## DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Labora	bratory Name : Alliance Technical Group LLC Client : Portal Partners Tri-Venture				
Projec	t Location : Kearny, NJ Project Number : 950000878				
Labora	tory Sample ID(s) : <u>Q2198</u> Sampling Date(s) : <u>5/31/2025,06/0</u>	1/2025			
List Dł	XQP Methods Used (e.g., 8260,8270, et Cetra) ,1030,1311,1311 ZHE, 6010D, 7196A, 7470 8151A, 8260-Low, 8260D ,8270E,9012B,90				
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	🗹 Yes 🗖 No			
1A	Were the method specified handling, preservation, and holding time requirements met?	D Yes 🗹 No			
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	Yes No N/A			
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes D No			
3	Were samples received at an appropriate temperature (4±2° C)?	Yes No N/A			
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	🛛 Yes 🗹 No			
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	Yes 🗖 No			
	b)Were these reporting limits met?	Yes D No D N/A			
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	🗹 Yes 🗖 No			
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	🛛 Yes 🗹 No			

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."



**Client Sample Number** 

# **Cover Page**

- **Order ID :** Q2198
- **Project ID :** Amtrak Sawtooth Bridges 2025
  - **Client :** Portal Partners Tri-Venture

#### Lab Sample Number

Q2198-01 B-202-SB02	
Q2198-02 B-202-SB02	
Q2198-03 B-207-SB02	
Q2198-04 B-207-SB02	
Q2198-05 B-202-GW01	

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

Signature :

Date: 6/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: VOC-TCLVOA-10

## A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

## C. Analytical Techniques:

The analysis performed on instrument MSVOA\_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis performed on instrument MSVOA\_Y were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOC-TCLVOA-10 was based on method 8260D.

## D. QA/ QC Samples:

The Holding Times were met for all analysis. The Surrogate recoveries met the acceptable criteria. The Internal Standards Areas met the acceptable requirements. The Retention Times were acceptable for all samples.

The RPD for {VX0604WBSD01} with File ID: VX046497.D met criteria except for Carbon disulfide[29%], Chloroethane[36%], Chloromethane[22%], Cyclohexane[23%] and Methylcyclohexane[21%] due to difference in results of BS and BSD.

The Blank Spike for {VX0604WBS01} with File ID: VX046491.D met requirements for all samples except for Methyl Acetate[138%] this compound did not meet the NJDKQP criteria and in-house criteria, is failing high but no positive hit in associate sample therefore no corrective action taken.



The Blank Spike Duplicate for {VX0604WBSD01} with File ID: VX046497.D met requirements for all samples except for Methyl Acetate[156%] this compound did not meet the NJDKQP criteria and in-house criteria, is failing high but no positive hit in associate sample therefore no corrective action taken.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration File ID VX046488.D met the requirements except for Methyl Acetate is failing high but no positive hit in associate sample therefore no corrective action taken.

The Tuning criteria met requirements.

#### **E. Additional Comments:**

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.

The soil samples results are based on a dry weight basis.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

#### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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

~ •	
Signature	
SIVUALUE	
Signer of	



Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: TCLP VOA

### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP VOA.

## C. Analytical Techniques:

The analysis performed on instrument MSVOA\_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of TCLP VOA was based on method 8260D and TCLP extraction method was 1311.

## D. QA/ QC Samples:

The Holding Times were met for all analysis. The Surrogate recoveries met the acceptable criteria. The Internal Standards Areas met the acceptable requirements. The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.



#### **E. Additional Comments:**

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.

The soil samples results are based on a dry weight basis.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: SVOC-TCL BNA -20

## A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

## **C. Analytical Techniques:**

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe samples were analyzed on instrument BNA\_P using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3510.

## D. QA/ QC Samples:

The Holding Times were met for all analysis. The Surrogate recoveries met the acceptable criteria. The Internal Standards Areas met the acceptable requirements. The Retention Times were acceptable for all samples.

The MS {Q2207-37MS} with File ID: BF142644.D recoveries met the requirements for all compounds except for 3,3-Dichlorobenzidine[56%], 3-Nitroaniline[58%], 4-Chloroaniline[54%] and Pyrene[66%]. These compounds did not meet the NJDKQP criteria but met the in-house criteria.

The MSD {Q2207-37MSD} with File ID: BF142645.D recoveries met the acceptable requirements except for 3,3-Dichlorobenzidine[58%], 3-Nitroaniline[60%] and 4-Chloroaniline[53%]. These compounds did not meet the NJDKQP criteria but met the inhouse criteria.



The RPD met criteria.

The Blank Spike for {PB168285BS} with File ID: BF142727.D met requirements for all samples except for 3,3-Dichlorobenzidine[43%], 3-Nitroaniline[52%] and 4-Chloroaniline[29%]. These compounds did not meet the NJDKQP criteria but met the inhouse criteria.

The Blank Spike Duplicate for {PB168285BSD} with File ID: BF142728.D met requirements for all samples except for 3,3-Dichlorobenzidine[44%], 3-Nitroaniline[51%] and 4-Chloroaniline[29%]. These compounds did not meet the NJDKQP criteria but met the in-house criteria.

The Blank Spike for {PB168300BS} with File ID: BP024907.D met requirements for all samples except for 4-Chloroaniline[65%]. These compounds did not meet the NJDKQP criteria but met the in-house criteria.

The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 20% in the Initial Calibration (8270-BP060625.M) for 2,4-Dinitrophenol, 4-Nitrophenol these compound are passing on Linear Regression.

The Continuous Calibration File ID BF142640.D met the requirements except for 4-Nitrophenol is marginally biased Low and Bis(2-ethylhexyl)phthalate and Di-n-octyl phthalate . Failed high but no hit in associated samples, therefor no further corrective action was taken.

The Tuning criteria met requirements.

## **E. Additional Comments:**

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The soil samples results are based on a dry weight basis.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

## **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.



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Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: TCLP BNA

### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP BNA.

## C. Analytical Techniques:

The samples were analyzed on instrument BNA\_M using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of TCLP BNA was based on method 8270E and extraction was done based on method 3510 and TCLP extraction method was 1311.

## D. QA/ QC Samples:

The Holding Times were met for all analysis. The Surrogate recoveries met the acceptable criteria. The Internal Standards Areas met the acceptable requirements. The Retention Times were acceptable for all samples.

The MS {Q2194-02MS} with File ID: BM050213.D recoveries met the requirements for all compounds except for 1,4-Dichlorobenzene[62%] and Hexachlorobutadiene[68%],these compounds did not meet the NJDKQP criteria but met the in-house criteria.

The MSD {Q2194-02MSD} with File ID: BM050214.D recoveries met the acceptable requirements except for 1,4-Dichlorobenzene[64%],this compound did not meet the NJDKQP criteria but met the in-house criteria.

The RPD met criteria.



The Blank Spike met requirements for all samples . The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration File ID BM050223.D met the requirements except for Pentachlorophenol, is failing high but no positive hit in associate samples therefore no corrective action taken.

The Tuning criteria met requirements.

### **E. Additional Comments:**

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Signature			
Signature	/		



Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: PCB

### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for PCB.

### **C. Analytical Techniques:**

The analyses were performed on instrument GCECD\_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11.The analyses were performed on instrument GCECD\_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11.The analyses were performed on instrument GCECD\_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11.The analysis of PCBs was based on method 8082A and extraction was done based on method 3510.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration File ID PP072634.D met the requirements except for Aroclor-1016(Peak-01), Aroclor-1260(Peak-02), Aroclor-1260(Peak-04) is failing in 1st column, however it is passed in 2nd column therefore no corrective action was taken.



## **E. Additional Comments:**

The soil samples results are based on a dry weight basis.

### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: TCLP Pesticide

### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP Pesticide.

## **C. Analytical Techniques:**

The analysis was performed on instrument ECD\_D. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11.The analysis of TCLP Pesticides was based on method 8081B and extraction was done based on method 3510 and TCLP extraction method was 1311.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: TCLP Herbicide

### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP Herbicide.

#### **C. Analytical Techniques:**

The analysis was performed on instrument ECD\_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

## D. QA/ QC Samples:

The Holding Times were met for all analysis. The Surrogate recoveries met the acceptable criteria. The Retention Times were acceptable for all samples. The MS recoveries met the requirements for all compounds . The MSD recoveries met the acceptable requirements . The RPD met criteria . The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: EPH

## A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for EPH.

### **C. Analytical Techniques:**

The analysis were performed on instrument FID\_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analyses were performed on instrument FID\_D. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPHs was based on method NJEPH and extraction was done based on method 3510.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS {Q2177-02MS} with File ID: FD049484.D recoveries met the requirements for all compounds except for Aromatic C10-C12[28%], Aromatic C12-C16[32%] due to matrix interference.

The MSD {Q2177-02MSD} with File ID: FD049485.D recoveries met the acceptable requirements except for Aromatic C10-C12[29%], Aromatic C12-C16[34%] due to matrix interference.

The RPD met criteria.

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



### **E. Additional Comments:**

The soil samples results are based on a dry weight basis.

#### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: TPH GC

## A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

## **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TPH GC.

## **C. Analytical Techniques:**

The analysis were performed on instrument FID\_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis of TPH GC was based on method 8015D and extraction was done based on method 3510.

## **D. QA/ QC Samples:**

The Holding Times were met for all analysis. The Surrogate recoveries met the acceptable criteria. The Retention Times were acceptable for all samples. The MS recoveries met the requirements for all compounds . The MSD recoveries met the acceptable requirements . The RPD met criteria . The Blank Spike met requirements for all samples . The Blank analysis did not indicate the presence of lab contamination. The Initial Calibration met the requirements . The Continuous Calibration met the requirements .

## **E. Additional Comments:**

The soil samples results are based on a dry weight basis.

## **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.



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



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

## CASE NARRATIVE

Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: Mercury,Metals ICP-TAL

## A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

#### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Mercury,Metals ICP-TAL.

#### **C. Analytical Techniques:**

The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils) and 3010 (waters). The analysis and digestion of Mercury was based on method 7470A. The analysis and digestion of Mercury was based on method 7471B.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate (OK-01-060325DUP) analysis met criteria for all samples except for Cadmium and Sodium due to sample matrix interference. The Duplicate (OK-01-060325MSD) analysis met criteria for all samples except for Potassium due to Chemical Interference during Digestion Process.

The Matrix Spike (B-202-GW01MS) analysis met criteria for all elements except for Antimony and Manganese due to Chemical Interference during Digestion process. The Matrix Spike (OK-01-060325MS) analysis met criteria for all elements except for Antimony, Barium, Beryllium, Potassium, Sodium and Zinc due to Chemical Interference during Digestion Process and for Mercury due to sample matrix interference.

The Matrix Spike Duplicate (B-202-GW01MSD) analysis met criteria for all elements except for Antimony and Manganese due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (OK-01-060325MSD) analysis met criteria for all elements except for Antimony, Barium, Beryllium, Chromium, Copper, Potassium, Silver and Sodium due to Chemical Interference during Digestion process.



The Blank analysis did not indicate the presence of lab contamination. The Calibration met the requirements. The Serial Dilution (OK-01-060325L) met criteria for all samples except for Calcium, Chromium, Copper, and Manganese due to sample matrix interference.

### **E. Additional Comments:**

The Post Digest Spike (Ok-01-060325A) analysis met criteria for all elements except for Barium, Chromium, Copper, Potassium and Sodium due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

The Post Digest Spike (B-202-GW01A) analysis met criteria for all elements except for Antimony and Manganese due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

Sample Q2198-05 and its QC's analyzed straight 5X Dilution due to sample matrix very highly contaminated and viscos matrix which can cause sample transporting to the sample introduction and to the torch

In analytical sequence LB136011, The % recovery was outside of acceptance limit for Iron, Potassium and Sodium of CCV08 but, no any sample associated under this CCV.

In analytical sequence LB136052, The % recovery was outside of acceptance limit for Arsenic, Iron, Potassium, Selenium, Sodium, Thallium, and Zinc of CCV06 and for Arsenic and Selenium of CCV07 but, no any samples associated under these CCVs.

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Signature	·



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## CASE NARRATIVE

**Portal Partners Tri-Venture** 

Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: TCLP ICP Metals,TCLP Mercury

### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

#### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for TCLP ICP Metals,TCLP Mercury.

## **C. Analytical Techniques:**

The analysis of TCLP ICP Metals was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of TCLP Mercury was based on method 7470A and TCLP extraction method was 1311.

## D. QA/ QC Samples:

The Holding Times were met for all analysis. The Blank Spike met requirements for all samples. The Duplicate analysis met criteria for all samples. The Matrix Spike analysis met criteria for all samples. The Matrix Spike Duplicate analysis met criteria for all samples. The Blank analysis did not indicate the presence of lab contamination. The Calibration met the requirements. The Serial Dilution met the acceptable requirements.

#### **E. Additional Comments:**

In analytical sequence LB136052, The % Recovery outside limit for Arsenic and selenium of CCV06 and CCV07 but, no any samples associated under these CCVs.



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## CASE NARRATIVE

Portal Partners Tri-Venture Project Name: Amtrak Sawtooth Bridges 2025 Project # N/A Order ID # Q2198 Test Name: Corrosivity,Hexavalent Chromium,Ignitability,pH,Reactive Cyanide,Reactive Sulfide,Trivalent Chromium

#### A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025. 1 Water sample was received on 06/03/2025.

#### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Corrosivity,Hexavalent Chromium,Ignitability,pH,Reactive Cyanide,Reactive Sulfide,Trivalent Chromium.

#### **C. Analytical Techniques:**

The analysis of Ignitability was based on method 1030, The analysis of Trivalent Chromium was based on method 6010D, The analysis of Hexavalent Chromium was based on method 7196A, The analysis of Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034, The analysis of pH was based on method 9040C and The analysis of Corrosivity,pH was based on method 9045D.

#### **D. QA/ QC Samples:**

The Holding Times were met for all samples except for B-202-GW01 of pH, for B-202-SB02 of pH.for B-202-SB02 of Corrosivity.for B-207-SB02 of pH.for B-207-SB02 of Corrosivity. As these samples are received out of hold.

The Blank Spike met requirements for all samples. The Duplicate analysis met criteria for all samples. The Matrix Spike analysis met criteria for all samples. The Matrix Spike Duplicate analysis met criteria for all samples. The Blank analysis did not indicate the presence of lab contamination. The Calibration met the requirements.



## **E. Additional Comments:**

Sample was filtered in the Lab and analyzed after 24 hours from collection. PH was 7.3 and was adjusted to 9.4.

Sample was filtered in the Lab and analyzed after 24 hours from collection. Because sample was received out of working hours it was filtered in the next morning.

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

Signature_	



## DATA REPORTING QUALIFIERS- INORGANIC

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

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



## DATA REPORTING QUALIFIERS- ORGANIC

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

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	<ul> <li>Indicates an estimated value. This flag is used:</li> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.</li> </ul>
В	Indicates the analyte was found in the blank as well as the sample report as "12 B".
Ε	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
Р	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
Ν	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
Α	This flag indicates that a Tentatively Identified Compound is a suspected aldol- condensation product.
Q	Indicates the LCS did not meet the control limits requirements



#### APPENDIX A

#### **QA REVIEW GENERAL DOCUMENTATION**

Project #: Q2198

Completed

For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	
Is the chain of custody signed and complete	<u> </u>
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<u> </u>
Collect information for each project id from server. Were all requirements followed	<u> </u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	<u> </u>
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u> </u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u> </u>
Do requested analyses on Chain of Custody agree with the log-in page	<u> </u>
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	
Were the samples received within hold time	<u> </u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	<u> </u>
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	<u> </u>

QA Review Signature: SOHIL JODHANI