

LAB CHRONICLE

OrderID:	Q2119	OrderDate:	5/22/2025 3:57:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	L41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2119-01	RW5-SP100-2025052 2	Water			05/22/25			05/22/25
			SVOC-SIMGroup1	8270-Modified		05/23/25	05/28/25	
Q2119-02	RW5-SP201-2025052 2	Water			05/22/25			05/22/25
			SVOC-SIMGroup1	8270-Modified		05/23/25	05/28/25	
Q2119-03	RW5-SP303-2025052 2	Water			05/22/25			05/22/25
			SVOC-SIMGroup1	8270-Modified		05/23/25	05/28/25	



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Hit Summary Sheet SW-846

SDG No.: Q2119
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20250522								
Q2119-01	RW5-SP100-20250522	WATER	1,4-Dioxane	5.600	0.13	0.4	0.4	ug/L
Total Svoc :				5.60				
Total Concentration:				5.60				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/22/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/22/25
Client Sample ID:	RW5-SP100-20250522	SDG No.:	Q2119
Lab Sample ID:	Q2119-01	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
BN037123.D	2	05/23/25 11:50	05/28/25 23:47	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	5.60		0.13	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 - 150		68%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		82%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.26		55 - 111		65%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.27		53 - 106		67%	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	2490	7.611				
1146-65-2	Naphthalene-d8	7000	10.394				
15067-26-2	Acenaphthene-d10	3880	14.256				
1517-22-2	Phenanthrene-d10	7010	17.009				
1719-03-5	Chrysene-d12	4200	21.197				
1520-96-3	Perylene-d12	3570	23.395				

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:	05/22/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/22/25
Client Sample ID:	RW5-SP201-20250522	SDG No.:	Q2119
Lab Sample ID:	Q2119-02	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
BN037104.D	1	05/23/25 11:50	05/28/25 11:53	PB168155

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	0.33		30 - 150		82%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		71%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		71%	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	1940	7.611				
1146-65-2	Naphthalene-d8	4980	10.394				
15067-26-2	Acenaphthene-d10	2650	14.256				
1517-22-2	Phenanthrene-d10	4790	17.009				
1719-03-5	Chrysene-d12	2910	21.198				
1520-96-3	Perylene-d12	2630	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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/22/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/22/25
Client Sample ID:	RW5-SP303-20250522	SDG No.:	Q2119
Lab Sample ID:	Q2119-03	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
BN037105.D	1	05/23/25 11:50	05/28/25 12:29	PB168155

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		70%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		71%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.53		58 - 132		132%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1930	7.611				
1146-65-2	Naphthalene-d8	4920	10.394				
15067-26-2	Acenaphthene-d10	2550	14.256				
1517-22-2	Phenanthrene-d10	4810	17.009				
1719-03-5	Chrysene-d12	3330	21.198				
1520-96-3	Perylene-d12	3070	23.398				

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



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2119

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168155BL	PB168155BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.32	80		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
PB168155BS	PB168155BS	2-Methylnaphthalene-d10	0.4	0.38	95		30	150
		Fluoranthene-d10	0.4	0.30	75		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.42	105		58	132
PB168155BSD	PB168155BSD	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.30	76		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.42	106		58	132
Q2119-01	RW5-SP100-20250522	2-Methylnaphthalene-d10	0.4	0.27	68		30	150
		Fluoranthene-d10	0.4	0.33	82		30	150
		Nitrobenzene-d5	0.4	0.26	65		55	111
		2-Fluorobiphenyl	0.4	0.27	67		53	106
		Terphenyl-d14	0.4	0.52	131		58	132
Q2119-02	RW5-SP201-20250522	2-Methylnaphthalene-d10	0.4	0.28	69		30	150
		Fluoranthene-d10	0.4	0.33	82		30	150
		Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.28	71		53	106
		Terphenyl-d14	0.4	0.58	145	*	58	132
Q2119-03	RW5-SP303-20250522	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.38	96		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.28	71		53	106
		Terphenyl-d14	0.4	0.53	132		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2119

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN037108.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168155BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2119

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN037109.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168155BSD	1,4-Dioxane	0.4	0.30	ug/L	75	3			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168155BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q2119

SAS No.: Q2119 SDG NO.: Q2119

Lab File ID: BN037103.D

Lab Sample ID: PB168155BL

Instrument ID: BNA_N

Date Extracted: 05/23/2025

Matrix: (soil/water) Water

Date Analyzed: 05/28/2025

Level: (low/med) LOW

Time Analyzed: 11:17

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168155BS	PB168155BS	BN037108.D	05/28/2025
RW5-SP201-20250522	Q2119-02	BN037104.D	05/28/2025
RW5-SP303-20250522	Q2119-03	BN037105.D	05/28/2025
PB168155BSD	PB168155BSD	BN037109.D	05/28/2025
RW5-SP100-20250522	Q2119-01	BN037123.D	05/28/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2119 SDG NO.: Q2119

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.: Q2119

SDG NO.: Q2119

Lab File ID: BN037101.D

DFTPP Injection Date: 05/28/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	72.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	60.6
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	54.2
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	24.2
365	Greater than 1% of mass 198	4
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 (17.8) 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
SSTDCCC0.4	SSTDCCC0.4	BN037102.D	05/28/2025	10:41
PB168155BL	PB168155BL	BN037103.D	05/28/2025	11:17
RW5-SP201-20250522	Q2119-02	BN037104.D	05/28/2025	11:53
RW5-SP303-20250522	Q2119-03	BN037105.D	05/28/2025	12:29
PB168155BS	PB168155BS	BN037108.D	05/28/2025	14:17
PB168155BSD	PB168155BSD	BN037109.D	05/28/2025	14:53
SSTDCCC0.4EC	SSTDCCC0.4	BN037110.D	05/28/2025	15:54

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2119

SDG NO.: Q2119

Lab File ID: BN037111.D

DFTPP Injection Date: 05/28/2025

Instrument ID: BNA_N

DFTPP Injection Time: 16:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	75.5
68	Less than 2.0% of mass 69	0.9 (1.4) 1
69	Mass 69 relative abundance	62.5
70	Less than 2.0% of mass 69	0.4 (0.6) 1
127	10.0 - 80.0% of mass 198	56.1
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
275	10.0 - 60.0% of mass 198	25.1
365	Greater than 1% of mass 198	4.6
441	Present, but less than mass 443	9.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 (19.5) 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	BN037112.D	05/28/2025	17:11
RW5-SP100-20250522	Q2119-01	BN037123.D	05/28/2025	23:47
SSTDCCC0.4EC	SSTDCCC0.4	BN037126.D	05/29/2025	01:35

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2119 SAS No.: Q2119 SDG NO.: Q2119

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/28/2025

Lab File ID: BN037102.D Time Analyzed: 10:41

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	2360	7.611	6377	10.38	3563	14.26
UPPER LIMIT	4720	8.111	12754	10.883	7126	14.756
LOWER LIMIT	1180	7.111	3188.5	9.883	1781.5	13.756
EPA SAMPLE NO.						
01 PB168155BS	1969	7.61	4930	10.39	2429	14.26
02 PB168155BSD	1893	7.61	4639	10.39	2241	14.26
03 PB168155BL	2460	7.61	5989	10.39	3067	14.26
04 RW5-SP201-20250522	1938	7.61	4981	10.39	2646	14.26
05 RW5-SP303-20250522	1933	7.61	4924	10.39	2554	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.: Q2119 SAS No.: Q2119 SDG NO.: Q2119

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/28/2025

Lab File ID: BN037102.D Time Analyzed: 10:41

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	6602	17.009	4312	21.197	3700	23.398
UPPER LIMIT	13204	17.509	8624	21.697	7400	23.898
LOWER LIMIT	3301	16.509	2156	20.697	1850	22.898
EPA SAMPLE NO.						
01 PB168155BS	4326	17.01	2746	21.20	2563	23.40
02 PB168155BSD	3936	17.01	2452	21.20	2400	23.40
03 PB168155BL	5493	17.01	3554	21.21	3269	23.40
04 RW5-SP201-20250522	4789	17.01	2905	21.20	2625	23.40
05 RW5-SP303-20250522	4806	17.01	3331	21.20	3065	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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2119 SAS No.: Q2119 SDG NO.: Q2119

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/28/2025

Lab File ID: BN037112.D Time Analyzed: 17:11

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	2022	7.611	5050	10.38	2480	14.26
UPPER LIMIT	4044	8.111	10100	10.883	4960	14.756
LOWER LIMIT	1011	7.111	2525	9.883	1240	13.756
EPA SAMPLE NO.						
01 RW5-SP100-20250522	2494	7.61	7003	10.39	3875	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.: Q2119 SAS No.: Q2119 SDG NO.: Q2119

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 05/28/2025

Lab File ID: BN037112.D Time Analyzed: 17:11

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	4231	17.009	3037	21.198	3091	23.395
UPPER LIMIT	8462	17.509	6074	21.698	6182	23.895
LOWER LIMIT	2115.5	16.509	1518.5	20.698	1545.5	22.895
EPA SAMPLE NO.						
01 RW5-SP100-20250522	7007	17.01	4199	21.20	3567	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:	PB168155BL		SDG No.:	Q2119	
Lab Sample ID:	PB168155BL		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
BN037103.D	1	05/23/25 11:50	05/28/25 11:17	PB168155

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	0.32		30 - 150		80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	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	2460	7.611				
1146-65-2	Naphthalene-d8	5990	10.394				
15067-26-2	Acenaphthene-d10	3070	14.256				
1517-22-2	Phenanthrene-d10	5490	17.009				
1719-03-5	Chrysene-d12	3550	21.206				
1520-96-3	Perylene-d12	3270	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:	PB168155BS		SDG No.:	Q2119
Lab Sample ID:	PB168155BS		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
BN037108.D	1	05/23/25 11:50	05/28/25 14:17	PB168155

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		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	0.30		30 - 150		75%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		105%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.611				
1146-65-2	Naphthalene-d8	4930	10.394				
15067-26-2	Acenaphthene-d10	2430	14.256				
1517-22-2	Phenanthrene-d10	4330	17.009				
1719-03-5	Chrysene-d12	2750	21.198				
1520-96-3	Perylene-d12	2560	23.398				

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:	PB168155BSD		SDG No.:	Q2119
Lab Sample ID:	PB168155BSD		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
BN037109.D	1	05/23/25 11:50	05/28/25 14:53	PB168155

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	0.30		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		106%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1890	7.611				
1146-65-2	Naphthalene-d8	4640	10.394				
15067-26-2	Acenaphthene-d10	2240	14.256				
1517-22-2	Phenanthrene-d10	3940	17.009				
1719-03-5	Chrysene-d12	2450	21.198				
1520-96-3	Perylene-d12	2400	23.398				

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.: Q2119 SAS No.: Q2119 SDG No.: Q2119

Instrument ID: BNA_N Calibration Date/Time: 05/28/2025 10:41

Lab File ID: BN037102.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	0.578		2.7	20.0
Fluoranthene-d10	1.097	0.983		-10.4	20.0
2-Fluorophenol	1.048	0.917		-12.5	20.0
Phenol-d6	1.311	1.136		-13.3	20.0
Nitrobenzene-d5	0.436	0.404		-7.3	20.0
2-Fluorobiphenyl	1.832	1.781		-2.8	20.0
2,4,6-Tribromophenol	0.176	0.150		-14.8	20.0
Terphenyl-d14	0.856	0.973		13.7	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.: Q2119 SAS No.: Q2119 SDG No.: Q2119

Instrument ID: BNA_N Calibration Date/Time: 05/28/2025 15:54

Lab File ID: BN037110.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	0.578		2.7	50.0
Fluoranthene-d10	1.097	1.001		-8.8	50.0
2-Fluorophenol	1.048	0.942		-10.1	50.0
Phenol-d6	1.311	1.119		-14.6	50.0
Nitrobenzene-d5	0.436	0.411		-5.7	50.0
2-Fluorobiphenyl	1.832	1.776		-3.1	50.0
2,4,6-Tribromophenol	0.176	0.163		-7.4	50.0
Terphenyl-d14	0.856	0.988		15.4	50.0
1,4-Dioxane	0.491	0.478		-2.6	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.: Q2119 SAS No.: Q2119 SDG No.: Q2119

Instrument ID: BNA_N Calibration Date/Time: 05/28/2025 17:11

Lab File ID: BN037112.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	0.552		-2.0	20.0
Fluoranthene-d10	1.097	0.986		-10.1	20.0
2-Fluorophenol	1.048	0.938		-10.5	20.0
Phenol-d6	1.311	1.123		-14.3	20.0
Nitrobenzene-d5	0.436	0.426		-2.3	20.0
2-Fluorobiphenyl	1.832	1.889		3.1	20.0
2,4,6-Tribromophenol	0.176	0.145		-17.6	20.0
Terphenyl-d14	0.856	0.888		3.7	20.0
1,4-Dioxane	0.491	0.489		-0.4	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.: Q2119 SAS No.: Q2119 SDG No.: Q2119

Instrument ID: BNA_N Calibration Date/Time: 05/29/2025 01:35

Lab File ID: BN037126.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	0.577		2.5	50.0
Fluoranthene-d10	1.097	1.019		-7.1	50.0
2-Fluorophenol	1.048	0.946		-9.7	50.0
Phenol-d6	1.311	1.170		-10.8	50.0
Nitrobenzene-d5	0.436	0.407		-6.7	50.0
2-Fluorobiphenyl	1.832	1.641		-10.4	50.0
2,4,6-Tribromophenol	0.176	0.153		-13.1	50.0
Terphenyl-d14	0.856	1.004		17.3	50.0
1,4-Dioxane	0.491	0.459		-6.5	50.0

All other compounds must meet a minimum RRF of 0.010.