



7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG No.: BM011124

Instrument ID: BNA_M Calibration Date/Time: 1/11/2024 1:10:00

Lab File ID: BM043816.D Init. Calib. Date(s): _____

EPA Sample No.: SSTD0.4174 Init. Calib. Time(s): _____

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

COMPOUND	RRF	RRFCAL	MIN RRF	%D	MAX%D
1,4-Dioxane	0.514	0.518	0.010	0.6325	40.0
1,4-Dioxane-d8	0.484	0.496	0.010	2.4737	40.0
Naphthalene	1.148	1.122	0.600	-2.2831	30.0
1-Methylnaphthalene	0.766	0.758	0.300	-1.1116	30.0
2-Methylnaphthalene	0.755	0.739	0.300	-2.1199	30.0
Acenaphthylene	2.144	2.065	0.900	-3.6773	30.0
Acenaphthene	1.559	1.524	0.500	-2.2303	30.0
Fluorene	1.786	1.787	0.700	0.0534	30.0
Pentachlorophenol	0.127	0.092	0.010	-27.2666	50.0
Phenanthrene	1.270	1.228	0.300	-3.3592	30.0
Anthracene	1.210	1.153	0.400	-4.704	30.0
Fluoranthene	1.980	1.970	0.400	-0.5397	30.0
Pyrene	2.063	2.068	0.500	0.2413	30.0
Benzo (a) anthracene	1.736	1.708	0.400	-1.6269	30.0
Chrysene	1.870	1.777	0.400	-4.9254	30.0
Benzo (b) fluoranthene	1.630	1.583	0.200	-2.9228	30.0
Benzo (k) fluoranthene	1.798	1.682	0.200	-6.4754	30.0
Benzo (a) pyrene	1.528	1.510	0.200	-1.1364	30.0
Indeno (1,2,3-cd) pyrene	1.932	1.906	0.200	-1.3483	30.0
Dibenzo (a,h) anthracene	1.497	1.484	0.200	-0.842	30.0
Benzo (g,h,i) perylene	1.616	1.534	0.200	-5.074	30.0
Fluoranthene-d10	1.293	1.259	0.400	-2.6754	30.0
2-Methylnaphthalene-d10	0.578	0.562	0.300	-2.8388	30.0

All other compounds must meet a minimum RRF of 0.010.



7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG No.: BM011124

Instrument ID: BNA_M Calibration Date/Time: 1/11/2024 1:12:50

Lab File ID: BM043820.D Init. Calib. Date(s): _____

EPA Sample No.: SSTD0.4175 Init. Calib. Time(s): _____

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

COMPOUND	RRF	RRFCAL	MIN RRF	%D	MAX%D
1,4-Dioxane	0.514	0.495	0.010	-3.7579	50.0
1,4-Dioxane-d8	0.484	0.465	0.010	-3.9032	50.0
Naphthalene	1.148	1.135	0.600	-1.2156	50.0
1-Methylnaphthalene	0.766	0.788	0.300	2.8143	50.0
2-Methylnaphthalene	0.755	0.765	0.300	1.4325	50.0
Acenaphthylene	2.144	2.081	0.900	-2.9391	50.0
Acenaphthene	1.559	1.543	0.500	-1.0145	50.0
Fluorene	1.786	1.819	0.700	1.8327	50.0
Pentachlorophenol	0.127	0.094	0.010	-25.725	50.0
Phenanthrene	1.270	1.246	0.300	-1.9484	50.0
Anthracene	1.210	1.165	0.400	-3.6614	50.0
Fluoranthene	1.980	2.071	0.400	4.5671	50.0
Pyrene	2.063	2.181	0.500	5.7386	50.0
Benzo (a) anthracene	1.736	1.723	0.400	-0.7151	50.0
Chrysene	1.870	1.808	0.400	-3.29	50.0
Benzo (b) fluoranthene	1.630	1.644	0.200	0.8545	50.0
Benzo (k) fluoranthene	1.798	1.723	0.200	-4.1824	50.0
Benzo (a) pyrene	1.528	1.549	0.200	1.4154	50.0
Indeno (1,2,3-cd) pyrene	1.932	1.937	0.200	0.2378	50.0
Dibenzo (a,h) anthracene	1.497	1.504	0.200	0.4662	50.0
Benzo (g,h,i) perylene	1.616	1.548	0.200	-4.2267	50.0
Fluoranthene-d10	1.293	1.302	0.400	0.6519	50.0
2-Methylnaphthalene-d10	0.578	0.575	0.300	-0.527	50.0

All other compounds must meet a minimum RRF of 0.010.

Report of Analysis

Client:		Date Collected:	1/4/2024 12:00:00 AM
Project:		Date Received:	1/4/2024 12:00:00 AM
Client Sample ID:	SBLK247	SDG No.:	BM011124
Lab Sample ID:	PB158247BL	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% 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
BM043817.D	1	1/4/2024 12:00:00 AM	1/11/2024 12:00:00 AM	PB158247

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.039	U	0.039	0	0.2	ug/L
91-20-3	Naphthalene	0.015	U	0.015	0.05	0.1	ug/L
90-12-0	1-Methylnaphthalene	0.013	U	0.013	0.05	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.014	U	0.014	0.05	0.1	ug/L
208-96-8	Acenaphthylene	0.023	U	0.023	0.05	0.1	ug/L
83-32-9	Acenaphthene	0.016	U	0.016	0.05	0.1	ug/L
86-73-7	Fluorene	0.016	U	0.016	0.05	0.1	ug/L
87-86-5	Pentachlorophenol	0.074	U	0.074	0.1	0.2	ug/L
85-01-8	Phenanthrene	0.023	U	0.023	0.05	0.1	ug/L
120-12-7	Anthracene	0.018	U	0.018	0.05	0.1	ug/L
206-44-0	Fluoranthene	0.025	U	0.025	0.05	0.1	ug/L
129-00-0	Pyrene	0.025	U	0.025	0.05	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.011	U	0.011	0.05	0.1	ug/L
218-01-9	Chrysene	0.021	U	0.021	0.05	0.1	ug/L
205-99-2	Benzo(b)fluoranthene	0.017	U	0.017	0.05	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.011	U	0.011	0.05	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.04	U	0.04	0.05	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.021	U	0.021	0.05	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.014	U	0.014	0.05	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.026	U	0.026	0.05	0.1	ug/L
SURROGATES							
17647-74-4	1,4-Dioxane-d8	5.615		15-120		70	SPK: -8
93951-69-0	Fluoranthene-d10	0.295		30-130		74	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.282		30-130		70	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	7514	7.95				
1146-65-2	Naphthalene-d8	23462	10.763				
15067-26-2	Acenaphthene-d10	13889	14.597				
1517-22-2	Phenanthrene-d10	29816	17.345				
1719-03-5	Chrysene-d12	20447	21.55				
1520-96-3	Perylene-d12	19368	23.965				



Report of Analysis

Client:		Date Collected:	1/4/2024 12:00:00 AM
Project:		Date Received:	1/4/2024 12:00:00 AM
Client Sample ID:	SBLK247	SDG No.:	BM011124
Lab Sample ID:	PB158247BL	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:		Final Vol:	1000
			uL
Extraction Type :		Test:	
	Decanted :	Level :	LOW
Injection Volume :		GPC Factor :	
		GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM043817.D	1	1/4/2024 12:00:00 AM	1/11/2024 12:00:00 AM	PB158247

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	0.039	U			99	ug/L

Report of Analysis

Client:		Date Collected:	1/4/2024 12:00:00 AM
Project:		Date Received:	1/4/2024 12:00:00 AM
Client Sample ID:	BH7G0	SDG No.:	BM011124
Lab Sample ID:	P1024-01	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% 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
BM043818.D	1	1/4/2024 12:00:00 AM	1/11/2024 12:00:00 AM	PB158247

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.56		0.039	0	0.2	ug/L
91-20-3	Naphthalene	0.015	U	0.015	0.05	0.1	ug/L
90-12-0	1-Methylnaphthalene	0.013	U	0.013	0.05	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.014	U	0.014	0.05	0.1	ug/L
208-96-8	Acenaphthylene	0.023	U	0.023	0.05	0.1	ug/L
83-32-9	Acenaphthene	0.016	U	0.016	0.05	0.1	ug/L
86-73-7	Fluorene	0.016	U	0.016	0.05	0.1	ug/L
87-86-5	Pentachlorophenol	0.074	U	0.074	0.1	0.2	ug/L
85-01-8	Phenanthrene	0.023	U	0.023	0.05	0.1	ug/L
120-12-7	Anthracene	0.018	U	0.018	0.05	0.1	ug/L
206-44-0	Fluoranthene	0.025	U	0.025	0.05	0.1	ug/L
129-00-0	Pyrene	0.025	U	0.025	0.05	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.011	U	0.011	0.05	0.1	ug/L
218-01-9	Chrysene	0.021	U	0.021	0.05	0.1	ug/L
205-99-2	Benzo(b)fluoranthene	0.017	U	0.017	0.05	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.011	U	0.011	0.05	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.04	U	0.04	0.05	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.021	U	0.021	0.05	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.014	U	0.014	0.05	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.026	U	0.026	0.05	0.1	ug/L
SURROGATES							
17647-74-4	1,4-Dioxane-d8	3.559		15-120		44	SPK: -8
93951-69-0	Fluoranthene-d10	0.33		30-130		83	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.31		30-130		77	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6852		7.954			
1146-65-2	Naphthalene-d8	21678		10.763			
15067-26-2	Acenaphthene-d10	13120		14.597			
1517-22-2	Phenanthrene-d10	29145		17.346			
1719-03-5	Chrysene-d12	21027		21.547			
1520-96-3	Perylene-d12	20775		23.971			



Report of Analysis

Client:		Date Collected:	1/4/2024 12:00:00 AM
Project:		Date Received:	1/4/2024 12:00:00 AM
Client Sample ID:	BH7G0	SDG No.:	BM011124
Lab Sample ID:	P1024-01	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:		Final Vol:	1000 uL
Extraction Type :		Test:	
	Decanted :	Level :	LOW
Injection Volume :		GPC Factor :	
		GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM043818.D	1	1/4/2024 12:00:00 AM	1/11/2024 12:00:00 AM	PB158247

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	0.039	U			99	ug/L

Report of Analysis

Client:		Date Collected:	1/4/2024 12:00:00 AM
Project:		Date Received:	1/4/2024 12:00:00 AM
Client Sample ID:	SLCS247	SDG No.:	BM011124
Lab Sample ID:	PB158247BS	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% 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
BM043819.D	1	1/4/2024 12:00:00 AM	1/11/2024 12:00:00 AM	PB158247

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	1.9		0.039	0	0.2	ug/L
91-20-3	Naphthalene	0.33		0.015	0.05	0.1	ug/L
90-12-0	1-Methylnaphthalene	0.33		0.013	0.05	0.1	ug/L
91-57-6	2-Methylnaphthalene	0.34		0.014	0.05	0.1	ug/L
208-96-8	Acenaphthylene	0.33		0.023	0.05	0.1	ug/L
83-32-9	Acenaphthene	0.33		0.016	0.05	0.1	ug/L
86-73-7	Fluorene	0.34		0.016	0.05	0.1	ug/L
87-86-5	Pentachlorophenol	0.62		0.074	0.1	0.2	ug/L
85-01-8	Phenanthrene	0.34		0.023	0.05	0.1	ug/L
120-12-7	Anthracene	0.34		0.018	0.05	0.1	ug/L
206-44-0	Fluoranthene	0.37		0.025	0.05	0.1	ug/L
129-00-0	Pyrene	0.36		0.025	0.05	0.1	ug/L
56-55-3	Benzo(a)anthracene	0.35		0.011	0.05	0.1	ug/L
218-01-9	Chrysene	0.35		0.021	0.05	0.1	ug/L
205-99-2	Benzo(b)fluoranthene	0.36		0.017	0.05	0.1	ug/L
207-08-9	Benzo(k)fluoranthene	0.35		0.011	0.05	0.1	ug/L
50-32-8	Benzo(a)pyrene	0.35		0.04	0.05	0.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.35		0.021	0.05	0.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.35		0.014	0.05	0.1	ug/L
191-24-2	Benzo(g,h,i)perylene	0.35		0.026	0.05	0.1	ug/L
SURROGATES							
17647-74-4	1,4-Dioxane-d8	0.635		15-120		79	SPK: -0.8
93951-69-0	Fluoranthene-d10	0.359		30-130		90	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.333		30-130		83	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6546	7.958				
1146-65-2	Naphthalene-d8	19553	10.774				
15067-26-2	Acenaphthene-d10	12422	14.601				
1517-22-2	Phenanthrene-d10	27888	17.354				
1719-03-5	Chrysene-d12	18904	21.542				
1520-96-3	Perylene-d12	20292	23.974				



Report of Analysis

Client:		Date Collected:	1/4/2024 12:00:00 AM
Project:		Date Received:	1/4/2024 12:00:00 AM
Client Sample ID:	SLCS247	SDG No.:	BM011124
Lab Sample ID:	PB158247BS	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:		Final Vol:	1000
			uL
Extraction Type :		Test:	
	Decanted :	Level :	LOW
Injection Volume :		GPC Factor :	
		GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM043819.D	1	1/4/2024 12:00:00 AM	1/11/2024 12:00:00 AM	PB158247

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	0.039	U			99	ug/L

Report of Analysis

Client:		Date Collected:	
Project:		Date Received:	
Client Sample ID:	SP6395	SDG No.:	BM011124
Lab Sample ID:	SP6395	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000000 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
BM043821.D	1		1/11/2024 12:00:00 AM	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	39	U	39	0	200	ug/L
91-20-3	Naphthalene	15	U	15	50	100	ug/L
90-12-0	1-Methylnaphthalene	13	U	13	50	100	ug/L
91-57-6	2-Methylnaphthalene	14	U	14	50	100	ug/L
208-96-8	Acenaphthylene	23	U	23	50	100	ug/L
83-32-9	Acenaphthene	16	U	16	50	100	ug/L
86-73-7	Fluorene	16	U	16	50	100	ug/L
87-86-5	Pentachlorophenol	74	U	74	100	200	ug/L
85-01-8	Phenanthrene	23	U	23	50	100	ug/L
120-12-7	Anthracene	18	U	18	50	100	ug/L
206-44-0	Fluoranthene	25	U	25	50	100	ug/L
129-00-0	Pyrene	25	U	25	50	100	ug/L
56-55-3	Benzo(a)anthracene	11	U	11	50	100	ug/L
218-01-9	Chrysene	21	U	21	50	100	ug/L
205-99-2	Benzo(b)fluoranthene	17	U	17	50	100	ug/L
207-08-9	Benzo(k)fluoranthene	11	U	11	50	100	ug/L
50-32-8	Benzo(a)pyrene	40	U	40	50	100	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	21	U	21	50	100	ug/L
53-70-3	Dibenzo(a,h)anthracene	14	U	14	50	100	ug/L
191-24-2	Benzo(g,h,i)perylene	26	U	26	50	100	ug/L
SURROGATES							
17647-74-4	1,4-Dioxane-d8	14264	*	15-120		178300	SPK: -8
93951-69-0	Fluoranthene-d10	746	*	30-130		186500	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	741	*	30-130		185250	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	7677	7.95				
1146-65-2	Naphthalene-d8	23922	10.757				
15067-26-2	Acenaphthene-d10	14545	14.592				
1517-22-2	Phenanthrene-d10	30922	17.346				
1719-03-5	Chrysene-d12	20373	21.551				
1520-96-3	Perylene-d12	18929	23.968				



Report of Analysis

Client:		Date Collected:	
Project:		Date Received:	
Client Sample ID:	SP6395	SDG No.:	BM011124
Lab Sample ID:	SP6395	Matrix:	Water
Analytical Method:	SFAM_SVOASIM	% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:		Final Vol:	1000000 uL
Extraction Type :		Test:	
Injection Volume :		Decanted :	
		Level :	LOW
		GPC Factor :	
		GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM043821.D	1		1/11/2024 12:00:00 AM	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	39	U			99	ug/L



Hit Summary Sheet
SW-846

SDG No.: BM011124

Client:

Sample ID	Client ID		Parameter	Concentration	C	MDL	RDL	Units
Client ID : BH7G0								
P1024-01	BH7G0	Water	Total Alkanes	*	0.000	0.039	0.2	ug/L
			Total Tics :			0.00		
P1024-01	BH7G0	Water	1,4-Dioxane		0.560	0.039	0.2	ug/L
			Total Svoc :			0.56		
			Total Concentration:			0.56		
Client ID : SP6395								
SP6395	SP6395	Water	Total Alkanes	*	0.000	39	200	ug/L
			Total Tics :			0.00		
			Total Concentration:			0.00		



6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH

Contract: _____

Lab Code: CHEM Case No.: BM011024

SAS No.: BM011024

SDG No.: BM011024

Instrument ID: _____

Calibration Date(s): 1/10/2024 : _____

Calibration Time(s): 12:04 _____

LAB FILE ID:		RRFAL1 = BM043808.D			RRFAL2 = BM043809.D		RRFAL3 = BM043810.D	
		RRFAL4 = BM043811.D			RRFAL5 = BM043812.D		RRFAL6 = BM043813.D	
COMPOUND	RRFAL1	RRFAL2	RRFAL3	RRFAL4	RRFAL5	RRFAL6	RRF	% RSD
1,4-Dioxane		0.508	0.499	0.538	0.510	0.517	0.514	2.9
1,4-Dioxane-d8		0.486	0.484	0.504	0.471	0.473	0.484	2.7
Naphthalene	1.164	1.165	1.118	1.161	1.134		1.148	1.9
1-Methylnaphthalene	0.717	0.785	0.734	0.808	0.788		0.766	5.1
2-Methylnaphthalene	0.725	0.768	0.716	0.789	0.775		0.755	4.3
Acenaphthylene	2.162	2.150	2.073	2.194	2.140		2.144	2.1
Acenaphthene	1.569	1.581	1.521	1.595	1.527		1.559	2.1
Fluorene	1.741	1.804	1.773	1.849	1.762		1.786	2.4
Pentachlorophenol		0.190	0.097	0.108	0.112	0.127	0.127	29.1
Phenanthrene	1.248	1.271	1.229	1.322	1.282		1.270	2.8
Anthracene	1.195	1.215	1.164	1.256	1.217		1.210	2.8
Fluoranthene	1.947	2.042	1.813	2.094	2.007		1.980	5.4
Pyrene	2.056	2.133	1.927	2.146	2.053		2.063	4.2
Benzo(a)anthracene	1.679	1.743	1.686	1.806	1.764		1.736	3.1
Chrysene	2.018	1.921	1.764	1.861	1.783		1.870	5.6
Benzo(b)fluoranthene	1.686	1.629	1.565	1.642	1.630		1.630	2.7
Benzo(k)fluoranthene	1.962	1.878	1.651	1.787	1.712		1.798	7.0
Benzo(a)pyrene	1.556	1.520	1.490	1.543	1.529		1.528	1.7
Indeno(1,2,3-cd)pyrene	1.975	1.915	1.938	1.914	1.920		1.932	1.3
Dibenzo(a,h)anthracene	1.509	1.466	1.516	1.492	1.503		1.497	1.3
Benzo(g,h,i)perylene	1.707	1.624	1.578	1.593	1.578		1.616	3.4
Fluoranthene-d10	1.284	1.337	1.181	1.358	1.307		1.293	5.3
2-Methylnaphthalene-d10	0.557	0.584	0.552	0.606	0.593		0.578	4.0

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG NO.: BM011124

EPA Sample No.: SSTD0.4038 Date Analyzed: Jan 11 2024 12:00AM

Lab File ID: BM043810.D Time Analyzed: 10:36

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	8330	7.958	24187	10.77	14422	14.60
UPPER LIMIT	16660	8.458	48374	11.274	28844	15.101
LOWER LIMIT	4165	7.458	12093.5	10.274	7211	14.101
EPA SAMPLE NO.						
01 SBLK247	7514	7.95	23462	10.76	13889	14.60
02 BH7G0	6852	7.95	21678	10.76	13120	14.60
03 SLCS247	6546	7.96	19553	10.77	12422	14.60
04 SP6395	7677	7.95	23922	10.76	14545	14.59

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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG NO.: BM011124

EPA Sample No.: SSTD0.4174 Date Analyzed: Jan 11 2024 12:00AM

Lab File ID: BM043816.D Time Analyzed: 10:36

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	9297	7.958	27131	10.77	16878	14.60
UPPER LIMIT	18594	8.458	54262	11.274	33756	15.101
LOWER LIMIT	4648.5	7.458	13565.5	10.274	8439	14.101
EPA SAMPLE NO.						
01 SBLK247	7514	7.95	23462	10.76	13889	14.60
02 BH7G0	6852	7.95	21678	10.76	13120	14.60
03 SLCS247	6546	7.96	19553	10.77	12422	14.60

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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG NO.: BM011124

EPA Sample No.: SSTD0.4175 Date Analyzed: Jan 11 2024 12:00AM

Lab File ID: BM043820.D Time Analyzed: 17:41

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	8608	7.958	25751	10.77	16753	14.60
UPPER LIMIT	17216	8.458	51502	11.268	33506	15.097
LOWER LIMIT	4304	7.458	12875.5	10.268	8376.5	14.097
EPA SAMPLE NO.						
01 SP6395	7677	7.95	23922	10.76	14545	14.59

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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG NO.: BM011124

EPA Sample No.: SSTD0.4038 Date Analyzed: Jan 11 2024 12:00AM

Lab File ID: BM043810.D Time Analyzed: 10:36

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	34900	17.354	28003	21.542	33692	23.974
UPPER LIMIT	69800	17.854	56006	22.042	67384	24.474
LOWER LIMIT	17450	16.854	14001.5	21.042	16846	23.474
EPA SAMPLE NO.						
01 SBLK247	29816	17.35	20447	21.55	19368	23.97
02 BH7G0	29145	17.35	21027	21.55	20775	23.97
03 SLCS247	27888	17.35	18904	21.54	20292	23.97
04 SP6395	30922	17.35	20373	21.55	18929	23.97

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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG NO.: BM011124

EPA Sample No.: SSTD0.4174 Date Analyzed: Jan 11 2024 12:00AM

Lab File ID: BM043816.D Time Analyzed: 10:36

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	40788	17.354	29375	21.539	33176	23.968
UPPER LIMIT	81576	17.854	58750	22.039	66352	24.468
LOWER LIMIT	20394	16.854	14687.5	21.039	16588	23.468
EPA SAMPLE NO.						
01 SBLK247	29816	17.35	20447	21.55	19368	23.97
02 BH7G0	29145	17.35	21027	21.55	20775	23.97
03 SLCS247	27888	17.35	18904	21.54	20292	23.97

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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM011124 SAS No.: BM011124 SDG NO.: BM011124

EPA Sample No.: SSTD0.4175 Date Analyzed: Jan 11 2024 12:00AM

Lab File ID: BM043820.D Time Analyzed: 17:41

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	40568	17.354	27542	21.539	30829	23.965
UPPER LIMIT	81136	17.854	55084	22.039	61658	24.465
LOWER LIMIT	20284	16.854	13771	21.039	15414.5	23.465
EPA SAMPLE NO.						
01 SP6395	30922	17.35	20373	21.55	18929	23.97

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.: BM011124

Client: _____

Analytical Method: SFAM_SVOASIM DataFile: _____

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB158247BS	1,4-Dioxane	2	1.9	ug/L	95				0	0	
	Naphthalene	0.4	0.33	ug/L	83				0	0	
	1-Methylnaphthalene	0.4	0.33	ug/L	83				0	0	
	2-Methylnaphthalene	0.4	0.34	ug/L	85				0	0	
	Acenaphthylene	0.4	0.33	ug/L	83				0	0	
	Acenaphthene	0.4	0.33	ug/L	83				0	0	
	Fluorene	0.4	0.34	ug/L	85				0	0	
	Pentachlorophenol	0.8	0.62	ug/L	78				0	0	
	Phenanthrene	0.4	0.34	ug/L	85				0	0	
	Anthracene	0.4	0.34	ug/L	85				0	0	
	Fluoranthene	0.4	0.37	ug/L	93				0	0	
	Pyrene	0.4	0.36	ug/L	90				0	0	
	Benzo(a)anthracene	0.4	0.35	ug/L	88				0	0	
	Chrysene	0.4	0.35	ug/L	88				0	0	
	Benzo(b)fluoranthene	0.4	0.36	ug/L	90				0	0	
	Benzo(k)fluoranthene	0.4	0.35	ug/L	88				0	0	
	Benzo(a)pyrene	0.4	0.35	ug/L	88				0	0	
	Indeno(1,2,3-cd)pyrene	0.4	0.35	ug/L	88				0	0	
	Dibenzo(a,h)anthracene	0.4	0.35	ug/L	88				0	0	
	Benzo(g,h,i)perylene	0.4	0.35	ug/L	88				0	0	



4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SP6395

Lab Name: CHEMTECH

Contract: _____

Lab Code: CHEM Case No.: BM011124SAS No.: BM011124 SDG NO.: BM011124Lab File ID: BM043821.DLab Sample ID: SP6395Instrument ID: BNA_M

Date Extracted: _____

Matrix: (soil/water) WaterDate Analyzed: 01/11/2024Level: (low/med) LOWTime Analyzed: 17:41

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SP6395	SP6395	BM043821.D	01/11/2024

COMMENTS: _____



4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK247

Lab Name: CHEMTECH

Contract: _____

Lab Code: CHEM Case No.: BM011124SAS No.: BM011124 SDG NO.: BM011124Lab File ID: BM043817.DLab Sample ID: PB158247BLInstrument ID: BNA_MDate Extracted: 01/04/2024Matrix: (soil/water) WaterDate Analyzed: 01/11/2024Level: (low/med) LOWTime Analyzed: 10:36

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BH7G0	P1024-01	BM043818.D	01/11/2024
PB158247BS	PB158247BS	BM043819.D	01/11/2024

COMMENTS: _____



Surrogate Summary
SW-846

SDG No.: BM011124

Client:

Analytical Method: SFAM_SVOASIM

Lab Sample ID	Client ID	Datafile	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
								Low	High
SP6395	SP6395	BM043821.D	1,4-Dioxane-d8	8	14,264.00	178300	*	15	120
			Fluoranthene-d10	0.4	746.00	186500	*	30	130
			2-Methylnaphthalene-d10	0.4	741.00	185250	*	30	130



Surrogate Summary
SW-846

SDG No.: BM011124

Client:

Analytical Method: SFAM_SVOASIM

Lab Sample ID	Client ID	Datafile	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
								Low	High
P1024-01	BH7G0	BM043818.D	1,4-Dioxane-d8	8	3.56	44		15	120
			Fluoranthene-d10	0.4	0.33	83		30	130
			2-Methylnaphthalene-d10	0.4	0.31	77		30	130
PB158247BL	PB158247BL	BM043817.D	1,4-Dioxane-d8	8	5.62	70		15	120
			Fluoranthene-d10	0.4	0.30	74		30	130
			2-Methylnaphthalene-d10	0.4	0.28	70		30	130
PB158247BS	PB158247BS	BM043819.D	1,4-Dioxane-d8	0.8	0.64	79		15	120
			Fluoranthene-d10	0.4	0.36	90		30	130
			2-Methylnaphthalene-d10	0.4	0.33	83		30	130



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)Lab Name: CHEMTECHContract: BM011124Lab Code: CHEMSAS No.: BM011124 SDG NO.: BM011124Lab File ID: BM043815.DDFTPP Injection Date: 01/11/2024Instrument ID: BNA_MDFTPP Injection Time: 09:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.4
68	Less than 2.0% of mass 69	0.7 (1.6) 1
69	Mass 69 relative abundance	41.1
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	49.6
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	24.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	11.3
442	Greater than 50% of mass 198	72.4
443	15.0 - 24.0% of mass 442	14.4 (20) 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
SSTD0.4174	SSTDCCC0.4	BM043816.D	01/11/2024	10:00
SBLK247	PB158247BL	BM043817.D	01/11/2024	10:36
BH7G0	P1024-01	BM043818.D	01/11/2024	11:27
SLCS247	PB158247BS	BM043819.D	01/11/2024	12:12
SSTD0.4175	SSTDCCC0.4EC	BM043820.D	01/11/2024	12:50
SP6395	SP6395	BM043821.D	01/11/2024	17:41