

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 : Q1283

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Order ID : Q1283

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q1283-01
Q1283-02
Q1283-03
Q1283-04
Q1283-05

Client Sample Number

VPB-192-HYD-20250131
BP-VPB-192-TB-20250130
BP-VPB-192-EB-20250131
BP-VPB-192-GW-480-482
BP-VPB-192-GW-500-502

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 9:02 am, Feb 14, 2025

Date: 2/13/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1283

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

5 Water samples were received on 02/03/2025.

B. Parameters

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

C. Analytical Techniques:

The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI The analysis of VOCMS Group1 was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

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

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

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

The Sample #VPB-192-HYD-20250131 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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.

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

F. Manual Integration Comments:

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

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

Signature _____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 9:02 am, Feb 14, 2025

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1283

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

5 Water samples were received on 02/03/2025.

B. Parameters

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

C. Analytical Techniques:

The samples were analyzed on instrument BNA_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for PB166533BSD [Nitrobenzene-d5 - 114%] failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken also VPB-192-HYD-20250131 [2-Methylnaphthalene-d10 - 16%], VPB-192-HYD-20250131RE [2-Methylnaphthalene-d10 - 15%], All the failure samples in surrogates were reanalyzed to confirm the results as per method and reported in the data.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration File ID BN036303.D met the requirements except for 2,4,6-Tribromophenol , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.

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

The Tuning criteria met requirements.

E. Additional Comments:

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

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

The not QT review data is reported in the Miscellaneous.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

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

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

Signature_____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 9:02 am, Feb 14, 2025

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1283

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 02/13/2025

LAB CHRONICLE

OrderID:	Q1283	OrderDate:	2/3/2025 4:41:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	D11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1283-01	VPB-192-HYD-20250131	Water			01/31/25			02/03/25
			VOCMS Group1	8260-Low			02/11/25	
Q1283-02	BP-VPB-192-TB-20250130	Water			01/30/25			02/03/25
			VOCMS Group1	8260-Low			02/11/25	
Q1283-03	BP-VPB-192-EB-20250131	Water			01/31/25			02/03/25
			VOCMS Group1	8260-Low			02/11/25	
Q1283-04	BP-VPB-192-GW-480-482	Water			01/30/25			02/03/25
			VOCMS Group1	8260-Low			02/11/25	
Q1283-05	BP-VPB-192-GW-500-502	Water			01/31/25			02/03/25
			VOCMS Group1	8260-Low			02/11/25	

Hit Summary Sheet
SW-846

SDG No.: Q1283
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	VPB-192-HYD-20250131								
Q1283-01	VPB-192-HYD-202	Water	Acetone	1.90	J	1.40	3.80	5.00	ug/L
Q1283-01	VPB-192-HYD-202	Water	Dibromochloromethane	1.20		0.18	0.50	1.00	ug/L
			Total Voc :	3.10					
			Total Concentration:	3.10					
Client ID:	BP-VPB-192-TB-20250130								
Q1283-02	BP-VPB-192-TB-20	Water	Acetone	1.60	J	1.40	3.80	5.00	ug/L
			Total Voc :	1.60					
			Total Concentration:	1.60					
Client ID:	BP-VPB-192-EB-20250131								
Q1283-03	BP-VPB-192-EB-20	Water	Acetone	3.20	J	1.40	3.80	5.00	ug/L
			Total Voc :	3.20					
			Total Concentration:	3.20					
Client ID:	BP-VPB-192-GW-480-482								
Q1283-04	BP-VPB-192-GW-4	Water	Acetone	6.70		1.40	3.80	5.00	ug/L
Q1283-04	BP-VPB-192-GW-4	Water	Carbon Disulfide	0.45	J	0.32	0.75	1.00	ug/L
			Total Voc :	7.15					
			Total Concentration:	7.15					
Client ID:	BP-VPB-192-GW-500-502								
Q1283-05	BP-VPB-192-GW-5	Water	Acetone	4.80	J	1.40	3.80	5.00	ug/L
			Total Voc :	4.80					
			Total Concentration:	4.80					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/31/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	VPB-192-HYD-20250131			SDG No.:	Q1283	
Lab Sample ID:	Q1283-01			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
VX044900.D	1		02/11/25 12:57	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
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	1.90	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/31/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	VPB-192-HYD-20250131		SDG No.:	Q1283	
Lab Sample ID:	Q1283-01		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
VX044900.D	1		02/11/25 12:57	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	1.20		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
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.3		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	49.3		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.0		85 - 114		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	91700	5.544				
540-36-3	1,4-Difluorobenzene	188000	6.757				
3114-55-4	Chlorobenzene-d5	169000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	73600	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/31/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	VPB-192-HYD-20250131		SDG No.:	Q1283	
Lab Sample ID:	Q1283-01		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
VX044900.D	1		02/11/25 12:57	VX021125

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:	01/30/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-TB-20250130			SDG No.:	Q1283	
Lab Sample ID:	Q1283-02			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044901.D	1		02/11/25 13:20	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
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	1.60	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/30/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-TB-20250130		SDG No.:	Q1283	
Lab Sample ID:	Q1283-02		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044901.D	1		02/11/25 13:20	VX021125

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
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.5		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	49.4		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	50.3		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.1		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	94300	5.544				
540-36-3	1,4-Difluorobenzene	194000	6.757				
3114-55-4	Chlorobenzene-d5	175000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	76600	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/30/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-TB-20250130		SDG No.:	Q1283	
Lab Sample ID:	Q1283-02		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044901.D	1		02/11/25 13:20	VX021125

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/31/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-EB-20250131			SDG No.:	Q1283	
Lab Sample ID:	Q1283-03			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
VX044902.D	1		02/11/25 13:43	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
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	3.20	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/31/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-EB-20250131			SDG No.:	Q1283	
Lab Sample ID:	Q1283-03			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
VX044902.D	1		02/11/25 13:43	VX021125

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
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.9		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	94100	5.544				
540-36-3	1,4-Difluorobenzene	192000	6.757				
3114-55-4	Chlorobenzene-d5	173000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	73700	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/31/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-EB-20250131		SDG No.:	Q1283	
Lab Sample ID:	Q1283-03		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
VX044902.D	1		02/11/25 13:43	VX021125

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/30/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-GW-480-482			SDG No.:	Q1283	
Lab Sample ID:	Q1283-04			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044903.D	1		02/11/25 14:06	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	3.80	U	1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	0.75	U	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.50	U	0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.75	U	0.26	0.75	1.00	ug/L
67-64-1	Acetone	6.70		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.45	J	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/30/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-GW-480-482			SDG No.:	Q1283	
Lab Sample ID:	Q1283-04			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044903.D	1		02/11/25 14:06	VX021125

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
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	54.4		81 - 118		109%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.6		85 - 114		107%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	92100	5.55				
540-36-3	1,4-Difluorobenzene	189000	6.757				
3114-55-4	Chlorobenzene-d5	174000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	77100	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/30/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-GW-480-482		SDG No.:	Q1283	
Lab Sample ID:	Q1283-04		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044903.D	1		02/11/25 14:06	VX021125

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/31/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-GW-500-502			SDG No.:	Q1283	
Lab Sample ID:	Q1283-05			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044904.D	1		02/11/25 14:29	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	3.80	U	1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	0.75	U	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.50	U	0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.75	U	0.26	0.75	1.00	ug/L
67-64-1	Acetone	4.80	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/31/25	
Project:	CTO WE13			Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-GW-500-502			SDG No.:	Q1283	
Lab Sample ID:	Q1283-05			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044904.D	1		02/11/25 14:29	VX021125

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
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.0		81 - 118		106%	SPK: 50
1868-53-7	Dibromofluoromethane	50.5		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	49.6		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		85 - 114		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	94200	5.544				
540-36-3	1,4-Difluorobenzene	191000	6.757				
3114-55-4	Chlorobenzene-d5	173000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	74300	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/31/25	
Project:	CTO WE13		Date Received:	02/03/25	
Client Sample ID:	BP-VPB-192-GW-500-502		SDG No.:	Q1283	
Lab Sample ID:	Q1283-05		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044904.D	1		02/11/25 14:29	VX021125

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

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



QC SUMMARY

Surrogate Summary

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1283-01	VPB-192-HYD-20250131	1,2-Dichloroethane-d4	50	53.3	107	81	118
		Dibromofluoromethane	50	49.3	99	80	119
		Toluene-d8	50	49.5	99	89	112
		4-Bromofluorobenzene	50	51.0	102	85	114
Q1283-02	BP-VPB-192-TB-20250130	1,2-Dichloroethane-d4	50	53.5	107	81	118
		Dibromofluoromethane	50	49.4	99	80	119
		Toluene-d8	50	50.3	101	89	112
		4-Bromofluorobenzene	50	52.1	104	85	114
Q1283-03	BP-VPB-192-EB-20250131	1,2-Dichloroethane-d4	50	52.9	106	81	118
		Dibromofluoromethane	50	50.4	101	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	51.8	104	85	114
Q1283-04	BP-VPB-192-GW-480-482	1,2-Dichloroethane-d4	50	54.4	109	81	118
		Dibromofluoromethane	50	50.3	101	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	53.6	107	85	114
Q1283-05	BP-VPB-192-GW-500-502	1,2-Dichloroethane-d4	50	53.0	106	81	118
		Dibromofluoromethane	50	50.5	101	80	119
		Toluene-d8	50	49.6	99	89	112
		4-Bromofluorobenzene	50	51.6	103	85	114
VX0211WBL01	VX0211WBL01	1,2-Dichloroethane-d4	50	53.5	107	81	118
		Dibromofluoromethane	50	51.0	102	80	119
		Toluene-d8	50	50.3	100	89	112
		4-Bromofluorobenzene	50	52.4	105	85	114
VX0211WBS01	VX0211WBS01	1,2-Dichloroethane-d4	50	43.8	88	81	118
		Dibromofluoromethane	50	45.5	91	80	119
		Toluene-d8	50	46.2	92	89	112
		4-Bromofluorobenzene	50	47.4	95	85	114
VX0211WBSD0	VX0211WBSD01	1,2-Dichloroethane-d4	50	49.4	99	81	118
		Dibromofluoromethane	50	48.8	98	80	119
		Toluene-d8	50	49.0	98	89	112
		4-Bromofluorobenzene	50	49.6	99	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX044896.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VX0211WBS01	Chloromethane	20	17.8	ug/L	89			50	139	
	Vinyl chloride	20	17.9	ug/L	90			58	137	
	Bromomethane	20	19.0	ug/L	95			53	141	
	Chloroethane	20	22.6	ug/L	113			60	138	
	Trichlorofluoromethane	20	18.3	ug/L	92			65	141	
	1,1,2-Trichlorotrifluoroethane	20	18.5	ug/L	93			70	136	
	1,1-Dichloroethene	20	18.0	ug/L	90			71	131	
	Acetone	100	88.2	ug/L	88			39	160	
	Carbon disulfide	20	17.2	ug/L	86			64	133	
	Methyl tert-butyl Ether	20	17.8	ug/L	89			71	124	
	Methylene Chloride	20	17.8	ug/L	89			74	124	
	trans-1,2-Dichloroethene	20	18.0	ug/L	90			75	124	
	1,1-Dichloroethane	20	18.1	ug/L	91			77	125	
	2-Butanone	100	90.3	ug/L	90			56	143	
	Carbon Tetrachloride	20	19.3	ug/L	97			72	136	
	cis-1,2-Dichloroethene	20	18.6	ug/L	93			78	123	
	Chloroform	20	18.5	ug/L	93			79	124	
	1,1,1-Trichloroethane	20	18.1	ug/L	91			74	131	
	Methylcyclohexane	20	20.3	ug/L	102			72	132	
	Benzene	20	19.2	ug/L	96			79	120	
	1,2-Dichloroethane	20	19.7	ug/L	99			73	128	
	Trichloroethene	20	19.2	ug/L	96			79	123	
	1,2-Dichloropropane	20	19.1	ug/L	96			78	122	
	Bromodichloromethane	20	19.5	ug/L	98			79	125	
	4-Methyl-2-Pentanone	100	99.3	ug/L	99			67	130	
	Toluene	20	19.5	ug/L	98			80	121	
	t-1,3-Dichloropropene	20	18.6	ug/L	93			73	127	
	cis-1,3-Dichloropropene	20	19.1	ug/L	96			75	124	
	1,1,2-Trichloroethane	20	19.8	ug/L	99			80	119	
	2-Hexanone	100	100	ug/L	100			57	139	
	Dibromochloromethane	20	19.0	ug/L	95			74	126	
	Tetrachloroethene	20	18.8	ug/L	94			74	129	
	Chlorobenzene	20	19.0	ug/L	95			82	118	
	Ethyl Benzene	20	19.1	ug/L	96			79	121	
	m/p-Xylenes	40	38.9	ug/L	97			80	121	
	o-Xylene	20	19.2	ug/L	96			78	122	
	Styrene	20	19.3	ug/L	97			78	123	
	Bromoform	20	19.2	ug/L	96			66	130	
	Isopropylbenzene	20	18.4	ug/L	92			72	131	
	1,1,2,2-Tetrachloroethane	20	18.5	ug/L	93			71	121	
	1,3-Dichlorobenzene	20	19.2	ug/L	96			80	119	
	1,4-Dichlorobenzene	20	18.7	ug/L	94			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.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX044897.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0211WBSD01	Chloromethane	20	18.7	ug/L	94	5		50	139	20
	Vinyl chloride	20	19.2	ug/L	96	6		58	137	20
	Bromomethane	20	20.1	ug/L	101	6		53	141	20
	Chloroethane	20	18.9	ug/L	95	17		60	138	20
	Trichlorofluoromethane	20	19.5	ug/L	98	6		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	20.3	ug/L	102	9		70	136	20
	1,1-Dichloroethene	20	19.3	ug/L	97	7		71	131	20
	Acetone	100	100	ug/L	100	13		39	160	20
	Carbon disulfide	20	18.6	ug/L	93	8		64	133	20
	Methyl tert-butyl Ether	20	20.2	ug/L	101	13		71	124	20
	Methylene Chloride	20	19.6	ug/L	98	10		74	124	20
	trans-1,2-Dichloroethene	20	19.7	ug/L	99	10		75	124	20
	1,1-Dichloroethane	20	19.6	ug/L	98	7		77	125	20
	2-Butanone	100	100	ug/L	100	11		56	143	20
	Carbon Tetrachloride	20	20.0	ug/L	100	3		72	136	20
	cis-1,2-Dichloroethene	20	20.0	ug/L	100	7		78	123	20
	Chloroform	20	19.7	ug/L	99	6		79	124	20
	1,1,1-Trichloroethane	20	19.6	ug/L	98	7		74	131	20
	Methylcyclohexane	20	20.8	ug/L	104	2		72	132	20
	Benzene	20	20.2	ug/L	101	5		79	120	20
	1,2-Dichloroethane	20	21.2	ug/L	106	7		73	128	20
	Trichloroethene	20	19.7	ug/L	99	3		79	123	20
	1,2-Dichloropropane	20	20.4	ug/L	102	6		78	122	20
	Bromodichloromethane	20	20.8	ug/L	104	6		79	125	20
	4-Methyl-2-Pentanone	100	110	ug/L	110	11		67	130	20
	Toluene	20	20.9	ug/L	104	6		80	121	20
	t-1,3-Dichloropropene	20	20.0	ug/L	100	7		73	127	20
	cis-1,3-Dichloropropene	20	20.5	ug/L	103	7		75	124	20
	1,1,2-Trichloroethane	20	21.3	ug/L	106	7		80	119	20
	2-Hexanone	100	110	ug/L	110	10		57	139	20
	Dibromochloromethane	20	21.0	ug/L	105	10		74	126	20
	Tetrachloroethene	20	20.0	ug/L	100	6		74	129	20
	Chlorobenzene	20	20.3	ug/L	102	7		82	118	20
	Ethyl Benzene	20	20.5	ug/L	103	7		79	121	20
	m/p-Xylenes	40	41.7	ug/L	104	7		80	121	20
	o-Xylene	20	20.5	ug/L	103	7		78	122	20
	Styrene	20	20.9	ug/L	104	7		78	123	20
	Bromoform	20	20.4	ug/L	102	6		66	130	20
	Isopropylbenzene	20	20.5	ug/L	103	11		72	131	20
	1,1,2,2-Tetrachloroethane	20	20.4	ug/L	102	9		71	121	20
	1,3-Dichlorobenzene	20	20.1	ug/L	101	5		80	119	20
	1,4-Dichlorobenzene	20	20.0	ug/L	100	6		79	118	20
	1,2-Dichlorobenzene	20	20.8	ug/L	104	7		80	119	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0211WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1283

SAS No.: Q1283 SDG NO.: Q1283

Lab File ID: VX044895.D

Lab Sample ID: VX0211WBL01

Date Analyzed: 02/11/2025

Time Analyzed: 11:00

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0211WBS01	VX0211WBS01	VX044896.D	02/11/2025
VX0211WBSD01	VX0211WBSD01	VX044897.D	02/11/2025
VPB-192-HYD-20250131	Q1283-01	VX044900.D	02/11/2025
BP-VPB-192-TB-20250130	Q1283-02	VX044901.D	02/11/2025
BP-VPB-192-EB-20250131	Q1283-03	VX044902.D	02/11/2025
BP-VPB-192-GW-480-482	Q1283-04	VX044903.D	02/11/2025
BP-VPB-192-GW-500-502	Q1283-05	VX044904.D	02/11/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283
Lab File ID: VX044867.D BFB Injection Date: 02/10/2025
Instrument ID: MSVOA_X BFB Injection Time: 09:35
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	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
VSTDIC001	VSTDIC001	VX044868.D	02/10/2025	10:25
VSTDIC005	VSTDIC005	VX044869.D	02/10/2025	10:48
VSTDIC020	VSTDIC020	VX044870.D	02/10/2025	11:11
VSTDIC050	VSTDIC050	VX044871.D	02/10/2025	11:34
VSTDIC100	VSTDIC100	VX044872.D	02/10/2025	12:05
VSTDIC150	VSTDIC150	VX044873.D	02/10/2025	12:28

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283
Lab File ID: VX044892.D BFB Injection Date: 02/11/2025
Instrument ID: MSVOA_X BFB Injection Time: 08:50
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	53.4
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	0.6 (0.9) 1
174	50.0 - 100.0% of mass 95	71.2
175	5.0 - 9.0% of mass 174	5.7 (7.9) 1
176	95.0 - 101.0% of mass 174	68.2 (95.8) 1
177	5.0 - 9.0% of mass 176	4.6 (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	VX044893.D	02/11/2025	10:09
VX0211WBL01	VX0211WBL01	VX044895.D	02/11/2025	11:00
VX0211WBS01	VX0211WBS01	VX044896.D	02/11/2025	11:23
VX0211WBSD01	VX0211WBSD01	VX044897.D	02/11/2025	11:48
VPB-192-HYD-20250131	Q1283-01	VX044900.D	02/11/2025	12:57
BP-VPB-192-TB-20250130	Q1283-02	VX044901.D	02/11/2025	13:20
BP-VPB-192-EB-20250131	Q1283-03	VX044902.D	02/11/2025	13:43
BP-VPB-192-GW-480-482	Q1283-04	VX044903.D	02/11/2025	14:06
BP-VPB-192-GW-500-502	Q1283-05	VX044904.D	02/11/2025	14:29
VSTDCCC050EC	VSTDCCC050	VX044918.D	02/11/2025	19:50

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283
Lab File ID: VX044893.D Date Analyzed: 02/11/2025
Instrument ID: MSVOA_X Time Analyzed: 10:09
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	125474	5.54	221806	6.75	200705	10.05
UPPER LIMIT	250948	6.044	443612	7.251	401410	10.549
LOWER LIMIT	62737	5.044	110903	6.251	100353	9.549
EPA SAMPLE NO.						
VPB-192-HYD-20250131	91747	5.54	188311	6.76	169014	10.05
BP-VPB-192-TB-20250130	94281	5.54	193913	6.76	175364	10.05
BP-VPB-192-EB-20250131	94090	5.54	191976	6.76	173093	10.05
BP-VPB-192-GW-480-482	92053	5.55	188552	6.76	173671	10.05
BP-VPB-192-GW-500-502	94241	5.54	190687	6.76	172611	10.05
VX0211WBL01	98496	5.54	199075	6.76	183423	10.05
VX0211WBS01	122388	5.54	213544	6.76	190238	10.05
VX0211WBSD01	116406	5.54	211404	6.76	186335	10.05

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283
Lab File ID: VX044893.D Date Analyzed: 02/11/2025
Instrument ID: MSVOA_X Time Analyzed: 10:09
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	89456	12.018				
UPPER LIMIT	178912	12.518				
LOWER LIMIT	44728	11.518				
EPA SAMPLE NO.						
VPB-192-HYD-20250131	73561	12.02				
BP-VPB-192-TB-20250130	76629	12.02				
BP-VPB-192-EB-20250131	73691	12.02				
BP-VPB-192-GW-480-482	77145	12.02				
BP-VPB-192-GW-500-502	74263	12.02				
VX0211WBL01	79632	12.02				
VX0211WBS01	87843	12.02				
VX0211WBSD01	83644	12.02				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0211WBL01		SDG No.:	Q1283
Lab Sample ID:	VX0211WBL01		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
VX044895.D	1		02/11/25 11:00	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
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:	VX0211WBL01		SDG No.:	Q1283	
Lab Sample ID:	VX0211WBL01		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
VX044895.D	1		02/11/25 11:00	VX021125

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
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.5		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.2		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.4		85 - 114		105%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	98500	5.544				
540-36-3	1,4-Difluorobenzene	199000	6.757				
3114-55-4	Chlorobenzene-d5	183000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	79600	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:	VX0211WBS01		SDG No.:	Q1283
Lab Sample ID:	VX0211WBS01		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
VX044896.D	1		02/11/25 11:23	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	17.8		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.9		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	19.0		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	22.6		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.3		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.5		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.0		0.26	0.75	1.00	ug/L
67-64-1	Acetone	88.2		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	17.2		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.8		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	17.8		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.0		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.1		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	90.3		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.3		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	18.5		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.1		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	20.3		0.19	0.50	1.00	ug/L
71-43-2	Benzene	19.2		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.7		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	19.1		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	19.5		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	99.3		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.5		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.6		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.1		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.8		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	100		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:	VX0211WBS01	SDG No.:	Q1283	
Lab Sample ID:	VX0211WBS01	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	
		Final Vol:	5000	uL
		Test:	VOCMS Group1	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044896.D	1		02/11/25 11:23	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	19.0		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	18.8		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.0		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.1		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.9		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.2		0.14	0.50	1.00	ug/L
100-42-5	Styrene	19.3		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	19.2		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.4		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.5		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	18.7		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.4		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.8		81 - 118		88%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		80 - 119		91%	SPK: 50
2037-26-5	Toluene-d8	46.2		89 - 112		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.4		85 - 114		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	122000	5.544				
540-36-3	1,4-Difluorobenzene	214000	6.757				
3114-55-4	Chlorobenzene-d5	190000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	87800	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:	VX0211WBSD01		SDG No.:	Q1283
Lab Sample ID:	VX0211WBSD01		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
VX044897.D	1		02/11/25 11:48	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.7		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	19.2		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	20.1		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	18.9		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.5		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.3		0.26	0.75	1.00	ug/L
67-64-1	Acetone	100		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	18.6		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.2		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.6		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.7		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.6		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	100		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.0		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.7		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.6		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	20.8		0.19	0.50	1.00	ug/L
71-43-2	Benzene	20.2		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.2		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.7		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.4		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.8		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.75	2.50	5.00	ug/L
108-88-3	Toluene	20.9		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	20.0		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.5		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.3		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	110		1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	VX0211WBSD01		SDG No.:	Q1283	
Lab Sample ID:	VX0211WBSD01		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
VX044897.D	1		02/11/25 11:48	VX021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	21.0		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	20.0		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.3		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.5		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	41.7		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.5		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.9		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	20.4		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	20.5		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	20.4		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.1		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	20.0		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.8		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.4		81 - 118		99%	SPK: 50
1868-53-7	Dibromofluoromethane	48.8		80 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	49.0		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.6		85 - 114		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	116000	5.538				
540-36-3	1,4-Difluorobenzene	211000	6.757				
3114-55-4	Chlorobenzene-d5	186000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	83600	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: MSVOA_X Calibration Date(s): 02/10/2025 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		
RRF050 = VX044871.D			RRF100 = VX044872.D			RRF150 = VX044873.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 Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283
Instrument ID: MSVOA_X Calibration Date(s): 02/10/2025 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			
		RRF050 = VX044871.D		RRF100 = VX044872.D		RRF150 = VX044873.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Dibromochloromethane	0.317	0.342	0.381	0.373	0.368	0.370	0.359	6.7	
Tetrachloroethene	0.306	0.311	0.343	0.310	0.307	0.314	0.315	4.4	
Chlorobenzene	0.969	1.093	1.140	1.096	1.071	1.076	1.074	5.3	
Ethyl Benzene	1.690	1.873	2.021	1.935	1.923	1.929	1.895	5.9	
m/p-Xylenes	0.616	0.700	0.754	0.724	0.706	0.694	0.699	6.6	
o-Xylene	0.661	0.721	0.747	0.707	0.691	0.681	0.701	4.4	
Styrene	0.909	1.124	1.249	1.199	1.161	1.139	1.130	10.4	
Bromoform	0.186	0.247	0.272	0.280	0.276	0.287	0.258	14.7	
Isopropylbenzene	3.735	4.012	4.347	4.045	3.940	4.076	4.026	4.9	
1,1,2,2-Tetrachloroethane	1.429	1.403	1.438	1.366	1.305	1.360	1.383	3.6	
1,3-Dichlorobenzene	1.616	1.669	1.741	1.679	1.663	1.703	1.678	2.5	
1,4-Dichlorobenzene	1.662	1.712	1.762	1.686	1.660	1.701	1.697	2.2	
1,2-Dichlorobenzene	1.512	1.713	1.763	1.666	1.604	1.639	1.650	5.3	
1,2-Dichloroethane-d4		0.764	0.718	0.723	0.707	0.747	0.732	3.2	
Dibromofluoromethane		0.335	0.322	0.320	0.320	0.328	0.325	2	
Toluene-d8		1.239	1.249	1.239	1.208	1.212	1.229	1.5	
4-Bromofluorobenzene		0.404	0.410	0.431	0.415	0.412	0.414	2.5	

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: MSVOA_X Calibration Date/Time: 02/11/2025 10:09

Lab File ID: VX044893.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	0.769	0.1	-9.95	20
Vinyl Chloride	0.827	0.753		-8.95	20
Bromomethane	0.247	0.240		-2.83	20
Chloroethane	0.307	0.329		7.17	20
Trichlorofluoromethane	1.046	0.998		-4.59	20
1,1,2-Trichlorotrifluoroethane	0.632	0.607		-3.96	20
1,1-Dichloroethene	0.644	0.595		-7.61	20
Acetone	0.294	0.277		-5.78	20
Carbon Disulfide	1.767	1.631		-7.7	20
Methyl tert-butyl Ether	2.050	2.002		-2.34	20
Methylene Chloride	0.721	0.677		-6.1	20
trans-1,2-Dichloroethene	0.634	0.597		-5.84	20
1,1-Dichloroethane	1.233	1.179	0.1	-4.38	20
2-Butanone	0.478	0.467		-2.3	20
Carbon Tetrachloride	0.460	0.449		-2.39	20
cis-1,2-Dichloroethene	0.762	0.732		-3.94	20
Chloroform	1.196	1.146		-4.18	20
1,1,1-Trichloroethane	1.014	0.966		-4.73	20
Methylcyclohexane	0.606	0.637		5.12	20
Benzene	1.465	1.449		-1.09	20
1,2-Dichloroethane	0.467	0.482		3.21	20
Trichloroethene	0.335	0.334		-0.3	20
1,2-Dichloropropane	0.364	0.371		1.92	20
Bromodichloromethane	0.489	0.514		5.11	20
4-Methyl-2-Pentanone	0.512	0.530		3.52	20
Toluene	0.872	0.893		2.41	20
t-1,3-Dichloropropene	0.495	0.525		6.06	20
cis-1,3-Dichloropropene	0.552	0.586		6.16	20
1,1,2-Trichloroethane	0.335	0.344		2.69	20
2-Hexanone	0.369	0.384		4.07	20
Dibromochloromethane	0.359	0.377		5.01	20
Tetrachloroethene	0.315	0.300		-4.76	20
Chlorobenzene	1.074	1.049	0.3	-2.33	20
Ethyl Benzene	1.895	1.879		-0.84	20
m/p-Xylenes	0.699	0.699		0	20
o-Xylene	0.701	0.691		-1.43	20
Styrene	1.130	1.147		1.5	20
Bromoform	0.258	0.264	0.1	2.33	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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: MSVOA_X Calibration Date/Time: 02/11/2025 10:09

Lab File ID: VX044893.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	3.967		-1.47	20
1,1,2,2-Tetrachloroethane	1.383	1.311	0.3	-5.21	20
1,3-Dichlorobenzene	1.678	1.655		-1.37	20
1,4-Dichlorobenzene	1.697	1.639		-3.42	20
1,2-Dichlorobenzene	1.650	1.615		-2.12	20
1,2-Dichloroethane-d4	0.732	0.712		-2.73	20
Dibromofluoromethane	0.325	0.323		-0.62	20
Toluene-d8	1.229	1.230		0.08	20
4-Bromofluorobenzene	0.414	0.426		2.9	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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: MSVOA_X Calibration Date/Time: 02/11/2025 19:50

Lab File ID: VX044918.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	0.814	0.1	-4.68	50
Vinyl Chloride	0.827	0.810		-2.06	50
Bromomethane	0.247	0.249		0.81	50
Chloroethane	0.307	0.270		-12.05	50
Trichlorofluoromethane	1.046	1.025		-2.01	50
1,1,2-Trichlorotrifluoroethane	0.632	0.619		-2.06	50
1,1-Dichloroethene	0.644	0.623		-3.26	50
Acetone	0.294	0.305		3.74	50
Carbon Disulfide	1.767	1.618		-8.43	50
Methyl tert-butyl Ether	2.050	2.032		-0.88	50
Methylene Chloride	0.721	0.705		-2.22	50
trans-1,2-Dichloroethene	0.634	0.630		-0.63	50
1,1-Dichloroethane	1.233	1.221	0.1	-0.97	50
2-Butanone	0.478	0.501		4.81	50
Carbon Tetrachloride	0.460	0.434		-5.65	50
cis-1,2-Dichloroethene	0.762	0.753		-1.18	50
Chloroform	1.196	1.191		-0.42	50
1,1,1-Trichloroethane	1.014	0.996		-1.77	50
Methylcyclohexane	0.606	0.593		-2.14	50
Benzene	1.465	1.452		-0.89	50
1,2-Dichloroethane	0.467	0.479		2.57	50
Trichloroethene	0.335	0.327		-2.39	50
1,2-Dichloropropane	0.364	0.360		-1.1	50
Bromodichloromethane	0.489	0.494		1.02	50
4-Methyl-2-Pentanone	0.512	0.538		5.08	50
Toluene	0.872	0.876		0.46	50
t-1,3-Dichloropropene	0.495	0.479		-3.23	50
cis-1,3-Dichloropropene	0.552	0.542		-1.81	50
1,1,2-Trichloroethane	0.335	0.336		0.3	50
2-Hexanone	0.369	0.396		7.32	50
Dibromochloromethane	0.359	0.359		0	50
Tetrachloroethene	0.315	0.295		-6.35	50
Chlorobenzene	1.074	1.035	0.3	-3.63	50
Ethyl Benzene	1.895	1.868		-1.42	50
m/p-Xylenes	0.699	0.685		-2	50
o-Xylene	0.701	0.680		-3	50
Styrene	1.130	1.139		0.8	50
Bromoform	0.258	0.253	0.1	-1.94	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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: MSVOA_X Calibration Date/Time: 02/11/2025 19:50

Lab File ID: VX044918.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:25 12:28

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	4.026	4.019		-0.17	50
1,1,2,2-Tetrachloroethane	1.383	1.357	0.3	-1.88	50
1,3-Dichlorobenzene	1.678	1.635		-2.56	50
1,4-Dichlorobenzene	1.697	1.629		-4.01	50
1,2-Dichlorobenzene	1.650	1.651		0.06	50
1,2-Dichloroethane-d4	0.732	0.764		4.37	50
Dibromofluoromethane	0.325	0.335		3.08	50
Toluene-d8	1.229	1.258		2.36	50
4-Bromofluorobenzene	0.414	0.434		4.83	50

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

LAB CHRONICLE

OrderID:	Q1283	OrderDate:	2/3/2025 4:41:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	D11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1283-01	VPB-192-HYD-202501 31	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	
Q1283-01RE	VPB-192-HYD-202501 31RE	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	
Q1283-03	BP-VPB-192-EB-2025 0131	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	
Q1283-05	BP-VPB-192-GW-500- 502	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	



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

Hit Summary Sheet SW-846

SDG No.: Q1283
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : BP-VPB-192-GW-500-502								
Q1283-05	BP-VPB-192-GW-500-500 WATER	1,4-Dioxane	3.200		0.07	0.21	0.21	ug/L
		Total Svoc :		3.20				
		Total Concentration:		3.20				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	VPB-192-HYD-20250131	SDG No.:	Q1283
Lab Sample ID:	Q1283-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 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
BN036316.D	1	02/04/25 11:00	02/06/25 02:34	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.062	*	30 - 150		16%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		102%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		99%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2360	7.775				
1146-65-2	Naphthalene-d8	5280	10.562				
15067-26-2	Acenaphthene-d10	2770	14.409				
1517-22-2	Phenanthrene-d10	5330	17.161				
1719-03-5	Chrysene-d12	5010	21.339				
1520-96-3	Perylene-d12	4930	23.622				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	VPB-192-HYD-20250131RE	SDG No.:	Q1283
Lab Sample ID:	Q1283-01RE	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 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
BN036331.D	1	02/04/25 11:00	02/06/25 12:15	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.061	*	30 - 150		15%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		99%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2280	7.775				
1146-65-2	Naphthalene-d8	4840	10.562				
15067-26-2	Acenaphthene-d10	2450	14.409				
1517-22-2	Phenanthrene-d10	4210	17.161				
1719-03-5	Chrysene-d12	3680	21.34				
1520-96-3	Perylene-d12	3490	23.627				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/31/25
Project:	CTO WE13		Date Received:	02/03/25
Client Sample ID:	BP-VPB-192-EB-20250131		SDG No.:	Q1283
Lab Sample ID:	Q1283-03		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	970	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
BN036322.D	1	02/04/25 11:00	02/06/25 06:51	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		106%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		93%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2020	7.775				
1146-65-2	Naphthalene-d8	4470	10.562				
15067-26-2	Acenaphthene-d10	2230	14.409				
1517-22-2	Phenanthrene-d10	4320	17.148				
1719-03-5	Chrysene-d12	3940	21.339				
1520-96-3	Perylene-d12	4430	23.624				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	BP-VPB-192-GW-500-502	SDG No.:	Q1283
Lab Sample ID:	Q1283-05	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036323.D	1	02/04/25 11:00	02/06/25 07:27	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.20		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		73%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		99%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2180	7.775				
1146-65-2	Naphthalene-d8	4870	10.562				
15067-26-2	Acenaphthene-d10	2590	14.409				
1517-22-2	Phenanthrene-d10	5150	17.149				
1719-03-5	Chrysene-d12	5130	21.34				
1520-96-3	Perylene-d12	5440	23.625				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166533BL	PB166533BL	2-Methylnaphthalene-d10	0.4	0.42	105		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.44	111		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.42	106		58	132
PB166533BS	PB166533BS	2-Methylnaphthalene-d10	0.4	0.54	134		30	150
		Fluoranthene-d10	0.4	0.40	101		30	150
		Nitrobenzene-d5	0.4	0.42	104		55	111
		2-Fluorobiphenyl	0.4	0.36	91		53	106
		Terphenyl-d14	0.4	0.40	99		58	132
PB166533BSD	PB166533BSD	2-Methylnaphthalene-d10	0.4	0.57	143		30	150
		Fluoranthene-d10	0.4	0.43	106		30	150
		Nitrobenzene-d5	0.4	0.46	114	*	55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.42	105		58	132
Q1283-01	VPB-192-HYD-20250131	2-Methylnaphthalene-d10	0.4	0.062	16	*	30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.40	99		55	111
		2-Fluorobiphenyl	0.4	0.34	86		53	106
		Terphenyl-d14	0.4	0.43	108		58	132
Q1283-01RE	VPB-192-HYD-20250131RE	2-Methylnaphthalene-d10	0.4	0.061	15	*	30	150
		Fluoranthene-d10	0.4	0.38	96		30	150
		Nitrobenzene-d5	0.4	0.40	99		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
Q1283-03	BP-VPB-192-EB-20250131	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.42	106		30	150
		Nitrobenzene-d5	0.4	0.37	93		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
Q1283-05	BP-VPB-192-GW-500-502	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.29	73		53	106
		Terphenyl-d14	0.4	0.40	99		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036326.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB166533BS	1,4-Dioxane	0.4	0.38	ug/L	95				70	130	

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036327.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166533BSD	1,4-Dioxane	0.4	0.40	ug/L	100	5			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166533BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1283

SAS No.: Q1283 SDG NO.: Q1283

Lab File ID: BN036321.D

Lab Sample ID: PB166533BL

Instrument ID: BNA_N

Date Extracted: 02/04/2025

Matrix: (soil/water) Water

Date Analyzed: 02/06/2025

Level: (low/med) LOW

Time Analyzed: 06:15

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166533BS	PB166533BS	BN036326.D	02/06/2025
VPB-192-HYD-20250131	Q1283-01	BN036316.D	02/06/2025
BP-VPB-192-EB-20250131	Q1283-03	BN036322.D	02/06/2025
BP-VPB-192-GW-500-502	Q1283-05	BN036323.D	02/06/2025
PB166533BSD	PB166533BSD	BN036327.D	02/06/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1283

SDG NO.: Q1283

Lab File ID: BN036009.D

DFTPP Injection Date: 01/22/2025

Instrument ID: BNA_N

DFTPP Injection Time: 09:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	48.9
68	Less than 2.0% of mass 69	0.5 (1.1) 1
69	Mass 69 relative abundance	45.7
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	47.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 (20.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN036010.D	01/22/2025	11:02
SSTDICC0.2	SSTDICC0.2	BN036011.D	01/22/2025	11:38
SSTDICCC0.4	SSTDICCC0.4	BN036012.D	01/22/2025	12:13
SSTDICC0.8	SSTDICC0.8	BN036013.D	01/22/2025	12:49
SSTDICC1.6	SSTDICC1.6	BN036014.D	01/22/2025	13:25
SSTDICC3.2	SSTDICC3.2	BN036015.D	01/22/2025	14:01
SSTDICC5.0	SSTDICC5.0	BN036016.D	01/22/2025	14:36

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1283

SDG NO.: Q1283

Lab File ID: BN036302.D

DFTPP Injection Date: 02/05/2025

Instrument ID: BNA_N

DFTPP Injection Time: 18:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	49.1
68	Less than 2.0% of mass 69	0.1 (0.3) 1
69	Mass 69 relative abundance	45.4
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	47.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	26.2
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	9.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 (18.9) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN036303.D	02/05/2025	18:47
VPB-192-HYD-20250131	Q1283-01	BN036316.D	02/06/2025	02:34
SSTDCCC0.4EC	SSTDCCC0.4	BN036318.D	02/06/2025	03:45

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1283 SDG NO.: Q1283

Lab File ID: BN036319.D

DFTPP Injection Date: 02/06/2025

Instrument ID: BNA_N

DFTPP Injection Time: 05:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	50.8
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	47
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	48
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.5 (18.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN036320.D	02/06/2025	05:40
PB166533BL	PB166533BL	BN036321.D	02/06/2025	06:15
BP-VPB-192-EB-20250131	Q1283-03	BN036322.D	02/06/2025	06:51
BP-VPB-192-GW-500-502	Q1283-05	BN036323.D	02/06/2025	07:27
PB166533BS	PB166533BS	BN036326.D	02/06/2025	09:15
PB166533BSD	PB166533BSD	BN036327.D	02/06/2025	09:51
VPB-192-HYD-20250131RE	Q1283-01RE	BN036331.D	02/06/2025	12:15
SSTDCCC0.4EC	SSTDCCC0.4	BN036332.D	02/06/2025	12:54

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/05/2025

Lab File ID: BN036303.D Time Analyzed: 18:47

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	2214	7.775	4864	10.56	2378	14.41
UPPER LIMIT	4428	8.275	9728	11.062	4756	14.909
LOWER LIMIT	1107	7.275	2432	10.062	1189	13.909
EPA SAMPLE NO.						
01 VPB-192-HYD-20250131	2355	7.78	5280	10.56	2768	14.41

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/05/2025

Lab File ID: BN036303.D Time Analyzed: 18:47

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	4362	17.161	3774	21.34	4195	23.628
UPPER LIMIT	8724	17.661	7548	21.84	8390	24.128
LOWER LIMIT	2181	16.661	1887	20.84	2097.5	23.128
EPA SAMPLE NO.						
01 VPB-192-HYD-20250131	5326	17.16	5009	21.34	4931	23.62

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/06/2025

Lab File ID: BN036320.D Time Analyzed: 05:40

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	2017	7.775	4328	10.56	2158	14.41
UPPER LIMIT	4034	8.275	8656	11.062	4316	14.909
LOWER LIMIT	1008.5	7.275	2164	10.062	1079	13.909
EPA SAMPLE NO.						
01 PB166533BL	2306	7.78	4718	10.57	2285	14.42
02 PB166533BS	2094	7.78	4542	10.56	2195	14.41
03 PB166533BSD	2075	7.78	4387	10.56	2054	14.41
04 VPB-192-HYD-20250131RE	2278	7.78	4837	10.56	2451	14.41
05 BP-VPB-192-EB-20250131	2015	7.78	4469	10.56	2232	14.41
06 BP-VPB-192-GW-500-502	2177	7.78	4873	10.56	2591	14.41

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/06/2025

Lab File ID: BN036320.D Time Analyzed: 05:40

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	4298	17.149	3803	21.34	4157	23.627
UPPER LIMIT	8596	17.649	7606	21.84	8314	24.127
LOWER LIMIT	2149	16.649	1901.5	20.84	2078.5	23.127
EPA SAMPLE NO.						
01 PB166533BL	4231	17.16	3945	21.35	4266	23.63
02 PB166533BS	4114	17.16	3845	21.34	4110	23.63
03 PB166533BSD	3795	17.16	3518	21.34	3845	23.63
04 VPB-192-HYD-20250131RE	4214	17.16	3676	21.34	3493	23.63
05 BP-VPB-192-EB-20250131	4322	17.15	3942	21.34	4427	23.62
06 BP-VPB-192-GW-500-502	5153	17.15	5130	21.34	5436	23.63

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB166533BL		SDG No.:	Q1283	
Lab Sample ID:	PB166533BL		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
BN036321.D	1	02/04/25 11:00	02/06/25 06:15	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.42		30 - 150		105%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		111%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		106%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2310	7.775				
1146-65-2	Naphthalene-d8	4720	10.573				
15067-26-2	Acenaphthene-d10	2290	14.42				
1517-22-2	Phenanthrene-d10	4230	17.161				
1719-03-5	Chrysene-d12	3950	21.348				
1520-96-3	Perylene-d12	4270	23.627				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB166533BS		SDG No.:	Q1283	
Lab Sample ID:	PB166533BS		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
BN036326.D	1	02/04/25 11:00	02/06/25 09:15	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.38		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.54		30 - 150		134%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		99%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2090	7.775				
1146-65-2	Naphthalene-d8	4540	10.562				
15067-26-2	Acenaphthene-d10	2200	14.409				
1517-22-2	Phenanthrene-d10	4110	17.161				
1719-03-5	Chrysene-d12	3850	21.34				
1520-96-3	Perylene-d12	4110	23.627				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB166533BSD		SDG No.:	Q1283	
Lab Sample ID:	PB166533BSD		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
BN036327.D	1	02/04/25 11:00	02/06/25 09:51	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.40		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.57		30 - 150		143%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		106%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.46	*	55 - 111		114%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		105%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2080	7.775				
1146-65-2	Naphthalene-d8	4390	10.562				
15067-26-2	Acenaphthene-d10	2050	14.409				
1517-22-2	Phenanthrene-d10	3800	17.161				
1719-03-5	Chrysene-d12	3520	21.339				
1520-96-3	Perylene-d12	3850	23.627				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

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

Calibration Files

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

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD

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

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

Method File : 8270-SIM-BN012225.M

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

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06
 Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283
 Instrument ID: BNA_N Calibration Date/Time: 02/05/2025 18:47
 Lab File ID: BN036303.D Init. Calib. Date(s): 01/22/2025 01/22/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:02 14:36
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.565		3.9	20.0
Fluoranthene-d10	1.036	1.052		1.5	20.0
2-Fluorophenol	1.040	1.145		10.1	20.0
Phenol-d6	1.222	1.324		8.3	20.0
Nitrobenzene-d5	0.378	0.409		8.2	20.0
2-Fluorobiphenyl	1.786	1.693		-5.2	20.0
2,4,6-Tribromophenol	0.257	0.198		-23.0	20.0
Terphenyl-d14	0.831	0.860		3.5	20.0
1,4-Dioxane	0.447	0.491		9.8	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: BNA_N Calibration Date/Time: 02/06/2025 03:45

Lab File ID: BN036318.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:02 14:36

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

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

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: BNA_N Calibration Date/Time: 02/06/2025 05:40

Lab File ID: BN036320.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:02 14:36

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

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

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1283 SAS No.: Q1283 SDG No.: Q1283

Instrument ID: BNA_N Calibration Date/Time: 02/06/2025 12:54

Lab File ID: BN036332.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:02 14:36

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

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

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS

CHEMTECH CHAIN OF CUSTODY RECORD		284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 Fax: (908) 78-8922 www.chemtech.net		Chemtech Project Number: <u>Q1283</u>	
CLIENT INFORMATION		PROJECT INFORMATION		BILLING INFORMATION	
COMPANY: Tetra Tech ADDRESS: 4433 Corporation Lane Suite 300 CITY: Virginia Beach STATE: VA ZIP: 23462 ATTENTION: Ernie Wu PHONE: 757-466-4901 FAX: 757-461-4148		PROJECT NAME: NWIRP Bethpage PROJECT #: 112G08005-WE13 LOCATION: VPB-192 PROJECT MANAGER: Ernie Wu E-MAIL: ernie.wu@tetrattech.com PHONE: 757-466-4901 FAX: 757-461-4148		BILL TO: SEE CONTRACT PO# ADDRESS: CITY: STATE: ZIP: ATTENTION: PHONE:	
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS	
FAX: _____ 10 _____ DAYS* HARD COPY: _____ 10 _____ DAYS* EDD _____ 10 _____ DAYS* * TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		☐ RESULTS ONLY ☐ USEPA CLP ☐ RESULTS + QC ☐ New York State ASP "B" ☐ New Jersey REDUCED ☐ New York State ASP "A" ☐ New Jersey CLP ☐ Other _____ ☐ EDD Format _____		VOC(SW846-8260B) _____ 1,4 Dioxane (8270 SWM) _____ 1 2 3 4 5 6 7 8 9	
				PRESERVATIVES	
CHEMTECH SAMPLE ID		PROJECT SAMPLE IDENTIFICATION		SAMPLE MATRIX	
		SAMPLE TYPE		SAMPLE COLLECTION	
		COMP GRAB		DATE TIME	
				# of Bottles	
				A 1 2 3 4 5 6 7 8 9	
				1 2 3 4 5 6 7 8 9	
				COMMENTS	
				<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other	
1.		VPB-192-HYD-20250131		AQ	
2.		BP-VPB-192-TB-20250130		QA	
3.		BP-VPB-192-EB-20250131		QA	
4.		BP-VPB-192-GW-480-482		AQ	
5.		BP-VPB-192-GW-500-502		AQ	
6.					
7.					
8.					
9.					
10.					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY					
RELINQUISHED BY SAMPLER		DATE/TIME RECEIVED BY		1646 2-3-25	
1. <u>[Signature]</u>		02/03/25		1. <u>[Signature]</u>	
RELINQUISHED BY		DATE/TIME RECEIVED BY		Conditions of bottles or coolers at receipt: q Compliant q Non Compliant q Cooler Temp <u>2.3°C</u> MeOH extraction requires an additional 4oz. Jar for percent solid Comments: Standard TAT	
2.		2.		q Ice in Cooler?: _____	
RELINQUISHED BY		DATE/TIME RECEIVED FOR LAB BY		SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight CHEMTECH: ☐ Picked Up ☐ Overnight	
3. <u>[Signature]</u>		2-3-25		3.	
		Page <u>1</u> of <u>1</u>		Shipment Complete ☐ YES ☐ 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 : Q1283 TETR06

Order Date : 2/3/2025 4:41:00 PM

Project Mgr :

Client Name : Tetra Tech NUS, Inc.

Project Name : CTO WE13

Report Type : Level 4

Client Contact : Ernie Wu

Receive DateTime : 2/3/2025 7:00:00 PM

EDD Type : ADAPT

Invoice Name : Tetra Tech NUS, Inc.

Purchase Order :

Hard Copy Date :

Invoice Contact : Ernie Wu

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1283-01	VPB-192-HYD-20250131	Water	01/31/2025	14:30					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-02	BP-VPB-192-TB-20250130	Water	01/31/2025	09:00					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-03	BP-VPB-192-EB-20250131	Water	01/31/2025	08:30					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-04	BP-VPB-192-GW-480-482	Water	01/31/2025	10:48					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-05	BP-VPB-192-GW-500-502	Water	01/31/2025	09:45					
					VOCMS Group1		8260-Low	10 Bus. Days	

Relinquished By :

Date / Time :


2-4-25 0900

Received By :

Date / Time :


02/04/25 09:00 Jeff 4

Storage Area : VOA Refridgerator Room