

LAB CHRONICLE

OrderID:	P5281	OrderDate:	12/13/2024 1:05:00 PM
Client:	AECOM Technical Services, Inc.	Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Contact:	Eleanor Vivadou	Location:	L61,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5281-01	RE114D1-20241212	Water	SVOC-SIMGroup1	8270-Modified	12/12/24	12/16/24	12/20/24	12/13/24
P5281-02	BPOW1-7-20241212	Water	SVOC-SIMGroup1	8270-Modified	12/12/24	12/16/24	12/23/24	12/13/24
P5281-03	BPOW1-8-20241212	Water	SVOC-SIMGroup1	8270-Modified	12/12/24	12/16/24	12/23/24	12/13/24
P5281-04	TT101D2-20241212	Water	SVOC-SIMGroup1	8270-Modified	12/12/24	12/16/24	12/23/24	12/13/24
P5281-04DL	TT101D2-20241212DL	Water	SVOC-SIMGroup1	8270-Modified	12/12/24	12/16/24	12/24/24	12/13/24
P5281-05	RE117D1-20241213	Water	SVOC-SIMGroup1	8270-Modified	12/13/24	12/16/24	12/24/24	12/13/24
P5281-06	RE115D1-20241213	Water	SVOC-SIMGroup1	8270-Modified	12/13/24	12/16/24	12/24/24	12/13/24
P5281-06DL	RE115D1-20241213D L	Water	SVOC-SIMGroup1	8270-Modified	12/13/24	12/16/24	12/26/24	12/13/24
P5281-07	TT189D2-20241213	Water	SVOC-SIMGroup1	8270-Modified	12/13/24	12/16/24	12/24/24	12/13/24
P5281-07DL	TT189D2-20241213DL	Water	SVOC-SIMGroup1	8270-Modified	12/13/24	12/16/24	12/26/24	12/13/24
P5281-08	FB02-20241213	Water	SVOC-SIMGroup1	8270-Modified	12/13/24	12/16/24	12/24/24	12/13/24

Hit Summary Sheet SW-846

SDG No.: P5281
Client: AECOM Technical Services, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	RE114D1-20241212								
P5281-01	RE114D1-20241212	WATER	1,4-Dioxane	4.200		0.07	0.2	0.2	ug/L
			Total Svoc :			4.20			
			Total Concentration:			4.20			
Client ID :	TT101D2-20241212								
P5281-04	TT101D2-20241212	WATER	1,4-Dioxane	5.800	E	0.07	0.2	0.2	ug/L
			Total Svoc :			5.80			
			Total Concentration:			5.80			
Client ID :	TT101D2-20241212DL								
P5281-04DL	TT101D2-20241212DL	WATER	1,4-Dioxane	6.100	D	0.14	0.4	0.4	ug/L
			Total Svoc :			6.10			
			Total Concentration:			6.10			
Client ID :	RE117D1-20241213								
P5281-05	RE117D1-20241213	WATER	1,4-Dioxane	0.520		0.07	0.2	0.2	ug/L
			Total Svoc :			0.52			
			Total Concentration:			0.52			
Client ID :	RE115D1-20241213								
P5281-06	RE115D1-20241213	WATER	1,4-Dioxane	6.000	E	0.07	0.2	0.2	ug/L
			Total Svoc :			6.00			
			Total Concentration:			6.00			
Client ID :	RE115D1-20241213DL								
P5281-06DL	RE115D1-20241213DL	WATER	1,4-Dioxane	7.200	D	0.14	0.4	0.4	ug/L
			Total Svoc :			7.20			
			Total Concentration:			7.20			
Client ID :	TT189D2-20241213								
P5281-07	TT189D2-20241213	WATER	1,4-Dioxane	6.700	E	0.08	0.23	0.23	ug/L
			Total Svoc :			6.70			
			Total Concentration:			6.70			
Client ID :	TT189D2-20241213DL								
P5281-07DL	TT189D2-20241213DL	WATER	1,4-Dioxane	8.100	D	0.15	0.45	0.45	ug/L
			Total Svoc :			8.10			
			Total Concentration:			8.10			



SAMPLE DATA

Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	12/12/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	RE114D1-20241212		SDG No.:	P5281
Lab Sample ID:	P5281-01		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
BN035742.D	1	12/16/24 11:30	12/20/24 15:18	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.20		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 - 150		67%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		82%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.25		53 - 106		63%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		107%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3070	7.272				
1146-65-2	Naphthalene-d8	8100	10.009				
15067-26-2	Acenaphthene-d10	5110	13.925				
1517-22-2	Phenanthrene-d10	9980	16.698				
1719-03-5	Chrysene-d12	8600	20.956				
1520-96-3	Perylene-d12	8490	23.041				

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:	12/12/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	BPOW1-7-20241212		SDG No.:	P5281
Lab Sample ID:	P5281-02		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
BN035791.D	1	12/16/24 11:30	12/23/24 19:15	PB165667

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	0.37		30 - 150		91%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		117%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		109%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	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	3490		7.264			
1146-65-2	Naphthalene-d8	8410		10.009			
15067-26-2	Acenaphthene-d10	4920		13.924			
1517-22-2	Phenanthrene-d10	9150		16.698			
1719-03-5	Chrysene-d12	6810		20.947			
1520-96-3	Perylene-d12	6990		23.032			

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Client:	AECOM Technical Services, Inc.		Date Collected:	12/12/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	BPOW1-8-20241212		SDG No.:	P5281
Lab Sample ID:	P5281-03		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	890	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035796.D	1	12/16/24 11:30	12/23/24 23:27	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22	U	0.080	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.50		30 - 150		124%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.45	*	55 - 111		112%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.64	*	58 - 132		160%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2750		7.264			
1146-65-2	Naphthalene-d8	6300		10.009			
15067-26-2	Acenaphthene-d10	3970		13.925			
1517-22-2	Phenanthrene-d10	7890		16.698			
1719-03-5	Chrysene-d12	6720		20.947			
1520-96-3	Perylene-d12	6520		23.032			

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Client:	AECOM Technical Services, Inc.		Date Collected:	12/12/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	TT101D2-20241212		SDG No.:	P5281
Lab Sample ID:	P5281-04		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	990	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN035778.D	1	12/16/24 11:30	12/23/24 11:32	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	5.80	E	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	0.40		30 - 150		100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		138%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3150		7.264			
1146-65-2	Naphthalene-d8	7760		10.009			
15067-26-2	Acenaphthene-d10	5020		13.924			
1517-22-2	Phenanthrene-d10	9830		16.698			
1719-03-5	Chrysene-d12	7580		20.947			
1520-96-3	Perylene-d12	7490		23.032			

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Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	12/12/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	TT101D2-20241212DL		SDG No.:	P5281
Lab Sample ID:	P5281-04DL		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
BN035813.D	2	12/16/24 11:30	12/24/24 10:10	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.10	D	0.14	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		88%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		111%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		136%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3010		7.264			
1146-65-2	Naphthalene-d8	6790		10.009			
15067-26-2	Acenaphthene-d10	4270		13.924			
1517-22-2	Phenanthrene-d10	8490		16.698			
1719-03-5	Chrysene-d12	6760		20.947			
1520-96-3	Perylene-d12	6810		23.032			

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Report of Analysis

Client:	AECOM Technical Services, Inc.		Date Collected:	12/13/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	RE117D1-20241213		SDG No.:	P5281
Lab Sample ID:	P5281-05		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
BN035797.D	1	12/16/24 11:30	12/24/24 00:03	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.52		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	0.46		30 - 150		115%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.46	*	55 - 111		116%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		101%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.62	*	58 - 132		155%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3510		7.264			
1146-65-2	Naphthalene-d8	8410		10.009			
15067-26-2	Acenaphthene-d10	4890		13.925			
1517-22-2	Phenanthrene-d10	9470		16.698			
1719-03-5	Chrysene-d12	7610		20.947			
1520-96-3	Perylene-d12	7540		23.032			

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Client:	AECOM Technical Services, Inc.		Date Collected:	12/13/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	RE115D1-20241213		SDG No.:	P5281
Lab Sample ID:	P5281-06		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
BN035798.D	1	12/16/24 11:30	12/24/24 00:38	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.00	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		91%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		115%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		108%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.62	*	58 - 132		154%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3250		7.264			
1146-65-2	Naphthalene-d8	7610		10.009			
15067-26-2	Acenaphthene-d10	4870		13.924			
1517-22-2	Phenanthrene-d10	9370		16.698			
1719-03-5	Chrysene-d12	7410		20.947			
1520-96-3	Perylene-d12	7620		23.029			

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Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	RE115D1-20241213DL		SDG No.:	P5281
Lab Sample ID:	P5281-06DL		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
BN035858.D	2	12/16/24 11:30	12/26/24 17:53	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.20	D	0.14	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.43		30 - 150		108%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.53		30 - 150		133%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.54	*	55 - 111		136%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43		53 - 106		106%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.75	*	58 - 132		187%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2930	7.257				
1146-65-2	Naphthalene-d8	6900	9.999				
15067-26-2	Acenaphthene-d10	4610	13.914				
1517-22-2	Phenanthrene-d10	10100	16.698				
1719-03-5	Chrysene-d12	7380	20.947				
1520-96-3	Perylene-d12	6930	23.026				

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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:	12/13/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	TT189D2-20241213		SDG No.:	P5281
Lab Sample ID:	P5281-07		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	880	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
BN035799.D	1	12/16/24 11:30	12/24/24 01:14	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.70	E	0.080	0.23	0.23	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	0.41		55 - 111		102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.58	*	58 - 132		146%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3280		7.264			
1146-65-2	Naphthalene-d8	7720		10.009			
15067-26-2	Acenaphthene-d10	4880		13.924			
1517-22-2	Phenanthrene-d10	10200		16.698			
1719-03-5	Chrysene-d12	8370		20.947			
1520-96-3	Perylene-d12	8290		23.029			

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:	12/13/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	TT189D2-20241213DL		SDG No.:	P5281
Lab Sample ID:	P5281-07DL		Matrix:	Water
Analytical Method:	SW8270ESIM		% Solid:	0
Sample Wt/Vol:	880	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
BN035856.D	2	12/16/24 11:30	12/26/24 16:42	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	8.10	D	0.15	0.45	0.45	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.43		30 - 150		107%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.55		30 - 150		138%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.56	*	55 - 111		140%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43		53 - 106		106%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.79	*	58 - 132		198%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3270	7.257				
1146-65-2	Naphthalene-d8	7530	9.999				
15067-26-2	Acenaphthene-d10	4930	13.914				
1517-22-2	Phenanthrene-d10	10700	16.686				
1719-03-5	Chrysene-d12	7940	20.947				
1520-96-3	Perylene-d12	7190	23.027				

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:	12/13/24	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24	
Client Sample ID:	FB02-20241213		SDG No.:	P5281	
Lab Sample ID:	P5281-08		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
BN035800.D	1	12/16/24 11:30	12/24/24 01:49	PB165667

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	0.37		30 - 150		92%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.45	*	55 - 111		112%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	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	3460		7.264			
1146-65-2	Naphthalene-d8	8000		10.009			
15067-26-2	Acenaphthene-d10	4900		13.925			
1517-22-2	Phenanthrene-d10	9900		16.698			
1719-03-5	Chrysene-d12	7910		20.947			
1520-96-3	Perylene-d12	7430		23.032			

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.: P5281

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P5280-04MS	BPOW6-11-20241212MS	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.28	70		53	106
		Terphenyl-d14	0.4	0.49	122		58	132
P5280-05MSD	BPOW6-11-20241212MSD	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.39	97		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.28	69		53	106
		Terphenyl-d14	0.4	0.49	122		58	132
P5281-01	RE114D1-20241212	2-Methylnaphthalene-d10	0.4	0.27	67		30	150
		Fluoranthene-d10	0.4	0.33	82		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.25	63		53	106
		Terphenyl-d14	0.4	0.43	107		58	132
P5281-02	BPOW1-7-20241212	2-Methylnaphthalene-d10	0.4	0.37	91		30	150
		Fluoranthene-d10	0.4	0.47	117		30	150
		Nitrobenzene-d5	0.4	0.44	109		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.67	167	*	58	132
P5281-03	BPOW1-8-20241212	2-Methylnaphthalene-d10	0.4	0.37	94		30	150
		Fluoranthene-d10	0.4	0.50	124		30	150
		Nitrobenzene-d5	0.4	0.45	112	*	55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.64	160	*	58	132
P5281-04	TT101D2-20241212	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.40	100		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.37	91		53	106
		Terphenyl-d14	0.4	0.55	138	*	58	132
P5281-04DL	TT101D2-20241212DL	2-Methylnaphthalene-d10	0.4	0.35	88		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.44	111		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.54	136	*	58	132
P5281-05	RE117D1-20241213	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.46	115		30	150
		Nitrobenzene-d5	0.4	0.46	116	*	55	111
		2-Fluorobiphenyl	0.4	0.40	101		53	106
		Terphenyl-d14	0.4	0.62	155	*	58	132
P5281-06	RE115D1-20241213	2-Methylnaphthalene-d10	0.4	0.36	91		30	150
		Fluoranthene-d10	0.4	0.46	115		30	150
		Nitrobenzene-d5	0.4	0.43	108		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.62	154	*	58	132
P5281-06DL	RE115D1-20241213DL	2-Methylnaphthalene-d10	0.4	0.43	108		30	150
		Fluoranthene-d10	0.4	0.53	133		30	150
		Nitrobenzene-d5	0.4	0.54	136	*	55	111
		2-Fluorobiphenyl	0.4	0.43	106		53	106
		Terphenyl-d14	0.4	0.75	187	*	58	132
P5281-07	TT189D2-20241213	2-Methylnaphthalene-d10	0.4	0.34	84		30	150

Surrogate Summary

SW-846

SDG No.: P5281

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P5281-07	TT189D2-20241213	Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.41	102		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.58	146	*	58	132
P5281-07DL	TT189D2-20241213DL	2-Methylnaphthalene-d10	0.4	0.43	107		30	150
		Fluoranthene-d10	0.4	0.55	138		30	150
		Nitrobenzene-d5	0.4	0.56	140	*	55	111
		2-Fluorobiphenyl	0.4	0.43	106		53	106
P5281-08	FB02-20241213	Terphenyl-d14	0.4	0.79	198	*	58	132
		2-Methylnaphthalene-d10	0.4	0.37	92		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.45	112	*	55	111
PB165667BL	PB165667BL	2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.59	147	*	58	132
		2-Methylnaphthalene-d10	0.4	0.37	92		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
PB165667BS	PB165667BS	Nitrobenzene-d5	0.4	0.43	107		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.56	140	*	58	132
		2-Methylnaphthalene-d10	0.4	0.46	115		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.47	116	*	55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.43	108		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.: P5281
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:	P5280-04MS	Client Sample ID:	BPOW6-11-20241212MS					DataFile:	BN035735.D		
1,4-Dioxane	0.4	0	0.53	ug/L	133	*			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.: P5281
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:	P5280-05MSD	Client Sample ID:	BPOW6-11-20241212MSD					DataFile:	BN035736.D		
1,4-Dioxane	0.4	0	0.55	ug/L	138	*	4		70	130	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5281

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035808.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB165667BS	1,4-Dioxane	0.4	0.37	ug/L	93				70	130	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165667BL

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM Case No.: P5281

SAS No.: P5281 SDG NO.: P5281

Lab File ID: BN035795.D

Lab Sample ID: PB165667BL

Instrument ID: BNA_N

Date Extracted: 12/16/2024

Matrix: (soil/water) Water

Date Analyzed: 12/23/2024

Level: (low/med) LOW

Time Analyzed: 22:52

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
RE117D1-20241213	P5281-05	BN035797.D	12/24/2024
RE115D1-20241213	P5281-06	BN035798.D	12/24/2024
TT189D2-20241213	P5281-07	BN035799.D	12/24/2024
FB02-20241213	P5281-08	BN035800.D	12/24/2024
PB165667BS	PB165667BS	BN035808.D	12/24/2024
BPOW6-11-20241212MS	P5280-04MS	BN035735.D	12/20/2024
BPOW6-11-20241212MSD	P5280-05MSD	BN035736.D	12/20/2024
RE114D1-20241212	P5281-01	BN035742.D	12/20/2024
TT101D2-20241212	P5281-04	BN035778.D	12/23/2024
BPOW1-7-20241212	P5281-02	BN035791.D	12/23/2024
BPOW1-8-20241212	P5281-03	BN035796.D	12/23/2024

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: P5281 SDG NO.: P5281

Lab File ID: BN035349.D

DFTPP Injection Date: 11/27/2024

Instrument ID: BNA_N

DFTPP Injection Time: 14:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	28.9
70	Less than 2.0% of mass 69	0.1 (0.4) 1
127	10.0 - 80.0% of mass 198	39.4
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	27.9
365	Greater than 1% of mass 198	4.6
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	14 (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
SSTDICC0.1	SSTDICC0.1	BN035350.D	11/27/2024	15:34
SSTDICC0.2	SSTDICC0.2	BN035351.D	11/27/2024	16:10
SSTDICCC0.4	SSTDICCC0.4	BN035352.D	11/27/2024	16:46
SSTDICC0.8	SSTDICC0.8	BN035353.D	11/27/2024	17:21
SSTDICC1.6	SSTDICC1.6	BN035354.D	11/27/2024	17:57
SSTDICC3.2	SSTDICC3.2	BN035355.D	11/27/2024	18:33
SSTDICC5.0	SSTDICC5.0	BN035356.D	11/27/2024	19:09

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: P5281 SDG NO.: P5281

Lab File ID: BN035730.D

DFTPP Injection Date: 12/20/2024

Instrument ID: BNA_N

DFTPP Injection Time: 07:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	22.5
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	31.3
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	38.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	28.6
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	13.2
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	15.5 (19.8) 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	BN035731.D	12/20/2024	08:04
BPOW6-11-20241212MS	P5280-04MS	BN035735.D	12/20/2024	11:05
BPOW6-11-20241212MSD	P5280-05MSD	BN035736.D	12/20/2024	11:41
RE114D1-20241212	P5281-01	BN035742.D	12/20/2024	15:18
SSTDCCC0.4EC	SSTDCCC0.4	BN035747.D	12/20/2024	18:18

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: P5281 SDG NO.: P5281

Lab File ID: BN035775.D

DFTPP Injection Date: 12/23/2024

Instrument ID: BNA_N

DFTPP Injection Time: 09:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	31.2
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	39.7
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	7.1
275	10.0 - 60.0% of mass 198	29.2
365	Greater than 1% of mass 198	4.3
441	Present, but less than mass 443	14
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	16.4 (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	BN035776.D	12/23/2024	10:22
TT101D2-20241212	P5281-04	BN035778.D	12/23/2024	11:32
BPOW1-7-20241212	P5281-02	BN035791.D	12/23/2024	19:15
SSTDCCC0.4EC	SSTDCCC0.4	BN035792.D	12/23/2024	19:51

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: P5281

SDG NO.: P5281

Lab File ID: BN035793.D

DFTPP Injection Date: 12/23/2024

Instrument ID: BNA_N

DFTPP Injection Time: 20:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23.2
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	32.6
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	39.9
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	6.8
275	10.0 - 60.0% of mass 198	26.6
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	11.1
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	13.8 (22.6) 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	BN035794.D	12/23/2024	22:16
PB165667BL	PB165667BL	BN035795.D	12/23/2024	22:52
BPOW1-8-20241212	P5281-03	BN035796.D	12/23/2024	23:27
RE117D1-20241213	P5281-05	BN035797.D	12/24/2024	00:03
RE115D1-20241213	P5281-06	BN035798.D	12/24/2024	00:38
TT189D2-20241213	P5281-07	BN035799.D	12/24/2024	01:14
FB02-20241213	P5281-08	BN035800.D	12/24/2024	01:49
PB165667BS	PB165667BS	BN035808.D	12/24/2024	06:34
SSTDCCC0.4EC	SSTDCCC0.4	BN035809.D	12/24/2024	07:09

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: P5281

SDG NO.: P5281

Lab File ID: BN035810.D

DFTPP Injection Date: 12/24/2024

Instrument ID: BNA_N

DFTPP Injection Time: 07:45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	22.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	30.9
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	39.2
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	6.8
275	10.0 - 60.0% of mass 198	29.6
365	Greater than 1% of mass 198	4.5
441	Present, but less than mass 443	13.2
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	15.2 (18.4) 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	BN035811.D	12/24/2024	08:59
TT101D2-20241212DL	P5281-04DL	BN035813.D	12/24/2024	10:10
SSTDCCC0.4EC	SSTDCCC0.4	BN035828.D	12/24/2024	19:05

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: AECO15

Lab Code: CHEM

SAS No.: P5281 SDG NO.: P5281

Lab File ID: BN035844.D

DFTPP Injection Date: 12/26/2024

Instrument ID: BNA_N

DFTPP Injection Time: 09:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	24
68	Less than 2.0% of mass 69	0.2 (0.6) 1
69	Mass 69 relative abundance	32.9
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	40
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	27.1
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	14.1 (20.5) 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	BN035845.D	12/26/2024	09:58
TT189D2-20241213DL	P5281-07DL	BN035856.D	12/26/2024	16:42
RE115D1-20241213DL	P5281-06DL	BN035858.D	12/26/2024	17:53
SSTDCCC0.4EC	SSTDCCC0.4	BN035861.D	12/26/2024	19:41

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/20/2024

Lab File ID: BN035731.D Time Analyzed: 08:04

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	3239	7.271	8431	10.02	5341	13.92
UPPER LIMIT	6478	7.771	16862	10.52	10682	14.424
LOWER LIMIT	1619.5	6.771	4215.5	9.52	2670.5	13.424
EPA SAMPLE NO.						
01 BPOW6-11-20241212MS	3051	7.27	8358	10.01	5197	13.92
02 BPOW6-11-20241212MSD	3357	7.27	9243	10.01	5773	13.92
03 RE114D1-20241212	3072	7.27	8100	10.01	5112	13.93

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/20/2024

Lab File ID: BN035731.D Time Analyzed: 08:04

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	10575	16.698	8878	20.956	9229	23.038
UPPER LIMIT	21150	17.198	17756	21.456	18458	23.538
LOWER LIMIT	5287.5	16.198	4439	20.456	4614.5	22.538
EPA SAMPLE NO.						
01 BPOW6-11-20241212MS	10502	16.70	9278	20.95	9467	23.04
02 BPOW6-11-20241212MSD	12117	16.70	11029	20.95	11370	23.04
03 RE114D1-20241212	9978	16.70	8603	20.96	8488	23.04

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/23/2024

Lab File ID: BN035776.D Time Analyzed: 10:22

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	3884	7.264	10099	10.01	5893	13.92
UPPER LIMIT	7768	7.764	20198	10.509	11786	14.424
LOWER LIMIT	1942	6.764	5049.5	9.509	2946.5	13.424
EPA SAMPLE NO.						
01 BPOW1-7-20241212	3489	7.26	8414	10.01	4915	13.92
02 TT101D2-20241212	3150	7.26	7756	10.01	5021	13.92

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/23/2024

Lab File ID: BN035776.D Time Analyzed: 10:22

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	11548	16.698	8770	20.947	8918	23.026
UPPER LIMIT	23096	17.198	17540	21.447	17836	23.526
LOWER LIMIT	5774	16.198	4385	20.447	4459	22.526
EPA SAMPLE NO.						
01 BPOW1-7-20241212	9153	16.70	6808	20.95	6994	23.03
02 TT101D2-20241212	9829	16.70	7584	20.95	7486	23.03

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/23/2024

Lab File ID: BN035794.D Time Analyzed: 22:16

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	3234	7.264	7877	10.01	4482	13.92
UPPER LIMIT	6468	7.764	15754	10.509	8964	14.424
LOWER LIMIT	1617	6.764	3938.5	9.509	2241	13.424
EPA SAMPLE NO.						
01 BPOW1-8-20241212	2754	7.26	6301	10.01	3973	13.93
02 RE117D1-20241213	3510	7.26	8407	10.01	4886	13.93
03 RE115D1-20241213	3252	7.26	7609	10.01	4867	13.92
04 TT189D2-20241213	3279	7.26	7719	10.01	4881	13.92
05 FB02-20241213	3456	7.26	8002	10.01	4899	13.93
06 PB165667BL	4926	7.26	11442	10.01	7253	13.92
07 PB165667BS	4067	7.26	9754	10.01	5527	13.91

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/23/2024

Lab File ID: BN035794.D Time Analyzed: 22:16

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	8845	16.698	7163	20.947	7277	23.032
UPPER LIMIT	17690	17.198	14326	21.447	14554	23.532
LOWER LIMIT	4422.5	16.198	3581.5	20.447	3638.5	22.532
EPA SAMPLE NO.						
01 BPOW1-8-20241212	7887	16.70	6724	20.95	6522	23.03
02 RE117D1-20241213	9472	16.70	7607	20.95	7540	23.03
03 RE115D1-20241213	9367	16.70	7413	20.95	7624	23.03
04 TT189D2-20241213	10153	16.70	8372	20.95	8287	23.03
05 FB02-20241213	9904	16.70	7907	20.95	7434	23.03
06 PB165667BL	12605	16.71	9944	20.96	9785	23.04
07 PB165667BS	10920	16.70	9467	20.95	9435	23.03

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/24/2024

Lab File ID: BN035811.D Time Analyzed: 08:59

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	3972	7.264	9483	10.00	5387	13.92
UPPER LIMIT	7944	7.764	18966	10.498	10774	14.424
LOWER LIMIT	1986	6.764	4741.5	9.498	2693.5	13.424
EPA SAMPLE NO.						
01 TT101D2-20241212DL	3005	7.26	6792	10.01	4271	13.92

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/24/2024

Lab File ID: BN035811.D Time Analyzed: 08:59

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	10855	16.698	8569	20.947	8879	23.029
UPPER LIMIT	21710	17.198	17138	21.447	17758	23.529
LOWER LIMIT	5427.5	16.198	4284.5	20.447	4439.5	22.529
EPA SAMPLE NO.						
01 TT101D2-20241212DL	8487	16.70	6764	20.95	6806	23.03

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/26/2024

Lab File ID: BN035845.D Time Analyzed: 09:58

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	3755	7.257	9322	10.00	5387	13.91
UPPER LIMIT	7510	7.757	18644	10.499	10774	14.414
LOWER LIMIT	1877.5	6.757	4661	9.499	2693.5	13.414
EPA SAMPLE NO.						
01 RE115D1-20241213DL	2930	7.26	6901	10.00	4611	13.91
02 TT189D2-20241213DL	3270	7.26	7531	10.00	4933	13.91

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.: P5281 SAS No.: P5281 SDG NO.: P5281

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/26/2024

Lab File ID: BN035845.D Time Analyzed: 09:58

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	11262	16.686	9932	20.938	10817	23.021
UPPER LIMIT	22524	17.186	19864	21.438	21634	23.521
LOWER LIMIT	5631	16.186	4966	20.438	5408.5	22.521
EPA SAMPLE NO.						
01 RE115D1-20241213DL	10065	16.70	7379	20.95	6927	23.03
02 TT189D2-20241213DL	10717	16.69	7941	20.95	7194	23.03

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:	PB165667BL		SDG No.:	P5281
Lab Sample ID:	PB165667BL		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
BN035795.D	1	12/16/24 11:30	12/23/24 22:52	PB165667

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	0.37		30 - 150		92%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		95%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		107%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		140%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	4930		7.264			
1146-65-2	Naphthalene-d8	11400		10.009			
15067-26-2	Acenaphthene-d10	7250		13.924			
1517-22-2	Phenanthrene-d10	12600		16.711			
1719-03-5	Chrysene-d12	9940		20.956			
1520-96-3	Perylene-d12	9790		23.038			

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:	PB165667BS		SDG No.:	P5281
Lab Sample ID:	PB165667BS		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
BN035808.D	1	12/16/24 11:30	12/24/24 06:34	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.37		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.46		30 - 150		115%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.47	*	55 - 111		116%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	4070	7.264				
1146-65-2	Naphthalene-d8	9750	10.009				
15067-26-2	Acenaphthene-d10	5530	13.914				
1517-22-2	Phenanthrene-d10	10900	16.698				
1719-03-5	Chrysene-d12	9470	20.947				
1520-96-3	Perylene-d12	9440	23.032				

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:	12/12/24
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24
Client Sample ID:	BPOW6-11-20241212MS		SDG No.:	P5281
Lab Sample ID:	P5280-04MS		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
BN035735.D	1	12/16/24 11:30	12/20/24 11:05	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.53		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	0.38		30 - 150		95%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		70%	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	3050	7.271				
1146-65-2	Naphthalene-d8	8360	10.009				
15067-26-2	Acenaphthene-d10	5200	13.924				
1517-22-2	Phenanthrene-d10	10500	16.698				
1719-03-5	Chrysene-d12	9280	20.947				
1520-96-3	Perylene-d12	9470	23.038				

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:	12/12/24	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258		Date Received:	12/13/24	
Client Sample ID:	BPOW6-11-20241212MSD		SDG No.:	P5281	
Lab Sample ID:	P5280-05MSD		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
BN035736.D	1	12/16/24 11:30	12/20/24 11:41	PB165667

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.55		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	0.39		30 - 150		97%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		53 - 106		69%	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	3360	7.272				
1146-65-2	Naphthalene-d8	9240	10.009				
15067-26-2	Acenaphthene-d10	5770	13.924				
1517-22-2	Phenanthrene-d10	12100	16.698				
1719-03-5	Chrysene-d12	11000	20.947				
1520-96-3	Perylene-d12	11400	23.038				

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-BN112724.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Nov 27 23:03:24 2024
 Response Via : Initial Calibration

Calibration Files

0.1 =BN035350.D 0.2 =BN035351.D 0.4 =BN035352.D 0.8 =BN035353.D 1.6 =BN035354.D 3.2 =BN035355.D 5.0 =BN035356.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	0.406	0.417	0.376	0.380	0.392	0.357	0.348	0.382	6.52
3)	n-Nitrosodimet...	0.334	0.302	0.326	0.315	0.332	0.310	0.309	0.319	3.92
4) S	2-Fluorophenol	1.025	1.112	1.018	0.958	0.998	0.954	0.942	1.001	5.88
5) S	Phenol-d6	1.227	1.186	1.193	1.143	1.235	1.215	1.229	1.204	2.69
6)	bis(2-Chloroet...	1.035	1.021	0.992	0.993	1.051	0.997	0.991	1.012	2.39
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.227	0.232	0.235	0.248	0.257	0.251	0.261	0.244	5.31
9)	Naphthalene	1.062	1.029	1.047	1.032	1.096	1.049	1.070	1.055	2.22
10)	Hexachlorobuta...	0.245	0.242	0.247	0.241	0.255	0.236	0.238	0.243	2.60
11) SURR2	Methylnaphth...	0.591	0.603	0.619	0.615	0.659	0.639	0.656	0.626	4.16
12)	2-Methylnaphth...	0.724	0.716	0.740	0.747	0.795	0.771	0.795	0.755	4.25
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.273	0.258	0.257	0.268	0.293	0.311	0.328	0.284	9.67
15) S	2-Fluorobiphenyl	1.489	1.491	1.510	1.508	1.566	1.511	1.511	1.512	1.68
16)	Acenaphthylene	1.643	1.600	1.595	1.638	1.737	1.763	1.781	1.680	4.68
17)	Acenaphthene	1.121	1.084	1.086	1.108	1.145	1.122	1.140	1.115	2.17
18)	Fluorene	1.589	1.549	1.543	1.600	1.652	1.614	1.625	1.596	2.47
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.038	0.031	0.036	0.041	0.051			0.039	19.30
21)	4-Bromophenyl-...	0.226	0.218	0.226	0.233	0.249	0.242	0.244	0.234	4.85
22)	Hexachlorobenzene	0.265	0.266	0.273	0.276	0.288	0.278	0.277	0.275	2.82
23)	Atrazine	0.155	0.155	0.154	0.156	0.175	0.179	0.191	0.167	8.98
24)	Pentachlorophenol	0.140	0.090	0.095	0.103	0.121	0.136	0.150	0.120	19.86
25)	Phenanthrene	1.092	1.046	1.067	1.092	1.148	1.121	1.125	1.099	3.20
26)	Anthracene	0.964	0.923	0.940	0.973	1.050	1.042	1.064	0.994	5.76
27) SURR	Fluoranthene-d10	1.203	1.086	1.077	1.105	1.165	1.138	1.164	1.134	4.10
28)	Fluoranthene	1.538	1.396	1.416	1.456	1.539	1.497	1.526	1.481	3.99
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.583	1.445	1.475	1.443	1.519	1.440	1.431	1.477	3.79
31) S	Terphenyl-d14	0.832	0.777	0.791	0.771	0.812	0.772	0.769	0.789	3.08
32)	Benzo(a)anthra...	1.431	1.343	1.355	1.375	1.451	1.411	1.429	1.399	2.98
33)	Chrysene	1.463	1.452	1.441	1.415	1.487	1.422	1.420	1.443	1.84
34)	Bis(2-ethylhex...	0.710	0.558	0.516	0.505	0.520	0.516	0.544	0.553	12.96
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN112724.M

36)	Indeno(1,2,3-c...	1.411	1.489	1.532	1.554	1.660	1.615	1.685	1.564	6.22
37)	Benzo(b)fluora...	1.305	1.348	1.313	1.378	1.827	1.463	1.608	1.463	13.12
38)	Benzo(k)fluora...	1.444	1.376	1.402	1.419	1.527	1.447	1.468	1.440	3.39
39) C	Benzo(a)pyrene	1.204	1.156	1.146	1.171	1.256	1.232	1.271	1.205	4.11
40)	Dibenzo(a,h)an...	1.104	1.187	1.194	1.226	1.315	1.280	1.332	1.234	6.55
41)	Benzo(g,h,i)pe...	1.188	1.238	1.248	1.269	1.360	1.330	1.394	1.289	5.71

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM Case No.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/20/2024 08:04

Lab File ID: BN035731.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.562		-10.2	20.0
Fluoranthene-d10	1.134	0.985		-13.1	20.0
2-Fluorophenol	1.001	0.990		-1.1	20.0
Phenol-d6	1.204	1.140		-5.3	20.0
Nitrobenzene-d5	0.244	0.284		16.4	20.0
2-Fluorobiphenyl	1.512	1.376		-9.0	20.0
2,4,6-Tribromophenol	0.284	0.221		-22.2	20.0
Terphenyl-d14	0.789	0.839		6.3	20.0
1,4-Dioxane	0.382	0.405		6.0	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/20/2024 18:18

Lab File ID: BN035747.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.618		-1.3	50.0
Fluoranthene-d10	1.134	1.034		-8.8	50.0
2-Fluorophenol	1.001	0.002		-99.8	50.0
Phenol-d6	1.204	0.025		-97.9	50.0
Nitrobenzene-d5	0.244	0.005		-98.0	50.0
2-Fluorobiphenyl	1.512	0.002		-99.9	50.0
2,4,6-Tribromophenol	0.284	0.001		-99.6	50.0
Terphenyl-d14	0.789	0.003		-99.6	50.0
1,4-Dioxane	0.382	0.448		17.3	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/23/2024 10:22

Lab File ID: BN035776.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.601		-4.0	20.0
Fluoranthene-d10	1.134	1.037		-8.6	20.0
2-Fluorophenol	1.001	1.009		0.7	20.0
Phenol-d6	1.204	1.111		-7.7	20.0
Nitrobenzene-d5	0.244	0.284		16.4	20.0
2-Fluorobiphenyl	1.512	1.601		5.9	20.0
2,4,6-Tribromophenol	0.284	0.205		-27.8	20.0
Terphenyl-d14	0.789	0.943		19.5	20.0
1,4-Dioxane	0.382	0.429		12.3	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.: P5281 SAS No.: P5281 SDG No.: P5281
 Instrument ID: BNA_N Calibration Date/Time: 12/23/2024 19:51
 Lab File ID: BN035792.D Init. Calib. Date(s): 11/27/2024 11/27/2024
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.557		-11.0	50.0
Fluoranthene-d10	1.134	0.972		-14.3	50.0
2-Fluorophenol	1.001	0.954		-4.7	50.0
Phenol-d6	1.204	1.061		-11.9	50.0
Nitrobenzene-d5	0.244	0.295		20.9	50.0
2-Fluorobiphenyl	1.512	1.518		0.4	50.0
2,4,6-Tribromophenol	0.284	0.220		-22.5	50.0
Terphenyl-d14	0.789	0.806		2.2	50.0
1,4-Dioxane	0.382	0.383		0.3	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/23/2024 22:16

Lab File ID: BN035794.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.540		-13.7	20.0
Fluoranthene-d10	1.134	0.950		-16.2	20.0
2-Fluorophenol	1.001	0.924		-7.7	20.0
Phenol-d6	1.204	1.016		-15.6	20.0
Nitrobenzene-d5	0.244	0.278		13.9	20.0
2-Fluorobiphenyl	1.512	1.529		1.1	20.0
2,4,6-Tribromophenol	0.284	0.208		-26.8	20.0
Terphenyl-d14	0.789	0.785		-0.5	20.0
1,4-Dioxane	0.382	0.419		9.7	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/24/2024 07:09

Lab File ID: BN035809.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.563		-10.1	50.0
Fluoranthene-d10	1.134	0.947		-16.5	50.0
2-Fluorophenol	1.001	0.946		-5.5	50.0
Phenol-d6	1.204	1.086		-9.8	50.0
Nitrobenzene-d5	0.244	0.307		25.8	50.0
2-Fluorobiphenyl	1.512	1.535		1.5	50.0
2,4,6-Tribromophenol	0.284	0.224		-21.1	50.0
Terphenyl-d14	0.789	0.817		3.5	50.0
1,4-Dioxane	0.382	0.382		0.0	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/24/2024 08:59

Lab File ID: BN035811.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.541		-13.6	20.0
Fluoranthene-d10	1.134	0.953		-16.0	20.0
2-Fluorophenol	1.001	0.931		-7.0	20.0
Phenol-d6	1.204	1.289		7.1	20.0
Nitrobenzene-d5	0.244	0.285		16.8	20.0
2-Fluorobiphenyl	1.512	1.523		0.7	20.0
2,4,6-Tribromophenol	0.284	0.214		-24.6	20.0
Terphenyl-d14	0.789	0.804		1.9	20.0
1,4-Dioxane	0.382	0.457		19.6	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/24/2024 19:05

Lab File ID: BN035828.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.533		-14.9	50.0
Fluoranthene-d10	1.134	0.931		-17.9	50.0
2-Fluorophenol	1.001	0.895		-10.6	50.0
Phenol-d6	1.204	1.524		26.6	50.0
Nitrobenzene-d5	0.244	0.319		30.7	50.0
2-Fluorobiphenyl	1.512	1.565		3.5	50.0
2,4,6-Tribromophenol	0.284	0.194		-31.7	50.0
Terphenyl-d14	0.789	0.809		2.5	50.0
1,4-Dioxane	0.382	0.501		31.2	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/26/2024 09:58

Lab File ID: BN035845.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.545		-12.9	20.0
Fluoranthene-d10	1.134	0.991		-12.6	20.0
2-Fluorophenol	1.001	1.006		0.5	20.0
Phenol-d6	1.204	1.112		-7.6	20.0
Nitrobenzene-d5	0.244	0.298		22.1	20.0
2-Fluorobiphenyl	1.512	1.504		-0.5	20.0
2,4,6-Tribromophenol	0.284	0.248		-12.7	20.0
Terphenyl-d14	0.789	0.784		-0.6	20.0
1,4-Dioxane	0.382	0.405		6.0	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.: P5281 SAS No.: P5281 SDG No.: P5281

Instrument ID: BNA_N Calibration Date/Time: 12/26/2024 19:41

Lab File ID: BN035861.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.551		-12.0	50.0
Fluoranthene-d10	1.134	0.922		-18.7	50.0
2-Fluorophenol	1.001	0.931		-7.0	50.0
Phenol-d6	1.204	1.022		-15.1	50.0
Nitrobenzene-d5	0.244	0.306		25.4	50.0
2-Fluorobiphenyl	1.512	1.480		-2.1	50.0
2,4,6-Tribromophenol	0.284	0.225		-20.8	50.0
Terphenyl-d14	0.789	0.898		13.8	50.0
1,4-Dioxane	0.382	0.394		3.1	50.0

All other compounds must meet a minimum RRF of 0.010.