

LAB CHRONICLE

OrderID:	Q1199	OrderDate:	1/27/2025 3:35:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	N21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1199-01	BP-VPB-192-TB-2025 0123	Water			01/23/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	
Q1199-02	BP-VPB-192-EB-2025 0124	Water			01/24/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	
Q1199-03	BP-VPB-192-GW-280- 282	Water			01/24/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	
Q1199-04	BP-VPB-192-GW-260- 262	Water			01/23/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	
Q1199-05	BP-VPB-192-GW-240- 242	Water			01/23/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	
Q1199-06	BP-VPB-192-GW-220- 222	Water			01/23/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	
Q1199-07	BP-VPB-192-DUP-202 50123	Water			01/23/25			01/27/25
			VOCMS Group1	8260-Low			01/28/25	

Hit Summary Sheet SW-846

SDG No.: Q1199
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID: Q1199-03	BP-VPB-192-GW-280-282 BP-VPB-192-GW-2 Water	Acetone		3.80	J	1.40	3.80	5.00	ug/L
		Total Voc :		3.80					
		Total Concentration:		3.80					
Client ID: Q1199-04	BP-VPB-192-GW-260-262 BP-VPB-192-GW-2 Water	Acetone		6.30		1.40	3.80	5.00	ug/L
		Total Voc :		6.30					
		Total Concentration:		6.30					
Client ID: Q1199-05	BP-VPB-192-GW-240-242 BP-VPB-192-GW-2 Water	Acetone		3.90	J	1.40	3.80	5.00	ug/L
Q1199-05	BP-VPB-192-GW-2 Water	Trichloroethene		12.9		0.32	0.75	1.00	ug/L
Q1199-05	BP-VPB-192-GW-2 Water	Tetrachloroethene		0.95	J	0.25	0.50	1.00	ug/L
		Total Voc :		17.8					
		Total Concentration:		17.8					
Client ID: Q1199-06	BP-VPB-192-GW-220-222 BP-VPB-192-GW-2 Water	Chloromethane		0.70	J	0.35	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	1,1-Dichloroethene		0.48	J	0.26	0.75	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Acetone		6.50		1.40	3.80	5.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Methyl tert-butyl Ether		0.56	J	0.16	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Chloroform		0.83	J	0.26	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Trichloroethene		1.40		0.32	0.75	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Toluene		0.52	J	0.18	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Ethyl Benzene		0.34	J	0.16	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	o-Xylene		0.30	J	0.14	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Styrene		0.31	J	0.16	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	Isopropylbenzene		0.27	J	0.13	0.50	1.00	ug/L
Q1199-06	BP-VPB-192-GW-2 Water	1,1,2,2-Tetrachloroethane		0.61	J	0.27	0.50	1.00	ug/L
		Total Voc :		12.8					
		Total Concentration:		12.8					
Client ID: Q1199-07	BP-VPB-192-DUP-20250123 BP-VPB-192-DUP- Water	Acetone		5.30		1.40	3.80	5.00	ug/L
Q1199-07	BP-VPB-192-DUP- Water	Trichloroethene		1.10		0.32	0.75	1.00	ug/L
		Total Voc :		6.40					
		Total Concentration:		6.40					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-TB-20250123		SDG No.:	Q1199	
Lab Sample ID:	Q1199-01		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
VN085534.D	1		01/28/25 13:24	VN012825

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-TB-20250123		SDG No.:	Q1199	
Lab Sample ID:	Q1199-01		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
VN085534.D	1		01/28/25 13:24	VN012825

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	55.4		81 - 118		111%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		80 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.5		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	179000	8.224				
540-36-3	1,4-Difluorobenzene	334000	9.1				
3114-55-4	Chlorobenzene-d5	294000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	114000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-TB-20250123		SDG No.:	Q1199	
Lab Sample ID:	Q1199-01		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
VN085534.D	1		01/28/25 13:24	VN012825

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/24/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-EB-20250124		SDG No.:	Q1199	
Lab Sample ID:	Q1199-02		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
VN085535.D	1		01/28/25 13:49	VN012825

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/24/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-EB-20250124		SDG No.:	Q1199	
Lab Sample ID:	Q1199-02		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
VN085535.D	1		01/28/25 13:49	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	56.7		81 - 118		113%	SPK: 50
1868-53-7	Dibromofluoromethane	53.7		80 - 119		107%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.3		85 - 114		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	158000	8.224				
540-36-3	1,4-Difluorobenzene	294000	9.1				
3114-55-4	Chlorobenzene-d5	251000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	92700	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/24/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-EB-20250124		SDG No.:	Q1199	
Lab Sample ID:	Q1199-02		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
VN085535.D	1		01/28/25 13:49	VN012825

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/24/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-280-282			SDG No.:	Q1199	
Lab Sample ID:	Q1199-03			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
VN085536.D	1		01/28/25 14:13	VN012825

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/24/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-280-282		SDG No.:	Q1199	
Lab Sample ID:	Q1199-03		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
VN085536.D	1		01/28/25 14:13	VN012825

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	57.0		81 - 118		114%	SPK: 50
1868-53-7	Dibromofluoromethane	54.0		80 - 119		108%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.0		85 - 114		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	163000	8.224				
540-36-3	1,4-Difluorobenzene	301000	9.1				
3114-55-4	Chlorobenzene-d5	271000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	109000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/24/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-280-282		SDG No.:	Q1199	
Lab Sample ID:	Q1199-03		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
VN085536.D	1		01/28/25 14:13	VN012825

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-260-262			SDG No.:	Q1199	
Lab Sample ID:	Q1199-04			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
VN085537.D	1		01/28/25 14:37	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.50	U	0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	3.80	U	1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	0.75	U	0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.50	U	0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.75	U	0.26	0.75	1.00	ug/L
67-64-1	Acetone	6.30		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-260-262		SDG No.:	Q1199	
Lab Sample ID:	Q1199-04		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
VN085537.D	1		01/28/25 14:37	VN012825

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	57.2		81 - 118		114%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		80 - 119		107%	SPK: 50
2037-26-5	Toluene-d8	48.8		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.5		85 - 114		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	153000	8.224				
540-36-3	1,4-Difluorobenzene	288000	9.1				
3114-55-4	Chlorobenzene-d5	249000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	90600	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-260-262		SDG No.:	Q1199	
Lab Sample ID:	Q1199-04		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
VN085537.D	1		01/28/25 14:37	VN012825

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-240-242			SDG No.:	Q1199	
Lab Sample ID:	Q1199-05			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085538.D	1		01/28/25 15:01	VN012825

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	3.90	J	1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	2.50	U	1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.50	U	0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.25	0.75	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	12.9		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-240-242		SDG No.:	Q1199	
Lab Sample ID:	Q1199-05		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085538.D	1		01/28/25 15:01	VN012825

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	0.95	J	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	57.1		81 - 118		114%	SPK: 50
1868-53-7	Dibromofluoromethane	52.6		80 - 119		105%	SPK: 50
2037-26-5	Toluene-d8	49.4		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.4		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	163000	8.224				
540-36-3	1,4-Difluorobenzene	307000	9.1				
3114-55-4	Chlorobenzene-d5	271000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	108000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-240-242		SDG No.:	Q1199	
Lab Sample ID:	Q1199-05		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085538.D	1		01/28/25 15:01	VN012825

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-220-222			SDG No.:	Q1199	
Lab Sample ID:	Q1199-06			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085545.D	1		01/28/25 17:50	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.70	J	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	0.48	J	0.26	0.75	1.00	ug/L
67-64-1	Acetone	6.50		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	0.56	J	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	0.83	J	0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.19	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	1.40		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.52	J	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-220-222		SDG No.:	Q1199	
Lab Sample ID:	Q1199-06		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085545.D	1		01/28/25 17:50	VN012825

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	0.34	J	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	0.30	J	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.31	J	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	0.27	J	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.61	J	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	58.5		81 - 118		117%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		80 - 119		107%	SPK: 50
2037-26-5	Toluene-d8	46.9		89 - 112		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.5		85 - 114		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	169000	8.224				
540-36-3	1,4-Difluorobenzene	327000	9.1				
3114-55-4	Chlorobenzene-d5	271000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	107000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-220-222		SDG No.:	Q1199	
Lab Sample ID:	Q1199-06		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085545.D	1		01/28/25 17:50	VN012825

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-DUP-20250123			SDG No.:	Q1199	
Lab Sample ID:	Q1199-07			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
VN085540.D	1		01/28/25 15:49	VN012825

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	5.30		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	1.10		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.75	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.50	U	0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	2.50	U	1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-DUP-20250123		SDG No.:	Q1199	
Lab Sample ID:	Q1199-07		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
VN085540.D	1		01/28/25 15:49	VN012825

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	55.6		81 - 118		111%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		80 - 119		105%	SPK: 50
2037-26-5	Toluene-d8	50.1		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.6		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	162000	8.224				
540-36-3	1,4-Difluorobenzene	301000	9.1				
3114-55-4	Chlorobenzene-d5	272000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	107000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/23/25	
Project:	CTO WE13		Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-DUP-20250123		SDG No.:	Q1199	
Lab Sample ID:	Q1199-07		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
VN085540.D	1		01/28/25 15:49	VN012825

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

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



QC SUMMARY

Surrogate Summary

SDG No.: **Q1199**

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

Analytical Method: **SW8260-Low**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1199-01	BP-VPB-192-TB-20250123	1,2-Dichloroethane-d4	50	55.4	111	81	118
		Dibromofluoromethane	50	52.1	104	80	119
		Toluene-d8	50	49.5	99	89	112
		4-Bromofluorobenzene	50	45.5	91	85	114
Q1199-02	BP-VPB-192-EB-20250124	1,2-Dichloroethane-d4	50	56.7	113	81	118
		Dibromofluoromethane	50	53.7	107	80	119
		Toluene-d8	50	49.5	99	89	112
		4-Bromofluorobenzene	50	43.3	87	85	114
Q1199-03	BP-VPB-192-GW-280-282	1,2-Dichloroethane-d4	50	57.0	114	81	118
		Dibromofluoromethane	50	54.0	108	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	47.0	94	85	114
Q1199-04	BP-VPB-192-GW-260-262	1,2-Dichloroethane-d4	50	57.2	114	81	118
		Dibromofluoromethane	50	53.6	107	80	119
		Toluene-d8	50	48.8	98	89	112
		4-Bromofluorobenzene	50	43.5	87	85	114
Q1199-05	BP-VPB-192-GW-240-242	1,2-Dichloroethane-d4	50	57.1	114	81	118
		Dibromofluoromethane	50	52.6	105	80	119
		Toluene-d8	50	49.4	99	89	112
		4-Bromofluorobenzene	50	45.4	91	85	114
Q1199-06	BP-VPB-192-GW-220-222	1,2-Dichloroethane-d4	50	58.5	117	81	118
		Dibromofluoromethane	50	53.6	107	80	119
		Toluene-d8	50	46.9	94	89	112
		4-Bromofluorobenzene	50	44.5	89	85	114
Q1199-07	BP-VPB-192-DUP-20250123	1,2-Dichloroethane-d4	50	55.6	111	81	118
		Dibromofluoromethane	50	52.5	105	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	46.6	93	85	114
VN0128WBL01	VN0128WBL01	1,2-Dichloroethane-d4	50	53.7	107	81	118
		Dibromofluoromethane	50	52.2	104	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	44.2	88	85	114
VN0128WBS01	VN0128WBS01	1,2-Dichloroethane-d4	50	51.1	102	81	118
		Dibromofluoromethane	50	53.2	106	80	119
		Toluene-d8	50	54.1	108	89	112
		4-Bromofluorobenzene	50	52.0	104	85	114
VN0128WBSD0	VN0128WBSD01	1,2-Dichloroethane-d4	50	50.3	101	81	118
		Dibromofluoromethane	50	50.2	100	80	119
		Toluene-d8	50	51.1	102	89	112
		4-Bromofluorobenzene	50	51.0	102	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN085529.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0128WBS01	Chloromethane	20	17.3	ug/L	86			50	139	
	Vinyl chloride	20	18.2	ug/L	91			58	137	
	Bromomethane	20	19.5	ug/L	98			53	141	
	Chloroethane	20	19.8	ug/L	99			60	138	
	Trichlorofluoromethane	20	20.7	ug/L	104			65	141	
	1,1,2-Trichlorotrifluoroethane	20	20.5	ug/L	103			70	136	
	1,1-Dichloroethene	20	19.1	ug/L	96			71	131	
	Acetone	100	100	ug/L	100			39	160	
	Carbon disulfide	20	16.4	ug/L	82			64	133	
	Methyl tert-butyl Ether	20	20.9	ug/L	104			71	124	
	Methylene Chloride	20	19.8	ug/L	99			74	124	
	trans-1,2-Dichloroethene	20	18.9	ug/L	95			75	124	
	1,1-Dichloroethane	20	20.1	ug/L	101			77	125	
	2-Butanone	100	110	ug/L	110			56	143	
	Carbon Tetrachloride	20	20.5	ug/L	103			72	136	
	cis-1,2-Dichloroethene	20	19.9	ug/L	100			78	123	
	Chloroform	20	20.6	ug/L	103			79	124	
	1,1,1-Trichloroethane	20	20.4	ug/L	102			74	131	
	Methylcyclohexane	20	18.9	ug/L	95			72	132	
	Benzene	20	20.7	ug/L	104			79	120	
	1,2-Dichloroethane	20	21.0	ug/L	105			73	128	
	Trichloroethene	20	20.4	ug/L	102			79	123	
	1,2-Dichloropropane	20	20.7	ug/L	104			78	122	
	Bromodichloromethane	20	21.7	ug/L	109			79	125	
	4-Methyl-2-Pentanone	100	120	ug/L	120			67	130	
	Toluene	20	21.9	ug/L	110			80	121	
	t-1,3-Dichloropropene	20	21.4	ug/L	107			73	127	
	cis-1,3-Dichloropropene	20	21.5	ug/L	108			75	124	
	1,1,2-Trichloroethane	20	21.9	ug/L	110			80	119	
	2-Hexanone	100	120	ug/L	120			57	139	
	Dibromochloromethane	20	21.2	ug/L	106			74	126	
	Tetrachloroethene	20	21.7	ug/L	109			74	129	
	Chlorobenzene	20	20.6	ug/L	103			82	118	
	Ethyl Benzene	20	20.8	ug/L	104			79	121	
	m/p-Xylenes	40	43.1	ug/L	108			80	121	
	o-Xylene	20	20.9	ug/L	104			78	122	
	Styrene	20	21.3	ug/L	106			78	123	
	Bromoform	20	22.5	ug/L	113			66	130	
	Isopropylbenzene	20	20.9	ug/L	104			72	131	
	1,1,2,2-Tetrachloroethane	20	21.6	ug/L	108			71	121	
	1,3-Dichlorobenzene	20	20.8	ug/L	104			80	119	
	1,4-Dichlorobenzene	20	19.8	ug/L	99			79	118	
	1,2-Dichlorobenzene	20	20.4	ug/L	102			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN085530.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0128WBSD01	Chloromethane	20	17.7	ug/L	89	3		50	139	20
	Vinyl chloride	20	17.8	ug/L	89	2		58	137	20
	Bromomethane	20	18.0	ug/L	90	9		53	141	20
	Chloroethane	20	19.6	ug/L	98	1		60	138	20
	Trichlorofluoromethane	20	19.5	ug/L	98	6		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	20.3	ug/L	102	1		70	136	20
	1,1-Dichloroethene	20	19.5	ug/L	98	2		71	131	20
	Acetone	100	110	ug/L	110	10		39	160	20
	Carbon disulfide	20	16.2	ug/L	81	1		64	133	20
	Methyl tert-butyl Ether	20	21.9	ug/L	110	6		71	124	20
	Methylene Chloride	20	19.7	ug/L	99	0		74	124	20
	trans-1,2-Dichloroethene	20	18.9	ug/L	95	0		75	124	20
	1,1-Dichloroethane	20	20.4	ug/L	102	1		77	125	20
	2-Butanone	100	110	ug/L	110	0		56	143	20
	Carbon Tetrachloride	20	20.0	ug/L	100	3		72	136	20
	cis-1,2-Dichloroethene	20	20.2	ug/L	101	1		78	123	20
	Chloroform	20	20.6	ug/L	103	0		79	124	20
	1,1,1-Trichloroethane	20	20.1	ug/L	101	1		74	131	20
	Methylcyclohexane	20	18.7	ug/L	94	1		72	132	20
	Benzene	20	20.2	ug/L	101	3		79	120	20
	1,2-Dichloroethane	20	21.5	ug/L	108	3		73	128	20
	Trichloroethene	20	19.4	ug/L	97	5		79	123	20
	1,2-Dichloropropane	20	20.7	ug/L	104	0		78	122	20
	Bromodichloromethane	20	21.7	ug/L	109	0		79	125	20
	4-Methyl-2-Pentanone	100	120	ug/L	120	0		67	130	20
	Toluene	20	21.5	ug/L	108	2		80	121	20
	t-1,3-Dichloropropene	20	21.5	ug/L	108	1		73	127	20
	cis-1,3-Dichloropropene	20	21.8	ug/L	109	1		75	124	20
	1,1,2-Trichloroethane	20	21.5	ug/L	108	2		80	119	20
	2-Hexanone	100	120	ug/L	120	0		57	139	20
	Dibromochloromethane	20	21.9	ug/L	110	4		74	126	20
	Tetrachloroethene	20	21.0	ug/L	105	4		74	129	20
	Chlorobenzene	20	20.6	ug/L	103	0		82	118	20
	Ethyl Benzene	20	20.6	ug/L	103	1		79	121	20
	m/p-Xylenes	40	43.4	ug/L	109	1		80	121	20
	o-Xylene	20	20.8	ug/L	104	0		78	122	20
	Styrene	20	21.3	ug/L	106	0		78	123	20
	Bromoform	20	22.5	ug/L	113	0		66	130	20
	Isopropylbenzene	20	21.2	ug/L	106	2		72	131	20
	1,1,2,2-Tetrachloroethane	20	21.8	ug/L	109	1		71	121	20
	1,3-Dichlorobenzene	20	21.0	ug/L	105	1		80	119	20
	1,4-Dichlorobenzene	20	20.4	ug/L	102	3		79	118	20
	1,2-Dichlorobenzene	20	20.4	ug/L	102	0		80	119	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0128WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1199

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: VN085528.D

Lab Sample ID: VN0128WBL01

Date Analyzed: 01/28/2025

Time Analyzed: 10:51

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0128WBS01	VN0128WBS01	VN085529.D	01/28/2025
VN0128WBSD01	VN0128WBSD01	VN085530.D	01/28/2025
BP-VPB-192-TB-20250123	Q1199-01	VN085534.D	01/28/2025
BP-VPB-192-EB-20250124	Q1199-02	VN085535.D	01/28/2025
BP-VPB-192-GW-280-282	Q1199-03	VN085536.D	01/28/2025
BP-VPB-192-GW-260-262	Q1199-04	VN085537.D	01/28/2025
BP-VPB-192-GW-240-242	Q1199-05	VN085538.D	01/28/2025
BP-VPB-192-DUP-20250123	Q1199-07	VN085540.D	01/28/2025
BP-VPB-192-GW-220-222	Q1199-06	VN085545.D	01/28/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199
Lab File ID: VN085437.D BFB Injection Date: 01/14/2025
Instrument ID: MSVOA_N BFB Injection Time: 14:22
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	22.3
75	30.0 - 60.0% of mass 95	58
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	1.4 (1.8) 1
174	50.0 - 100.0% of mass 95	76
175	5.0 - 9.0% of mass 174	5.4 (7.1) 1
176	95.0 - 101.0% of mass 174	74.1 (97.4) 1
177	5.0 - 9.0% of mass 176	4.9 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN085438.D	01/14/2025	14:56
VSTDICCC050	VSTDICCC050	VN085439.D	01/14/2025	15:19
VSTDICC020	VSTDICC020	VN085440.D	01/14/2025	15:43
VSTDICC010	VSTDICC010	VN085441.D	01/14/2025	16:07
VSTDICC005	VSTDICC005	VN085442.D	01/14/2025	16:31
VSTDICC001	VSTDICC001	VN085443.D	01/14/2025	17:19

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199
Lab File ID: VN085525.D BFB Injection Date: 01/28/2025
Instrument ID: MSVOA_N BFB Injection Time: 09:17
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	21.1
75	30.0 - 60.0% of mass 95	55.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	1.5 (1.9) 1
174	50.0 - 100.0% of mass 95	75.9
175	5.0 - 9.0% of mass 174	5.5 (7.2) 1
176	95.0 - 101.0% of mass 174	73.7 (97.2) 1
177	5.0 - 9.0% of mass 176	5 (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
VSTDCCC050	VSTDCCC050	VN085526.D	01/28/2025	09:53
VN0128WBL01	VN0128WBL01	VN085528.D	01/28/2025	10:51
VN0128WBS01	VN0128WBS01	VN085529.D	01/28/2025	11:15
VN0128WBSD01	VN0128WBSD01	VN085530.D	01/28/2025	11:48
BP-VPB-192-TB-20250123	Q1199-01	VN085534.D	01/28/2025	13:24
BP-VPB-192-EB-20250124	Q1199-02	VN085535.D	01/28/2025	13:49
BP-VPB-192-GW-280-282	Q1199-03	VN085536.D	01/28/2025	14:13
BP-VPB-192-GW-260-262	Q1199-04	VN085537.D	01/28/2025	14:37
BP-VPB-192-GW-240-242	Q1199-05	VN085538.D	01/28/2025	15:01
BP-VPB-192-DUP-20250123	Q1199-07	VN085540.D	01/28/2025	15:49
BP-VPB-192-GW-220-222	Q1199-06	VN085545.D	01/28/2025	17:50
VSTDCCC050EC	VSTDCCC050	VN085546.D	01/28/2025	18:14

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199
Lab File ID: VN085526.D Date Analyzed: 01/28/2025
Instrument ID: MSVOA_N Time Analyzed: 09:53
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	203638	8.22	333806	9.09	302551	11.87
UPPER LIMIT	407276	8.718	667612	9.594	605102	12.365
LOWER LIMIT	101819	7.718	166903	8.594	151276	11.365
EPA SAMPLE NO.						
BP-VPB-192-TB-20250123	179083	8.22	333621	9.10	293971	11.87
BP-VPB-192-EB-20250124	158329	8.22	293573	9.10	250987	11.87
BP-VPB-192-GW-280-282	162876	8.22	301319	9.10	270559	11.87
BP-VPB-192-GW-260-262	153446	8.22	287847	9.10	248805	11.87
BP-VPB-192-GW-240-242	162553	8.22	306518	9.10	270799	11.87
BP-VPB-192-GW-220-222	169137	8.22	327198	9.10	270505	11.87
BP-VPB-192-DUP-20250123	162005	8.22	300571	9.10	271698	11.87
VN0128WBL01	183717	8.22	332601	9.10	291066	11.87
VN0128WBS01	185562	8.22	307569	9.10	271043	11.87
VN0128WBSD01	182154	8.22	309854	9.10	273221	11.87

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
 Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG NO.: Q1199
 Lab File ID: VN085526.D Date Analyzed: 01/28/2025
 Instrument ID: MSVOA_N Time Analyzed: 09:53
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	155713	13.788				
UPPER LIMIT	311426	14.288				
LOWER LIMIT	77856.5	13.288				
EPA SAMPLE NO.						
BP-VPB-192-TB-20250123	113614	13.79				
BP-VPB-192-EB-20250124	92670	13.79				
BP-VPB-192-GW-280-282	109450	13.79				
BP-VPB-192-GW-260-262	90634	13.79				
BP-VPB-192-GW-240-242	108170	13.79				
BP-VPB-192-GW-220-222	106728	13.79				
BP-VPB-192-DUP-20250123	107447	13.79				
VN0128WBL01	116250	13.79				
VN0128WBS01	126721	13.79				
VN0128WBSD01	127977	13.79				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VN0128WBL01		SDG No.:	Q1199
Lab Sample ID:	VN0128WBL01		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
VN085528.D	1		01/28/25 10:51	VN012825

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VN0128WBL01		SDG No.:	Q1199
Lab Sample ID:	VN0128WBL01		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
VN085528.D	1		01/28/25 10:51	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.7		81 - 118		107%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		80 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	50.1		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		85 - 114		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	184000	8.218				
540-36-3	1,4-Difluorobenzene	333000	9.1				
3114-55-4	Chlorobenzene-d5	291000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	116000	13.788				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VN0128WBS01		SDG No.:	Q1199
Lab Sample ID:	VN0128WBS01		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
VN085529.D	1		01/28/25 11:15	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	17.3		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.2		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	19.5		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.8		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	20.7		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.5		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.1		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	16.4		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.9		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.8		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.9		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.1		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	110		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.5		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.9		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	20.6		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.4		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.9		0.19	0.50	1.00	ug/L
71-43-2	Benzene	20.7		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.0		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	20.4		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.7		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	21.7		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	120		0.75	2.50	5.00	ug/L
108-88-3	Toluene	21.9		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	21.4		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	21.5		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.9		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	120		1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VN0128WBS01		SDG No.:	Q1199
Lab Sample ID:	VN0128WBS01		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
VN085529.D	1		01/28/25 11:15	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	21.2		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	21.7		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.6		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.8		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	43.1		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.9		0.14	0.50	1.00	ug/L
100-42-5	Styrene	21.3		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	22.5		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	20.9		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.6		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.8		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.8		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.4		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.1		81 - 118		102%	SPK: 50
1868-53-7	Dibromofluoromethane	53.2		80 - 119		106%	SPK: 50
2037-26-5	Toluene-d8	54.1		89 - 112		108%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.0		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	186000	8.224				
540-36-3	1,4-Difluorobenzene	308000	9.1				
3114-55-4	Chlorobenzene-d5	271000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	127000	13.788				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VN0128WBSD01		SDG No.:	Q1199
Lab Sample ID:	VN0128WBSD01		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
VN085530.D	1		01/28/25 11:48	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	17.7		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	17.8		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	18.0		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.6		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.5		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.5		0.26	0.75	1.00	ug/L
67-64-1	Acetone	110		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.2		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	21.9		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.7		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.9		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.4		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	110		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.2		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	20.6		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.1		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.7		0.19	0.50	1.00	ug/L
71-43-2	Benzene	20.2		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.5		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.4		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.7		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	21.7		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	120		0.75	2.50	5.00	ug/L
108-88-3	Toluene	21.5		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	21.5		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	21.8		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.5		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	120		1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VN0128WBSD01		SDG No.:	Q1199
Lab Sample ID:	VN0128WBSD01		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
VN085530.D	1		01/28/25 11:48	VN012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	21.9		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	21.0		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	20.6		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.6		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	43.4		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.8		0.14	0.50	1.00	ug/L
100-42-5	Styrene	21.3		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	22.5		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	21.2		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.8		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	21.0		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	20.4		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.4		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.3		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	50.2		80 - 119		100%	SPK: 50
2037-26-5	Toluene-d8	51.1		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.0		85 - 114		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	182000	8.224				
540-36-3	1,4-Difluorobenzene	310000	9.1				
3114-55-4	Chlorobenzene-d5	273000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.788				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19

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

LAB FILE ID:								
RRF100 = VN085438.D			RRF050 = VN085439.D			RRF020 = VN085440.D		
RRF010 = VN085441.D			RRF005 = VN085442.D			RRF001 = VN085443.D		
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD
Chloromethane	0.680	0.680	0.727	0.693	0.779	0.839	0.733	8.8
Vinyl Chloride	0.697	0.686	0.727	0.711	0.781	0.819	0.737	7.1
Bromomethane	0.392	0.417	0.454	0.437	0.525		0.445	11.3
Chloroethane	0.435	0.424	0.468	0.429	0.505	0.542	0.467	10.3
Trichlorofluoromethane	1.046	0.997	1.097	1.040	1.077	1.157	1.069	5.1
1,1,2-Trichlorotrifluoroethane	0.590	0.542	0.609	0.587	0.639	0.646	0.602	6.4
1,1-Dichloroethene	0.548	0.533	0.556	0.526	0.559	0.497	0.537	4.3
Acetone	0.238	0.252	0.252	0.247	0.269	0.306	0.261	9.3
Carbon Disulfide	1.555	1.477	1.647	1.537	1.719	1.978	1.652	11
Methyl tert-butyl Ether	1.834	1.873	1.853	1.664	1.685	1.545	1.742	7.5
Methylene Chloride	0.629	0.629	0.658	0.606	0.696	0.656	0.646	4.9
trans-1,2-Dichloroethene	0.571	0.555	0.574	0.539	0.569	0.632	0.573	5.5
1,1-Dichloroethane	1.164	1.170	1.206	1.100	1.226	1.204	1.178	3.8
2-Butanone	0.378	0.390	0.398	0.363	0.387	0.386	0.384	3.1
Carbon Tetrachloride	0.574	0.530	0.579	0.529	0.565	0.567	0.557	4
cis-1,2-Dichloroethene	0.691	0.683	0.715	0.639	0.669	0.655	0.675	4
Chloroform	1.197	1.175	1.241	1.169	1.253	1.273	1.218	3.6
1,1,1-Trichloroethane	1.053	1.016	1.091	1.000	1.148	1.102	1.068	5.2
Methylcyclohexane	0.564	0.463	0.477	0.407	0.437	0.397	0.457	13.3
Benzene	1.551	1.449	1.527	1.376	1.474	1.400	1.463	4.7
1,2-Dichloroethane	0.569	0.547	0.575	0.522	0.574	0.517	0.551	4.8
Trichloroethene	0.362	0.324	0.352	0.310	0.343	0.352	0.341	5.8
1,2-Dichloropropane	0.390	0.371	0.388	0.334	0.388	0.371	0.374	5.7
Bromodichloromethane	0.590	0.559	0.579	0.514	0.569	0.484	0.549	7.5
4-Methyl-2-Pentanone	0.499	0.492	0.495	0.432	0.443	0.380	0.457	10.3
Toluene	0.964	0.870	0.919	0.808	0.835	0.690	0.848	11.3
t-1,3-Dichloropropene	0.594	0.551	0.544	0.481	0.527	0.416	0.519	12
cis-1,3-Dichloropropene	0.623	0.588	0.601	0.527	0.538	0.450	0.554	11.4
1,1,2-Trichloroethane	0.348	0.340	0.353	0.309	0.349	0.314	0.335	5.7
2-Hexanone	0.358	0.357	0.353	0.298	0.302	0.261	0.321	12.6

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19

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

LAB FILE ID:		RRF100 = VN085438.D		RRF050 = VN085439.D		RRF020 = VN085440.D		
		RRF010 = VN085441.D		RRF005 = VN085442.D		RRF001 = VN085443.D		
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD
Dibromochloromethane	0.430	0.414	0.412	0.368	0.420	0.386	0.405	5.8
Tetrachloroethene	0.351	0.322	0.365	0.338	0.346	0.323	0.341	4.9
Chlorobenzene	1.133	1.076	1.154	1.047	1.110	1.051	1.095	4
Ethyl Benzene	2.072	1.867	1.940	1.685	1.709	1.430	1.784	12.7
m/p-Xylenes	0.775	0.707	0.750	0.615	0.616	0.492	0.659	16
o-Xylene	0.738	0.681	0.713	0.584	0.582	0.482	0.630	15.5
Styrene	1.271	1.173	1.186	0.956	0.929	0.742	1.043	19.2
Bromoform	0.311	0.311	0.312	0.273	0.284	0.235	0.288	10.6
Isopropylbenzene	3.922	3.448	3.681	3.272	3.157	2.766	3.375	12.1
1,1,2,2-Tetrachloroethane	1.121	1.145	1.187	1.157	1.228	1.314	1.192	5.9
1,3-Dichlorobenzene	1.720	1.565	1.701	1.574	1.656	1.526	1.624	4.9
1,4-Dichlorobenzene	1.706	1.562	1.713	1.607	1.743	1.767	1.683	4.8
1,2-Dichlorobenzene	1.611	1.555	1.654	1.532	1.600	1.766	1.620	5.2
1,2-Dichloroethane-d4	0.774	0.831	0.754	0.762	0.914		0.807	8.3
Dibromofluoromethane	0.359	0.358	0.335	0.310	0.373		0.347	7.1
Toluene-d8	1.339	1.267	1.207	1.076	1.274		1.232	8.1
4-Bromofluorobenzene	0.475	0.449	0.410	0.357	0.417		0.422	10.6

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA_N Calibration Date/Time: 01/28/2025 09:53

Lab File ID: VN085526.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.733	0.642	0.1	-12.41	20
Vinyl Chloride	0.737	0.665		-9.77	20
Bromomethane	0.445	0.389		-12.58	20
Chloroethane	0.467	0.439		-6	20
Trichlorofluoromethane	1.069	1.071		0.19	20
1,1,2-Trichlorotrifluoroethane	0.602	0.618		2.66	20
1,1-Dichloroethene	0.537	0.526		-2.05	20
Acetone	0.261	0.263		0.77	20
Carbon Disulfide	1.652	1.391		-15.8	20
Methyl tert-butyl Ether	1.742	1.940		11.37	20
Methylene Chloride	0.646	0.645		-0.16	20
trans-1,2-Dichloroethene	0.573	0.570		-0.52	20
1,1-Dichloroethane	1.178	1.202	0.1	2.04	20
2-Butanone	0.384	0.399		3.91	20
Carbon Tetrachloride	0.557	0.602		8.08	20
cis-1,2-Dichloroethene	0.675	0.700		3.7	20
Chloroform	1.218	1.248		2.46	20
1,1,1-Trichloroethane	1.068	1.105		3.46	20
Methylcyclohexane	0.457	0.513		12.25	20
Benzene	1.463	1.575		7.66	20
1,2-Dichloroethane	0.551	0.585		6.17	20
Trichloroethene	0.341	0.359		5.28	20
1,2-Dichloropropane	0.374	0.407		8.82	20
Bromodichloromethane	0.549	0.613		11.66	20
4-Methyl-2-Pentanone	0.457	0.535		17.07	20
Toluene	0.848	0.975		14.98	20
t-1,3-Dichloropropene	0.519	0.611		17.73	20
cis-1,3-Dichloropropene	0.554	0.639		15.34	20
1,1,2-Trichloroethane	0.335	0.375		11.94	20
2-Hexanone	0.321	0.386		20.25	20
Dibromochloromethane	0.405	0.460		13.58	20
Tetrachloroethene	0.341	0.361		5.86	20
Chlorobenzene	1.095	1.171	0.3	6.94	20
Ethyl Benzene	1.784	2.053		15.08	20
m/p-Xylenes	0.659	0.785		19.12	20
o-Xylene	0.630	0.739		17.3	20
Styrene	1.043	1.279		22.63	20
Bromoform	0.288	0.334	0.1	15.97	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.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA_N Calibration Date/Time: 01/28/2025 09:53

Lab File ID: VN085526.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.375	3.736		10.7	20
1,1,2,2-Tetrachloroethane	1.192	1.170	0.3	-1.85	20
1,3-Dichlorobenzene	1.624	1.699		4.62	20
1,4-Dichlorobenzene	1.683	1.700		1.01	20
1,2-Dichlorobenzene	1.620	1.644		1.48	20
1,2-Dichloroethane-d4	0.807	0.777		-3.72	20
Dibromofluoromethane	0.347	0.355		2.31	20
Toluene-d8	1.232	1.296		5.2	20
4-Bromofluorobenzene	0.422	0.467		10.66	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.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA_N Calibration Date/Time: 01/28/2025 18:14

Lab File ID: VN085546.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.733	0.606	0.1	-17.33	50
Vinyl Chloride	0.737	0.641		-13.03	50
Bromomethane	0.445	0.362		-18.65	50
Chloroethane	0.467	0.426		-8.78	50
Trichlorofluoromethane	1.069	1.034		-3.27	50
1,1,2-Trichlorotrifluoroethane	0.602	0.590		-1.99	50
1,1-Dichloroethene	0.537	0.523		-2.61	50
Acetone	0.261	0.285		9.19	50
Carbon Disulfide	1.652	1.307		-20.88	50
Methyl tert-butyl Ether	1.742	1.909		9.59	50
Methylene Chloride	0.646	0.637		-1.39	50
trans-1,2-Dichloroethene	0.573	0.549		-4.19	50
1,1-Dichloroethane	1.178	1.186	0.1	0.68	50
2-Butanone	0.384	0.451		17.45	50
Carbon Tetrachloride	0.557	0.573		2.87	50
cis-1,2-Dichloroethene	0.675	0.693		2.67	50
Chloroform	1.218	1.238		1.64	50
1,1,1-Trichloroethane	1.068	1.078		0.94	50
Methylcyclohexane	0.457	0.458		0.22	50
Benzene	1.463	1.498		2.39	50
1,2-Dichloroethane	0.551	0.571		3.63	50
Trichloroethene	0.341	0.341		0	50
1,2-Dichloropropane	0.374	0.391		4.55	50
Bromodichloromethane	0.549	0.602		9.65	50
4-Methyl-2-Pentanone	0.457	0.577		26.26	50
Toluene	0.848	0.923		8.84	50
t-1,3-Dichloropropene	0.519	0.580		11.75	50
cis-1,3-Dichloropropene	0.554	0.602		8.66	50
1,1,2-Trichloroethane	0.335	0.367		9.55	50
2-Hexanone	0.321	0.420		30.84	50
Dibromochloromethane	0.405	0.444		9.63	50
Tetrachloroethene	0.341	0.309		-9.38	50
Chlorobenzene	1.095	1.102	0.3	0.64	50
Ethyl Benzene	1.784	1.936		8.52	50
m/p-Xylenes	0.659	0.738		11.99	50
o-Xylene	0.630	0.697		10.64	50
Styrene	1.043	1.210		16.01	50
Bromoform	0.288	0.322	0.1	11.81	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.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: MSVOA_N Calibration Date/Time: 01/28/2025 18:14

Lab File ID: VN085546.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.375	3.613		7.05	50
1,1,2,2-Tetrachloroethane	1.192	1.228	0.3	3.02	50
1,3-Dichlorobenzene	1.624	1.626		0.12	50
1,4-Dichlorobenzene	1.683	1.600		-4.93	50
1,2-Dichlorobenzene	1.620	1.592		-1.73	50
1,2-Dichloroethane-d4	0.807	0.882		9.29	50
Dibromofluoromethane	0.347	0.384		10.66	50
Toluene-d8	1.232	1.397		13.39	50
4-Bromofluorobenzene	0.422	0.503		19.19	50

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