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

Labora	atory Name :	Alliance Technical Group LLC	Client :	Portal Partners	Tri-Venture	<del>)</del>		
Projec	t Location :	Kearny, NJ	Project Number :	950000878				
Labora	atory Sample ID	O(s): Q1194	Sampling Date(s):	1/25/2025				
List DI	KQP Methods U	Jsed (e.g., 8260,8270, et Cetra)	,6010D,7196A,7470A,7471	B,8082A,8260-L	ow,8260D	,8270E	,NJEF	PH,SOP
1	specified QA/C explain any cri	rtical method referenced in this land performance criteria followed teria falling outside of acceptable f Known Quality performance states.	, including the requirement to e guidelines, as specified in th		<b>✓</b> Yes	s <b>□</b>	No	
1A	Were the meth	od specified handling, preservat	ion, and holding time requiren	nents met?	✓ Yes	; <b></b>	No	
1B		Was the EPH method conducted frespective DKQ methods)	without significant modification	ons (see	✓ Yes	з <b>П</b>	No	□ N/A
2		les received by the laboratory in he associated chain-of-custody of		at	✓ Yes	<b>□</b>	No	
3	Were samples	received at an appropriate temp	erature (4±2° C)?		✓ Yes	; <b></b>	No	□ N/A
4	Were all QA/Q standards ach	C performance criteria specified nieved?	in the NJDEP DKQP		☐ Yes		No	
5		ng limits specified or referenced to the laboratory prior to sample			<b>✓</b> Yes	; <b></b>	No	
	b)Were these r	reporting limits met?			Yes	; <b></b>	No	□ N/A
6	results reporte	rtical method referenced in this land for all constituents identified in the DKQP documents and/or site-	n the method-specific analyte		<b>☑</b> Yes		No	
7	Are project-spe	ecific matrix spikes and/or labora	ntory duplicates included in thi	s data set?	☐ Yes	<b>V</b>	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."

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

# **Cover Page**

**Order ID:** Q1194

**Project ID:** Amtrak Sawtooth Bridges 2025

Client: Portal Partners Tri-Venture

#### **Lab Sample Number Client Sample Number** Q1194-01 B-110-SB01 Q1194-02 B-110-SB02 Q1194-03 B-113-SB01 B-113-SB02 Q1194-04 Q1194-08 EΒ Q1194-09 FΒ Q1194-10 TB

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 :			
oigilatare .	Da	te:	2/10/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





**Portal Partners Tri-Venture** 

**Project Name: Amtrak Sawtooth Bridges 2025** 

Project # N/A

Chemtech Project # Q1194 Test Name: VOC-TCLVOA-10

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

4 Solid samples were received on 01/27/2025.

3 Water samples were received on 01/27/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, 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\_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The 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 8260-Low,8260D.

### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for B-110-SB01RE [4-Bromofluorobenzene - 63%], B-110-SB02 [4-Bromofluorobenzene - 68%], these compound did not meet the NJDKQP criteria but met the in-house criteria

The Internal Standards Areas met the acceptable requirements except for B-110-SB01, B-110-SB01RE The failure sample in Internal standard was reanalyzed to confirm the failure as per method and reported.

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 Continuous Calibration File ID VN085516.D met the requirements except for Carbon Disulfide failing failing low but marginally low therefor no corrective action taken. and Methyl tert-butyl Ether failing high but no positive hits in associated samples therefor no corrective action taken.

The Continuous Calibration File ID VN085526.D met the requirements except for 2-Hexanone and Styrene failing high but no positive hits in associated samples therefor 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.

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

Chemtech Project # Q1194

**Test Name: SVOC-TCL BNA -20** 

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

4 Solid samples were received on 01/27/2025.

3 Water samples were received on 01/27/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, 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 df The samples were analyzed on instrument BNA\_G using GC Column ZB-Semi Volatiles 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 {Q1194-04MS} with File ID: BF141352.D recoveries met the requirements for all compounds except for 3,3-Dichlorobenzidine[58%], 3-Nitroaniline[54%], 4-Chloroaniline[17%], Benzaldehyde[13%], Benzo(g,h,i)perylene[58%], Dibenz(a,h)anthracene[69%], Indeno(1,2,3-cd)pyrene[69%] and Pyrene[69%], these compounds did not meet the NJDKQP criteria but met the in-house criteria.

The MSD {Q1194-04MSD} with File ID: BF141353.D recoveries met the acceptable requirements except for 3,3-Dichlorobenzidine[62%], 3-Nitroaniline[54%], 4-Chloroaniline[23%], Benzaldehyde[13%], Benzo(g,h,i)perylene[58%], Dibenz(a,h)anthracene[69%], Indeno(1,2,3-cd)pyrene[69%] and Pyrene[65%], these compounds did not meet the NJDKQP criteria but met the in-house criteria.



The RPD for {Q1194-04MSD} with File ID: BF141353.D met criteria except for 4-Chloroaniline [30%], this compound did not meet the NJDKQP criteria but met the inhouse criteria.

The Blank Spike for {PB166294BS} with File ID: BF141439.D met requirements for all samples except for 3,3-Dichlorobenzidine[47%], 3-Nitroaniline[53%], 4-Chloroaniline[42%], Benzaldehyde[12%], these compounds did not meet the NJDKQP criteria but met the in-house criteria, while Hexachlorocyclopentadiene[185%], this compound did not meet the NJDKQP criteria and in-house criteria, the associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Blank Spike for {PB166339BS} with File ID: BF141442.D met requirements for all samples except for 3,3-Dichlorobenzidine[46%], 4-Chloroaniline[39%],3 Nitroaniline[53%], Benzaldehyde[13%], these compounds did not meet the NJDKQP criteria but met the in-house criteria, while Hexachlorocyclopentadiene[190%], this compound did not meet the NJDKQP criteria and in-house criteria, the associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Blank Spike Duplicate for {PB166339BSD} with File ID: BF141443.D met requirements for all samples except for 3,3-Dichlorobenzidine[47%], 3-Nitroaniline[54%], 4-Chloroaniline[37%], Benzaldehyde[12%], these compounds did not meet the NJDKQP criteria but met the in-house criteria, Hexachlorocyclopentadiene[190%], this compound did not meet the NJDKQP criteria and in-house criteria, the associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Blank analysis did not indicate the presence of lab contamination. The Initial Calibration met the requirements.

The Continuous Calibration File ID BF141336.D met the requirements except for 4-Nitrophenol and Pentachlorophenol, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID File ID BF141410.D met the requirements except for 4,6-Dinitro-2-methylphenol, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

#### E. Additional Comments:

Sample # EB was received with limited volume.

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 <15% 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 > 15% 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

Chemtech Project # Q1194

**Test Name: PCB** 

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

4 Solid samples were received on 01/27/2025.

3 Water samples were received on 01/27/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, 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\_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 PO109288.D met the requirements except for Decachlorobiphenyl is failing in 1st column but passing in 2nd column therefore no corrective action taken.



The Continuous Calibration File ID PO109302.D met the requirements except for Aroclor-1260(Peak-04), Aroclor-1260(Peak-05), Decachlorobiphenyl is failing in 1st column but passing in 2nd column therefore no corrective action 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.

Signature		
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**Portal Partners Tri-Venture** 

**Project Name: Amtrak Sawtooth Bridges 2025** 

Project # N/A

Chemtech Project # Q1194

**Test Name: EPH** 

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

4 Solid samples were received on 01/27/2025.

3 Water samples were received on 01/27/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, 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 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 were performed on instrument FID\_F. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. 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 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 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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## CASE NARRATIVE

**Portal Partners Tri-Venture** 

Project Name: Amtrak Sawtooth Bridges 2025

Project # N/A

**Chemtech Project # O1194** 

Test Name: Metals ICP-TAL, Mercury

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

4 Solid samples were received on 01/27/2025.

3 Water samples were received on 01/27/2025.

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

According to the Chain of Custody document, the following analyses were requested: EPH, EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Metals ICP-TAL, Mercury.

#### **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.

Sample B-110-SB02 was diluted due to high concentrations for Mercury.

The Blank Spike met requirements for all samples.

The Duplicate (B-113-SB02DUP) analysis met criteria for all samples except for Cadmium due to sample matrix interference.

The Matrix Spike (B-113-SB02MS) analysis met criteria for all samples except for Beryllium, Potassium and Selenium due to Chemical Interference during Digestion process. The Matrix Spike (EBMS) analysis met criteria for all samples except for Manganese due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (B-113-SB02MSD) analysis met criteria for all samples except for Barium, Beryllium, Chromium, Copper, Potassium, Selenium and Vanadium due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (EBMSD) analysis met criteria for all samples except for Manganese 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 (B-113-SB02L) met criteria for all samples except for Calcium, Chromium, Iron, Magnesium and Manganese due to sample matrix interference.



# **E. Additional Comments:**

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	



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## CASE NARRATIVE

**Portal Partners Tri-Venture** 

**Project Name: Amtrak Sawtooth Bridges 2025** 

Project # N/A

**Chemtech Project # O1194** 

Test Name: Hexavalent Chromium, Trivalent Chromium

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

4 Solid samples were received on 01/27/2025.

3 Water samples were received on 01/27/2025.

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

According to the Chain of Custody document, the following analyses were requested: EPH, EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Hexavalent Chromium, Trivalent Chromium.

#### C. Analytical Techniques:

The analysis of Trivalent Chromium was based on method 6010D and The analysis of Hexavalent Chromium was based on method 7196A.

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

The Calibration met the requirements.

#### E. Additional Comments:

Signature_			
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# DATA REPORTING QUALIFIERS- INORGANIC

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

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers  "P" for ICP instrument  "PM" for ICP when Microwave Digestion is used  "CV" for Manual Cold Vapor AA  "AV" for automated Cold Vapor AA  "CA" for MIDI-Distillation Spectrophotometric  "AS" for Semi – Automated Spectrophotometric  "C" for Manual Spectrophotometric  "T" for Titrimetric  "NR" for analyte not required to be analyzed  Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
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
В	<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> <li>Indicates the analyte was found in the blank as well as the sample report as "12 B".</li> </ul>
Е	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.
P	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".
N	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.
A	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 #: Q1194

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	<b>→</b>
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<del>'</del> <del>'</del> <del>'</del> <del>'</del>
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	
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	<u> </u>
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?	<u>'</u> <u>'</u> <u>'</u> _'
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	<u> </u>

QA Review Signature:	KETAN PATEL	Date:	02/10/2025
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