

LAB CHRONICLE

OrderID:	Q1621	OrderDate:	3/21/2025 10:33:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005
Contact:	Ernie Wu	Location:	I31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1621-01	RW5-SP100-20250320	Water			03/20/25			03/21/25
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/27/25	
Q1621-01DL	RW5-SP100-20250320DL	Water			03/20/25			03/21/25
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/27/25	
Q1621-02	RW5-SP201-20250320	Water			03/20/25			03/21/25
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/27/25	
Q1621-03	RW5-SP303-20250320	Water			03/20/25			03/21/25
			SVOC-SIMGroup1	8270-Modified		03/24/25	03/27/25	



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

Hit Summary Sheet SW-846

SDG No.: Q1621
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20250320								
Q1621-01	RW5-SP100-20250320	WATER	1,4-Dioxane	7.200	E	0.07	0.2	0.2 ug/L
			Total Svoc :	7.20				
			Total Concentration:	7.20				
Client ID : RW5-SP100-20250320DL								
Q1621-01DL	RW5-SP100-20250320DI	WATER	1,4-Dioxane	7.900	D	0.35	1	1 ug/L
			Total Svoc :	7.90				
			Total Concentration:	7.90				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	03/20/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW5-SP100-20250320	SDG No.:	Q1621
Lab Sample ID:	Q1621-01	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
BN036733.D	1	03/24/25 08:15	03/27/25 12:14	PB167269

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.20	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.30		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	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		82%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1490	7.703				
1146-65-2	Naphthalene-d8	3350	10.487				
15067-26-2	Acenaphthene-d10	2090	14.345				
1517-22-2	Phenanthrene-d10	4630	17.086				
1719-03-5	Chrysene-d12	3860	21.277				
1520-96-3	Perylene-d12	3370	23.528				

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:	03/20/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW5-SP100-20250320DL	SDG No.:	Q1621
Lab Sample ID:	Q1621-01DL	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
BN036742.D	5	03/24/25 08:15	03/27/25 18:02	PB167269

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.90	D	0.35	1.00	1.00	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		70%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		69%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		120%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1240		7.703			
1146-65-2	Naphthalene-d8	2700		10.498			
15067-26-2	Acenaphthene-d10	1840		14.345			
1517-22-2	Phenanthrene-d10	4030		17.099			
1719-03-5	Chrysene-d12	3350		21.286			
1520-96-3	Perylene-d12	2970		23.531			

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() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	03/20/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005	Date Received:	03/21/25
Client Sample ID:	RW5-SP201-20250320	SDG No.:	Q1621
Lab Sample ID:	Q1621-02	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
BN036740.D	1	03/24/25 08:15	03/27/25 16:50	PB167269

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	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		118%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1440	7.703				
1146-65-2	Naphthalene-d8	3290	10.487				
15067-26-2	Acenaphthene-d10	2040	14.345				
1517-22-2	Phenanthrene-d10	4650	17.086				
1719-03-5	Chrysene-d12	3790	21.277				
1520-96-3	Perylene-d12	3230	23.528				

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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:	03/20/25
Project:	NWIRP Bethpage - RW5B CTO WE13 112G08005		Date Received:	03/21/25
Client Sample ID:	RW5-SP303-20250320		SDG No.:	Q1621
Lab Sample ID:	Q1621-03		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
BN036741.D	1	03/24/25 08:15	03/27/25 17:26	PB167269

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	0.31		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		116%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		72%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	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	1320	7.703				
1146-65-2	Naphthalene-d8	3210	10.487				
15067-26-2	Acenaphthene-d10	2060	14.345				
1517-22-2	Phenanthrene-d10	4580	17.086				
1719-03-5	Chrysene-d12	3930	21.277				
1520-96-3	Perylene-d12	3540	23.528				

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.: Q1621

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB167269BL	PB167269BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.31	78		55	111
		2-Fluorobiphenyl	0.4	0.29	73		53	106
		Terphenyl-d14	0.4	0.39	98		58	132
PB167269BS	PB167269BS	2-Methylnaphthalene-d10	0.4	0.40	101		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.46	115	*	53	106
		Terphenyl-d14	0.4	0.49	122		58	132
PB167269BSD	PB167269BSD	2-Methylnaphthalene-d10	0.4	0.43	106		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.44	109		55	111
		2-Fluorobiphenyl	0.4	0.46	116	*	53	106
		Terphenyl-d14	0.4	0.52	131		58	132
Q1621-01	RW5-SP100-20250320	2-Methylnaphthalene-d10	0.4	0.30	76		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.33	82		53	106
		Terphenyl-d14	0.4	0.49	123		58	132
Q1621-01DL	RW5-SP100-20250320DL	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.45	111		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.28	69		53	106
		Terphenyl-d14	0.4	0.48	120		58	132
Q1621-02	RW5-SP201-20250320	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.31	78		55	111
		2-Fluorobiphenyl	0.4	0.34	86		53	106
		Terphenyl-d14	0.4	0.47	118		58	132
Q1621-03	RW5-SP303-20250320	2-Methylnaphthalene-d10	0.4	0.31	79		30	150
		Fluoranthene-d10	0.4	0.46	116		30	150
		Nitrobenzene-d5	0.4	0.29	72		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.46	115		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1621

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036806.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB167269BS	1,4-Dioxane	0.4	0.38	ug/L	95				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1621

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036814.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB167269BSD	1,4-Dioxane	0.4	0.32	ug/L	80	17			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167269BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1621

SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036758.D

Lab Sample ID: PB167269BL

Instrument ID: BNA_N

Date Extracted: 03/24/2025

Matrix: (soil/water) Water

Date Analyzed: 03/28/2025

Level: (low/med) LOW

Time Analyzed: 04:22

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
RW5-SP100-20250320	Q1621-01	BN036733.D	03/27/2025
RW5-SP201-20250320	Q1621-02	BN036740.D	03/27/2025
RW5-SP303-20250320	Q1621-03	BN036741.D	03/27/2025
PB167269BS	PB167269BS	BN036806.D	03/29/2025
PB167269BSD	PB167269BSD	BN036814.D	03/31/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036556.D

DFTPP Injection Date: 03/10/2025

Instrument ID: BNA_N

DFTPP Injection Time: 11:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	58.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	52.3
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	50.7
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	24.8
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.3
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	10.9 (19.6) 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	BN036557.D	03/10/2025	11:42
SSTDICC0.2	SSTDICC0.2	BN036558.D	03/10/2025	12:18
SSTDICCC0.4	SSTDICCC0.4	BN036559.D	03/10/2025	12:54
SSTDICC0.8	SSTDICC0.8	BN036560.D	03/10/2025	13:31
SSTDICC1.6	SSTDICC1.6	BN036561.D	03/10/2025	14:07
SSTDICC3.2	SSTDICC3.2	BN036562.D	03/10/2025	14:43
SSTDICC5.0	SSTDICC5.0	BN036563.D	03/10/2025	15:19

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036728.D

DFTPP Injection Date: 03/27/2025

Instrument ID: BNA_N

DFTPP Injection Time: 09:10

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	56.4
70	Less than 2.0% of mass 69	0.8 (1.4) 1
127	10.0 - 80.0% of mass 198	52.6
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	6.6
275	10.0 - 60.0% of mass 198	24.3
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	7.8
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	9.3 (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	BN036729.D	03/27/2025	09:49
RW5-SP100-20250320	Q1621-01	BN036733.D	03/27/2025	12:14
SSTDCCC0.4EC	SSTDCCC0.4	BN036736.D	03/27/2025	14:02

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1621

SDG NO.: Q1621

Lab File ID: BN036737.D

DFTPP Injection Date: 03/27/2025

Instrument ID: BNA_N

DFTPP Injection Time: 14:38

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	66.6
68	Less than 2.0% of mass 69	0.8 (1.4) 1
69	Mass 69 relative abundance	56.1
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	53
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
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	8.4
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	9.8 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN036738.D	03/27/2025	15:38
RW5-SP201-20250320	Q1621-02	BN036740.D	03/27/2025	16:50
RW5-SP303-20250320	Q1621-03	BN036741.D	03/27/2025	17:26
RW5-SP100-20250320DL	Q1621-01DL	BN036742.D	03/27/2025	18:02
SSTDCCC0.4EC	SSTDCCC0.4	BN036755.D	03/28/2025	01:52

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1621 SDG NO.: Q1621

Lab File ID: BN036756.D

DFTPP Injection Date: 03/28/2025

Instrument ID: BNA_N

DFTPP Injection Time: 03:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	67
68	Less than 2.0% of mass 69	0.9 (1.5) 1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	53.9
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	7.1
275	10.0 - 60.0% of mass 198	24.9
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	8.9
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	10.3 (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	BN036757.D	03/28/2025	03:46
PB167269BL	PB167269BL	BN036758.D	03/28/2025	04:22
SSTDCCC0.4EC	SSTDCCC0.4	BN036771.D	03/28/2025	13:58

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1621

SDG NO.: Q1621

Lab File ID: BN036790.D

DFTPP Injection Date: 03/29/2025

Instrument ID: BNA_N

DFTPP Injection Time: 01:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	71.7
68	Less than 2.0% of mass 69	1.1 (1.9) 1
69	Mass 69 relative abundance	58.5
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	6.8
275	10.0 - 60.0% of mass 198	22.7
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	8.2
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	10.1 (20.2) 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	BN036791.D	03/29/2025	02:44
PB167269BS	PB167269BS	BN036806.D	03/29/2025	11:45
SSTDCCC0.4EC	SSTDCCC0.4	BN036807.D	03/29/2025	12:21

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1621

SDG NO.: Q1621

Lab File ID: BN036808.D

DFTPP Injection Date: 03/31/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	70.2
68	Less than 2.0% of mass 69	1 (1.8) 1
69	Mass 69 relative abundance	58.4
70	Less than 2.0% of mass 69	0.4 (0.6) 1
127	10.0 - 80.0% of mass 198	54.1
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	7.2
275	10.0 - 60.0% of mass 198	23.4
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	8.3
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	10 (21.3) 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	BN036809.D	03/31/2025	10:39
PB167269BSD	PB167269BSD	BN036814.D	03/31/2025	14:16
SSTDCCC0.4EC	SSTDCCC0.4	BN036815.D	03/31/2025	15:08

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036729.D Time Analyzed: 09:49

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	2892	7.703	7150	10.49	4255	14.35
UPPER LIMIT	5784	8.203	14300	10.987	8510	14.845
LOWER LIMIT	1446	7.203	3575	9.987	2127.5	13.845
EPA SAMPLE NO.						
01 RW5-SP100-20250320	1492	7.70	3351 *	10.49	2085 *	14.35

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036729.D Time Analyzed: 09:49

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	8860	17.086	7759	21.277	6723	23.522
UPPER LIMIT	17720	17.586	15518	21.777	13446	24.022
LOWER LIMIT	4430	16.586	3879.5	20.777	3361.5	23.022
EPA SAMPLE NO.						
01 RW5-SP100-20250320	4625	17.09	3861 *	21.28	3367	23.53

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036738.D Time Analyzed: 15:38

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	1523	7.703	3803	10.49	2348	14.35
UPPER LIMIT	3046	8.203	7606	10.987	4696	14.845
LOWER LIMIT	761.5	7.203	1901.5	9.987	1174	13.845
EPA SAMPLE NO.						
01 RW5-SP201-20250320	1438	7.70	3285	10.49	2042	14.35
02 RW5-SP100-20250320DL	1243	7.70	2699	10.50	1836	14.35
03 RW5-SP303-20250320	1324	7.70	3208	10.49	2058	14.35

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/27/2025

Lab File ID: BN036738.D Time Analyzed: 15:38

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	4989	17.086	4385	21.277	4045	23.525
UPPER LIMIT	9978	17.586	8770	21.777	8090	24.025
LOWER LIMIT	2494.5	16.586	2192.5	20.777	2022.5	23.025
EPA SAMPLE NO.						
01 RW5-SP201-20250320	4646	17.09	3789	21.28	3230	23.53
02 RW5-SP100-20250320DL	4032	17.10	3349	21.29	2971	23.53
03 RW5-SP303-20250320	4583	17.09	3932	21.28	3540	23.53

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/28/2025

Lab File ID: BN036757.D Time Analyzed: 03:46

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	1974	7.703	4607	10.49	2750	14.33
UPPER LIMIT	3948	8.203	9214	10.988	5500	14.834
LOWER LIMIT	987	7.203	2303.5	9.988	1375	13.834
EPA SAMPLE NO.						
01 PB167269BL	2126	7.70	4744	10.50	2602	14.35

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/28/2025

Lab File ID: BN036757.D Time Analyzed: 03:46

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	5937	17.087	5680	21.277	5140	23.519
UPPER LIMIT	11874	17.587	11360	21.777	10280	24.019
LOWER LIMIT	2968.5	16.587	2840	20.777	2570	23.019
EPA SAMPLE NO.						
01 PB167269BL	5169	17.10	3967	21.28	2206 *	23.53

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/29/2025

Lab File ID: BN036791.D Time Analyzed: 02:44

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	1826	7.696	4490	10.48	2701	14.33
UPPER LIMIT	3652	8.196	8980	10.977	5402	14.834
LOWER LIMIT	913	7.196	2245	9.977	1350.5	13.834
EPA SAMPLE NO.						
01 PB167269BS	1846	7.70	4665	10.48	2569	14.33

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/29/2025

Lab File ID: BN036791.D Time Analyzed: 02:44

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

01

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	5571	17.087	4634	21.268	4032	23.516
UPPER LIMIT	11142	17.587	9268	21.768	8064	24.016
LOWER LIMIT	2785.5	16.587	2317	20.768	2016	23.016
EPA SAMPLE NO.						
PB167269BS	5013	17.09	3219	21.28	1389 *	23.52

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/31/2025

Lab File ID: BN036809.D Time Analyzed: 10:39

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	1888	7.695	4656	10.48	2798	14.33
UPPER LIMIT	3776	8.195	9312	10.977	5596	14.834
LOWER LIMIT	944	7.195	2328	9.977	1399	13.834
EPA SAMPLE NO.						
01 PB167269BSD	2858	7.70	7352	10.48	4021	14.33

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.: Q1621 SAS No.: Q1621 SDG NO.: Q1621

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/31/2025

Lab File ID: BN036809.D Time Analyzed: 10:39

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

01

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	5809	17.086	4586	21.277	3945	23.522
UPPER LIMIT	11618	17.586	9172	21.777	7890	24.022
LOWER LIMIT	2904.5	16.586	2293	20.777	1972.5	23.022
EPA SAMPLE NO.						
PB167269BSD	7787	17.09	4781	21.28	1670 *	23.52

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 - RW5B CTO WE13 112G08005		Date Received:		
Client Sample ID:	PB167269BL		SDG No.:	Q1621	
Lab Sample ID:	PB167269BL		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
BN036758.D	1	03/24/25 08:15	03/28/25 04:22	PB167269

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	0.41		30 - 150		102%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		73%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		98%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2130	7.703				
1146-65-2	Naphthalene-d8	4740	10.498				
15067-26-2	Acenaphthene-d10	2600	14.345				
1517-22-2	Phenanthrene-d10	5170	17.099				
1719-03-5	Chrysene-d12	3970	21.277				
1520-96-3	Perylene-d12	2210	23.528				

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 - RW5B CTO WE13 112G08005		Date Received:	
Client Sample ID:	PB167269BS		SDG No.:	Q1621
Lab Sample ID:	PB167269BS		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
BN036806.D	1	03/24/25 08:15	03/29/25 11:45	PB167269

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.38		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		101%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.46	*	53 - 106		115%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		122%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1850	7.696				
1146-65-2	Naphthalene-d8	4670	10.477				
15067-26-2	Acenaphthene-d10	2570	14.334				
1517-22-2	Phenanthrene-d10	5010	17.087				
1719-03-5	Chrysene-d12	3220	21.277				
1520-96-3	Perylene-d12	1390	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 - RW5B CTO WE13 112G08005		Date Received:		
Client Sample ID:	PB167269BSD		SDG No.:	Q1621	
Lab Sample ID:	PB167269BSD		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
BN036814.D	1	03/24/25 08:15	03/31/25 14:16	PB167269

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.32		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.43		30 - 150		106%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		109%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.46	*	53 - 106		116%	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	2860	7.695				
1146-65-2	Naphthalene-d8	7350	10.477				
15067-26-2	Acenaphthene-d10	4020	14.334				
1517-22-2	Phenanthrene-d10	7790	17.086				
1719-03-5	Chrysene-d12	4780	21.277				
1520-96-3	Perylene-d12	1670	23.519				

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-BN031025.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Mon Mar 10 16:06:28 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036557.D 0.2 =BN036558.D 0.4 =BN036559.D 0.8 =BN036560.D 1.6 =BN036561.D 3.2 =BN036562.D 5.0 =BN036563.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	0.434	0.439	0.498	0.451	0.440	0.445	0.399	0.444	6.60
3)	n-Nitrosodimet...	1.112	0.874	0.935	0.841	0.850	0.883	0.789	0.898	11.64
4) S	2-Fluorophenol	0.931	0.908	0.987	0.878	0.914	0.996	0.911	0.932	4.67
5) S	Phenol-d6	1.243	1.057	1.128	1.067	1.133	1.254	1.180	1.152	6.79
6)	bis(2-Chloroet...	1.426	1.150	1.183	1.129	1.132	1.210	1.104	1.190	9.22
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.572	0.396	0.415	0.401	0.402	0.450	0.411	0.435	14.47
9)	Naphthalene	1.371	1.125	1.206	1.111	1.108	1.222	1.094	1.177	8.45
10)	Hexachlorobuta...	0.296	0.283	0.294	0.267	0.261	0.286	0.251	0.277	6.24
11) SURR2	Methylnaphth...	0.656	0.549	0.606	0.562	0.577	0.633	0.581	0.595	6.55
12)	2-Methylnaphth...	0.810	0.696	0.765	0.703	0.734	0.802	0.731	0.749	6.03
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.181	0.160	0.187	0.169	0.188	0.197	0.188	0.182	7.04
15) S	2-Fluorobiphenyl	2.208	1.982	2.398	2.350	2.364	2.566	2.419	2.327	7.96
16)	Acenaphthylene	1.882	1.756	1.938	1.794	1.834	2.074	1.935	1.888	5.66
17)	Acenaphthene	1.257	1.159	1.281	1.171	1.199	1.339	1.243	1.236	5.17
18)	Fluorene	1.629	1.600	1.764	1.609	1.670	1.778	1.650	1.672	4.32
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.057	0.077	0.075	0.088	0.110	0.111	0.086		24.66
21)	4-Bromophenyl-...	0.243	0.227	0.274	0.238	0.241	0.278	0.253	0.251	7.53
22)	Hexachlorobenzene	0.306	0.288	0.336	0.295	0.283	0.322	0.289	0.303	6.58
23)	Atrazine	0.193	0.191	0.213	0.192	0.200	0.216	0.200	0.201	5.08
24)	Pentachlorophenol	0.140	0.116	0.137	0.122	0.135	0.161	0.155	0.138	11.76
25)	Phenanthrene	1.190	1.111	1.297	1.141	1.165	1.300	1.195	1.200	6.09
26)	Anthracene	1.026	0.971	1.147	1.033	1.075	1.215	1.112	1.083	7.60
27) SURR	Fluoranthene-d10	1.037	0.955	1.116	0.956	1.025	1.087	1.000	1.025	5.98
28)	Fluoranthene	1.341	1.243	1.452	1.272	1.364	1.447	1.316	1.348	5.95
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.945	2.005	2.131	1.910	1.870	1.992	1.837	1.956	5.04
31) S	Terphenyl-d14	0.962	0.965	1.028	0.924	0.915	0.987	0.926	0.958	4.23
32)	Benzo(a)anthra...	1.389	1.315	1.437	1.304	1.347	1.528	1.415	1.391	5.63
33)	Chrysene	1.486	1.509	1.610	1.507	1.462	1.616	1.448	1.520	4.44
34)	Bis(2-ethylhex...	1.196	1.100	1.044	0.865	0.946	0.912	0.870	0.990	12.74
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN031025.M

36)	Indeno(1,2,3-c...	1.160	1.316	1.546	1.404	1.417	1.693	1.571	1.444	12.27
37)	Benzo(b)fluora...	1.311	1.360	1.547	1.402	1.477	1.595	1.498	1.456	7.04
38)	Benzo(k)fluora...	1.504	1.397	1.620	1.481	1.521	1.635	1.534	1.527	5.34
39) C	Benzo(a)pyrene	1.090	1.152	1.303	1.195	1.223	1.350	1.268	1.226	7.29
40)	Dibenzo(a,h)an...	0.893	0.981	1.163	1.126	1.102	1.351	1.252	1.124	13.76
41)	Benzo(g,h,i)pe...	1.138	1.213	1.382	1.250	1.233	1.449	1.334	1.286	8.36

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/27/2025 09:49

Lab File ID: BN036729.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.536		-9.9	20.0
Fluoranthene-d10	1.025	1.110		8.3	20.0
2-Fluorophenol	0.932	0.879		-5.7	20.0
Phenol-d6	1.152	1.073		-6.9	20.0
Nitrobenzene-d5	0.435	0.371		-14.7	20.0
2-Fluorobiphenyl	2.327	1.998		-14.1	20.0
2,4,6-Tribromophenol	0.182	0.167		-8.2	20.0
Terphenyl-d14	0.958	0.820		-14.4	20.0
1,4-Dioxane	0.444	0.426		-4.1	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/27/2025 14:02

Lab File ID: BN036736.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.530		-10.9	50.0
Fluoranthene-d10	1.025	1.022		-0.3	50.0
2-Fluorophenol	0.932	0.868		-6.9	50.0
Phenol-d6	1.152	1.008		-12.5	50.0
Nitrobenzene-d5	0.435	0.361		-17.0	50.0
2-Fluorobiphenyl	2.327	2.004		-13.9	50.0
2,4,6-Tribromophenol	0.182	0.174		-4.4	50.0
Terphenyl-d14	0.958	0.810		-15.4	50.0
1,4-Dioxane	0.444	0.491		10.6	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/27/2025 15:38

Lab File ID: BN036738.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.535		-10.1	20.0
Fluoranthene-d10	1.025	1.046		2.0	20.0
2-Fluorophenol	0.932	0.850		-8.8	20.0
Phenol-d6	1.152	1.009		-12.4	20.0
Nitrobenzene-d5	0.435	0.358		-17.7	20.0
2-Fluorobiphenyl	2.327	2.012		-13.5	20.0
2,4,6-Tribromophenol	0.182	0.176		-3.3	20.0
Terphenyl-d14	0.958	0.790		-17.5	20.0
1,4-Dioxane	0.444	0.473		6.5	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 01:52

Lab File ID: BN036755.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.516		-13.3	50.0
Fluoranthene-d10	1.025	1.003		-2.1	50.0
2-Fluorophenol	0.932	0.839		-10.0	50.0
Phenol-d6	1.152	1.005		-12.8	50.0
Nitrobenzene-d5	0.435	0.357		-17.9	50.0
2-Fluorobiphenyl	2.327	1.853		-20.4	50.0
2,4,6-Tribromophenol	0.182	0.170		-6.6	50.0
Terphenyl-d14	0.958	0.759		-20.8	50.0
1,4-Dioxane	0.444	0.464		4.5	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 03:46

Lab File ID: BN036757.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.509		-14.5	20.0
Fluoranthene-d10	1.025	1.053		2.7	20.0
2-Fluorophenol	0.932	0.782		-16.1	20.0
Phenol-d6	1.152	0.986		-14.4	20.0
Nitrobenzene-d5	0.435	0.370		-14.9	20.0
2-Fluorobiphenyl	2.327	2.013		-13.5	20.0
2,4,6-Tribromophenol	0.182	0.184		1.1	20.0
Terphenyl-d14	0.958	0.749		-21.8	20.0
1,4-Dioxane	0.444	0.442		-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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/28/2025 13:58

Lab File ID: BN036771.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.540		-9.2	50.0
Fluoranthene-d10	1.025	1.012		-1.3	50.0
2-Fluorophenol	0.932	0.846		-9.2	50.0
Phenol-d6	1.152	1.010		-12.3	50.0
Nitrobenzene-d5	0.435	0.354		-18.6	50.0
2-Fluorobiphenyl	2.327	2.021		-13.1	50.0
2,4,6-Tribromophenol	0.182	0.177		-2.7	50.0
Terphenyl-d14	0.958	0.816		-14.8	50.0
1,4-Dioxane	0.444	0.460		3.6	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/29/2025 02:44

Lab File ID: BN036791.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.526		-11.6	20.0
Fluoranthene-d10	1.025	1.032		0.7	20.0
2-Fluorophenol	0.932	0.833		-10.6	20.0
Phenol-d6	1.152	1.007		-12.6	20.0
Nitrobenzene-d5	0.435	0.376		-13.6	20.0
2-Fluorobiphenyl	2.327	2.041		-12.3	20.0
2,4,6-Tribromophenol	0.182	0.178		-2.2	20.0
Terphenyl-d14	0.958	0.782		-18.4	20.0
1,4-Dioxane	0.444	0.453		2.0	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/29/2025 12:21

Lab File ID: BN036807.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.526		-11.6	50.0
Fluoranthene-d10	1.025	0.985		-3.9	50.0
2-Fluorophenol	0.932	0.835		-10.4	50.0
Phenol-d6	1.152	0.978		-15.1	50.0
Nitrobenzene-d5	0.435	0.364		-16.3	50.0
2-Fluorobiphenyl	2.327	1.915		-17.7	50.0
2,4,6-Tribromophenol	0.182	0.169		-7.1	50.0
Terphenyl-d14	0.958	0.875		-8.7	50.0
1,4-Dioxane	0.444	0.456		2.7	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/31/2025 10:39

Lab File ID: BN036809.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.537		-9.7	20.0
Fluoranthene-d10	1.025	0.990		-3.4	20.0
2-Fluorophenol	0.932	0.818		-12.2	20.0
Phenol-d6	1.152	0.953		-17.3	20.0
Nitrobenzene-d5	0.435	0.363		-16.6	20.0
2-Fluorobiphenyl	2.327	1.979		-15.0	20.0
2,4,6-Tribromophenol	0.182	0.161		-11.5	20.0
Terphenyl-d14	0.958	0.798		-16.7	20.0
1,4-Dioxane	0.444	0.454		2.3	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.: Q1621 SAS No.: Q1621 SDG No.: Q1621

Instrument ID: BNA_N Calibration Date/Time: 03/31/2025 15:08

Lab File ID: BN036815.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.543		-8.7	50.0
Fluoranthene-d10	1.025	0.994		-3.0	50.0
2-Fluorophenol	0.932	0.839		-10.0	50.0
Phenol-d6	1.152	0.976		-15.3	50.0
Nitrobenzene-d5	0.435	0.348		-20.0	50.0
2-Fluorobiphenyl	2.327	1.957		-15.9	50.0
2,4,6-Tribromophenol	0.182	0.159		-12.6	50.0
Terphenyl-d14	0.958	0.842		-12.1	50.0
1,4-Dioxane	0.444	0.447		0.7	50.0

All other compounds must meet a minimum RRF of 0.010.