

LAB CHRONICLE

OrderID:	Q1557	OrderDate:	3/12/2025 4:47:00 PM
Client:	AECOM Technical Services, Inc.	Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Contact:	Eleanor Vivadou	Location:	I41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1557-01	BPOW6-7-20250312	Water	SVOC-SIMGroup1	8270-Modified	03/12/25	03/13/25	03/14/25	03/12/25
Q1557-02	BPOW6-8-20250312	Water	SVOC-SIMGroup1	8270-Modified	03/12/25	03/13/25	03/14/25	03/12/25
Q1557-03	BPOW6-9-20250312	Water	SVOC-SIMGroup1	8270-Modified	03/12/25	03/13/25	03/14/25	03/12/25
Q1557-06	BPOW6-10-20250312	Water	SVOC-SIMGroup1	8270-Modified	03/12/25	03/13/25	03/15/25	03/12/25
Q1557-07	BPOW6-11-20250312	Water	SVOC-SIMGroup1	8270-Modified	03/12/25	03/13/25	03/15/25	03/12/25
Q1557-08	DUP04-20250312	Water	SVOC-SIMGroup1	8270-Modified	03/12/25	03/13/25	03/15/25	03/12/25



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

Hit Summary Sheet
SW-846

SDG No.: Q1557
Client: AECOM Technical Services, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :				0.000					
Total Svoc :					0.00				
Total Concentration:					0.00				



SAMPLE DATA

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	03/12/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25
Client Sample ID:	BPOW6-7-20250312		SDG No.:	Q1557
Lab Sample ID:	Q1557-01		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
BN036609.D	1	03/13/25 12:40	03/14/25 16:11	PB167128

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		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		121%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2350	7.717				
1146-65-2	Naphthalene-d8	5640	10.509				
15067-26-2	Acenaphthene-d10	3370	14.355				
1517-22-2	Phenanthrene-d10	6640	17.099				
1719-03-5	Chrysene-d12	4660	21.295				
1520-96-3	Perylene-d12	3940	23.545				

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:	03/12/25	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25	
Client Sample ID:	BPOW6-8-20250312		SDG No.:	Q1557	
Lab Sample ID:	Q1557-02		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	990	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036617.D	1	03/13/25 12:40	03/14/25 21:43	PB167128

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		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		86%	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	1920	7.717				
1146-65-2	Naphthalene-d8	4720	10.509				
15067-26-2	Acenaphthene-d10	2790	14.356				
1517-22-2	Phenanthrene-d10	5750	17.099				
1719-03-5	Chrysene-d12	4290	21.295				
1520-96-3	Perylene-d12	3620	23.546				

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:	03/12/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25
Client Sample ID:	BPOW6-9-20250312		SDG No.:	Q1557
Lab Sample ID:	Q1557-03		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	980	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
BN036610.D	1	03/13/25 12:40	03/14/25 16:48	PB167128

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	UM	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.67	*	58 - 132		167%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2140	7.717				
1146-65-2	Naphthalene-d8	4880	10.509				
15067-26-2	Acenaphthene-d10	3050	14.356				
1517-22-2	Phenanthrene-d10	5880	17.111				
1719-03-5	Chrysene-d12	4020	21.295				
1520-96-3	Perylene-d12	3270	23.549				

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:	03/12/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25
Client Sample ID:	BPOW6-10-20250312		SDG No.:	Q1557
Lab Sample ID:	Q1557-06		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
BN036622.D	1	03/13/25 12:40	03/15/25 00:42	PB167128

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	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.61	*	58 - 132		151%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1780		7.724			
1146-65-2	Naphthalene-d8	4070		10.509			
15067-26-2	Acenaphthene-d10	2520		14.366			
1517-22-2	Phenanthrene-d10	5070		17.111			
1719-03-5	Chrysene-d12	3700		21.295			
1520-96-3	Perylene-d12	2910		23.549			

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:	03/12/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25
Client Sample ID:	BPOW6-11-20250312		SDG No.:	Q1557
Lab Sample ID:	Q1557-07		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
BN036623.D	1	03/13/25 12:40	03/15/25 01:17	PB167128

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		77%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		72%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		94%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.59	*	58 - 132		147%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.717				
1146-65-2	Naphthalene-d8	4920	10.509				
15067-26-2	Acenaphthene-d10	2840	14.356				
1517-22-2	Phenanthrene-d10	5850	17.099				
1719-03-5	Chrysene-d12	4170	21.295				
1520-96-3	Perylene-d12	3340	23.543				

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:	03/12/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25
Client Sample ID:	DUP04-20250312		SDG No.:	Q1557
Lab Sample ID:	Q1557-08		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	990	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036624.D	1	03/13/25 12:40	03/15/25 01:53	PB167128

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		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		113%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2160	7.717				
1146-65-2	Naphthalene-d8	5210	10.509				
15067-26-2	Acenaphthene-d10	2920	14.356				
1517-22-2	Phenanthrene-d10	6240	17.099				
1719-03-5	Chrysene-d12	4590	21.286				
1520-96-3	Perylene-d12	3900	23.543				

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.: Q1557

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB167128BL	PB167128BL	2-Methylnaphthalene-d10	0.4	0.30	74		30	150
		Fluoranthene-d10	0.4	0.36	89		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.25	62		53	106
		Terphenyl-d14	0.4	0.37	92		58	132
PB167128BS	PB167128BS	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.32	81		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.42	106		58	132
Q1557-01	BPOW6-7-20250312	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.48	121		58	132
Q1557-02	BPOW6-8-20250312	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.30	74		55	111
		2-Fluorobiphenyl	0.4	0.34	86		53	106
		Terphenyl-d14	0.4	0.49	122		58	132
Q1557-03	BPOW6-9-20250312	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.67	167	*	58	132
Q1557-04MS	BPOW6-9-20250312MS	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.43	107		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.65	163	*	58	132
Q1557-05MSD	BPOW6-9-20250312MSD	2-Methylnaphthalene-d10	0.4	0.39	96		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.41	102		53	106
		Terphenyl-d14	0.4	0.69	172	*	58	132
Q1557-06	BPOW6-10-20250312	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.61	151	*	58	132
Q1557-07	BPOW6-11-20250312	2-Methylnaphthalene-d10	0.4	0.31	77		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.29	72		55	111
		2-Fluorobiphenyl	0.4	0.37	94		53	106
		Terphenyl-d14	0.4	0.59	147	*	58	132
Q1557-08	DUP04-20250312	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.31	79		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.46	114		58	132



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

Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: Q1557
Client: AECOM Technical Services, Inc.
Analytical Method: SW8270-Modified

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID: Q1557-04MS		Client Sample ID: BPOW6-9-20250312MS						DataFile: BN036611.D			
1,4-Dioxane	0.4	0	0.22	ug/L	55	*			70	130	



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

Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: Q1557
Client: AECOM Technical Services, Inc.
Analytical Method: SW8270-Modified

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID: Q1557-05MSD		Client Sample ID: BPOW6-9-20250312MSD						DataFile: BN036612.D			
1,4-Dioxane	0.4	0	0.23	ug/L	58	*	5		70	130	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1557

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036630.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB167128BS	1,4-Dioxane	0.4	0.36	ug/L	90				70	130	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167128BL

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM Case No.: Q1557

SAS No.: Q1557 SDG NO.: Q1557

Lab File ID: BN036634.D

Lab Sample ID: PB167128BL

Instrument ID: BNA_N

Date Extracted: 03/13/2025

Matrix: (soil/water) Water

Date Analyzed: 03/15/2025

Level: (low/med) LOW

Time Analyzed: 09:11

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167128BS	PB167128BS	BN036630.D	03/15/2025
BPOW6-7-20250312	Q1557-01	BN036609.D	03/14/2025
BPOW6-9-20250312	Q1557-03	BN036610.D	03/14/2025
BPOW6-9-20250312MS	Q1557-04MS	BN036611.D	03/14/2025
BPOW6-8-20250312	Q1557-02	BN036617.D	03/14/2025
BPOW6-9-20250312MSD	Q1557-05MSD	BN036612.D	03/14/2025
BPOW6-10-20250312	Q1557-06	BN036622.D	03/15/2025
BPOW6-11-20250312	Q1557-07	BN036623.D	03/15/2025
DUP04-20250312	Q1557-08	BN036624.D	03/15/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q1557

SDG NO.: Q1557

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
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: AECO15

Lab Code: CHEM

SAS No.: Q1557

SDG NO.: Q1557

Lab File ID: BN036600.D

DFTPP Injection Date: 03/14/2025

Instrument ID: BNA_N

DFTPP Injection Time: 09:30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	65.5
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	55.5
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	51.9
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	6.7
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	9.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11 (19.7) 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	BN036601.D	03/14/2025	10:09
BPOW6-7-20250312	Q1557-01	BN036609.D	03/14/2025	16:11
BPOW6-9-20250312	Q1557-03	BN036610.D	03/14/2025	16:48
BPOW6-9-20250312MS	Q1557-04MS	BN036611.D	03/14/2025	17:24
BPOW6-9-20250312MSD	Q1557-05MSD	BN036612.D	03/14/2025	18:00
SSTDCCC0.4EC	SSTDCCC0.4	BN036613.D	03/14/2025	18:36

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q1557

SDG NO.: Q1557

Lab File ID: BN036614.D

DFTPP Injection Date: 03/14/2025

Instrument ID: BNA_N

DFTPP Injection Time: 19:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	67.5
68	Less than 2.0% of mass 69	0.5 (0.9) 1
69	Mass 69 relative abundance	57.8
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	54.2
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	7.1
275	10.0 - 60.0% of mass 198	25.4
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
443	15.0 - 24.0% of mass 442	11 (18.6) 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
SSTDCCC0.4	SSTDCCC0.4	BN036615.D	03/14/2025	20:30
BPOW6-8-20250312	Q1557-02	BN036617.D	03/14/2025	21:43
BPOW6-10-20250312	Q1557-06	BN036622.D	03/15/2025	00:42
BPOW6-11-20250312	Q1557-07	BN036623.D	03/15/2025	01:17
DUP04-20250312	Q1557-08	BN036624.D	03/15/2025	01:53
PB167128BS	PB167128BS	BN036630.D	03/15/2025	05:28
SSTDCCC0.4EC	SSTDCCC0.4	BN036631.D	03/15/2025	06:04

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: Q1557

SDG NO.: Q1557

Lab File ID: BN036632.D

DFTPP Injection Date: 03/15/2025

Instrument ID: BNA_N

DFTPP Injection Time: 06:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	64.9
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	55.9
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	52.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	25.6
365	Greater than 1% of mass 198	4.2
441	Present, but less than mass 443	9.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.3 (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	BN036633.D	03/15/2025	08:35
PB167128BL	PB167128BL	BN036634.D	03/15/2025	09:11
SSTDCCC0.4EC	SSTDCCC0.4	BN036649.D	03/15/2025	18:12

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1557 SAS No.: Q1557 SDG NO.: Q1557

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/14/2025

Lab File ID: BN036601.D Time Analyzed: 10:09

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	2400	7.717	5723	10.51	3321	14.36
UPPER LIMIT	4800	8.217	11446	11.009	6642	14.855
LOWER LIMIT	1200	7.217	2861.5	10.009	1660.5	13.855
EPA SAMPLE NO.						
01 BPOW6-7-20250312	2352	7.72	5638	10.51	3373	14.36
02 BPOW6-9-20250312	2138	7.72	4877	10.51	3049	14.36
03 BPOW6-9-20250312MS	2246	7.72	5352	10.51	3243	14.36
04 BPOW6-9-20250312MSD	2513	7.72	5928	10.51	3540	14.36

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1557 SAS No.: Q1557 SDG NO.: Q1557

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/14/2025

Lab File ID: BN036601.D Time Analyzed: 10:09

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	6547	17.099	4700	21.295	3986	23.546
UPPER LIMIT	13094	17.599	9400	21.795	7972	24.046
LOWER LIMIT	3273.5	16.599	2350	20.795	1993	23.046
EPA SAMPLE NO.						
01 BPOW6-7-20250312	6644	17.10	4660	21.30	3938	23.55
02 BPOW6-9-20250312	5883	17.11	4022	21.30	3268	23.55
03 BPOW6-9-20250312MS	6301	17.10	4672	21.30	3903	23.54
04 BPOW6-9-20250312MSD	7131	17.10	5437	21.30	4602	23.55

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.: Q1557 SAS No.: Q1557 SDG NO.: Q1557

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/14/2025

Lab File ID: BN036615.D Time Analyzed: 20:30

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	2093	7.717	5069	10.51	2917	14.36
UPPER LIMIT	4186	8.217	10138	11.009	5834	14.855
LOWER LIMIT	1046.5	7.217	2534.5	10.009	1458.5	13.855
EPA SAMPLE NO.						
01 PB167128BS	2536	7.72	5899	10.51	2985	14.36
02 BPOW6-10-20250312	1781	7.72	4065	10.51	2518	14.37
03 BPOW6-11-20250312	1969	7.72	4915	10.51	2840	14.36
04 DUP04-20250312	2158	7.72	5209	10.51	2915	14.36
05 BPOW6-8-20250312	1924	7.72	4715	10.51	2788	14.36

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1557 SAS No.: Q1557 SDG NO.: Q1557

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/14/2025

Lab File ID: BN036615.D Time Analyzed: 20:30

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	6068	17.099	4261	21.295	3574	23.548
UPPER LIMIT	12136	17.599	8522	21.795	7148	24.048
LOWER LIMIT	3034	16.599	2130.5	20.795	1787	23.048
EPA SAMPLE NO.						
01 PB167128BS	5084	17.10	2789	21.30	2522	23.55
02 BPOW6-10-20250312	5072	17.11	3698	21.30	2905	23.55
03 BPOW6-11-20250312	5846	17.10	4173	21.30	3340	23.54
04 DUP04-20250312	6243	17.10	4594	21.29	3899	23.54
05 BPOW6-8-20250312	5747	17.10	4285	21.30	3617	23.55

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.: Q1557 SAS No.: Q1557 SDG NO.: Q1557

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/15/2025

Lab File ID: BN036633.D Time Analyzed: 08:35

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	2056	7.717	5167	10.51	3028	14.36
UPPER LIMIT	4112	8.217	10334	11.009	6056	14.856
LOWER LIMIT	1028	7.217	2583.5	10.009	1514	13.856
EPA SAMPLE NO.						
01 PB167128BL	2323	7.72	4860	10.52	2639	14.37

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.: Q1557 SAS No.: Q1557 SDG NO.: Q1557

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/15/2025

Lab File ID: BN036633.D Time Analyzed: 08:35

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	5852	17.099	3964	21.295	3322	23.543
UPPER LIMIT	11704	17.599	7928	21.795	6644	24.043
LOWER LIMIT	2926	16.599	1982	20.795	1661	23.043
EPA SAMPLE NO.						
PB167128BL	4474	17.12	2905	21.30	2592	23.56

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:	PB167128BL		SDG No.:	Q1557
Lab Sample ID:	PB167128BL		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
BN036634.D	1	03/13/25 12:40	03/15/25 09:11	PB167128

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	0.30		30 - 150		74%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		89%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.25		53 - 106		62%	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	2320	7.717				
1146-65-2	Naphthalene-d8	4860	10.519				
15067-26-2	Acenaphthene-d10	2640	14.366				
1517-22-2	Phenanthrene-d10	4470	17.124				
1719-03-5	Chrysene-d12	2910	21.304				
1520-96-3	Perylene-d12	2590	23.557				

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:	PB167128BS		SDG No.:	Q1557
Lab Sample ID:	PB167128BS		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
BN036630.D	1	03/13/25 12:40	03/15/25 05:28	PB167128

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.36		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		106%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2540	7.717				
1146-65-2	Naphthalene-d8	5900	10.509				
15067-26-2	Acenaphthene-d10	2990	14.356				
1517-22-2	Phenanthrene-d10	5080	17.099				
1719-03-5	Chrysene-d12	2790	21.295				
1520-96-3	Perylene-d12	2520	23.546				

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:	03/12/25	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25	
Client Sample ID:	BPOW6-9-20250312MS		SDG No.:	Q1557	
Lab Sample ID:	Q1557-04MS		Matrix:	Water	
Analytical Method:	SW8270ESIM		% Solid:	0	
Sample Wt/Vol:	990	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036611.D	1	03/13/25 12:40	03/14/25 17:24	PB167128

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		107%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.65	*	58 - 132		163%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2250	7.717				
1146-65-2	Naphthalene-d8	5350	10.509				
15067-26-2	Acenaphthene-d10	3240	14.356				
1517-22-2	Phenanthrene-d10	6300	17.099				
1719-03-5	Chrysene-d12	4670	21.295				
1520-96-3	Perylene-d12	3900	23.543				

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:	03/12/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	03/12/25
Client Sample ID:	BPOW6-9-20250312MSD		SDG No.:	Q1557
Lab Sample ID:	Q1557-05MSD		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	990	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036612.D	1	03/13/25 12:40	03/14/25 18:00	PB167128

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.23		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		102%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.69	*	58 - 132		172%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2510	7.717				
1146-65-2	Naphthalene-d8	5930	10.509				
15067-26-2	Acenaphthene-d10	3540	14.355				
1517-22-2	Phenanthrene-d10	7130	17.099				
1719-03-5	Chrysene-d12	5440	21.295				
1520-96-3	Perylene-d12	4600	23.545				

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) SURR	2-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: AECO15

Lab Code: CHEM Case No.: Q1557 SAS No.: Q1557 SDG No.: Q1557

Instrument ID: BNA_N Calibration Date/Time: 03/14/2025 10:09

Lab File ID: BN036601.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	0.593		-0.3	20.0
Fluoranthene-d10	1.025	1.108		8.1	20.0
2-Fluorophenol	0.932	0.929		-0.3	20.0
Phenol-d6	1.152	1.129		-2.0	20.0
Nitrobenzene-d5	0.435	0.423		-2.8	20.0
2-Fluorobiphenyl	2.327	2.416		3.8	20.0
2,4,6-Tribromophenol	0.182	0.184		1.1	20.0
Terphenyl-d14	0.958	0.974		1.7	20.0
1,4-Dioxane	0.444	0.525		18.2	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.: Q1557 SAS No.: Q1557 SDG No.: Q1557

Instrument ID: BNA_N Calibration Date/Time: 03/14/2025 18:36

Lab File ID: BN036613.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	0.591		-0.7	50.0
Fluoranthene-d10	1.025	1.135		10.7	50.0
2-Fluorophenol	0.932	0.942		1.1	50.0
Phenol-d6	1.152	1.125		-2.3	50.0
Nitrobenzene-d5	0.435	0.410		-5.7	50.0
2-Fluorobiphenyl	2.327	2.340		0.6	50.0
2,4,6-Tribromophenol	0.182	0.170		-6.6	50.0
Terphenyl-d14	0.958	0.995		3.9	50.0
1,4-Dioxane	0.444	0.493		11.0	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.: Q1557 SAS No.: Q1557 SDG No.: Q1557

Instrument ID: BNA_N Calibration Date/Time: 03/14/2025 20:30

Lab File ID: BN036615.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	0.605		1.7	20.0
Fluoranthene-d10	1.025	1.072		4.6	20.0
2-Fluorophenol	0.932	0.927		-0.5	20.0
Phenol-d6	1.152	1.120		-2.8	20.0
Nitrobenzene-d5	0.435	0.416		-4.4	20.0
2-Fluorobiphenyl	2.327	2.425		4.2	20.0
2,4,6-Tribromophenol	0.182	0.184		1.1	20.0
Terphenyl-d14	0.958	0.981		2.4	20.0
1,4-Dioxane	0.444	0.512		15.3	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.: Q1557 SAS No.: Q1557 SDG No.: Q1557

Instrument ID: BNA_N Calibration Date/Time: 03/15/2025 06:04

Lab File ID: BN036631.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	0.591		-0.7	50.0
Fluoranthene-d10	1.025	1.082		5.6	50.0
2-Fluorophenol	0.932	0.955		2.5	50.0
Phenol-d6	1.152	1.150		-0.2	50.0
Nitrobenzene-d5	0.435	0.411		-5.5	50.0
2-Fluorobiphenyl	2.327	2.352		1.1	50.0
2,4,6-Tribromophenol	0.182	0.181		-0.5	50.0
Terphenyl-d14	0.958	1.041		8.7	50.0
1,4-Dioxane	0.444	0.499		12.4	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.: Q1557 SAS No.: Q1557 SDG No.: Q1557

Instrument ID: BNA_N Calibration Date/Time: 03/15/2025 08:35

Lab File ID: BN036633.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	0.597		0.3	20.0
Fluoranthene-d10	1.025	1.103		7.6	20.0
2-Fluorophenol	0.932	0.969		4.0	20.0
Phenol-d6	1.152	1.163		1.0	20.0
Nitrobenzene-d5	0.435	0.413		-5.1	20.0
2-Fluorobiphenyl	2.327	2.306		-0.9	20.0
2,4,6-Tribromophenol	0.182	0.181		-0.5	20.0
Terphenyl-d14	0.958	1.011		5.5	20.0
1,4-Dioxane	0.444	0.508		14.4	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.: Q1557 SAS No.: Q1557 SDG No.: Q1557

Instrument ID: BNA_N Calibration Date/Time: 03/15/2025 18:12

Lab File ID: BN036649.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	0.607		2.0	50.0
Fluoranthene-d10	1.025	1.145		11.7	50.0
2-Fluorophenol	0.932	0.966		3.6	50.0
Phenol-d6	1.152	1.189		3.2	50.0
Nitrobenzene-d5	0.435	0.423		-2.8	50.0
2-Fluorobiphenyl	2.327	2.416		3.8	50.0
2,4,6-Tribromophenol	0.182	0.195		7.1	50.0
Terphenyl-d14	0.958	0.993		3.7	50.0
1,4-Dioxane	0.444	0.476		7.2	50.0

All other compounds must meet a minimum RRF of 0.010.