

ANALYTICAL RESULTS SUMMARY

SEMI-VOLATILE ORGANICS
VOLATILE ORGANICS

PROJECT NAME : NWIRP BETHPAGE 112G08005-WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q2120

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2120

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2120-01
Q2120-02

Client Sample Number

VPB182-HYD-20250522
BP-VPB-182-EB-20250522

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: 5/30/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager# Ernie Wu

Order ID # Q2120

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 05/22/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI The analysis of VOCMS Group1 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 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.

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."

Trip Blank was not provided with this set of samples.

The not QT review data is reported in the Miscellaneous.

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_____

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager # Ernie Wu

Order ID # Q2120

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 05/22/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. This data package contains results for SVOC-SIMGroup1.

C. Analytical Techniques:

The samples were analyzed on instrument BNA_N 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-SIMGroup1 was based on method 8270-Modified 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 except for, VPB182-HYD-20250522 [2-Methylnaphthalene-d10 - 6%, Fluoranthene-d10 - 23%, Terphenyl-d14 - 140%], due to matrix interference which can be observed by the abnormal chromatogram. and due to the limited volume of this samples they can not be re-extracted. and BP-VPB-182-EB-20250522 [Terphenyl-d14 - 161%]. Failed surrogate is not associated with DOD, Therefore no further corrective action was taken.

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:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."

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

The not QT review data is reported in the Miscellaneous.

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_____

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	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (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 flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	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 #: Q2120

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

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

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 Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 05/30/2025

LAB CHRONICLE

OrderID:	Q2120	OrderDate:	5/22/2025 3:57:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	L41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2120-01	VPB182-HYD-20250522	Water			05/22/25			05/22/25
			VOCMS Group1	8260-Low			05/23/25	
Q2120-02	BP-VPB-182-EB-20250522	Water			05/22/25			05/22/25
			VOCMS Group1	8260-Low			05/23/25	

Hit Summary Sheet
SW-846

SDG No.: Q2120
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	VPB182-HYD-20250522								
Q2120-01	VPB182-HYD-2025 Water	Acetone		1.60	J	1.50	3.80	5.00	ug/L
Q2120-01	VPB182-HYD-2025 Water	Dibromochloromethane		1.50		0.18	0.50	1.00	ug/L
		Total Voc :		3.10					
		Total Concentration:		3.10					
Client ID:	BP-VPB-182-EB-20250522								
Q2120-02	BP-VPB-182-EB-2025 Water	Acetone		15.4		1.50	3.80	5.00	ug/L
		Total Voc :		15.4					
		Total Concentration:		15.4					

A

B

C

D

E

F

G



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	05/22/25		
Project:	NWIRP Bethpage 112G08005-WE13			Date Received:	05/22/25		
Client Sample ID:	VPB182-HYD-20250522			SDG No.:	Q2120		
Lab Sample ID:	Q2120-01			Matrix:	Water		
Analytical Method:	8260D			% Solid:	0		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOCMS Group1		
GC Column:	DB-624UI	ID :	0.18	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046338.D	1		05/23/25 12:33	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	3.80	U	1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	0.75	U	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.50	U	0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.75	U	0.23	0.75	1.00	ug/L
67-64-1	Acetone	1.60	J	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.19	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	05/22/25	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	05/22/25	
Client Sample ID:	VPB182-HYD-20250522		SDG No.:	Q2120	
Lab Sample ID:	Q2120-01		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046338.D	1		05/23/25 12:33	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	1.50		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	54.0		81 - 118		108%	SPK: 50
1868-53-7	Dibromofluoromethane	50.5		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	49.7		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5		85 - 114		105%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	61900	5.55				
540-36-3	1,4-Difluorobenzene	125000	6.757				
3114-55-4	Chlorobenzene-d5	121000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	52100	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D	U				

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	05/22/25	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	05/22/25	
Client Sample ID:	VPB182-HYD-20250522		SDG No.:	Q2120	
Lab Sample ID:	Q2120-01		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046338.D	1		05/23/25 12:33	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 () = Laboratory InHouse Limit
 A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	05/22/25	
Project:	NWIRP Bethpage 112G08005-WE13			Date Received:	05/22/25	
Client Sample ID:	BP-VPB-182-EB-20250522			SDG No.:	Q2120	
Lab Sample ID:	Q2120-02			Matrix:	Water	
Analytical Method:	8260D			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046356.D	1		05/23/25 19:32	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	3.80	U	1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	0.75	U	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.50	U	0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.75	U	0.23	0.75	1.00	ug/L
67-64-1	Acetone	15.4		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.19	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	05/22/25	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	05/22/25	
Client Sample ID:	BP-VPB-182-EB-20250522		SDG No.:	Q2120	
Lab Sample ID:	Q2120-02		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046356.D	1		05/23/25 19:32	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.6		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	50.5		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	50.7		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.0		85 - 114		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	63800	5.55				
540-36-3	1,4-Difluorobenzene	128000	6.757				
3114-55-4	Chlorobenzene-d5	124000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	52700	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D	U				

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	05/22/25	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	05/22/25	
Client Sample ID:	BP-VPB-182-EB-20250522		SDG No.:	Q2120	
Lab Sample ID:	Q2120-02		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046356.D	1		05/23/25 19:32	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 () = Laboratory InHouse Limit
 A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SDG No.: Q2120

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q2120-01	VPB182-HYD-20250522	1,2-Dichloroethane-d4	50	54.0	108	81	118
		Dibromofluoromethane	50	50.5	101	80	119
		Toluene-d8	50	49.7	99	89	112
		4-Bromofluorobenzene	50	52.5	105	85	114
Q2120-02	BP-VPB-182-EB-20250522	1,2-Dichloroethane-d4	50	53.6	107	81	118
		Dibromofluoromethane	50	50.5	101	80	119
		Toluene-d8	50	50.7	101	89	112
		4-Bromofluorobenzene	50	51.0	102	85	114
VX0523WBL01	VX0523WBL01	1,2-Dichloroethane-d4	50	53.2	106	81	118
		Dibromofluoromethane	50	52.0	104	80	119
		Toluene-d8	50	51.1	102	89	112
		4-Bromofluorobenzene	50	51.9	104	85	114
VX0523WBS01	VX0523WBS01	1,2-Dichloroethane-d4	50	50.5	101	81	118
		Dibromofluoromethane	50	52.4	105	80	119
		Toluene-d8	50	50.7	101	89	112
		4-Bromofluorobenzene	50	51.4	103	85	114
VX0523WBSD0	VX0523WBSD01	1,2-Dichloroethane-d4	50	50.2	100	81	118
		Dibromofluoromethane	50	51.1	102	80	119
		Toluene-d8	50	50.3	101	89	112
		4-Bromofluorobenzene	50	51.8	104	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2120

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX046334.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0523WBS01	Chloromethane	20	18.7	ug/L	94			50	139	
	Vinyl chloride	20	17.8	ug/L	89			58	137	
	Bromomethane	20	18.3	ug/L	92			53	141	
	Chloroethane	20	19.2	ug/L	96			60	138	
	Trichlorofluoromethane	20	19.9	ug/L	100			65	141	
	1,1,2-Trichlorotrifluoroethane	20	20.1	ug/L	101			70	136	
	1,1-Dichloroethene	20	19.3	ug/L	97			71	131	
	Acetone	100	100	ug/L	100			39	160	
	Carbon disulfide	20	15.4	ug/L	77			64	133	
	Methyl tert-butyl Ether	20	20.7	ug/L	104			71	124	
	Methylene Chloride	20	18.6	ug/L	93			74	124	
	trans-1,2-Dichloroethene	20	19.0	ug/L	95			75	124	
	1,1-Dichloroethane	20	20.3	ug/L	102			77	125	
	2-Butanone	100	110	ug/L	110			56	143	
	Carbon Tetrachloride	20	20.4	ug/L	102			72	136	
	cis-1,2-Dichloroethene	20	20.4	ug/L	102			78	123	
	Chloroform	20	21.0	ug/L	105			79	124	
	1,1,1-Trichloroethane	20	20.4	ug/L	102			74	131	
	Methylcyclohexane	20	18.4	ug/L	92			72	132	
	Benzene	20	20.3	ug/L	102			79	120	
	1,2-Dichloroethane	20	20.7	ug/L	104			73	128	
	Trichloroethene	20	19.8	ug/L	99			79	123	
	1,2-Dichloropropane	20	21.1	ug/L	106			78	122	
	Bromodichloromethane	20	20.8	ug/L	104			79	125	
	4-Methyl-2-Pentanone	100	110	ug/L	110			67	130	
	Toluene	20	20.4	ug/L	102			80	121	
	t-1,3-Dichloropropene	20	19.5	ug/L	98			73	127	
	cis-1,3-Dichloropropene	20	20.7	ug/L	104			75	124	
	1,1,2-Trichloroethane	20	21.8	ug/L	109			80	119	
	2-Hexanone	100	110	ug/L	110			57	139	
	Dibromochloromethane	20	21.0	ug/L	105			74	126	
	Tetrachloroethene	20	20.9	ug/L	104			74	129	
	Chlorobenzene	20	20.1	ug/L	101			82	118	
	Ethyl Benzene	20	20.3	ug/L	102			79	121	
	m/p-Xylenes	40	40.6	ug/L	102			80	121	
	o-Xylene	20	20.5	ug/L	103			78	122	
	Styrene	20	21.0	ug/L	105			78	123	
	Bromoform	20	19.4	ug/L	97			66	130	
	Isopropylbenzene	20	20.2	ug/L	101			72	131	
	1,1,2,2-Tetrachloroethane	20	20.2	ug/L	101			71	121	
	1,3-Dichlorobenzene	20	20.0	ug/L	100			80	119	
	1,4-Dichlorobenzene	20	19.8	ug/L	99			79	118	
	1,2-Dichlorobenzene	20	20.6	ug/L	103			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2120

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX046337.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0523WBSD01	Chloromethane	20	18.5	ug/L	93	1		50	139	20
	Vinyl chloride	20	17.4	ug/L	87	2		58	137	20
	Bromomethane	20	17.6	ug/L	88	4		53	141	20
	Chloroethane	20	19.9	ug/L	100	4		60	138	20
	Trichlorofluoromethane	20	19.6	ug/L	98	2		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	19.6	ug/L	98	3		70	136	20
	1,1-Dichloroethene	20	18.5	ug/L	93	4		71	131	20
	Acetone	100	100	ug/L	100	0		39	160	20
	Carbon disulfide	20	14.1	ug/L	71	8		64	133	20
	Methyl tert-butyl Ether	20	20.8	ug/L	104	0		71	124	20
	Methylene Chloride	20	18.6	ug/L	93	0		74	124	20
	trans-1,2-Dichloroethene	20	18.6	ug/L	93	2		75	124	20
	1,1-Dichloroethane	20	20.5	ug/L	103	1		77	125	20
	2-Butanone	100	110	ug/L	110	0		56	143	20
	Carbon Tetrachloride	20	19.1	ug/L	96	6		72	136	20
	cis-1,2-Dichloroethene	20	20.2	ug/L	101	1		78	123	20
	Chloroform	20	21.0	ug/L	105	0		79	124	20
	1,1,1-Trichloroethane	20	20.4	ug/L	102	0		74	131	20
	Methylcyclohexane	20	18.6	ug/L	93	1		72	132	20
	Benzene	20	20.4	ug/L	102	0		79	120	20
	1,2-Dichloroethane	20	20.7	ug/L	104	0		73	128	20
	Trichloroethene	20	19.8	ug/L	99	0		79	123	20
	1,2-Dichloropropane	20	21.3	ug/L	106	0		78	122	20
	Bromodichloromethane	20	20.3	ug/L	102	2		79	125	20
	4-Methyl-2-Pentanone	100	110	ug/L	110	0		67	130	20
	Toluene	20	20.7	ug/L	104	2		80	121	20
	t-1,3-Dichloropropene	20	19.3	ug/L	97	1		73	127	20
	cis-1,3-Dichloropropene	20	20.0	ug/L	100	4		75	124	20
	1,1,2-Trichloroethane	20	21.7	ug/L	109	0		80	119	20
	2-Hexanone	100	110	ug/L	110	0		57	139	20
	Dibromochloromethane	20	20.3	ug/L	102	3		74	126	20
	Tetrachloroethene	20	20.2	ug/L	101	3		74	129	20
	Chlorobenzene	20	20.0	ug/L	100	1		82	118	20
	Ethyl Benzene	20	20.7	ug/L	104	2		79	121	20
	m/p-Xylenes	40	41.1	ug/L	103	1		80	121	20
	o-Xylene	20	21.0	ug/L	105	2		78	122	20
	Styrene	20	21.5	ug/L	108	3		78	123	20
	Bromoform	20	18.5	ug/L	93	4		66	130	20
	Isopropylbenzene	20	21.5	ug/L	108	7		72	131	20
	1,1,2,2-Tetrachloroethane	20	21.2	ug/L	106	5		71	121	20
	1,3-Dichlorobenzene	20	20.6	ug/L	103	3		80	119	20
	1,4-Dichlorobenzene	20	20.6	ug/L	103	4		79	118	20
	1,2-Dichlorobenzene	20	21.9	ug/L	110	7		80	119	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0523WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q2120

SAS No.: Q2120 SDG NO.: Q2120

Lab File ID: VX046333.D

Lab Sample ID: VX0523WBL01

Date Analyzed: 05/23/2025

Time Analyzed: 10:16

GC Column: DB-624UI ID: 0.18 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0523WBS01	VX0523WBS01	VX046334.D	05/23/2025
VX0523WBSD01	VX0523WBSD01	VX046337.D	05/23/2025
VPB182-HYD-20250522	Q2120-01	VX046338.D	05/23/2025
BP-VPB-182-EB-20250522	Q2120-02	VX046356.D	05/23/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG NO.: Q2120
Lab File ID: VX046038.D BFB Injection Date: 05/05/2025
Instrument ID: MSVOA_X BFB Injection Time: 09:37
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 60.0% of mass 95	56.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	68.8
175	5.0 - 9.0% of mass 174	5 (7.3) 1
176	95.0 - 101.0% of mass 174	66.7 (97) 1
177	5.0 - 9.0% of mass 176	4.6 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC020	VSTDIC020	VX046041.D	05/05/2025	11:35
VSTDIC050	VSTDIC050	VX046042.D	05/05/2025	11:58
VSTDIC100	VSTDIC100	VX046043.D	05/05/2025	12:21
VSTDIC150	VSTDIC150	VX046044.D	05/05/2025	12:45
VSTDIC005	VSTDIC005	VX046046.D	05/05/2025	16:04
VSTDIC001	VSTDIC001	VX046047.D	05/05/2025	16:27

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG NO.: Q2120
Lab File ID: VX046330.D BFB Injection Date: 05/23/2025
Instrument ID: MSVOA_X BFB Injection Time: 08:25
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22
75	30.0 - 60.0% of mass 95	56.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.8 (1.2) 1
174	50.0 - 100.0% of mass 95	66.8
175	5.0 - 9.0% of mass 174	4.6 (6.9) 1
176	95.0 - 101.0% of mass 174	64 (95.9) 1
177	5.0 - 9.0% of mass 176	4.1 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX046331.D	05/23/2025	09:24
VX0523WBL01	VX0523WBL01	VX046333.D	05/23/2025	10:16
VX0523WBS01	VX0523WBS01	VX046334.D	05/23/2025	10:57
VX0523WBSD01	VX0523WBSD01	VX046337.D	05/23/2025	12:10
VPB182-HYD-20250522	Q2120-01	VX046338.D	05/23/2025	12:33
BP-VPB-182-EB-20250522	Q2120-02	VX046356.D	05/23/2025	19:32
VSTDCCC050EC	VSTDCCC050	VX046357.D	05/23/2025	19:55

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG NO.: Q2120
Lab File ID: VX046331.D Date Analyzed: 05/23/2025
Instrument ID: MSVOA_X Time Analyzed: 09:24
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	89943	5.54	154938	6.76	137123	10.05
UPPER LIMIT	179886	6.044	309876	7.257	274246	10.549
LOWER LIMIT	44971.5	5.044	77469	6.257	68561.5	9.549
EPA SAMPLE NO.						
VPB182-HYD-20250522	61857	5.55	124865	6.76	120584	10.05
BP-VPB-182-EB-20250522	63849	5.55	127611	6.76	124029	10.05
VX0523WBL01	69169	5.55	136383	6.76	129888	10.05
VX0523WBS01	88801	5.54	154286	6.75	135355	10.05
VX0523WBSD01	88781	5.55	156018	6.76	138561	10.05

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG NO.: Q2120
Lab File ID: VX046331.D Date Analyzed: 05/23/2025
Instrument ID: MSVOA_X Time Analyzed: 09:24
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	66629	12.018				
UPPER LIMIT	133258	12.518				
LOWER LIMIT	33314.5	11.518				
EPA SAMPLE NO.						
VPB182-HYD-20250522	52108	12.02				
BP-VPB-182-EB-20250522	52711	12.02				
VX0523WBL01	57102	12.02				
VX0523WBS01	65596	12.02				
VX0523WBSD01	64515	12.02				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	VX0523WBL01		SDG No.:	Q2120
Lab Sample ID:	VX0523WBL01		Matrix:	Water
Analytical Method:	8260D		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046333.D	1		05/23/25 10:16	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	3.80	U	1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	0.75	U	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.50	U	0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.75	U	0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.19	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	VX0523WBL01		SDG No.:	Q2120
Lab Sample ID:	VX0523WBL01		Matrix:	Water
Analytical Method:	8260D		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046333.D	1		05/23/25 10:16	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.2		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		80 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	51.1		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.9		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	69200	5.55				
540-36-3	1,4-Difluorobenzene	136000	6.757				
3114-55-4	Chlorobenzene-d5	130000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	57100	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	VX0523WBS01		SDG No.:	Q2120
Lab Sample ID:	VX0523WBS01		Matrix:	Water
Analytical Method:	8260D		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046334.D	1		05/23/25 10:57	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.7		0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.8		0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	18.3		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.2		0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.9		0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.1		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.3		0.23	0.75	1.00	ug/L
67-64-1	Acetone	100		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	15.4		0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.7		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.6		0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.0		0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.3		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	110		0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.4		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.4		0.19	0.75	1.00	ug/L
67-66-3	Chloroform	21.0		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.4		0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.4		0.16	0.50	1.00	ug/L
71-43-2	Benzene	20.3		0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.7		0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.8		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	21.1		0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.8		0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.68	2.50	5.00	ug/L
108-88-3	Toluene	20.4		0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.5		0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.7		0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.8		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	110		0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	VX0523WBS01		SDG No.:	Q2120
Lab Sample ID:	VX0523WBS01		Matrix:	Water
Analytical Method:	8260D		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046334.D	1		05/23/25 10:57	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	21.0		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	20.9		0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.1		0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.3		0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	40.6		0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	20.5		0.12	0.50	1.00	ug/L
100-42-5	Styrene	21.0		0.15	0.50	1.00	ug/L
75-25-2	Bromoform	19.4		0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	20.2		0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	20.2		0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.0		0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.8		0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.6		0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.5		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		80 - 119		105%	SPK: 50
2037-26-5	Toluene-d8	50.7		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.4		85 - 114		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	88800	5.544				
540-36-3	1,4-Difluorobenzene	154000	6.751				
3114-55-4	Chlorobenzene-d5	135000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	65600	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	VX0523WBSD01		SDG No.:	Q2120
Lab Sample ID:	VX0523WBSD01		Matrix:	Water
Analytical Method:	8260D		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046337.D	1		05/23/25 12:10	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.5		0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.4		0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	17.6		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.9		0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.6		0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.6		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.5		0.23	0.75	1.00	ug/L
67-64-1	Acetone	100		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	14.1		0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.8		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.6		0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.6		0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.5		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	110		0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.1		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.2		0.19	0.75	1.00	ug/L
67-66-3	Chloroform	21.0		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.4		0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.6		0.16	0.50	1.00	ug/L
71-43-2	Benzene	20.4		0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.7		0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.8		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	21.3		0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.3		0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.68	2.50	5.00	ug/L
108-88-3	Toluene	20.7		0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.3		0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.0		0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.7		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	110		0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:		
Client Sample ID:	VX0523WBSD01		SDG No.:	Q2120	
Lab Sample ID:	VX0523WBSD01		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046337.D	1		05/23/25 12:10	VX052325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	20.3		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	20.2		0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.0		0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.7		0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	41.1		0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	21.0		0.12	0.50	1.00	ug/L
100-42-5	Styrene	21.5		0.15	0.50	1.00	ug/L
75-25-2	Bromoform	18.5		0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	21.5		0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.2		0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.6		0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	20.6		0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	21.9		0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.2		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	51.1		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.3		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	88800	5.55				
540-36-3	1,4-Difluorobenzene	156000	6.757				
3114-55-4	Chlorobenzene-d5	139000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	64500	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: MSVOA_X Calibration Date(s): 05/05/2025 05/05/2025

Heated Purge: (Y/N) N Calibration Time(s): 11:35 16:27

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF020 = VX046041.D		RRF050 = VX046042.D		RRF100 = VX046043.D		RRF150 = VX046044.D		RRF005 = VX046046.D		RRF001 = VX046047.D	
COMPOUND	RRF020	RRF050	RRF100	RRF150	RRF005	RRF001	RRF	% RSD					
Chloromethane	0.727	0.775	0.787	0.791	0.679	0.694	0.742	6.6					
Vinyl Chloride	0.660	0.710	0.727	0.755	0.619	0.673	0.691	7.2					
Bromomethane	0.296	0.326	0.340	0.334	0.305		0.320	5.8					
Chloroethane	0.354	0.378	0.329	0.317	0.368	0.467	0.369	14.4					
Trichlorofluoromethane	1.035	1.068	0.983	0.985	0.990	1.064	1.021	3.9					
1,1,2-Trichlorotrifluoroethane	0.628	0.641	0.629	0.648	0.610	0.633	0.632	2.1					
1,1-Dichloroethene	0.565	0.601	0.607	0.625	0.567	0.594	0.593	3.9					
Acetone	0.361	0.362	0.361	0.370	0.408	0.380	0.374	4.9					
Carbon Disulfide	1.295	1.455	1.522	1.597	1.141	1.423	1.406	11.7					
Methyl tert-butyl Ether	2.044	2.160	2.172	2.239	1.908	1.949	2.079	6.4					
Methylene Chloride	0.689	0.684	0.691	0.691	0.689	0.853	0.716	9.4					
trans-1,2-Dichloroethene	0.573	0.610	0.612	0.622	0.557	0.604	0.596	4.3					
1,1-Dichloroethane	1.233	1.263	1.263	1.286	1.154	1.116	1.219	5.6					
2-Butanone	0.540	0.555	0.558	0.569	0.539	0.495	0.543	4.8					
Carbon Tetrachloride	0.528	0.558	0.552	0.577	0.505	0.541	0.544	4.6					
cis-1,2-Dichloroethene	0.716	0.737	0.738	0.755	0.642	0.719	0.718	5.5					
Chloroform	1.287	1.296	1.277	1.300	1.199	1.265	1.271	3					
1,1,1-Trichloroethane	1.106	1.131	1.155	1.188	1.013	1.015	1.101	6.6					
Methylcyclohexane	0.596	0.641	0.627	0.658	0.587	0.627	0.623	4.3					
Benzene	1.426	1.474	1.441	1.477	1.337	1.348	1.417	4.3					
1,2-Dichloroethane	0.632	0.627	0.611	0.625	0.594	0.579	0.612	3.5					
Trichloroethene	0.344	0.355	0.345	0.362	0.315	0.324	0.341	5.3					
1,2-Dichloropropane	0.356	0.371	0.368	0.378	0.324	0.317	0.352	7.4					
Bromodichloromethane	0.557	0.577	0.573	0.594	0.498	0.485	0.547	8.2					
4-Methyl-2-Pentanone	0.620	0.634	0.630	0.631	0.555	0.561	0.605	6					
Toluene	0.884	0.898	0.885	0.904	0.838	0.803	0.869	4.5					
t-1,3-Dichloropropene	0.468	0.528	0.555	0.591	0.406	0.371	0.487	17.9					
cis-1,3-Dichloropropene	0.531	0.578	0.602	0.623	0.469	0.423	0.538	14.6					
1,1,2-Trichloroethane	0.349	0.354	0.351	0.356	0.337	0.308	0.343	5.3					
2-Hexanone	0.466	0.473	0.477	0.473	0.414	0.385	0.448	8.7					

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: MSVOA_X Calibration Date(s): 05/05/2025 05/05/2025

Heated Purge: (Y/N) N Calibration Time(s): 11:35 16:27

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF020 = VX046041.D		RRF050 = VX046042.D		RRF100 = VX046043.D			
		RRF150 = VX046044.D		RRF005 = VX046046.D		RRF001 = VX046047.D			
COMPOUND	RRF020	RRF050	RRF100	RRF150	RRF005	RRF001	RRF	% RSD	
Dibromochloromethane	0.378	0.400	0.415	0.431	0.326	0.306	0.376	13.3	
Tetrachloroethene	0.390	0.375	0.345	0.344	0.323	0.347	0.354	6.8	
Chlorobenzene	1.093	1.098	1.085	1.114	1.046	1.131	1.094	2.7	
Ethyl Benzene	1.919	2.022	1.979	2.036	1.816	1.803	1.929	5.2	
m/p-Xylenes	0.706	0.740	0.721	0.740	0.678	0.648	0.706	5.2	
o-Xylene	0.688	0.727	0.706	0.726	0.639	0.642	0.688	5.7	
Styrene	1.135	1.219	1.214	1.230	1.012	0.951	1.127	10.6	
Bromoform	0.270	0.304	0.312	0.327	0.236	0.234	0.281	14.2	
Isopropylbenzene	3.843	4.130	3.876	4.156	3.562	3.789	3.893	5.7	
1,1,2,2-Tetrachloroethane	1.315	1.338	1.284	1.345	1.350	1.552	1.364	7	
1,3-Dichlorobenzene	1.633	1.701	1.656	1.730	1.558	1.619	1.649	3.7	
1,4-Dichlorobenzene	1.629	1.693	1.639	1.722	1.606	1.817	1.684	4.6	
1,2-Dichlorobenzene	1.613	1.696	1.634	1.702	1.577	1.710	1.655	3.3	
1,2-Dichloroethane-d4	0.953	0.910	0.930	0.932	0.935		0.932	1.6	
Dibromofluoromethane	0.359	0.355	0.364	0.368	0.354		0.360	1.7	
Toluene-d8	1.246	1.223	1.266	1.275	1.221		1.246	2	
4-Bromofluorobenzene	0.455	0.470	0.500	0.500	0.464		0.478	4.4	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: MSVOA_X Calibration Date/Time: 05/23/2025 09:24

Lab File ID: VX046331.D Init. Calib. Date(s): 05/05/2025 05/05/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:35 16:27

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.742	0.654	0.1	-11.86	20
Vinyl Chloride	0.691	0.592		-14.33	20
Bromomethane	0.320	0.288		-10	20
Chloroethane	0.369	0.378		2.44	20
Trichlorofluoromethane	1.021	0.993		-2.74	20
1,1,2-Trichlorotrifluoroethane	0.632	0.618		-2.21	20
1,1-Dichloroethene	0.593	0.550		-7.25	20
Acetone	0.374	0.393		5.08	20
Carbon Disulfide	1.406	1.170		-16.78	20
Methyl tert-butyl Ether	2.079	2.197		5.68	20
Methylene Chloride	0.716	0.663		-7.4	20
trans-1,2-Dichloroethene	0.596	0.560		-6.04	20
1,1-Dichloroethane	1.219	1.239	0.1	1.64	20
2-Butanone	0.543	0.592		9.02	20
Carbon Tetrachloride	0.544	0.551		1.29	20
cis-1,2-Dichloroethene	0.718	0.706		-1.67	20
Chloroform	1.271	1.286		1.18	20
1,1,1-Trichloroethane	1.101	1.128		2.45	20
Methylcyclohexane	0.623	0.597		-4.17	20
Benzene	1.417	1.421		0.28	20
1,2-Dichloroethane	0.612	0.628		2.61	20
Trichloroethene	0.341	0.343		0.59	20
1,2-Dichloropropane	0.352	0.374		6.25	20
Bromodichloromethane	0.547	0.595		8.77	20
4-Methyl-2-Pentanone	0.605	0.677		11.9	20
Toluene	0.869	0.878		1.04	20
t-1,3-Dichloropropene	0.487	0.542		11.29	20
cis-1,3-Dichloropropene	0.538	0.591		9.85	20
1,1,2-Trichloroethane	0.343	0.366		6.71	20
2-Hexanone	0.448	0.511		14.06	20
Dibromochloromethane	0.376	0.417		10.9	20
Tetrachloroethene	0.354	0.357		0.85	20
Chlorobenzene	1.094	1.084	0.3	-0.91	20
Ethyl Benzene	1.929	1.985		2.9	20
m/p-Xylenes	0.706	0.719		1.84	20
o-Xylene	0.688	0.714		3.78	20
Styrene	1.127	1.208		7.19	20
Bromoform	0.281	0.310	0.1	10.32	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: MSVOA_X Calibration Date/Time: 05/23/2025 09:24

Lab File ID: VX046331.D Init. Calib. Date(s): 05/05/2025 05/05/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:35 16:27

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.893	3.986		2.39	20
1,1,2,2-Tetrachloroethane	1.364	1.366	0.3	0.15	20
1,3-Dichlorobenzene	1.649	1.650		0.06	20
1,4-Dichlorobenzene	1.684	1.672		-0.71	20
1,2-Dichlorobenzene	1.655	1.688		1.99	20
1,2-Dichloroethane-d4	0.932	0.966		3.65	20
Dibromofluoromethane	0.360	0.384		6.67	20
Toluene-d8	1.246	1.307		4.9	20
4-Bromofluorobenzene	0.478	0.514		7.53	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: MSVOA_X Calibration Date/Time: 05/23/2025 19:55

Lab File ID: VX046357.D Init. Calib. Date(s): 05/05/2025 05/05/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:35 16:27

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.742	0.828	0.1	11.59	50
Vinyl Chloride	0.691	0.742		7.38	50
Bromomethane	0.320	0.337		5.31	50
Chloroethane	0.369	0.428		15.99	50
Trichlorofluoromethane	1.021	1.173		14.89	50
1,1,2-Trichlorotrifluoroethane	0.632	0.715		13.13	50
1,1-Dichloroethene	0.593	0.657		10.79	50
Acetone	0.374	0.428		14.44	50
Carbon Disulfide	1.406	1.429		1.64	50
Methyl tert-butyl Ether	2.079	2.383		14.62	50
Methylene Chloride	0.716	0.774		8.1	50
trans-1,2-Dichloroethene	0.596	0.665		11.58	50
1,1-Dichloroethane	1.219	1.413	0.1	15.91	50
2-Butanone	0.543	0.643		18.42	50
Carbon Tetrachloride	0.544	0.614		12.87	50
cis-1,2-Dichloroethene	0.718	0.826		15.04	50
Chloroform	1.271	1.489		17.15	50
1,1,1-Trichloroethane	1.101	1.253		13.81	50
Methylcyclohexane	0.623	0.674		8.19	50
Benzene	1.417	1.650		16.44	50
1,2-Dichloroethane	0.612	0.717		17.16	50
Trichloroethene	0.341	0.379		11.14	50
1,2-Dichloropropane	0.352	0.422		19.89	50
Bromodichloromethane	0.547	0.652		19.2	50
4-Methyl-2-Pentanone	0.605	0.739		22.15	50
Toluene	0.869	1.003		15.42	50
t-1,3-Dichloropropene	0.487	0.559		14.78	50
cis-1,3-Dichloropropene	0.538	0.614		14.13	50
1,1,2-Trichloroethane	0.343	0.411		19.83	50
2-Hexanone	0.448	0.551		22.99	50
Dibromochloromethane	0.376	0.451		19.95	50
Tetrachloroethene	0.354	0.391		10.45	50
Chlorobenzene	1.094	1.215	0.3	11.06	50
Ethyl Benzene	1.929	2.216		14.88	50
m/p-Xylenes	0.706	0.808		14.45	50
o-Xylene	0.688	0.787		14.39	50
Styrene	1.127	1.347		19.52	50
Bromoform	0.281	0.310	0.1	10.32	50

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: MSVOA_X Calibration Date/Time: 05/23/2025 19:55

Lab File ID: VX046357.D Init. Calib. Date(s): 05/05/2025 05/05/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:35 16:27

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.893	4.443		14.13	50
1,1,2,2-Tetrachloroethane	1.364	1.471	0.3	7.84	50
1,3-Dichlorobenzene	1.649	1.817		10.19	50
1,4-Dichlorobenzene	1.684	1.802		7.01	50
1,2-Dichlorobenzene	1.655	1.854		12.02	50
1,2-Dichloroethane-d4	0.932	0.992		6.44	50
Dibromofluoromethane	0.360	0.392		8.89	50
Toluene-d8	1.246	1.306		4.82	50
4-Bromofluorobenzene	0.478	0.512		7.11	50

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

LAB CHRONICLE

OrderID:	Q2120	OrderDate:	5/22/2025 3:57:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	L41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2120-01	VPB182-HYD-20250522	Water			05/22/25			05/22/25
			SVOC-SIMGroup1	8270-Modified		05/23/25	05/28/25	
Q2120-02	BP-VPB-182-EB-20250522	Water			05/22/25			05/22/25
			SVOC-SIMGroup1	8270-Modified		05/23/25	05/28/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q2120
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :				0.000					
Total Svoc :					0.00				
Total Concentration:					0.00				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/22/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/22/25
Client Sample ID:	VPB182-HYD-20250522	SDG No.:	Q2120
Lab Sample ID:	Q2120-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	890 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037106.D	1	05/23/25 11:50	05/28/25 13:05	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22	U	0.070	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.024	*	30 - 150		6%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.090	*	30 - 150		23%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		78%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		140%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2040		7.611			
1146-65-2	Naphthalene-d8	5330		10.394			
15067-26-2	Acenaphthene-d10	2870		14.256			
1517-22-2	Phenanthrene-d10	5400		17.009			
1719-03-5	Chrysene-d12	3510		21.198			
1520-96-3	Perylene-d12	2710		23.395			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/22/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/22/25
Client Sample ID:	BP-VPB-182-EB-20250522	SDG No.:	Q2120
Lab Sample ID:	Q2120-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	860 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037107.D	1	05/23/25 11:50	05/28/25 13:41	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.23	U	0.080	0.23	0.23	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.29		30 - 150		73%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.64	*	58 - 132		161%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1890	7.611				
1146-65-2	Naphthalene-d8	5070	10.394				
15067-26-2	Acenaphthene-d10	2780	14.256				
1517-22-2	Phenanthrene-d10	5180	17.009				
1719-03-5	Chrysene-d12	3260	21.198				
1520-96-3	Perylene-d12	2740	23.398				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2120

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168155BL	PB168155BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.32	80		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
PB168155BS	PB168155BS	2-Methylnaphthalene-d10	0.4	0.38	95		30	150
		Fluoranthene-d10	0.4	0.30	75		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.42	105		58	132
PB168155BSD	PB168155BSD	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.30	76		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.42	106		58	132
Q2120-01	VPB182-HYD-20250522	2-Methylnaphthalene-d10	0.4	0.024	6	*	30	150
		Fluoranthene-d10	0.4	0.090	23	*	30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.31	78		53	106
		Terphenyl-d14	0.4	0.56	140	*	58	132
Q2120-02	BP-VPB-182-EB-20250522	2-Methylnaphthalene-d10	0.4	0.29	73		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.30	76		55	111
		2-Fluorobiphenyl	0.4	0.31	76		53	106
		Terphenyl-d14	0.4	0.64	161	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2120

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN037108.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168155BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2120

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN037109.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168155BSD	1,4-Dioxane	0.4	0.30	ug/L	75	3			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168155BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q2120

SAS No.: Q2120 SDG NO.: Q2120

Lab File ID: BN037103.D

Lab Sample ID: PB168155BL

Instrument ID: BNA_N

Date Extracted: 05/23/2025

Matrix: (soil/water) Water

Date Analyzed: 05/28/2025

Level: (low/med) LOW

Time Analyzed: 11:17

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168155BS	PB168155BS	BN037108.D	05/28/2025
VPB182-HYD-20250522	Q2120-01	BN037106.D	05/28/2025
BP-VPB-182-EB-20250522	Q2120-02	BN037107.D	05/28/2025
PB168155BSD	PB168155BSD	BN037109.D	05/28/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2120

SDG NO.: Q2120

Lab File ID: BN036998.D

DFTPP Injection Date: 05/13/2025

Instrument ID: BNA_N

DFTPP Injection Time: 17:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	62.8
68	Less than 2.0% of mass 69	0.8 (1.4) 1
69	Mass 69 relative abundance	55.6
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	52.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.4 (19) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN036999.D	05/13/2025	17:41
SSTDICC0.2	SSTDICC0.2	BN037000.D	05/13/2025	18:17
SSTDICCC0.4	SSTDICCC0.4	BN037001.D	05/13/2025	18:53
SSTDICC0.8	SSTDICC0.8	BN037002.D	05/13/2025	19:29
SSTDICC1.6	SSTDICC1.6	BN037003.D	05/13/2025	20:05
SSTDICC3.2	SSTDICC3.2	BN037004.D	05/13/2025	20:41
SSTDICC5.0	SSTDICC5.0	BN037005.D	05/13/2025	21:17

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2120 SDG NO.: Q2120

Lab File ID: BN037101.D

DFTPP Injection Date: 05/28/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	72.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	60.6
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	54.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	24.2
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	8.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10 (17.8) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN037102.D	05/28/2025	10:41
PB168155BL	PB168155BL	BN037103.D	05/28/2025	11:17
VPB182-HYD-20250522	Q2120-01	BN037106.D	05/28/2025	13:05
BP-VPB-182-EB-20250522	Q2120-02	BN037107.D	05/28/2025	13:41
PB168155BS	PB168155BS	BN037108.D	05/28/2025	14:17
PB168155BSD	PB168155BSD	BN037109.D	05/28/2025	14:53
SSTDCCC0.4EC	SSTDCCC0.4	BN037110.D	05/28/2025	15:54

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG NO.: Q2120

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/28/2025

Lab File ID: BN037102.D Time Analyzed: 10:41

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	2360	7.611	6377	10.38	3563	14.26
UPPER LIMIT	4720	8.111	12754	10.883	7126	14.756
LOWER LIMIT	1180	7.111	3188.5	9.883	1781.5	13.756
EPA SAMPLE NO.						
01 PB168155BS	1969	7.61	4930	10.39	2429	14.26
02 PB168155BSD	1893	7.61	4639	10.39	2241	14.26
03 PB168155BL	2460	7.61	5989	10.39	3067	14.26
04 VPB182-HYD-20250522	2040	7.61	5327	10.39	2867	14.26
05 BP-VPB-182-EB-20250522	1892	7.61	5067	10.39	2782	14.26

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG NO.: Q2120

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/28/2025

Lab File ID: BN037102.D Time Analyzed: 10:41

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	6602	17.009	4312	21.197	3700	23.398
UPPER LIMIT	13204	17.509	8624	21.697	7400	23.898
LOWER LIMIT	3301	16.509	2156	20.697	1850	22.898
EPA SAMPLE NO.						
01 PB168155BS	4326	17.01	2746	21.20	2563	23.40
02 PB168155BSD	3936	17.01	2452	21.20	2400	23.40
03 PB168155BL	5493	17.01	3554	21.21	3269	23.40
04 VPB182-HYD-20250522	5402	17.01	3514	21.20	2707	23.40
05 BP-VPB-182-EB-20250522	5180	17.01	3260	21.20	2737	23.40

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:		
Client Sample ID:	PB168155BL		SDG No.:	Q2120	
Lab Sample ID:	PB168155BL		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037103.D	1	05/23/25 11:50	05/28/25 11:17	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		83%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2460	7.611				
1146-65-2	Naphthalene-d8	5990	10.394				
15067-26-2	Acenaphthene-d10	3070	14.256				
1517-22-2	Phenanthrene-d10	5490	17.009				
1719-03-5	Chrysene-d12	3550	21.206				
1520-96-3	Perylene-d12	3270	23.404				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB168155BS	SDG No.:	Q2120
Lab Sample ID:	PB168155BS	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037108.D	1	05/23/25 11:50	05/28/25 14:17	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		95%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		75%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		105%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.611				
1146-65-2	Naphthalene-d8	4930	10.394				
15067-26-2	Acenaphthene-d10	2430	14.256				
1517-22-2	Phenanthrene-d10	4330	17.009				
1719-03-5	Chrysene-d12	2750	21.198				
1520-96-3	Perylene-d12	2560	23.398				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168155BSD		SDG No.:	Q2120
Lab Sample ID:	PB168155BSD		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037109.D	1	05/23/25 11:50	05/28/25 14:53	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		106%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1890	7.611				
1146-65-2	Naphthalene-d8	4640	10.394				
15067-26-2	Acenaphthene-d10	2240	14.256				
1517-22-2	Phenanthrene-d10	3940	17.009				
1719-03-5	Chrysene-d12	2450	21.198				
1520-96-3	Perylene-d12	2400	23.398				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN051425.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed May 14 11:26:32 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036999.D 0.2 =BN037000.D 0.4 =BN037001.D 0.8 =BN037002.D 1.6 =BN037003.D 3.2 =BN037004.D 5.0 =BN037005.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD

1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.510	0.512	0.487	0.514	0.467	0.454	0.491	5.25	
3)	n-Nitrosodimet...	1.465	0.974	0.980	0.971	1.075	0.967	0.950	1.054	17.59
4) S	2-Fluorophenol	1.101	1.134	1.024	1.093	0.964	0.971	1.048	6.87	
5) S	Phenol-d6	1.304	1.385	1.236	1.392	1.259	1.292	1.311	4.91	
6)	bis(2-Chloroet...	1.441	1.163	1.153	1.135	1.240	1.168	1.148	1.207	9.02
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.546	0.383	0.398	0.400	0.452	0.426	0.442	0.436	12.60
9)	Naphthalene	1.326	1.140	1.144	1.122	1.226	1.152	1.165	1.182	6.05
10)	Hexachlorobuta...	0.286	0.248	0.244	0.235	0.256	0.236	0.233	0.248	7.47
11) SURR2	Methylnaphth...	0.529	0.547	0.552	0.548	0.603	0.574	0.588	0.563	4.65
12)	2-Methylnaphth...	0.754	0.724	0.736	0.733	0.814	0.770	0.790	0.760	4.34
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.174	0.168	0.178	0.160	0.186	0.175	0.189	0.176	5.77
15) S	2-Fluorobiphenyl	1.912	1.801	1.901	1.802	1.927	1.672	1.807	1.832	4.90
16)	Acenaphthylene	1.906	1.838	1.894	1.849	2.071	1.997	2.075	1.947	5.14
17)	Acenaphthene	1.255	1.229	1.243	1.217	1.350	1.298	1.315	1.272	3.89
18)	Fluorene	1.602	1.581	1.635	1.611	1.779	1.721	1.752	1.669	4.80
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.060	0.073	0.079	0.102	0.103	0.124	0.090	26.02	
21)	4-Bromophenyl-...	0.243	0.246	0.250	0.247	0.262	0.261	0.259	0.253	3.13
22)	Hexachlorobenzene	0.267	0.269	0.281	0.259	0.281	0.270	0.267	0.270	3.03
23)	Atrazine	0.199	0.207	0.211	0.213	0.237	0.234	0.242	0.220	7.64
24)	Pentachlorophenol	0.133	0.134	0.141	0.137	0.159	0.162	0.177	0.149	11.45
25)	Phenanthrene	1.259	1.272	1.292	1.263	1.367	1.337	1.361	1.307	3.56
26)	Anthracene	1.099	1.104	1.166	1.130	1.269	1.259	1.300	1.190	7.13
27) SURR	Fluoranthene-d10	1.033	1.033	1.078	1.042	1.153	1.161	1.178	1.097	5.95
28)	Fluoranthene	1.461	1.439	1.500	1.496	1.670	1.672	1.693	1.562	7.13
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.744	1.708	1.727	1.656	1.790	1.641	1.711	1.711	2.96
31) S	Terphenyl-d14	0.897	0.844	0.871	0.822	0.891	0.816	0.848	0.856	3.73
32)	Benzo(a)anthra...	1.463	1.432	1.485	1.438	1.594	1.521	1.609	1.506	4.77
33)	Chrysene	1.655	1.559	1.616	1.532	1.653	1.560	1.576	1.593	3.05
34)	Bis(2-ethylhex...	0.955	0.919	0.906	0.855	0.941	0.903	1.011	0.927	5.27
35) I	Perylene-d12	-----ISTD-----								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\

Method File : 8270-SIM-BN051425.M

36)	Indeno(1,2,3-c...	1.511	1.613	1.645	1.568	1.687	1.732	1.680	1.634	4.65
37)	Benzo(b)fluora...	1.631	1.570	1.602	1.599	1.749	1.698	1.765	1.659	4.71
38)	Benzo(k)fluora...	1.539	1.538	1.642	1.601	1.770	1.661	1.719	1.639	5.34
39) C	Benzo(a)pyrene	1.380	1.343	1.381	1.331	1.486	1.444	1.486	1.407	4.59
40)	Dibenzo(a,h)an...	1.116	1.232	1.273	1.237	1.340	1.376	1.334	1.272	6.90
41)	Benzo(g,h,i)pe...	1.299	1.407	1.424	1.330	1.403	1.439	1.376	1.383	3.72

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: BNA_N Calibration Date/Time: 05/28/2025 10:41

Lab File ID: BN037102.D Init. Calib. Date(s): 05/13/2025 05/13/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 17:41 21:17

GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.563	0.578		2.7	20.0
Fluoranthene-d10	1.097	0.983		-10.4	20.0
2-Fluorophenol	1.048	0.917		-12.5	20.0
Phenol-d6	1.311	1.136		-13.3	20.0
Nitrobenzene-d5	0.436	0.404		-7.3	20.0
2-Fluorobiphenyl	1.832	1.781		-2.8	20.0
2,4,6-Tribromophenol	0.176	0.150		-14.8	20.0
Terphenyl-d14	0.856	0.973		13.7	20.0
1,4-Dioxane	0.491	0.461		-6.1	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2120 SAS No.: Q2120 SDG No.: Q2120

Instrument ID: BNA_N Calibration Date/Time: 05/28/2025 15:54

Lab File ID: BN037110.D Init. Calib. Date(s): 05/13/2025 05/13/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 17:41 21:17

GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.563	0.578		2.7	50.0
Fluoranthene-d10	1.097	1.001		-8.8	50.0
2-Fluorophenol	1.048	0.942		-10.1	50.0
Phenol-d6	1.311	1.119		-14.6	50.0
Nitrobenzene-d5	0.436	0.411		-5.7	50.0
2-Fluorobiphenyl	1.832	1.776		-3.1	50.0
2,4,6-Tribromophenol	0.176	0.163		-7.4	50.0
Terphenyl-d14	0.856	0.988		15.4	50.0
1,4-Dioxane	0.491	0.478		-2.6	50.0

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS

Q2120

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2120	TETR06	Order Date : 5/22/2025 3:57:00 PM	Project Mgr :
Client Name : Tetra Tech NUS, Inc.		Project Name : NWIRP Bethpage 112G080	Report Type : Level 4
Client Contact : Ernie Wu		Receive DateTime : 5/22/2025 12:00:00 AM	EDD Type : ADAPT
Invoice Name : Tetra Tech NUS, Inc.		Purchase Order : 17:45	Hard Copy Date :
Invoice Contact : Ernie Wu			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2120-01	VPB182-HYD-20250522	Water	05/22/2025	14:30	VOCMS Group1		8260-Low		² / 10 Bus. Days
Q2120-02	BP-VPB-182-EB-20250522	Water	05/22/2025	11:00	VOCMS Group1		8260-Low		² / 10 Bus. Days

Relinquished By :

Date / Time : 5/23/25 0800

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room