

LAB CHRONICLE

OrderID:	Q1022	OrderDate:	1/6/2025 3:27:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	N41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1022-01	BP-VPB-190A-TB-202 50103	Water			01/03/25			01/06/25
			VOCMS Group1	8260-Low			01/07/25	
Q1022-02	BP-VPB-190A-DUP-20 250103	Water			01/03/25			01/06/25
			VOCMS Group1	8260-Low			01/07/25	
Q1022-03	BP-VPB-190A-GW-838 -840	Water			01/03/25			01/06/25
			VOCMS Group1	8260-Low			01/07/25	
Q1022-04	BP-VPB-190A-GW-858 -860	Water			01/03/25			01/06/25
			VOCMS Group1	8260-Low			01/07/25	

Hit Summary Sheet
SW-846

SDG No.: Q1022
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID: Q1022-01	BP-VPB-190A-TB-20250103 BP-VPB-190A-TB- Water	Acetone		1.50	J	1.40	3.80	5.00	ug/L
		Total Voc :		1.50					
		Total Concentration:		1.50					
Client ID: Q1022-02	BP-VPB-190A-DUP-20250103 BP-VPB-190A-DUI Water	Acetone		4.00	J	1.40	3.80	5.00	ug/L
		Total Voc :		4.00					
		Total Concentration:		4.00					
Client ID: Q1022-03	BP-VPB-190A-GW-838-840 BP-VPB-190A-GW Water	Acetone		6.30		1.40	3.80	5.00	ug/L
		Total Voc :		6.30					
		Total Concentration:		6.30					
Client ID: Q1022-04	BP-VPB-190A-GW-858-860 BP-VPB-190A-GW Water	Acetone		3.70	J	1.40	3.80	5.00	ug/L
		Total Voc :		3.70					
		Total Concentration:		3.70					



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-TB-20250103		SDG No.:	Q1022	
Lab Sample ID:	Q1022-01		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
VX044609.D	1		01/07/25 18:05	VX010725

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-TB-20250103		SDG No.:	Q1022	
Lab Sample ID:	Q1022-01		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
VX044609.D	1		01/07/25 18:05	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.5		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		80 - 119		95%	SPK: 50
2037-26-5	Toluene-d8	50.9		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		85 - 114		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	176000	5.544				
540-36-3	1,4-Difluorobenzene	319000	6.757				
3114-55-4	Chlorobenzene-d5	290000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	128000	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-TB-20250103		SDG No.:	Q1022	
Lab Sample ID:	Q1022-01		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
VX044609.D	1		01/07/25 18:05	VX010725

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-DUP-20250103		SDG No.:	Q1022	
Lab Sample ID:	Q1022-02		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
VX044612.D	1		01/07/25 19:14	VX010725

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:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-DUP-20250103		SDG No.:	Q1022	
Lab Sample ID:	Q1022-02		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
VX044612.D	1		01/07/25 19:14	VX010725

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	51.3		81 - 118		103%	SPK: 50
1868-53-7	Dibromofluoromethane	47.1		80 - 119		94%	SPK: 50
2037-26-5	Toluene-d8	51.7		89 - 112		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.4		85 - 114		105%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	173000	5.544				
540-36-3	1,4-Difluorobenzene	314000	6.757				
3114-55-4	Chlorobenzene-d5	292000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	123000	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-DUP-20250103		SDG No.:	Q1022	
Lab Sample ID:	Q1022-02		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
VX044612.D	1		01/07/25 19:14	VX010725

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-GW-838-840		SDG No.:	Q1022	
Lab Sample ID:	Q1022-03		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
VX044610.D	1		01/07/25 18:28	VX010725

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-GW-838-840		SDG No.:	Q1022	
Lab Sample ID:	Q1022-03		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
VX044610.D	1		01/07/25 18:28	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.3		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		80 - 119		95%	SPK: 50
2037-26-5	Toluene-d8	51.3		89 - 112		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.7		85 - 114		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	189000	5.544				
540-36-3	1,4-Difluorobenzene	336000	6.757				
3114-55-4	Chlorobenzene-d5	309000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	131000	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-GW-838-840		SDG No.:	Q1022	
Lab Sample ID:	Q1022-03		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
VX044610.D	1		01/07/25 18:28	VX010725

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

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-GW-858-860		SDG No.:	Q1022	
Lab Sample ID:	Q1022-04		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
VX044611.D	1		01/07/25 18:51	VX010725

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-GW-858-860		SDG No.:	Q1022	
Lab Sample ID:	Q1022-04		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
VX044611.D	1		01/07/25 18:51	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.5		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	45.8		80 - 119		92%	SPK: 50
2037-26-5	Toluene-d8	50.9		89 - 112		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.5		85 - 114		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	178000	5.544				
540-36-3	1,4-Difluorobenzene	326000	6.757				
3114-55-4	Chlorobenzene-d5	293000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	119000	12.018				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D.					

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	01/03/25	
Project:	CTO WE13		Date Received:	01/06/25	
Client Sample ID:	BP-VPB-190A-GW-858-860		SDG No.:	Q1022	
Lab Sample ID:	Q1022-04		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
VX044611.D	1		01/07/25 18:51	VX010725

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.: Q1022

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1022-01	BP-VPB-190A-TB-20250103	1,2-Dichloroethane-d4	50	50.5	101	81	118
		Dibromofluoromethane	50	47.5	95	80	119
		Toluene-d8	50	50.9	102	89	112
		4-Bromofluorobenzene	50	51.8	104	85	114
Q1022-02	BP-VPB-190A-DUP-20250103	1,2-Dichloroethane-d4	50	51.3	103	81	118
		Dibromofluoromethane	50	47.1	94	80	119
		Toluene-d8	50	51.7	103	89	112
		4-Bromofluorobenzene	50	52.4	105	85	114
Q1022-03	BP-VPB-190A-GW-838-840	1,2-Dichloroethane-d4	50	50.3	101	81	118
		Dibromofluoromethane	50	47.5	95	80	119
		Toluene-d8	50	51.3	103	89	112
		4-Bromofluorobenzene	50	51.7	103	85	114
Q1022-04	BP-VPB-190A-GW-858-860	1,2-Dichloroethane-d4	50	50.5	101	81	118
		Dibromofluoromethane	50	45.8	92	80	119
		Toluene-d8	50	50.9	102	89	112
		4-Bromofluorobenzene	50	49.5	99	85	114
VX0107WBL01	VX0107WBL01	1,2-Dichloroethane-d4	50	50.6	101	81	118
		Dibromofluoromethane	50	47.1	94	80	119
		Toluene-d8	50	49.5	99	89	112
		4-Bromofluorobenzene	50	47.6	95	85	114
VX0107WBS02	VX0107WBS02	1,2-Dichloroethane-d4	50	50.2	100	81	118
		Dibromofluoromethane	50	48.5	97	80	119
		Toluene-d8	50	49.3	99	89	112
		4-Bromofluorobenzene	50	50.5	101	85	114
VX0107WBSD0	VX0107WBSD02	1,2-Dichloroethane-d4	50	49.7	99	81	118
		Dibromofluoromethane	50	46.3	93	80	119
		Toluene-d8	50	47.5	95	89	112
		4-Bromofluorobenzene	50	48.4	97	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1022

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX044606.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0107WBS02	Chloromethane	20	17.3	ug/L	86			50	139	
	Vinyl chloride	20	18.2	ug/L	91			58	137	
	Bromomethane	20	18.0	ug/L	90			53	141	
	Chloroethane	20	17.6	ug/L	88			60	138	
	Trichlorofluoromethane	20	19.5	ug/L	98			65	141	
	1,1,2-Trichlorotrifluoroethane	20	18.4	ug/L	92			70	136	
	1,1-Dichloroethene	20	17.7	ug/L	89			71	131	
	Acetone	100	110	ug/L	110			39	160	
	Carbon disulfide	20	17.6	ug/L	88			64	133	
	Methyl tert-butyl Ether	20	18.8	ug/L	94			71	124	
	Methylene Chloride	20	17.5	ug/L	88			74	124	
	trans-1,2-Dichloroethene	20	17.8	ug/L	89			75	124	
	1,1-Dichloroethane	20	18.0	ug/L	90			77	125	
	2-Butanone	100	110	ug/L	110			56	143	
	Carbon Tetrachloride	20	17.9	ug/L	90			72	136	
	cis-1,2-Dichloroethene	20	17.6	ug/L	88			78	123	
	Chloroform	20	17.8	ug/L	89			79	124	
	1,1,1-Trichloroethane	20	18.9	ug/L	95			74	131	
	Methylcyclohexane	20	18.7	ug/L	94			72	132	
	Benzene	20	17.6	ug/L	88			79	120	
	1,2-Dichloroethane	20	18.9	ug/L	95			73	128	
	Trichloroethene	20	16.8	ug/L	84			79	123	
	1,2-Dichloropropane	20	18.0	ug/L	90			78	122	
	Bromodichloromethane	20	18.6	ug/L	93			79	125	
	4-Methyl-2-Pentanone	100	100	ug/L	100			67	130	
	Toluene	20	18.4	ug/L	92			80	121	
	t-1,3-Dichloropropene	20	19.3	ug/L	97			73	127	
	cis-1,3-Dichloropropene	20	18.6	ug/L	93			75	124	
	1,1,2-Trichloroethane	20	18.3	ug/L	92			80	119	
	2-Hexanone	100	110	ug/L	110			57	139	
	Dibromochloromethane	20	18.4	ug/L	92			74	126	
	Tetrachloroethene	20	17.3	ug/L	86			74	129	
	Chlorobenzene	20	18.3	ug/L	92			82	118	
	Ethyl Benzene	20	18.8	ug/L	94			79	121	
	m/p-Xylenes	40	38.0	ug/L	95			80	121	
	o-Xylene	20	18.3	ug/L	92			78	122	
	Styrene	20	18.9	ug/L	95			78	123	
	Bromoform	20	17.8	ug/L	89			66	130	
	Isopropylbenzene	20	17.2	ug/L	86			72	131	
	1,1,2,2-Tetrachloroethane	20	17.1	ug/L	86			71	121	
	1,3-Dichlorobenzene	20	18.5	ug/L	93			80	119	
	1,4-Dichlorobenzene	20	17.8	ug/L	89			79	118	
	1,2-Dichlorobenzene	20	18.3	ug/L	92			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1022

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260-Low

Datafile : VX044607.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0107WBSD02	Chloromethane	20	20.1	ug/L	101	16		50	139	20
	Vinyl chloride	20	19.4	ug/L	97	6		58	137	20
	Bromomethane	20	20.2	ug/L	101	12		53	141	20
	Chloroethane	20	19.5	ug/L	98	11		60	138	20
	Trichlorofluoromethane	20	20.3	ug/L	102	4		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	19.3	ug/L	97	5		70	136	20
	1,1-Dichloroethene	20	18.8	ug/L	94	5		71	131	20
	Acetone	100	120	ug/L	120	9		39	160	20
	Carbon disulfide	20	18.9	ug/L	95	8		64	133	20
	Methyl tert-butyl Ether	20	21.3	ug/L	106	12		71	124	20
	Methylene Chloride	20	19.7	ug/L	99	12		74	124	20
	trans-1,2-Dichloroethene	20	19.3	ug/L	97	9		75	124	20
	1,1-Dichloroethane	20	20.4	ug/L	102	13		77	125	20
	2-Butanone	100	120	ug/L	120	9		56	143	20
	Carbon Tetrachloride	20	19.0	ug/L	95	5		72	136	20
	cis-1,2-Dichloroethene	20	19.6	ug/L	98	11		78	123	20
	Chloroform	20	20.4	ug/L	102	14		79	124	20
	1,1,1-Trichloroethane	20	21.1	ug/L	106	11		74	131	20
	Methylcyclohexane	20	19.1	ug/L	96	2		72	132	20
	Benzene	20	19.3	ug/L	97	10		79	120	20
	1,2-Dichloroethane	20	21.3	ug/L	106	11		73	128	20
	Trichloroethene	20	18.5	ug/L	93	10		79	123	20
	1,2-Dichloropropane	20	20.5	ug/L	103	13		78	122	20
	Bromodichloromethane	20	20.6	ug/L	103	10		79	125	20
	4-Methyl-2-Pentanone	100	120	ug/L	120	18		67	130	20
	Toluene	20	20.3	ug/L	102	10		80	121	20
	t-1,3-Dichloropropene	20	20.8	ug/L	104	7		73	127	20
	cis-1,3-Dichloropropene	20	20.4	ug/L	102	9		75	124	20
	1,1,2-Trichloroethane	20	20.7	ug/L	104	12		80	119	20
	2-Hexanone	100	120	ug/L	120	9		57	139	20
	Dibromochloromethane	20	20.0	ug/L	100	8		74	126	20
	Tetrachloroethene	20	18.6	ug/L	93	8		74	129	20
	Chlorobenzene	20	19.9	ug/L	100	8		82	118	20
	Ethyl Benzene	20	20.2	ug/L	101	7		79	121	20
	m/p-Xylenes	40	40.8	ug/L	102	7		80	121	20
	o-Xylene	20	20.0	ug/L	100	8		78	122	20
	Styrene	20	20.5	ug/L	103	8		78	123	20
	Bromoform	20	20.2	ug/L	101	13		66	130	20
	Isopropylbenzene	20	20.9	ug/L	104	19		72	131	20
	1,1,2,2-Tetrachloroethane	20	21.4	ug/L	107	22	*	71	121	20
	1,3-Dichlorobenzene	20	20.5	ug/L	103	10		80	119	20
	1,4-Dichlorobenzene	20	19.3	ug/L	97	9		79	118	20
	1,2-Dichlorobenzene	20	20.1	ug/L	101	9		80	119	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0107WBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1022

SAS No.: Q1022 SDG NO.: Q1022

Lab File ID: VX044604.D

Lab Sample ID: VX0107WBL01

Date Analyzed: 01/07/2025

Time Analyzed: 16:06

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
VX0107WBS02	VX0107WBS02	VX044606.D	01/07/2025
VX0107WBSD02	VX0107WBSD02	VX044607.D	01/07/2025
BP-VPB-190A-TB-20250103	Q1022-01	VX044609.D	01/07/2025
BP-VPB-190A-GW-838-840	Q1022-03	VX044610.D	01/07/2025
BP-VPB-190A-GW-858-860	Q1022-04	VX044611.D	01/07/2025
BP-VPB-190A-DUP-20250103	Q1022-02	VX044612.D	01/07/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG NO.: Q1022
Lab File ID: VX044595.D BFB Injection Date: 01/07/2025
Instrument ID: MSVOA_X BFB Injection Time: 09:14
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.7
75	30.0 - 60.0% of mass 95	53.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.7 (1) 1
174	50.0 - 100.0% of mass 95	71.5
175	5.0 - 9.0% of mass 174	5.7 (8) 1
176	95.0 - 101.0% of mass 174	70.2 (98.2) 1
177	5.0 - 9.0% of mass 176	4.6 (6.5) 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	VX044596.D	01/07/2025	10:06
VSTDIC005	VSTDIC005	VX044597.D	01/07/2025	10:29
VSTDIC020	VSTDIC020	VX044598.D	01/07/2025	10:51
VSTDIC050	VSTDIC050	VX044599.D	01/07/2025	11:14
VSTDIC100	VSTDIC100	VX044600.D	01/07/2025	11:37
VSTDIC150	VSTDIC150	VX044601.D	01/07/2025	12:00
VX0107WBL01	VX0107WBL01	VX044604.D	01/07/2025	16:06
VX0107WBS02	VX0107WBS02	VX044606.D	01/07/2025	16:57
VX0107WBSD02	VX0107WBSD02	VX044607.D	01/07/2025	17:19
BP-VPB-190A-TB-20250103	Q1022-01	VX044609.D	01/07/2025	18:05
BP-VPB-190A-GW-838-840	Q1022-03	VX044610.D	01/07/2025	18:28
BP-VPB-190A-GW-858-860	Q1022-04	VX044611.D	01/07/2025	18:51
BP-VPB-190A-DUP-20250103	Q1022-02	VX044612.D	01/07/2025	19:14
VSTDC050EC	VSTDC050	VX044613.D	01/07/2025	19:37

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG NO.: Q1022
Lab File ID: VX044599.D Date Analyzed: 01/07/2025
Instrument ID: MSVOA_X Time Analyzed: 11:14
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	173796	5.54	298796	6.76	260263	10.05
UPPER LIMIT	347592	6.044	597592	7.257	520526	10.549
LOWER LIMIT	86898	5.044	149398	6.257	130132	9.549
EPA SAMPLE NO.						
BP-VPB-190A-TB-20250103	176098	5.54	318982	6.76	290099	10.05
BP-VPB-190A-DUP-20250103	172596	5.54	314042	6.76	292342	10.05
BP-VPB-190A-GW-838-840	188583	5.54	335673	6.76	308993	10.05
BP-VPB-190A-GW-858-860	178481	5.54	326468	6.76	293289	10.05
VX0107WBL01	173540	5.54	316021	6.75	270881	10.05
VX0107WBS02	220733	5.54	377450	6.75	324333	10.05
VX0107WBSD02	171730	5.54	300759	6.76	266797	10.05

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
 Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG NO.: Q1022
 Lab File ID: VX044599.D Date Analyzed: 01/07/2025
 Instrument ID: MSVOA_X Time Analyzed: 11:14
 GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	121154	12.018				
UPPER LIMIT	242308	12.518				
LOWER LIMIT	60577	11.518				
EPA SAMPLE NO.						
BP-VPB-190A-TB-20250103	127980	12.02				
BP-VPB-190A-DUP-20250103	123056	12.02				
BP-VPB-190A-GW-838-840	131138	12.02				
BP-VPB-190A-GW-858-860	119305	12.02				
VX0107WBL01	109213	12.02				
VX0107WBS02	167120	12.02				
VX0107WBSD02	120544	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:	VX0107WBL01		SDG No.:	Q1022
Lab Sample ID:	VX0107WBL01		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
VX044604.D	1		01/07/25 16:06	VX010725

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:	VX0107WBL01		SDG No.:	Q1022
Lab Sample ID:	VX0107WBL01		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
VX044604.D	1		01/07/25 16:06	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.14	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.16	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.6		81 - 118		101%	SPK: 50
1868-53-7	Dibromofluoromethane	47.1		80 - 119		94%	SPK: 50
2037-26-5	Toluene-d8	49.5		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.6		85 - 114		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	174000	5.544				
540-36-3	1,4-Difluorobenzene	316000	6.751				
3114-55-4	Chlorobenzene-d5	271000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	109000	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:	VX0107WBS02		SDG No.:	Q1022
Lab Sample ID:	VX0107WBS02		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
VX044606.D	1		01/07/25 16:57	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	17.3		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.2		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	18.0		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	17.6		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.5		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.4		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.7		0.26	0.75	1.00	ug/L
67-64-1	Acetone	110		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	17.6		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.8		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	17.5		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.8		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	110		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	17.9		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	17.6		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	17.8		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.9		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.7		0.19	0.50	1.00	ug/L
71-43-2	Benzene	17.6		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.9		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	16.8		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.0		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	18.6		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	18.4		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.3		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.6		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.3		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	110		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:	VX0107WBS02		SDG No.:	Q1022
Lab Sample ID:	VX0107WBS02		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
VX044606.D	1		01/07/25 16:57	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	18.4		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	17.3		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	18.3		0.13	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	18.8		0.16	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.0		0.31	1.00	2.00	ug/L
95-47-6	o-Xylene	18.3		0.14	0.50	1.00	ug/L
100-42-5	Styrene	18.9		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	17.2		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	17.1		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.5		0.24	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.8		0.27	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.3		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.2		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		80 - 119		97%	SPK: 50
2037-26-5	Toluene-d8	49.3		89 - 112		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.5		85 - 114		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	221000	5.538				
540-36-3	1,4-Difluorobenzene	377000	6.751				
3114-55-4	Chlorobenzene-d5	324000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	167000	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:	VX0107WBSD02		SDG No.:	Q1022
Lab Sample ID:	VX0107WBSD02		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
VX044607.D	1		01/07/25 17:19	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
74-87-3	Chloromethane	20.1		0.35	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	19.4		0.34	0.75	1.00	ug/L
74-83-9	Bromomethane	20.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.5		0.56	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	20.3		0.34	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.3		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.8		0.26	0.75	1.00	ug/L
67-64-1	Acetone	120		1.40	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	18.9		0.32	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	21.3		0.16	0.50	1.00	ug/L
75-09-2	Methylene Chloride	19.7		0.32	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.3		0.25	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.4		0.23	0.50	1.00	ug/L
78-93-3	2-Butanone	120		1.30	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.0		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.6		0.25	0.75	1.00	ug/L
67-66-3	Chloroform	20.4		0.26	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	21.1		0.19	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	19.1		0.19	0.50	1.00	ug/L
71-43-2	Benzene	19.3		0.16	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.3		0.24	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.5		0.32	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.5		0.19	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.6		0.24	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	120		0.75	2.50	5.00	ug/L
108-88-3	Toluene	20.3		0.18	0.50	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	20.8		0.21	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	20.4		0.18	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.7		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	120		1.10	2.50	5.00	ug/L

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VX0107WBSD02		SDG No.:	Q1022
Lab Sample ID:	VX0107WBSD02		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
VX044607.D	1		01/07/25 17:19	VX010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	20.0		0.18	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	18.6		0.25	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.9		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	40.8		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	20.5		0.16	0.50	1.00	ug/L
75-25-2	Bromoform	20.2		0.21	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	20.9		0.13	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.4		0.27	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.5		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	20.1		0.19	0.50	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.7		81 - 118		99%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		80 - 119		93%	SPK: 50
2037-26-5	Toluene-d8	47.5		89 - 112		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.4		85 - 114		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	172000	5.544				
540-36-3	1,4-Difluorobenzene	301000	6.757				
3114-55-4	Chlorobenzene-d5	267000	10.049				
3855-82-1	1,4-Dichlorobenzene-d4	121000	12.018				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG No.: Q1022

Instrument ID: MSVOA_X Calibration Date(s): 01/07/2025 01/07/2025

Heated Purge: (Y/N) N Calibration Time(s): 10:06 12:00

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

LAB FILE ID:	RRF001 = VX044596.D	RRF005 = VX044597.D	RRF020 = VX044598.D	RRF050 = VX044599.D	RRF100 = VX044600.D	RRF150 = VX044601.D		
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Chloromethane	0.736	0.794	0.736	0.736	0.703	0.621	0.721	7.9
Vinyl Chloride	0.629	0.704	0.696	0.710	0.696	0.624	0.676	5.8
Bromomethane		0.380	0.364	0.369	0.369	0.270	0.350	13
Chloroethane	0.482	0.371	0.371	0.324	0.387		0.387	15.1
Trichlorofluoromethane	0.982	1.037	0.991	1.084	1.092	0.855	1.007	8.7
1,1,2-Trichlorotrifluoroethane	0.557	0.586	0.583	0.588	0.596	0.554	0.577	3.1
1,1-Dichloroethene	0.539	0.587	0.549	0.562	0.565	0.553	0.559	3
Acetone	0.310	0.215	0.270	0.275	0.263	0.192	0.254	17
Carbon Disulfide	0.909	1.045	1.058	1.220	1.356	1.352	1.157	15.7
Methyl tert-butyl Ether	1.768	1.979	1.965	2.051	2.012	1.726	1.917	7.1
Methylene Chloride	0.687	0.657	0.661	0.657	0.629	0.598	0.648	4.7
trans-1,2-Dichloroethene	0.554	0.579	0.580	0.580	0.588	0.562	0.574	2.3
1,1-Dichloroethane	1.017	1.181	1.171	1.182	1.156	0.980	1.114	8.2
2-Butanone	0.295	0.393	0.403	0.409	0.399	0.303	0.367	14.4
Carbon Tetrachloride	0.467	0.457	0.491	0.516	0.534	0.488	0.492	5.9
cis-1,2-Dichloroethene	0.601	0.763	0.715	0.731	0.711	0.679	0.700	7.9
Chloroform	1.142	1.316	1.258	1.253	1.210	1.028	1.201	8.5
1,1,1-Trichloroethane	0.848	1.057	1.051	1.087	1.084	0.939	1.011	9.5
Methylcyclohexane	0.512	0.566	0.572	0.580	0.592	0.571	0.566	4.9
Benzene	1.291	1.449	1.463	1.448	1.399	1.324	1.396	5.2
1,2-Dichloroethane	0.473	0.586	0.603	0.599	0.577	0.437	0.546	13.2
Trichloroethene	0.355	0.364	0.358	0.349	0.353	0.362	0.357	1.6
1,2-Dichloropropane	0.314	0.340	0.363	0.362	0.353	0.310	0.340	6.9
Bromodichloromethane	0.401	0.472	0.503	0.524	0.530	0.459	0.482	10
4-Methyl-2-Pentanone	0.361	0.455	0.486	0.491	0.477	0.354	0.437	14.4
Toluene	0.736	0.867	0.896	0.878	0.865	0.811	0.842	7
t-1,3-Dichloropropene	0.330	0.416	0.486	0.519	0.537	0.473	0.460	16.6
cis-1,3-Dichloropropene	0.426	0.480	0.533	0.570	0.575	0.521	0.517	11
1,1,2-Trichloroethane	0.308	0.345	0.349	0.345	0.326	0.308	0.330	5.7
2-Hexanone	0.232	0.310	0.348	0.359	0.348	0.259	0.309	17.1

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG No.: Q1022

Instrument ID: MSVOA_X Calibration Date(s): 01/07/2025 01/07/2025

Heated Purge: (Y/N) N Calibration Time(s): 10:06 12:00

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

LAB FILE ID:		RRF001 = VX044596.D		RRF005 = VX044597.D		RRF020 = VX044598.D		
		RRF050 = VX044599.D		RRF100 = VX044600.D		RRF150 = VX044601.D		
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Dibromochloromethane	0.231	0.305	0.339	0.368	0.371	0.362	0.329	16.4
Tetrachloroethene	0.360	0.370	0.362	0.346	0.338	0.345	0.354	3.5
Chlorobenzene	0.977	1.089	1.086	1.088	1.063	1.065	1.061	4
Ethyl Benzene	1.555	1.854	1.919	1.928	1.895	1.783	1.822	7.8
m/p-Xylenes	0.518	0.677	0.713	0.715	0.711	0.684	0.670	11.4
o-Xylene	0.636	0.650	0.696	0.696	0.693	0.683	0.676	3.8
Styrene	0.790	1.026	1.156	1.187	1.181	1.145	1.081	14.3
Bromoform	0.153	0.200	0.225	0.248	0.271	0.293	0.232	21.9
Isopropylbenzene	3.392	3.801	3.892	3.885	3.740	3.516	3.704	5.6
1,1,2,2-Tetrachloroethane	1.145	1.320	1.227	1.255	1.166	1.051	1.194	7.9
1,3-Dichlorobenzene	1.456	1.659	1.683	1.688	1.629	1.653	1.628	5.4
1,4-Dichlorobenzene	1.762	1.780	1.665	1.685	1.637	1.646	1.696	3.6
1,2-Dichlorobenzene	1.560	1.699	1.669	1.699	1.612	1.630	1.645	3.3
1,2-Dichloroethane-d4		0.919	0.850	0.817	0.819	0.626	0.806	13.5
Dibromofluoromethane		0.354	0.347	0.335	0.348	0.330	0.343	3
Toluene-d8		1.192	1.213	1.156	1.185	1.109	1.171	3.5
4-Bromofluorobenzene		0.404	0.416	0.415	0.432	0.400	0.413	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 CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG No.: Q1022

Instrument ID: MSVOA_X Calibration Date/Time: 01/07/2025 19:37

Lab File ID: VX044613.D Init. Calib. Date(s): 01/07/2025 01/07/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:06 12:00

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chloromethane	0.721	0.767	0.1	6.38	50
Vinyl Chloride	0.676	0.734		8.58	50
Bromomethane	0.350	0.372		6.29	50
Chloroethane	0.387	0.385		-0.52	50
Trichlorofluoromethane	1.007	1.105		9.73	50
1,1,2-Trichlorotrifluoroethane	0.577	0.596		3.29	50
1,1-Dichloroethene	0.559	0.569		1.79	50
Acetone	0.254	0.293		15.35	50
Carbon Disulfide	1.157	1.242		7.35	50
Methyl tert-butyl Ether	1.917	2.102		9.65	50
Methylene Chloride	0.648	0.673		3.86	50
trans-1,2-Dichloroethene	0.574	0.581		1.22	50
1,1-Dichloroethane	1.114	1.187	0.1	6.55	50
2-Butanone	0.367	0.441		20.16	50
Carbon Tetrachloride	0.492	0.508		3.25	50
cis-1,2-Dichloroethene	0.700	0.741		5.86	50
Chloroform	1.201	1.263		5.16	50
1,1,1-Trichloroethane	1.011	1.107		9.5	50
Methylcyclohexane	0.566	0.562		-0.71	50
Benzene	1.396	1.418		1.58	50
1,2-Dichloroethane	0.546	0.602		10.26	50
Trichloroethene	0.357	0.344		-3.64	50
1,2-Dichloropropane	0.340	0.353		3.82	50
Bromodichloromethane	0.482	0.530		9.96	50
4-Methyl-2-Pentanone	0.437	0.511		16.93	50
Toluene	0.842	0.870		3.33	50
t-1,3-Dichloropropene	0.460	0.511		11.09	50
cis-1,3-Dichloropropene	0.517	0.555		7.35	50
1,1,2-Trichloroethane	0.330	0.348		5.45	50
2-Hexanone	0.309	0.374		21.04	50
Dibromochloromethane	0.329	0.365		10.94	50
Tetrachloroethene	0.354	0.336		-5.09	50
Chlorobenzene	1.061	1.087	0.3	2.45	50
Ethyl Benzene	1.822	1.948		6.91	50
m/p-Xylenes	0.670	0.721		7.61	50
o-Xylene	0.676	0.707		4.59	50
Styrene	1.081	1.185		9.62	50
Bromoform	0.232	0.258	0.1	11.21	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.: Q1022 SAS No.: Q1022 SDG No.: Q1022

Instrument ID: MSVOA_X Calibration Date/Time: 01/07/2025 19:37

Lab File ID: VX044613.D Init. Calib. Date(s): 01/07/2025 01/07/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:06 12:00

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Isopropylbenzene	3.704	3.898		5.24	50
1,1,2,2-Tetrachloroethane	1.194	1.276	0.3	6.87	50
1,3-Dichlorobenzene	1.628	1.657		1.78	50
1,4-Dichlorobenzene	1.696	1.652		-2.59	50
1,2-Dichlorobenzene	1.645	1.699		3.28	50
1,2-Dichloroethane-d4	0.806	0.902		11.91	50
Dibromofluoromethane	0.343	0.357		4.08	50
Toluene-d8	1.171	1.217		3.93	50
4-Bromofluorobenzene	0.413	0.433		4.84	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:	Q1022	OrderDate:	1/6/2025 3:27:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	N41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1022-03	BP-VPB-190A-GW-838-840	Water	SVOC-SIMGroup1	8270-Modified	01/03/25	01/07/25	01/07/25	01/06/25



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

Hit Summary Sheet
SW-846

SDG No.: Q1022
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:	01/03/25
Project:	CTO WE13	Date Received:	01/06/25
Client Sample ID:	BP-VPB-190A-GW-838-840	SDG No.:	Q1022
Lab Sample ID:	Q1022-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	760 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035899.D	1	01/07/25 11:00	01/07/25 16:44	PB165971

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.26	U	0.090	0.26	0.26	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		65%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.35		58 - 132		87%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1120	7.832				
1146-65-2	Naphthalene-d8	2230	10.622				
15067-26-2	Acenaphthene-d10	1400	14.463				
1517-22-2	Phenanthrene-d10	2790	17.199				
1719-03-5	Chrysene-d12	2870	21.385				
1520-96-3	Perylene-d12	3460	23.686				

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.: Q1022

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB165971BL	PB165971BL	2-Methylnaphthalene-d10	0.4	0.46	115		30	150
		Fluoranthene-d10	0.4	0.47	117		30	150
		Nitrobenzene-d5	0.4	0.50	124	*	55	111
		2-Fluorobiphenyl	0.4	0.47	117	*	53	106
		Terphenyl-d14	0.4	0.48	120		58	132
PB165971BS	PB165971BS	2-Methylnaphthalene-d10	0.4	0.45	113		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.47	116	*	55	111
		2-Fluorobiphenyl	0.4	0.46	115	*	53	106
		Terphenyl-d14	0.4	0.46	114		58	132
PB165971BSD	PB165971BSD	2-Methylnaphthalene-d10	0.4	0.47	116		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.47	118	*	55	111
		2-Fluorobiphenyl	0.4	0.45	112	*	53	106
		Terphenyl-d14	0.4	0.47	117		58	132
Q1022-03	BP-VPB-190A-GW-838-840	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.26	65		53	106
		Terphenyl-d14	0.4	0.35	87		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1022

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035900.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB165971BS	1,4-Dioxane	0.4	0.42	ug/L	105				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1022

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN035901.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB165971BSD	1,4-Dioxane	0.4	0.41	ug/L	103	2			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165971BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1022

SAS No.: Q1022 SDG NO.: Q1022

Lab File ID: BN035898.D

Lab Sample ID: PB165971BL

Instrument ID: BNA_N

Date Extracted: 01/07/2025

Matrix: (soil/water) Water

Date Analyzed: 01/07/2025

Level: (low/med) LOW

Time Analyzed: 16:08

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB165971BS	PB165971BS	BN035900.D	01/07/2025
BP-VPB-190A-GW-838-840	Q1022-03	BN035899.D	01/07/2025
PB165971BSD	PB165971BSD	BN035901.D	01/07/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1022

SDG NO.: Q1022

Lab File ID: BN035870.D

DFTPP Injection Date: 01/02/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	39.9
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	39
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	43.4
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.2
275	10.0 - 60.0% of mass 198	25.6
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	9.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.1 (19.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN035871.D	01/02/2025	11:28
SSTDICC0.2	SSTDICC0.2	BN035872.D	01/02/2025	12:04
SSTDICCC0.4	SSTDICCC0.4	BN035873.D	01/02/2025	12:40
SSTDICC0.8	SSTDICC0.8	BN035874.D	01/02/2025	13:16
SSTDICC1.6	SSTDICC1.6	BN035875.D	01/02/2025	13:52
SSTDICC3.2	SSTDICC3.2	BN035876.D	01/02/2025	14:28
SSTDICC5.0	SSTDICC5.0	BN035877.D	01/02/2025	15:04

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1022

SDG NO.: Q1022

Lab File ID: BN035896.D

DFTPP Injection Date: 01/07/2025

Instrument ID: BNA_N

DFTPP Injection Time: 14:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	45.9
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	43.4
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	44.4
197	Less than 2.0% of mass 198	0.2
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	26
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	9.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.3 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN035897.D	01/07/2025	15:03
PB165971BL	PB165971BL	BN035898.D	01/07/2025	16:08
BP-VPB-190A-GW-838-840	Q1022-03	BN035899.D	01/07/2025	16:44
PB165971BS	PB165971BS	BN035900.D	01/07/2025	17:19
PB165971BSD	PB165971BSD	BN035901.D	01/07/2025	17:55
SSTDCCC0.4EC	SSTDCCC0.4	BN035902.D	01/07/2025	18:31

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG NO.: Q1022

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/07/2025

Lab File ID: BN035897.D Time Analyzed: 15:03

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	1335	7.832	2523	10.62	1187	14.46
UPPER LIMIT	2670	8.332	5046	11.122	2374	14.958
LOWER LIMIT	667.5	7.332	1261.5	10.122	593.5	13.958
EPA SAMPLE NO.						
01 PB165971BL	1101	7.83	2139	10.62	1003	14.46
02 BP-VPB-190A-GW-838-840	1117	7.83	2226	10.62	1401	14.46
03 PB165971BS	1718	7.83	3309	10.62	1504	14.46
04 PB165971BSD	1875	7.83	3596	10.62	1733	14.46

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.: Q1022 SAS No.: Q1022 SDG NO.: Q1022

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/07/2025

Lab File ID: BN035897.D Time Analyzed: 15:03

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	2191	17.206	1780	21.384	2085	23.686
UPPER LIMIT	4382	17.706	3560	21.884	4170	24.186
LOWER LIMIT	1095.5	16.706	890	20.884	1042.5	23.186
EPA SAMPLE NO.						
01 PB165971BL	1872	17.20	1597	21.39	1804	23.69
02 BP-VPB-190A-GW-838-840	2790	17.20	2866	21.39	3458	23.69
03 PB165971BS	2603	17.20	2176	21.39	2465	23.68
04 PB165971BSD	3028	17.20	2486	21.38	2806	23.68

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:	PB165971BL		SDG No.:	Q1022	
Lab Sample ID:	PB165971BL		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035898.D	1	01/07/25 11:00	01/07/25 16:08	PB165971

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	0.46		30 - 150		115%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		117%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.50	*	55 - 111		124%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		117%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		120%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1100	7.831				
1146-65-2	Naphthalene-d8	2140	10.622				
15067-26-2	Acenaphthene-d10	1000	14.463				
1517-22-2	Phenanthrene-d10	1870	17.199				
1719-03-5	Chrysene-d12	1600	21.385				
1520-96-3	Perylene-d12	1800	23.692				

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:	PB165971BS		SDG No.:	Q1022
Lab Sample ID:	PB165971BS		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035900.D	1	01/07/25 11:00	01/07/25 17:19	PB165971

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.42		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.45		30 - 150		113%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.47	*	55 - 111		116%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.46	*	53 - 106		115%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1720	7.832				
1146-65-2	Naphthalene-d8	3310	10.622				
15067-26-2	Acenaphthene-d10	1500	14.463				
1517-22-2	Phenanthrene-d10	2600	17.199				
1719-03-5	Chrysene-d12	2180	21.385				
1520-96-3	Perylene-d12	2470	23.683				

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:	PB165971BSD		SDG No.:	Q1022	
Lab Sample ID:	PB165971BSD		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035901.D	1	01/07/25 11:00	01/07/25 17:55	PB165971

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.41		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.47		30 - 150		116%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.47	*	55 - 111		118%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.45	*	53 - 106		112%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1880	7.832				
1146-65-2	Naphthalene-d8	3600	10.622				
15067-26-2	Acenaphthene-d10	1730	14.463				
1517-22-2	Phenanthrene-d10	3030	17.199				
1719-03-5	Chrysene-d12	2490	21.376				
1520-96-3	Perylene-d12	2810	23.684				

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-BN010225.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Jan 02 15:39:17 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN035871.D 0.2 =BN035872.D 0.4 =BN035873.D 0.8 =BN035874.D 1.6 =BN035875.D 3.2 =BN035876.D 5.0 =BN035877.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	0.454	0.422	0.373	0.388	0.391	0.377	0.377	0.397	7.52
3)	n-Nitrosodimet...	0.707	0.674	0.676	0.690	0.722	0.690	0.692	0.693	2.45
4) S	2-Fluorophenol	1.031	1.009	0.952	0.958	0.997	0.956	0.968	0.981	3.13
5) S	Phenol-d6	1.351	1.255	1.180	1.197	1.215	1.163	1.170	1.219	5.44
6)	bis(2-Chloroet...	1.001	0.946	0.936	0.913	0.938	0.886	0.879	0.929	4.43
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.346	0.307	0.296	0.302	0.319	0.317	0.330	0.317	5.48
9)	Naphthalene	1.163	1.094	1.086	1.096	1.167	1.113	1.141	1.123	3.00
10)	Hexachlorobuta...	0.368	0.354	0.353	0.363	0.382	0.362	0.369	0.365	2.74
11) SURR2	Methylnaphth...	0.547	0.536	0.527	0.519	0.556	0.524	0.540	0.536	2.50
12)	2-Methylnaphth...	0.691	0.654	0.685	0.680	0.731	0.701	0.722	0.695	3.75
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.164	0.165	0.189	0.189	0.207	0.211	0.220	0.192	11.39
15) S	2-Fluorobiphenyl	1.776	1.675	1.708	1.765	1.823	1.779	1.762	1.755	2.79
16)	Acenaphthylene	1.890	1.766	1.819	1.839	1.962	1.948	1.963	1.884	4.15
17)	Acenaphthene	1.187	1.162	1.198	1.232	1.300	1.275	1.291	1.235	4.43
18)	Fluorene	1.341	1.270	1.307	1.298	1.419	1.444	1.432	1.359	5.28
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.058	0.066	0.067	0.069	0.076	0.076	0.074	0.069	9.51
21)	4-Bromophenyl-...	0.265	0.269	0.268	0.267	0.290	0.283	0.279	0.274	3.47
22)	Hexachlorobenzene	0.393	0.369	0.356	0.362	0.394	0.373	0.371	0.374	3.93
23)	Atrazine	0.169	0.191	0.176	0.171	0.198	0.190	0.193	0.184	6.36
24)	Pentachlorophenol	0.141	0.101	0.118	0.122	0.143	0.148	0.153	0.132	14.40
25)	Phenanthrene	1.131	1.132	1.142	1.144	1.228	1.193	1.200	1.167	3.36
26)	Anthracene	0.996	0.998	1.008	1.033	1.137	1.132	1.130	1.062	6.34
27) SURR	Fluoranthene-d10	0.988	0.952	0.978	0.959	1.028	1.010	1.035	0.993	3.28
28)	Fluoranthene	1.268	1.253	1.330	1.312	1.441	1.446	1.475	1.361	6.71
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.606	1.620	1.571	1.612	1.711	1.621	1.627	1.624	2.63
31) S	Terphenyl-d14	0.814	0.813	0.790	0.777	0.828	0.776	0.781	0.797	2.64
32)	Benzo(a)anthra...	1.379	1.382	1.344	1.407	1.461	1.427	1.466	1.410	3.19
33)	Chrysene	1.484	1.458	1.441	1.451	1.541	1.478	1.471	1.475	2.24
34)	Bis(2-ethylhex...	0.691	0.583	0.582	0.541	0.569	0.519	0.530	0.574	10.05
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN010225.M

36)	Indeno(1,2,3-c...	1.428	1.461	1.414	1.578	1.697	1.712	1.751	1.577	9.15
37)	Benzo(b)fluora...	1.337	1.304	1.294	1.351	1.466	1.420	1.447	1.374	5.06
38)	Benzo(k)fluora...	1.279	1.254	1.251	1.344	1.469	1.442	1.482	1.360	7.55
39) C	Benzo(a)pyrene	1.099	1.181	1.086	1.163	1.270	1.244	1.284	1.190	6.71
40)	Dibenzo(a,h)an...	1.145	1.152	1.106	1.251	1.363	1.365	1.402	1.255	9.75
41)	Benzo(g,h,i)pe...	1.335	1.316	1.245	1.407	1.490	1.501	1.530	1.403	7.72

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1022 SAS No.: Q1022 SDG No.: Q1022

Instrument ID: BNA_N Calibration Date/Time: 01/07/2025 15:03

Lab File ID: BN035897.D Init. Calib. Date(s): 01/02/2025 01/02/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:28 15:04

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.536	0.500		-6.7	20.0
Fluoranthene-d10	0.993	0.931		-6.2	20.0
2-Fluorophenol	0.981	0.971		-1.0	20.0
Phenol-d6	1.219	1.172		-3.9	20.0
Nitrobenzene-d5	0.317	0.342		7.9	20.0
2-Fluorobiphenyl	1.755	1.747		-0.5	20.0
2,4,6-Tribromophenol	0.192	0.201		4.7	20.0
Terphenyl-d14	0.797	0.739		-7.3	20.0
1,4-Dioxane	0.397	0.449		13.1	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.: Q1022 SAS No.: Q1022 SDG No.: Q1022

Instrument ID: BNA_N Calibration Date/Time: 01/07/2025 18:31

Lab File ID: BN035902.D Init. Calib. Date(s): 01/02/2025 01/02/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:28 15:04

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.536	0.501		-6.5	50.0
Fluoranthene-d10	0.993	0.919		-7.5	50.0
2-Fluorophenol	0.981	0.948		-3.4	50.0
Phenol-d6	1.219	1.168		-4.2	50.0
Nitrobenzene-d5	0.317	0.335		5.7	50.0
2-Fluorobiphenyl	1.755	1.789		1.9	50.0
2,4,6-Tribromophenol	0.192	0.200		4.2	50.0
Terphenyl-d14	0.797	0.755		-5.3	50.0
1,4-Dioxane	0.397	0.400		0.8	50.0

All other compounds must meet a minimum RRF of 0.010.