

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 : Q3691

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q3691

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q3691-01
Q3691-02
Q3691-03
Q3691-04

Client Sample Number

RW7-SP100-20251118
RW7-SP201-20251118
RW7-SP302-20251118
RW7-SP303-20251118

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 9:51 am, Dec 05, 2025

Date: 12/5/2025

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 # Q3691

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

4 Water samples were received on 11/20/2025.

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 PB170712BS [2-Fluorobiphenyl - 113%], PB170712BSD [2-Fluorobiphenyl - 107%], RW7-SP302-20251118 [2-Fluorobiphenyl - 115%] and RW7-SP303-20251118 [Terphenyl-d14 - 147%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken.

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 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.



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Phone: 908 789 8900 Fax: 908 789 8922

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_____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 9:51 am, Dec 05, 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 #: Q3691

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: 12/05/2025

LAB CHRONICLE

OrderID:	Q3691	OrderDate:	11/20/2025 10:01:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	A11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3691-01	RW7-SP100-20251118	Water			11/18/25			11/20/25
			SVOC-SIMGroup1	8270-Modified		11/21/25	12/02/25	
Q3691-02	RW7-SP201-20251118	Water			11/18/25			11/20/25
			SVOC-SIMGroup1	8270-Modified		11/21/25	12/02/25	
Q3691-03	RW7-SP302-20251118	Water			11/18/25			11/20/25
			SVOC-SIMGroup1	8270-Modified		11/21/25	12/02/25	
Q3691-04	RW7-SP303-20251118	Water			11/18/25			11/20/25
			SVOC-SIMGroup1	8270-Modified		11/21/25	12/02/25	



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Fax : 908 789 8922

Hit Summary Sheet SW-846

SDG No.: Q3691
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	RW7-SP100-20251118							
Q3691-01	RW7-SP100-20251118	WATER	1,4-Dioxane	2.900	0.07	0.2	0.2	ug/L
			Total Svoc :	2.90				
			Total Concentration:	2.90				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	11/18/25
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	11/20/25
Client Sample ID:	RW7-SP100-20251118		SDG No.:	Q3691
Lab Sample ID:	Q3691-01		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: 11/21/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	2.90		1	0.070	0.20	0.20	ug/L	12/02/25 00:30	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.28			30 - 150		70%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.41			30 - 150		102%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.33			55 - 111		83%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.36			53 - 106		90%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.42			58 - 132		105%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8460								
1146-65-2	Naphthalene-d8	24500								
15067-26-2	Acenaphthene-d10	11300								
1517-22-2	Phenanthrene-d10	17500								
1719-03-5	Chrysene-d12	13300								
1520-96-3	Perylene-d12	13900								

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:	11/18/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	11/20/25
Client Sample ID:	RW7-SP201-20251118	SDG No.:	Q3691
Lab Sample ID:	Q3691-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 mL	Test:	SVOC-SIMGroup1
Prep Method :	3510C		
	Level: LOW		
	Final Vol: 1000 uL		
	Prep Date: 11/21/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.21	U	1	0.070	0.21	0.21	ug/L	12/02/25 01:07	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.33			30 - 150		81%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.45			30 - 150		113%	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		100%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.50			58 - 132		124%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8290								
1146-65-2	Naphthalene-d8	24400								
15067-26-2	Acenaphthene-d10	11200								
1517-22-2	Phenanthrene-d10	17100								
1719-03-5	Chrysene-d12	12700								
1520-96-3	Perylene-d12	12900								

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Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	11/18/25
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	11/20/25
Client Sample ID:	RW7-SP302-20251118		SDG No.:	Q3691
Lab Sample ID:	Q3691-03		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: 11/21/25		

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	12/02/25 01:43	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.38			30 - 150		94%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.47			30 - 150		118%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.44			55 - 111		111%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.46	*		53 - 106		115%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.49			58 - 132		122%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8270								
1146-65-2	Naphthalene-d8	23900								
15067-26-2	Acenaphthene-d10	11000								
1517-22-2	Phenanthrene-d10	15900								
1719-03-5	Chrysene-d12	11600								
1520-96-3	Perylene-d12	11900								

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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:	11/18/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	11/20/25
Client Sample ID:	RW7-SP303-20251118	SDG No.:	Q3691
Lab Sample ID:	Q3691-04	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	900 mL	Test:	SVOC-SIMGroup1
Prep Method :	3510C		
	Level: LOW		
	Final Vol: 1000 uL		
	Prep Date: 11/21/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.22	U	1	0.070	0.22	0.22	ug/L	12/02/25 02:19	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.31			30 - 150		78%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.46			30 - 150		116%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.37			55 - 111		92%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.43			53 - 106		106%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.59	*		58 - 132		147%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	7800								
1146-65-2	Naphthalene-d8	22900								
15067-26-2	Acenaphthene-d10	10400								
1517-22-2	Phenanthrene-d10	15600								
1719-03-5	Chrysene-d12	11100								
1520-96-3	Perylene-d12	11300								

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LOQ = Limit of Quantitation

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M = MS/MSD acceptance criteria did not meet requirements

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() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q3691

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB170712BL	PB170712BL	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.36	91		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.35	88		58	132
PB170712BS	PB170712BS	2-Methylnaphthalene-d10	0.4	0.41	101		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.40	99		55	111
		2-Fluorobiphenyl	0.4	0.45	113	*	53	106
		Terphenyl-d14	0.4	0.36	91		58	132
PB170712BSD	PB170712BSD	2-Methylnaphthalene-d10	0.4	0.35	86		30	150
		Fluoranthene-d10	0.4	0.39	97		30	150
		Nitrobenzene-d5	0.4	0.40	100		55	111
		2-Fluorobiphenyl	0.4	0.43	107	*	53	106
		Terphenyl-d14	0.4	0.32	79		58	132
Q3691-01	RW7-SP100-20251118	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.42	105		58	132
Q3691-02	RW7-SP201-20251118	2-Methylnaphthalene-d10	0.4	0.33	81		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.50	124		58	132
Q3691-03	RW7-SP302-20251118	2-Methylnaphthalene-d10	0.4	0.38	94		30	150
		Fluoranthene-d10	0.4	0.47	118		30	150
		Nitrobenzene-d5	0.4	0.44	111		55	111
		2-Fluorobiphenyl	0.4	0.46	115	*	53	106
		Terphenyl-d14	0.4	0.49	122		58	132
Q3691-04	RW7-SP303-20251118	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.46	116		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.43	106		53	106
		Terphenyl-d14	0.4	0.59	147	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3691

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN038232.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB170712BS	1,4-Dioxane	0.4	0.33	ug/L	83				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3691

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN038238.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB170712BSD	1,4-Dioxane	0.4	0.30	ug/L	75	10			70	130		20

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB170712BL

Lab Name: Alliance Contract: TETR06

Lab Code: ACE SDG NO.: Q3691

Lab File ID: BN038231.D Lab Sample ID: PB170712BL

Instrument ID: BNA_N Date Extracted: 11/21/2025

Matrix: (soil/water) Water Date Analyzed: 12/01/2025

Level: (low/med) LOW Time Analyzed: 18:28

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB170712BS	PB170712BS	BN038232.D	12/01/2025
PB170712BSD	PB170712BSD	BN038238.D	12/01/2025
RW7-SP100-20251118	Q3691-01	BN038241.D	12/02/2025
RW7-SP201-20251118	Q3691-02	BN038242.D	12/02/2025
RW7-SP302-20251118	Q3691-03	BN038243.D	12/02/2025
RW7-SP303-20251118	Q3691-04	BN038244.D	12/02/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN038211.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q3691
DFTPP Injection Date: 11/26/2025
DFTPP Injection Time: 19:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (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	6.6
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	78.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.4 (20.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN038212.D	11/26/2025	20:35
SSTDICC0.2	SSTDICC0.2	BN038213.D	11/26/2025	21:12
SSTDICCC0.4	SSTDICCC0.4	BN038214.D	11/26/2025	21:48
SSTDICC0.8	SSTDICC0.8	BN038215.D	11/26/2025	22:25
SSTDICC1.6	SSTDICC1.6	BN038216.D	11/26/2025	23:01
SSTDICC3.2	SSTDICC3.2	BN038217.D	11/26/2025	23:37
SSTDICC5.0	SSTDICC5.0	BN038218.D	11/27/2025	00:13

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN038229.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q3691
DFTPP Injection Date: 12/01/2025
DFTPP Injection Time: 17:11

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	6.7
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	87.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.5 (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
SSTDCCC0.4	SSTDCCC0.4	BN038230.D	12/01/2025	17:51
PB170712BL	PB170712BL	BN038231.D	12/01/2025	18:28
PB170712BS	PB170712BS	BN038232.D	12/01/2025	19:04
PB170712BSD	PB170712BSD	BN038238.D	12/01/2025	22:42
RW7-SP100-20251118	Q3691-01	BN038241.D	12/02/2025	00:30
RW7-SP201-20251118	Q3691-02	BN038242.D	12/02/2025	01:07
RW7-SP302-20251118	Q3691-03	BN038243.D	12/02/2025	01:43
RW7-SP303-20251118	Q3691-04	BN038244.D	12/02/2025	02:19
SSTDCCC0.4EC	SSTDCCC0.4	BN038248.D	12/02/2025	04:44

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q3691

Client ID : SSTDCCC0.4

Date Analyzed: 12/01/2025

Lab File ID: BN038230.D

Time Analyzed: 17:51

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	8054	7.768	24560	10.56	13292	14.43
UPPER LIMIT	16108	8.268	49120	11.062	26584	14.93
LOWER LIMIT	4027	7.268	12280	10.062	6646	13.93
EPA SAMPLE NO.						
01 PB170712BS	7901	7.77	22379	10.56	10358	14.43
02 PB170712BL	8256	7.77	22952	10.57	10779	14.43
03 PB170712BSD	9081	7.77	25072	10.56	10824	14.43
04 RW7-SP100-20251118	8461	7.77	24494	10.56	11341	14.43
05 RW7-SP201-20251118	8294	7.77	24395	10.56	11211	14.43
06 RW7-SP302-20251118	8272	7.77	23888	10.56	10984	14.43
07 RW7-SP303-20251118	7804	7.77	22916	10.56	10391	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.: Q3691

Client ID: SSTDCCC0.4

Date Analyzed: 12/01/2025

Lab File ID: BN038230.D

Time Analyzed: 17:51

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	21033	17.173	11703	21.366	11756	23.674
UPPER LIMIT	42066	17.673	23406	21.866	23512	24.174
LOWER LIMIT	10516.5	16.673	5851.5	20.866	5878	23.174
EPA SAMPLE NO.						
01 PB170712BS	14739	17.19	10142	21.37	10375	23.67
02 PB170712BL	14873	17.19	10479	21.38	10853	23.68
03 PB170712BSD	16101	17.17	14003	21.37	15858	23.67
04 RW7-SP100-20251118	17486	17.17	13270	21.37	13889	23.67
05 RW7-SP201-20251118	17126	17.17	12662	21.37	12907	23.67
06 RW7-SP302-20251118	15936	17.17	11565	21.37	11916	23.67
07 RW7-SP303-20251118	15598	17.19	11057	21.37	11303	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:	PB170712BL		SDG No.:	Q3691
Lab Sample ID:	PB170712BL		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: 11/21/25		

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	12/01/25 18:28	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.32			30 - 150		79%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.36			30 - 150		91%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.36			55 - 111		90%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.39			53 - 106		98%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.35			58 - 132		88%	SPK: 0.4		
INTERNAL STANDARDS										
		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	8260								
1146-65-2	Naphthalene-d8	23000								
15067-26-2	Acenaphthene-d10	10800								
1517-22-2	Phenanthrene-d10	14900								
1719-03-5	Chrysene-d12	10500								
1520-96-3	Perylene-d12	10900								

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:	PB170712BS		SDG No.:	Q3691
Lab Sample ID:	PB170712BS		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: 11/21/25		

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	12/01/25 19:04	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.41			30 - 150		101%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.36			30 - 150		90%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.40			55 - 111		99%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.45	*		53 - 106		113%	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	7900								
1146-65-2	Naphthalene-d8	22400								
15067-26-2	Acenaphthene-d10	10400								
1517-22-2	Phenanthrene-d10	14700								
1719-03-5	Chrysene-d12	10100								
1520-96-3	Perylene-d12	10400								

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:	PB170712BSD		SDG No.:	Q3691
Lab Sample ID:	PB170712BSD		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: 11/21/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Date Ana.	Prep BatchID
TARGETS										
123-91-1	1,4-Dioxane	0.30		1	0.070	0.20	0.20	ug/L	12/01/25 22:42	PB170712
SURROGATES										
7297-45-2	2-Methylnaphthalene-d10	0.35			30 - 150		86%	SPK: 0.4		
93951-69-0	Fluoranthene-d10	0.39			30 - 150		97%	SPK: 0.4		
4165-60-0	Nitrobenzene-d5	0.40			55 - 111		100%	SPK: 0.4		
321-60-8	2-Fluorobiphenyl	0.43	*		53 - 106		107%	SPK: 0.4		
1718-51-0	Terphenyl-d14	0.32			58 - 132		79%	SPK: 0.4		
INTERNAL STANDARDS		Area Count								
3855-82-1	1,4-Dichlorobenzene-d4	9080								
1146-65-2	Naphthalene-d8	25100								
15067-26-2	Acenaphthene-d10	10800								
1517-22-2	Phenanthrene-d10	16100								
1719-03-5	Chrysene-d12	14000								
1520-96-3	Perylene-d12	15900								

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-BN112725.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Nov 28 21:04:10 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN038212.D 0.2 =BN038213.D 0.4 =BN038214.D 0.8 =BN038215.D 1.6 =BN038216.D 3.2 =BN038217.D 5 =BN038218.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	0.484	0.448	0.396	0.423	0.399	0.378	0.421	9.29	
3)	n-Nitrosodimet...	0.488	0.543	0.513	0.536	0.528	0.510	0.520	3.87	
4) S	2-Fluorophenol	1.008	0.930	0.992	0.881	0.925	0.915	0.892	0.935	5.14
5) S	Phenol-d6	1.180	1.103	1.215	1.099	1.187	1.203	1.191	1.168	4.05
6)	bis(2-Chloroet...	1.066	1.118	1.188	1.086	1.152	1.130	1.088	1.118	3.79
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.370	0.314	0.310	0.304	0.321	0.309	0.311	0.320	7.07
9)	Naphthalene	1.152	1.102	1.153	1.075	1.118	1.093	1.082	1.111	2.87
10)	Hexachlorobuta...	0.203	0.192	0.200	0.182	0.188	0.180	0.177	0.189	5.29
11) SURR	2-Methylnaphth...	0.535	0.548	0.588	0.558	0.584	0.584	0.579	0.568	3.70
12)	2-Methylnaphth...	0.696	0.697	0.760	0.718	0.754	0.750	0.741	0.731	3.68
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.106	0.100	0.123	0.122	0.139	0.165	0.126	18.76	
15) S	2-Fluorobiphenyl	1.620	1.549	1.590	1.546	1.578	1.474	1.459	1.545	3.85
16)	Acenaphthylene	1.756	1.685	1.801	1.702	1.830	1.866	1.880	1.789	4.31
17)	Acenaphthene	1.244	1.208	1.292	1.198	1.263	1.262	1.261	1.247	2.66
18)	Fluorene	1.544	1.442	1.650	1.571	1.680	1.708	1.703	1.614	6.13
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.021	0.026	0.031	0.044	0.059	0.071	0.042	46.82	
21)	4-Bromophenyl-...	0.268	0.268	0.285	0.268	0.287	0.284	0.280	0.277	3.19
22)	Hexachlorobenzene	0.377	0.366	0.358	0.320	0.337	0.319	0.307	0.341	7.87
23)	Atrazine	0.165	0.157	0.175	0.164	0.181	0.198	0.200	0.177	9.46
24)	Pentachlorophenol	0.090	0.084	0.080	0.096	0.117	0.093	15.54		
25)	Phenanthrene	1.247	1.207	1.311	1.202	1.270	1.293	1.259	1.256	3.24
26)	Anthracene	0.996	0.998	1.068	1.016	1.100	1.156	1.166	1.071	6.73
27) SURR	Fluoranthene-d10	0.853	0.845	0.890	0.817	0.864	0.906	0.900	0.868	3.76
28)	Fluoranthene	1.174	1.147	1.227	1.146	1.230	1.281	1.266	1.210	4.55
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	2.066	1.804	2.087	1.972	1.973	2.077	2.006	1.998	4.91
31) S	Terphenyl-d14	0.903	0.847	0.962	0.906	0.927	0.972	0.949	0.924	4.65
32)	Benzo(a)anthra...	1.321	1.271	1.368	1.320	1.373	1.421	1.409	1.355	3.94
33)	Chrysene	1.742	1.639	1.661	1.517	1.597	1.541	1.494	1.599	5.53
34)	Bis(2-ethylhex...	0.780	0.801	0.700	0.682	0.740	0.746	0.742	6.12	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN112725.M

36)	Indeno(1,2,3-c...	1.747	1.715	1.875	1.736	1.962	1.963	1.960	1.851	6.24
37)	Benzo(b)fluora...	1.563	1.555	1.703	1.586	1.675	1.721	1.690	1.642	4.32
38)	Benzo(k)fluora...	1.627	1.639	1.758	1.658	1.749	1.776	1.742	1.707	3.69
39) C	Benzo(a)pyrene	1.414	1.284	1.386	1.316	1.403	1.414	1.417	1.376	3.93
40)	Dibenzo(a,h)an...	1.264	1.234	1.379	1.349	1.512	1.541	1.531	1.401	9.14
41)	Benzo(g,h,i)pe...	1.722	1.586	1.721	1.617	1.720	1.687	1.670	1.674	3.25

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q3691
 Instrument ID: BNA_N Calibration Date/Time: 12/01/2025 17:51
 Lab File ID: BN038230.D Init. Calib. Date(s): 11/26/2025 11/27/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 20:35 00:13
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.568	0.591		4.0	20.0
Fluoranthene-d10	0.868	0.851		-2.0	20.0
2-Fluorophenol	0.935	0.944		1.0	20.0
Phenol-d6	1.168	1.204		3.1	20.0
Nitrobenzene-d5	0.320	0.317		-0.9	20.0
2-Fluorobiphenyl	1.545	1.656		7.2	20.0
2,4,6-Tribromophenol	0.126	0.139		10.3	20.0
Terphenyl-d14	0.924	0.961		4.0	20.0
1,4-Dioxane	0.421	0.451		7.1	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q3691
 Instrument ID: BNA_N Calibration Date/Time: 12/02/2025 04:44
 Lab File ID: BN038248.D Init. Calib. Date(s): 11/26/2025 11/27/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 20:35 00:13
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.568	0.562		-1.1	50.0
Fluoranthene-d10	0.868	0.924		6.5	50.0
2-Fluorophenol	0.935	1.019		9.0	50.0
Phenol-d6	1.168	1.291		10.5	50.0
Nitrobenzene-d5	0.320	0.323		0.9	50.0
2-Fluorobiphenyl	1.545	1.663		7.6	50.0
2,4,6-Tribromophenol	0.126	0.130		3.2	50.0
Terphenyl-d14	0.924	0.862		-6.7	50.0
1,4-Dioxane	0.421	0.416		-1.2	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:

Q 3691

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: RW7B

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-OtherCHEMTECH
SAMPLE
IDPROJECT
SAMPLE IDENTIFICATIONSAMPLE
MATRIXSAMPLE
TYPE
COMP GRABSAMPLE
COLLECTION

DATE

TIME

of Bottles

1

2

3

4

5

6

7

8

9

1.

RW7-SP100-20251118

GW

x

11/18/25

12:15

1

x

2.

RW7-SP201-20251118

GW

x

11/18/25

12:17

1

x

3.

RW7-SP302-20251118

GW

x

11/18/25

12:27

1

x

4.

RW7-SP303-20251118

GW

x

11/18/25

12:29

1

x

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. *U. St. W.*

11/19/25/1300

1. *[Signature]*

RELINQUISHED BY

DATE/TIME

RECEIVED BY

2. *FedEx*

11-20-25

2. *[Signature]*

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

3. *[Signature]*

DATE/TIME

3. *[Signature]*Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant☐ Cooler Temp 2-3°C

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

☐ Ice in Cooler? y

Comments:

Page of SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ OvernightCHEMTECH: ☐ 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.
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