

LAB CHRONICLE

OrderID:	P4475	OrderDate:	10/22/2024 10:05:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	K61,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4475-01	BP-VPB-190-TB-2024 1018	Water			10/18/24			10/21/24
			VOCMS Group1	8260-Low			10/22/24	
P4475-02	BP-VPB-190-DUP-202 41018	Water			10/18/24			10/21/24
			VOCMS Group1	8260-Low			10/22/24	
P4475-03	BP-VPB-190-GW-223- 225	Water			10/18/24			10/21/24
			VOCMS Group1	8260-Low			10/22/24	
P4475-04	BP-VPB-190-GW-238- 240	Water			10/18/24			10/21/24
			VOCMS Group1	8260-Low			10/22/24	
P4475-05	BP-VPB-190-GW-258- 260	Water			10/21/24			10/21/24
			VOCMS Group1	8260-Low			10/22/24	
P4475-06	BP-VPB-190-GW-278- 280	Water			10/21/24			10/21/24
			VOCMS Group1	8260-Low			10/22/24	

Hit Summary Sheet
SW-846

SDG No.: P4475

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	BP-VPB-190-GW-238-240								
P4475-04	BP-VPB-190-GW-2 Water		Trichloroethene	1.10		0.32	0.75	1.00	ug/L
			Total Voc :	1.10					
			Total Concentration:	1.10					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	10/18/24	
Project:	CTO WE13			Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-TB-20241018			SDG No.:	P4475	
Lab Sample ID:	P4475-01			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
VN084456.D	1		10/22/24 15:33	VN102224

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:	10/18/24		
Project:	CTO WE13			Date Received:	10/21/24		
Client Sample ID:	BP-VPB-190-TB-20241018			SDG No.:	P4475		
Lab Sample ID:	P4475-01			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
VN084456.D	1		10/22/24 15:33	VN102224

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	46.0		81 - 118		92%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		80 - 119		102%	SPK: 50
2037-26-5	Toluene-d8	49.1		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.6		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	187000	8.224				
540-36-3	1,4-Difluorobenzene	314000	9.1				
3114-55-4	Chlorobenzene-d5	266000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	104000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-TB-20241018		SDG No.:	P4475	
Lab Sample ID:	P4475-01		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
VN084456.D	1		10/22/24 15:33	VN102224

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:	10/18/24		
Project:	CTO WE13			Date Received:	10/21/24		
Client Sample ID:	BP-VPB-190-DUP-20241018			SDG No.:	P4475		
Lab Sample ID:	P4475-02			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
VN084461.D	1		10/22/24 17:57	VN102224

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:	10/18/24		
Project:	CTO WE13			Date Received:	10/21/24		
Client Sample ID:	BP-VPB-190-DUP-20241018			SDG No.:	P4475		
Lab Sample ID:	P4475-02			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
VN084461.D	1		10/22/24 17:57	VN102224

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	49.6		81 - 118		99%	SPK: 50
1868-53-7	Dibromofluoromethane	52.6		80 - 119		105%	SPK: 50
2037-26-5	Toluene-d8	50.4		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		85 - 114		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	163000	8.224				
540-36-3	1,4-Difluorobenzene	278000	9.1				
3114-55-4	Chlorobenzene-d5	246000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	100000	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-DUP-20241018		SDG No.:	P4475	
Lab Sample ID:	P4475-02		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
VN084461.D	1		10/22/24 17:57	VN102224

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:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-223-225		SDG No.:	P4475	
Lab Sample ID:	P4475-03		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
VN084460.D	1		10/22/24 17:33	VN102224

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:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-223-225		SDG No.:	P4475	
Lab Sample ID:	P4475-03		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
VN084460.D	1		10/22/24 17:33	VN102224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48.5		81 - 118		97%	SPK: 50
1868-53-7	Dibromofluoromethane	52.3		80 - 119		105%	SPK: 50
2037-26-5	Toluene-d8	49.7		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.1		85 - 114		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	167000	8.224				
540-36-3	1,4-Difluorobenzene	284000	9.106				
3114-55-4	Chlorobenzene-d5	246000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	98200	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-223-225		SDG No.:	P4475	
Lab Sample ID:	P4475-03		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
VN084460.D	1		10/22/24 17:33	VN102224

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:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-238-240		SDG No.:	P4475	
Lab Sample ID:	P4475-04		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
VN084455.D	1		10/22/24 15:09	VN102224

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	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:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-238-240		SDG No.:	P4475	
Lab Sample ID:	P4475-04		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
VN084455.D	1		10/22/24 15:09	VN102224

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	46.3		81 - 118		93%	SPK: 50
1868-53-7	Dibromofluoromethane	50.2		80 - 119		100%	SPK: 50
2037-26-5	Toluene-d8	48.9		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.4		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	174000	8.224				
540-36-3	1,4-Difluorobenzene	291000	9.1				
3114-55-4	Chlorobenzene-d5	247000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	101000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/18/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-238-240		SDG No.:	P4475	
Lab Sample ID:	P4475-04		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
VN084455.D	1		10/22/24 15:09	VN102224

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:	10/21/24	
Project:	CTO WE13			Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-258-260			SDG No.:	P4475	
Lab Sample ID:	P4475-05			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
VN084458.D	1		10/22/24 16:45	VN102224

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:	10/21/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-258-260		SDG No.:	P4475	
Lab Sample ID:	P4475-05		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
VN084458.D	1		10/22/24 16:45	VN102224

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	49.0		81 - 118		98%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	49.8		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.6		85 - 114		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	161000	8.224				
540-36-3	1,4-Difluorobenzene	277000	9.1				
3114-55-4	Chlorobenzene-d5	244000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	99800	13.794				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/21/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-258-260		SDG No.:	P4475	
Lab Sample ID:	P4475-05		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
VN084458.D	1		10/22/24 16:45	VN102224

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:	10/21/24	
Project:	CTO WE13			Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-278-280			SDG No.:	P4475	
Lab Sample ID:	P4475-06			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
VN084459.D	1		10/22/24 17:09	VN102224

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:	10/21/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-278-280		SDG No.:	P4475	
Lab Sample ID:	P4475-06		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
VN084459.D	1		10/22/24 17:09	VN102224

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	50.0		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		80 - 119		103%	SPK: 50
2037-26-5	Toluene-d8	49.9		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.4		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	158000	8.23				
540-36-3	1,4-Difluorobenzene	282000	9.1				
3114-55-4	Chlorobenzene-d5	246000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	101000	13.788				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/21/24	
Project:	CTO WE13		Date Received:	10/21/24	
Client Sample ID:	BP-VPB-190-GW-278-280		SDG No.:	P4475	
Lab Sample ID:	P4475-06		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
VN084459.D	1		10/22/24 17:09	VN102224

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.: **P4475**

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

Analytical Method: **SW8260-Low**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P4475-01	BP-VPB-190-TB-20241018	1,2-Dichloroethane-d4	50	46.0	92	81	118
		Dibromofluoromethane	50	50.8	102	80	119
		Toluene-d8	50	49.1	98	89	112
		4-Bromofluorobenzene	50	45.6	91	85	114
P4475-02	BP-VPB-190-DUP-20241018	1,2-Dichloroethane-d4	50	49.6	99	81	118
		Dibromofluoromethane	50	52.6	105	80	119
		Toluene-d8	50	50.4	101	89	112
		4-Bromofluorobenzene	50	47.5	95	85	114
P4475-03	BP-VPB-190-GW-223-225	1,2-Dichloroethane-d4	50	48.5	97	81	118
		Dibromofluoromethane	50	52.3	105	80	119
		Toluene-d8	50	49.8	99	89	112
		4-Bromofluorobenzene	50	46.1	92	85	114
P4475-04	BP-VPB-190-GW-238-240	1,2-Dichloroethane-d4	50	46.3	93	81	118
		Dibromofluoromethane	50	50.2	100	80	119
		Toluene-d8	50	48.9	98	89	112
		4-Bromofluorobenzene	50	46.4	93	85	114
P4475-05	BP-VPB-190-GW-258-260	1,2-Dichloroethane-d4	50	49.0	98	81	118
		Dibromofluoromethane	50	51.3	103	80	119
		Toluene-d8	50	49.9	100	89	112
		4-Bromofluorobenzene	50	47.6	95	85	114
P4475-06	BP-VPB-190-GW-278-280	1,2-Dichloroethane-d4	50	50.0	100	81	118
		Dibromofluoromethane	50	51.3	103	80	119
		Toluene-d8	50	49.9	100	89	112
		4-Bromofluorobenzene	50	46.4	93	85	114
VN1022WBL01	VN1022WBL01	1,2-Dichloroethane-d4	50	45.7	91	81	118
		Dibromofluoromethane	50	50.0	100	80	119
		Toluene-d8	50	49.3	99	89	112
		4-Bromofluorobenzene	50	45.0	90	85	114
VN1022WBS01	VN1022WBS01	1,2-Dichloroethane-d4	50	46.2	92	81	118
		Dibromofluoromethane	50	49.5	99	80	119
		Toluene-d8	50	48.8	98	89	112
		4-Bromofluorobenzene	50	49.0	98	85	114
VN1022WBSD01	VN1022WBSD01	1,2-Dichloroethane-d4	50	49.1	98	81	118
		Dibromofluoromethane	50	49.5	99	80	119
		Toluene-d8	50	48.0	96	89	112
		4-Bromofluorobenzene	50	48.9	98	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4475

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN084453.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1022WBS01	Chloromethane	20	15.9	ug/L	79			50	139	
	Vinyl chloride	20	16.5	ug/L	83			58	137	
	Bromomethane	20	17.0	ug/L	85			53	141	
	Chloroethane	20	14.8	ug/L	74			60	138	
	Trichlorofluoromethane	20	17.3	ug/L	86			65	141	
	1,1,2-Trichlorotrifluoroethane	20	17.8	ug/L	89			70	136	
	1,1-Dichloroethene	20	18.2	ug/L	91			71	131	
	Acetone	100	81.7	ug/L	82			39	160	
	Carbon disulfide	20	16.3	ug/L	81			64	133	
	Methyl tert-butyl Ether	20	17.7	ug/L	89			71	124	
	Methylene Chloride	20	18.2	ug/L	91			74	124	
	trans-1,2-Dichloroethene	20	18.0	ug/L	90			75	124	
	1,1-Dichloroethane	20	18.5	ug/L	93			77	125	
	2-Butanone	100	87.6	ug/L	88			56	143	
	Carbon Tetrachloride	20	18.8	ug/L	94			72	136	
	cis-1,2-Dichloroethene	20	18.2	ug/L	91			78	123	
	Chloroform	20	18.7	ug/L	94			79	124	
	1,1,1-Trichloroethane	20	18.2	ug/L	91			74	131	
	Methylcyclohexane	20	17.5	ug/L	88			72	132	
	Benzene	20	18.7	ug/L	94			79	120	
	1,2-Dichloroethane	20	18.3	ug/L	92			73	128	
	Trichloroethene	20	19.0	ug/L	95			79	123	
	1,2-Dichloropropane	20	19.0	ug/L	95			78	122	
	Bromodichloromethane	20	19.0	ug/L	95			79	125	
	4-Methyl-2-Pentanone	100	92.2	ug/L	92			67	130	
	Toluene	20	19.2	ug/L	96			80	121	
	t-1,3-Dichloropropene	20	18.6	ug/L	93			73	127	
	cis-1,3-Dichloropropene	20	18.4	ug/L	92			75	124	
	1,1,2-Trichloroethane	20	20.3	ug/L	102			80	119	
	2-Hexanone	100	91.4	ug/L	91			57	139	
	Dibromochloromethane	20	19.6	ug/L	98			74	126	
	Tetrachloroethene	20	18.4	ug/L	92			74	129	
	Chlorobenzene	20	18.7	ug/L	94			82	118	
	Ethyl Benzene	20	18.1	ug/L	91			79	121	
	m/p-Xylenes	40	37.8	ug/L	95			80	121	
	o-Xylene	20	19.1	ug/L	96			78	122	
	Styrene	20	19.2	ug/L	96			78	123	
	Bromoform	20	19.2	ug/L	96			66	130	
	Isopropylbenzene	20	18.0	ug/L	90			72	131	
	1,1,2,2-Tetrachloroethane	20	18.4	ug/L	92			71	121	
	1,3-Dichlorobenzene	20	18.2	ug/L	91			80	119	
	1,4-Dichlorobenzene	20	17.6	ug/L	88			79	118	
	1,2-Dichlorobenzene	20	17.8	ug/L	89			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4475

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VN084454.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1022WBSD01	Chloromethane	20	16.1	ug/L	81	3		50	139	20
	Vinyl chloride	20	16.5	ug/L	83	0		58	137	20
	Bromomethane	20	18.0	ug/L	90	6		53	141	20
	Chloroethane	20	15.7	ug/L	79	7		60	138	20
	Trichlorofluoromethane	20	17.9	ug/L	90	5		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	18.3	ug/L	92	3		70	136	20
	1,1-Dichloroethene	20	17.9	ug/L	90	1		71	131	20
	Acetone	100	84.1	ug/L	84	2		39	160	20
	Carbon disulfide	20	16.6	ug/L	83	2		64	133	20
	Methyl tert-butyl Ether	20	19.6	ug/L	98	10		71	124	20
	Methylene Chloride	20	19.8	ug/L	99	8		74	124	20
	trans-1,2-Dichloroethene	20	19.1	ug/L	96	6		75	124	20
	1,1-Dichloroethane	20	19.6	ug/L	98	5		77	125	20
	2-Butanone	100	92.3	ug/L	92	4		56	143	20
	Carbon Tetrachloride	20	18.6	ug/L	93	1		72	136	20
	cis-1,2-Dichloroethene	20	19.3	ug/L	97	6		78	123	20
	Chloroform	20	19.4	ug/L	97	3		79	124	20
	1,1,1-Trichloroethane	20	18.9	ug/L	95	4		74	131	20
	Methylcyclohexane	20	17.3	ug/L	86	2		72	132	20
	Benzene	20	18.9	ug/L	95	1		79	120	20
	1,2-Dichloroethane	20	19.6	ug/L	98	6		73	128	20
	Trichloroethene	20	18.8	ug/L	94	1		79	123	20
	1,2-Dichloropropane	20	20.0	ug/L	100	5		78	122	20
	Bromodichloromethane	20	19.8	ug/L	99	4		79	125	20
	4-Methyl-2-Pentanone	100	99.8	ug/L	100	8		67	130	20
	Toluene	20	19.0	ug/L	95	1		80	121	20
	t-1,3-Dichloropropene	20	19.0	ug/L	95	2		73	127	20
	cis-1,3-Dichloropropene	20	19.1	ug/L	96	4		75	124	20
	1,1,2-Trichloroethane	20	20.9	ug/L	104	2		80	119	20
	2-Hexanone	100	96.4	ug/L	96	5		57	139	20
	Dibromochloromethane	20	20.9	ug/L	104	6		74	126	20
	Tetrachloroethene	20	19.2	ug/L	96	4		74	129	20
	Chlorobenzene	20	19.6	ug/L	98	4		82	118	20
	Ethyl Benzene	20	18.2	ug/L	91	0		79	121	20
	m/p-Xylenes	40	38.8	ug/L	97	2		80	121	20
	o-Xylene	20	19.0	ug/L	95	1		78	122	20
	Styrene	20	19.4	ug/L	97	1		78	123	20
	Bromoform	20	20.1	ug/L	101	5		66	130	20
	Isopropylbenzene	20	18.2	ug/L	91	1		72	131	20
	1,1,2,2-Tetrachloroethane	20	19.9	ug/L	100	8		71	121	20
	1,3-Dichlorobenzene	20	18.7	ug/L	94	3		80	119	20
	1,4-Dichlorobenzene	20	18.9	ug/L	95	8		79	118	20
	1,2-Dichlorobenzene	20	18.5	ug/L	93	4		80	119	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1022WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4475

SAS No.: P4475 SDG NO.: P4475

Lab File ID: VN084452.D

Lab Sample ID: VN1022WBL01

Date Analyzed: 10/22/2024

Time Analyzed: 13:38

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
VN1022WBS01	VN1022WBS01	VN084453.D	10/22/2024
VN1022WBSD01	VN1022WBSD01	VN084454.D	10/22/2024
BP-VPB-190-GW-238-240	P4475-04	VN084455.D	10/22/2024
BP-VPB-190-TB-20241018	P4475-01	VN084456.D	10/22/2024
BP-VPB-190-GW-258-260	P4475-05	VN084458.D	10/22/2024
BP-VPB-190-GW-278-280	P4475-06	VN084459.D	10/22/2024
BP-VPB-190-GW-223-225	P4475-03	VN084460.D	10/22/2024
BP-VPB-190-DUP-20241018	P4475-02	VN084461.D	10/22/2024

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4475 SAS No.: P4475 SDG NO.: P4475
Lab File ID: VN084211.D BFB Injection Date: 09/30/2024
Instrument ID: MSVOA_N BFB Injection Time: 09:24
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	53.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	71
175	5.0 - 9.0% of mass 174	5.5 (7.8) 1
176	95.0 - 101.0% of mass 174	69.7 (98.2) 1
177	5.0 - 9.0% of mass 176	4.9 (7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN084213.D	09/30/2024	12:25
VSTDICCC050	VSTDICCC050	VN084214.D	09/30/2024	12:49
VSTDICC020	VSTDICC020	VN084215.D	09/30/2024	13:13
VSTDICC010	VSTDICC010	VN084216.D	09/30/2024	13:37
VSTDICC005	VSTDICC005	VN084217.D	09/30/2024	14:00
VSTDICC001	VSTDICC001	VN084218.D	09/30/2024	14:48

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4475 SAS No.: P4475 SDG NO.: P4475
Lab File ID: VN084449.D BFB Injection Date: 10/22/2024
Instrument ID: MSVOA_N BFB Injection Time: 08:33
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	18.3
75	30.0 - 60.0% of mass 95	51.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	1.2 (1.7) 1
174	50.0 - 100.0% of mass 95	73.9
175	5.0 - 9.0% of mass 174	5.9 (7.9) 1
176	95.0 - 101.0% of mass 174	70.5 (95.4) 1
177	5.0 - 9.0% of mass 176	4.7 (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
VSTDCCC050	VSTDCCC050	VN084450.D	10/22/2024	12:50
VN1022WBL01	VN1022WBL01	VN084452.D	10/22/2024	13:38
VN1022WBS01	VN1022WBS01	VN084453.D	10/22/2024	14:01
VN1022WBSD01	VN1022WBSD01	VN084454.D	10/22/2024	14:45
BP-VPB-190-GW-238-240	P4475-04	VN084455.D	10/22/2024	15:09
BP-VPB-190-TB-20241018	P4475-01	VN084456.D	10/22/2024	15:33
BP-VPB-190-GW-258-260	P4475-05	VN084458.D	10/22/2024	16:45
BP-VPB-190-GW-278-280	P4475-06	VN084459.D	10/22/2024	17:09
BP-VPB-190-GW-223-225	P4475-03	VN084460.D	10/22/2024	17:33
BP-VPB-190-DUP-20241018	P4475-02	VN084461.D	10/22/2024	17:57
VSTDCCC050EC	VSTDCCC050	VN084464.D	10/22/2024	19:10

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4475 SAS No.: P4475 SDG NO.: P4475
Lab File ID: VN084450.D Date Analyzed: 10/22/2024
Instrument ID: MSVOA_N Time Analyzed: 12:50
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	171974	8.22	293014	9.10	264421	11.87
UPPER LIMIT	343948	8.724	586028	9.6	528842	12.365
LOWER LIMIT	85987	7.724	146507	8.6	132211	11.365
EPA SAMPLE NO.						
BP-VPB-190-TB-20241018	187259	8.22	314405	9.10	266392	11.87
BP-VPB-190-DUP-20241018	163076	8.22	278181	9.10	246196	11.87
BP-VPB-190-GW-223-225	166570	8.22	283884	9.11	246455	11.87
BP-VPB-190-GW-238-240	173757	8.22	291051	9.10	247138	11.87
BP-VPB-190-GW-258-260	160725	8.22	277213	9.10	244441	11.87
BP-VPB-190-GW-278-280	157977	8.23	281977	9.10	245983	11.87
VN1022WBL01	195991	8.22	325943	9.10	276681	11.87
VN1022WBS01	177710	8.22	304170	9.10	270028	11.87
VN1022WBSD01	162648	8.22	284290	9.10	251894	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.: P4475 SAS No.: P4475 SDG NO.: P4475
Lab File ID: VN084450.D Date Analyzed: 10/22/2024
Instrument ID: MSVOA_N Time Analyzed: 12:50
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	131065	13.788				
UPPER LIMIT	262130	14.288				
LOWER LIMIT	65532.5	13.288				
EPA SAMPLE NO.						
BP-VPB-190-TB-20241018	103875	13.79				
BP-VPB-190-DUP-20241018	100139	13.79				
BP-VPB-190-GW-223-225	98200	13.79				
BP-VPB-190-GW-238-240	100728	13.79				
BP-VPB-190-GW-258-260	99804	13.79				
BP-VPB-190-GW-278-280	100831	13.79				
VN1022WBL01	106919	13.79				
VN1022WBS01	132421	13.79				
VN1022WBSD01	120786	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:	VN1022WBL01		SDG No.:	P4475
Lab Sample ID:	VN1022WBL01		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
VN084452.D	1		10/22/24 13:38	VN102224

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:	VN1022WBL01		SDG No.:	P4475
Lab Sample ID:	VN1022WBL01		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
VN084452.D	1		10/22/24 13:38	VN102224

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	45.7		81 - 118		91%	SPK: 50
1868-53-7	Dibromofluoromethane	49.9		80 - 119		100%	SPK: 50
2037-26-5	Toluene-d8	49.3		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.0		85 - 114		90%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	196000	8.224				
540-36-3	1,4-Difluorobenzene	326000	9.1				
3114-55-4	Chlorobenzene-d5	277000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	107000	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:	VN1022WBS01		SDG No.:	P4475
Lab Sample ID:	VN1022WBS01		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
VN084453.D	1		10/22/24 14:01	VN102224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	15.9		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	16.5		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	17.0		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	14.8		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	17.3		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	17.8		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.2		0.26	0.75	1.00	ug/L
67-64-1	Acetone	81.7		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.3		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.7		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.2		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.0		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.5		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	87.6		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.8		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.2		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	18.7		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.2		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	17.5		0.19	0.50	1.00	ug/L
71-43-2	Benzene	18.7		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.3		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.0		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.0		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	19.0		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	92.2		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.2		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.6		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.4		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.3		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	91.4		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:	VN1022WBS01		SDG No.:	P4475
Lab Sample ID:	VN1022WBS01		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
VN084453.D	1		10/22/24 14:01	VN102224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	19.6		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	18.4		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	18.7		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	18.1		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	37.8		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.1		0.14	0.50	1.00	ug/L
100-42-5	Styrene	19.2		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	19.2		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.0		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.4		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.2		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.6		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.8		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.2		81 - 118		92%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	48.8		89 - 112		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.0		85 - 114		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	178000	8.224				
540-36-3	1,4-Difluorobenzene	304000	9.1				
3114-55-4	Chlorobenzene-d5	270000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	132000	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:	VN1022WBSD01		SDG No.:	P4475
Lab Sample ID:	VN1022WBSD01		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
VN084454.D	1		10/22/24 14:45	VN102224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	16.1		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	16.5		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	15.7		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	17.9		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.9		0.26	0.75	1.00	ug/L
67-64-1	Acetone	84.1		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	16.6		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.6		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	19.1		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.6		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	92.3		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.6		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.3		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.4		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.9		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	17.3		0.19	0.50	1.00	ug/L
71-43-2	Benzene	18.9		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.6		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.8		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.0		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	19.8		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	99.8		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.0		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.0		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.1		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.9		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	96.4		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:	VN1022WBSD01		SDG No.:	P4475
Lab Sample ID:	VN1022WBSD01		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
VN084454.D	1		10/22/24 14:45	VN102224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	20.9		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.2		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.6		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	18.2		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.8		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	19.0		0.14	0.50	1.00	ug/L
100-42-5	Styrene	19.4		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	20.1		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.2		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.9		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.7		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.9		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.5		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.1		81 - 118		98%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		80 - 119		99%	SPK: 50
2037-26-5	Toluene-d8	48.0		89 - 112		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.9		85 - 114		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	163000	8.224				
540-36-3	1,4-Difluorobenzene	284000	9.1				
3114-55-4	Chlorobenzene-d5	252000	11.865				
3855-82-1	1,4-Dichlorobenzene-d4	121000	13.794				

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:	<u>CHEMTECH</u>	Contract:	<u>TETR06</u>
Lab Code:	<u>CHEM</u>	Case No.:	<u>P4475</u>
Instrument ID:	<u>MSVOA_N</u>	SAS No.:	<u>P4475</u>
Heated Purge: (Y/N)	<u>N</u>	SDG No.:	<u>P4475</u>
GC Column:	<u>RXI-624</u>	Calibration Date(s):	<u>09/30/2024</u>
ID:	<u>0.25 (mm)</u>	Calibration Time(s):	<u>12:25</u>
			<u>14:48</u>

LAB FILE ID:	RRF100 = VN084213.D	RRF050 = VN084214.D	RRF020 = VN084215.D	RRF010 = VN084216.D	RRF005 = VN084217.D	RRF001 = VN084218.D		
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD
Chloromethane	0.619	0.671	0.677	0.648	0.747	0.690	0.675	6.4
Vinyl Chloride	0.611	0.667	0.665	0.641	0.724	0.617	0.654	6.4
Bromomethane	0.368	0.432	0.432	0.424	0.501		0.431	10.9
Chloroethane	0.375	0.419	0.430	0.433	0.522	0.632	0.468	19.9
Trichlorofluoromethane	0.953	1.060	1.047	0.959	1.113	0.978	1.019	6.4
1,1,2-Trichlorotrifluoroethane	0.542	0.590	0.603	0.532	0.633	0.602	0.584	6.7
1,1-Dichloroethene	0.538	0.587	0.596	0.533	0.631	0.493	0.563	8.9
Acetone	0.299	0.342	0.337	0.298	0.336	0.299	0.318	6.8
Carbon Disulfide	1.588	1.723	1.746	1.650	1.908	2.080	1.782	10.2
Methyl tert-butyl Ether	1.825	2.033	2.035	1.802	2.049	1.656	1.900	8.6
Methylene Chloride	0.594	0.655	0.661	0.618	0.669	0.686	0.647	5.3
trans-1,2-Dichloroethene	0.555	0.622	0.619	0.570	0.627	0.546	0.590	6.2
1,1-Dichloroethane	1.075	1.193	1.163	1.084	1.226	1.046	1.131	6.4
2-Butanone	0.395	0.452	0.465	0.419	0.467	0.404	0.434	7.3
Carbon Tetrachloride	0.515	0.549	0.553	0.508	0.545	0.482	0.525	5.4
cis-1,2-Dichloroethene	0.670	0.741	0.741	0.655	0.767	0.703	0.713	6.2
Chloroform	1.083	1.204	1.205	1.117	1.259	1.181	1.175	5.5
1,1,1-Trichloroethane	0.997	1.102	1.089	1.018	1.154	0.972	1.055	6.7
Methylcyclohexane	0.567	0.583	0.577	0.507	0.534	0.428	0.533	11
Benzene	1.434	1.553	1.559	1.410	1.574	1.421	1.492	5.2
1,2-Dichloroethane	0.480	0.528	0.524	0.498	0.544	0.460	0.506	6.3
Trichloroethene	0.334	0.362	0.361	0.329	0.379	0.325	0.348	6.3
1,2-Dichloropropane	0.346	0.375	0.380	0.339	0.388	0.289	0.353	10.4
Bromodichloromethane	0.521	0.557	0.556	0.497	0.570	0.475	0.529	7.2
4-Methyl-2-Pentanone	0.449	0.508	0.510	0.468	0.484	0.387	0.468	9.9
Toluene	0.904	0.970	0.963	0.861	0.920	0.840	0.910	5.8
t-1,3-Dichloropropene	0.562	0.590	0.573	0.517	0.564	0.430	0.539	10.9
cis-1,3-Dichloropropene	0.592	0.638	0.608	0.569	0.606	0.469	0.580	10.2
1,1,2-Trichloroethane	0.317	0.349	0.347	0.316	0.340	0.288	0.326	7.3
2-Hexanone	0.341	0.387	0.387	0.340	0.357	0.285	0.349	10.8

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4475 SAS No.: P4475 SDG No.: P4475

Instrument ID: MSVOA_N Calibration Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Calibration Time(s): 12:25 14:48

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

LAB FILE ID:		RRF100 = VN084213.D		RRF050 = VN084214.D		RRF020 = VN084215.D			
		RRF010 = VN084216.D		RRF005 = VN084217.D		RRF001 = VN084218.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Dibromochloromethane	0.384	0.418	0.409	0.374	0.396	0.330	0.385	8.1	
Tetrachloroethene	0.323	0.359	0.351	0.338	0.373	0.346	0.348	5	
Chlorobenzene	1.068	1.170	1.143	1.069	1.173	1.028	1.109	5.5	
Ethyl Benzene	1.988	2.121	2.028	1.840	2.030	1.756	1.961	6.9	
m/p-Xylenes	0.741	0.806	0.779	0.695	0.729	0.600	0.725	10	
o-Xylene	0.714	0.774	0.738	0.666	0.734	0.491	0.686	14.9	
Styrene	1.234	1.312	1.238	1.112	1.159	0.918	1.162	11.9	
Bromoform	0.282	0.315	0.303	0.260	0.288	0.239	0.281	10	
Isopropylbenzene	3.737	4.132	4.055	3.677	3.864	3.428	3.815	6.8	
1,1,2,2-Tetrachloroethane	1.001	1.183	1.187	1.127	1.291	1.095	1.147	8.5	
1,3-Dichlorobenzene	1.624	1.787	1.780	1.646	1.843	1.679	1.727	5.1	
1,4-Dichlorobenzene	1.628	1.784	1.734	1.638	1.889	1.789	1.744	5.7	
1,2-Dichlorobenzene	1.555	1.710	1.740	1.613	1.769	1.770	1.693	5.3	
1,2-Dichloroethane-d4	0.673	0.737	0.764	0.712	0.821		0.741	7.5	
Dibromofluoromethane	0.308	0.324	0.341	0.316	0.359		0.330	6.1	
Toluene-d8	1.189	1.243	1.242	1.148	1.242		1.213	3.5	
4-Bromofluorobenzene	0.447	0.452	0.449	0.406	0.456		0.442	4.6	

* 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.: P4475 SAS No.: P4475 SDG No.: P4475

Instrument ID: MSVOA_N Calibration Date/Time: 10/22/2024 12:50

Lab File ID: VN084450.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.675	0.586	0.1	-13.19	20
Vinyl Chloride	0.654	0.602		-7.95	20
Bromomethane	0.431	0.382		-11.37	20
Chloroethane	0.468	0.386		-17.52	20
Trichlorofluoromethane	1.019	1.002		-1.67	20
1,1,2-Trichlorotrifluoroethane	0.584	0.581		-0.51	20
1,1-Dichloroethene	0.563	0.575		2.13	20
Acetone	0.318	0.304		-4.4	20
Carbon Disulfide	1.782	1.630		-8.53	20
Methyl tert-butyl Ether	1.900	1.950		2.63	20
Methylene Chloride	0.647	0.645		-0.31	20
trans-1,2-Dichloroethene	0.590	0.615		4.24	20
1,1-Dichloroethane	1.131	1.157	0.1	2.3	20
2-Butanone	0.434	0.422		-2.77	20
Carbon Tetrachloride	0.525	0.551		4.95	20
cis-1,2-Dichloroethene	0.713	0.729		2.24	20
Chloroform	1.175	1.210		2.98	20
1,1,1-Trichloroethane	1.055	1.084		2.75	20
Methylcyclohexane	0.533	0.580		8.82	20
Benzene	1.492	1.558		4.42	20
1,2-Dichloroethane	0.506	0.521		2.96	20
Trichloroethene	0.348	0.369		6.03	20
1,2-Dichloropropane	0.353	0.380		7.65	20
Bromodichloromethane	0.529	0.565		6.8	20
4-Methyl-2-Pentanone	0.468	0.488		4.27	20
Toluene	0.910	0.982		7.91	20
t-1,3-Dichloropropene	0.539	0.578		7.24	20
cis-1,3-Dichloropropene	0.580	0.629		8.45	20
1,1,2-Trichloroethane	0.326	0.358		9.82	20
2-Hexanone	0.349	0.360		3.15	20
Dibromochloromethane	0.385	0.425		10.39	20
Tetrachloroethene	0.348	0.359		3.16	20
Chlorobenzene	1.109	1.161	0.3	4.69	20
Ethyl Benzene	1.961	2.068		5.46	20
m/p-Xylenes	0.725	0.790		8.97	20
o-Xylene	0.686	0.757		10.35	20
Styrene	1.162	1.307		12.48	20
Bromoform	0.281	0.306	0.1	8.9	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.: P4475 SAS No.: P4475 SDG No.: P4475

Instrument ID: MSVOA_N Calibration Date/Time: 10/22/2024 12:50

Lab File ID: VN084450.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.815	3.937		3.2	20
1,1,2,2-Tetrachloroethane	1.147	1.130	0.3	-1.48	20
1,3-Dichlorobenzene	1.727	1.782		3.13	20
1,4-Dichlorobenzene	1.744	1.783		2.24	20
1,2-Dichlorobenzene	1.693	1.708		0.89	20
1,2-Dichloroethane-d4	0.741	0.701		-5.4	20
Dibromofluoromethane	0.330	0.335		1.51	20
Toluene-d8	1.213	1.224		0.91	20
4-Bromofluorobenzene	0.442	0.456		3.17	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.: P4475 SAS No.: P4475 SDG No.: P4475

Instrument ID: MSVOA_N Calibration Date/Time: 10/22/2024 19:10

Lab File ID: VN084464.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.675	0.600	0.1	-11.11	50
Vinyl Chloride	0.654	0.610		-6.73	50
Bromomethane	0.431	0.368		-14.62	50
Chloroethane	0.468	0.401		-14.32	50
Trichlorofluoromethane	1.019	1.030		1.08	50
1,1,2-Trichlorotrifluoroethane	0.584	0.590		1.03	50
1,1-Dichloroethene	0.563	0.581		3.2	50
Acetone	0.318	0.265		-16.67	50
Carbon Disulfide	1.782	1.625		-8.81	50
Methyl tert-butyl Ether	1.900	1.968		3.58	50
Methylene Chloride	0.647	0.678		4.79	50
trans-1,2-Dichloroethene	0.590	0.615		4.24	50
1,1-Dichloroethane	1.131	1.199	0.1	6.01	50
2-Butanone	0.434	0.421		-2.99	50
Carbon Tetrachloride	0.525	0.554		5.52	50
cis-1,2-Dichloroethene	0.713	0.748		4.91	50
Chloroform	1.175	1.260		7.23	50
1,1,1-Trichloroethane	1.055	1.120		6.16	50
Methylcyclohexane	0.533	0.546		2.44	50
Benzene	1.492	1.588		6.43	50
1,2-Dichloroethane	0.506	0.538		6.32	50
Trichloroethene	0.348	0.360		3.45	50
1,2-Dichloropropane	0.353	0.386		9.35	50
Bromodichloromethane	0.529	0.584		10.4	50
4-Methyl-2-Pentanone	0.468	0.515		10.04	50
Toluene	0.910	1.002		10.11	50
t-1,3-Dichloropropene	0.539	0.580		7.61	50
cis-1,3-Dichloropropene	0.580	0.632		8.97	50
1,1,2-Trichloroethane	0.326	0.365		11.96	50
2-Hexanone	0.349	0.380		8.88	50
Dibromochloromethane	0.385	0.436		13.25	50
Tetrachloroethene	0.348	0.357		2.59	50
Chlorobenzene	1.109	1.168	0.3	5.32	50
Ethyl Benzene	1.961	2.096		6.88	50
m/p-Xylenes	0.725	0.809		11.59	50
o-Xylene	0.686	0.772		12.54	50
Styrene	1.162	1.331		14.54	50
Bromoform	0.281	0.323	0.1	14.95	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.: P4475 SAS No.: P4475 SDG No.: P4475

Instrument ID: MSVOA_N Calibration Date/Time: 10/22/2024 19:10

Lab File ID: VN084464.D Init. Calib. Date(s): 09/30/2024 09/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.815	3.895		2.1	50
1,1,2,2-Tetrachloroethane	1.147	1.175	0.3	2.44	50
1,3-Dichlorobenzene	1.727	1.769		2.43	50
1,4-Dichlorobenzene	1.744	1.749		0.29	50
1,2-Dichlorobenzene	1.693	1.724		1.83	50
1,2-Dichloroethane-d4	0.741	0.738		-0.41	50
Dibromofluoromethane	0.330	0.346		4.85	50
Toluene-d8	1.213	1.258		3.71	50
4-Bromofluorobenzene	0.442	0.470		6.34	50

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