

## **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 : Q1401**

**ATTENTION : Ernie Wu**



**Laboratory Certification ID # 20012**



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## Cover Page

**Order ID :** Q1401

**Project ID :** CTO WE13

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

### Lab Sample Number

Q1401-01  
Q1401-02  
Q1401-03  
Q1401-04  
Q1401-06  
Q1401-07  
Q1401-08  
Q1401-09

### Client Sample Number

BP-VPB-192-TB-20250217  
BP-VPB-192-GW-825-827  
BP-VPB-192-GW-840-842  
BP-VPB-192-GW-860-862  
BP-VPB-192-GW-900-902  
BP-VPB-192-GW-825-827  
BP-VPB-192-GW-860-862  
BP-VPB-192-GW-880-882

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 10:47 am, Mar 05, 2025*

Date: 3/4/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** CTO WE13

**Project Manager:** Ernie Wu

**Chemtech Project #** Q1401

**Test Name:** VOCMS Group1

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

3 Solid samples were received on 02/20/2025.

5 Water samples were received on 02/20/2025.

### **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 performed on instrument MSVOA\_Y were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOCMS Group1 was based on method 8260D.

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

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

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

The Continuous Calibration File ID VX045029.D met the requirements except for 2-Hexanone,4-Methyl-2-Pentanone are failing high but no positive hit in associate samples therefore no corrective action taken and Acetone is Failing high but Associated sample having hit below CRQL, therefore no corrective action taken.

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)."

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

The not QT review data is reported in the Miscellaneous.

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

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

**F. Manual Integration Comments:**

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

---

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

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 10:47 am, Mar 05, 2025*

Signature \_\_\_\_\_



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

## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** CTO WE13

**Project Manager:** Ernie Wu

**Chemtech Project #** Q1401

**Test Name:** SVOC-SIMGroup1

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

3 Solid samples were received on 02/20/2025.

5 Water samples were received on 02/20/2025.

### **B. Parameters**

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

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

The samples were analyzed on instrument BNA\_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-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 PB166832BS [2-Fluorobiphenyl - 112%], PB166832BSD [2-Fluorobiphenyl - 111%], BP-VPB-192-GW-825-827 [Terphenyl-d14 - 56%], BP-VPB-192-GW-860-862 [2-Fluorobiphenyl - 118%], BP-VPB-192-GW-860-862RE [2-Fluorobiphenyl - 115%] and BP-VPB-192-GW-900-902 [2-Fluorobiphenyl - 118%], failure surrogates are 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 except for BP-VPB-192-GW-860-862, BP-VPB-192-GW-860-862RE, All the failure samples in Internal Standard were reanalyzed to confirm the results as per method and reported in the data.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



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Phone: 908 789 8900 Fax: 908 789 8922

The Tuning criteria met requirements.

**E. Additional Comments:**

Less volume was taken for samples # BP-VPB-192-GW-825-827, BP-VPB-192-GW-860-862 at the time of extraction due to Muddy matrix.

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

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

The not QT review data is reported in the Miscellaneous.

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

**F. Manual Integration Comments:**

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

---

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

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 10:49 am, Mar 05, 2025*

Signature \_\_\_\_\_

**DATA REPORTING QUALIFIERS- ORGANIC**

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

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

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1401

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: 03/04/2025

## LAB CHRONICLE

<b>OrderID:</b>	Q1401	<b>OrderDate:</b>	2/20/2025 3:49:00 PM
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	CTO WE13
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	H31,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1401-01	<b>BP-VPB-192-TB-2025 0217</b>	Water			<b>02/17/25</b>			<b>02/20/25</b>
			VOCMS Group1	8260-Low			02/25/25	
Q1401-03	<b>BP-VPB-192-GW-840- 842</b>	Water			<b>02/18/25</b>			<b>02/20/25</b>
			VOCMS Group1	8260-Low			02/28/25	
Q1401-06	<b>BP-VPB-192-GW-900- 902</b>	Water			<b>02/19/25</b>			<b>02/20/25</b>
			VOCMS Group1	8260-Low			02/28/25	
Q1401-07	<b>BP-VPB-192-GW-825- 827</b>	SOIL			<b>02/17/25</b>			<b>02/20/25</b>
			VOCMS Group1	8260D			02/26/25	
Q1401-08	<b>BP-VPB-192-GW-860- 862</b>	SOIL			<b>02/18/25</b>			<b>02/20/25</b>
			VOCMS Group1	8260D			02/26/25	
Q1401-09	<b>BP-VPB-192-GW-880- 882</b>	SOIL			<b>02/19/25</b>			<b>02/20/25</b>
			VOCMS Group1	8260D			02/26/25	

A

B

C

D

E

F

G

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

**SDG No.:** Q1401  
**Client:** Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
<b>Client ID:</b> Q1401-01	<b>BP-VPB-192-TB-20250217</b> BP-VPB-192-TB-2( Water		Acetone	2.40	J	1.40	3.80	5.00	ug/L
			<b>Total Voc :</b>	2.40					
			<b>Total Concentration:</b>	2.40					
<b>Client ID:</b> Q1401-03	<b>BP-VPB-192-GW-840-842</b> BP-VPB-192-GW-8 Water		Acetone	17.4		1.40	3.80	5.00	ug/L
Q1401-03	BP-VPB-192-GW-8 Water		Carbon Disulfide	0.49	J	0.32	0.75	1.00	ug/L
Q1401-03	BP-VPB-192-GW-8 Water		2-Butanone	4.30	J	1.30	2.50	5.00	ug/L
			<b>Total Voc :</b>	22.2					
			<b>Total Concentration:</b>	22.2					
<b>Client ID:</b> Q1401-06	<b>BP-VPB-192-GW-900-902</b> BP-VPB-192-GW-9 Water		Acetone	11.8		1.40	3.80	5.00	ug/L
Q1401-06	BP-VPB-192-GW-9 Water		Carbon Disulfide	0.49	J	0.32	0.75	1.00	ug/L
			<b>Total Voc :</b>	12.3					
			<b>Total Concentration:</b>	12.3					



A  
B  
C  
D  
E  
F  
G

# SAMPLE DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/17/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-TB-20250217	SDG No.:	Q1401
Lab Sample ID:	Q1401-01	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
VX045035.D	1		02/25/25 13:44	VX022525

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	2.40	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:	02/17/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-TB-20250217	SDG No.:	Q1401
Lab Sample ID:	Q1401-01	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
VX045035.D	1		02/25/25 13:44	VX022525

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	52.4		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	47.9		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	46.8		89 - 112		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.9		85 - 114		94%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	80400	5.55				
540-36-3	1,4-Difluorobenzene	162000	6.757				
3114-55-4	Chlorobenzene-d5	146000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	60700	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/17/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-TB-20250217	SDG No.:	Q1401
Lab Sample ID:	Q1401-01	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
VX045035.D	1		02/25/25 13:44	VX022525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
------------	-----------	-------	-----------	-----	-----	------------	-------

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:	02/18/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-840-842	SDG No.:	Q1401
Lab Sample ID:	Q1401-03	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
VX045082.D	1		02/28/25 12:37	VX022825

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	17.4		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.49	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	4.30	J	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:	02/18/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-840-842	SDG No.:	Q1401
Lab Sample ID:	Q1401-03	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
VX045082.D	1		02/28/25 12:37	VX022825

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	50.6		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	51.8		89 - 112		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.6		85 - 114		105%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	67800	5.544				
540-36-3	1,4-Difluorobenzene	136000	6.757				
3114-55-4	Chlorobenzene-d5	124000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	52300	12.018				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/18/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-840-842	SDG No.:	Q1401
Lab Sample ID:	Q1401-03	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
VX045082.D	1		02/28/25 12:37	VX022825

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:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-900-902	SDG No.:	Q1401
Lab Sample ID:	Q1401-06	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
VX045083.D	1		02/28/25 13:00	VX022825

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	11.8		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.49	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:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-900-902	SDG No.:	Q1401
Lab Sample ID:	Q1401-06	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
VX045083.D	1		02/28/25 13:00	VX022825

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	51.2		81 - 118		102%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	49.9		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.3		85 - 114		103%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	74000	5.55				
540-36-3	1,4-Difluorobenzene	147000	6.757				
3114-55-4	Chlorobenzene-d5	133000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	55100	12.024				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-900-902	SDG No.:	Q1401
Lab Sample ID:	Q1401-06	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
VX045083.D	1		02/28/25 13:00	VX022825

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:	02/17/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-825-827	SDG No.:	Q1401
Lab Sample ID:	Q1401-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	10.1
Sample Wt/Vol:	4.99	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021328.D	1		02/26/25 13:54	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>							
74-87-3	Chloromethane	24.8	U	11.5	24.8	49.6	ug/Kg
75-01-4	Vinyl Chloride	24.8	U	7.60	24.8	49.6	ug/Kg
74-83-9	Bromomethane	39.7	U	10.2	39.7	49.6	ug/Kg
75-00-3	Chloroethane	24.8	U	10.0	24.8	49.6	ug/Kg
75-69-4	Trichlorofluoromethane	39.7	U	9.00	39.7	49.6	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	24.8	U	10.6	24.8	49.6	ug/Kg
75-35-4	1,1-Dichloroethene	24.8	U	7.70	24.8	49.6	ug/Kg
67-64-1	Acetone	200	U	61.9	200	250	ug/Kg
75-15-0	Carbon Disulfide	39.7	U	12.7	39.7	49.6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	24.8	U	6.60	24.8	49.6	ug/Kg
75-09-2	Methylene Chloride	79.4	U	33.8	79.4	99.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	24.8	U	8.30	24.8	49.6	ug/Kg
75-34-3	1,1-Dichloroethane	24.8	U	6.30	24.8	49.6	ug/Kg
78-93-3	2-Butanone	200	U	56.4	200	250	ug/Kg
56-23-5	Carbon Tetrachloride	24.8	U	8.60	24.8	49.6	ug/Kg
156-59-2	cis-1,2-Dichloroethene	24.8	U	6.10	24.8	49.6	ug/Kg
67-66-3	Chloroform	39.7	U	6.60	39.7	49.6	ug/Kg
71-55-6	1,1,1-Trichloroethane	24.8	U	7.70	24.8	49.6	ug/Kg
108-87-2	Methylcyclohexane	24.8	U	8.60	24.8	49.6	ug/Kg
71-43-2	Benzene	24.8	U	7.10	24.8	49.6	ug/Kg
107-06-2	1,2-Dichloroethane	24.8	U	6.10	24.8	49.6	ug/Kg
79-01-6	Trichloroethene	24.8	U	7.40	24.8	49.6	ug/Kg
78-87-5	1,2-Dichloropropane	24.8	U	6.50	24.8	49.6	ug/Kg
75-27-4	Bromodichloromethane	24.8	U	5.60	24.8	49.6	ug/Kg
108-10-1	4-Methyl-2-Pentanone	120	U	43.2	120	250	ug/Kg
108-88-3	Toluene	24.8	U	6.60	24.8	49.6	ug/Kg
10061-02-6	t-1,3-Dichloropropene	24.8	U	6.00	24.8	49.6	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	24.8	U	5.70	24.8	49.6	ug/Kg
79-00-5	1,1,2-Trichloroethane	24.8	U	8.30	24.8	49.6	ug/Kg
591-78-6	2-Hexanone	120	U	47.5	120	250	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/17/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-825-827	SDG No.:	Q1401
Lab Sample ID:	Q1401-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	10.1
Sample Wt/Vol:	4.99	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021328.D	1		02/26/25 13:54	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
124-48-1	Dibromochloromethane	24.8	U	6.40	24.8	49.6	ug/Kg
127-18-4	Tetrachloroethene	24.8	U	8.80	24.8	49.6	ug/Kg
108-90-7	Chlorobenzene	24.8	U	7.30	24.8	49.6	ug/Kg
100-41-4	Ethyl Benzene	24.8	U	6.20	24.8	49.6	ug/Kg
179601-23-1	m/p-Xylenes	49.6	U	13.4	49.6	99.2	ug/Kg
95-47-6	o-Xylene	24.8	U	6.90	24.8	49.6	ug/Kg
100-42-5	Styrene	24.8	U	6.00	24.8	49.6	ug/Kg
75-25-2	Bromoform	24.8	U	8.00	24.8	49.6	ug/Kg
98-82-8	Isopropylbenzene	24.8	U	6.60	24.8	49.6	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	24.8	U	10.9	24.8	49.6	ug/Kg
541-73-1	1,3-Dichlorobenzene	24.8	U	7.30	24.8	49.6	ug/Kg
106-46-7	1,4-Dichlorobenzene	24.8	U	7.90	24.8	49.6	ug/Kg
95-50-1	1,2-Dichlorobenzene	24.8	U	5.90	24.8	49.6	ug/Kg
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	61.3		71 - 136		123%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		78 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	49.4		85 - 116		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.0		79 - 119		112%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	238000	7.707				
540-36-3	1,4-Difluorobenzene	467000	8.616				
3114-55-4	Chlorobenzene-d5	480000	11.414				
3855-82-1	1,4-Dichlorobenzene-d4	211000	13.346				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/17/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-825-827	SDG No.:	Q1401
Lab Sample ID:	Q1401-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	10.1
Sample Wt/Vol:	4.99	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021328.D	1		02/26/25 13:54	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
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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:	02/18/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-860-862	SDG No.:	Q1401
Lab Sample ID:	Q1401-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	9.2
Sample Wt/Vol:	5.04	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021329.D	1		02/26/25 14:17	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>							
74-87-3	Chloromethane	27.0	U	12.5	27.0	53.9	ug/Kg
75-01-4	Vinyl Chloride	27.0	U	8.30	27.0	53.9	ug/Kg
74-83-9	Bromomethane	43.1	U	11.1	43.1	53.9	ug/Kg
75-00-3	Chloroethane	27.0	U	10.9	27.0	53.9	ug/Kg
75-69-4	Trichlorofluoromethane	43.1	U	9.80	43.1	53.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	27.0	U	11.5	27.0	53.9	ug/Kg
75-35-4	1,1-Dichloroethene	27.0	U	8.40	27.0	53.9	ug/Kg
67-64-1	Acetone	220	U	67.3	220	270	ug/Kg
75-15-0	Carbon Disulfide	43.1	U	13.8	43.1	53.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	27.0	U	7.20	27.0	53.9	ug/Kg
75-09-2	Methylene Chloride	86.3	U	36.8	86.3	110	ug/Kg
156-60-5	trans-1,2-Dichloroethene	27.0	U	9.10	27.0	53.9	ug/Kg
75-34-3	1,1-Dichloroethane	27.0	U	6.80	27.0	53.9	ug/Kg
78-93-3	2-Butanone	220	U	61.2	220	270	ug/Kg
56-23-5	Carbon Tetrachloride	27.0	U	9.40	27.0	53.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	27.0	U	6.60	27.0	53.9	ug/Kg
67-66-3	Chloroform	43.1	U	7.20	43.1	53.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	27.0	U	8.40	27.0	53.9	ug/Kg
108-87-2	Methylcyclohexane	27.0	U	9.40	27.0	53.9	ug/Kg
71-43-2	Benzene	27.0	U	7.80	27.0	53.9	ug/Kg
107-06-2	1,2-Dichloroethane	27.0	U	6.60	27.0	53.9	ug/Kg
79-01-6	Trichloroethene	27.0	U	8.10	27.0	53.9	ug/Kg
78-87-5	1,2-Dichloropropane	27.0	U	7.10	27.0	53.9	ug/Kg
75-27-4	Bromodichloromethane	27.0	U	6.00	27.0	53.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	130	U	46.9	130	270	ug/Kg
108-88-3	Toluene	27.0	U	7.20	27.0	53.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	27.0	U	6.50	27.0	53.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	27.0	U	6.10	27.0	53.9	ug/Kg
79-00-5	1,1,2-Trichloroethane	27.0	U	9.10	27.0	53.9	ug/Kg
591-78-6	2-Hexanone	130	U	51.7	130	270	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/18/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-860-862	SDG No.:	Q1401
Lab Sample ID:	Q1401-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	9.2
Sample Wt/Vol:	5.04	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021329.D	1		02/26/25 14:17	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
124-48-1	Dibromochloromethane	27.0	U	7.00	27.0	53.9	ug/Kg
127-18-4	Tetrachloroethene	27.0	U	9.60	27.0	53.9	ug/Kg
108-90-7	Chlorobenzene	27.0	U	8.00	27.0	53.9	ug/Kg
100-41-4	Ethyl Benzene	27.0	U	6.70	27.0	53.9	ug/Kg
179601-23-1	m/p-Xylenes	53.9	U	14.6	53.9	110	ug/Kg
95-47-6	o-Xylene	27.0	U	7.50	27.0	53.9	ug/Kg
100-42-5	Styrene	27.0	U	6.50	27.0	53.9	ug/Kg
75-25-2	Bromoform	27.0	U	8.70	27.0	53.9	ug/Kg
98-82-8	Isopropylbenzene	27.0	U	7.20	27.0	53.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	27.0	U	11.9	27.0	53.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	27.0	U	8.00	27.0	53.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	27.0	U	8.60	27.0	53.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	27.0	U	6.40	27.0	53.9	ug/Kg
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	67.8		71 - 136		136%	SPK: 50
1868-53-7	Dibromofluoromethane	53.2		78 - 119		106%	SPK: 50
2037-26-5	Toluene-d8	49.6		85 - 116		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	58.5		79 - 119		117%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	235000	7.707				
540-36-3	1,4-Difluorobenzene	467000	8.616				
3114-55-4	Chlorobenzene-d5	492000	11.414				
3855-82-1	1,4-Dichlorobenzene-d4	224000	13.347				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/18/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-860-862	SDG No.:	Q1401
Lab Sample ID:	Q1401-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	9.2
Sample Wt/Vol:	5.04	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021329.D	1		02/26/25 14:17	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
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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:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-880-882	SDG No.:	Q1401
Lab Sample ID:	Q1401-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	5.9
Sample Wt/Vol:	5.05	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021330.D	1		02/26/25 14:40	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>							
74-87-3	Chloromethane	42.0	U	19.5	42.0	83.9	ug/Kg
75-01-4	Vinyl Chloride	42.0	U	12.9	42.0	83.9	ug/Kg
74-83-9	Bromomethane	67.1	U	17.3	67.1	83.9	ug/Kg
75-00-3	Chloroethane	42.0	U	16.9	42.0	83.9	ug/Kg
75-69-4	Trichlorofluoromethane	67.1	U	15.3	67.1	83.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	42.0	U	18.0	42.0	83.9	ug/Kg
75-35-4	1,1-Dichloroethene	42.0	U	13.1	42.0	83.9	ug/Kg
67-64-1	Acetone	340	U	100	340	420	ug/Kg
75-15-0	Carbon Disulfide	67.1	U	21.5	67.1	83.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	42.0	U	11.2	42.0	83.9	ug/Kg
75-09-2	Methylene Chloride	130	U	57.2	130	170	ug/Kg
156-60-5	trans-1,2-Dichloroethene	42.0	U	14.1	42.0	83.9	ug/Kg
75-34-3	1,1-Dichloroethane	42.0	U	10.6	42.0	83.9	ug/Kg
78-93-3	2-Butanone	340	U	95.3	340	420	ug/Kg
56-23-5	Carbon Tetrachloride	42.0	U	14.6	42.0	83.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	42.0	U	10.2	42.0	83.9	ug/Kg
67-66-3	Chloroform	67.1	U	11.2	67.1	83.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	42.0	U	13.1	42.0	83.9	ug/Kg
108-87-2	Methylcyclohexane	42.0	U	14.6	42.0	83.9	ug/Kg
71-43-2	Benzene	42.0	U	12.1	42.0	83.9	ug/Kg
107-06-2	1,2-Dichloroethane	42.0	U	10.2	42.0	83.9	ug/Kg
79-01-6	Trichloroethene	42.0	U	12.6	42.0	83.9	ug/Kg
78-87-5	1,2-Dichloropropane	42.0	U	11.1	42.0	83.9	ug/Kg
75-27-4	Bromodichloromethane	42.0	U	9.40	42.0	83.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	210	U	73.0	210	420	ug/Kg
108-88-3	Toluene	42.0	U	11.2	42.0	83.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	42.0	U	10.1	42.0	83.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	42.0	U	9.60	42.0	83.9	ug/Kg
79-00-5	1,1,2-Trichloroethane	42.0	U	14.1	42.0	83.9	ug/Kg
591-78-6	2-Hexanone	210	U	80.4	210	420	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-880-882	SDG No.:	Q1401
Lab Sample ID:	Q1401-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	5.9
Sample Wt/Vol:	5.05	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021330.D	1		02/26/25 14:40	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
124-48-1	Dibromochloromethane	42.0	U	10.9	42.0	83.9	ug/Kg
127-18-4	Tetrachloroethene	42.0	U	14.9	42.0	83.9	ug/Kg
108-90-7	Chlorobenzene	42.0	U	12.4	42.0	83.9	ug/Kg
100-41-4	Ethyl Benzene	42.0	U	10.4	42.0	83.9	ug/Kg
179601-23-1	m/p-Xylenes	83.9	U	22.7	83.9	170	ug/Kg
95-47-6	o-Xylene	42.0	U	11.7	42.0	83.9	ug/Kg
100-42-5	Styrene	42.0	U	10.1	42.0	83.9	ug/Kg
75-25-2	Bromoform	42.0	U	13.6	42.0	83.9	ug/Kg
98-82-8	Isopropylbenzene	42.0	U	11.2	42.0	83.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	42.0	U	18.5	42.0	83.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	42.0	U	12.4	42.0	83.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	42.0	U	13.4	42.0	83.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	42.0	U	9.90	42.0	83.9	ug/Kg
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	59.1		71 - 136		118%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		78 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	49.4		85 - 116		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	55.8		79 - 119		112%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	241000	7.707				
540-36-3	1,4-Difluorobenzene	471000	8.609				
3114-55-4	Chlorobenzene-d5	480000	11.414				
3855-82-1	1,4-Dichlorobenzene-d4	212000	13.346				
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>							
75-43-4	Dichlorofluoromethane		N.D				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-880-882	SDG No.:	Q1401
Lab Sample ID:	Q1401-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	5.9
Sample Wt/Vol:	5.05	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021330.D	1		02/26/25 14:40	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
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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.:** Q1401

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

**Analytical Method:** SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Limits	
						Qual	Low
Q1401-07	BP-VPB-192-GW-825-827	1,2-Dichloroethane-d4	50	61.3	123	71	136
		Dibromofluoromethane	50	52.0	104	78	119
		Toluene-d8	50	49.4	99	85	116
		4-Bromofluorobenzene	50	56.0	112	79	119
Q1401-08	BP-VPB-192-GW-860-862	1,2-Dichloroethane-d4	50	67.8	136	71	136
		Dibromofluoromethane	50	53.2	106	78	119
		Toluene-d8	50	49.6	99	85	116
		4-Bromofluorobenzene	50	58.5	117	79	119
Q1401-09	BP-VPB-192-GW-880-882	1,2-Dichloroethane-d4	50	59.1	118	71	136
		Dibromofluoromethane	50	50.8	102	78	119
		Toluene-d8	50	49.4	99	85	116
		4-Bromofluorobenzene	50	55.8	112	79	119
VY0226SBL01	VY0226SBL01	1,2-Dichloroethane-d4	50	53.1	106	71	136
		Dibromofluoromethane	50	49.5	99	78	119
		Toluene-d8	50	49.1	98	85	116
		4-Bromofluorobenzene	50	50.1	100	79	119
VY0226SBS01	VY0226SBS01	1,2-Dichloroethane-d4	50	46.7	93	71	136
		Dibromofluoromethane	50	47.4	95	78	119
		Toluene-d8	50	47.6	95	85	116
		4-Bromofluorobenzene	50	47.3	95	79	119
VY0226SBSD01	VY0226SBSD01	1,2-Dichloroethane-d4	50	48.5	97	71	136
		Dibromofluoromethane	50	49.1	98	78	119
		Toluene-d8	50	49.9	100	85	116
		4-Bromofluorobenzene	50	50.3	101	79	119

### Surrogate Summary

**SDG No.:** Q1401

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

**Analytical Method:** SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1401-01	BP-VPB-192-TB-20250217	1,2-Dichloroethane-d4	50	52.4	105	81	118
		Dibromofluoromethane	50	47.9	96	80	119
		Toluene-d8	50	46.8	94	89	112
		4-Bromofluorobenzene	50	46.9	94	85	114
Q1401-03	BP-VPB-192-GW-840-842	1,2-Dichloroethane-d4	50	52.3	105	81	118
		Dibromofluoromethane	50	50.6	101	80	119
		Toluene-d8	50	51.8	104	89	112
		4-Bromofluorobenzene	50	52.6	105	85	114
Q1401-06	BP-VPB-192-GW-900-902	1,2-Dichloroethane-d4	50	51.1	102	81	118
		Dibromofluoromethane	50	50.8	102	80	119
		Toluene-d8	50	49.9	100	89	112
		4-Bromofluorobenzene	50	51.3	103	85	114
VX0225WBL01	VX0225WBL01	1,2-Dichloroethane-d4	50	53.6	107	81	118
		Dibromofluoromethane	50	50.3	101	80	119
		Toluene-d8	50	48.4	97	89	112
		4-Bromofluorobenzene	50	47.5	95	85	114
VX0225WBS01	VX0225WBS01	1,2-Dichloroethane-d4	50	53.0	106	81	118
		Dibromofluoromethane	50	52.8	106	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	51.6	103	85	114
VX0225WBSD01	VX0225WBSD01	1,2-Dichloroethane-d4	50	53.4	107	81	118
		Dibromofluoromethane	50	53.7	107	80	119
		Toluene-d8	50	49.7	99	89	112
		4-Bromofluorobenzene	50	53.8	108	85	114
VX0228WBL01	VX0228WBL01	1,2-Dichloroethane-d4	50	50.0	100	81	118
		Dibromofluoromethane	50	51.0	102	80	119
		Toluene-d8	50	50.9	102	89	112
		4-Bromofluorobenzene	50	53.3	107	85	114
VX0228WBS01	VX0228WBS01	1,2-Dichloroethane-d4	50	46.9	94	81	118
		Dibromofluoromethane	50	48.2	96	80	119
		Toluene-d8	50	50.1	100	89	112
		4-Bromofluorobenzene	50	51.0	102	85	114

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

**SW-846**

**SDG No.:** Q1401

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

**Analytical Method:** SW8260-Low

**Datafile :** VX045032.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		RPD
								Low	High	
VX0225WBS01	Chloromethane	20	15.3	ug/L	77			50	139	
	Vinyl chloride	20	16.6	ug/L	83			58	137	
	Bromomethane	20	20.6	ug/L	103			53	141	
	Chloroethane	20	21.1	ug/L	106			60	138	
	Trichlorofluoromethane	20	18.6	ug/L	93			65	141	
	1,1,2-Trichlorotrifluoroethane	20	19.1	ug/L	96			70	136	
	1,1-Dichloroethene	20	17.0	ug/L	85			71	131	
	Acetone	100	110	ug/L	110			39	160	
	Carbon disulfide	20	15.3	ug/L	77			64	133	
	Methyl tert-butyl Ether	20	18.8	ug/L	94			71	124	
	Methylene Chloride	20	18.5	ug/L	93			74	124	
	trans-1,2-Dichloroethene	20	17.7	ug/L	89			75	124	
	1,1-Dichloroethane	20	18.7	ug/L	94			77	125	
	2-Butanone	100	120	ug/L	120			56	143	
	Carbon Tetrachloride	20	19.6	ug/L	98			72	136	
	cis-1,2-Dichloroethene	20	18.8	ug/L	94			78	123	
	Chloroform	20	19.6	ug/L	98			79	124	
	1,1,1-Trichloroethane	20	18.7	ug/L	94			74	131	
	Methylcyclohexane	20	18.2	ug/L	91			72	132	
	Benzene	20	19.1	ug/L	96			79	120	
	1,2-Dichloroethane	20	21.3	ug/L	106			73	128	
	Trichloroethene	20	19.2	ug/L	96			79	123	
	1,2-Dichloroproppane	20	19.8	ug/L	99			78	122	
	Bromodichloromethane	20	20.4	ug/L	102			79	125	
	4-Methyl-2-Pentanone	100	120	ug/L	120			67	130	
	Toluene	20	19.6	ug/L	98			80	121	
	t-1,3-Dichloropropene	20	18.7	ug/L	94			73	127	
	cis-1,3-Dichloropropene	20	19.3	ug/L	97			75	124	
	1,1,2-Trichloroethane	20	20.7	ug/L	104			80	119	
	2-Hexanone	100	120	ug/L	120			57	139	
	Dibromochloromethane	20	20.2	ug/L	101			74	126	
	Tetrachloroethene	20	19.2	ug/L	96			74	129	
	Chlorobenzene	20	19.5	ug/L	98			82	118	
	Ethyl Benzene	20	19.0	ug/L	95			79	121	
	m/p-Xylenes	40	38.8	ug/L	97			80	121	
	o-Xylene	20	19.5	ug/L	98			78	122	
	Styrene	20	20.0	ug/L	100			78	123	
	Bromoform	20	21.0	ug/L	105			66	130	
	Isopropylbenzene	20	19.0	ug/L	95			72	131	
	1,1,2,2-Tetrachloroethane	20	19.7	ug/L	99			71	121	
	1,3-Dichlorobenzene	20	18.6	ug/L	93			80	119	
	1,4-Dichlorobenzene	20	18.6	ug/L	93			79	118	
	1,2-Dichlorobenzene	20	19.2	ug/L	96			80	119	

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

**SW-846**

**SDG No.:** Q1401

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

**Analytical Method:** SW8260-Low

**Datafile :** VX045033.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		
								Low	High	RPD
VX0225WBSD01	Chloromethane	20	15.6	ug/L	78	1		50	139	20
	Vinyl chloride	20	16.1	ug/L	81	2		58	137	20
	Bromomethane	20	20.5	ug/L	103	0		53	141	20
	Chloroethane	20	22.7	ug/L	114	7		60	138	20
	Trichlorofluoromethane	20	18.9	ug/L	95	2		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	18.4	ug/L	92	4		70	136	20
	1,1-Dichloroethene	20	17.1	ug/L	86	1		71	131	20
	Acetone	100	120	ug/L	120	9		39	160	20
	Carbon disulfide	20	15.3	ug/L	77	0		64	133	20
	Methyl tert-butyl Ether	20	19.2	ug/L	96	2		71	124	20
	Methylene Chloride	20	18.5	ug/L	93	0		74	124	20
	trans-1,2-Dichloroethene	20	17.6	ug/L	88	1		75	124	20
	1,1-Dichloroethane	20	18.6	ug/L	93	1		77	125	20
	2-Butanone	100	120	ug/L	120	0		56	143	20
	Carbon Tetrachloride	20	19.6	ug/L	98	0		72	136	20
	cis-1,2-Dichloroethene	20	18.6	ug/L	93	1		78	123	20
	Chloroform	20	19.7	ug/L	99	1		79	124	20
	1,1,1-Trichloroethane	20	18.9	ug/L	95	1		74	131	20
	Methylcyclohexane	20	18.8	ug/L	94	3		72	132	20
	Benzene	20	18.8	ug/L	94	2		79	120	20
	1,2-Dichloroethane	20	21.5	ug/L	108	2		73	128	20
	Trichloroethene	20	19.4	ug/L	97	1		79	123	20
	1,2-Dichloroproppane	20	19.9	ug/L	100	1		78	122	20
	Bromodichloromethane	20	20.9	ug/L	104	2		79	125	20
	4-Methyl-2-Pentanone	100	130	ug/L	130	8		67	130	20
	Toluene	20	19.3	ug/L	97	1		80	121	20
	t-1,3-Dichloropropene	20	18.3	ug/L	92	2		73	127	20
	cis-1,3-Dichloropropene	20	19.7	ug/L	99	2		75	124	20
	1,1,2-Trichloroethane	20	21.0	ug/L	105	1		80	119	20
	2-Hexanone	100	130	ug/L	130	8		57	139	20
	Dibromochloromethane	20	20.7	ug/L	104	3		74	126	20
	Tetrachloroethene	20	19.2	ug/L	96	0		74	129	20
	Chlorobenzene	20	19.3	ug/L	97	1		82	118	20
	Ethyl Benzene	20	19.2	ug/L	96	1		79	121	20
	m/p-Xylenes	40	39.5	ug/L	99	2		80	121	20
	o-Xylene	20	19.3	ug/L	97	1		78	122	20
	Styrene	20	20.2	ug/L	101	1		78	123	20
	Bromoform	20	21.2	ug/L	106	1		66	130	20
	Isopropylbenzene	20	18.7	ug/L	94	1		72	131	20
	1,1,2,2-Tetrachloroethane	20	20.2	ug/L	101	2		71	121	20
	1,3-Dichlorobenzene	20	19.2	ug/L	96	3		80	119	20
	1,4-Dichlorobenzene	20	18.6	ug/L	93	0		79	118	20
	1,2-Dichlorobenzene	20	19.8	ug/L	99	3		80	119	20

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

**SW-846**

**SDG No.:** Q1401

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

**Analytical Method:** SW8260-Low

**Datafile :** VX045080.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		RPD
								Low	High	
VX0228WBS01	Chloromethane	20	18.6	ug/L	93			50	139	
	Vinyl chloride	20	18.4	ug/L	92			58	137	
	Bromomethane	20	17.7	ug/L	89			53	141	
	Chloroethane	20	16.6	ug/L	83			60	138	
	Trichlorofluoromethane	20	18.6	ug/L	93			65	141	
	1,1,2-Trichlorotrifluoroethane	20	19.9	ug/L	100			70	136	
	1,1-Dichloroethene	20	18.1	ug/L	91			71	131	
	Acetone	100	83.3	ug/L	83			39	160	
	Carbon disulfide	20	17.7	ug/L	89			64	133	
	Methyl tert-butyl Ether	20	17.9	ug/L	90			71	124	
	Methylene Chloride	20	17.9	ug/L	90			74	124	
	trans-1,2-Dichloroethene	20	18.6	ug/L	93			75	124	
	1,1-Dichloroethane	20	17.9	ug/L	90			77	125	
	2-Butanone	100	91.6	ug/L	92			56	143	
	Carbon Tetrachloride	20	18.5	ug/L	93			72	136	
	cis-1,2-Dichloroethene	20	18.2	ug/L	91			78	123	
	Chloroform	20	18.1	ug/L	91			79	124	
	1,1,1-Trichloroethane	20	18.2	ug/L	91			74	131	
	Methylcyclohexane	20	20.8	ug/L	104			72	132	
	Benzene	20	19.0	ug/L	95			79	120	
	1,2-Dichloroethane	20	18.6	ug/L	93			73	128	
	Trichloroethene	20	18.6	ug/L	93			79	123	
	1,2-Dichloroproppane	20	18.6	ug/L	93			78	122	
	Bromodichloromethane	20	18.6	ug/L	93			79	125	
	4-Methyl-2-Pentanone	100	95.6	ug/L	96			67	130	
	Toluene	20	19.6	ug/L	98			80	121	
	t-1,3-Dichloropropene	20	19.5	ug/L	98			73	127	
	cis-1,3-Dichloropropene	20	20.0	ug/L	100			75	124	
	1,1,2-Trichloroethane	20	19.1	ug/L	96			80	119	
	2-Hexanone	100	97.0	ug/L	97			57	139	
	Dibromochloromethane	20	18.5	ug/L	93			74	126	
	Tetrachloroethene	20	19.0	ug/L	95			74	129	
	Chlorobenzene	20	19.6	ug/L	98			82	118	
	Ethyl Benzene	20	19.4	ug/L	97			79	121	
	m/p-Xylenes	40	40.1	ug/L	100			80	121	
	o-Xylene	20	19.7	ug/L	99			78	122	
	Styrene	20	20.2	ug/L	101			78	123	
	Bromoform	20	18.2	ug/L	91			66	130	
	Isopropylbenzene	20	19.4	ug/L	97			72	131	
	1,1,2,2-Tetrachloroethane	20	18.3	ug/L	92			71	121	
	1,3-Dichlorobenzene	20	19.5	ug/L	98			80	119	
	1,4-Dichlorobenzene	20	19.4	ug/L	97			79	118	
	1,2-Dichlorobenzene	20	19.4	ug/L	97			80	119	

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

**SW-846**

**SDG No.:** Q1401

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

**Analytical Method:** SW8260D

**Datafile :** VY021322.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		RPD
								Low	High	
VY0226SBS01	Chloromethane	20	18.9	ug/Kg	95			50	136	
	Vinyl chloride	20	19.3	ug/Kg	97			56	135	
	Bromomethane	20	19.2	ug/Kg	96			53	143	
	Chloroethane	20	19.0	ug/Kg	95			59	139	
	Trichlorofluoromethane	20	19.0	ug/Kg	95			62	140	
	1,1,2-Trichlorotrifluoroethane	20	19.8	ug/Kg	99			66	136	
	1,1-Dichloroethene	20	19.0	ug/Kg	95			70	131	
	Acetone	100	94.9	ug/Kg	95			36	164	
	Carbon disulfide	20	18.6	ug/Kg	93			63	132	
	Methyl tert-butyl Ether	20	19.1	ug/Kg	96			73	125	
	Methylene Chloride	20	18.5	ug/Kg	93			70	128	
	trans-1,2-Dichloroethene	20	19.0	ug/Kg	95			74	125	
	1,1-Dichloroethane	20	19.1	ug/Kg	96			76	125	
	2-Butanone	100	92.9	ug/Kg	93			51	148	
	Carbon Tetrachloride	20	19.0	ug/Kg	95			70	135	
	cis-1,2-Dichloroethene	20	19.2	ug/Kg	96			77	123	
	Chloroform	20	19.3	ug/Kg	97			78	123	
	1,1,1-Trichloroethane	20	19.2	ug/Kg	96			73	130	
	Methylcyclohexane	20	18.9	ug/Kg	95			66	133	
	Benzene	20	19.3	ug/Kg	97			77	121	
	1,2-Dichloroethane	20	19.2	ug/Kg	96			73	128	
	Trichloroethene	20	19.2	ug/Kg	96			77	123	
	1,2-Dichloroproppane	20	19.1	ug/Kg	96			76	123	
	Bromodichloromethane	20	19.1	ug/Kg	96			75	127	
	4-Methyl-2-Pentanone	100	93.3	ug/Kg	93			65	135	
	Toluene	20	19.3	ug/Kg	97			77	121	
	t-1,3-Dichloropropene	20	19.0	ug/Kg	95			71	130	
	cis-1,3-Dichloropropene	20	19.3	ug/Kg	97			74	126	
	1,1,2-Trichloroethane	20	19.1	ug/Kg	96			78	121	
	2-Hexanone	100	93.8	ug/Kg	94			53	145	
	Dibromochloromethane	20	19.3	ug/Kg	97			74	126	
	Tetrachloroethene	20	19.2	ug/Kg	96			73	128	
	Chlorobenzene	20	19.0	ug/Kg	95			79	120	
	Ethyl Benzene	20	19.0	ug/Kg	95			76	122	
	m/p-Xylenes	40	38.8	ug/Kg	97			77	124	
	o-Xylene	20	19.3	ug/Kg	97			77	123	
	Styrene	20	19.3	ug/Kg	97			76	124	
	Bromoform	20	19.1	ug/Kg	96			67	132	
	Isopropylbenzene	20	19.1	ug/Kg	96			68	134	
	1,1,2,2-Tetrachloroethane	20	18.8	ug/Kg	94			70	124	
	1,3-Dichlorobenzene	20	19.1	ug/Kg	96			77	121	
	1,4-Dichlorobenzene	20	19.2	ug/Kg	96			75	120	
	1,2-Dichlorobenzene	20	18.8	ug/Kg	94			78	121	

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

**SW-846**

**SDG No.:** Q1401

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

**Analytical Method:** SW8260D

**Datafile :** VY021323.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		
								Low	High	RPD
VY0226SBSD01	Chloromethane	20	19.6	ug/Kg	98	3		50	136	20
	Vinyl chloride	20	19.4	ug/Kg	97	0		56	135	20
	Bromomethane	20	19.4	ug/Kg	97	1		53	143	20
	Chloroethane	20	19.6	ug/Kg	98	3		59	139	20
	Trichlorofluoromethane	20	19.2	ug/Kg	96	1		62	140	20
	1,1,2-Trichlorotrifluoroethane	20	20.0	ug/Kg	100	1		66	136	20
	1,1-Dichloroethene	20	19.2	ug/Kg	96	1		70	131	20
	Acetone	100	91.3	ug/Kg	91	4		36	164	20
	Carbon disulfide	20	19.2	ug/Kg	96	3		63	132	20
	Methyl tert-butyl Ether	20	19.5	ug/Kg	98	2		73	125	20
	Methylene Chloride	20	18.9	ug/Kg	95	2		70	128	20
	trans-1,2-Dichloroethene	20	19.4	ug/Kg	97	2		74	125	20
	1,1-Dichloroethane	20	19.5	ug/Kg	98	2		76	125	20
	2-Butanone	100	94.4	ug/Kg	94	1		51	148	20
	Carbon Tetrachloride	20	19.6	ug/Kg	98	3		70	135	20
	cis-1,2-Dichloroethene	20	19.9	ug/Kg	100	4		77	123	20
	Chloroform	20	19.5	ug/Kg	98	1		78	123	20
	1,1,1-Trichloroethane	20	19.2	ug/Kg	96	0		73	130	20
	Methylcyclohexane	20	19.5	ug/Kg	98	3		66	133	20
	Benzene	20	19.9	ug/Kg	100	3		77	121	20
	1,2-Dichloroethane	20	19.7	ug/Kg	99	3		73	128	20
	Trichloroethene	20	19.6	ug/Kg	98	2		77	123	20
	1,2-Dichloroproppane	20	19.6	ug/Kg	98	2		76	123	20
	Bromodichloromethane	20	19.5	ug/Kg	98	2		75	127	20
	4-Methyl-2-Pentanone	100	97.8	ug/Kg	98	5		65	135	20
	Toluene	20	19.7	ug/Kg	99	2		77	121	20
	t-1,3-Dichloropropene	20	19.8	ug/Kg	99	4		71	130	20
	cis-1,3-Dichloropropene	20	19.3	ug/Kg	97	0		74	126	20
	1,1,2-Trichloroethane	20	19.4	ug/Kg	97	1		78	121	20
	2-Hexanone	100	96.5	ug/Kg	97	3		53	145	20
	Dibromochloromethane	20	19.8	ug/Kg	99	2		74	126	20
	Tetrachloroethene	20	19.7	ug/Kg	99	3		73	128	20
	Chlorobenzene	20	19.6	ug/Kg	98	3		79	120	20
	Ethyl Benzene	20	19.2	ug/Kg	96	1		76	122	20
	m/p-Xylenes	40	38.6	ug/Kg	97	0		77	124	20
	o-Xylene	20	19.4	ug/Kg	97	0		77	123	20
	Styrene	20	19.8	ug/Kg	99	2		76	124	20
	Bromoform	20	19.1	ug/Kg	96	0		67	132	20
	Isopropylbenzene	20	19.7	ug/Kg	99	3		68	134	20
	1,1,2,2-Tetrachloroethane	20	19.4	ug/Kg	97	3		70	124	20
	1,3-Dichlorobenzene	20	19.7	ug/Kg	99	3		77	121	20
	1,4-Dichlorobenzene	20	19.8	ug/Kg	99	3		75	120	20
	1,2-Dichlorobenzene	20	19.5	ug/Kg	98	4		78	121	20

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0225WBL01

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEM Case No.: Q1401SAS No.: Q1401 SDG NO.: Q1401Lab File ID: VX045031.DLab Sample ID: VX0225WBL01Date Analyzed: 02/25/2025Time Analyzed: 12:07GC Column: DB-624UI ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument 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
VX0225WBS01	VX0225WBS01	VX045032.D	02/25/2025
VX0225WBSD01	VX0225WBSD01	VX045033.D	02/25/2025
BP-VPB-192-TB-20250217	Q1401-01	VX045035.D	02/25/2025

COMMENTS:

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## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0228WBL01

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEM Case No.: Q1401SAS No.: Q1401 SDG NO.: Q1401Lab File ID: VX045079.DLab Sample ID: VX0228WBL01Date Analyzed: 02/28/2025Time Analyzed: 11:23GC Column: DB-624UI ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument 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
VX0228WBS01	VX0228WBS01	VX045080.D	02/28/2025
BP-VPB-192-GW-840-842	Q1401-03	VX045082.D	02/28/2025
BP-VPB-192-GW-900-902	Q1401-06	VX045083.D	02/28/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

**VY0226SBL01**

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1401

SAS No.: Q1401 SDG NO.: Q1401

Lab File ID: VY021321.D

Lab Sample ID: VY0226SBL01

Date Analyzed: 02/26/2025

Time Analyzed: 10:50

GC Column: RXI-624 ID: 0.25 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSVOA\_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY0226SBS01	VY0226SBS01	VY021322.D	02/26/2025
VY0226SBSD01	VY0226SBSD01	VY021323.D	02/26/2025
BP-VPB-192-GW-825-827	Q1401-07	VY021328.D	02/26/2025
BP-VPB-192-GW-860-862	Q1401-08	VY021329.D	02/26/2025
BP-VPB-192-GW-880-882	Q1401-09	VY021330.D	02/26/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VX044867.D	SAS No.:	Q1401
Instrument ID:	MSVOA_X	SDG NO.:	Q1401
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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VX045028.D	SAS No.:	Q1401
Instrument ID:	MSVOA_X	SDG NO.:	Q1401
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Date:	02/25/2025
		BFB Injection Time:	09:30
		Heated Purge:	Y/N
			N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	52.1
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	0.8 ( 1 ) 1
174	50.0 - 100.0% of mass 95	76.2
175	5.0 - 9.0% of mass 174	5.7 ( 7.5 ) 1
176	95.0 - 101.0% of mass 174	73.8 ( 96.9 ) 1
177	5.0 - 9.0% of mass 176	4.7 ( 6.3 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX045029.D	02/25/2025	10:00
VX0225WBL01	VX0225WBL01	VX045031.D	02/25/2025	12:07
VX0225WBS01	VX0225WBS01	VX045032.D	02/25/2025	12:30
VX0225WBSD01	VX0225WBSD01	VX045033.D	02/25/2025	12:57
BP-VPB-192-TB-20250217	Q1401-01	VX045035.D	02/25/2025	13:44
VSTDCCC050EC	VSTDCCC050	VX045042.D	02/25/2025	16:28

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VX045067.D	SAS No.:	Q1401
Instrument ID:	MSVOA_X	SDG NO.:	Q1401
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Date:	02/28/2025
		BFB Injection Time:	01:03
		Heated Purge:	Y/N
			N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.7
75	30.0 - 60.0% of mass 95	53.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 ( 1 ) 1
174	50.0 - 100.0% of mass 95	73.8
175	5.0 - 9.0% of mass 174	5.8 ( 7.9 ) 1
176	95.0 - 101.0% of mass 174	70.6 ( 95.6 ) 1
177	5.0 - 9.0% of mass 176	4.3 ( 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	VX045068.D	02/28/2025	01:27
VSTDICC005	VSTDICC005	VX045069.D	02/28/2025	02:13
VSTDICC020	VSTDICC020	VX045070.D	02/28/2025	02:37
VSTDICCC050	VSTDICCC050	VX045071.D	02/28/2025	03:00
VSTDICC100	VSTDICC100	VX045072.D	02/28/2025	03:23
VSTDICC150	VSTDICC150	VX045073.D	02/28/2025	03:47

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VX045076.D	SAS No.:	Q1401
Instrument ID:	MSVOA_X	SDG NO.:	Q1401
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Date:	02/28/2025
		BFB Injection Time:	10:03
		Heated Purge:	Y/N
			N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	52.2
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	0.8 ( 1 ) 1
174	50.0 - 100.0% of mass 95	74.6
175	5.0 - 9.0% of mass 174	5.5 ( 7.4 ) 1
176	95.0 - 101.0% of mass 174	72.8 ( 97.6 ) 1
177	5.0 - 9.0% of mass 176	5.1 ( 7 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX045077.D	02/28/2025	10:32
VX0228WBL01	VX0228WBL01	VX045079.D	02/28/2025	11:23
VX0228WBS01	VX0228WBS01	VX045080.D	02/28/2025	11:46
BP-VPB-192-GW-840-842	Q1401-03	VX045082.D	02/28/2025	12:37
BP-VPB-192-GW-900-902	Q1401-06	VX045083.D	02/28/2025	13:00
VSTDCCC050EC	VSTDCCC050	VX045098.D	02/28/2025	18:50

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VY021308.D	SAS No.:	Q1401
Instrument ID:	MSVOA_Y	SDG NO.:	Q1401
GC Column:	RXI-624 ID: 0.25 (mm)	BFB Injection Date:	02/25/2025
		BFB Injection Time:	12:10
		Heated Purge: Y/N	Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.8
75	30.0 - 60.0% of mass 95	55.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7 ( 0.8 ) 1
174	50.0 - 100.0% of mass 95	84.7
175	5.0 - 9.0% of mass 174	6.4 ( 7.5 ) 1
176	95.0 - 101.0% of mass 174	83.6 ( 98.8 ) 1
177	5.0 - 9.0% of mass 176	5.5 ( 6.5 ) 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
VSTDICC005	VSTDICC005	VY021309.D	02/25/2025	12:40
VSTDICC010	VSTDICC010	VY021310.D	02/25/2025	13:03
VSTDICC020	VSTDICC020	VY021311.D	02/25/2025	13:26
VSTDICCC050	VSTDICCC050	VY021312.D	02/25/2025	14:48
VSTDICC150	VSTDICC150	VY021314.D	02/25/2025	15:57
VSTDICC100	VSTDICC100	VY021316.D	02/25/2025	16:49

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VY021319.D	SAS No.:	Q1401
Instrument ID:	MSVOA_Y	SDG NO.:	Q1401
GC Column:	RXI-624 ID: 0.25 (mm)	BFB Injection Date:	02/26/2025
		BFB Injection Time:	09:12
		Heated Purge: Y/N	Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.5
75	30.0 - 60.0% of mass 95	55.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	1.2 ( 1.5 ) 1
174	50.0 - 100.0% of mass 95	78.5
175	5.0 - 9.0% of mass 174	6.5 ( 8.3 ) 1
176	95.0 - 101.0% of mass 174	75.9 ( 96.7 ) 1
177	5.0 - 9.0% of mass 176	5.1 ( 6.7 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY021320.D	02/26/2025	10:11
VY0226SBL01	VY0226SBL01	VY021321.D	02/26/2025	10:50
VY0226SBS01	VY0226SBS01	VY021322.D	02/26/2025	11:22
VY0226SBSD01	VY0226SBSD01	VY021323.D	02/26/2025	11:44
BP-VPB-192-GW-825-827	Q1401-07	VY021328.D	02/26/2025	13:54
BP-VPB-192-GW-860-862	Q1401-08	VY021329.D	02/26/2025	14:17
BP-VPB-192-GW-880-882	Q1401-09	VY021330.D	02/26/2025	14:40
VSTDCCC050EC	VSTDCCC050	VY021344.D	02/26/2025	20:06

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	<u>CHEMTECH</u>	Contract:	<u>TETR06</u>				
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1401</u>	SAS No.:	<u>Q1401</u>	SDG NO.:	<u>Q1401</u>
Lab File ID:	<u>VX045029.D</u>		Date Analyzed:	<u>02/25/2025</u>			
Instrument ID:	<u>MSVOA_X</u>		Time Analyzed:	<u>10:00</u>			
GC Column:	<u>DB-624UI</u>	ID: <u>0.18</u> (mm)	Heated Purge:	(Y/N)	<u>N</u>		

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	110252	5.54	188741	6.75	166334	10.05
UPPER LIMIT	220504	6.044	377482	7.251	332668	10.549
LOWER LIMIT	55126	5.044	94370.5	6.251	83167	9.549
EPA SAMPLE NO.						
BP-VPB-192-TB-20250217	80365	5.55	162183	6.76	145520	10.05
VX0225WBL01	79395	5.55	159366	6.76	142850	10.05
VX0225WBS01	112915	5.55	200483	6.76	175398	10.05
VX0225WBSD01	104015	5.55	184616	6.76	164218	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:	<u>CHEMTECH</u>	Contract:	<u>TETR06</u>
Lab Code:	<u>CHEM</u>	SAS No.:	<u>Q1401</u>
SDG NO.:	<u>Q1401</u>	Date Analyzed:	<u>02/25/2025</u>
Instrument ID:	<u>MSVOA_X</u>	Time Analyzed:	<u>10:00</u>
GC Column:	<u>DB-624UI</u>	ID:	<u>0.18</u> (mm)
		Heated Purge:	(Y/N) <u>N</u>

	IS4 AREA #	RT #				
12 HOUR STD	76720	12.018				
	153440	12.518				
	38360	11.518				
EPA SAMPLE NO.						
BP-VPB-192-TB-20250217	60661	12.02				
VX0225WBL01	58355	12.02				
VX0225WBS01	80174	12.02				
VX0225WBSD01	77007	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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	<u>CHEMTECH</u>	Contract:	<u>TETR06</u>				
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1401</u>	SAS No.:	<u>Q1401</u>	SDG NO.:	<u>Q1401</u>
Lab File ID:	<u>VX045077.D</u>		Date Analyzed:	<u>02/28/2025</u>			
Instrument ID:	<u>MSVOA_X</u>		Time Analyzed:	<u>10:32</u>			
GC Column:	<u>DB-624UI</u>	ID: <u>0.18</u> (mm)	Heated Purge:	(Y/N)	<u>N</u>		

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	111989	5.54	196414	6.75	172369	10.05
UPPER LIMIT	223978	6.037	392828	7.251	344738	10.549
LOWER LIMIT	55994.5	5.037	98207	6.251	86184.5	9.549
EPA SAMPLE NO.						
BP-VPB-192-GW-840-842	67792	5.54	135879	6.76	123593	10.05
BP-VPB-192-GW-900-902	73969	5.55	147122	6.76	132699	10.06
VX0228WBL01	76430	5.54	149381	6.76	137180	10.05
VX0228WBS01	108329	5.54	192724	6.76	169474	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:	<u>CHEMTECH</u>		Contract:	<u>TETR06</u>			
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1401</u>	SAS No.:	<u>Q1401</u>	SDG NO.:	<u>Q1401</u>
Lab File ID:	<u>VX045077.D</u>		Date Analyzed:	<u>02/28/2025</u>			
Instrument ID:	<u>MSVOA_X</u>		Time Analyzed:	<u>10:32</u>			
GC Column:	<u>DB-624UI</u>	ID: <u>0.18</u> (mm)	Heated Purge:	(Y/N)	<u>N</u>		

	IS4 AREA #	RT #				
12 HOUR STD	76314	12.018				
	152628	12.518				
	38157	11.518				
EPA SAMPLE NO.						
BP-VPB-192-GW-840-842	52250	12.02				
BP-VPB-192-GW-900-902	55091	12.02				
VX0228WBL01	59690	12.02				
VX0228WBS01	76472	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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	Case No.:	Q1401
Lab File ID:	VY021320.D	Date Analyzed:	02/26/2025
Instrument ID:	MSVOA_Y	Time Analyzed:	10:11
GC Column:	RXI-624	ID: 0.25 (mm)	Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	193888	7.71	308714	8.62	268805	11.42
	387776	8.213	617428	9.116	537610	11.92
	96944	7.213	154357	8.116	134403	10.92
EPA SAMPLE NO.						
BP-VPB-192-GW-825-827	237643	7.71	467253	8.62	479781	11.41
BP-VPB-192-GW-860-862	234926	7.71	466686	8.62	492462	11.41
BP-VPB-192-GW-880-882	240939	7.71	470542	8.61	479899	11.41
VY0226SBL01	251129	7.71	483695	8.62	470141	11.42
VY0226SBS01	184417	7.71	291138	8.62	254891	11.41
VY0226SBSD01	186200	7.71	292071	8.62	258744	11.41

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:	<u>CHEM</u>	SAS No.:	<u>Q1401</u>	SDG NO.:	<u>Q1401</u>
Lab File ID:	<u>VY021320.D</u>	Date Analyzed:	<u>02/26/2025</u>		
Instrument ID:	<u>MSVOA_Y</u>	Time Analyzed:	<u>10:11</u>		
GC Column:	<u>RXI-624</u>	ID:	<u>0.25</u> (mm)	Heated Purge:	(Y/N) <u>Y</u>

	IS4 AREA #	RT #				
12 HOUR STD	131935	13.347				
UPPER LIMIT	263870	13.847				
LOWER LIMIT	65967.5	12.847				
EPA SAMPLE NO.						
BP-VPB-192-GW-825-827	211227	13.35				
BP-VPB-192-GW-860-862	224351	13.35				
BP-VPB-192-GW-880-882	211748	13.35				
VY0226SBL01	192201	13.35				
VY0226SBS01	128725	13.35				
VY0226SBSD01	129829	13.35				

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:	VX0225WBL01	SDG No.: Q1401
Lab Sample ID:	VX0225WBL01	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
VX045031.D	1		02/25/25 12:07	VX022525

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:	VX0225WBL01	SDG No.: Q1401
Lab Sample ID:	VX0225WBL01	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
VX045031.D	1		02/25/25 12:07	VX022525

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	53.6		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	48.4		89 - 112		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		85 - 114		95%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	79400	5.55				
540-36-3	1,4-Difluorobenzene	159000	6.757				
3114-55-4	Chlorobenzene-d5	143000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	58400	12.018				

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX0225WBL01	SDG No.:	Q1401
Lab Sample ID:	VX0225WBL01	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
VX045031.D	1		02/25/25 12:07	VX022525

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:
Project:	CTO WE13	Date Received:
Client Sample ID:	VX0228WBL01	SDG No.: Q1401
Lab Sample ID:	VX0228WBL01	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
VX045079.D	1		02/28/25 11:23	VX022825

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:	VX0228WBL01	SDG No.: Q1401
Lab Sample ID:	VX0228WBL01	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
VX045079.D	1		02/28/25 11:23	VX022825

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	50.0		81 - 118		100%	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	53.3		85 - 114		107%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	76400	5.544				
540-36-3	1,4-Difluorobenzene	149000	6.757				
3114-55-4	Chlorobenzene-d5	137000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	59700	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:	VY0226SBL01	SDG No.: Q1401
Lab Sample ID:	VY0226SBL01	Matrix: SOIL
Analytical Method:	SW8260	% Solid: 100
Sample Wt/Vol:	5 Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:	uL	Test: VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level : LOW
Prep Method :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021321.D	1		02/26/25 10:50	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>							
74-87-3	Chloromethane	2.50	U	1.20	2.50	5.00	ug/Kg
75-01-4	Vinyl Chloride	2.50	U	0.77	2.50	5.00	ug/Kg
74-83-9	Bromomethane	4.00	U	1.00	4.00	5.00	ug/Kg
75-00-3	Chloroethane	2.50	U	1.00	2.50	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	4.00	U	0.91	4.00	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.50	U	1.10	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	2.50	U	0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	20.0	U	6.20	20.0	25.0	ug/Kg
75-15-0	Carbon Disulfide	4.00	U	1.30	4.00	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.50	U	0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	8.00	U	3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.50	U	0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	2.50	U	0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	20.0	U	5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	2.50	U	0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.50	U	0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	4.00	U	0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.50	U	0.78	2.50	5.00	ug/Kg
108-87-2	Methylcyclohexane	2.50	U	0.87	2.50	5.00	ug/Kg
71-43-2	Benzene	2.50	U	0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	2.50	U	0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	2.50	U	0.75	2.50	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	2.50	U	0.66	2.50	5.00	ug/Kg
75-27-4	Bromodichloromethane	2.50	U	0.56	2.50	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	4.40	12.5	25.0	ug/Kg
108-88-3	Toluene	2.50	U	0.67	2.50	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.50	U	0.60	2.50	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.50	U	0.57	2.50	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	2.50	U	0.84	2.50	5.00	ug/Kg
591-78-6	2-Hexanone	12.5	U	4.80	12.5	25.0	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:
Project:	CTO WE13	Date Received:
Client Sample ID:	VY0226SBL01	SDG No.: Q1401
Lab Sample ID:	VY0226SBL01	Matrix: SOIL
Analytical Method:	SW8260	% Solid: 100
Sample Wt/Vol:	5 Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:	uL	Test: VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level : LOW
Prep Method :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021321.D	1		02/26/25 10:50	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
124-48-1	Dibromochloromethane	2.50	U	0.65	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	2.50	U	0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	2.50	U	0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	2.50	U	0.62	2.50	5.00	ug/Kg
179601-23-1	m/p-Xylenes	5.00	U	1.40	5.00	10.0	ug/Kg
95-47-6	o-Xylene	2.50	U	0.70	2.50	5.00	ug/Kg
100-42-5	Styrene	2.50	U	0.60	2.50	5.00	ug/Kg
75-25-2	Bromoform	2.50	U	0.81	2.50	5.00	ug/Kg
98-82-8	Isopropylbenzene	2.50	U	0.67	2.50	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.50	U	1.10	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.50	U	0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.50	U	0.80	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.50	U	0.59	2.50	5.00	ug/Kg
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.1		71 - 136		106%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		78 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	49.1		85 - 116		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.1		79 - 119		100%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	251000		7.713			
540-36-3	1,4-Difluorobenzene	484000		8.615			
3114-55-4	Chlorobenzene-d5	470000		11.42			
3855-82-1	1,4-Dichlorobenzene-d4	192000		13.346			

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:	VX0225WBS01	SDG No.: Q1401
Lab Sample ID:	VX0225WBS01	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
VX045032.D	1		02/25/25 12:30	VX022525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	15.3		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	16.6		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	20.6		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	21.1		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.6		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.1		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.0		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	15.3		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.8		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.5		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.7		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.7		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	120		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.6		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.8		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.6		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.7		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.2		0.19	0.50	1.00	ug/L
71-43-2	Benzene	19.1		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.3		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.2		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.8		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.4		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	120		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.6		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.7		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.3		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.7		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	120		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:	VX0225WBS01	SDG No.: Q1401
Lab Sample ID:	VX0225WBS01	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
VX045032.D	1		02/25/25 12:30	VX022525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	20.2		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.2		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.5		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.0		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.8		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.5		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.0		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	21.0		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	19.0		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.7		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.6		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.6		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.2		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	52.8		80 - 119		106%	SPK: 50
2037-26-5	Toluene-d8	50.6		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		85 - 114		103%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	113000	5.55				
540-36-3	1,4-Difluorobenzene	200000	6.757				
3114-55-4	Chlorobenzene-d5	175000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	80200	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:	VX0228WBS01	SDG No.: Q1401
Lab Sample ID:	VX0228WBS01	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
VX045080.D	1		02/28/25 11:46	VX022825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	18.6		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.4		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	17.7		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	16.6		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.6		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.9		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.1		0.26	0.75	1.00	ug/L
67-64-1	Acetone	83.3		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	17.7		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.9		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	17.9		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.6		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	17.9		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	91.6		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.5		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.2		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	18.1		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.2		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	20.8		0.19	0.50	1.00	ug/L
71-43-2	Benzene	19.0		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.6		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.6		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.6		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	18.6		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	95.6		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.6		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.5		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.0		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.1		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	97.0		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:	VX0228WBS01	SDG No.: Q1401
Lab Sample ID:	VX0228WBS01	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
VX045080.D	1		02/28/25 11:46	VX022825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	18.5		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.0		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.6		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.4		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	40.1		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.7		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.2		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	18.2		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	19.4		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.3		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.5		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.4		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.4		0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.9		81 - 118		94%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	50.1		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	108000	5.544				
540-36-3	1,4-Difluorobenzene	193000	6.757				
3114-55-4	Chlorobenzene-d5	169000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	76500	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:	VY0226SBS01	SDG No.: Q1401
Lab Sample ID:	VY0226SBS01	Matrix: SOIL
Analytical Method:	SW8260	% Solid: 100
Sample Wt/Vol:	5 Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:	uL	Test: VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level : LOW
Prep Method :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021322.D	1		02/26/25 11:22	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>							
74-87-3	Chloromethane	18.9		1.20	2.50	5.00	ug/Kg
75-01-4	Vinyl Chloride	19.3		0.77	2.50	5.00	ug/Kg
74-83-9	Bromomethane	19.2		1.00	4.00	5.00	ug/Kg
75-00-3	Chloroethane	19.0		1.00	2.50	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	19.0		0.91	4.00	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	19.8		1.10	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	19.0		0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	94.9		6.20	20.0	25.0	ug/Kg
75-15-0	Carbon Disulfide	18.6		1.30	4.00	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.1		0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	18.5		3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.0		0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	19.1		0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	92.9		5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.0		0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.2		0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	19.3		0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.2		0.78	2.50	5.00	ug/Kg
108-87-2	Methylcyclohexane	18.9		0.87	2.50	5.00	ug/Kg
71-43-2	Benzene	19.3		0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.2		0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	19.2		0.75	2.50	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.1		0.66	2.50	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.1		0.56	2.50	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	93.3		4.40	12.5	25.0	ug/Kg
108-88-3	Toluene	19.3		0.67	2.50	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.0		0.60	2.50	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.3		0.57	2.50	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.1		0.84	2.50	5.00	ug/Kg
591-78-6	2-Hexanone	93.8		4.80	12.5	25.0	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:
Project:	CTO WE13	Date Received:
Client Sample ID:	VY0226SBS01	SDG No.: Q1401
Lab Sample ID:	VY0226SBS01	Matrix: SOIL
Analytical Method:	SW8260	% Solid: 100
Sample Wt/Vol:	5 Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:	uL	Test: VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level : LOW
Prep Method :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021322.D	1		02/26/25 11:22	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
124-48-1	Dibromochloromethane	19.3		0.65	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.2		0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	19.0		0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.0		0.62	2.50	5.00	ug/Kg
179601-23-1	m/p-Xylenes	38.8		1.40	5.00	10.0	ug/Kg
95-47-6	o-Xylene	19.3		0.70	2.50	5.00	ug/Kg
100-42-5	Styrene	19.3		0.60	2.50	5.00	ug/Kg
75-25-2	Bromoform	19.1		0.81	2.50	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.1		0.67	2.50	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	18.8		1.10	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.1		0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.2		0.80	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	18.8		0.59	2.50	5.00	ug/Kg
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.7		71 - 136		93%	SPK: 50
1868-53-7	Dibromofluoromethane	47.4		78 - 119		95%	SPK: 50
2037-26-5	Toluene-d8	47.6		85 - 116		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.3		79 - 119		95%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	184000		7.707			
540-36-3	1,4-Difluorobenzene	291000		8.615			
3114-55-4	Chlorobenzene-d5	255000		11.414			
3855-82-1	1,4-Dichlorobenzene-d4	129000		13.346			

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:	VX0225WBSD01	SDG No.: Q1401
Lab Sample ID:	VX0225WBSD01	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
VX045033.D	1		02/25/25 12:57	VX022525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
74-87-3	Chloromethane	15.6		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	16.1		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	20.5		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	22.7		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.9		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.4		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.1		0.26	0.75	1.00	ug/L
67-64-1	Acetone	120		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	15.3		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.2		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.5		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.6		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.6		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	120		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.6		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.6		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	18.9		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.8		0.19	0.50	1.00	ug/L
71-43-2	Benzene	18.8		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.5		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.4		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	20.9		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	130		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.3		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.3		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.7		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.0		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	130		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:	VX0225WBSD01	SDG No.: Q1401
Lab Sample ID:	VX0225WBSD01	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
VX045033.D	1		02/25/25 12:57	VX022525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	20.7		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.2		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.3		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.2		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	39.5		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.3		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.2		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	21.2		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.7		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	20.2		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.2		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.6		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.8		0.19	0.50	1.00	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.4		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	53.7		80 - 119		107%	SPK: 50
2037-26-5	Toluene-d8	49.7		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.8		85 - 114		108%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	104000	5.55				
540-36-3	1,4-Difluorobenzene	185000	6.757				
3114-55-4	Chlorobenzene-d5	164000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	77000	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:	VY0226SBSD01	SDG No.: Q1401
Lab Sample ID:	VY0226SBSD01	Matrix: SOIL
Analytical Method:	SW8260	% Solid: 100
Sample Wt/Vol:	5 Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:	uL	Test: VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level : LOW
Prep Method :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021323.D	1		02/26/25 11:44	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>							
74-87-3	Chloromethane	19.6		1.20	2.50	5.00	ug/Kg
75-01-4	Vinyl Chloride	19.4		0.77	2.50	5.00	ug/Kg
74-83-9	Bromomethane	19.4		1.00	4.00	5.00	ug/Kg
75-00-3	Chloroethane	19.6		1.00	2.50	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	19.2		0.91	4.00	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.0		1.10	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	19.2		0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	91.3		6.20	20.0	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.2		1.30	4.00	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.5		0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	18.9		3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.4		0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	19.5		0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	94.4		5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.6		0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.9		0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	19.5		0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.2		0.78	2.50	5.00	ug/Kg
108-87-2	Methylcyclohexane	19.5		0.87	2.50	5.00	ug/Kg
71-43-2	Benzene	19.9		0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.7		0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	19.6		0.75	2.50	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.6		0.66	2.50	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.5		0.56	2.50	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	97.8		4.40	12.5	25.0	ug/Kg
108-88-3	Toluene	19.7		0.67	2.50	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.8		0.60	2.50	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.3		0.57	2.50	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.4		0.84	2.50	5.00	ug/Kg
591-78-6	2-Hexanone	96.5		4.80	12.5	25.0	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:
Project:	CTO WE13	Date Received:
Client Sample ID:	VY0226SBSD01	SDG No.: Q1401
Lab Sample ID:	VY0226SBSD01	Matrix: SOIL
Analytical Method:	SW8260	% Solid: 100
Sample Wt/Vol:	5 Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:	uL	Test: VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level : LOW
Prep Method :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021323.D	1		02/26/25 11:44	VY022625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
124-48-1	Dibromochloromethane	19.8		0.65	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.7		0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	19.6		0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.2		0.62	2.50	5.00	ug/Kg
179601-23-1	m/p-Xylenes	38.6		1.40	5.00	10.0	ug/Kg
95-47-6	o-Xylene	19.4		0.70	2.50	5.00	ug/Kg
100-42-5	Styrene	19.8		0.60	2.50	5.00	ug/Kg
75-25-2	Bromoform	19.1		0.81	2.50	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.7		0.67	2.50	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.4		1.10	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.7		0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.8		0.80	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	19.5		0.59	2.50	5.00	ug/Kg
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	48.5		71 - 136		97%	SPK: 50
1868-53-7	Dibromofluoromethane	49.1		78 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	49.9		85 - 116		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		79 - 119		101%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	186000		7.707			
540-36-3	1,4-Difluorobenzene	292000		8.615			
3114-55-4	Chlorobenzene-d5	259000		11.414			
3855-82-1	1,4-Dichlorobenzene-d4	130000		13.346			

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

# CALIBRATION

# SUMMARY

## VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	SAS No.:	Q1401
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.:	<u>Q1401</u>
Instrument ID:	MSVOA_X	SDG No.:	<u>Q1401</u>
Heated Purge:	(Y/N) <u>N</u>	Calibration Date(s):	<u>02/10/2025</u>
GC Column:	DB-624UI	Calibration Time(s):	<u>10:25</u> <u>12:28</u>
ID: <u>0.18</u> (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 ORGANICS INITIAL CALIBRATION DATA

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	SAS No.:	Q1401
Instrument ID:	MSVOA_X	Calibration Date(s):	02/28/2025
Heated Purge:	(Y/N) N	Calibration Time(s):	01:27 03:47
GC Column:	DB-624UI	ID:	0.18 (mm)

LAB FILE ID:	RRF001 = VX045068.D	RRF005 = VX045069.D	RRF020 = VX045070.D					
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Chloromethane	0.755	0.821	0.828	0.753	0.721	0.744	0.770	5.7
Vinyl Chloride	0.773	0.755	0.774	0.761	0.765	0.758	0.764	1
Bromomethane		0.337	0.298	0.292	0.284	0.291	0.300	7
Chloroethane	0.373	0.421	0.366	0.373	0.297	0.286	0.352	14.5
Trichlorofluoromethane	0.978	1.061	1.050	1.050	0.982	0.948	1.012	4.7
1,1,2-Trichlorotrifluoroethane	0.526	0.613	0.595	0.594	0.596	0.563	0.581	5.4
1,1-Dichloroethene	0.609	0.620	0.612	0.623	0.620	0.603	0.614	1.3
Acetone	0.414	0.363	0.384	0.351	0.345	0.356	0.369	7
Carbon Disulfide	1.584	1.582	1.587	1.660	1.708	1.698	1.636	3.6
Methyl tert-butyl Ether	1.955	1.913	2.127	2.083	2.132	2.158	2.061	5
Methylene Chloride	0.806	0.730	0.752	0.698	0.694	0.706	0.731	5.8
trans-1,2-Dichloroethene	0.540	0.619	0.603	0.631	0.634	0.616	0.607	5.7
1,1-Dichloroethane	1.200	1.223	1.280	1.242	1.270	1.264	1.247	2.5
2-Butanone	0.476	0.545	0.610	0.579	0.553	0.570	0.555	8.1
Carbon Tetrachloride	0.463	0.463	0.447	0.468	0.489	0.463	0.465	3
cis-1,2-Dichloroethene	0.687	0.746	0.765	0.762	0.767	0.769	0.749	4.2
Chloroform	1.206	1.247	1.278	1.246	1.230	1.225	1.239	2
1,1,1-Trichloroethane	0.908	0.992	1.009	1.024	1.044	1.025	1.000	4.8
Methylcyclohexane	0.464	0.530	0.560	0.585	0.607	0.550	0.549	9.1
Benzene	1.321	1.459	1.491	1.496	1.497	1.424	1.448	4.7
1,2-Dichloroethane	0.487	0.525	0.545	0.528	0.524	0.520	0.521	3.6
Trichloroethene	0.319	0.351	0.339	0.341	0.354	0.336	0.340	3.7
1,2-Dichloropropane	0.354	0.378	0.382	0.371	0.376	0.373	0.372	2.7
Bromodichloromethane	0.478	0.503	0.536	0.524	0.528	0.528	0.516	4.2
4-Methyl-2-Pentanone	0.535	0.570	0.647	0.610	0.579	0.579	0.587	6.5
Toluene	0.716	0.872	0.892	0.898	0.874	0.845	0.849	8
t-1,3-Dichloropropene	0.304	0.389	0.436	0.469	0.490	0.502	0.431	17.3
cis-1,3-Dichloropropene	0.404	0.463	0.509	0.535	0.555	0.553	0.503	11.8
1,1,2-Trichloroethane	0.346	0.348	0.371	0.356	0.341	0.336	0.350	3.6
2-Hexanone	0.349	0.412	0.476	0.448	0.431	0.436	0.425	10.1

\* 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.:	Q1401
Instrument ID:	MSVOA_X	SDG No.:	Q1401
Heated Purge:	(Y/N) N	Calibration Date(s):	02/28/2025
GC Column:	DB-624UI	Calibration Time(s):	01:27      03:47
	ID: 0.18 (mm)		

LAB FILE ID:	RRF001 = VX045068.D	RRF005 = VX045069.D	RRF020 = VX045070.D					
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Dibromochloromethane	0.305	0.349	0.390	0.384	0.385	0.380	0.366	9
Tetrachloroethene	0.315	0.326	0.319	0.324	0.329	0.309	0.320	2.3
Chlorobenzene	0.968	1.054	1.090	1.092	1.100	1.045	1.058	4.7
Ethyl Benzene	1.566	1.794	1.889	1.952	1.972	1.888	1.843	8.1
m/p-Xylenes	0.555	0.672	0.711	0.724	0.715	0.673	0.675	9.3
o-Xylene	0.609	0.689	0.702	0.706	0.707	0.670	0.681	5.5
Styrene	0.879	1.060	1.170	1.181	1.183	1.134	1.101	10.7
Bromoform	0.209	0.234	0.276	0.276	0.300	0.300	0.266	13.9
Isopropylbenzene	3.397	4.034	3.999	4.135	4.006	3.845	3.903	6.8
1,1,2,2-Tetrachloroethane	1.395	1.479	1.513	1.419	1.391	1.396	1.432	3.6
1,3-Dichlorobenzene	1.502	1.652	1.710	1.668	1.675	1.649	1.643	4.4
1,4-Dichlorobenzene	1.605	1.702	1.665	1.687	1.669	1.643	1.662	2.1
1,2-Dichlorobenzene	1.479	1.695	1.735	1.668	1.687	1.622	1.648	5.5
1,2-Dichloroethane-d4		0.836	0.784	0.757	0.783	0.817	0.795	3.9
Dibromofluoromethane		0.329	0.335	0.329	0.340	0.338	0.334	1.5
Toluene-d8		1.237	1.191	1.210	1.219	1.203	1.212	1.4
4-Bromofluorobenzene		0.383	0.393	0.402	0.410	0.421	0.402	3.7

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

## VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	CHEMTECH	Contract:	TETR06
Lab Code:	CHEM	SAS No.:	Q1401
Instrument ID:	MSVOA_Y	Calibration Date(s):	02/25/2025
Heated Purge:	(Y/N) Y	Calibration Time(s):	12:40 16:49
GC Column:	RXI-624	ID:	0.25 (mm)

LAB FILE ID:	RRF005 = VY021309.D	RRF010 = VY021310.D	RRF020 = VY021311.D					
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF150	RRF100	RRF	% RSD
Chloromethane	0.709	0.628	0.566	0.602	0.597	0.570	0.612	8.6
Vinyl Chloride	0.648	0.591	0.554	0.627	0.606	0.580	0.601	5.6
Bromomethane	0.505	0.414	0.361	0.387	0.371	0.359	0.399	13.9
Chloroethane	0.414	0.365	0.347	0.390	0.365	0.355	0.373	6.7
Trichlorofluoromethane	0.976	0.915	0.838	0.936	0.909	0.870	0.908	5.3
1,1,2-Trichlorotrifluoroethane	0.546	0.529	0.491	0.537	0.541	0.508	0.525	4.1
1,1-Dichloroethene	0.545	0.489	0.462	0.515	0.518	0.490	0.503	5.7
Acetone	0.122	0.102	0.094	0.128	0.104	0.103	0.109	11.9
Carbon Disulfide	1.800	1.652	1.540	1.734	1.678	1.620	1.671	5.4
Methyl tert-butyl Ether	1.312	1.268	1.267	1.410	1.410	1.307	1.329	4.9
Methylene Chloride	0.733	0.598	0.539	0.585	0.547	0.529	0.588	12.8
trans-1,2-Dichloroethene	0.589	0.536	0.507	0.573	0.570	0.547	0.554	5.4
1,1-Dichloroethane	1.101	1.032	0.961	1.083	1.058	1.007	1.040	4.9
2-Butanone	0.162	0.155	0.156	0.183	0.171	0.159	0.164	6.5
Carbon Tetrachloride	0.567	0.562	0.509	0.581	0.567	0.535	0.554	4.8
cis-1,2-Dichloroethene	0.649	0.610	0.588	0.665	0.656	0.626	0.632	4.7
Chloroform	1.128	1.046	0.977	1.095	1.062	1.017	1.054	5.1
1,1,1-Trichloroethane	1.020	0.956	0.889	0.986	0.979	0.927	0.960	4.8
Methylcyclohexane	0.597	0.613	0.584	0.662	0.663	0.618	0.623	5.3
Benzene	1.515	1.445	1.359	1.533	1.472	1.409	1.456	4.5
1,2-Dichloroethane	0.422	0.417	0.393	0.434	0.419	0.394	0.413	3.9
Trichloroethene	0.375	0.360	0.341	0.382	0.375	0.354	0.364	4.3
1,2-Dichloropropane	0.360	0.350	0.329	0.371	0.357	0.336	0.350	4.5
Bromodichloromethane	0.519	0.503	0.477	0.541	0.528	0.495	0.511	4.5
4-Methyl-2-Pentanone	0.220	0.227	0.239	0.267	0.264	0.238	0.243	7.9
Toluene	0.887	0.888	0.852	0.965	0.936	0.897	0.904	4.4
t-1,3-Dichloropropene	0.438	0.436	0.434	0.515	0.509	0.474	0.468	8
cis-1,3-Dichloropropene	0.541	0.526	0.528	0.591	0.581	0.546	0.552	5
1,1,2-Trichloroethane	0.250	0.251	0.238	0.267	0.254	0.237	0.249	4.4
2-Hexanone	0.133	0.146	0.155	0.183	0.178	0.162	0.159	11.9

\* 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.:	Q1401
Instrument ID:	MSVOA_Y	SDG No.:	Q1401
Heated Purge:	(Y/N) Y	Calibration Date(s):	02/25/2025
GC Column:	RXI-624	Calibration Time(s):	12:40 16:49
ID:	0.25 (mm)		

LAB FILE ID:	RRF005 = VY021309.D	RRF010 = VY021310.D	RRF020 = VY021311.D					
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF150	RRF100	RRF	% RSD
Dibromochloromethane	0.340	0.325	0.322	0.368	0.352	0.332	0.340	5.2
Tetrachloroethene	0.405	0.380	0.351	0.389	0.386	0.355	0.378	5.5
Chlorobenzene	1.171	1.111	1.039	1.176	1.159	1.078	1.122	5
Ethyl Benzene	1.938	1.941	1.826	2.130	2.115	1.979	1.988	5.8
m/p-Xylenes	0.735	0.738	0.696	0.802	0.783	0.733	0.748	5.1
o-Xylene	0.689	0.675	0.648	0.758	0.739	0.694	0.701	5.9
Styrene	1.081	1.128	1.091	1.277	1.257	1.159	1.166	7.2
Bromoform	0.221	0.221	0.211	0.246	0.236	0.214	0.225	5.9
Isopropylbenzene	3.744	3.605	3.437	3.976	4.009	3.783	3.759	5.8
1,1,2,2-Tetrachloroethane	0.700	0.649	0.621	0.697	0.689	0.624	0.663	5.5
1,3-Dichlorobenzene	1.812	1.729	1.598	1.792	1.777	1.668	1.730	4.8
1,4-Dichlorobenzene	1.825	1.710	1.593	1.751	1.744	1.629	1.709	5
1,2-Dichlorobenzene	1.599	1.499	1.408	1.575	1.564	1.446	1.515	5.1
1,2-Dichloroethane-d4	0.681	0.510	0.548	0.551	0.566	0.547	0.567	10.3
Dibromofluoromethane	0.370	0.299	0.317	0.325	0.334	0.322	0.328	7.2
Toluene-d8	1.420	1.158	1.230	1.251	1.290	1.253	1.267	6.8
4-Bromofluorobenzene	0.490	0.387	0.404	0.423	0.435	0.420	0.426	8.2

- \* 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.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X	Calibration Date/Time:				02/25/2025	10:00
Lab File ID:	VX045029.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	0.745	0.1	-12.76	20
Vinyl Chloride	0.827	0.732		-11.49	20
Bromomethane	0.247	0.252		2.02	20
Chloroethane	0.307	0.346		12.7	20
Trichlorofluoromethane	1.046	1.033		-1.24	20
1,1,2-Trichlorotrifluoroethane	0.632	0.617		-2.37	20
1,1-Dichloroethene	0.644	0.593		-7.92	20
Acetone	0.294	0.364		23.81	20
Carbon Disulfide	1.767	1.454		-17.71	20
Methyl tert-butyl Ether	2.050	1.972		-3.81	20
Methylene Chloride	0.721	0.673		-6.66	20
trans-1,2-Dichloroethene	0.634	0.582		-8.2	20
1,1-Dichloroethane	1.233	1.194	0.1	-3.16	20
2-Butanone	0.478	0.544		13.81	20
Carbon Tetrachloride	0.460	0.478		3.91	20
cis-1,2-Dichloroethene	0.762	0.721		-5.38	20
Chloroform	1.196	1.170		-2.17	20
1,1,1-Trichloroethane	1.014	0.979		-3.45	20
Methylcyclohexane	0.606	0.609		0.5	20
Benzene	1.465	1.459		-0.41	20
1,2-Dichloroethane	0.467	0.504		7.92	20
Trichloroethene	0.335	0.339		1.19	20
1,2-Dichloropropane	0.364	0.376		3.3	20
Bromodichloromethane	0.489	0.538		10.02	20
4-Methyl-2-Pentanone	0.512	0.618		20.7	20
Toluene	0.872	0.882		1.15	20
t-1,3-Dichloropropene	0.495	0.515		4.04	20
cis-1,3-Dichloropropene	0.552	0.576		4.35	20
1,1,2-Trichloroethane	0.335	0.356		6.27	20
2-Hexanone	0.369	0.458		24.12	20
Dibromochloromethane	0.359	0.394		9.75	20
Tetrachloroethene	0.315	0.319		1.27	20
Chlorobenzene	1.074	1.097	0.3	2.14	20
Ethyl Benzene	1.895	1.927		1.69	20
m/p-Xylenes	0.699	0.720		3	20
o-Xylene	0.701	0.716		2.14	20
Styrene	1.130	1.200		6.2	20
Bromoform	0.258	0.297	0.1	15.12	20

All other compounds must meet a minimum RRF of 0.010.

RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH	Contract:	TETR06				
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X			Calibration Date/Time:		02/25/2025	10:00
Lab File ID:	VX045029.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	3.989		-0.92	20
1,1,2,2-Tetrachloroethane	1.383	1.395	0.3	0.87	20
1,3-Dichlorobenzene	1.678	1.702		1.43	20
1,4-Dichlorobenzene	1.697	1.703		0.35	20
1,2-Dichlorobenzene	1.650	1.713		3.82	20
1,2-Dichloroethane-d4	0.732	0.737		0.68	20
Dibromofluoromethane	0.325	0.348		7.08	20
Toluene-d8	1.229	1.235		0.49	20
4-Bromofluorobenzene	0.414	0.445		7.49	20

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH	Contract:	TETR06				
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X			Calibration Date/Time:		02/25/2025	16:28
Lab File ID:	VX045042.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	0.726	0.1	-14.99	50
Vinyl Chloride	0.827	0.730		-11.73	50
Bromomethane	0.247	0.257		4.05	50
Chloroethane	0.307	0.394		28.34	50
Trichlorofluoromethane	1.046	1.033		-1.24	50
1,1,2-Trichlorotrifluoroethane	0.632	0.618		-2.21	50
1,1-Dichloroethene	0.644	0.588		-8.7	50
Acetone	0.294	0.351		19.39	50
Carbon Disulfide	1.767	1.404		-20.54	50
Methyl tert-butyl Ether	2.050	1.999		-2.49	50
Methylene Chloride	0.721	0.693		-3.88	50
trans-1,2-Dichloroethene	0.634	0.586		-7.57	50
1,1-Dichloroethane	1.233	1.217	0.1	-1.3	50
2-Butanone	0.478	0.582		21.76	50
Carbon Tetrachloride	0.460	0.456		-0.87	50
cis-1,2-Dichloroethene	0.762	0.735		-3.54	50
Chloroform	1.196	1.210		1.17	50
1,1,1-Trichloroethane	1.014	0.999		-1.48	50
Methylcyclohexane	0.606	0.586		-3.3	50
Benzene	1.465	1.440		-1.71	50
1,2-Dichloroethane	0.467	0.512		9.64	50
Trichloroethene	0.335	0.332		-0.9	50
1,2-Dichloropropane	0.364	0.369		1.37	50
Bromodichloromethane	0.489	0.527		7.77	50
4-Methyl-2-Pentanone	0.512	0.643		25.59	50
Toluene	0.872	0.881		1.03	50
t-1,3-Dichloropropene	0.495	0.493		-0.4	50
cis-1,3-Dichloropropene	0.552	0.553		0.18	50
1,1,2-Trichloroethane	0.335	0.357		6.57	50
2-Hexanone	0.369	0.477		29.27	50
Dibromochloromethane	0.359	0.388		8.08	50
Tetrachloroethene	0.315	0.301		-4.44	50
Chlorobenzene	1.074	1.075	0.3	0.09	50
Ethyl Benzene	1.895	1.889		-0.32	50
m/p-Xylenes	0.699	0.704		0.71	50
o-Xylene	0.701	0.697		-0.57	50
Styrene	1.130	1.186		4.96	50
Bromoform	0.258	0.284	0.1	10.08	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.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X			Calibration Date/Time:		02/25/2025	16:28
Lab File ID:	VX045042.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	3.925		-2.51	50
1,1,2,2-Tetrachloroethane	1.383	1.401	0.3	1.3	50
1,3-Dichlorobenzene	1.678	1.635		-2.56	50
1,4-Dichlorobenzene	1.697	1.651		-2.71	50
1,2-Dichlorobenzene	1.650	1.641		-0.55	50
1,2-Dichloroethane-d4	0.732	0.643		-12.16	50
Dibromofluoromethane	0.325	0.287		-11.69	50
Toluene-d8	1.229	1.046		-14.89	50
4-Bromofluorobenzene	0.414	0.377		-8.94	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.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X	Calibration Date/Time:				02/28/2025	10:32
Lab File ID:	VX045077.D	Init. Calib. Date(s):				02/28/2025	02/28/2025
Heated Purge:	(Y/N) N	Init. Calib. Time(s):				01:27	03:47
GC Column:	DB-624UI	ID:	0.18	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.770	0.741	0.1	-3.77	20
Vinyl Chloride	0.764	0.729		-4.58	20
Bromomethane	0.300	0.282		-6	20
Chloroethane	0.352	0.283		-19.6	20
Trichlorofluoromethane	1.012	0.999		-1.28	20
1,1,2-Trichlorotrifluoroethane	0.581	0.595		2.41	20
1,1-Dichloroethene	0.614	0.584		-4.89	20
Acetone	0.369	0.312		-15.45	20
Carbon Disulfide	1.636	1.571		-3.97	20
Methyl tert-butyl Ether	2.061	1.935		-6.11	20
Methylene Chloride	0.731	0.667		-8.76	20
trans-1,2-Dichloroethene	0.607	0.586		-3.46	20
1,1-Dichloroethane	1.247	1.167	0.1	-6.41	20
2-Butanone	0.555	0.512		-7.75	20
Carbon Tetrachloride	0.465	0.459		-1.29	20
cis-1,2-Dichloroethene	0.749	0.712		-4.94	20
Chloroform	1.239	1.140		-7.99	20
1,1,1-Trichloroethane	1.000	0.948		-5.2	20
Methylcyclohexane	0.549	0.617		12.39	20
Benzene	1.448	1.433		-1.04	20
1,2-Dichloroethane	0.521	0.494		-5.18	20
Trichloroethene	0.340	0.328		-3.53	20
1,2-Dichloropropane	0.372	0.358		-3.76	20
Bromodichloromethane	0.516	0.508		-1.55	20
4-Methyl-2-Pentanone	0.587	0.565		-3.75	20
Toluene	0.849	0.870		2.47	20
t-1,3-Dichloropropene	0.431	0.483		12.06	20
cis-1,3-Dichloropropene	0.503	0.551		9.54	20
1,1,2-Trichloroethane	0.350	0.330		-5.71	20
2-Hexanone	0.425	0.411		-3.29	20
Dibromochloromethane	0.366	0.367		0.27	20
Tetrachloroethene	0.320	0.319		-0.31	20
Chlorobenzene	1.058	1.039	0.3	-1.8	20
Ethyl Benzene	1.843	1.879		1.95	20
m/p-Xylenes	0.675	0.694		2.82	20
o-Xylene	0.681	0.685		0.59	20
Styrene	1.101	1.143		3.82	20
Bromoform	0.266	0.268	0.1	0.75	20

All other compounds must meet a minimum RRF of 0.010.

RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH	Contract:	TETR06				
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X			Calibration Date/Time:		02/28/2025	10:32
Lab File ID:	VX045077.D			Init. Calib. Date(s):		02/28/2025	02/28/2025
Heated Purge:	(Y/N) N			Init. Calib. Time(s):		01:27	03:47
GC Column:	DB-624UI	ID:	0.18	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.903	3.973		1.79	20
1,1,2,2-Tetrachloroethane	1.432	1.334	0.3	-6.84	20
1,3-Dichlorobenzene	1.643	1.660		1.03	20
1,4-Dichlorobenzene	1.662	1.653		-0.54	20
1,2-Dichlorobenzene	1.648	1.652		0.24	20
1,2-Dichloroethane-d4	0.795	0.733		-7.8	20
Dibromofluoromethane	0.334	0.331		-0.9	20
Toluene-d8	1.212	1.209		-0.25	20
4-Bromofluorobenzene	0.402	0.404		0.5	20

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH	Contract:	TETR06				
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X			Calibration Date/Time:		02/28/2025	18:50
Lab File ID:	VX045098.D			Init. Calib. Date(s):		02/28/2025	02/28/2025
Heated Purge:	(Y/N) N			Init. Calib. Time(s):		01:27	03:47
GC Column:	DB-624UI	ID:	0.18 (mm)				

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.770	0.696	0.1	-9.61	50
Vinyl Chloride	0.764	0.736		-3.66	50
Bromomethane	0.300	0.261		-13	50
Chloroethane	0.352	0.305		-13.35	50
Trichlorofluoromethane	1.012	0.992		-1.98	50
1,1,2-Trichlorotrifluoroethane	0.581	0.602		3.61	50
1,1-Dichloroethene	0.614	0.600		-2.28	50
Acetone	0.369	0.330		-10.57	50
Carbon Disulfide	1.636	1.572		-3.91	50
Methyl tert-butyl Ether	2.061	2.046		-0.73	50
Methylene Chloride	0.731	0.691		-5.47	50
trans-1,2-Dichloroethene	0.607	0.624		2.8	50
1,1-Dichloroethane	1.247	1.237	0.1	-0.8	50
2-Butanone	0.555	0.536		-3.42	50
Carbon Tetrachloride	0.465	0.475		2.15	50
cis-1,2-Dichloroethene	0.749	0.756		0.94	50
Chloroform	1.239	1.219		-1.61	50
1,1,1-Trichloroethane	1.000	1.013		1.3	50
Methylcyclohexane	0.549	0.612		11.48	50
Benzene	1.448	1.471		1.59	50
1,2-Dichloroethane	0.521	0.520		-0.19	50
Trichloroethene	0.340	0.344		1.18	50
1,2-Dichloropropane	0.372	0.372		0	50
Bromodichloromethane	0.516	0.518		0.39	50
4-Methyl-2-Pentanone	0.587	0.582		-0.85	50
Toluene	0.849	0.879		3.53	50
t-1,3-Dichloropropene	0.431	0.460		6.73	50
cis-1,3-Dichloropropene	0.503	0.536		6.56	50
1,1,2-Trichloroethane	0.350	0.342		-2.29	50
2-Hexanone	0.425	0.430		1.18	50
Dibromochloromethane	0.366	0.364		-0.55	50
Tetrachloroethene	0.320	0.334		4.38	50
Chlorobenzene	1.058	1.084	0.3	2.46	50
Ethyl Benzene	1.843	1.942		5.37	50
m/p-Xylenes	0.675	0.717		6.22	50
o-Xylene	0.681	0.694		1.91	50
Styrene	1.101	1.166		5.9	50
Bromoform	0.266	0.275	0.1	3.38	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.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_X			Calibration Date/Time:		02/28/2025	18:50
Lab File ID:	VX045098.D			Init. Calib. Date(s):		02/28/2025	02/28/2025
Heated Purge:	(Y/N) N			Init. Calib. Time(s):		01:27	03:47
GC Column:	DB-624UI	ID:	0.18	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.903	4.046		3.66	50
1,1,2,2-Tetrachloroethane	1.432	1.422	0.3	-0.7	50
1,3-Dichlorobenzene	1.643	1.677		2.07	50
1,4-Dichlorobenzene	1.662	1.661		-0.06	50
1,2-Dichlorobenzene	1.648	1.681		2	50
1,2-Dichloroethane-d4	0.795	0.780		-1.89	50
Dibromofluoromethane	0.334	0.338		1.2	50
Toluene-d8	1.212	1.211		-0.08	50
4-Bromofluorobenzene	0.402	0.392		-2.49	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.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_Y	Calibration Date/Time:				02/26/2025	10:11
Lab File ID:	VY021320.D	Init. Calib. Date(s):				02/25/2025	02/25/2025
Heated Purge:	(Y/N) Y	Init. Calib. Time(s):				12:40	16:49
GC Column:	RXI-624	ID:	0.25	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.612	0.581	0.1	-5.07	20
Vinyl Chloride	0.601	0.586		-2.5	20
Bromomethane	0.399	0.370		-7.27	20
Chloroethane	0.373	0.363		-2.68	20
Trichlorofluoromethane	0.908	0.866		-4.63	20
1,1,2-Trichlorotrifluoroethane	0.525	0.496		-5.52	20
1,1-Dichloroethene	0.503	0.487		-3.18	20
Acetone	0.109	0.113		3.67	20
Carbon Disulfide	1.671	1.628		-2.57	20
Methyl tert-butyl Ether	1.329	1.308		-1.58	20
Methylene Chloride	0.588	0.533		-9.35	20
trans-1,2-Dichloroethene	0.554	0.540		-2.53	20
1,1-Dichloroethane	1.040	1.021	0.1	-1.83	20
2-Butanone	0.164	0.162		-1.22	20
Carbon Tetrachloride	0.554	0.536		-3.25	20
cis-1,2-Dichloroethene	0.632	0.633		0.16	20
Chloroform	1.054	1.038		-1.52	20
1,1,1-Trichloroethane	0.960	0.936		-2.5	20
Methylcyclohexane	0.623	0.578		-7.22	20
Benzene	1.456	1.415		-2.82	20
1,2-Dichloroethane	0.413	0.396		-4.12	20
Trichloroethene	0.364	0.355		-2.47	20
1,2-Dichloropropane	0.350	0.341		-2.57	20
Bromodichloromethane	0.511	0.494		-3.33	20
4-Methyl-2-Pentanone	0.243	0.234		-3.7	20
Toluene	0.904	0.892		-1.33	20
t-1,3-Dichloropropene	0.468	0.468		0	20
cis-1,3-Dichloropropene	0.552	0.543		-1.63	20
1,1,2-Trichloroethane	0.249	0.236		-5.22	20
2-Hexanone	0.159	0.159		0	20
Dibromochloromethane	0.340	0.332		-2.35	20
Tetrachloroethene	0.378	0.359		-5.03	20
Chlorobenzene	1.122	1.091	0.3	-2.76	20
Ethyl Benzene	1.988	1.972		-0.81	20
m/p-Xylenes	0.748	0.735		-1.74	20
o-Xylene	0.701	0.696		-0.71	20
Styrene	1.166	1.176		0.86	20
Bromoform	0.225	0.217	0.1	-3.56	20

All other compounds must meet a minimum RRF of 0.010.

RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH	Contract:	TETR06				
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_Y	Calibration Date/Time:			02/26/2025	10:11	
Lab File ID:	VY021320.D	Init. Calib. Date(s):			02/25/2025	02/25/2025	
Heated Purge: (Y/N)	Y	Init. Calib. Time(s):			12:40	16:49	
GC Column:	RXI-624	ID:	0.25	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.759	3.742		-0.45	20
1,1,2,2-Tetrachloroethane	0.663	0.639	0.3	-3.62	20
1,3-Dichlorobenzene	1.730	1.676		-3.12	20
1,4-Dichlorobenzene	1.709	1.633		-4.45	20
1,2-Dichlorobenzene	1.515	1.469		-3.04	20
1,2-Dichloroethane-d4	0.567	0.544		-4.06	20
Dibromofluoromethane	0.328	0.320		-2.44	20
Toluene-d8	1.267	1.257		-0.79	20
4-Bromofluorobenzene	0.426	0.420		-1.41	20

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH	Contract:	TETR06				
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_Y			Calibration Date/Time:		02/26/2025	20:06
Lab File ID:	VY021344.D			Init. Calib. Date(s):		02/25/2025	02/25/2025
Heated Purge:	(Y/N) Y			Init. Calib. Time(s):		12:40	16:49
GC Column:	RXI-624	ID:	0.25 (mm)				

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.612	0.566	0.1	-7.52	50
Vinyl Chloride	0.601	0.577		-3.99	50
Bromomethane	0.399	0.382		-4.26	50
Chloroethane	0.373	0.374		0.27	50
Trichlorofluoromethane	0.908	0.871		-4.07	50
1,1,2-Trichlorotrifluoroethane	0.525	0.494		-5.91	50
1,1-Dichloroethene	0.503	0.489		-2.78	50
Acetone	0.109	0.098		-10.09	50
Carbon Disulfide	1.671	1.626		-2.69	50
Methyl tert-butyl Ether	1.329	1.439		8.28	50
Methylene Chloride	0.588	0.567		-3.57	50
trans-1,2-Dichloroethene	0.554	0.566		2.17	50
1,1-Dichloroethane	1.040	1.051	0.1	1.06	50
2-Butanone	0.164	0.166		1.22	50
Carbon Tetrachloride	0.554	0.520		-6.14	50
cis-1,2-Dichloroethene	0.632	0.663		4.91	50
Chloroform	1.054	1.085		2.94	50
1,1,1-Trichloroethane	0.960	0.958		-0.21	50
Methylcyclohexane	0.623	0.557		-10.59	50
Benzene	1.456	1.421		-2.4	50
1,2-Dichloroethane	0.413	0.419		1.45	50
Trichloroethene	0.364	0.352		-3.3	50
1,2-Dichloropropane	0.350	0.341		-2.57	50
Bromodichloromethane	0.511	0.511		0	50
4-Methyl-2-Pentanone	0.243	0.248		2.06	50
Toluene	0.904	0.897		-0.77	50
t-1,3-Dichloropropene	0.468	0.465		-0.64	50
cis-1,3-Dichloropropene	0.552	0.534		-3.26	50
1,1,2-Trichloroethane	0.249	0.254		2.01	50
2-Hexanone	0.159	0.166		4.4	50
Dibromochloromethane	0.340	0.345		1.47	50
Tetrachloroethene	0.378	0.354		-6.35	50
Chlorobenzene	1.122	1.085	0.3	-3.3	50
Ethyl Benzene	1.988	1.913		-3.77	50
m/p-Xylenes	0.748	0.722		-3.48	50
o-Xylene	0.701	0.694		-1	50
Styrene	1.166	1.170		0.26	50
Bromoform	0.225	0.225	0.1	0	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.:	Q1401	SAS No.:	Q1401	SDG No.:	Q1401
Instrument ID:	MSVOA_Y			Calibration Date/Time:		02/26/2025	20:06
Lab File ID:	VY021344.D			Init. Calib. Date(s):		02/25/2025	02/25/2025
Heated Purge: (Y/N)	Y			Init. Calib. Time(s):		12:40	16:49
GC Column:	RXI-624	ID:	0.25	(mm)			

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.759	3.702		-1.52	50
1,1,2,2-Tetrachloroethane	0.663	0.666	0.3	0.45	50
1,3-Dichlorobenzene	1.730	1.669		-3.53	50
1,4-Dichlorobenzene	1.709	1.629		-4.68	50
1,2-Dichlorobenzene	1.515	1.475		-2.64	50
1,2-Dichloroethane-d4	0.567	0.529		-6.7	50
Dibromofluoromethane	0.328	0.298		-9.15	50
Toluene-d8	1.267	1.131		-10.73	50
4-Bromofluorobenzene	0.426	0.383		-10.09	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>	Q1401	<b>OrderDate:</b>	2/20/2025 3:49:00 PM					
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	CTO WE13					
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	H31,VOA Ref. #2 Soil,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1401-02</b>	<b>BP-VPB-192-GW-825-827</b>	<b>Water</b>			<b>02/17/25</b>			<b>02/20/25</b>
			SVOC-SIMGroup1	8270-Modified		02/21/25	02/24/25	
<b>Q1401-04</b>	<b>BP-VPB-192-GW-860-862</b>	<b>Water</b>			<b>02/18/25</b>			<b>02/20/25</b>
			SVOC-SIMGroup1	8270-Modified		02/21/25	02/24/25	
<b>Q1401-04RE</b>	<b>BP-VPB-192-GW-860-862RE</b>	<b>Water</b>			<b>02/18/25</b>			<b>02/20/25</b>
			SVOC-SIMGroup1	8270-Modified		02/21/25	02/24/25	
<b>Q1401-06</b>	<b>BP-VPB-192-GW-900-902</b>	<b>Water</b>			<b>02/19/25</b>			<b>02/20/25</b>
			SVOC-SIMGroup1	8270-Modified		02/21/25	02/24/25	



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

**Hit Summary Sheet  
SW-846**

**SDG No.:** Q1401

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

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



A  
B  
C  
D  
E  
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# SAMPLE DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	02/17/25	
Project:	CTO WE13			Date Received:	02/20/25	
Client Sample ID:	BP-VPB-192-GW-825-827			SDG No.:	Q1401	
Lab Sample ID:	Q1401-02			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	100	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
BN036494.D	1	02/21/25 13:55	02/24/25 12:01	PB166832

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	2.00	U	0.68	2.00	2.00	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.19		30 - 150		49%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.15		30 - 150		37%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.25		55 - 111		62%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.30		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.22	*	58 - 132		56%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	3780	7.746				
1146-65-2	Naphthalene-d8	10000	10.53				
15067-26-2	Acenaphthene-d10	5710	14.377				
1517-22-2	Phenanthrene-d10	12400	17.124				
1719-03-5	Chrysene-d12	9000	21.313				
1520-96-3	Perylene-d12	8850	23.584				

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:	02/18/25	
Project:	CTO WE13			Date Received:	02/20/25	
Client Sample ID:	BP-VPB-192-GW-860-862			SDG No.:	Q1401	
Lab Sample ID:	Q1401-04			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	100	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
BN036495.D	1	02/21/25 13:55	02/24/25 12:37	PB166832

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	2.00	U	0.68	2.00	2.00	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.26		30 - 150		66%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.17		30 - 150		43%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		72%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		118%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		110%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	5630	7.746				
1146-65-2	Naphthalene-d8	16100	10.53				
15067-26-2	Acenaphthene-d10	8960	14.377				
1517-22-2	Phenanthrene-d10	16000	17.124				
1719-03-5	Chrysene-d12	9520	21.313				
1520-96-3	Perylene-d12	10000	23.581				

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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:	02/18/25	
Project:	CTO WE13			Date Received:	02/20/25	
Client Sample ID:	BP-VPB-192-GW-860-862RE			SDG No.:	Q1401	
Lab Sample ID:	Q1401-04RE			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	100	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
BN036500.D	1	02/21/25 13:55	02/24/25 15:37	PB166832

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	2.00	U	0.68	2.00	2.00	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 - 150		66%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.19		30 - 150		47%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.46	*	53 - 106		115%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		106%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	4760	7.746				
1146-65-2	Naphthalene-d8	13000	10.53				
15067-26-2	Acenaphthene-d10	7380	14.377				
1517-22-2	Phenanthrene-d10	14100	17.124				
1719-03-5	Chrysene-d12	9830	21.313				
1520-96-3	Perylene-d12	10300	23.584				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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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:	02/19/25
Project:	CTO WE13	Date Received:	02/20/25
Client Sample ID:	BP-VPB-192-GW-900-902	SDG No.:	Q1401
Lab Sample ID:	Q1401-06	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	920	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
BN036496.D	1	02/21/25 13:55	02/24/25 13:13	PB166832

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.22	U	0.070	0.22	0.22	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		70%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.20		30 - 150		51%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		118%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		90%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	4550	7.746				
1146-65-2	Naphthalene-d8	12200	10.53				
15067-26-2	Acenaphthene-d10	6890	14.377				
1517-22-2	Phenanthrene-d10	11800	17.124				
1719-03-5	Chrysene-d12	7450	21.313				
1520-96-3	Perylene-d12	7510	23.581				

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

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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  
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# QC SUMMARY

### Surrogate Summary

SW-846

SDG No.: Q1401

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166832BL	PB166832BL	2-Methylnaphthalene-d10	0.4	0.28	71		30	150
		Fluoranthene-d10	0.4	0.32	80		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.29	72		53	106
		Terphenyl-d14	0.4	0.35	88		58	132
PB166832BS	PB166832BS	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.29	72		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.45	112	*	53	106
		Terphenyl-d14	0.4	0.42	105		58	132
PB166832BSD	PB166832BSD	2-Methylnaphthalene-d10	0.4	0.43	108		30	150
		Fluoranthene-d10	0.4	0.28	69		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.45	111	*	53	106
		Terphenyl-d14	0.4	0.42	105		58	132
Q1401-02	BP-VPB-192-GW-825-827	2-Methylnaphthalene-d10	0.4	0.19	49		30	150
		Fluoranthene-d10	0.4	0.15	37		30	150
		Nitrobenzene-d5	0.4	0.25	62		55	111
		2-Fluorobiphenyl	0.4	0.30	76		53	106
		Terphenyl-d14	0.4	0.22	56	*	58	132
Q1401-04	BP-VPB-192-GW-860-862	2-Methylnaphthalene-d10	0.4	0.26	66		30	150
		Fluoranthene-d10	0.4	0.17	43		30	150
		Nitrobenzene-d5	0.4	0.29	72		55	111
		2-Fluorobiphenyl	0.4	0.47	118	*	53	106
		Terphenyl-d14	0.4	0.44	110		58	132
Q1401-04RE	BP-VPB-192-GW-860-862RE	2-Methylnaphthalene-d10	0.4	0.27	66		30	150
		Fluoranthene-d10	0.4	0.19	47		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.46	115	*	53	106
		Terphenyl-d14	0.4	0.42	106		58	132
Q1401-06	BP-VPB-192-GW-900-902	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.20	51		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.47	118	*	53	106
		Terphenyl-d14	0.4	0.36	90		58	132

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

SW-846

SDG No.: Q1401

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036502.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB166832BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	

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

SW-846

SDG No.: Q1401

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036505.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits			RPD
									Low	High	RPD	
PB166832BSD	1,4-Dioxane	0.4	0.31	ug/L	78				70	130	20	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166832BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1401

SAS No.: Q1401 SDG NO.: Q1401

Lab File ID: BN036493.D

Lab Sample ID: PB166832BL

Instrument ID: BNA\_N

Date Extracted: 02/21/2025

Matrix: (soil/water) Water

Date Analyzed: 02/24/2025

Level: (low/med) LOW

Time Analyzed: 11:25

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166832BS	PB166832BS	BN036502.D	02/24/2025
BP-VPB-192-GW-825-827	Q1401-02	BN036494.D	02/24/2025
BP-VPB-192-GW-860-862	Q1401-04	BN036495.D	02/24/2025
BP-VPB-192-GW-900-902	Q1401-06	BN036496.D	02/24/2025
PB166832BSD	PB166832BSD	BN036505.D	02/24/2025

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1401 SDG NO.: Q1401

Lab File ID: BN036408.D

DFTPP Injection Date: 02/10/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 11:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	51.4
68	Less than 2.0% of mass 69	0.3 ( 0.7 ) 1
69	Mass 69 relative abundance	47.7
70	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
127	10.0 - 80.0% of mass 198	48.3
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	7
275	10.0 - 60.0% of mass 198	24.7
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	7.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.5 ( 20.1 ) 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	BN036409.D	02/10/2025	12:25
SSTDICC0.2	SSTDICC0.2	BN036410.D	02/10/2025	13:01
SSTDICCC0.4	SSTDICCC0.4	BN036411.D	02/10/2025	13:36
SSTDICC0.8	SSTDICC0.8	BN036412.D	02/10/2025	14:12
SSTDICC1.6	SSTDICC1.6	BN036413.D	02/10/2025	14:48
SSTDICC3.2	SSTDICC3.2	BN036414.D	02/10/2025	15:24
SSTDICC5.0	SSTDICC5.0	BN036415.D	02/10/2025	16:00

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1401 SDG NO.: Q1401

Lab File ID: BN036491.D

DFTPP Injection Date: 02/24/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 10:10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.3
68	Less than 2.0% of mass 69	0.5 ( 1.1 ) 1
69	Mass 69 relative abundance	47.7
70	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
127	10.0 - 80.0% of mass 198	47.5
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	7.1
275	10.0 - 60.0% of mass 198	25.9
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	9.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.8 ( 18.1 ) 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	BN036492.D	02/24/2025	10:49
PB166832BL	PB166832BL	BN036493.D	02/24/2025	11:25
BP-VPB-192-GW-825-827	Q1401-02	BN036494.D	02/24/2025	12:01
BP-VPB-192-GW-860-862	Q1401-04	BN036495.D	02/24/2025	12:37
BP-VPB-192-GW-900-902	Q1401-06	BN036496.D	02/24/2025	13:13
BP-VPB-192-GW-860-862RE	Q1401-04RE	BN036500.D	02/24/2025	15:37
PB166832BS	PB166832BS	BN036502.D	02/24/2025	16:49
PB166832BSD	PB166832BSD	BN036505.D	02/24/2025	19:25
SSTDCCC0.4EC	SSTDCCC0.4	BN036506.D	02/24/2025	20:02



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

6

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1401 SAS No.: Q1401 SDG No.: Q1401  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/24/2025  
Lab File ID: BN036492.D Time Analyzed: 10:49  
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	2546	7.739	6147	10.53	4030	14.38
UPPER LIMIT	5092	8.239	12294	11.03	8060	14.877
LOWER LIMIT	1273	7.239	3073.5	10.03	2015	13.877
EPA SAMPLE NO.						
01 PB166832BL	2545	7.75	5531	10.54	3002	14.39
02 BP-VPB-192-GW-825-827	3781	7.75	10043	10.53	5710	14.38
03 PB166832BS	3804	7.75	9827	10.53	5679	14.38
04 BP-VPB-192-GW-860-862	5626 *	7.75	16089 *	10.53	8959 *	14.38
05 BP-VPB-192-GW-900-902	4549	7.75	12151	10.53	6886	14.38
06 BP-VPB-192-GW-860-862RE	4764	7.75	12976 *	10.53	7380	14.38
07 PB166832BSD	3237	7.74	7948	10.53	4588	14.38

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.:	Q1401	SAS No.:	Q1401	SDG NO.:	Q1401
EPA Sample No.:	SSTDCCCC0.4		Date Analyzed:	02/24/2025			
Lab File ID:	BN036492.D		Time Analyzed:	10:49			
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	8380	17.124	7132	21.313	6830	23.581
	16760	17.624	14264	21.813	13660	24.081
	4190	16.624	3566	20.813	3415	23.081
EPA SAMPLE NO.						
01 PB166832BL	6667	17.14	5489	21.32	5028	23.58
02 BP-VPB-192-GW-825-827	12437	17.12	9000	21.31	8845	23.58
03 PB166832BS	11615	17.12	7487	21.31	6852	23.58
04 BP-VPB-192-GW-860-862	15975	17.12	9523	21.31	10012	23.58
05 BP-VPB-192-GW-900-902	11829	17.12	7452	21.31	7512	23.58
06 BP-VPB-192-GW-860-862RE	14127	17.12	9825	21.31	10325	23.58
07 PB166832BSD	9111	17.12	5499	21.31	5044	23.58

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.



A  
B  
C  
D  
E  
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G

# QC SAMPLE

# DATA

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB166832BL			SDG No.:	Q1401
Lab Sample ID:	PB166832BL			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
BN036493.D	1	02/21/25 13:55	02/24/25 11:25	PB166832

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	0.28		30 - 150		71%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		72%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.35		58 - 132		88%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2550		7.746			
1146-65-2	Naphthalene-d8	5530		10.541			
15067-26-2	Acenaphthene-d10	3000		14.388			
1517-22-2	Phenanthrene-d10	6670		17.136			
1719-03-5	Chrysene-d12	5490		21.322			
1520-96-3	Perylene-d12	5030		23.584			

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:	PB166832BS			SDG No.:	Q1401
Lab Sample ID:	PB166832BS			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
BN036502.D	1	02/21/25 13:55	02/24/25 16:49	PB166832

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.29		30 - 150		72%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.45	*	53 - 106		112%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		105%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	3800	7.746				
1146-65-2	Naphthalene-d8	9830	10.53				
15067-26-2	Acenaphthene-d10	5680	14.377				
1517-22-2	Phenanthrene-d10	11600	17.124				
1719-03-5	Chrysene-d12	7490	21.313				
1520-96-3	Perylene-d12	6850	23.581				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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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:	PB166832BSD			SDG No.:	Q1401
Lab Sample ID:	PB166832BSD			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
BN036505.D	1	02/21/25 13:55	02/24/25 19:25	PB166832

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.31		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.43		30 - 150		108%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 - 150		69%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.45	*	53 - 106		111%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		105%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	3240		7.739			
1146-65-2	Naphthalene-d8	7950		10.53			
15067-26-2	Acenaphthene-d10	4590		14.377			
1517-22-2	Phenanthrene-d10	9110		17.124			
1719-03-5	Chrysene-d12	5500		21.313			
1520-96-3	Perylene-d12	5040		23.578			

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

# CALIBRATION

# SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN021025.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Tue Feb 11 01:17:14 2025  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN036409.D 0.2 =BN036410.D 0.4 =BN036411.D 0.8 =BN036412.D 1.6 =BN036413.D 3.2 =BN036414.D 5.0 =BN036415.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD
<hr/>										
1) I	1,4-Dichlorobenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
2)	1,4-Dioxane	0.555	0.437	0.433	0.414	0.411	0.433	0.381	0.438	12.66
3)	n-Nitrosodimethylamine	0.906	0.779	0.764	0.724	0.708	0.769	0.670	0.760	9.90
4) S	2-Fluorophenol	1.009	0.954	0.936	0.920	0.914	0.999	0.885	0.945	4.80
5) S	Phenol-d6	1.134	1.007	1.032	1.062	1.099	1.267	1.164	1.109	8.00
6)	bis(2-Chloroethyl)ether	1.382	1.070	1.086	1.129	1.120	1.225	1.107	1.160	9.48
7) I	Naphthalene-d8	-----	-----	-----	-----	-----	-----	-----	-----	-----
8) S	Nitrobenzene-d5	0.500	0.363	0.365	0.370	0.367	0.417	0.381	0.395	12.70
9)	Naphthalene	1.400	1.141	1.116	1.088	1.075	1.186	1.073	1.154	10.01
10)	Hexachlorobutane	0.319	0.293	0.283	0.272	0.264	0.282	0.253	0.281	7.67
11)	SURR2-Methylnaphthalene	0.647	0.583	0.602	0.588	0.597	0.668	0.618	0.615	5.19
12)	2-Methylnaphthalene	0.833	0.712	0.738	0.721	0.726	0.816	0.750	0.757	6.40
13) I	Acenaphthene-d10	-----	-----	-----	-----	-----	-----	-----	-----	-----
14) S	2,4,6-Tribromoethane	0.196	0.181	0.186	0.184	0.195	0.226	0.219	0.198	8.90
15) S	2-Fluorobiphenyl	1.409	1.390	1.377	1.491	1.564	1.738	1.558	1.504	8.57
16)	Acenaphthylene	1.807	1.667	1.692	1.683	1.734	1.964	1.820	1.767	5.98
17)	Acenaphthene	1.245	1.125	1.146	1.128	1.175	1.273	1.169	1.180	4.89
18)	Fluorene	1.696	1.630	1.661	1.627	1.669	1.829	1.646	1.680	4.17
19) I	Phenanthrene-d10	-----	-----	-----	-----	-----	-----	-----	-----	-----
20)	4,6-Dinitro-2-methylphenol	0.071	0.067	0.069	0.074	0.084	0.107	0.078	0.078	19.60
21)	4-Bromophenylmethanol	0.243	0.227	0.231	0.232	0.236	0.264	0.238	0.239	5.15
22)	Hexachlorobenzene	0.305	0.296	0.284	0.287	0.289	0.317	0.285	0.295	4.11
23)	Atrazine	0.196	0.190	0.187	0.186	0.194	0.229	0.213	0.199	8.00
24)	Pentachlorophenol	0.140	0.125	0.122	0.122	0.134	0.170	0.167	0.140	14.74
25)	Phenanthrene	1.233	1.090	1.095	1.112	1.138	1.273	1.153	1.156	6.12
26)	Anthracene	0.990	0.933	0.967	0.978	1.015	1.167	1.088	1.020	7.92
27)	SURRFluoranthene-d10	1.109	1.043	1.063	1.059	1.098	1.258	1.156	1.112	6.70
28)	Fluoranthene	1.441	1.323	1.353	1.356	1.404	1.607	1.461	1.421	6.76
29) I	Chrysene-d12	-----	-----	-----	-----	-----	-----	-----	-----	-----
30)	Pyrene	1.584	1.568	1.534	1.490	1.488	1.629	1.492	1.541	3.59
31) S	Terphenyl-d14	0.860	0.847	0.852	0.829	0.834	0.913	0.843	0.854	3.27
32)	Benzo(a)anthracene	1.257	1.276	1.293	1.255	1.300	1.471	1.362	1.316	5.86
33)	Chrysene	1.449	1.456	1.360	1.414	1.404	1.527	1.366	1.425	4.08
34)	Bis(2-ethylhexylphthalate)	0.902	0.875	0.777	0.745	0.761	0.861	0.819	0.820	7.45
35) I	Perylene-d12	-----	-----	-----	-----	-----	-----	-----	-----	-----

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN021025.M

36)	Indeno(1,2,3-c...)	1.182	1.289	1.378	1.390	1.446	1.630	1.471	1.398	10.13
37)	Benzo(b)fluora...	1.174	1.220	1.260	1.290	1.333	1.529	1.416	1.317	9.24
38)	Benzo(k)fluora...	1.258	1.253	1.363	1.326	1.347	1.532	1.413	1.356	7.08
39) C	Benzo(a)pyrene	1.091	1.081	1.102	1.114	1.145	1.309	1.206	1.150	7.12
40)	Dibenz(a,h)an...	0.906	1.021	1.075	1.087	1.154	1.304	1.176	1.103	11.40
41)	Benzo(g,h,i)pe...	1.140	1.212	1.254	1.230	1.269	1.400	1.249	1.250	6.27

(#) = Out of Range

A  
B  
C  
D  
E  
F  
G

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH		Contract:	TETR06	
Lab Code:	CHEM	Case No.:	Q1401	SAS No.:	Q1401
Instrument ID:	BNA_N		Calibration Date/Time:	02/24/2025	10:49
Lab File ID:	BN036492.D		Init. Calib. Date(s):	02/10/2025	02/10/2025
EPA Sample No.:	SSTDCCC0.4		Init. Calib. Time(s):	12:25	16:00
GC Column:	ZB-GR	ID: 0.25	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.615	0.576		-6.3	20.0
Fluoranthene-d10	1.112	1.048		-5.8	20.0
2-Fluorophenol	0.945	0.874		-7.5	20.0
Phenol-d6	1.109	1.041		-6.1	20.0
Nitrobenzene-d5	0.395	0.385		-2.5	20.0
2-Fluorobiphenyl	1.504	1.722		14.5	20.0
2,4,6-Tribromophenol	0.198	0.166		-16.2	20.0
Terphenyl-d14	0.854	0.838		-1.9	20.0
1,4-Dioxane	0.438	0.440		0.5	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.:	Q1401	SAS No.:	Q1401
Instrument ID:	BNA_N		Calibration Date/Time:	02/24/2025	20:02
Lab File ID:	BN036506.D		Init. Calib. Date(s):	02/10/2025	02/10/2025
EPA Sample No.:	SSTDCCC0.4EC		Init. Calib. Time(s):	12:25	16:00
GC Column:	ZB-GR	ID: 0.25	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.615	0.606		-1.5	50.0
Fluoranthene-d10	1.112	0.961		-13.6	50.0
2-Fluorophenol	0.945	0.900		-4.8	50.0
Phenol-d6	1.109	1.014		-8.6	50.0
Nitrobenzene-d5	0.395	0.368		-6.8	50.0
2-Fluorobiphenyl	1.504	1.733		15.2	50.0
2,4,6-Tribromophenol	0.198	0.158		-20.2	50.0
Terphenyl-d14	0.854	0.987		15.6	50.0
1,4-Dioxane	0.438	0.415		-5.3	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:

Q1401

COC Number:

CLIENT INFORMATION		PROJECT INFORMATION				BILLING INFORMATION											
COMPANY: Tetra Tech		PROJECT NAME: NWIRP Bethpage				BILL TO: SEE CONTRACT PO#											
ADDRESS: 4433 Corporation Lane Suite 300		PROJECT #: 112G08005-WE13 LOCATION: VPB-192				ADDRESS:											
CITY: Virginia Beach	STATE: VA	ZIP: 23462	PROJECT MANAGER: Ernie Wu				CITY: STATE: ZIP:										
ATTENTION: Ernie Wu		E-MAIL: ernie.wu@tetrtech.com				ATTENTION: PHONE:											
PHONE: 757-466-4901	FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148				ANALYSIS											
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				VOC(SW846-8260B) 14 Dioxane (8270 SIM)	1	2	3	4	5	6	7	8	9		
FAX: 10 DAYS*	HARD COPY: 10 DAYS*	EDD: 10 DAYS*	<input type="checkbox"/> RESULTS ONLY <input type="checkbox"/> USEPA CLP <input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> Other _____ <input type="checkbox"/> EDD Format _____				PRESERVATIVES										
* TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS						COMMENTS											
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	A	1	2	3	4	5	6	7	8	9
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	BP-VPB-192-TB-20250217	QA	X	2/17/25	9:00	2	2										Trip blank
2.	BP-VPB-192-GW-825-827	AQ	X	2/17/25	12:45	4	3	1									
3.	BP-VPB-192-GW-840-842	AQ	X	2/18/25	9:45	2	2										
4.	BP-VPB-192-GW-860-862	AQ	X	2/18/25	12:40	3	2	1									
5.	BP-VPB-192-GW-880-882	AQ	X	2/19/25	9:50	4	4										
6.	BP-VPB-192-GW-900-902	AQ	X	2/19/25	12:50	3	2	1									
7.																	
8.																	
9.																	
10.																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY																	
RELINQUISHED BY SAMPLER <i>Ernie Wu</i>	DATE/TIME 2/19/25 15:30	RECEIVED BY <i>LP 30</i>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp <u>2.1</u> °C MeOH extraction requires an additional 4oz. Jar for percent solid Comments: Standard TAT														
RELINQUISHED BY 2.	DATE/TIME 2/20/25	RECEIVED BY 2.	<input type="checkbox"/> Ice in Cooler?: _____														
RELINQUISHED BY <i>LP 30</i>	DATE/TIME 2/20/25	RECEIVED FOR LAB BY 3.	Page <u>1</u> of <u>1</u>			SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight						Shipment Complete <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 : Q1401	TETR06	Order Date : 2/20/2025 3:49:00 PM	Project Mgr : Yazmeen
Client Name : Tetra Tech NUS, Inc.		Project Name : CTO WE13	Report Type : Level 4
Client Contact : Ernie Wu		Receive DateTime : 2/20/2025 6:00:00 PM	EDD Type : ADAPT
Invoice Name : Tetra Tech NUS, Inc.		Purchase Order :	Hard Copy Date :
Invoice Contact : Ernie Wu			Date Signoff : 2/21/2025 1:50:04 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUUE DATES
Q1401-01	BP-VPB-192-TB-20250217	Water	02/17/2025	09:00	VOCMS Group1		8260-Low	2 Bus. Days	02/28/2025
Q1401-03	BP-VPB-192-GW-840-842	Water	02/18/2025	09:45	VOCMS Group1		8260-Low	2 Bus. Days	02/28/2025
Q1401-06	BP-VPB-192-GW-900-902	Water	02/19/2025	12:50	VOCMS Group1		8260-Low	2 Bus. Days	02/28/2025
Q1401-07	BP-VPB-192-GW-825-827	Solid	02/17/2025	12:45	VOCMS Group1		8260D	2 Bus. Days	02/28/2025
Q1401-08	BP-VPB-192-GW-860-862	Solid	02/18/2025	12:40	VOCMS Group1		8260D	2 Bus. Days	02/28/2025
Q1401-09	BP-VPB-192-GW-880-882	Solid	02/17/2025 02/19/2025	09:50	VOCMS Group1		8260D	2 Bus. Days	02/28/2025

**LOGIN REPORT/SAMPLE TRANSFER**

Order ID : Q1401      TETR06  
Client Name : Tetra Tech NUS, Inc.  
Client Contact : Ernie Wu  
Invoice Name : Tetra Tech NUS, Inc.  
Invoice Contact : Ernie Wu

Order Date : 2/20/2025 3:49:00 PM  
Project Name : CTO WE13  
Receive DateTime : 2/20/2025 6:00:00 PM  
Purchase Order :

Project Mgr : Yazmeen  
Report Type : Level 4  
EDD Type : ADAPT  
Hard Copy Date :  
Date Signoff : 2/21/2025 1:50:04 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

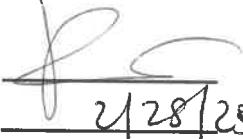
Relinquished By :



Date / Time :

2/28/25

Received By :



Date / Time :

2/28/25

Storage Area : VOA Refrigerator Room