

LAB CHRONICLE

OrderID: Q2263	OrderDate: 6/6/2025 12:42:00 PM
Client: AECOM Technical Services, Inc.	Project: NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Contact: Eleanor Vivadou	Location: D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2263-01	RW9-MW01D3-20250606	Water	SVOC-SIMGroup1	8270-Modified	06/06/25	06/10/25	06/14/25	06/06/25
Q2263-02	RW9-MW01S-20250606	Water	SVOC-SIMGroup1	8270-Modified	06/06/25	06/10/25	06/14/25	06/06/25



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

Hit Summary Sheet SW-846

SDG No.: Q2263
Client: AECOM Technical Services, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW9-MW01S-20250606								
Q2263-02	RW9-MW01S-20250606	WATER 1,4-Dioxane	0.410		0.07	0.21	0.21	ug/L
Total Svoc :				0.41				
Total Concentration:				0.41				



SAMPLE DATA

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	06/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	06/06/25
Client Sample ID:	RW9-MW01D3-20250606		SDG No.:	Q2263
Lab Sample ID:	Q2263-01		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
BN037242.D	1	06/10/25 12:20	06/14/25 01:08	PB168391

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	0.34		30 - 150		86%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	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	958	7.582				
1146-65-2	Naphthalene-d8	2260	10.361				
15067-26-2	Acenaphthene-d10	1260	14.224				
1517-22-2	Phenanthrene-d10	2160	16.984				
1719-03-5	Chrysene-d12	1830	21.171				
1520-96-3	Perylene-d12	1840	23.36				

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:	AECOM Technical Services, Inc.		Date Collected:	06/06/25	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	06/06/25	
Client Sample ID:	RW9-MW01S-20250606		SDG No.:	Q2263	
Lab Sample ID:	Q2263-02		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	970	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
BN037243.D	1	06/10/25 12:20	06/14/25 01:44	PB168391

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.41		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		102%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.27		55 - 111		68%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	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	932	7.582				
1146-65-2	Naphthalene-d8	2360	10.362				
15067-26-2	Acenaphthene-d10	1260	14.224				
1517-22-2	Phenanthrene-d10	2210	16.984				
1719-03-5	Chrysene-d12	1780	21.171				
1520-96-3	Perylene-d12	1750	23.363				

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.: Q2263

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168391BL	PB168391BL	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.41	103		30	150
		Nitrobenzene-d5	0.4	0.26	64		55	111
		2-Fluorobiphenyl	0.4	0.28	69		53	106
		Terphenyl-d14	0.4	0.35	88		58	132
PB168391BS	PB168391BS	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.34	85		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.37	93		58	132
PB168391BSD	PB168391BSD	2-Methylnaphthalene-d10	0.4	0.37	91		30	150
		Fluoranthene-d10	0.4	0.34	85		30	150
		Nitrobenzene-d5	0.4	0.35	86		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.37	92		58	132
Q2263-01	RW9-MW01D3-20250606	2-Methylnaphthalene-d10	0.4	0.34	86		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.46	115		58	132
Q2263-02	RW9-MW01S-20250606	2-Methylnaphthalene-d10	0.4	0.33	81		30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.27	68		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.50	125		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2263

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified **DataFile:** BN037236.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168391BS	1,4-Dioxane	0.4	0.39	ug/L	98				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2263

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified DataFile: BN037237.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB168391BSD	1,4-Dioxane	0.4	0.42	ug/L	105	7			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168391BL

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM Case No.: Q2263

SAS No.: Q2263 SDG NO.: Q2263

Lab File ID: BN037233.D

Lab Sample ID: PB168391BL

Instrument ID: BNA_N

Date Extracted: 06/10/2025

Matrix: (soil/water) Water

Date Analyzed: 06/13/2025

Level: (low/med) LOW

Time Analyzed: 19:00

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168391BS	PB168391BS	BN037236.D	06/13/2025
PB168391BSD	PB168391BSD	BN037237.D	06/13/2025
RW9-MW01D3-20250606	Q2263-01	BN037242.D	06/14/2025
RW9-MW01S-20250606	Q2263-02	BN037243.D	06/14/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q2263

SDG NO.: Q2263

Lab File ID: BN037223.D

DFTPP Injection Date: 06/13/2025

Instrument ID: BNA_N

DFTPP Injection Time: 11:34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	80.2
68	Less than 2.0% of mass 69	0.7 (1.1) 1
69	Mass 69 relative abundance	64.6
70	Less than 2.0% of mass 69	0.3 (0.4) 1
127	10.0 - 80.0% of mass 198	56.8
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	26
365	Greater than 1% of mass 198	5.3
441	Present, but less than mass 443	11.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.6 (20.1) 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	BN037225.D	06/13/2025	13:33
SSTDICC0.2	SSTDICC0.2	BN037226.D	06/13/2025	14:10
SSTDICCC0.4	SSTDICCC0.4	BN037227.D	06/13/2025	14:46
SSTDICC0.8	SSTDICC0.8	BN037228.D	06/13/2025	15:22
SSTDICC1.6	SSTDICC1.6	BN037229.D	06/13/2025	15:59
SSTDICC3.2	SSTDICC3.2	BN037230.D	06/13/2025	16:35
SSTDICC5.0	SSTDICC5.0	BN037231.D	06/13/2025	17:11
PB168391BL	PB168391BL	BN037233.D	06/13/2025	19:00
PB168391BS	PB168391BS	BN037236.D	06/13/2025	20:49
PB168391BSD	PB168391BSD	BN037237.D	06/13/2025	21:25
SSTDCCC0.4EC	SSTDCCC0.4	BN037238.D	06/13/2025	22:01

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q2263 SDG NO.: Q2263

Lab File ID: BN037239.D

DFTPP Injection Date: 06/13/2025

Instrument ID: BNA_N

DFTPP Injection Time: 23:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	87.1
68	Less than 2.0% of mass 69	0.7 (1) 1
69	Mass 69 relative abundance	65.4
70	Less than 2.0% of mass 69	0.4 (0.6) 1
127	10.0 - 80.0% of mass 198	55.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	23.4
365	Greater than 1% of mass 198	4.7
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	10.3 (21.5) 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	BN037240.D	06/13/2025	23:55
RW9-MW01D3-20250606	Q2263-01	BN037242.D	06/14/2025	01:08
RW9-MW01S-20250606	Q2263-02	BN037243.D	06/14/2025	01:44
SSTDCCC0.4EC	SSTDCCC0.4	BN037257.D	06/14/2025	10:10

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2263 SAS No.: Q2263 SDG NO.: Q2263

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 06/13/2025

Lab File ID: BN037227.D Time Analyzed: 14:46

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	1287	7.575	3210	10.36	1738	14.22
UPPER LIMIT	2574	8.075	6420	10.861	3476	14.724
LOWER LIMIT	643.5	7.075	1605	9.861	869	13.724
EPA SAMPLE NO.						
01 PB168391BS	1477	7.58	3518	10.35	1759	14.22
02 PB168391BSD	1340	7.58	3197	10.35	1517	14.22
03 PB168391BL	1036	7.58	2301	10.37	1224	14.23

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.: Q2263 SAS No.: Q2263 SDG NO.: Q2263

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 06/13/2025

Lab File ID: BN037227.D Time Analyzed: 14:46

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	3195	16.971	2284	21.179	2150	23.365
UPPER LIMIT	6390	17.471	4568	21.679	4300	23.865
LOWER LIMIT	1597.5	16.471	1142	20.679	1075	22.865
EPA SAMPLE NO.						
01 PB168391BS	2958	16.97	2090	21.17	1978	23.36
02 PB168391BSD	2544	16.97	1864	21.17	1823	23.36
03 PB168391BL	1841	17.00	1578	21.18	1599	23.37

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.: Q2263 SAS No.: Q2263 SDG NO.: Q2263

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 06/13/2025

Lab File ID: BN037240.D Time Analyzed: 23:55

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	1101	7.582	2581	10.35	1319	14.22
UPPER LIMIT	2202	8.082	5162	10.851	2638	14.724
LOWER LIMIT	550.5	7.082	1290.5	9.851	659.5	13.724
EPA SAMPLE NO.						
01 RW9-MW01D3-20250606	958	7.58	2256	10.36	1255	14.22
02 RW9-MW01S-20250606	932	7.58	2363	10.36	1257	14.22

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.: Q2263 SAS No.: Q2263 SDG NO.: Q2263

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 06/13/2025

Lab File ID: BN037240.D Time Analyzed: 23:55

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	2396	16.971	1787	21.171	1797	23.36
UPPER LIMIT	4792	17.471	3574	21.671	3594	23.86
LOWER LIMIT	1198	16.471	893.5	20.671	898.5	22.86
EPA SAMPLE NO.						
01 RW9-MW01D3-20250606	2156	16.98	1827	21.17	1841	23.36
02 RW9-MW01S-20250606	2205	16.98	1783	21.17	1754	23.36

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	PB168391BL		SDG No.:	Q2263
Lab Sample ID:	PB168391BL		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
BN037233.D	1	06/10/25 12:20	06/13/25 19:00	PB168391

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	0.41		30 - 150		103%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.26		55 - 111		64%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		69%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.35		58 - 132		88%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1040	7.582				
1146-65-2	Naphthalene-d8	2300	10.372				
15067-26-2	Acenaphthene-d10	1220	14.234				
1517-22-2	Phenanthrene-d10	1840	16.996				
1719-03-5	Chrysene-d12	1580	21.18				
1520-96-3	Perylene-d12	1600	23.368				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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J = Estimated Value

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N = Presumptive Evidence of a Compound

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D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	PB168391BS		SDG No.:	Q2263
Lab Sample ID:	PB168391BS		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
BN037236.D	1	06/10/25 12:20	06/13/25 20:49	PB168391

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.39		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		85%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1480	7.575				
1146-65-2	Naphthalene-d8	3520	10.351				
15067-26-2	Acenaphthene-d10	1760	14.224				
1517-22-2	Phenanthrene-d10	2960	16.971				
1719-03-5	Chrysene-d12	2090	21.171				
1520-96-3	Perylene-d12	1980	23.363				

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:	AECOM Technical Services, Inc.		Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	
Client Sample ID:	PB168391BSD		SDG No.:	Q2263
Lab Sample ID:	PB168391BSD		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
BN037237.D	1	06/10/25 12:20	06/13/25 21:25	PB168391

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.42		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		91%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		85%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	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	1340	7.575				
1146-65-2	Naphthalene-d8	3200	10.351				
15067-26-2	Acenaphthene-d10	1520	14.224				
1517-22-2	Phenanthrene-d10	2540	16.971				
1719-03-5	Chrysene-d12	1860	21.171				
1520-96-3	Perylene-d12	1820	23.363				

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* = 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-BN061325.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Jun 13 18:43:34 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037225.D 0.2 =BN037226.D 0.4 =BN037227.D 0.8 =BN037228.D 1.6 =BN037229.D 3.2 =BN037230.D 5.0 =BN037231.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	0.683	0.525	0.535	0.549	0.515	0.486	0.549	12.56	
3)	n-Nitrosodimet...	1.357	1.277	1.208	1.295	1.232	1.134	1.250	6.18	
4) S	2-Fluorophenol	1.043	1.026	0.942	0.907	0.996	0.990	0.972	0.982	4.80
5) S	Phenol-d6	0.875	0.937	0.963	0.986	1.148	1.166	1.173	1.035	11.94
6)	bis(2-Chloroet...	0.768	0.709	0.870	0.955	1.086	1.064	1.040	0.927	16.08
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.366	0.304	0.384	0.377	0.440	0.442	0.453	0.395	13.53
9)	Naphthalene	1.186	1.153	1.133	1.109	1.208	1.161	1.159	1.158	2.83
10)	Hexachlorobuta...	0.299	0.290	0.302	0.271	0.285	0.267	0.258	0.282	5.91
11) SURR	2-Methylnaphth...	0.496	0.504	0.557	0.520	0.576	0.552	0.553	0.537	5.64
12)	2-Methylnaphth...	0.631	0.634	0.704	0.699	0.769	0.746	0.745	0.704	7.77
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.126	0.146	0.171	0.171	0.188	0.183	0.178	0.166	13.42
15) S	2-Fluorobiphenyl	1.566	1.530	1.699	1.658	1.822	1.777	1.715	1.681	6.31
16)	Acenaphthylene	1.907	1.870	1.870	1.915	2.077	2.062	2.021	1.960	4.61
17)	Acenaphthene	1.242	1.209	1.240	1.230	1.341	1.318	1.277	1.265	3.87
18)	Fluorene	1.544	1.509	1.593	1.610	1.757	1.714	1.649	1.625	5.46
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.074	0.066	0.086	0.100	0.110	0.116	0.092		21.86
21)	4-Bromophenyl-...	0.248	0.248	0.244	0.256	0.278	0.276	0.273	0.261	5.65
22)	Hexachlorobenzene	0.342	0.318	0.311	0.284	0.297	0.284	0.279	0.302	7.65
23)	Atrazine	0.223	0.229	0.222	0.228	0.241	0.241	0.244	0.232	3.84
24)	Pentachlorophenol	0.139	0.124	0.137	0.154	0.162	0.171	0.148		11.86
25)	Phenanthrene	1.253	1.225	1.186	1.238	1.324	1.328	1.327	1.269	4.54
26)	Anthracene	1.094	1.079	1.080	1.138	1.221	1.257	1.261	1.161	7.13
27) SURR	Fluoranthene-d10	1.015	1.073	1.053	1.017	1.053	1.043	1.073	1.046	2.27
28)	Fluoranthene	1.470	1.508	1.412	1.449	1.509	1.510	1.537	1.485	2.94
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.850	1.740	1.962	1.849	2.016	1.892	1.854	1.881	4.74
31) S	Terphenyl-d14	0.815	0.845	0.946	0.871	0.990	0.939	0.924	0.904	6.89
32)	Benzo(a)anthra...	1.175	1.204	1.225	1.332	1.512	1.507	1.499	1.351	11.36
33)	Chrysene	1.783	1.722	1.695	1.617	1.711	1.633	1.616	1.683	3.73
34)	Bis(2-ethylhex...	1.104	1.024	1.000	1.006	0.942	0.960	1.006		5.65
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN061325.M

36)	Indeno(1,2,3-c...	1.506	1.503	1.507	1.486	1.718	1.757	1.813	1.613	8.87
37)	Benzo(b)fluora...	1.309	1.288	1.376	1.456	1.618	1.576	1.620	1.463	9.81
38)	Benzo(k)fluora...	1.835	1.503	1.628	1.667	1.757	1.704	1.728	1.689	6.24
39) C	Benzo(a)pyrene	1.271	1.208	1.234	1.298	1.407	1.382	1.413	1.316	6.42
40)	Dibenzo(a,h)an...	1.106	1.102	1.049	1.118	1.362	1.425	1.427	1.227	13.76
41)	Benzo(g,h,i)pe...	1.504	1.460	1.441	1.386	1.557	1.566	1.557	1.496	4.63

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO15
 Lab Code: CHEM Case No.: Q2263 SAS No.: Q2263 SDG No.: Q2263
 Instrument ID: BNA_N Calibration Date/Time: 06/13/2025 22:01
 Lab File ID: BN037238.D Init. Calib. Date(s): 06/13/2025 06/13/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 13:33 17:11
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.537	0.571		6.3	50.0
Fluoranthene-d10	1.047	1.092		4.4	50.0
2-Fluorophenol	0.982	0.974		-0.8	50.0
Phenol-d6	1.035	0.987		-4.6	50.0
Nitrobenzene-d5	0.395	0.392		-0.8	50.0
2-Fluorobiphenyl	1.681	1.737		3.3	50.0
2,4,6-Tribromophenol	0.166	0.165		-0.6	50.0
Terphenyl-d14	0.904	0.885		-2.1	50.0
1,4-Dioxane	0.549	0.579		5.5	50.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM Case No.: Q2263 SAS No.: Q2263 SDG No.: Q2263

Instrument ID: BNA_N Calibration Date/Time: 06/13/2025 23:55

Lab File ID: BN037240.D Init. Calib. Date(s): 06/13/2025 06/13/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 13:33 17:11

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.537	0.559		4.1	20.0
Fluoranthene-d10	1.047	1.058		1.1	20.0
2-Fluorophenol	0.982	0.884		-10.0	20.0
Phenol-d6	1.035	0.970		-6.3	20.0
Nitrobenzene-d5	0.395	0.404		2.3	20.0
2-Fluorobiphenyl	1.681	1.759		4.6	20.0
2,4,6-Tribromophenol	0.166	0.171		3.0	20.0
Terphenyl-d14	0.904	0.889		-1.7	20.0
1,4-Dioxane	0.549	0.484		-11.8	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM Case No.: Q2263 SAS No.: Q2263 SDG No.: Q2263

Instrument ID: BNA_N Calibration Date/Time: 06/14/2025 10:10

Lab File ID: BN037257.D Init. Calib. Date(s): 06/13/2025 06/13/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 13:33 17:11

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.537	0.557		3.7	50.0
Fluoranthene-d10	1.047	1.058		1.1	50.0
2-Fluorophenol	0.982	0.966		-1.6	50.0
Phenol-d6	1.035	1.004		-3.0	50.0
Nitrobenzene-d5	0.395	0.401		1.5	50.0
2-Fluorobiphenyl	1.681	1.713		1.9	50.0
2,4,6-Tribromophenol	0.166	0.169		1.8	50.0
Terphenyl-d14	0.904	0.905		0.1	50.0
1,4-Dioxane	0.549	0.503		-8.4	50.0

All other compounds must meet a minimum RRF of 0.010.