



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/18/24 09:50
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/18/24
Client Sample ID:	WB-303-TOP	SDG No.:	P4460
Lab Sample ID:	P4460-02	Matrix:	SOIL
		% Solid:	51.5

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.15	U	1	0.15	0.77	mg/Kg	10/22/24 09:00	10/22/24 12:57	7196A
Trivalent Chromium	145		1	0.97	0.97	mg/Kg		10/23/24 17:55	6010D

Comments:

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

H = Sample Analysis Out Of Hold Time

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:	10/18/24 10:40
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/18/24
Client Sample ID:	WB-303-BOT	SDG No.:	P4460
Lab Sample ID:	P4460-03	Matrix:	SOIL
		% Solid:	80.1

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.098	U	1	0.098	0.50	mg/Kg	10/22/24 09:00	10/22/24 12:58	7196A
Trivalent Chromium	14.6		1	0.62	0.62	mg/Kg		10/23/24 17:59	6010D

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

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J = Estimated Value

B = Analyte Found in Associated Method Blank

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OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/18/24 10:40
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/18/24
Client Sample ID:	WB-303-BOT	SDG No.:	P4460
Lab Sample ID:	P4460-04	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	8.30	H	1	0	0	pH		10/18/24 17:10	9045D
Ignitability	NO		1	0	0	oC		10/21/24 10:27	1030
Reactive Cyanide	0.0088	U	1	0.0088	0.050	mg/Kg	10/21/24 13:30	10/21/24 15:50	9012B
Reactive Sulfide	1.60	J	1	0.19	10.0	mg/Kg	10/22/24 09:20	10/22/24 11:48	9034

Comments: pH result reported at temperature 21.4 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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H = Sample Analysis Out Of Hold Time

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:	10/18/24 09:00
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/18/24
Client Sample ID:	WB-303-SW	SDG No.:	P4460
Lab Sample ID:	P4460-06	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Dissolved Hexavalent Chromium	0.0030	U	1	0.0030	0.010	mg/L		10/18/24 17:04	7196A
trivalent Chromium	0.010	U	1	0.010	0.010	mg/L		10/24/24 19:00	6010D

Comments:

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
 H = Sample Analysis Out Of Hold Time

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



QC RESULT SUMMARY



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

Initial and Continuing Calibration Verification

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

SDG No.: P4460
RunNo.: LB133010

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.499	0.5	100	90-110	10/18/2024
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.504	0.5	101	90-110	10/18/2024
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.500	0.5	100	90-110	10/18/2024

Initial and Continuing Calibration Verification

Client: Portal Partners Tri-Venture

SDG No.: P4460

Project: Amtrak Sawtooth Bridges 2024

RunNo.: LB133013

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Corrosivity	ICV	pH	7.00	7	100	90-110	10/18/2024
Sample ID: Corrosivity	CCV1	pH	2.01	2.00	101	90-110	10/18/2024
Sample ID: Corrosivity	CCV2	pH	12.02	12.00	100	90-110	10/18/2024

Initial and Continuing Calibration Verification

Client: Portal Partners Tri-Venture

SDG No.: P4460

Project: Amtrak Sawtooth Bridges 2024

RunNo.: LB133034

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Reactive Cyanide	mg/L	0.097	0.099	98	85-115	10/21/2024
Sample ID: CCV1 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	10/21/2024
Sample ID: CCV2 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	10/21/2024
Sample ID: CCV3 Reactive Cyanide	mg/L	0.26	0.25	104	90-110	10/21/2024

Initial and Continuing Calibration Verification

Client: Portal Partners Tri-Venture

SDG No.: P4460

Project: Amtrak Sawtooth Bridges 2024

RunNo.: LB133044

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.503	0.5	101	90-110	10/22/2024
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.499	0.5	100	90-110	10/22/2024
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.500	0.5	100	90-110	10/22/2024
Sample ID: CCV3 Hexavalent Chromium	mg/L	0.503	0.5	101	90-110	10/22/2024

Initial and Continuing Calibration Blank Summary

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

SDG No.: P4460
RunNo.: LB133010

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/18/2024
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/18/2024
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/18/2024

Initial and Continuing Calibration Blank Summary

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

SDG No.: P4460
RunNo.: LB133034

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	10/21/2024
Sample ID: CCB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	10/21/2024
Sample ID: CCB2 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	10/21/2024
Sample ID: CCB3 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	10/21/2024

Initial and Continuing Calibration Blank Summary

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

SDG No.: P4460
RunNo.: LB133044

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/22/2024
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/22/2024
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/22/2024
Sample ID: CCB3 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	10/22/2024

Preparation Blank Summary

Client: Portal Partners Tri-Venture

SDG No.: P4460

Project: Amtrak Sawtooth Bridges 2024

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB133010BL Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.003	0.01	10/18/2024
Sample ID: PB164265BL Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0088	0.05	10/21/2024
Sample ID: PB164266BL Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.079	0.4	10/22/2024
Sample ID: PB164267BL Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.186	10	10/22/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P4460

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P4460-03

Client ID:

WB-303-BOTMS

Percent Solids for Spike Sample:

80.1

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	1450		0.098	U	1600	40	91		10/22/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P4460

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P4460-03

Client ID:

WB-303-BOTMS

Percent Solids for Spike Sample:

80.1

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	85-115	46.7		0.098	U	49.9	2	94		10/22/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P4460

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P4460-03

Client ID:

WB-303-BOTMS

Percent Solids for Spike Sample:

80.1

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	38.6		0.098	U	49.9	2	77		10/22/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P4460

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P4460-06

Client ID:

WB-303-SWMS

Percent Solids for Spike Sample:

0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/L	90-111	1.00		0.0030	U	1.0	2	100		10/18/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P4460

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P4460-06

Client ID:

WB-303-SWMSD

Percent Solids for Spike Sample:

0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/L	90-111	1.00		0.0030	U	1.0	2	100		10/18/2024

Duplicate Sample Summary

Client: Portal Partners Tri-Venture	SDG No.: P4460
Project: Amtrak Sawtooth Bridges 2024	Sample ID: P4397-06
Client ID: WB-301-BOTDUP	Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Ignitability	oC	+/-20	NO		NO		1	0		10/21/2024
Reactive Cyanide	mg/Kg	+/-20	0.0087	U	0.013	J	1	200	*	10/21/2024
Reactive Sulfide	mg/Kg	+/-20	1.58	J	1.58	J	1	0		10/22/2024

Duplicate Sample Summary

Client:	Portal Partners Tri-Venture	SDG No.:	P4460
Project:	Amtrak Sawtooth Bridges 2024	Sample ID:	P4460-03
Client ID:	WB-303-BOTDUP	Percent Solids for Spike Sample:	80.1

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.098	U	0.098	U	1	0		10/22/2024

Duplicate Sample Summary

Client:	Portal Partners Tri-Venture	SDG No.:	P4460
Project:	Amtrak Sawtooth Bridges 2024	Sample ID:	P4460-04
Client ID:	WB-303-BOTDUP	Percent Solids for Spike Sample:	100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Corrosivity	pH	+/-20	8.30		8.31		1	0.12		10/18/2024

Duplicate Sample Summary

Client:	Portal Partners Tri-Venture	SDG No.:	P4460
Project:	Amtrak Sawtooth Bridges 2024	Sample ID:	P4460-06
Client ID:	WB-303-SWDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Hexavalent Chromium	mg/L	+/-20	0.0030	U	0.0030	U	1	0		10/18/2024

Duplicate Sample Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P4460

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P4460-06

Client ID:

WB-303-SWMSD

Percent Solids for Spike Sample:

0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Hexavalent Chromium	mg/L	+/-20	1.00		1.00		2	0.2		10/18/2024

Laboratory Control Sample Summary

Client: Portal Partners Tri-Venture

SDG No.: P4460

Project: Amtrak Sawtooth Bridges 2024

Run No.: LB133010

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB133010BS							
Hexavalent Chromium	mg/L	0.5	0.52		103	1	90-111	10/18/2024

Laboratory Control Sample Summary

Client: Portal Partners Tri-Venture

SDG No.: P4460

Project: Amtrak Sawtooth Bridges 2024

Run No.: LB133044

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB164266BS							
Hexavalent Chromium	mg/Kg	20	20.0		100	1	84-110	10/22/2024

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133010

Review By	rubina	Review On	10/18/2024 5:19:57 PM
Supervise By	Iwona	Supervise On	10/21/2024 10:10:08 AM
SubDirectory	LB133010	Test	Hexavalent Chromium
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP110294,WP110293,WP110291,WP110290,WP110246,WP107791,WP110292,WP110297,WP110295,WP110296		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	10/18/24 16:50		rubina	OK
2	CAL2	CAL2	CAL	10/18/24 16:51		rubina	OK
3	CAL3	CAL3	CAL	10/18/24 16:52		rubina	OK
4	CAL4	CAL4	CAL	10/18/24 16:53		rubina	OK
5	CAL5	CAL5	CAL	10/18/24 16:54		rubina	OK
6	CAL6	CAL6	CAL	10/18/24 16:55		rubina	OK
7	CAL7	CAL7	CAL	10/18/24 16:56		rubina	OK
8	ICV	ICV	ICV	10/18/24 16:57		rubina	OK
9	ICB	ICB	ICB	10/18/24 16:58		rubina	OK
10	CCV1	CCV1	CCV	10/18/24 16:59		rubina	OK
11	CCB1	CCB1	CCB	10/18/24 17:00		rubina	OK
12	RL Check	RL Check	SAM	10/18/24 17:01		rubina	OK
13	LB133010BL	LB133010BL	MB	10/18/24 17:02		rubina	OK
14	LB133010BS	LB133010BS	LCS	10/18/24 17:03		rubina	OK
15	P4460-06	WB-303-SW	SAM	10/18/24 17:04		rubina	OK
16	P4460-06DUP	WB-303-SWDUP	DUP	10/18/24 17:05		rubina	OK
17	P4460-06MS	WB-303-SWMS	MS	10/18/24 17:06		rubina	OK
18	P4460-06MSD	WB-303-SWMSD	MSD	10/18/24 17:07		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133010

Review By	rubina	Review On	10/18/2024 5:19:57 PM
Supervise By	Iwona	Supervise On	10/21/2024 10:10:08 AM
SubDirectory	LB133010	Test	Hexavalent Chromium

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP110294,WP110293,WP110291,WP110290,WP110246,WP107791,WP110292,WP110297,WP110295,WP110296

19	CCV2	CCV2	CCV	10/18/24 17:08		rubina	OK
20	CCB2	CCB2	CCB	10/18/24 17:09		rubina	OK

A
B
C
D
E
F

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133013

Review By	jignesh	Review On	10/19/2024 12:17:28 PM
Supervise By	Iwona	Supervise On	10/21/2024 10:08:59 AM
SubDirectory	LB133013	Test	Corrosivity
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3107,W3093,W3094,W3071,W3005,W3072		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	10/18/24 16:30		Jignesh	OK
2	CAL2	CAL2	CAL	10/18/24 16:31		Jignesh	OK
3	CAL3	CAL3	CAL	10/18/24 16:33		Jignesh	OK
4	ICV	ICV	ICV	10/18/24 16:37		Jignesh	OK
5	CCV1	CCV1	CCV	10/18/24 16:40		Jignesh	OK
6	P4397-06	WB-301-BOT	SAM	10/18/24 16:45		Jignesh	OK
7	P4443-05	OG-315-HR-502-COM	SAM	10/18/24 16:48		Jignesh	OK
8	P4443-10	OG-315-HR-502-COM	SAM	10/18/24 16:50		Jignesh	OK
9	P4458-02	280517	SAM	10/18/24 17:00		Jignesh	OK
10	P4460-04	WB-303-BOT	SAM	10/18/24 17:10		Jignesh	OK
11	P4460-04DUP	WB-303-BOTDUP	DUP	10/18/24 17:11		Jignesh	OK
12	CCV2	CCV2	CCV	10/18/24 17:15		Jignesh	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QCBatch ID # LB133020

Review By	rubina	Review On	10/21/2024 11:12:11 AM
Supervise By	Iwona	Supervise On	10/21/2024 11:13:29 AM
SubDirectory	LB133020	Test	Ignitability
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	P4397-06	WB-301-BOT	SAM	10/21/24 09:20		rubina	OK
2	P4397-06DUP	WB-301-BOTDUP	DUP	10/21/24 09:28		rubina	OK
3	P4443-01	OG-315-HR-502-COM	SAM	10/21/24 09:35		rubina	OK
4	P4443-05	OG-315-HR-502-COM	SAM	10/21/24 09:42		rubina	OK
5	P4443-06	OG-315-HR-502-COM	SAM	10/21/24 09:50		rubina	OK
6	P4443-10	OG-315-HR-502-COM	SAM	10/21/24 09:58		rubina	OK
7	P4454-03	34542-43	SAM	10/21/24 10:05		rubina	OK
8	P4458-01	280517	SAM	10/21/24 10:12		rubina	OK
9	P4458-02	280517	SAM	10/21/24 10:20		rubina	OK
10	P4460-04	WB-303-BOT	SAM	10/21/24 10:27		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB133034

Review By	Niha	Review On	10/22/2024 8:50:05 AM
Supervise By	Iwona	Supervise On	10/22/2024 9:43:54 AM
SubDirectory	LB133034	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP110325,WP110326,WP110327,WP110328,WP110329,WP110330,WP110331		
ICV Standard	WP110333		
CCV Standard	WP110326		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP109068,WP110103,WP110332		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	10/21/24 14:13		Niha	OK
2	5.0PPBCN	5.0PPBCN	CAL2	10/21/24 14:13		Niha	OK
3	10PPBCN	10PPBCN	CAL3	10/21/24 14:13		Niha	OK
4	50PPBCN	50PPBCN	CAL4	10/21/24 14:13		Niha	OK
5	100PPBCN	100PPBCN	CAL5	10/21/24 14:13		Niha	OK
6	250PPBCN	250PPBCN	CAL6	10/21/24 14:13		Niha	OK
7	500PPBCN	500PPBCN	CAL7	10/21/24 14:13		Niha	OK
8	ICV1	ICV1	ICV	10/21/24 15:35		Niha	OK
9	ICB1	ICB1	ICB	10/21/24 15:35		Niha	OK
10	CCV1	CCV1	CCV	10/21/24 15:35		Niha	OK
11	CCB1	CCB1	CCB	10/21/24 15:35		Niha	OK
12	PB164265BL	PB164265BL	MB	10/21/24 15:35		Niha	OK
13	P4397-06	WB-301-BOT	SAM	10/21/24 15:35		Niha	OK
14	P4397-06DUP	WB-301-BOTDUP	DUP	10/21/24 15:42		Niha	OK
15	P4430-01	VNJ-209	SAM	10/21/24 15:42		Niha	OK
16	P4443-10	OG-315-HR-502-COM	SAM	10/21/24 15:42		Niha	OK
17	P4458-02	280517	SAM	10/21/24 15:42		Niha	OK
18	P4460-04	WB-303-BOT	SAM	10/21/24 15:50		Niha	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB133034

Review By	Niha	Review On	10/22/2024 8:50:05 AM
Supervise By	Iwona	Supervise On	10/22/2024 9:43:54 AM
SubDirectory	LB133034	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP110325,WP110326,WP110327,WP110328,WP110329,WP110330,WP110331		
ICV Standard	WP110333		
CCV Standard	WP110326		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP109068,WP110103,WP110332		

19	P4467-04	TP-1	SAM	10/21/24 15:50		Niha	OK
20	P4468-04	ETGI-329	SAM	10/21/24 15:50		Niha	OK
21	P4443-05	OG-315-HR-502-COM	SAM	10/21/24 15:50		Niha	OK
22	CCV2	CCV2	CCV	10/21/24 15:50		Niha	OK
23	CCB2	CCB2	CCB	10/21/24 15:55		Niha	OK
24	P4468-06	ETGI-345	SAM	10/21/24 15:55		Niha	OK
25	CCV3	CCV3	CCV	10/21/24 15:55		Niha	OK
26	CCB3	CCB3	CCB	10/21/24 15:55		Niha	OK

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB133040

Review By	rubina	Review On	10/22/2024 12:08:17 PM
Supervise By	Iwona	Supervise On	10/22/2024 12:08:34 PM
SubDirectory	LB133040	Test	Reactive Sulfide
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3105,W3114,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB164267BL	PB164267BL	MB	10/22/24 11:30		rubina	OK
2	P4397-06	WB-301-BOT	SAM	10/22/24 11:33		rubina	OK
3	P4397-06DUP	WB-301-BOTDUP	DUP	10/22/24 11:35		rubina	OK
4	P4430-01	VNJ-209	SAM	10/22/24 11:38		rubina	OK
5	P4443-05	OG-315-HR-502-COM	SAM	10/22/24 11:40		rubina	OK
6	P4443-10	OG-315-HR-502-COM	SAM	10/22/24 11:43		rubina	OK
7	P4458-02	280517	SAM	10/22/24 11:45		rubina	OK
8	P4460-04	WB-303-BOT	SAM	10/22/24 11:48		rubina	OK
9	P4467-04	TP-1	SAM	10/22/24 11:50		rubina	OK
10	P4468-04	ETGI-329	SAM	10/22/24 11:53		rubina	OK
11	P4468-06	ETGI-345	SAM	10/22/24 11:56		rubina	OK
12	P4472-04	BP-F-28	SAM	10/22/24 11:58		rubina	OK
13	P4472-08	BP-F-6	SAM	10/22/24 12:00		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133044

Review By	rubina	Review On	10/22/2024 1:21:12 PM
Supervise By	Iwona	Supervise On	10/24/2024 9:43:11 AM
SubDirectory	LB133044	Test	Hexavalent Chromium
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP110246,WP107791,WP107796,WP108645		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	10/22/24 12:40		rubina	OK
2	CAL2	CAL2	CAL	10/22/24 12:41		rubina	OK
3	CAL3	CAL3	CAL	10/22/24 12:42		rubina	OK
4	CAL4	CAL4	CAL	10/22/24 12:43		rubina	OK
5	CAL5	CAL5	CAL	10/22/24 12:44		rubina	OK
6	CAL6	CAL6	CAL	10/22/24 12:45		rubina	OK
7	CAL7	CAL7	CAL	10/22/24 12:46		rubina	OK
8	ICV	ICV	ICV	10/22/24 12:47		rubina	OK
9	ICB	ICB	ICB	10/22/24 12:48		rubina	OK
10	CCV1	CCV1	CCV	10/22/24 12:49		rubina	OK
11	CCB1	CCB1	CCB	10/22/24 12:50		rubina	OK
12	RL Check	RL Check	SAM	10/22/24 12:51		rubina	OK
13	PB164266BL	PB164266BL	MB	10/22/24 12:52		rubina	OK
14	PB164266BS	PB164266BS	LCS	10/22/24 12:53		rubina	OK
15	P4443-01	OG-315-HR-502-COM	SAM	10/22/24 12:54		rubina	OK
16	P4443-06	OG-315-HR-502-COM	SAM	10/22/24 12:55		rubina	OK
17	P4458-01	280517	SAM	10/22/24 12:56		rubina	OK
18	P4460-02	WB-303-TOP	SAM	10/22/24 12:57		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133044

Review By	rubina	Review On	10/22/2024 1:21:12 PM
Supervise By	Iwona	Supervise On	10/24/2024 9:43:11 AM
SubDirectory	LB133044	Test	Hexavalent Chromium
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP110246,WP107791,WP107796,WP108645		

19	P4460-03	WB-303-BOT	SAM	10/22/24 12:58		rubina	OK
20	P4460-03DUP	WB-303-BOTDUP	DUP	10/22/24 12:59		rubina	OK
21	P4460-03MSPre	WB-303-BOTMS	MS	10/22/24 13:00		rubina	OK
22	P4460-03MS2Ins	WB-303-BOTMS	MS	10/22/24 13:01		rubina	OK
23	CCV2	CCV2	CCV	10/22/24 13:02		rubina	OK
24	CCB2	CCB2	CCB	10/22/24 13:03		rubina	OK
25	P4460-03MS3Post	WB-303-BOTMS	MS	10/22/24 13:04		rubina	OK
26	P4467-01	TP-1	SAM	10/22/24 13:05		rubina	OK
27	P4468-03	ETGI-329	SAM	10/22/24 13:06		rubina	OK
28	P4468-05	ETGI-345	SAM	10/22/24 13:07		rubina	OK
29	P4471-01	B-180-SB01	SAM	10/22/24 13:08		rubina	OK
30	P4471-02	B-180-SB02	SAM	10/22/24 13:09		rubina	OK
31	P4472-01	BP-F-28	SAM	10/22/24 13:10		rubina	OK
32	P4472-05	BP-F-6	SAM	10/22/24 13:11		rubina	OK
33	CCV3	CCV3	CCV	10/22/24 13:12		rubina	OK
34	CCB3	CCB3	CCB	10/22/24 13:13		rubina	OK

LAB CHRONICLE

OrderID:	P4460	OrderDate:	10/18/2024 3:24:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	K51,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4460-02	WB-303-TOP	SOIL			10/18/24 09:50	10/22/24		10/18/24
			Hexavalent Chromium	7196A			10/22/24 12:57	
			Trivalent Chromium	6010D			10/23/24 17:55	
P4460-03	WB-303-BOT	SOIL			10/18/24 10:40	10/22/24		10/18/24
			Hexavalent Chromium	7196A			10/22/24 12:58	
			Trivalent Chromium	6010D			10/23/24 17:59	
P4460-04	WB-303-BOT	SOIL			10/18/24 10:40			10/18/24
			Corrosivity	9045D			10/18/24 17:10	
			Ignitability	1030			10/21/24 10:27	
			Reactive Cyanide	9012B		10/21/24	10/21/24 15:50	
			Reactive Sulfide	9034		10/22/24	10/22/24 11:48	
P4460-06	WB-303-SW	WATER			10/18/24 09:00			10/18/24
			Hexavalent Chromium	7196A			10/18/24 17:04	
			trivalent Chromium	6010D			10/24/24 19:00	

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-20

SDG No : N/A

Start Digest Date: 10/21/2024 Time : 13:30 Temp : N/A

Matrix : SOIL

End Digest Date: 10/21/2024 Time : 15:00 Temp : N/A

Pipette ID : N/A

Balance ID : WC SC-4

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : N/A

Block ID : MC-1,MC-2

Filter paper ID : N/A

Prep Technician Signature: NF

Weigh By : NF

pH Meter ID : N/A

Supervisor Signature: 12

Standardized Name	MLS USED	STD REF. # FROM LOG
PBS003	50.0ML	W3112
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 USED	Lot Number
0.25N NaOH	50.0ML	WP108640
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
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Comment

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/21/2024, 15:10	NF(WC)	NF
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4397-06	WB-301-BOT	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
P4397-06DUP	WB-301-BOTDUP	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
P4430-01	VNJ-209	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4443-05	OG-315-HR-502-COMP-29	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P4443-10	OG-315-HR-502-COMP-30	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
P4458-02	280517	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
P4460-04	WB-303-BOT	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4467-04	TP-1	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
P4468-04	ETGI-329	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
P4468-06	ETGI-345	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164265BL	PBS265	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A

SOP ID : M3060A,7196A-Hex.Chromium-26

SDG No : N/A

Start Digest Date: 10/22/2024 Time : 09:00 Temp : 90 °C

Matrix : SOIL

End Digest Date: 10/22/2024 Time : 10:00 Temp : 94 °C

Pipette ID : WC

il batch
10/22/2024 10-15 90°C RM
10/22/2024 11-15 95°C

Balance ID : WC SC-4

Hood ID : HOOD#3

Digestion tube ID : M6054

Block Thermometer ID : WC-Block#1

Block ID : WC S-2, WC S-1

Filter paper ID : 400213

Prep Technician Signature: RM

Weigh By : RM

pH Meter ID : WC pH meter-1

Supervisor Signature: 12

Standardized Name	MLS USED	STD REF. # FROM LOG
PRE-DIGESTION SPIKE	2.0ML	WP108658
INSOLUBLE SPIKE	0.02GM	W2202
POST-DIGESTION SPIKE	2.0ML	WP108658
LCSS	1.0ML	WP108659
PBS003	50ML	W3112

Chemical Used	ML/SAMPLE USED	Lot Number
MAGNESIUM CHLORIDE	0.4GM	W3001
PHOSPHATE BUFFER	0.5ML	WP108008
HEX. DIGESTION SOLN.	50.0ML	WP110092
5M HNO3	5-7ML	WP107796
5N H2SO4	1-3ML	WP107791
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	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP110336
CAL3	CAL3	0.5ML	WP110336
CAL4	CAL4	1ML	WP110336
CAL5	CAL5	0.2ML	WP108658
CAL6	CAL6	1ML	WP108658
CAL7	CAL7	2.0ML	WP108658
ICV	ICV	1ML	WP108659
ICB	ICB	2.5ML	W3112
CCV	CCV	1ML	WP108658
CCB	CCB	2.5ML	W3112

Extraction Conformance/Non-Conformance Comments:

10/22/2024 RM

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4443-01	OG-315-HR-502-COMP-29	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4443-06	OG-315-HR-502-COMP-30	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4458-01	280517	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4460-02	WB-303-TOP	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
P4460-03	WB-303-BOT	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4460-03DUP	WB-303-BOTDUP	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4460-03MSPre	WB-303-BOTMSPRE	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4460-03MS2Ins	WB-303-BOTMS2INS	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4460-03MS3Post	WB-303-BOTMS3POST	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4467-01	TP-1	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4468-03	ETGI-329	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4468-05	ETGI-345	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4471-01	B-180-SB01	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4471-02	B-180-SB02	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
P4472-01	BP-F-28	2.56	100	N/A	N/A	N/A	N/A	N/A	N/A
P4472-05	BP-F-6	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
PB164266BL	PBS266	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB164266BS	LCS266	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A

SOP ID : M9030B-Sulfide-12

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-4

Hood ID : HOOD#1

Block ID : MC-1,MC-2

Weigh By : RM

Start Digest Date: 10/22/2024 Time : 09:20 Temp : N/A

End Digest Date: 10/22/2024 Time : 10:50 Temp : N/A

Digestion tube ID : M5595

Block Thermometer ID : N/A

Filter paper ID : N/A

Prep Technician Signature: RM

pH Meter ID : N/A

Supervisor Signature: 12

Standardized Name	MLS USED	STD REF. # FROM LOG
PBS003	50.0ML	W3112
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 USED	Lot Number
0.5M ZINC ACETATE	5.0ML	WP108780
FORMALDEHYDE	2.0ML	W2725
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:

10/22/2024
RM

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4397-06	WB-301-BOT	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
P4397-06DUP	WB-301-BOTDUP	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
P4430-01	VNJ-209	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4443-05	OG-315-HR-502-COMP-29	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
P4443-10	OG-315-HR-502-COMP-30	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P4458-02	280517	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
P4460-04	WB-303-BOT	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
P4467-04	TP-1	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
P4468-04	ETGI-329	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
P4468-06	ETGI-345	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P4472-04	BP-F-28	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
P4472-08	BP-F-6	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164267BL	PBS267	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A