$284 \; Sheffield \; Street, \; Mountainside, \; New \; Jersey \; 07092, \; Phone \; : \; 908 \; 789 \; 8900, \\$ 

Fax: 908 789 8922

### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FORM S-I

#### SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample	Laboratory Sample	VOA GC/MS	BNA GC/MS	VOA GC	Pest PCBs	Metals	Other
ID/Code	ID/Code	(Method #)	(Method #)	(Method #)	(Method #)	(Method #)	(Method #)
TT174I1-20250320	Q1629-01	8260-Low	8270-Modified				
TT162S1-20250320	Q1629-02	8260-Low	8270-Modified				
TT188S1-20250320	Q1629-03	8260-Low	8270-Modified				
RW09-MW01D1-20250 320	Q1629-07	8260-Low	8270-Modified				
RW09-MW01D2-20250 320	Q1629-08	8260-Low	8270-Modified				
RW09-MW01D3-20250 320	Q1629-09	8260-Low	8270-Modified				
TT150S1-20250320	Q1629-10	8260-Low	8270-Modified				
FB03-20250321	Q1629-11	8260-Low	8270-Modified				
ТВ	Q1629-12	8260-Low	8270-Modified				
RW09-MW01S-2025032	Q1629-14	8260-Low	8270-Modified				
J							



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# 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
Q1629-01	Water	03/20/25	03/21/25	03/25/25	03/29/25
Q1629-02	Water	03/20/25	03/21/25	03/25/25	03/29/25
Q1629-03	Water	03/20/25	03/21/25	03/25/25	03/28/25
Q1629-07	Water	03/20/25	03/21/25	03/25/25	03/29/25
Q1629-08	Water	03/20/25	03/21/25	03/25/25	03/29/25
Q1629-09	Water	03/20/25	03/21/25	03/25/25	03/29/25
Q1629-10	Water	03/20/25	03/21/25	03/25/25	03/29/25
Q1629-11	Water	03/21/25	03/21/25	03/25/25	03/29/25
Q1629-14	Water	03/20/25	03/21/25	03/25/25	03/31/25

<sup>\*</sup> Details For Test: SVOC-SIMGroup1

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## 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
Q1629-01	Water	03/20/25	03/21/25		03/25/25
Q1629-02	Water	03/20/25	03/21/25		03/25/25
Q1629-03	Water	03/20/25	03/21/25		03/26/25
Q1629-07	Water	03/20/25	03/21/25		03/25/25
Q1629-08	Water	03/20/25	03/21/25		03/25/25
Q1629-09	Water	03/20/25	03/21/25		03/25/25
Q1629-10	Water	03/20/25	03/21/25		03/25/25
Q1629-11	Water	03/21/25	03/21/25		03/25/25
Q1629-12	Water	03/21/25	03/21/25		03/25/25
Q1629-14	Water	03/20/25	03/21/25		03/26/25

<sup>\*</sup> Details For Test: VOCMS Group1

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## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION $\mbox{FORM S-III}$

#### SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1629-01	Water	8260-Low	5030		
Q1629-02	Water	8260-Low	5030		
Q1629-03	Water	8260-Low	5030		
Q1629-04	Water	8260-Low	5030		
Q1629-05	Water	8260-Low	5030		
Q1629-07	Water	8260-Low	5030		
Q1629-08	Water	8260-Low	5030		
Q1629-09	Water	8260-Low	5030		
Q1629-10	Water	8260-Low	5030		
Q1629-11	Water	8260-Low	5030		
Q1629-12	Water	8260-Low	5030		
Q1629-14	Water	8260-Low	5030		
Q1629-15	Water	8260-Low	5030		
Q1629-16	Water	8260-Low	5030		

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## 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
Q1629-01	Water	8270-Modified	3510C		
Q1629-02	Water	8270-Modified	3510C		
Q1629-03	Water	8270-Modified	3510C		
Q1629-04	Water	8270-Modified	3510C		
Q1629-05	Water	8270-Modified	3510C		
Q1629-07	Water	8270-Modified	3510C		
Q1629-08	Water	8270-Modified	3510C		
Q1629-09	Water	8270-Modified	3510C		
Q1629-10	Water	8270-Modified	3510C		
Q1629-11	Water	8270-Modified	3510C		
Q1629-14	Water	8270-Modified	3510C		
Q1629-15	Water	8270-Modified	3510C		
Q1629-16	Water	8270-Modified	3510C		



### **Cover Page**

**Order ID:** Q1629

Q1629-16

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

**Client:** AECOM Technical Services, Inc.

#### **Lab Sample Number Client Sample Number** Q1629-01 TT174I1-20250320 Q1629-02 TT162S1-20250320 Q1629-03 TT188S1-20250320 Q1629-04 Q1629-03MS Q1629-05 Q1629-03MSD Q1629-07 RW09-MW01D1-20250320 Q1629-08 RW09-MW01D2-20250320 Q1629-09 RW09-MW01D3-20250320 Q1629-10 TT150S1-20250320 Q1629-11 FB03-20250321 Q1629-12 TB Q1629-14 RW09-MW01S-20250320 Q1629-15 Q1629-14MS

Q1629-14MSD

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 :		
Signature .	Date:	4/3/2025

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

Chemtech Project # Q1629 Test Name: VOCMS Group1

#### A. Number of Samples and Date of Receipt:

14 Water samples were received on 03/21/2025.

#### **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#121-1324UIThe 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 except for TT188S1-20250320MSD [4-Bromofluorobenzene - 115%] and RW09-MW01S-20250320MSD [Toluene-d8 - 76%], Surrogate fail in only MSD but MS and Parent Sample is Passing For Surrogate Recoveries therefore no Corrective action was taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS {Q1629-04MS} with File ID: VX045467.D recoveries met the requirements for all compounds except for Methyl Acetate[143%], due to matrix interference.

The MSD {Q1629-05MSD} with File ID: VX045468.D recoveries met the acceptable requirements except for 1,2-Dibromo-3-Chloropropane[129%], 1,2-Dichloroethane[130%], cis-1,3-Dichloropropene[126%] and t-1,3-Dichloropropene[129%],due to matrix interference.

The RPD for {Q1629-05MSD} with File ID: VX045468.D met criteria except for Bromomethane[26%], Carbon disulfide[42%], Chloroethane[23%], Chloromethane[30%], Cyclohexane[23%], Dichlorodifluoromethane[33%], Methyl



Acetate[33%], Methylcyclohexane[22%] and Vinyl chloride[25%], due to difference in results of MS and MSD.

The sample # TT188S1-20250320MS and TT188S1-20250320MSD are failing for Methyl Acetate, 1,2-Dichloroethane, t-1,3-Dichloropropene, cis-1,3-Dichloropropene, 1,2-Dibromo-3-Chloropropane and the original sample(TT188S1- 20250320) is reported with M flag for this compounds.

The Blank Spike for {VX0325WBS02} with File ID: VX045436.D met requirements for all samples except for Methyl Acetate[147%] is failing high but no positive hit in associate sample therefore no corrective action taken.

The Blank Spike for {VX0326WBS01} with File ID: VX045460.D met requirements for all samples except for Methyl Acetate[140%] failing high but no positive hit in associate sample therefore no corrective action taken.

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

The Initial Calibration met the requirements.

The Continuous Calibration File ID VX045431.D met the requirements except for 1,1,2-Trichlorotrifluoroethane,2-Hexanone,cis-1,3-

Dichloropropene, Dichlorodifluoromethane, Methylcyclohexane and t-1,3-Dichloropropene, are failing high but no positive hit in associate samples therefore no corrective action taken.

The Continuous Calibration File ID VX045457.D met the requirements except for Dichlorodifluoromethane,Methylcyclohexane and t-1,3-Dichloropropene,are failing high but no positive hit in associate samples therefore no corrective action taken. The Tuning criteria met requirements.

#### E. Additional Comments:

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_		





#### CASE NARRATIVE

**AECOM Technical Services, Inc.** 

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

Project Manager: Ernie Wu Chemtech Project # Q1629 Test Name: SVOC-SIMGroup1

#### A. Number of Samples and Date of Receipt:

14 Water samples were received on 03/21/2025.

#### **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 except for PB167295BL Which is not associated for required compound.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike 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. Except Terphenyl-d14, This compound is not associate for required compound.

The Tuning criteria met requirements.



#### **E. Additional Comments:**

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."

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.

<b>~</b> :			
Signature			
Dignature_	 		



### 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
В	<ul> <li>Indicates an estimated value. This flag is used:</li> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(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 is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.</li> <li>Indicates the analyte was found in the blank as well as the sample report as "12 B".</li> </ul>
Е	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 #: Q1629** 

	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	<b>→</b>
Is the chain of custody signed and complete	<u>✓</u>
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<del>'</del> <del>'</del> <del>'</del> <del>'</del>
Collect information for each project id from server. Were all requirements followed	<u> </u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	<u> </u>
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u> </u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u> </u>
Do requested analyses on Chain of Custody agree with the log-in page	<u> </u>
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	<u> </u>
Were the samples received within hold time	<u> </u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	<u> </u>
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	<u>'</u> <u>'</u> <u>'</u> _'
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	<u> </u>

QA Review Signature:	MAYUR DESAI	Date:	04/03/2025
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