

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 : P4550

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Order ID : P4550

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

P4550-01
P4550-02
P4550-03
P4550-04
P4550-05
P4550-06
P4550-07
P4550-08
P4550-09
P4550-10
P4550-11
P4550-12

Client Sample Number

BP-VPB-190-TB-20241022
VPB190-HYD-20241023
BP-VPB-190-EB-20241023
BP-VPB-190-GW-298-300
BP-VPB-190-GW-318-320
BP-VPB-190-GW-338-340
BP-VPB-190-GW-338-340MS
BP-VPB-190-GW-338-340MSD
BP-VPB-190-GW-358-360
BP-VPB-190-GW-378-380
BP-VPB-190-GW-398-400
BP-VPB-190-GW-418-420

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 :

N. N. Pandya

APPROVED

Nimisha Pandya QA/QC Supervisor Pandya , 11/6/2024, 12:08:14 PM

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # P4550

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

12 Water samples were received on 10/24/2024.

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_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868. The analysis of VOCMS Group1 was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples ..

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

The Initial Calibration met the requirements .

The Continuous Calibration File ID VN084503.D met the requirements except for Chloroethane and Chloromethane failing marginally low therefore no corrective action taken.

The Tuning criteria met requirements.

E. Additional Comments:

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

VIAL A and B combined to run sample # 12 as both having much sediment and not possible to run separately.

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 N. N. Pandya



CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager : Ernie Wu

Chemtech Project # P4550

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

12 Water samples were received on 10/24/2024.

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 VPB190-HYD-20241023 [2-Methylnaphthalene-d10 - 5%,], VPB190-HYD-20241023RE [2-Methylnaphthalene-d10 - 5%,], Failure sample for surrogate was reanalyzed to confirm the failure and both run were reported in Hard Copy, and BP-VPB-190-GW-318-320 [Terphenyl-d14 - 142%] and BP-VPB-190-GW-398-400 [Terphenyl-d14 - 134%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration 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).” For all dep

The Sample BP-VPB-190-GW-398-400, have the concentration of target compound below method detection limits; therefore it is not reported as Hit in Form1.

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 N. N. Pandya

APPROVED

Nimisha Pandya QA/QC Supervisor Pandya , 11/6/2024, 12:08:29 PM

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 #: P4550

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: 11/05/2024

LAB CHRONICLE

OrderID:	P4550	OrderDate:	10/24/2024 5:50:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	K63,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4550-01	BP-VPB-190-TB-2024 1022	Water			10/22/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	
P4550-02	VPB190-HYD-202410 23	Water			10/23/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	
P4550-03	BP-VPB-190-EB-2024 1023	Water			10/23/24			10/24/24
			VOCMS Group1	8260-Low			10/25/24	
P4550-04	BP-VPB-190-GW-298- 300	Water			10/22/24			10/24/24
			VOCMS Group1	8260-Low			10/25/24	
P4550-05	BP-VPB-190-GW-318- 320	Water			10/22/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	
P4550-06	BP-VPB-190-GW-338- 340	Water			10/22/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	
P4550-09	BP-VPB-190-GW-358- 360	Water			10/23/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	
P4550-10	BP-VPB-190-GW-378- 380	Water			10/23/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	
P4550-11	BP-VPB-190-GW-398- 400	Water			10/23/24			10/24/24
			VOCMS Group1	8260-Low			10/28/24	

LAB CHRONICLE

P4550-12

**BP-VPB-190-GW-418-
420**

Water

10/24/24

10/24/24

VOCMS Group1

8260-Low

10/28/24

Hit Summary Sheet
SW-846

SDG No.: P4550
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	BP-VPB-190-GW-318-320								
P4550-05	BP-VPB-190-GW-3 Water	Acetone		3.80	J	1.40	3.80	5.00	ug/L
P4550-05	BP-VPB-190-GW-3 Water	Carbon Disulfide		1.70		0.32	0.75	1.00	ug/L
		Total Voc :		5.50					
		Total Concentration:		5.50					
Client ID:	BP-VPB-190-GW-358-360								
P4550-09	BP-VPB-190-GW-3 Water	Acetone		1.90	J	1.40	3.80	5.00	ug/L
		Total Voc :		1.90					
		Total Concentration:		1.90					
Client ID:	BP-VPB-190-GW-378-380								
P4550-10	BP-VPB-190-GW-3 Water	Acetone		1.90	J	1.40	3.80	5.00	ug/L
		Total Voc :		1.90					
		Total Concentration:		1.90					
Client ID:	BP-VPB-190-GW-418-420								
P4550-12	BP-VPB-190-GW-4 Water	Acetone		4.60	J	1.40	3.80	5.00	ug/L
		Total Voc :		4.60					
		Total Concentration:		4.60					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	10/22/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-TB-20241022			SDG No.:	P4550	
Lab Sample ID:	P4550-01			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:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084543.D	1		10/28/24 16:41	VN102824

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:	10/22/24		
Project:	CTO WE13			Date Received:	10/24/24		
Client Sample ID:	BP-VPB-190-TB-20241022			SDG No.:	P4550		
Lab Sample ID:	P4550-01			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:	RXI-624	ID :	0.25	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084543.D	1		10/28/24 16:41	VN102824

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	48.8		81 - 118		98%	SPK: 50
1868-53-7	Dibromofluoromethane	52.6		80 - 119		105%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.0		85 - 114		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	161000	8.224				
540-36-3	1,4-Difluorobenzene	278000	9.1				
3114-55-4	Chlorobenzene-d5	241000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	93400	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-TB-20241022		SDG No.:	P4550	
Lab Sample ID:	P4550-01		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084543.D	1		10/28/24 16:41	VN102824

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:	10/23/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	VPB190-HYD-20241023			SDG No.:	P4550	
Lab Sample ID:	P4550-02			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:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084544.D	1		10/28/24 17:05	VN102824

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:	10/23/24		
Project:	CTO WE13			Date Received:	10/24/24		
Client Sample ID:	VPB190-HYD-20241023			SDG No.:	P4550		
Lab Sample ID:	P4550-02			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:	RXI-624	ID :	0.25	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084544.D	1		10/28/24 17:05	VN102824

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	50.0		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	48.6		89 - 112		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.7		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	163000	8.224				
540-36-3	1,4-Difluorobenzene	284000	9.1				
3114-55-4	Chlorobenzene-d5	245000	11.864				
3855-82-1	1,4-Dichlorobenzene-d4	102000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	VPB190-HYD-20241023		SDG No.:	P4550	
Lab Sample ID:	P4550-02		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084544.D	1		10/28/24 17:05	VN102824

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:	10/23/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-EB-20241023			SDG No.:	P4550	
Lab Sample ID:	P4550-03			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:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084523.D	1		10/25/24 18:02	VN102524

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:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-EB-20241023		SDG No.:	P4550	
Lab Sample ID:	P4550-03		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084523.D	1		10/25/24 18:02	VN102524

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	56.5		81 - 118		113%	SPK: 50
1868-53-7	Dibromofluoromethane	55.1		80 - 119		110%	SPK: 50
2037-26-5	Toluene-d8	48.1		89 - 112		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.5		85 - 114		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	130000	8.224				
540-36-3	1,4-Difluorobenzene	242000	9.1				
3114-55-4	Chlorobenzene-d5	211000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	83800	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-EB-20241023		SDG No.:	P4550	
Lab Sample ID:	P4550-03		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084523.D	1		10/25/24 18:02	VN102524

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:	10/22/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-298-300			SDG No.:	P4550	
Lab Sample ID:	P4550-04			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:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084524.D	1		10/25/24 18:26	VN102524

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:	10/22/24		
Project:	CTO WE13			Date Received:	10/24/24		
Client Sample ID:	BP-VPB-190-GW-298-300			SDG No.:	P4550		
Lab Sample ID:	P4550-04			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:	RXI-624	ID :	0.25	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084524.D	1		10/25/24 18:26	VN102524

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	56.8		81 - 118		114%	SPK: 50
1868-53-7	Dibromofluoromethane	55.9		80 - 119		112%	SPK: 50
2037-26-5	Toluene-d8	48.8		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.6		85 - 114		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	129000	8.224				
540-36-3	1,4-Difluorobenzene	239000	9.1				
3114-55-4	Chlorobenzene-d5	205000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	82300	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-298-300		SDG No.:	P4550	
Lab Sample ID:	P4550-04		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084524.D	1		10/25/24 18:26	VN102524

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:	10/22/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-318-320			SDG No.:	P4550	
Lab Sample ID:	P4550-05			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:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084545.D	1		10/28/24 17:29	VN102824

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	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	1.70		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:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-318-320		SDG No.:	P4550	
Lab Sample ID:	P4550-05		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084545.D	1		10/28/24 17:29	VN102824

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	49.8		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	49.8		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.9		85 - 114		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	162000	8.224				
540-36-3	1,4-Difluorobenzene	284000	9.1				
3114-55-4	Chlorobenzene-d5	249000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	99600	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-318-320		SDG No.:	P4550	
Lab Sample ID:	P4550-05		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084545.D	1		10/28/24 17:29	VN102824

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:	10/22/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340			SDG No.:	P4550	
Lab Sample ID:	P4550-06			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084539.D	1		10/28/24 15:05	VN102824

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:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340		SDG No.:	P4550	
Lab Sample ID:	P4550-06		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084539.D	1		10/28/24 15:05	VN102824

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	50.9		81 - 118		102%	SPK: 50
1868-53-7	Dibromofluoromethane	51.9		80 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	49.3		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.4		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	151000	8.224				
540-36-3	1,4-Difluorobenzene	267000	9.1				
3114-55-4	Chlorobenzene-d5	231000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	94500	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340		SDG No.:	P4550	
Lab Sample ID:	P4550-06		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084539.D	1		10/28/24 15:05	VN102824

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:	10/23/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-358-360			SDG No.:	P4550	
Lab Sample ID:	P4550-09			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:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084535.D	1		10/28/24 13:30	VN102824

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:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-358-360		SDG No.:	P4550	
Lab Sample ID:	P4550-09		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084535.D	1		10/28/24 13:30	VN102824

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	48.0		81 - 118		96%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	49.3		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		85 - 114		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	174000	8.224				
540-36-3	1,4-Difluorobenzene	300000	9.1				
3114-55-4	Chlorobenzene-d5	254000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	101000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-358-360		SDG No.:	P4550	
Lab Sample ID:	P4550-09		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084535.D	1		10/28/24 13:30	VN102824

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:	10/23/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-378-380			SDG No.:	P4550	
Lab Sample ID:	P4550-10			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084536.D	1		10/28/24 13:53	VN102824

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:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-378-380		SDG No.:	P4550	
Lab Sample ID:	P4550-10		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084536.D	1		10/28/24 13:53	VN102824

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	49.2		81 - 118		98%	SPK: 50
1868-53-7	Dibromofluoromethane	51.8		80 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	49.7		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.1		85 - 114		90%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	163000	8.224				
540-36-3	1,4-Difluorobenzene	286000	9.1				
3114-55-4	Chlorobenzene-d5	248000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	101000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-378-380		SDG No.:	P4550	
Lab Sample ID:	P4550-10		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084536.D	1		10/28/24 13:53	VN102824

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:	10/23/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-398-400			SDG No.:	P4550	
Lab Sample ID:	P4550-11			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084537.D	1		10/28/24 14:17	VN102824

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:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-398-400		SDG No.:	P4550	
Lab Sample ID:	P4550-11		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084537.D	1		10/28/24 14:17	VN102824

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	50.4		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	49.1		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.6		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	161000	8.224				
540-36-3	1,4-Difluorobenzene	288000	9.1				
3114-55-4	Chlorobenzene-d5	248000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	98600	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/23/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-398-400		SDG No.:	P4550	
Lab Sample ID:	P4550-11		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084537.D	1		10/28/24 14:17	VN102824

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:	10/24/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-418-420			SDG No.:	P4550	
Lab Sample ID:	P4550-12			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084538.D	1		10/28/24 14:41	VN102824

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	4.60	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:	10/24/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-418-420		SDG No.:	P4550	
Lab Sample ID:	P4550-12		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084538.D	1		10/28/24 14:41	VN102824

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	49.1		81 - 118		98%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	49.6		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.5		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	159000	8.224				
540-36-3	1,4-Difluorobenzene	275000	9.1				
3114-55-4	Chlorobenzene-d5	239000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	94200	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/24/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-418-420		SDG No.:	P4550	
Lab Sample ID:	P4550-12		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084538.D	1		10/28/24 14:41	VN102824

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.: **P4550**

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

Analytical Method: **SW8260-Low**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P4550-01	BP-VPB-190-TB-20241022	1,2-Dichloroethane-d4	50	48.8	98	81	118
		Dibromofluoromethane	50	52.6	105	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	46.0	92	85	114
P4550-02	VPB190-HYD-20241023	1,2-Dichloroethane-d4	50	50.0	100	81	118
		Dibromofluoromethane	50	51.2	102	80	119
		Toluene-d8	50	48.5	97	89	112
		4-Bromofluorobenzene	50	46.7	93	85	114
P4550-03	BP-VPB-190-EB-20241023	1,2-Dichloroethane-d4	50	56.5	113	81	118
		Dibromofluoromethane	50	55.1	110	80	119
		Toluene-d8	50	48.1	96	89	112
		4-Bromofluorobenzene	50	43.5	87	85	114
P4550-04	BP-VPB-190-GW-298-300	1,2-Dichloroethane-d4	50	56.8	114	81	118
		Dibromofluoromethane	50	55.9	112	80	119
		Toluene-d8	50	48.8	98	89	112
		4-Bromofluorobenzene	50	43.6	87	85	114
P4550-05	BP-VPB-190-GW-318-320	1,2-Dichloroethane-d4	50	49.8	100	81	118
		Dibromofluoromethane	50	51.4	103	80	119
		Toluene-d8	50	49.8	100	89	112
		4-Bromofluorobenzene	50	46.0	92	85	114
P4550-06	BP-VPB-190-GW-338-340	1,2-Dichloroethane-d4	50	50.9	102	81	118
		Dibromofluoromethane	50	51.9	104	80	119
		Toluene-d8	50	49.3	99	89	112
		4-Bromofluorobenzene	50	45.4	91	85	114
P4550-07MS	BP-VPB-190-GW-338-340MS	1,2-Dichloroethane-d4	50	50.2	100	81	118
		Dibromofluoromethane	50	54.6	109	80	119
		Toluene-d8	50	52.1	104	89	112
		4-Bromofluorobenzene	50	55.3	111	85	114
P4550-08MSD	BP-VPB-190-GW-338-340MSD	1,2-Dichloroethane-d4	50	53.4	107	81	118
		Dibromofluoromethane	50	55.0	110	80	119
		Toluene-d8	50	53.6	107	89	112
		4-Bromofluorobenzene	50	57.0	114	85	114
P4550-09	BP-VPB-190-GW-358-360	1,2-Dichloroethane-d4	50	48.0	96	81	118
		Dibromofluoromethane	50	51.3	103	80	119
		Toluene-d8	50	49.3	99	89	112
		4-Bromofluorobenzene	50	44.2	88	85	114
P4550-10	BP-VPB-190-GW-378-380	1,2-Dichloroethane-d4	50	49.2	98	81	118
		Dibromofluoromethane	50	51.8	104	80	119
		Toluene-d8	50	49.7	99	89	112
		4-Bromofluorobenzene	50	45.1	90	85	114
P4550-11	BP-VPB-190-GW-398-400	1,2-Dichloroethane-d4	50	50.4	101	81	118
		Dibromofluoromethane	50	50.8	102	80	119
		Toluene-d8	50	49.1	98	89	112
		4-Bromofluorobenzene	50	45.6	91	85	114
P4550-12	BP-VPB-190-GW-418-420	1,2-Dichloroethane-d4	50	49.0	98	81	118
		Dibromofluoromethane	50	51.3	103	80	119
		Toluene-d8	50	49.6	99	89	112
		4-Bromofluorobenzene	50	45.5	91	85	114
VN1025WBL02	VN1025WBL02	1,2-Dichloroethane-d4	50	52.2	104	81	118
		Dibromofluoromethane	50	51.4	103	80	119

Surrogate Summary

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
VN1025WBL02	VN1025WBL02	Toluene-d8	50	46.5	93	89	112
		4-Bromofluorobenzene	50	43.0	86	85	114
VN1025WBS02	VN1025WBS02	1,2-Dichloroethane-d4	50	47.7	95	81	118
		Dibromofluoromethane	50	50.8	102	80	119
		Toluene-d8	50	49.7	99	89	112
		4-Bromofluorobenzene	50	51.4	103	85	114
		1,2-Dichloroethane-d4	50	49.7	99	81	118
VN1028WBL01	VN1028WBL01	Dibromofluoromethane	50	51.4	103	80	119
		Toluene-d8	50	49.5	99	89	112
		4-Bromofluorobenzene	50	44.9	90	85	114
		1,2-Dichloroethane-d4	50	52.4	105	81	118
		Dibromofluoromethane	50	56.5	113	80	119
VN1028WBS01	VN1028WBS01	Toluene-d8	50	53.9	108	89	112
		4-Bromofluorobenzene	50	56.4	113	85	114

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Limits											
Parameter	Spike	Sample	Result	Units	Rec		RPD	RPD	Low	High	RPD
		Result			Qual	Qual					
Lab Sample ID :	P4550-07MS	Client Sample ID :	BP-VPB-190-GW-338-340MS					Datafile :	VN084540.D		
Chloromethane	50	0	44.5	ug/L	89				50	139	
Vinyl chloride	50	0	46.3	ug/L	93				58	137	
Bromomethane	50	0	43.2	ug/L	86				53	141	
Chloroethane	50	0	41.0	ug/L	82				60	138	
Trichlorofluoromethane	50	0	51.1	ug/L	102				65	141	
1,1,2-Trichlorotrifluoroethane	50	0	51.3	ug/L	103				70	136	
1,1-Dichloroethene	50	0	49.7	ug/L	99				71	131	
Acetone	250	0	200	ug/L	80				39	160	
Carbon disulfide	50	0	42.1	ug/L	84				64	133	
Methyl tert-butyl Ether	50	0	51.3	ug/L	103				71	124	
Methylene Chloride	50	0	50.8	ug/L	102				74	124	
trans-1,2-Dichloroethene	50	0	50.8	ug/L	102				75	124	
1,1-Dichloroethane	50	0	52.3	ug/L	105				77	125	
2-Butanone	250	0	240	ug/L	96				56	143	
Carbon Tetrachloride	50	0	53.6	ug/L	107				72	136	
cis-1,2-Dichloroethene	50	0	51.5	ug/L	103				78	123	
Chloroform	50	0	52.8	ug/L	106				79	124	
1,1,1-Trichloroethane	50	0	52.2	ug/L	104				74	131	
Methylcyclohexane	50	0	49.2	ug/L	98				72	132	
Benzene	50	0	53.1	ug/L	106				79	120	
1,2-Dichloroethane	50	0	51.8	ug/L	104				73	128	
Trichloroethene	50	0	52.3	ug/L	105				79	123	
1,2-Dichloropropane	50	0	54.4	ug/L	109				78	122	
Bromodichloromethane	50	0	54.6	ug/L	109				79	125	
4-Methyl-2-Pentanone	250	0	280	ug/L	112				67	130	
Toluene	50	0	53.7	ug/L	107				80	121	
t-1,3-Dichloropropene	50	0	53.7	ug/L	107				73	127	
cis-1,3-Dichloropropene	50	0	50.2	ug/L	100				75	124	
1,1,2-Trichloroethane	50	0	57.3	ug/L	115				80	119	
2-Hexanone	250	0	280	ug/L	112				57	139	
Dibromochloromethane	50	0	56.9	ug/L	114				74	126	
Tetrachloroethene	50	0	49.1	ug/L	98				74	129	
Chlorobenzene	50	0	50.8	ug/L	102				82	118	
Ethyl Benzene	50	0	51.5	ug/L	103				79	121	
m/p-Xylenes	100	0	110	ug/L	110				80	121	
o-Xylene	50	0	54.3	ug/L	109				78	122	
Styrene	50	0	55.3	ug/L	111				78	123	
Bromoform	50	0	57.5	ug/L	115				66	130	
Isopropylbenzene	50	0	47.8	ug/L	96				72	131	
1,1,2,2-Tetrachloroethane	50	0	50.4	ug/L	101				71	121	
1,3-Dichlorobenzene	50	0	48.6	ug/L	97				80	119	
1,4-Dichlorobenzene	50	0	47.2	ug/L	94				79	118	
1,2-Dichlorobenzene	50	0	47.5	ug/L	95				80	119	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Limits											
Parameter	Spike	Sample	Result	Units	Rec		RPD	RPD		RPD	
		Result			Qual	Qual		Low	High		
Lab Sample ID :	P4550-08MSD	Client Sample ID :	BP-VPB-190-GW-338-340MSD					Datafile :	VN084541.D		
Chloromethane	50	0	45.9	ug/L	92		3		50	139	20
Vinyl chloride	50	0	49.0	ug/L	98		6		58	137	20
Bromomethane	50	0	47.0	ug/L	94		8		53	141	20
Chloroethane	50	0	43.5	ug/L	87		6		60	138	20
Trichlorofluoromethane	50	0	53.2	ug/L	106		4		65	141	20
1,1,2-Trichlorotrifluoroethane	50	0	53.9	ug/L	108		5		70	136	20
1,1-Dichloroethene	50	0	53.0	ug/L	106		6		71	131	20
Acetone	250	0	210	ug/L	84		5		39	160	20
Carbon disulfide	50	0	43.8	ug/L	88		4		64	133	20
Methyl tert-butyl Ether	50	0	54.5	ug/L	109		6		71	124	20
Methylene Chloride	50	0	53.2	ug/L	106		5		74	124	20
trans-1,2-Dichloroethene	50	0	52.8	ug/L	106		4		75	124	20
1,1-Dichloroethane	50	0	54.7	ug/L	109		4		77	125	20
2-Butanone	250	0	250	ug/L	100		4		56	143	20
Carbon Tetrachloride	50	0	53.8	ug/L	108		0		72	136	20
cis-1,2-Dichloroethene	50	0	54.2	ug/L	108		5		78	123	20
Chloroform	50	0	55.2	ug/L	110		4		79	124	20
1,1,1-Trichloroethane	50	0	54.6	ug/L	109		4		74	131	20
Methylcyclohexane	50	0	50.0	ug/L	100		2		72	132	20
Benzene	50	0	53.2	ug/L	106		0		79	120	20
1,2-Dichloroethane	50	0	52.3	ug/L	105		1		73	128	20
Trichloroethene	50	0	51.6	ug/L	103		1		79	123	20
1,2-Dichloropropane	50	0	55.8	ug/L	112		3		78	122	20
Bromodichloromethane	50	0	54.7	ug/L	109		0		79	125	20
4-Methyl-2-Pentanone	250	0	280	ug/L	112		0		67	130	20
Toluene	50	0	54.7	ug/L	109		2		80	121	20
t-1,3-Dichloropropene	50	0	53.8	ug/L	108		0		73	127	20
cis-1,3-Dichloropropene	50	0	51.3	ug/L	103		2		75	124	20
1,1,2-Trichloroethane	50	0	57.1	ug/L	114		0		80	119	20
2-Hexanone	250	0	270	ug/L	108		4		57	139	20
Dibromochloromethane	50	0	57.8	ug/L	116		2		74	126	20
Tetrachloroethene	50	0	51.2	ug/L	102		4		74	129	20
Chlorobenzene	50	0	52.3	ug/L	105		3		82	118	20
Ethyl Benzene	50	0	53.8	ug/L	108		4		79	121	20
m/p-Xylenes	100	0	110	ug/L	110		0		80	121	20
o-Xylene	50	0	56.0	ug/L	112		3		78	122	20
Styrene	50	0	58.1	ug/L	116		5		78	123	20
Bromoform	50	0	59.8	ug/L	120		4		66	130	20
Isopropylbenzene	50	0	50.4	ug/L	101		5		72	131	20
1,1,2,2-Tetrachloroethane	50	0	52.2	ug/L	104		4		71	121	20
1,3-Dichlorobenzene	50	0	50.2	ug/L	100		3		80	119	20
1,4-Dichlorobenzene	50	0	49.0	ug/L	98		4		79	118	20
1,2-Dichlorobenzene	50	0	49.6	ug/L	99		4		80	119	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN084509.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1025WBS02	Chloromethane	20	15.2	ug/L	76			50	139	
	Vinyl chloride	20	16.2	ug/L	81			58	137	
	Bromomethane	20	16.2	ug/L	81			53	141	
	Chloroethane	20	15.4	ug/L	77			60	138	
	Trichlorofluoromethane	20	18.1	ug/L	91			65	141	
	1,1,2-Trichlorotrifluoroethane	20	18.0	ug/L	90			70	136	
	1,1-Dichloroethene	20	18.2	ug/L	91			71	131	
	Acetone	100	94.3	ug/L	94			39	160	
	Carbon disulfide	20	14.8	ug/L	74			64	133	
	Methyl tert-butyl Ether	20	19.2	ug/L	96			71	124	
	Methylene Chloride	20	18.3	ug/L	92			74	124	
	trans-1,2-Dichloroethene	20	18.2	ug/L	91			75	124	
	1,1-Dichloroethane	20	19.2	ug/L	96			77	125	
	2-Butanone	100	100	ug/L	100			56	143	
	Carbon Tetrachloride	20	19.0	ug/L	95			72	136	
	cis-1,2-Dichloroethene	20	19.0	ug/L	95			78	123	
	Chloroform	20	19.5	ug/L	98			79	124	
	1,1,1-Trichloroethane	20	19.1	ug/L	96			74	131	
	Methylcyclohexane	20	16.9	ug/L	85			72	132	
	Benzene	20	19.2	ug/L	96			79	120	
	1,2-Dichloroethane	20	19.5	ug/L	98			73	128	
	Trichloroethene	20	19.8	ug/L	99			79	123	
	1,2-Dichloropropane	20	20.2	ug/L	101			78	122	
	Bromodichloromethane	20	20.0	ug/L	100			79	125	
	4-Methyl-2-Pentanone	100	110	ug/L	110			67	130	
	Toluene	20	19.6	ug/L	98			80	121	
	t-1,3-Dichloropropene	20	19.1	ug/L	96			73	127	
	cis-1,3-Dichloropropene	20	19.4	ug/L	97			75	124	
	1,1,2-Trichloroethane	20	21.5	ug/L	108			80	119	
	2-Hexanone	100	110	ug/L	110			57	139	
	Dibromochloromethane	20	21.1	ug/L	106			74	126	
	Tetrachloroethene	20	18.8	ug/L	94			74	129	
	Chlorobenzene	20	19.5	ug/L	98			82	118	
	Ethyl Benzene	20	18.8	ug/L	94			79	121	
	m/p-Xylenes	40	39.6	ug/L	99			80	121	
	o-Xylene	20	19.9	ug/L	100			78	122	
	Styrene	20	20.2	ug/L	101			78	123	
	Bromoform	20	20.9	ug/L	104			66	130	
	Isopropylbenzene	20	17.8	ug/L	89			72	131	
	1,1,2,2-Tetrachloroethane	20	20.0	ug/L	100			71	121	
	1,3-Dichlorobenzene	20	18.5	ug/L	93			80	119	
	1,4-Dichlorobenzene	20	18.4	ug/L	92			79	118	
	1,2-Dichlorobenzene	20	18.5	ug/L	93			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN084532.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VN1028WBS01	Chloromethane	20	18.3	ug/L	92			50	139	
	Vinyl chloride	20	18.6	ug/L	93			58	137	
	Bromomethane	20	18.8	ug/L	94			53	141	
	Chloroethane	20	16.8	ug/L	84			60	138	
	Trichlorofluoromethane	20	20.4	ug/L	102			65	141	
	1,1,2-Trichlorotrifluoroethane	20	21.1	ug/L	106			70	136	
	1,1-Dichloroethene	20	19.9	ug/L	100			71	131	
	Acetone	100	98.9	ug/L	99			39	160	
	Carbon disulfide	20	16.7	ug/L	84			64	133	
	Methyl tert-butyl Ether	20	20.0	ug/L	100			71	124	
	Methylene Chloride	20	20.7	ug/L	104			74	124	
	trans-1,2-Dichloroethene	20	20.1	ug/L	101			75	124	
	1,1-Dichloroethane	20	20.8	ug/L	104			77	125	
	2-Butanone	100	98.1	ug/L	98			56	143	
	Carbon Tetrachloride	20	21.1	ug/L	106			72	136	
	cis-1,2-Dichloroethene	20	19.9	ug/L	100			78	123	
	Chloroform	20	21.3	ug/L	106			79	124	
	1,1,1-Trichloroethane	20	20.7	ug/L	104			74	131	
	Methylcyclohexane	20	19.0	ug/L	95			72	132	
	Benzene	20	21.5	ug/L	108			79	120	
	1,2-Dichloroethane	20	21.4	ug/L	107			73	128	
	Trichloroethene	20	21.0	ug/L	105			79	123	
	1,2-Dichloropropane	20	22.3	ug/L	112			78	122	
	Bromodichloromethane	20	21.7	ug/L	109			79	125	
	4-Methyl-2-Pentanone	100	110	ug/L	110			67	130	
	Toluene	20	21.7	ug/L	109			80	121	
	t-1,3-Dichloropropene	20	20.7	ug/L	104			73	127	
	cis-1,3-Dichloropropene	20	21.0	ug/L	105			75	124	
	1,1,2-Trichloroethane	20	22.5	ug/L	113			80	119	
	2-Hexanone	100	110	ug/L	110			57	139	
	Dibromochloromethane	20	22.4	ug/L	112			74	126	
	Tetrachloroethene	20	21.8	ug/L	109			74	129	
	Chlorobenzene	20	20.7	ug/L	104			82	118	
	Ethyl Benzene	20	20.1	ug/L	101			79	121	
	m/p-Xylenes	40	42.2	ug/L	106			80	121	
	o-Xylene	20	21.0	ug/L	105			78	122	
	Styrene	20	21.4	ug/L	107			78	123	
	Bromoform	20	22.1	ug/L	111			66	130	
	Isopropylbenzene	20	18.9	ug/L	95			72	131	
	1,1,2,2-Tetrachloroethane	20	20.5	ug/L	103			71	121	
	1,3-Dichlorobenzene	20	19.6	ug/L	98			80	119	
	1,4-Dichlorobenzene	20	19.5	ug/L	98			79	118	
	1,2-Dichlorobenzene	20	19.5	ug/L	98			80	119	

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1025WBL02

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4550

SAS No.: P4550 SDG NO.: P4550

Lab File ID: VN084508.D

Lab Sample ID: VN1025WBL02

Date Analyzed: 10/25/2024

Time Analyzed: 11:51

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1025WBS02	VN1025WBS02	VN084509.D	10/25/2024
BP-VPB-190-EB-20241023	P4550-03	VN084523.D	10/25/2024
BP-VPB-190-GW-298-300	P4550-04	VN084524.D	10/25/2024

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1028WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4550

SAS No.: P4550 SDG NO.: P4550

Lab File ID: VN084531.D

Lab Sample ID: VN1028WBL01

Date Analyzed: 10/28/2024

Time Analyzed: 11:42

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1028WBS01	VN1028WBS01	VN084532.D	10/28/2024
BP-VPB-190-GW-358-360	P4550-09	VN084535.D	10/28/2024
BP-VPB-190-GW-378-380	P4550-10	VN084536.D	10/28/2024
BP-VPB-190-GW-398-400	P4550-11	VN084537.D	10/28/2024
BP-VPB-190-GW-418-420	P4550-12	VN084538.D	10/28/2024
BP-VPB-190-GW-338-340	P4550-06	VN084539.D	10/28/2024
BP-VPB-190-GW-338-340MS	P4550-07MS	VN084540.D	10/28/2024
BP-VPB-190-GW-338-340MSD	P4550-08MSD	VN084541.D	10/28/2024
BP-VPB-190-TB-20241022	P4550-01	VN084543.D	10/28/2024
VPB190-HYD-20241023	P4550-02	VN084544.D	10/28/2024
BP-VPB-190-GW-318-320	P4550-05	VN084545.D	10/28/2024

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084211.D BFB Injection Date: 09/30/2024
Instrument ID: MSVOA_N BFB Injection Time: 09:24
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	53.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	71
175	5.0 - 9.0% of mass 174	5.5 (7.8) 1
176	95.0 - 101.0% of mass 174	69.7 (98.2) 1
177	5.0 - 9.0% of mass 176	4.9 (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
VSTDIC100	VSTDIC100	VN084213.D	09/30/2024	12:25
VSTDICCC050	VSTDICCC050	VN084214.D	09/30/2024	12:49
VSTDIC020	VSTDIC020	VN084215.D	09/30/2024	13:13
VSTDIC010	VSTDIC010	VN084216.D	09/30/2024	13:37
VSTDIC005	VSTDIC005	VN084217.D	09/30/2024	14:00
VSTDIC001	VSTDIC001	VN084218.D	09/30/2024	14:48

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084502.D BFB Injection Date: 10/25/2024
Instrument ID: MSVOA_N BFB Injection Time: 08:21
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.4
75	30.0 - 60.0% of mass 95	54
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.6 (0.7) 1
174	50.0 - 100.0% of mass 95	76
175	5.0 - 9.0% of mass 174	5.4 (7.1) 1
176	95.0 - 101.0% of mass 174	72.6 (95.4) 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
VSTDCCC050	VSTDCCC050	VN084503.D	10/25/2024	08:59
VN1025WBL02	VN1025WBL02	VN084508.D	10/25/2024	11:51
VN1025WBS02	VN1025WBS02	VN084509.D	10/25/2024	12:27
BP-VPB-190-EB-20241023	P4550-03	VN084523.D	10/25/2024	18:02
BP-VPB-190-GW-298-300	P4550-04	VN084524.D	10/25/2024	18:26
VSTDCCC050EC	VSTDCCC050	VN084526.D	10/25/2024	19:13

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084528.D BFB Injection Date: 10/28/2024
Instrument ID: MSVOA_N BFB Injection Time: 09:18
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 60.0% of mass 95	53
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	1.3 (1.7) 1
174	50.0 - 100.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	6 (7.9) 1
176	95.0 - 101.0% of mass 174	72.6 (95.1) 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
VSTDCCC050	VSTDCCC050	VN084529.D	10/28/2024	10:05
VN1028WBL01	VN1028WBL01	VN084531.D	10/28/2024	11:42
VN1028WBS01	VN1028WBS01	VN084532.D	10/28/2024	12:18
BP-VPB-190-GW-358-360	P4550-09	VN084535.D	10/28/2024	13:30
BP-VPB-190-GW-378-380	P4550-10	VN084536.D	10/28/2024	13:53
BP-VPB-190-GW-398-400	P4550-11	VN084537.D	10/28/2024	14:17
BP-VPB-190-GW-418-420	P4550-12	VN084538.D	10/28/2024	14:41
BP-VPB-190-GW-338-340	P4550-06	VN084539.D	10/28/2024	15:05
BP-VPB-190-GW-338-340MS	P4550-07MS	VN084540.D	10/28/2024	15:29
BP-VPB-190-GW-338-340MSD	P4550-08MSD	VN084541.D	10/28/2024	15:53
BP-VPB-190-TB-20241022	P4550-01	VN084543.D	10/28/2024	16:41
VPB190-HYD-20241023	P4550-02	VN084544.D	10/28/2024	17:05
BP-VPB-190-GW-318-320	P4550-05	VN084545.D	10/28/2024	17:29
VSTDCCC050EC	VSTDCCC050	VN084550.D	10/28/2024	21:02

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084503.D Date Analyzed: 10/25/2024
Instrument ID: MSVOA_N Time Analyzed: 08:59
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	182036	8.22	306519	9.10	274612	11.87
UPPER LIMIT	364072	8.724	613038	9.6	549224	12.365
LOWER LIMIT	91018	7.724	153260	8.6	137306	11.365
EPA SAMPLE NO.						
BP-VPB-190-EB-20241023	130309	8.22	242378	9.10	210611	11.87
BP-VPB-190-GW-298-300	129311	8.22	239210	9.10	205331	11.87
VN1025WBL02	159284	8.22	289382	9.10	249149	11.87
VN1025WBS02	171552	8.22	293994	9.10	259694	11.87

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.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084503.D Date Analyzed: 10/25/2024
Instrument ID: MSVOA_N Time Analyzed: 08:59
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	138591	13.788				
UPPER LIMIT	277182	14.288				
LOWER LIMIT	69295.5	13.288				
EPA SAMPLE NO.						
BP-VPB-190-EB-20241023	83821	13.79				
BP-VPB-190-GW-298-300	82305	13.79				
VN1025WBL02	102517	13.79				
VN1025WBS02	130520	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084529.D Date Analyzed: 10/28/2024
Instrument ID: MSVOA_N Time Analyzed: 10:05
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	166557	8.22	279237	9.10	255910	11.87
UPPER LIMIT	333114	8.724	558474	9.6	511820	12.365
LOWER LIMIT	83278.5	7.724	139619	8.6	127955	11.365
EPA SAMPLE NO.						
BP-VPB-190-TB-20241022	160667	8.22	278018	9.10	241263	11.87
VPB190-HYD-20241023	162703	8.22	283801	9.10	245056	11.86
BP-VPB-190-GW-318-320	161796	8.22	284018	9.10	249132	11.87
BP-VPB-190-GW-338-340	150803	8.22	267490	9.10	231312	11.87
BP-VPB-190-GW-338-340MS	159466	8.22	270686	9.10	249070	11.87
BP-VPB-190-GW-338-340MSD	154539	8.22	270823	9.10	242254	11.87
BP-VPB-190-GW-358-360	173665	8.22	300123	9.10	253646	11.87
BP-VPB-190-GW-378-380	162900	8.22	286048	9.10	248436	11.87
BP-VPB-190-GW-398-400	161144	8.22	287581	9.10	247681	11.87
BP-VPB-190-GW-418-420	158931	8.22	275224	9.10	239281	11.87
VN1028WBL01	165769	8.22	293503	9.10	253666	11.87
VN1028WBS01	157919	8.22	266847	9.10	239542	11.87

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.: P4550 SAS No.: P4550 SDG NO.: P4550
Lab File ID: VN084529.D Date Analyzed: 10/28/2024
Instrument ID: MSVOA_N Time Analyzed: 10:05
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	127505	13.788				
UPPER LIMIT	255010	14.288				
LOWER LIMIT	63752.5	13.288				
EPA SAMPLE NO.						
BP-VPB-190-TB-20241022	93439	13.79				
VPB190-HYD-20241023	101775	13.79				
BP-VPB-190-GW-318-320	99614	13.79				
BP-VPB-190-GW-338-340	94475	13.79				
BP-VPB-190-GW-338-340MS	129633	13.79				
BP-VPB-190-GW-338-340MSD	124264	13.79				
BP-VPB-190-GW-358-360	101148	13.79				
BP-VPB-190-GW-378-380	100597	13.79				
BP-VPB-190-GW-398-400	98638	13.79				
BP-VPB-190-GW-418-420	94178	13.79				
VN1028WBL01	101609	13.79				
VN1028WBS01	120806	13.79				

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:	VN1025WBL02			SDG No.:	P4550
Lab Sample ID:	VN1025WBL02			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:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084508.D	1		10/25/24 11:51	VN102524

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:	VN1025WBL02		SDG No.:	P4550
Lab Sample ID:	VN1025WBL02		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:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084508.D	1		10/25/24 11:51	VN102524

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	52.2		81 - 118		104%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	46.5		89 - 112		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.0		85 - 114		86%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	159000	8.224				
540-36-3	1,4-Difluorobenzene	289000	9.1				
3114-55-4	Chlorobenzene-d5	249000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	103000	13.788				

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:	VN1028WBL01		SDG No.:	P4550
Lab Sample ID:	VN1028WBL01		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:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084531.D	1		10/28/24 11:42	VN102824

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:	VN1028WBL01		SDG No.:	P4550
Lab Sample ID:	VN1028WBL01		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:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084531.D	1		10/28/24 11:42	VN102824

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	49.7		81 - 118		99%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.9		85 - 114		90%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	166000	8.224				
540-36-3	1,4-Difluorobenzene	294000	9.1				
3114-55-4	Chlorobenzene-d5	254000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	102000	13.788				

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:	VN1025WBS02			SDG No.:	P4550
Lab Sample ID:	VN1025WBS02			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:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084509.D	1		10/25/24 12:27	VN102524

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	15.2		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	16.2		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	16.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	15.4		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.1		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.0		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.2		0.26	0.75	1.00	ug/L
67-64-1	Acetone	94.3		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	14.8		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.2		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.3		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.2		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.2		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	19.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.0		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.5		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.1		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	16.9		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	19.5		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.8		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.2		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.0		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	19.6		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.1		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.4		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.5		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:	VN1025WBS02		SDG No.:	P4550
Lab Sample ID:	VN1025WBS02		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:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084509.D	1		10/25/24 12:27	VN102524

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	21.1		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	19.5		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	18.8		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	39.6		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.9		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.2		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	20.9		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	17.8		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	20.0		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.5		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.4		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.5		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.7		81 - 118		95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	49.7		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.4		85 - 114		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	172000	8.224				
540-36-3	1,4-Difluorobenzene	294000	9.1				
3114-55-4	Chlorobenzene-d5	260000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.788				

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:	VN1028WBS01		SDG No.:	P4550
Lab Sample ID:	VN1028WBS01		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:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084532.D	1		10/28/24 12:18	VN102824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.3		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.6		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	18.8		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	16.8		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	20.4		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	21.1		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.9		0.26	0.75	1.00	ug/L
67-64-1	Acetone	98.9		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.7		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.0		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	20.7		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	20.1		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.8		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	98.1		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	21.1		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.9		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	21.3		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.7		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	19.0		0.19	0.50	1.00	ug/L
71-43-2	Benzene	21.5		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.4		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	21.0		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	22.3		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	21.7		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	21.7		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	20.7		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	21.0		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	22.5		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:	VN1028WBS01		SDG No.:	P4550	
Lab Sample ID:	VN1028WBS01		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:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084532.D	1		10/28/24 12:18	VN102824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	22.4		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	21.8		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.7		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.1		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	42.2		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	21.0		0.14	0.50	1.00	ug/L
100-42-5	Styrene	21.4		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	22.1		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.9		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	20.5		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.6		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.5		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.5		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.4		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	56.4		80 - 119		113%	SPK: 50
2037-26-5	Toluene-d8	53.9		89 - 112		108%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.4		85 - 114		113%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	158000	8.224				
540-36-3	1,4-Difluorobenzene	267000	9.1				
3114-55-4	Chlorobenzene-d5	240000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	121000	13.788				

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:	10/22/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340MS			SDG No.:	P4550	
Lab Sample ID:	P4550-07MS			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084540.D	1		10/28/24 15:29	VN102824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	44.5		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	46.3		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	43.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	41.0		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	51.1		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	51.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	49.7		0.26	0.75	1.00	ug/L
67-64-1	Acetone	200		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	42.1		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	51.3		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	50.8		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	50.8		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	52.3		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	240		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	53.6		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	51.5		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	52.8		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	52.2		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	49.2		0.19	0.50	1.00	ug/L
71-43-2	Benzene	53.1		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	51.8		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	52.3		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	54.4		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	54.6		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	280		0.75	2.50	5.00	ug/L
108-88-3	Toluene	53.7		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	53.7		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	50.2		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	57.3		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	280		1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340MS		SDG No.:	P4550	
Lab Sample ID:	P4550-07MS		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084540.D	1		10/28/24 15:29	VN102824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	56.9		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	49.1		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	50.8		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	51.5		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	110		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	54.3		0.14	0.50	1.00	ug/L
100-42-5	Styrene	55.3		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	57.5		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	47.8		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50.4		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	48.6		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	47.2		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	47.5		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.2		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	54.6		80 - 119		109%	SPK: 50
2037-26-5	Toluene-d8	52.1		89 - 112		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	55.3		85 - 114		111%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	159000	8.224				
540-36-3	1,4-Difluorobenzene	271000	9.1				
3114-55-4	Chlorobenzene-d5	249000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	130000	13.788				

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:	10/22/24	
Project:	CTO WE13			Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340MSD			SDG No.:	P4550	
Lab Sample ID:	P4550-08MSD			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084541.D	1		10/28/24 15:53	VN102824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	45.9		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	49.0		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	47.0		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	43.5		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	53.2		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	53.9		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	53.0		0.26	0.75	1.00	ug/L
67-64-1	Acetone	210		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	43.8		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	54.5		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	53.2		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	52.8		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	54.7		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	250		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	53.8		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	54.2		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	55.2		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	54.6		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	50.0		0.19	0.50	1.00	ug/L
71-43-2	Benzene	53.2		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	52.3		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	51.6		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	55.8		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	54.7		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	280		0.75	2.50	5.00	ug/L
108-88-3	Toluene	54.7		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	53.8		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	51.3		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	57.1		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	270		1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/22/24	
Project:	CTO WE13		Date Received:	10/24/24	
Client Sample ID:	BP-VPB-190-GW-338-340MSD		SDG No.:	P4550	
Lab Sample ID:	P4550-08MSD		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084541.D	1		10/28/24 15:53	VN102824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	57.8		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	51.2		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	52.3		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	53.8		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	110		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	56.0		0.14	0.50	1.00	ug/L
100-42-5	Styrene	58.1		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	59.8		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	50.4		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	52.2		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	50.2		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	49.0		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	49.6		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.4		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	55.0		80 - 119		110%	SPK: 50
2037-26-5	Toluene-d8	53.6		89 - 112		107%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.0		85 - 114		114%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	155000	8.224				
540-36-3	1,4-Difluorobenzene	271000	9.1				
3114-55-4	Chlorobenzene-d5	242000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	124000	13.788				

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.: P4550 SAS No.: P4550 SDG No.: P4550
Instrument ID: MSVOA_N Calibration Date(s): 09/30/2024 09/30/2024
Heated Purge: (Y/N) N Calibration Time(s): 12:25 14:48
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF100 = VN084213.D	RRF050 = VN084214.D	RRF020 = VN084215.D	RRF010 = VN084216.D	RRF005 = VN084217.D	RRF001 = VN084218.D		
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD
Chloromethane	0.619	0.671	0.677	0.648	0.747	0.690	0.675	6.4
Vinyl Chloride	0.611	0.667	0.665	0.641	0.724	0.617	0.654	6.4
Bromomethane	0.368	0.432	0.432	0.424	0.501		0.431	10.9
Chloroethane	0.375	0.419	0.430	0.433	0.522	0.632	0.468	19.9
Trichlorofluoromethane	0.953	1.060	1.047	0.959	1.113	0.978	1.019	6.4
1,1,2-Trichlorotrifluoroethane	0.542	0.590	0.603	0.532	0.633	0.602	0.584	6.7
1,1-Dichloroethene	0.538	0.587	0.596	0.533	0.631	0.493	0.563	8.9
Acetone	0.299	0.342	0.337	0.298	0.336	0.299	0.318	6.8
Carbon Disulfide	1.588	1.723	1.746	1.650	1.908	2.080	1.782	10.2
Methyl tert-butyl Ether	1.825	2.033	2.035	1.802	2.049	1.656	1.900	8.6
Methylene Chloride	0.594	0.655	0.661	0.618	0.669	0.686	0.647	5.3
trans-1,2-Dichloroethene	0.555	0.622	0.619	0.570	0.627	0.546	0.590	6.2
1,1-Dichloroethane	1.075	1.193	1.163	1.084	1.226	1.046	1.131	6.4
2-Butanone	0.395	0.452	0.465	0.419	0.467	0.404	0.434	7.3
Carbon Tetrachloride	0.515	0.549	0.553	0.508	0.545	0.482	0.525	5.4
cis-1,2-Dichloroethene	0.670	0.741	0.741	0.655	0.767	0.703	0.713	6.2
Chloroform	1.083	1.204	1.205	1.117	1.259	1.181	1.175	5.5
1,1,1-Trichloroethane	0.997	1.102	1.089	1.018	1.154	0.972	1.055	6.7
Methylcyclohexane	0.567	0.583	0.577	0.507	0.534	0.428	0.533	11
Benzene	1.434	1.553	1.559	1.410	1.574	1.421	1.492	5.2
1,2-Dichloroethane	0.480	0.528	0.524	0.498	0.544	0.460	0.506	6.3
Trichloroethene	0.334	0.362	0.361	0.329	0.379	0.325	0.348	6.3
1,2-Dichloropropane	0.346	0.375	0.380	0.339	0.388	0.289	0.353	10.4
Bromodichloromethane	0.521	0.557	0.556	0.497	0.570	0.475	0.529	7.2
4-Methyl-2-Pentanone	0.449	0.508	0.510	0.468	0.484	0.387	0.468	9.9
Toluene	0.904	0.970	0.963	0.861	0.920	0.840	0.910	5.8
t-1,3-Dichloropropene	0.562	0.590	0.573	0.517	0.564	0.430	0.539	10.9
cis-1,3-Dichloropropene	0.592	0.638	0.608	0.569	0.606	0.469	0.580	10.2
1,1,2-Trichloroethane	0.317	0.349	0.347	0.316	0.340	0.288	0.326	7.3
2-Hexanone	0.341	0.387	0.387	0.340	0.357	0.285	0.349	10.8

* 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.: P4550 SAS No.: P4550 SDG No.: P4550
Instrument ID: MSVOA_N Calibration Date(s): 09/30/2024 09/30/2024
Heated Purge: (Y/N) N Calibration Time(s): 12:25 14:48
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN084213.D		RRF050 = VN084214.D		RRF020 = VN084215.D			
		RRF010 = VN084216.D		RRF005 = VN084217.D		RRF001 = VN084218.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Dibromochloromethane	0.384	0.418	0.409	0.374	0.396	0.330	0.385	8.1	
Tetrachloroethene	0.323	0.359	0.351	0.338	0.373	0.346	0.348	5	
Chlorobenzene	1.068	1.170	1.143	1.069	1.173	1.028	1.109	5.5	
Ethyl Benzene	1.988	2.121	2.028	1.840	2.030	1.756	1.961	6.9	
m/p-Xylenes	0.741	0.806	0.779	0.695	0.729	0.600	0.725	10	
o-Xylene	0.714	0.774	0.738	0.666	0.734	0.491	0.686	14.9	
Styrene	1.234	1.312	1.238	1.112	1.159	0.918	1.162	11.9	
Bromoform	0.282	0.315	0.303	0.260	0.288	0.239	0.281	10	
Isopropylbenzene	3.737	4.132	4.055	3.677	3.864	3.428	3.815	6.8	
1,1,2,2-Tetrachloroethane	1.001	1.183	1.187	1.127	1.291	1.095	1.147	8.5	
1,3-Dichlorobenzene	1.624	1.787	1.780	1.646	1.843	1.679	1.727	5.1	
1,4-Dichlorobenzene	1.628	1.784	1.734	1.638	1.889	1.789	1.744	5.7	
1,2-Dichlorobenzene	1.555	1.710	1.740	1.613	1.769	1.770	1.693	5.3	
1,2-Dichloroethane-d4	0.673	0.737	0.764	0.712	0.821		0.741	7.5	
Dibromofluoromethane	0.308	0.324	0.341	0.316	0.359		0.330	6.1	
Toluene-d8	1.189	1.243	1.242	1.148	1.242		1.213	3.5	
4-Bromofluorobenzene	0.447	0.452	0.449	0.406	0.456		0.442	4.6	

* 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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/25/2024 08:59

Lab File ID: VN084503.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.675	0.535	0.1	-20.74	20
Vinyl Chloride	0.654	0.560		-14.37	20
Bromomethane	0.431	0.358		-16.94	20
Chloroethane	0.468	0.374		-20.08	20
Trichlorofluoromethane	1.019	0.965		-5.3	20
1,1,2-Trichlorotrifluoroethane	0.584	0.570		-2.4	20
1,1-Dichloroethene	0.563	0.545		-3.2	20
Acetone	0.318	0.365		14.78	20
Carbon Disulfide	1.782	1.442		-19.08	20
Methyl tert-butyl Ether	1.900	1.987		4.58	20
Methylene Chloride	0.647	0.639		-1.24	20
trans-1,2-Dichloroethene	0.590	0.585		-0.85	20
1,1-Dichloroethane	1.131	1.151	0.1	1.77	20
2-Butanone	0.434	0.461		6.22	20
Carbon Tetrachloride	0.525	0.544		3.62	20
cis-1,2-Dichloroethene	0.713	0.722		1.26	20
Chloroform	1.175	1.213		3.23	20
1,1,1-Trichloroethane	1.055	1.069		1.33	20
Methylcyclohexane	0.533	0.535		0.38	20
Benzene	1.492	1.554		4.16	20
1,2-Dichloroethane	0.506	0.527		4.15	20
Trichloroethene	0.348	0.361		3.74	20
1,2-Dichloropropane	0.353	0.381		7.93	20
Bromodichloromethane	0.529	0.576		8.89	20
4-Methyl-2-Pentanone	0.468	0.513		9.61	20
Toluene	0.910	0.983		8.02	20
t-1,3-Dichloropropene	0.539	0.592		9.83	20
cis-1,3-Dichloropropene	0.580	0.639		10.17	20
1,1,2-Trichloroethane	0.326	0.364		11.66	20
2-Hexanone	0.349	0.394		12.89	20
Dibromochloromethane	0.385	0.437		13.51	20
Tetrachloroethene	0.348	0.356		2.3	20
Chlorobenzene	1.109	1.176	0.3	6.04	20
Ethyl Benzene	1.961	2.097		6.93	20
m/p-Xylenes	0.725	0.806		11.17	20
o-Xylene	0.686	0.757		10.35	20
Styrene	1.162	1.339		15.23	20
Bromoform	0.281	0.317	0.1	12.81	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/25/2024 08:59

Lab File ID: VN084503.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.815	3.921		2.78	20
1,1,2,2-Tetrachloroethane	1.147	1.156	0.3	0.79	20
1,3-Dichlorobenzene	1.727	1.755		1.62	20
1,4-Dichlorobenzene	1.744	1.742		-0.12	20
1,2-Dichlorobenzene	1.693	1.683		-0.59	20
1,2-Dichloroethane-d4	0.741	0.751		1.35	20
Dibromofluoromethane	0.330	0.363		10	20
Toluene-d8	1.213	1.283		5.77	20
4-Bromofluorobenzene	0.442	0.496		12.22	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/25/2024 19:13

Lab File ID: VN084526.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.675	0.530	0.1	-21.48	50
Vinyl Chloride	0.654	0.549		-16.06	50
Bromomethane	0.431	0.340		-21.11	50
Chloroethane	0.468	0.372		-20.51	50
Trichlorofluoromethane	1.019	0.971		-4.71	50
1,1,2-Trichlorotrifluoroethane	0.584	0.564		-3.42	50
1,1-Dichloroethene	0.563	0.525		-6.75	50
Acetone	0.318	0.256		-19.5	50
Carbon Disulfide	1.782	1.370		-23.12	50
Methyl tert-butyl Ether	1.900	1.913		0.68	50
Methylene Chloride	0.647	0.638		-1.39	50
trans-1,2-Dichloroethene	0.590	0.563		-4.58	50
1,1-Dichloroethane	1.131	1.153	0.1	1.95	50
2-Butanone	0.434	0.401		-7.6	50
Carbon Tetrachloride	0.525	0.531		1.14	50
cis-1,2-Dichloroethene	0.713	0.727		1.96	50
Chloroform	1.175	1.223		4.09	50
1,1,1-Trichloroethane	1.055	1.069		1.33	50
Methylcyclohexane	0.533	0.498		-6.57	50
Benzene	1.492	1.515		1.54	50
1,2-Dichloroethane	0.506	0.517		2.17	50
Trichloroethene	0.348	0.352		1.15	50
1,2-Dichloropropane	0.353	0.380		7.65	50
Bromodichloromethane	0.529	0.565		6.8	50
4-Methyl-2-Pentanone	0.468	0.495		5.77	50
Toluene	0.910	0.953		4.72	50
t-1,3-Dichloropropene	0.539	0.562		4.27	50
cis-1,3-Dichloropropene	0.580	0.600		3.45	50
1,1,2-Trichloroethane	0.326	0.358		9.82	50
2-Hexanone	0.349	0.364		4.3	50
Dibromochloromethane	0.385	0.433		12.47	50
Tetrachloroethene	0.348	0.348		0	50
Chlorobenzene	1.109	1.125	0.3	1.44	50
Ethyl Benzene	1.961	2.044		4.23	50
m/p-Xylenes	0.725	0.784		8.14	50
o-Xylene	0.686	0.752		9.62	50
Styrene	1.162	1.287		10.76	50
Bromoform	0.281	0.308	0.1	9.61	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/25/2024 19:13

Lab File ID: VN084526.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.815	3.640		-4.59	50
1,1,2,2-Tetrachloroethane	1.147	1.101	0.3	-4.01	50
1,3-Dichlorobenzene	1.727	1.625		-5.91	50
1,4-Dichlorobenzene	1.744	1.638		-6.08	50
1,2-Dichlorobenzene	1.693	1.600		-5.49	50
1,2-Dichloroethane-d4	0.741	0.736		-0.68	50
Dibromofluoromethane	0.330	0.344		4.24	50
Toluene-d8	1.213	1.245		2.64	50
4-Bromofluorobenzene	0.442	0.467		5.66	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/28/2024 10:05

Lab File ID: VN084529.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.675	0.598	0.1	-11.41	20
Vinyl Chloride	0.654	0.603		-7.8	20
Bromomethane	0.431	0.378		-12.3	20
Chloroethane	0.468	0.391		-16.45	20
Trichlorofluoromethane	1.019	1.025		0.59	20
1,1,2-Trichlorotrifluoroethane	0.584	0.582		-0.34	20
1,1-Dichloroethene	0.563	0.554		-1.6	20
Acetone	0.318	0.308		-3.14	20
Carbon Disulfide	1.782	1.501		-15.77	20
Methyl tert-butyl Ether	1.900	1.919		1	20
Methylene Chloride	0.647	0.663		2.47	20
trans-1,2-Dichloroethene	0.590	0.607		2.88	20
1,1-Dichloroethane	1.131	1.164	0.1	2.92	20
2-Butanone	0.434	0.425		-2.07	20
Carbon Tetrachloride	0.525	0.563		7.24	20
cis-1,2-Dichloroethene	0.713	0.739		3.65	20
Chloroform	1.175	1.237		5.28	20
1,1,1-Trichloroethane	1.055	1.088		3.13	20
Methylcyclohexane	0.533	0.520		-2.44	20
Benzene	1.492	1.585		6.23	20
1,2-Dichloroethane	0.506	0.528		4.35	20
Trichloroethene	0.348	0.368		5.75	20
1,2-Dichloropropane	0.353	0.387		9.63	20
Bromodichloromethane	0.529	0.582		10.02	20
4-Methyl-2-Pentanone	0.468	0.503		7.48	20
Toluene	0.910	0.991		8.9	20
t-1,3-Dichloropropene	0.539	0.580		7.61	20
cis-1,3-Dichloropropene	0.580	0.632		8.97	20
1,1,2-Trichloroethane	0.326	0.378		15.95	20
2-Hexanone	0.349	0.373		6.88	20
Dibromochloromethane	0.385	0.441		14.55	20
Tetrachloroethene	0.348	0.381		9.48	20
Chlorobenzene	1.109	1.155	0.3	4.15	20
Ethyl Benzene	1.961	2.049		4.49	20
m/p-Xylenes	0.725	0.784		8.14	20
o-Xylene	0.686	0.751		9.48	20
Styrene	1.162	1.303		12.13	20
Bromoform	0.281	0.312	0.1	11.03	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/28/2024 10:05

Lab File ID: VN084529.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.815	3.841		0.68	20
1,1,2,2-Tetrachloroethane	1.147	1.165	0.3	1.57	20
1,3-Dichlorobenzene	1.727	1.752		1.45	20
1,4-Dichlorobenzene	1.744	1.746		0.12	20
1,2-Dichlorobenzene	1.693	1.699		0.35	20
1,2-Dichloroethane-d4	0.741	0.721		-2.7	20
Dibromofluoromethane	0.330	0.356		7.88	20
Toluene-d8	1.213	1.245		2.64	20
4-Bromofluorobenzene	0.442	0.476		7.69	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/28/2024 21:02

Lab File ID: VN084550.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.675	0.594	0.1	-12	50
Vinyl Chloride	0.654	0.604		-7.64	50
Bromomethane	0.431	0.382		-11.37	50
Chloroethane	0.468	0.380		-18.8	50
Trichlorofluoromethane	1.019	1.042		2.26	50
1,1,2-Trichlorotrifluoroethane	0.584	0.610		4.45	50
1,1-Dichloroethene	0.563	0.563		0	50
Acetone	0.318	0.263		-17.3	50
Carbon Disulfide	1.782	1.504		-15.6	50
Methyl tert-butyl Ether	1.900	1.983		4.37	50
Methylene Chloride	0.647	0.656		1.39	50
trans-1,2-Dichloroethene	0.590	0.597		1.19	50
1,1-Dichloroethane	1.131	1.181	0.1	4.42	50
2-Butanone	0.434	0.417		-3.92	50
Carbon Tetrachloride	0.525	0.548		4.38	50
cis-1,2-Dichloroethene	0.713	0.747		4.77	50
Chloroform	1.175	1.243		5.79	50
1,1,1-Trichloroethane	1.055	1.107		4.93	50
Methylcyclohexane	0.533	0.528		-0.94	50
Benzene	1.492	1.566		4.96	50
1,2-Dichloroethane	0.506	0.516		1.98	50
Trichloroethene	0.348	0.355		2.01	50
1,2-Dichloropropane	0.353	0.381		7.93	50
Bromodichloromethane	0.529	0.577		9.07	50
4-Methyl-2-Pentanone	0.468	0.512		9.4	50
Toluene	0.910	0.966		6.15	50
t-1,3-Dichloropropene	0.539	0.566		5.01	50
cis-1,3-Dichloropropene	0.580	0.614		5.86	50
1,1,2-Trichloroethane	0.326	0.366		12.27	50
2-Hexanone	0.349	0.374		7.16	50
Dibromochloromethane	0.385	0.431		11.95	50
Tetrachloroethene	0.348	0.344		-1.15	50
Chlorobenzene	1.109	1.144	0.3	3.16	50
Ethyl Benzene	1.961	2.025		3.26	50
m/p-Xylenes	0.725	0.788		8.69	50
o-Xylene	0.686	0.748		9.04	50
Styrene	1.162	1.312		12.91	50
Bromoform	0.281	0.318	0.1	13.17	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: MSVOA_N Calibration Date/Time: 10/28/2024 21:02

Lab File ID: VN084550.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.815	3.459		-9.33	50
1,1,2,2-Tetrachloroethane	1.147	1.090	0.3	-4.97	50
1,3-Dichlorobenzene	1.727	1.615		-6.49	50
1,4-Dichlorobenzene	1.744	1.608		-7.8	50
1,2-Dichlorobenzene	1.693	1.541		-8.98	50
1,2-Dichloroethane-d4	0.741	0.754		1.75	50
Dibromofluoromethane	0.330	0.351		6.36	50
Toluene-d8	1.213	1.244		2.56	50
4-Bromofluorobenzene	0.442	0.487		10.18	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:	P4550	OrderDate:	10/24/2024 5:50:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	K63,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4550-02	VPB190-HYD-202410 23	Water			10/23/24			10/24/24
			SVOC-SIMGroup1	8270-Modified		10/25/24	10/25/24	
P4550-02RE	VPB190-HYD-202410 23RE	Water			10/23/24			10/24/24
			SVOC-SIMGroup1	8270-Modified		10/25/24	10/26/24	
P4550-05	BP-VPB-190-GW-318- 320	Water			10/22/24			10/24/24
			SVOC-SIMGroup1	8270-Modified		10/25/24	10/25/24	
P4550-09	BP-VPB-190-GW-358- 360	Water			10/23/24			10/24/24
			SVOC-SIMGroup1	8270-Modified		10/25/24	10/25/24	
P4550-11	BP-VPB-190-GW-398- 400	Water			10/23/24			10/24/24
			SVOC-SIMGroup1	8270-Modified		10/25/24	10/26/24	

Hit Summary Sheet SW-846

SDG No.: P4550
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : BP-VPB-190-GW-318-320								
P4550-05	BP-VPB-190-GW-318-32 WATER	1,4-Dioxane	0.370		0.09	0.26	0.26	ug/L
		Total Svoc :		0.37				
		Total Concentration:		0.37				
Client ID : BP-VPB-190-GW-358-360								
P4550-09	BP-VPB-190-GW-358-36 WATER	1,4-Dioxane	0.620		0.1	0.28	0.28	ug/L
		Total Svoc :		0.62				
		Total Concentration:		0.62				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	10/23/24
Project:	CTO WE13	Date Received:	10/24/24
Client Sample ID:	VPB190-HYD-20241023	SDG No.:	P4550
Lab Sample ID:	P4550-02	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	980 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034729.D	1	10/25/24 10:45	10/25/24 18:53	PB164409

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	0.020	*	30 - 150		5%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.18		30 - 150		45%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.27		55 - 111		67%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		65%	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	8810	7.654				
1146-65-2	Naphthalene-d8	25100	10.426				
15067-26-2	Acenaphthene-d10	12100	14.275				
1517-22-2	Phenanthrene-d10	23200	17.019				
1719-03-5	Chrysene-d12	12500	21.214				
1520-96-3	Perylene-d12	11200	23.414				

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:	10/23/24
Project:	CTO WE13	Date Received:	10/24/24
Client Sample ID:	VPB190-HYD-20241023RE	SDG No.:	P4550
Lab Sample ID:	P4550-02RE	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	980 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034737.D	1	10/25/24 10:45	10/26/24 12:05	PB164409

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	0.019	*	30 - 150		5%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.18		30 - 150		45%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.26		55 - 111		65%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		66%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		100%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	9060	7.647				
1146-65-2	Naphthalene-d8	26000	10.415				
15067-26-2	Acenaphthene-d10	12200	14.272				
1517-22-2	Phenanthrene-d10	23600	17.014				
1719-03-5	Chrysene-d12	11900	21.212				
1520-96-3	Perylene-d12	8890	23.409				

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:	10/22/24
Project:	CTO WE13	Date Received:	10/24/24
Client Sample ID:	BP-VPB-190-GW-318-320	SDG No.:	P4550
Lab Sample ID:	P4550-05	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	760 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034730.D	1	10/25/24 10:45	10/25/24 19:29	PB164409

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.37		0.090	0.26	0.26	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		55 - 111		102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		101%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	58 - 132		142%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8100	7.655				
1146-65-2	Naphthalene-d8	23100	10.415				
15067-26-2	Acenaphthene-d10	11200	14.283				
1517-22-2	Phenanthrene-d10	21200	17.026				
1719-03-5	Chrysene-d12	11500	21.212				
1520-96-3	Perylene-d12	10500	23.412				

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:	10/23/24
Project:	CTO WE13	Date Received:	10/24/24
Client Sample ID:	BP-VPB-190-GW-358-360	SDG No.:	P4550
Lab Sample ID:	P4550-09	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	710 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034731.D	1	10/25/24 10:45	10/25/24 20:05	PB164409

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.62		0.10	0.28	0.28	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		83%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		103%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8000	7.647				
1146-65-2	Naphthalene-d8	22800	10.426				
15067-26-2	Acenaphthene-d10	10400	14.276				
1517-22-2	Phenanthrene-d10	19200	17.019				
1719-03-5	Chrysene-d12	12800	21.214				
1520-96-3	Perylene-d12	12800	23.411				

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:	10/23/24
Project:	CTO WE13	Date Received:	10/24/24
Client Sample ID:	BP-VPB-190-GW-398-400	SDG No.:	P4550
Lab Sample ID:	P4550-11	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	750 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034736.D	1	10/25/24 10:45	10/26/24 11:28	PB164409

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.27	U	0.090	0.27	0.27	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		78%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		134%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8580	7.647				
1146-65-2	Naphthalene-d8	25000	10.415				
15067-26-2	Acenaphthene-d10	11900	14.276				
1517-22-2	Phenanthrene-d10	22700	17.019				
1719-03-5	Chrysene-d12	11600	21.205				
1520-96-3	Perylene-d12	9890	23.408				

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.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P4550-02	VPB190-HYD-20241023	2-Methylnaphthalene-d10	0.4	0.020	5	*	30	150
		Fluoranthene-d10	0.4	0.18	45		30	150
		Nitrobenzene-d5	0.4	0.27	67		55	111
		2-Fluorobiphenyl	0.4	0.26	65		53	106
		Terphenyl-d14	0.4	0.40	99		58	132
P4550-02RE	VPB190-HYD-20241023RE	2-Methylnaphthalene-d10	0.4	0.019	5	*	30	150
		Fluoranthene-d10	0.4	0.18	45		30	150
		Nitrobenzene-d5	0.4	0.26	65		55	111
		2-Fluorobiphenyl	0.4	0.26	66		53	106
		Terphenyl-d14	0.4	0.40	100		58	132
P4550-05	BP-VPB-190-GW-318-320	2-Methylnaphthalene-d10	0.4	0.38	96		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.41	102		55	111
		2-Fluorobiphenyl	0.4	0.41	101		53	106
		Terphenyl-d14	0.4	0.57	142	*	58	132
P4550-09	BP-VPB-190-GW-358-360	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.41	103		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
P4550-11	BP-VPB-190-GW-398-400	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132
PB164409BL	PB164409BL	2-Methylnaphthalene-d10	0.4	0.34	86		30	150
		Fluoranthene-d10	0.4	0.34	85		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.46	116		58	132
PB164409BS	PB164409BS	2-Methylnaphthalene-d10	0.4	0.47	118		30	150
		Fluoranthene-d10	0.4	0.35	88		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.48	119		58	132
PB164409BSD	PB164409BSD	2-Methylnaphthalene-d10	0.4	0.48	119		30	150
		Fluoranthene-d10	0.4	0.35	88		30	150
		Nitrobenzene-d5	0.4	0.39	96		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.47	118		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN034727.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB164409BS	1,4-Dioxane	0.4	0.28	ug/L	70				70	130	

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4550

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN034728.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB164409BSD	1,4-Dioxane	0.4	0.29	ug/L	73	4			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164409BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4550

SAS No.: P4550 SDG NO.: P4550

Lab File ID: BN034735.D

Lab Sample ID: PB164409BL

Instrument ID: BNA_N

Date Extracted: 10/25/2024

Matrix: (soil/water) Water

Date Analyzed: 10/26/2024

Level: (low/med) LOW

Time Analyzed: 10:52

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BP-VPB-190-GW-398-400	P4550-11	BN034736.D	10/26/2024
PB164409BSD	PB164409BSD	BN034728.D	10/25/2024
VPB190-HYD-20241023	P4550-02	BN034729.D	10/25/2024
BP-VPB-190-GW-318-320	P4550-05	BN034730.D	10/25/2024
PB164409BS	PB164409BS	BN034727.D	10/25/2024
BP-VPB-190-GW-358-360	P4550-09	BN034731.D	10/25/2024

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4550 SDG NO.: P4550

Lab File ID: BN034683.D

DFTPP Injection Date: 10/24/2024

Instrument ID: BNA_N

DFTPP Injection Time: 07:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	66.1
68	Less than 2.0% of mass 69	0.9 (1.7) 1
69	Mass 69 relative abundance	54.4
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	60.3
197	Less than 2.0% of mass 198	0.2
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	20.6
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	7.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.1 (18.6) 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	BN034684.D	10/24/2024	09:11
SSTDICC0.2	SSTDICC0.2	BN034685.D	10/24/2024	09:47
SSTDICCC0.4	SSTDICCC0.4	BN034686.D	10/24/2024	10:23
SSTDICC0.8	SSTDICC0.8	BN034687.D	10/24/2024	10:59
SSTDICC1.6	SSTDICC1.6	BN034688.D	10/24/2024	11:35
SSTDICC3.2	SSTDICC3.2	BN034689.D	10/24/2024	12:11
SSTDICC5.0	SSTDICC5.0	BN034690.D	10/24/2024	12:48

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4550 SDG NO.: P4550

Lab File ID: BN034720.D

DFTPP Injection Date: 10/25/2024

Instrument ID: BNA_N

DFTPP Injection Time: 09:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	66.6
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	56.4
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	61.5
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	21
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	7.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.5 (19.4) 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
SSTDCCC0.4	SSTDCCC0.4	BN034721.D	10/25/2024	09:46
PB164409BS	PB164409BS	BN034727.D	10/25/2024	17:40
PB164409BSD	PB164409BSD	BN034728.D	10/25/2024	18:16
VPB190-HYD-20241023	P4550-02	BN034729.D	10/25/2024	18:53
BP-VPB-190-GW-318-320	P4550-05	BN034730.D	10/25/2024	19:29
BP-VPB-190-GW-358-360	P4550-09	BN034731.D	10/25/2024	20:05
SSTDCCC0.4EC	SSTDCCC0.4	BN034732.D	10/25/2024	20:41

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4550 SDG NO.: P4550

Lab File ID: BN034733.D

DFTPP Injection Date: 10/26/2024

Instrument ID: BNA_N

DFTPP Injection Time: 09:37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	73.1
68	Less than 2.0% of mass 69	1 (1.6) 1
69	Mass 69 relative abundance	59.9
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	65.1
197	Less than 2.0% of mass 198	0.4
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	20.4
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	8.5 (18.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN034734.D	10/26/2024	10:16
PB164409BL	PB164409BL	BN034735.D	10/26/2024	10:52
BP-VPB-190-GW-398-400	P4550-11	BN034736.D	10/26/2024	11:28
VPB190-HYD-20241023RE	P4550-02RE	BN034737.D	10/26/2024	12:05
SSTDCCC0.4EC	SSTDCCC0.4	BN034738.D	10/26/2024	12:41

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG NO.: P4550

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/25/2024

Lab File ID: BN034721.D Time Analyzed: 09:46

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	6565	7.705	19566	10.48	9604	14.33
UPPER LIMIT	13130	8.205	39132	10.979	19208	14.825
LOWER LIMIT	3282.5	7.205	9783	9.979	4802	13.825
EPA SAMPLE NO.						
01 VPB190-HYD-20241023	8808	7.65	25081	10.43	12081	14.28
02 BP-VPB-190-GW-318-320	8100	7.66	23066	10.42	11169	14.28
03 PB164409BS	8770	7.65	24617	10.43	11438	14.28
04 BP-VPB-190-GW-358-360	8001	7.65	22771	10.43	10442	14.28
05 PB164409BSD	8434	7.65	23419	10.43	10653	14.28

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.: P4550 SAS No.: P4550 SDG NO.: P4550

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/25/2024

Lab File ID: BN034721.D Time Analyzed: 09:46

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	17577	17.064	13068	21.248	14018	23.459
UPPER LIMIT	35154	17.564	26136	21.748	28036	23.959
LOWER LIMIT	8788.5	16.564	6534	20.748	7009	22.959
EPA SAMPLE NO.						
01 VPB190-HYD-20241023	23223	17.02	12463	21.21	11231	23.41
02 BP-VPB-190-GW-318-320	21194	17.03	11462	21.21	10529	23.41
03 PB164409BS	20789	17.03	11212	21.21	10991	23.42
04 BP-VPB-190-GW-358-360	19183	17.02	12779	21.21	12768	23.41
05 PB164409BSD	19220	17.03	10276	21.21	10044	23.42

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.: P4550 SAS No.: P4550 SDG NO.: P4550

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/26/2024

Lab File ID: BN034734.D Time Analyzed: 10:16

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	8464	7.647	25235	10.42	12818	14.27
UPPER LIMIT	16928	8.147	50470	10.915	25636	14.772
LOWER LIMIT	4232	7.147	12617.5	9.915	6409	13.772
EPA SAMPLE NO.						
01 BP-VPB-190-GW-398-400	8583	7.65	24972	10.42	11895	14.28
02 PB164409BL	8695	7.65	24402	10.42	10618	14.27
03 VPB190-HYD-20241023RE	9064	7.65	26031	10.42	12214	14.27

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.: P4550 SAS No.: P4550 SDG NO.: P4550

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/26/2024

Lab File ID: BN034734.D Time Analyzed: 10:16

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	25182	17.014	13756	21.212	12370	23.406
UPPER LIMIT	50364	17.514	27512	21.712	24740	23.906
LOWER LIMIT	12591	16.514	6878	20.712	6185	22.906
EPA SAMPLE NO.						
01 BP-VPB-190-GW-398-400	22735	17.02	11602	21.21	9891	23.41
02 PB164409BL	19019	17.03	9693	21.21	9063	23.41
03 VPB190-HYD-20241023RE	23563	17.01	11935	21.21	8887	23.41

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:	PB164409BL		SDG No.:	P4550	
Lab Sample ID:	PB164409BL		Matrix:	Water	
Analytical Method:	SW8270SIM		% 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 :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034735.D	1	10/25/24 10:45	10/26/24 10:52	PB164409

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	0.34		30 - 150		86%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		85%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		92%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		116%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8700	7.647				
1146-65-2	Naphthalene-d8	24400	10.415				
15067-26-2	Acenaphthene-d10	10600	14.272				
1517-22-2	Phenanthrene-d10	19000	17.026				
1719-03-5	Chrysene-d12	9690	21.212				
1520-96-3	Perylene-d12	9060	23.412				

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:	PB164409BS		SDG No.:	P4550
Lab Sample ID:	PB164409BS		Matrix:	Water
Analytical Method:	SW8270SIM		% 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 :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034727.D	1	10/25/24 10:45	10/25/24 17:40	PB164409

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.28		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.47		30 - 150		118%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		88%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		97%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		119%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8770	7.654				
1146-65-2	Naphthalene-d8	24600	10.426				
15067-26-2	Acenaphthene-d10	11400	14.283				
1517-22-2	Phenanthrene-d10	20800	17.026				
1719-03-5	Chrysene-d12	11200	21.212				
1520-96-3	Perylene-d12	11000	23.415				

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:	PB164409BSD		SDG No.:	P4550	
Lab Sample ID:	PB164409BSD		Matrix:	Water	
Analytical Method:	SW8270SIM		% 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 :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034728.D	1	10/25/24 10:45	10/25/24 18:16	PB164409

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.48		30 - 150		119%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		88%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		96%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		118%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8430	7.654				
1146-65-2	Naphthalene-d8	23400	10.426				
15067-26-2	Acenaphthene-d10	10700	14.283				
1517-22-2	Phenanthrene-d10	19200	17.026				
1719-03-5	Chrysene-d12	10300	21.212				
1520-96-3	Perylene-d12	10000	23.415				

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-BN102424.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Oct 24 13:17:02 2024
 Response Via : Initial Calibration

Calibration Files

0.1 =BN034684.D 0.2 =BN034685.D 0.4 =BN034686.D 0.8 =BN034687.D 1.6 =BN034688.D 3.2 =BN034689.D 5.0 =BN034690.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	0.621	0.564	0.485	0.545	0.530	0.503	0.479	0.532	9.40
3)	n-Nitrosodimet...	0.775	0.766	0.704	0.842	0.827	0.761	0.749	0.775	6.06
4) S	2-Fluorophenol	1.188	1.202	1.070	1.268	1.253	1.168	1.177	1.189	5.46
5) S	Phenol-d6	1.556	1.554	1.386	1.658	1.657	1.569	1.597	1.568	5.85
6)	bis(2-Chloroet...	1.306	1.281	1.140	1.380	1.346	1.243	1.220	1.274	6.37
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.345	0.323	0.294	0.354	0.349	0.337	0.348	0.336	6.27
9)	Naphthalene	1.126	1.100	0.987	1.182	1.157	1.094	1.101	1.107	5.61
10)	Hexachlorobuta...	0.175	0.169	0.149	0.178	0.170	0.160	0.159	0.166	6.23
11) SURR2	Methylnaphth...	0.542	0.534	0.481	0.583	0.586	0.557	0.566	0.550	6.53
12)	2-Methylnaphth...	0.675	0.670	0.600	0.729	0.730	0.697	0.705	0.687	6.50
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.110	0.118	0.096	0.127	0.133	0.136	0.146	0.124	13.66
15) S	2-Fluorobiphenyl	1.661	1.577	1.379	1.703	1.666	1.540	1.601	1.590	6.84
16)	Acenaphthylene	1.900	1.860	1.581	2.040	2.038	1.964	2.064	1.921	8.76
17)	Acenaphthene	1.318	1.286	1.122	1.435	1.407	1.329	1.370	1.324	7.79
18)	Fluorene	1.598	1.609	1.388	1.764	1.750	1.663	1.663	1.634	7.68
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.048	0.043	0.055	0.059	0.063	0.067	0.056		16.66
21)	4-Bromophenyl-...	0.217	0.211	0.190	0.224	0.221	0.212	0.219	0.213	5.22
22)	Hexachlorobenzene	0.238	0.234	0.211	0.243	0.238	0.226	0.229	0.231	4.55
23)	Atrazine	0.151	0.158	0.140	0.183	0.181	0.181	0.179	0.168	10.55
24)	Pentachlorophenol	0.065	0.064	0.083	0.087	0.092	0.100	0.082		17.73
25)	Phenanthrene	1.214	1.208	1.065	1.273	1.244	1.191	1.215	1.202	5.49
26)	Anthracene	1.006	1.043	0.931	1.124	1.127	1.102	1.131	1.067	7.17
27) SURR	Fluoranthene-d10	0.870	0.885	0.784	0.994	0.951	0.913	0.910	0.901	7.35
28)	Fluoranthene	1.188	1.222	1.092	1.380	1.333	1.290	1.269	1.253	7.66
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	2.066	2.035	1.880	2.152	2.164	2.039	2.048	2.055	4.57
31) S	Terphenyl-d14	0.813	0.797	0.740	0.867	0.865	0.820	0.820	0.817	5.27
32)	Benzo(a)anthra...	1.502	1.445	1.373	1.640	1.613	1.553	1.570	1.528	6.19
33)	Chrysene	1.642	1.568	1.442	1.709	1.643	1.533	1.531	1.581	5.68
34)	Bis(2-ethylhex...	0.901	0.779	0.722	0.843	0.878	0.915	1.030	0.867	11.48
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN102424.M

36)	Indeno(1,2,3-c...	1.562	1.447	1.418	1.596	1.620	1.517	1.624	1.541	5.39
37)	Benzo(b)fluora...	1.543	1.516	1.481	1.714	1.699	1.614	1.615	1.597	5.57
38)	Benzo(k)fluora...	1.511	1.491	1.386	1.723	1.712	1.596	1.613	1.576	7.75
39) C	Benzo(a)pyrene	1.203	1.188	1.157	1.369	1.383	1.323	1.350	1.282	7.45
40)	Dibenzo(a,h)an...	1.236	1.139	1.113	1.246	1.283	1.201	1.288	1.215	5.58
41)	Benzo(g,h,i)pe...	1.397	1.287	1.262	1.377	1.387	1.290	1.378	1.340	4.28

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: BNA_N Calibration Date/Time: 10/25/2024 09:46

Lab File ID: BN034721.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.491		-10.7	20.0
Fluoranthene-d10	0.901	0.834		-7.4	20.0
2-Fluorophenol	1.189	1.280		7.7	20.0
Phenol-d6	1.568	1.733		10.5	20.0
Nitrobenzene-d5	0.336	0.300		-10.7	20.0
2-Fluorobiphenyl	1.590	1.396		-12.2	20.0
2,4,6-Tribromophenol	0.124	0.119		-4.0	20.0
Terphenyl-d14	0.817	0.690		-15.5	20.0
1,4-Dioxane	0.532	0.460		-13.5	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06
 Lab Code: CHEM Case No.: P4550 SAS No.: P4550 SDG No.: P4550
 Instrument ID: BNA_N Calibration Date/Time: 10/25/2024 20:41
 Lab File ID: BN034732.D Init. Calib. Date(s): 10/24/2024 10/24/2024
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 09:11 12:48
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.499		-9.3	50.0
Fluoranthene-d10	0.901	0.778		-13.7	50.0
2-Fluorophenol	1.189	1.284		8.0	50.0
Phenol-d6	1.568	1.673		6.7	50.0
Nitrobenzene-d5	0.336	0.311		-7.4	50.0
2-Fluorobiphenyl	1.590	1.375		-13.5	50.0
2,4,6-Tribromophenol	0.124	0.129		4.0	50.0
Terphenyl-d14	0.817	0.831		1.7	50.0
1,4-Dioxane	0.532	0.481		-9.6	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: BNA_N Calibration Date/Time: 10/26/2024 10:16

Lab File ID: BN034734.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.496		-9.8	20.0
Fluoranthene-d10	0.901	0.780		-13.4	20.0
2-Fluorophenol	1.189	1.207		1.5	20.0
Phenol-d6	1.568	1.607		2.5	20.0
Nitrobenzene-d5	0.336	0.310		-7.7	20.0
2-Fluorobiphenyl	1.590	1.390		-12.6	20.0
2,4,6-Tribromophenol	0.124	0.123		-0.8	20.0
Terphenyl-d14	0.817	0.806		-1.3	20.0
1,4-Dioxane	0.532	0.469		-11.8	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.: P4550 SAS No.: P4550 SDG No.: P4550

Instrument ID: BNA_N Calibration Date/Time: 10/26/2024 12:41

Lab File ID: BN034738.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.495		-10.0	50.0
Fluoranthene-d10	0.901	0.784		-13.0	50.0
2-Fluorophenol	1.189	1.228		3.3	50.0
Phenol-d6	1.568	1.647		5.0	50.0
Nitrobenzene-d5	0.336	0.304		-9.5	50.0
2-Fluorobiphenyl	1.590	1.369		-13.9	50.0
2,4,6-Tribromophenol	0.124	0.117		-5.6	50.0
Terphenyl-d14	0.817	0.800		-2.1	50.0
1,4-Dioxane	0.532	0.472		-11.3	50.0

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS



CHAIN OF CUSTODY RECORD

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

Chemtech Project Number:

P4550

COC Number:

CLIENT 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 INFORMATION

PROJECT NAME: NWIRP Bethpage
PROJECT #: 112G08005-WE13 LOCATION: VPB-189
PROJECT MANAGER: Ernie Wu
E-MAIL: ernie.wu@tetratech.com
PHONE: 757-466-4901 FAX: 757-461-4148

BILLING INFORMATION

BILL TO: SEE CONTRACT PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: 2 & 10 DAYS*
HARD COPY: 2 & 10 DAYS*
EDD 2 & 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ 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 _____

ANALYSIS

VOC(SW846-8260B)	1,4 Dioxane (8270 SIM)	1,4 Dioxane (522 PREC)							
1	2	3	4	5	6	7	8	9	

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles										<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
			COMP	GRAB	DATE	TIME		A									
1.	BP-VPB-190-TB-20241022	QA		X	10/22/24	8:00	2	2									Trip Blank
2.	VPB190-HYD-20241023	QA		X	10/23/24	9:05	5	2	1	2							Hydrant Sample
3.	BP-VPB-190-EB-20241023	QA		X	10/23/24	11:05	2	2									Equipment Blank
4.	BP-VPB-190-GW-298-300	AQ		X	10/22/24	9:55	2	2									
5.	BP-VPB-190-GW-318-320	AQ		X	10/22/24	12:05	3	2	1								
6.	BP-VPB-190-GW-338-340	AQ		X	10/22/24	14:30	6	6									MS/MSD
7.	BP-VPB-190-GW-358-360	AQ		X	10/23/24	10:40	3	2	1								
8.	BP-VPB-190-GW-378-380	AQ		X	10/23/24	13:05	2	2									
9.	BP-VPB-190-GW-398-400	AQ		X	10/23/24	15:25	3	2	1								
10.	BP-VPB-190-GW-418-420	AQ		X	10/24/24	12:35	4	4									Collected extra vials due to high particulate matter

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

RELINQUISHED BY SAMPLER 1. <i>[Signature]</i>	DATE/TIME 10/24/24 15:30	RECEIVED BY 1. <i>[Signature]</i>	Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp <u>2.9°C</u> MeOH extraction requires an additional 4oz. Jar for percent solid Ice in Cooler?: <u>Yes</u> Comments: 48hr TAT - For VOC's see worksheet #15 of SAP 2018 for VPB program VOC list 10-DAY TAT - For 1,4 Dioxane (8270 SIM)	
RELINQUISHED BY 2. <i>[Signature]</i>	DATE/TIME 10-24-2024	RECEIVED BY		
RELINQUISHED BY 3. <i>[Signature]</i>	DATE/TIME 10-24-2024	RECEIVED FOR LAB BY 3. <i>[Signature]</i>		
Page <u>1</u> of <u>1</u>			SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight CHEMTECH: ☐ Picked Up ☐ Overnight	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 (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4550 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 10/24/2024 5:50:00 PM
Project Name : CTO WE13
Receive DateTime : 10/24/2024 12:00:00 AM
Purchase Order : 19:05

Project Mgr :
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4550-01	BP-VPB-190-TB-20241022	Water	10/22/2024	08:00	VOCMS Group1		8260-Low		2 Bus. Days
P4550-02	BP-VPB-190-HYD-20241023 VPB190-HYD-20241023	Water	10/22/2024 23	09:05	VOCMS Group1		8260-Low		2 Bus. Days
P4550-03	BP-VPB-190-EB-20241023	Water	10/22/2024 23	11:05	VOCMS Group1		8260-Low		2 Bus. Days
P4550-04	BP-VPB-190-GW-298-300	Water	10/22/2024	09:55	VOCMS Group1		8260-Low		2 Bus. Days
P4550-05	BP-VPB-190-GW-318-320	Water	10/22/2024	12:05	VOCMS Group1		8260-Low		2 Bus. Days
P4550-06	BP-VPB-190-GW-338-340	Water	10/22/2024	14:30	VOCMS Group1		8260-Low		2 Bus. Days
P4550-07	P4550-06MS	Water	10/22/2024	14:30	VOCMS Group1		8260-Low		2 Bus. Days
P4550-08	P4550-06MSD	Water	10/22/2024	14:30					



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

7
7.3

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4550 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 10/24/2024 5:50:00 PM
Project Name : CTO WE13
Receive DateTime : 10/24/2024 12:00:00 AM
Purchase Order : 19:05

Project Mgr :
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4550-09	BP-VPB-190-GW-358-360	Water	10/23/2024	10:40	VOCMS Group1		8260-Low		2 Bus. Days
P4550-10	BP-VPB-190-GW-378-380	Water	10/23/2024	13:05	VOCMS Group1		8260-Low		2 Bus. Days
P4550-11	BP-VPB-190-GW-398-400	Water	10/24/2024 23	15:25	VOCMS Group1		8260-Low		2 Bus. Days
P4550-12	BP-VPB-190-GW-418-420	Water	10/24/2024	12:35	VOCMS Group1		8260-Low		2 Bus. Days

Relinquished By :

Date / Time : 10/25/24 0900

Received By :

Date / Time : 10/25/24 0900

Storage Area : VOA Refridgerator Room