

**ANALYTICAL RESULTS SUMMARY**VOLATILE ORGANICS  
SEMI-VOLATILE ORGANICS**PROJECT NAME : CTO WE13****TETRA TECH NUS, INC.****661 Andersen Drive****Suite 200****Pittsburgh, PA - 15220-2745****Phone No: 412-921-7090****ORDER ID : Q1250****ATTENTION : Ernie Wu****Laboratory Certification ID # 20012**

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## Cover Page

**Order ID :** Q1250

**Project ID :** CTO WE13

**Client :** Tetra Tech NUS, Inc.

### Lab Sample Number

Q1250-01  
Q1250-02  
Q1250-03  
Q1250-04  
Q1250-05  
Q1250-06  
Q1250-07  
Q1250-08  
Q1250-09  
Q1250-10  
Q1250-11  
Q1250-12

### Client Sample Number

BP-VPB-192-TB-20250127  
BP-VPB-192-GW-420-422  
BP-VPB-192-GW-300-302  
BP-VPB-192-GW-320-322  
BP-VPB-192-GW-340-342  
BP-VPB-192-GW-360-362  
BP-VPB-192-GW-360-362MS  
BP-VPB-192-GW-360-362MSD  
BP-VPB-192-DUP-20250128  
BP-VPB-192-GW-380-382  
BP-VPB-192-GW-400-402  
BP-VPB-192-GW-440-442

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 : \_\_\_\_\_

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 11:01 am, Feb 12, 2025*

Date: 2/12/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** CTO WE13

**Project Manager:** Ernie Wu

**Chemtech Project #** Q1250

**Test Name:** VOCMS Group1

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

12 Water samples were received on 01/30/2025.

### **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#121-1324UIThe 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 MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .

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

The %RSD is greater than 20% in the Initial Calibration method (82X021025W.M) for Chloroethane this compound is passing on Quadratic Regression.

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 Sample #BP-VPB-192-GW-360-362 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.



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

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.

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Signature \_\_\_\_\_

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 11:01 am, Feb 12, 2025*

## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** CTO WE13

**Project Manager:** Ernie Wu

**Chemtech Project #** Q1250

**Test Name:** SVOC-SIMGroup1

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

12 Water samples were received on 01/30/2025.

### **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-SemiVolatile Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The 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 BP-VPB-192-DUP-20250128 [Terphenyl-d14 - 167%], failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no 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 File ID BN036303.D met the requirements except for 2,4,6-Tribromophenol , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.

The Continuous Calibration File ID BN036320.D met the requirements except for 2,4,6-Tribromophenol , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.



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The Tuning criteria met requirements.

**E. Additional Comments:**

Less volume was taken for samples # BP-VPB-192-DUP-20250128 and BP-VPB-192-GW-380-382 at the extraction due to Limited volume received.

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 <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.

---

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 \_\_\_\_\_

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 11:01 am, Feb 12, 2025*

**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 #: Q1250

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 Castody

✓

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: 02/12/2025

## LAB CHRONICLE

<b>OrderID:</b>	Q1250	<b>OrderDate:</b>	1/31/2025 10:38:00 AM					
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	CTO WE13					
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	N31,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1250-01	<b>BP-VPB-192-TB-2025 0127</b>	Water	VOCMS Group1	8260-Low	<b>01/27/25</b>		<b>01/30/25</b>	
Q1250-02	<b>BP-VPB-192-GW-420- 422</b>	Water	VOCMS Group1	8260-Low	<b>01/29/25</b>		<b>01/30/25</b>	
Q1250-03	<b>BP-VPB-192-GW-300- 302</b>	Water	VOCMS Group1	8260-Low	<b>01/27/25</b>		<b>01/30/25</b>	
Q1250-04	<b>BP-VPB-192-GW-320- 322</b>	Water	VOCMS Group1	8260-Low	<b>01/27/25</b>		<b>01/30/25</b>	
Q1250-05	<b>BP-VPB-192-GW-340- 342</b>	Water	VOCMS Group1	8260-Low	<b>01/27/25</b>		<b>01/30/25</b>	
Q1250-06	<b>BP-VPB-192-GW-360- 362</b>	Water	VOCMS Group1	8260-Low	<b>01/28/25</b>		<b>01/30/25</b>	
Q1250-10	<b>BP-VPB-192-GW-380- 382</b>	Water	VOCMS Group1	8260-Low	<b>01/28/25</b>		<b>01/30/25</b>	
Q1250-11	<b>BP-VPB-192-GW-400- 402</b>	Water	VOCMS Group1	8260-Low	<b>01/28/25</b>		<b>01/30/25</b>	
Q1250-12	<b>BP-VPB-192-GW-440- 442</b>	Water	VOCMS Group1	8260-Low	<b>01/29/25</b>		<b>01/30/25</b>	

**Hit Summary Sheet**  
**SW-846**

SDG No.: Q1250  
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
<b>Client ID:</b> Q1250-01	<b>BP-VPB-192-TB-20250127</b> BP-VPB-192-TB-2( Water		Acetone	2.90	J	1.40	3.80	5.00	ug/L
			<b>Total Voc :</b>	<b>2.90</b>					
			<b>Total Concentration:</b>	<b>2.90</b>					
<b>Client ID:</b> Q1250-02	<b>BP-VPB-192-GW-420-422</b> BP-VPB-192-GW-4 Water		Acetone	4.80	J	1.40	3.80	5.00	ug/L
Q1250-02	BP-VPB-192-GW-4 Water		Carbon Disulfide	0.54	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>5.34</b>					
			<b>Total Concentration:</b>	<b>5.34</b>					
<b>Client ID:</b> Q1250-03	<b>BP-VPB-192-GW-300-302</b> BP-VPB-192-GW-3 Water		Acetone	6.00		1.40	3.80	5.00	ug/L
Q1250-03	BP-VPB-192-GW-3 Water		Carbon Disulfide	0.36	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>6.36</b>					
			<b>Total Concentration:</b>	<b>6.36</b>					
<b>Client ID:</b> Q1250-04	<b>BP-VPB-192-GW-320-322</b> BP-VPB-192-GW-3 Water		Acetone	8.60		1.40	3.80	5.00	ug/L
Q1250-04	BP-VPB-192-GW-3 Water		Carbon Disulfide	0.51	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>9.11</b>					
			<b>Total Concentration:</b>	<b>9.11</b>					
<b>Client ID:</b> Q1250-05	<b>BP-VPB-192-GW-340-342</b> BP-VPB-192-GW-3 Water		Acetone	8.70		1.40	3.80	5.00	ug/L
Q1250-05	BP-VPB-192-GW-3 Water		Carbon Disulfide	0.81	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>9.51</b>					
			<b>Total Concentration:</b>	<b>9.51</b>					
<b>Client ID:</b> Q1250-06	<b>BP-VPB-192-GW-360-362</b> BP-VPB-192-GW-3 Water		Acetone	4.80	J	1.40	3.80	5.00	ug/L
			<b>Total Voc :</b>	<b>4.80</b>					
			<b>Total Concentration:</b>	<b>4.80</b>					
<b>Client ID:</b> Q1250-10	<b>BP-VPB-192-GW-380-382</b> BP-VPB-192-GW-3 Water		Acetone	7.50		1.40	3.80	5.00	ug/L
Q1250-10	BP-VPB-192-GW-3 Water		Carbon Disulfide	0.86	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>8.36</b>					
			<b>Total Concentration:</b>	<b>8.36</b>					
<b>Client ID:</b> Q1250-11	<b>BP-VPB-192-GW-400-402</b> BP-VPB-192-GW-4 Water		Acetone	12.8		1.40	3.80	5.00	ug/L
Q1250-11	BP-VPB-192-GW-4 Water		Carbon Disulfide	0.34	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>13.1</b>					
			<b>Total Concentration:</b>	<b>13.1</b>					
<b>Client ID:</b> Q1250-12	<b>BP-VPB-192-GW-440-442</b> BP-VPB-192-GW-4 Water		Acetone	11.0		1.40	3.80	5.00	ug/L
Q1250-12	BP-VPB-192-GW-4 Water		Carbon Disulfide	0.45	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	<b>11.45</b>					
			<b>Total Concentration:</b>	<b>11.45</b>					

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** Q1250  
**Client:** Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
			Total Voc :	11.4					
			Total Concentration:	11.4					



A  
B  
C  
D  
E  
F  
G

# SAMPLE DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-TB-20250127	SDG No.:	Q1250
Lab Sample ID:	Q1250-01	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044881.D	1		02/10/25 15:41	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	2.90	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-TB-20250127	SDG No.:	Q1250
Lab Sample ID:	Q1250-01	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044881.D	1		02/10/25 15:41	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.0		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	50.2		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.6		85 - 114		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	92700	5.544				
540-36-3	1,4-Difluorobenzene	190000	6.757				
3114-55-4	Chlorobenzene-d5	171000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	69200	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-TB-20250127	SDG No.:	Q1250
Lab Sample ID:	Q1250-01	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044881.D	1		02/10/25 15:41	VX021025

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:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-420-422	SDG No.:	Q1250
Lab Sample ID:	Q1250-02	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044880.D	1		02/10/25 15:18	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	4.80	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.54	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-420-422	SDG No.:	Q1250
Lab Sample ID:	Q1250-02	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044880.D	1		02/10/25 15:18	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.1		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.9		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.7		85 - 114		103%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	96900	5.549				
540-36-3	1,4-Difluorobenzene	197000	6.756				
3114-55-4	Chlorobenzene-d5	180000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	78400	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-420-422	SDG No.:	Q1250
Lab Sample ID:	Q1250-02	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044880.D	1		02/10/25 15:18	VX021025

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:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-300-302	SDG No.:	Q1250
Lab Sample ID:	Q1250-03	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044882.D	1		02/10/25 16:04	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	6.00		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.36	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-300-302	SDG No.:	Q1250
Lab Sample ID:	Q1250-03	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044882.D	1		02/10/25 16:04	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.2		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	51.1		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		85 - 114		104%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	99300	5.55				
540-36-3	1,4-Difluorobenzene	201000	6.757				
3114-55-4	Chlorobenzene-d5	184000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	78900	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-300-302	SDG No.:	Q1250
Lab Sample ID:	Q1250-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044882.D	1		02/10/25 16:04	VX021025

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:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-320-322	SDG No.:	Q1250
Lab Sample ID:	Q1250-04	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044883.D	1		02/10/25 16:27	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	8.60		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.51	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-320-322	SDG No.:	Q1250
Lab Sample ID:	Q1250-04	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044883.D	1		02/10/25 16:27	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52.3		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	49.7		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.9		85 - 114		104%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	96100	5.55				
540-36-3	1,4-Difluorobenzene	195000	6.757				
3114-55-4	Chlorobenzene-d5	175000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	76700	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-320-322	SDG No.:	Q1250
Lab Sample ID:	Q1250-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044883.D	1		02/10/25 16:27	VX021025

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:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-340-342	SDG No.:	Q1250
Lab Sample ID:	Q1250-05	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044884.D	1		02/10/25 16:51	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	8.70		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.81	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-340-342	SDG No.:	Q1250
Lab Sample ID:	Q1250-05	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044884.D	1		02/10/25 16:51	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52.3		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	51.1		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	49.7		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.4		85 - 114		105%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	97000	5.544				
540-36-3	1,4-Difluorobenzene	194000	6.757				
3114-55-4	Chlorobenzene-d5	176000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	75900	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-340-342	SDG No.:	Q1250
Lab Sample ID:	Q1250-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044884.D	1		02/10/25 16:51	VX021025

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:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362	SDG No.:	Q1250
Lab Sample ID:	Q1250-06	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044888.D	1		02/10/25 18:23	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	4.80	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362	SDG No.:	Q1250
Lab Sample ID:	Q1250-06	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044888.D	1		02/10/25 18:23	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52.6		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	51.0		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.2		85 - 114		106%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	93900	5.543				
540-36-3	1,4-Difluorobenzene	188000	6.757				
3114-55-4	Chlorobenzene-d5	174000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	73200	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362	SDG No.:	Q1250
Lab Sample ID:	Q1250-06	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044888.D	1		02/10/25 18:23	VX021025

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:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-380-382	SDG No.:	Q1250
Lab Sample ID:	Q1250-10	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044885.D	1		02/10/25 17:14	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	7.50		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.86	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-380-382	SDG No.:	Q1250
Lab Sample ID:	Q1250-10	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044885.D	1		02/10/25 17:14	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.8		81 - 118		108%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.9		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.9		85 - 114		104%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	98000	5.544				
540-36-3	1,4-Difluorobenzene	197000	6.757				
3114-55-4	Chlorobenzene-d5	182000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	77300	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-380-382	SDG No.:	Q1250
Lab Sample ID:	Q1250-10	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044885.D	1		02/10/25 17:14	VX021025

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:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-400-402	SDG No.:	Q1250
Lab Sample ID:	Q1250-11	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044886.D	1		02/10/25 17:37	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	12.8		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.34	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-400-402	SDG No.:	Q1250
Lab Sample ID:	Q1250-11	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044886.D	1		02/10/25 17:37	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.8		81 - 118		108%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	51.0		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.5		85 - 114		107%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	94400	5.549				
540-36-3	1,4-Difluorobenzene	192000	6.756				
3114-55-4	Chlorobenzene-d5	179000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	76700	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-400-402	SDG No.:	Q1250
Lab Sample ID:	Q1250-11	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044886.D	1		02/10/25 17:37	VX021025

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:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-440-442	SDG No.:	Q1250
Lab Sample ID:	Q1250-12	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044887.D	1		02/10/25 18:00	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	11.0		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.45	J	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-440-442	SDG No.:	Q1250
Lab Sample ID:	Q1250-12	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044887.D	1		02/10/25 18:00	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52.9		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.2		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.0		85 - 114		102%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	91100	5.544				
540-36-3	1,4-Difluorobenzene	183000	6.757				
3114-55-4	Chlorobenzene-d5	167000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	68200	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-440-442	SDG No.:	Q1250
Lab Sample ID:	Q1250-12	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044887.D	1		02/10/25 18:00	VX021025

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



A  
B  
C  
D  
E  
F  
G

# QC SUMMARY

### Surrogate Summary

**SDG No.:** Q1250

**Client:** Tetra Tech NUS, Inc.

**Analytical Method:** SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Limits	
						Qual	Low
Q1250-01	BP-VPB-192-TB-20250127	1,2-Dichloroethane-d4	50	53.0	106	81	118
		Dibromofluoromethane	50	49.5	99	80	119
		Toluene-d8	50	50.2	100	89	112
Q1250-02	BP-VPB-192-GW-420-422	4-Bromofluorobenzene	50	50.6	101	85	114
		1,2-Dichloroethane-d4	50	53.1	106	81	118
		Dibromofluoromethane	50	51.2	102	80	119
Q1250-03	BP-VPB-192-GW-300-302	Toluene-d8	50	50.9	102	89	112
		4-Bromofluorobenzene	50	51.7	103	85	114
		1,2-Dichloroethane-d4	50	53.2	106	81	118
Q1250-04	BP-VPB-192-GW-320-322	Dibromofluoromethane	50	51.1	102	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	51.8	104	85	114
Q1250-05	BP-VPB-192-GW-340-342	1,2-Dichloroethane-d4	50	52.3	105	81	118
		Dibromofluoromethane	50	49.7	99	80	119
		Toluene-d8	50	50.5	101	89	112
Q1250-06	BP-VPB-192-GW-360-362	4-Bromofluorobenzene	50	51.9	104	85	114
		1,2-Dichloroethane-d4	50	52.3	105	81	118
		Dibromofluoromethane	50	51.1	102	80	119
Q1250-07MS	BP-VPB-192-GW-360-362MS	Toluene-d8	50	49.7	99	89	112
		4-Bromofluorobenzene	50	52.4	105	85	114
		1,2-Dichloroethane-d4	50	52.6	105	81	118
Q1250-08MSD	BP-VPB-192-GW-360-362MSD	Dibromofluoromethane	50	51.2	102	80	119
		Toluene-d8	50	51.0	102	89	112
		4-Bromofluorobenzene	50	53.1	106	85	114
Q1250-10	BP-VPB-192-GW-380-382	1,2-Dichloroethane-d4	50	50.8	102	81	118
		Dibromofluoromethane	50	49.0	98	80	119
		Toluene-d8	50	49.5	99	89	112
Q1250-11	BP-VPB-192-GW-400-402	4-Bromofluorobenzene	50	49.3	99	85	114
		1,2-Dichloroethane-d4	50	50.2	100	81	118
		Dibromofluoromethane	50	50.4	101	80	119
Q1250-12	BP-VPB-192-GW-440-442	Toluene-d8	50	51.0	102	89	112
		4-Bromofluorobenzene	50	51.6	103	85	114
		1,2-Dichloroethane-d4	50	53.8	108	81	118
VX0210WBL01	VX0210WBL01	Dibromofluoromethane	50	51.0	102	80	119
		Toluene-d8	50	50.9	102	89	112
		4-Bromofluorobenzene	50	52.0	104	85	114
VX0210WBS01	VX0210WBS01	1,2-Dichloroethane-d4	50	53.9	108	81	118
		Dibromofluoromethane	50	51.3	103	80	119
		Toluene-d8	50	51.0	102	89	112
VX0210WBS01	VX0210WBS01	4-Bromofluorobenzene	50	53.5	107	85	114
		1,2-Dichloroethane-d4	50	52.9	106	81	118
		Dibromofluoromethane	50	51.0	102	80	119
VX0210WBS01	VX0210WBS01	Toluene-d8	50	50.2	100	89	112
		4-Bromofluorobenzene	50	51.0	102	85	114
		1,2-Dichloroethane-d4	50	55.5	111	81	118
VX0210WBS01	VX0210WBS01	Dibromofluoromethane	50	49.8	100	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	51.2	102	85	114
VX0210WBS01	VX0210WBS01	1,2-Dichloroethane-d4	50	46.8	94	81	118
		Dibromofluoromethane	50	46.6	93	80	119

**Surrogate Summary**SDG No.: Q1250Client: Tetra Tech NUS, Inc.Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
VX0210WBS01	VX0210WBS01	Toluene-d8	50	47.0	94	89	112
		4-Bromofluorobenzene	50	47.2	94	85	114

### Matrix Spike/Matrix Spike Duplicate Summary

**SW-846**

**SDG No.:** Q1250

**Client:** Tetra Tech NUS, Inc.

**Analytical Method:** SW8260-Low

Parameter	Spike	Sample		Result	Units	Rec		RPD	Limits			RPD
		Result	Units			Rec	Qual		Low	High		
<b>Lab Sample ID :</b>	<b>Q1250-07MS</b>	<b>Client Sample ID :</b>			<b>BP-VPB-192-GW-360-362MS</b>			<b>Datafile :</b>		<b>VX044889.D</b>		
Chloromethane	50	0	46.2	ug/L	92				50	139		
Vinyl chloride	50	0	45.7	ug/L	91				58	137		
Bromomethane	50	0	47.6	ug/L	95				53	141		
Chloroethane	50	0	52.8	ug/L	106				60	138		
Trichlorofluoromethane	50	0	47.0	ug/L	94				65	141		
1,1,2-Trichlorotrifluoroethane	50	0	47.3	ug/L	95				70	136		
1,1-Dichloroethene	50	0	46.3	ug/L	93				71	131		
Acetone	250	4.80	250	ug/L	98				39	160		
Carbon disulfide	50	0	45.8	ug/L	92				64	133		
Methyl tert-butyl Ether	50	0	47.7	ug/L	95				71	124		
Methylene Chloride	50	0	47.0	ug/L	94				74	124		
trans-1,2-Dichloroethene	50	0	47.8	ug/L	96				75	124		
1,1-Dichloroethane	50	0	47.6	ug/L	95				77	125		
2-Butanone	250	0	250	ug/L	100				56	143		
Carbon Tetrachloride	50	0	45.0	ug/L	90				72	136		
cis-1,2-Dichloroethene	50	0	48.0	ug/L	96				78	123		
Chloroform	50	0	47.3	ug/L	95				79	124		
1,1,1-Trichloroethane	50	0	47.1	ug/L	94				74	131		
Methylcyclohexane	50	0	45.4	ug/L	91				72	132		
Benzene	50	0	46.4	ug/L	93				79	120		
1,2-Dichloroethane	50	0	47.6	ug/L	95				73	128		
Trichloroethene	50	0	45.6	ug/L	91				79	123		
1,2-Dichloropropane	50	0	46.7	ug/L	93				78	122		
Bromodichloromethane	50	0	47.7	ug/L	95				79	125		
4-Methyl-2-Pentanone	250	0	250	ug/L	100				67	130		
Toluene	50	0	47.4	ug/L	95				80	121		
t-1,3-Dichloropropene	50	0	47.0	ug/L	94				73	127		
cis-1,3-Dichloropropene	50	0	47.0	ug/L	94				75	124		
1,1,2-Trichloroethane	50	0	48.6	ug/L	97				80	119		
2-Hexanone	250	0	260	ug/L	104				57	139		
Dibromochloromethane	50	0	47.6	ug/L	95				74	126		
Tetrachloroethene	50	0	45.5	ug/L	91				74	129		
Chlorobenzene	50	0	46.6	ug/L	93				82	118		
Ethyl Benzene	50	0	47.0	ug/L	94				79	121		
m/p-Xylenes	100	0	93.5	ug/L	94				80	121		
o-Xylene	50	0	46.7	ug/L	93				78	122		
Styrene	50	0	47.9	ug/L	96				78	123		
Bromoform	50	0	47.4	ug/L	95				66	130		
Isopropylbenzene	50	0	47.0	ug/L	94				72	131		
1,1,2,2-Tetrachloroethane	50	0	47.1	ug/L	94				71	121		
1,3-Dichlorobenzene	50	0	46.0	ug/L	92				80	119		
1,4-Dichlorobenzene	50	0	45.2	ug/L	90				79	118		
1,2-Dichlorobenzene	50	0	47.5	ug/L	95				80	119		

### Matrix Spike/Matrix Spike Duplicate Summary

**SW-846**

**SDG No.:** Q1250

**Client:** Tetra Tech NUS, Inc.

**Analytical Method:** SW8260-Low

Parameter	Spike	Sample		Result	Units	Rec		RPD	Limits		RPD
		Result	Units			Rec	Qual		Low	High	
<b>Lab Sample ID :</b>	<b>Q1250-08MSD</b>	<b>Client Sample ID :</b>		<b>BP-VPB-192-GW-360-362MSD</b>		<b>Datafile :</b>		<b>VX044890.D</b>			
Chloromethane	50	0	48.9	ug/L	98	6			50	139	20
Vinyl chloride	50	0	47.9	ug/L	96	5			58	137	20
Bromomethane	50	0	50.2	ug/L	100	5			53	141	20
Chloroethane	50	0	52.3	ug/L	105	1			60	138	20
Trichlorofluoromethane	50	0	49.5	ug/L	99	5			65	141	20
1,1,2-Trichlorotrifluoroethane	50	0	49.6	ug/L	99	5			70	136	20
1,1-Dichloroethene	50	0	50.2	ug/L	100	8			71	131	20
Acetone	250	4.80	260	ug/L	102	4			39	160	20
Carbon disulfide	50	0	49.3	ug/L	99	7			64	133	20
Methyl tert-butyl Ether	50	0	51.1	ug/L	102	7			71	124	20
Methylene Chloride	50	0	50.3	ug/L	101	7			74	124	20
trans-1,2-Dichloroethene	50	0	50.8	ug/L	102	6			75	124	20
1,1-Dichloroethane	50	0	51.2	ug/L	102	7			77	125	20
2-Butanone	250	0	270	ug/L	108	8			56	143	20
Carbon Tetrachloride	50	0	50.5	ug/L	101	12			72	136	20
cis-1,2-Dichloroethene	50	0	50.7	ug/L	101	5			78	123	20
Chloroform	50	0	50.8	ug/L	102	7			79	124	20
1,1,1-Trichloroethane	50	0	51.0	ug/L	102	8			74	131	20
Methylcyclohexane	50	0	49.1	ug/L	98	8			72	132	20
Benzene	50	0	51.3	ug/L	103	10			79	120	20
1,2-Dichloroethane	50	0	51.8	ug/L	104	8			73	128	20
Trichloroethene	50	0	51.2	ug/L	102	12			79	123	20
1,2-Dichloropropane	50	0	51.2	ug/L	102	9			78	122	20
Bromodichloromethane	50	0	52.4	ug/L	105	9			79	125	20
4-Methyl-2-Pentanone	250	0	280	ug/L	112	11			67	130	20
Toluene	50	0	51.8	ug/L	104	9			80	121	20
t-1,3-Dichloropropene	50	0	51.8	ug/L	104	10			73	127	20
cis-1,3-Dichloropropene	50	0	52.5	ug/L	105	11			75	124	20
1,1,2-Trichloroethane	50	0	52.6	ug/L	105	8			80	119	20
2-Hexanone	250	0	280	ug/L	112	7			57	139	20
Dibromochloromethane	50	0	52.8	ug/L	106	10			74	126	20
Tetrachloroethene	50	0	48.5	ug/L	97	6			74	129	20
Chlorobenzene	50	0	50.5	ug/L	101	8			82	118	20
Ethyl Benzene	50	0	50.4	ug/L	101	7			79	121	20
m/p-Xylenes	100	0	100	ug/L	100	7			80	121	20
o-Xylene	50	0	50.4	ug/L	101	8			78	122	20
Styrene	50	0	52.6	ug/L	105	9			78	123	20
Bromoform	50	0	53.2	ug/L	106	12			66	130	20
Isopropylbenzene	50	0	50.6	ug/L	101	7			72	131	20
1,1,2,2-Tetrachloroethane	50	0	50.6	ug/L	101	7			71	121	20
1,3-Dichlorobenzene	50	0	49.9	ug/L	100	8			80	119	20
1,4-Dichlorobenzene	50	0	49.2	ug/L	98	8			79	118	20
1,2-Dichlorobenzene	50	0	51.7	ug/L	103	8			80	119	20

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** Q1250

**Client:** Tetra Tech NUS, Inc.

**Analytical Method:** SW8260-Low

**Datafile :** VX044878.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		RPD
								Low	High	
VX0210WBS01	Chloromethane	20	19.2	ug/L	96			50	139	
	Vinyl chloride	20	18.2	ug/L	91			58	137	
	Bromomethane	20	19.8	ug/L	99			53	141	
	Chloroethane	20	22.6	ug/L	113			60	138	
	Trichlorofluoromethane	20	19.4	ug/L	97			65	141	
	1,1,2-Trichlorotrifluoroethane	20	20.5	ug/L	103			70	136	
	1,1-Dichloroethene	20	18.8	ug/L	94			71	131	
	Acetone	100	110	ug/L	110			39	160	
	Carbon disulfide	20	19.5	ug/L	98			64	133	
	Methyl tert-butyl Ether	20	19.6	ug/L	98			71	124	
	Methylene Chloride	20	19.3	ug/L	97			74	124	
	trans-1,2-Dichloroethene	20	19.6	ug/L	98			75	124	
	1,1-Dichloroethane	20	19.8	ug/L	99			77	125	
	2-Butanone	100	110	ug/L	110			56	143	
	Carbon Tetrachloride	20	19.8	ug/L	99			72	136	
	cis-1,2-Dichloroethene	20	20.0	ug/L	100			78	123	
	Chloroform	20	19.7	ug/L	99			79	124	
	1,1,1-Trichloroethane	20	19.6	ug/L	98			74	131	
	Methylcyclohexane	20	21.2	ug/L	106			72	132	
	Benzene	20	20.1	ug/L	101			79	120	
	1,2-Dichloroethane	20	20.4	ug/L	102			73	128	
	Trichloroethene	20	19.8	ug/L	99			79	123	
	1,2-Dichloroproppane	20	19.9	ug/L	100			78	122	
	Bromodichloromethane	20	20.1	ug/L	101			79	125	
	4-Methyl-2-Pentanone	100	110	ug/L	110			67	130	
	Toluene	20	20.1	ug/L	101			80	121	
	t-1,3-Dichloropropene	20	19.8	ug/L	99			73	127	
	cis-1,3-Dichloropropene	20	20.3	ug/L	102			75	124	
	1,1,2-Trichloroethane	20	19.9	ug/L	100			80	119	
	2-Hexanone	100	110	ug/L	110			57	139	
	Dibromochloromethane	20	19.9	ug/L	100			74	126	
	Tetrachloroethene	20	20.8	ug/L	104			74	129	
	Chlorobenzene	20	20.7	ug/L	104			82	118	
	Ethyl Benzene	20	20.5	ug/L	103			79	121	
	m/p-Xylenes	40	42.0	ug/L	105			80	121	
	o-Xylene	20	20.6	ug/L	103			78	122	
	Styrene	20	21.0	ug/L	105			78	123	
	Bromoform	20	20.5	ug/L	103			66	130	
	Isopropylbenzene	20	19.8	ug/L	99			72	131	
	1,1,2,2-Tetrachloroethane	20	19.9	ug/L	100			71	121	
	1,3-Dichlorobenzene	20	19.6	ug/L	98			80	119	
	1,4-Dichlorobenzene	20	19.9	ug/L	100			79	118	
	1,2-Dichlorobenzene	20	20.3	ug/L	102			80	119	

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

**VX0210WBL01**

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1250

SAS No.: Q1250 SDG No.: Q1250

Lab File ID: VX044877.D

Lab Sample ID: VX0210WBL01

Date Analyzed: 02/10/2025

Time Analyzed: 14:06

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
VX0210WBS01	VX0210WBS01	VX044878.D	02/10/2025
BP-VPB-192-GW-420-422	Q1250-02	VX044880.D	02/10/2025
BP-VPB-192-TB-20250127	Q1250-01	VX044881.D	02/10/2025
BP-VPB-192-GW-300-302	Q1250-03	VX044882.D	02/10/2025
BP-VPB-192-GW-320-322	Q1250-04	VX044883.D	02/10/2025
BP-VPB-192-GW-340-342	Q1250-05	VX044884.D	02/10/2025
BP-VPB-192-GW-380-382	Q1250-10	VX044885.D	02/10/2025
BP-VPB-192-GW-400-402	Q1250-11	VX044886.D	02/10/2025
BP-VPB-192-GW-440-442	Q1250-12	VX044887.D	02/10/2025
BP-VPB-192-GW-360-362	Q1250-06	VX044888.D	02/10/2025
BP-VPB-192-GW-360-362MS	Q1250-07MS	VX044889.D	02/10/2025
BP-VPB-192-GW-360-362MSD	Q1250-08MSD	VX044890.D	02/10/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1250
Lab File ID:	VX044867.D	SAS No.:	Q1250
Instrument ID:	MSVOA_X	SDG NO.:	Q1250
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Date:	02/10/2025
		BFB Injection Time:	09:35
		Heated Purge:	Y/N
			N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	52.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.5 ( 0.6 ) 1
174	50.0 - 100.0% of mass 95	75.9
175	5.0 - 9.0% of mass 174	5.7 ( 7.5 ) 1
176	95.0 - 101.0% of mass 174	72.6 ( 95.7 ) 1
177	5.0 - 9.0% of mass 176	4.5 ( 6.2 ) 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
VSTDICC001	VSTDICC001	VX044868.D	02/10/2025	10:25
VSTDICC005	VSTDICC005	VX044869.D	02/10/2025	10:48
VSTDICC020	VSTDICC020	VX044870.D	02/10/2025	11:11
VSTDICCC050	VSTDICCC050	VX044871.D	02/10/2025	11:34
VSTDICC100	VSTDICC100	VX044872.D	02/10/2025	12:05
VSTDICC150	VSTDICC150	VX044873.D	02/10/2025	12:28
VX0210WBL01	VX0210WBL01	VX044877.D	02/10/2025	14:06
VX0210WBS01	VX0210WBS01	VX044878.D	02/10/2025	14:29
BP-VPB-192-GW-420-422	Q1250-02	VX044880.D	02/10/2025	15:18
BP-VPB-192-TB-20250127	Q1250-01	VX044881.D	02/10/2025	15:41
BP-VPB-192-GW-300-302	Q1250-03	VX044882.D	02/10/2025	16:04
BP-VPB-192-GW-320-322	Q1250-04	VX044883.D	02/10/2025	16:27
BP-VPB-192-GW-340-342	Q1250-05	VX044884.D	02/10/2025	16:51
BP-VPB-192-GW-380-382	Q1250-10	VX044885.D	02/10/2025	17:14
BP-VPB-192-GW-400-402	Q1250-11	VX044886.D	02/10/2025	17:37
BP-VPB-192-GW-440-442	Q1250-12	VX044887.D	02/10/2025	18:00
BP-VPB-192-GW-360-362	Q1250-06	VX044888.D	02/10/2025	18:23
BP-VPB-192-GW-360-362MS	Q1250-07MS	VX044889.D	02/10/2025	18:46

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1250
Lab File ID:	VX044867.D	SAS No.:	Q1250
Instrument ID:	MSVOA_X	BFB Injection Date:	02/10/2025
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Time:	09:35
		Heated Purge:	Y/N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	52.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.5 ( 0.6 ) 1
174	50.0 - 100.0% of mass 95	75.9
175	5.0 - 9.0% of mass 174	5.7 ( 7.5 ) 1
176	95.0 - 101.0% of mass 174	72.6 ( 95.7 ) 1
177	5.0 - 9.0% of mass 176	4.5 ( 6.2 ) 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
BP-VPB-192-GW-360-362MSD	Q1250-08MSD	VX044890.D	02/10/2025	19:09
VSTDCCC050EC	VSTDCCC050	VX044891.D	02/10/2025	19:32

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1250
Lab File ID:	VX044871.D	Date Analyzed:	02/10/2025
Instrument ID:	MSVOA_X	Time Analyzed:	11:34
GC Column:	DB-624UI	ID: 0.18 (mm)	Heated Purge: (Y/N) <u>N</u>

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	127984	5.54	233736	6.76	204751	10.05
UPPER LIMIT	255968	6.043	467472	7.257	409502	10.549
LOWER LIMIT	63992	5.043	116868	6.257	102376	9.549
EPA SAMPLE NO.						
BP-VPB-192-TB-20250127	92731	5.54	189692	6.76	170630	10.05
BP-VPB-192-GW-420-422	96890	5.55	196670	6.76	180490	10.05
BP-VPB-192-GW-300-302	99257	5.55	200954	6.76	183816	10.05
BP-VPB-192-GW-320-322	96132	5.55	194678	6.76	175107	10.05
BP-VPB-192-GW-340-342	96963	5.54	193723	6.76	175745	10.05
BP-VPB-192-GW-360-362	93911	5.54	187948	6.76	173877	10.05
BP-VPB-192-GW-360-362MS	123128	5.55	231125	6.76	204212	10.05
BP-VPB-192-GW-360-362MSD	113791	5.54	209107	6.76	187126	10.05
BP-VPB-192-GW-380-382	98000	5.54	197272	6.76	182089	10.05
BP-VPB-192-GW-400-402	94362	5.55	191816	6.76	178953	10.05
BP-VPB-192-GW-440-442	91120	5.54	183168	6.76	166878	10.05
VX0210WBL01	95840	5.54	200206	6.76	182254	10.05
VX0210WBS01	143675	5.54	262165	6.76	224717	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.:	Q1250	SAS No.:	Q1250
SDG NO.:				SDG NO.:	Q1250
Lab File ID:	VX044871.D		Date Analyzed:	02/10/2025	
Instrument ID:	MSVOA_X		Time Analyzed:	11:34	
GC Column:	DB-624UI	ID: 0.18 (mm)	Heated Purge: (Y/N)	N	

	IS4 AREA #	RT #				
12 HOUR STD	92648	12.018				
	185296	12.518				
	46324	11.518				
EPA SAMPLE NO.						
BP-VPB-192-TB-20250127	69234	12.02				
BP-VPB-192-GW-420-422	78413	12.02				
BP-VPB-192-GW-300-302	78851	12.02				
BP-VPB-192-GW-320-322	76744	12.02				
BP-VPB-192-GW-340-342	75903	12.02				
BP-VPB-192-GW-360-362	73228	12.02				
BP-VPB-192-GW-360-362MS	88501	12.02				
BP-VPB-192-GW-360-362MSD	83002	12.02				
BP-VPB-192-GW-380-382	77317	12.02				
BP-VPB-192-GW-400-402	76716	12.02				
BP-VPB-192-GW-440-442	68152	12.02				
VX0210WBL01	76715	12.02				
VX0210WBS01	103194	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.



A  
B  
C  
D  
E  
F  
G

# QC SAMPLE

# DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:
Project:	CTO WE13	Date Received:
Client Sample ID:	VX0210WBL01	SDG No.: Q1250
Lab Sample ID:	VX0210WBL01	Matrix: Water
Analytical Method:	SW8260	% Solid: 0
Sample Wt/Vol:	5 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
VX044877.D	1		02/10/25 14:06	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	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	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	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	0.26	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	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	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	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	1.30	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	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	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	1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:
Project:	CTO WE13	Date Received:
Client Sample ID:	VX0210WBL01	SDG No.: Q1250
Lab Sample ID:	VX0210WBL01	Matrix: Water
Analytical Method:	SW8260	% Solid: 0
Sample Wt/Vol:	5 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
VX044877.D	1		02/10/25 14:06	VX021025

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	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	55.5		81 - 118		111%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		80 - 119		100%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.2		85 - 114		102%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	95800	5.544				
540-36-3	1,4-Difluorobenzene	200000	6.757				
3114-55-4	Chlorobenzene-d5	182000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	76700	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:	CTO WE13	Date Received:
Client Sample ID:	VX0210WBS01	SDG No.: Q1250
Lab Sample ID:	VX0210WBS01	Matrix: Water
Analytical Method:	SW8260	% Solid: 0
Sample Wt/Vol:	5 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
VX044878.D	1		02/10/25 14:29	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	19.2		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.2		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	19.8		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	22.6		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.4		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.5		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.8		0.26	0.75	1.00	ug/L
67-64-1	Acetone	110		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	19.5		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.6		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.3		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.6		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.8		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	110		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.8		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.0		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.7		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.6		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	21.2		0.19	0.50	1.00	ug/L
71-43-2	Benzene	20.1		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.4		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.8		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.9		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.1		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.75	2.50	5.00	ug/L
108-88-3	Toluene	20.1		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.8		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.3		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.9		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	110		1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:
Project:	CTO WE13	Date Received:
Client Sample ID:	VX0210WBS01	SDG No.: Q1250
Lab Sample ID:	VX0210WBS01	Matrix: Water
Analytical Method:	SW8260	% Solid: 0
Sample Wt/Vol:	5 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
VX044878.D	1		02/10/25 14:29	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	19.9		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	20.8		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.7		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.5		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	42.0		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.6		0.14	0.50	1.00	ug/L
100-42-5	Styrene	21.0		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	20.5		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	19.8		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.9		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.6		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.9		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.3		0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.8		81 - 118		94%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		80 - 119		93%	SPK: 50
2037-26-5	Toluene-d8	47.0		89 - 112		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.2		85 - 114		94%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	144000	5.544				
540-36-3	1,4-Difluorobenzene	262000	6.757				
3114-55-4	Chlorobenzene-d5	225000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	103000	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:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362MS	SDG No.:	Q1250
Lab Sample ID:	Q1250-07MS	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044889.D	1		02/10/25 18:46	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	46.2		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	45.7		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	47.6		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	52.8		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	47.0		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	47.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	46.3		0.26	0.75	1.00	ug/L
67-64-1	Acetone	250		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	45.8		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	47.7		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	47.0		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	47.8		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	47.6		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	250		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	45.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	48.0		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	47.3		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	47.1		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	45.4		0.19	0.50	1.00	ug/L
71-43-2	Benzene	46.4		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	47.6		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	45.6		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	46.7		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	47.7		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	250		0.75	2.50	5.00	ug/L
108-88-3	Toluene	47.4		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	47.0		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	47.0		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	48.6		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	260		1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362MS	SDG No.:	Q1250
Lab Sample ID:	Q1250-07MS	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044889.D	1		02/10/25 18:46	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	47.6		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	45.5		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	46.6		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	47.0		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	93.5		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	46.7		0.14	0.50	1.00	ug/L
100-42-5	Styrene	47.9		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	47.4		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	47.0		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	47.1		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	46.0		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	45.2		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	47.5		0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50.8		81 - 118		102%	SPK: 50
1868-53-7	Dibromofluoromethane	49.0		80 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.3		85 - 114		99%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	123000	5.55				
540-36-3	1,4-Difluorobenzene	231000	6.757				
3114-55-4	Chlorobenzene-d5	204000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	88500	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:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362MSD	SDG No.:	Q1250
Lab Sample ID:	Q1250-08MSD	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044890.D	1		02/10/25 19:09	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	48.9		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	47.9		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	50.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	52.3		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	49.5		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	49.6		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	50.2		0.26	0.75	1.00	ug/L
67-64-1	Acetone	260		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	49.3		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	51.1		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	50.3		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	50.8		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	51.2		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	270		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	50.5		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	50.7		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	50.8		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	51.0		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	49.1		0.19	0.50	1.00	ug/L
71-43-2	Benzene	51.3		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	51.8		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	51.2		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	51.2		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	52.4		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	280		0.75	2.50	5.00	ug/L
108-88-3	Toluene	51.8		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	51.8		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	52.5		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	52.6		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	280		1.10	2.50	5.00	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/28/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-360-362MSD	SDG No.:	Q1250
Lab Sample ID:	Q1250-08MSD	Matrix:	Water
Analytical Method:	SW8260	% 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
VX044890.D	1		02/10/25 19:09	VX021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	52.8		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	48.5		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	50.5		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	50.4		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	100		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	50.4		0.14	0.50	1.00	ug/L
100-42-5	Styrene	52.6		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	53.2		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	50.6		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50.6		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	49.9		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	49.2		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	51.7		0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50.2		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	51.0		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		85 - 114		103%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	114000	5.544				
540-36-3	1,4-Difluorobenzene	209000	6.757				
3114-55-4	Chlorobenzene-d5	187000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	83000	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



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# CALIBRATION

# SUMMARY

## VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	CHEMTECH	Contract:	TETR06	
Lab Code:	CHEM	Case No.:	Q1250	
Instrument ID:	MSVOA_X	Calibration Date(s):	02/10/2025	
Heated Purge:	(Y/N) N	Calibration Time(s):	10:25	12:28
GC Column:	DB-624UI	ID:	0.18	(mm)

LAB FILE ID:	RRF001 = VX044868.D	RRF005 = VX044869.D	RRF020 = VX044870.D					
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Chloromethane	0.958	0.860	0.862	0.843	0.805	0.793	0.854	6.9
Vinyl Chloride	0.839	0.846	0.847	0.808	0.807	0.814	0.827	2.3
Bromomethane		0.248	0.252	0.249	0.242	0.246	0.247	1.4
Chloroethane	0.500	0.288	0.280	0.341	0.249	0.181	0.307	35.4
Trichlorofluoromethane	1.062	1.066	1.096	1.029	1.013	1.008	1.046	3.3
1,1,2-Trichlorotrifluoroethane	0.583	0.647	0.668	0.626	0.631	0.637	0.632	4.5
1,1-Dichloroethene	0.647	0.639	0.661	0.630	0.632	0.657	0.644	2
Acetone	0.305	0.292	0.298	0.293	0.285	0.292	0.294	2.3
Carbon Disulfide	1.689	1.732	1.786	1.762	1.789	1.846	1.767	3
Methyl tert-butyl Ether	1.941	2.065	2.130	2.046	2.011	2.110	2.050	3.4
Methylene Chloride	0.747	0.717	0.741	0.704	0.695	0.720	0.721	2.8
trans-1,2-Dichloroethene	0.608	0.622	0.657	0.640	0.633	0.644	0.634	2.7
1,1-Dichloroethane	1.155	1.257	1.292	1.227	1.209	1.257	1.233	3.9
2-Butanone	0.422	0.472	0.504	0.506	0.477	0.487	0.478	6.4
Carbon Tetrachloride	0.457	0.466	0.478	0.453	0.445	0.459	0.460	2.4
cis-1,2-Dichloroethene	0.680	0.783	0.812	0.758	0.758	0.779	0.762	5.9
Chloroform	1.167	1.209	1.268	1.169	1.153	1.208	1.196	3.5
1,1,1-Trichloroethane	1.014	1.003	1.051	1.005	0.984	1.028	1.014	2.3
Methylcyclohexane	0.509	0.571	0.667	0.622	0.634	0.635	0.606	9.4
Benzene	1.370	1.488	1.577	1.470	1.429	1.453	1.465	4.7
1,2-Dichloroethane	0.417	0.465	0.502	0.472	0.462	0.482	0.467	6.1
Trichloroethene	0.293	0.340	0.367	0.335	0.332	0.343	0.335	7.2
1,2-Dichloropropane	0.343	0.354	0.389	0.367	0.360	0.372	0.364	4.3
Bromodichloromethane	0.428	0.481	0.514	0.500	0.500	0.513	0.489	6.6
4-Methyl-2-Pentanone	0.439	0.514	0.562	0.554	0.506	0.498	0.512	8.6
Toluene	0.776	0.872	0.957	0.898	0.866	0.864	0.872	6.7
t-1,3-Dichloropropene	0.417	0.451	0.518	0.514	0.528	0.543	0.495	10
cis-1,3-Dichloropropene	0.452	0.511	0.587	0.577	0.587	0.599	0.552	10.5
1,1,2-Trichloroethane	0.307	0.342	0.362	0.341	0.331	0.329	0.335	5.4
2-Hexanone	0.313	0.360	0.406	0.404	0.369	0.362	0.369	9.3

\* 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	SAS No.:	Q1250
Instrument ID:	MSVOA_X	SDG No.:	Q1250
Heated Purge:	(Y/N) N	Calibration Date(s):	02/10/2025
GC Column:	DB-624UI	Calibration Time(s):	10:25 12:28
	ID: 0.18 (mm)		

LAB FILE ID:	RRF001 = VX044868.D	RRF005 = VX044869.D	RRF020 = VX044870.D					
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Dibromochloromethane	0.317	0.342	0.381	0.373	0.368	0.370	0.359	6.7
Tetrachloroethene	0.306	0.311	0.343	0.310	0.307	0.314	0.315	4.4
Chlorobenzene	0.969	1.093	1.140	1.096	1.071	1.076	1.074	5.3
Ethyl Benzene	1.690	1.873	2.021	1.935	1.923	1.929	1.895	5.9
m/p-Xylenes	0.616	0.700	0.754	0.724	0.706	0.694	0.699	6.6
o-Xylene	0.661	0.721	0.747	0.707	0.691	0.681	0.701	4.4
Styrene	0.909	1.124	1.249	1.199	1.161	1.139	1.130	10.4
Bromoform	0.186	0.247	0.272	0.280	0.276	0.287	0.258	14.7
Isopropylbenzene	3.735	4.012	4.347	4.045	3.940	4.076	4.026	4.9
1,1,2,2-Tetrachloroethane	1.429	1.403	1.438	1.366	1.305	1.360	1.383	3.6
1,3-Dichlorobenzene	1.616	1.669	1.741	1.679	1.663	1.703	1.678	2.5
1,4-Dichlorobenzene	1.662	1.712	1.762	1.686	1.660	1.701	1.697	2.2
1,2-Dichlorobenzene	1.512	1.713	1.763	1.666	1.604	1.639	1.650	5.3
1,2-Dichloroethane-d4		0.764	0.718	0.723	0.707	0.747	0.732	3.2
Dibromofluoromethane		0.335	0.322	0.320	0.320	0.328	0.325	2
Toluene-d8		1.239	1.249	1.239	1.208	1.212	1.229	1.5
4-Bromofluorobenzene		0.404	0.410	0.431	0.415	0.412	0.414	2.5

- \* 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.:	Q1250	SAS No.:	Q1250	SDG No.:	Q1250
Instrument ID:	MSVOA_X	Calibration Date/Time:			02/10/2025	19:32	
Lab File ID:	VX044891.D	Init. Calib. Date(s):			02/10/2025	02/10/2025	
Heated Purge:	(Y/N) N	Init. Calib. Time(s):			10:25	12:28	
GC Column:	DB-624UI	ID:	0.18	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.854	0.831	0.1	-2.69	50
Vinyl Chloride	0.827	0.785		-5.08	50
Bromomethane	0.247	0.245		-0.81	50
Chloroethane	0.307	0.279		-9.12	50
Trichlorofluoromethane	1.046	1.008		-3.63	50
1,1,2-Trichlorotrifluoroethane	0.632	0.593		-6.17	50
1,1-Dichloroethene	0.644	0.635		-1.4	50
Acetone	0.294	0.310		5.44	50
Carbon Disulfide	1.767	1.726		-2.32	50
Methyl tert-butyl Ether	2.050	2.132		4	50
Methylene Chloride	0.721	0.714		-0.97	50
trans-1,2-Dichloroethene	0.634	0.636		0.31	50
1,1-Dichloroethane	1.233	1.250	0.1	1.38	50
2-Butanone	0.478	0.524		9.62	50
Carbon Tetrachloride	0.460	0.438		-4.78	50
cis-1,2-Dichloroethene	0.762	0.787		3.28	50
Chloroform	1.196	1.210		1.09	50
1,1,1-Trichloroethane	1.014	1.008		-0.59	50
Methylcyclohexane	0.606	0.575		-5.12	50
Benzene	1.465	1.458		-0.48	50
1,2-Dichloroethane	0.467	0.487		4.28	50
Trichloroethene	0.335	0.330		-1.49	50
1,2-Dichloropropane	0.364	0.373		2.47	50
Bromodichloromethane	0.489	0.511		4.5	50
4-Methyl-2-Pentanone	0.512	0.566		10.55	50
Toluene	0.872	0.879		0.8	50
t-1,3-Dichloropropene	0.495	0.512		3.43	50
cis-1,3-Dichloropropene	0.552	0.577		4.53	50
1,1,2-Trichloroethane	0.335	0.350		4.48	50
2-Hexanone	0.369	0.413		11.92	50
Dibromochloromethane	0.359	0.384		6.96	50
Tetrachloroethene	0.315	0.293		-6.98	50
Chlorobenzene	1.074	1.078	0.3	0.37	50
Ethyl Benzene	1.895	1.898		0.16	50
m/p-Xylenes	0.699	0.704		0.71	50
o-Xylene	0.701	0.707		0.86	50
Styrene	1.130	1.169		3.45	50
Bromoform	0.258	0.270	0.1	4.65	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.:	Q1250	SAS No.:	Q1250
Instrument ID:	MSVOA_X		Calibration Date/Time:	02/10/2025	19:32
Lab File ID:	VX044891.D		Init. Calib. Date(s):	02/10/2025	02/10/2025
Heated Purge:	(Y/N)	N	Init. Calib. Time(s):	10:25	12:28
GC Column:	DB-624UI	ID: 0.18 (mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	4.026	4.020		-0.15	50
1,1,2,2-Tetrachloroethane	1.383	1.415	0.3	2.31	50
1,3-Dichlorobenzene	1.678	1.664		-0.83	50
1,4-Dichlorobenzene	1.697	1.666		-1.83	50
1,2-Dichlorobenzene	1.650	1.683		2	50
1,2-Dichloroethane-d4	0.732	0.679		-7.24	50
Dibromofluoromethane	0.325	0.294		-9.54	50
Toluene-d8	1.229	1.099		-10.58	50
4-Bromofluorobenzene	0.414	0.382		-7.73	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

<b>OrderID:</b>	Q1250	<b>OrderDate:</b>	1/31/2025 10:38:00 AM					
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	CTO WE13					
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	N31,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1250-02	BP-VPB-192-GW-420-422	Water			<b>01/29/25</b>			<b>01/30/25</b>
			SVOC-SIMGroup1	8270-Modified		02/01/25	02/05/25	
Q1250-03	BP-VPB-192-GW-300-302	Water			<b>01/27/25</b>			<b>01/30/25</b>
			SVOC-SIMGroup1	8270-Modified		02/01/25	02/05/25	
Q1250-05	BP-VPB-192-GW-340-342	Water			<b>01/27/25</b>			<b>01/30/25</b>
			SVOC-SIMGroup1	8270-Modified		02/01/25	02/06/25	
Q1250-09	BP-VPB-192-DUP-202 50128	Water			<b>01/28/25</b>			<b>01/30/25</b>
			SVOC-SIMGroup1	8270-Modified		02/01/25	02/06/25	
Q1250-10	BP-VPB-192-GW-380-382	Water			<b>01/28/25</b>			<b>01/30/25</b>
			SVOC-SIMGroup1	8270-Modified		02/01/25	02/06/25	

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

### Hit Summary Sheet SW-846

**SDG No.:** Q1250

**Client:** Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
<b>Client ID :</b> Q1250-02	<b>BP-VPB-192-GW-420-422</b> BP-VPB-192-GW-420-42 WATER	1,4-Dioxane	2.200	0.09	0.26	0.26	ug/L	
		<b>Total Svoc :</b>			<b>2.20</b>			
		<b>Total Concentration:</b>			<b>2.20</b>			
<b>Client ID :</b> Q1250-03	<b>BP-VPB-192-GW-300-302</b> BP-VPB-192-GW-300-30 WATER	1,4-Dioxane	1.700	0.07	0.21	0.21	ug/L	
		<b>Total Svoc :</b>			<b>1.70</b>			
		<b>Total Concentration:</b>			<b>1.70</b>			
<b>Client ID :</b> Q1250-05	<b>BP-VPB-192-GW-340-342</b> BP-VPB-192-GW-340-34 WATER	1,4-Dioxane	1.900	0.08	0.23	0.23	ug/L	
		<b>Total Svoc :</b>			<b>1.90</b>			
		<b>Total Concentration:</b>			<b>1.90</b>			
<b>Client ID :</b> Q1250-09	<b>BP-VPB-192-DUP-20250128</b> BP-VPB-192-DUP-20250 WATER	1,4-Dioxane	5.100	0.13	0.39	0.39	ug/L	
		<b>Total Svoc :</b>			<b>5.10</b>			
		<b>Total Concentration:</b>			<b>5.10</b>			
<b>Client ID :</b> Q1250-10	<b>BP-VPB-192-GW-380-382</b> BP-VPB-192-GW-380-38 WATER	1,4-Dioxane	5.100	0.14	0.4	0.4	ug/L	
		<b>Total Svoc :</b>			<b>5.10</b>			
		<b>Total Concentration:</b>			<b>5.10</b>			



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# SAMPLE DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/29/25	
Project:	CTO WE13			Date Received:	01/30/25	
Client Sample ID:	BP-VPB-192-GW-420-422			SDG No.:	Q1250	
Lab Sample ID:	Q1250-02			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	760	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOC-SIMGroup1	
Extraction Type :				Decanted :	N	Level :
Injection Volume :				GPC Factor :	1.0	GPC Cleanup : N PH :
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036310.D	1	02/01/25 08:33	02/05/25 22:58	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	2.20		0.090	0.26	0.26	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.42		30 - 150		106%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.48		30 - 150		120%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		111%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.45		58 - 132		111%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2530	7.775				
1146-65-2	Naphthalene-d8	5710	10.562				
15067-26-2	Acenaphthene-d10	2960	14.409				
1517-22-2	Phenanthrene-d10	6300	17.149				
1719-03-5	Chrysene-d12	6350	21.34				
1520-96-3	Perylene-d12	6780	23.625				

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:	01/27/25	
Project:	CTO WE13			Date Received:	01/30/25	
Client Sample ID:	BP-VPB-192-GW-300-302			SDG No.:	Q1250	
Lab Sample ID:	Q1250-03			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	960	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
BN036311.D	1	02/01/25 08:33	02/05/25 23:34	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	1.70		0.070	0.21	0.21	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.42		30 - 150		105%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		111%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		77%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2260	7.775				
1146-65-2	Naphthalene-d8	5200	10.562				
15067-26-2	Acenaphthene-d10	2700	14.409				
1517-22-2	Phenanthrene-d10	5450	17.148				
1719-03-5	Chrysene-d12	5100	21.34				
1520-96-3	Perylene-d12	5420	23.627				

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:	01/27/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	BP-VPB-192-GW-340-342	SDG No.:	Q1250
Lab Sample ID:	Q1250-05	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	880	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
BN036312.D	1	02/01/25 08:33	02/06/25 00:10	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	1.90		0.080	0.23	0.23	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		97%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		72%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		115%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2480	7.775				
1146-65-2	Naphthalene-d8	5570	10.562				
15067-26-2	Acenaphthene-d10	2820	14.409				
1517-22-2	Phenanthrene-d10	5610	17.149				
1719-03-5	Chrysene-d12	4960	21.34				
1520-96-3	Perylene-d12	5290	23.625				

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:	01/28/25	
Project:	CTO WE13			Date Received:	01/30/25	
Client Sample ID:	BP-VPB-192-DUP-20250128			SDG No.:	Q1250	
Lab Sample ID:	Q1250-09			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	510	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOC-SIMGroup1	
Extraction Type :				Decanted :	N	Level :
Injection Volume :				GPC Factor :	1.0	GPC Cleanup : N PH :
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036313.D	1	02/01/25 08:33	02/06/25 00:46	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	5.10		0.13	0.39	0.39	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		114%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		97%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		78%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.67	*	58 - 132		167%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2250	7.775				
1146-65-2	Naphthalene-d8	5090	10.562				
15067-26-2	Acenaphthene-d10	2670	14.409				
1517-22-2	Phenanthrene-d10	5300	17.149				
1719-03-5	Chrysene-d12	4840	21.34				
1520-96-3	Perylene-d12	5190	23.625				

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:	01/28/25	
Project:	CTO WE13			Date Received:	01/30/25	
Client Sample ID:	BP-VPB-192-GW-380-382			SDG No.:	Q1250	
Lab Sample ID:	Q1250-10			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	500	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
BN036314.D	1	02/01/25 08:33	02/06/25 01:22	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	5.10		0.14	0.40	0.40	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		92%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		92%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		79%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		116%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2130	7.775				
1146-65-2	Naphthalene-d8	4890	10.562				
15067-26-2	Acenaphthene-d10	2490	14.409				
1517-22-2	Phenanthrene-d10	4850	17.148				
1719-03-5	Chrysene-d12	4370	21.339				
1520-96-3	Perylene-d12	4610	23.621				

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



A  
B  
C  
D  
E  
F  
G

# QC SUMMARY

### Surrogate Summary

SW-846

**SDG No.:** Q1250

**Client:** Tetra Tech NUS, Inc.

**Analytical Method:** 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166470BL	PB166470BL	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
		Fluoranthene-d10	0.4	0.41	103		30	150
		Nitrobenzene-d5	0.4	0.41	102		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.45	112		58	132
PB166470BS	PB166470BS	2-Methylnaphthalene-d10	0.4	0.48	121		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.38	94		55	111
		2-Fluorobiphenyl	0.4	0.32	79		53	106
		Terphenyl-d14	0.4	0.39	97		58	132
PB166470BSD	PB166470BSD	2-Methylnaphthalene-d10	0.4	0.56	141		30	150
		Fluoranthene-d10	0.4	0.43	107		30	150
		Nitrobenzene-d5	0.4	0.43	106		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.46	115		58	132
Q1250-02	BP-VPB-192-GW-420-422	2-Methylnaphthalene-d10	0.4	0.42	106		30	150
		Fluoranthene-d10	0.4	0.48	120		30	150
		Nitrobenzene-d5	0.4	0.44	111		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.45	111		58	132
Q1250-03	BP-VPB-192-GW-300-302	2-Methylnaphthalene-d10	0.4	0.42	105		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.44	111		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
Q1250-05	BP-VPB-192-GW-340-342	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.39	97		30	150
		Nitrobenzene-d5	0.4	0.32	81		55	111
		2-Fluorobiphenyl	0.4	0.29	72		53	106
		Terphenyl-d14	0.4	0.46	115		58	132
Q1250-09	BP-VPB-192-DUP-20250128	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.46	114		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.31	78		53	106
		Terphenyl-d14	0.4	0.46	115	*	58	132
Q1250-10	BP-VPB-192-GW-380-382	2-Methylnaphthalene-d10	0.4	0.37	92		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.31	79		53	106
		Terphenyl-d14	0.4	0.46	116		58	132

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1250

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036317.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB166470BS	1,4-Dioxane	0.4	0.34	ug/L	85				70	130	

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1250

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036325.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits			RPD
									RPD	Low	High	
PB166470BSD	1,4-Dioxane	0.4	0.40	ug/L	100	16			70	130	20	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166470BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1250

SAS No.: Q1250 SDG No.: Q1250

Lab File ID: BN036305.D

Lab Sample ID: PB166470BL

Instrument ID: BNA\_N

Date Extracted: 02/01/2025

Matrix: (soil/water) Water

Date Analyzed: 02/05/2025

Level: (low/med) LOW

Time Analyzed: 19:59

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166470BS	PB166470BS	BN036317.D	02/06/2025
BP-VPB-192-GW-420-422	Q1250-02	BN036310.D	02/05/2025
BP-VPB-192-GW-300-302	Q1250-03	BN036311.D	02/05/2025
BP-VPB-192-GW-340-342	Q1250-05	BN036312.D	02/06/2025
PB166470BSD	PB166470BSD	BN036325.D	02/06/2025
BP-VPB-192-DUP-20250128	Q1250-09	BN036313.D	02/06/2025
BP-VPB-192-GW-380-382	Q1250-10	BN036314.D	02/06/2025

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1250 SDG NO.: Q1250

Lab File ID: BN036009.D

DFTPP Injection Date: 01/22/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 09:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	48.9
68	Less than 2.0% of mass 69	0.5 ( 1.1 ) 1
69	Mass 69 relative abundance	45.7
70	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
127	10.0 - 80.0% of mass 198	47.7
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	6.5
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 ( 20.4 ) 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	BN036010.D	01/22/2025	11:02
SSTDICC0.2	SSTDICC0.2	BN036011.D	01/22/2025	11:38
SSTDICCC0.4	SSTDICCC0.4	BN036012.D	01/22/2025	12:13
SSTDICC0.8	SSTDICC0.8	BN036013.D	01/22/2025	12:49
SSTDICC1.6	SSTDICC1.6	BN036014.D	01/22/2025	13:25
SSTDICC3.2	SSTDICC3.2	BN036015.D	01/22/2025	14:01
SSTDICC5.0	SSTDICC5.0	BN036016.D	01/22/2025	14:36

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1250 SDG NO.: Q1250

Lab File ID: BN036302.D

DFTPP Injection Date: 02/05/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 18:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	49.1
68	Less than 2.0% of mass 69	0.1 ( 0.3 ) 1
69	Mass 69 relative abundance	45.4
70	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
127	10.0 - 80.0% of mass 198	47.2
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	6.9
275	10.0 - 60.0% of mass 198	26.2
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	9.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 ( 18.9 ) 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	BN036303.D	02/05/2025	18:47
PB166470BL	PB166470BL	BN036305.D	02/05/2025	19:59
BP-VPB-192-GW-420-422	Q1250-02	BN036310.D	02/05/2025	22:58
BP-VPB-192-GW-300-302	Q1250-03	BN036311.D	02/05/2025	23:34
BP-VPB-192-GW-340-342	Q1250-05	BN036312.D	02/06/2025	00:10
BP-VPB-192-DUP-20250128	Q1250-09	BN036313.D	02/06/2025	00:46
BP-VPB-192-GW-380-382	Q1250-10	BN036314.D	02/06/2025	01:22
PB166470BS	PB166470BS	BN036317.D	02/06/2025	03:10
SSTDCCC0.4EC	SSTDCCC0.4	BN036318.D	02/06/2025	03:45

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1250 SDG NO.: Q1250

Lab File ID: BN036319.D

DFTPP Injection Date: 02/06/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 05:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	50.8
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
69	Mass 69 relative abundance	47
70	Less than 2.0% of mass 69	0.2 ( 0.4 ) 1
127	10.0 - 80.0% of mass 198	48
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	6.6
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1% of mass 198	3.6
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	9.5 ( 18.3 ) 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	BN036320.D	02/06/2025	05:40
PB166470BSD	PB166470BSD	BN036325.D	02/06/2025	08:39
SSTDCCC0.4EC	SSTDCCC0.4	BN036332.D	02/06/2025	12:54



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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1250 SAS No.: Q1250 SDG No.: Q1250  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/05/2025  
Lab File ID: BN036303.D Time Analyzed: 18:47  
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	2214	7.775	4864	10.56	2378	14.41
UPPER LIMIT	4428	8.275	9728	11.062	4756	14.909
LOWER LIMIT	1107	7.275	2432	10.062	1189	13.909
EPA SAMPLE NO.						
01 PB166470BL	2016	7.78	4203	10.57	2165	14.42
02 PB166470BS	2549	7.78	5535	10.56	2691	14.41
03 BP-VPB-192-GW-420-422	2525	7.78	5711	10.56	2963	14.41
04 BP-VPB-192-GW-300-302	2258	7.78	5198	10.56	2702	14.41
05 BP-VPB-192-GW-340-342	2477	7.78	5572	10.56	2819	14.41
06 BP-VPB-192-DUP-20250128	2251	7.78	5091	10.56	2666	14.41
07 BP-VPB-192-GW-380-382	2134	7.78	4894	10.56	2486	14.41

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 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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	CHEMTECH						
Lab Code:	CHEM	Case No.:	Q1250	SAS No.:	Q1250	SDG NO.:	Q1250
EPA Sample No.:	SSTDCCCC0.4		Date Analyzed:	02/05/2025			
Lab File ID:	BN036303.D		Time Analyzed:	18:47			
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	4362	17.161	3774	21.34	4195	23.628
	8724	17.661	7548	21.84	8390	24.128
	2181	16.661	1887	20.84	2097.5	23.128
EPA SAMPLE NO.						
01 PB166470BL	4132	17.16	3837	21.35	4121	23.63
02 PB166470BS	4972	17.16	4629	21.34	4995	23.63
03 BP-VPB-192-GW-420-422	6299	17.15	6349	21.34	6778	23.63
04 BP-VPB-192-GW-300-302	5449	17.15	5103	21.34	5423	23.63
05 BP-VPB-192-GW-340-342	5611	17.15	4958	21.34	5294	23.63
06 BP-VPB-192-DUP-20250128	5297	17.15	4839	21.34	5192	23.63
07 BP-VPB-192-GW-380-382	4846	17.15	4374	21.34	4606	23.62

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 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.



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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1250 SAS No.: Q1250 SDG NO.: Q1250  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/06/2025  
Lab File ID: BN036320.D Time Analyzed: 05:40  
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	2017	7.775	4328	10.56	2158	14.41
UPPER LIMIT	4034	8.275	8656	11.062	4316	14.909
LOWER LIMIT	1008.5	7.275	2164	10.062	1079	13.909
EPA SAMPLE NO.						
01 PB166470BSD	2053	7.78	4504	10.56	2275	14.41

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 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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	CHEMTECH			
Lab Code:	CHEM	Case No.:	Q1250	
SAS No.:	Q1250		SDG NO.:	Q1250
EPA Sample No.:	SSTDCCCC0.4		Date Analyzed:	02/06/2025
Lab File ID:	BN036320.D		Time Analyzed:	05:40
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	4298	17.149	3803	21.34	4157	23.627
	8596	17.649	7606	21.84	8314	24.127
	2149	16.649	1901.5	20.84	2078.5	23.127
EPA SAMPLE NO.						
01 PB166470BSD	4578	17.15	4182	21.34	4261	23.63

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 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.



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# QC SAMPLE

# DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB166470BL			SDG No.:	Q1250
Lab Sample ID:	PB166470BL			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
BN036305.D	1	02/01/25 08:33	02/05/25 19:59	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		103%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		55 - 111		102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.45		58 - 132		112%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2020	7.775				
1146-65-2	Naphthalene-d8	4200	10.573				
15067-26-2	Acenaphthene-d10	2170	14.42				
1517-22-2	Phenanthrene-d10	4130	17.161				
1719-03-5	Chrysene-d12	3840	21.349				
1520-96-3	Perylene-d12	4120	23.63				

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:	CTO WE13			Date Received:	
Client Sample ID:	PB166470BS			SDG No.:	Q1250
Lab Sample ID:	PB166470BS			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
BN036317.D	1	02/01/25 08:33	02/06/25 03:10	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.34		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.48		30 - 150		121%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		79%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		97%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2550	7.775				
1146-65-2	Naphthalene-d8	5540	10.562				
15067-26-2	Acenaphthene-d10	2690	14.409				
1517-22-2	Phenanthrene-d10	4970	17.161				
1719-03-5	Chrysene-d12	4630	21.34				
1520-96-3	Perylene-d12	5000	23.627				

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:	CTO WE13			Date Received:	
Client Sample ID:	PB166470BSD			SDG No.:	Q1250
Lab Sample ID:	PB166470BSD			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
BN036325.D	1	02/01/25 08:33	02/06/25 08:39	PB166470

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.40		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.56		30 - 150		141%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		107%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		106%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		115%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2050	7.775				
1146-65-2	Naphthalene-d8	4500	10.562				
15067-26-2	Acenaphthene-d10	2280	14.409				
1517-22-2	Phenanthrene-d10	4580	17.149				
1719-03-5	Chrysene-d12	4180	21.34				
1520-96-3	Perylene-d12	4260	23.628				

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



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# CALIBRATION

# SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN012225.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Jan 23 00:34:56 2025  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN036010.D 0.2 =BN036011.D 0.4 =BN036012.D 0.8 =BN036013.D 1.6 =BN036014.D 3.2 =BN036015.D 5.0 =BN036016.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD
<hr/>										
1) I	1,4-Dichlorobenzene								ISTD	
2)	1,4-Dioxane	0.452	0.460	0.469	0.477	0.447	0.408	0.417	0.447	5.81
3)	n-Nitrosodimethylamine	0.798	0.749	0.877	0.883	0.829	0.781	0.759	0.811	6.65
4) S	2-Fluorophenol	1.032	1.012	1.092	1.099	1.042	0.997	1.010	1.040	3.88
5) S	Phenol-d6	1.284	1.195	1.270	1.155	1.230	1.210	1.209	1.222	3.61
6)	bis(2-Chloroethyl)ether	1.024	0.979	1.056	0.929	0.993	0.952	0.952	0.984	4.53
7) I	Naphthalene-d8								ISTD	
8) S	Nitrobenzene-d5	0.377	0.356	0.399	0.333	0.397	0.388	0.394	0.378	6.55
9)	Naphthalene	1.149	1.141	1.250	1.137	1.184	1.141	1.131	1.162	3.68
10)	Hexachlorobutane	0.383	0.369	0.404	0.371	0.388	0.359	0.353	0.375	4.74
11)	SURR2-Methylnaphthalene	0.522	0.527	0.578	0.528	0.556	0.550	0.545	0.544	3.66
12)	2-Methylnaphthalene	0.702	0.688	0.760	0.700	0.741	0.735	0.721	0.721	3.58
13) I	Acenaphthene-d10								ISTD	
14) S	2,4,6-Tribromoethane	0.240	0.238	0.256	0.238	0.268	0.275	0.282	0.257	7.32
15) S	2-Fluorobiphenyl	1.806	1.736	1.934	1.787	1.819	1.693	1.724	1.786	4.47
16)	Acenaphthylene	1.835	1.826	2.011	1.840	1.940	1.889	1.936	1.897	3.65
17)	Acenaphthene	1.248	1.236	1.365	1.266	1.338	1.310	1.327	1.299	3.78
18)	Fluorene	1.583	1.482	1.633	1.550	1.739	1.703	1.700	1.627	5.76
19) I	Phenanthrene-d10								ISTD	
20)	4,6-Dinitro-2-methoxyphenol	0.071	0.081	0.095	0.089	0.101	0.107	0.108	0.093	14.73
21)	4-Bromophenylmethanol	0.285	0.269	0.307	0.287	0.293	0.273	0.281	0.285	4.42
22)	Hexachlorobenzene	0.391	0.358	0.407	0.374	0.380	0.355	0.361	0.375	5.08
23)	Atrazine	0.185	0.194	0.218	0.204	0.216	0.209	0.215	0.206	6.05
24)	Pentachlorophenol	0.131	0.131	0.164	0.155	0.179	0.185	0.192	0.162	15.18
25)	Phenanthrene	1.154	1.158	1.302	1.172	1.226	1.182	1.219	1.202	4.33
26)	Anthracene	1.019	1.016	1.151	1.064	1.128	1.123	1.151	1.093	5.42
27)	SURRFluoranthene-d10	1.005	1.006	1.111	0.994	0.959	1.078	1.101	1.036	5.75
28)	Fluoranthene	1.312	1.350	1.507	1.357	1.317	1.506	1.533	1.412	6.99
29) I	Chrysene-d12								ISTD	
30)	Pyrene	1.657	1.588	1.693	1.636	1.646	1.552	1.575	1.621	3.12
31) S	Terphenyl-d14	0.821	0.807	0.871	0.831	0.860	0.804	0.822	0.831	3.09
32)	Benzo(a)anthracene	1.445	1.403	1.503	1.411	1.513	1.448	1.433	1.451	2.93
33)	Chrysene	1.501	1.476	1.545	1.448	1.515	1.435	1.463	1.483	2.63
34)	Bis(2-ethylhexyl)phthalate	0.919	0.793	0.798	0.748	0.791	0.748	0.768	0.795	7.36
35) I	Perylene-d12								ISTD	

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\

Method File : 8270-SIM-BN012225.M

36)	Indeno(1,2,3-c...)	1.525	1.477	1.621	1.585	1.669	1.668	1.692	1.605	5.03
37)	Benzo(b)fluora...	1.443	1.380	1.497	1.429	1.475	1.444	1.510	1.454	3.03
38)	Benzo(k)fluora...	1.427	1.378	1.486	1.427	1.519	1.496	1.524	1.465	3.76
39) C	Benzo(a)pyrene	1.237	1.164	1.263	1.203	1.264	1.265	1.296	1.242	3.61
40)	Dibenz(a,h)an...	1.187	1.169	1.290	1.279	1.337	1.338	1.356	1.279	5.86
41)	Benzo(g,h,i)pe...	1.338	1.308	1.426	1.387	1.438	1.428	1.436	1.394	3.75

(#) = Out of Range

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH		Contract:	TETR06	
Lab Code:	CHEM	Case No.:	Q1250	SAS No.:	Q1250
Instrument ID:	BNA_N		Calibration Date/Time:	02/05/2025	18:47
Lab File ID:	BN036303.D		Init. Calib. Date(s):	01/22/2025	01/22/2025
EPA Sample No.:	SSTDCCC0.4		Init. Calib. Time(s):	11:02	14:36
GC Column:	ZB-GR	ID: 0.25	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.565		3.9	20.0
Fluoranthene-d10	1.036	1.052		1.5	20.0
2-Fluorophenol	1.040	1.145		10.1	20.0
Phenol-d6	1.222	1.324		8.3	20.0
Nitrobenzene-d5	0.378	0.409		8.2	20.0
2-Fluorobiphenyl	1.786	1.693		-5.2	20.0
2,4,6-Tribromophenol	0.257	0.198		-23.0	20.0
Terphenyl-d14	0.831	0.860		3.5	20.0
1,4-Dioxane	0.447	0.491		9.8	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.:	Q1250	SAS No.:	Q1250
Instrument ID:	BNA_N		Calibration Date/Time:	02/06/2025	03:45
Lab File ID:	BN036318.D		Init. Calib. Date(s):	01/22/2025	01/22/2025
EPA Sample No.:	SSTDCCC0.4EC		Init. Calib. Time(s):	11:02	14:36
GC Column:	ZB-GR	ID: 0.25	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.576		5.9	50.0
Fluoranthene-d10	1.036	1.061		2.4	50.0
2-Fluorophenol	1.040	1.175		13.0	50.0
Phenol-d6	1.222	1.328		8.7	50.0
Nitrobenzene-d5	0.378	0.397		5.0	50.0
2-Fluorobiphenyl	1.786	1.502		-15.9	50.0
2,4,6-Tribromophenol	0.257	0.194		-24.5	50.0
Terphenyl-d14	0.831	0.907		9.1	50.0
1,4-Dioxane	0.447	0.478		6.9	50.0

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.:	Q1250	SAS No.:	Q1250
Instrument ID:	BNA_N		Calibration Date/Time:	02/06/2025	05:40
Lab File ID:	BN036320.D		Init. Calib. Date(s):	01/22/2025	01/22/2025
EPA Sample No.:	SSTDCCC0.4		Init. Calib. Time(s):	11:02	14:36
GC Column:	ZB-GR	ID: 0.25	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.575		5.7	20.0
Fluoranthene-d10	1.036	1.072		3.5	20.0
2-Fluorophenol	1.040	1.170		12.5	20.0
Phenol-d6	1.222	1.367		11.9	20.0
Nitrobenzene-d5	0.378	0.417		10.3	20.0
2-Fluorobiphenyl	1.786	1.611		-9.8	20.0
2,4,6-Tribromophenol	0.257	0.200		-22.2	20.0
Terphenyl-d14	0.831	0.874		5.2	20.0
1,4-Dioxane	0.447	0.518		15.9	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>CHEMTECH</u>		Contract:	<u>TETR06</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1250</u>	SAS No.:	<u>Q1250</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>02/06/2025</u>	<u>12:54</u>
Lab File ID:	<u>BN036332.D</u>		Init. Calib. Date(s):	<u>01/22/2025</u>	<u>01/22/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4EC</u>		Init. Calib. Time(s):	<u>11:02</u>	<u>14:36</u>
GC Column:	<u>ZB-GR</u>	ID: <u>0.25</u>	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.570		4.8	50.0
Fluoranthene-d10	1.036	1.077		4.0	50.0
2-Fluorophenol	1.040	1.162		11.7	50.0
Phenol-d6	1.222	1.293		5.8	50.0
Nitrobenzene-d5	0.378	0.409		8.2	50.0
2-Fluorobiphenyl	1.786	1.549		-13.3	50.0
2,4,6-Tribromophenol	0.257	0.188		-26.8	50.0
Terphenyl-d14	0.831	0.868		4.5	50.0
1,4-Dioxane	0.447	0.486		8.7	50.0

All other compounds must meet a minimum RRF of 0.010.



# SHIPPING DOCUMENTS

**CHEMTECH**  
**CHAIN OF CUSTODY RECORD**

284 Sheffield Street, Mountainside, NJ 07092  
(908) 789-8900 Fax: (908) 78-8922  
www.chemtech.net

Chemtech Project Number:

Q1250

COC Number:

**CLIENT INFORMATION****PROJECT INFORMATION****BILLING INFORMATION**

COMPANY: Tetra Tech

ADDRESS: 4433 Corporation Lane Suite 300

CITY: Virginia Beach STATE: VA ZIP: 23462

ATTENTION: Ernie Wu

PHONE: 757-466-4901 FAX: 757-461-4148

PROJECT NAME: NWIRP Bethpage

PROJECT #: 112G08005-WE13 LOCATION: VPB-192

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetrach.com

PHONE: 757-466-4901 FAX: 757-461-4148

BILL TO: SEE CONTRACT

PO#

ADDRESS:

CITY: STATE: ZIP:

ATTENTION:

PHONE:

**DATA TURNAROUND INFORMATION****DATA DELIVERABLE INFORMATION****ANALYSIS**

FAX: 10 DAYS\*  
HARD COPY: 10 DAYS\*  
EDD 10 DAYS\*

\* TO BE APPROVED BY CHEMTECH  
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

- RESULTS ONLY       USEPA CLP  
 RESULTS + QC       New York State ASP "B"  
 New Jersey REDUCED       New York State ASP "A"  
 New Jersey CLP       Other \_\_\_\_\_  
 EDD Format \_\_\_\_\_

VOC(SW846-8260B)	1.4 Dioxane (8270 SIM)							
1	2	3	4	5	6	7	8	9

**PRESERVATIVES****COMMENTS**

-- Specify Preservatives  
A-HCl      B-HNO3  
C-H2SO4      D-NaOH  
E-ICE      F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	A	Preservatives									Comments	
			COMP	GRAB	DATE	TIME			1	2	3	4	5	6	7	8	9		
1.	BP-VPB-192-TB-20250127	QA		X	1/27/25	9:00	2	2											Trip Blank
2.	BP-VPB-192-GW-420-422	AQ		X	1/29/25	10:32	3	2	1										
3.	BP-VPB-192-GW-300-302	AQ		X	1/27/25	10:30	3	2	1										
4.	BP-VPB-192-GW-320-322	AQ		X	1/27/25	12:30	3	3											
5.	BP-VPB-192-GW-340-342	AQ		X	1/27/25	14:40	3	2	1										
6.	BP-VPB-192-GW-360-362	AQ		X	1/28/25	10:15	3	6											8260B MS/MSD
7.	BP-VPB-192-DUP-20250128	AQ		X	1/28/25	12:00	1		1										8270 SIM Duplicate
8.	BP-VPB-192-GW-380-382	AQ		X	1/28/25	12:18	3	2	1										
9.	BP-VPB-192-GW-400-402	AQ		X	1/28/25	14:52	2	2											
10.	BP-VPB-192-GW-440-442	AQ		X	1/29/25	12:28	2	2											

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY**

RELINQUISHED BY SAMPLER <i>Murphy</i>	DATE/TIME 1/30/25 1:30	RECEIVED BY <i>D</i>	1530	Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp 2.5° MeOH extraction requires an additional 4oz. Jar for percent solid Comments: Standard TAT														
RELINQUISHED BY 2.	DATE/TIME 1/30/25	RECEIVED BY <i>D</i>	1-30-25	<input type="checkbox"/> Ice in Cooler?: _____														
RELINQUISHED BY 3.	DATE/TIME 1:30:25	RECEIVED FOR LAB BY 3.	1800	Page 1 of 1					SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight					<b>Shipment Complete</b>				
					CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight					<input type="checkbox"/> YES <input type="checkbox"/> NO								

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT    YELLOW - CHEMTECH COPY    PINK - SAMPLER COPY

**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 :** Q1250 TETR06

**Order Date :** 1/31/2025 10:38:00 AM

**Project Mgr :**

**Client Name :** Tetra Tech NUS, Inc.

**Project Name :** CTO WE13

**Report Type :** Level 4

**Client Contact :** Ernie Wu

**Receive DateTime :** 1/30/2025 6:20:00 PM

**EDD Type :** ADAPT

**Invoice Name :** Tetra Tech NUS, Inc.

**Purchase Order :**

**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
Q1250-01	BP-VPB-192-TB-20250127	Water	01/27/2025	09:00	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-02	BP-VPB-192-GW-420-422	Water	01/29/2025	10:32	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-03	BP-VPB-192-GW-300-302	Water	01/27/2025	10:30	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-04	BP-VPB-192-GW-320-322	Water	01/27/2025	12:30	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-05	BP-VPB-192-GW-340-342	Water	01/27/2025	14:40	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-06	BP-VPB-192-GW-360-362	Water	01/28/2025	10:15	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-07	Q1250-06MS	Water	01/28/2025	10:15	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-08	Q1250-06MSD	Water	01/28/2025	10:15					

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1250	TETR06	Order Date : 1/31/2025 10:38:00 AM	Project Mgr :
Client Name : Tetra Tech NUS, Inc.		Project Name : CTO WE13	Report Type : Level 4
Client Contact : Ernie Wu		Receive DateTime : 1/30/2025 6:20:00 PM	EDD Type : ADAPT
Invoice Name : Tetra Tech NUS, Inc.		Purchase Order :	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
Q1250-10	BP-VPB-GW-380-382 BP-VPB-192-GW-380-382	Water	01/28/2025	12:18	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-11	BP-VPB-GW-400-402 BP-VPB-192-GW-400-402	Water	01/28/2025	14:52	VOCMS Group1		8260-Low	10 Bus. Days	
Q1250-12	BP-VPB-GW-440-442 BP-VPB-192-GW-440-442	Water	01/29/2025	12:28	VOCMS Group1		8260-Low	10 Bus. Days	

Relinquished By :

Date / Time : 1-31-25 11:40

Received By :

Date / Time : 1-31-25 11:40

Storage Area : VOA Refrigerator Room

Interim

Laboratory: Chemtech

GARAGE

Field Sample Seal No. Q1256

Case No.: 21/3 Clarendon Brooklyn.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample			
<b>Laboratory:</b>	Chemtech		
<b>Case No.:</b>	Q1256		
<b>Field Sample Seal No.:</b>	Q1256		
<b>Location:</b>	284 Sheffield Street, Mountainside, NJ 7092		
<b>Title:</b>	Sample Custodian		
<b>Date Broken:</b>	1/31/2025		
<b>Military Time Seal Broken:</b>	12:42:00		
<b>Analytical Parameter/Fraction:</b>	MOCMS Group 3		
<b>Sample No.</b>	<b>Aliquot/Extract No.</b>	<b>Sample No.</b>	<b>Aliquot/Extract No.</b>
Q1256-01	SV1		
Q1256-02	IA1		

*Distribution:* White - Original (Sent With Report)

Yellow - Contractor Archive

Pink - Sample Custodian -

Add