

ANALYTICAL RESULTS SUMMARY

SEMI-VOLATILE ORGANICS

PROJECT NAME : NWIRP BETHPAGE 112G08005-WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q2603

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2603

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2603-01
Q2603-02

Client Sample Number

RW7-SP303-Test-20250709
RW7-Pond-Test-20250709

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 12:41 pm, Jul 25, 2025

Date: 7/25/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Ernie Wu

Order ID # Q2603

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 07/15/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1. 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-GGA. The 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 were met for all analysis.

The Internal Standards Areas were met for all analysis.

The Retention Times were met for all analysis.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

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 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.

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 12:41 pm, Jul 25, 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 #: Q2603

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: SOHIL JODHANI

Date: 07/25/2025

LAB CHRONICLE

OrderID:	Q2603	OrderDate:	7/15/2025 10:27:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	O11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2603-01	RW7-SP303-Test-202 50709	Water			07/09/25			07/15/25
			SVOC-SIMGroup1	8270-Modified		07/15/25	07/16/25	
Q2603-02	RW7-Pond-Test-2025 0709	Water			07/09/25			07/15/25
			SVOC-SIMGroup1	8270-Modified		07/15/25	07/16/25	

Hit Summary Sheet SW-846

SDG No.: Q2603

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW7-SP303-Test-20250709								
Q2603-01	RW7-SP303-Test-202507 WATER	1,4-Dioxane	0.110	J	0.07	0.22	0.22	ug/L
		Total Svoc :			0.11			
		Total Concentration:			0.11			
Client ID : RW7-Pond-Test-20250709								
Q2603-02	RW7-Pond-Test-2025070 WATER	1,4-Dioxane	0.100	J	0.07	0.21	0.21	ug/L
		Total Svoc :			0.10			
		Total Concentration:			0.10			



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/09/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW7-SP303-Test-20250709	SDG No.:	Q2603
Lab Sample ID:	Q2603-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	890 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
BN037512.D	1	07/15/25 11:40	07/16/25 11:04	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.11	J	0.070	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		69%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	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	1930	7.724				
1146-65-2	Naphthalene-d8	4710	10.509				
15067-26-2	Acenaphthene-d10	2440	14.355				
1517-22-2	Phenanthrene-d10	4920	17.099				
1719-03-5	Chrysene-d12	4510	21.277				
1520-96-3	Perylene-d12	4310	23.516				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/09/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW7-Pond-Test-20250709	SDG No.:	Q2603
Lab Sample ID:	Q2603-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	940 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
BN037513.D	1	07/15/25 11:40	07/16/25 11:40	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.10	J	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.29		30 - 150		73%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		77%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.45		58 - 132		113%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2080	7.724				
1146-65-2	Naphthalene-d8	5170	10.509				
15067-26-2	Acenaphthene-d10	2860	14.355				
1517-22-2	Phenanthrene-d10	5800	17.099				
1719-03-5	Chrysene-d12	4350	21.277				
1520-96-3	Perylene-d12	3730	23.516				

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.: Q2603

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168868BL	PB168868BL	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.33	81		30	150
		Nitrobenzene-d5	0.4	0.37	91		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.43	107		58	132
PB168868BS	PB168868BS	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.31	79		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.40	99		58	132
PB168868BSD	PB168868BSD	2-Methylnaphthalene-d10	0.4	0.36	89		30	150
		Fluoranthene-d10	0.4	0.30	76		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
Q2603-01	RW7-SP303-Test-20250709	2-Methylnaphthalene-d10	0.4	0.28	69		30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.39	98		58	132
Q2603-02	RW7-Pond-Test-20250709	2-Methylnaphthalene-d10	0.4	0.29	73		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.31	77		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.45	113		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2603

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037516.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168868BS	1,4-Dioxane	0.4	0.31	ug/L	78				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2603

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037517.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168868BSD	1,4-Dioxane	0.4	0.29	ug/L	73	7			70	130	20

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB168868BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2603

Lab File ID: BN037511.D

Lab Sample ID: PB168868BL

Instrument ID: BNA_N

Date Extracted: 07/15/2025

Matrix: (soil/water) Water

Date Analyzed: 07/16/2025

Level: (low/med) LOW

Time Analyzed: 10:27

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168868BS	PB168868BS	BN037516.D	07/16/2025
RW7-SP303-Test-20250709	Q2603-01	BN037512.D	07/16/2025
RW7-Pond-Test-20250709	Q2603-02	BN037513.D	07/16/2025
PB168868BSD	PB168868BSD	BN037517.D	07/16/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037497.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2603
DFTPP Injection Date: 07/15/2025
DFTPP Injection Time: 10:57

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 (0.6) 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	6.7
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	83.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.4 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037499.D	07/15/2025	12:36
SSTDICC0.2	SSTDICC0.2	BN037500.D	07/15/2025	13:12
SSTDICCC0.4	SSTDICCC0.4	BN037501.D	07/15/2025	13:49
SSTDICC0.8	SSTDICC0.8	BN037502.D	07/15/2025	14:25
SSTDICC1.6	SSTDICC1.6	BN037503.D	07/15/2025	15:01
SSTDICC3.2	SSTDICC3.2	BN037504.D	07/15/2025	15:38
SSTDICC5.0	SSTDICC5.0	BN037505.D	07/15/2025	16:14

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037509.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2603
DFTPP Injection Date: 07/16/2025
DFTPP Injection Time: 09:11

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 (0.5) 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	4.1
441	Present, but less than mass 443	83.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.5 (17.9) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN037510.D	07/16/2025	09:50
PB168868BL	PB168868BL	BN037511.D	07/16/2025	10:27
RW7-SP303-Test-20250709	Q2603-01	BN037512.D	07/16/2025	11:04
RW7-Pond-Test-20250709	Q2603-02	BN037513.D	07/16/2025	11:40
PB168868BS	PB168868BS	BN037516.D	07/16/2025	13:29
PB168868BSD	PB168868BSD	BN037517.D	07/16/2025	14:06
SSTDCCC0.4EC	SSTDCCC0.4	BN037518.D	07/16/2025	15:34

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2603

Client ID : SSTDCCC0.4

Date Analyzed: 07/16/2025

Lab File ID: BN037510.D

Time Analyzed: 09:50

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	2448	7.724	6343	10.51	3548	14.36
UPPER LIMIT	4896	8.224	12686	11.009	7096	14.855
LOWER LIMIT	1224	7.224	3171.5	10.009	1774	13.855
EPA SAMPLE NO.						
01 PB168868BL	3101	7.72	7573	10.51	3896	14.36
02 RW7-SP303-Test-20250709	1928	7.72	4714	10.51	2443	14.36
03 PB168868BS	1941	7.72	4724	10.51	2338	14.36
04 PB168868BSD	1974	7.72	4747	10.51	2348	14.36
05 RW7-Pond-Test-20250709	2084	7.72	5174	10.51	2862	14.36

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: Alliance

Lab Code: ACE

SDG NO.: Q2603

Client ID: SSTDCCC0.4

Date Analyzed: 07/16/2025

Lab File ID: BN037510.D

Time Analyzed: 09:50

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	6984	17.086	5489	21.277	5154	23.513
UPPER LIMIT	13968	17.586	10978	21.777	10308	24.013
LOWER LIMIT	3492	16.586	2744.5	20.777	2577	23.013
EPA SAMPLE NO.						
01 PB168868BL	7545	17.10	5013	21.28	4525	23.51
02 RW7-SP303-Test-20250709	4918	17.10	4511	21.28	4307	23.52
03 PB168868BS	4406	17.10	3170	21.28	2673	23.52
04 PB168868BSD	4399	17.10	3154	21.28	2636	23.52
05 RW7-Pond-Test-20250709	5795	17.10	4345	21.28	3728	23.52

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:		
Client Sample ID:	PB168868BL		SDG No.:	Q2603	
Lab Sample ID:	PB168868BL		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
BN037511.D	1	07/15/25 11:40	07/16/25 10:27	PB168868

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	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		91%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	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	3100	7.724				
1146-65-2	Naphthalene-d8	7570	10.509				
15067-26-2	Acenaphthene-d10	3900	14.355				
1517-22-2	Phenanthrene-d10	7550	17.099				
1719-03-5	Chrysene-d12	5010	21.277				
1520-96-3	Perylene-d12	4530	23.513				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168868BS		SDG No.:	Q2603
Lab Sample ID:	PB168868BS		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
BN037516.D	1	07/15/25 11:40	07/16/25 13:29	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.31		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		79%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		99%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1940	7.724				
1146-65-2	Naphthalene-d8	4720	10.509				
15067-26-2	Acenaphthene-d10	2340	14.355				
1517-22-2	Phenanthrene-d10	4410	17.099				
1719-03-5	Chrysene-d12	3170	21.277				
1520-96-3	Perylene-d12	2670	23.516				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:		
Client Sample ID:	PB168868BSD		SDG No.:	Q2603	
Lab Sample ID:	PB168868BSD		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
BN037517.D	1	07/15/25 11:40	07/16/25 14:06	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		89%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.724				
1146-65-2	Naphthalene-d8	4750	10.509				
15067-26-2	Acenaphthene-d10	2350	14.356				
1517-22-2	Phenanthrene-d10	4400	17.099				
1719-03-5	Chrysene-d12	3150	21.277				
1520-96-3	Perylene-d12	2640	23.519				

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-BN071525.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Jul 16 02:38:11 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037499.D 0.2 =BN037500.D 0.4 =BN037501.D 0.8 =BN037502.D 1.6 =BN037503.D 3.2 =BN037504.D 5 =BN037505.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	0.409	0.395	0.371	0.398	0.380	0.354	0.385	5.29	
3)	n-Nitrosodimet...	0.466	0.464	0.465	0.508	0.499	0.501	0.484	4.31	
4) S	2-Fluorophenol	1.038	1.011	0.985	0.908	0.982	0.971	1.030	0.989	4.42
5) S	Phenol-d6	1.448	1.238	1.190	1.105	1.201	1.229	1.275	1.241	8.52
6)	bis(2-Chloroet...	1.082	1.052	1.024	0.983	1.037	1.033	1.016	1.033	2.99
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.311	0.288	0.283	0.270	0.300	0.305	0.336	0.299	7.20
9)	Naphthalene	1.069	1.054	1.046	1.009	1.091	1.073	1.126	1.067	3.45
10)	Hexachlorobuta...	0.229	0.237	0.235	0.223	0.245	0.236	0.246	0.236	3.44
11) SURR2	Methylnaphth...	0.556	0.534	0.541	0.522	0.562	0.590	0.711	0.574	11.24
12)	2-Methylnaphth...	0.704	0.655	0.678	0.665	0.716	0.736	0.756	0.701	5.34
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.197	0.173	0.173	0.176	0.194	0.215	0.248	0.197	13.98
15) S	2-Fluorobiphenyl	1.818	1.794	2.045	2.024	2.277	2.205	2.397	2.080	10.91
16)	Acenaphthylene	1.723	1.708	1.719	1.684	1.830	1.895	1.981	1.792	6.30
17)	Acenaphthene	1.239	1.160	1.172	1.150	1.238	1.251	1.320	1.218	5.03
18)	Fluorene	1.592	1.488	1.485	1.486	1.605	1.606	1.717	1.569	5.56
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.044	0.041	0.047	0.057	0.070	0.080	0.057	27.89	
21)	4-Bromophenyl-...	0.248	0.247	0.243	0.242	0.268	0.272	0.274	0.256	5.58
22)	Hexachlorobenzene	0.315	0.330	0.328	0.321	0.345	0.340	0.338	0.331	3.26
23)	Atrazine	0.173	0.161	0.159	0.158	0.181	0.200	0.220	0.179	13.24
24)	Pentachlorophenol	0.131	0.125	0.126	0.151	0.170	0.189	0.149	17.64	
25)	Phenanthrene	1.167	1.163	1.160	1.129	1.248	1.248	1.273	1.198	4.70
26)	Anthracene	1.025	1.025	1.013	1.023	1.160	1.176	1.232	1.093	8.45
27) SURR	Fluoranthene-d10	1.023	0.998	0.962	0.928	1.041	1.078	1.385	1.060	14.34
28)	Fluoranthene	1.358	1.310	1.290	1.270	1.429	1.431	1.585	1.382	7.96
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.754	1.559	1.607	1.549	1.607	1.665	1.539	1.612	4.74
31) S	Terphenyl-d14	0.926	0.815	0.844	0.811	0.854	0.902	0.865	0.859	4.94
32)	Benzo(a)anthra...	1.414	1.357	1.341	1.285	1.429	1.464	1.517	1.401	5.63
33)	Chrysene	1.452	1.461	1.434	1.358	1.488	1.490	1.528	1.459	3.70
34)	Bis(2-ethylhex...	0.603	0.564	0.538	0.603	0.693	0.779	0.630	14.26	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN071525.M

36)	Indeno(1,2,3-c...	1.493	1.528	1.514	1.559	1.771	1.805	1.991	1.666	11.48
37)	Benzo(b)fluora...	1.464	1.378	1.454	1.436	1.589	1.617	1.692	1.518	7.53
38)	Benzo(k)fluora...	1.516	1.420	1.486	1.470	1.661	1.689	1.724	1.567	7.75
39) C	Benzo(a)pyrene	1.189	1.152	1.192	1.176	1.320	1.369	1.469	1.267	9.51
40)	Dibenzo(a,h)an...	1.201	1.218	1.216	1.256	1.444	1.483	1.627	1.349	12.46
41)	Benzo(g,h,i)pe...	1.247	1.283	1.309	1.297	1.482	1.497	1.663	1.397	10.98

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q2603
 Instrument ID: BNA_N Calibration Date/Time: 07/16/2025 09:50
 Lab File ID: BN037510.D Init. Calib. Date(s): 07/15/2025 07/15/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:36 16:14
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.534		-7.0	20.0
Fluoranthene-d10	1.060	0.921		-13.1	20.0
2-Fluorophenol	0.989	0.945		-4.4	20.0
Phenol-d6	1.241	1.176		-5.2	20.0
Nitrobenzene-d5	0.299	0.281		-6.0	20.0
2-Fluorobiphenyl	2.080	2.104		1.2	20.0
2,4,6-Tribromophenol	0.197	0.158		-19.8	20.0
Terphenyl-d14	0.859	0.818		-4.8	20.0
1,4-Dioxane	0.385	0.402		4.4	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>TETR06</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2603</u>
Instrument ID:	<u>BNA_N</u>	Calibration Date/Time:	<u>07/16/2025 15:34</u>
Lab File ID:	<u>BN037518.D</u>	Init. Calib. Date(s):	<u>07/15/2025 07/15/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4EC</u>	Init. Calib. Time(s):	<u>12:36 16:14</u>
GC Column:	<u>ZB-GR</u>	ID:	<u>0.25</u> (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.525		-8.5	50.0
Fluoranthene-d10	1.060	0.943		-11.0	50.0
2-Fluorophenol	0.989	0.896		-9.4	50.0
Phenol-d6	1.241	1.092		-12.0	50.0
Nitrobenzene-d5	0.299	0.280		-6.4	50.0
2-Fluorobiphenyl	2.080	2.170		4.3	50.0
2,4,6-Tribromophenol	0.197	0.155		-21.3	50.0
Terphenyl-d14	0.859	0.847		-1.4	50.0
1,4-Dioxane	0.385	0.391		1.6	50.0

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS

CHEMTECH CHAIN OF CUSTODY RECORD		284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 Fax: (908) 78-8922 www.chemtech.net		Chemtech Project Number: 22603										
				COC Number:										
CLIENT INFORMATION		PROJECT INFORMATION		BILLING INFORMATION										
COMPANY: Tetra Tech		PROJECT NAME: NWIRP Bethpage		BILL TO: PO#										
ADDRESS: 4433 Corporation Ln, Suite 300		PROJECT #: 112G08005-WE13 LOCATION: RW7B		ADDRESS:										
CITY: Virginia Beach STATE: VA ZIP: 23462		PROJECT MANAGER: Ernie Wu		CITY: STATE: ZIP:										
ATTENTION: Ernie Wu		E-MAIL: ernie.wu@tetratech.com		ATTENTION: PHONE:										
PHONE: 757-466-4901 FAX: 757-461-4148		PHONE: 757-466-4901 FAX: 757-461-4148												
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS										
FAX: 10 DAYS* HARD COPY: 10 DAYS* EDD 10 DAYS* * TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		☐ RESEULTS ONLY ☐ USEPA CLP ☐ RESULTS + QC ☐ New York State ASP "B" ☐ New Jersey REDUCED ☐ New York State ASP "A" ☐ New Jersey CLP ☐ Other _____ ☐ EDD Format _____		1,4-Dioxane SW846 8270 SIM <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>		1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9						
				PRESERVATIVES										
				COMMENTS										
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMPGRAB	SAMPLE COLLECTION DATETIME	# of Bottles									
1.	RW7-SP303-Test-20250709	GW		X 7/9/25 13:30	1									
2.	RW7-Pond-Test-20250709	GW		X 7/9/25 13:40	1									
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY	Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp <u>2.1</u> MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler? <u>yes</u>
1.	7/14/25 1:50	1.	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	
2.	7/15/25 10:15	2.	Comments:
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY	
3.		3.	

Page _____ of _____

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
 CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete
☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

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