

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 : Q1773

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q1773

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q1773-01
Q1773-02
Q1773-03

Client Sample Number

BP-TB-20250407
BP-TT190D2-GW-20250407
BP-TT190D1-GW-20250409

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

Signature : _____

Date: 4/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1773

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

3 Water samples were received on 04/10/2025.

B. Parameters

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

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

The %RSD is greater than 20% in the Initial Calibration method (82X040225W.M) for t-1,3dichloropropene is passing on Linear Regression.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

Sample BP-TT190D1-GW-20250409 was diluted due to high concentration.

E. Additional Comments:

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

The Sample #BP-TT190D2-GW-20250407 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

The not QT review data is reported in the Miscellaneous.

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

F. Manual Integration Comments:

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

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

Signature_____

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1773

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

3 Water samples were received on 04/10/2025.

B. Parameters

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for PB167565BSD [2-Fluorobiphenyl - 113%,] and BP-TT-190D2-GW-20250407 [2-Fluorobiphenyl - 108%, Terphenyl-d14 - 143%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken..

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

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

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

The not QT review data is reported in the Miscellaneous.

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

F. Manual Integration Comments:

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

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

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1773

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 04/18/2025

LAB CHRONICLE

OrderID:	Q1773	OrderDate:	4/10/2025 10:14:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	F11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1773-01	BP-TB-20250407	Water	VOCMS Group1	8260-Low	04/07/25		04/11/25	04/10/25
Q1773-02	BP-TT190D2-GW-20250407	Water	VOCMS Group1	8260-Low	04/07/25		04/11/25	04/10/25
Q1773-03	BP-TT190D1-GW-20250409	Water	VOCMS Group1	8260-Low	04/09/25		04/11/25	04/10/25
Q1773-03DL	BP-TT190D1-GW-20250409DL	Water	VOCMS Group1	8260-Low	04/09/25		04/11/25	04/10/25

Hit Summary Sheet SW-846

SDG No.: Q1773
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID: BP-TT190D2-GW-20250407									
Q1773-02	BP-TT190D2-GW-1 Water		1,1,2-Trichlorotrifluoroethane	19.6		0.25	0.50	1.00	ug/L
Q1773-02	BP-TT190D2-GW-1 Water		1,1-Dichloroethene	3.80		0.23	0.75	1.00	ug/L
Q1773-02	BP-TT190D2-GW-1 Water		cis-1,2-Dichloroethene	1.70		0.19	0.75	1.00	ug/L
Q1773-02	BP-TT190D2-GW-1 Water		Trichloroethene	130		0.090	0.75	1.00	ug/L
			Total Voc :	155					
			Total Concentration:	155					
Client ID: BP-TT190D1-GW-20250409									
Q1773-03	BP-TT190D1-GW-1 Water		1,1,2-Trichlorotrifluoroethane	8.80		0.25	0.50	1.00	ug/L
Q1773-03	BP-TT190D1-GW-1 Water		1,1-Dichloroethene	3.70		0.23	0.75	1.00	ug/L
Q1773-03	BP-TT190D1-GW-1 Water		Carbon Tetrachloride	3.00		0.25	0.50	1.00	ug/L
Q1773-03	BP-TT190D1-GW-1 Water		cis-1,2-Dichloroethene	2.80		0.19	0.75	1.00	ug/L
Q1773-03	BP-TT190D1-GW-1 Water		Chloroform	1.40		0.25	0.50	1.00	ug/L
Q1773-03	BP-TT190D1-GW-1 Water		Trichloroethene	440	E	0.090	0.75	1.00	ug/L
Q1773-03	BP-TT190D1-GW-1 Water		1,1,2-Trichloroethane	2.20		0.21	0.50	1.00	ug/L
			Total Voc :	462					
			Total Concentration:	462					
Client ID: BP-TT190D1-GW-20250409DL									
Q1773-03DL	BP-TT190D1-GW-1 Water		1,1,2-Trichlorotrifluoroethane	8.40	JD	2.50	5.00	10.0	ug/L
Q1773-03DL	BP-TT190D1-GW-1 Water		1,1-Dichloroethene	3.80	JD	2.30	7.50	10.0	ug/L
Q1773-03DL	BP-TT190D1-GW-1 Water		Trichloroethene	420	D	0.93	7.50	10.0	ug/L
			Total Voc :	432					
			Total Concentration:	432					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	04/07/25		
Project:	CTO WE13			Date Received:	04/10/25		
Client Sample ID:	BP-TB-20250407			SDG No.:	Q1773		
Lab Sample ID:	Q1773-01			Matrix:	Water		
Analytical Method:	SW8260			% Solid:	0		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOCMS Group1		
GC Column:	DB-624UI	ID :	0.18	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045747.D	1		04/11/25 17:23	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	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	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	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	0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	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	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	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	0.98	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	0.19	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	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	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	04/07/25	
Project:	CTO WE13		Date Received:	04/10/25	
Client Sample ID:	BP-TB-20250407		SDG No.:	Q1773	
Lab Sample ID:	Q1773-01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045747.D	1		04/11/25 17:23	VX041125

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	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	54.2		81 - 118		108%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.1		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.8		85 - 114		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	64600	5.544				
540-36-3	1,4-Difluorobenzene	127000	6.757				
3114-55-4	Chlorobenzene-d5	120000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	50300	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	04/07/25	
Project:	CTO WE13		Date Received:	04/10/25	
Client Sample ID:	BP-TB-20250407		SDG No.:	Q1773	
Lab Sample ID:	Q1773-01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045747.D	1		04/11/25 17:23	VX041125

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

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	04/07/25	
Project:	CTO WE13			Date Received:	04/10/25	
Client Sample ID:	BP-TT190D2-GW-20250407			SDG No.:	Q1773	
Lab Sample ID:	Q1773-02			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045735.D	1		04/11/25 12:45	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	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	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.6		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	3.80		0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	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	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	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	0.98	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	1.70		0.19	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	130		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	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	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	04/07/25	
Project:	CTO WE13		Date Received:	04/10/25	
Client Sample ID:	BP-TT190D2-GW-20250407		SDG No.:	Q1773	
Lab Sample ID:	Q1773-02		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045735.D	1		04/11/25 12:45	VX041125

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	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.7		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.6		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.5		85 - 114		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	64500	5.55				
540-36-3	1,4-Difluorobenzene	124000	6.757				
3114-55-4	Chlorobenzene-d5	112000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	44200	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	04/07/25	
Project:	CTO WE13		Date Received:	04/10/25	
Client Sample ID:	BP-TT190D2-GW-20250407		SDG No.:	Q1773	
Lab Sample ID:	Q1773-02		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045735.D	1		04/11/25 12:45	VX041125

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	04/09/25	
Project:	CTO WE13			Date Received:	04/10/25	
Client Sample ID:	BP-TT190D1-GW-20250409			SDG No.:	Q1773	
Lab Sample ID:	Q1773-03			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045736.D	1		04/11/25 13:08	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	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	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	8.80		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	3.70		0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	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	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	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	0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	3.00		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	2.80		0.19	0.75	1.00	ug/L
67-66-3	Chloroform	1.40		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	440	E	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	2.20		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	04/09/25	
Project:	CTO WE13			Date Received:	04/10/25	
Client Sample ID:	BP-TT190D1-GW-20250409			SDG No.:	Q1773	
Lab Sample ID:	Q1773-03			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045736.D	1		04/11/25 13:08	VX041125

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	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	54.5		81 - 118		109%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	50.7		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.7		85 - 114		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	67100	5.55				
540-36-3	1,4-Difluorobenzene	131000	6.757				
3114-55-4	Chlorobenzene-d5	122000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	48500	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	04/09/25	
Project:	CTO WE13		Date Received:	04/10/25	
Client Sample ID:	BP-TT190D1-GW-20250409		SDG No.:	Q1773	
Lab Sample ID:	Q1773-03		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045736.D	1		04/11/25 13:08	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	04/09/25	
Project:	CTO WE13			Date Received:	04/10/25	
Client Sample ID:	BP-TT190D1-GW-20250409DL			SDG No.:	Q1773	
Lab Sample ID:	Q1773-03DL			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045746.D	10		04/11/25 17:00	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	5.00	UD	3.20	5.00	10.0	ug/L
75-01-4	Vinyl Chloride	7.50	UD	2.60	7.50	10.0	ug/L
74-83-9	Bromomethane	37.5	UD	14.4	37.5	50.0	ug/L
75-00-3	Chloroethane	7.50	UD	4.70	7.50	10.0	ug/L
75-69-4	Trichlorofluoromethane	5.00	UD	3.30	5.00	10.0	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	8.40	JD	2.50	5.00	10.0	ug/L
75-35-4	1,1-Dichloroethene	3.80	JD	2.30	7.50	10.0	ug/L
67-64-1	Acetone	37.5	UD	15.1	37.5	50.0	ug/L
75-15-0	Carbon Disulfide	7.50	UD	2.10	7.50	10.0	ug/L
1634-04-4	Methyl tert-butyl Ether	5.00	UD	1.60	5.00	10.0	ug/L
75-09-2	Methylene Chloride	5.00	UD	2.80	5.00	10.0	ug/L
156-60-5	trans-1,2-Dichloroethene	5.00	UD	2.30	5.00	10.0	ug/L
75-34-3	1,1-Dichloroethane	5.00	UD	2.30	5.00	10.0	ug/L
78-93-3	2-Butanone	25.0	UD	9.80	25.0	50.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	UD	2.50	5.00	10.0	ug/L
156-59-2	cis-1,2-Dichloroethene	7.50	UD	1.90	7.50	10.0	ug/L
67-66-3	Chloroform	5.00	UD	2.50	5.00	10.0	ug/L
71-55-6	1,1,1-Trichloroethane	5.00	UD	2.00	5.00	10.0	ug/L
108-87-2	Methylcyclohexane	5.00	UD	1.60	5.00	10.0	ug/L
71-43-2	Benzene	5.00	UD	1.50	5.00	10.0	ug/L
107-06-2	1,2-Dichloroethane	5.00	UD	2.20	5.00	10.0	ug/L
79-01-6	Trichloroethene	420	D	0.93	7.50	10.0	ug/L
78-87-5	1,2-Dichloropropane	5.00	UD	2.00	5.00	10.0	ug/L
75-27-4	Bromodichloromethane	5.00	UD	2.20	5.00	10.0	ug/L
108-10-1	4-Methyl-2-Pentanone	25.0	UD	6.80	25.0	50.0	ug/L
108-88-3	Toluene	5.00	UD	1.40	5.00	10.0	ug/L
10061-02-6	t-1,3-Dichloropropene	5.00	UD	1.70	5.00	10.0	ug/L
10061-01-5	cis-1,3-Dichloropropene	5.00	UD	1.60	5.00	10.0	ug/L
79-00-5	1,1,2-Trichloroethane	5.00	UD	2.10	5.00	10.0	ug/L
591-78-6	2-Hexanone	25.0	UD	8.90	25.0	50.0	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	04/09/25	
Project:	CTO WE13		Date Received:	04/10/25	
Client Sample ID:	BP-TT190D1-GW-20250409DL		SDG No.:	Q1773	
Lab Sample ID:	Q1773-03DL		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045746.D	10		04/11/25 17:00	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	5.00	UD	1.80	5.00	10.0	ug/L
127-18-4	Tetrachloroethene	5.00	UD	2.30	5.00	10.0	ug/L
108-90-7	Chlorobenzene	5.00	UD	1.20	5.00	10.0	ug/L
100-41-4	Ethyl Benzene	5.00	UD	1.30	5.00	10.0	ug/L
179601-23-1	m/p-Xylenes	10.0	UD	2.40	10.0	20.0	ug/L
95-47-6	o-Xylene	5.00	UD	1.20	5.00	10.0	ug/L
100-42-5	Styrene	5.00	UD	1.50	5.00	10.0	ug/L
75-25-2	Bromoform	5.00	UD	1.90	5.00	10.0	ug/L
98-82-8	Isopropylbenzene	5.00	UD	1.20	5.00	10.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5.00	UD	2.60	5.00	10.0	ug/L
541-73-1	1,3-Dichlorobenzene	5.00	UD	1.60	5.00	10.0	ug/L
106-46-7	1,4-Dichlorobenzene	5.00	UD	1.90	5.00	10.0	ug/L
95-50-1	1,2-Dichlorobenzene	5.00	UD	1.60	5.00	10.0	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.6		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	50.2		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.3		85 - 114		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	66500	5.544				
540-36-3	1,4-Difluorobenzene	130000	6.757				
3114-55-4	Chlorobenzene-d5	119000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	49100	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1773-01	BP-TB-20250407	1,2-Dichloroethane-d4	50	54.2	108	81	118
		Dibromofluoromethane	50	51.0	102	80	119
		Toluene-d8	50	50.1	100	89	112
		4-Bromofluorobenzene	50	52.8	106	85	114
Q1773-02	BP-TT190D2-GW-20250407	1,2-Dichloroethane-d4	50	52.7	105	81	118
		Dibromofluoromethane	50	51.0	102	80	119
		Toluene-d8	50	50.6	101	89	112
		4-Bromofluorobenzene	50	49.5	99	85	114
Q1773-03	BP-TT190D1-GW-20250409	1,2-Dichloroethane-d4	50	54.5	109	81	118
		Dibromofluoromethane	50	51.3	103	80	119
		Toluene-d8	50	50.7	101	89	112
		4-Bromofluorobenzene	50	51.7	103	85	114
Q1773-03DL	BP-TT190D1-GW-20250409DL	1,2-Dichloroethane-d4	50	53.6	107	81	118
		Dibromofluoromethane	50	51.4	103	80	119
		Toluene-d8	50	50.2	100	89	112
		4-Bromofluorobenzene	50	51.3	103	85	114
VX0411WBL01	VX0411WBL01	1,2-Dichloroethane-d4	50	53.5	107	81	118
		Dibromofluoromethane	50	51.2	102	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	50.4	101	85	114
VX0411WBS01	VX0411WBS01	1,2-Dichloroethane-d4	50	50.5	101	81	118
		Dibromofluoromethane	50	50.6	101	80	119
		Toluene-d8	50	49.2	98	89	112
		4-Bromofluorobenzene	50	50.6	101	85	114
VX0411WBSD0	VX0411WBSD01	1,2-Dichloroethane-d4	50	52.3	105	81	118
		Dibromofluoromethane	50	49.8	100	80	119
		Toluene-d8	50	49.3	99	89	112
		4-Bromofluorobenzene	50	52.9	106	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX045733.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0411WBS01	Chloromethane	20	17.6	ug/L	88			50	139	
	Vinyl chloride	20	17.5	ug/L	88			58	137	
	Bromomethane	20	16.8	ug/L	84			53	141	
	Chloroethane	20	18.9	ug/L	95			60	138	
	Trichlorofluoromethane	20	18.4	ug/L	92			65	141	
	1,1,2-Trichlorotrifluoroethane	20	18.6	ug/L	93			70	136	
	1,1-Dichloroethene	20	17.7	ug/L	89			71	131	
	Acetone	100	91.5	ug/L	92			39	160	
	Carbon disulfide	20	14.2	ug/L	71			64	133	
	Methyl tert-butyl Ether	20	18.6	ug/L	93			71	124	
	Methylene Chloride	20	18.2	ug/L	91			74	124	
	trans-1,2-Dichloroethene	20	18.0	ug/L	90			75	124	
	1,1-Dichloroethane	20	18.2	ug/L	91			77	125	
	2-Butanone	100	95.6	ug/L	96			56	143	
	Carbon Tetrachloride	20	18.6	ug/L	93			72	136	
	cis-1,2-Dichloroethene	20	18.0	ug/L	90			78	123	
	Chloroform	20	18.3	ug/L	92			79	124	
	1,1,1-Trichloroethane	20	18.6	ug/L	93			74	131	
	Methylcyclohexane	20	17.9	ug/L	90			72	132	
	Benzene	20	18.1	ug/L	91			79	120	
	1,2-Dichloroethane	20	19.4	ug/L	97			73	128	
	Trichloroethene	20	17.6	ug/L	88			79	123	
	1,2-Dichloropropane	20	18.7	ug/L	94			78	122	
	Bromodichloromethane	20	18.3	ug/L	92			79	125	
	4-Methyl-2-Pentanone	100	98.3	ug/L	98			67	130	
	Toluene	20	18.2	ug/L	91			80	121	
	t-1,3-Dichloropropene	20	17.5	ug/L	88			73	127	
	cis-1,3-Dichloropropene	20	19.0	ug/L	95			75	124	
	1,1,2-Trichloroethane	20	18.9	ug/L	95			80	119	
	2-Hexanone	100	100	ug/L	100			57	139	
	Dibromochloromethane	20	18.5	ug/L	93			74	126	
	Tetrachloroethene	20	19.2	ug/L	96			74	129	
	Chlorobenzene	20	19.0	ug/L	95			82	118	
	Ethyl Benzene	20	19.0	ug/L	95			79	121	
	m/p-Xylenes	40	37.7	ug/L	94			80	121	
	o-Xylene	20	19.1	ug/L	96			78	122	
	Styrene	20	19.3	ug/L	97			78	123	
	Bromoform	20	17.9	ug/L	90			66	130	
	Isopropylbenzene	20	19.0	ug/L	95			72	131	
	1,1,2,2-Tetrachloroethane	20	19.3	ug/L	97			71	121	
	1,3-Dichlorobenzene	20	18.9	ug/L	95			80	119	
	1,4-Dichlorobenzene	20	19.0	ug/L	95			79	118	
	1,2-Dichlorobenzene	20	19.4	ug/L	97			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX045734.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0411WBSD01	Chloromethane	20	18.0	ug/L	90	2		50	139	20
	Vinyl chloride	20	17.6	ug/L	88	0		58	137	20
	Bromomethane	20	17.6	ug/L	88	5		53	141	20
	Chloroethane	20	19.0	ug/L	95	0		60	138	20
	Trichlorofluoromethane	20	19.3	ug/L	97	5		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	19.4	ug/L	97	4		70	136	20
	1,1-Dichloroethene	20	17.9	ug/L	90	1		71	131	20
	Acetone	100	100	ug/L	100	8		39	160	20
	Carbon disulfide	20	14.5	ug/L	73	3		64	133	20
	Methyl tert-butyl Ether	20	20.4	ug/L	102	9		71	124	20
	Methylene Chloride	20	19.4	ug/L	97	6		74	124	20
	trans-1,2-Dichloroethene	20	18.5	ug/L	93	3		75	124	20
	1,1-Dichloroethane	20	19.2	ug/L	96	5		77	125	20
	2-Butanone	100	100	ug/L	100	4		56	143	20
	Carbon Tetrachloride	20	18.9	ug/L	95	2		72	136	20
	cis-1,2-Dichloroethene	20	18.4	ug/L	92	2		78	123	20
	Chloroform	20	19.7	ug/L	99	7		79	124	20
	1,1,1-Trichloroethane	20	19.3	ug/L	97	4		74	131	20
	Methylcyclohexane	20	18.7	ug/L	94	4		72	132	20
	Benzene	20	18.7	ug/L	94	3		79	120	20
	1,2-Dichloroethane	20	20.4	ug/L	102	5		73	128	20
	Trichloroethene	20	18.4	ug/L	92	4		79	123	20
	1,2-Dichloropropane	20	19.2	ug/L	96	2		78	122	20
	Bromodichloromethane	20	19.5	ug/L	98	6		79	125	20
	4-Methyl-2-Pentanone	100	110	ug/L	110	12		67	130	20
	Toluene	20	19.1	ug/L	96	5		80	121	20
	t-1,3-Dichloropropene	20	18.4	ug/L	92	4		73	127	20
	cis-1,3-Dichloropropene	20	19.9	ug/L	100	5		75	124	20
	1,1,2-Trichloroethane	20	19.9	ug/L	100	5		80	119	20
	2-Hexanone	100	110	ug/L	110	10		57	139	20
	Dibromochloromethane	20	19.2	ug/L	96	3		74	126	20
	Tetrachloroethene	20	19.2	ug/L	96	0		74	129	20
	Chlorobenzene	20	19.6	ug/L	98	3		82	118	20
	Ethyl Benzene	20	19.5	ug/L	98	3		79	121	20
	m/p-Xylenes	40	38.9	ug/L	97	3		80	121	20
	o-Xylene	20	19.7	ug/L	99	3		78	122	20
	Styrene	20	20.1	ug/L	101	4		78	123	20
	Bromoform	20	18.8	ug/L	94	4		66	130	20
	Isopropylbenzene	20	18.8	ug/L	94	1		72	131	20
	1,1,2,2-Tetrachloroethane	20	19.1	ug/L	96	1		71	121	20
	1,3-Dichlorobenzene	20	18.7	ug/L	94	1		80	119	20
	1,4-Dichlorobenzene	20	18.6	ug/L	93	2		79	118	20
	1,2-Dichlorobenzene	20	19.4	ug/L	97	0		80	119	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0411WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1773

SAS No.: Q1773 SDG NO.: Q1773

Lab File ID: VX045732.D

Lab Sample ID: VX0411WBL01

Date Analyzed: 04/11/2025

Time Analyzed: 11:32

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0411WBS01	VX0411WBS01	VX045733.D	04/11/2025
VX0411WBSD01	VX0411WBSD01	VX045734.D	04/11/2025
BP-TT190D2-GW-20250407	Q1773-02	VX045735.D	04/11/2025
BP-TT190D1-GW-20250409	Q1773-03	VX045736.D	04/11/2025
BP-TT190D1-GW-20250409DL	Q1773-03DL	VX045746.D	04/11/2025
BP-TB-20250407	Q1773-01	VX045747.D	04/11/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG NO.: Q1773
Lab File ID: VX045524.D BFB Injection Date: 04/01/2025
Instrument ID: MSVOA_X BFB Injection Time: 16:15
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 60.0% of mass 95	58.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.8 (1.2) 1
174	50.0 - 100.0% of mass 95	66.8
175	5.0 - 9.0% of mass 174	5.2 (7.8) 1
176	95.0 - 101.0% of mass 174	65.3 (97.8) 1
177	5.0 - 9.0% of mass 176	4.4 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC001	VSTDIC001	VX045525.D	04/01/2025	17:06
VSTDIC005	VSTDIC005	VX045526.D	04/01/2025	17:29
VSTDIC020	VSTDIC020	VX045527.D	04/01/2025	17:52
VSTDIC050	VSTDIC050	VX045528.D	04/01/2025	18:15
VSTDIC100	VSTDIC100	VX045529.D	04/01/2025	18:38
VSTDIC150	VSTDIC150	VX045530.D	04/01/2025	19:02

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG NO.: Q1773
Lab File ID: VX045729.D BFB Injection Date: 04/11/2025
Instrument ID: MSVOA_X BFB Injection Time: 10:14
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.2
75	30.0 - 60.0% of mass 95	59.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.8 (1.3) 1
174	50.0 - 100.0% of mass 95	66.2
175	5.0 - 9.0% of mass 174	5 (7.5) 1
176	95.0 - 101.0% of mass 174	63.3 (95.7) 1
177	5.0 - 9.0% of mass 176	4 (6.2) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX045730.D	04/11/2025	10:41
VX0411WBL01	VX0411WBL01	VX045732.D	04/11/2025	11:32
VX0411WBS01	VX0411WBS01	VX045733.D	04/11/2025	11:55
VX0411WBSD01	VX0411WBSD01	VX045734.D	04/11/2025	12:22
BP-TT190D2-GW-20250407	Q1773-02	VX045735.D	04/11/2025	12:45
BP-TT190D1-GW-20250409	Q1773-03	VX045736.D	04/11/2025	13:08
BP-TT190D1-GW-20250409DL	Q1773-03DL	VX045746.D	04/11/2025	17:00
BP-TB-20250407	Q1773-01	VX045747.D	04/11/2025	17:23
VSTDCCC050EC	VSTDCCC050	VX045753.D	04/11/2025	19:42

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG NO.: Q1773
Lab File ID: VX045730.D Date Analyzed: 04/11/2025
Instrument ID: MSVOA_X Time Analyzed: 10:41
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	97283	5.54	164714	6.76	147741	10.05
UPPER LIMIT	194566	6.044	329428	7.257	295482	10.549
LOWER LIMIT	48641.5	5.044	82357	6.257	73870.5	9.549
EPA SAMPLE NO.						
BP-TB-20250407	64635	5.54	127456	6.76	119779	10.05
BP-TT190D2-GW-20250407	64518	5.55	124304	6.76	112481	10.05
BP-TT190D1-GW-20250409	67136	5.55	131053	6.76	122019	10.05
BP-TT190D1-GW-20250409DL	66514	5.54	129658	6.76	118906	10.05
VX0411WBL01	65554	5.55	128675	6.76	118153	10.05
VX0411WBS01	92540	5.54	163903	6.76	140888	10.05
VX0411WBSD01	84320	5.54	150272	6.76	131860	10.05

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG NO.: Q1773
Lab File ID: VX045730.D Date Analyzed: 04/11/2025
Instrument ID: MSVOA_X Time Analyzed: 10:41
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	71449	12.018				
UPPER LIMIT	142898	12.518				
LOWER LIMIT	35724.5	11.518				
EPA SAMPLE NO.						
BP-TB-20250407	50320	12.02				
BP-TT190D2-GW-20250407	44175	12.02				
BP-TT190D1-GW-20250409	48475	12.02				
BP-TT190D1-GW-20250409DL	49147	12.02				
VX0411WBL01	48353	12.02				
VX0411WBS01	64715	12.02				
VX0411WBSD01	63206	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0411WBL01		SDG No.:	Q1773
Lab Sample ID:	VX0411WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045732.D	1		04/11/25 11:32	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	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	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	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	0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	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	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	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	0.98	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	0.19	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	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	0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0411WBL01		SDG No.:	Q1773
Lab Sample ID:	VX0411WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045732.D	1		04/11/25 11:32	VX041125

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	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.5		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.4		85 - 114		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	65600	5.55				
540-36-3	1,4-Difluorobenzene	129000	6.757				
3114-55-4	Chlorobenzene-d5	118000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	48400	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0411WBS01		SDG No.:	Q1773
Lab Sample ID:	VX0411WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045733.D	1		04/11/25 11:55	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	17.6		0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.5		0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	16.8		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	18.9		0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.4		0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.6		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.7		0.23	0.75	1.00	ug/L
67-64-1	Acetone	91.5		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	14.2		0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.6		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.2		0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.0		0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.2		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	95.6		0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.6		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.0		0.19	0.75	1.00	ug/L
67-66-3	Chloroform	18.3		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.6		0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	17.9		0.16	0.50	1.00	ug/L
71-43-2	Benzene	18.1		0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.4		0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	17.6		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.7		0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	18.3		0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	98.3		0.68	2.50	5.00	ug/L
108-88-3	Toluene	18.2		0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	17.5		0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.0		0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.9		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	100		0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0411WBS01		SDG No.:	Q1773
Lab Sample ID:	VX0411WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045733.D	1		04/11/25 11:55	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	18.5		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.2		0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.0		0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.0		0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	37.7		0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	19.1		0.12	0.50	1.00	ug/L
100-42-5	Styrene	19.3		0.15	0.50	1.00	ug/L
75-25-2	Bromoform	17.9		0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	19.0		0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.3		0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.9		0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.0		0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.4		0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.5		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		80 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	49.2		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.6		85 - 114		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	92500	5.544				
540-36-3	1,4-Difluorobenzene	164000	6.757				
3114-55-4	Chlorobenzene-d5	141000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	64700	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0411WBSD01		SDG No.:	Q1773
Lab Sample ID:	VX0411WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045734.D	1		04/11/25 12:22	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	18.0		0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.6		0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	17.6		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.0		0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.3		0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.4		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.9		0.23	0.75	1.00	ug/L
67-64-1	Acetone	100		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	14.5		0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.4		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.4		0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.5		0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.2		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	100		0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.9		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.4		0.19	0.75	1.00	ug/L
67-66-3	Chloroform	19.7		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.3		0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.7		0.16	0.50	1.00	ug/L
71-43-2	Benzene	18.7		0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.4		0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.4		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.2		0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	19.5		0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.68	2.50	5.00	ug/L
108-88-3	Toluene	19.1		0.14	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.4		0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.9		0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.9		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	110		0.89	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	VX0411WBSD01		SDG No.:	Q1773	
Lab Sample ID:	VX0411WBSD01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045734.D	1		04/11/25 12:22	VX041125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	19.2		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.2		0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.6		0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.5		0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.9		0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	19.7		0.12	0.50	1.00	ug/L
100-42-5	Styrene	20.1		0.15	0.50	1.00	ug/L
75-25-2	Bromoform	18.8		0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.8		0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.1		0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.7		0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.6		0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.4		0.16	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.3		81 - 118		105%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		80 - 119		100%	SPK: 50
2037-26-5	Toluene-d8	49.3		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.9		85 - 114		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	84300	5.544				
540-36-3	1,4-Difluorobenzene	150000	6.757				
3114-55-4	Chlorobenzene-d5	132000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	63200	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773
Instrument ID: MSVOA_X Calibration Date(s): 04/01/2025 04/01/2025
Heated Purge: (Y/N) N Calibration Time(s): 17:06 19:02
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:								
RRF001 = VX045525.D			RRF005 = VX045526.D			RRF020 = VX045527.D		
RRF050 = VX045528.D			RRF100 = VX045529.D			RRF150 = VX045530.D		
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Chloromethane	0.764	0.734	0.777	0.784	0.815	0.734	0.768	4.1
Vinyl Chloride	0.671	0.662	0.701	0.716	0.738	0.730	0.703	4.4
Bromomethane		0.342	0.327	0.330	0.341	0.327	0.333	2.2
Chloroethane	0.378	0.397	0.390	0.398	0.355	0.319	0.373	8.3
Trichlorofluoromethane	1.051	0.999	1.075	1.086	1.089	0.989	1.048	4.2
1,1,2-Trichlorotrifluoroethane	0.575	0.599	0.635	0.621	0.621	0.634	0.614	3.7
1,1-Dichloroethene	0.563	0.588	0.612	0.604	0.618	0.616	0.600	3.5
Acetone	0.400	0.369	0.387	0.378	0.365	0.355	0.375	4.3
Carbon Disulfide	1.334	1.327	1.434	1.553	1.604	1.642	1.483	9.2
Methyl tert-butyl Ether	1.915	1.964	2.169	2.118	2.217	2.216	2.100	6.2
Methylene Chloride	0.692	0.695	0.726	0.709	0.705	0.690	0.703	2
trans-1,2-Dichloroethene	0.574	0.594	0.636	0.624	0.621	0.630	0.613	3.9
1,1-Dichloroethane	1.211	1.240	1.318	1.269	1.283	1.292	1.269	3
2-Butanone	0.474	0.537	0.582	0.586	0.571	0.548	0.550	7.5
Carbon Tetrachloride	0.450	0.497	0.521	0.536	0.545	0.556	0.518	7.5
cis-1,2-Dichloroethene	0.762	0.696	0.760	0.751	0.754	0.760	0.747	3.4
Chloroform	1.244	1.309	1.348	1.315	1.309	1.309	1.306	2.6
1,1,1-Trichloroethane	1.028	1.052	1.120	1.109	1.153	1.167	1.105	5
Methylcyclohexane	0.519	0.527	0.596	0.622	0.628	0.632	0.587	8.8
Benzene	1.414	1.416	1.519	1.481	1.483	1.465	1.463	2.8
1,2-Dichloroethane	0.533	0.585	0.649	0.622	0.620	0.617	0.604	6.7
Trichloroethene	0.349	0.322	0.356	0.351	0.351	0.356	0.348	3.7
1,2-Dichloropropane	0.309	0.365	0.388	0.376	0.379	0.374	0.365	7.8
Bromodichloromethane	0.521	0.519	0.576	0.572	0.587	0.583	0.560	5.6
4-Methyl-2-Pentanone	0.499	0.578	0.661	0.663	0.647	0.589	0.606	10.6
Toluene	0.817	0.866	0.939	0.910	0.905	0.875	0.885	4.8
t-1,3-Dichloropropene	0.316	0.400	0.465	0.508	0.555	0.558	0.467	20.3
cis-1,3-Dichloropropene	0.371	0.474	0.546	0.568	0.597	0.600	0.526	16.9
1,1,2-Trichloroethane	0.337	0.346	0.376	0.359	0.358	0.340	0.353	4.1
2-Hexanone	0.363	0.429	0.488	0.492	0.484	0.439	0.449	11.1

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: MSVOA_X Calibration Date(s): 04/01/2025 04/01/2025

Heated Purge: (Y/N) N Calibration Time(s): 17:06 19:02

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

LAB FILE ID:		RRF001 = VX045525.D		RRF005 = VX045526.D		RRF020 = VX045527.D			
		RRF050 = VX045528.D		RRF100 = VX045529.D		RRF150 = VX045530.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Dibromochloromethane	0.313	0.352	0.404	0.412	0.421	0.405	0.385	11.1	
Tetrachloroethene	0.346	0.373	0.371	0.347	0.333	0.347	0.353	4.5	
Chlorobenzene	0.951	1.054	1.123	1.084	1.086	1.112	1.068	5.8	
Ethyl Benzene	1.608	1.819	2.002	2.007	1.993	2.053	1.914	8.9	
m/p-Xylenes	0.594	0.669	0.732	0.728	0.723	0.729	0.696	7.9	
o-Xylene	0.562	0.676	0.725	0.719	0.716	0.714	0.686	9.2	
Styrene	0.897	1.043	1.202	1.216	1.230	1.202	1.132	11.8	
Bromoform	0.220	0.252	0.272	0.296	0.307	0.315	0.277	13.1	
Isopropylbenzene	3.581	3.850	4.224	4.181	4.043	4.151	4.005	6.2	
1,1,2,2-Tetrachloroethane	1.457	1.428	1.461	1.384	1.354	1.358	1.407	3.4	
1,3-Dichlorobenzene	1.658	1.605	1.726	1.699	1.714	1.706	1.684	2.7	
1,4-Dichlorobenzene	1.671	1.724	1.768	1.703	1.674	1.706	1.708	2.1	
1,2-Dichlorobenzene	1.644	1.645	1.750	1.678	1.665	1.667	1.675	2.3	
1,2-Dichloroethane-d4		0.962	0.900	0.868	0.904	0.937	0.914	3.9	
Dibromofluoromethane		0.372	0.342	0.345	0.353	0.362	0.355	3.5	
Toluene-d8		1.257	1.233	1.214	1.230	1.257	1.238	1.5	
4-Bromofluorobenzene		0.413	0.448	0.453	0.481	0.460	0.451	5.5	

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: MSVOA_X Calibration Date/Time: 04/11/2025 10:41

Lab File ID: VX045730.D Init. Calib. Date(s): 04/01/2025 04/01/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:06 19:02

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.768	0.696	0.1	-9.38	20
Vinyl Chloride	0.703	0.636		-9.53	20
Bromomethane	0.333	0.280		-15.92	20
Chloroethane	0.373	0.355		-4.83	20
Trichlorofluoromethane	1.048	1.004		-4.2	20
1,1,2-Trichlorotrifluoroethane	0.614	0.605		-1.47	20
1,1-Dichloroethene	0.600	0.549		-8.5	20
Acetone	0.375	0.347		-7.47	20
Carbon Disulfide	1.483	1.188		-19.89	20
Methyl tert-butyl Ether	2.100	2.067		-1.57	20
Methylene Chloride	0.703	0.649		-7.68	20
trans-1,2-Dichloroethene	0.613	0.554		-9.63	20
1,1-Dichloroethane	1.269	1.181	0.1	-6.93	20
2-Butanone	0.550	0.536		-2.55	20
Carbon Tetrachloride	0.518	0.529		2.12	20
cis-1,2-Dichloroethene	0.747	0.682		-8.7	20
Chloroform	1.306	1.240		-5.05	20
1,1,1-Trichloroethane	1.105	1.067		-3.44	20
Methylcyclohexane	0.587	0.596		1.53	20
Benzene	1.463	1.404		-4.03	20
1,2-Dichloroethane	0.604	0.611		1.16	20
Trichloroethene	0.348	0.335		-3.74	20
1,2-Dichloropropane	0.365	0.361		-1.1	20
Bromodichloromethane	0.560	0.562		0.36	20
4-Methyl-2-Pentanone	0.606	0.640		5.61	20
Toluene	0.885	0.858		-3.05	20
t-1,3-Dichloropropene	0.467	0.511		9.42	20
cis-1,3-Dichloropropene	0.526	0.565		7.41	20
1,1,2-Trichloroethane	0.353	0.353		0	20
2-Hexanone	0.449	0.475		5.79	20
Dibromochloromethane	0.385	0.398		3.38	20
Tetrachloroethene	0.353	0.323		-8.5	20
Chlorobenzene	1.068	1.043	0.3	-2.34	20
Ethyl Benzene	1.914	1.917		0.16	20
m/p-Xylenes	0.696	0.709		1.87	20
o-Xylene	0.686	0.699		1.89	20
Styrene	1.132	1.185		4.68	20
Bromoform	0.277	0.288	0.1	3.97	20

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: MSVOA_X Calibration Date/Time: 04/11/2025 10:41

Lab File ID: VX045730.D Init. Calib. Date(s): 04/01/2025 04/01/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:06 19:02

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	4.005	3.906		-2.47	20
1,1,2,2-Tetrachloroethane	1.407	1.291	0.3	-8.24	20
1,3-Dichlorobenzene	1.684	1.629		-3.27	20
1,4-Dichlorobenzene	1.708	1.635		-4.27	20
1,2-Dichlorobenzene	1.675	1.610		-3.88	20
1,2-Dichloroethane-d4	0.914	0.880		-3.72	20
Dibromofluoromethane	0.355	0.354		-0.28	20
Toluene-d8	1.238	1.226		-0.97	20
4-Bromofluorobenzene	0.451	0.491		8.87	20

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: MSVOA_X Calibration Date/Time: 04/11/2025 19:42

Lab File ID: VX045753.D Init. Calib. Date(s): 04/01/2025 04/01/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:06 19:02

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.768	0.720	0.1	-6.25	50
Vinyl Chloride	0.703	0.676		-3.84	50
Bromomethane	0.333	0.302		-9.31	50
Chloroethane	0.373	0.327		-12.33	50
Trichlorofluoromethane	1.048	1.046		-0.19	50
1,1,2-Trichlorotrifluoroethane	0.614	0.606		-1.3	50
1,1-Dichloroethene	0.600	0.580		-3.33	50
Acetone	0.375	0.376		0.27	50
Carbon Disulfide	1.483	1.195		-19.42	50
Methyl tert-butyl Ether	2.100	2.139		1.86	50
Methylene Chloride	0.703	0.684		-2.7	50
trans-1,2-Dichloroethene	0.613	0.586		-4.41	50
1,1-Dichloroethane	1.269	1.257	0.1	-0.95	50
2-Butanone	0.550	0.568		3.27	50
Carbon Tetrachloride	0.518	0.519		0.19	50
cis-1,2-Dichloroethene	0.747	0.724		-3.08	50
Chloroform	1.306	1.320		1.07	50
1,1,1-Trichloroethane	1.105	1.098		-0.63	50
Methylcyclohexane	0.587	0.562		-4.26	50
Benzene	1.463	1.417		-3.14	50
1,2-Dichloroethane	0.604	0.621		2.82	50
Trichloroethene	0.348	0.337		-3.16	50
1,2-Dichloropropane	0.365	0.365		0	50
Bromodichloromethane	0.560	0.566		1.07	50
4-Methyl-2-Pentanone	0.606	0.635		4.78	50
Toluene	0.885	0.864		-2.37	50
t-1,3-Dichloropropene	0.467	0.479		2.57	50
cis-1,3-Dichloropropene	0.526	0.530		0.76	50
1,1,2-Trichloroethane	0.353	0.358		1.42	50
2-Hexanone	0.449	0.466		3.79	50
Dibromochloromethane	0.385	0.396		2.86	50
Tetrachloroethene	0.353	0.335		-5.1	50
Chlorobenzene	1.068	1.068	0.3	0	50
Ethyl Benzene	1.914	1.929		0.78	50
m/p-Xylenes	0.696	0.703		1.01	50
o-Xylene	0.686	0.703		2.48	50
Styrene	1.132	1.186		4.77	50
Bromoform	0.277	0.278	0.1	0.36	50

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: MSVOA_X Calibration Date/Time: 04/11/2025 19:42

Lab File ID: VX045753.D Init. Calib. Date(s): 04/01/2025 04/01/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:06 19:02

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	4.005	3.985		-0.5	50
1,1,2,2-Tetrachloroethane	1.407	1.327	0.3	-5.69	50
1,3-Dichlorobenzene	1.684	1.609		-4.45	50
1,4-Dichlorobenzene	1.708	1.606		-5.97	50
1,2-Dichlorobenzene	1.675	1.636		-2.33	50
1,2-Dichloroethane-d4	0.914	0.966		5.69	50
Dibromofluoromethane	0.355	0.356		0.28	50
Toluene-d8	1.238	1.228		-0.81	50
4-Bromofluorobenzene	0.451	0.467		3.55	50

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

LAB CHRONICLE

OrderID:	Q1773	OrderDate:	4/10/2025 10:14:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	F11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1773-02	BP-TT190D2-GW-202 50407	Water			04/07/25			04/10/25
			SVOC-SIMGroup1	8270-Modified		04/11/25	04/11/25	
Q1773-03	BP-TT190D1-GW-202 50409	Water			04/09/25			04/10/25
			SVOC-SIMGroup1	8270-Modified		04/11/25	04/11/25	

Hit Summary Sheet SW-846

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : BP-TT190D2-GW-20250407								
Q1773-02	BP-TT190D2-GW-20250 WATER	1,4-Dioxane	2.500		0.07	0.21	0.21	ug/L
		Total Svoc :		2.50				
		Total Concentration:		2.50				
Client ID : BP-TT190D1-GW-20250409								
Q1773-03	BP-TT190D1-GW-20250 WATER	1,4-Dioxane	2.100		0.07	0.2	0.2	ug/L
		Total Svoc :		2.10				
		Total Concentration:		2.10				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	04/07/25
Project:	CTO WE13	Date Received:	04/10/25
Client Sample ID:	BP-TT190D2-GW-20250407	SDG No.:	Q1773
Lab Sample ID:	Q1773-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036889.D	1	04/11/25 09:20	04/11/25 21:46	PB167565

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	2.50		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.41		30 - 150		102%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.51		30 - 150		128%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		100%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43	*	53 - 106		108%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	58 - 132		143%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	223		7.64			
1146-65-2	Naphthalene-d8	582		10.426			
15067-26-2	Acenaphthene-d10	355		14.288			
1517-22-2	Phenanthrene-d10	872		17.033			
1719-03-5	Chrysene-d12	1200		21.233			
1520-96-3	Perylene-d12	1560		23.447			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	04/09/25
Project:	CTO WE13	Date Received:	04/10/25
Client Sample ID:	BP-TT190D1-GW-20250409	SDG No.:	Q1773
Lab Sample ID:	Q1773-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036890.D	1	04/11/25 09:20	04/11/25 22:22	PB167565

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	2.10		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		117%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		99%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.51		58 - 132		128%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	423	7.64				
1146-65-2	Naphthalene-d8	1030	10.426				
15067-26-2	Acenaphthene-d10	590	14.288				
1517-22-2	Phenanthrene-d10	1360	17.033				
1719-03-5	Chrysene-d12	1640	21.233				
1520-96-3	Perylene-d12	2050	23.447				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB167565BL	PB167565BL	2-Methylnaphthalene-d10	0.4	0.35	87		30	150
		Fluoranthene-d10	0.4	0.46	114		30	150
		Nitrobenzene-d5	0.4	0.38	94		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.39	97		58	132
PB167565BS	PB167565BS	2-Methylnaphthalene-d10	0.4	0.46	116		30	150
		Fluoranthene-d10	0.4	0.46	115		30	150
		Nitrobenzene-d5	0.4	0.38	96		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.40	100		58	132
PB167565BSD	PB167565BSD	2-Methylnaphthalene-d10	0.4	0.44	111		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.37	93		55	111
		2-Fluorobiphenyl	0.4	0.45	113	*	53	106
		Terphenyl-d14	0.4	0.43	108		58	132
Q1773-02	BP-TT190D2-GW-20250407	2-Methylnaphthalene-d10	0.4	0.41	102		30	150
		Fluoranthene-d10	0.4	0.51	128		30	150
		Nitrobenzene-d5	0.4	0.40	100		55	111
		2-Fluorobiphenyl	0.4	0.43	108	*	53	106
		Terphenyl-d14	0.4	0.57	143	*	58	132
Q1773-03	BP-TT190D1-GW-20250409	2-Methylnaphthalene-d10	0.4	0.38	96		30	150
		Fluoranthene-d10	0.4	0.47	117		30	150
		Nitrobenzene-d5	0.4	0.37	94		55	111
		2-Fluorobiphenyl	0.4	0.40	99		53	106
		Terphenyl-d14	0.4	0.51	128		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036891.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB167565BS	1,4-Dioxane	0.4	0.35	ug/L	88				70	130	

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1773

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036892.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB167565BSD	1,4-Dioxane	0.4	0.41	ug/L	103	16			70	130	20

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167565BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1773

SAS No.: Q1773 SDG NO.: Q1773

Lab File ID: BN036885.D

Lab Sample ID: PB167565BL

Instrument ID: BNA_N

Date Extracted: 04/11/2025

Matrix: (soil/water) Water

Date Analyzed: 04/11/2025

Level: (low/med) LOW

Time Analyzed: 19:21

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167565BS	PB167565BS	BN036891.D	04/11/2025
BP-TT190D2-GW-20250407	Q1773-02	BN036889.D	04/11/2025
BP-TT190D1-GW-20250409	Q1773-03	BN036890.D	04/11/2025
PB167565BSD	PB167565BSD	BN036892.D	04/11/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1773

SDG NO.: Q1773

Lab File ID: BN036872.D

DFTPP Injection Date: 04/11/2025

Instrument ID: BNA_N

DFTPP Injection Time: 11:03

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	54
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	50.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	25.4
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	10.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.3 (21.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN036873.D	04/11/2025	11:42
SSTDICC0.2	SSTDICC0.2	BN036874.D	04/11/2025	12:37
SSTDICCC0.4	SSTDICCC0.4	BN036875.D	04/11/2025	13:17
SSTDICC0.8	SSTDICC0.8	BN036876.D	04/11/2025	13:53
SSTDICC1.6	SSTDICC1.6	BN036877.D	04/11/2025	14:30
SSTDICC3.2	SSTDICC3.2	BN036878.D	04/11/2025	15:06
SSTDICC5.0	SSTDICC5.0	BN036879.D	04/11/2025	15:42

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1773 SDG NO.: Q1773

Lab File ID: BN036883.D

DFTPP Injection Date: 04/11/2025

Instrument ID: BNA_N

DFTPP Injection Time: 18:06

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	68.5
68	Less than 2.0% of mass 69	0.5 (0.9) 1
69	Mass 69 relative abundance	55.2
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	53.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	21.7
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	10.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.9 (19.6) 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	BN036884.D	04/11/2025	18:45
PB167565BL	PB167565BL	BN036885.D	04/11/2025	19:21
BP-TT190D2-GW-20250407	Q1773-02	BN036889.D	04/11/2025	21:46
BP-TT190D1-GW-20250409	Q1773-03	BN036890.D	04/11/2025	22:22
PB167565BS	PB167565BS	BN036891.D	04/11/2025	22:57
PB167565BSD	PB167565BSD	BN036892.D	04/11/2025	23:33
SSTDCCC0.4EC	SSTDCCC0.4	BN036895.D	04/12/2025	01:21

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG NO.: Q1773

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/11/2025

Lab File ID: BN036884.D Time Analyzed: 18:45

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	254	7.64	679	10.43	407	14.29
UPPER LIMIT	508	8.14	1358	10.925	814	14.788
LOWER LIMIT	127	7.14	339.5	9.925	203.5	13.788
EPA SAMPLE NO.						
01 PB167565BL	228	7.64	558	10.43	321	14.29
02 PB167565BS	208	7.64	496	10.43	321	14.29
03 PB167565BSD	383	7.64	935	10.43	512	14.29
04 BP-TT190D2-GW-20250407	223	7.64	582	10.43	355	14.29
05 BP-TT190D1-GW-20250409	423	7.64	1033	10.43	590	14.29

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG NO.: Q1773

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/11/2025

Lab File ID: BN036884.D Time Analyzed: 18:45

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	865	17.033	1015	21.233	1369	23.447
UPPER LIMIT	1730	17.533	2030	21.733	2738	23.947
LOWER LIMIT	432.5	16.533	507.5	20.733	684.5	22.947
EPA SAMPLE NO.						
01 PB167565BL	761	17.03	945	21.23	1194	23.45
02 PB167565BS	731	17.03	908	21.23	1138	23.45
03 PB167565BSD	1263	17.03	1400	21.22	1606	23.45
04 BP-TT190D2-GW-20250407	872	17.03	1197	21.23	1560	23.45
05 BP-TT190D1-GW-20250409	1355	17.03	1635	21.23	2047	23.45

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB167565BL		SDG No.:	Q1773	
Lab Sample ID:	PB167565BL		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036885.D	1	04/11/25 09:20	04/11/25 19:21	PB167565

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	0.35		30 - 150		87%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		114%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		97%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	228		7.64			
1146-65-2	Naphthalene-d8	558		10.426			
15067-26-2	Acenaphthene-d10	321		14.288			
1517-22-2	Phenanthrene-d10	761		17.033			
1719-03-5	Chrysene-d12	945		21.233			
1520-96-3	Perylene-d12	1190		23.45			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB167565BS		SDG No.:	Q1773	
Lab Sample ID:	PB167565BS		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036891.D	1	04/11/25 09:20	04/11/25 22:57	PB167565

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.35		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.46		30 - 150		116%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		115%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		96%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		100%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	208	7.64				
1146-65-2	Naphthalene-d8	496	10.426				
15067-26-2	Acenaphthene-d10	321	14.288				
1517-22-2	Phenanthrene-d10	731	17.033				
1719-03-5	Chrysene-d12	908	21.233				
1520-96-3	Perylene-d12	1140	23.447				

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LOD = Limit of Detection

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB167565BSD		SDG No.:	Q1773	
Lab Sample ID:	PB167565BSD		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036892.D	1	04/11/25 09:20	04/11/25 23:33	PB167565

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.41		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.44		30 - 150		111%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		93%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.45	*	53 - 106		113%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	383	7.64				
1146-65-2	Naphthalene-d8	935	10.426				
15067-26-2	Acenaphthene-d10	512	14.288				
1517-22-2	Phenanthrene-d10	1260	17.033				
1719-03-5	Chrysene-d12	1400	21.224				
1520-96-3	Perylene-d12	1610	23.445				

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MDL = Method Detection Limit

LOD = Limit of Detection

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M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN041125.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Apr 11 16:11:08 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036873.D 0.2 =BN036874.D 0.4 =BN036875.D 0.8 =BN036876.D 1.6 =BN036877.D 3.2 =BN036878.D 5.0 =BN036879.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	0.588	0.440	0.411	0.455	0.471	0.417	0.464	14.02	
3)	n-Nitrosodimet...	1.024	1.092	1.084	0.971	1.022	1.058	0.943	1.028	5.43
4) S	2-Fluorophenol	1.000	0.941	0.965	0.920	0.892	0.981	0.888	0.941	4.61
5) S	Phenol-d6	1.315	1.199	1.198	1.134	1.147	1.263	1.166	1.203	5.40
6)	bis(2-Chloroet...	1.476	1.031	1.187	1.163	1.124	1.190	1.091	1.180	12.04
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.575	0.438	0.451	0.399	0.395	0.439	0.411	0.444	13.86
9)	Naphthalene	1.336	1.141	1.170	1.079	1.072	1.176	1.080	1.151	8.09
10)	Hexachlorobuta...	0.300	0.261	0.284	0.247	0.240	0.261	0.235	0.261	9.11
11) SURR2	Methylnaphth...	0.600	0.564	0.594	0.554	0.572	0.616	0.571	0.582	3.78
12)	2-Methylnaphth...	0.803	0.703	0.759	0.704	0.711	0.784	0.724	0.741	5.50
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.215	0.188	0.183	0.187	0.185	0.202	0.191	0.193	5.97
15) S	2-Fluorobiphenyl	2.063	1.860	2.013	1.697	1.897	2.083	1.833	1.921	7.28
16)	Acenaphthylene	1.959	1.808	1.891	1.744	1.750	1.995	1.861	1.858	5.25
17)	Acenaphthene	1.227	1.175	1.234	1.162	1.152	1.316	1.205	1.210	4.65
18)	Fluorene	1.695	1.698	1.694	1.566	1.593	1.780	1.657	1.669	4.29
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.081	0.084	0.095	0.092	0.092	0.116	0.102	0.095	12.46
21)	4-Bromophenyl-...	0.239	0.230	0.260	0.229	0.230	0.258	0.231	0.240	5.77
22)	Hexachlorobenzene	0.308	0.293	0.310	0.262	0.261	0.288	0.263	0.284	7.64
23)	Atrazine	0.237	0.233	0.263	0.221	0.223	0.245	0.218	0.234	6.76
24)	Pentachlorophenol	0.153	0.154	0.162	0.130	0.134	0.160	0.149	0.149	8.32
25)	Phenanthrene	1.233	1.093	1.298	1.139	1.149	1.300	1.183	1.199	6.70
26)	Anthracene	1.033	0.999	1.150	0.991	1.036	1.182	1.094	1.069	6.97
27) SURR	Fluoranthene-d10	1.100	1.059	1.221	1.044	1.091	1.226	1.148	1.127	6.53
28)	Fluoranthene	1.448	1.405	1.606	1.395	1.463	1.677	1.570	1.509	7.21
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.488	1.512	1.604	1.477	1.469	1.582	1.451	1.512	3.88
31) S	Terphenyl-d14	0.743	0.751	0.815	0.741	0.739	0.802	0.730	0.760	4.45
32)	Benzo(a)anthra...	1.361	1.371	1.410	1.354	1.402	1.552	1.443	1.413	4.87
33)	Chrysene	1.436	1.567	1.669	1.519	1.553	1.641	1.517	1.558	5.06
34)	Bis(2-ethylhex...	1.205	1.197	1.023	0.957	0.990	1.022	0.947	1.049	10.29
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN041125.M

36)	Indeno(1,2,3-c...	1.781	1.803	2.021	1.816	1.925	2.099	1.919	1.909	6.24
37)	Benzo(b)fluora...	1.373	1.278	1.523	1.355	1.376	1.572	1.456	1.419	7.26
38)	Benzo(k)fluora...	1.486	1.302	1.482	1.370	1.384	1.545	1.452	1.432	5.83
39) C	Benzo(a)pyrene	1.121	1.154	1.345	1.204	1.226	1.378	1.279	1.244	7.66
40)	Dibenzo(a,h)an...	1.331	1.416	1.585	1.487	1.560	1.680	1.552	1.516	7.61
41)	Benzo(g,h,i)pe...	1.646	1.673	1.805	1.634	1.724	1.835	1.678	1.714	4.59

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: BNA_N Calibration Date/Time: 04/11/2025 18:45

Lab File ID: BN036884.D Init. Calib. Date(s): 04/11/2025 04/11/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:42

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.582	0.596		2.4	20.0
Fluoranthene-d10	1.127	1.290		14.5	20.0
2-Fluorophenol	0.941	0.980		4.1	20.0
Phenol-d6	1.203	1.244		3.4	20.0
Nitrobenzene-d5	0.444	0.442		-0.4	20.0
2-Fluorobiphenyl	1.921	2.017		5.0	20.0
2,4,6-Tribromophenol	0.193	0.204		5.7	20.0
Terphenyl-d14	0.760	0.770		1.3	20.0
1,4-Dioxane	0.464	0.386		-16.8	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1773 SAS No.: Q1773 SDG No.: Q1773

Instrument ID: BNA_N Calibration Date/Time: 04/12/2025 01:21

Lab File ID: BN036895.D Init. Calib. Date(s): 04/11/2025 04/11/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:42

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.582	0.635		9.1	50.0
Fluoranthene-d10	1.127	1.234		9.5	50.0
2-Fluorophenol	0.941	1.009		7.2	50.0
Phenol-d6	1.203	1.179		-2.0	50.0
Nitrobenzene-d5	0.444	0.413		-7.0	50.0
2-Fluorobiphenyl	1.921	1.956		1.8	50.0
2,4,6-Tribromophenol	0.193	0.212		9.8	50.0
Terphenyl-d14	0.760	0.765		0.7	50.0
1,4-Dioxane	0.464	0.513		10.6	50.0

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS

Q1773

Laboratory Certification

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1773	TETRO6	Order Date : 4/10/2025 10:14:00 AM	Project Mgr :
Client Name : Tetra Tech NUS, Inc.		Project Name : CTO WE13	Report Type : Level 4
Client Contact : Ernie Wu		Receive DateTime : 4/10/2025 9:50:00 AM	EDD Type : ADAPT
Invoice Name : Tetra Tech NUS, Inc.		Purchase Order :	Hard Copy Date :
Invoice Contact : Ernie Wu			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1773-01	BP-TB-20250407	Water	04/07/2025	09:00					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1773-02	BP-TT190D2-GW-20250407 BP-TT190D2-GW-20250407	Water	04/07/2025	11:05					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1773-03	BP-TT190D1-GW-20250409 BP-TT190D1-GW-20250409	Water	04/07/2025 04/09/2025	10:30					
					VOCMS Group1		8260-Low	10 Bus. Days	

YG 04/15/2025

Relinquished By :

Date / Time : 4/10/25 11:20

Received By :

Date / Time : 4-10-25 11:20

Storage Area : VOA Refridgerator Room