

LAB CHRONICLE

OrderID:	Q2082	OrderDate:	5/19/2025 4:13:00 PM
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
Q2082-02	BP-VPB-182-GW-260-262	Water			05/15/25			05/19/25
			SVOC-SIMGroup1	8270-Modified		05/21/25	05/28/25	
Q2082-04	BP-VPB-182-GW-300-302	Water			05/15/25			05/19/25
			SVOC-SIMGroup1	8270-Modified		05/21/25	05/28/25	
Q2082-06	BP-VPB-182-GW-340-342	Water			05/16/25			05/19/25
			SVOC-SIMGroup1	8270-Modified		05/21/25	05/28/25	
Q2082-08	BP-VPB-182-GW-390-392	Water			05/19/25			05/19/25
			SVOC-SIMGroup1	8270-Modified		05/21/25	05/28/25	
Q2082-12	VPB182-HYD-20250516	Water			05/16/25			05/19/25
			SVOC-SIMGroup1	8270-Modified		05/21/25	05/28/25	

Hit Summary Sheet SW-846

SDG No.: Q2082

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : BP-VPB-182-GW-300-302								
Q2082-04	BP-VPB-182-GW-300-30 WATER	1,4-Dioxane	0.230		0.07	0.2	0.2	ug/L
		Total Svoc :		0.23				
		Total Concentration:		0.23				
Client ID : BP-VPB-182-GW-340-342								
Q2082-06	BP-VPB-182-GW-340-34 WATER	1,4-Dioxane	0.330		0.08	0.24	0.24	ug/L
		Total Svoc :		0.33				
		Total Concentration:		0.33				
Client ID : BP-VPB-182-GW-390-392								
Q2082-08	BP-VPB-182-GW-390-35 WATER	1,4-Dioxane	0.300		0.07	0.22	0.22	ug/L
		Total Svoc :		0.30				
		Total Concentration:		0.30				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/15/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/19/25
Client Sample ID:	BP-VPB-182-GW-260-262	SDG No.:	Q2082
Lab Sample ID:	Q2082-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	520 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
BN037114.D	1	05/21/25 08:41	05/28/25 18:23	PB168100

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.38	U	0.13	0.38	0.38	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.26		30 - 150		64%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 - 150		71%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.25		55 - 111		63%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.50		58 - 132		125%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1700	7.611				
1146-65-2	Naphthalene-d8	4550	10.394				
15067-26-2	Acenaphthene-d10	2500	14.256				
1517-22-2	Phenanthrene-d10	4890	17.009				
1719-03-5	Chrysene-d12	3170	21.198				
1520-96-3	Perylene-d12	2640	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:	05/15/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/19/25
Client Sample ID:	BP-VPB-182-GW-300-302	SDG No.:	Q2082
Lab Sample ID:	Q2082-04	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
BN037115.D	1	05/21/25 08:41	05/28/25 18:59	PB168100

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.23		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.26		30 - 150		64%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.26		55 - 111		64%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		82%	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	1750	7.611				
1146-65-2	Naphthalene-d8	4760	10.394				
15067-26-2	Acenaphthene-d10	2640	14.256				
1517-22-2	Phenanthrene-d10	5100	16.996				
1719-03-5	Chrysene-d12	3510	21.198				
1520-96-3	Perylene-d12	2980	23.398				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/16/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/19/25
Client Sample ID:	BP-VPB-182-GW-340-342	SDG No.:	Q2082
Lab Sample ID:	Q2082-06	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	850 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
BN037116.D	1	05/21/25 08:41	05/28/25 19:35	PB168100

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.33		0.080	0.24	0.24	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		71%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		84%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	58 - 132		142%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1870	7.611				
1146-65-2	Naphthalene-d8	4980	10.394				
15067-26-2	Acenaphthene-d10	2700	14.256				
1517-22-2	Phenanthrene-d10	5230	17.009				
1719-03-5	Chrysene-d12	3310	21.198				
1520-96-3	Perylene-d12	2880	23.398				

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A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	05/19/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/19/25
Client Sample ID:	BP-VPB-182-GW-390-392	SDG No.:	Q2082
Lab Sample ID:	Q2082-08	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	890 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
BN037117.D	1	05/21/25 08:41	05/28/25 20:11	PB168100

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		70%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		79%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		102%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.59	*	58 - 132		147%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1980	7.611				
1146-65-2	Naphthalene-d8	5090	10.394				
15067-26-2	Acenaphthene-d10	2710	14.256				
1517-22-2	Phenanthrene-d10	4780	17.009				
1719-03-5	Chrysene-d12	3140	21.197				
1520-96-3	Perylene-d12	3040	23.398				

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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:	05/16/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	05/19/25
Client Sample ID:	VPB182-HYD-20250516	SDG No.:	Q2082
Lab Sample ID:	Q2082-12	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
BN037118.D	1	05/21/25 08:41	05/28/25 20:47	PB168100

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	0.0080	*	30 - 150		2%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.032	*	30 - 150		8%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		71%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		103%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2060	7.611				
1146-65-2	Naphthalene-d8	5060	10.394				
15067-26-2	Acenaphthene-d10	2510	14.256				
1517-22-2	Phenanthrene-d10	4250	17.009				
1719-03-5	Chrysene-d12	3090	21.198				
1520-96-3	Perylene-d12	2550	23.398				

U = Not Detected

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MDL = Method Detection Limit

LOD = Limit of Detection

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M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2082

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168100BL	PB168100BL	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.46	115		58	132
PB168100BS	PB168100BS	2-Methylnaphthalene-d10	0.4	0.38	94		30	150
		Fluoranthene-d10	0.4	0.28	69		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.37	92		58	132
PB168100BSD	PB168100BSD	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.29	73		30	150
		Nitrobenzene-d5	0.4	0.35	86		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
Q2082-02	BP-VPB-182-GW-260-262	2-Methylnaphthalene-d10	0.4	0.26	64		30	150
		Fluoranthene-d10	0.4	0.28	71		30	150
		Nitrobenzene-d5	0.4	0.25	63		55	111
		2-Fluorobiphenyl	0.4	0.34	86		53	106
		Terphenyl-d14	0.4	0.50	125		58	132
Q2082-04	BP-VPB-182-GW-300-302	2-Methylnaphthalene-d10	0.4	0.26	64		30	150
		Fluoranthene-d10	0.4	0.32	81		30	150
		Nitrobenzene-d5	0.4	0.26	64		55	111
		2-Fluorobiphenyl	0.4	0.33	82		53	106
		Terphenyl-d14	0.4	0.53	132		58	132
Q2082-06	BP-VPB-182-GW-340-342	2-Methylnaphthalene-d10	0.4	0.28	71		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.57	142	*	58	132
Q2082-08	BP-VPB-182-GW-390-392	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.32	79		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.41	102		53	106
		Terphenyl-d14	0.4	0.59	147	*	58	132
Q2082-12	VPB182-HYD-20250516	2-Methylnaphthalene-d10	0.4	0.0080	2	*	30	150
		Fluoranthene-d10	0.4	0.032	8	*	30	150
		Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.41	103		53	106
		Terphenyl-d14	0.4	0.46	114		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2082

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN037124.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168100BS	1,4-Dioxane	0.4	0.28	ug/L	70				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2082

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN037125.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168100BSD	1,4-Dioxane	0.4	0.29	ug/L	73	4			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168100BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q2082

SAS No.: Q2082 SDG NO.: Q2082

Lab File ID: BN037113.D

Lab Sample ID: PB168100BL

Instrument ID: BNA_N

Date Extracted: 05/21/2025

Matrix: (soil/water) Water

Date Analyzed: 05/28/2025

Level: (low/med) LOW

Time Analyzed: 17:47

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168100BS	PB168100BS	BN037124.D	05/29/2025
BP-VPB-182-GW-260-262	Q2082-02	BN037114.D	05/28/2025
BP-VPB-182-GW-300-302	Q2082-04	BN037115.D	05/28/2025
BP-VPB-182-GW-340-342	Q2082-06	BN037116.D	05/28/2025
PB168100BSD	PB168100BSD	BN037125.D	05/29/2025
BP-VPB-182-GW-390-392	Q2082-08	BN037117.D	05/28/2025
VPB182-HYD-20250516	Q2082-12	BN037118.D	05/28/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2082

SDG NO.: Q2082

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.: Q2082

SDG NO.: Q2082

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
PB168100BL	PB168100BL	BN037113.D	05/28/2025	17:47
BP-VPB-182-GW-260-262	Q2082-02	BN037114.D	05/28/2025	18:23
BP-VPB-182-GW-300-302	Q2082-04	BN037115.D	05/28/2025	18:59
BP-VPB-182-GW-340-342	Q2082-06	BN037116.D	05/28/2025	19:35
BP-VPB-182-GW-390-392	Q2082-08	BN037117.D	05/28/2025	20:11
VPB182-HYD-20250516	Q2082-12	BN037118.D	05/28/2025	20:47
PB168100BS	PB168100BS	BN037124.D	05/29/2025	00:23
PB168100BSD	PB168100BSD	BN037125.D	05/29/2025	00:59
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.: Q2082 SAS No.: Q2082 SDG NO.: Q2082

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 PB168100BL	1765	7.61	4396	10.39	2346	14.26
02 BP-VPB-182-GW-260-262	1698	7.61	4547	10.39	2504	14.26
03 PB168100BS	2482	7.61	6249	10.38	2970	14.26
04 PB168100BSD	2246	7.61	5562	10.38	2593	14.26
05 BP-VPB-182-GW-300-302	1749	7.61	4761	10.39	2641	14.26
06 BP-VPB-182-GW-340-342	1870	7.61	4981	10.39	2695	14.26
07 BP-VPB-182-GW-390-392	1975	7.61	5085	10.39	2709	14.26
08 VPB182-HYD-20250516	2059	7.61	5062	10.39	2514	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.: Q2082 SAS No.: Q2082 SDG NO.: Q2082

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 PB168100BL	4153	17.01	2590	21.20	2358	23.40
02 BP-VPB-182-GW-260-262	4885	17.01	3172	21.20	2643	23.40
03 PB168100BS	4819	17.01	3074	21.20	3112	23.40
04 PB168100BSD	4050	17.01	2689	21.20	2817	23.39
05 BP-VPB-182-GW-300-302	5103	17.00	3511	21.20	2983	23.40
06 BP-VPB-182-GW-340-342	5234	17.01	3312	21.20	2878	23.40
07 BP-VPB-182-GW-390-392	4782	17.01	3144	21.20	3044	23.40
08 VPB182-HYD-20250516	4253	17.01	3086	21.20	2551	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:	PB168100BL		SDG No.:	Q2082
Lab Sample ID:	PB168100BL		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
BN037113.D	1	05/21/25 08:41	05/28/25 17:47	PB168100

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	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	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	1770	7.611				
1146-65-2	Naphthalene-d8	4400	10.394				
15067-26-2	Acenaphthene-d10	2350	14.256				
1517-22-2	Phenanthrene-d10	4150	17.009				
1719-03-5	Chrysene-d12	2590	21.198				
1520-96-3	Perylene-d12	2360	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:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168100BS		SDG No.:	Q2082
Lab Sample ID:	PB168100BS		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
BN037124.D	1	05/21/25 08:41	05/29/25 00:23	PB168100

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.28		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 - 150		69%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		92%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2480	7.611				
1146-65-2	Naphthalene-d8	6250	10.383				
15067-26-2	Acenaphthene-d10	2970	14.256				
1517-22-2	Phenanthrene-d10	4820	17.009				
1719-03-5	Chrysene-d12	3070	21.198				
1520-96-3	Perylene-d12	3110	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:	
Project:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168100BSD		SDG No.:	Q2082
Lab Sample ID:	PB168100BSD		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
BN037125.D	1	05/21/25 08:41	05/29/25 00:59	PB168100

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	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.29		30 - 150		73%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2250	7.611				
1146-65-2	Naphthalene-d8	5560	10.383				
15067-26-2	Acenaphthene-d10	2590	14.256				
1517-22-2	Phenanthrene-d10	4050	17.009				
1719-03-5	Chrysene-d12	2690	21.197				
1520-96-3	Perylene-d12	2820	23.392				

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.: Q2082 SAS No.: Q2082 SDG No.: Q2082

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.: Q2082 SAS No.: Q2082 SDG No.: Q2082

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.