

LAB CHRONICLE

OrderID: P4600	OrderDate: 10/29/2024 10:17:00 AM
Client: Tetra Tech NUS, Inc.	Project: CTO WE13
Contact: Ernie Wu	Location: K63,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4600-01	BP-VPB-190-TB-2024 1025	Water			10/25/24			10/28/24
			VOCMS Group1	8260-Low				
P4600-02	BP-VPB-190-DUP-202 41025	Water			10/25/24		10/29/24	10/28/24
			VOCMS Group1	8260-Low				
P4600-03	BP-VPB-190-GW-438- 440	Water			10/25/24		10/29/24	10/28/24
			VOCMS Group1	8260-Low				
P4600-04	BP-VPB-190-GW-458- 460	Water			10/25/24		10/29/24	10/28/24
			VOCMS Group1	8260-Low				
P4600-05	BP-VPB-190-GW-478- 480	Water			10/25/24		10/30/24	10/28/24
			VOCMS Group1	8260-Low				
P4600-06	BP-VPB-190-GW-498- 500	Water			10/28/24		10/29/24	10/28/24
			VOCMS Group1	8260-Low				
P4600-07	BP-VPB-190-GW-518- 520	Water			10/28/24		10/29/24	10/28/24
			VOCMS Group1	8260-Low				

Hit Summary Sheet
SW-846

SDG No.: P4600
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	BP-VPB-190-TB-20241025								
P4600-01	BP-VPB-190-TB-20 Water	Acetone		2.00	J	1.40	3.80	5.00	ug/L
P4600-01	BP-VPB-190-TB-20 Water	Methylene Chloride		0.73	J	0.32	0.50	1.00	ug/L
		Total Voc :		2.73					
		Total Concentration:		2.73					
Client ID:	BP-VPB-190-DUP-20241025								
P4600-02	BP-VPB-190-DUP- Water	Acetone		4.00	J	1.40	3.80	5.00	ug/L
		Total Voc :		4.00					
		Total Concentration:		4.00					
Client ID:	BP-VPB-190-GW-438-440								
P4600-03	BP-VPB-190-GW-4 Water	Acetone		3.30	J	1.40	3.80	5.00	ug/L
		Total Voc :		3.30					
		Total Concentration:		3.30					
Client ID:	BP-VPB-190-GW-458-460								
P4600-04	BP-VPB-190-GW-4 Water	Chloromethane		0.41	J	0.35	0.50	1.00	ug/L
P4600-04	BP-VPB-190-GW-4 Water	Acetone		5.10		1.40	3.80	5.00	ug/L
		Total Voc :		5.51					
		Total Concentration:		5.51					
Client ID:	BP-VPB-190-GW-478-480								
P4600-05	BP-VPB-190-GW-4 Water	Acetone		3.40	J	1.40	3.80	5.00	ug/L
		Total Voc :		3.40					
		Total Concentration:		3.40					
Client ID:	BP-VPB-190-GW-498-500								
P4600-06	BP-VPB-190-GW-4 Water	Acetone		10.6		1.40	3.80	5.00	ug/L
		Total Voc :		10.6					
		Total Concentration:		10.6					
Client ID:	BP-VPB-190-GW-518-520								
P4600-07	BP-VPB-190-GW-5 Water	Acetone		3.60	J	1.40	3.80	5.00	ug/L
		Total Voc :		3.60					
		Total Concentration:		3.60					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-TB-20241025		SDG No.:	P4600	
Lab Sample ID:	P4600-01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043599.D	1		10/29/24 16:01	VX102924

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	2.00	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	0.73	J	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:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-TB-20241025		SDG No.:	P4600	
Lab Sample ID:	P4600-01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043599.D	1		10/29/24 16:01	VX102924

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	43.6		81 - 118		87%	SPK: 50
1868-53-7	Dibromofluoromethane	45.3		80 - 119		91%	SPK: 50
2037-26-5	Toluene-d8	50.1		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.5		85 - 114		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	144000	5.55				
540-36-3	1,4-Difluorobenzene	269000	6.757				
3114-55-4	Chlorobenzene-d5	236000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	104000	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-TB-20241025		SDG No.:	P4600	
Lab Sample ID:	P4600-01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043599.D	1		10/29/24 16:01	VX102924

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:	10/25/24	
Project:	CTO WE13			Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-DUP-20241025			SDG No.:	P4600	
Lab Sample ID:	P4600-02			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043600.D	1		10/29/24 16:24	VX102924

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	4.00	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:	10/25/24		
Project:	CTO WE13			Date Received:	10/28/24		
Client Sample ID:	BP-VPB-190-DUP-20241025			SDG No.:	P4600		
Lab Sample ID:	P4600-02			Matrix:	Water		
Analytical Method:	SW8260			% Solid:	0		
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOCMS Group1		
GC Column:	DB-624UI	ID :	0.18	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043600.D	1		10/29/24 16:24	VX102924

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	44.0		81 - 118		88%	SPK: 50
1868-53-7	Dibromofluoromethane	45.8		80 - 119		92%	SPK: 50
2037-26-5	Toluene-d8	49.9		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.4		85 - 114		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	157000	5.543				
540-36-3	1,4-Difluorobenzene	293000	6.757				
3114-55-4	Chlorobenzene-d5	249000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	109000	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-DUP-20241025		SDG No.:	P4600	
Lab Sample ID:	P4600-02		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043600.D	1		10/29/24 16:24	VX102924

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:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-438-440		SDG No.:	P4600	
Lab Sample ID:	P4600-03		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043601.D	1		10/29/24 16:48	VX102924

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	3.30	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:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-438-440		SDG No.:	P4600	
Lab Sample ID:	P4600-03		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043601.D	1		10/29/24 16:48	VX102924

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	43.3		81 - 118		87%	SPK: 50
1868-53-7	Dibromofluoromethane	45.2		80 - 119		90%	SPK: 50
2037-26-5	Toluene-d8	49.9		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		85 - 114		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	143000	5.55				
540-36-3	1,4-Difluorobenzene	264000	6.757				
3114-55-4	Chlorobenzene-d5	234000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	106000	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-438-440		SDG No.:	P4600	
Lab Sample ID:	P4600-03		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043601.D	1		10/29/24 16:48	VX102924

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:	10/25/24		
Project:	CTO WE13			Date Received:	10/28/24		
Client Sample ID:	BP-VPB-190-GW-458-460			SDG No.:	P4600		
Lab Sample ID:	P4600-04			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:	DB-624UI	ID :	0.18	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043602.D	1		10/29/24 17:11	VX102924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	0.41	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	0.75	U	0.26	0.75	1.00	ug/L
67-64-1	Acetone	5.10		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:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-458-460		SDG No.:	P4600	
Lab Sample ID:	P4600-04		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043602.D	1		10/29/24 17:11	VX102924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.1		81 - 118		94%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		80 - 119		94%	SPK: 50
2037-26-5	Toluene-d8	51.4		89 - 112		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.1		85 - 114		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	107000	5.55				
540-36-3	1,4-Difluorobenzene	198000	6.757				
3114-55-4	Chlorobenzene-d5	185000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	83800	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-458-460		SDG No.:	P4600	
Lab Sample ID:	P4600-04		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043602.D	1		10/29/24 17:11	VX102924

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:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-478-480		SDG No.:	P4600	
Lab Sample ID:	P4600-05		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043616.D	1		10/30/24 12:06	VX103024

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	3.40	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:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-478-480		SDG No.:	P4600	
Lab Sample ID:	P4600-05		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043616.D	1		10/30/24 12:06	VX103024

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	41.9		81 - 118		84%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		80 - 119		91%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.2		85 - 114		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	143000	5.55				
540-36-3	1,4-Difluorobenzene	259000	6.757				
3114-55-4	Chlorobenzene-d5	229000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	100000	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/25/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-478-480		SDG No.:	P4600	
Lab Sample ID:	P4600-05		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043616.D	1		10/30/24 12:06	VX103024

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:	10/28/24	
Project:	CTO WE13			Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-498-500			SDG No.:	P4600	
Lab Sample ID:	P4600-06			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:	DB-624UI	ID :	0.18	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043604.D	1		10/29/24 17:57	VX102924

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	10.6		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:	10/28/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-498-500		SDG No.:	P4600	
Lab Sample ID:	P4600-06		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043604.D	1		10/29/24 17:57	VX102924

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	43.8		81 - 118		88%	SPK: 50
1868-53-7	Dibromofluoromethane	45.9		80 - 119		92%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.2		85 - 114		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	128000	5.55				
540-36-3	1,4-Difluorobenzene	238000	6.757				
3114-55-4	Chlorobenzene-d5	216000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	99200	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/28/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-498-500		SDG No.:	P4600	
Lab Sample ID:	P4600-06		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043604.D	1		10/29/24 17:57	VX102924

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:	10/28/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-518-520		SDG No.:	P4600	
Lab Sample ID:	P4600-07		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043605.D	1		10/29/24 18:20	VX102924

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	3.60	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:	10/28/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-518-520		SDG No.:	P4600	
Lab Sample ID:	P4600-07		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043605.D	1		10/29/24 18:20	VX102924

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	42.7		81 - 118		85%	SPK: 50
1868-53-7	Dibromofluoromethane	45.2		80 - 119		90%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		85 - 114		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	134000	5.544				
540-36-3	1,4-Difluorobenzene	245000	6.757				
3114-55-4	Chlorobenzene-d5	220000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	98000	12.024				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/28/24	
Project:	CTO WE13		Date Received:	10/28/24	
Client Sample ID:	BP-VPB-190-GW-518-520		SDG No.:	P4600	
Lab Sample ID:	P4600-07		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:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043605.D	1		10/29/24 18:20	VX102924

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.: **P4600**

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

Analytical Method: **SW8260-Low**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P4600-01	BP-VPB-190-TB-20241025	1,2-Dichloroethane-d4	50	43.6	87	81	118
		Dibromofluoromethane	50	45.3	91	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	46.5	93	85	114
P4600-02	BP-VPB-190-DUP-20241025	1,2-Dichloroethane-d4	50	44.0	88	81	118
		Dibromofluoromethane	50	45.8	92	80	119
		Toluene-d8	50	49.9	100	89	112
		4-Bromofluorobenzene	50	45.4	91	85	114
P4600-03	BP-VPB-190-GW-438-440	1,2-Dichloroethane-d4	50	43.3	87	81	118
		Dibromofluoromethane	50	45.2	90	80	119
		Toluene-d8	50	49.9	100	89	112
		4-Bromofluorobenzene	50	48.2	96	85	114
P4600-04	BP-VPB-190-GW-458-460	1,2-Dichloroethane-d4	50	47.1	94	81	118
		Dibromofluoromethane	50	46.9	94	80	119
		Toluene-d8	50	51.4	103	89	112
		4-Bromofluorobenzene	50	51.1	102	85	114
P4600-05	BP-VPB-190-GW-478-480	1,2-Dichloroethane-d4	50	42.0	84	81	118
		Dibromofluoromethane	50	46.0	92	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	47.0	94	85	114
P4600-06	BP-VPB-190-GW-498-500	1,2-Dichloroethane-d4	50	43.8	88	81	118
		Dibromofluoromethane	50	45.9	92	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	51.2	102	85	114
P4600-07	BP-VPB-190-GW-518-520	1,2-Dichloroethane-d4	50	42.8	85	81	118
		Dibromofluoromethane	50	45.2	90	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	48.3	97	85	114
VX1029WBL01	VX1029WBL01	1,2-Dichloroethane-d4	50	43.4	87	81	118
		Dibromofluoromethane	50	45.5	91	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	50.6	101	85	114
VX1029WBS01	VX1029WBS01	1,2-Dichloroethane-d4	50	42.1	84	81	118
		Dibromofluoromethane	50	46.6	93	80	119
		Toluene-d8	50	48.3	97	89	112
		4-Bromofluorobenzene	50	47.0	94	85	114
VX1029WBSD0	VX1029WBSD01	1,2-Dichloroethane-d4	50	42.9	86	81	118
		Dibromofluoromethane	50	47.2	94	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	50.0	100	85	114
VX1030WBL01	VX1030WBL01	1,2-Dichloroethane-d4	50	44.0	88	81	118
		Dibromofluoromethane	50	45.0	90	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	47.0	94	85	114
VX1030WBS01	VX1030WBS01	1,2-Dichloroethane-d4	50	46.0	92	81	118
		Dibromofluoromethane	50	48.0	96	80	119
		Toluene-d8	50	51.0	102	89	112
		4-Bromofluorobenzene	50	52.0	104	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4600

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX043586.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX1029WBS01	Chloromethane	20	16.0	ug/L	80			50	139	
	Vinyl chloride	20	18.2	ug/L	91			58	137	
	Bromomethane	20	17.4	ug/L	87			53	141	
	Chloroethane	20	19.0	ug/L	95			60	138	
	Trichlorofluoromethane	20	20.7	ug/L	104			65	141	
	1,1,2-Trichlorotrifluoroethane	20	21.4	ug/L	107			70	136	
	1,1-Dichloroethene	20	19.4	ug/L	97			71	131	
	Acetone	100	92.3	ug/L	92			39	160	
	Carbon disulfide	20	18.2	ug/L	91			64	133	
	Methyl tert-butyl Ether	20	17.4	ug/L	87			71	124	
	Methylene Chloride	20	17.1	ug/L	86			74	124	
	trans-1,2-Dichloroethene	20	19.3	ug/L	97			75	124	
	1,1-Dichloroethane	20	17.9	ug/L	90			77	125	
	2-Butanone	100	86.1	ug/L	86			56	143	
	Carbon Tetrachloride	20	20.1	ug/L	101			72	136	
	cis-1,2-Dichloroethene	20	18.4	ug/L	92			78	123	
	Chloroform	20	18.1	ug/L	91			79	124	
	1,1,1-Trichloroethane	20	19.4	ug/L	97			74	131	
	Methylcyclohexane	20	21.3	ug/L	106			72	132	
	Benzene	20	18.9	ug/L	95			79	120	
	1,2-Dichloroethane	20	18.3	ug/L	92			73	128	
	Trichloroethene	20	19.6	ug/L	98			79	123	
	1,2-Dichloropropane	20	18.2	ug/L	91			78	122	
	Bromodichloromethane	20	18.3	ug/L	92			79	125	
	4-Methyl-2-Pentanone	100	90.2	ug/L	90			67	130	
	Toluene	20	19.9	ug/L	100			80	121	
	t-1,3-Dichloropropene	20	17.7	ug/L	89			73	127	
	cis-1,3-Dichloropropene	20	19.5	ug/L	98			75	124	
	1,1,2-Trichloroethane	20	18.8	ug/L	94			80	119	
	2-Hexanone	100	91.2	ug/L	91			57	139	
	Dibromochloromethane	20	18.7	ug/L	94			74	126	
	Tetrachloroethene	20	21.2	ug/L	106			74	129	
	Chlorobenzene	20	19.4	ug/L	97			82	118	
	Ethyl Benzene	20	20.2	ug/L	101			79	121	
	m/p-Xylenes	40	40.6	ug/L	102			80	121	
	o-Xylene	20	20.1	ug/L	101			78	122	
	Styrene	20	20.2	ug/L	101			78	123	
	Bromoform	20	17.8	ug/L	89			66	130	
	Isopropylbenzene	20	20.5	ug/L	103			72	131	
	1,1,2,2-Tetrachloroethane	20	18.5	ug/L	93			71	121	
	1,3-Dichlorobenzene	20	19.7	ug/L	99			80	119	
	1,4-Dichlorobenzene	20	19.3	ug/L	97			79	118	
	1,2-Dichlorobenzene	20	19.3	ug/L	97			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4600

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX043587.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX1029WBSD01	Chloromethane	20	16.6	ug/L	83	4		50	139	20
	Vinyl chloride	20	18.1	ug/L	91	0		58	137	20
	Bromomethane	20	18.6	ug/L	93	7		53	141	20
	Chloroethane	20	18.9	ug/L	95	0		60	138	20
	Trichlorofluoromethane	20	20.6	ug/L	103	1		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	19.8	ug/L	99	8		70	136	20
	1,1-Dichloroethene	20	19.1	ug/L	96	1		71	131	20
	Acetone	100	95.8	ug/L	96	4		39	160	20
	Carbon disulfide	20	18.1	ug/L	91	0		64	133	20
	Methyl tert-butyl Ether	20	17.9	ug/L	90	3		71	124	20
	Methylene Chloride	20	17.0	ug/L	85	1		74	124	20
	trans-1,2-Dichloroethene	20	18.7	ug/L	94	3		75	124	20
	1,1-Dichloroethane	20	18.4	ug/L	92	2		77	125	20
	2-Butanone	100	91.3	ug/L	91	6		56	143	20
	Carbon Tetrachloride	20	20.0	ug/L	100	1		72	136	20
	cis-1,2-Dichloroethene	20	18.6	ug/L	93	1		78	123	20
	Chloroform	20	18.3	ug/L	92	1		79	124	20
	1,1,1-Trichloroethane	20	19.1	ug/L	96	1		74	131	20
	Methylcyclohexane	20	21.0	ug/L	105	1		72	132	20
	Benzene	20	19.5	ug/L	98	3		79	120	20
	1,2-Dichloroethane	20	19.2	ug/L	96	4		73	128	20
	Trichloroethene	20	19.5	ug/L	98	0		79	123	20
	1,2-Dichloropropane	20	19.1	ug/L	96	5		78	122	20
	Bromodichloromethane	20	18.9	ug/L	95	3		79	125	20
	4-Methyl-2-Pentanone	100	98.8	ug/L	99	10		67	130	20
	Toluene	20	20.2	ug/L	101	1		80	121	20
	t-1,3-Dichloropropene	20	19.1	ug/L	96	8		73	127	20
	cis-1,3-Dichloropropene	20	20.1	ug/L	101	3		75	124	20
	1,1,2-Trichloroethane	20	20.3	ug/L	102	8		80	119	20
	2-Hexanone	100	100	ug/L	100	9		57	139	20
	Dibromochloromethane	20	19.6	ug/L	98	4		74	126	20
	Tetrachloroethene	20	21.1	ug/L	106	0		74	129	20
	Chlorobenzene	20	19.8	ug/L	99	2		82	118	20
	Ethyl Benzene	20	20.2	ug/L	101	0		79	121	20
	m/p-Xylenes	40	41.9	ug/L	105	3		80	121	20
	o-Xylene	20	20.8	ug/L	104	3		78	122	20
	Styrene	20	20.5	ug/L	103	2		78	123	20
	Bromoform	20	18.8	ug/L	94	5		66	130	20
	Isopropylbenzene	20	20.5	ug/L	103	0		72	131	20
	1,1,2,2-Tetrachloroethane	20	19.6	ug/L	98	5		71	121	20
	1,3-Dichlorobenzene	20	20.0	ug/L	100	1		80	119	20
	1,4-Dichlorobenzene	20	19.1	ug/L	96	1		79	118	20
	1,2-Dichlorobenzene	20	20.1	ug/L	101	4		80	119	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: **P4600**

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

Analytical Method: **SW8260-Low**

Datafile : VX043613.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX1030WBS01	Chloromethane	20	17.0	ug/L	85			50	139	
	Vinyl chloride	20	18.0	ug/L	90			58	137	
	Bromomethane	20	19.0	ug/L	95			53	141	
	Chloroethane	20	18.0	ug/L	90			60	138	
	Trichlorofluoromethane	20	18.0	ug/L	90			65	141	
	1,1,2-Trichlorotrifluoroethane	20	19.0	ug/L	95			70	136	
	1,1-Dichloroethene	20	18.0	ug/L	90			71	131	
	Acetone	100	99.0	ug/L	99			39	160	
	Carbon disulfide	20	15.0	ug/L	75			64	133	
	Methyl tert-butyl Ether	20	19.0	ug/L	95			71	124	
	Methylene Chloride	20	18.0	ug/L	90			74	124	
	trans-1,2-Dichloroethene	20	18.0	ug/L	90			75	124	
	1,1-Dichloroethane	20	18.0	ug/L	90			77	125	
	2-Butanone	100	100	ug/L	100			56	143	
	Carbon Tetrachloride	20	18.0	ug/L	90			72	136	
	cis-1,2-Dichloroethene	20	19.0	ug/L	95			78	123	
	Chloroform	20	19.0	ug/L	95			79	124	
	1,1,1-Trichloroethane	20	18.0	ug/L	90			74	131	
	Methylcyclohexane	20	19.0	ug/L	95			72	132	
	Benzene	20	19.0	ug/L	95			79	120	
	1,2-Dichloroethane	20	19.0	ug/L	95			73	128	
	Trichloroethene	20	18.0	ug/L	90			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	100	ug/L	100			67	130	
	Toluene	20	20.0	ug/L	100			80	121	
	t-1,3-Dichloropropene	20	18.0	ug/L	90			73	127	
	cis-1,3-Dichloropropene	20	20.0	ug/L	100			75	124	
	1,1,2-Trichloroethane	20	20.0	ug/L	100			80	119	
	2-Hexanone	100	100	ug/L	100			57	139	
	Dibromochloromethane	20	19.0	ug/L	95			74	126	
	Tetrachloroethene	20	19.0	ug/L	95			74	129	
	Chlorobenzene	20	19.0	ug/L	95			82	118	
	Ethyl Benzene	20	19.0	ug/L	95			79	121	
	m/p-Xylenes	40	39.0	ug/L	98			80	121	
	o-Xylene	20	20.0	ug/L	100			78	122	
	Styrene	20	20.0	ug/L	100			78	123	
	Bromoform	20	18.0	ug/L	90			66	130	
	Isopropylbenzene	20	19.0	ug/L	95			72	131	
	1,1,2,2-Tetrachloroethane	20	19.0	ug/L	95			71	121	
	1,3-Dichlorobenzene	20	19.0	ug/L	95			80	119	
	1,4-Dichlorobenzene	20	19.0	ug/L	95			79	118	
	1,2-Dichlorobenzene	20	20.0	ug/L	100			80	119	

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX1029WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4600

SAS No.: P4600 SDG NO.: P4600

Lab File ID: VX043585.D

Lab Sample ID: VX1029WBL01

Date Analyzed: 10/29/2024

Time Analyzed: 10:31

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX1029WBS01	VX1029WBS01	VX043586.D	10/29/2024
VX1029WBSD01	VX1029WBSD01	VX043587.D	10/29/2024
BP-VPB-190-TB-20241025	P4600-01	VX043599.D	10/29/2024
BP-VPB-190-DUP-20241025	P4600-02	VX043600.D	10/29/2024
BP-VPB-190-GW-438-440	P4600-03	VX043601.D	10/29/2024
BP-VPB-190-GW-458-460	P4600-04	VX043602.D	10/29/2024
BP-VPB-190-GW-498-500	P4600-06	VX043604.D	10/29/2024
BP-VPB-190-GW-518-520	P4600-07	VX043605.D	10/29/2024

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX1030WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4600

SAS No.: P4600 SDG NO.: P4600

Lab File ID: VX043612.D

Lab Sample ID: VX1030WBL01

Date Analyzed: 10/30/2024

Time Analyzed: 10:22

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX1030WBS01	VX1030WBS01	VX043613.D	10/30/2024
BP-VPB-190-GW-478-480	P4600-05	VX043616.D	10/30/2024

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043555.D BFB Injection Date: 10/28/2024
Instrument ID: MSVOA_X BFB Injection Time: 10:09
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.8
75	30.0 - 60.0% of mass 95	50.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.8 (1.2) 1
174	50.0 - 100.0% of mass 95	71.2
175	5.0 - 9.0% of mass 174	5.6 (7.9) 1
176	95.0 - 101.0% of mass 174	68.9 (96.7) 1
177	5.0 - 9.0% of mass 176	4.1 (6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC001	VSTDIC001	VX043556.D	10/28/2024	10:59
VSTDIC005	VSTDIC005	VX043557.D	10/28/2024	11:22
VSTDIC020	VSTDIC020	VX043558.D	10/28/2024	11:45
VSTDIC050	VSTDIC050	VX043559.D	10/28/2024	12:08
VSTDIC100	VSTDIC100	VX043560.D	10/28/2024	12:31
VSTDIC150	VSTDIC150	VX043561.D	10/28/2024	12:54

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043582.D BFB Injection Date: 10/29/2024
Instrument ID: MSVOA_X BFB Injection Time: 08:30
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 60.0% of mass 95	50.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	73.3
175	5.0 - 9.0% of mass 174	5.5 (7.5) 1
176	95.0 - 101.0% of mass 174	70.5 (96.2) 1
177	5.0 - 9.0% of mass 176	4.7 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX043583.D	10/29/2024	09:29
VX1029WBL01	VX1029WBL01	VX043585.D	10/29/2024	10:31
VX1029WBS01	VX1029WBS01	VX043586.D	10/29/2024	10:57
VX1029WBSD01	VX1029WBSD01	VX043587.D	10/29/2024	11:20
BP-VPB-190-TB-20241025	P4600-01	VX043599.D	10/29/2024	16:01
BP-VPB-190-DUP-20241025	P4600-02	VX043600.D	10/29/2024	16:24
BP-VPB-190-GW-438-440	P4600-03	VX043601.D	10/29/2024	16:48
BP-VPB-190-GW-458-460	P4600-04	VX043602.D	10/29/2024	17:11
BP-VPB-190-GW-498-500	P4600-06	VX043604.D	10/29/2024	17:57
BP-VPB-190-GW-518-520	P4600-07	VX043605.D	10/29/2024	18:20
VSTDCCC050EC	VSTDCCC050	VX043608.D	10/29/2024	19:29

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043609.D BFB Injection Date: 10/30/2024
Instrument ID: MSVOA_X BFB Injection Time: 08:59
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	46.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	72
175	5.0 - 9.0% of mass 174	5.4 (7.5) 1
176	95.0 - 101.0% of mass 174	70.9 (98.5) 1
177	5.0 - 9.0% of mass 176	4.2 (6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX043610.D	10/30/2024	09:26
VX1030WBL01	VX1030WBL01	VX043612.D	10/30/2024	10:22
VX1030WBS01	VX1030WBS01	VX043613.D	10/30/2024	10:56
BP-VPB-190-GW-478-480	P4600-05	VX043616.D	10/30/2024	12:06
VSTDCCC050EC	VSTDCCC050	VX043635.D	10/30/2024	19:25

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043583.D Date Analyzed: 10/29/2024
Instrument ID: MSVOA_X Time Analyzed: 09:29
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	185040	5.54	317661	6.76	277122	10.06
UPPER LIMIT	370080	6.044	635322	7.257	554244	10.555
LOWER LIMIT	92520	5.044	158831	6.257	138561	9.555
EPA SAMPLE NO.						
BP-VPB-190-TB-20241025	143669	5.55	269321	6.76	235549	10.06
BP-VPB-190-DUP-20241025	157457	5.54	292690	6.76	249474	10.06
BP-VPB-190-GW-438-440	143380	5.55	264264	6.76	234277	10.06
BP-VPB-190-GW-458-460	106562	5.55	197540	6.76	185294	10.06
BP-VPB-190-GW-498-500	128235	5.55	237971	6.76	216332	10.06
BP-VPB-190-GW-518-520	133601	5.54	245193	6.76	219937	10.06
VX1029WBL01	160199	5.55	295395	6.76	265502	10.06
VX1029WBS01	202431	5.54	352202	6.76	294857	10.06
VX1029WBSD01	180366	5.55	312050	6.76	270005	10.06

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.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043583.D Date Analyzed: 10/29/2024
Instrument ID: MSVOA_X Time Analyzed: 09:29
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	136145	12.018				
UPPER LIMIT	272290	12.518				
LOWER LIMIT	68072.5	11.518				
EPA SAMPLE NO.						
BP-VPB-190-TB-20241025	104072	12.02				
BP-VPB-190-DUP-20241025	109255	12.02				
BP-VPB-190-GW-438-440	105995	12.02				
BP-VPB-190-GW-458-460	83818	12.02				
BP-VPB-190-GW-498-500	99219	12.02				
BP-VPB-190-GW-518-520	98034	12.02				
VX1029WBL01	128354	12.02				
VX1029WBS01	142936	12.02				
VX1029WBSD01	131226	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043610.D Date Analyzed: 10/30/2024
Instrument ID: MSVOA_X Time Analyzed: 09:26
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	150073	5.54	269353	6.76	239151	10.06
UPPER LIMIT	300146	6.044	538706	7.257	478302	10.555
LOWER LIMIT	75036.5	5.044	134677	6.257	119576	9.555
EPA SAMPLE NO.						
BP-VPB-190-GW-478-480	143159	5.55	259096	6.76	228779	10.06
VX1030WBL01	124305	5.54	229429	6.76	204357	10.06
VX1030WBS01	148306	5.54	264784	6.76	239021	10.06

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.: P4600 SAS No.: P4600 SDG NO.: P4600
Lab File ID: VX043610.D Date Analyzed: 10/30/2024
Instrument ID: MSVOA_X Time Analyzed: 09:26
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	115673	12.018				
UPPER LIMIT	231346	12.518				
LOWER LIMIT	57836.5	11.518				
EPA SAMPLE NO.						
BP-VPB-190-GW-478-480	100346	12.02				
VX1030WBL01	87309	12.02				
VX1030WBS01	117960	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX1029WBL01		SDG No.:	P4600
Lab Sample ID:	VX1029WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043585.D	1		10/29/24 10:31	VX102924

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:	VX1029WBL01		SDG No.:	P4600
Lab Sample ID:	VX1029WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043585.D	1		10/29/24 10:31	VX102924

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	43.4		81 - 118		87%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		80 - 119		91%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.6		85 - 114		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	160000	5.55				
540-36-3	1,4-Difluorobenzene	295000	6.757				
3114-55-4	Chlorobenzene-d5	266000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	128000	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX1030WBL01		SDG No.:	P4600
Lab Sample ID:	VX1030WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043612.D	1		10/30/24 10:22	VX103024

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:	VX1030WBL01		SDG No.:	P4600
Lab Sample ID:	VX1030WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043612.D	1		10/30/24 10:22	VX103024

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	43.6		81 - 118		87%	SPK: 50
1868-53-7	Dibromofluoromethane	45.2		80 - 119		90%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		85 - 114		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	124000	5.544				
540-36-3	1,4-Difluorobenzene	229000	6.757				
3114-55-4	Chlorobenzene-d5	204000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	87300	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX1029WBS01		SDG No.:	P4600
Lab Sample ID:	VX1029WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043586.D	1		10/29/24 10:57	VX102924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	16.0		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	17.4		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.0		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	21.4		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.4		0.26	0.75	1.00	ug/L
67-64-1	Acetone	92.3		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	18.2		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.4		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	17.1		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.3		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	17.9		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	86.1		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.1		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.4		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	18.1		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.4		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	21.3		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	18.3		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.6		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.2		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	18.3		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	90.2		0.75	2.50	5.00	ug/L
108-88-3	Toluene	19.9		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	17.7		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.5		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.8		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	91.2		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:	VX1029WBS01	SDG No.:	P4600	
Lab Sample ID:	VX1029WBS01	Matrix:	Water	
Analytical Method:	SW8260	% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	
Soil Aliquot Vol:			uL	
GC Column:	DB-624UI	ID :	0.18	
Prep Method :		Level :	LOW	
		Final Vol:	5000	uL
		Test:	VOCMS Group1	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043586.D	1		10/29/24 10:57	VX102924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	18.7		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	21.2		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.4		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.2		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	40.6		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.1		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.2		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	17.8		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	20.5		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.5		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.7		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.3		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.3		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	42.1		81 - 118		84%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		80 - 119		93%	SPK: 50
2037-26-5	Toluene-d8	48.3		89 - 112		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.0		85 - 114		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	202000	5.544				
540-36-3	1,4-Difluorobenzene	352000	6.757				
3114-55-4	Chlorobenzene-d5	295000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	143000	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX1030WBS01		SDG No.:	P4600
Lab Sample ID:	VX1030WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043613.D	1		10/30/24 10:56	VX103024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	17.0		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.0		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	19.0		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	18.0		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.0		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.0		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.0		0.26	0.75	1.00	ug/L
67-64-1	Acetone	99.0		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	15.0		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.0		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	18.0		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	18.0		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	100		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.0		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	19.0		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.0		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	19.0		0.19	0.50	1.00	ug/L
71-43-2	Benzene	19.0		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.0		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.0		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	100		0.75	2.50	5.00	ug/L
108-88-3	Toluene	20.0		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.0		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.0		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.0		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	100		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:	VX1030WBS01	SDG No.:	P4600	
Lab Sample ID:	VX1030WBS01	Matrix:	Water	
Analytical Method:	SW8260	% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	
Soil Aliquot Vol:			uL	
GC Column:	DB-624UI	ID :	0.18	
Prep Method :		Level :	LOW	
		Final Vol:	5000	uL
		Test:	VOCMS Group1	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043613.D	1		10/30/24 10:56	VX103024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	19.0		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	19.0		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.0		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.0		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	39.0		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	20.0		0.14	0.50	1.00	ug/L
100-42-5	Styrene	20.0		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	18.0		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	19.0		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.0		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.0		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.0		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.0		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	48.0		80 - 119		96%	SPK: 50
2037-26-5	Toluene-d8	51.0		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.0		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	148000	5.544				
540-36-3	1,4-Difluorobenzene	265000	6.757				
3114-55-4	Chlorobenzene-d5	239000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	118000	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX1029WBSD01		SDG No.:	P4600
Lab Sample ID:	VX1029WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043587.D	1		10/29/24 11:20	VX102924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	16.6		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.1		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	18.6		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	18.9		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	20.6		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.8		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	95.8		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	18.1		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.9		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	17.0		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.7		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.4		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	91.3		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	18.6		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	18.3		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.1		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	21.0		0.19	0.50	1.00	ug/L
71-43-2	Benzene	19.5		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.2		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.5		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.1		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	18.9		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	98.8		0.75	2.50	5.00	ug/L
108-88-3	Toluene	20.2		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.1		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.1		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	100		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:	VX1029WBSD01		SDG No.:	P4600
Lab Sample ID:	VX1029WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX043587.D	1		10/29/24 11:20	VX102924

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	21.1		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.8		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	20.2		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	41.9		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	20.5		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	18.8		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	20.5		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.6		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.0		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.1		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.1		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	42.9		81 - 118		86%	SPK: 50
1868-53-7	Dibromofluoromethane	47.2		80 - 119		94%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.1		85 - 114		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	180000	5.55				
540-36-3	1,4-Difluorobenzene	312000	6.757				
3114-55-4	Chlorobenzene-d5	270000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	131000	12.024				

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>P4600</u>
Instrument ID:	<u>MSVOA_X</u>	SAS No.:	<u>P4600</u>
Heated Purge: (Y/N)	<u>N</u>	SDG No.:	<u>P4600</u>
GC Column:	<u>DB-624UI</u>	Calibration Date(s):	<u>10/28/2024</u>
ID:	<u>0.18 (mm)</u>	Calibration Time(s):	<u>10:59</u>
			<u>12:54</u>

LAB FILE ID:	RRF001 = VX043556.D	RRF005 = VX043557.D	RRF020 = VX043558.D	RRF050 = VX043559.D	RRF100 = VX043560.D	RRF150 = VX043561.D		
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Chloromethane	0.795	0.703	0.678	0.651	0.662	0.612	0.684	9.1
Vinyl Chloride	0.626	0.674	0.638	0.634	0.643	0.591	0.634	4.2
Bromomethane		0.267	0.246	0.262	0.260	0.258	0.259	2.9
Chloroethane	0.263	0.215	0.212	0.225	0.217	0.210	0.223	9
Trichlorofluoromethane	0.823	0.776	0.710	0.779	0.846	0.716	0.775	7.1
1,1,2-Trichlorotrifluoroethane	0.522	0.546	0.522	0.525	0.539	0.491	0.524	3.7
1,1-Dichloroethene	0.533	0.555	0.521	0.536	0.556	0.513	0.536	3.3
Acetone	0.365	0.320	0.294	0.312	0.314	0.295	0.317	8.2
Carbon Disulfide	1.067	0.974	1.007	1.134	1.310	1.227	1.120	11.6
Methyl tert-butyl Ether	1.992	2.025	2.038	2.080	2.086	1.999	2.037	1.9
Methylene Chloride	0.772	0.699	0.663	0.663	0.665	0.633	0.682	7.2
trans-1,2-Dichloroethene	0.559	0.557	0.577	0.562	0.594	0.546	0.566	3
1,1-Dichloroethane	1.103	1.105	1.103	1.109	1.135	1.048	1.101	2.6
2-Butanone	0.427	0.462	0.457	0.483	0.484	0.459	0.462	4.5
Carbon Tetrachloride	0.462	0.442	0.423	0.444	0.465	0.429	0.444	3.8
cis-1,2-Dichloroethene	0.708	0.719	0.716	0.740	0.747	0.707	0.723	2.3
Chloroform	1.171	1.170	1.165	1.163	1.166	1.087	1.154	2.8
1,1,1-Trichloroethane	0.939	0.949	0.978	0.986	1.020	0.939	0.969	3.3
Methylcyclohexane	0.475	0.509	0.515	0.510	0.512	0.473	0.499	3.9
Benzene	1.335	1.396	1.383	1.355	1.333	1.246	1.341	4
1,2-Dichloroethane	0.455	0.488	0.500	0.495	0.489	0.466	0.482	3.6
Trichloroethene	0.321	0.345	0.338	0.338	0.341	0.317	0.333	3.4
1,2-Dichloropropane	0.327	0.339	0.325	0.338	0.333	0.320	0.330	2.2
Bromodichloromethane	0.378	0.415	0.435	0.476	0.495	0.477	0.446	10
4-Methyl-2-Pentanone	0.416	0.497	0.507	0.525	0.518	0.491	0.492	8
Toluene	0.743	0.832	0.866	0.838	0.831	0.769	0.813	5.7
t-1,3-Dichloropropene	0.421	0.424	0.485	0.509	0.526	0.510	0.479	9.6
cis-1,3-Dichloropropene	0.393	0.495	0.535	0.543	0.560	0.536	0.510	12
1,1,2-Trichloroethane	0.318	0.341	0.345	0.355	0.345	0.327	0.339	4.1
2-Hexanone	0.333	0.369	0.380	0.400	0.392	0.368	0.374	6.3

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:59 12:54

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

LAB FILE ID:		RRF001 = VX043556.D		RRF005 = VX043557.D		RRF020 = VX043558.D			
		RRF050 = VX043559.D		RRF100 = VX043560.D		RRF150 = VX043561.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Dibromochloromethane	0.259	0.289	0.332	0.367	0.387	0.377	0.335	15.4	
Tetrachloroethene	0.337	0.323	0.327	0.309	0.308	0.284	0.314	5.8	
Chlorobenzene	1.098	1.110	1.083	1.075	1.081	1.007	1.076	3.3	
Ethyl Benzene	1.757	1.763	1.799	1.777	1.794	1.634	1.754	3.5	
m/p-Xylenes	0.625	0.680	0.708	0.691	0.691	0.629	0.671	5.2	
o-Xylene	0.616	0.698	0.698	0.689	0.698	0.645	0.674	5.2	
Styrene	1.007	1.055	1.174	1.183	1.189	1.114	1.120	6.8	
Bromoform	0.203	0.206	0.230	0.275	0.304	0.297	0.253	17.9	
Isopropylbenzene	3.522	3.684	3.705	3.560	3.549	3.230	3.542	4.8	
1,1,2,2-Tetrachloroethane	1.210	1.355	1.316	1.292	1.276	1.193	1.274	4.9	
1,3-Dichlorobenzene	1.645	1.695	1.647	1.646	1.654	1.548	1.639	3	
1,4-Dichlorobenzene	1.917	1.720	1.694	1.653	1.657	1.551	1.699	7.1	
1,2-Dichlorobenzene	1.638	1.735	1.698	1.726	1.675	1.586	1.676	3.4	
1,2-Dichloroethane-d4		0.902	0.794	0.785	0.771	0.735	0.797	7.9	
Dibromofluoromethane		0.358	0.337	0.336	0.342	0.323	0.339	3.7	
Toluene-d8		1.255	1.206	1.175	1.159	1.072	1.174	5.8	
4-Bromofluorobenzene		0.446	0.431	0.444	0.439	0.415	0.435	2.9	

* 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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/29/2024 09:29

Lab File ID: VX043583.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.684	0.597	0.1	-12.72	20
Vinyl Chloride	0.634	0.614		-3.31	20
Bromomethane	0.259	0.236		-8.88	20
Chloroethane	0.223	0.209		-6.28	20
Trichlorofluoromethane	0.775	0.759		-2.07	20
1,1,2-Trichlorotrifluoroethane	0.524	0.542		3.43	20
1,1-Dichloroethene	0.536	0.536		0	20
Acetone	0.317	0.297		-6.31	20
Carbon Disulfide	1.120	1.146		2.32	20
Methyl tert-butyl Ether	2.037	1.814		-10.95	20
Methylene Chloride	0.682	0.601		-11.88	20
trans-1,2-Dichloroethene	0.566	0.555		-1.94	20
1,1-Dichloroethane	1.101	1.028	0.1	-6.63	20
2-Butanone	0.462	0.403		-12.77	20
Carbon Tetrachloride	0.444	0.466		4.95	20
cis-1,2-Dichloroethene	0.723	0.687		-4.98	20
Chloroform	1.154	1.065		-7.71	20
1,1,1-Trichloroethane	0.969	0.948		-2.17	20
Methylcyclohexane	0.499	0.574		15.03	20
Benzene	1.341	1.333		-0.6	20
1,2-Dichloroethane	0.482	0.452		-6.22	20
Trichloroethene	0.333	0.351		5.41	20
1,2-Dichloropropane	0.330	0.327		-0.91	20
Bromodichloromethane	0.446	0.461		3.36	20
4-Methyl-2-Pentanone	0.492	0.451		-8.33	20
Toluene	0.813	0.854		5.04	20
t-1,3-Dichloropropene	0.479	0.490		2.3	20
cis-1,3-Dichloropropene	0.510	0.537		5.29	20
1,1,2-Trichloroethane	0.339	0.329		-2.95	20
2-Hexanone	0.374	0.352		-5.88	20
Dibromochloromethane	0.335	0.358		6.87	20
Tetrachloroethene	0.314	0.333		6.05	20
Chlorobenzene	1.076	1.092	0.3	1.49	20
Ethyl Benzene	1.754	1.860		6.04	20
m/p-Xylenes	0.671	0.725		8.05	20
o-Xylene	0.674	0.708		5.05	20
Styrene	1.120	1.213		8.3	20
Bromoform	0.253	0.265	0.1	4.74	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/29/2024 09:29

Lab File ID: VX043583.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.542	3.725		5.17	20
1,1,2,2-Tetrachloroethane	1.274	1.176	0.3	-7.69	20
1,3-Dichlorobenzene	1.639	1.707		4.15	20
1,4-Dichlorobenzene	1.699	1.695		-0.23	20
1,2-Dichlorobenzene	1.676	1.698		1.31	20
1,2-Dichloroethane-d4	0.797	0.708		-11.17	20
Dibromofluoromethane	0.339	0.345		1.77	20
Toluene-d8	1.174	1.260		7.32	20
4-Bromofluorobenzene	0.435	0.471		8.28	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/29/2024 19:29

Lab File ID: VX043608.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.684	0.630	0.1	-7.89	50
Vinyl Chloride	0.634	0.622		-1.89	50
Bromomethane	0.259	0.257		-0.77	50
Chloroethane	0.223	0.220		-1.35	50
Trichlorofluoromethane	0.775	0.787		1.55	50
1,1,2-Trichlorotrifluoroethane	0.524	0.521		-0.57	50
1,1-Dichloroethene	0.536	0.539		0.56	50
Acetone	0.317	0.294		-7.26	50
Carbon Disulfide	1.120	1.013		-9.55	50
Methyl tert-butyl Ether	2.037	2.113		3.73	50
Methylene Chloride	0.682	0.675		-1.03	50
trans-1,2-Dichloroethene	0.566	0.578		2.12	50
1,1-Dichloroethane	1.101	1.100	0.1	-0.09	50
2-Butanone	0.462	0.462		0	50
Carbon Tetrachloride	0.444	0.421		-5.18	50
cis-1,2-Dichloroethene	0.723	0.766		5.95	50
Chloroform	1.154	1.146		-0.69	50
1,1,1-Trichloroethane	0.969	0.953		-1.65	50
Methylcyclohexane	0.499	0.498		-0.2	50
Benzene	1.341	1.365		1.79	50
1,2-Dichloroethane	0.482	0.481		-0.21	50
Trichloroethene	0.333	0.333		0	50
1,2-Dichloropropane	0.330	0.345		4.55	50
Bromodichloromethane	0.446	0.461		3.36	50
4-Methyl-2-Pentanone	0.492	0.510		3.66	50
Toluene	0.813	0.855		5.17	50
t-1,3-Dichloropropene	0.479	0.492		2.71	50
cis-1,3-Dichloropropene	0.510	0.542		6.28	50
1,1,2-Trichloroethane	0.339	0.364		7.38	50
2-Hexanone	0.374	0.380		1.6	50
Dibromochloromethane	0.335	0.362		8.06	50
Tetrachloroethene	0.314	0.314		0	50
Chlorobenzene	1.076	1.088	0.3	1.12	50
Ethyl Benzene	1.754	1.752		-0.11	50
m/p-Xylenes	0.671	0.684		1.94	50
o-Xylene	0.674	0.696		3.26	50
Styrene	1.120	1.189		6.16	50
Bromoform	0.253	0.259	0.1	2.37	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/29/2024 19:29

Lab File ID: VX043608.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.542	3.503		-1.1	50
1,1,2,2-Tetrachloroethane	1.274	1.276	0.3	0.16	50
1,3-Dichlorobenzene	1.639	1.673		2.07	50
1,4-Dichlorobenzene	1.699	1.682		-1	50
1,2-Dichlorobenzene	1.676	1.725		2.92	50
1,2-Dichloroethane-d4	0.797	0.760		-4.64	50
Dibromofluoromethane	0.339	0.345		1.77	50
Toluene-d8	1.174	1.203		2.47	50
4-Bromofluorobenzene	0.435	0.447		2.76	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/30/2024 09:26

Lab File ID: VX043610.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.684	0.584	0.1	-14.6	20
Vinyl Chloride	0.634	0.571		-10	20
Bromomethane	0.259	0.237		-8.5	20
Chloroethane	0.223	0.203		-9.1	20
Trichlorofluoromethane	0.775	0.698		-10	20
1,1,2-Trichlorotrifluoroethane	0.524	0.507		-3.3	20
1,1-Dichloroethene	0.536	0.501		-6.4	20
Acetone	0.317	0.343		8.3	20
Carbon Disulfide	1.120	0.957		-14.6	20
Methyl tert-butyl Ether	2.037	1.972		-3.2	20
Methylene Chloride	0.682	0.636		-6.7	20
trans-1,2-Dichloroethene	0.566	0.534		-5.7	20
1,1-Dichloroethane	1.101	1.028	0.1	-6.5	20
2-Butanone	0.462	0.468		1.3	20
Carbon Tetrachloride	0.444	0.405		-8.8	20
cis-1,2-Dichloroethene	0.723	0.716		-1	20
Chloroform	1.154	1.104		-4.3	20
1,1,1-Trichloroethane	0.969	0.886		-8.6	20
Methylcyclohexane	0.499	0.481		-3.7	20
Benzene	1.341	1.280		-4.5	20
1,2-Dichloroethane	0.482	0.451		-6.5	20
Trichloroethene	0.333	0.323		-3	20
1,2-Dichloropropane	0.330	0.318		-3.7	20
Bromodichloromethane	0.446	0.457		2.5	20
4-Methyl-2-Pentanone	0.492	0.488		-0.8	20
Toluene	0.813	0.812		-0.2	20
t-1,3-Dichloropropene	0.479	0.489		2	20
cis-1,3-Dichloropropene	0.510	0.524		2.7	20
1,1,2-Trichloroethane	0.339	0.347		2.5	20
2-Hexanone	0.374	0.373		-0.1	20
Dibromochloromethane	0.335	0.357		6.6	20
Tetrachloroethene	0.314	0.299		-5	20
Chlorobenzene	1.076	1.032	0.3	-4	20
Ethyl Benzene	1.754	1.649		-6	20
m/p-Xylenes	0.671	0.654		-2.6	20
o-Xylene	0.674	0.664		-1.4	20
Styrene	1.120	1.140		1.8	20
Bromoform	0.253	0.264	0.1	4.7	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/30/2024 09:26

Lab File ID: VX043610.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.542	3.300		-6.8	20
1,1,2,2-Tetrachloroethane	1.274	1.220	0.3	-4.2	20
1,3-Dichlorobenzene	1.639	1.625		-0.8	20
1,4-Dichlorobenzene	1.699	1.622		-4.5	20
1,2-Dichlorobenzene	1.676	1.677		0.1	20
1,2-Dichloroethane-d4	0.797	0.748		-6.2	20
Dibromofluoromethane	0.339	0.352		3.9	20
Toluene-d8	1.174	1.213		3.4	20
4-Bromofluorobenzene	0.435	0.462		6.1	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/30/2024 19:25

Lab File ID: VX043635.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.684	0.543	0.1	-20.5	50
Vinyl Chloride	0.634	0.564		-11.1	50
Bromomethane	0.259	0.219		-15.2	50
Chloroethane	0.223	0.211		-5.8	50
Trichlorofluoromethane	0.775	0.774		-0.1	50
1,1,2-Trichlorotrifluoroethane	0.524	0.512		-2.4	50
1,1-Dichloroethene	0.536	0.517		-3.6	50
Acetone	0.317	0.239		-24.5	50
Carbon Disulfide	1.120	0.960		-14.2	50
Methyl tert-butyl Ether	2.037	1.790		-12.1	50
Methylene Chloride	0.682	0.581		-14.9	50
trans-1,2-Dichloroethene	0.566	0.535		-5.5	50
1,1-Dichloroethane	1.101	0.987	0.1	-10.3	50
2-Butanone	0.462	0.385		-16.6	50
Carbon Tetrachloride	0.444	0.428		-3.7	50
cis-1,2-Dichloroethene	0.723	0.674		-6.8	50
Chloroform	1.154	1.034		-10.4	50
1,1,1-Trichloroethane	0.969	0.899		-7.2	50
Methylcyclohexane	0.499	0.480		-3.9	50
Benzene	1.341	1.267		-5.5	50
1,2-Dichloroethane	0.482	0.417		-13.6	50
Trichloroethene	0.333	0.330		-0.9	50
1,2-Dichloropropane	0.330	0.310		-6.2	50
Bromodichloromethane	0.446	0.419		-6	50
4-Methyl-2-Pentanone	0.492	0.448		-8.9	50
Toluene	0.813	0.799		-1.7	50
t-1,3-Dichloropropene	0.479	0.441		-8	50
cis-1,3-Dichloropropene	0.510	0.489		-4.2	50
1,1,2-Trichloroethane	0.339	0.325		-4	50
2-Hexanone	0.374	0.340		-9.1	50
Dibromochloromethane	0.335	0.331		-1.3	50
Tetrachloroethene	0.314	0.330		5	50
Chlorobenzene	1.076	1.030	0.3	-4.3	50
Ethyl Benzene	1.754	1.709		-2.6	50
m/p-Xylenes	0.671	0.675		0.6	50
o-Xylene	0.674	0.674		0	50
Styrene	1.120	1.139		1.6	50
Bromoform	0.253	0.252	0.1	-0.2	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: MSVOA_X Calibration Date/Time: 10/30/2024 19:25

Lab File ID: VX043635.D Init. Calib. Date(s): 10/28/2024 10/28/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:59 12:54

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.542	3.515		-0.8	50
1,1,2,2-Tetrachloroethane	1.274	1.189	0.3	-6.6	50
1,3-Dichlorobenzene	1.639	1.596		-2.6	50
1,4-Dichlorobenzene	1.699	1.596		-6	50
1,2-Dichlorobenzene	1.676	1.655		-1.3	50
1,2-Dichloroethane-d4	0.797	0.669		-16.1	50
Dibromofluoromethane	0.339	0.326		-3.7	50
Toluene-d8	1.174	1.177		0.3	50
4-Bromofluorobenzene	0.435	0.419		-3.5	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:	P4600	OrderDate:	10/29/2024 10:17:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	K63,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4600-03	BP-VPB-190-GW-438-440	Water			10/25/24			10/28/24
			SVOC-SIMGroup1	8270-Modified		10/29/24	11/04/24	
P4600-05	BP-VPB-190-GW-478-480	Water			10/25/24			10/28/24
			SVOC-SIMGroup1	8270-Modified		10/29/24	11/05/24	
P4600-07	BP-VPB-190-GW-518-520	Water			10/28/24			10/28/24
			SVOC-SIMGroup1	8270-Modified		10/29/24	11/05/24	



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

Hit Summary Sheet
SW-846

SDG No.: P4600
Client: Tetra Tech NUS, Inc.

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



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	10/25/24
Project:	CTO WE13	Date Received:	10/28/24
Client Sample ID:	BP-VPB-190-GW-438-440	SDG No.:	P4600
Lab Sample ID:	P4600-03	Matrix:	Water
Analytical Method:	SW8270SIM	% 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034854.D	1	10/29/24 12:50	11/04/24 23:57	PB164511

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.25	U	0.090	0.25	0.25	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.29		30 - 150		72%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		77%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.62	*	58 - 132		155%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	7600	7.589				
1146-65-2	Naphthalene-d8	23300	10.351				
15067-26-2	Acenaphthene-d10	11500	14.218				
1517-22-2	Phenanthrene-d10	21200	16.964				
1719-03-5	Chrysene-d12	9920	21.158				
1520-96-3	Perylene-d12	7350	23.342				

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:	10/25/24
Project:	CTO WE13		Date Received:	10/28/24
Client Sample ID:	BP-VPB-190-GW-478-480		SDG No.:	P4600
Lab Sample ID:	P4600-05		Matrix:	Water
Analytical Method:	SW8270SIM		% 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 :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034855.D	1	10/29/24 12:50	11/05/24 00:33	PB164511

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.24	U	0.080	0.24	0.24	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		89%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		95%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.42		53 - 106		104%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.62	*	58 - 132		154%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6890	7.589				
1146-65-2	Naphthalene-d8	21200	10.351				
15067-26-2	Acenaphthene-d10	10600	14.222				
1517-22-2	Phenanthrene-d10	19500	16.97				
1719-03-5	Chrysene-d12	8880	21.16				
1520-96-3	Perylene-d12	4050	23.341				

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:	10/28/24
Project:	CTO WE13		Date Received:	10/28/24
Client Sample ID:	BP-VPB-190-GW-518-520		SDG No.:	P4600
Lab Sample ID:	P4600-07		Matrix:	Water
Analytical Method:	SW8270SIM		% Solid:	0
Sample Wt/Vol:	830	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034856.D	1	10/29/24 12:50	11/05/24 01:09	PB164511

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.24	U	0.080	0.24	0.24	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		88%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		97%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		95%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		99%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		138%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6530	7.589				
1146-65-2	Naphthalene-d8	20400	10.351				
15067-26-2	Acenaphthene-d10	10500	14.222				
1517-22-2	Phenanthrene-d10	19900	16.97				
1719-03-5	Chrysene-d12	10900	21.16				
1520-96-3	Perylene-d12	5700	23.338				

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.: **P4600**

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

Analytical Method: **8270-Modified**

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P4600-03	BP-VPB-190-GW-438-440	2-Methylnaphthalene-d10	0.4	0.29	72		30	150
		Fluoranthene-d10	0.4	0.31	76		30	150
		Nitrobenzene-d5	0.4	0.31	77		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.62	155	*	58	132
P4600-05	BP-VPB-190-GW-478-480	2-Methylnaphthalene-d10	0.4	0.36	89		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.38	95		55	111
		2-Fluorobiphenyl	0.4	0.42	104		53	106
		Terphenyl-d14	0.4	0.62	154	*	58	132
P4600-07	BP-VPB-190-GW-518-520	2-Methylnaphthalene-d10	0.4	0.35	88		30	150
		Fluoranthene-d10	0.4	0.39	97		30	150
		Nitrobenzene-d5	0.4	0.38	95		55	111
		2-Fluorobiphenyl	0.4	0.40	99		53	106
		Terphenyl-d14	0.4	0.55	138	*	58	132
PB164511BL	PB164511BL	2-Methylnaphthalene-d10	0.4	0.37	91		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.38	96		55	111
		2-Fluorobiphenyl	0.4	0.43	107	*	53	106
		Terphenyl-d14	0.4	0.51	126		58	132
PB164511BS	PB164511BS	2-Methylnaphthalene-d10	0.4	0.45	111		30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
PB164511BSD	PB164511BSD	2-Methylnaphthalene-d10	0.4	0.43	108		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.41	102		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4600

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034852.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB164511BS	1,4-Dioxane	0.4	0.34	ug/L	85				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4600

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034853.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB164511BSD	1,4-Dioxane	0.4	0.33	ug/L	83	3			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164511BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4600

SAS No.: P4600 SDG NO.: P4600

Lab File ID: BN034851.D

Lab Sample ID: PB164511BL

Instrument ID: BNA_N

Date Extracted: 10/29/2024

Matrix: (soil/water) Water

Date Analyzed: 11/04/2024

Level: (low/med) LOW

Time Analyzed: 22:09

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB164511BS	PB164511BS	BN034852.D	11/04/2024
PB164511BSD	PB164511BSD	BN034853.D	11/04/2024
BP-VPB-190-GW-518-520	P4600-07	BN034856.D	11/05/2024
BP-VPB-190-GW-438-440	P4600-03	BN034854.D	11/04/2024
BP-VPB-190-GW-478-480	P4600-05	BN034855.D	11/05/2024

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4600 SDG NO.: P4600

Lab File ID: BN034739.D

DFTPP Injection Date: 10/30/2024

Instrument ID: BNA_N

DFTPP Injection Time: 08:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	38.7
68	Less than 2.0% of mass 69	0.6 (1.4) 1
69	Mass 69 relative abundance	40
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	53.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	21.7
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	9.4
442	Greater than 50% of mass 198	61
443	15.0 - 24.0% of mass 442	11.3 (18.5) 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	BN034740.D	10/30/2024	09:20
SSTDICC0.2	SSTDICC0.2	BN034741.D	10/30/2024	09:56
SSTDICCC0.4	SSTDICCC0.4	BN034742.D	10/30/2024	10:32
SSTDICC0.8	SSTDICC0.8	BN034743.D	10/30/2024	11:08
SSTDICC1.6	SSTDICC1.6	BN034744.D	10/30/2024	11:44
SSTDICC3.2	SSTDICC3.2	BN034745.D	10/30/2024	12:20
SSTDICC5.0	SSTDICC5.0	BN034746.D	10/30/2024	12:56

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4600 SDG NO.: P4600

Lab File ID: BN034849.D

DFTPP Injection Date: 11/04/2024

Instrument ID: BNA_N

DFTPP Injection Time: 20:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	53.1
68	Less than 2.0% of mass 69	0.8 (1.6) 1
69	Mass 69 relative abundance	49
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	61.5
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3
441	Present, but less than mass 443	8.8
442	Greater than 50% of mass 198	58.2
443	15.0 - 24.0% of mass 442	11.1 (19.1) 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	BN034850.D	11/04/2024	21:33
PB164511BL	PB164511BL	BN034851.D	11/04/2024	22:09
PB164511BS	PB164511BS	BN034852.D	11/04/2024	22:45
PB164511BSD	PB164511BSD	BN034853.D	11/04/2024	23:21
BP-VPB-190-GW-438-440	P4600-03	BN034854.D	11/04/2024	23:57
BP-VPB-190-GW-478-480	P4600-05	BN034855.D	11/05/2024	00:33
BP-VPB-190-GW-518-520	P4600-07	BN034856.D	11/05/2024	01:09
SSTDCCC0.4EC	SSTDCCC0.4	BN034861.D	11/05/2024	04:09

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG NO.: P4600

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/04/2024

Lab File ID: BN034850.D Time Analyzed: 21:33

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	7674	7.589	23850	10.35	12009	14.22
UPPER LIMIT	15348	8.089	47700	10.851	24018	14.722
LOWER LIMIT	3837	7.089	11925	9.851	6004.5	13.722
EPA SAMPLE NO.						
01 BP-VPB-190-GW-478-480	6889	7.59	21222	10.35	10585	14.22
02 BP-VPB-190-GW-438-440	7603	7.59	23260	10.35	11506	14.22
03 PB164511BL	6305	7.59	18630	10.35	8717	14.22
04 PB164511BS	6963	7.59	20876	10.35	10113	14.22
05 PB164511BSD	6841	7.59	20343	10.35	9830	14.22
06 BP-VPB-190-GW-518-520	6525	7.59	20443	10.35	10522	14.22

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.: P4600 SAS No.: P4600 SDG NO.: P4600

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/04/2024

Lab File ID: BN034850.D Time Analyzed: 21:33

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	23508	16.97	14579	21.16	11281	23.335
UPPER LIMIT	47016	17.47	29158	21.66	22562	23.835
LOWER LIMIT	11754	16.47	7289.5	20.66	5640.5	22.835
EPA SAMPLE NO.						
01 BP-VPB-190-GW-478-480	19498	16.97	8880	21.16	4054 *	23.34
02 BP-VPB-190-GW-438-440	21221	16.96	9919	21.16	7346	23.34
03 PB164511BL	16792	16.97	7936	21.16	6177	23.34
04 PB164511BS	18739	16.97	9523	21.16	6855	23.34
05 PB164511BSD	18690	16.97	9814	21.16	7135	23.34
06 BP-VPB-190-GW-518-520	19872	16.97	10871	21.16	5696	23.34

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:	PB164511BL		SDG No.:	P4600	
Lab Sample ID:	PB164511BL		Matrix:	Water	
Analytical Method:	SW8270SIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034851.D	1	10/29/24 12:50	11/04/24 22:09	PB164511

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	0.37		30 - 150		91%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		96%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43	*	53 - 106		107%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.51		58 - 132		126%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6310	7.589				
1146-65-2	Naphthalene-d8	18600	10.351				
15067-26-2	Acenaphthene-d10	8720	14.222				
1517-22-2	Phenanthrene-d10	16800	16.97				
1719-03-5	Chrysene-d12	7940	21.16				
1520-96-3	Perylene-d12	6180	23.341				

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:	PB164511BS		SDG No.:	P4600
Lab Sample ID:	PB164511BS		Matrix:	Water
Analytical Method:	SW8270SIM		% Solid:	0
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034852.D	1	10/29/24 12:50	11/04/24 22:45	PB164511

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.34		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.45		30 - 150		111%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		92%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6960	7.589				
1146-65-2	Naphthalene-d8	20900	10.351				
15067-26-2	Acenaphthene-d10	10100	14.222				
1517-22-2	Phenanthrene-d10	18700	16.97				
1719-03-5	Chrysene-d12	9520	21.16				
1520-96-3	Perylene-d12	6860	23.338				

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:	PB164511BSD		SDG No.:	P4600	
Lab Sample ID:	PB164511BSD		Matrix:	Water	
Analytical Method:	SW8270SIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034853.D	1	10/29/24 12:50	11/04/24 23:21	PB164511

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.33		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	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.41		58 - 132		102%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6840	7.589				
1146-65-2	Naphthalene-d8	20300	10.351				
15067-26-2	Acenaphthene-d10	9830	14.222				
1517-22-2	Phenanthrene-d10	18700	16.97				
1719-03-5	Chrysene-d12	9810	21.16				
1520-96-3	Perylene-d12	7140	23.335				

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-BN103024.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Oct 30 13:28:24 2024
 Response Via : Initial Calibration

Calibration Files

0.1 =BN034740.D 0.2 =BN034741.D 0.4 =BN034742.D 0.8 =BN034743.D 1.6 =BN034744.D 3.2 =BN034745.D 5.0 =BN034746.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	0.498	0.441	0.407	0.462	0.438	0.418	0.405	0.439	7.62
3)	n-Nitrosodimet...	0.506	0.483	0.437	0.537	0.523	0.484	0.490	0.494	6.58
4) S	2-Fluorophenol	1.305	1.235	1.096	1.293	1.248	1.144	1.161	1.212	6.55
5) S	Phenol-d6	1.675	1.592	1.406	1.658	1.625	1.511	1.552	1.574	5.96
6)	bis(2-Chloroet...	1.155	1.134	1.057	1.247	1.211	1.115	1.124	1.149	5.51
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.320	0.305	0.278	0.338	0.328	0.308	0.323	0.314	6.25
9)	Naphthalene	1.150	1.096	0.996	1.191	1.153	1.069	1.087	1.106	5.87
10)	Hexachlorobuta...	0.191	0.182	0.165	0.197	0.190	0.173	0.177	0.182	6.17
11) SURR2	Methylnaphth...	0.577	0.560	0.519	0.628	0.617	0.569	0.584	0.579	6.27
12)	2-Methylnaphth...	0.719	0.708	0.649	0.785	0.769	0.709	0.725	0.723	6.16
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.199	0.178	0.158	0.204	0.213	0.206	0.224	0.198	11.32
15) S	2-Fluorobiphenyl	1.593	1.579	1.360	1.726	1.667	1.542	1.561	1.575	7.29
16)	Acenaphthylene	2.027	1.956	1.678	2.156	2.136	2.018	2.077	2.007	8.02
17)	Acenaphthene	1.338	1.292	1.133	1.458	1.440	1.332	1.368	1.337	8.07
18)	Fluorene	1.692	1.628	1.434	1.816	1.793	1.650	1.653	1.667	7.55
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.043	0.045	0.060	0.065	0.069	0.076	0.059		22.17
21)	4-Bromophenyl-...	0.235	0.234	0.210	0.246	0.238	0.229	0.229	0.231	4.76
22)	Hexachlorobenzene	0.265	0.262	0.238	0.278	0.267	0.254	0.250	0.259	5.10
23)	Atrazine	0.196	0.190	0.178	0.214	0.214	0.203	0.199	0.199	6.44
24)	Pentachlorophenol	0.102	0.088	0.091	0.114	0.122	0.127	0.138	0.112	16.80
25)	Phenanthrene	1.166	1.168	1.076	1.267	1.233	1.168	1.158	1.176	5.16
26)	Anthracene	1.080	1.074	0.990	1.163	1.177	1.108	1.114	1.101	5.67
27) SURR	Fluoranthene-d10	0.935	0.883	0.849	1.006	1.019	0.940	0.937	0.938	6.48
28)	Fluoranthene	1.282	1.221	1.174	1.404	1.416	1.296	1.283	1.297	6.82
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	2.207	2.148	1.926	2.280	2.091	2.001	1.987	2.091	6.12
31) S	Terphenyl-d14	0.911	0.869	0.788	0.931	0.867	0.825	0.822	0.859	5.92
32)	Benzo(a)anthra...	1.620	1.534	1.406	1.721	1.679	1.581	1.606	1.592	6.45
33)	Chrysene	1.596	1.522	1.406	1.688	1.644	1.519	1.538	1.559	5.98
34)	Bis(2-ethylhex...	1.487	1.243	1.291	1.388	1.332	1.237	1.342	1.331	6.57
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN103024.M

36)	Indeno(1,2,3-c...	1.517	1.552	1.332	1.572	1.482	1.423	1.421	1.471	5.76
37)	Benzo(b)fluora...	1.589	1.500	1.450	1.753	1.730	1.619	1.632	1.610	6.87
38)	Benzo(k)fluora...	1.562	1.491	1.396	1.704	1.653	1.605	1.588	1.571	6.52
39) C	Benzo(a)pyrene	1.315	1.277	1.181	1.434	1.404	1.336	1.355	1.329	6.31
40)	Dibenzo(a,h)an...	1.189	1.210	1.035	1.230	1.152	1.110	1.107	1.147	5.98
41)	Benzo(g,h,i)pe...	1.302	1.335	1.138	1.329	1.223	1.185	1.170	1.240	6.54

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: BNA_N Calibration Date/Time: 11/04/2024 21:33

Lab File ID: BN034850.D Init. Calib. Date(s): 10/30/2024 10/30/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 09:20 12:56

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.579	0.495		-14.5	20.0
Fluoranthene-d10	0.938	0.829		-11.6	20.0
2-Fluorophenol	1.212	1.320		8.9	20.0
Phenol-d6	1.574	1.837		16.7	20.0
Nitrobenzene-d5	0.314	0.268		-14.6	20.0
2-Fluorobiphenyl	1.575	1.396		-11.4	20.0
2,4,6-Tribromophenol	0.198	0.157		-20.7	20.0
Terphenyl-d14	0.859	0.690		-19.7	20.0
1,4-Dioxane	0.439	0.410		-6.6	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.: P4600 SAS No.: P4600 SDG No.: P4600

Instrument ID: BNA_N Calibration Date/Time: 11/05/2024 04:09

Lab File ID: BN034861.D Init. Calib. Date(s): 10/30/2024 10/30/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 09:20 12:56

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.579	0.506		-12.6	50.0
Fluoranthene-d10	0.938	0.812		-13.4	50.0
2-Fluorophenol	1.212	1.041		-14.1	50.0
Phenol-d6	1.574	1.409		-10.5	50.0
Nitrobenzene-d5	0.314	0.279		-11.1	50.0
2-Fluorobiphenyl	1.575	1.451		-7.9	50.0
2,4,6-Tribromophenol	0.198	0.105		-47.0	50.0
Terphenyl-d14	0.859	0.735		-14.4	50.0
1,4-Dioxane	0.439	0.451		2.7	50.0

All other compounds must meet a minimum RRF of 0.010.