



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/14/24 16:14
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-01	Matrix:	SOIL
		% Solid:	78.5

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.099	U	1	0.099	0.50	mg/Kg	12/20/24 10:45	12/20/24 13:54	7196A
Trivalent Chromium	7.98		1	0.64	0.64	mg/Kg		12/20/24 18:38	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:	12/15/24 10:17
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-02	Matrix:	SOIL
		% Solid:	75.5

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.10	U	1	0.10	0.52	mg/Kg	12/20/24 10:45	12/20/24 13:55	7196A
Trivalent Chromium	13.2		1	0.66	0.66	mg/Kg		12/20/24 20:06	6010D

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

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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:	12/15/24 16:02
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-03	Matrix:	SOIL
		% Solid:	68.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	0.11	U	1	0.11	0.58	mg/Kg	12/20/24 10:45	12/20/24 13:56	7196A
Trivalent Chromium	26.1		1	0.73	0.73	mg/Kg		12/20/24 20:10	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:	12/15/24 17:27
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-04	Matrix:	SOIL
		% Solid:	79.2

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	12/20/24 10:45	12/20/24 13:57	7196A
Trivalent Chromium	18.6		1	0.63	0.63	mg/Kg		12/20/24 20:14	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

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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

Initial and Continuing Calibration Verification

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

SDG No.: P5299
RunNo.: LB134045

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	12/20/2024
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.501	0.5	100	90-110	12/20/2024
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.500	0.5	100	90-110	12/20/2024
Sample ID: CCV3 Hexavalent Chromium	mg/L	0.501	0.5	100	90-110	12/20/2024

Initial and Continuing Calibration Blank Summary

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

SDG No.: P5299
RunNo.: LB134045

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	12/20/2024
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	12/20/2024
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	12/20/2024
Sample ID: CCB3 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	12/20/2024

Preparation Blank Summary

Client: Portal Partners Tri-Venture

SDG No.: P5299

Project: Amtrak Sawtooth Bridges 2024

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB165729BL							
Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.079	0.4	12/20/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P5299

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P5339-01

Client ID:

TR-06-12182024MS

Percent Solids for Spike Sample:

86.4

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	1410		0.090	U	1490	40	95		12/20/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P5299

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P5339-01

Client ID:

TR-06-12182024MS

Percent Solids for Spike Sample:

86.4

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	43.7		0.090	U	46.3	2	94		12/20/2024

Matrix Spike Summary

Client:

Portal Partners Tri-Venture

SDG No.:

P5299

Project:

Amtrak Sawtooth Bridges 2024

Sample ID:

P5339-01

Client ID:

TR-06-12182024MS

Percent Solids for Spike Sample:

86.4

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	35.1		0.090	U	46.3	2	76		12/20/2024

Duplicate Sample Summary

Client:	Portal Partners Tri-Venture	SDG No.:	P5299
Project:	Amtrak Sawtooth Bridges 2024	Sample ID:	P5339-01
Client ID:	TR-06-12182024DUP	Percent Solids for Spike Sample:	86.4

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.090	U	0.10	U	1	0		12/20/2024

Laboratory Control Sample Summary

Client: Portal Partners Tri-Venture

SDG No.: P5299

Project: Amtrak Sawtooth Bridges 2024

Run No.: LB134045

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB165729BS							
Hexavalent Chromium	mg/Kg	20	19.9		100	1	84-110	12/20/2024

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134045

Review By	rubina	Review On	12/20/2024 2:26:57 PM
Supervise By	Iwona	Supervise On	12/20/2024 3:44:23 PM
SubDirectory	LB134045	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	WP111113,WP110380,WP110381,WP108645		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	12/20/24 13:40		rubina	OK
2	CAL2	CAL2	CAL	12/20/24 13:41		rubina	OK
3	CAL3	CAL3	CAL	12/20/24 13:42		rubina	OK
4	CAL4	CAL4	CAL	12/20/24 13:43		rubina	OK
5	CAL5	CAL5	CAL	12/20/24 13:44		rubina	OK
6	CAL6	CAL6	CAL	12/20/24 13:45		rubina	OK
7	CAL7	CAL7	CAL	12/20/24 13:46		rubina	OK
8	ICV	ICV	ICV	12/20/24 13:47		rubina	OK
9	ICB	ICB	ICB	12/20/24 13:48		rubina	OK
10	CCV1	CCV1	CCV	12/20/24 13:49		rubina	OK
11	CCB1	CCB1	CCB	12/20/24 13:50		rubina	OK
12	RL Check	RL Check	SAM	12/20/24 13:51		rubina	OK
13	PB165729BL	PB165729BL	MB	12/20/24 13:52		rubina	OK
14	PB165729BS	PB165729BS	LCS	12/20/24 13:53		rubina	OK
15	P5299-01	SB-01	SAM	12/20/24 13:54		rubina	OK
16	P5299-02	SB-02	SAM	12/20/24 13:55		rubina	OK
17	P5299-03	SB-01	SAM	12/20/24 13:56		rubina	OK
18	P5299-04	SB-02	SAM	12/20/24 13:57		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134045

Review By	rubina	Review On	12/20/2024 2:26:57 PM
Supervise By	Iwona	Supervise On	12/20/2024 3:44:23 PM
SubDirectory	LB134045	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	WP111113,WP110380,WP110381,WP108645		

19	P5330-01	TP-5	SAM	12/20/24 13:58		rubina	OK
20	P5339-01	TR-06-12182024	SAM	12/20/24 13:59		rubina	OK
21	P5339-01DUP	TR-06-12182024DUP	DUP	12/20/24 14:00		rubina	OK
22	P5339-01MSPre	TR-06-12182024MS	MS	12/20/24 14:01		rubina	OK
23	CCV2	CCV2	CCV	12/20/24 14:02		rubina	OK
24	CCB2	CCB2	CCB	12/20/24 14:03		rubina	OK
25	P5339-01MS2Ins	TR-06-12182024MS	MS	12/20/24 14:04		rubina	OK
26	P5339-01MS3Post	TR-06-12182024MS	MS	12/20/24 14:05		rubina	OK
27	P5355-01	RBR251688	SAM	12/20/24 14:06		rubina	OK
28	CCV3	CCV3	CCV	12/20/24 14:07		rubina	OK
29	CCB3	CCB3	CCB	12/20/24 14:08		rubina	OK

LAB CHRONICLE

OrderID:	P5299	OrderDate:	12/16/2024 12:24:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5299-01	SB-01	SOIL			12/14/24 16:14	12/20/24		12/16/24
			Hexavalent Chromium	7196A			12/20/24 13:54	
			Trivalent Chromium	6010D			12/20/24 18:38	
P5299-02	SB-02	SOIL			12/15/24 10:17	12/20/24		12/16/24
			Hexavalent Chromium	7196A			12/20/24 13:55	
			Trivalent Chromium	6010D			12/20/24 20:06	
P5299-03	SB-01	SOIL			12/15/24 16:02	12/20/24		12/16/24
			Hexavalent Chromium	7196A			12/20/24 13:56	
			Trivalent Chromium	6010D			12/20/24 20:10	
P5299-04	SB-02	SOIL			12/15/24 17:27	12/20/24		12/16/24
			Hexavalent Chromium	7196A			12/20/24 13:57	
			Trivalent Chromium	6010D			12/20/24 20:14	

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

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

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

Weigh By : RM

Start Digest Date: 12/20/2024 Time : 10:45 Temp : 90 °C

End Digest Date: 12/20/2024 Time : 11:45 Temp : 94 °C

batch 12/20/2024 12:05 13:05 90°C 95°C RM

Digestion tube ID : M6054

Block Thermometer ID : WC-Block#1

Filter paper ID : 400213

Prep Technician Signature: RM

pH Meter ID : WC pH meter-1

Supervisor Signature: 12

Standard 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	W3152
PHOSPHATE BUFFER	0.5ML	WP110498
HEX. DIGESTION SOLN.	50.0ML	WP111052
5M HNO3	5-7ML	WP110381
5N H2SO4	1-3ML	WP110380
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	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP111163
CAL3	CAL3	0.5ML	WP111163
CAL4	CAL4	1ML	WP111163
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:

N/A

12/20/2024 RM

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
P5299-01	SB-01	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
P5299-02	SB-02	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
P5299-03	SB-01	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P5299-04	SB-02	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P5330-01	TP-5	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
P5339-01	TR-06-12182024	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
P5339-01DUP	TR-06-12182024DUP	2.23	100	N/A	N/A	N/A	N/A	N/A	N/A
P5339-01MSPre	TR-06-12182024MSPRE	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P5339-01MS2Ins	TR-06-12182024MS2INS	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
P5339-01MS3Post	TR-06-12182024MS3POST	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P5355-01	RBR251688	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
PB165729BL	PBS729	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB165729BS	LCS729	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A