

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 : Q2373

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2373

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2373-01
Q2373-02
Q2373-03

Client Sample Number

RW5-SP100-20250619
RW5-SP201-20250619
RW5-SP303-20250619

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 12:13 pm, Jul 01, 2025

Date: 6/30/2025

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 # Q2373

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

3 Water samples were received on 06/19/2025.

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-GGAThe analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

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

The Initial Calibration met the requirements.

The Continuous Calibration File ID BN037403.D met the requirements except for 2,4,6-Tribromophenol, The Failure Surrogate is not Associated with DOD Parameter list, Therefore no Corrective Action was taken.

The Tuning criteria met requirements.

Sample RW5-SP100-20250619 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.

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 12:14 pm, Jul 01, 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 #: Q2373

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: MOHAMMAD AHMED

Date: 06/30/2025

LAB CHRONICLE

OrderID:	Q2373	OrderDate:	6/19/2025 3:56:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	D51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2373-01	RW5-SP100-2025061 9	Water			06/19/25			06/19/25
			SVOC-SIMGroup1	8270-Modified		06/20/25	06/27/25	
Q2373-01DL	RW5-SP100-2025061 9DL	Water			06/19/25			06/19/25
			SVOC-SIMGroup1	8270-Modified		06/20/25	06/27/25	
Q2373-02	RW5-SP201-2025061 9	Water			06/19/25			06/19/25
			SVOC-SIMGroup1	8270-Modified		06/20/25	06/27/25	
Q2373-03	RW5-SP303-2025061 9	Water			06/19/25			06/19/25
			SVOC-SIMGroup1	8270-Modified		06/20/25	06/27/25	



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

Hit Summary Sheet SW-846

SDG No.: Q2373
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20250619								
Q2373-01	RW5-SP100-20250619	WATER	1,4-Dioxane	7.100	E	0.07	0.2	0.2 ug/L
			Total Svoc :	7.10				
			Total Concentration:	7.10				
Client ID : RW5-SP100-20250619DL								
Q2373-01DL	RW5-SP100-20250619DI	WATER	1,4-Dioxane	7.700	D	0.13	0.4	0.4 ug/L
			Total Svoc :	7.70				
			Total Concentration:	7.70				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/19/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/19/25
Client Sample ID:	RW5-SP100-20250619	SDG No.:	Q2373
Lab Sample ID:	Q2373-01	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
BN037420.D	1	06/20/25 12:03	06/27/25 11:57	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.10	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		95%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		107%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1610	7.56				
1146-65-2	Naphthalene-d8	3610	10.34				
15067-26-2	Acenaphthene-d10	2440	14.213				
1517-22-2	Phenanthrene-d10	5010	16.959				
1719-03-5	Chrysene-d12	5110	21.162				
1520-96-3	Perylene-d12	5320	23.348				

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:	06/19/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/19/25
Client Sample ID:	RW5-SP100-20250619DL	SDG No.:	Q2373
Lab Sample ID:	Q2373-01DL	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
BN037421.D	2	06/20/25 12:03	06/27/25 12:34	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.70	D	0.13	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		114%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		120%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1450		7.568			
1146-65-2	Naphthalene-d8	3260		10.34			
15067-26-2	Acenaphthene-d10	2270		14.213			
1517-22-2	Phenanthrene-d10	4630		16.971			
1719-03-5	Chrysene-d12	4630		21.171			
1520-96-3	Perylene-d12	4890		23.351			

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

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A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/19/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/19/25
Client Sample ID:	RW5-SP201-20250619	SDG No.:	Q2373
Lab Sample ID:	Q2373-02	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
BN037407.D	1	06/20/25 12:03	06/27/25 00:03	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.29		30 - 150		73%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		98%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.27		55 - 111		67%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2330	7.568				
1146-65-2	Naphthalene-d8	5150	10.34				
15067-26-2	Acenaphthene-d10	3320	14.213				
1517-22-2	Phenanthrene-d10	6550	16.971				
1719-03-5	Chrysene-d12	6220	21.162				
1520-96-3	Perylene-d12	6230	23.348				

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

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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:	06/19/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/19/25
Client Sample ID:	RW5-SP303-20250619	SDG No.:	Q2373
Lab Sample ID:	Q2373-03	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
BN037408.D	1	06/20/25 12:03	06/27/25 00:40	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 - 150		68%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.24		55 - 111		61%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		110%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2130	7.568				
1146-65-2	Naphthalene-d8	4520	10.34				
15067-26-2	Acenaphthene-d10	3030	14.213				
1517-22-2	Phenanthrene-d10	5850	16.971				
1719-03-5	Chrysene-d12	5580	21.162				
1520-96-3	Perylene-d12	5750	23.348				

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LOQ = Limit of Quantitation

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* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2373

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168563BL	PB168563BL	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.33	81		53	106
		Terphenyl-d14	0.4	0.37	93		58	132
PB168563BS	PB168563BS	2-Methylnaphthalene-d10	0.4	0.49	123		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.39	98		58	132
PB168563BSD	PB168563BSD	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.40	99		53	106
		Terphenyl-d14	0.4	0.38	94		58	132
Q2373-01	RW5-SP100-20250619	2-Methylnaphthalene-d10	0.4	0.38	95		30	150
		Fluoranthene-d10	0.4	0.43	107		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.46	114		58	132
Q2373-01DL	RW5-SP100-20250619DL	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.46	114		30	150
		Nitrobenzene-d5	0.4	0.33	81		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.48	120		58	132
Q2373-02	RW5-SP201-20250619	2-Methylnaphthalene-d10	0.4	0.29	73		30	150
		Fluoranthene-d10	0.4	0.39	98		30	150
		Nitrobenzene-d5	0.4	0.27	67		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
Q2373-03	RW5-SP303-20250619	2-Methylnaphthalene-d10	0.4	0.27	68		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.24	61		55	111
		2-Fluorobiphenyl	0.4	0.31	76		53	106
		Terphenyl-d14	0.4	0.44	110		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2373

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN037363.D

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

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2373

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN037364.D

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

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168563BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q2373

SAS No.: Q2373 SDG NO.: Q2373

Lab File ID: BN037361.D

Lab Sample ID: PB168563BL

Instrument ID: BNA_N

Date Extracted: 06/20/2025

Matrix: (soil/water) Water

Date Analyzed: 06/20/2025

Level: (low/med) LOW

Time Analyzed: 22:16

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168563BS	PB168563BS	BN037363.D	06/20/2025
PB168563BSD	PB168563BSD	BN037364.D	06/21/2025
RW5-SP201-20250619	Q2373-02	BN037407.D	06/27/2025
RW5-SP303-20250619	Q2373-03	BN037408.D	06/27/2025
RW5-SP100-20250619	Q2373-01	BN037420.D	06/27/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2373

SDG NO.: Q2373

Lab File ID: BN037351.D

DFTPP Injection Date: 06/20/2025

Instrument ID: BNA_N

DFTPP Injection Time: 15:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.7) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
365	Greater than 1% of mass 198	4.9
441	Present, but less than mass 443	85.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.4 (20) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037353.D	06/20/2025	16:51
SSTDICC0.2	SSTDICC0.2	BN037354.D	06/20/2025	17:27
SSTDICCC0.4	SSTDICCC0.4	BN037355.D	06/20/2025	18:03
SSTDICC0.8	SSTDICC0.8	BN037356.D	06/20/2025	18:39
SSTDICC1.6	SSTDICC1.6	BN037357.D	06/20/2025	19:15
SSTDICC3.2	SSTDICC3.2	BN037358.D	06/20/2025	19:51
SSTDICC5.0	SSTDICC5.0	BN037359.D	06/20/2025	20:27
PB168563BL	PB168563BL	BN037361.D	06/20/2025	22:16
PB168563BS	PB168563BS	BN037363.D	06/20/2025	23:28
PB168563BSD	PB168563BSD	BN037364.D	06/21/2025	00:04
SSTDCCC0.4EC	SSTDCCC0.4	BN037365.D	06/21/2025	01:17

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2374

SDG NO.: Q2374

Lab File ID: BN037385.D

DFTPP Injection Date: 06/26/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.3 (0.9) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
365	Greater than 1% of mass 198	4.9
441	Present, but less than mass 443	78.0
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.1 (18.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2373 SDG NO.: Q2373

Lab File ID: BN037402.D

DFTPP Injection Date: 06/26/2025

Instrument ID: BNA_N

DFTPP Injection Time: 20:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (2) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.1 (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	7.3
365	Greater than 1% of mass 198	6.1
441	Present, but less than mass 443	83.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	13.7 (19) 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	BN037403.D	06/26/2025	21:38
RW5-SP201-20250619	Q2373-02	BN037407.D	06/27/2025	00:03
RW5-SP303-20250619	Q2373-03	BN037408.D	06/27/2025	00:40
SSTDCCC0.4EC	SSTDCCC0.4	BN037415.D	06/27/2025	04:54

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2373

SDG NO.: Q2373

Lab File ID: BN037416.D

DFTPP Injection Date: 06/27/2025

Instrument ID: BNA_N

DFTPP Injection Time: 09:30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.3 (1.1) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
365	Greater than 1% of mass 198	5.1
441	Present, but less than mass 443	79.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.4 (19.3) 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
SSTDCCC0.4	SSTDCCC0.4	BN037417.D	06/27/2025	10:09
RW5-SP100-20250619	Q2373-01	BN037420.D	06/27/2025	11:57
RW5-SP100-20250619DL	Q2373-01DL	BN037421.D	06/27/2025	12:34
SSTDCCC0.4EC	SSTDCCC0.4	BN037423.D	06/27/2025	15:34

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG NO.: Q2373

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

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

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	1912	7.568	4157	10.34	2811	14.21
UPPER LIMIT	3824	8.068	8314	10.84	5622	14.713
LOWER LIMIT	956	7.068	2078.5	9.84	1405.5	13.713
EPA SAMPLE NO.						
01 PB168563BL	1968	7.57	4045	10.35	2736	14.22
02 PB168563BS	1960	7.57	4204	10.34	2586	14.21
03 PB168563BSD	1885	7.57	4095	10.34	2623	14.21

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG NO.: Q2373

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

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

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	5776	16.971	4813	21.171	4943	23.354
UPPER LIMIT	11552	17.471	9626	21.671	9886	23.854
LOWER LIMIT	2888	16.471	2406.5	20.671	2471.5	22.854
EPA SAMPLE NO.						
01 PB168563BL	4864	16.98	4288	21.17	3457	23.36
02 PB168563BS	4830	16.97	3875	21.17	2749	23.35
03 PB168563BSD	5035	16.97	4193	21.16	4470	23.35

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG NO.: Q2373

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 06/26/2025

Lab File ID: BN037403.D Time Analyzed: 21:38

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	1253	7.56	2741	10.34	1842	14.21
UPPER LIMIT	2506	8.06	5482	10.84	3684	14.713
LOWER LIMIT	626.5	7.06	1370.5	9.84	921	13.713
EPA SAMPLE NO.						
01 RW5-SP201-20250619	2329	7.57	5147	10.34	3323	14.21
02 RW5-SP303-20250619	2127	7.57	4523	10.34	3031	14.21

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG NO.: Q2373

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 06/26/2025

Lab File ID: BN037403.D Time Analyzed: 21:38

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	3978	16.959	3956	21.162	4281	23.342
UPPER LIMIT	7956	17.459	7912	21.662	8562	23.842
LOWER LIMIT	1989	16.459	1978	20.662	2140.5	22.842
EPA SAMPLE NO.						
01 RW5-SP201-20250619	6550	16.97	6220	21.16	6232	23.35
02 RW5-SP303-20250619	5854	16.97	5581	21.16	5749	23.35

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG NO.: Q2373

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 06/27/2025

Lab File ID: BN037417.D Time Analyzed: 10:09

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	1790	7.56	3949	10.34	2792	14.21
UPPER LIMIT	3580	8.06	7898	10.84	5584	14.713
LOWER LIMIT	895	7.06	1974.5	9.84	1396	13.713
EPA SAMPLE NO.						
01 RW5-SP100-20250619	1613	7.56	3612	10.34	2437	14.21
02 RW5-SP100-20250619DL	1445	7.57	3259	10.34	2269	14.21

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG NO.: Q2373

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 06/27/2025

Lab File ID: BN037417.D Time Analyzed: 10:09

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	6217	16.959	6164	21.162	6622	23.345
UPPER LIMIT	12434	17.459	12328	21.662	13244	23.845
LOWER LIMIT	3108.5	16.459	3082	20.662	3311	22.845
EPA SAMPLE NO.						
01 RW5-SP100-20250619	5011	16.96	5110	21.16	5320	23.35
02 RW5-SP100-20250619DL	4629	16.97	4631	21.17	4886	23.35

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:		
Client Sample ID:	PB168563BL		SDG No.:	Q2373	
Lab Sample ID:	PB168563BL		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037361.D	1	06/20/25 12:03	06/20/25 22:16	PB168563

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.568				
1146-65-2	Naphthalene-d8	4050	10.351				
15067-26-2	Acenaphthene-d10	2740	14.224				
1517-22-2	Phenanthrene-d10	4860	16.984				
1719-03-5	Chrysene-d12	4290	21.171				
1520-96-3	Perylene-d12	3460	23.357				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168563BS		SDG No.:	Q2373
Lab Sample ID:	PB168563BS		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037363.D	1	06/20/25 12:03	06/20/25 23:28	PB168563

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB168563BSD	SDG No.:	Q2373
Lab Sample ID:	PB168563BSD	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037364.D	1	06/20/25 12:03	06/21/25 00:04	PB168563

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN062125.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Jun 20 23:41:54 2025
 Response Via : Initial Calibration

Calibration Files

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

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD

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

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

Method File : 8270-SIM-BN062125.M

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

(#) = Out of Range

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

Calibration Files

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

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.470	0.369	0.366	0.377	0.363	0.331	0.379	12.38	
3)	n-Nitrosodimet...	0.377	0.374	0.366	0.385	0.374	0.371	0.375	1.73	
4) S	2-Fluorophenol	0.771	0.778	0.804	0.697	0.754	0.773	0.818	0.771	5.09
5) S	Phenol-d6	0.663	0.706	0.812	0.737	0.839	0.886	0.951	0.799	12.86
6)	bis(2-Chloroet...	0.574	0.661	0.718	0.694	0.765	0.775	0.790	0.711	10.74
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.270	0.281	0.311	0.296	0.345	0.353	0.389	0.321	13.45
9)	Naphthalene	1.042	1.001	0.999	0.972	1.048	1.050	1.096	1.030	4.06
10)	Hexachlorobuta...	0.407	0.410	0.413	0.400	0.422	0.404	0.405	0.409	1.74
11) SURR2	Methylnaphth...	0.532	0.567	0.576	0.568	0.628	0.656	0.807	0.619	14.98
12)	2-Methylnaphth...	0.635	0.665	0.684	0.662	0.746	0.767	0.803	0.709	8.89
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.194	0.207	0.239	0.225	0.251	0.256	0.271	0.235	11.68
15) S	2-Fluorobiphenyl	1.548	1.656	1.723	1.652	1.798	1.801	1.910	1.727	6.95
16)	Acenaphthylene	1.585	1.600	1.576	1.538	1.714	1.741	1.858	1.659	6.95
17)	Acenaphthene	1.030	1.027	1.045	1.009	1.123	1.147	1.203	1.083	6.85
18)	Fluorene	1.444	1.417	1.476	1.420	1.603	1.643	1.706	1.530	7.74
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.084	0.085	0.087	0.113	0.119	0.128	0.103	19.13	
21)	4-Bromophenyl-...	0.264	0.253	0.270	0.269	0.303	0.302	0.316	0.282	8.58
22)	Hexachlorobenzene	0.310	0.299	0.302	0.291	0.311	0.301	0.311	0.303	2.45
23)	Atrazine	0.200	0.208	0.213	0.204	0.232	0.242	0.266	0.224	10.81
24)	Pentachlorophenol	0.164	0.155	0.148	0.165	0.165	0.168	0.183	0.164	7.30
25)	Phenanthrene	1.056	1.067	1.080	1.038	1.172	1.190	1.287	1.127	8.12
26)	Anthracene	0.935	0.972	0.969	0.959	1.076	1.120	1.222	1.036	10.28
27) SURR	Fluoranthene-d10	1.073	1.137	1.063	1.028	1.121	1.154	1.447	1.146	12.22
28)	Fluoranthene	1.377	1.398	1.362	1.320	1.487	1.507	1.624	1.439	7.32
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.459	1.449	1.534	1.431	1.561	1.550	1.612	1.514	4.47
31) S	Terphenyl-d14	0.800	0.794	0.868	0.796	0.878	0.892	0.943	0.853	6.77
32)	Benzo(a)anthra...	1.149	1.202	1.167	1.152	1.318	1.364	1.446	1.257	9.46
33)	Chrysene	1.630	1.573	1.583	1.491	1.554	1.510	1.551	1.556	2.98
34)	Bis(2-ethylhex...	0.509	0.504	0.466	0.481	0.488	0.537	0.498	5.00	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN062625.M

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

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG No.: Q2373

Instrument ID: BNA_N Calibration Date/Time: 06/21/2025 01:17

Lab File ID: BN037365.D Init. Calib. Date(s): 06/20/2025 06/20/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 16:51 20:27

GC Column: ZB-GR ID: 0.25 (mm)

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

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG No.: Q2373

Instrument ID: BNA_N Calibration Date/Time: 06/26/2025 21:38

Lab File ID: BN037403.D Init. Calib. Date(s): 06/26/2025 06/26/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 10:41 14:17

GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.590		-4.7	20.0
Fluoranthene-d10	1.146	1.145		-0.1	20.0
2-Fluorophenol	0.771	0.749		-2.9	20.0
Phenol-d6	0.799	0.782		-2.1	20.0
Nitrobenzene-d5	0.321	0.301		-6.2	20.0
2-Fluorobiphenyl	1.727	1.728		0.1	20.0
2,4,6-Tribromophenol	0.235	0.289		23.0	20.0
Terphenyl-d14	0.853	0.867		1.6	20.0
1,4-Dioxane	0.379	0.373		-1.6	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06
 Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG No.: Q2373
 Instrument ID: BNA_N Calibration Date/Time: 06/27/2025 04:54
 Lab File ID: BN037415.D Init. Calib. Date(s): 06/26/2025 06/26/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 10:41 14:17
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.582		-6.0	50.0
Fluoranthene-d10	1.146	1.097		-4.3	50.0
2-Fluorophenol	0.771	0.782		1.4	50.0
Phenol-d6	0.799	0.787		-1.5	50.0
Nitrobenzene-d5	0.321	0.289		-10.0	50.0
2-Fluorobiphenyl	1.727	1.699		-1.6	50.0
2,4,6-Tribromophenol	0.235	0.235		0.0	50.0
Terphenyl-d14	0.853	0.849		-0.5	50.0
1,4-Dioxane	0.379	0.394		4.0	50.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG No.: Q2373

Instrument ID: BNA_N Calibration Date/Time: 06/27/2025 10:09

Lab File ID: BN037417.D Init. Calib. Date(s): 06/26/2025 06/26/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 10:41 14:17

GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.578		-6.6	20.0
Fluoranthene-d10	1.146	1.126		-1.7	20.0
2-Fluorophenol	0.771	0.793		2.9	20.0
Phenol-d6	0.799	0.783		-2.0	20.0
Nitrobenzene-d5	0.321	0.297		-7.5	20.0
2-Fluorobiphenyl	1.727	1.669		-3.4	20.0
2,4,6-Tribromophenol	0.235	0.245		4.3	20.0
Terphenyl-d14	0.853	0.854		0.1	20.0
1,4-Dioxane	0.379	0.367		-3.2	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2373 SAS No.: Q2373 SDG No.: Q2373

Instrument ID: BNA_N Calibration Date/Time: 06/27/2025 15:34

Lab File ID: BN037423.D Init. Calib. Date(s): 06/26/2025 06/26/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 10:41 14:17

GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.609		-1.6	50.0
Fluoranthene-d10	1.146	1.092		-4.7	50.0
2-Fluorophenol	0.771	0.857		11.2	50.0
Phenol-d6	0.799	0.861		7.8	50.0
Nitrobenzene-d5	0.321	0.290		-9.7	50.0
2-Fluorobiphenyl	1.727	1.640		-5.0	50.0
2,4,6-Tribromophenol	0.235	0.221		-6.0	50.0
Terphenyl-d14	0.853	0.853		0.0	50.0
1,4-Dioxane	0.379	0.383		1.1	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: Q2373										
				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: RW5B		ADDRESS:										
CITY: Virginia Beach STATE: VA ZIP: 23462		PROJECT MANAGER: Ernie Wu		CITY: STATE: ZIP:										
ATTENTION: Ernie Wu		E-MAIL: ernie.wu@tetrattech.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		☐ RESULTS 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 SPM										
				<table border="1" style="width:100%; border-collapse: collapse;"> <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 COMP GRAB	SAMPLE COLLECTION DATE TIME	# of Bottles									
1.	RW5-SP100-20250619	GW	X	6/19/25 10:45	1									
2.	RW5-SP201-20250619	GW	X	6/19/25 10:47	1									
3.	RW5-SP303-20250619	GW	X	6/19/25 10:53	1									
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	Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp <u>2.2°</u> MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: _____
1.	6/19/25 1530	1.	Comments: SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight CHEMTECH: ☐ Picked Up ☐ Overnight Shipment Complete ☐ YES ☐ NO
RELINQUISHED BY	DATE/TIME	RECEIVED BY	
2.		2.	
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY	Page _____ of _____
3.	6-19-25 1830	3.	

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