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 : P4710

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

Table Of Contents for P4710

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

Cover Page

Order ID : P4710

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
P4710-01	BP-TB-20241030
P4710-02	BP-BPOW6-7-GW-20241030
P4710-03	BP-BPOW6-11-GW-20241031
P4710-04	BP-BPOW6-8-GW-20241101

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

Signature : N. N. Pandya

APPROVED

Date : 11/14/2024

By Nimisha Pandya, QA/QC Supervisor at 3:12 pm, Nov 15, 2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager: Ernie Wu
Chemtech Project # P4710
Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:
4 Water samples were received on 11/04/2024.

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

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of VOCMS Group1 was based on method 8260D.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The 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 (82N103024W.M) for Acetone, Chloroethane, Chloromethane these compounds are passing on Linear Regression while, 1,4-Dichlorobenzene this compound is passing on Quadratic Regression.

The Continuous Calibration File ID VN084702.D met the requirements except for Carbon Disulfide failing marginally low therefore no corrective action taken.

The Tuning criteria met requirements.

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

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

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

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

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

Signature N. N. Pandya

APPROVED
By Nimisha Pandya, QA/QC Supervisor at 3:12 pm, Nov 15, 2024

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

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager : Ernie Wu
Chemtech Project # P4710
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
4 Water samples were received on 11/04/2024.

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.
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 (8270Sim-BN110724.M) for 2,4,6-Tribromophenol is passing on Quadratic regression.

The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

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

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

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

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 N. N. Pandya

APPROVED
By Nimisha Pandya, QA/QC Supervisor at 3:12 pm, Nov 15, 2024

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4710

	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:** 11/14/2024

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

LAB CHRONICLE

OrderID:	P4710	**OrderDate:**	11/4/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4710-01	**BP-TB-20241030**	**Water**			**10/30/24**			**11/04/24**
			VOCMS Group1	8260-Low			11/06/24	
P4710-02	**BP-BPOW6-7-GW-20241030**	**Water**			**10/30/24**			**11/04/24**
			VOCMS Group1	8260-Low			11/06/24	
P4710-03	**BP-BPOW6-11-GW-20241031**	**Water**			**10/31/24**			**11/04/24**
			VOCMS Group1	8260-Low			11/06/24	
P4710-04	**BP-BPOW6-8-GW-20241101**	**Water**			**11/01/24**			**11/04/24**
			VOCMS Group1	8260-Low			11/06/24	

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

Hit Summary Sheet
SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:									
				0					

Total Voc :

Total Concentration:

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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-TB-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084708.D	1		11/06/24 14:02	VN110624

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

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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-TB-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084708.D	1		11/06/24 14:02	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48.1		81 - 118		96%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	46.1		89 - 112		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.5		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	186000	8.224				
540-36-3	1,4-Difluorobenzene	325000	9.1				
3114-55-4	Chlorobenzene-d5	286000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	125000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-TB-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084708.D	1		11/06/24 14:02	VN110624

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
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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-7-GW-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084709.D	1		11/06/24 14:26	VN110624

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

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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-7-GW-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084709.D	1		11/06/24 14:26	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48.5		81 - 118		97%	SPK: 50
1868-53-7	Dibromofluoromethane	47.4		80 - 119		95%	SPK: 50
2037-26-5	Toluene-d8	45.7		89 - 112		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.8		85 - 114		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	190000	8.224				
540-36-3	1,4-Difluorobenzene	333000	9.1				
3114-55-4	Chlorobenzene-d5	287000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	129000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-7-GW-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084709.D	1		11/06/24 14:26	VN110624

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
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:	10/31/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-11-GW-20241031	SDG No.:	P4710
Lab Sample ID:	P4710-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084710.D	1		11/06/24 14:50	VN110624

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

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:	10/31/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-11-GW-20241031	SDG No.:	P4710
Lab Sample ID:	P4710-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084710.D	1		11/06/24 14:50	VN110624

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	47.9		81 - 118		96%	SPK: 50
1868-53-7	Dibromofluoromethane	48.9		80 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	46.5		89 - 112		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		85 - 114		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	178000	8.218				
540-36-3	1,4-Difluorobenzene	310000	9.1				
3114-55-4	Chlorobenzene-d5	274000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	118000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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:	10/31/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-11-GW-20241031	SDG No.:	P4710
Lab Sample ID:	P4710-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084710.D	1		11/06/24 14:50	VN110624

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
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:	11/01/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-8-GW-20241101	SDG No.:	P4710
Lab Sample ID:	P4710-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084711.D	1		11/06/24 15:14	VN110624

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

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:	11/01/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-8-GW-20241101	SDG No.:	P4710
Lab Sample ID:	P4710-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084711.D	1		11/06/24 15:14	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48.4		81 - 118		97%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		80 - 119		97%	SPK: 50
2037-26-5	Toluene-d8	46.2		89 - 112		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.7		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	182000	8.224				
540-36-3	1,4-Difluorobenzene	317000	9.1				
3114-55-4	Chlorobenzene-d5	279000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	124000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

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:	11/01/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-8-GW-20241101	SDG No.:	P4710
Lab Sample ID:	P4710-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084711.D	1		11/06/24 15:14	VN110624

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

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

Surrogate Summary

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
P4710-01	BP-TB-20241030	1,2-Dichloroethane-d4	50	48.1	96	81	118
		Dibromofluoromethane	50	48.2	96	80	119
		Toluene-d8	50	46.1	92	89	112
		4-Bromofluorobenzene	50	46.5	93	85	114
P4710-02	BP-BPOW6-7-GW-20241030	1,2-Dichloroethane-d4	50	48.5	97	81	118
		Dibromofluoromethane	50	47.4	95	80	119
		Toluene-d8	50	45.7	91	89	112
		4-Bromofluorobenzene	50	45.8	92	85	114
P4710-03	BP-BPOW6-11-GW-20241031	1,2-Dichloroethane-d4	50	47.9	96	81	118
		Dibromofluoromethane	50	48.9	98	80	119
		Toluene-d8	50	46.5	93	89	112
		4-Bromofluorobenzene	50	47.5	95	85	114
P4710-04	BP-BPOW6-8-GW-20241101	1,2-Dichloroethane-d4	50	48.4	97	81	118
		Dibromofluoromethane	50	48.7	97	80	119
		Toluene-d8	50	46.2	92	89	112
		4-Bromofluorobenzene	50	46.7	93	85	114
VN1106WBL01	VN1106WBL01	1,2-Dichloroethane-d4	50	47.5	95	81	118
		Dibromofluoromethane	50	49.1	98	80	119
		Toluene-d8	50	46.2	92	89	112
		4-Bromofluorobenzene	50	46.0	92	85	114
VN1106WBS02	VN1106WBS02	1,2-Dichloroethane-d4	50	49.1	98	81	118
		Dibromofluoromethane	50	48.2	96	80	119
		Toluene-d8	50	47.8	96	89	112
		4-Bromofluorobenzene	50	49.3	99	85	114
VN1106WBSD0	VN1106WBSD02	1,2-Dichloroethane-d4	50	44.7	89	81	118
		Dibromofluoromethane	50	45.4	91	80	119
		Toluene-d8	50	44.9	90	89	112
		4-Bromofluorobenzene	50	46.7	93	85	114

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low **Datafile :** VN084706.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1106WBS02	Chloromethane	20	15.8	ug/L	79			50	139	
	Vinyl chloride	20	18.6	ug/L	93			58	137	
	Bromomethane	20	18.2	ug/L	91			53	141	
	Chloroethane	20	18.6	ug/L	93			60	138	
	Trichlorofluoromethane	20	19.1	ug/L	96			65	141	
	1,1,2-Trichlorotrifluoroethane	20	19.2	ug/L	96			70	136	
	1,1-Dichloroethene	20	18.1	ug/L	91			71	131	
	Acetone	100	100	ug/L	100			39	160	
	Carbon disulfide	20	16.5	ug/L	83			64	133	
	Methyl tert-butyl Ether	20	20.2	ug/L	101			71	124	
	Methylene Chloride	20	19.0	ug/L	95			74	124	
	trans-1,2-Dichloroethene	20	18.2	ug/L	91			75	124	
	1,1-Dichloroethane	20	19.1	ug/L	96			77	125	
	2-Butanone	100	97.1	ug/L	97			56	143	
	Carbon Tetrachloride	20	19.0	ug/L	95			72	136	
	cis-1,2-Dichloroethene	20	19.4	ug/L	97			78	123	
	Chloroform	20	19.6	ug/L	98			79	124	
	1,1,1-Trichloroethane	20	19.6	ug/L	98			74	131	
	Methylcyclohexane	20	18.1	ug/L	91			72	132	
	Benzene	20	18.3	ug/L	92			79	120	
	1,2-Dichloroethane	20	18.9	ug/L	95			73	128	
	Trichloroethene	20	18.6	ug/L	93			79	123	
	1,2-Dichloropropane	20	18.4	ug/L	92			78	122	
	Bromodichloromethane	20	19.1	ug/L	96			79	125	
	4-Methyl-2-Pentanone	100	99.6	ug/L	100			67	130	
	Toluene	20	19.5	ug/L	98			80	121	
	t-1,3-Dichloropropene	20	18.2	ug/L	91			73	127	
	cis-1,3-Dichloropropene	20	18.1	ug/L	91			75	124	
	1,1,2-Trichloroethane	20	19.3	ug/L	97			80	119	
	2-Hexanone	100	100	ug/L	100			57	139	
	Dibromochloromethane	20	20.4	ug/L	102			74	126	
	Tetrachloroethene	20	18.9	ug/L	95			74	129	
	Chlorobenzene	20	18.4	ug/L	92			82	118	
	Ethyl Benzene	20	18.7	ug/L	94			79	121	
	m/p-Xylenes	40	38.4	ug/L	96			80	121	
	o-Xylene	20	20.1	ug/L	101			78	122	
	Styrene	20	19.8	ug/L	99			78	123	
	Bromoform	20	20.1	ug/L	101			66	130	
	Isopropylbenzene	20	18.6	ug/L	93			72	131	
	1,1,2,2-Tetrachloroethane	20	18.2	ug/L	91			71	121	
	1,3-Dichlorobenzene	20	17.0	ug/L	85			80	119	
	1,4-Dichlorobenzene	20	18.1	ug/L	91			79	118	
	1,2-Dichlorobenzene	20	17.5	ug/L	88			80	119	

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low **Datafile :** VN084713.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1106WBSD02	Chloromethane	20	14.0	ug/L	70	12		50	139	20
	Vinyl chloride	20	16.3	ug/L	81	14		58	137	20
	Bromomethane	20	17.2	ug/L	86	6		53	141	20
	Chloroethane	20	17.2	ug/L	86	8		60	138	20
	Trichlorofluoromethane	20	17.3	ug/L	86	11		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	17.3	ug/L	86	11		70	136	20
	1,1-Dichloroethene	20	16.8	ug/L	84	8		71	131	20
	Acetone	100	100	ug/L	100	0		39	160	20
	Carbon disulfide	20	14.6	ug/L	73	13		64	133	20
	Methyl tert-butyl Ether	20	18.0	ug/L	90	12		71	124	20
	Methylene Chloride	20	17.4	ug/L	87	9		74	124	20
	trans-1,2-Dichloroethene	20	16.7	ug/L	84	8		75	124	20
	1,1-Dichloroethane	20	17.6	ug/L	88	9		77	125	20
	2-Butanone	100	95.9	ug/L	96	1		56	143	20
	Carbon Tetrachloride	20	17.7	ug/L	89	7		72	136	20
	cis-1,2-Dichloroethene	20	17.5	ug/L	88	10		78	123	20
	Chloroform	20	17.7	ug/L	89	10		79	124	20
	1,1,1-Trichloroethane	20	18.0	ug/L	90	9		74	131	20
	Methylcyclohexane	20	17.1	ug/L	86	6		72	132	20
	Benzene	20	17.3	ug/L	86	7		79	120	20
	1,2-Dichloroethane	20	17.9	ug/L	90	5		73	128	20
	Trichloroethene	20	17.0	ug/L	85	9		79	123	20
	1,2-Dichloropropane	20	18.1	ug/L	91	1		78	122	20
	Bromodichloromethane	20	17.8	ug/L	89	8		79	125	20
	4-Methyl-2-Pentanone	100	96.7	ug/L	97	3		67	130	20
	Toluene	20	17.9	ug/L	90	9		80	121	20
	t-1,3-Dichloropropene	20	16.5	ug/L	83	9		73	127	20
	cis-1,3-Dichloropropene	20	17.1	ug/L	86	6		75	124	20
	1,1,2-Trichloroethane	20	18.2	ug/L	91	6		80	119	20
	2-Hexanone	100	97.6	ug/L	98	2		57	139	20
	Dibromochloromethane	20	18.9	ug/L	95	7		74	126	20
	Tetrachloroethene	20	17.6	ug/L	88	8		74	129	20
	Chlorobenzene	20	17.4	ug/L	87	6		82	118	20
	Ethyl Benzene	20	17.4	ug/L	87	8		79	121	20
	m/p-Xylenes	40	35.9	ug/L	90	6		80	121	20
	o-Xylene	20	18.7	ug/L	94	7		78	122	20
	Styrene	20	17.8	ug/L	89	11		78	123	20
	Bromoform	20	18.6	ug/L	93	8		66	130	20
	Isopropylbenzene	20	17.7	ug/L	89	4		72	131	20
	1,1,2,2-Tetrachloroethane	20	17.4	ug/L	87	4		71	121	20
	1,3-Dichlorobenzene	20	16.2	ug/L	81	5		80	119	20
	1,4-Dichlorobenzene	20	16.6	ug/L	83	9		79	118	20
	1,2-Dichlorobenzene	20	16.4	ug/L	82	7		80	119	20

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

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1106WBL01

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

Lab File ID: VN084704.D Lab Sample ID: VN1106WBL01

Date Analyzed: 11/06/2024 Time Analyzed: 12:12

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1106WBS02	VN1106WBS02	VN084706.D	11/06/2024
BP-TB-20241030	P4710-01	VN084708.D	11/06/2024
BP-BPOW6-7-GW-20241030	P4710-02	VN084709.D	11/06/2024
BP-BPOW6-11-GW-20241031	P4710-03	VN084710.D	11/06/2024
BP-BPOW6-8-GW-20241101	P4710-04	VN084711.D	11/06/2024
VN1106WBSD02	VN1106WBSD02	VN084713.D	11/06/2024

COMMENTS:

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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

Lab File ID: VN084569.D BFB Injection Date: 10/30/2024

Instrument ID: MSVOA_N BFB Injection Time: 10:42

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	1.2 (1.6) 1
174	50.0 - 100.0% of mass 95	73.5
175	5.0 - 9.0% of mass 174	5.7 (7.7) 1
176	95.0 - 101.0% of mass 174	70.1 (95.4) 1
177	5.0 - 9.0% of mass 176	4.8 (6.9) 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
VSTDICC100	VSTDICC100	VN084570.D	10/30/2024	11:46
VSTDICCC050	VSTDICCC050	VN084571.D	10/30/2024	12:09
VSTDICC020	VSTDICC020	VN084572.D	10/30/2024	12:33
VSTDICC010	VSTDICC010	VN084573.D	10/30/2024	12:57
VSTDICC005	VSTDICC005	VN084574.D	10/30/2024	13:21
VSTDICC001	VSTDICC001	VN084575.D	10/30/2024	13:45

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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

Lab File ID: VN084701.D BFB Injection Date: 11/06/2024

Instrument ID: MSVOA_N BFB Injection Time: 09:44

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.2
75	30.0 - 60.0% of mass 95	50.5
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	0.8 (1.1) 1
174	50.0 - 100.0% of mass 95	74.9
175	5.0 - 9.0% of mass 174	5.2 (6.9) 1
176	95.0 - 101.0% of mass 174	71.4 (95.3) 1
177	5.0 - 9.0% of mass 176	4.7 (6.6) 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	VN084702.D	11/06/2024	11:11
VN1106WBL01	VN1106WBL01	VN084704.D	11/06/2024	12:12
VN1106WBS02	VN1106WBS02	VN084706.D	11/06/2024	13:14
BP-TB-20241030	P4710-01	VN084708.D	11/06/2024	14:02
BP-BPOW6-7-GW-20241030	P4710-02	VN084709.D	11/06/2024	14:26
BP-BPOW6-11-GW-20241031	P4710-03	VN084710.D	11/06/2024	14:50
BP-BPOW6-8-GW-20241101	P4710-04	VN084711.D	11/06/2024	15:14
VN1106WBSD02	VN1106WBSD02	VN084713.D	11/06/2024	16:02
VSTDCCC050EC	VSTDCCC050	VN084714.D	11/06/2024	16:26

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

Lab File ID: VN084702.D Date Analyzed: 11/06/2024

Instrument ID: MSVOA_N Time Analyzed: 11:11

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	191071	8.22	316478	9.10	275366	11.87
UPPER LIMIT	382142	8.724	632956	9.6	550732	12.365
LOWER LIMIT	95535.5	7.724	158239	8.6	137683	11.365
EPA SAMPLE NO.						
BP-TB-20241030	186121	8.22	325049	9.10	285775	11.87
BP-BPOW6-7-GW-20241030	189555	8.22	333260	9.10	287186	11.87
BP-BPOW6-11-GW-20241031	178323	8.22	310385	9.10	273551	11.87
BP-BPOW6-8-GW-20241101	181626	8.22	317427	9.10	279072	11.87
VN1106WBL01	187715	8.22	325613	9.10	283849	11.87
VN1106WBS02	167841	8.22	290171	9.10	254182	11.87
VN1106WBSD02	186152	8.22	316813	9.10	280533	11.87

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

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

Lab File ID: VN084702.D Date Analyzed: 11/06/2024

Instrument ID: MSVOA_N Time Analyzed: 11:11

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	145388	13.788				
UPPER LIMIT	290776	14.288				
LOWER LIMIT	72694	13.288				
EPA SAMPLE NO.						
BP-TB-20241030	125045	13.79				
BP-BPOW6-7-GW-20241030	129474	13.79				
BP-BPOW6-11-GW-20241031	118494	13.79				
BP-BPOW6-8-GW-20241101	124288	13.79				
VN1106WBL01	125372	13.79				
VN1106WBS02	130671	13.79				
VN1106WBSD02	138903	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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

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

QC SAMPLE DATA

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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VN1106WBL01	SDG No.:	P4710
Lab Sample ID:	VN1106WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084704.D	1		11/06/24 12:12	VN110624

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

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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VN1106WBL01	SDG No.:	P4710
Lab Sample ID:	VN1106WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084704.D	1		11/06/24 12:12	VN110624

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	47.5		81 - 118		95%	SPK: 50
1868-53-7	Dibromofluoromethane	49.1		80 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	46.2		89 - 112		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.0		85 - 114		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	188000	8.218				
540-36-3	1,4-Difluorobenzene	326000	9.1				
3114-55-4	Chlorobenzene-d5	284000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	125000	13.788				

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

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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VN1106WBS02	SDG No.:	P4710
Lab Sample ID:	VN1106WBS02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084706.D	1		11/06/24 13:14	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	15.8		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.6		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	18.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	18.6		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.1		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.2		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.1		0.26	0.75	1.00	ug/L
67-64-1	Acetone	100		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.5		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.2		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.0		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.2		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.1		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	97.1		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.4		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.6		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.6		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.1		0.19	0.50	1.00	ug/L
71-43-2	Benzene	18.3		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.9		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.6		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.4		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	99.6		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.5		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.2		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.1		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.3		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	100		1.10	2.50	5.00	ug/L

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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VN1106WBS02	SDG No.:	P4710
Lab Sample ID:	VN1106WBS02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084706.D	1		11/06/24 13:14	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	20.4		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	18.9		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	18.4		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	18.7		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.4		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.1		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	20.1		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.6		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.2		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	17.0		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.1		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.5		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.1		81 - 118		98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	47.8		89 - 112		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.3		85 - 114		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	168000	8.224				
540-36-3	1,4-Difluorobenzene	290000	9.1				
3114-55-4	Chlorobenzene-d5	254000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.788				

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

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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VN1106WBSD02	SDG No.:	P4710
Lab Sample ID:	VN1106WBSD02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084713.D	1		11/06/24 16:02	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	14.0		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	16.3		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	17.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	17.2		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	17.3		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	17.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	16.8		0.26	0.75	1.00	ug/L
67-64-1	Acetone	100		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	14.6		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	17.4		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	16.7		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	17.6		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	95.9		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	17.7		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	17.5		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	18.0		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	17.1		0.19	0.50	1.00	ug/L
71-43-2	Benzene	17.3		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	17.9		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	17.0		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.1		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	17.8		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	96.7		0.75	2.50	5.00	ug/L
108-88-3	Toluene	17.9		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	16.5		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	17.1		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.2		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	97.6		1.10	2.50	5.00	ug/L

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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	VN1106WBSD02	SDG No.:	P4710
Lab Sample ID:	VN1106WBSD02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084713.D	1		11/06/24 16:02	VN110624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	18.9		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	17.6		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	17.4		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	17.4		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	35.9		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	18.7		0.14	0.50	1.00	ug/L
100-42-5	Styrene	17.8		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	18.6		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	17.7		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	17.4		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	16.2		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	16.6		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	16.4		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.7		81 - 118		89%	SPK: 50
1868-53-7	Dibromofluoromethane	45.4		80 - 119		91%	SPK: 50
2037-26-5	Toluene-d8	44.9		89 - 112		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.7		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	186000	8.224				
540-36-3	1,4-Difluorobenzene	317000	9.1				
3114-55-4	Chlorobenzene-d5	281000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	139000	13.788				

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

CALIBRATION SUMMARY

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.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: MSVOA_N Calibration Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45

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

LAB FILE ID: RRF100 = VN084570.D RRF050 = VN084571.D RRF020 = VN084572.D
RRF010 = VN084573.D RRF005 = VN084574.D RRF001 = VN084575.D

COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	$\overline{RRF}$	% RSD
Chloromethane	0.658	0.672	0.725	0.871	0.995	1.789	0.952	45.2
Vinyl Chloride	0.613	0.605	0.623	0.636	0.651	0.581	0.618	4
Bromomethane	0.292	0.296	0.310	0.336	0.405		0.328	14.2
Chloroethane	0.378	0.376	0.413	0.426	0.475	0.863	0.488	38.3
Trichlorofluoromethane	0.971	0.959	1.017	1.022	1.070	1.071	1.018	4.7
1,1,2-Trichlorotrifluoroethane	0.566	0.557	0.571	0.585	0.588	0.586	0.575	2.2
1,1-Dichloroethene	0.548	0.538	0.560	0.575	0.552	0.644	0.569	6.8
Acetone	0.209	0.204	0.213	0.223	0.241	0.338	0.238	21.3
Carbon Disulfide	1.604	1.603	1.700	1.714	1.784	2.117	1.753	10.9
Methyl tert-butyl Ether	1.773	1.758	1.802	1.779	1.786	1.572	1.745	4.9
Methylene Chloride	0.604	0.602	0.633	0.658	0.714	0.600	0.635	7.1
trans-1,2-Dichloroethene	0.565	0.563	0.596	0.600	0.584	0.601	0.585	2.9
1,1-Dichloroethane	1.067	1.066	1.114	1.127	1.203	1.033	1.102	5.5
2-Butanone	0.316	0.315	0.348	0.338	0.370	0.334	0.337	6.1
Carbon Tetrachloride	0.530	0.514	0.532	0.548	0.537	0.488	0.525	4
cis-1,2-Dichloroethene	0.675	0.662	0.697	0.685	0.705	0.673	0.683	2.4
Chloroform	1.099	1.086	1.142	1.154	1.222	1.025	1.121	6
1,1,1-Trichloroethane	1.000	0.991	1.046	1.073	1.032	0.980	1.021	3.5
Methylcyclohexane	0.546	0.509	0.495	0.487	0.458	0.371	0.478	12.5
Benzene	1.494	1.448	1.509	1.507	1.546	1.540	1.507	2.4
1,2-Dichloroethane	0.488	0.494	0.493	0.492	0.503	0.459	0.488	3.1
Trichloroethene	0.339	0.335	0.345	0.338	0.341	0.387	0.348	5.7
1,2-Dichloropropane	0.356	0.348	0.358	0.357	0.373	0.330	0.354	4
Bromodichloromethane	0.528	0.521	0.526	0.522	0.529	0.530	0.526	0.7
4-Methyl-2-Pentanone	0.424	0.423	0.416	0.417	0.412	0.344	0.406	7.6
Toluene	0.923	0.899	0.919	0.902	0.891	0.757	0.882	7.1
t-1,3-Dichloropropene	0.552	0.543	0.538	0.532	0.547	0.555	0.544	1.6
cis-1,3-Dichloropropene	0.592	0.581	0.582	0.569	0.584	0.548	0.576	2.7
1,1,2-Trichloroethane	0.336	0.329	0.334	0.342	0.342	0.309	0.332	3.7
2-Hexanone	0.314	0.312	0.301	0.297	0.294	0.256	0.296	7.1

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

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.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: MSVOA_N Calibration Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45

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

LAB FILE ID: RRF100 = VN084570.D RRF050 = VN084571.D RRF020 = VN084572.D
RRF010 = VN084573.D RRF005 = VN084574.D RRF001 = VN084575.D

COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	$\overline{RRF}$	% RSD
Dibromochloromethane	0.404	0.394	0.391	0.393	0.377	0.312	0.378	8.9
Tetrachloroethene	0.326	0.313	0.333	0.347	0.351	0.325	0.333	4.3
Chlorobenzene	1.068	1.061	1.149	1.123	1.165	1.146	1.119	3.9
Ethyl Benzene	1.957	1.891	1.928	1.880	1.849	1.697	1.867	4.9
m/p-Xylenes	0.737	0.728	0.737	0.701	0.683	0.654	0.707	4.8
o-Xylene	0.703	0.690	0.701	0.679	0.645	0.550	0.661	8.9
Styrene	1.223	1.205	1.206	1.144	1.093	1.050	1.154	6.1
Bromoform	0.287	0.295	0.298	0.289	0.302	0.286	0.293	2.3
Isopropylbenzene	3.558	3.570	3.701	3.605	3.402	3.188	3.504	5.2
1,1,2,2-Tetrachloroethane	1.052	1.073	1.163	1.190	1.317	1.222	1.170	8.4
1,3-Dichlorobenzene	1.642	1.668	1.770	1.802	1.884	2.264	1.838	12.3
1,4-Dichlorobenzene	1.646	1.674	1.782	1.867	1.879	2.773	1.937	21.7
1,2-Dichlorobenzene	1.601	1.618	1.748	1.732	1.879	2.021	1.766	9.1
1,2-Dichloroethane-d4	0.689	0.721	0.708	0.722	0.771		0.722	4.2
Dibromofluoromethane	0.334	0.344	0.326	0.336	0.353		0.338	3.1
Toluene-d8	1.267	1.303	1.216	1.231	1.217		1.247	3
4-Bromofluorobenzene	0.481	0.493	0.450	0.451	0.454		0.466	4.3

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

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.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: MSVOA_N Calibration Date/Time: 11/06/2024 11:11

Lab File ID: VN084702.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.952	0.568	0.1	-40.34	20
Vinyl Chloride	0.618	0.556		-10.03	20
Bromomethane	0.328	0.285		-13.11	20
Chloroethane	0.488	0.351		-28.07	20
Trichlorofluoromethane	1.018	0.930		-8.64	20
1,1,2-Trichlorotrifluoroethane	0.575	0.541		-5.91	20
1,1-Dichloroethene	0.569	0.520		-8.61	20
Acetone	0.238	0.213		-10.5	20
Carbon Disulfide	1.753	1.396		-20.36	20
Methyl tert-butyl Ether	1.745	1.690		-3.15	20
Methylene Chloride	0.635	0.577		-9.13	20
trans-1,2-Dichloroethene	0.585	0.523		-10.6	20
1,1-Dichloroethane	1.102	1.023	0.1	-7.17	20
2-Butanone	0.337	0.307		-8.9	20
Carbon Tetrachloride	0.525	0.507		-3.43	20
cis-1,2-Dichloroethene	0.683	0.640		-6.3	20
Chloroform	1.121	1.064		-5.09	20
1,1,1-Trichloroethane	1.021	0.956		-6.37	20
Methylcyclohexane	0.478	0.499		4.39	20
Benzene	1.507	1.402		-6.97	20
1,2-Dichloroethane	0.488	0.459		-5.94	20
Trichloroethene	0.348	0.323		-7.18	20
1,2-Dichloropropane	0.354	0.339		-4.24	20
Bromodichloromethane	0.526	0.499		-5.13	20
4-Methyl-2-Pentanone	0.406	0.388		-4.43	20
Toluene	0.882	0.863		-2.15	20
t-1,3-Dichloropropene	0.544	0.514		-5.51	20
cis-1,3-Dichloropropene	0.576	0.555		-3.65	20
1,1,2-Trichloroethane	0.332	0.318		-4.22	20
2-Hexanone	0.296	0.294		-0.68	20
Dibromochloromethane	0.378	0.389		2.91	20
Tetrachloroethene	0.333	0.321		-3.6	20
Chlorobenzene	1.119	1.062	0.3	-5.09	20
Ethyl Benzene	1.867	1.897		1.61	20
m/p-Xylenes	0.707	0.722		2.12	20
o-Xylene	0.661	0.702		6.2	20
Styrene	1.154	1.192		3.29	20
Bromoform	0.293	0.298	0.1	1.71	20

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.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: MSVOA_N Calibration Date/Time: 11/06/2024 11:11

Lab File ID: VN084702.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.504	3.397		-3.05	20
1,1,2,2-Tetrachloroethane	1.170	0.995	0.3	-14.96	20
1,3-Dichlorobenzene	1.838	1.583		-13.87	20
1,4-Dichlorobenzene	1.937	1.583		-18.28	20
1,2-Dichlorobenzene	1.766	1.558		-11.78	20
1,2-Dichloroethane-d4	0.722	0.612		-15.23	20
Dibromofluoromethane	0.338	0.303		-10.35	20
Toluene-d8	1.247	1.116		-10.51	20
4-Bromofluorobenzene	0.466	0.426		-8.58	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
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.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: MSVOA_N Calibration Date/Time: 11/06/2024 16:26

Lab File ID: VN084714.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.952	0.577	0.1	-39.39	50
Vinyl Chloride	0.618	0.551		-10.84	50
Bromomethane	0.328	0.300		-8.54	50
Chloroethane	0.488	0.354		-27.46	50
Trichlorofluoromethane	1.018	0.945		-7.17	50
1,1,2-Trichlorotrifluoroethane	0.575	0.547		-4.87	50
1,1-Dichloroethene	0.569	0.520		-8.61	50
Acetone	0.238	0.227		-4.62	50
Carbon Disulfide	1.753	1.408		-19.68	50
Methyl tert-butyl Ether	1.745	1.782		2.12	50
Methylene Chloride	0.635	0.600		-5.51	50
trans-1,2-Dichloroethene	0.585	0.527		-9.91	50
1,1-Dichloroethane	1.102	1.068	0.1	-3.09	50
2-Butanone	0.337	0.354		5.05	50
Carbon Tetrachloride	0.525	0.509		-3.05	50
cis-1,2-Dichloroethene	0.683	0.658		-3.66	50
Chloroform	1.121	1.100		-1.87	50
1,1,1-Trichloroethane	1.021	0.980		-4.02	50
Methylcyclohexane	0.478	0.483		1.05	50
Benzene	1.507	1.422		-5.64	50
1,2-Dichloroethane	0.488	0.477		-2.25	50
Trichloroethene	0.348	0.327		-6.03	50
1,2-Dichloropropane	0.354	0.352		-0.56	50
Bromodichloromethane	0.526	0.517		-1.71	50
4-Methyl-2-Pentanone	0.406	0.432		6.4	50
Toluene	0.882	0.887		0.57	50
t-1,3-Dichloropropene	0.544	0.520		-4.41	50
cis-1,3-Dichloropropene	0.576	0.558		-3.13	50
1,1,2-Trichloroethane	0.332	0.337		1.51	50
2-Hexanone	0.296	0.321		8.45	50
Dibromochloromethane	0.378	0.396		4.76	50
Tetrachloroethene	0.333	0.307		-7.81	50
Chlorobenzene	1.119	1.048	0.3	-6.34	50
Ethyl Benzene	1.867	1.859		-0.43	50
m/p-Xylenes	0.707	0.719		1.7	50
o-Xylene	0.661	0.709		7.26	50
Styrene	1.154	1.182		2.43	50
Bromoform	0.293	0.303	0.1	3.41	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.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: MSVOA_N Calibration Date/Time: 11/06/2024 16:26

Lab File ID: VN084714.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.504	3.357		-4.2	50
1,1,2,2-Tetrachloroethane	1.170	1.044	0.3	-10.77	50
1,3-Dichlorobenzene	1.838	1.508		-17.95	50
1,4-Dichlorobenzene	1.937	1.522		-21.42	50
1,2-Dichlorobenzene	1.766	1.532		-13.25	50
1,2-Dichloroethane-d4	0.722	0.663		-8.17	50
Dibromofluoromethane	0.338	0.316		-6.51	50
Toluene-d8	1.247	1.163		-6.74	50
4-Bromofluorobenzene	0.466	0.453		-2.79	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

LAB CHRONICLE

OrderID:	P4710	**OrderDate:**	11/4/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4710-02	**BP-BPOW6-7-GW-20241030**	**Water**			**10/30/24**			**11/04/24**
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	
P4710-03	**BP-BPOW6-11-GW-20241031**	**Water**			**10/31/24**			**11/04/24**
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	
P4710-04	**BP-BPOW6-8-GW-20241101**	**Water**			**11/01/24**			**11/04/24**
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	

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

Hit Summary Sheet
SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

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

SAMPLE DATA

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:	10/30/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-7-GW-20241030	SDG No.:	P4710
Lab Sample ID:	P4710-02	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034905.D	1	11/06/24 08:45	11/08/24 13:05	PB164705

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	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5190	7.575				
1146-65-2	Naphthalene-d8	15100	10.34				
15067-26-2	Acenaphthene-d10	6740	14.201				
1517-22-2	Phenanthrene-d10	13600	16.957				
1719-03-5	Chrysene-d12	8570	21.152				
1520-96-3	Perylene-d12	6880	23.321				

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

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:	10/31/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-11-GW-20241031	SDG No.:	P4710
Lab Sample ID:	P4710-03	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034906.D	1	11/06/24 08:45	11/08/24 13:41	PB164705

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	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5460	7.575				
1146-65-2	Naphthalene-d8	15800	10.34				
15067-26-2	Acenaphthene-d10	7290	14.208				
1517-22-2	Phenanthrene-d10	14800	16.952				
1719-03-5	Chrysene-d12	9380	21.149				
1520-96-3	Perylene-d12	7760	23.318				

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

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:	11/01/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-8-GW-20241101	SDG No.:	P4710
Lab Sample ID:	P4710-04	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034907.D	1	11/06/24 08:45	11/08/24 14:17	PB164705

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	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		111%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5710	7.575				
1146-65-2	Naphthalene-d8	16700	10.34				
15067-26-2	Acenaphthene-d10	7610	14.208				
1517-22-2	Phenanthrene-d10	15600	16.952				
1719-03-5	Chrysene-d12	9490	21.149				
1520-96-3	Perylene-d12	7810	23.318				

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

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

Surrogate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	High
P4710-02	BP-BPOW6-7-GW-20241030	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.38	96		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.46	114		58	132
P4710-03	BP-BPOW6-11-GW-20241031	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
P4710-04	BP-BPOW6-8-GW-20241101	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.39	96		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.44	111		58	132
PB164705BL	PB164705BL	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
PB164705BS	PB164705BS	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
		Fluoranthene-d10	0.4	0.33	81		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB164705BSD	PB164705BSD	2-Methylnaphthalene-d10	0.4	0.39	98		30	150
		Fluoranthene-d10	0.4	0.33	82		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.38	95		58	132

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034908.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB164705BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034909.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB164705BSD	1,4-Dioxane	0.4	0.28	ug/L	70	4			70	130	20

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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164705BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034910.D Lab Sample ID: PB164705BL

Instrument ID: BNA_N Date Extracted: 11/06/2024

Matrix: (soil/water) Water Date Analyzed: 11/08/2024

Level: (low/med) LOW Time Analyzed: 16:05

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BP-BPOW6-7-GW-20241030	P4710-02	BN034905.D	11/08/2024
BP-BPOW6-11-GW-20241031	P4710-03	BN034906.D	11/08/2024
BP-BPOW6-8-GW-20241101	P4710-04	BN034907.D	11/08/2024
PB164705BS	PB164705BS	BN034908.D	11/08/2024
PB164705BSD	PB164705BSD	BN034909.D	11/08/2024

COMMENTS:

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034883.D DFTPP Injection Date: 11/07/2024

Instrument ID: BNA_N DFTPP Injection Time: 08:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	64.6
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	64.5
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	19.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	6.6
442	Greater than 50% of mass 198	37.1
443	15.0 - 24.0% of mass 442	8.9 (24) 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	BN034885.D	11/07/2024	10:02
SSTDICC0.2	SSTDICC0.2	BN034886.D	11/07/2024	10:48
SSTDICCC0.4	SSTDICCC0.4	BN034887.D	11/07/2024	11:24
SSTDICC0.8	SSTDICC0.8	BN034888.D	11/07/2024	12:00
SSTDICC1.6	SSTDICC1.6	BN034889.D	11/07/2024	12:36
SSTDICC3.2	SSTDICC3.2	BN034890.D	11/07/2024	13:13
SSTDICC5.0	SSTDICC5.0	BN034891.D	11/07/2024	13:49

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034897.D DFTPP Injection Date: 11/08/2024

Instrument ID: BNA_N DFTPP Injection Time: 07:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	65.5
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	56.3
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	63.8
197	Less than 2.0% of mass 198	0.5
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	20.3
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	7
442	Greater than 50% of mass 198	43.5
443	15.0 - 24.0% of mass 442	8.1 (18.6) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN034898.D	11/08/2024	08:29
BP-BPOW6-7-GW-20241030	P4710-02	BN034905.D	11/08/2024	13:05
BP-BPOW6-11-GW-20241031	P4710-03	BN034906.D	11/08/2024	13:41
BP-BPOW6-8-GW-20241101	P4710-04	BN034907.D	11/08/2024	14:17
PB164705BS	PB164705BS	BN034908.D	11/08/2024	14:53
PB164705BSD	PB164705BSD	BN034909.D	11/08/2024	15:29
PB164705BL	PB164705BL	BN034910.D	11/08/2024	16:05
SSTDCCC0.4EC	SSTDCCC0.4	BN034911.D	11/08/2024	16:41

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/08/2024

Lab File ID: BN034898.D Time Analyzed: 08:29

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	6102	7.575	18171	10.34	8711	14.20
	UPPER LIMIT	12204	8.075	36342	10.84	17422	14.701
	LOWER LIMIT	3051	7.075	9085.5	9.84	4355.5	13.701
	EPA SAMPLE NO.						
01	BP-BPOW6-8-GW-20241101	5705	7.58	16698	10.34	7609	14.21
02	PB164705BL	6271	7.58	17552	10.34	7420	14.20
03	PB164705BS	6394	7.58	18264	10.34	8109	14.21
04	PB164705BSD	6255	7.58	17867	10.34	7947	14.21
05	BP-BPOW6-7-GW-20241030	5186	7.58	15083	10.34	6739	14.20
06	BP-BPOW6-11-GW-20241031	5457	7.58	15845	10.34	7293	14.21

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.

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

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/08/2024

Lab File ID: BN034898.D Time Analyzed: 08:29

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	17291	16.957	11255	21.143	9481	23.315
	UPPER LIMIT	34582	17.457	22510	21.643	18962	23.815
	LOWER LIMIT	8645.5	16.457	5627.5	20.643	4740.5	22.815
	EPA SAMPLE NO.						
01	BP-BPOW6-8-GW-20241101	15639	16.95	9493	21.15	7807	23.32
02	PB164705BL	15255	16.96	8049	21.15	6373	23.32
03	PB164705BS	16416	16.95	9189	21.15	6982	23.32
04	PB164705BSD	15963	16.95	9019	21.15	6770	23.32
05	BP-BPOW6-7-GW-20241030	13647	16.96	8571	21.15	6880	23.32
06	BP-BPOW6-11-GW-20241031	14785	16.95	9375	21.15	7760	23.32

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
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:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB164705BL	SDG No.:	P4710
Lab Sample ID:	PB164705BL	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034910.D	1	11/06/24 08:45	11/08/24 16:05	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6270	7.575				
1146-65-2	Naphthalene-d8	17600	10.34				
15067-26-2	Acenaphthene-d10	7420	14.201				
1517-22-2	Phenanthrene-d10	15300	16.957				
1719-03-5	Chrysene-d12	8050	21.151				
1520-96-3	Perylene-d12	6370	23.317				

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
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:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB164705BS			SDG No.:	P4710
Lab Sample ID:	PB164705BS			Matrix:	Water
Analytical Method:	SW8270SIM			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOC-SIMGroup1
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034908.D	1	11/06/24 08:45	11/08/24 14:53	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6390	7.575				
1146-65-2	Naphthalene-d8	18300	10.34				
15067-26-2	Acenaphthene-d10	8110	14.208				
1517-22-2	Phenanthrene-d10	16400	16.952				
1719-03-5	Chrysene-d12	9190	21.149				
1520-96-3	Perylene-d12	6980	23.318				

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
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:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB164705BSD			SDG No.:	P4710
Lab Sample ID:	PB164705BSD			Matrix:	Water
Analytical Method:	SW8270SIM			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOC-SIMGroup1
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034909.D	1	11/06/24 08:45	11/08/24 15:29	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.28		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		98%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		82%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6260	7.575				
1146-65-2	Naphthalene-d8	17900	10.34				
15067-26-2	Acenaphthene-d10	7950	14.208				
1517-22-2	Phenanthrene-d10	16000	16.952				
1719-03-5	Chrysene-d12	9020	21.149				
1520-96-3	Perylene-d12	6770	23.315				

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-BN110724.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Nov 07 15:02:36 2024
Response Via : Initial Calibration

Calibration Files
0.1 =BN034885.D 0.2 =BN034886.D 0.4 =BN034887.D 0.8 =BN034888.D 1.6 =BN034889.D 3.2 =BN034890.D 5.0 =BN034891.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	0.563	0.562	0.474	0.530	0.498	0.470	0.441	0.505	9.43
3)		n-Nitrosodimet...	0.697	0.715	0.621	0.753	0.712	0.643	0.632	0.682	7.32
4)	S	2-Fluorophenol	1.137	1.131	1.007	1.180	1.146	1.082	1.120	1.115	5.00
5)	S	Phenol-d6	1.438	1.439	1.299	1.582	1.550	1.495	1.557	1.480	6.62
6)		bis(2-Chloroet...	1.316	1.267	1.170	1.389	1.336	1.230	1.230	1.277	5.84
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.314	0.301	0.280	0.327	0.324	0.313	0.324	0.312	5.36
9)		Naphthalene	1.110	1.086	1.028	1.181	1.166	1.089	1.111	1.110	4.63
10)		Hexachlorobuta...	0.183	0.180	0.167	0.189	0.182	0.168	0.169	0.177	4.89
11)	SURR	2-Methylnaphth...	0.527	0.519	0.491	0.579	0.577	0.548	0.575	0.545	6.30
12)		2-Methylnaphth...	0.647	0.641	0.612	0.725	0.723	0.691	0.717	0.679	6.76
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.083	0.094	0.087	0.121	0.129	0.142	0.167	0.118	26.52
15)	S	2-Fluorobiphenyl	1.753	1.737	1.540	1.788	1.747	1.620	1.642	1.690	5.32
16)		Acenaphthylene	1.833	1.826	1.672	2.034	2.040	2.003	2.097	1.929	8.00
17)		Acenaphthene	1.292	1.281	1.176	1.430	1.412	1.352	1.403	1.335	6.83
18)		Fluorene	1.614	1.600	1.463	1.774	1.779	1.680	1.727	1.662	6.78
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...		0.033	0.032	0.040	0.044	0.052	0.062	0.044	26.24
21)		4-Bromophenyl-...	0.212	0.201	0.202	0.220	0.219	0.216	0.222	0.213	4.05
22)		Hexachlorobenzene	0.262	0.255	0.252	0.268	0.260	0.252	0.248	0.257	2.61
23)		Atrazine	0.128	0.136	0.133	0.162	0.169	0.173	0.180	0.154	13.84
24)		Pentachlorophenol		0.055	0.055	0.074	0.079	0.092	0.107	0.077	26.61
25)		Phenanthrene	1.218	1.168	1.162	1.303	1.276	1.239	1.221	1.227	4.22
26)		Anthracene	0.965	0.963	0.963	1.121	1.116	1.119	1.156	1.058	8.39
27)	SURR	Fluoranthene-d10	0.801	0.845	0.801	0.971	0.976	0.947	0.972	0.902	9.15
28)		Fluoranthene	1.112	1.183	1.135	1.414	1.418	1.385	1.391	1.291	10.85
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	2.180	2.005	1.990	2.107	2.033	1.945	1.916	2.025	4.53
31)	S	Terphenyl-d14	0.788	0.750	0.743	0.777	0.750	0.715	0.722	0.749	3.54
32)		Benzo(a)anthra...	1.450	1.472	1.423	1.663	1.663	1.622	1.622	1.559	6.80
33)		Chrysene	1.632	1.632	1.583	1.768	1.709	1.625	1.601	1.650	3.95
34)		Bis(2-ethylhex...	0.984	0.873	0.720	0.881	0.838	0.922	1.048	0.895	11.77
35)	I	Perylene-d12	----------ISTD----------								

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN110724.M

36)		Indeno(1,2,3-c...	1.810	1.753	1.680	1.845	1.868	1.733	1.785	1.782	3.68
37)		Benzo(b)fluora...	1.685	1.601	1.752	1.900	1.814	1.765	1.784	1.757	5.40
38)		Benzo(k)fluora...	1.763	1.746	1.724	1.982	1.931	1.812	1.835	1.828	5.30
39)	C	Benzo(a)pyrene	1.308	1.249	1.339	1.475	1.469	1.438	1.492	1.396	6.85
40)		Dibenzo(a,h)an...	1.389	1.356	1.304	1.423	1.447	1.347	1.386	1.379	3.48
41)		Benzo(g,h,i)pe...	1.482	1.434	1.483	1.485	1.509	1.407	1.445	1.464	2.44

(#) = Out of Range

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: BNA_N Calibration Date/Time: 11/08/2024 08:29

Lab File ID: BN034898.D Init. Calib. Date(s): 11/07/2024 11/07/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 10:02 13:49

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.545	0.496		-9.0	20.0
Fluoranthene-d10	0.902	0.852		-5.5	20.0
2-Fluorophenol	1.115	0.972		-12.8	20.0
Phenol-d6	1.480	1.313		-11.3	20.0
Nitrobenzene-d5	0.312	0.279		-10.6	20.0
2-Fluorobiphenyl	1.690	1.536		-9.1	20.0
2,4,6-Tribromophenol	0.118	0.098		-16.9	20.0
Terphenyl-d14	0.749	0.697		-6.9	20.0
1,4-Dioxane	0.505	0.457		-9.5	20.0

All other compounds must meet a minimum RRF of 0.010.

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: BNA_N Calibration Date/Time: 11/08/2024 16:41

Lab File ID: BN034911.D Init. Calib. Date(s): 11/07/2024 11/07/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 10:02 13:49

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.545	0.486		-10.8	50.0
Fluoranthene-d10	0.902	0.830		-8.0	50.0
2-Fluorophenol	1.115	0.993		-10.9	50.0
Phenol-d6	1.480	1.324		-10.5	50.0
Nitrobenzene-d5	0.312	0.275		-11.9	50.0
2-Fluorobiphenyl	1.690	1.539		-8.9	50.0
2,4,6-Tribromophenol	0.118	0.094		-20.3	50.0
Terphenyl-d14	0.749	0.739		-1.3	50.0
1,4-Dioxane	0.505	0.476		-5.7	50.0

All other compounds must meet a minimum RRF of 0.010.

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

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

Chemtech Project Number: P4710

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-196	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

- ❑ RESEULTS 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)							

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									<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	BP-TB-20241030	QA		X	10/30/24	8:00	2	2									Trip Blank
2.	BP-BPOW6-7-GW-20241030	AQ		X	10/30/24	13:20	3	2	1								
3.	BP-BPOW6-11-GW-20241031	AQ		X	10/31/24	13:40	3	2	1								
4.	BP-BPOW6-8-GW-20241101	AQ		X	11/1/24	13:10	3	2	1								
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	11/4/24 1530	1. 1530 11-4-24
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.		2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
2.	11-4-24 1800	3.

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

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 : P4710 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 11/4/2024 3:44:00 PM
Project Name : CTO WE13
Receive DateTime : 11/4/2024 6:00:00 PM
Purchase Order :

Project Mgr : Yazmeen
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff : 11/5/2024 11:07:08 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4710-02	BP-BPOW6-7-GW-20241030	Water	10/30/2024	13:20	VOCMS Group1		8260-Low		10 Bus. Days
P4710-03	BP-BPOW6-11-GW-20241031	Water	10/31/2024	13:40	VOCMS Group1		8260-Low		10 Bus. Days
P4710-04	BP-BPOW6-8-GW-20241101	Water	11/01/2024	13:10	VOCMS Group1		8260-Low		10 Bus. Days
P4710-01	BP-TB-20241030	water	10/30	8:00	VOCMS group 1		8260-Low		10 Days

Relinquished By :
Date / Time : 11/5/24 1145

Received on ~~11/4/24~~ 11/4/24
Placed in SM-REF

Received By :
Date / Time : 11/5/24 12:30 Cg # 4

Storage Area : VOA Refridgerator Room