

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Case No.: BN073124 SAS No.: BN073124 SDG No.: BN073124

Instrument ID: BNA_N Calibration Date/Time: 7/30/2024 1: 23:36

Lab File ID: BN033118.D Init. Calib. Date(s): _____

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): _____

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.612	0.559		-8.66	20.0
Fluoranthene-d10	1.035	1.076		3.961	20.0
n-Nitrosodimethylamine	0.419	0.460		9.785	20.0
2-Fluorophenol	1.012	1.103		8.992	20.0
Phenol-d6	1.256	1.512		20.382	20.0
bis(2-Chloroethyl) ether	1.050	1.520		44.762	20.0
Nitrobenzene-d5	0.301	0.285		-5.316	20.0
Naphthalene	1.108	1.084		-2.166	20.0
Hexachlorobutadiene	0.212	0.195		-8.019	20.0
2-Methylnaphthalene	0.724	0.604		-16.575	20.0
2-Fluorobiphenyl	1.489	1.319		-11.417	20.0
Acenaphthylene	1.627	1.597		-1.844	20.0
Acenaphthene	1.153	1.137		-1.388	20.0
Fluorene	1.541	1.537		-0.26	20.0
4,6-Dinitro-2-methylphenol	0.056	0.008		-85.714	20.0
2,4,6-Tribromophenol	0.171	0.123		-28.07	20.0
4-Bromophenyl-phenylether	0.235	0.198		-15.745	20.0
Hexachlorobenzene	0.263	0.220		-16.35	20.0
Atrazine	0.173	0.146		-15.607	20.0
Pentachlorophenol	0.098	0.078		-20.408	20.0
Phenanthrene	1.093	1.007		-7.868	20.0
Anthracene	0.900	0.707		-21.444	20.0
Fluoranthene	1.323	1.417		7.105	20.0
Pyrene	1.634	1.446		-11.506	20.0
Terphenyl-d14	0.820	0.692		-15.61	20.0
Benzo(a)anthracene	1.265	1.204		-4.822	20.0
Chrysene	1.504	1.539		2.327	20.0
Bis(2-ethylhexyl)phthalate	0.700	0.960		37.143	20.0
Benzo(b)fluoranthene	1.393	1.263		-9.332	20.0
Benzo(k)fluoranthene	1.592	1.486		-6.658	20.0
Benzo(a)pyrene	1.256	1.180		-6.051	20.0
Indeno(1,2,3-cd)pyrene	1.577	1.583		0.38	20.0
Dibenzo(a,h)anthracene	1.245	1.263		1.446	20.0
Benzo(g,h,i)perylene	1.379	1.444		4.714	20.0
1,4-Dioxane	0.496	0.584		17.742	20.0

All other compounds must meet a minimum RRF of 0.010.

Report of Analysis

Client:		Date Collected:	7/30/2024 12:00:00 AM
Project:		Date Received:	7/30/2024 12:00:00 AM
Client Sample ID:	PB162359BL	SDG No.:	BN073124
Lab Sample ID:	PB162359BL	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033119.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
62-75-9	n-Nitrosodimethylamine	0.03	U	0.03	0.2	0.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.03	U	0.03	0.1	0.1	ug/L
91-20-3	Naphthalene	0.02	U	0.02	0.1	0.1	ug/L
87-68-3	Hexachlorobutadiene	0.03	U	0.03	0.1	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.03	U	0.03	0.1	0.1	ug/L
208-96-8	Acenaphthylene	0.02	U	0.02	0.1	0.1	ug/L
83-32-9	Acenaphthene	0.02	U	0.02	0.1	0.1	ug/L
Total PAH	Total PAH	0.45	U	0.45	0.1	1.6	ug/L
86-73-7	Fluorene	0.02	U	0.02	0.1	0.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	0.14	U	0.14	0.2	0.2	ug/L
101-55-3	4-Bromophenyl-phenylether	0.03	U	0.03	0.1	0.1	ug/L
118-74-1	Hexachlorobenzene	0.03	U	0.03	0.1	0.1	ug/L
1912-24-9	Atrazine	0.02	U	0.02	0.1	0.1	ug/L
87-86-5	Pentachlorophenol	0.09	U	0.09	0.2	0.2	ug/L
85-01-8	Phenanthrene	0.02	U	0.02	0.1	0.1	ug/L
120-12-7	Anthracene	0.02	U	0.02	0.1	0.1	ug/L
206-44-0	Fluoranthene	0.02	U	0.02	0.1	0.1	ug/L
129-00-0	Pyrene	0.02	U	0.02	0.1	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.02	U	0.02	0.1	0.1	ug/L
218-01-9	Chrysene	0.03	U	0.03	0.1	0.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	0.14	U	0.14	0.2	0.2	ug/L
205-99-2	Benzo(b)fluoranthene	0.03	U	0.03	0.1	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.03	U	0.03	0.1	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.06	U	0.06	0.1	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	U	0.04	0.1	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.04	U	0.04	0.1	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.04	U	0.04	0.1	0.1	ug/L
123-91-1	1,4-Dioxane	0.07	U	0.07	0.2	0.2	ug/L

Report of Analysis

Client:		Date Collected:	7/30/2024 12:00:00 AM
Project:		Date Received:	7/30/2024 12:00:00 AM
Client Sample ID:	PB162359BL	SDG No.:	BN073124
Lab Sample ID:	PB162359BL	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033119.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.398		30-150		100	SPK: -0.4
93951-69-0	Fluoranthene-d10	0.434		30-150		108	SPK: -0.4
367-12-4	2-Fluorophenol	0.427	*	10-92		107	SPK: -0.4
13127-88-3	Phenol-d6	0.581	*	10-100		145	SPK: -0.4
4165-60-0	Nitrobenzene-d5	0.417		11-175		104	SPK: -0.4
321-60-8	2-Fluorobiphenyl	0.351		10-175		88	SPK: -0.4
118-79-6	2,4,6-Tribromophenol	0.252		24-148		63	SPK: -0.4
1718-51-0	Terphenyl-d14	0.433		54-171		108	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1047	7.662				
1146-65-2	Naphthalene-d8	3848	10.511				
15067-26-2	Acenaphthene-d10	2847	14.229				
1517-22-2	Phenanthrene-d10	6484	17.014				
1719-03-5	Chrysene-d12	6136	21.176				
1520-96-3	Perylene-d12	6282	23.35				

Report of Analysis

Client:		Date Collected:	7/30/2024 12:00:00 AM
Project:		Date Received:	7/30/2024 12:00:00 AM
Client Sample ID:	PB162359BS	SDG No.:	BN073124
Lab Sample ID:	PB162359BS	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033120.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
62-75-9	n-Nitrosodimethylamine	0.48		0.03	0.2	0.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.38		0.03	0.1	0.1	ug/L
91-20-3	Naphthalene	0.39		0.02	0.1	0.1	ug/L
87-68-3	Hexachlorobutadiene	0.38		0.03	0.1	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.35		0.03	0.1	0.1	ug/L
208-96-8	Acenaphthylene	0.39		0.02	0.1	0.1	ug/L
83-32-9	Acenaphthene	0.39		0.02	0.1	0.1	ug/L
Total PAH	Total PAH	6.11		0.45	0.1	1.6	ug/L
86-73-7	Fluorene	0.41		0.02	0.1	0.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	0.14	U	0.14	0.2	0.2	ug/L
101-55-3	4-Bromophenyl-phenylether	0.33		0.03	0.1	0.1	ug/L
118-74-1	Hexachlorobenzene	0.33		0.03	0.1	0.1	ug/L
1912-24-9	Atrazine	0.33		0.02	0.1	0.1	ug/L
87-86-5	Pentachlorophenol	0.23		0.09	0.2	0.2	ug/L
85-01-8	Phenanthrene	0.37		0.02	0.1	0.1	ug/L
120-12-7	Anthracene	0.32		0.02	0.1	0.1	ug/L
206-44-0	Fluoranthene	0.42		0.02	0.1	0.1	ug/L
129-00-0	Pyrene	0.35		0.02	0.1	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.36		0.02	0.1	0.1	ug/L
218-01-9	Chrysene	0.41		0.03	0.1	0.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	0.55		0.14	0.2	0.2	ug/L
205-99-2	Benzo(b)fluoranthene	0.35		0.03	0.1	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.38		0.03	0.1	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.37		0.06	0.1	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.39		0.04	0.1	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.4		0.04	0.1	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.41		0.04	0.1	0.1	ug/L
123-91-1	1,4-Dioxane	0.45		0.07	0.2	0.2	ug/L

Report of Analysis

Client:		Date Collected:	7/30/2024 12:00:00 AM
Project:		Date Received:	7/30/2024 12:00:00 AM
Client Sample ID:	PB162359BS	SDG No.:	BN073124
Lab Sample ID:	PB162359BS	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033120.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.389		30-150		97	SPK: -0.4
93951-69-0	Fluoranthene-d10	0.415		30-150		104	SPK: -0.4
367-12-4	2-Fluorophenol	0.451	*	10-92		113	SPK: -0.4
13127-88-3	Phenol-d6	0.53	*	10-100		132	SPK: -0.4
4165-60-0	Nitrobenzene-d5	0.375		11-175		94	SPK: -0.4
321-60-8	2-Fluorobiphenyl	0.362		10-175		90	SPK: -0.4
118-79-6	2,4,6-Tribromophenol	0.318		24-148		79	SPK: -0.4
1718-51-0	Terphenyl-d14	0.34		54-171		85	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1303	7.532				
1146-65-2	Naphthalene-d8	5216	10.351				
15067-26-2	Acenaphthene-d10	3726	14.165				
1517-22-2	Phenanthrene-d10	8881	16.952				
1719-03-5	Chrysene-d12	8995	21.149				
1520-96-3	Perylene-d12	9641	23.339				

Report of Analysis

Client:		Date Collected:	7/30/2024 12:00:00 AM
Project:		Date Received:	7/30/2024 12:00:00 AM
Client Sample ID:	PB162359BSD	SDG No.:	BN073124
Lab Sample ID:	PB162359BSD	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033121.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
62-75-9	n-Nitrosodimethylamine	0.5		0.03	0.2	0.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.38		0.03	0.1	0.1	ug/L
91-20-3	Naphthalene	0.39		0.02	0.1	0.1	ug/L
87-68-3	Hexachlorobutadiene	0.37		0.03	0.1	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.35		0.03	0.1	0.1	ug/L
208-96-8	Acenaphthylene	0.39		0.02	0.1	0.1	ug/L
83-32-9	Acenaphthene	0.4		0.02	0.1	0.1	ug/L
Total PAH	Total PAH	6.12		0.45	0.1	1.6	ug/L
86-73-7	Fluorene	0.41		0.02	0.1	0.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	0.14	U	0.14	0.2	0.2	ug/L
101-55-3	4-Bromophenyl-phenylether	0.33		0.03	0.1	0.1	ug/L
118-74-1	Hexachlorobenzene	0.33		0.03	0.1	0.1	ug/L
1912-24-9	Atrazine	0.33		0.02	0.1	0.1	ug/L
87-86-5	Pentachlorophenol	0.24		0.09	0.2	0.2	ug/L
85-01-8	Phenanthrene	0.37		0.02	0.1	0.1	ug/L
120-12-7	Anthracene	0.31		0.02	0.1	0.1	ug/L
206-44-0	Fluoranthene	0.43		0.02	0.1	0.1	ug/L
129-00-0	Pyrene	0.34		0.02	0.1	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.37		0.02	0.1	0.1	ug/L
218-01-9	Chrysene	0.4		0.03	0.1	0.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	0.56		0.14	0.2	0.2	ug/L
205-99-2	Benzo(b)fluoranthene	0.34		0.03	0.1	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.38		0.03	0.1	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.37		0.06	0.1	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.4		0.04	0.1	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.4		0.04	0.1	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.42		0.04	0.1	0.1	ug/L
123-91-1	1,4-Dioxane	0.52		0.07	0.2	0.2	ug/L

Report of Analysis

Client:		Date Collected:	7/30/2024 12:00:00 AM
Project:		Date Received:	7/30/2024 12:00:00 AM
Client Sample ID:	PB162359BSD	SDG No.:	BN073124
Lab Sample ID:	PB162359BSD	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033121.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.402		30-150		100	SPK: -0.4
93951-69-0	Fluoranthene-d10	0.418		30-150		104	SPK: -0.4
367-12-4	2-Fluorophenol	0.498	*	10-92		125	SPK: -0.4
13127-88-3	Phenol-d6	0.578	*	10-100		145	SPK: -0.4
4165-60-0	Nitrobenzene-d5	0.342		11-175		86	SPK: -0.4
321-60-8	2-Fluorobiphenyl	0.361		10-175		90	SPK: -0.4
118-79-6	2,4,6-Tribromophenol	0.307		24-148		77	SPK: -0.4
1718-51-0	Terphenyl-d14	0.328		54-171		82	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1122	7.539				
1146-65-2	Naphthalene-d8	4774	10.351				
15067-26-2	Acenaphthene-d10	3402	14.169				
1517-22-2	Phenanthrene-d10	8115	16.957				
1719-03-5	Chrysene-d12	8576	21.151				
1520-96-3	Perylene-d12	9365	23.338				

Report of Analysis

Client:		Date Collected:	7/29/2024 12:00:00 AM
Project:		Date Received:	7/29/2024 12:00:00 AM
Client Sample ID:	GWBR-05-440-460-072924	SDG No.:	BN073124
Lab Sample ID:	P3395-01	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033122.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
62-75-9	n-Nitrosodimethylamine	0.03	U	0.03	0.2	0.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.03	U	0.03	0.1	0.1	ug/L
91-20-3	Naphthalene	0.02	U	0.02	0.1	0.1	ug/L
87-68-3	Hexachlorobutadiene	0.03	U	0.03	0.1	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.03	U	0.03	0.1	0.1	ug/L
208-96-8	Acenaphthylene	0.02	U	0.02	0.1	0.1	ug/L
83-32-9	Acenaphthene	0.02	U	0.02	0.1	0.1	ug/L
Total PAH	Total PAH	0.45	U	0.45	0.1	1.6	ug/L
86-73-7	Fluorene	0.02	U	0.02	0.1	0.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	0.14	U	0.14	0.2	0.2	ug/L
101-55-3	4-Bromophenyl-phenylether	0.03	U	0.03	0.1	0.1	ug/L
118-74-1	Hexachlorobenzene	0.03	U	0.03	0.1	0.1	ug/L
1912-24-9	Atrazine	0.02	U	0.02	0.1	0.1	ug/L
87-86-5	Pentachlorophenol	0.09	U	0.09	0.2	0.2	ug/L
85-01-8	Phenanthrene	0.02	U	0.02	0.1	0.1	ug/L
120-12-7	Anthracene	0.02	U	0.02	0.1	0.1	ug/L
206-44-0	Fluoranthene	0.02	J	0.02	0.1	0.1	ug/L
129-00-0	Pyrene	0.02	U	0.02	0.1	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.04	J	0.02	0.1	0.1	ug/L
218-01-9	Chrysene	0.05	J	0.03	0.1	0.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	0.38		0.14	0.2	0.2	ug/L
205-99-2	Benzo(b)fluoranthene	0.05	J	0.03	0.1	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.04	J	0.03	0.1	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.06	U	0.06	0.1	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.04	J	0.04	0.1	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.04	J	0.04	0.1	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.04	J	0.04	0.1	0.1	ug/L
123-91-1	1,4-Dioxane	0.44		0.07	0.2	0.2	ug/L

Report of Analysis

Client:		Date Collected:	7/29/2024 12:00:00 AM
Project:		Date Received:	7/29/2024 12:00:00 AM
Client Sample ID:	GWBR-05-440-460-072924	SDG No.:	BN073124
Lab Sample ID:	P3395-01	Matrix:	Water
Analytical Method:	8270-Modified	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	LOW
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN033122.D	1	7/30/2024 12:00:00 AM	7/31/2024 12:00:00 AM	PB162359

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.304		30-150		76	SPK: -0.4
93951-69-0	Fluoranthene-d10	0.427		30-150		107	SPK: -0.4
367-12-4	2-Fluorophenol	0.182		10-92		45	SPK: -0.4
13127-88-3	Phenol-d6	0.148		10-100		37	SPK: -0.4
4165-60-0	Nitrobenzene-d5	0.298		11-175		75	SPK: -0.4
321-60-8	2-Fluorobiphenyl	0.303		10-175		76	SPK: -0.4
118-79-6	2,4,6-Tribromophenol	0.324		24-148		81	SPK: -0.4
1718-51-0	Terphenyl-d14	0.411		54-171		103	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1336	7.575				
1146-65-2	Naphthalene-d8	5226	10.351				
15067-26-2	Acenaphthene-d10	3558	14.158				
1517-22-2	Phenanthrene-d10	9109	16.933				
1719-03-5	Chrysene-d12	10204	21.142				
1520-96-3	Perylene-d12	11347	23.329				



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

Hit Summary Sheet SW-846

SDG No.: BN073124

Client:

Sample ID	Client ID	Parameter	Concentration	C	MDL	RDL	Units
Client ID :	GWBR-05-440-460-072924						
P3395-01	GWBR-05-440-460-0729 Water	1,4-Dioxane	0.440		0.07	0.2	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Benzo(a)anthracene	0.040	J	0.02	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Benzo(b)fluoranthene	0.050	J	0.03	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Benzo(g,h,i)perylene	0.040	J	0.04	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Benzo(k)fluoranthene	0.040	J	0.03	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Bis(2-ethylhexyl)phthalate	0.380		0.14	0.2	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Chrysene	0.050	J	0.03	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Dibenzo(a,h)anthracene	0.040	J	0.04	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Fluoranthene	0.020	J	0.02	0.1	ug/L
P3395-01	GWBR-05-440-460-0729 Water	Indeno(1,2,3-cd)pyrene	0.040	J	0.04	0.1	ug/L
Total Svoc :					1.14		
Total Concentration:					1.14		

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Case No.: BN071124 SAS No.: BN071124 SDG No.: BN071124

Instrument ID: _____ Calibration Date(s): 7/10/2024 : _____

Calibration Time(s): 15:54 _____

LAB FILE ID:	RRF0.1 = BN032616.D			RRF0.2 = BN032617.D			RRF0.4 = BN032618.D	
	RRF0.8 = BN032619.D			RRF1.6 = BN032620.D			RRF3.2 = BN032621.D	
COMPOUND	RRF0.1	RRF0.2	RRF0.4	RRF0.8	RRF1.6	RRF3.2	RRF	% RSD
2-Methylnaphthalene-d10	0.594	0.576	0.597	0.657	0.650	0.596	0.612	5.0
Fluoranthene-d10	1.009	0.987	0.986	1.101	1.097	1.018	1.035	4.7
n-Nitrosodimethylamine	0.451	0.408	0.421	0.441	0.428	0.400	0.419	5.7
2-Fluorophenol	1.089	0.979	1.038	1.043	1.009	0.974	1.012	4.8
Phenol-d6	1.214	1.102	1.258	1.297	1.331	1.282	1.256	6.2
bis(2-Chloroethyl)ether	0.977	0.841	1.059	1.258	1.054	1.062	1.050	12.0
Nitrobenzene-d5	0.268	0.271	0.291	0.331	0.328	0.310	0.301	8.5
Naphthalene	1.116	1.074	1.103	1.173	1.147	1.071	1.108	3.7
Hexachlorobutadiene	0.228	0.216	0.214	0.222	0.212	0.197	0.212	5.9
2-Methylnaphthalene	0.677	0.665	0.697	0.784	0.785	0.720	0.724	6.6
2-Fluorobiphenyl	1.471	1.388	1.485	1.608	1.547	1.475	1.489	4.7
Acenaphthylene	1.493	1.457	1.495	1.715	1.765	1.718	1.627	8.5
Acenaphthene	1.117	1.088	1.142	1.251	1.212	1.134	1.153	5.0
Fluorene	1.504	1.473	1.523	1.674	1.635	1.470	1.541	5.2
4,6-Dinitro-2-methylphenol		0.028	0.034	0.053	0.065	0.071	0.056	39.5
2,4,6-Tribromophenol	0.168	0.150	0.153	0.174	0.183	0.173	0.171	9.4
4-Bromophenyl-phenylether	0.235	0.219	0.231	0.245	0.244	0.237	0.235	3.8
Hexachlorobenzene	0.270	0.254	0.258	0.277	0.272	0.262	0.263	3.9
Atrazine	0.164	0.156	0.155	0.182	0.188	0.177	0.173	8.6
Pentachlorophenol	0.113	0.080	0.081	0.093	0.100	0.103	0.098	14.1
Phenanthrene	1.036	0.986	1.058	1.197	1.172	1.108	1.093	6.8
Anthracene	0.760	0.742	0.789	0.963	1.024	1.001	0.900	14.4
Fluoranthene	1.263	1.235	1.250	1.418	1.430	1.316	1.323	6.0
Pyrene	1.719	1.569	1.692	1.772	1.676	1.506	1.634	6.6
Terphenyl-d14	0.861	0.794	0.846	0.886	0.841	0.744	0.820	6.4
Benzo (a) anthracene	1.224	1.077	1.198	1.352	1.336	1.313	1.265	8.2
Chrysene	1.490	1.507	1.549	1.597	1.576	1.397	1.504	5.2
Bis(2-ethylhexyl)phthalate	0.701	0.684	0.604	0.695	0.711	0.703	0.700	8.3
Benzo (b) fluoranthene	1.190	1.195	1.313	1.544	1.566	1.434	1.393	11.5
Benzo (k) fluoranthene	1.502	1.528	1.587	1.770	1.684	1.561	1.592	6.3
Benzo (a) pyrene	1.200	1.142	1.203	1.362	1.344	1.272	1.256	6.4
Indeno (1,2,3-cd) pyrene	1.547	1.410	1.534	1.674	1.629	1.704	1.577	6.4
Dibenzo (a,h) anthracene	1.180	1.116	1.215	1.323	1.294	1.362	1.245	6.9
Benzo (g,h,i) perylene	1.374	1.288	1.378	1.459	1.394	1.470	1.379	5.2
1,4-Dioxane	0.613	0.525	0.495	0.515	0.476	0.434	0.496	13.4

All other compounds must meet a minimum RRF of 0.010.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN073124 SAS No.: BN073124 SDG NO.: BN073124

EPA Sample No.: SSTDICCC0.4 Date Analyzed: Jul 31 2024 12:00AM

Lab File ID: BN032618.D Time Analyzed: 00:49

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	4288	7.567	13064	10.36	8572	14.21
UPPER LIMIT	8576	8.067	26128	10.857	17144	14.71
LOWER LIMIT	2144	7.067	6532	9.857	4286	13.71
EPA SAMPLE NO.						
01 PB162359BL	1047 *	7.66	3848 *	10.51	2847 *	14.23
02 PB162359BS	1303 *	7.53	5216 *	10.35	3726 *	14.17
03 PB162359BSD	1122 *	7.54	4774 *	10.35	3402 *	14.17
04 GWBR-05-440-460-072924	1336 *	7.58	5226 *	10.35	3558 *	14.16

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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN073124 SAS No.: BN073124 SDG NO.: BN073124

EPA Sample No.: SSTDCCC0.4 Date Analyzed: Jul 31 2024 12:00AM

Lab File ID: BN033118.D Time Analyzed: 00:49

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	1035	7.553	4165	10.36	2815	14.17
UPPER LIMIT	2070	8.053	8330	10.862	5630	14.665
LOWER LIMIT	517.5	7.053	2082.5	9.862	1407.5	13.665
EPA SAMPLE NO.						
01 PB162359BL	1047	7.66	3848	10.51	2847	14.23
02 PB162359BS	1303	7.53	5216	10.35	3726	14.17
03 PB162359BSD	1122	7.54	4774	10.35	3402	14.17
04 GWBR-05-440-460-072924	1336	7.58	5226	10.35	3558	14.16

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.: BN073124 SAS No.: BN073124 SDG NO.: BN073124

EPA Sample No.: SSTDICCC0.4 Date Analyzed: Jul 31 2024 12:00AM

Lab File ID: BN032618.D Time Analyzed: 00:49

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	18433	16.979	13897	21.193	13224	23.402
UPPER LIMIT	36866	17.479	27794	21.693	26448	23.902
LOWER LIMIT	9216.5	16.479	6948.5	20.693	6612	22.902
EPA SAMPLE NO.						
01 PB162359BL	6484 *	17.01	6136 *	21.18	6282 *	23.35
02 PB162359BS	8881 *	16.95	8995	21.15	9641	23.34
03 PB162359BSD	8115 *	16.96	8576	21.15	9365	23.34
04 GWBR-05-440-460-072924	9109 *	16.93	10204	21.14	11347	23.33

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN073124 SAS No.: BN073124 SDG NO.: BN073124

EPA Sample No.: SSTDCCC0.4 Date Analyzed: Jul 31 2024 12:00AM

Lab File ID: BN033118.D Time Analyzed: 00:49

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	6545	16.952	6678	21.149	7431	23.336
UPPER LIMIT	13090	17.452	13356	21.649	14862	23.836
LOWER LIMIT	3272.5	16.452	3339	20.649	3715.5	22.836
EPA SAMPLE NO.						
01 PB162359BL	6484	17.01	6136	21.18	6282	23.35
02 PB162359BS	8881	16.95	8995	21.15	9641	23.34
03 PB162359BSD	8115	16.96	8576	21.15	9365	23.34
04 GWBR-05-440-460-072924	9109	16.93	10204	21.14	11347	23.33

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.

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: BN073124

Client: _____

Analytical Method: **8270-Modified**

DataFile: _____

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB162359BS	n-Nitrosodimethylamine	0.4	0.48	ug/L	120				33	130		
	bis(2-Chloroethyl)ether	0.4	0.38	ug/L	95				55	118		
	Naphthalene	0.4	0.39	ug/L	98				67	120		
	Hexachlorobutadiene	0.4	0.38	ug/L	95				33	114		
	2-Methylnaphthalene	0.4	0.35	ug/L	88				50	122		
	Acenaphthylene	0.4	0.39	ug/L	98				60	119		
	Acenaphthene	0.4	0.39	ug/L	98				65	119		
	Total PAH	6.4	6.11	ug/L	95				65	119		
	Fluorene	0.4	0.41	ug/L	103				58	122		
	4,6-Dinitro-2-methylphenol	0.4		ug/L	0		*		20	150		
	4-Bromophenyl-phenylether	0.4	0.33	ug/L	83				20	150		
	Hexachlorobenzene	0.4	0.33	ug/L	83				62	127		
	Atrazine	0.4	0.33	ug/L	83				20	150		
	Pentachlorophenol	0.8	0.23	ug/L	29				10	137		
	Phenanthrene	0.4	0.37	ug/L	93				65	117		
	Anthracene	0.4	0.32	ug/L	80				57	118		
	Fluoranthene	0.4	0.42	ug/L	105				53	126		
	Pyrene	0.4	0.35	ug/L	88				54	124		
	Benzo(a)anthracene	0.4	0.36	ug/L	90				54	130		
	Chrysene	0.4	0.41	ug/L	103				64	126		
	bis(2-Ethylhexyl)phthalate	0.4	0.55	ug/L	138		*		40	137		
	Benzo(b)fluoranthene	0.4	0.35	ug/L	88				65	121		
	Benzo(k)fluoranthene	0.4	0.38	ug/L	95				72	119		
	Benzo(a)pyrene	0.4	0.37	ug/L	93				68	120		
	Indeno(1,2,3-cd)pyrene	0.4	0.39	ug/L	98				70	127		
	Dibenz(a,h)anthracene	0.4	0.4	ug/L	100				65	121		
	Benzo(g,h,i)perylene	0.4	0.41	ug/L	103				76	117		
	1,4-Dioxane	0.4	0.45	ug/L	113				60	132		
PB162359BSD	n-Nitrosodimethylamine	0.4	0.5	ug/L	125				33	130		20
	bis(2-Chloroethyl)ether	0.4	0.38	ug/L	95				55	118		20
	Naphthalene	0.4	0.39	ug/L	98				67	120		20
	Hexachlorobutadiene	0.4	0.37	ug/L	93				33	114		20
	2-Methylnaphthalene	0.4	0.35	ug/L	88				50	122		20
	Acenaphthylene	0.4	0.39	ug/L	98				60	119		20
	Acenaphthene	0.4	0.4	ug/L	100				65	119		20
	Total PAH	6.4	6.12	ug/L	96				65	119		20
	Fluorene	0.4	0.41	ug/L	103				58	122		20
	4,6-Dinitro-2-methylphenol	0.4		ug/L	0		*		20	150		20
	4-Bromophenyl-phenylether	0.4	0.33	ug/L	83				20	150		20
	Hexachlorobenzene	0.4	0.33	ug/L	83				62	127		20
	Atrazine	0.4	0.33	ug/L	83				20	150		20
	Pentachlorophenol	0.8	0.24	ug/L	30				10	137		20
	Phenanthrene	0.4	0.37	ug/L	93				65	117		20
	Anthracene	0.4	0.31	ug/L	78				57	118		20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: BN073124

Client: _____

Analytical Method: **8270-Modified**

DataFile: _____

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB162359BSD	Fluoranthene	0.4	0.43	ug/L	108				53	126	20
	Pyrene	0.4	0.34	ug/L	85				54	124	20
	Benzo(a)anthracene	0.4	0.37	ug/L	93				54	130	20
	Chrysene	0.4	0.4	ug/L	100				64	126	20
	bis(2-Ethylhexyl)phthalate	0.4	0.56	ug/L	140		*		40	137	20
	Benzo(b)fluoranthene	0.4	0.34	ug/L	85				65	121	20
	Benzo(k)fluoranthene	0.4	0.38	ug/L	95				72	119	20
	Benzo(a)pyrene	0.4	0.37	ug/L	93				68	120	20
	Indeno(1,2,3-cd)pyrene	0.4	0.4	ug/L	100				70	127	20
	Dibenz(a,h)anthracene	0.4	0.4	ug/L	100				65	121	20
	Benzo(g,h,i)perylene	0.4	0.42	ug/L	105				76	117	20
	1,4-Dioxane	0.4	0.52	ug/L	130				60	132	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB162359BL

Lab Name: CHEMTECH

Contract: _____

Lab Code: CHEM Case No.: BN073124

SAS No.: BN073124 SDG NO.: BN073124

Lab File ID: BN033119.D

Lab Sample ID: PB162359BL

Instrument ID: BNA_N

Date Extracted: 07/30/2024

Matrix: (soil/water) Water

Date Analyzed: 07/31/2024

Level: (low/med) LOW

Time Analyzed: 00:49

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB162359BS	PB162359BS	BN033120.D	07/31/2024
PB162359BSD	PB162359BSD	BN033121.D	07/31/2024
GWBR-05-440-460-072924	P3395-01	BN033122.D	07/31/2024

COMMENTS: _____

Surrogate Summary

SW-846

SDG No.: BN073124

Client: _____

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Datafile	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
								Low	High
P3395-01	GWBR-05-440-460	BN033122.D	2-Methylnaphthalene-d10	0.4	0.30	76		30	150
			Fluoranthene-d10	0.4	0.43	107		30	150
			2-Fluorophenol	0.4	0.18	45		10	92
			Phenol-d6	0.4	0.15	37		10	100
			Nitrobenzene-d5	0.4	0.30	75		11	175
			2-Fluorobiphenyl	0.4	0.30	76		10	175
			2,4,6-Tribromophenol	0.4	0.32	81		24	148
			Terphenyl-d14	0.4	0.41	103		54	171
PB162359BL	PB162359BL	BN033119.D	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
			Fluoranthene-d10	0.4	0.43	108		30	150
			2-Fluorophenol	0.4	0.43	107	*	10	92
			Phenol-d6	0.4	0.58	145	*	10	100
			Nitrobenzene-d5	0.4	0.42	104		11	175
			2-Fluorobiphenyl	0.4	0.35	88		10	175
			2,4,6-Tribromophenol	0.4	0.25	63		24	148
			Terphenyl-d14	0.4	0.43	108		54	171
PB162359BS	PB162359BS	BN033120.D	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
			Fluoranthene-d10	0.4	0.42	104		30	150
			2-Fluorophenol	0.4	0.45	113	*	10	92
			Phenol-d6	0.4	0.53	132	*	10	100
			Nitrobenzene-d5	0.4	0.38	94		11	175
			2-Fluorobiphenyl	0.4	0.36	90		10	175
			2,4,6-Tribromophenol	0.4	0.32	79		24	148
			Terphenyl-d14	0.4	0.34	85		54	171
PB162359BSD	PB162359BSD	BN033121.D	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
			Fluoranthene-d10	0.4	0.42	104		30	150
			2-Fluorophenol	0.4	0.50	125	*	10	92
			Phenol-d6	0.4	0.58	145	*	10	100
			Nitrobenzene-d5	0.4	0.34	86		11	175
			2-Fluorobiphenyl	0.4	0.36	90		10	175
			2,4,6-Tribromophenol	0.4	0.31	77		24	148
			Terphenyl-d14	0.4	0.33	82		54	171

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: BN073124

Lab Code: CHEM

SAS No.: BN073124

SDG NO.: BN073124

Lab File ID: BN033117.D

DFTPP Injection Date: 07/30/2024

Instrument ID: BNA_N

DFTPP Injection Time: 22:57

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.1
68	Less than 2.0% of mass 69	0.8 (1.8) 1
69	Mass 69 relative abundance	46.2
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	52.8
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	26.6
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	7.9
442	Greater than 50% of mass 198	52.6
443	15.0 - 24.0% of mass 442	10.5 (19.9) 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	BN033118.D	07/30/2024	23:36
PB162359BL	PB162359BL	BN033119.D	07/31/2024	00:49
PB162359BS	PB162359BS	BN033120.D	07/31/2024	01:25
PB162359BSD	PB162359BSD	BN033121.D	07/31/2024	02:01
GWBR-05-440-460-072924	P3395-01	BN033122.D	07/31/2024	02:37