q2177</u>
matrix: <u>Water</u>	sample id: <u>Q2185-08</u>	client id: <u>TP01-MHA-WCMSD</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q2185-08MSD</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	3530		100	U	4000	88		P
Barium	ug/L	75 - 125	3000		2770		1000	24	N	P
Cadmium	ug/L	75 - 125	887		30.0	U	1000	89		P
Chromium	ug/L	75 - 125	1800		50.0	U	2000	90		P
Lead	ug/L	75 - 125	4250		25.1	J	5000	85		P
Mercury	ug/L	75 - 125	40.0		2.00	U	40.0	100		CV
Selenium	ug/L	75 - 125	8820		100	U	10000	88		P
Silver	ug/L	75 - 125	323		50.0	U	380	85		P

Metals
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POST DIGEST SPIKE SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

Matrix: Water

Level: LOW

Client ID: TP01-MHB-WCA

Sample ID: Q2185-08

Spiked ID: Q2185-08A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Barium	ug/L	75 - 125	3090		2770		1000	32	N	P

A
B
C
D
E
F
G
H
I
J

Metals

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
Matrix: Water **Sample ID:** Q2185-08 **Client ID:** TP01-MHB-WCDUP
Percent Solids for Sample: NA **Duplicate ID** Q2185-08DUP **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	2770		1890		38	*	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	25.1	J	60.0	U	200.0		P
Mercury	ug/L	20	2.00	U	2.00	U			CV
Selenium	ug/L	20	100	U	100	U			P
Silver	ug/L	20	50.0	U	50.0	U			P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **Level:** LOW **SDG No.:** Q2177
Contract: PORT06 **Lab Code:** CHEM **Case No.:** Q2177 **SAS No.:** Q2177
Matrix: Water **Sample ID:** Q2185-08MS **Client ID:** TP01-MHA-WCMSD
Percent Solids for Sample: NA **Duplicate ID** Q2185-08MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	3810		3530		8		P
Barium	ug/L	20	3220		3000		7		P
Cadmium	ug/L	20	955		887		7		P
Chromium	ug/L	20	1930		1800		7		P
Lead	ug/L	20	4550		4250		7		P
Mercury	ug/L	20	41.3		40.0		3		CV
Selenium	ug/L	20	9550		8820		8		P
Silver	ug/L	20	349		323		8		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168256BS							
Arsenic	ug/L	4000	3770		94	80 - 120	P
Barium	ug/L	1000	882		88	80 - 120	P
Cadmium	ug/L	1000	949		95	80 - 120	P
Chromium	ug/L	2000	1910		96	80 - 120	P
Lead	ug/L	5000	4640		93	80 - 120	P
Selenium	ug/L	10000	9700		97	80 - 120	P
Silver	ug/L	380	342		90	80 - 120	P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168262BS Mercury	ug/L	4.0	3.58		90	80 - 120	CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

TP01-MHB-WCL

Lab Name: Chemtech Consulting Group

Contract: PORT06

Lab Code: CHEM **Lb No.:** lb136011 **Lab Sample ID :** Q2185-08L **SDG No.:** Q2177

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
		C		C			
Arsenic	100	U	500	U			P
Barium	2770		2750		0		P
Cadmium	30.0	U	150	U			P
Chromium	50.0	U	250	U			P
Lead	25.1	J	300	U	100.0		P
Mercury	2.00	U	10.0	U			CV
Selenium	100	U	500	U			P
Silver	50.0	U	250	U			P

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q2177 **Sas no.:** Q2177 **Sdg no.:** Q2177

Instrument id number: **Method:** **Run number:** LB135995

Start date: 06/04/2025 **End date:** 06/04/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1002	HG
S0.2	S0.2	1	1004	HG
S2.5	S2.5	1	1006	HG
S5	S5	1	1008	HG
S7.5	S7.5	1	1011	HG
S10	S10	1	1013	HG
ICV26	ICV26	1	1025	HG
ICB26	ICB26	1	1030	HG
CCV95	CCV95	1	1032	HG
CCB95	CCB95	1	1034	HG
CRA	CRA	1	1036	HG
PB168262BL	PB168262BL	1	1043	HG
PB168262BS	PB168262BS	1	1048	HG
CCV96	CCV96	1	1102	HG
CCB96	CCB96	1	1104	HG
Q2177-03	B-187-SB01	1	1118	HG
Q2177-05	B-187-SB02	1	1120	HG
Q2177-07	B-202-SB01	1	1122	HG
CCV97	CCV97	1	1129	HG
CCB97	CCB97	1	1131	HG
Q2185-08DUP	TP01-MHB-WCDUP	1	1134	HG
Q2185-08MS	TP01-MHA-WCMS	1	1138	HG
Q2185-08MSD	TP01-MHA-WCMSD	1	1141	HG
PB168224TB	PB168224TB	1	1143	HG
Q2185-08L	TP01-MHB-WCL	5	1145	HG
CCV98	CCV98	1	1153	HG
CCB98	CCB98	1	1155	HG

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q2177 **Sas no.:** Q2177 **Sdg no.:** Q2177

Instrument id number: **Method:** **Run number:** LB136011

Start date: 06/04/2025 **End date:** 06/04/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1418	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1423	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1427	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1431	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1435	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1439	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1549	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1606	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1610	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1615	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1626	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1632	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1645	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1652	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1735	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1739	Ag,As,Ba,Cd,Cr,Pb,Se
PB168224TB	PB168224TB	1	1805	Ag,As,Ba,Cd,Cr,Pb,Se
Q2177-03	B-187-SB01	1	1823	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1837	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1842	Ag,As,Ba,Cd,Cr,Pb,Se
Q2177-05	B-187-SB02	1	1847	Ag,As,Ba,Cd,Cr,Pb,Se
Q2177-07	B-202-SB01	1	1851	Ag,As,Ba,Cd,Cr,Pb,Se
Q2185-08DUP	TP01-MHB-WCDUP	1	1904	Ag,As,Ba,Cd,Cr,Pb,Se
Q2185-08L	TP01-MHB-WCL	5	1909	Ag,As,Ba,Cd,Cr,Pb,Se
Q2185-08MS	TP01-MHA-WCMS	1	1913	Ag,As,Ba,Cd,Cr,Pb,Se
Q2185-08MSD	TP01-MHA-WCMSD	1	1917	Ag,As,Ba,Cd,Cr,Pb,Se
Q2185-08A	TP01-MHB-WCA	1	1922	Ba
CCV04	CCV04	1	1926	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1930	Ag,As,Ba,Cd,Cr,Pb,Se
PB168256BL	PB168256BL	1	1934	Ag,As,Ba,Cd,Cr,Pb,Se
PB168256BS	PB168256BS	1	1939	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	2012	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	2016	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	2058	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	2102	Ag,As,Ba,Cd,Cr,Pb,Se
CCV07	CCV07	1	2141	Ag,As,Ba,Cd,Cr,Pb,Se
CCB07	CCB07	1	2145	Ag,As,Ba,Cd,Cr,Pb,Se
CCV08	CCV08	1	2206	Ag,As,Ba,Cd,Cr,Pb,Se
CCB08	CCB08	1	2210	Ag,As,Ba,Cd,Cr,Pb,Se



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

Instrument ID:

Date:

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement 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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture

SDG No.: Q2177

Contract: PORT06

Lab Code: CHEM

Case No.: Q2177

SAS No.: Q2177

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

LAB CHRONICLE

OrderID:	Q2177	OrderDate:	6/2/2025 11:19:00 AM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	Location:	L41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2177-02	B-187-SB01	SOIL			05/31/25			06/02/25
			Mercury	7471B		06/02/25	06/03/25	
			Metals ICP-TAL	6010D		06/02/25	06/10/25	
Q2177-03	B-187-SB01	TCLP			05/31/25			06/02/25
			TCLP ICP Metals	6010D		06/03/25	06/04/25	
			TCLP Mercury	7470A		06/03/25	06/04/25	
Q2177-04	B-187-SB02	SOIL			05/31/25			06/02/25
			Mercury	7471B		06/02/25	06/03/25	
			Metals ICP-TAL	6010D		06/02/25	06/10/25	
Q2177-05	B-187-SB02	TCLP			05/31/25			06/02/25
			TCLP ICP Metals	6010D		06/03/25	06/04/25	
			TCLP Mercury	7470A		06/03/25	06/04/25	
Q2177-06	B-202-SB01	SOIL			05/31/25			06/02/25
			Mercury	7471B		06/02/25	06/03/25	
			Metals ICP-TAL	6010D		06/02/25	06/10/25	
Q2177-07	B-202-SB01	TCLP			05/31/25			06/02/25
			TCLP ICP Metals	6010D		06/03/25	06/04/25	
			TCLP Mercury	7470A		06/03/25	06/04/25	
Q2177-08	EB05312025	Water			05/31/25			06/02/25
			Mercury	7470A		06/02/25	06/03/25	
			Metals ICP-TAL	6010D		06/03/25	06/04/25	



METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>Q2177</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2177</u>
		SAS No.:	<u>Q2177</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168256							
PB168224TB	PB168224TB	MB	WATER	06/03/2025	5.0	25.0	
PB168256BL	PB168256BL	MB	WATER	06/03/2025	5.0	25.0	
PB168256BS	PB168256BS	LCS	WATER	06/03/2025	5.0	25.0	
Q2177-03	B-187-SB01	SAM	WATER	06/03/2025	5.0	25.0	
Q2177-05	B-187-SB02	SAM	WATER	06/03/2025	5.0	25.0	
Q2177-07	B-202-SB01	SAM	WATER	06/03/2025	5.0	25.0	
Q2185-08DUP	TP01-MHB-WCDUP	DUP	WATER	06/03/2025	5.0	25.0	
Q2185-08MS	TP01-MHA-WCMS	MS	WATER	06/03/2025	5.0	25.0	
Q2185-08MSD	TP01-MHA-WCMSD	MSD	WATER	06/03/2025	5.0	25.0	

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>Q2177</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2177</u>
		SAS No.:	<u>Q2177</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168262							
PB168224TB	PB168224TB	MB	WATER	06/03/2025	3.0	30.0	
PB168262BL	PB168262BL	MB	WATER	06/03/2025	30.0	30.0	
PB168262BS	PB168262BS	LCS	WATER	06/03/2025	30.0	30.0	
Q2177-03	B-187-SB01	SAM	WATER	06/03/2025	3.0	30.0	
Q2177-05	B-187-SB02	SAM	WATER	06/03/2025	3.0	30.0	
Q2177-07	B-202-SB01	SAM	WATER	06/03/2025	3.0	30.0	
Q2185-08DUP	TP01-MHB-WCDUP	DUP	WATER	06/03/2025	3.0	30.0	
Q2185-08MS	TP01-MHA-WCMS	MS	WATER	06/03/2025	3.0	30.0	
Q2185-08MSD	TP01-MHA-WCMSD	MSD	WATER	06/03/2025	3.0	30.0	

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135995

Review By	MOHAN	Review On	6/4/2025 5:38:08 PM
Supervise By	jaswal	Supervise On	6/4/2025 5:41:58 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85853,MP85854,MP85855,MP85856,MP85857,MP85858		
ICV Standard	MP85859		
CCV Standard	MP85861		
ICSA Standard			
CRI Standard	MP85863		
LCS Standard			
Chk Standard	MP85860,MP85862,MP85864,MP85866		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/04/25 10:02		MOHAN	OK
2	S0.2	S0.2	CAL2	06/04/25 10:04		MOHAN	OK
3	S2.5	S2.5	CAL3	06/04/25 10:06		MOHAN	OK
4	S5	S5	CAL4	06/04/25 10:08		MOHAN	OK
5	S7.5	S7.5	CAL5	06/04/25 10:11		MOHAN	OK
6	S10	S10	CAL6	06/04/25 10:13		MOHAN	OK
7	ICV26	ICV26	ICV	06/04/25 10:25		MOHAN	OK
8	ICB26	ICB26	ICB	06/04/25 10:30		MOHAN	OK
9	CCV95	CCV95	CCV	06/04/25 10:32		MOHAN	OK
10	CCB95	CCB95	CCB	06/04/25 10:34		MOHAN	OK
11	CRA	CRA	CRDL	06/04/25 10:36		MOHAN	OK
12	HighStd	HighStd	HIGH STD	06/04/25 10:39		MOHAN	OK
13	ChkStd	ChkStd	SAM	06/04/25 10:41		MOHAN	OK
14	PB168262BL	PB168262BL	MB	06/04/25 10:43		MOHAN	OK
15	PB168262BS	PB168262BS	LCS	06/04/25 10:48		MOHAN	OK
16	Q2159-04	TP05-MHO-WC	SAM	06/04/25 10:50		MOHAN	OK
17	Q2160-04	TP04-MHG-WC	SAM	06/04/25 10:53		MOHAN	OK
18	Q2160-08	TP05-MHH-WC	SAM	06/04/25 10:55		MOHAN	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135995

Review By	MOHAN	Review On	6/4/2025 5:38:08 PM
Supervise By	jaswal	Supervise On	6/4/2025 5:41:58 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85853,MP85854,MP85855,MP85856,MP85857,MP85858		
ICV Standard	MP85859		
CCV Standard	MP85861		
ICSA Standard			
CRI Standard	MP85863		
LCS Standard			
Chk Standard	MP85860,MP85862,MP85864,MP85866		

19	Q2168-02	SAN-A1-A3	SAM	06/04/25 10:57		MOHAN	OK
20	Q2168-06	SAN-B1-B3	SAM	06/04/25 10:59		MOHAN	OK
21	CCV96	CCV96	CCV	06/04/25 11:02		MOHAN	OK
22	CCB96	CCB96	CCB	06/04/25 11:04		MOHAN	OK
23	Q2168-10	SAN-C1-C2	SAM	06/04/25 11:06		MOHAN	OK
24	Q2172-04	TP06-MHQ	SAM	06/04/25 11:09		MOHAN	OK
25	Q2173-06	OR-400-CF-402B-CO	SAM	06/04/25 11:11		MOHAN	OK
26	Q2173-12	OR-400-CF-402B-CO	SAM	06/04/25 11:13		MOHAN	OK
27	Q2173-18	OR-400-CF-402B-CO	SAM	06/04/25 11:15		MOHAN	OK
28	Q2177-03	B-187-SB01	SAM	06/04/25 11:18		MOHAN	OK
29	Q2177-05	B-187-SB02	SAM	06/04/25 11:20		MOHAN	OK
30	Q2177-07	B-202-SB01	SAM	06/04/25 11:22		MOHAN	OK
31	Q2185-04	TP02-MHB-WC	SAM	06/04/25 11:24		MOHAN	OK
32	Q2185-08	TP01-MHA-WC	SAM	06/04/25 11:27		MOHAN	OK
33	CCV97	CCV97	CCV	06/04/25 11:29		MOHAN	OK
34	CCB97	CCB97	CCB	06/04/25 11:31		MOHAN	OK
35	Q2185-08DUP	TP01-MHA-WC	DUP	06/04/25 11:34		MOHAN	OK
36	Q2185-08MS	TP01-MHA-WCMS	MS	06/04/25 11:38		MOHAN	OK
37	Q2185-08MSD	TP01-MHA-WCMSD	MSD	06/04/25 11:41		MOHAN	OK
38	PB168224TB	PB168224TB	MB	06/04/25 11:43		MOHAN	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135995

Review By	MOHAN	Review On	6/4/2025 5:38:08 PM
Supervise By	jaswal	Supervise On	6/4/2025 5:41:58 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85853,MP85854,MP85855,MP85856,MP85857,MP85858		
ICV Standard	MP85859		
CCV Standard	MP85861		
ICSA Standard			
CRI Standard	MP85863		
LCS Standard			
Chk Standard	MP85860,MP85862,MP85864,MP85866		

39	Q2185-08L	TP01-MHA-WC	SD	06/04/25 11:45		MOHAN	OK
40	Q2185-08A	TP01-MHA-WC	PS	06/04/25 11:48		MOHAN	OK
41	CCV98	CCV98	CCV	06/04/25 11:53		MOHAN	OK
42	CCB98	CCB98	CCB	06/04/25 11:55		MOHAN	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB136011

Review By	Janvi	Review On	6/5/2025 3:57:54 PM
Supervise By	jaswal	Supervise On	6/10/2025 4:55:25 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868		
ICV Standard	MP85872		
CCV Standard	MP85875		
ICSA Standard	MP85873,MP85874		
CRI Standard	MP85897		
LCS Standard			
Chk Standard	MP85876,MP85877		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	06/04/25 14:18		Jaswal	OK
2	S1	S1	CAL2	06/04/25 14:23		Jaswal	OK
3	S2	S2	CAL3	06/04/25 14:27		Jaswal	OK
4	S3	S3	CAL4	06/04/25 14:31		Jaswal	OK
5	S4	S4	CAL5	06/04/25 14:35		Jaswal	OK
6	S5	S5	CAL6	06/04/25 14:39		Jaswal	OK
7	ICV01	ICV01	ICV	06/04/25 15:49		Jaswal	OK
8	LLICV01	LLICV01	LLICV	06/04/25 16:06		Jaswal	OK
9	ICB01	ICB01	ICB	06/04/25 16:10		Jaswal	OK
10	CRI01	CRI01	CRDL	06/04/25 16:15		Jaswal	OK
11	ICSA01	ICSA01	ICSA	06/04/25 16:26		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	06/04/25 16:32		Jaswal	OK
13	ICSADL	ICSADL	ICSA	06/04/25 16:36		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	06/04/25 16:40		Jaswal	OK
15	CCV01	CCV01	CCV	06/04/25 16:45		Jaswal	OK
16	CCB01	CCB01	CCB	06/04/25 16:52		Jaswal	OK
17	Q2160-05	TP05-MHH-WC	SAM	06/04/25 16:57		Jaswal	OK
18	Q2159-04	TP05-MHO-WC	SAM	06/04/25 17:01		Jaswal	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB136011

Review By	Janvi	Review On	6/5/2025 3:57:54 PM
Supervise By	jaswal	Supervise On	6/10/2025 4:55:25 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868		
ICV Standard	MP85872		
CCV Standard	MP85875		
ICSA Standard	MP85873,MP85874		
CRI Standard	MP85897		
LCS Standard			
Chk Standard	MP85876,MP85877		

19	Q2178-01	RT2929	SAM	06/04/25 17:05		Jaswal	OK
20	Q2182-01	OR-03-06022025	SAM	06/04/25 17:10		Jaswal	OK
21	Q2172-04	TP06-MHQ	SAM	06/04/25 17:14		Jaswal	OK
22	Q2178-02	RT2929	SAM	06/04/25 17:18		Jaswal	OK
23	Q2185-01	TP02-MHB-WC	SAM	06/04/25 17:23		Jaswal	OK
24	Q2185-05	TP01-MHA-WC	SAM	06/04/25 17:27		Jaswal	OK
25	Q2178-01DUP	RT2929DUP	DUP	06/04/25 17:31		Jaswal	OK
26	CCV02	CCV02	CCV	06/04/25 17:35		Jaswal	OK
27	CCB02	CCB02	CCB	06/04/25 17:39		Jaswal	OK
28	Q2178-01L	RT2929L	SD	06/04/25 17:48		Jaswal	OK
29	Q2178-01MS	RT2929MS	MS	06/04/25 17:53		Jaswal	OK
30	Q2178-01MSD	RT2929MSD	MSD	06/04/25 17:57		Jaswal	OK
31	Q2178-01A	RT2929A	PS	06/04/25 18:01		Jaswal	OK
32	PB168224TB	PB168224TB	MB	06/04/25 18:05		Jaswal	OK
33	Q2168-02	SAN-A1-A3	SAM	06/04/25 18:10		Jaswal	OK
34	Q2168-06	SAN-B1-B3	SAM	06/04/25 18:14		Jaswal	OK
35	Q2168-10	SAN-C1-C2	SAM	06/04/25 18:19		Jaswal	OK
36	Q2177-03	B-187-SB01	SAM	06/04/25 18:23		Jaswal	OK
37	CCV03	CCV03	CCV	06/04/25 18:37		Jaswal	OK
38	CCB03	CCB03	CCB	06/04/25 18:42		Jaswal	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB136011

Review By	Janvi	Review On	6/5/2025 3:57:54 PM
Supervise By	jaswal	Supervise On	6/10/2025 4:55:25 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868		
ICV Standard	MP85872		
CCV Standard	MP85875		
ICSA Standard	MP85873,MP85874		
CRI Standard	MP85897		
LCS Standard			
Chk Standard	MP85876,MP85877		

39	Q2177-05	B-187-SB02	SAM	06/04/25 18:47		Jaswal	OK
40	Q2177-07	B-202-SB01	SAM	06/04/25 18:51		Jaswal	OK
41	Q2185-04	TP02-MHB-WC	SAM	06/04/25 18:56		Jaswal	OK
42	Q2185-08	TP01-MHA-WC	SAM	06/04/25 19:00		Jaswal	OK
43	Q2185-08DUP	TP01-MHA-WC	DUP	06/04/25 19:04		Jaswal	OK
44	Q2185-08L	TP01-MHA-WC	SD	06/04/25 19:09		Jaswal	OK
45	Q2185-08MS	TP01-MHA-WCMS	MS	06/04/25 19:13		Jaswal	OK
46	Q2185-08MSD	TP01-MHA-WCMSD	MSD	06/04/25 19:17		Jaswal	OK
47	Q2185-08A	TP01-MHA-WC	PS	06/04/25 19:22		Jaswal	OK
48	CCV04	CCV04	CCV	06/04/25 19:26		Jaswal	OK
49	CCB04	CCB04	CCB	06/04/25 19:30		Jaswal	OK
50	PB168256BL	PB168256BL	MB	06/04/25 19:34		Jaswal	OK
51	PB168256BS	PB168256BS	LCS	06/04/25 19:39		Jaswal	OK
52	PB168261BL	PB168261BL	MB	06/04/25 19:43		Jaswal	OK
53	PB168261BS	PB168261BS	LCS	06/04/25 19:47		Jaswal	OK
54	PB168255BL	PB168255BL	MB	06/04/25 19:51		Jaswal	OK
55	PB168255BS	PB168255BS	LCS	06/04/25 19:55		Jaswal	OK
56	Q2169-01	303-PPR-1	SAM	06/04/25 19:59		Jaswal	OK
57	Q2169-03	303-PPR-2	SAM	06/04/25 20:03		Jaswal	OK
58	Q2175-06DL	EGR-LIQUIDDL	SAM	06/04/25 20:08	Straight 5x for all elements	Jaswal	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB136011

Review By	Janvi	Review On	6/5/2025 3:57:54 PM
Supervise By	jaswal	Supervise On	6/10/2025 4:55:25 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868		
ICV Standard	MP85872		
CCV Standard	MP85875		
ICSA Standard	MP85873,MP85874		
CRI Standard	MP85897		
LCS Standard			
Chk Standard	MP85876,MP85877		

59	CCV05	CCV05	CCV	06/04/25 20:12		Jaswal	OK
60	CCB05	CCB05	CCB	06/04/25 20:16		Jaswal	OK
61	Q2177-08	EB05312025	SAM	06/04/25 20:20		Jaswal	OK
62	Q2169-03DUP	303-PPR-2DUP	DUP	06/04/25 20:25		Jaswal	OK
63	Q2169-03L	303-PPR-2L	SD	06/04/25 20:29		Jaswal	OK
64	Q2169-03MS	303-PPR-2MS	MS	06/04/25 20:33		Jaswal	OK
65	Q2169-03MSD	303-PPR-2MSD	MSD	06/04/25 20:37		Jaswal	OK
66	Q2169-03A	303-PPR-2A	PS	06/04/25 20:42		Jaswal	OK
67	PB168276BL	PB168276BL	MB	06/04/25 20:46		Jaswal	OK
68	PB168276BS	PB168276BS	LCS	06/04/25 20:50		Jaswal	OK
69	Q2175-09DL	52725DL	SAM	06/04/25 20:54	Straight 5x for all elements	Jaswal	OK
70	CCV06	CCV06	CCV	06/04/25 20:58		Jaswal	OK
71	CCB06	CCB06	CCB	06/04/25 21:02		Jaswal	OK
72	Q2198-05DL	B-202-GW01DL	SAM	06/04/25 21:07	Straight 5x for all elements	Jaswal	OK
73	Q2198-05DUPDL	B-202-GW01DUPDL	DUP	06/04/25 21:11	Straight 5x for all elements	Jaswal	OK
74	Q2198-05LDL	B-202-GW01LDL	SD	06/04/25 21:15	Straight 25x for all elements	Jaswal	OK
75	Q2198-05MSDL	B-202-GW01MSDL	MS	06/04/25 21:20	Straight 5x for all elements	Jaswal	OK
76	Q2198-05MSDDL	B-202-GW01MSDDL	MSD	06/04/25 21:24	Straight 5x for all elements	Jaswal	OK
77	Q2198-05ADL	B-202-GW01ADL	PS	06/04/25 21:28	Straight 5x for all elements	Jaswal	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB136011

Review By	Janvi	Review On	6/5/2025 3:57:54 PM
Supervise By	jaswal	Supervise On	6/10/2025 4:55:25 PM
STD. NAME	STD REF.#		
ICAL Standard	MP85867,MP85897,MP85871,MP85870,MP85869,MP85868		
ICV Standard	MP85872		
CCV Standard	MP85875		
ICSA Standard	MP85873,MP85874		
CRI Standard	MP85897		
LCS Standard			
Chk Standard	MP85876,MP85877		

78	Q2172-01	TP06-MHQ	SAM	06/04/25 21:32	CCV fail for Fe,K,Na	Jaswal	Not Ok
79	Q2172-01DUP	TP06-MHQDUP	DUP	06/04/25 21:37	CCV fail for Fe,K,Na	Jaswal	Not Ok
80	CCV07	CCV07	CCV	06/04/25 21:41		Jaswal	OK
81	CCB07	CCB07	CCB	06/04/25 21:45		Jaswal	OK
82	Q2172-01L	TP06-MHQL	SD	06/04/25 21:49	CCV fail for Fe,K,Na	Jaswal	Not Ok
83	Q2172-01MS	TP06-MHQMS	MS	06/04/25 21:54	CCV fail for Fe,K,Na	Jaswal	Not Ok
84	Q2172-01MSD	TP06-MHQMSD	MSD	06/04/25 21:57	CCV fail for Fe,K,Na	Jaswal	Not Ok
85	Q2172-01A	TP06-MHQA	PS	06/04/25 22:01	CCV fail for Fe,K,Na	Jaswal	Not Ok
86	CCV08	CCV08	CCV	06/04/25 22:06	CCV fail for Fe,K,Na	Jaswal	OK
87	CCB08	CCB08	CCB	06/04/25 22:10		Jaswal	OK

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pipette 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: 06/03/2025 Time : 12:30 Temp : 96 °C

End Digest Date: 06/03/2025 Time : 15:32 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: *SLR*

Supervisor Signature: *[Signature]*

Temp : 1. 96°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6007
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	MP84041
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
06/03/25 16:32	<i>SLR met dig</i>	<i>[Signature]</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB168224TB	PB168224TB	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	1
PB168256BL	PBW256	<2	5	25	Colorless	Colorless	Clear	Clear	M6007,M6016	2
PB168256BS	LCS256	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	3
Q2159-04	TP05-MHO-WC	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	4
Q2160-04	TP04-MHG-WC	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	5
Q2160-08	TP05-MHH-WC	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	6
Q2168-02	SAN-A1-A3	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	7
Q2168-06	SAN-B1-B3	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	8
Q2168-10	SAN-C1-C2	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	9
Q2172-04	TP06-MHQ	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	10
Q2173-06	OR-400-CF-402B-COMP-23	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	11
Q2173-12	OR-400-CF-402B-COMP-24	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	12
Q2173-18	OR-400-CF-402B-COMP-25	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	13
Q2177-03	B-187-SB01	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	14
Q2177-05	B-187-SB02	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	15
Q2177-07	B-202-SB01	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	16
Q2178-02	RT2929	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	17
Q2185-04	TP02-MHB-WC	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	18
Q2185-08	TP01-MHB-WC	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	19
Q2185-08MS	TP01-MHB-WCMS	<2	5	25	Colorless	Colorless	Clear	Clear	M6007,M6016	21
Q2185-08MSD	TP01-MHB-WCMSD	<2	5	25	Colorless	Colorless	Clear	Clear	M6007,M6016	22
Q2185-08DUP	TP01-MHB-WCDUP	<2	5	25	Colorless	Colorless	Clear	Clear	N/A	20

SOP ID : M7470A-Mercury-20

SDG No : NA

Matrix : WATER

Pipette 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: 06/03/2025 Time : 13:30 Temp : 94 °C

End Digest Date: 06/03/2025 Time : 15:30 Temp : 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature:

Supervisor Signature:

Temp : 1. 94°C 2. N/A

Standardized Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP85859
CCV	30mL	MP85861
CRA	30mL	MP85863
Blank Spike	0.48mL	MP85852
Matrix Spike	0.48mL	MP85852

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.25mL	MP85240
KMnO4 (5%)	4.5mL	MP85241
K2S2O8 (5%)	2.4mL	MP85242
Hydroxylamine HCL (12%)	1.8mL	MP85243
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	MP85853
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP85854
2.5 ppb	S2.5	30mL	MP85855
5.0 ppb	S5.0	30mL	MP85856
7.5 ppb	S7.5	30mL	MP85857
10.0 ppb	S10.0	30mL	MP85858
ICV	ICV	30mL	MP85859
ICB	ICB	30mL	MP85860
CCV	CCV	30mL	MP85861
CCB	CCB	30mL	MP85862
CRI	CRI	30mL	MP85863
CHK STD	CHK STD	30mL	MP85864

Extraction Conformance/Non-Conformance Comments:

N/A		
Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/03/25 16:30	MB - DIG#3 LUS	MB - MBZM LUS
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB168224TB	PB168224TB	3	30	<2	N/A	3-1
PB168262BL	PBW262	30	30	<2	N/A	2
PB168262BS	LCS262	30	30	<2	MP85852	3
Q2159-04	TP05-MHO-WC	3	30	<2	N/A	4
Q2160-04	TP04-MHG-WC	3	30	<2	N/A	5
Q2160-08	TP05-MHH-WC	3	30	<2	N/A	6
Q2168-02	SAN-A1-A3	3	30	<2	N/A	7
Q2168-06	SAN-B1-B3	3	30	<2	N/A	8
Q2168-10	SAN-C1-C2	3	30	<2	N/A	9
Q2172-04	TP06-MHQ	3	30	<2	N/A	10
Q2173-06	OR-400-CF-402B-COMP-23	3	30	<2	N/A	11
Q2173-12	OR-400-CF-402B-COMP-24	3	30	<2	N/A	12
Q2173-18	OR-400-CF-402B-COMP-25	3	30	<2	N/A	13
Q2177-03	B-187-SB01	3	30	<2	N/A	14
Q2177-05	B-187-SB02	3	30	<2	N/A	15
Q2177-07	B-202-SB01	3	30	<2	N/A	16
Q2185-04	TP02-MHB-WC	3	30	<2	N/A	17
Q2185-08	TP01-MHB-WC	3	30	<2	N/A	18
Q2185-08DUP	TP01-MHB-WCDUP	3	30	<2	N/A	19
Q2185-08MS	TP01-MHB-WCMS	3	30	<2	MP85852	20
Q2185-08MSD	TP01-MHB-WCMSD	3	30	<2	MP85852	21

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
Pipette ID : WC
Tumbler ID : T-1 / T-2
TCLP Filter ID : 115525

Start Prep Date : 06/02/2025 Time : 16:00
End Prep Date : 06/03/2025 Time : 09:15
Combination Ratio : 20
ZHE Cleaning Batch : N/A
Initial Room Temperature: 22 °C
Final Room Temperature: 21 °C
TCLP Technician Signature : *[Signature]*
Supervisor By : *[Signature]*

Standard 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	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:

Matrix spikes are added after filtration and before preservation. TUMBLER T-1 /T-2 checked,30 rpm. q2185-08 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/03/25 11:00	<i>[Signature]</i> /TCLP Room	SIHS. RS 1641
	Preparation Group	Analysis Group <i>[Signature]</i>

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB168224TB	LEB224	17	N/A	2000	N/A	N/A	N/A	4.93	1.5	T-2
Q2159-04	TP05-MHO-WC	01	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q2160-04	TP04-MHG-WC	02	100.03	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q2160-08	TP05-MHH-WC	03	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-1
Q2168-02	SAN-A1-A3	04	100.03	2000	N/A	N/A	N/A	4.5	1.5	T-1
Q2168-06	SAN-B1-B3	05	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
Q2168-10	SAN-C1-C2	06	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-1
Q2172-04	TP06-MHQ	07	100.01	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q2173-06	OR-400-CF-402B-COMP-23	08	100.02	2000	N/A	N/A	N/A	7.0	1.0	T-1
Q2173-12	OR-400-CF-402B-COMP-24	09	100.03	2000	N/A	N/A	N/A	5.8	1.5	T-1
Q2173-18	OR-400-CF-402B-COMP-25	10	100.04	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2177-03	B-187-SB01	11	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-2
Q2177-05	B-187-SB02	12	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q2177-07	B-202-SB01	13	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-2
Q2178-02	RT2929	14	100.03	2000	N/A	N/A	N/A	10.0	1.5	T-2
Q2185-04	TP02-MHB-WC	15	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-2
Q2185-08	TP01-MHB-WC	16	100.03	2000	N/A	N/A	N/A	6.0	1.0	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB168224TB	LEB224	N/A	N/A	N/A	N/A	N/A	N/A
Q2159-04	TP05-MHO-WC	N/A	N/A	N/A	N/A	100	N/A
Q2160-04	TP04-MHG-WC	N/A	N/A	N/A	N/A	100	N/A
Q2160-08	TP05-MHH-WC	N/A	N/A	N/A	N/A	100	N/A
Q2168-02	SAN-A1-A3	N/A	N/A	N/A	N/A	100	N/A
Q2168-06	SAN-B1-B3	N/A	N/A	N/A	N/A	100	N/A
Q2168-10	SAN-C1-C2	N/A	N/A	N/A	N/A	100	N/A
Q2172-04	TP06-MHQ	N/A	N/A	N/A	N/A	100	N/A
Q2173-06	OR-400-CF-402B-COMP-23	N/A	N/A	N/A	N/A	100	N/A
Q2173-12	OR-400-CF-402B-COMP-24	N/A	N/A	N/A	N/A	100	N/A
Q2173-18	OR-400-CF-402B-COMP-25	N/A	N/A	N/A	N/A	100	N/A
Q2177-03	B-187-SB01	N/A	N/A	N/A	N/A	100	N/A
Q2177-05	B-187-SB02	N/A	N/A	N/A	N/A	100	N/A
Q2177-07	B-202-SB01	N/A	N/A	N/A	N/A	100	N/A
Q2178-02	RT2929	N/A	N/A	N/A	N/A	100	N/A
Q2185-04	TP02-MHB-WC	N/A	N/A	N/A	N/A	100	N/A
Q2185-08	TP01-MHB-WC	N/A	N/A	N/A	N/A	100	N/A

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

Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB168224TB	LEB224	N/A	N/A	N/A	N/A	#1	4.93
Q2159-04	TP05-MHO-WC	5.02	96.5	5.6	2.0	#1	4.93
Q2160-04	TP04-MHG-WC	5.01	96.5	5.5	2.0	#1	4.93
Q2160-08	TP05-MHH-WC	5.02	96.5	5.8	2.0	#1	4.93
Q2168-02	SAN-A1-A3	5.01	96.5	6.2	2.5	#1	4.93
Q2168-06	SAN-B1-B3	5.02	96.5	6.0	2.0	#1	4.93
Q2168-10	SAN-C1-C2	5.03	96.5	6.0	2.0	#1	4.93
Q2172-04	TP06-MHQ	5.03	96.5	5.5	1.5	#1	4.93
Q2173-06	OR-400-CF-402B-COMP-23	5.02	96.5	9.0	3.5	#1	4.93
Q2173-12	OR-400-CF-402B-COMP-24	5.03	96.5	7.2	2.5	#1	4.93
Q2173-18	OR-400-CF-402B-COMP-25	5.02	96.5	8.4	3.0	#1	4.93
Q2177-03	B-187-SB01	5.03	96.5	8.2	3.0	#1	4.93
Q2177-05	B-187-SB02	5.02	96.5	7.2	2.5	#1	4.93
Q2177-07	B-202-SB01	5.01	96.5	8.2	3.0	#1	4.93
Q2178-02	RT2929	5.02	96.5	10.5	4.0	#1	4.93
Q2185-04	TP02-MHB-WC	5.02	96.5	8.0	3.0	#1	4.93
Q2185-08	TP01-MHB-WC	5.01	96.5	8.0	3.0	N/A	4.93