

LAB CHRONICLE

OrderID:	Q2050	OrderDate:	5/15/2025 9:46:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2050-02	BP-VPB-182-GW-60-6 2	Water			05/12/25			05/14/25
			SVOC-SIMGroup1	8270-Modified		05/16/25	05/19/25	
Q2050-04	BP-VPB-182-GW-150- 152	Water			05/13/25			05/14/25
			SVOC-SIMGroup1	8270-Modified		05/16/25	05/19/25	
Q2050-06	BP-VPB-182-GW-220- 222	Water			05/14/25			05/14/25
			SVOC-SIMGroup1	8270-Modified		05/16/25	05/19/25	
Q2050-08	BP-VPB-182-EB-2025 0514	Water			05/14/25			05/14/25
			SVOC-SIMGroup1	8270-Modified		05/16/25	05/19/25	



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

Hit Summary Sheet SW-846

SDG No.: Q2050
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	BP-VPB-182-GW-220-222							
Q2050-06	BP-VPB-182-GW-220-22 WATER	1,4-Dioxane	0.130	J	0.08	0.23	0.23	ug/L
		Total Svoc :		0.13				
		Total Concentration:		0.13				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/12/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/14/25
Client Sample ID:	BP-VPB-182-GW-60-62	SDG No.:	Q2050
Lab Sample ID:	Q2050-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	550 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
BN037048.D	1	05/16/25 08:42	05/19/25 16:51	PB168032

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.36	U	0.12	0.36	0.36	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.24		30 - 150		60%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		98%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.26		55 - 111		65%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		71%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.52		58 - 132		129%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2090	7.611				
1146-65-2	Naphthalene-d8	5700	10.394				
15067-26-2	Acenaphthene-d10	3310	14.256				
1517-22-2	Phenanthrene-d10	6660	17.009				
1719-03-5	Chrysene-d12	6100	21.206				
1520-96-3	Perylene-d12	5200	23.409				

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:	05/13/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/14/25
Client Sample ID:	BP-VPB-182-GW-150-152	SDG No.:	Q2050
Lab Sample ID:	Q2050-04	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	910 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
BN037049.D	1	05/16/25 08:42	05/19/25 17:27	PB168032

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22	U	0.070	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		69%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	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	0.58	*	58 - 132		145%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2170	7.611				
1146-65-2	Naphthalene-d8	5840	10.394				
15067-26-2	Acenaphthene-d10	3380	14.267				
1517-22-2	Phenanthrene-d10	6630	17.009				
1719-03-5	Chrysene-d12	5280	21.207				
1520-96-3	Perylene-d12	4530	23.407				

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() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/14/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/14/25
Client Sample ID:	BP-VPB-182-GW-220-222	SDG No.:	Q2050
Lab Sample ID:	Q2050-06	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	870 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
BN037050.D	1	05/16/25 08:42	05/19/25 18:03	PB168032

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.13	J	0.080	0.23	0.23	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 - 150		68%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.27		55 - 111		68%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		80%	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	1930	7.611				
1146-65-2	Naphthalene-d8	5280	10.394				
15067-26-2	Acenaphthene-d10	3090	14.256				
1517-22-2	Phenanthrene-d10	6260	17.009				
1719-03-5	Chrysene-d12	4980	21.207				
1520-96-3	Perylene-d12	4280	23.41				

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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:	05/14/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/14/25
Client Sample ID:	BP-VPB-182-EB-20250514	SDG No.:	Q2050
Lab Sample ID:	Q2050-08	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	950 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
BN037051.D	1	05/16/25 08:42	05/19/25 18:40	PB168032

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 - 150		68%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		69%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		134%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1900	7.618				
1146-65-2	Naphthalene-d8	5250	10.394				
15067-26-2	Acenaphthene-d10	3120	14.267				
1517-22-2	Phenanthrene-d10	6080	17.009				
1719-03-5	Chrysene-d12	4710	21.207				
1520-96-3	Perylene-d12	4050	23.412				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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J = Estimated Value

B = Analyte Found in Associated Method Blank

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* = Values outside of QC limits

D = Dilution

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A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2050

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168032BL	PB168032BL	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.32	81		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
PB168032BS	PB168032BS	2-Methylnaphthalene-d10	0.4	0.39	96		30	150
		Fluoranthene-d10	0.4	0.33	81		30	150
		Nitrobenzene-d5	0.4	0.32	81		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.39	97		58	132
PB168032BSD	PB168032BSD	2-Methylnaphthalene-d10	0.4	0.39	98		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
Q2050-02	BP-VPB-182-GW-60-62	2-Methylnaphthalene-d10	0.4	0.24	60		30	150
		Fluoranthene-d10	0.4	0.39	98		30	150
		Nitrobenzene-d5	0.4	0.26	65		55	111
		2-Fluorobiphenyl	0.4	0.28	71		53	106
		Terphenyl-d14	0.4	0.52	129		58	132
Q2050-04	BP-VPB-182-GW-150-152	2-Methylnaphthalene-d10	0.4	0.28	69		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.58	145	*	58	132
Q2050-06	BP-VPB-182-GW-220-222	2-Methylnaphthalene-d10	0.4	0.27	68		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.27	68		55	111
		2-Fluorobiphenyl	0.4	0.32	80		53	106
		Terphenyl-d14	0.4	0.49	122		58	132
Q2050-08	BP-VPB-182-EB-20250514	2-Methylnaphthalene-d10	0.4	0.27	68		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.28	69		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2050

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN037080.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168032BS	1,4-Dioxane	0.4	0.31	ug/L	78				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2050

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN037081.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168032BSD	1,4-Dioxane	0.4	0.32	ug/L	80	3			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168032BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q2050

SAS No.: Q2050 SDG NO.: Q2050

Lab File ID: BN037075.D

Lab Sample ID: PB168032BL

Instrument ID: BNA_N

Date Extracted: 05/16/2025

Matrix: (soil/water) Water

Date Analyzed: 05/20/2025

Level: (low/med) LOW

Time Analyzed: 15:45

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168032BS	PB168032BS	BN037080.D	05/20/2025
PB168032BSD	PB168032BSD	BN037081.D	05/20/2025
BP-VPB-182-GW-60-62	Q2050-02	BN037048.D	05/19/2025
BP-VPB-182-GW-150-152	Q2050-04	BN037049.D	05/19/2025
BP-VPB-182-GW-220-222	Q2050-06	BN037050.D	05/19/2025
BP-VPB-182-EB-20250514	Q2050-08	BN037051.D	05/19/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2050

SDG NO.: Q2050

Lab File ID: BN036998.D

DFTPP Injection Date: 05/13/2025

Instrument ID: BNA_N

DFTPP Injection Time: 17:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	62.8
68	Less than 2.0% of mass 69	0.8 (1.4) 1
69	Mass 69 relative abundance	55.6
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	6.9
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.4 (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
SSTDICC0.1	SSTDICC0.1	BN036999.D	05/13/2025	17:41
SSTDICC0.2	SSTDICC0.2	BN037000.D	05/13/2025	18:17
SSTDICCC0.4	SSTDICCC0.4	BN037001.D	05/13/2025	18:53
SSTDICC0.8	SSTDICC0.8	BN037002.D	05/13/2025	19:29
SSTDICC1.6	SSTDICC1.6	BN037003.D	05/13/2025	20:05
SSTDICC3.2	SSTDICC3.2	BN037004.D	05/13/2025	20:41
SSTDICC5.0	SSTDICC5.0	BN037005.D	05/13/2025	21:17

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2050 SDG NO.: Q2050

Lab File ID: BN037037.D

DFTPP Injection Date: 05/19/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	62.3
68	Less than 2.0% of mass 69	0.8 (1.4) 1
69	Mass 69 relative abundance	55.6
70	Less than 2.0% of mass 69	0.4 (0.7) 1
127	10.0 - 80.0% of mass 198	51.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	24.7
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	8.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.1 (18) 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	BN037038.D	05/19/2025	10:47
BP-VPB-182-GW-60-62	Q2050-02	BN037048.D	05/19/2025	16:51
BP-VPB-182-GW-150-152	Q2050-04	BN037049.D	05/19/2025	17:27
BP-VPB-182-GW-220-222	Q2050-06	BN037050.D	05/19/2025	18:03
BP-VPB-182-EB-20250514	Q2050-08	BN037051.D	05/19/2025	18:40
SSTDCCC0.4EC	SSTDCCC0.4	BN037055.D	05/19/2025	21:05

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2050

SDG NO.: Q2050

Lab File ID: BN037073.D

DFTPP Injection Date: 05/20/2025

Instrument ID: BNA_N

DFTPP Injection Time: 14:30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	69.3
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	59.3
70	Less than 2.0% of mass 69	0.3 (0.4) 1
127	10.0 - 80.0% of mass 198	52.8
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	25.4
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	8.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.5 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN037074.D	05/20/2025	15:09
PB168032BL	PB168032BL	BN037075.D	05/20/2025	15:45
PB168032BS	PB168032BS	BN037080.D	05/20/2025	18:47
PB168032BSD	PB168032BSD	BN037081.D	05/20/2025	19:23
SSTDCCC0.4EC	SSTDCCC0.4	BN037082.D	05/20/2025	19:59

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2050 SAS No.: Q2050 SDG NO.: Q2050

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/19/2025

Lab File ID: BN037038.D Time Analyzed: 10:47

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	2152	7.611	5916	10.39	3512	14.26
UPPER LIMIT	4304	8.111	11832	10.894	7024	14.756
LOWER LIMIT	1076	7.111	2958	9.894	1756	13.756
EPA SAMPLE NO.						
01 BP-VPB-182-GW-60-62	2086	7.61	5701	10.39	3309	14.26
02 BP-VPB-182-GW-150-152	2171	7.61	5837	10.39	3378	14.27
03 BP-VPB-182-GW-220-222	1931	7.61	5282	10.39	3090	14.26
04 BP-VPB-182-EB-20250514	1904	7.62	5247	10.39	3115	14.27

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.: Q2050 SAS No.: Q2050 SDG NO.: Q2050

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/19/2025

Lab File ID: BN037038.D Time Analyzed: 10:47

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	7043	17.009	5607	21.207	4830	23.41
UPPER LIMIT	14086	17.509	11214	21.707	9660	23.91
LOWER LIMIT	3521.5	16.509	2803.5	20.707	2415	22.91
EPA SAMPLE NO.						
01 BP-VPB-182-GW-60-62	6655	17.01	6097	21.21	5198	23.41
02 BP-VPB-182-GW-150-152	6626	17.01	5279	21.21	4526	23.41
03 BP-VPB-182-GW-220-222	6262	17.01	4980	21.21	4275	23.41
04 BP-VPB-182-EB-20250514	6080	17.01	4710	21.21	4050	23.41

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.: Q2050 SAS No.: Q2050 SDG NO.: Q2050

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/20/2025

Lab File ID: BN037074.D Time Analyzed: 15:09

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	2240	7.611	6230	10.39	3461	14.26
UPPER LIMIT	4480	8.111	12460	10.894	6922	14.756
LOWER LIMIT	1120	7.111	3115	9.894	1730.5	13.756
EPA SAMPLE NO.						
01 PB168032BL	1695	7.61	4260	10.39	2468	14.26
02 PB168032BS	1842	7.61	4702	10.39	2635	14.26
03 PB168032BSD	1841	7.61	4693	10.39	2613	14.26

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.: Q2050 SAS No.: Q2050 SDG NO.: Q2050

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/20/2025

Lab File ID: BN037074.D Time Analyzed: 15:09

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	6762	17.009	4645	21.207	3820	23.407
UPPER LIMIT	13524	17.509	9290	21.707	7640	23.907
LOWER LIMIT	3381	16.509	2322.5	20.707	1910	22.907
EPA SAMPLE NO.						
01 PB168032BL	5072	17.01	3622	21.21	3128	23.41
02 PB168032BS	5352	17.01	4047	21.21	3455	23.40
03 PB168032BSD	5111	17.01	3649	21.20	3038	23.40

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:	PB168032BL		SDG No.:	Q2050
Lab Sample ID:	PB168032BL		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
BN037075.D	1	05/16/25 08:42	05/20/25 15:45	PB168032

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	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		84%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1700	7.611				
1146-65-2	Naphthalene-d8	4260	10.393				
15067-26-2	Acenaphthene-d10	2470	14.256				
1517-22-2	Phenanthrene-d10	5070	17.008				
1719-03-5	Chrysene-d12	3620	21.206				
1520-96-3	Perylene-d12	3130	23.409				

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:	PB168032BS		SDG No.:	Q2050
Lab Sample ID:	PB168032BS		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
BN037080.D	1	05/16/25 08:42	05/20/25 18:47	PB168032

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.31		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		97%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1840	7.611				
1146-65-2	Naphthalene-d8	4700	10.394				
15067-26-2	Acenaphthene-d10	2640	14.256				
1517-22-2	Phenanthrene-d10	5350	17.009				
1719-03-5	Chrysene-d12	4050	21.206				
1520-96-3	Perylene-d12	3460	23.404				

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:	PB168032BSD		SDG No.:	Q2050
Lab Sample ID:	PB168032BSD		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
BN037081.D	1	05/16/25 08:42	05/20/25 19:23	PB168032

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	0.39		30 - 150		98%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1840	7.611				
1146-65-2	Naphthalene-d8	4690	10.394				
15067-26-2	Acenaphthene-d10	2610	14.256				
1517-22-2	Phenanthrene-d10	5110	17.009				
1719-03-5	Chrysene-d12	3650	21.198				
1520-96-3	Perylene-d12	3040	23.401				

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-BN051425.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed May 14 11:26:32 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036999.D 0.2 =BN037000.D 0.4 =BN037001.D 0.8 =BN037002.D 1.6 =BN037003.D 3.2 =BN037004.D 5.0 =BN037005.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	0.510	0.512	0.487	0.514	0.467	0.454	0.491	5.25	
3)	n-Nitrosodimet...	1.465	0.974	0.980	0.971	1.075	0.967	0.950	1.054	17.59
4) S	2-Fluorophenol	1.101	1.134	1.024	1.093	0.964	0.971	1.048	6.87	
5) S	Phenol-d6	1.304	1.385	1.236	1.392	1.259	1.292	1.311	4.91	
6)	bis(2-Chloroet...	1.441	1.163	1.153	1.135	1.240	1.168	1.148	1.207	9.02
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.546	0.383	0.398	0.400	0.452	0.426	0.442	0.436	12.60
9)	Naphthalene	1.326	1.140	1.144	1.122	1.226	1.152	1.165	1.182	6.05
10)	Hexachlorobuta...	0.286	0.248	0.244	0.235	0.256	0.236	0.233	0.248	7.47
11) SURR2	Methylnaphth...	0.529	0.547	0.552	0.548	0.603	0.574	0.588	0.563	4.65
12)	2-Methylnaphth...	0.754	0.724	0.736	0.733	0.814	0.770	0.790	0.760	4.34
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.174	0.168	0.178	0.160	0.186	0.175	0.189	0.176	5.77
15) S	2-Fluorobiphenyl	1.912	1.801	1.901	1.802	1.927	1.672	1.807	1.832	4.90
16)	Acenaphthylene	1.906	1.838	1.894	1.849	2.071	1.997	2.075	1.947	5.14
17)	Acenaphthene	1.255	1.229	1.243	1.217	1.350	1.298	1.315	1.272	3.89
18)	Fluorene	1.602	1.581	1.635	1.611	1.779	1.721	1.752	1.669	4.80
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.060	0.073	0.079	0.102	0.103	0.124	0.090	26.02	
21)	4-Bromophenyl-...	0.243	0.246	0.250	0.247	0.262	0.261	0.259	0.253	3.13
22)	Hexachlorobenzene	0.267	0.269	0.281	0.259	0.281	0.270	0.267	0.270	3.03
23)	Atrazine	0.199	0.207	0.211	0.213	0.237	0.234	0.242	0.220	7.64
24)	Pentachlorophenol	0.133	0.134	0.141	0.137	0.159	0.162	0.177	0.149	11.45
25)	Phenanthrene	1.259	1.272	1.292	1.263	1.367	1.337	1.361	1.307	3.56
26)	Anthracene	1.099	1.104	1.166	1.130	1.269	1.259	1.300	1.190	7.13
27) SURR	Fluoranthene-d10	1.033	1.033	1.078	1.042	1.153	1.161	1.178	1.097	5.95
28)	Fluoranthene	1.461	1.439	1.500	1.496	1.670	1.672	1.693	1.562	7.13
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.744	1.708	1.727	1.656	1.790	1.641	1.711	1.711	2.96
31) S	Terphenyl-d14	0.897	0.844	0.871	0.822	0.891	0.816	0.848	0.856	3.73
32)	Benzo(a)anthra...	1.463	1.432	1.485	1.438	1.594	1.521	1.609	1.506	4.77
33)	Chrysene	1.655	1.559	1.616	1.532	1.653	1.560	1.576	1.593	3.05
34)	Bis(2-ethylhex...	0.955	0.919	0.906	0.855	0.941	0.903	1.011	0.927	5.27
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN051425.M

36)	Indeno(1,2,3-c...	1.511	1.613	1.645	1.568	1.687	1.732	1.680	1.634	4.65
37)	Benzo(b)fluora...	1.631	1.570	1.602	1.599	1.749	1.698	1.765	1.659	4.71
38)	Benzo(k)fluora...	1.539	1.538	1.642	1.601	1.770	1.661	1.719	1.639	5.34
39) C	Benzo(a)pyrene	1.380	1.343	1.381	1.331	1.486	1.444	1.486	1.407	4.59
40)	Dibenzo(a,h)an...	1.116	1.232	1.273	1.237	1.340	1.376	1.334	1.272	6.90
41)	Benzo(g,h,i)pe...	1.299	1.407	1.424	1.330	1.403	1.439	1.376	1.383	3.72

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2050 SAS No.: Q2050 SDG No.: Q2050

Instrument ID: BNA_N Calibration Date/Time: 05/19/2025 10:47

Lab File ID: BN037038.D Init. Calib. Date(s): 05/13/2025 05/13/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 17:41 21:17

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.563	0.598		6.2	20.0
Fluoranthene-d10	1.097	1.086		-1.0	20.0
2-Fluorophenol	1.048	0.944		-9.9	20.0
Phenol-d6	1.311	1.169		-10.8	20.0
Nitrobenzene-d5	0.436	0.392		-10.1	20.0
2-Fluorobiphenyl	1.832	1.706		-6.9	20.0
2,4,6-Tribromophenol	0.176	0.147		-16.5	20.0
Terphenyl-d14	0.856	0.915		6.9	20.0
1,4-Dioxane	0.491	0.461		-6.1	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.: Q2050 SAS No.: Q2050 SDG No.: Q2050

Instrument ID: BNA_N Calibration Date/Time: 05/19/2025 21:05

Lab File ID: BN037055.D Init. Calib. Date(s): 05/13/2025 05/13/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 17:41 21:17

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.563	0.581		3.2	50.0
Fluoranthene-d10	1.097	1.058		-3.6	50.0
2-Fluorophenol	1.048	0.956		-8.8	50.0
Phenol-d6	1.311	1.171		-10.7	50.0
Nitrobenzene-d5	0.436	0.406		-6.9	50.0
2-Fluorobiphenyl	1.832	1.804		-1.5	50.0
2,4,6-Tribromophenol	0.176	0.160		-9.1	50.0
Terphenyl-d14	0.856	0.927		8.3	50.0
1,4-Dioxane	0.491	0.456		-7.1	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.: Q2050 SAS No.: Q2050 SDG No.: Q2050

Instrument ID: BNA_N Calibration Date/Time: 05/20/2025 15:09

Lab File ID: BN037074.D Init. Calib. Date(s): 05/13/2025 05/13/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 17:41 21:17

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.563	0.573		1.8	20.0
Fluoranthene-d10	1.097	1.010		-7.9	20.0
2-Fluorophenol	1.048	0.964		-8.0	20.0
Phenol-d6	1.311	1.198		-8.6	20.0
Nitrobenzene-d5	0.436	0.402		-7.8	20.0
2-Fluorobiphenyl	1.832	1.798		-1.9	20.0
2,4,6-Tribromophenol	0.176	0.153		-13.1	20.0
Terphenyl-d14	0.856	0.940		9.8	20.0
1,4-Dioxane	0.491	0.488		-0.6	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.: Q2050 SAS No.: Q2050 SDG No.: Q2050

Instrument ID: BNA_N Calibration Date/Time: 05/20/2025 19:59

Lab File ID: BN037082.D Init. Calib. Date(s): 05/13/2025 05/13/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 17:41 21:17

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.563	0.581		3.2	50.0
Fluoranthene-d10	1.097	1.017		-7.3	50.0
2-Fluorophenol	1.048	0.946		-9.7	50.0
Phenol-d6	1.311	1.150		-12.3	50.0
Nitrobenzene-d5	0.436	0.417		-4.4	50.0
2-Fluorobiphenyl	1.832	1.796		-2.0	50.0
2,4,6-Tribromophenol	0.176	0.165		-6.3	50.0
Terphenyl-d14	0.856	0.957		11.8	50.0
1,4-Dioxane	0.491	0.473		-3.7	50.0

All other compounds must meet a minimum RRF of 0.010.