

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
VSTDIC100	VSTDIC100	VN085438.D	01/14/2025	14:56
VSTDICCC050	VSTDICCC050	VN085439.D	01/14/2025	15:19
VSTDIC020	VSTDIC020	VN085440.D	01/14/2025	15:43
VSTDIC010	VSTDIC010	VN085441.D	01/14/2025	16:07
VSTDIC005	VSTDIC005	VN085442.D	01/14/2025	16:31
VSTDIC001	VSTDIC001	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.

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
Q1199-02	BP-VPB-192-EB-2025 0124	Water			01/24/25			01/27/25
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
Q1199-03	BP-VPB-192-GW-280- 282	Water			01/24/25			01/27/25
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
Q1199-04	BP-VPB-192-GW-260- 262	Water			01/23/25			01/27/25
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
Q1199-05	BP-VPB-192-GW-240- 242	Water			01/23/25			01/27/25
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
Q1199-06	BP-VPB-192-GW-220- 222	Water			01/23/25			01/27/25
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	

Hit Summary Sheet SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : BP-VPB-192-GW-280-282								
Q1199-03	BP-VPB-192-GW-280-28 WATER	1,4-Dioxane	0.360		0.09	0.25	0.25	ug/L
		Total Svoc :		0.36				
		Total Concentration:		0.36				
Client ID : BP-VPB-192-GW-260-262								
Q1199-04	BP-VPB-192-GW-260-26 WATER	1,4-Dioxane	0.830		0.08	0.25	0.25	ug/L
		Total Svoc :		0.83				
		Total Concentration:		0.83				
Client ID : BP-VPB-192-GW-240-242								
Q1199-05	BP-VPB-192-GW-240-24 WATER	1,4-Dioxane	0.490		0.09	0.25	0.25	ug/L
		Total Svoc :		0.49				
		Total Concentration:		0.49				
Client ID : BP-VPB-192-GW-220-222								
Q1199-06	BP-VPB-192-GW-220-22 WATER	1,4-Dioxane	0.250		0.08	0.24	0.24	ug/L
		Total Svoc :		0.25				
		Total Concentration:		0.25				



SAMPLE DATA

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:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	900	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
BN036115.D	1	01/28/25 09:50	01/29/25 19:55	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22	U	0.080	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		113%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		93%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		134%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2210		7.803			
1146-65-2	Naphthalene-d8	5270		10.6			
15067-26-2	Acenaphthene-d10	2990		14.441			
1517-22-2	Phenanthrene-d10	6580		17.186			
1719-03-5	Chrysene-d12	5320		21.376			
1520-96-3	Perylene-d12	5110		23.675			

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:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	800 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036116.D	1	01/28/25 09:50	01/29/25 20:31	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.36		0.090	0.25	0.25	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.30		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2250	7.803				
1146-65-2	Naphthalene-d8	5220	10.6				
15067-26-2	Acenaphthene-d10	2650	14.442				
1517-22-2	Phenanthrene-d10	5260	17.186				
1719-03-5	Chrysene-d12	4930	21.376				
1520-96-3	Perylene-d12	5690	23.672				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

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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:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	810	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
BN036117.D	1	01/28/25 09:50	01/29/25 21:07	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.83		0.080	0.25	0.25	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		118%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		80%	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	2150	7.803				
1146-65-2	Naphthalene-d8	4870	10.6				
15067-26-2	Acenaphthene-d10	2940	14.441				
1517-22-2	Phenanthrene-d10	6490	17.186				
1719-03-5	Chrysene-d12	5410	21.376				
1520-96-3	Perylene-d12	5180	23.672				

U = Not Detected

LOQ = Limit of Quantitation

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

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:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	800	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036118.D	1	01/28/25 09:50	01/29/25 21:43	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.49		0.090	0.25	0.25	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		77%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		134%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2470	7.803				
1146-65-2	Naphthalene-d8	5780	10.6				
15067-26-2	Acenaphthene-d10	3180	14.442				
1517-22-2	Phenanthrene-d10	6950	17.186				
1719-03-5	Chrysene-d12	5740	21.376				
1520-96-3	Perylene-d12	5850	23.672				

U = Not Detected

LOQ = Limit of Quantitation

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

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:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	820 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
BN036114.D	1	01/28/25 09:50	01/29/25 19:19	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.25		0.080	0.24	0.24	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		95%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.48		30 - 150		119%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		80%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		137%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2010	7.803				
1146-65-2	Naphthalene-d8	4880	10.6				
15067-26-2	Acenaphthene-d10	2770	14.441				
1517-22-2	Phenanthrene-d10	6230	17.186				
1719-03-5	Chrysene-d12	5540	21.376				
1520-96-3	Perylene-d12	5180	23.675				

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.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166297BL	PB166297BL	2-Methylnaphthalene-d10	0.4	0.43	108		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.56	141	*	58	132
PB166297BS	PB166297BS	2-Methylnaphthalene-d10	0.4	0.59	146		30	150
		Fluoranthene-d10	0.4	0.40	99		30	150
		Nitrobenzene-d5	0.4	0.43	108		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.53	133	*	58	132
PB166297BSD	PB166297BSD	2-Methylnaphthalene-d10	0.4	0.57	143		30	150
		Fluoranthene-d10	0.4	0.40	100		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.55	137	*	58	132
Q1199-02	BP-VPB-192-EB-20250124	2-Methylnaphthalene-d10	0.4	0.38	96		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.37	93		55	111
		2-Fluorobiphenyl	0.4	0.31	76		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132
Q1199-03	BP-VPB-192-GW-280-282	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.35	87		55	111
		2-Fluorobiphenyl	0.4	0.30	76		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
Q1199-04	BP-VPB-192-GW-260-262	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.47	118		30	150
		Nitrobenzene-d5	0.4	0.38	94		55	111
		2-Fluorobiphenyl	0.4	0.32	80		53	106
		Terphenyl-d14	0.4	0.57	143	*	58	132
Q1199-05	BP-VPB-192-GW-240-242	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.35	87		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132
Q1199-06	BP-VPB-192-GW-220-222	2-Methylnaphthalene-d10	0.4	0.38	95		30	150
		Fluoranthene-d10	0.4	0.48	119		30	150
		Nitrobenzene-d5	0.4	0.38	94		55	111
		2-Fluorobiphenyl	0.4	0.32	80		53	106
		Terphenyl-d14	0.4	0.55	137	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036126.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166297BS	1,4-Dioxane	0.4	0.32	ug/L	80				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036127.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166297BSD	1,4-Dioxane	0.4	0.30	ug/L	75	6			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166297BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1199

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: BN036113.D

Lab Sample ID: PB166297BL

Instrument ID: BNA_N

Date Extracted: 01/28/2025

Matrix: (soil/water) Water

Date Analyzed: 01/29/2025

Level: (low/med) LOW

Time Analyzed: 18:42

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166297BS	PB166297BS	BN036126.D	01/30/2025
BP-VPB-192-EB-20250124	Q1199-02	BN036115.D	01/29/2025
BP-VPB-192-GW-280-282	Q1199-03	BN036116.D	01/29/2025
BP-VPB-192-GW-260-262	Q1199-04	BN036117.D	01/29/2025
PB166297BSD	PB166297BSD	BN036127.D	01/30/2025
BP-VPB-192-GW-220-222	Q1199-06	BN036114.D	01/29/2025
BP-VPB-192-GW-240-242	Q1199-05	BN036118.D	01/29/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: BN036009.D

DFTPP Injection Date: 01/22/2025

Instrument ID: BNA_N

DFTPP Injection Time: 09:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	48.9
68	Less than 2.0% of mass 69	0.5 (1.1) 1
69	Mass 69 relative abundance	45.7
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	47.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 (20.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN036010.D	01/22/2025	11:02
SSTDICC0.2	SSTDICC0.2	BN036011.D	01/22/2025	11:38
SSTDICCC0.4	SSTDICCC0.4	BN036012.D	01/22/2025	12:13
SSTDICC0.8	SSTDICC0.8	BN036013.D	01/22/2025	12:49
SSTDICC1.6	SSTDICC1.6	BN036014.D	01/22/2025	13:25
SSTDICC3.2	SSTDICC3.2	BN036015.D	01/22/2025	14:01
SSTDICC5.0	SSTDICC5.0	BN036016.D	01/22/2025	14:36

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: BN036111.D

DFTPP Injection Date: 01/29/2025

Instrument ID: BNA_N

DFTPP Injection Time: 17:27

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42.5
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	42.8
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	47.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 60.0% of mass 198	26.8
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	11.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.7 (18.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN036112.D	01/29/2025	18:06
PB166297BL	PB166297BL	BN036113.D	01/29/2025	18:42
BP-VPB-192-GW-220-222	Q1199-06	BN036114.D	01/29/2025	19:19
BP-VPB-192-EB-20250124	Q1199-02	BN036115.D	01/29/2025	19:55
BP-VPB-192-GW-280-282	Q1199-03	BN036116.D	01/29/2025	20:31
BP-VPB-192-GW-260-262	Q1199-04	BN036117.D	01/29/2025	21:07
BP-VPB-192-GW-240-242	Q1199-05	BN036118.D	01/29/2025	21:43
PB166297BS	PB166297BS	BN036126.D	01/30/2025	02:31
PB166297BSD	PB166297BSD	BN036127.D	01/30/2025	03:07
SSTDCCC0.4EC	SSTDCCC0.4	BN036128.D	01/30/2025	03:43

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/29/2025

Lab File ID: BN036112.D Time Analyzed: 18:06

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	2094	7.803	4943	10.60	2715	14.44
UPPER LIMIT	4188	8.303	9886	11.1	5430	14.937
LOWER LIMIT	1047	7.303	2471.5	10.1	1357.5	13.937
EPA SAMPLE NO.						
01 PB166297BL	2136	7.80	4915	10.60	2707	14.44
02 BP-VPB-192-GW-220-222	2008	7.80	4878	10.60	2770	14.44
03 BP-VPB-192-EB-20250124	2206	7.80	5271	10.60	2988	14.44
04 BP-VPB-192-GW-280-282	2253	7.80	5222	10.60	2653	14.44
05 BP-VPB-192-GW-260-262	2145	7.80	4867	10.60	2939	14.44
06 BP-VPB-192-GW-240-242	2471	7.80	5780	10.60	3178	14.44
07 PB166297BS	2324	7.80	5152	10.59	2819	14.44
08 PB166297BSD	2359	7.80	5174	10.59	2851	14.44

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.: Q1199 SAS No.: Q1199 SDG NO.: Q1199

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/29/2025

Lab File ID: BN036112.D Time Analyzed: 18:06

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	5698	17.194	4562	21.376	5021	23.677
UPPER LIMIT	11396	17.694	9124	21.876	10042	24.177
LOWER LIMIT	2849	16.694	2281	20.876	2510.5	23.177
EPA SAMPLE NO.						
01 PB166297BL	5606	17.19	4293	21.38	4681	23.68
02 BP-VPB-192-GW-220-222	6230	17.19	5536	21.38	5180	23.68
03 BP-VPB-192-EB-20250124	6578	17.19	5317	21.38	5108	23.68
04 BP-VPB-192-GW-280-282	5259	17.19	4932	21.38	5685	23.67
05 BP-VPB-192-GW-260-262	6485	17.19	5413	21.38	5178	23.67
06 BP-VPB-192-GW-240-242	6949	17.19	5738	21.38	5850	23.67
07 PB166297BS	5724	17.18	4238	21.38	4580	23.67
08 PB166297BSD	6109	17.19	4365	21.37	4649	23.67

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:	PB166297BL		SDG No.:	Q1199
Lab Sample ID:	PB166297BL		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
BN036113.D	1	01/28/25 09:50	01/29/25 18:42	PB166297

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	0.43		30 - 150		108%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		141%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2140	7.803				
1146-65-2	Naphthalene-d8	4920	10.6				
15067-26-2	Acenaphthene-d10	2710	14.442				
1517-22-2	Phenanthrene-d10	5610	17.186				
1719-03-5	Chrysene-d12	4290	21.376				
1520-96-3	Perylene-d12	4680	23.678				

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:	PB166297BS		SDG No.:	Q1199
Lab Sample ID:	PB166297BS		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
BN036126.D	1	01/28/25 09:50	01/30/25 02:31	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.32		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.59		30 - 150		146%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		108%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.53	*	58 - 132		133%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2320	7.803				
1146-65-2	Naphthalene-d8	5150	10.59				
15067-26-2	Acenaphthene-d10	2820	14.436				
1517-22-2	Phenanthrene-d10	5720	17.181				
1719-03-5	Chrysene-d12	4240	21.375				
1520-96-3	Perylene-d12	4580	23.671				

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:	PB166297BSD		SDG No.:	Q1199	
Lab Sample ID:	PB166297BSD		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
BN036127.D	1	01/28/25 09:50	01/30/25 03:07	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.57		30 - 150		143%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		137%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2360		7.803			
1146-65-2	Naphthalene-d8	5170		10.59			
15067-26-2	Acenaphthene-d10	2850		14.442			
1517-22-2	Phenanthrene-d10	6110		17.186			
1719-03-5	Chrysene-d12	4370		21.367			
1520-96-3	Perylene-d12	4650		23.672			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN012225.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Jan 23 00:34:56 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036010.D 0.2 =BN036011.D 0.4 =BN036012.D 0.8 =BN036013.D 1.6 =BN036014.D 3.2 =BN036015.D 5.0 =BN036016.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	0.452	0.460	0.469	0.477	0.447	0.408	0.417	0.447	5.81
3)	n-Nitrosodimet...	0.798	0.749	0.877	0.883	0.829	0.781	0.759	0.811	6.65
4) S	2-Fluorophenol	1.032	1.012	1.092	1.099	1.042	0.997	1.010	1.040	3.88
5) S	Phenol-d6	1.284	1.195	1.270	1.155	1.230	1.210	1.209	1.222	3.61
6)	bis(2-Chloroet...	1.024	0.979	1.056	0.929	0.993	0.952	0.952	0.984	4.53
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.377	0.356	0.399	0.333	0.397	0.388	0.394	0.378	6.55
9)	Naphthalene	1.149	1.141	1.250	1.137	1.184	1.141	1.131	1.162	3.68
10)	Hexachlorobuta...	0.383	0.369	0.404	0.371	0.388	0.359	0.353	0.375	4.74
11) SURR	2-Methylnaphth...	0.522	0.527	0.578	0.528	0.556	0.550	0.545	0.544	3.66
12)	2-Methylnaphth...	0.702	0.688	0.760	0.700	0.741	0.735	0.721	0.721	3.58
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.240	0.238	0.256	0.238	0.268	0.275	0.282	0.257	7.32
15) S	2-Fluorobiphenyl	1.806	1.736	1.934	1.787	1.819	1.693	1.724	1.786	4.47
16)	Acenaphthylene	1.835	1.826	2.011	1.840	1.940	1.889	1.936	1.897	3.65
17)	Acenaphthene	1.248	1.236	1.365	1.266	1.338	1.310	1.327	1.299	3.78
18)	Fluorene	1.583	1.482	1.633	1.550	1.739	1.703	1.700	1.627	5.76
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.071	0.081	0.095	0.089	0.101	0.107	0.108	0.093	14.73
21)	4-Bromophenyl-...	0.285	0.269	0.307	0.287	0.293	0.273	0.281	0.285	4.42
22)	Hexachlorobenzene	0.391	0.358	0.407	0.374	0.380	0.355	0.361	0.375	5.08
23)	Atrazine	0.185	0.194	0.218	0.204	0.216	0.209	0.215	0.206	6.05
24)	Pentachlorophenol	0.131	0.131	0.164	0.155	0.179	0.185	0.192	0.162	15.18
25)	Phenanthrene	1.154	1.158	1.302	1.172	1.226	1.182	1.219	1.202	4.33
26)	Anthracene	1.019	1.016	1.151	1.064	1.128	1.123	1.151	1.093	5.42
27) SURR	Fluoranthene-d10	1.005	1.006	1.111	0.994	0.959	1.078	1.101	1.036	5.75
28)	Fluoranthene	1.312	1.350	1.507	1.357	1.317	1.506	1.533	1.412	6.99
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.657	1.588	1.693	1.636	1.646	1.552	1.575	1.621	3.12
31) S	Terphenyl-d14	0.821	0.807	0.871	0.831	0.860	0.804	0.822	0.831	3.09
32)	Benzo(a)anthra...	1.445	1.403	1.503	1.411	1.513	1.448	1.433	1.451	2.93
33)	Chrysene	1.501	1.476	1.545	1.448	1.515	1.435	1.463	1.483	2.63
34)	Bis(2-ethylhex...	0.919	0.793	0.798	0.748	0.791	0.748	0.768	0.795	7.36
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN012225.M

36)	Indeno(1,2,3-c...	1.525	1.477	1.621	1.585	1.669	1.668	1.692	1.605	5.03
37)	Benzo(b)fluora...	1.443	1.380	1.497	1.429	1.475	1.444	1.510	1.454	3.03
38)	Benzo(k)fluora...	1.427	1.378	1.486	1.427	1.519	1.496	1.524	1.465	3.76
39) C	Benzo(a)pyrene	1.237	1.164	1.263	1.203	1.264	1.265	1.296	1.242	3.61
40)	Dibenzo(a,h)an...	1.187	1.169	1.290	1.279	1.337	1.338	1.356	1.279	5.86
41)	Benzo(g,h,i)pe...	1.338	1.308	1.426	1.387	1.438	1.428	1.436	1.394	3.75

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

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

Instrument ID: BNA_N Calibration Date/Time: 01/29/2025 18:06

Lab File ID: BN036112.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:02 14:36

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.594		9.2	20.0
Fluoranthene-d10	1.036	1.092		5.4	20.0
2-Fluorophenol	1.040	1.195		14.9	20.0
Phenol-d6	1.222	1.488		21.8	20.0
Nitrobenzene-d5	0.378	0.398		5.3	20.0
2-Fluorobiphenyl	1.786	1.681		-5.9	20.0
2,4,6-Tribromophenol	0.257	0.246		-4.3	20.0
Terphenyl-d14	0.831	0.973		17.1	20.0
1,4-Dioxane	0.447	0.405		-9.4	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.: Q1199 SAS No.: Q1199 SDG No.: Q1199

Instrument ID: BNA_N Calibration Date/Time: 01/30/2025 03:43

Lab File ID: BN036128.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:02 14:36

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.601		10.5	50.0
Fluoranthene-d10	1.036	1.159		11.9	50.0
2-Fluorophenol	1.040	1.189		14.3	50.0
Phenol-d6	1.222	1.499		22.7	50.0
Nitrobenzene-d5	0.378	0.413		9.3	50.0
2-Fluorobiphenyl	1.786	1.729		-3.2	50.0
2,4,6-Tribromophenol	0.257	0.251		-2.3	50.0
Terphenyl-d14	0.831	1.004		20.8	50.0
1,4-Dioxane	0.447	0.408		-8.7	50.0

All other compounds must meet a minimum RRF of 0.010.