284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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ANALYTICAL RESULTS SUMMARY

SEMI-VOLATILE ORGANICS

PROJECT NAME : NWIRP BETHPAGE - RW7B CTO WE13 112G08005

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q1620

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

Table Of Contents for Q1620

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Cover Page

Order ID : Q1620

Project ID : NWIRP Bethpage - RW7B CTO WE13 112G08005

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
Q1620-01	RW7-SP100-20250320
Q1620-02	RW7-SP201-20250320
Q1620-03	RW7-SP302-20250320
Q1620-04	RW7-SP303-20250320

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: 4/2/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NWIRP Bethpage - RW7B CTO WE13 112G08005
Project Manager: Ernie Wu
Chemtech Project # Q1620
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
4 Water samples were received on 03/21/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Metals Group4 and 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 except for PB167269BS [2-Fluorobiphenyl - 115%,], PB167269BSD [2-Fluorobiphenyl - 116%,] and RW7-SP303-20250320 [Terphenyl-d14 - 160%], The above failure surrogates not associated with the client parameters list, therefore no corrective action was taken.

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 BN036757.D met the requirements except for Terphenyl-d14, The above failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.

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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 <15% 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 > 15% 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_____

284 Sheffield Street, Mountainside NJ 07092 Tel.
908-789-8900 Fax: 908-789-8922

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 is 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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1620

	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 Castody	✓
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:** 04/02/2025

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LAB CHRONICLE

OrderID:	Q1620	**OrderDate:**	3/21/2025 10:33:00 AM
Client:	Tetra Tech NUS, Inc.	**Project:**	NWIRP Bethpage - RW7B CTO WE13 112G08005
Contact:	Ernie Wu	**Location:**	I41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1620-01	**RW7-SP100-20250320**	**Water**			**03/20/25**			**03/21/25**
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/29/25	
Q1620-02	**RW7-SP201-20250320**	**Water**			**03/20/25**			**03/21/25**
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/29/25	
Q1620-03	**RW7-SP302-20250320**	**Water**			**03/20/25**			**03/21/25**
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/29/25	
Q1620-04	**RW7-SP303-20250320**	**Water**			**03/20/25**			**03/21/25**
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/29/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1620

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	**RW7-SP100-20250320**								
Q1620-01	RW7-SP100-20250320	WATER	1,4-Dioxane	4.500		0.07	0.2	0.2	ug/L
			Total Svoc :		**4.50**				
			Total Concentration:		**4.50**				

SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	03/20/25
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW7-SP100-20250320	SDG No.:	Q1620
Lab Sample ID:	Q1620-01	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
BN036794.D	1	03/24/25 08:15	03/29/25 04:32	PB167269

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.50		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		70%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		95%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		77%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		72%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1710	7.695				
1146-65-2	Naphthalene-d8	4170	10.487				
15067-26-2	Acenaphthene-d10	2530	14.334				
1517-22-2	Phenanthrene-d10	5370	17.086				
1719-03-5	Chrysene-d12	3860	21.277				
1520-96-3	Perylene-d12	3190	23.516				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	03/20/25
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW7-SP201-20250320	SDG No.:	Q1620
Lab Sample ID:	Q1620-02	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
BN036795.D	1	03/24/25 08:15	03/29/25 05:08	PB167269

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	0.28		30 - 150		69%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		91%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.26		55 - 111		65%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.30		53 - 106		75%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		111%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1480	7.695				
1146-65-2	Naphthalene-d8	3590	10.487				
15067-26-2	Acenaphthene-d10	2210	14.334				
1517-22-2	Phenanthrene-d10	4790	17.086				
1719-03-5	Chrysene-d12	3550	21.277				
1520-96-3	Perylene-d12	2030	23.522				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	03/20/25
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW7-SP302-20250320	SDG No.:	Q1620
Lab Sample ID:	Q1620-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	990 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
BN036796.D	1	03/24/25 08:15	03/29/25 05:43	PB167269

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	0.26		30 - 150		65%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		98%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.25		55 - 111		63%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		66%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1520	7.695				
1146-65-2	Naphthalene-d8	3540	10.487				
15067-26-2	Acenaphthene-d10	2190	14.334				
1517-22-2	Phenanthrene-d10	4470	17.086				
1719-03-5	Chrysene-d12	3540	21.277				
1520-96-3	Perylene-d12	2850	23.519				

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A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	03/20/25
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW7-SP303-20250320	SDG No.:	Q1620
Lab Sample ID:	Q1620-04	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
BN036793.D	1	03/24/25 08:15	03/29/25 03:56	PB167269

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	0.30		30 - 150		74%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		98%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		71%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.64	*	58 - 132		160%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1390	7.703				
1146-65-2	Naphthalene-d8	3240	10.488				
15067-26-2	Acenaphthene-d10	2030	14.334				
1517-22-2	Phenanthrene-d10	4390	17.087				
1719-03-5	Chrysene-d12	3210	21.277				
1520-96-3	Perylene-d12	2750	23.522				

U = Not Detected
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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
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N = Presumptive Evidence of a Compound
* = Values outside of QC limits
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() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q1620

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	High
PB167269BL	PB167269BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.31	78		55	111
		2-Fluorobiphenyl	0.4	0.29	73		53	106
		Terphenyl-d14	0.4	0.39	98		58	132
PB167269BS	PB167269BS	2-Methylnaphthalene-d10	0.4	0.40	101		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.46	115	*	53	106
		Terphenyl-d14	0.4	0.49	122		58	132
PB167269BSD	PB167269BSD	2-Methylnaphthalene-d10	0.4	0.43	106		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.44	109		55	111
		2-Fluorobiphenyl	0.4	0.46	116	*	53	106
		Terphenyl-d14	0.4	0.52	131		58	132
Q1620-01	RW7-SP100-20250320	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
		Nitrobenzene-d5	0.4	0.31	77		55	111
		2-Fluorobiphenyl	0.4	0.29	72		53	106
		Terphenyl-d14	0.4	0.49	123		58	132
Q1620-02	RW7-SP201-20250320	2-Methylnaphthalene-d10	0.4	0.28	69		30	150
		Fluoranthene-d10	0.4	0.36	91		30	150
		Nitrobenzene-d5	0.4	0.26	65		55	111
		2-Fluorobiphenyl	0.4	0.30	75		53	106
		Terphenyl-d14	0.4	0.44	111		58	132
Q1620-03	RW7-SP302-20250320	2-Methylnaphthalene-d10	0.4	0.26	65		30	150
		Fluoranthene-d10	0.4	0.39	98		30	150
		Nitrobenzene-d5	0.4	0.25	63		55	111
		2-Fluorobiphenyl	0.4	0.26	66		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
Q1620-04	RW7-SP303-20250320	2-Methylnaphthalene-d10	0.4	0.30	74		30	150
		Fluoranthene-d10	0.4	0.39	98		30	150
		Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.64	160	*	58	132

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1620

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036806.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB167269BS	1,4-Dioxane	0.4	0.38	ug/L	95				70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1620

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036814.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB167269BSD	1,4-Dioxane	0.4	0.32	ug/L	80	17			70	130	20

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167269BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

Lab File ID: BN036758.D Lab Sample ID: PB167269BL

Instrument ID: BNA_N Date Extracted: 03/24/2025

Matrix: (soil/water) Water Date Analyzed: 03/28/2025

Level: (low/med) LOW Time Analyzed: 04:22

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167269BS	PB167269BS	BN036806.D	03/29/2025
RW7-SP303-20250320	Q1620-04	BN036793.D	03/29/2025
RW7-SP100-20250320	Q1620-01	BN036794.D	03/29/2025
RW7-SP201-20250320	Q1620-02	BN036795.D	03/29/2025
RW7-SP302-20250320	Q1620-03	BN036796.D	03/29/2025
PB167269BSD	PB167269BSD	BN036814.D	03/31/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1620 SDG NO.: Q1620

Lab File ID: BN036556.D DFTPP Injection Date: 03/10/2025

Instrument ID: BNA_N DFTPP Injection Time: 11:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	58.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	52.3
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	50.7
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
275	10.0 - 60.0% of mass 198	24.8
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.9 (19.6) 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	BN036557.D	03/10/2025	11:42
SSTDICC0.2	SSTDICC0.2	BN036558.D	03/10/2025	12:18
SSTDICCC0.4	SSTDICCC0.4	BN036559.D	03/10/2025	12:54
SSTDICC0.8	SSTDICC0.8	BN036560.D	03/10/2025	13:31
SSTDICC1.6	SSTDICC1.6	BN036561.D	03/10/2025	14:07
SSTDICC3.2	SSTDICC3.2	BN036562.D	03/10/2025	14:43
SSTDICC5.0	SSTDICC5.0	BN036563.D	03/10/2025	15:19

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1620 SDG NO.: Q1620

Lab File ID: BN036756.D DFTPP Injection Date: 03/28/2025

Instrument ID: BNA_N DFTPP Injection Time: 03:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	67
68	Less than 2.0% of mass 69	0.9 (1.5) 1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	53.9
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
275	10.0 - 60.0% of mass 198	24.9
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	8.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.3 (19.2) 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	BN036757.D	03/28/2025	03:46
PB167269BL	PB167269BL	BN036758.D	03/28/2025	04:22
SSTDCCC0.4EC	SSTDCCC0.4	BN036771.D	03/28/2025	13:58

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1620 SDG NO.: Q1620

Lab File ID: BN036790.D DFTPP Injection Date: 03/29/2025

Instrument ID: BNA_N DFTPP Injection Time: 01:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	71.7
68	Less than 2.0% of mass 69	1.1 (1.9) 1
69	Mass 69 relative abundance	58.5
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	52.7
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
275	10.0 - 60.0% of mass 198	22.7
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	8.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.1 (20.2) 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	BN036791.D	03/29/2025	02:44
RW7-SP303-20250320	Q1620-04	BN036793.D	03/29/2025	03:56
RW7-SP100-20250320	Q1620-01	BN036794.D	03/29/2025	04:32
RW7-SP201-20250320	Q1620-02	BN036795.D	03/29/2025	05:08
RW7-SP302-20250320	Q1620-03	BN036796.D	03/29/2025	05:43
PB167269BS	PB167269BS	BN036806.D	03/29/2025	11:45
SSTDCCC0.4EC	SSTDCCC0.4	BN036807.D	03/29/2025	12:21

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1620 SDG NO.: Q1620

Lab File ID: BN036808.D DFTPP Injection Date: 03/31/2025

Instrument ID: BNA_N DFTPP Injection Time: 10:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	70.2
68	Less than 2.0% of mass 69	1 (1.8) 1
69	Mass 69 relative abundance	58.4
70	Less than 2.0% of mass 69	0.4 (0.6) 1
127	10.0 - 80.0% of mass 198	54.1
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	7.2
275	10.0 - 60.0% of mass 198	23.4
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	8.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10 (21.3) 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	BN036809.D	03/31/2025	10:39
PB167269BSD	PB167269BSD	BN036814.D	03/31/2025	14:16
SSTDCCC0.4EC	SSTDCCC0.4	BN036815.D	03/31/2025	15:08

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/28/2025

Lab File ID: BN036757.D Time Analyzed: 03:46

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	1974	7.703	4607	10.49	2750	14.33
	UPPER LIMIT	3948	8.203	9214	10.988	5500	14.834
	LOWER LIMIT	987	7.203	2303.5	9.988	1375	13.834
	EPA SAMPLE NO.						
01	PB167269BL	2126	7.70	4744	10.50	2602	14.35

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/28/2025

Lab File ID: BN036757.D Time Analyzed: 03:46

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	5937	17.087	5680	21.277	5140		23.519
	UPPER LIMIT	11874	17.587	11360	21.777	10280		24.019
	LOWER LIMIT	2968.5	16.587	2840	20.777	2570		23.019
	EPA SAMPLE NO.							
01	PB167269BL	5169	17.10	3967	21.28	2206	*	23.53

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.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/29/2025

Lab File ID: BN036791.D Time Analyzed: 02:44

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	1826	7.696	4490	10.48	2701	14.33
	UPPER LIMIT	3652	8.196	8980	10.977	5402	14.834
	LOWER LIMIT	913	7.196	2245	9.977	1350.5	13.834
	EPA SAMPLE NO.						
01	PB167269BS	1846	7.70	4665	10.48	2569	14.33
02	RW7-SP100-20250320	1706	7.70	4169	10.49	2534	14.33
03	RW7-SP201-20250320	1483	7.70	3589	10.49	2207	14.33
04	RW7-SP302-20250320	1521	7.70	3536	10.49	2187	14.33
05	RW7-SP303-20250320	1389	7.70	3240	10.49	2031	14.33

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.
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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/29/2025

Lab File ID: BN036791.D Time Analyzed: 02:44

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	5571	17.087	4634	21.268	4032		23.516
	UPPER LIMIT	11142	17.587	9268	21.768	8064		24.016
	LOWER LIMIT	2785.5	16.587	2317	20.768	2016		23.016
	EPA SAMPLE NO.							
01	PB167269BS	5013	17.09	3219	21.28	1389	*	23.52
02	RW7-SP100-20250320	5367	17.09	3857	21.28	3191		23.52
03	RW7-SP201-20250320	4786	17.09	3552	21.28	2034		23.52
04	RW7-SP302-20250320	4472	17.09	3538	21.28	2845		23.52
05	RW7-SP303-20250320	4392	17.09	3210	21.28	2752		23.52

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/31/2025

Lab File ID: BN036809.D Time Analyzed: 10:39

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	1888	7.695	4656	10.48	2798	14.33
	UPPER LIMIT	3776	8.195	9312	10.977	5596	14.834
	LOWER LIMIT	944	7.195	2328	9.977	1399	13.834
	EPA SAMPLE NO.						
01	PB167269BSD	2858	7.70	7352	10.48	4021	14.33

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG NO.: Q1620

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/31/2025

Lab File ID: BN036809.D Time Analyzed: 10:39

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	5809	17.086	4586	21.277	3945		23.522
	UPPER LIMIT	11618	17.586	9172	21.777	7890		24.022
	LOWER LIMIT	2904.5	16.586	2293	20.777	1972.5		23.022
	EPA SAMPLE NO.							
01	PB167269BSD	7787	17.09	4781	21.28	1670	*	23.52

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

QC SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	
Client Sample ID:	PB167269BL	SDG No.:	Q1620
Lab Sample ID:	PB167269BL	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
BN036758.D	1	03/24/25 08:15	03/28/25 04:22	PB167269

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	0.33		30 - 150		83%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		102%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		73%	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	2130	7.703				
1146-65-2	Naphthalene-d8	4740	10.498				
15067-26-2	Acenaphthene-d10	2600	14.345				
1517-22-2	Phenanthrene-d10	5170	17.099				
1719-03-5	Chrysene-d12	3970	21.277				
1520-96-3	Perylene-d12	2210	23.528				

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	
Client Sample ID:	PB167269BS	SDG No.:	Q1620
Lab Sample ID:	PB167269BS	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
BN036806.D	1	03/24/25 08:15	03/29/25 11:45	PB167269

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.38		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		101%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	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							
3855-82-1	1,4-Dichlorobenzene-d4	1850	7.696				
1146-65-2	Naphthalene-d8	4670	10.477				
15067-26-2	Acenaphthene-d10	2570	14.334				
1517-22-2	Phenanthrene-d10	5010	17.087				
1719-03-5	Chrysene-d12	3220	21.277				
1520-96-3	Perylene-d12	1390	23.516				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage - RW7B CTO WE13 112G08005	Date Received:	
Client Sample ID:	PB167269BSD	SDG No.:	Q1620
Lab Sample ID:	PB167269BSD	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
BN036814.D	1	03/24/25 08:15	03/31/25 14:16	PB167269

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	0.43		30 - 150		106%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		109%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.46	*	53 - 106		116%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.52		58 - 132		131%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2860	7.695				
1146-65-2	Naphthalene-d8	7350	10.477				
15067-26-2	Acenaphthene-d10	4020	14.334				
1517-22-2	Phenanthrene-d10	7790	17.086				
1719-03-5	Chrysene-d12	4780	21.277				
1520-96-3	Perylene-d12	1670	23.519				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025
Response Via : Initial Calibration

Calibration Files
0.1 =BN036557.D 0.2 =BN036558.D 0.4 =BN036559.D 0.8 =BN036560.D 1.6 =BN036561.D 3.2 =BN036562.D 5.0 =BN036563.D

		Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------								
2)		1,4-Dioxane	0.434	0.439	0.498	0.451	0.440	0.445	0.399	0.444	6.60
3)		n-Nitrosodimet...	1.112	0.874	0.935	0.841	0.850	0.883	0.789	0.898	11.64
4)	S	2-Fluorophenol	0.931	0.908	0.987	0.878	0.914	0.996	0.911	0.932	4.67
5)	S	Phenol-d6	1.243	1.057	1.128	1.067	1.133	1.254	1.180	1.152	6.79
6)		bis(2-Chloroet...	1.426	1.150	1.183	1.129	1.132	1.210	1.104	1.190	9.22
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.572	0.396	0.415	0.401	0.402	0.450	0.411	0.435	14.47
9)		Naphthalene	1.371	1.125	1.206	1.111	1.108	1.222	1.094	1.177	8.45
10)		Hexachlorobuta...	0.296	0.283	0.294	0.267	0.261	0.286	0.251	0.277	6.24
11)	SURR	2-Methylnaphth...	0.656	0.549	0.606	0.562	0.577	0.633	0.581	0.595	6.55
12)		2-Methylnaphth...	0.810	0.696	0.765	0.703	0.734	0.802	0.731	0.749	6.03
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.181	0.160	0.187	0.169	0.188	0.197	0.188	0.182	7.04
15)	S	2-Fluorobiphenyl	2.208	1.982	2.398	2.350	2.364	2.566	2.419	2.327	7.96
16)		Acenaphthylene	1.882	1.756	1.938	1.794	1.834	2.074	1.935	1.888	5.66
17)		Acenaphthene	1.257	1.159	1.281	1.171	1.199	1.339	1.243	1.236	5.17
18)		Fluorene	1.629	1.600	1.764	1.609	1.670	1.778	1.650	1.672	4.32
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...		0.057	0.077	0.075	0.088	0.110	0.111	0.086	24.66
21)		4-Bromophenyl-...	0.243	0.227	0.274	0.238	0.241	0.278	0.253	0.251	7.53
22)		Hexachlorobenzene	0.306	0.288	0.336	0.295	0.283	0.322	0.289	0.303	6.58
23)		Atrazine	0.193	0.191	0.213	0.192	0.200	0.216	0.200	0.201	5.08
24)		Pentachlorophenol	0.140	0.116	0.137	0.122	0.135	0.161	0.155	0.138	11.76
25)		Phenanthrene	1.190	1.111	1.297	1.141	1.165	1.300	1.195	1.200	6.09
26)		Anthracene	1.026	0.971	1.147	1.033	1.075	1.215	1.112	1.083	7.60
27)	SURR	Fluoranthene-d10	1.037	0.955	1.116	0.956	1.025	1.087	1.000	1.025	5.98
28)		Fluoranthene	1.341	1.243	1.452	1.272	1.364	1.447	1.316	1.348	5.95
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.945	2.005	2.131	1.910	1.870	1.992	1.837	1.956	5.04
31)	S	Terphenyl-d14	0.962	0.965	1.028	0.924	0.915	0.987	0.926	0.958	4.23
32)		Benzo(a)anthra...	1.389	1.315	1.437	1.304	1.347	1.528	1.415	1.391	5.63
33)		Chrysene	1.486	1.509	1.610	1.507	1.462	1.616	1.448	1.520	4.44
34)		Bis(2-ethylhex...	1.196	1.100	1.044	0.865	0.946	0.912	0.870	0.990	12.74
35)	I	Perylene-d12	----------ISTD----------								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN031025.M

36)		Indeno(1,2,3-c...	1.160	1.316	1.546	1.404	1.417	1.693	1.571	1.444	12.27
37)		Benzo(b)fluora...	1.311	1.360	1.547	1.402	1.477	1.595	1.498	1.456	7.04
38)		Benzo(k)fluora...	1.504	1.397	1.620	1.481	1.521	1.635	1.534	1.527	5.34
39)	C	Benzo(a)pyrene	1.090	1.152	1.303	1.195	1.223	1.350	1.268	1.226	7.29
40)		Dibenzo(a,h)an...	0.893	0.981	1.163	1.126	1.102	1.351	1.252	1.124	13.76
41)		Benzo(g,h,i)pe...	1.138	1.213	1.382	1.250	1.233	1.449	1.334	1.286	8.36

(#) = Out of Range

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG No.: Q1620

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 03:46

Lab File ID: BN036757.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.509		-14.5	20.0
Fluoranthene-d10	1.025	1.053		2.7	20.0
2-Fluorophenol	0.932	0.782		-16.1	20.0
Phenol-d6	1.152	0.986		-14.4	20.0
Nitrobenzene-d5	0.435	0.370		-14.9	20.0
2-Fluorobiphenyl	2.327	2.013		-13.5	20.0
2,4,6-Tribromophenol	0.182	0.184		1.1	20.0
Terphenyl-d14	0.958	0.749		-21.8	20.0
1,4-Dioxane	0.444	0.442		-0.4	20.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG No.: Q1620

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 13:58

Lab File ID: BN036771.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.540		-9.2	50.0
Fluoranthene-d10	1.025	1.012		-1.3	50.0
2-Fluorophenol	0.932	0.846		-9.2	50.0
Phenol-d6	1.152	1.010		-12.3	50.0
Nitrobenzene-d5	0.435	0.354		-18.6	50.0
2-Fluorobiphenyl	2.327	2.021		-13.1	50.0
2,4,6-Tribromophenol	0.182	0.177		-2.7	50.0
Terphenyl-d14	0.958	0.816		-14.8	50.0
1,4-Dioxane	0.444	0.460		3.6	50.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG No.: Q1620

Instrument ID: BNA_N Calibration Date/Time: 03/29/2025 02:44

Lab File ID: BN036791.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.526		-11.6	20.0
Fluoranthene-d10	1.025	1.032		0.7	20.0
2-Fluorophenol	0.932	0.833		-10.6	20.0
Phenol-d6	1.152	1.007		-12.6	20.0
Nitrobenzene-d5	0.435	0.376		-13.6	20.0
2-Fluorobiphenyl	2.327	2.041		-12.3	20.0
2,4,6-Tribromophenol	0.182	0.178		-2.2	20.0
Terphenyl-d14	0.958	0.782		-18.4	20.0
1,4-Dioxane	0.444	0.453		2.0	20.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG No.: Q1620

Instrument ID: BNA_N Calibration Date/Time: 03/29/2025 12:21

Lab File ID: BN036807.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.526		-11.6	50.0
Fluoranthene-d10	1.025	0.985		-3.9	50.0
2-Fluorophenol	0.932	0.835		-10.4	50.0
Phenol-d6	1.152	0.978		-15.1	50.0
Nitrobenzene-d5	0.435	0.364		-16.3	50.0
2-Fluorobiphenyl	2.327	1.915		-17.7	50.0
2,4,6-Tribromophenol	0.182	0.169		-7.1	50.0
Terphenyl-d14	0.958	0.875		-8.7	50.0
1,4-Dioxane	0.444	0.456		2.7	50.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG No.: Q1620

Instrument ID: BNA_N Calibration Date/Time: 03/31/2025 10:39

Lab File ID: BN036809.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.537		-9.7	20.0
Fluoranthene-d10	1.025	0.990		-3.4	20.0
2-Fluorophenol	0.932	0.818		-12.2	20.0
Phenol-d6	1.152	0.953		-17.3	20.0
Nitrobenzene-d5	0.435	0.363		-16.6	20.0
2-Fluorobiphenyl	2.327	1.979		-15.0	20.0
2,4,6-Tribromophenol	0.182	0.161		-11.5	20.0
Terphenyl-d14	0.958	0.798		-16.7	20.0
1,4-Dioxane	0.444	0.454		2.3	20.0

All other compounds must meet a minimum RRF of 0.010.

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1620 SAS No.: Q1620 SDG No.: Q1620

Instrument ID: BNA_N Calibration Date/Time: 03/31/2025 15:08

Lab File ID: BN036815.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.543		-8.7	50.0
Fluoranthene-d10	1.025	0.994		-3.0	50.0
2-Fluorophenol	0.932	0.839		-10.0	50.0
Phenol-d6	1.152	0.976		-15.3	50.0
Nitrobenzene-d5	0.435	0.348		-20.0	50.0
2-Fluorobiphenyl	2.327	1.957		-15.9	50.0
2,4,6-Tribromophenol	0.182	0.159		-12.6	50.0
Terphenyl-d14	0.958	0.842		-12.1	50.0
1,4-Dioxane	0.444	0.447		0.7	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: Q1620

COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Tetra Tech	PROJECT NAME: NWIRP Bethpage	BILL TO: PO#
ADDRESS: 4433 Corporation Ln, Suite 300	PROJECT #: 112G08005-WE13 LOCATION: RW7B	ADDRESS:
CITY: Virginia Beach STATE: VA ZIP: 23462	PROJECT MANAGER: Ernie Wu	CITY: STATE: ZIP:
ATTENTION: Ernie Wu	E-MAIL: ernie.wu@tetratech.com	ATTENTION: PHONE:
PHONE: 757-466-4901 FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148	

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other
- ☐ EDD Format

ANALYSIS

	1	2	3	4	5	6	7	8	9
	1,4-Dioxane SW846 8270 SIM	Iron							

PRESERVATIVES

	1	2	3	4	5	6	7	8	9
		B							

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles
1.	RW7-SP100-20250320	GW		x	3/20/25	12:15	2
2.	RW7-SP201-20250320	GW		x	3/20/25	12:17	1
3.	RW7-SP302-20250320	GW		x	3/20/25	12:27	1
4.	RW7-SP303-20250320	GW		x	3/20/25	12:29	2
5.							
6.							
7.							
8.							
9.							
10.							

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	3/20/25 1700	1.
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2. Fed Ex	3-21-25 0944	2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.		3.

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?: N
Comments:

Page ____ of ____

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

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

From: Varricchio, Vin <Vin.Varricchio@tetratech.com>
Sent: Friday, March 21, 2025 10:53 AM
To: Yazmeen Gomez
Cc: Wu, Ernie
Subject: Re: NWIRP Bethpage RW5 & RW7 GW Samples
Attachments: COC.pdf

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Yazmeen,
So sorry, that was a remnant from a previous sampling event. Please use the attached revised COC.

Thanks,

Vincent J. Varricchio, P.G. | Geologist V | NWIRP Bethpage Facilities Manager | Tetra Tech
Direct **(631) 962-0812** | Mobile **(516) 680-1201** | vin.varricchio@tetratech.com
Time Zone: Eastern Time

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From: Yazmeen Gomez <Yazmeen.Gomez@AllianceTG.com>
Sent: Friday, March 21, 2025 10:48 AM
To: Varricchio, Vin <Vin.Varricchio@tetratech.com>
Cc: Wu, Ernie <Ernie.Wu@tetratech.com>
Subject: RE: NWIRP Bethpage RW5 & RW7 GW Samples

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Vin,

We received the attached – however, there were no metals (Iron) bottles received only the Ambers for 1,4-Dioxane. Did you need us to make the metals bottle here?

Also, do you need more bottles for metals?

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147

Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Varricchio, Vin <Vin.Varricchio@tetratech.com>
Sent: Thursday, March 20, 2025 4:16 PM
To: Yazmeen Gomez <Yazmeen.Gomez@AllianceTG.com>
Cc: Wu, Ernie <Ernie.Wu@tetratech.com>
Subject: NWIRP Bethpage RW5 & RW7 GW Samples

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Yazmeen,
I am sending you some GW samples for delivery tomorrow morning. FedEx: 772867203895

Thanks,

Vincent J. Varricchio, P.G. | Geologist V | NWIRP Bethpage Facilities Manager
Direct **(631) 962-0812** | Mobile **(516) 680-1201** | vin.varricchio@tetratech.com
Time Zone: Eastern Time

Tetra Tech | *Leading with Science®* | Environmental Services
500 Bi-County Boulevard, Suite 104 | Farmingdale, NY 11735 | tetratech.com
EGS

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284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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