

ANALYTICAL RESULTS SUMMARY

SEMI-VOLATILE ORGANICS
VOLATILE ORGANICS

PROJECT NAME : NAVFAC NWIRP BETHPAGE, NY SITE 1 OU-2 - 32258

AECOM TECHNICAL SERVICES, INC.

13640 Briarwick Drive

Austin, TX - 78729

Phone No: 512-454-4797

ORDER ID : Q2361

ATTENTION : Eleanor Vivadou



Laboratory Certification ID # 20012



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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
TT205S1-20250617	Q2361-01	8260-Low	8270-Modified				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q2361-01	Water	06/17/25	06/18/25	06/20/25	06/26/25

* Details For Test : SVOC-SIMGroup1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIb

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q2361-01	Water	06/17/25	06/18/25		06/19/25

* Details For Test : VOCMS Group1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q2361-01	Water	8260-Low	5030		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q2361-01	Water	8270-Modified	3510C		

Cover Page

Order ID : Q2361

Project ID : NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258

Client : AECOM Technical Services, Inc.

Lab Sample Number

Q2361-01

Client Sample Number

TT205S1-20250617

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:11 am, Jun 30, 2025

Date: 6/28/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

AECOM Technical Services, Inc.

Project Name: NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258

Project # N/A

Order ID # Q2361

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

1 Water sample was received on 06/18/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI The analysis of VOCMS Group1 was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

The not QT review data is reported in the Miscellaneous.

Trip Blank was not provided with this set of samples.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.



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

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:11 am, Jun 30, 2025

Signature_____

CASE NARRATIVE

AECOM Technical Services, Inc.

Project Name: NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258

Project # N/A

Order ID # Q2361

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

1 Water sample was received on 06/18/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. This data package contains results for SVOC-SIMGroup1.

C. Analytical Techniques:

The samples were analyzed on instrument BNA_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

E. Additional Comments:

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:11 am, Jun 30, 2025

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “Results Qualifiers” are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2361

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: MOHAMMAD AHMED

Date: 06/28/2025

LAB CHRONICLE

OrderID:	Q2361	OrderDate:	6/18/2025 3:09:00 PM
Client:	AECOM Technical Services, Inc.	Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Contact:	Eleanor Vivadou	Location:	D51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2361-01	TT205S1-20250617	Water	VOCMS Group1	8260-Low	06/17/25		06/19/25	06/18/25

Hit Summary Sheet SW-846

SDG No.: Q2361
Client: AECOM Technical Services, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	TT205S1-20250617								
Q2361-01	TT205S1-20250617	Water	Trichloroethene	7.00		0.090	0.75	1.00	ug/L
			Total Voc :	7.00					
			Total Concentration:	7.00					

A

B

C

D

E

F

G



SAMPLE DATA

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	06/17/25	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	06/18/25	
Client Sample ID:	TT205S1-20250617		SDG No.:	Q2361	
Lab Sample ID:	Q2361-01		Matrix:	Water	
Analytical Method:	8260D		% 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
VX046764.D	1		06/19/25 12:12	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.50	U	0.22	0.50	1.00	ug/L
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	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	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	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	0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
79-20-9	Methyl Acetate	0.75	U	0.27	0.75	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
110-82-7	Cyclohexane	2.50	U	1.50	2.50	5.00	ug/L
78-93-3	2-Butanone	2.50	U	0.98	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	0.19	0.75	1.00	ug/L
74-97-5	Bromochloromethane	0.50	U	0.22	0.50	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	7.00		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L

Report of Analysis

Client:	AECOM Technical Services, Inc.			Date Collected:	06/17/25		
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258			Date Received:	06/18/25		
Client Sample ID:	TT205S1-20250617			SDG No.:	Q2361		
Lab Sample ID:	Q2361-01			Matrix:	Water		
Analytical Method:	8260D			% 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
VX046764.D	1		06/19/25 12:12	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	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	0.89	2.50	5.00	ug/L
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.50	U	0.15	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.75	U	0.53	0.75	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.20	0.50	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.75	U	0.20	0.75	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.5		81 - 118		95%	SPK: 50
1868-53-7	Dibromofluoromethane	49.1		80 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	50.5		89 - 112		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		85 - 114		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	120000	5.562				
540-36-3	1,4-Difluorobenzene	201000	6.769				
3114-55-4	Chlorobenzene-d5	178000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	84200	12.018				

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	06/17/25	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	06/18/25	
Client Sample ID:	TT205S1-20250617		SDG No.:	Q2361	
Lab Sample ID:	Q2361-01		Matrix:	Water	
Analytical Method:	8260D		% 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
VX046764.D	1		06/19/25 12:12	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
------------	-----------	-------	-----------	-----	-----	------------	-------

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.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q2361-01	TT205S1-20250617	1,2-Dichloroethane-d4	50	47.5	95	81	118
		Dibromofluoromethane	50	49.1	98	80	119
		Toluene-d8	50	50.5	101	89	112
		4-Bromofluorobenzene	50	48.7	97	85	114
VX0619WBL01	VX0619WBL01	1,2-Dichloroethane-d4	50	48.3	97	81	118
		Dibromofluoromethane	50	49.0	98	80	119
		Toluene-d8	50	50.0	100	89	112
		4-Bromofluorobenzene	50	49.4	99	85	114
VX0619WBS01	VX0619WBS01	1,2-Dichloroethane-d4	50	49.8	100	81	118
		Dibromofluoromethane	50	52.0	104	80	119
		Toluene-d8	50	52.3	105	89	112
		4-Bromofluorobenzene	50	54.1	108	85	114
VX0619WBSD0	VX0619WBSD01	1,2-Dichloroethane-d4	50	51.5	103	81	118
		Dibromofluoromethane	50	52.8	106	80	119
		Toluene-d8	50	52.7	105	89	112
		4-Bromofluorobenzene	50	54.9	110	85	114

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: SW8260-Low

Datafile : VX046762.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VX0619WBS01	Dichlorodifluoromethane	20	19.1	ug/L	96			32	152	
	Chloromethane	20	18.7	ug/L	94			50	139	
	Vinyl chloride	20	18.9	ug/L	95			58	137	
	Bromomethane	20	21.2	ug/L	106			53	141	
	Chloroethane	20	19.9	ug/L	100			60	138	
	Trichlorofluoromethane	20	18.4	ug/L	92			65	141	
	1,1,2-Trichlorotrifluoroethane	20	18.5	ug/L	93			70	136	
	1,1-Dichloroethene	20	18.6	ug/L	93			71	131	
	Acetone	100	74.1	ug/L	74			39	160	
	Carbon disulfide	20	17.0	ug/L	85			64	133	
	Methyl tert-butyl Ether	20	17.0	ug/L	85			71	124	
	Methyl Acetate	20	16.0	ug/L	80			56	136	
	Methylene Chloride	20	18.1	ug/L	91			74	124	
	trans-1,2-Dichloroethene	20	18.3	ug/L	92			75	124	
	1,1-Dichloroethane	20	18.5	ug/L	93			77	125	
	Cyclohexane	20	18.8	ug/L	94			71	130	
	2-Butanone	100	78.9	ug/L	79			56	143	
	Carbon Tetrachloride	20	18.0	ug/L	90			72	136	
	cis-1,2-Dichloroethene	20	18.6	ug/L	93			78	123	
	Bromochloromethane	20	20.8	ug/L	104			78	123	
	Chloroform	20	19.0	ug/L	95			79	124	
	1,1,1-Trichloroethane	20	17.7	ug/L	89			74	131	
	Methylcyclohexane	20	18.5	ug/L	93			72	132	
	Benzene	20	18.9	ug/L	95			79	120	
	1,2-Dichloroethane	20	18.5	ug/L	93			73	128	
	Trichloroethene	20	18.4	ug/L	92			79	123	
	1,2-Dichloropropane	20	18.4	ug/L	92			78	122	
	Bromodichloromethane	20	18.9	ug/L	95			79	125	
	4-Methyl-2-Pentanone	100	81.6	ug/L	82			67	130	
	Toluene	20	19.0	ug/L	95			80	121	
	t-1,3-Dichloropropene	20	18.0	ug/L	90			73	127	
	cis-1,3-Dichloropropene	20	18.2	ug/L	91			75	124	
	1,1,2-Trichloroethane	20	18.5	ug/L	93			80	119	
	2-Hexanone	100	78.9	ug/L	79			57	139	
	Dibromochloromethane	20	18.4	ug/L	92			74	126	
	1,2-Dibromoethane	20	18.0	ug/L	90			77	121	
	Tetrachloroethene	20	17.7	ug/L	89			74	129	
	Chlorobenzene	20	18.0	ug/L	90			82	118	
	Ethyl Benzene	20	18.0	ug/L	90			79	121	
	m/p-Xylenes	40	37.2	ug/L	93			80	121	
	o-Xylene	20	18.6	ug/L	93			78	122	
	Styrene	20	18.3	ug/L	92			78	123	
	Bromoform	20	16.7	ug/L	84			66	130	
	Isopropylbenzene	20	18.1	ug/L	91			72	131	
	1,1,2,2-Tetrachloroethane	20	17.3	ug/L	86			71	121	
	1,3-Dichlorobenzene	20	17.8	ug/L	89			80	119	
	1,4-Dichlorobenzene	20	17.5	ug/L	88			79	118	
	1,2-Dichlorobenzene	20	18.1	ug/L	91			80	119	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: SW8260-Low

Datafile : VX046762.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0619WBS01	1,2-Dibromo-3-Chloropropane	20	15.1	ug/L	76			62	128	
	1,2,4-Trichlorobenzene	20	17.1	ug/L	86			69	130	
	1,2,3-Trichlorobenzene	20	17.6	ug/L	88			69	129	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: SW8260-Low

Datafile : VX046763.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VX0619WBSD01	Dichlorodifluoromethane	20	19.8	ug/L	99	3		32	152	20
	Chloromethane	20	19.5	ug/L	98	4		50	139	20
	Vinyl chloride	20	19.7	ug/L	99	4		58	137	20
	Bromomethane	20	22.2	ug/L	111	5		53	141	20
	Chloroethane	20	20.6	ug/L	103	3		60	138	20
	Trichlorofluoromethane	20	19.3	ug/L	97	5		65	141	20
	1,1,2-Trichlorotrifluoroethane	20	19.7	ug/L	99	6		70	136	20
	1,1-Dichloroethene	20	19.5	ug/L	98	5		71	131	20
	Acetone	100	81.5	ug/L	82	10		39	160	20
	Carbon disulfide	20	18.0	ug/L	90	6		64	133	20
	Methyl tert-butyl Ether	20	18.7	ug/L	94	10		71	124	20
	Methyl Acetate	20	17.8	ug/L	89	11		56	136	20
	Methylene Chloride	20	19.3	ug/L	97	6		74	124	20
	trans-1,2-Dichloroethene	20	19.2	ug/L	96	4		75	124	20
	1,1-Dichloroethane	20	19.4	ug/L	97	4		77	125	20
	Cyclohexane	20	19.7	ug/L	99	5		71	130	20
	2-Butanone	100	87.0	ug/L	87	10		56	143	20
	Carbon Tetrachloride	20	19.1	ug/L	96	6		72	136	20
	cis-1,2-Dichloroethene	20	19.4	ug/L	97	4		78	123	20
	Bromochloromethane	20	23.1	ug/L	116	11		78	123	20
	Chloroform	20	20.5	ug/L	103	8		79	124	20
	1,1,1-Trichloroethane	20	19.3	ug/L	97	9		74	131	20
	Methylcyclohexane	20	19.0	ug/L	95	2		72	132	20
	Benzene	20	20.0	ug/L	100	5		79	120	20
	1,2-Dichloroethane	20	20.1	ug/L	101	8		73	128	20
	Trichloroethene	20	19.3	ug/L	97	5		79	123	20
	1,2-Dichloropropane	20	20.3	ug/L	102	10		78	122	20
	Bromodichloromethane	20	20.1	ug/L	101	6		79	125	20
	4-Methyl-2-Pentanone	100	91.8	ug/L	92	11		67	130	20
	Toluene	20	20.3	ug/L	102	7		80	121	20
	t-1,3-Dichloropropene	20	19.5	ug/L	98	9		73	127	20
	cis-1,3-Dichloropropene	20	19.9	ug/L	100	9		75	124	20
	1,1,2-Trichloroethane	20	20.4	ug/L	102	9		80	119	20
	2-Hexanone	100	88.8	ug/L	89	12		57	139	20
	Dibromochloromethane	20	19.9	ug/L	100	8		74	126	20
	1,2-Dibromoethane	20	20.1	ug/L	101	12		77	121	20
	Tetrachloroethene	20	18.8	ug/L	94	5		74	129	20
	Chlorobenzene	20	19.4	ug/L	97	7		82	118	20
	Ethyl Benzene	20	19.1	ug/L	96	6		79	121	20
	m/p-Xylenes	40	38.8	ug/L	97	4		80	121	20
	o-Xylene	20	19.8	ug/L	99	6		78	122	20
	Styrene	20	19.7	ug/L	99	7		78	123	20
	Bromoform	20	18.4	ug/L	92	9		66	130	20
	Isopropylbenzene	20	18.6	ug/L	93	2		72	131	20
	1,1,2,2-Tetrachloroethane	20	18.4	ug/L	92	7		71	121	20
	1,3-Dichlorobenzene	20	18.6	ug/L	93	4		80	119	20
	1,4-Dichlorobenzene	20	17.8	ug/L	89	1		79	118	20
	1,2-Dichlorobenzene	20	19.0	ug/L	95	4		80	119	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: SW8260-Low

Datafile : VX046763.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0619WBSD01	1,2-Dibromo-3-Chloropropane	20	16.1	ug/L	81	6		62	128	20
	1,2,4-Trichlorobenzene	20	18.3	ug/L	92	7		69	130	20
	1,2,3-Trichlorobenzene	20	18.2	ug/L	91	3		69	129	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0619WBL01

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM Case No.: Q2361

SAS No.: Q2361 SDG NO.: Q2361

Lab File ID: VX046760.D

Lab Sample ID: VX0619WBL01

Date Analyzed: 06/19/2025

Time Analyzed: 10:33

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
VX0619WBS01	VX0619WBS01	VX046762.D	06/19/2025
VX0619WBSD01	VX0619WBSD01	VX046763.D	06/19/2025
TT205S1-20250617	Q2361-01	VX046764.D	06/19/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: AECO15
Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG NO.: Q2361
Lab File ID: VX046715.D BFB Injection Date: 06/17/2025
Instrument ID: MSVOA_X BFB Injection Time: 08:46
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	18.7
75	30.0 - 60.0% of mass 95	50.7
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	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	74.8
175	5.0 - 9.0% of mass 174	5.5 (7.4) 1
176	95.0 - 101.0% of mass 174	72 (96.2) 1
177	5.0 - 9.0% of mass 176	4.3 (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
VSTDIC005	VSTDIC005	VX046718.D	06/17/2025	11:19
VSTDIC020	VSTDIC020	VX046719.D	06/17/2025	13:59
VSTDIC050	VSTDIC050	VX046720.D	06/17/2025	14:20
VSTDIC100	VSTDIC100	VX046721.D	06/17/2025	14:41
VSTDIC150	VSTDIC150	VX046722.D	06/17/2025	15:02
VSTDIC001	VSTDIC001	VX046725.D	06/17/2025	17:18

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: AECO15
Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG NO.: Q2361
Lab File ID: VX046757.D BFB Injection Date: 06/19/2025
Instrument ID: MSVOA_X BFB Injection Time: 08:42
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	18.8
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.7 (1) 1
174	50.0 - 100.0% of mass 95	72.6
175	5.0 - 9.0% of mass 174	5.7 (7.8) 1
176	95.0 - 101.0% of mass 174	71.1 (97.9) 1
177	5.0 - 9.0% of mass 176	4.5 (6.3) 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	VX046758.D	06/19/2025	09:43
VX0619WBL01	VX0619WBL01	VX046760.D	06/19/2025	10:33
VX0619WBS01	VX0619WBS01	VX046762.D	06/19/2025	11:24
VX0619WBSD01	VX0619WBSD01	VX046763.D	06/19/2025	11:51
TT205S1-20250617	Q2361-01	VX046764.D	06/19/2025	12:12
VSTDCCC050EC	VSTDCCC050	VX046775.D	06/19/2025	17:10

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: AECO15
Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG NO.: Q2361
Lab File ID: VX046758.D Date Analyzed: 06/19/2025
Instrument ID: MSVOA_X Time Analyzed: 09:43
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	137182	5.56	224265	6.76	197740	10.05
UPPER LIMIT	274364	6.056	448530	7.263	395480	10.549
LOWER LIMIT	68591	5.056	112133	6.263	98870	9.549
EPA SAMPLE NO.						
TT205S1-20250617	120112	5.56	200995	6.77	177542	10.06
VX0619WBL01	124937	5.56	212303	6.77	191555	10.06
VX0619WBS01	137936	5.56	227140	6.77	207463	10.06
VX0619WBSD01	120371	5.56	199496	6.76	183807	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: AECO15
 Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG NO.: Q2361
 Lab File ID: VX046758.D Date Analyzed: 06/19/2025
 Instrument ID: MSVOA_X Time Analyzed: 09:43
 GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	96867	12.018				
UPPER LIMIT	193734	12.518				
LOWER LIMIT	48433.5	11.518				
EPA SAMPLE NO.						
TT205S1-20250617	84203	12.02				
VX0619WBL01	93040	12.02				
VX0619WBS01	104652	12.02				
VX0619WBSD01	94851	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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBL01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBL01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046760.D	1		06/19/25 10:33	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.50	U	0.22	0.50	1.00	ug/L
74-87-3	Chloromethane	0.50	U	0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	0.75	U	0.26	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	0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.50	U	0.33	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	0.23	0.75	1.00	ug/L
67-64-1	Acetone	3.80	U	1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	0.75	U	0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.16	0.50	1.00	ug/L
79-20-9	Methyl Acetate	0.75	U	0.27	0.75	1.00	ug/L
75-09-2	Methylene Chloride	0.50	U	0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.50	U	0.23	0.50	1.00	ug/L
110-82-7	Cyclohexane	2.50	U	1.50	2.50	5.00	ug/L
78-93-3	2-Butanone	2.50	U	0.98	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	0.19	0.75	1.00	ug/L
74-97-5	Bromochloromethane	0.50	U	0.22	0.50	1.00	ug/L
67-66-3	Chloroform	0.50	U	0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	0.50	U	0.16	0.50	1.00	ug/L
71-43-2	Benzene	0.50	U	0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	0.75	U	0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.50	U	0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	0.50	U	0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	2.50	U	0.68	2.50	5.00	ug/L
108-88-3	Toluene	0.50	U	0.14	0.50	1.00	ug/L

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBL01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBL01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046760.D	1		06/19/25 10:33	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.16	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	0.89	2.50	5.00	ug/L
124-48-1	Dibromochloromethane	0.50	U	0.18	0.50	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.50	U	0.15	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	0.50	U	0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	0.50	U	0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	0.50	U	0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	1.00	U	0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	0.50	U	0.12	0.50	1.00	ug/L
100-42-5	Styrene	0.50	U	0.15	0.50	1.00	ug/L
75-25-2	Bromoform	0.50	U	0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	0.50	U	0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.50	U	0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.50	U	0.16	0.50	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.75	U	0.53	0.75	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.20	0.50	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.75	U	0.20	0.75	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48.3		81 - 118		97%	SPK: 50
1868-53-7	Dibromofluoromethane	49.0		80 - 119		98%	SPK: 50
2037-26-5	Toluene-d8	50.0		89 - 112		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.4		85 - 114		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	125000	5.562				
540-36-3	1,4-Difluorobenzene	212000	6.769				
3114-55-4	Chlorobenzene-d5	192000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	93000	12.018				

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBL01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBL01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046760.D	1		06/19/25 10:33	VX061925

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBS01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBS01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046762.D	1		06/19/25 11:24	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	19.1		0.22	0.50	1.00	ug/L
74-87-3	Chloromethane	18.7		0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	18.9		0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	21.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	19.9		0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.4		0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.5		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.6		0.23	0.75	1.00	ug/L
67-64-1	Acetone	74.1		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	17.0		0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.0		0.16	0.50	1.00	ug/L
79-20-9	Methyl Acetate	16.0		0.27	0.75	1.00	ug/L
75-09-2	Methylene Chloride	18.1		0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.3		0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.5		0.23	0.50	1.00	ug/L
110-82-7	Cyclohexane	18.8		1.50	2.50	5.00	ug/L
78-93-3	2-Butanone	78.9		0.98	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	18.6		0.19	0.75	1.00	ug/L
74-97-5	Bromochloromethane	20.8		0.22	0.50	1.00	ug/L
67-66-3	Chloroform	19.0		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	17.7		0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	18.5		0.16	0.50	1.00	ug/L
71-43-2	Benzene	18.9		0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.5		0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	18.4		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.4		0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	18.9		0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	81.6		0.68	2.50	5.00	ug/L
108-88-3	Toluene	19.0		0.14	0.50	1.00	ug/L

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBS01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBS01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046762.D	1		06/19/25 11:24	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	18.0		0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.2		0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.5		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	78.9		0.89	2.50	5.00	ug/L
124-48-1	Dibromochloromethane	18.4		0.18	0.50	1.00	ug/L
106-93-4	1,2-Dibromoethane	18.0		0.15	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	17.7		0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	18.0		0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	18.0		0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	37.2		0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	18.6		0.12	0.50	1.00	ug/L
100-42-5	Styrene	18.3		0.15	0.50	1.00	ug/L
75-25-2	Bromoform	16.7		0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.1		0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	17.3		0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	17.8		0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.5		0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.1		0.16	0.50	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	15.1		0.53	0.75	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	17.1		0.20	0.50	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	17.6		0.20	0.75	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.8		81 - 118		100%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		80 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	52.3		89 - 112		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.1		85 - 114		108%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	138000	5.562				
540-36-3	1,4-Difluorobenzene	227000	6.769				
3114-55-4	Chlorobenzene-d5	207000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	105000	12.018				

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBS01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBS01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046762.D	1		06/19/25 11:24	VX061925

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBSD01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBSD01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046763.D	1		06/19/25 11:51	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	19.8		0.22	0.50	1.00	ug/L
74-87-3	Chloromethane	19.5		0.32	0.50	1.00	ug/L
75-01-4	Vinyl Chloride	19.7		0.26	0.75	1.00	ug/L
74-83-9	Bromomethane	22.2		1.40	3.80	5.00	ug/L
75-00-3	Chloroethane	20.6		0.47	0.75	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.3		0.33	0.50	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.7		0.25	0.50	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.5		0.23	0.75	1.00	ug/L
67-64-1	Acetone	81.5		1.50	3.80	5.00	ug/L
75-15-0	Carbon Disulfide	18.0		0.21	0.75	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.7		0.16	0.50	1.00	ug/L
79-20-9	Methyl Acetate	17.8		0.27	0.75	1.00	ug/L
75-09-2	Methylene Chloride	19.3		0.28	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.2		0.23	0.50	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.4		0.23	0.50	1.00	ug/L
110-82-7	Cyclohexane	19.7		1.50	2.50	5.00	ug/L
78-93-3	2-Butanone	87.0		0.98	2.50	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.1		0.25	0.50	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.4		0.19	0.75	1.00	ug/L
74-97-5	Bromochloromethane	23.1		0.22	0.50	1.00	ug/L
67-66-3	Chloroform	20.5		0.25	0.50	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.3		0.20	0.50	1.00	ug/L
108-87-2	Methylcyclohexane	19.0		0.16	0.50	1.00	ug/L
71-43-2	Benzene	20.0		0.15	0.50	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.1		0.22	0.50	1.00	ug/L
79-01-6	Trichloroethene	19.3		0.090	0.75	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.3		0.20	0.50	1.00	ug/L
75-27-4	Bromodichloromethane	20.1		0.22	0.50	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	91.8		0.68	2.50	5.00	ug/L
108-88-3	Toluene	20.3		0.14	0.50	1.00	ug/L

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBSD01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBSD01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046763.D	1		06/19/25 11:51	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	19.5		0.17	0.50	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.9		0.16	0.50	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.4		0.21	0.50	1.00	ug/L
591-78-6	2-Hexanone	88.8		0.89	2.50	5.00	ug/L
124-48-1	Dibromochloromethane	19.9		0.18	0.50	1.00	ug/L
106-93-4	1,2-Dibromoethane	20.1		0.15	0.50	1.00	ug/L
127-18-4	Tetrachloroethene	18.8		0.23	0.50	1.00	ug/L
108-90-7	Chlorobenzene	19.4		0.12	0.50	1.00	ug/L
100-41-4	Ethyl Benzene	19.1		0.13	0.50	1.00	ug/L
179601-23-1	m/p-Xylenes	38.8		0.24	1.00	2.00	ug/L
95-47-6	o-Xylene	19.8		0.12	0.50	1.00	ug/L
100-42-5	Styrene	19.7		0.15	0.50	1.00	ug/L
75-25-2	Bromoform	18.4		0.19	0.50	1.00	ug/L
98-82-8	Isopropylbenzene	18.6		0.12	0.50	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.4		0.26	0.50	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.6		0.16	0.50	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.8		0.19	0.50	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.0		0.16	0.50	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	16.1		0.53	0.75	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	18.3		0.20	0.50	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	18.2		0.20	0.75	1.00	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.5		81 - 118		103%	SPK: 50
1868-53-7	Dibromofluoromethane	52.8		80 - 119		106%	SPK: 50
2037-26-5	Toluene-d8	52.7		89 - 112		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.9		85 - 114		110%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	120000	5.562				
540-36-3	1,4-Difluorobenzene	199000	6.763				
3114-55-4	Chlorobenzene-d5	184000	10.055				
3855-82-1	1,4-Dichlorobenzene-d4	94900	12.018				

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	VX0619WBSD01		SDG No.:	Q2361
Lab Sample ID:	VX0619WBSD01		Matrix:	Water
Analytical Method:	8260D		% 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
VX046763.D	1		06/19/25 11:51	VX061925

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



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: AECO15
Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361
Instrument ID: MSVOA_X Calibration Date(s): 06/17/2025 06/17/2025
Heated Purge: (Y/N) N Calibration Time(s): 11:19 17:18
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:	RRF005 = VX046718.D	RRF020 = VX046719.D	RRF050 = VX046720.D	RRF100 = VX046721.D	RRF150 = VX046722.D	RRF001 = VX046725.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
Dichlorodifluoromethane	0.464	0.507	0.583	0.627	0.598	0.425	0.534	15.1
Chloromethane	0.541	0.570	0.593	0.641	0.627	0.485	0.576	10
Vinyl Chloride	0.569	0.632	0.634	0.687	0.644	0.521	0.614	9.7
Bromomethane	0.371	0.367	0.369	0.341	0.280		0.346	11.1
Chloroethane	0.350	0.388	0.377	0.405	0.381	0.332	0.372	7.1
Trichlorofluoromethane	0.897	0.974	0.967	1.030	0.972	0.757	0.933	10.3
1,1,2-Trichlorotrifluoroethane	0.563	0.608	0.576	0.623	0.594	0.470	0.572	9.6
1,1-Dichloroethene	0.527	0.574	0.569	0.609	0.583	0.451	0.552	10.2
Acetone	0.219	0.222	0.220	0.238	0.234	0.251	0.231	5.6
Carbon Disulfide	1.503	1.644	1.599	1.735	1.656	1.869	1.668	7.5
Methyl tert-butyl Ether	1.628	1.803	1.752	1.898	1.808	1.427	1.720	9.8
Methyl Acetate	0.577	0.590	0.581	0.650	0.647	0.470	0.586	11.2
Methylene Chloride	0.655	0.655	0.610	0.666	0.624	0.637	0.641	3.3
trans-1,2-Dichloroethene	0.569	0.627	0.589	0.637	0.595	0.529	0.591	6.7
1,1-Dichloroethane	1.054	1.153	1.088	1.170	1.114	0.972	1.092	6.6
Cyclohexane	0.983	1.086	1.013	1.074	1.021		1.036	4.2
2-Butanone	0.319	0.325	0.338	0.371	0.353	0.251	0.326	12.7
Carbon Tetrachloride	0.509	0.537	0.515	0.548	0.531	0.470	0.518	5.4
cis-1,2-Dichloroethene	0.681	0.731	0.686	0.741	0.704	0.623	0.694	6.1
Bromochloromethane	0.527	0.459	0.485	0.519	0.500	0.480	0.495	5.2
Chloroform	1.102	1.190	1.114	1.181	1.109	0.857	1.092	11.1
1,1,1-Trichloroethane	0.931	1.012	0.956	1.046	0.990	0.812	0.958	8.6
Methylcyclohexane	0.631	0.642	0.629	0.672	0.647	0.550	0.628	6.6
Benzene	1.431	1.477	1.417	1.509	1.427	1.218	1.413	7.2
1,2-Dichloroethane	0.508	0.523	0.495	0.528	0.497	0.429	0.497	7.2
Trichloroethene	0.355	0.374	0.356	0.389	0.366	0.320	0.360	6.5
1,2-Dichloropropane	0.347	0.372	0.346	0.374	0.357	0.305	0.350	7.2
Bromodichloromethane	0.510	0.545	0.522	0.562	0.540	0.404	0.514	11.1
4-Methyl-2-Pentanone	0.408	0.414	0.426	0.460	0.439	0.322	0.411	11.6
Toluene	0.884	0.927	0.888	0.927	0.881	0.750	0.876	7.4

* 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: AECO15
Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361
Instrument ID: MSVOA_X Calibration Date(s): 06/17/2025 06/17/2025
Heated Purge: (Y/N) N Calibration Time(s): 11:19 17:18
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:								
RRF005 = VX046718.D			RRF020 = VX046719.D			RRF050 = VX046720.D		
RRF100 = VX046721.D			RRF150 = VX046722.D			RRF001 = VX046725.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
t-1,3-Dichloropropene	0.438	0.484	0.488	0.555	0.540	0.355	0.477	15.3
cis-1,3-Dichloropropene	0.516	0.555	0.548	0.603	0.589	0.436	0.541	11.1
1,1,2-Trichloroethane	0.330	0.341	0.326	0.347	0.329	0.287	0.327	6.4
2-Hexanone	0.285	0.285	0.297	0.320	0.305	0.214	0.284	13
Dibromochloromethane	0.380	0.402	0.388	0.419	0.402	0.318	0.385	9.3
1,2-Dibromoethane	0.333	0.348	0.335	0.363	0.346	0.267	0.332	10.1
Tetrachloroethene	0.345	0.353	0.340	0.360	0.339	0.341	0.346	2.4
Chlorobenzene	1.114	1.148	1.091	1.165	1.100	1.005	1.104	5.1
Ethyl Benzene	1.905	2.030	1.933	2.062	1.945	1.696	1.929	6.7
m/p-Xylenes	0.705	0.764	0.724	0.765	0.718	0.635	0.719	6.7
o-Xylene	0.686	0.729	0.692	0.739	0.698	0.498	0.673	13.1
Styrene	1.144	1.256	1.208	1.267	1.203	0.993	1.179	8.6
Bromoform	0.268	0.295	0.287	0.315	0.304	0.226	0.282	11.3
Isopropylbenzene	3.593	3.914	3.723	4.004	3.814	3.048	3.682	9.3
1,1,2,2-Tetrachloroethane	1.037	1.075	1.044	1.124	1.074	0.816	1.028	10.6
1,3-Dichlorobenzene	1.703	1.787	1.678	1.786	1.719	1.694	1.728	2.7
1,4-Dichlorobenzene	1.743	1.830	1.653	1.789	1.702	1.932	1.775	5.6
1,2-Dichlorobenzene	1.604	1.701	1.592	1.703	1.628	1.460	1.615	5.5
1,2-Dibromo-3-Chloropropane	0.196	0.205	0.211	0.235	0.237	0.134	0.203	18.6
1,2,4-Trichlorobenzene	1.040	1.138	1.127	1.253	1.160	1.170	1.148	6
1,2,3-Trichlorobenzene	1.062	1.129	1.082	1.207	1.153	0.957	1.098	7.9
1,2-Dichloroethane-d4	0.801	0.567	0.649	0.726	0.714		0.692	12.7
Dibromofluoromethane	0.362	0.267	0.320	0.354	0.351		0.331	11.9
Toluene-d8	1.342	0.973	1.144	1.250	1.234		1.189	11.7
4-Bromofluorobenzene	0.513	0.354	0.426	0.466	0.456		0.443	13.3

* 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: AECO15

Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361

Instrument ID: MSVOA_X Calibration Date/Time: 06/19/2025 09:43

Lab File ID: VX046758.D Init. Calib. Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:19 17:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.534	0.565		5.8	20
Chloromethane	0.576	0.595	0.1	3.3	20
Vinyl Chloride	0.614	0.641		4.4	20
Bromomethane	0.346	0.384		10.98	20
Chloroethane	0.372	0.387		4.03	20
Trichlorofluoromethane	0.933	0.957		2.57	20
1,1,2-Trichlorotrifluoroethane	0.572	0.592		3.5	20
1,1-Dichloroethene	0.552	0.572		3.62	20
Acetone	0.231	0.185		-19.91	20
Carbon Disulfide	1.668	1.595		-4.38	20
Methyl tert-butyl Ether	1.720	1.569		-8.78	20
Methyl Acetate	0.586	0.480		-18.09	20
Methylene Chloride	0.641	0.618		-3.59	20
trans-1,2-Dichloroethene	0.591	0.587		-0.68	20
1,1-Dichloroethane	1.092	1.081	0.1	-1.01	20
Cyclohexane	1.036	1.018		-1.74	20
2-Butanone	0.326	0.263		-19.33	20
Carbon Tetrachloride	0.518	0.515		-0.58	20
cis-1,2-Dichloroethene	0.694	0.686		-1.15	20
Bromochloromethane	0.495	0.476		-3.84	20
Chloroform	1.092	1.093		0.09	20
1,1,1-Trichloroethane	0.958	0.939		-1.98	20
Methylcyclohexane	0.628	0.627		-0.32	20
Benzene	1.413	1.415		0.14	20
1,2-Dichloroethane	0.497	0.481		-3.22	20
Trichloroethene	0.360	0.357		-0.83	20
1,2-Dichloropropane	0.350	0.353		0.86	20
Bromodichloromethane	0.514	0.521		1.36	20
4-Methyl-2-Pentanone	0.411	0.339		-17.52	20
Toluene	0.876	0.877		0.11	20
t-1,3-Dichloropropene	0.477	0.481		0.84	20
cis-1,3-Dichloropropene	0.541	0.545		0.74	20
1,1,2-Trichloroethane	0.327	0.311		-4.89	20
2-Hexanone	0.284	0.229		-19.37	20
Dibromochloromethane	0.385	0.377		-2.08	20
1,2-Dibromoethane	0.332	0.317		-4.52	20
Tetrachloroethene	0.346	0.344		-0.58	20
Chlorobenzene	1.104	1.089	0.3	-1.36	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: AECO15

Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361

Instrument ID: MSVOA_X Calibration Date/Time: 06/19/2025 09:43

Lab File ID: VX046758.D Init. Calib. Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:19 17:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.929	1.918		-0.57	20
m/p-Xylenes	0.719	0.724		0.69	20
o-Xylene	0.673	0.687		2.08	20
Styrene	1.179	1.192		1.1	20
Bromoform	0.282	0.263	0.1	-6.74	20
Isopropylbenzene	3.682	3.747		1.76	20
1,1,2,2-Tetrachloroethane	1.028	0.933	0.3	-9.24	20
1,3-Dichlorobenzene	1.728	1.670		-3.36	20
1,4-Dichlorobenzene	1.775	1.693		-4.62	20
1,2-Dichlorobenzene	1.615	1.598		-1.05	20
1,2-Dibromo-3-Chloropropane	0.203	0.164		-19.21	20
1,2,4-Trichlorobenzene	1.148	1.111		-3.22	20
1,2,3-Trichlorobenzene	1.098	1.064		-3.1	20
1,2-Dichloroethane-d4	0.692	0.639		-7.66	20
Dibromofluoromethane	0.331	0.327		-1.21	20
Toluene-d8	1.189	1.166		-1.93	20
4-Bromofluorobenzene	0.443	0.433		-2.26	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: AECO15

Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361

Instrument ID: MSVOA_X Calibration Date/Time: 06/19/2025 17:10

Lab File ID: VX046775.D Init. Calib. Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:19 17:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.534	0.573		7.3	50
Chloromethane	0.576	0.601	0.1	4.34	50
Vinyl Chloride	0.614	0.661		7.66	50
Bromomethane	0.346	0.382		10.4	50
Chloroethane	0.372	0.413		11.02	50
Trichlorofluoromethane	0.933	0.983		5.36	50
1,1,2-Trichlorotrifluoroethane	0.572	0.614		7.34	50
1,1-Dichloroethene	0.552	0.592		7.25	50
Acetone	0.231	0.223		-3.46	50
Carbon Disulfide	1.668	1.588		-4.8	50
Methyl tert-butyl Ether	1.720	1.740		1.16	50
Methyl Acetate	0.586	0.608		3.75	50
Methylene Chloride	0.641	0.645		0.62	50
trans-1,2-Dichloroethene	0.591	0.612		3.55	50
1,1-Dichloroethane	1.092	1.144	0.1	4.76	50
Cyclohexane	1.036	1.061		2.41	50
2-Butanone	0.326	0.334		2.45	50
Carbon Tetrachloride	0.518	0.513		-0.96	50
cis-1,2-Dichloroethene	0.694	0.729		5.04	50
Bromochloromethane	0.495	0.513		3.64	50
Chloroform	1.092	1.155		5.77	50
1,1,1-Trichloroethane	0.958	0.973		1.57	50
Methylcyclohexane	0.628	0.645		2.71	50
Benzene	1.413	1.472		4.18	50
1,2-Dichloroethane	0.497	0.505		1.61	50
Trichloroethene	0.360	0.369		2.5	50
1,2-Dichloropropane	0.350	0.363		3.71	50
Bromodichloromethane	0.514	0.529		2.92	50
4-Methyl-2-Pentanone	0.411	0.419		1.95	50
Toluene	0.876	0.902		2.97	50
t-1,3-Dichloropropene	0.477	0.490		2.72	50
cis-1,3-Dichloropropene	0.541	0.565		4.44	50
1,1,2-Trichloroethane	0.327	0.339		3.67	50
2-Hexanone	0.284	0.287		1.06	50
Dibromochloromethane	0.385	0.396		2.86	50
1,2-Dibromoethane	0.332	0.339		2.11	50
Tetrachloroethene	0.346	0.348		0.58	50
Chlorobenzene	1.104	1.134	0.3	2.72	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: AECO15

Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361

Instrument ID: MSVOA_X Calibration Date/Time: 06/19/2025 17:10

Lab File ID: VX046775.D Init. Calib. Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:19 17:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.929	1.995		3.42	50
m/p-Xylenes	0.719	0.745		3.62	50
o-Xylene	0.673	0.716		6.39	50
Styrene	1.179	1.253		6.28	50
Bromoform	0.282	0.283	0.1	0.35	50
Isopropylbenzene	3.682	3.814		3.59	50
1,1,2,2-Tetrachloroethane	1.028	1.047	0.3	1.85	50
1,3-Dichlorobenzene	1.728	1.702		-1.5	50
1,4-Dichlorobenzene	1.775	1.686		-5.01	50
1,2-Dichlorobenzene	1.615	1.619		0.25	50
1,2-Dibromo-3-Chloropropane	0.203	0.194		-4.43	50
1,2,4-Trichlorobenzene	1.148	1.143		-0.44	50
1,2,3-Trichlorobenzene	1.098	1.103		0.46	50
1,2-Dichloroethane-d4	0.692	0.648		-6.36	50
Dibromofluoromethane	0.331	0.320		-3.32	50
Toluene-d8	1.189	1.138		-4.29	50
4-Bromofluorobenzene	0.443	0.431		-2.71	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:	Q2361	OrderDate:	6/18/2025 3:09:00 PM
Client:	AECOM Technical Services, Inc.	Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Contact:	Eleanor Vivadou	Location:	D51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2361-01	TT205S1-20250617	Water	SVOC-SIMGroup1	8270-Modified	06/17/25	06/20/25	06/26/25	06/18/25



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

Hit Summary Sheet SW-846

SDG No.: Q2361
Client: AECOM Technical Services, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	TT205S1-20250617							
Q2361-01	TT205S1-20250617	WATER	1,4-Dioxane	0.370	0.07	0.2	0.2	ug/L
			Total Svoc :	0.37				
			Total Concentration:	0.37				



SAMPLE DATA

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	06/17/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	06/18/25
Client Sample ID:	TT205S1-20250617	SDG No.:	Q2361
Lab Sample ID:	Q2361-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	990 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
BN037400.D	1	06/20/25 09:32	06/26/25 19:06	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.37		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.30		30 - 150		75%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		95%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.25		55 - 111		63%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.42		53 - 106		104%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		107%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1480	7.568				
1146-65-2	Naphthalene-d8	3310	10.34				
15067-26-2	Acenaphthene-d10	2180	14.213				
1517-22-2	Phenanthrene-d10	4360	16.971				
1719-03-5	Chrysene-d12	4230	21.162				
1520-96-3	Perylene-d12	3950	23.345				

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.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168563BL	PB168563BL	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.33	81		53	106
		Terphenyl-d14	0.4	0.37	93		58	132
PB168563BS	PB168563BS	2-Methylnaphthalene-d10	0.4	0.49	123		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.39	98		58	132
PB168563BSD	PB168563BSD	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.40	99		53	106
		Terphenyl-d14	0.4	0.38	94		58	132
Q2361-01	TT205S1-20250617	2-Methylnaphthalene-d10	0.4	0.30	75		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
		Nitrobenzene-d5	0.4	0.25	63		55	111
		2-Fluorobiphenyl	0.4	0.42	104		53	106
		Terphenyl-d14	0.4	0.43	107		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified DataFile: BN037363.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168563BS	1,4-Dioxane	0.4	0.32	ug/L	80				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2361

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified DataFile: BN037364.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168563BSD	1,4-Dioxane	0.4	0.30	ug/L	75	6			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168563BL

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM Case No.: Q2361

SAS No.: Q2361 SDG NO.: Q2361

Lab File ID: BN037361.D

Lab Sample ID: PB168563BL

Instrument ID: BNA_N

Date Extracted: 06/20/2025

Matrix: (soil/water) Water

Date Analyzed: 06/20/2025

Level: (low/med) LOW

Time Analyzed: 22:16

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168563BS	PB168563BS	BN037363.D	06/20/2025
PB168563BSD	PB168563BSD	BN037364.D	06/21/2025
TT205S1-20250617	Q2361-01	BN037400.D	06/26/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q2361 SDG NO.: Q2361

Lab File ID: BN037351.D

DFTPP Injection Date: 06/20/2025

Instrument ID: BNA_N

DFTPP Injection Time: 15:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.7) 1
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	6.8
365	Greater than 1% of mass 198	4.9
441	Present, but less than mass 443	85.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.4 (20) 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	BN037353.D	06/20/2025	16:51
SSTDICC0.2	SSTDICC0.2	BN037354.D	06/20/2025	17:27
SSTDICCC0.4	SSTDICCC0.4	BN037355.D	06/20/2025	18:03
SSTDICC0.8	SSTDICC0.8	BN037356.D	06/20/2025	18:39
SSTDICC1.6	SSTDICC1.6	BN037357.D	06/20/2025	19:15
SSTDICC3.2	SSTDICC3.2	BN037358.D	06/20/2025	19:51
SSTDICC5.0	SSTDICC5.0	BN037359.D	06/20/2025	20:27
PB168563BL	PB168563BL	BN037361.D	06/20/2025	22:16
PB168563BS	PB168563BS	BN037363.D	06/20/2025	23:28
PB168563BSD	PB168563BSD	BN037364.D	06/21/2025	00:04
SSTDCCC0.4EC	SSTDCCC0.4	BN037365.D	06/21/2025	01:17

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q2361 SDG NO.: Q2361

Lab File ID: BN037385.D

DFTPP Injection Date: 06/26/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.3 (0.9) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
365	Greater than 1% of mass 198	4.9
441	Present, but less than mass 443	78
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.1 (18.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037386.D	06/26/2025	10:41
SSTDICC0.2	SSTDICC0.2	BN037387.D	06/26/2025	11:17
SSTDICCC0.4	SSTDICCC0.4	BN037388.D	06/26/2025	11:53
SSTDICC0.8	SSTDICC0.8	BN037389.D	06/26/2025	12:29
SSTDICC1.6	SSTDICC1.6	BN037390.D	06/26/2025	13:05
SSTDICC3.2	SSTDICC3.2	BN037391.D	06/26/2025	13:41
SSTDICC5.0	SSTDICC5.0	BN037392.D	06/26/2025	14:17
TT205S1-20250617	Q2361-01	BN037400.D	06/26/2025	19:06
SSTDCCC0.4EC	SSTDCCC0.4	BN037401.D	06/26/2025	19:42

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG NO.: Q2361

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 06/20/2025

Lab File ID: BN037355.D Time Analyzed: 18:03

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	1912	7.568	4157	10.34	2811	14.21
UPPER LIMIT	3824	8.068	8314	10.84	5622	14.713
LOWER LIMIT	956	7.068	2078.5	9.84	1405.5	13.713
EPA SAMPLE NO.						
01 PB168563BL	1968	7.57	4045	10.35	2736	14.22
02 PB168563BS	1960	7.57	4204	10.34	2586	14.21
03 PB168563BSD	1885	7.57	4095	10.34	2623	14.21

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.: Q2361 SAS No.: Q2361 SDG NO.: Q2361

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 06/20/2025

Lab File ID: BN037355.D Time Analyzed: 18:03

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	5776	16.971	4813	21.171	4943	23.354
UPPER LIMIT	11552	17.471	9626	21.671	9886	23.854
LOWER LIMIT	2888	16.471	2406.5	20.671	2471.5	22.854
EPA SAMPLE NO.						
01 PB168563BL	4864	16.98	4288	21.17	3457	23.36
02 PB168563BS	4830	16.97	3875	21.17	2749	23.35
03 PB168563BSD	5035	16.97	4193	21.16	4470	23.35

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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG NO.: Q2361

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 06/26/2025

Lab File ID: BN037388.D Time Analyzed: 11:53

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	2117	7.568	4565	10.34	3048	14.21
UPPER LIMIT	4234	8.068	9130	10.84	6096	14.713
LOWER LIMIT	1058.5	7.068	2282.5	9.84	1524	13.713
EPA SAMPLE NO.						
01 TT205S1-20250617	1481	7.57	3305	10.34	2183	14.21

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.: Q2361 SAS No.: Q2361 SDG NO.: Q2361

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 06/26/2025

Lab File ID: BN037388.D Time Analyzed: 11:53

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	6284	16.959	5612	21.162	5950	23.345
UPPER LIMIT	12568	17.459	11224	21.662	11900	23.845
LOWER LIMIT	3142	16.459	2806	20.662	2975	22.845
EPA SAMPLE NO.						
01 TT205S1-20250617	4358	16.97	4233	21.16	3947	23.35

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	PB168563BL		SDG No.:	Q2361
Lab Sample ID:	PB168563BL		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
BN037361.D	1	06/20/25 09:32	06/20/25 22:16	PB168563

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	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.568				
1146-65-2	Naphthalene-d8	4050	10.351				
15067-26-2	Acenaphthene-d10	2740	14.224				
1517-22-2	Phenanthrene-d10	4860	16.984				
1719-03-5	Chrysene-d12	4290	21.171				
1520-96-3	Perylene-d12	3460	23.357				

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	PB168563BS		SDG No.:	Q2361
Lab Sample ID:	PB168563BS		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
BN037363.D	1	06/20/25 09:32	06/20/25 23:28	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.32		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.49		30 - 150		123%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		92%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		98%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1960	7.568				
1146-65-2	Naphthalene-d8	4200	10.34				
15067-26-2	Acenaphthene-d10	2590	14.213				
1517-22-2	Phenanthrene-d10	4830	16.971				
1719-03-5	Chrysene-d12	3880	21.171				
1520-96-3	Perylene-d12	2750	23.351				

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	PB168563BSD		SDG No.:	Q2361
Lab Sample ID:	PB168563BSD		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
BN037364.D	1	06/20/25 09:32	06/21/25 00:04	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		97%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		99%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		94%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1890	7.568				
1146-65-2	Naphthalene-d8	4100	10.34				
15067-26-2	Acenaphthene-d10	2620	14.213				
1517-22-2	Phenanthrene-d10	5040	16.971				
1719-03-5	Chrysene-d12	4190	21.162				
1520-96-3	Perylene-d12	4470	23.354				

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-BN062125.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Jun 20 23:41:54 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037353.D 0.2 =BN037354.D 0.4 =BN037355.D 0.8 =BN037356.D 1.6 =BN037357.D 3.2 =BN037358.D 5 =BN037359.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD

1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.506	0.390	0.412	0.417	0.370	0.346	0.407	13.63	
3)	n-Nitrosodimet...	0.392	0.394	0.367	0.391	0.354	0.338	0.373	6.37	
4) S	2-Fluorophenol	0.854	0.818	0.751	0.781	0.834	0.786	0.771	0.799	4.65
5) S	Phenol-d6	0.781	0.766	0.766	0.785	0.891	0.878	0.896	0.823	7.45
6)	bis(2-Chloroet...	0.719	0.546	0.707	0.738	0.826	0.786	0.791	0.730	12.59
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.254	0.292	0.319	0.318	0.363	0.354	0.361	0.323	12.43
9)	Naphthalene	1.056	1.056	1.046	1.014	1.105	1.052	1.063	1.056	2.54
10)	Hexachlorobuta...	0.452	0.434	0.441	0.407	0.424	0.384	0.376	0.417	6.95
11) SURR2	Methylnaphth...	0.619	0.638	0.666	0.610	0.666	0.664	0.675	0.648	3.96
12)	2-Methylnaphth...	0.703	0.692	0.711	0.704	0.777	0.778	0.787	0.736	5.73
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.219	0.226	0.230	0.231	0.253	0.238	0.246	0.235	4.96
15) S	2-Fluorobiphenyl	1.705	1.675	1.777	1.714	1.897	1.752	1.778	1.757	4.15
16)	Acenaphthylene	1.646	1.636	1.597	1.595	1.797	1.717	1.786	1.682	5.06
17)	Acenaphthene	1.108	1.070	1.061	1.051	1.174	1.123	1.160	1.107	4.40
18)	Fluorene	1.499	1.470	1.506	1.490	1.660	1.605	1.660	1.556	5.34
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.070	0.079	0.097	0.110	0.107	0.114	0.096	18.63	
21)	4-Bromophenyl-...	0.264	0.267	0.279	0.284	0.305	0.295	0.299	0.285	5.55
22)	Hexachlorobenzene	0.322	0.319	0.314	0.304	0.324	0.296	0.292	0.310	4.11
23)	Atrazine	0.221	0.215	0.218	0.220	0.239	0.239	0.238	0.227	4.74
24)	Pentachlorophenol	0.131	0.137	0.157	0.169	0.161	0.170	0.154	10.69	
25)	Phenanthrene	1.108	1.075	1.104	1.139	1.242	1.221	1.222	1.158	5.88
26)	Anthracene	0.993	0.984	0.990	1.054	1.150	1.137	1.171	1.068	7.75
27) SURR	Fluoranthene-d10	1.097	1.070	1.161	1.166	1.235	1.151	1.158	1.148	4.62
28)	Fluoranthene	1.412	1.343	1.367	1.492	1.605	1.512	1.518	1.464	6.39
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.726	1.690	1.660	1.444	1.572	1.642	1.643	1.625	5.73
31) S	Terphenyl-d14	0.949	0.911	0.925	0.829	0.909	0.935	0.921	0.912	4.25
32)	Benzo(a)anthra...	1.309	1.168	1.216	1.278	1.431	1.372	1.429	1.315	7.76
33)	Chrysene	1.752	1.706	1.611	1.481	1.586	1.528	1.495	1.594	6.52
34)	Bis(2-ethylhex...	0.606	0.541	0.487	0.520	0.531	0.554	0.540	7.34	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN062125.M

36)	Indeno(1,2,3-c...	1.741	1.715	1.695	1.761	1.974	1.819	1.856	1.794	5.42
37)	Benzo(b)fluora...	1.428	1.380	1.444	1.392	1.541	1.532	1.587	1.472	5.50
38)	Benzo(k)fluora...	1.576	1.593	1.569	1.466	1.671	1.617	1.686	1.597	4.59
39) C	Benzo(a)pyrene	1.320	1.249	1.274	1.247	1.399	1.348	1.395	1.319	4.90
40)	Dibenzo(a,h)an...	1.179	1.185	1.236	1.355	1.561	1.446	1.478	1.348	11.32
41)	Benzo(g,h,i)pe...	1.620	1.554	1.589	1.560	1.720	1.577	1.598	1.603	3.53

(#) = Out of Range

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN062625.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Jun 26 16:06:33 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037386.D 0.2 =BN037387.D 0.4 =BN037388.D 0.8 =BN037389.D 1.6 =BN037390.D 3.2 =BN037391.D 5 =BN037392.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD

1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.470	0.369	0.366	0.377	0.363	0.331	0.379	12.38	
3)	n-Nitrosodimet...	0.377	0.374	0.366	0.385	0.374	0.371	0.375	1.73	
4) S	2-Fluorophenol	0.771	0.778	0.804	0.697	0.754	0.773	0.818	0.771	5.09
5) S	Phenol-d6	0.663	0.706	0.812	0.737	0.839	0.886	0.951	0.799	12.86
6)	bis(2-Chloroet...	0.574	0.661	0.718	0.694	0.765	0.775	0.790	0.711	10.74
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.270	0.281	0.311	0.296	0.345	0.353	0.389	0.321	13.45
9)	Naphthalene	1.042	1.001	0.999	0.972	1.048	1.050	1.096	1.030	4.06
10)	Hexachlorobuta...	0.407	0.410	0.413	0.400	0.422	0.404	0.405	0.409	1.74
11) SURR2	Methylnaphth...	0.532	0.567	0.576	0.568	0.628	0.656	0.807	0.619	14.98
12)	2-Methylnaphth...	0.635	0.665	0.684	0.662	0.746	0.767	0.803	0.709	8.89
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.194	0.207	0.239	0.225	0.251	0.256	0.271	0.235	11.68
15) S	2-Fluorobiphenyl	1.548	1.656	1.723	1.652	1.798	1.801	1.910	1.727	6.95
16)	Acenaphthylene	1.585	1.600	1.576	1.538	1.714	1.741	1.858	1.659	6.95
17)	Acenaphthene	1.030	1.027	1.045	1.009	1.123	1.147	1.203	1.083	6.85
18)	Fluorene	1.444	1.417	1.476	1.420	1.603	1.643	1.706	1.530	7.74
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.084	0.085	0.087	0.113	0.119	0.128	0.103	19.13	
21)	4-Bromophenyl-...	0.264	0.253	0.270	0.269	0.303	0.302	0.316	0.282	8.58
22)	Hexachlorobenzene	0.310	0.299	0.302	0.291	0.311	0.301	0.311	0.303	2.45
23)	Atrazine	0.200	0.208	0.213	0.204	0.232	0.242	0.266	0.224	10.81
24)	Pentachlorophenol	0.164	0.155	0.148	0.165	0.165	0.168	0.183	0.164	7.30
25)	Phenanthrene	1.056	1.067	1.080	1.038	1.172	1.190	1.287	1.127	8.12
26)	Anthracene	0.935	0.972	0.969	0.959	1.076	1.120	1.222	1.036	10.28
27) SURR	Fluoranthene-d10	1.073	1.137	1.063	1.028	1.121	1.154	1.447	1.146	12.22
28)	Fluoranthene	1.377	1.398	1.362	1.320	1.487	1.507	1.624	1.439	7.32
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.459	1.449	1.534	1.431	1.561	1.550	1.612	1.514	4.47
31) S	Terphenyl-d14	0.800	0.794	0.868	0.796	0.878	0.892	0.943	0.853	6.77
32)	Benzo(a)anthra...	1.149	1.202	1.167	1.152	1.318	1.364	1.446	1.257	9.46
33)	Chrysene	1.630	1.573	1.583	1.491	1.554	1.510	1.551	1.556	2.98
34)	Bis(2-ethylhex...	0.509	0.504	0.466	0.481	0.488	0.537	0.498	5.00	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN062625.M

36)	Indeno(1,2,3-c...	1.487	1.515	1.577	1.620	1.786	1.853	1.967	1.686	10.88
37)	Benzo(b)fluora...	1.329	1.305	1.318	1.320	1.464	1.504	1.632	1.410	8.93
38)	Benzo(k)fluora...	1.408	1.389	1.462	1.430	1.552	1.613	1.697	1.507	7.73
39) C	Benzo(a)pyrene	1.211	1.160	1.183	1.174	1.286	1.341	1.426	1.254	8.01
40)	Dibenzo(a,h)an...	1.050	1.138	1.211	1.229	1.394	1.485	1.561	1.296	14.53
41)	Benzo(g,h,i)pe...	1.425	1.473	1.477	1.462	1.617	1.658	1.725	1.548	7.51

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO15
 Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361
 Instrument ID: BNA_N Calibration Date/Time: 06/21/2025 01:17
 Lab File ID: BN037365.D Init. Calib. Date(s): 06/20/2025 06/20/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 16:51 20:27
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.648	0.670		3.4	50.0
Fluoranthene-d10	1.148	1.189		3.6	50.0
2-Fluorophenol	0.799	0.740		-7.4	50.0
Phenol-d6	0.823	0.753		-8.5	50.0
Nitrobenzene-d5	0.323	0.318		-1.5	50.0
2-Fluorobiphenyl	1.757	1.777		1.1	50.0
2,4,6-Tribromophenol	0.235	0.218		-7.2	50.0
Terphenyl-d14	0.912	0.903		-1.0	50.0
1,4-Dioxane	0.407	0.399		-2.0	50.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO15
 Lab Code: CHEM Case No.: Q2361 SAS No.: Q2361 SDG No.: Q2361
 Instrument ID: BNA_N Calibration Date/Time: 06/26/2025 19:42
 Lab File ID: BN037401.D Init. Calib. Date(s): 06/26/2025 06/26/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 10:41 14:17
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.588		-5.0	50.0
Fluoranthene-d10	1.146	1.129		-1.5	50.0
2-Fluorophenol	0.771	0.791		2.6	50.0
Phenol-d6	0.799	0.773		-3.3	50.0
Nitrobenzene-d5	0.321	0.299		-6.9	50.0
2-Fluorobiphenyl	1.727	1.679		-2.8	50.0
2,4,6-Tribromophenol	0.235	0.263		11.9	50.0
Terphenyl-d14	0.853	0.857		0.5	50.0
1,4-Dioxane	0.379	0.416		9.8	50.0

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2361 AECO15

Order Date : 6/18/2025 3:09:00 PM

Project Mgr :

Client Name : AECOM Technical Services

Project Name : NAVFAC NWIRP Bethpage

Report Type : Results Only

Client Contact : Eleanor Vivadou

Receive DateTime : 6/18/2025 12:00:00 PM

EDD Type : EQUIS

Invoice Name : AECOM Technical Services

Purchase Order :

Hard Copy Date :

Invoice Contact : Eleanor Vivadou

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2361-01	TT205S1-20250617	Water	06/17/2025	12:40	VOCMS Group1		8260-Low	10 Bus. Days	

Relinquished By :

Date / Time : 6/19/25 0730

Received By :

Date / Time : 06/19/25 7:30

Pg # 4

Storage Area : VOA Refridgerator Room