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

LAB CHRONICLE

OrderID:	Q1886	**OrderDate:**	4/25/2025 10:16:00 AM
Client:	Tetra Tech NUS, Inc.	**Project:**	NWIRP Bethpage - RW5B CTO WE13 112G08005
Contact:	Ernie Wu	**Location:**	L51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1886-01	**RW5-SP100-20250423**	**Water**			**04/23/25**			**04/25/25**
			SVOC-SIMGroup1	8270-Modified		04/28/25	04/30/25	
Q1886-01DL	**RW5-SP100-20250423DL**	**Water**			**04/23/25**			**04/25/25**
			SVOC-SIMGroup1	8270-Modified		04/28/25	04/30/25	
Q1886-02	**RW5-SP201-20250423**	**Water**			**04/23/25**			**04/25/25**
			SVOC-SIMGroup1	8270-Modified		04/28/25	04/30/25	
Q1886-03	**RW5-SP303-20250423**	**Water**			**04/23/25**			**04/25/25**
			SVOC-SIMGroup1	8270-Modified		04/28/25	04/30/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1886

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20250423									
Q1886-01	RW5-SP100-20250423	WATER	1,4-Dioxane	6.200	EQ	0.07	0.2	0.2	ug/L
			Total Svoc :		**6.20**				
			Total Concentration:		**6.20**				
Client ID : RW5-SP100-20250423DL									
Q1886-01DL	RW5-SP100-20250423DI	WATER	1,4-Dioxane	6.400	DQ	0.13	0.4	0.4	ug/L
			Total Svoc :		**6.40**				
			Total Concentration:		**6.40**				

SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	04/23/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	04/25/25
Client Sample ID:	RW5-SP100-20250423	SDG No.:	Q1886
Lab Sample ID:	Q1886-01	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
BN036947.D	1	04/28/25 08:50	04/30/25 15:16	PB167760

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.20	EQ	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		78%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		89%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1740	7.633				
1146-65-2	Naphthalene-d8	4360	10.415				
15067-26-2	Acenaphthene-d10	2480	14.277				
1517-22-2	Phenanthrene-d10	5000	17.021				
1719-03-5	Chrysene-d12	4500	21.215				
1520-96-3	Perylene-d12	4170	23.424				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	04/23/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	04/25/25
Client Sample ID:	RW5-SP100-20250423DL	SDG No.:	Q1886
Lab Sample ID:	Q1886-01DL	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
BN036951.D	2	04/28/25 08:50	04/30/25 17:41	PB167760

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.40	DQ	0.13	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		69%	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	1640	7.633				
1146-65-2	Naphthalene-d8	4150	10.415				
15067-26-2	Acenaphthene-d10	2380	14.277				
1517-22-2	Phenanthrene-d10	4970	17.021				
1719-03-5	Chrysene-d12	3860	21.215				
1520-96-3	Perylene-d12	3390	23.424				

U = Not Detected
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LOD = Limit of Detection
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B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	04/23/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	04/25/25
Client Sample ID:	RW5-SP201-20250423	SDG No.:	Q1886
Lab Sample ID:	Q1886-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036948.D	1	04/28/25 08:50	04/30/25 15:52	PB167760

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	UQ	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		77%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	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	1780	7.633				
1146-65-2	Naphthalene-d8	4540	10.415				
15067-26-2	Acenaphthene-d10	2510	14.277				
1517-22-2	Phenanthrene-d10	5100	17.021				
1719-03-5	Chrysene-d12	4280	21.215				
1520-96-3	Perylene-d12	3780	23.424				

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

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B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	04/23/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	04/25/25
Client Sample ID:	RW5-SP303-20250423	SDG No.:	Q1886
Lab Sample ID:	Q1886-03	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
BN036949.D	1	04/28/25 08:50	04/30/25 16:28	PB167760

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	UQ	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.29		30 - 150		72%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		91%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		66%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.33		58 - 132		83%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1940	7.633				
1146-65-2	Naphthalene-d8	4850	10.415				
15067-26-2	Acenaphthene-d10	2710	14.277				
1517-22-2	Phenanthrene-d10	5600	17.021				
1719-03-5	Chrysene-d12	4530	21.216				
1520-96-3	Perylene-d12	3930	23.424				

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

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Surrogate Summary

SW-846

SDG No.: Q1886

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	High
PB167760BL	PB167760BL	2-Methylnaphthalene-d10	0.4	0.27	68		30	150
		Fluoranthene-d10	0.4	0.28	71		30	150
		Nitrobenzene-d5	0.4	0.28	70		55	111
		2-Fluorobiphenyl	0.4	0.29	73		53	106
		Terphenyl-d14	0.4	0.31	77		58	132
PB167760BS	PB167760BS	2-Methylnaphthalene-d10	0.4	0.36	91		30	150
		Fluoranthene-d10	0.4	0.35	88		30	150
		Nitrobenzene-d5	0.4	0.35	86		55	111
		2-Fluorobiphenyl	0.4	0.31	79		53	106
		Terphenyl-d14	0.4	0.36	90		58	132
PB167760BSD	PB167760BSD	2-Methylnaphthalene-d10	0.4	0.36	89		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.36	90		58	132
Q1886-01	RW5-SP100-20250423	2-Methylnaphthalene-d10	0.4	0.31	76		30	150
		Fluoranthene-d10	0.4	0.40	99		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.31	78		53	106
		Terphenyl-d14	0.4	0.36	89		58	132
Q1886-01DL	RW5-SP100-20250423DL	2-Methylnaphthalene-d10	0.4	0.31	76		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.28	69		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
Q1886-02	RW5-SP201-20250423	2-Methylnaphthalene-d10	0.4	0.31	77		30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.40	100		58	132
Q1886-03	RW5-SP303-20250423	2-Methylnaphthalene-d10	0.4	0.29	72		30	150
		Fluoranthene-d10	0.4	0.37	91		30	150
		Nitrobenzene-d5	0.4	0.31	76		55	111
		2-Fluorobiphenyl	0.4	0.26	66		53	106
		Terphenyl-d14	0.4	0.33	83		58	132

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1886

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036952.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167760BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1886

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036953.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167760BSD	1,4-Dioxane	0.4	0.27	ug/L	68	7	*		70	130	20

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167760BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1886 SAS No.: Q1886 SDG NO.: Q1886

Lab File ID: BN036942.D Lab Sample ID: PB167760BL

Instrument ID: BNA_N Date Extracted: 04/28/2025

Matrix: (soil/water) Water Date Analyzed: 04/30/2025

Level: (low/med) LOW Time Analyzed: 11:38

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167760BS	PB167760BS	BN036952.D	04/30/2025
RW5-SP100-20250423	Q1886-01	BN036947.D	04/30/2025
RW5-SP201-20250423	Q1886-02	BN036948.D	04/30/2025
RW5-SP303-20250423	Q1886-03	BN036949.D	04/30/2025
PB167760BSD	PB167760BSD	BN036953.D	04/30/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1886 SDG NO.: Q1886

Lab File ID: BN036922.D DFTPP Injection Date: 04/28/2025

Instrument ID: BNA_N DFTPP Injection Time: 10:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	67.4
68	Less than 2.0% of mass 69	0.8 (1.4) 1
69	Mass 69 relative abundance	58.8
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	54.3
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
275	10.0 - 60.0% of mass 198	23.7
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	8.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.3 (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	BN036923.D	04/28/2025	11:35
SSTDICC0.2	SSTDICC0.2	BN036924.D	04/28/2025	12:11
SSTDICCC0.4	SSTDICCC0.4	BN036925.D	04/28/2025	12:47
SSTDICC0.8	SSTDICC0.8	BN036926.D	04/28/2025	13:24
SSTDICC1.6	SSTDICC1.6	BN036927.D	04/28/2025	14:00
SSTDICC3.2	SSTDICC3.2	BN036928.D	04/28/2025	14:36
SSTDICC5.0	SSTDICC5.0	BN036929.D	04/28/2025	15:12

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1886 SDG NO.: Q1886

Lab File ID: BN036940.D DFTPP Injection Date: 04/30/2025

Instrument ID: BNA_N DFTPP Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	72
68	Less than 2.0% of mass 69	0.6 (0.9) 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	54.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	24.7
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	8.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.9 (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	BN036941.D	04/30/2025	10:59
PB167760BL	PB167760BL	BN036942.D	04/30/2025	11:38
RW5-SP100-20250423	Q1886-01	BN036947.D	04/30/2025	15:16
RW5-SP201-20250423	Q1886-02	BN036948.D	04/30/2025	15:52
RW5-SP303-20250423	Q1886-03	BN036949.D	04/30/2025	16:28
RW5-SP100-20250423DL	Q1886-01DL	BN036951.D	04/30/2025	17:41
PB167760BS	PB167760BS	BN036952.D	04/30/2025	18:17
PB167760BSD	PB167760BSD	BN036953.D	04/30/2025	18:53
SSTDCCC0.4EC	SSTDCCC0.4	BN036954.D	04/30/2025	19:29

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1886 SAS No.: Q1886 SDG NO.: Q1886

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/30/2025

Lab File ID: BN036941.D Time Analyzed: 10:59

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	2089	7.625	5327	10.40	3019	14.28
	UPPER LIMIT	4178	8.125	10654	10.904	6038	14.777
	LOWER LIMIT	1044.5	7.125	2663.5	9.904	1509.5	13.777
	EPA SAMPLE NO.						
01	PB167760BL	2641	7.63	6297	10.42	3237	14.28
02	RW5-SP100-20250423	1739	7.63	4356	10.42	2481	14.28
03	PB167760BS	2072	7.63	5162	10.40	2727	14.28
04	PB167760BSD	2106	7.63	5174	10.40	2716	14.28
05	RW5-SP100-20250423DL	1638	7.63	4145	10.42	2384	14.28
06	RW5-SP201-20250423	1784	7.63	4537	10.42	2513	14.28
07	RW5-SP303-20250423	1937	7.63	4854	10.42	2711	14.28

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1886 SAS No.: Q1886 SDG NO.: Q1886

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/30/2025

Lab File ID: BN036941.D Time Analyzed: 10:59

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	6059	17.021	4788	21.215	4103	23.427
	UPPER LIMIT	12118	17.521	9576	21.715	8206	23.927
	LOWER LIMIT	3029.5	16.521	2394	20.715	2051.5	22.927
	EPA SAMPLE NO.						
01	PB167760BL	6245	17.02	4196	21.22	3575	23.43
02	RW5-SP100-20250423	5000	17.02	4495	21.22	4168	23.42
03	PB167760BS	5423	17.02	4126	21.22	3488	23.42
04	PB167760BSD	5366	17.02	3877	21.22	3193	23.42
05	RW5-SP100-20250423DL	4971	17.02	3859	21.22	3394	23.42
06	RW5-SP201-20250423	5104	17.02	4282	21.22	3782	23.42
07	RW5-SP303-20250423	5602	17.02	4527	21.22	3928	23.42

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

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

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

QC SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	
Client Sample ID:	PB167760BL	SDG No.:	Q1886
Lab Sample ID:	PB167760BL	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
BN036942.D	1	04/28/25 08:50	04/30/25 11:38	PB167760

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	0.27		30 - 150		68%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 - 150		71%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		70%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		73%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.31		58 - 132		77%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2640	7.633				
1146-65-2	Naphthalene-d8	6300	10.415				
15067-26-2	Acenaphthene-d10	3240	14.277				
1517-22-2	Phenanthrene-d10	6250	17.021				
1719-03-5	Chrysene-d12	4200	21.224				
1520-96-3	Perylene-d12	3580	23.43				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	
Client Sample ID:	PB167760BS	SDG No.:	Q1886
Lab Sample ID:	PB167760BS	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
BN036952.D	1	04/28/25 08:50	04/30/25 18:17	PB167760

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		91%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		88%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		79%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		90%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2070	7.626				
1146-65-2	Naphthalene-d8	5160	10.404				
15067-26-2	Acenaphthene-d10	2730	14.277				
1517-22-2	Phenanthrene-d10	5420	17.021				
1719-03-5	Chrysene-d12	4130	21.216				
1520-96-3	Perylene-d12	3490	23.424				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	
Client Sample ID:	PB167760BSD	SDG No.:	Q1886
Lab Sample ID:	PB167760BSD	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
BN036953.D	1	04/28/25 08:50	04/30/25 18:53	PB167760

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.27		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		89%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		84%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		77%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		90%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2110	7.625				
1146-65-2	Naphthalene-d8	5170	10.404				
15067-26-2	Acenaphthene-d10	2720	14.277				
1517-22-2	Phenanthrene-d10	5370	17.021				
1719-03-5	Chrysene-d12	3880	21.215				
1520-96-3	Perylene-d12	3190	23.424				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN042825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Apr 28 15:35:03 2025
Response Via : Initial Calibration

Calibration Files
0.1 =BN036923.D 0.2 =BN036924.D 0.4 =BN036925.D 0.8 =BN036926.D 1.6 =BN036927.D 3.2 =BN036928.D 5.0 =BN036929.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	0.452	0.489	0.551	0.506	0.537	0.489	0.465	0.498	7.23
3)		n-Nitrosodimet...	0.903	0.998	1.010	0.957	1.034	0.952	0.918	0.967	5.01
4)	S	2-Fluorophenol	1.050	1.056	1.118	0.946	1.040	0.982	0.970	1.023	5.86
5)	S	Phenol-d6	1.270	1.237	1.337	1.151	1.294	1.255	1.272	1.259	4.57
6)		bis(2-Chloroet...	1.174	1.123	1.170	1.139	1.240	1.162	1.162	1.167	3.17
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.400	0.401	0.411	0.404	0.446	0.432	0.436	0.418	4.52
9)		Naphthalene	1.155	1.147	1.155	1.132	1.225	1.170	1.165	1.164	2.56
10)		Hexachlorobuta...	0.260	0.250	0.253	0.249	0.262	0.248	0.240	0.252	2.99
11)	SURR	2-Methylnaphth...	0.540	0.532	0.541	0.543	0.596	0.575	0.589	0.559	4.75
12)		2-Methylnaphth...	0.716	0.713	0.719	0.735	0.804	0.782	0.798	0.753	5.41
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.156	0.173	0.177	0.175	0.187	0.184	0.196	0.178	7.18
15)	S	2-Fluorobiphenyl	1.877	1.975	2.055	1.690	2.023	1.986	1.928	1.933	6.32
16)		Acenaphthylene	1.876	1.850	1.907	1.884	2.067	2.035	2.066	1.955	4.93
17)		Acenaphthene	1.264	1.270	1.275	1.248	1.333	1.295	1.305	1.284	2.22
18)		Fluorene	1.604	1.612	1.624	1.658	1.788	1.720	1.752	1.680	4.39
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...		0.083	0.090	0.096	0.113	0.120	0.134	0.106	18.55
21)		4-Bromophenyl-...	0.260	0.263	0.262	0.260	0.282	0.272	0.270	0.267	3.11
22)		Hexachlorobenzene	0.301	0.289	0.300	0.280	0.303	0.293	0.282	0.293	3.18
23)		Atrazine	0.193	0.198	0.199	0.217	0.227	0.226	0.248	0.215	9.20
24)		Pentachlorophenol	0.160	0.136	0.144	0.145	0.163	0.168	0.181	0.157	10.06
25)		Phenanthrene	1.309	1.274	1.299	1.280	1.387	1.346	1.347	1.320	3.13
26)		Anthracene	1.131	1.108	1.147	1.138	1.275	1.261	1.299	1.194	6.74
27)	SURR	Fluoranthene-d10	0.993	1.004	0.991	1.016	1.087	1.053	1.115	1.037	4.74
28)		Fluoranthene	1.387	1.380	1.399	1.471	1.578	1.530	1.613	1.480	6.46
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.919	1.942	1.958	1.802	2.073	1.969	1.823	1.927	4.77
31)	S	Terphenyl-d14	0.974	0.942	0.946	0.893	1.005	0.952	0.897	0.944	4.22
32)		Benzo(a)anthra...	1.402	1.407	1.429	1.422	1.583	1.509	1.561	1.473	5.19
33)		Chrysene	1.517	1.576	1.637	1.582	1.700	1.572	1.536	1.589	3.91
34)		Bis(2-ethylhex...	0.949	0.847	0.834	0.784	0.804	0.782	0.866	0.838	6.96
35)	I	Perylene-d12	----------ISTD----------								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN042825.M

36)		Indeno(1,2,3-c...	1.595	1.571	1.712	1.503	1.720	1.724	1.609	1.634	5.29
37)		Benzo(b)fluora...	1.580	1.552	1.634	1.628	1.796	1.758	1.825	1.682	6.50
38)		Benzo(k)fluora...	1.601	1.569	1.648	1.641	1.812	1.784	1.785	1.691	5.89
39)	C	Benzo(a)pyrene	1.315	1.301	1.361	1.315	1.463	1.447	1.477	1.383	5.57
40)		Dibenzo(a,h)an...	1.229	1.241	1.349	1.176	1.357	1.379	1.268	1.286	5.96
41)		Benzo(g,h,i)pe...	1.459	1.405	1.515	1.305	1.495	1.470	1.339	1.427	5.61

(#) = Out of Range

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1886 SAS No.: Q1886 SDG No.: Q1886

Instrument ID: BNA_N Calibration Date/Time: 04/30/2025 10:59

Lab File ID: BN036941.D Init. Calib. Date(s): 04/28/2025 04/28/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:35 15:12

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.559	0.553		-1.1	20.0
Fluoranthene-d10	1.037	1.024		-1.3	20.0
2-Fluorophenol	1.023	1.039		1.6	20.0
Phenol-d6	1.259	1.276		1.4	20.0
Nitrobenzene-d5	0.418	0.412		-1.4	20.0
2-Fluorobiphenyl	1.933	2.002		3.6	20.0
2,4,6-Tribromophenol	0.178	0.171		-3.9	20.0
Terphenyl-d14	0.944	0.910		-3.6	20.0
1,4-Dioxane	0.498	0.530		6.4	20.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1886 SAS No.: Q1886 SDG No.: Q1886

Instrument ID: BNA_N Calibration Date/Time: 04/30/2025 19:29

Lab File ID: BN036954.D Init. Calib. Date(s): 04/28/2025 04/28/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:35 15:12

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.559	0.551		-1.4	50.0
Fluoranthene-d10	1.037	1.031		-0.6	50.0
2-Fluorophenol	1.023	1.071		4.7	50.0
Phenol-d6	1.259	1.249		-0.8	50.0
Nitrobenzene-d5	0.418	0.418		0.0	50.0
2-Fluorobiphenyl	1.933	1.735		-10.2	50.0
2,4,6-Tribromophenol	0.178	0.181		1.7	50.0
Terphenyl-d14	0.944	0.934		-1.1	50.0
1,4-Dioxane	0.498	0.513		3.0	50.0

All other compounds must meet a minimum RRF of 0.010.