

LAB CHRONICLE

OrderID:	Q2697	OrderDate:	7/25/2025 10:41:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	D51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2697-01	RW7-SP100-2025072 4	Water			07/24/25			07/25/25
			SVOC-SIMGroup1	8270-Modified		07/29/25	07/30/25	
Q2697-02	RW7-SP201-2025072 4	Water			07/24/25			07/25/25
			SVOC-SIMGroup1	8270-Modified		07/29/25	07/30/25	
Q2697-03	RW7-SP303-2025072 4	Water			07/24/25			07/25/25
			SVOC-SIMGroup1	8270-Modified		07/29/25	07/30/25	



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

Hit Summary Sheet SW-846

SDG No.: Q2697
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	RW7-SP100-20250724							
Q2697-01	RW7-SP100-20250724	WATER	1,4-Dioxane	3.100	0.07	0.2	0.2	ug/L
Total Svoc :				3.10				
Total Concentration:				3.10				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/24/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/25/25
Client Sample ID:	RW7-SP100-20250724	SDG No.:	Q2697
Lab Sample ID:	Q2697-01	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
BN037552.D	1	07/29/25 08:49	07/30/25 12:03	PB169039

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.10		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	0.34		30 - 150		84%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		115%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2150	7.724				
1146-65-2	Naphthalene-d8	5440	10.498				
15067-26-2	Acenaphthene-d10	2760	14.355				
1517-22-2	Phenanthrene-d10	5500	17.086				
1719-03-5	Chrysene-d12	4220	21.277				
1520-96-3	Perylene-d12	3680	23.51				

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:	07/24/25	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	07/25/25	
Client Sample ID:	RW7-SP201-20250724		SDG No.:	Q2697	
Lab Sample ID:	Q2697-02		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
BN037553.D	1	07/29/25 08:49	07/30/25 12:39	PB169039

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	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		82%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		94%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2520	7.724				
1146-65-2	Naphthalene-d8	6120	10.498				
15067-26-2	Acenaphthene-d10	2960	14.355				
1517-22-2	Phenanthrene-d10	5990	17.086				
1719-03-5	Chrysene-d12	5390	21.277				
1520-96-3	Perylene-d12	5030	23.513				

U = Not Detected

LOQ = Limit of Quantitation

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B = Analyte Found in Associated Method Blank

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D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/24/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/25/25
Client Sample ID:	RW7-SP303-20250724	SDG No.:	Q2697
Lab Sample ID:	Q2697-03	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
BN037554.D	1	07/29/25 08:49	07/30/25 13:16	PB169039

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	0.27		30 - 150		67%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		89%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.45		58 - 132		113%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1820	7.724				
1146-65-2	Naphthalene-d8	4480	10.498				
15067-26-2	Acenaphthene-d10	2280	14.355				
1517-22-2	Phenanthrene-d10	4420	17.086				
1719-03-5	Chrysene-d12	3550	21.277				
1520-96-3	Perylene-d12	3010	23.513				

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.: Q2697

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB169039BL	PB169039BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.40	100		58	132
PB169039BS	PB169039BS	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.31	77		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.37	93		58	132
PB169039BSD	PB169039BSD	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.31	77		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.41	102		53	106
		Terphenyl-d14	0.4	0.37	93		58	132
Q2697-01	RW7-SP100-20250724	2-Methylnaphthalene-d10	0.4	0.26	65		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.31	78		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.46	115		58	132
Q2697-02	RW7-SP201-20250724	2-Methylnaphthalene-d10	0.4	0.26	65		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.31	76		55	111
		2-Fluorobiphenyl	0.4	0.33	82		53	106
		Terphenyl-d14	0.4	0.38	94		58	132
Q2697-03	RW7-SP303-20250724	2-Methylnaphthalene-d10	0.4	0.27	67		30	150
		Fluoranthene-d10	0.4	0.36	89		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.33	81		53	106
		Terphenyl-d14	0.4	0.45	113		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2697

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037555.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB169039BS	1,4-Dioxane	0.4	0.31	ug/L	78				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2697

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037556.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB169039BSD	1,4-Dioxane	0.4	0.30	ug/L	75	3			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB169039BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2697

Lab File ID: BN037549.D

Lab Sample ID: PB169039BL

Instrument ID: BNA_N

Date Extracted: 07/29/2025

Matrix: (soil/water) Water

Date Analyzed: 07/30/2025

Level: (low/med) LOW

Time Analyzed: 10:14

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB169039BS	PB169039BS	BN037555.D	07/30/2025
RW7-SP100-20250724	Q2697-01	BN037552.D	07/30/2025
RW7-SP201-20250724	Q2697-02	BN037553.D	07/30/2025
RW7-SP303-20250724	Q2697-03	BN037554.D	07/30/2025
PB169039BSD	PB169039BSD	BN037556.D	07/30/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037497.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2697
DFTPP Injection Date: 07/15/2025
DFTPP Injection Time: 10:57

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	83.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.4 (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
SSTDICC0.1	SSTDICC0.1	BN037499.D	07/15/2025	12:36
SSTDICC0.2	SSTDICC0.2	BN037500.D	07/15/2025	13:12
SSTDICCC0.4	SSTDICCC0.4	BN037501.D	07/15/2025	13:49
SSTDICC0.8	SSTDICC0.8	BN037502.D	07/15/2025	14:25
SSTDICC1.6	SSTDICC1.6	BN037503.D	07/15/2025	15:01
SSTDICC3.2	SSTDICC3.2	BN037504.D	07/15/2025	15:38
SSTDICC5.0	SSTDICC5.0	BN037505.D	07/15/2025	16:14

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037547.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2697
DFTPP Injection Date: 07/30/2025
DFTPP Injection Time: 08:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	83.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.3 (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	BN037548.D	07/30/2025	09:38
PB169039BL	PB169039BL	BN037549.D	07/30/2025	10:14
RW7-SP100-20250724	Q2697-01	BN037552.D	07/30/2025	12:03
RW7-SP201-20250724	Q2697-02	BN037553.D	07/30/2025	12:39
RW7-SP303-20250724	Q2697-03	BN037554.D	07/30/2025	13:16
PB169039BS	PB169039BS	BN037555.D	07/30/2025	13:52
PB169039BSD	PB169039BSD	BN037556.D	07/30/2025	14:28
SSTDCCC0.4EC	SSTDCCC0.4	BN037557.D	07/30/2025	15:16

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2697

Client ID : SSTDCCC0.4

Date Analyzed: 07/30/2025

Lab File ID: BN037548.D

Time Analyzed: 09:38

Instrument ID: BNA_N

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	2372	7.717	6287	10.50	3213	14.35
UPPER LIMIT	4744	8.217	12574	10.998	6426	14.845
LOWER LIMIT	1186	7.217	3143.5	9.998	1606.5	13.845
EPA SAMPLE NO.						
01 PB169039BL	2234	7.72	5448	10.50	2592	14.36
02 RW7-SP100-20250724	2145	7.72	5437	10.50	2763	14.36
03 PB169039BS	1872	7.72	4499	10.50	2146	14.35
04 PB169039BSD	1856	7.72	4469	10.50	2108	14.36
05 RW7-SP201-20250724	2519	7.72	6118	10.50	2961	14.36
06 RW7-SP303-20250724	1819	7.72	4480	10.50	2281	14.36

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2697

Client ID: SSTDCCC0.4

Date Analyzed: 07/30/2025

Lab File ID: BN037548.D

Time Analyzed: 09:38

Instrument ID: BNA_N

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	5852	17.087	4832	21.277	4297	23.508
UPPER LIMIT	11704	17.587	9664	21.777	8594	24.008
LOWER LIMIT	2926	16.587	2416	20.777	2148.5	23.008
EPA SAMPLE NO.						
01 PB169039BL	4582	17.09	3451	21.28	3078	23.51
02 RW7-SP100-20250724	5503	17.09	4223	21.28	3679	23.51
03 PB169039BS	3846	17.09	2873	21.28	2422	23.52
04 PB169039BSD	3782	17.09	2830	21.28	2422	23.52
05 RW7-SP201-20250724	5987	17.09	5386	21.28	5025	23.51
06 RW7-SP303-20250724	4415	17.09	3551	21.28	3007	23.51

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:	PB169039BL		SDG No.:	Q2697
Lab Sample ID:	PB169039BL		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
BN037549.D	1	07/29/25 08:49	07/30/25 10:14	PB169039

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	0.34		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		100%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2230	7.724				
1146-65-2	Naphthalene-d8	5450	10.498				
15067-26-2	Acenaphthene-d10	2590	14.356				
1517-22-2	Phenanthrene-d10	4580	17.087				
1719-03-5	Chrysene-d12	3450	21.277				
1520-96-3	Perylene-d12	3080	23.513				

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:	PB169039BS		SDG No.:	Q2697
Lab Sample ID:	PB169039BS		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
BN037555.D	1	07/29/25 08:49	07/30/25 13:52	PB169039

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	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		77%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1870	7.724				
1146-65-2	Naphthalene-d8	4500	10.498				
15067-26-2	Acenaphthene-d10	2150	14.345				
1517-22-2	Phenanthrene-d10	3850	17.087				
1719-03-5	Chrysene-d12	2870	21.277				
1520-96-3	Perylene-d12	2420	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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB169039BSD		SDG No.:	Q2697
Lab Sample ID:	PB169039BSD		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
BN037556.D	1	07/29/25 08:49	07/30/25 14:28	PB169039

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	0.33		30 - 150		83%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		77%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		102%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1860	7.724				
1146-65-2	Naphthalene-d8	4470	10.498				
15067-26-2	Acenaphthene-d10	2110	14.355				
1517-22-2	Phenanthrene-d10	3780	17.086				
1719-03-5	Chrysene-d12	2830	21.277				
1520-96-3	Perylene-d12	2420	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



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN071525.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Jul 16 02:38:11 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037499.D 0.2 =BN037500.D 0.4 =BN037501.D 0.8 =BN037502.D 1.6 =BN037503.D 3.2 =BN037504.D 5 =BN037505.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.409	0.395	0.371	0.398	0.380	0.354	0.385	5.29	
3)	n-Nitrosodimet...	0.466	0.464	0.465	0.508	0.499	0.501	0.484	4.31	
4) S	2-Fluorophenol	1.038	1.011	0.985	0.908	0.982	0.971	1.030	0.989	4.42
5) S	Phenol-d6	1.448	1.238	1.190	1.105	1.201	1.229	1.275	1.241	8.52
6)	bis(2-Chloroet...	1.082	1.052	1.024	0.983	1.037	1.033	1.016	1.033	2.99
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.311	0.288	0.283	0.270	0.300	0.305	0.336	0.299	7.20
9)	Naphthalene	1.069	1.054	1.046	1.009	1.091	1.073	1.126	1.067	3.45
10)	Hexachlorobuta...	0.229	0.237	0.235	0.223	0.245	0.236	0.246	0.236	3.44
11) SURR2	Methylnaphth...	0.556	0.534	0.541	0.522	0.562	0.590	0.711	0.574	11.24
12)	2-Methylnaphth...	0.704	0.655	0.678	0.665	0.716	0.736	0.756	0.701	5.34
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.197	0.173	0.173	0.176	0.194	0.215	0.248	0.197	13.98
15) S	2-Fluorobiphenyl	1.818	1.794	2.045	2.024	2.277	2.205	2.397	2.080	10.91
16)	Acenaphthylene	1.723	1.708	1.719	1.684	1.830	1.895	1.981	1.792	6.30
17)	Acenaphthene	1.239	1.160	1.172	1.150	1.238	1.251	1.320	1.218	5.03
18)	Fluorene	1.592	1.488	1.485	1.486	1.605	1.606	1.717	1.569	5.56
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.044	0.041	0.047	0.057	0.070	0.080	0.057	27.89	
21)	4-Bromophenyl-...	0.248	0.247	0.243	0.242	0.268	0.272	0.274	0.256	5.58
22)	Hexachlorobenzene	0.315	0.330	0.328	0.321	0.345	0.340	0.338	0.331	3.26
23)	Atrazine	0.173	0.161	0.159	0.158	0.181	0.200	0.220	0.179	13.24
24)	Pentachlorophenol	0.131	0.125	0.126	0.151	0.170	0.189	0.149	17.64	
25)	Phenanthrene	1.167	1.163	1.160	1.129	1.248	1.248	1.273	1.198	4.70
26)	Anthracene	1.025	1.025	1.013	1.023	1.160	1.176	1.232	1.093	8.45
27) SURR	Fluoranthene-d10	1.023	0.998	0.962	0.928	1.041	1.078	1.385	1.060	14.34
28)	Fluoranthene	1.358	1.310	1.290	1.270	1.429	1.431	1.585	1.382	7.96
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.754	1.559	1.607	1.549	1.607	1.665	1.539	1.612	4.74
31) S	Terphenyl-d14	0.926	0.815	0.844	0.811	0.854	0.902	0.865	0.859	4.94
32)	Benzo(a)anthra...	1.414	1.357	1.341	1.285	1.429	1.464	1.517	1.401	5.63
33)	Chrysene	1.452	1.461	1.434	1.358	1.488	1.490	1.528	1.459	3.70
34)	Bis(2-ethylhex...	0.603	0.564	0.538	0.603	0.693	0.779	0.630	14.26	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN071525.M

36)	Indeno(1,2,3-c...	1.493	1.528	1.514	1.559	1.771	1.805	1.991	1.666	11.48
37)	Benzo(b)fluora...	1.464	1.378	1.454	1.436	1.589	1.617	1.692	1.518	7.53
38)	Benzo(k)fluora...	1.516	1.420	1.486	1.470	1.661	1.689	1.724	1.567	7.75
39) C	Benzo(a)pyrene	1.189	1.152	1.192	1.176	1.320	1.369	1.469	1.267	9.51
40)	Dibenzo(a,h)an...	1.201	1.218	1.216	1.256	1.444	1.483	1.627	1.349	12.46
41)	Benzo(g,h,i)pe...	1.247	1.283	1.309	1.297	1.482	1.497	1.663	1.397	10.98

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
Lab Code: ACE SDG No.: Q2697
Instrument ID: BNA_N Calibration Date/Time: 07/30/2025 09:38
Lab File ID: BN037548.D Init. Calib. Date(s): 07/15/2025 07/15/2025
EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:36 16:14
GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.520		-9.4	20.0
Fluoranthene-d10	1.060	0.900		-15.1	20.0
2-Fluorophenol	0.989	0.916		-7.4	20.0
Phenol-d6	1.241	1.129		-9.0	20.0
Nitrobenzene-d5	0.299	0.272		-9.0	20.0
2-Fluorobiphenyl	2.080	2.204		6.0	20.0
2,4,6-Tribromophenol	0.197	0.139		-29.4	20.0
Terphenyl-d14	0.859	0.751		-12.6	20.0
1,4-Dioxane	0.385	0.392		1.8	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
Lab Code: ACE SDG No.: Q2697
Instrument ID: BNA_N Calibration Date/Time: 07/30/2025 15:16
Lab File ID: BN037557.D Init. Calib. Date(s): 07/15/2025 07/15/2025
EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:36 16:14
GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.502		-12.5	50.0
Fluoranthene-d10	1.060	0.915		-13.7	50.0
2-Fluorophenol	0.989	0.855		-13.5	50.0
Phenol-d6	1.241	1.046		-15.7	50.0
Nitrobenzene-d5	0.299	0.277		-7.4	50.0
2-Fluorobiphenyl	2.080	2.179		4.8	50.0
2,4,6-Tribromophenol	0.197	0.143		-27.4	50.0
Terphenyl-d14	0.859	0.818		-4.8	50.0
1,4-Dioxane	0.385	0.375		-2.6	50.0

All other compounds must meet a minimum RRF of 0.010.



LAB CHRONICLE

OrderID:	Q2697	OrderDate:	7/25/2025 10:41:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	D51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2697-01	RW7-SP100-20250724	WATER	Anions Group4	300.0	07/24/25 12:15		07/25/25 14:43	07/25/25



SAMPLE DATA

A

B

C

D

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/24/25 12:15
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/25/25
Client Sample ID:	RW7-SP100-20250724	SDG No.:	Q2697
Lab Sample ID:	Q2697-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Nitrite	0.30	U	1	0.074	0.30	0.60	mg/L		07/25/25 14:43	300.0
Nitrate	3.00		1	0.095	0.25	0.50	mg/L		07/25/25 14:43	300.0
Nitrate+Nitrite	3.00		1	0.17	0.55	1.10	mg/L		07/25/25 14:43	300.0

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: Tetra Tech NUS, Inc.

SDG No.: Q2697

Project: NWIRP Bethpage 112G08005-WE13

RunNo.: LB136635

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	9.5	10	95	90-110	07/21/2025
Chloride	mg/L	2.8	3	93	90-110	07/21/2025
Fluoride	mg/L	1.9	2	95	90-110	07/21/2025
Nitrite	mg/L	2.8	3	93	90-110	07/21/2025
Nitrate	mg/L	2.3	2.5	92	90-110	07/21/2025
Sulfate	mg/L	14.2	15	95	90-110	07/21/2025
Orthophosphate as P	mg/L	4.8	5	96	90-110	07/21/2025
Sample ID: CCV1						
Bromide	mg/L	10.1	10	101	90-110	07/25/2025
Chloride	mg/L	3.1	3	103	90-110	07/25/2025
Fluoride	mg/L	2	2	100	90-110	07/25/2025
Nitrite	mg/L	3	3	100	90-110	07/25/2025
Nitrate	mg/L	2.5	2.5	100	90-110	07/25/2025
Sulfate	mg/L	14.9	15	99	90-110	07/25/2025
Orthophosphate as P	mg/L	5	5	100	90-110	07/25/2025
Sample ID: CCV2						
Bromide	mg/L	10.2	10	102	90-110	07/25/2025
Chloride	mg/L	3.1	3	103	90-110	07/25/2025
Fluoride	mg/L	2	2	100	90-110	07/25/2025
Nitrite	mg/L	3	3	100	90-110	07/25/2025
Nitrate	mg/L	2.5	2.5	100	90-110	07/25/2025
Sulfate	mg/L	15.1	15	101	90-110	07/25/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	07/25/2025
Sample ID: CCV3						
Bromide	mg/L	10.2	10	102	90-110	07/25/2025
Chloride	mg/L	3.1	3	103	90-110	07/25/2025
Fluoride	mg/L	2	2	100	90-110	07/25/2025
Nitrite	mg/L	3	3	100	90-110	07/25/2025
Nitrate	mg/L	2.5	2.5	100	90-110	07/25/2025
Sulfate	mg/L	15	15	100	90-110	07/25/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	07/25/2025

Initial and Continuing Calibration Blank Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2697

Project: NWIRP Bethpage 112G08005-WE13

RunNo.: LB136635

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/21/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/21/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/21/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/21/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/21/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/21/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/21/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025

Preparation Blank Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2697

Project: NWIRP Bethpage 112G08005-WE13

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136635BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025

Matrix Spike Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2697
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2695-01
Client ID:	RW5-SP100-20250724MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.1		0.37	U	10	1	101		07/25/2025
Chloride	mg/L	80-120	13.4	OR	10.8	OR	3	1	87		07/25/2025
Fluoride	mg/L	80-120	2.00		0.11	U	2	1	100		07/25/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		07/25/2025
Nitrate	mg/L	80-120	6.30	OR	3.90		2.5	1	96		07/25/2025
Sulfate	mg/L	80-120	16.9		2.60	J	15	1	95		07/25/2025
Orthophosphate as P	mg/L	80-120	5.10		0.34	U	5	1	102		07/25/2025

Matrix Spike Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2697
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2695-01
Client ID:	RW5-SP100-20250724MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.0		0.37	U	10	1	100		07/25/2025
Chloride	mg/L	80-120	13.4	OR	10.8	OR	3	1	87		07/25/2025
Fluoride	mg/L	80-120	2.00		0.11	U	2	1	100		07/25/2025
Nitrite	mg/L	80-120	2.90		0.074	U	3	1	97		07/25/2025
Nitrate	mg/L	80-120	6.30	OR	3.90		2.5	1	96		07/25/2025
Sulfate	mg/L	80-120	16.7		2.60	J	15	1	94		07/25/2025
Orthophosphate as P	mg/L	80-120	5.00		0.34	U	5	1	100		07/25/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2697
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2695-01
Client ID:	RW5-SP100-20250724MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Fluoride	mg/L	+/-20	2.00		2.00		1	0		07/25/2025
Chloride	mg/L	+/-20	13.4	OR	13.4	OR	1	0		07/25/2025
Nitrate	mg/L	+/-20	6.30	OR	6.30	OR	1	0		07/25/2025
Bromide	mg/L	+/-20	10.1		10.0		1	1		07/25/2025
Sulfate	mg/L	+/-20	16.9		16.7		1	1		07/25/2025
Orthophosphate as P	mg/L	+/-20	5.10		5.00		1	2		07/25/2025
Nitrite	mg/L	+/-20	3.00		2.90		1	3		07/25/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2697
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136635

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136635BSW							
Bromide	mg/L	10	10.2		102	1	90-110	07/25/2025
Chloride	mg/L	3	3.10		103	1	90-110	07/25/2025
Fluoride	mg/L	2	2.00		100	1	90-110	07/25/2025
Nitrite	mg/L	3	3.00		100	1	90-110	07/25/2025
Nitrate	mg/L	2.5	2.50		100	1	90-110	07/25/2025
Sulfate	mg/L	15	15.0		100	1	90-110	07/25/2025
Orthophosphate as P	mg/L	5	5.10		102	1	90-110	07/25/2025