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

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 : P5314

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

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Cover Page

Order ID : P5314

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
P5314-01	BP-VPB-190A-TB-20241213
P5314-02	BP-VPB-190A-GW-678-680
P5314-03	BP-VPB-190A-GW-698-700
P5314-04	VPB190A-HYD-20241217

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

Signature : _____ Date: 12/30/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager: Ernie Wu
Chemtech Project # P5314
Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:
4 Water samples were received on 12/17/2024.

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

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 20% in the Initial Calibration method (82X121124W.M) for t-1,3-Dichloropropene, Dibromochloromethane, Bromoform these compounds are passing on Quadratic Regression.

The Continuous Calibration File ID VX044438.D met the requirements except for Methylcyclohexane is failing high but no positive hit in associate sample therefore no corrective action taken.

The Tuning criteria met requirements.

Sample BP-VPB-190A-GW-678-680 was diluted due to high concentration.

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

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

The not QT review data is reported in the Miscellaneous.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

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

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

Signature_____

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager: Ernie Wu
Chemtech Project # P5314
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
4 Water samples were received on 12/17/2024.

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 BP-VPB-190A-GW-678-680 [Terphenyl-d14 - 140%], VPB190A-HYD-20241217 [2-Fluorobiphenyl - 107%, Terphenyl-d14 - 170%], PB165724BL [Nitrobenzene-d5 - 114%, Terphenyl-d14 - 134%], PB165724BS [2-Fluorobiphenyl - 115%, Nitrobenzene-d5 - 125%], PB165724BSD [2-Fluorobiphenyl - 116% and Nitrobenzene-d5 - 140%], 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 File ID BN035749.D met the requirements except for Nitrobenzene-d5, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

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The Continuous Calibration File ID BN035776.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Continuous Calibration File ID BN035845.D met the requirements except for Nitrobenzene-d5, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.

E. Additional Comments:
The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
The not QT review data is reported in the Miscellaneous.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

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

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

Signature_____

284 Sheffield Street, Mountainside NJ 07092 Tel.
908-789-8900 Fax: 908-789-8922

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 is 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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P5314**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **SOHIL JODHANI** **Date:** **12/30/2024**

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LAB CHRONICLE

OrderID:	P5314	**OrderDate:**	12/17/2024 3:43:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5314-01	**BP-VPB-190A-TB-20241213**	**Water**			**12/13/24**			**12/17/24**
			VOCMS Group1	8260-Low			12/20/24	
P5314-02	**BP-VPB-190A-GW-678-680**	**Water**			**12/13/24**			**12/17/24**
			VOCMS Group1	8260-Low			12/20/24	
P5314-02DL	**BP-VPB-190A-GW-678-680DL**	**Water**			**12/13/24**			**12/17/24**
			VOCMS Group1	8260-Low			12/20/24	
P5314-03	**BP-VPB-190A-GW-698-700**	**Water**			**12/13/24**			**12/17/24**
			VOCMS Group1	8260-Low			12/20/24	
P5314-04	**VPB190A-HYD-20241217**	**Water**			**12/17/24**			**12/17/24**
			VOCMS Group1	8260-Low			12/20/24	

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Hit Summary Sheet
SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	**BP-VPB-190A-GW-678-680**								
P5314-02	BP-VPB-190A-GW	Water	1,1,2-Trichlorotrifluoroethane	5.40		0.25	0.50	1.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	1,1-Dichloroethene	1.40		0.26	0.75	1.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	Acetone	5.00		1.40	3.80	5.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	Carbon Tetrachloride	1.40		0.25	0.50	1.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	cis-1,2-Dichloroethene	1.60		0.25	0.75	1.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	Chloroform	0.85	J	0.26	0.50	1.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	Trichloroethene	290	E	0.32	0.75	1.00	ug/L
P5314-02	BP-VPB-190A-GW	Water	1,1,2-Trichloroethane	1.30		0.21	0.50	1.00	ug/L
			Total Voc :	307					
			Total Concentration:	307					
Client ID:	**BP-VPB-190A-GW-678-680DL**								
P5314-02DL	BP-VPB-190A-GW	Water	1,1,2-Trichlorotrifluoroethane	5.70	D	1.30	2.50	5.00	ug/L
P5314-02DL	BP-VPB-190A-GW	Water	1,1-Dichloroethene	1.90	JD	1.30	3.80	5.00	ug/L
P5314-02DL	BP-VPB-190A-GW	Water	Acetone	8.10	JD	7.00	18.8	25.0	ug/L
P5314-02DL	BP-VPB-190A-GW	Water	cis-1,2-Dichloroethene	1.90	JD	1.30	3.80	5.00	ug/L
P5314-02DL	BP-VPB-190A-GW	Water	Trichloroethene	300	D	1.60	3.80	5.00	ug/L
P5314-02DL	BP-VPB-190A-GW	Water	1,1,2-Trichloroethane	1.80	JD	1.10	2.50	5.00	ug/L
			Total Voc :	319					
			Total Concentration:	319					
Client ID:	**BP-VPB-190A-GW-698-700**								
P5314-03	BP-VPB-190A-GW	Water	Acetone	10.9		1.40	3.80	5.00	ug/L
P5314-03	BP-VPB-190A-GW	Water	2-Butanone	1.70	J	1.30	2.50	5.00	ug/L
P5314-03	BP-VPB-190A-GW	Water	Trichloroethene	4.40		0.32	0.75	1.00	ug/L
			Total Voc :	17.0					
			Total Concentration:	17.0					
Client ID:	**VPB190A-HYD-20241217**								
P5314-04	VPB190A-HYD-20	Water	Acetone	2.70	J	1.40	3.80	5.00	ug/L
			Total Voc :	2.70					
			Total Concentration:	2.70					

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-TB-20241213	SDG No.:	P5314
Lab Sample ID:	P5314-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044445.D	1		12/20/24 12:26	VX122024

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-TB-20241213	SDG No.:	P5314
Lab Sample ID:	P5314-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044445.D	1		12/20/24 12:26	VX122024

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	43.0		81 - 118		86%	SPK: 50
1868-53-7	Dibromofluoromethane	46.2		80 - 119		92%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		85 - 114		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	118000	5.55				
540-36-3	1,4-Difluorobenzene	209000	6.757				
3114-55-4	Chlorobenzene-d5	178000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	71900	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-TB-20241213	SDG No.:	P5314
Lab Sample ID:	P5314-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044445.D	1		12/20/24 12:26	VX122024

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-678-680	SDG No.:	P5314
Lab Sample ID:	P5314-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044447.D	1		12/20/24 13:13	VX122024

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	5.40		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.40		0.26	0.75	1.00	ug/L
67-64-1	Acetone	5.00		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	1.40		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.60		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.85	J	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	290	E	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	1.30		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-678-680	SDG No.:	P5314
Lab Sample ID:	P5314-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044447.D	1		12/20/24 13:13	VX122024

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	42.7		81 - 118		85%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	51.5		89 - 112		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.0		85 - 114		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	117000	5.55				
540-36-3	1,4-Difluorobenzene	205000	6.757				
3114-55-4	Chlorobenzene-d5	179000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	74100	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-678-680	SDG No.:	P5314
Lab Sample ID:	P5314-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044447.D	1		12/20/24 13:13	VX122024

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-678-680DL	SDG No.:	P5314
Lab Sample ID:	P5314-02DL	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044449.D	5		12/20/24 13:59	VX122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	2.50	UD	1.80	2.50	5.00	ug/L
75-01-4	Vinyl Chloride	3.80	UD	1.70	3.80	5.00	ug/L
74-83-9	Bromomethane	18.8	UD	6.80	18.8	25.0	ug/L
75-00-3	Chloroethane	3.80	UD	2.80	3.80	5.00	ug/L
75-69-4	Trichlorofluoromethane	2.50	UD	1.70	2.50	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	5.70	D	1.30	2.50	5.00	ug/L
75-35-4	1,1-Dichloroethene	1.90	JD	1.30	3.80	5.00	ug/L
67-64-1	Acetone	8.10	JD	7.00	18.8	25.0	ug/L
75-15-0	Carbon Disulfide	3.80	UD	1.60	3.80	5.00	ug/L
1634-04-4	Methyl tert-butyl Ether	2.50	UD	0.80	2.50	5.00	ug/L
75-09-2	Methylene Chloride	2.50	UD	1.60	2.50	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	2.50	UD	1.30	2.50	5.00	ug/L
75-34-3	1,1-Dichloroethane	2.50	UD	1.20	2.50	5.00	ug/L
78-93-3	2-Butanone	12.5	UD	6.50	12.5	25.0	ug/L
56-23-5	Carbon Tetrachloride	2.50	UD	1.30	2.50	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.90	JD	1.30	3.80	5.00	ug/L
67-66-3	Chloroform	2.50	UD	1.30	2.50	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	2.50	UD	0.95	2.50	5.00	ug/L
108-87-2	Methylcyclohexane	2.50	UD	0.95	2.50	5.00	ug/L
71-43-2	Benzene	2.50	UD	0.80	2.50	5.00	ug/L
107-06-2	1,2-Dichloroethane	2.50	UD	1.20	2.50	5.00	ug/L
79-01-6	Trichloroethene	300	D	1.60	3.80	5.00	ug/L
78-87-5	1,2-Dichloropropane	2.50	UD	0.95	2.50	5.00	ug/L
75-27-4	Bromodichloromethane	2.50	UD	1.20	2.50	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	12.5	UD	3.80	12.5	25.0	ug/L
108-88-3	Toluene	2.50	UD	0.90	2.50	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	2.50	UD	1.10	2.50	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	2.50	UD	0.90	2.50	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	1.80	JD	1.10	2.50	5.00	ug/L
591-78-6	2-Hexanone	12.5	UD	5.70	12.5	25.0	ug/L

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-678-680DL	SDG No.:	P5314
Lab Sample ID:	P5314-02DL	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044449.D	5		12/20/24 13:59	VX122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	2.50	UD	0.90	2.50	5.00	ug/L
127-18-4	Tetrachloroethene	2.50	UD	1.30	2.50	5.00	ug/L
108-90-7	Chlorobenzene	2.50	UD	0.65	2.50	5.00	ug/L
100-41-4	Ethyl Benzene	2.50	UD	0.80	2.50	5.00	ug/L
179601-23-1	m/p-Xylenes	5.00	UD	1.60	5.00	10.0	ug/L
95-47-6	o-Xylene	2.50	UD	0.70	2.50	5.00	ug/L
100-42-5	Styrene	2.50	UD	0.80	2.50	5.00	ug/L
75-25-2	Bromoform	2.50	UD	1.10	2.50	5.00	ug/L
98-82-8	Isopropylbenzene	2.50	UD	0.65	2.50	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	2.50	UD	1.40	2.50	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	2.50	UD	1.20	2.50	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	2.50	UD	1.40	2.50	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	2.50	UD	0.95	2.50	5.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.2		81 - 118		86%	SPK: 50
1868-53-7	Dibromofluoromethane	47.8		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	50.9		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.0		85 - 114		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	114000	5.544				
540-36-3	1,4-Difluorobenzene	203000	6.757				
3114-55-4	Chlorobenzene-d5	178000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	76200	12.018				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-698-700	SDG No.:	P5314
Lab Sample ID:	P5314-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044446.D	1		12/20/24 12:49	VX122024

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	10.9		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	1.70	J	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	4.40		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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-698-700	SDG No.:	P5314
Lab Sample ID:	P5314-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044446.D	1		12/20/24 12:49	VX122024

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	42.3		81 - 118		85%	SPK: 50
1868-53-7	Dibromofluoromethane	47.1		80 - 119		94%	SPK: 50
2037-26-5	Toluene-d8	51.1		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.3		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	122000	5.55				
540-36-3	1,4-Difluorobenzene	211000	6.757				
3114-55-4	Chlorobenzene-d5	182000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	69200	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-698-700	SDG No.:	P5314
Lab Sample ID:	P5314-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044446.D	1		12/20/24 12:49	VX122024

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	VPB190A-HYD-20241217	SDG No.:	P5314
Lab Sample ID:	P5314-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044454.D	1		12/20/24 15:56	VX122024

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	2.70	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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	VPB190A-HYD-20241217	SDG No.:	P5314
Lab Sample ID:	P5314-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044454.D	1		12/20/24 15:56	VX122024

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	42.8		81 - 118		86%	SPK: 50
1868-53-7	Dibromofluoromethane	46.8		80 - 119		94%	SPK: 50
2037-26-5	Toluene-d8	50.6		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.4		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	120000	5.55				
540-36-3	1,4-Difluorobenzene	212000	6.757				
3114-55-4	Chlorobenzene-d5	184000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	74200	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	VPB190A-HYD-20241217	SDG No.:	P5314
Lab Sample ID:	P5314-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044454.D	1		12/20/24 15:56	VX122024

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

QC SUMMARY

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Surrogate Summary

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
P5314-01	BP-VPB-190A-TB-20241213	1,2-Dichloroethane-d4	50	43.0	86	81	118
		Dibromofluoromethane	50	46.2	92	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	47.1	94	85	114
P5314-02	BP-VPB-190A-GW-678-680	1,2-Dichloroethane-d4	50	42.7	85	81	118
		Dibromofluoromethane	50	48.2	96	80	119
		Toluene-d8	50	51.5	103	89	112
		4-Bromofluorobenzene	50	50.0	100	85	114
P5314-02DL	BP-VPB-190A-GW-678-680DL	1,2-Dichloroethane-d4	50	43.2	86	81	118
		Dibromofluoromethane	50	47.8	96	80	119
		Toluene-d8	50	50.9	102	89	112
		4-Bromofluorobenzene	50	47.0	94	85	114
P5314-03	BP-VPB-190A-GW-698-700	1,2-Dichloroethane-d4	50	42.3	85	81	118
		Dibromofluoromethane	50	47.1	94	80	119
		Toluene-d8	50	51.1	102	89	112
		4-Bromofluorobenzene	50	46.3	93	85	114
P5314-04	VPB190A-HYD-20241217	1,2-Dichloroethane-d4	50	42.8	86	81	118
		Dibromofluoromethane	50	46.8	94	80	119
		Toluene-d8	50	50.6	101	89	112
		4-Bromofluorobenzene	50	45.5	91	85	114
VX1220WBL01	VX1220WBL01	1,2-Dichloroethane-d4	50	44.1	88	81	118
		Dibromofluoromethane	50	47.5	95	80	119
		Toluene-d8	50	52.0	104	89	112
		4-Bromofluorobenzene	50	48.4	97	85	114
VX1220WBS01	VX1220WBS01	1,2-Dichloroethane-d4	50	42.7	85	81	118
		Dibromofluoromethane	50	48.5	97	80	119
		Toluene-d8	50	48.7	97	89	112
		4-Bromofluorobenzene	50	46.4	93	85	114
VX1220WBSD0	VX1220WBSD01	1,2-Dichloroethane-d4	50	43.6	87	81	118
		Dibromofluoromethane	50	49.3	99	80	119
		Toluene-d8	50	49.9	100	89	112
		4-Bromofluorobenzene	50	48.6	97	85	114

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low **Datafile :** VX044441.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1220WBS01	Chloromethane	20	18.7	ug/L	94			50	139	
	Vinyl chloride	20	17.9	ug/L	90			58	137	
	Bromomethane	20	18.8	ug/L	94			53	141	
	Chloroethane	20	19.8	ug/L	99			60	138	
	Trichlorofluoromethane	20	15.3	ug/L	77			65	141	
	1,1,2-Trichlorotrifluoroethane	20	18.5	ug/L	93			70	136	
	1,1-Dichloroethene	20	18.9	ug/L	95			71	131	
	Acetone	100	75.7	ug/L	76			39	160	
	Carbon disulfide	20	16.4	ug/L	82			64	133	
	Methyl tert-butyl Ether	20	17.6	ug/L	88			71	124	
	Methylene Chloride	20	19.1	ug/L	96			74	124	
	trans-1,2-Dichloroethene	20	18.7	ug/L	94			75	124	
	1,1-Dichloroethane	20	18.9	ug/L	95			77	125	
	2-Butanone	100	83.3	ug/L	83			56	143	
	Carbon Tetrachloride	20	18.9	ug/L	95			72	136	
	cis-1,2-Dichloroethene	20	18.0	ug/L	90			78	123	
	Chloroform	20	17.7	ug/L	89			79	124	
	1,1,1-Trichloroethane	20	17.5	ug/L	88			74	131	
	Methylcyclohexane	20	19.3	ug/L	97			72	132	
	Benzene	20	20.4	ug/L	102			79	120	
	1,2-Dichloroethane	20	19.2	ug/L	96			73	128	
	Trichloroethene	20	19.9	ug/L	100			79	123	
	1,2-Dichloropropane	20	19.1	ug/L	96			78	122	
	Bromodichloromethane	20	19.1	ug/L	96			79	125	
	4-Methyl-2-Pentanone	100	92.4	ug/L	92			67	130	
	Toluene	20	19.5	ug/L	98			80	121	
	t-1,3-Dichloropropene	20	17.9	ug/L	90			73	127	
	cis-1,3-Dichloropropene	20	19.2	ug/L	96			75	124	
	1,1,2-Trichloroethane	20	20.8	ug/L	104			80	119	
	2-Hexanone	100	90.4	ug/L	90			57	139	
	Dibromochloromethane	20	18.8	ug/L	94			74	126	
	Tetrachloroethene	20	20.8	ug/L	104			74	129	
	Chlorobenzene	20	19.9	ug/L	100			82	118	
	Ethyl Benzene	20	19.2	ug/L	96			79	121	
	m/p-Xylenes	40	39.8	ug/L	100			80	121	
	o-Xylene	20	19.8	ug/L	99			78	122	
	Styrene	20	19.8	ug/L	99			78	123	
	Bromoform	20	19.3	ug/L	97			66	130	
	Isopropylbenzene	20	19.9	ug/L	100			72	131	
	1,1,2,2-Tetrachloroethane	20	19.6	ug/L	98			71	121	
	1,3-Dichlorobenzene	20	20.1	ug/L	101			80	119	
	1,4-Dichlorobenzene	20	20.0	ug/L	100			79	118	
	1,2-Dichlorobenzene	20	19.8	ug/L	99			80	119	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low **Datafile :** VX044442.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1220WBSD01	Chloromethane	20	18.7	ug/L	94	0		50	139	20
	Vinyl chloride	20	18.1	ug/L	91	1		58	137	20
	Bromomethane	20	18.1	ug/L	91	3		53	141	20
	Chloroethane	20	20.3	ug/L	102	3		60	138	20
	Trichlorofluoromethane	20	15.9	ug/L	79	3		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	18.3	ug/L	92	1		70	136	20
	1,1-Dichloroethene	20	18.6	ug/L	93	2		71	131	20
	Acetone	100	79.1	ug/L	79	4		39	160	20
	Carbon disulfide	20	16.8	ug/L	84	2		64	133	20
	Methyl tert-butyl Ether	20	18.0	ug/L	90	2		71	124	20
	Methylene Chloride	20	19.0	ug/L	95	1		74	124	20
	trans-1,2-Dichloroethene	20	17.9	ug/L	90	4		75	124	20
	1,1-Dichloroethane	20	18.4	ug/L	92	3		77	125	20
	2-Butanone	100	88.5	ug/L	89	7		56	143	20
	Carbon Tetrachloride	20	18.9	ug/L	95	0		72	136	20
	cis-1,2-Dichloroethene	20	18.4	ug/L	92	2		78	123	20
	Chloroform	20	18.3	ug/L	92	3		79	124	20
	1,1,1-Trichloroethane	20	17.5	ug/L	88	0		74	131	20
	Methylcyclohexane	20	19.6	ug/L	98	1		72	132	20
	Benzene	20	20.8	ug/L	104	2		79	120	20
	1,2-Dichloroethane	20	19.8	ug/L	99	3		73	128	20
	Trichloroethene	20	20.3	ug/L	102	2		79	123	20
	1,2-Dichloropropane	20	20.3	ug/L	102	6		78	122	20
	Bromodichloromethane	20	19.7	ug/L	99	3		79	125	20
	4-Methyl-2-Pentanone	100	99.0	ug/L	99	7		67	130	20
	Toluene	20	19.9	ug/L	100	2		80	121	20
	t-1,3-Dichloropropene	20	19.1	ug/L	96	6		73	127	20
	cis-1,3-Dichloropropene	20	20.2	ug/L	101	5		75	124	20
	1,1,2-Trichloroethane	20	21.6	ug/L	108	4		80	119	20
	2-Hexanone	100	97.2	ug/L	97	7		57	139	20
	Dibromochloromethane	20	19.3	ug/L	97	3		74	126	20
	Tetrachloroethene	20	20.5	ug/L	103	1		74	129	20
	Chlorobenzene	20	20.2	ug/L	101	1		82	118	20
	Ethyl Benzene	20	19.5	ug/L	98	2		79	121	20
	m/p-Xylenes	40	41.2	ug/L	103	3		80	121	20
	o-Xylene	20	20.2	ug/L	101	2		78	122	20
	Styrene	20	20.4	ug/L	102	3		78	123	20
	Bromoform	20	20.1	ug/L	101	4		66	130	20
	Isopropylbenzene	20	18.8	ug/L	94	6		72	131	20
	1,1,2,2-Tetrachloroethane	20	19.7	ug/L	99	1		71	121	20
	1,3-Dichlorobenzene	20	20.2	ug/L	101	0		80	119	20
	1,4-Dichlorobenzene	20	19.7	ug/L	99	1		79	118	20
	1,2-Dichlorobenzene	20	20.0	ug/L	100	1		80	119	20

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX1220WBL01

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

Lab File ID: VX044440.D Lab Sample ID: VX1220WBL01

Date Analyzed: 12/20/2024 Time Analyzed: 10:23

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX1220WBS01	VX1220WBS01	VX044441.D	12/20/2024
VX1220WBSD01	VX1220WBSD01	VX044442.D	12/20/2024
BP-VPB-190A-TB-20241213	P5314-01	VX044445.D	12/20/2024
BP-VPB-190A-GW-698-700	P5314-03	VX044446.D	12/20/2024
BP-VPB-190A-GW-678-680	P5314-02	VX044447.D	12/20/2024
BP-VPB-190A-GW-678-680DL	P5314-02DL	VX044449.D	12/20/2024
VPB190A-HYD-20241217	P5314-04	VX044454.D	12/20/2024

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

Lab File ID: VX044218.D BFB Injection Date: 12/11/2024

Instrument ID: MSVOA_X BFB Injection Time: 10:13

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	56.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	71.1
175	5.0 - 9.0% of mass 174	5.2 (7.3) 1
176	95.0 - 101.0% of mass 174	68.7 (96.6) 1
177	5.0 - 9.0% of mass 176	4.6 (6.8) 2

1-Value is % mass 174 2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VX044219.D	12/11/2024	10:41
VSTDICC005	VSTDICC005	VX044220.D	12/11/2024	11:27
VSTDICC020	VSTDICC020	VX044221.D	12/11/2024	11:50
VSTDICCC050	VSTDICCC050	VX044222.D	12/11/2024	12:14
VSTDICC100	VSTDICC100	VX044223.D	12/11/2024	12:37
VSTDICC150	VSTDICC150	VX044224.D	12/11/2024	13:00

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

Lab File ID: VX044437.D BFB Injection Date: 12/20/2024

Instrument ID: MSVOA_X BFB Injection Time: 08:49

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	52.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	77.7
175	5.0 - 9.0% of mass 174	5.6 (7.2) 1
176	95.0 - 101.0% of mass 174	76.6 (98.5) 1
177	5.0 - 9.0% of mass 176	4.7 (6.1) 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	VX044438.D	12/20/2024	09:16
VX1220WBL01	VX1220WBL01	VX044440.D	12/20/2024	10:23
VX1220WBS01	VX1220WBS01	VX044441.D	12/20/2024	10:46
VX1220WBSD01	VX1220WBSD01	VX044442.D	12/20/2024	11:16
BP-VPB-190A-TB-20241213	P5314-01	VX044445.D	12/20/2024	12:26
BP-VPB-190A-GW-698-700	P5314-03	VX044446.D	12/20/2024	12:49
BP-VPB-190A-GW-678-680	P5314-02	VX044447.D	12/20/2024	13:13
BP-VPB-190A-GW-678-680DL	P5314-02DL	VX044449.D	12/20/2024	13:59
VPB190A-HYD-20241217	P5314-04	VX044454.D	12/20/2024	15:56
VSTDCCC050EC	VSTDCCC050	VX044464.D	12/20/2024	19:49

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

Lab File ID: VX044438.D Date Analyzed: 12/20/2024

Instrument ID: MSVOA_X Time Analyzed: 09:16

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	136445	5.54	226018	6.76	197543	10.06
UPPER LIMIT	272890	6.044	452036	7.257	395086	10.555
LOWER LIMIT	68222.5	5.044	113009	6.257	98771.5	9.555
EPA SAMPLE NO.						
BP-VPB-190A-TB-20241213	117644	5.55	208582	6.76	178072	10.06
BP-VPB-190A-GW-678-680	116922	5.55	205157	6.76	179312	10.06
BP-VPB-190A-GW-678-680DL	113918	5.54	202874	6.76	177737	10.06
BP-VPB-190A-GW-698-700	121735	5.55	211457	6.76	182367	10.06
VPB190A-HYD-20241217	120419	5.55	211996	6.76	183684	10.05
VX1220WBL01	120864	5.55	218417	6.76	193836	10.05
VX1220WBS01	146515	5.55	249173	6.76	212384	10.05
VX1220WBSD01	138719	5.54	231232	6.76	202087	10.05

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

Lab File ID: VX044438.D Date Analyzed: 12/20/2024

Instrument ID: MSVOA_X Time Analyzed: 09:16

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	95339	12.018				
UPPER LIMIT	190678	12.518				
LOWER LIMIT	47669.5	11.518				
EPA SAMPLE NO.						
BP-VPB-190A-TB-20241213	71905	12.02				
BP-VPB-190A-GW-678-680	74123	12.02				
BP-VPB-190A-GW-678-680DL	76153	12.02				
BP-VPB-190A-GW-698-700	69187	12.02				
VPB190A-HYD-20241217	74241	12.02				
VX1220WBL01	81005	12.02				
VX1220WBS01	96885	12.02				
VX1220WBSD01	96082	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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

QC SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX1220WBL01	SDG No.:	P5314
Lab Sample ID:	VX1220WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044440.D	1		12/20/24 10:23	VX122024

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX1220WBL01	SDG No.:	P5314
Lab Sample ID:	VX1220WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044440.D	1		12/20/24 10:23	VX122024

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	44.1		81 - 118		88%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		80 - 119		95%	SPK: 50
2037-26-5	Toluene-d8	52.1		89 - 112		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.4		85 - 114		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	121000	5.55				
540-36-3	1,4-Difluorobenzene	218000	6.757				
3114-55-4	Chlorobenzene-d5	194000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	81000	12.018				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX1220WBS01	SDG No.:	P5314
Lab Sample ID:	VX1220WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044441.D	1		12/20/24 10:46	VX122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.7		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.9		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	19.8		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	15.3		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.5		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.9		0.26	0.75	1.00	ug/L
67-64-1	Acetone	75.7		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.4		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.6		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.1		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.7		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.9		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	83.3		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.9		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.0		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	17.7		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	17.5		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	19.3		0.19	0.50	1.00	ug/L
71-43-2	Benzene	20.4		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.2		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.9		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.1		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	19.1		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	92.4		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.5		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	17.9		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.2		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.8		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	90.4		1.10	2.50	5.00	ug/L

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX1220WBS01	SDG No.:	P5314
Lab Sample ID:	VX1220WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044441.D	1		12/20/24 10:46	VX122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	18.8		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	20.8		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.9		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.2		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	39.8		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.8		0.14	0.50	1.00	ug/L
100-42-5	Styrene	19.8		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	19.3		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	19.9		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.6		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.1		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	20.0		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.8		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	42.7		81 - 118		85%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		80 - 119		97%	SPK: 50
2037-26-5	Toluene-d8	48.7		89 - 112		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.4		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	147000	5.55				
540-36-3	1,4-Difluorobenzene	249000	6.757				
3114-55-4	Chlorobenzene-d5	212000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	96900	12.018				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX1220WBSD01	SDG No.:	P5314
Lab Sample ID:	VX1220WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044442.D	1		12/20/24 11:16	VX122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.7		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.1		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	18.1		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	20.3		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	15.9		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.6		0.26	0.75	1.00	ug/L
67-64-1	Acetone	79.1		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.8		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.0		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.0		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.9		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.4		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	88.5		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.9		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.4		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	18.3		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	17.5		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	19.6		0.19	0.50	1.00	ug/L
71-43-2	Benzene	20.8		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.8		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	20.3		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.3		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	19.7		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	99.0		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.9		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	20.2		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.6		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	97.2		1.10	2.50	5.00	ug/L

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VX1220WBSD01	SDG No.:	P5314
Lab Sample ID:	VX1220WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044442.D	1		12/20/24 11:16	VX122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	19.3		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	20.5		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.2		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.5		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	41.2		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.2		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.4		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	20.1		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.8		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.7		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.2		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.7		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.0		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.6		81 - 118		87%	SPK: 50
1868-53-7	Dibromofluoromethane	49.3		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	49.9		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.6		85 - 114		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	139000	5.538				
540-36-3	1,4-Difluorobenzene	231000	6.757				
3114-55-4	Chlorobenzene-d5	202000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	96100	12.018				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CALIBRATION SUMMARY

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: MSVOA_X Calibration Date(s): 12/11/2024 12/11/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:41 13:00

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

LAB FILE ID: RRF001 = VX044219.D RRF005 = VX044220.D RRF020 = VX044221.D
RRF050 = VX044222.D RRF100 = VX044223.D RRF150 = VX044224.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Chloromethane	0.743	0.747	0.735	0.756	0.715	0.740	0.739	1.8
Vinyl Chloride	0.805	0.790	0.782	0.786	0.722	0.737	0.770	4.3
Bromomethane		0.590	0.513	0.551	0.529	0.548	0.546	5.3
Chloroethane	0.464	0.520	0.515	0.532	0.422	0.426	0.480	10.2
Trichlorofluoromethane	1.582	1.519	1.514	1.541	1.478	1.414	1.508	3.8
1,1,2-Trichlorotrifluoroethane	0.633	0.628	0.592	0.615	0.573	0.620	0.610	3.8
1,1-Dichloroethene	0.512	0.560	0.544	0.596	0.554	0.596	0.560	5.7
Acetone	0.359	0.353	0.331	0.381	0.348	0.372	0.357	5
Carbon Disulfide	0.841	0.872	0.937	1.150	1.230	1.362	1.065	20
Methyl tert-butyl Ether	2.054	2.188	2.127	2.305	2.170	2.279	2.187	4.3
Methylene Chloride	0.679	0.678	0.666	0.689	0.648	0.668	0.671	2.1
trans-1,2-Dichloroethene	0.600	0.556	0.577	0.619	0.595	0.626	0.596	4.4
1,1-Dichloroethane	1.071	1.173	1.154	1.244	1.171	1.218	1.172	5.1
2-Butanone	0.449	0.491	0.510	0.548	0.509	0.541	0.508	7.1
Carbon Tetrachloride	0.484	0.443	0.432	0.501	0.502	0.529	0.482	7.8
cis-1,2-Dichloroethene	0.809	0.737	0.728	0.772	0.731	0.762	0.756	4.1
Chloroform	1.389	1.312	1.272	1.343	1.272	1.310	1.316	3.4
1,1,1-Trichloroethane	0.993	1.019	1.077	1.176	1.119	1.173	1.093	7.1
Methylcyclohexane	0.514	0.503	0.527	0.555	0.550	0.562	0.535	4.5
Benzene	1.353	1.353	1.332	1.410	1.353	1.353	1.359	1.9
1,2-Dichloroethane	0.554	0.557	0.545	0.584	0.556	0.564	0.560	2.4
Trichloroethene	0.356	0.325	0.325	0.349	0.337	0.342	0.339	3.8
1,2-Dichloropropane	0.368	0.345	0.330	0.357	0.341	0.342	0.347	3.8
Bromodichloromethane	0.380	0.411	0.436	0.508	0.518	0.538	0.465	13.9
4-Methyl-2-Pentanone	0.506	0.551	0.547	0.590	0.561	0.582	0.556	5.4
Toluene	0.908	0.830	0.816	0.877	0.841	0.849	0.853	4
t-1,3-Dichloropropene	0.338	0.357	0.439	0.514	0.526	0.558	0.455	20.3
cis-1,3-Dichloropropene	0.404	0.441	0.488	0.567	0.558	0.583	0.507	14.6
1,1,2-Trichloroethane	0.337	0.332	0.335	0.358	0.334	0.340	0.339	2.8
2-Hexanone	0.323	0.386	0.408	0.439	0.420	0.438	0.403	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.

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: MSVOA_X Calibration Date(s): 12/11/2024 12/11/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:41 13:00

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

LAB FILE ID: RRF001 = VX044219.D RRF005 = VX044220.D RRF020 = VX044221.D
RRF050 = VX044222.D RRF100 = VX044223.D RRF150 = VX044224.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dibromochloromethane	0.254	0.248	0.306	0.370	0.378	0.398	0.326	20.2
Tetrachloroethene	0.359	0.354	0.317	0.321	0.312	0.327	0.332	6
Chlorobenzene	1.130	1.068	1.039	1.088	1.036	1.067	1.071	3.3
Ethyl Benzene	1.853	1.806	1.816	1.927	1.831	1.875	1.851	2.4
m/p-Xylenes	0.653	0.660	0.665	0.707	0.683	0.707	0.679	3.5
o-Xylene	0.686	0.683	0.685	0.703	0.671	0.697	0.687	1.6
Styrene	1.007	1.019	1.099	1.162	1.148	1.177	1.102	6.7
Bromoform	0.137	0.173	0.194	0.247	0.269	0.297	0.219	28
Isopropylbenzene	3.665	3.976	3.920	3.912	3.747	3.747	3.828	3.2
1,1,2,2-Tetrachloroethane	1.410	1.350	1.332	1.336	1.256	1.293	1.329	3.9
1,3-Dichlorobenzene	1.519	1.634	1.640	1.683	1.625	1.628	1.621	3.3
1,4-Dichlorobenzene	1.811	1.640	1.632	1.672	1.621	1.623	1.667	4.4
1,2-Dichlorobenzene	1.745	1.666	1.668	1.726	1.654	1.643	1.684	2.5
1,2-Dichloroethane-d4		0.934	0.778	0.921	0.862	0.888	0.877	7.1
Dibromofluoromethane		0.353	0.298	0.367	0.360	0.354	0.346	8
Toluene-d8		1.148	1.010	1.251	1.229	1.203	1.168	8.3
4-Bromofluorobenzene		0.390	0.351	0.442	0.432	0.426	0.408	9.2

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: MSVOA_X Calibration Date/Time: 12/20/2024 09:16

Lab File ID: VX044438.D Init. Calib. Date(s): 12/11/2024 12/11/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:41 13:00

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.739	0.782	0.1	5.82	20
Vinyl Chloride	0.770	0.798		3.64	20
Bromomethane	0.546	0.532		-2.56	20
Chloroethane	0.480	0.473		-1.46	20
Trichlorofluoromethane	1.508	1.482		-1.72	20
1,1,2-Trichlorotrifluoroethane	0.610	0.676		10.82	20
1,1-Dichloroethene	0.560	0.624		11.43	20
Acetone	0.357	0.291		-18.49	20
Carbon Disulfide	1.065	1.106		3.85	20
Methyl tert-butyl Ether	2.187	2.093		-4.3	20
Methylene Chloride	0.671	0.689		2.68	20
trans-1,2-Dichloroethene	0.596	0.625		4.87	20
1,1-Dichloroethane	1.172	1.203	0.1	2.64	20
2-Butanone	0.508	0.457		-10.04	20
Carbon Tetrachloride	0.482	0.533		10.58	20
cis-1,2-Dichloroethene	0.756	0.755		-0.13	20
Chloroform	1.316	1.265		-3.88	20
1,1,1-Trichloroethane	1.093	1.099		0.55	20
Methylcyclohexane	0.535	0.648		21.12	20
Benzene	1.359	1.529		12.51	20
1,2-Dichloroethane	0.560	0.586		4.64	20
Trichloroethene	0.339	0.388		14.45	20
1,2-Dichloropropane	0.347	0.369		6.34	20
Bromodichloromethane	0.465	0.525		12.9	20
4-Methyl-2-Pentanone	0.556	0.573		3.06	20
Toluene	0.853	0.924		8.32	20
t-1,3-Dichloropropene	0.455	0.517		13.63	20
cis-1,3-Dichloropropene	0.507	0.577		13.81	20
1,1,2-Trichloroethane	0.339	0.374		10.32	20
2-Hexanone	0.403	0.414		2.73	20
Dibromochloromethane	0.326	0.381		16.87	20
Tetrachloroethene	0.332	0.378		13.85	20
Chlorobenzene	1.071	1.187	0.3	10.83	20
Ethyl Benzene	1.851	2.034		9.89	20
m/p-Xylenes	0.679	0.780		14.88	20
o-Xylene	0.687	0.748		8.88	20
Styrene	1.102	1.275		15.7	20
Bromoform	0.219	0.266	0.1	21.46	20

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

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: MSVOA_X Calibration Date/Time: 12/20/2024 09:16

Lab File ID: VX044438.D Init. Calib. Date(s): 12/11/2024 12/11/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:41 13:00

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.828	4.095		6.97	20
1,1,2,2-Tetrachloroethane	1.329	1.387	0.3	4.36	20
1,3-Dichlorobenzene	1.621	1.811		11.72	20
1,4-Dichlorobenzene	1.667	1.781		6.84	20
1,2-Dichlorobenzene	1.684	1.820		8.08	20
1,2-Dichloroethane-d4	0.877	0.836		-4.68	20
Dibromofluoromethane	0.346	0.392		13.3	20
Toluene-d8	1.168	1.318		12.84	20
4-Bromofluorobenzene	0.408	0.454		11.27	20

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

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: MSVOA_X Calibration Date/Time: 12/20/2024 19:49

Lab File ID: VX044464.D Init. Calib. Date(s): 12/11/2024 12/11/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:41 13:00

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.739	0.696	0.1	-5.82	50
Vinyl Chloride	0.770	0.730		-5.2	50
Bromomethane	0.546	0.498		-8.79	50
Chloroethane	0.480	0.507		5.63	50
Trichlorofluoromethane	1.508	1.202		-20.29	50
1,1,2-Trichlorotrifluoroethane	0.610	0.590		-3.28	50
1,1-Dichloroethene	0.560	0.560		0	50
Acetone	0.357	0.270		-24.37	50
Carbon Disulfide	1.065	1.089		2.25	50
Methyl tert-butyl Ether	2.187	1.972		-9.83	50
Methylene Chloride	0.671	0.636		-5.22	50
trans-1,2-Dichloroethene	0.596	0.578		-3.02	50
1,1-Dichloroethane	1.172	1.125	0.1	-4.01	50
2-Butanone	0.508	0.433		-14.76	50
Carbon Tetrachloride	0.482	0.495		2.7	50
cis-1,2-Dichloroethene	0.756	0.719		-4.89	50
Chloroform	1.316	1.190		-9.57	50
1,1,1-Trichloroethane	1.093	1.029		-5.86	50
Methylcyclohexane	0.535	0.550		2.8	50
Benzene	1.359	1.393		2.5	50
1,2-Dichloroethane	0.560	0.534		-4.64	50
Trichloroethene	0.339	0.360		6.2	50
1,2-Dichloropropane	0.347	0.345		-0.58	50
Bromodichloromethane	0.465	0.491		5.59	50
4-Methyl-2-Pentanone	0.556	0.524		-5.76	50
Toluene	0.853	0.855		0.23	50
t-1,3-Dichloropropene	0.455	0.482		5.93	50
cis-1,3-Dichloropropene	0.507	0.531		4.73	50
1,1,2-Trichloroethane	0.339	0.345		1.77	50
2-Hexanone	0.403	0.381		-5.46	50
Dibromochloromethane	0.326	0.361		10.74	50
Tetrachloroethene	0.332	0.343		3.31	50
Chlorobenzene	1.071	1.094	0.3	2.15	50
Ethyl Benzene	1.851	1.868		0.92	50
m/p-Xylenes	0.679	0.713		5.01	50
o-Xylene	0.687	0.708		3.06	50
Styrene	1.102	1.163		5.53	50
Bromoform	0.219	0.251	0.1	14.61	50

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: MSVOA_X Calibration Date/Time: 12/20/2024 19:49

Lab File ID: VX044464.D Init. Calib. Date(s): 12/11/2024 12/11/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:41 13:00

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.828	3.829		0.03	50
1,1,2,2-Tetrachloroethane	1.329	1.278	0.3	-3.84	50
1,3-Dichlorobenzene	1.621	1.669		2.96	50
1,4-Dichlorobenzene	1.667	1.653		-0.84	50
1,2-Dichlorobenzene	1.684	1.709		1.49	50
1,2-Dichloroethane-d4	0.877	0.778		-11.29	50
Dibromofluoromethane	0.346	0.363		4.91	50
Toluene-d8	1.168	1.213		3.85	50
4-Bromofluorobenzene	0.408	0.418		2.45	50

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

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

LAB CHRONICLE

OrderID:	P5314	**OrderDate:**	12/17/2024 3:43:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5314-02	**BP-VPB-190A-GW-678-680**	**Water**			**12/13/24**			**12/17/24**
			SVOC-SIMGroup1	8270-Modified		12/18/24	12/23/24	
P5314-04	**VPB190A-HYD-20241217**	**Water**			**12/17/24**			**12/17/24**
			SVOC-SIMGroup1	8270-Modified		12/18/24	12/23/24	

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

Hit Summary Sheet
SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	**BP-VPB-190A-GW-678-680**							
P5314-02	BP-VPB-190A-GW-678-I WATER	1,4-Dioxane	1.400		0.09	0.25	0.25	ug/L
		Total Svoc :		**1.40**				
		Total Concentration:		**1.40**				

SAMPLE DATA

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/13/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	BP-VPB-190A-GW-678-680	SDG No.:	P5314
Lab Sample ID:	P5314-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	800 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035785.D	1	12/18/24 12:50	12/23/24 15:41	PB165724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	1.40		0.090	0.25	0.25	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		55 - 111		102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		140%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3450	7.264				
1146-65-2	Naphthalene-d8	8950	10.009				
15067-26-2	Acenaphthene-d10	5550	13.924				
1517-22-2	Phenanthrene-d10	10300	16.698				
1719-03-5	Chrysene-d12	8360	20.947				
1520-96-3	Perylene-d12	8390	23.032				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	VPB190A-HYD-20241217	SDG No.:	P5314
Lab Sample ID:	P5314-04	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	940 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035786.D	1	12/18/24 12:50	12/23/24 16:17	PB165724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.13		30 - 150		34%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.17		30 - 150		43%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43	*	53 - 106		107%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.68	*	58 - 132		170%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	4130	7.264				
1146-65-2	Naphthalene-d8	10900	10.009				
15067-26-2	Acenaphthene-d10	6410	13.925				
1517-22-2	Phenanthrene-d10	11600	16.698				
1719-03-5	Chrysene-d12	7750	20.947				
1520-96-3	Perylene-d12	5710	23.035				

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

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Surrogate Summary

SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
P5314-02	BP-VPB-190A-GW-678-680	2-Methylnaphthalene-d10	0.4	0.39	96		30	150
		Fluoranthene-d10	0.4	0.41	101		30	150
		Nitrobenzene-d5	0.4	0.41	102		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.56	140	*	58	132
P5314-04	VPB190A-HYD-20241217	2-Methylnaphthalene-d10	0.4	0.13	34		30	150
		Fluoranthene-d10	0.4	0.17	43		30	150
		Nitrobenzene-d5	0.4	0.42	104		55	111
		2-Fluorobiphenyl	0.4	0.43	107	*	53	106
		Terphenyl-d14	0.4	0.68	170	*	58	132
PB165724BL	PB165724BL	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
		Nitrobenzene-d5	0.4	0.46	114	*	55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132
PB165724BS	PB165724BS	2-Methylnaphthalene-d10	0.4	0.56	139		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.50	125	*	55	111
		2-Fluorobiphenyl	0.4	0.46	115	*	53	106
		Terphenyl-d14	0.4	0.50	125		58	132
PB165724BSD	PB165724BSD	2-Methylnaphthalene-d10	0.4	0.53	132		30	150
		Fluoranthene-d10	0.4	0.40	99		30	150
		Nitrobenzene-d5	0.4	0.56	140	*	55	111
		2-Fluorobiphenyl	0.4	0.47	116	*	53	106
		Terphenyl-d14	0.4	0.51	128		58	132

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035764.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB165724BS	1,4-Dioxane	0.4	0.48	ug/L	120				70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5314

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035853.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB165724BSD	1,4-Dioxane	0.4	0.45	ug/L	113	6			70	130	20

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165724BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

Lab File ID: BN035846.D Lab Sample ID: PB165724BL

Instrument ID: BNA_N Date Extracted: 12/18/2024

Matrix: (soil/water) Water Date Analyzed: 12/26/2024

Level: (low/med) LOW Time Analyzed: 10:35

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB165724BSD	PB165724BSD	BN035853.D	12/26/2024
PB165724BS	PB165724BS	BN035764.D	12/21/2024
BP-VPB-190A-GW-678-680	P5314-02	BN035785.D	12/23/2024
VPB190A-HYD-20241217	P5314-04	BN035786.D	12/23/2024

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5314 SDG NO.: P5314

Lab File ID: BN035349.D DFTPP Injection Date: 11/27/2024

Instrument ID: BNA_N DFTPP Injection Time: 14:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	28.9
70	Less than 2.0% of mass 69	0.1 (0.4) 1
127	10.0 - 80.0% of mass 198	39.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	27.9
365	Greater than 1% of mass 198	4.6
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14 (19.7) 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	BN035350.D	11/27/2024	15:34
SSTDICC0.2	SSTDICC0.2	BN035351.D	11/27/2024	16:10
SSTDICCC0.4	SSTDICCC0.4	BN035352.D	11/27/2024	16:46
SSTDICC0.8	SSTDICC0.8	BN035353.D	11/27/2024	17:21
SSTDICC1.6	SSTDICC1.6	BN035354.D	11/27/2024	17:57
SSTDICC3.2	SSTDICC3.2	BN035355.D	11/27/2024	18:33
SSTDICC5.0	SSTDICC5.0	BN035356.D	11/27/2024	19:09

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5314 SDG NO.: P5314

Lab File ID: BN035748.D DFTPP Injection Date: 12/20/2024

Instrument ID: BNA_N DFTPP Injection Time: 18:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.2
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	30
70	Less than 2.0% of mass 69	0.1 (0.5) 1
127	10.0 - 80.0% of mass 198	37.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	29.5
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	13.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.3 (19.1) 2

1-Value is % mass 69 2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN035749.D	12/20/2024	19:33
PB165724BS	PB165724BS	BN035764.D	12/21/2024	04:34
SSTDCCC0.4EC	SSTDCCC0.4	BN035765.D	12/21/2024	05:10

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5314 SDG NO.: P5314

Lab File ID: BN035775.D DFTPP Injection Date: 12/23/2024

Instrument ID: BNA_N DFTPP Injection Time: 09:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	31.2
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	39.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	29.2
365	Greater than 1% of mass 198	4.3
441	Present, but less than mass 443	14
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.4 (19.7) 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	BN035776.D	12/23/2024	10:22
BP-VPB-190A-GW-678-680	P5314-02	BN035785.D	12/23/2024	15:41
VPB190A-HYD-20241217	P5314-04	BN035786.D	12/23/2024	16:17
SSTDCCC0.4EC	SSTDCCC0.4	BN035792.D	12/23/2024	19:51

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5314 SDG NO.: P5314

Lab File ID: BN035844.D DFTPP Injection Date: 12/26/2024

Instrument ID: BNA_N DFTPP Injection Time: 09:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	24
68	Less than 2.0% of mass 69	0.2 (0.6) 1
69	Mass 69 relative abundance	32.9
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	40
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	27.1
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.1 (20.5) 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	BN035845.D	12/26/2024	09:58
PB165724BL	PB165724BL	BN035846.D	12/26/2024	10:35
PB165724BSD	PB165724BSD	BN035853.D	12/26/2024	14:54
SSTDCCC0.4EC	SSTDCCC0.4	BN035861.D	12/26/2024	19:41

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/20/2024

Lab File ID: BN035749.D Time Analyzed: 19:33

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	2885	7.272	7460	10.01	4592	13.93
	UPPER LIMIT	5770	7.772	14920	10.509	9184	14.425
	LOWER LIMIT	1442.5	6.772	3730	9.509	2296	13.425
	EPA SAMPLE NO.						
01	PB165724BS	2647	7.27	6538	10.01	3740	13.92

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/20/2024

Lab File ID: BN035749.D Time Analyzed: 19:33

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	9182	16.698	7719	20.956	7943	23.038
	UPPER LIMIT	18364	17.198	15438	21.456	15886	23.538
	LOWER LIMIT	4591	16.198	3859.5	20.456	3971.5	22.538
	EPA SAMPLE NO.						
01	PB165724BS	6891	16.70	6144	20.96	6576	23.04

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.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/23/2024

Lab File ID: BN035776.D Time Analyzed: 10:22

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	3884	7.264	10099	10.01	5893	13.92
	UPPER LIMIT	7768	7.764	20198	10.509	11786	14.424
	LOWER LIMIT	1942	6.764	5049.5	9.509	2946.5	13.424
	EPA SAMPLE NO.						
01	BP-VPB-190A-GW-678-680	3452	7.26	8948	10.01	5551	13.92
02	VPB190A-HYD-20241217	4132	7.26	10947	10.01	6411	13.93

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/23/2024

Lab File ID: BN035776.D Time Analyzed: 10:22

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	11548	16.698	8770	20.947	8918	23.026
	UPPER LIMIT	23096	17.198	17540	21.447	17836	23.526
	LOWER LIMIT	5774	16.198	4385	20.447	4459	22.526
	EPA SAMPLE NO.						
01	BP-VPB-190A-GW-678-680	10343	16.70	8364	20.95	8390	23.03
02	VPB190A-HYD-20241217	11585	16.70	7747	20.95	5708	23.04

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.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/26/2024

Lab File ID: BN035845.D Time Analyzed: 09:58

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	3755	7.257	9322	10.00	5387	13.91
	UPPER LIMIT	7510	7.757	18644	10.499	10774	14.414
	LOWER LIMIT	1877.5	6.757	4661	9.499	2693.5	13.414
	EPA SAMPLE NO.						
01	PB165724BL	4513	7.26	10649	10.00	6575	13.92
02	PB165724BSD	2938	7.26	6908	10.00	3870	13.91

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG NO.: P5314

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/26/2024

Lab File ID: BN035845.D Time Analyzed: 09:58

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	11262	16.686	9932	20.938	10817	23.021
	UPPER LIMIT	22524	17.186	19864	21.438	21634	23.521
	LOWER LIMIT	5631	16.186	4966	20.438	5408.5	22.521
	EPA SAMPLE NO.						
01	PB165724BL	14052	16.70	10269	20.95	9894	23.03
02	PB165724BSD	7401	16.70	5744	20.95	6254	23.02

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB165724BL	SDG No.:	P5314
Lab Sample ID:	PB165724BL	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035846.D	1	12/18/24 12:50	12/26/24 10:35	PB165724

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	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		95%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.46	*	55 - 111		114%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	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	4510	7.257				
1146-65-2	Naphthalene-d8	10600	9.999				
15067-26-2	Acenaphthene-d10	6580	13.924				
1517-22-2	Phenanthrene-d10	14100	16.698				
1719-03-5	Chrysene-d12	10300	20.947				
1520-96-3	Perylene-d12	9890	23.029				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB165724BS	SDG No.:	P5314
Lab Sample ID:	PB165724BS	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035764.D	1	12/18/24 12:50	12/21/24 04:34	PB165724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.48		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.56		30 - 150		139%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.50	*	55 - 111		125%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.46	*	53 - 106		115%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.50		58 - 132		125%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2650	7.271				
1146-65-2	Naphthalene-d8	6540	10.009				
15067-26-2	Acenaphthene-d10	3740	13.924				
1517-22-2	Phenanthrene-d10	6890	16.698				
1719-03-5	Chrysene-d12	6140	20.955				
1520-96-3	Perylene-d12	6580	23.041				

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

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB165724BSD	SDG No.:	P5314
Lab Sample ID:	PB165724BSD	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035853.D	1	12/18/24 12:50	12/26/24 14:54	PB165724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.45		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.53		30 - 150		132%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.56	*	55 - 111		140%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		116%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.51		58 - 132		128%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2940	7.257				
1146-65-2	Naphthalene-d8	6910	9.999				
15067-26-2	Acenaphthene-d10	3870	13.914				
1517-22-2	Phenanthrene-d10	7400	16.698				
1719-03-5	Chrysene-d12	5740	20.947				
1520-96-3	Perylene-d12	6250	23.024				

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

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN112724.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Nov 27 23:03:24 2024
Response Via : Initial Calibration

Calibration Files
0.1 =BN035350.D 0.2 =BN035351.D 0.4 =BN035352.D 0.8 =BN035353.D 1.6 =BN035354.D 3.2 =BN035355.D 5.0 =BN035356.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	0.406	0.417	0.376	0.380	0.392	0.357	0.348	0.382	6.52
3)		n-Nitrosodimet...	0.334	0.302	0.326	0.315	0.332	0.310	0.309	0.319	3.92
4)	S	2-Fluorophenol	1.025	1.112	1.018	0.958	0.998	0.954	0.942	1.001	5.88
5)	S	Phenol-d6	1.227	1.186	1.193	1.143	1.235	1.215	1.229	1.204	2.69
6)		bis(2-Chloroet...	1.035	1.021	0.992	0.993	1.051	0.997	0.991	1.012	2.39
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.227	0.232	0.235	0.248	0.257	0.251	0.261	0.244	5.31
9)		Naphthalene	1.062	1.029	1.047	1.032	1.096	1.049	1.070	1.055	2.22
10)		Hexachlorobuta...	0.245	0.242	0.247	0.241	0.255	0.236	0.238	0.243	2.60
11)	SURR	2-Methylnaphth...	0.591	0.603	0.619	0.615	0.659	0.639	0.656	0.626	4.16
12)		2-Methylnaphth...	0.724	0.716	0.740	0.747	0.795	0.771	0.795	0.755	4.25
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.273	0.258	0.257	0.268	0.293	0.311	0.328	0.284	9.67
15)	S	2-Fluorobiphenyl	1.489	1.491	1.510	1.508	1.566	1.511	1.511	1.512	1.68
16)		Acenaphthylene	1.643	1.600	1.595	1.638	1.737	1.763	1.781	1.680	4.68
17)		Acenaphthene	1.121	1.084	1.086	1.108	1.145	1.122	1.140	1.115	2.17
18)		Fluorene	1.589	1.549	1.543	1.600	1.652	1.614	1.625	1.596	2.47
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...	0.038	0.031	0.036	0.041	0.051			0.039	19.30
21)		4-Bromophenyl-...	0.226	0.218	0.226	0.233	0.249	0.242	0.244	0.234	4.85
22)		Hexachlorobenzene	0.265	0.266	0.273	0.276	0.288	0.278	0.277	0.275	2.82
23)		Atrazine	0.155	0.155	0.154	0.156	0.175	0.179	0.191	0.167	8.98
24)		Pentachlorophenol	0.140	0.090	0.095	0.103	0.121	0.136	0.150	0.120	19.86
25)		Phenanthrene	1.092	1.046	1.067	1.092	1.148	1.121	1.125	1.099	3.20
26)		Anthracene	0.964	0.923	0.940	0.973	1.050	1.042	1.064	0.994	5.76
27)	SURR	Fluoranthene-d10	1.203	1.086	1.077	1.105	1.165	1.138	1.164	1.134	4.10
28)		Fluoranthene	1.538	1.396	1.416	1.456	1.539	1.497	1.526	1.481	3.99
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.583	1.445	1.475	1.443	1.519	1.440	1.431	1.477	3.79
31)	S	Terphenyl-d14	0.832	0.777	0.791	0.771	0.812	0.772	0.769	0.789	3.08
32)		Benzo(a)anthra...	1.431	1.343	1.355	1.375	1.451	1.411	1.429	1.399	2.98
33)		Chrysene	1.463	1.452	1.441	1.415	1.487	1.422	1.420	1.443	1.84
34)		Bis(2-ethylhex...	0.710	0.558	0.516	0.505	0.520	0.516	0.544	0.553	12.96
35)	I	Perylene-d12	----------ISTD----------								

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN112724.M

36)		Indeno(1,2,3-c...	1.411	1.489	1.532	1.554	1.660	1.615	1.685	1.564	6.22
37)		Benzo(b)fluora...	1.305	1.348	1.313	1.378	1.827	1.463	1.608	1.463	13.12
38)		Benzo(k)fluora...	1.444	1.376	1.402	1.419	1.527	1.447	1.468	1.440	3.39
39)	C	Benzo(a)pyrene	1.204	1.156	1.146	1.171	1.256	1.232	1.271	1.205	4.11
40)		Dibenzo(a,h)an...	1.104	1.187	1.194	1.226	1.315	1.280	1.332	1.234	6.55
41)		Benzo(g,h,i)pe...	1.188	1.238	1.248	1.269	1.360	1.330	1.394	1.289	5.71

(#) = Out of Range

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: BNA_N Calibration Date/Time: 12/20/2024 19:33

Lab File ID: BN035749.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.622		-0.6	20.0
Fluoranthene-d10	1.134	1.074		-5.3	20.0
2-Fluorophenol	1.001	1.021		2.0	20.0
Phenol-d6	1.204	1.178		-2.2	20.0
Nitrobenzene-d5	0.244	0.294		20.5	20.0
2-Fluorobiphenyl	1.512	1.560		3.2	20.0
2,4,6-Tribromophenol	0.284	0.235		-17.3	20.0
Terphenyl-d14	0.789	0.891		12.9	20.0
1,4-Dioxane	0.382	0.445		16.5	20.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: BNA_N Calibration Date/Time: 12/21/2024 05:10

Lab File ID: BN035765.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.578		-7.7	50.0
Fluoranthene-d10	1.134	0.989		-12.8	50.0
2-Fluorophenol	1.001	0.960		-4.1	50.0
Phenol-d6	1.204	1.094		-9.1	50.0
Nitrobenzene-d5	0.244	0.284		16.4	50.0
2-Fluorobiphenyl	1.512	1.389		-8.1	50.0
2,4,6-Tribromophenol	0.284	0.215		-24.3	50.0
Terphenyl-d14	0.789	0.863		9.4	50.0
1,4-Dioxane	0.382	0.439		14.9	50.0

All other compounds must meet a minimum RRF of 0.010.

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: BNA_N Calibration Date/Time: 12/23/2024 10:22

Lab File ID: BN035776.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.601		-4.0	20.0
Fluoranthene-d10	1.134	1.037		-8.6	20.0
2-Fluorophenol	1.001	1.009		0.7	20.0
Phenol-d6	1.204	1.111		-7.7	20.0
Nitrobenzene-d5	0.244	0.284		16.4	20.0
2-Fluorobiphenyl	1.512	1.601		5.9	20.0
2,4,6-Tribromophenol	0.284	0.205		-27.8	20.0
Terphenyl-d14	0.789	0.943		19.5	20.0
1,4-Dioxane	0.382	0.429		12.3	20.0

All other compounds must meet a minimum RRF of 0.010.

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: BNA_N Calibration Date/Time: 12/23/2024 19:51

Lab File ID: BN035792.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.557		-11.0	50.0
Fluoranthene-d10	1.134	0.972		-14.3	50.0
2-Fluorophenol	1.001	0.954		-4.7	50.0
Phenol-d6	1.204	1.061		-11.9	50.0
Nitrobenzene-d5	0.244	0.295		20.9	50.0
2-Fluorobiphenyl	1.512	1.518		0.4	50.0
2,4,6-Tribromophenol	0.284	0.220		-22.5	50.0
Terphenyl-d14	0.789	0.806		2.2	50.0
1,4-Dioxane	0.382	0.383		0.3	50.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: BNA_N Calibration Date/Time: 12/26/2024 09:58

Lab File ID: BN035845.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.545		-12.9	20.0
Fluoranthene-d10	1.134	0.991		-12.6	20.0
2-Fluorophenol	1.001	1.006		0.5	20.0
Phenol-d6	1.204	1.112		-7.6	20.0
Nitrobenzene-d5	0.244	0.298		22.1	20.0
2-Fluorobiphenyl	1.512	1.504		-0.5	20.0
2,4,6-Tribromophenol	0.284	0.248		-12.7	20.0
Terphenyl-d14	0.789	0.784		-0.6	20.0
1,4-Dioxane	0.382	0.405		6.0	20.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5314 SAS No.: P5314 SDG No.: P5314

Instrument ID: BNA_N Calibration Date/Time: 12/26/2024 19:41

Lab File ID: BN035861.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.551		-12.0	50.0
Fluoranthene-d10	1.134	0.922		-18.7	50.0
2-Fluorophenol	1.001	0.931		-7.0	50.0
Phenol-d6	1.204	1.022		-15.1	50.0
Nitrobenzene-d5	0.244	0.306		25.4	50.0
2-Fluorobiphenyl	1.512	1.480		-2.1	50.0
2,4,6-Tribromophenol	0.284	0.225		-20.8	50.0
Terphenyl-d14	0.789	0.898		13.8	50.0
1,4-Dioxane	0.382	0.394		3.1	50.0

All other compounds must meet a minimum RRF of 0.010.

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

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

Chemtech Project Number: P5314|15

COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Tetra Tech	PROJECT NAME: NWIRP Bethpage	BILL TO: SEE CONTRACT PO#
ADDRESS: 4433 Corporation Lane Suite 300	PROJECT #: 112G08005-WE13 LOCATION: VPB-189	ADDRESS:
CITY: Virginia Beach STATE: VA ZIP: 23462	PROJECT MANAGER: Ernie Wu	CITY: STATE: ZIP:
ATTENTION: Ernie Wu	E-MAIL: ernie.wu@tetratech.com	ATTENTION: PHONE:
PHONE: 757-466-4901 FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148	

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

ANALYSIS

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

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A		F							<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	BP-VPB-190A-TB-20241213	QA		X	12/13/24	8:00	2	2									Trip Blank
2.	BP-VPB-190A-GW-678-680	AQ		X	12/13/24	11:00	3	2	1								
3.	BP-VPB-190A-GW-698-700	AQ		X	12/13/24	13:20	3	3									Collected extra vials due to high particulate matter
4.	VPB190A-HYD-20241217	QA		X	12/17/24	10:00	5	2	1	2							Hydrant Sample
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

	DATE/TIME		
1. RELINQUISHED BY SAMPLER	12/17/24 14:00	1. RECEIVED BY	1530 12-17-24
2. RELINQUISHED BY	DATE/TIME	2. RECEIVED BY	
3. RELINQUISHED BY	1830 12-17-24	3. RECEIVED FOR LAB BY	

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.1 C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?:

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)

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

Laboratory Certification

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5314 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 12/17/2024 3:43:00 PM
Project Name : CTO WE13
Receive DateTime : 12/17/2024 12:00:00 AM 18:30
Purchase Order :

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
P5314-01	BP-VPB-190A-TB-20241213	Water	12/13/2024	08:00						
					VOCMS Group1		8260-Low	~~10~~ Bus. Days		2 days
P5314-02	BP-VPB-190A-GW-678-680	Water	12/13/2024	11:00						
					VOCMS Group1		8260-Low	~~10~~ Bus. Days		
P5314-03	BP-VPB-190A-GW-698-700	Water	12/13/2024	13:20						
					VOCMS Group1		8260-Low	~~10~~ Bus. Days		
P5314-04	~~VPB190A-HYF-20241217~~ VPB190A-HYD-20241217	Water	12/17/2024	10:00						
					VOCMS Group1		8260-Low	~~10~~ Bus. Days		

Relinguished By : cl
Date / Time : 12-18-24 1045

Received By :
Date / Time : 12-18-24 10:45

Storage Area : VOA Refridgerator Room