

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 : Q3525

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q3525

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q3525-01
Q3525-02
Q3525-03

Client Sample Number

RW5-SP100-20251030
RW5-SP201-20251030
RW5-SP303-20251030

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 : _____

Date: 11/8/2025

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 # Q3525

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

3 Water samples were received on 11/03/2025.

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 except for RW5-SP100-20251030DL [Terphenyl-d14 - 137%], RW5-SP201-20251030 [Terphenyl-d14 - 143%] and RW5-SP303-20251030 [Terphenyl-d14 - 140%]. Failed surrogate is not associated with DOD, Therefore no further corrective action was taken.

The Internal Standards Areas were met for all analysis.

The Retention Times were met for all analysis.

The RPD for met criteria except for except for PB170381BSD for 1,4-Dioxane. %RPD was affected due to marginal difference in recoveries.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate for {PB170381BSD} with File ID: BN038133.D met requirements for all compounds except for 1,4-Dioxane[65%]. Failed marginally biased low, however, it is meeting QC criteria in the continues calibration.

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

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.



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

The Tuning criteria met requirements.

Sample RW5-SP100-20251030 was diluted due to high concentration.

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.

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_____

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 #: Q3525

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: 11/08/2025

LAB CHRONICLE

OrderID:	Q3525	OrderDate:	11/3/2025 9:26:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	A12

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3525-01	RW5-SP100-2025103 0	Water			10/30/25			11/03/25
			SVOC-SIMGroup1	8270-Modified		11/03/25	11/04/25	
Q3525-01DL	RW5-SP100-2025103 0DL	Water			10/30/25			11/03/25
			SVOC-SIMGroup1	8270-Modified		11/03/25	11/04/25	
Q3525-02	RW5-SP201-2025103 0	Water			10/30/25			11/03/25
			SVOC-SIMGroup1	8270-Modified		11/03/25	11/04/25	
Q3525-03	RW5-SP303-2025103 0	Water			10/30/25			11/03/25
			SVOC-SIMGroup1	8270-Modified		11/03/25	11/04/25	



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Fax : 908 789 8922

Hit Summary Sheet SW-846

SDG No.: Q3525

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20251030								
Q3525-01	RW5-SP100-20251030	WATER	1,4-Dioxane	6.000	EQ	0.07	0.2	0.2 ug/L
			Total Svoc :	6.00				
			Total Concentration:	6.00				
Client ID : RW5-SP100-20251030DL								
Q3525-01DL	RW5-SP100-20251030DI	WATER	1,4-Dioxane	6.300	DQ	0.13	0.4	0.4 ug/L
			Total Svoc :	6.30				
			Total Concentration:	6.30				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	10/30/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	11/03/25
Client Sample ID:	RW5-SP100-20251030	SDG No.:	Q3525
Lab Sample ID:	Q3525-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 mL	Test:	SVOC-SIMGroup1
Prep Method :	3510C		
	Level: LOW		
	Final Vol: 1000 uL		
	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	6.00	EQ	1	0.070	0.20	0.20	ug/L	11/04/25 14:08	PB170381
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.26			30 - 150		66%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.34			30 - 150		85%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.31			55 - 111		77%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.31			53 - 106		76%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.47			58 - 132		118%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8620								
1146-65-2	Naphthalene-d8	25400								
15067-26-2	Acenaphthene-d10	13200								
1517-22-2	Phenanthrene-d10	22300								
1719-03-5	Chrysene-d12	15100								
1520-96-3	Perylene-d12	14700								

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/30/25
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	11/03/25
Client Sample ID:	RW5-SP100-20251030DL		SDG No.:	Q3525
Lab Sample ID:	Q3525-01DL		Matrix:	Water
Analytical Method:	SW8270ESIM	Level: LOW	% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol: 1000 uL	Test:	SVOC-SIMGroup1
Prep Method :	3510C	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	6.30	DQ	2	0.13	0.40	0.40	ug/L	11/04/25 19:35	PB170381
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.27			30 - 150		68%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.34			30 - 150		84%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.31			55 - 111		79%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.31			53 - 106		77%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.55	*		58 - 132		137%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8330								
1146-65-2	Naphthalene-d8	24100								
15067-26-2	Acenaphthene-d10	13200								
1517-22-2	Phenanthrene-d10	23200								
1719-03-5	Chrysene-d12	13200								
1520-96-3	Perylene-d12	12000								

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* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/30/25
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	11/03/25
Client Sample ID:	RW5-SP201-20251030		SDG No.:	Q3525
Lab Sample ID:	Q3525-02		Matrix:	Water
Analytical Method:	SW8270ESIM	Level: LOW	% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol: 1000 uL	Test:	SVOC-SIMGroup1
Prep Method :	3510C	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.20	UQ	1	0.070	0.20	0.20	ug/L	11/04/25 14:45	PB170381
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	0.29			55 - 111		72%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.31			53 - 106		77%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.57	*		58 - 132		143%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8490								
1146-65-2	Naphthalene-d8	25700								
15067-26-2	Acenaphthene-d10	14000								
1517-22-2	Phenanthrene-d10	26400								
1719-03-5	Chrysene-d12	15700								
1520-96-3	Perylene-d12	12800								

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/30/25
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	11/03/25
Client Sample ID:	RW5-SP303-20251030		SDG No.:	Q3525
Lab Sample ID:	Q3525-03		Matrix:	Water
Analytical Method:	SW8270ESIM	Level: LOW	% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol: 1000 uL	Test:	SVOC-SIMGroup1
Prep Method :	3510C	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.20	UQ	1	0.070	0.20	0.20	ug/L	11/04/25 15:21	PB170381
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.30			30 - 150		76%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.33			30 - 150		83%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.31			55 - 111		77%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.35			53 - 106		86%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.56	*		58 - 132		140%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8150								
1146-65-2	Naphthalene-d8	24400								
15067-26-2	Acenaphthene-d10	13400								
1517-22-2	Phenanthrene-d10	23100								
1719-03-5	Chrysene-d12	12600								
1520-96-3	Perylene-d12	11200								

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M = MS/MSD acceptance criteria did not meet requirements

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D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q3525

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB170381BL	PB170381BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.35	88		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.46	114		58	132
PB170381BS	PB170381BS	2-Methylnaphthalene-d10	0.4	0.35	88		30	150
		Fluoranthene-d10	0.4	0.30	76		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.42	104		53	106
		Terphenyl-d14	0.4	0.48	121		58	132
PB170381BSD	PB170381BSD	2-Methylnaphthalene-d10	0.4	0.29	73		30	150
		Fluoranthene-d10	0.4	0.25	63		30	150
		Nitrobenzene-d5	0.4	0.31	76		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.36	91		58	132
Q3525-01	RW5-SP100-20251030	2-Methylnaphthalene-d10	0.4	0.26	66		30	150
		Fluoranthene-d10	0.4	0.34	85		30	150
		Nitrobenzene-d5	0.4	0.31	77		55	111
		2-Fluorobiphenyl	0.4	0.31	76		53	106
		Terphenyl-d14	0.4	0.47	118		58	132
Q3525-01DL	RW5-SP100-20251030DL	2-Methylnaphthalene-d10	0.4	0.27	68		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.31	79		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.55	137	*	58	132
Q3525-02	RW5-SP201-20251030	2-Methylnaphthalene-d10	0.4	0.28	69		30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.29	72		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.57	143	*	58	132
Q3525-03	RW5-SP303-20251030	2-Methylnaphthalene-d10	0.4	0.30	76		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.31	77		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.56	140	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:

Q3525

Analytical Method:

8270-Modified

Client:

Tetra Tech NUS, Inc.

DataFile:

BN038132.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB170381BS	1,4-Dioxane	0.4	0.33	ug/L	83				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q3525</u>	Analytical Method:	<u>8270-Modified</u>
Client:	<u>Tetra Tech NUS, Inc.</u>	DataFile:	<u>BN038133.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Low	Limits		RPD
								Qual			High		
PB170381BSD	1,4-Dioxane	0.4	0.26	ug/L	65	24	*	*		70	130		20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB170381BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q3525

Lab File ID: BN038131.D

Lab Sample ID: PB170381BL

Instrument ID: BNA_N

Date Extracted: 11/03/2025

Matrix: (soil/water) Water

Date Analyzed: 11/04/2025

Level: (low/med) LOW

Time Analyzed: 11:43

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB170381BS	PB170381BS	BN038132.D	11/04/2025
PB170381BSD	PB170381BSD	BN038133.D	11/04/2025
RW5-SP100-20251030	Q3525-01	BN038135.D	11/04/2025
RW5-SP201-20251030	Q3525-02	BN038136.D	11/04/2025
RW5-SP303-20251030	Q3525-03	BN038137.D	11/04/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN038110.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q3525
DFTPP Injection Date: 10/28/2025
DFTPP Injection Time: 12:05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.7 (1.8) 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	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	83.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17 (19.9) 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
SSTDICC0.1	SSTDICC0.1	BN038111.D	10/28/2025	13:00
SSTDICC0.2	SSTDICC0.2	BN038112.D	10/28/2025	13:36
SSTDICCC0.4	SSTDICCC0.4	BN038113.D	10/28/2025	14:13
SSTDICC0.8	SSTDICC0.8	BN038114.D	10/28/2025	14:49
SSTDICC1.6	SSTDICC1.6	BN038115.D	10/28/2025	15:25
SSTDICC3.2	SSTDICC3.2	BN038116.D	10/28/2025	16:02
SSTDICC5.0	SSTDICC5.0	BN038117.D	10/28/2025	16:38

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN038129.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q3525
DFTPP Injection Date: 11/04/2025
DFTPP Injection Time: 10:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.7 (1.8) 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	6.9
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	77.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19 (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
SSTDCCC0.4	SSTDCCC0.4	BN038130.D	11/04/2025	10:40
PB170381BL	PB170381BL	BN038131.D	11/04/2025	11:43
PB170381BS	PB170381BS	BN038132.D	11/04/2025	12:19
PB170381BSD	PB170381BSD	BN038133.D	11/04/2025	12:56
RW5-SP100-20251030	Q3525-01	BN038135.D	11/04/2025	14:08
RW5-SP201-20251030	Q3525-02	BN038136.D	11/04/2025	14:45
RW5-SP303-20251030	Q3525-03	BN038137.D	11/04/2025	15:21
RW5-SP100-20251030DL	Q3525-01DL	BN038144.D	11/04/2025	19:35
SSTDCCC0.4EC	SSTDCCC0.4	BN038145.D	11/04/2025	20:12

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q3525

Client ID : SSTDCCC0.4

Date Analyzed: 11/04/2025

Lab File ID: BN038130.D

Time Analyzed: 10:40

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	8599	7.775	24973	10.57	13947	14.44
UPPER LIMIT	17198	8.275	49946	11.073	27894	14.941
LOWER LIMIT	4299.5	7.275	12486.5	10.073	6973.5	13.941
EPA SAMPLE NO.						
01 PB170381BL	8221	7.79	22221	10.59	11601	14.44
02 PB170381BS	11523	7.78	31801	10.57	16154	14.44
03 PB170381BSD	10823	7.78	30534	10.57	15616	14.43
04 RW5-SP100-20251030	8620	7.78	25357	10.57	13158	14.43
05 RW5-SP201-20251030	8491	7.78	25672	10.58	14049	14.44
06 RW5-SP303-20251030	8154	7.78	24363	10.58	13426	14.43
07 RW5-SP100-20251030DL	8331	7.78	24076	10.57	13164	14.43

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.: Q3525

Client ID: SSTDCCC0.4

Date Analyzed: 11/04/2025

Lab File ID: BN038130.D

Time Analyzed: 10:40

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	27056	17.186	17059	21.375	13607	23.686
UPPER LIMIT	54112	17.686	34118	21.875	27214	24.186
LOWER LIMIT	13528	16.686	8529.5	20.875	6803.5	23.186
EPA SAMPLE NO.						
01 PB170381BL	21781	17.20	15202	21.38	13241	23.70
02 PB170381BS	30417	17.19	16510	21.38	13194	23.69
03 PB170381BSD	28756	17.19	18053	21.38	14856	23.68
04 RW5-SP100-20251030	22343	17.19	15115	21.38	14719	23.68
05 RW5-SP201-20251030	26434	17.19	15662	21.38	12818	23.68
06 RW5-SP303-20251030	23084	17.19	12560	21.38	11161	23.68
07 RW5-SP100-20251030DL	23184	17.19	13188	21.38	12045	23.68

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB170381BL		SDG No.:	Q3525
Lab Sample ID:	PB170381BL		Matrix:	Water
Analytical Method:	SW8270ESIM	Level: LOW	% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol: 1000 uL	Test:	SVOC-SIMGroup1
Prep Method :	3510C	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.20	U	1	0.070	0.20	0.20	ug/L	11/04/25 11:43	PB170381
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.33			30 - 150		83%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.35			30 - 150		88%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.35			55 - 111		88%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.39			53 - 106		97%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.46			58 - 132		114%	SPK: 0.4		
INTERNAL STANDARDS		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8220								
1146-65-2	Naphthalene-d8	22200								
15067-26-2	Acenaphthene-d10	11600								
1517-22-2	Phenanthrene-d10	21800								
1719-03-5	Chrysene-d12	15200								
1520-96-3	Perylene-d12	13200								

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:	PB170381BS		SDG No.:	Q3525
Lab Sample ID:	PB170381BS		Matrix:	Water
Analytical Method:	SW8270ESIM	Level: LOW	% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol: 1000 uL	Test:	SVOC-SIMGroup1
Prep Method :	3510C	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.33		1	0.070	0.20	0.20	ug/L	11/04/25 12:19	PB170381
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.35			30 - 150		88%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.30			30 - 150		76%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.37			55 - 111		92%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.42			53 - 106		104%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.48			58 - 132		121%	SPK: 0.4		
INTERNAL STANDARDS		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	11500								
1146-65-2	Naphthalene-d8	31800								
15067-26-2	Acenaphthene-d10	16200								
1517-22-2	Phenanthrene-d10	30400								
1719-03-5	Chrysene-d12	16500								
1520-96-3	Perylene-d12	13200								

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:	PB170381BSD	SDG No.:	Q3525
Lab Sample ID:	PB170381BSD	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 mL	Test:	SVOC-SIMGroup1
Prep Method :	3510C		
	Level: LOW		
	Final Vol: 1000 uL		
	Prep Date: 11/03/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.26		1	0.070	0.20	0.20	ug/L	11/04/25 12:56	PB170381
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.29			30 - 150		73%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.25			30 - 150		63%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.31			55 - 111		76%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.32			53 - 106		81%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.36			58 - 132		91%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	10800								
1146-65-2	Naphthalene-d8	30500								
15067-26-2	Acenaphthene-d10	15600								
1517-22-2	Phenanthrene-d10	28800								
1719-03-5	Chrysene-d12	18100								
1520-96-3	Perylene-d12	14900								

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-BN102825.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Oct 29 13:09:46 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN038111.D 0.2 =BN038112.D 0.4 =BN038113.D 0.8 =BN038114.D 1.6 =BN038115.D 3.2 =BN038116.D 5 =BN038117.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	0.446	0.424	0.405	0.416	0.400	0.389	0.413	4.87	
3)	n-Nitrosodimet...	0.528	0.537	0.527	0.547	0.534	0.518	0.532	1.85	
4) S	2-Fluorophenol	1.066	0.973	0.954	0.907	0.918	0.895	0.882	0.942	6.73
5) S	Phenol-d6	1.266	1.134	1.134	1.097	1.131	1.135	1.137	1.148	4.71
6)	bis(2-Chloroet...	1.164	1.140	1.126	1.122	1.148	1.114	1.079	1.128	2.42
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.403	0.312	0.313	0.301	0.316	0.307	0.307	0.323	11.11
9)	Naphthalene	1.139	1.097	1.081	1.080	1.125	1.107	1.084	1.102	2.08
10)	Hexachlorobuta...	0.198	0.187	0.187	0.182	0.188	0.183	0.177	0.186	3.49
11) SURR2	Methylnaphth...	0.581	0.569	0.551	0.549	0.586	0.584	0.579	0.571	2.69
12)	2-Methylnaphth...	0.765	0.712	0.709	0.713	0.757	0.749	0.738	0.735	3.22
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.156	0.151	0.149	0.152	0.171	0.182	0.194	0.165	10.70
15) S	2-Fluorobiphenyl	1.794	1.649	1.577	1.570	1.615	1.514	1.495	1.602	6.24
16)	Acenaphthylene	1.768	1.728	1.711	1.764	1.891	1.912	1.908	1.811	4.88
17)	Acenaphthene	1.260	1.242	1.211	1.234	1.318	1.310	1.297	1.267	3.25
18)	Fluorene	1.549	1.618	1.596	1.635	1.768	1.731	1.729	1.661	4.93
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.041	0.045	0.051	0.064	0.073		0.055	24.55	
21)	4-Bromophenyl-...	0.260	0.251	0.250	0.256	0.274	0.271	0.275	0.262	4.06
22)	Hexachlorobenzene	0.304	0.292	0.298	0.293	0.306	0.297	0.298	0.298	1.76
23)	Atrazine	0.190	0.176	0.176	0.179	0.203	0.209	0.211	0.192	8.19
24)	Pentachlorophenol	0.112	0.108	0.113	0.132	0.146	0.159	0.128	16.16	
25)	Phenanthrene	1.281	1.231	1.224	1.236	1.327	1.293	1.298	1.270	3.12
26)	Anthracene	1.076	1.029	1.047	1.057	1.182	1.183	1.202	1.111	6.72
27) SURR	Fluoranthene-d10	1.040	0.969	0.957	0.981	1.050	1.055	1.009	1.009	4.01
28)	Fluoranthene	1.448	1.349	1.345	1.394	1.492	1.491	1.414	1.419	4.30
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.834	1.853	1.842	1.664	1.835	1.766	1.846	1.806	3.82
31) S	Terphenyl-d14	0.878	0.881	0.872	0.807	0.892	0.862	0.891	0.869	3.37
32)	Benzo(a)anthra...	1.491	1.379	1.358	1.363	1.469	1.474	1.456	1.427	4.06
33)	Chrysene	1.623	1.586	1.543	1.523	1.558	1.518	1.490	1.549	2.91
34)	Bis(2-ethylhex...	0.910	0.722	0.700	0.721	0.754	0.703	0.752	10.60	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN102825.M

36)	Indeno(1,2,3-c...	1.521	1.512	1.604	1.620	1.730	1.739	1.778	1.643	6.53
37)	Benzo(b)fluora...	1.603	1.543	1.630	1.729	1.806	1.839	1.822	1.710	6.94
38)	Benzo(k)fluora...	1.652	1.590	1.619	1.669	1.831	1.835	1.855	1.721	6.62
39) C	Benzo(a)pyrene	1.344	1.276	1.316	1.314	1.420	1.451	1.462	1.369	5.44
40)	Dibenzo(a,h)an...	1.149	1.150	1.196	1.240	1.352	1.363	1.402	1.265	8.42
41)	Benzo(g,h,i)pe...	1.402	1.365	1.426	1.432	1.499	1.477	1.509	1.444	3.66

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q3525
 Instrument ID: BNA_N Calibration Date/Time: 11/04/2025 10:40
 Lab File ID: BN038130.D Init. Calib. Date(s): 10/28/2025 10/28/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 13:00 16:38
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.571	0.541		-5.3	20.0
Fluoranthene-d10	1.008	0.889		-11.8	20.0
2-Fluorophenol	0.943	0.856		-9.2	20.0
Phenol-d6	1.148	1.025		-10.7	20.0
Nitrobenzene-d5	0.323	0.277		-14.2	20.0
2-Fluorobiphenyl	1.602	1.514		-5.5	20.0
2,4,6-Tribromophenol	0.165	0.134		-18.8	20.0
Terphenyl-d14	0.869	0.916		5.4	20.0
1,4-Dioxane	0.416	0.433		4.1	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>Q3525</u>
Instrument ID:	<u>BNA_N</u>	Calibration Date/Time:	<u>11/04/2025 20:12</u>
Lab File ID:	<u>BN038145.D</u>	Init. Calib. Date(s):	<u>10/28/2025 10/28/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4EC</u>	Init. Calib. Time(s):	<u>13:00 16:38</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	0.571	0.538		-5.8	50.0
Fluoranthene-d10	1.008	0.826		-18.1	50.0
2-Fluorophenol	0.943	0.881		-6.6	50.0
Phenol-d6	1.148	1.042		-9.2	50.0
Nitrobenzene-d5	0.323	0.273		-15.5	50.0
2-Fluorobiphenyl	1.602	1.511		-5.7	50.0
2,4,6-Tribromophenol	0.165	0.126		-23.6	50.0
Terphenyl-d14	0.869	0.962		10.7	50.0
1,4-Dioxane	0.416	0.430		3.4	50.0

All other compounds must meet a minimum RRF of 0.010.



SHIPPING DOCUMENTS



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax: (908) 78-8922

www.chemtech.net

Chemtech Project Number:

Q 3525

COC Number:

CLIENT INFORMATION

COMPANY: Tetra Tech

ADDRESS: 4433 Corporation Ln, Suite 300

CITY: Virginia Beach STATE: VA ZIP: 23462

ATTENTION: Ernie Wu

PHONE: 757-466-4901

FAX: 757-461-4148

PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage

PROJECT #: 112G08005-WE13 LOCATION: RW5B

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetrattech.com

PHONE: 757-466-4901

FAX: 757-461-4148

BILLING INFORMATION

BILL TO:

PO#

ADDRESS:

CITY:

STATE: ZIP:

ATTENTION:

PHONE:

ANALYSIS

1,4-Dioxane SW846 8270
SIM

1 2 3 4 5 6 7 8 9

PRESERVATIVES

COMMENTS

<-- Specify Preservatives

A-HCl B-HNO3

C-H2SO4 D-NaOH

E-ICE F-Other

CHEMTECH
SAMPLE
IDPROJECT
SAMPLE IDENTIFICATIONSAMPLE
MATRIXSAMPLE
TYPE
COMP GRABSAMPLE
COLLECTION

DATE TIME

of Bottles

1 2 3 4 5 6 7 8 9

1. RW5-SP100-20251030

GW

X

10/30/25

10:45

1

X

2. RW5-SP201-20251030

GW

X

10/30/25

10:47

1

X

3. RW5-SP303-20251030

GW

X

10/30/25

10:53

1

X

4.

5.

6.

7.

8.

9.

10.

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

RELINQUISHED BY SAMPLER

DATE/TIME

RECEIVED BY

1.

10/31/25 1:16W

1.

11-3-25
0700

RELINQUISHED BY

DATE/TIME

RECEIVED BY

2.

DATE/TIME

RECEIVED BY

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

3.

DATE/TIME

RECEIVED BY

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant☐ Cooler Temp. 23°C

MeOH extraction requires an additional 4oz. Jar for percent solid

☐ Ice in Cooler? Y

Comments:

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

Shipment Complete

☐ YES ☐ NO

Page ____ of ____

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT

YELLOW - CHEMTECH COPY

PINK - SAMPLER COPY

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312