

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: _____
Lab Code: CHEM Case No.: BM061224 SAS No.: BM061224 SDG No.: BM061224
Instrument ID: BNA_M Calibration Date/Time: 6/12/2024 1:10:50
Lab File ID: BM045992.D Init. Calib. Date(s): _____
EPA Sample No.: SSTD0.4126 Init. Calib. Time(s): _____
GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRFCAL	MIN RRF	%D	MAX%D
1,4-Dioxane	0.521	0.562	0.010	7.8835	40.0
1,4-Dioxane-d8	0.456	0.503	0.010	10.4984	40.0
Naphthalene	1.045	1.002	0.600	-4.1838	30.0
1-Methylnaphthalene	0.725	0.704	0.300	-2.8302	30.0
2-Methylnaphthalene	0.666	0.631	0.300	-5.2922	30.0
Acenaphthylene	1.819	1.713	0.900	-5.8451	30.0
Acenaphthene	1.337	1.267	0.500	-5.2134	30.0
Fluorene	1.494	1.408	0.700	-5.7417	30.0
Pentachlorophenol	0.075	0.074	0.010	-0.7733	50.0
Phenanthrene	1.123	1.013	0.300	-9.7689	30.0
Anthracene	0.958	0.817	0.400	-14.7533	30.0
Fluoranthene	1.595	1.490	0.400	-6.5718	30.0
Pyrene	1.664	1.541	0.500	-7.3973	30.0
Benzo (a) anthracene	1.468	1.314	0.400	-10.4959	30.0
Chrysene	1.598	1.497	0.400	-6.3633	30.0
Benzo (b) fluoranthene	1.327	1.330	0.200	0.2428	30.0
Benzo (k) fluoranthene	1.458	1.412	0.200	-3.1633	30.0
Benzo (a) pyrene	1.319	1.267	0.200	-4.0066	30.0
Indeno (1,2,3-cd) pyrene	1.706	1.490	0.200	-12.6474	30.0
Dibenzo (a,h) anthracene	1.364	1.190	0.200	-12.7677	30.0
Benzo (g,h,i) perylene	1.471	1.290	0.200	-12.314	30.0
Fluoranthene-d10	1.198	1.123	0.400	-6.2213	30.0
2-Methylnaphthalene-d10	0.575	0.559	0.300	-2.8408	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.: BM061224 SAS No.: BM061224 SDG No.: BM061224
Instrument ID: BNA_M Calibration Date/Time: 6/12/2024 1:16:45
Lab File ID: BM046000.D Init. Calib. Date(s): _____
EPA Sample No.: SSTD0.4127 Init. Calib. Time(s): _____
GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRFCAL	MIN RRF	%D	MAX%D
1,4-Dioxane	0.521	0.492	0.010	-5.7145	50.0
1,4-Dioxane-d8	0.456	0.459	0.010	0.8155	50.0
Naphthalene	1.045	1.007	0.600	-3.6348	50.0
1-Methylnaphthalene	0.725	0.714	0.300	-1.5557	50.0
2-Methylnaphthalene	0.666	0.644	0.300	-3.4501	50.0
Acenaphthylene	1.819	1.745	0.900	-4.0482	50.0
Acenaphthene	1.337	1.270	0.500	-5.0238	50.0
Fluorene	1.494	1.404	0.700	-6.0303	50.0
Pentachlorophenol	0.075	0.079	0.010	5.7269	50.0
Phenanthrene	1.123	1.015	0.300	-9.6528	50.0
Anthracene	0.958	0.821	0.400	-14.2909	50.0
Fluoranthene	1.595	1.507	0.400	-5.5259	50.0
Pyrene	1.664	1.552	0.500	-6.7312	50.0
Benzo (a) anthracene	1.468	1.327	0.400	-9.6303	50.0
Chrysene	1.598	1.520	0.400	-4.8799	50.0
Benzo (b) fluoranthene	1.327	1.332	0.200	0.4263	50.0
Benzo (k) fluoranthene	1.458	1.418	0.200	-2.715	50.0
Benzo (a) pyrene	1.319	1.233	0.200	-6.5449	50.0
Indeno (1,2,3-cd) pyrene	1.706	1.458	0.200	-14.5299	50.0
Dibenzo (a,h) anthracene	1.364	1.160	0.200	-14.9146	50.0
Benzo (g,h,i) perylene	1.471	1.241	0.200	-15.6503	50.0
Fluoranthene-d10	1.198	1.107	0.400	-7.5851	50.0
2-Methylnaphthalene-d10	0.575	0.561	0.300	-2.5291	50.0

All other compounds must meet a minimum RRF of 0.010.

Report of Analysis

Client:		Date Collected:	5/31/2024 12:00:00 AM
Project:		Date Received:	5/31/2024 12:00:00 AM
Client Sample ID:	SBLK249	SDG No.:	BM061224
Lab Sample ID:	PB161249BL	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045993.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.89	U	0.89	0	6.7	ug/Kg
91-20-3	Naphthalene	0.2	U	0.2	0.83	3.3	ug/Kg
90-12-0	1-Methylnaphthalene	0.52	U	0.52	0.83	3.3	ug/Kg
91-57-6	2-Methylnaphthalene	0.19	U	0.19	0.83	3.3	ug/Kg
208-96-8	Acenaphthylene	0.33	U	0.33	0.83	3.3	ug/Kg
83-32-9	Acenaphthene	0.18	U	0.18	0.83	3.3	ug/Kg
86-73-7	Fluorene	0.22	U	0.22	0.83	3.3	ug/Kg
87-86-5	Pentachlorophenol	2	U	2	1.7	6.7	ug/Kg
85-01-8	Phenanthrene	0.18	U	0.18	0.83	3.3	ug/Kg
120-12-7	Anthracene	0.17	U	0.17	0.83	3.3	ug/Kg
206-44-0	Fluoranthene	0.18	U	0.18	0.83	3.3	ug/Kg
129-00-0	Pyrene	0.24	U	0.24	0.83	3.3	ug/Kg
56-55-3	Benzo(a)anthracene	0.09	U	0.09	0.83	3.3	ug/Kg
218-01-9	Chrysene	0.25	U	0.25	0.83	3.3	ug/Kg
205-99-2	Benzo(b)fluoranthene	0.47	U	0.47	0.83	3.3	ug/Kg
207-08-9	Benzo(k)fluoranthene	0.32	U	0.32	0.83	3.3	ug/Kg
50-32-8	Benzo(a)pyrene	0.32	U	0.32	0.83	3.3	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	0.52	U	0.52	0.83	3.3	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	0.47	U	0.47	0.83	3.3	ug/Kg
191-24-2	Benzo(g,h,i)perylene	0.75	U	0.75	0.83	3.3	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	6.318		15-120		79	SPK: -8
93951-69-0	Fluoranthene-d10	0.355		30-130		89	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.309		20-140		77	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3270	7.442				
1146-65-2	Naphthalene-d8	11631	10.211				
15067-26-2	Acenaphthene-d10	7003	14.09				

Report of Analysis

Client:		Date Collected:	5/31/2024 12:00:00 AM
Project:		Date Received:	5/31/2024 12:00:00 AM
Client Sample ID:	SBLK249	SDG No.:	BM061224
Lab Sample ID:	PB161249BL	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045993.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	15694	16.829				
1719-03-5	Chrysene-d12	11807	21.044				
1520-96-3	Perylene-d12	9898	23.133				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	0.89	U			99	ug/Kg

Report of Analysis

Client:		Date Collected:	5/29/2024 12:00:00 AM
Project:		Date Received:	5/29/2024 12:00:00 AM
Client Sample ID:	A4DG2	SDG No.:	BM061224
Lab Sample ID:	P2642-18	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045994.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.89	U	0.89	0	6.7	ug/Kg
91-20-3	Naphthalene	5300	E	0.2	0.83	3.3	ug/Kg
90-12-0	1-Methylnaphthalene	0.52	U	0.52	0.83	3.3	ug/Kg
91-57-6	2-Methylnaphthalene	1.4	J	0.19	0.83	3.3	ug/Kg
208-96-8	Acenaphthylene	6100	E	0.33	0.83	3.3	ug/Kg
83-32-9	Acenaphthene	4000	E	0.18	0.83	3.3	ug/Kg
86-73-7	Fluorene	1800	E	0.22	0.83	3.3	ug/Kg
87-86-5	Pentachlorophenol	15000	E	2	1.7	6.7	ug/Kg
85-01-8	Phenanthrene	1900	E	0.18	0.83	3.3	ug/Kg
120-12-7	Anthracene	2900	E	0.17	0.83	3.3	ug/Kg
206-44-0	Fluoranthene	5400	E	0.18	0.83	3.3	ug/Kg
129-00-0	Pyrene	2600	E	0.24	0.83	3.3	ug/Kg
56-55-3	Benzo(a)anthracene	4000	E	0.09	0.83	3.3	ug/Kg
218-01-9	Chrysene	4600	E	0.25	0.83	3.3	ug/Kg
205-99-2	Benzo(b)fluoranthene	0.47	U	0.47	0.83	3.3	ug/Kg
207-08-9	Benzo(k)fluoranthene	5500	E	0.32	0.83	3.3	ug/Kg
50-32-8	Benzo(a)pyrene	0.32	U	0.32	0.83	3.3	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	0.52	U	0.52	0.83	3.3	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	3300	E	0.47	0.83	3.3	ug/Kg
191-24-2	Benzo(g,h,i)perylene	0.75	U	0.75	0.83	3.3	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	3.62		15-120		45	SPK: -8
93951-69-0	Fluoranthene-d10	0.388		30-130		97	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.29		20-140		72	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3822		7.438			
1146-65-2	Naphthalene-d8	12228		10.198			
15067-26-2	Acenaphthene-d10	7237		14.08			

Report of Analysis

Client:		Date Collected:	5/29/2024 12:00:00 AM
Project:		Date Received:	5/29/2024 12:00:00 AM
Client Sample ID:	A4DG2	SDG No.:	BM061224
Lab Sample ID:	P2642-18	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045994.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	16710	16.828				
1719-03-5	Chrysene-d12	14184	21.035				
1520-96-3	Perylene-d12	13686	23.128				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	0.89	U			99	ug/Kg

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18	SDG No.:	BM061224
Lab Sample ID:	P2642-01	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045995.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	1.3	U	1.3	0	9.6	ug/Kg
91-20-3	Naphthalene	21		0.29	1.2	4.7	ug/Kg
90-12-0	1-Methylnaphthalene	9.3		0.75	1.2	4.7	ug/Kg
91-57-6	2-Methylnaphthalene	12		0.27	1.2	4.7	ug/Kg
208-96-8	Acenaphthylene	25		0.47	1.2	4.7	ug/Kg
83-32-9	Acenaphthene	38		0.26	1.2	4.7	ug/Kg
86-73-7	Fluorene	40		0.32	1.2	4.7	ug/Kg
87-86-5	Pentachlorophenol	3.8	J	2.9	2.4	9.6	ug/Kg
85-01-8	Phenanthrene	460	E	0.26	1.2	4.7	ug/Kg
120-12-7	Anthracene	92	E	0.24	1.2	4.7	ug/Kg
206-44-0	Fluoranthene	700	E	0.26	1.2	4.7	ug/Kg
129-00-0	Pyrene	540	E	0.34	1.2	4.7	ug/Kg
56-55-3	Benzo(a)anthracene	330	E	0.13	1.2	4.7	ug/Kg
218-01-9	Chrysene	320	E	0.36	1.2	4.7	ug/Kg
205-99-2	Benzo(b)fluoranthene	460	E	0.68	1.2	4.7	ug/Kg
207-08-9	Benzo(k)fluoranthene	130	E	0.46	1.2	4.7	ug/Kg
50-32-8	Benzo(a)pyrene	220	E	0.46	1.2	4.7	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	120	E	0.75	1.2	4.7	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	45		0.68	1.2	4.7	ug/Kg
191-24-2	Benzo(g,h,i)perylene	24		1.1	1.2	4.7	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	5.101		15-120		64	SPK: -8
93951-69-0	Fluoranthene-d10	0.37		30-130		93	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.325		20-140		81	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3135		7.442			
1146-65-2	Naphthalene-d8	11128		10.211			
15067-26-2	Acenaphthene-d10	6724		14.09			

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18	SDG No.:	BM061224
Lab Sample ID:	P2642-01	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045995.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	15911	16.829				
1719-03-5	Chrysene-d12	12817	21.029				
1520-96-3	Perylene-d12	12855	23.13				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	1.3	U			99	ug/Kg

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18MS	SDG No.:	BM061224
Lab Sample ID:	P2642-02MS	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30.07 Units: g	Final Vol:	500 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
BM045996.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	55		1.3	0	9.6	ug/Kg
91-20-3	Naphthalene	26		0.29	1.2	4.7	ug/Kg
90-12-0	1-Methylnaphthalene	19		0.75	1.2	4.7	ug/Kg
91-57-6	2-Methylnaphthalene	21		0.27	1.2	4.7	ug/Kg
208-96-8	Acenaphthylene	26		0.47	1.2	4.7	ug/Kg
83-32-9	Acenaphthene	35		0.26	1.2	4.7	ug/Kg
86-73-7	Fluorene	37		0.32	1.2	4.7	ug/Kg
87-86-5	Pentachlorophenol	27		2.9	2.4	9.6	ug/Kg
85-01-8	Phenanthrene	290	E	0.26	1.2	4.7	ug/Kg
120-12-7	Anthracene	64		0.24	1.2	4.7	ug/Kg
206-44-0	Fluoranthene	440	E	0.26	1.2	4.7	ug/Kg
129-00-0	Pyrene	340	E	0.34	1.2	4.7	ug/Kg
56-55-3	Benzo(a)anthracene	210	E	0.13	1.2	4.7	ug/Kg
218-01-9	Chrysene	210	E	0.36	1.2	4.7	ug/Kg
205-99-2	Benzo(b)fluoranthene	250	E	0.67	1.2	4.7	ug/Kg
207-08-9	Benzo(k)fluoranthene	96	E	0.46	1.2	4.7	ug/Kg
50-32-8	Benzo(a)pyrene	120	E	0.46	1.2	4.7	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	74		0.75	1.2	4.7	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	35		0.67	1.2	4.7	ug/Kg
191-24-2	Benzo(g,h,i)perylene	14		1.1	1.2	4.7	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	0.535		15-120		67	SPK: -0.8
93951-69-0	Fluoranthene-d10	0.343		30-130		86	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.301		20-140		75	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2908		7.451			
1146-65-2	Naphthalene-d8	10368		10.222			
15067-26-2	Acenaphthene-d10	6611		14.095			

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18MS	SDG No.:	BM061224
Lab Sample ID:	P2642-02MS	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30.07 Units: g	Final Vol:	500 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
BM045996.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	14672	16.833				
1719-03-5	Chrysene-d12	12310	21.026				
1520-96-3	Perylene-d12	14208	23.127				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	1.3	U			99	ug/Kg

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18MSD	SDG No.:	BM061224
Lab Sample ID:	P2642-03MSD	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30.05 Units: g	Final Vol:	500 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
BM045997.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	52		1.3	0	9.6	ug/Kg
91-20-3	Naphthalene	24		0.29	1.2	4.7	ug/Kg
90-12-0	1-Methylnaphthalene	18		0.75	1.2	4.7	ug/Kg
91-57-6	2-Methylnaphthalene	20		0.27	1.2	4.7	ug/Kg
208-96-8	Acenaphthylene	24		0.47	1.2	4.7	ug/Kg
83-32-9	Acenaphthene	33		0.26	1.2	4.7	ug/Kg
86-73-7	Fluorene	35		0.32	1.2	4.7	ug/Kg
87-86-5	Pentachlorophenol	25		2.9	2.4	9.6	ug/Kg
85-01-8	Phenanthrene	280	E	0.26	1.2	4.7	ug/Kg
120-12-7	Anthracene	60		0.24	1.2	4.7	ug/Kg
206-44-0	Fluoranthene	400	E	0.26	1.2	4.7	ug/Kg
129-00-0	Pyrene	310	E	0.34	1.2	4.7	ug/Kg
56-55-3	Benzo(a)anthracene	200	E	0.13	1.2	4.7	ug/Kg
218-01-9	Chrysene	180	E	0.36	1.2	4.7	ug/Kg
205-99-2	Benzo(b)fluoranthene	230	E	0.67	1.2	4.7	ug/Kg
207-08-9	Benzo(k)fluoranthene	95	E	0.46	1.2	4.7	ug/Kg
50-32-8	Benzo(a)pyrene	110	E	0.46	1.2	4.7	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	69		0.75	1.2	4.7	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33		0.67	1.2	4.7	ug/Kg
191-24-2	Benzo(g,h,i)perylene	13		1.1	1.2	4.7	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	0.464		15-120		58	SPK: -0.8
93951-69-0	Fluoranthene-d10	0.314		30-130		79	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.284		20-140		71	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3075		7.451			
1146-65-2	Naphthalene-d8	10818		10.227			
15067-26-2	Acenaphthene-d10	6925		14.095			

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18MSD	SDG No.:	BM061224
Lab Sample ID:	P2642-03MSD	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30.05 Units: g	Final Vol:	500 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
BM045997.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	15154	16.833				
1719-03-5	Chrysene-d12	13351	21.026				
1520-96-3	Perylene-d12	15094	23.127				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	1.3	U			99	ug/Kg

Report of Analysis

Client:		Date Collected:	5/31/2024 12:00:00 AM
Project:		Date Received:	5/31/2024 12:00:00 AM
Client Sample ID:	SLCS249	SDG No.:	BM061224
Lab Sample ID:	PB161249BS	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045998.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	58		0.89	0	6.7	ug/Kg
91-20-3	Naphthalene	12		0.2	0.83	3.3	ug/Kg
90-12-0	1-Methylnaphthalene	11		0.52	0.83	3.3	ug/Kg
91-57-6	2-Methylnaphthalene	12		0.19	0.83	3.3	ug/Kg
208-96-8	Acenaphthylene	11		0.33	0.83	3.3	ug/Kg
83-32-9	Acenaphthene	11		0.18	0.83	3.3	ug/Kg
86-73-7	Fluorene	11		0.22	0.83	3.3	ug/Kg
87-86-5	Pentachlorophenol	23		2	1.7	6.7	ug/Kg
85-01-8	Phenanthrene	11		0.18	0.83	3.3	ug/Kg
120-12-7	Anthracene	10		0.17	0.83	3.3	ug/Kg
206-44-0	Fluoranthene	12		0.18	0.83	3.3	ug/Kg
129-00-0	Pyrene	12		0.24	0.83	3.3	ug/Kg
56-55-3	Benzo(a)anthracene	11		0.09	0.83	3.3	ug/Kg
218-01-9	Chrysene	12		0.25	0.83	3.3	ug/Kg
205-99-2	Benzo(b)fluoranthene	13		0.47	0.83	3.3	ug/Kg
207-08-9	Benzo(k)fluoranthene	13		0.32	0.83	3.3	ug/Kg
50-32-8	Benzo(a)pyrene	12		0.32	0.83	3.3	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	11		0.52	0.83	3.3	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	11		0.47	0.83	3.3	ug/Kg
191-24-2	Benzo(g,h,i)perylene	11		0.75	0.83	3.3	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	0.773		15-120		97	SPK: -0.8
93951-69-0	Fluoranthene-d10	0.35		30-130		88	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.356		20-140		89	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2665	7.459				
1146-65-2	Naphthalene-d8	9988	10.233				
15067-26-2	Acenaphthene-d10	6694	14.1				

Report of Analysis

Client:		Date Collected:	5/31/2024 12:00:00 AM
Project:		Date Received:	5/31/2024 12:00:00 AM
Client Sample ID:	SLCS249	SDG No.:	BM061224
Lab Sample ID:	PB161249BS	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045998.D	1	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	13892	16.85				
1719-03-5	Chrysene-d12	11521	21.038				
1520-96-3	Perylene-d12	11905	23.139				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	0.89	U			99	ug/Kg

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18DL	SDG No.:	BM061224
Lab Sample ID:	P2642-01DL	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045999.D	5	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.4	U	6.4	0	48	ug/Kg
91-20-3	Naphthalene	22	JD	1.4	5.9	24	ug/Kg
90-12-0	1-Methylnaphthalene	9.6	JD	3.7	5.9	24	ug/Kg
91-57-6	2-Methylnaphthalene	12	JD	1.4	5.9	24	ug/Kg
208-96-8	Acenaphthylene	28	D	2.4	5.9	24	ug/Kg
83-32-9	Acenaphthene	40	D	1.3	5.9	24	ug/Kg
86-73-7	Fluorene	41	D	1.6	5.9	24	ug/Kg
87-86-5	Pentachlorophenol	14	U	14	12	48	ug/Kg
85-01-8	Phenanthrene	510	ED	1.3	5.9	24	ug/Kg
120-12-7	Anthracene	100	D	1.2	5.9	24	ug/Kg
206-44-0	Fluoranthene	710	ED	1.3	5.9	24	ug/Kg
129-00-0	Pyrene	560	ED	1.7	5.9	24	ug/Kg
56-55-3	Benzo(a)anthracene	310	D	0.67	5.9	24	ug/Kg
218-01-9	Chrysene	310	D	1.8	5.9	24	ug/Kg
205-99-2	Benzo(b)fluoranthene	500	ED	3.4	5.9	24	ug/Kg
207-08-9	Benzo(k)fluoranthene	160	D	2.3	5.9	24	ug/Kg
50-32-8	Benzo(a)pyrene	240	D	2.3	5.9	24	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	140	D	3.7	5.9	24	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	47	D	3.4	5.9	24	ug/Kg
191-24-2	Benzo(g,h,i)perylene	28	D	5.4	5.9	24	ug/Kg
SURROGATES							
17647-74-4	1,4-Dioxane-d8	5.375		15-120		67	SPK: -8
93951-69-0	Fluoranthene-d10	0.34		30-130		85	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	0.32		20-140		80	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3013	7.443				
1146-65-2	Naphthalene-d8	10611	10.222				
15067-26-2	Acenaphthene-d10	6748	14.095				

Report of Analysis

Client:		Date Collected:	5/28/2024 12:00:00 AM
Project:		Date Received:	5/28/2024 12:00:00 AM
Client Sample ID:	A4C18DL	SDG No.:	BM061224
Lab Sample ID:	P2642-01DL	Matrix:	Solid
Analytical Method:	SFAM_SVOASIM	% Moisture:	30.4
Sample Wt/Vol:	30 Units: g	Final Vol:	500 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
BM045999.D	5	5/31/2024 12:00:00 AM	6/12/2024 12:00:00 AM	PB161249

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	14529	16.837				
1719-03-5	Chrysene-d12	13019	21.032				
1520-96-3	Perylene-d12	11848	23.136				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	6.4	U			99	ug/Kg

Hit Summary Sheet SW-846

SDG No.: BM061224

Client:

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : A4C18								
P2642-01	A4C18	Solid	Total Alkanes	*	0.000	1.3	9.6	ug/Kg
			Total Tics :			0.00		
P2642-01	A4C18	Solid	1-Methylnaphthalene		9.300	0.75	4.7	ug/Kg
P2642-01	A4C18	Solid	2-Methylnaphthalene		12.000	0.27	4.7	ug/Kg
P2642-01	A4C18	Solid	Acenaphthene		38.000	0.26	4.7	ug/Kg
P2642-01	A4C18	Solid	Acenaphthylene		25.000	0.47	4.7	ug/Kg
P2642-01	A4C18	Solid	Anthracene		92.000	E 0.24	4.7	ug/Kg
P2642-01	A4C18	Solid	Benzo(a)anthracene		330.000	E 0.13	4.7	ug/Kg
P2642-01	A4C18	Solid	Benzo(a)pyrene		220.000	E 0.46	4.7	ug/Kg
P2642-01	A4C18	Solid	Benzo(b)fluoranthene		460.000	E 0.68	4.7	ug/Kg
P2642-01	A4C18	Solid	Benzo(g,h,i)perylene		24.000	1.1	4.7	ug/Kg
P2642-01	A4C18	Solid	Benzo(k)fluoranthene		130.000	E 0.46	4.7	ug/Kg
P2642-01	A4C18	Solid	Chrysene		320.000	E 0.36	4.7	ug/Kg
P2642-01	A4C18	Solid	Dibenzo(a,h)anthracene		45.000	0.68	4.7	ug/Kg
P2642-01	A4C18	Solid	Fluoranthene		700.000	E 0.26	4.7	ug/Kg
P2642-01	A4C18	Solid	Fluorene		40.000	0.32	4.7	ug/Kg
P2642-01	A4C18	Solid	Indeno(1,2,3-cd)pyrene		120.000	E 0.75	4.7	ug/Kg
P2642-01	A4C18	Solid	Naphthalene		21.000	0.29	4.7	ug/Kg
P2642-01	A4C18	Solid	Pentachlorophenol		3.800	J 2.9	9.6	ug/Kg
P2642-01	A4C18	Solid	Phenanthrene		460.000	E 0.26	4.7	ug/Kg
P2642-01	A4C18	Solid	Pyrene		540.000	E 0.34	4.7	ug/Kg
			Total Svoc :			3,590.10		
			Total Concentration:			3,590.10		
Client ID : A4C18DL								
P2642-01DL	A4C18DL	Solid	Total Alkanes	*	0.000	D 6.4	48	ug/Kg
			Total Tics :			0.00		
P2642-01DL	A4C18DL	Solid	1-Methylnaphthalene		9.600	JD 3.7	24	ug/Kg
P2642-01DL	A4C18DL	Solid	2-Methylnaphthalene		12.000	JD 1.4	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Acenaphthene		40.000	D 1.3	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Acenaphthylene		28.000	D 2.4	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Anthracene		100.000	D 1.2	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Benzo(a)anthracene		310.000	D 0.67	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Benzo(a)pyrene		240.000	D 2.3	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Benzo(b)fluoranthene		500.000	ED 3.4	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Benzo(g,h,i)perylene		28.000	D 5.4	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Benzo(k)fluoranthene		160.000	D 2.3	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Chrysene		310.000	D 1.8	24	ug/Kg

Hit Summary Sheet SW-846

SDG No.: BM061224

Client:

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
P2642-01DL	A4C18DL	Solid	Dibenzo(a,h)anthracene	47.000	D	3.4	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Fluoranthene	710.000	ED	1.3	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Fluorene	41.000	D	1.6	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Indeno(1,2,3-cd)pyrene	140.000	D	3.7	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Naphthalene	22.000	JD	1.4	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Phenanthrene	510.000	ED	1.3	24	ug/Kg
P2642-01DL	A4C18DL	Solid	Pyrene	560.000	ED	1.7	24	ug/Kg
Total Svoc :				3,767.60				
Total Concentration:				3,767.60				

Client ID : A4DG2

P2642-18	A4DG2	Solid	Total Alkanes	*	0.000	0.89	6.7	ug/Kg
Total Tics :				0.00				
P2642-18	A4DG2	Solid	2-Methylnaphthalene		1.400	J	0.19	ug/Kg
P2642-18	A4DG2	Solid	Acenaphthene		4,000.000	E	0.18	ug/Kg
P2642-18	A4DG2	Solid	Acenaphthylene		6,100.000	E	0.33	ug/Kg
P2642-18	A4DG2	Solid	Anthracene		2,900.000	E	0.17	ug/Kg
P2642-18	A4DG2	Solid	Benzo(a)anthracene		4,000.000	E	0.09	ug/Kg
P2642-18	A4DG2	Solid	Benzo(k)fluoranthene		5,500.000	E	0.32	ug/Kg
P2642-18	A4DG2	Solid	Chrysene		4,600.000	E	0.25	ug/Kg
P2642-18	A4DG2	Solid	Dibenzo(a,h)anthracene		3,300.000	E	0.47	ug/Kg
P2642-18	A4DG2	Solid	Fluoranthene		5,400.000	E	0.18	ug/Kg
P2642-18	A4DG2	Solid	Fluorene		1,800.000	E	0.22	ug/Kg
P2642-18	A4DG2	Solid	Naphthalene		5,300.000	E	0.2	ug/Kg
P2642-18	A4DG2	Solid	Pentachlorophenol		15,000.000	E	2	ug/Kg
P2642-18	A4DG2	Solid	Phenanthrene		1,900.000	E	0.18	ug/Kg
P2642-18	A4DG2	Solid	Pyrene		2,600.000	E	0.24	ug/Kg
Total Svoc :				62,401.40				
Total Concentration:				62,401.40				



6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: _____
Lab Code: CHEM Case No.: BM060624 SAS No.: BM060624 SDG No.: BM060624
Instrument ID: _____ Calibration Date(s): 6/6/2024 1: _____
Calibration Time(s): 14:09 _____

LAB FILE ID:		RRFAL1 = BM045865.D			RRFAL2 = BM045866.D		RRFAL3 = BM045867.D	
		RRFAL4 = BM045868.D			RRFAL5 = BM045869.D		RRFAL6 = BM045870.D	
COMPOUND	RRFAL1	RRFAL2	RRFAL3	RRFAL4	RRFAL5	RRFAL6	RRF	% RSD
1,4-Dioxane		0.609	0.462	0.526	0.501	0.509	0.521	10.4
1,4-Dioxane-d8		0.461	0.396	0.484	0.459	0.479	0.456	7.7
Naphthalene	1.068	1.074	1.007	1.058	1.019		1.045	2.9
1-Methylnaphthalene	0.740	0.738	0.704	0.728	0.715		0.725	2.1
2-Methylnaphthalene	0.682	0.666	0.643	0.678	0.665		0.666	2.3
Acenaphthylene	1.849	1.818	1.739	1.861	1.829		1.819	2.6
Acenaphthene	1.377	1.348	1.274	1.365	1.319		1.337	3.1
Fluorene	1.532	1.447	1.444	1.547	1.502		1.494	3.2
Pentachlorophenol		0.069	0.063	0.077	0.078	0.087	0.075	12.0
Phenanthrene	1.242	1.124	1.044	1.119	1.087		1.123	6.6
Anthracene	0.949	0.932	0.905	0.999	1.004		0.958	4.5
Fluoranthene	1.653	1.580	1.538	1.574	1.631		1.595	2.9
Pyrene	1.742	1.666	1.594	1.637	1.680		1.664	3.3
Benzo(a)anthracene	1.524	1.461	1.348	1.507	1.501		1.468	4.8
Chrysene	1.680	1.653	1.513	1.610	1.536		1.598	4.5
Benzo(b)fluoranthene	1.380	1.297	1.246	1.331	1.380		1.327	4.3
Benzo(k)fluoranthene	1.523	1.519	1.354	1.491	1.403		1.458	5.2
Benzo(a)pyrene	1.393	1.364	1.216	1.329	1.296		1.319	5.2
Indeno(1,2,3-cd)pyrene	1.812	1.743	1.554	1.754	1.667		1.706	5.8
Dibenzo(a,h)anthracene	1.444	1.409	1.235	1.399	1.333		1.364	6.1
Benzo(g,h,i)perylene	1.550	1.517	1.350	1.513	1.427		1.471	5.6
Fluoranthene-d10	1.204	1.188	1.170	1.187	1.240		1.198	2.2
2-Methylnaphthalene-d10	0.577	0.580	0.558	0.586	0.576		0.575	1.8

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM061224 SAS No.: BM061224 SDG NO.: BM061224

EPA Sample No.: SSTD0.4010 Date Analyzed: Jun 12 2024 12:00AM

Lab File ID: BM045867.D Time Analyzed: 11:26

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	5098	7.485	16286	10.25	9715	14.12
UPPER LIMIT	10196	7.985	32572	10.753	19430	14.621
LOWER LIMIT	2549	6.985	8143	9.753	4857.5	13.621
EPA SAMPLE NO.						
01 SBLK249	3270	7.44	11631	10.21	7003	14.09
02 A4DG2	3822	7.44	12228	10.20	7237	14.08
03 A4C18	3135	7.44	11128	10.21	6724	14.09
04 A4C18MS	2908	7.45	10368	10.22	6611	14.10
05 A4C18MSD	3075	7.45	10818	10.23	6925	14.10
06 SLCS249	2665	7.46	9988	10.23	6694	14.10
07 A4C18DL	3013	7.44	10611	10.22	6748	14.10

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.: BM061224 SAS No.: BM061224 SDG NO.: BM061224

EPA Sample No.: SSTD0.4126 Date Analyzed: Jun 12 2024 12:00AM

Lab File ID: BM045992.D Time Analyzed: 11:26

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	2779	7.455	9678	10.23	6079	14.10
UPPER LIMIT	5558	7.955	19356	10.733	12158	14.6
LOWER LIMIT	1389.5	6.955	4839	9.733	3039.5	13.6
EPA SAMPLE NO.						
01 SBLK249	3270	7.44	11631	10.21	7003	14.09
02 A4DG2	3822	7.44	12228	10.20	7237	14.08
03 A4C18	3135	7.44	11128	10.21	6724	14.09
04 A4C18MS	2908	7.45	10368	10.22	6611	14.10
05 A4C18MSD	3075	7.45	10818	10.23	6925	14.10
06 SLCS249	2665	7.46	9988	10.23	6694	14.10
07 A4C18DL	3013	7.44	10611	10.22	6748	14.10

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.: BM061224 SAS No.: BM061224 SDG NO.: BM061224

EPA Sample No.: SSTD0.4010 Date Analyzed: Jun 12 2024 12:00AM

Lab File ID: BM045867.D Time Analyzed: 11:26

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	20314	16.866	15505	21.053	18210	23.166
UPPER LIMIT	40628	17.366	31010	21.553	36420	23.666
LOWER LIMIT	10157	16.366	7752.5	20.553	9105	22.666
EPA SAMPLE NO.						
01 SBLK249	15694	16.83	11807	21.04	9898	23.13
02 A4DG2	16710	16.83	14184	21.04	13686	23.13
03 A4C18	15911	16.83	12817	21.03	12855	23.13
04 A4C18MS	14672	16.83	12310	21.03	14208	23.13
05 A4C18MSD	15154	16.83	13351	21.03	15094	23.13
06 SLCS249	13892	16.85	11521	21.04	11905	23.14
07 A4C18DL	14529	16.84	13019	21.03	11848	23.14

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.: BM061224 SAS No.: BM061224 SDG NO.: BM061224

EPA Sample No.: SSTD0.4126 Date Analyzed: Jun 12 2024 12:00AM

Lab File ID: BM045992.D Time Analyzed: 11:26

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	13259	16.846	11030	21.038	12381	23.139
UPPER LIMIT	26518	17.346	22060	21.538	24762	23.639
LOWER LIMIT	6629.5	16.346	5515	20.538	6190.5	22.639
EPA SAMPLE NO.						
01 SBLK249	15694	16.83	11807	21.04	9898	23.13
02 A4DG2	16710	16.83	14184	21.04	13686	23.13
03 A4C18	15911	16.83	12817	21.03	12855	23.13
04 A4C18MS	14672	16.83	12310	21.03	14208	23.13
05 A4C18MSD	15154	16.83	13351	21.03	15094	23.13
06 SLCS249	13892	16.85	11521	21.04	11905	23.14
07 A4C18DL	14529	16.84	13019	21.03	11848	23.14

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.: BM061224

Client: _____

Analytical Method: SFAM_SVOASIM

DataFile: _____

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB161249BS	1,4-Dioxane	66.7	58	ug/Kg	87				0	0	
	Naphthalene	13.3	12	ug/Kg	90				0	0	
	1-Methylnaphthalene	13.3	11	ug/Kg	83				0	0	
	2-Methylnaphthalene	13.3	12	ug/Kg	90				0	0	
	Acenaphthylene	13.3	11	ug/Kg	83				0	0	
	Acenaphthene	13.3	11	ug/Kg	83				0	0	
	Fluorene	13.3	11	ug/Kg	83				0	0	
	Pentachlorophenol	26.7	23	ug/Kg	86				0	0	
	Phenanthrene	13.3	11	ug/Kg	83				0	0	
	Anthracene	13.3	10	ug/Kg	75				0	0	
	Fluoranthene	13.3	12	ug/Kg	90				0	0	
	Pyrene	13.3	12	ug/Kg	90				0	0	
	Benzo(a)anthracene	13.3	11	ug/Kg	83				0	0	
	Chrysene	13.3	12	ug/Kg	90				0	0	
	Benzo(b)fluoranthene	13.3	13	ug/Kg	98				0	0	
	Benzo(k)fluoranthene	13.3	13	ug/Kg	98				0	0	
	Benzo(a)pyrene	13.3	12	ug/Kg	90				0	0	
	Indeno(1,2,3-cd)pyrene	13.3	11	ug/Kg	83				0	0	
	Dibenzo(a,h)anthracene	13.3	11	ug/Kg	83				0	0	
	Benzo(g,h,i)perylene	13.3	11	ug/Kg	83				0	0	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK249

Lab Name: CHEMTECH

Contract: _____

Lab Code: CHEM Case No.: BM061224

SAS No.: BM061224 SDG NO.: BM061224

Lab File ID: BM045993.D

Lab Sample ID: PB161249BL

Instrument ID: BNA_M

Date Extracted: 05/31/2024

Matrix: (soil/water) Solid

Date Analyzed: 06/12/2024

Level: (low/med) LOW

Time Analyzed: 11:26

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
A4DG2	P2642-18	BM045994.D	06/12/2024
A4C18	P2642-01	BM045995.D	06/12/2024
A4C18MS	P2642-02MS	BM045996.D	06/12/2024
A4C18MSD	P2642-03MSD	BM045997.D	06/12/2024
PB161249BS	PB161249BS	BM045998.D	06/12/2024

COMMENTS: _____

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: BM061224

Client: _____

Analytical Method: SFAM_SVOASIM

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	P2642-02MS	Client Sample ID:	A4C18MS					DataFile:	BM045996.D		
1,4-Dioxane	95.6		55	ug/Kg	58				15	120	
Naphthalene	19.1	21	26	ug/Kg	26				0	0	
1-Methylnaphthalene	19.1	9.3	19	ug/Kg	51				0	0	
2-Methylnaphthalene	19.1	12	21	ug/Kg	47				0	0	
Acenaphthylene	19.1	25	26	ug/Kg	5				0	0	
Acenaphthene	19.1	38	35	ug/Kg	-16	*			31	137	
Fluorene	19.1	40	37	ug/Kg	-16				0	0	
Pentachlorophenol	38.2	3.8	27	ug/Kg	61				17	109	
Phenanthrene	19.1	460	290	ug/Kg	-890				0	0	
Anthracene	19.1	92	64	ug/Kg	-147				0	0	
Fluoranthene	19.1	700	440	ug/Kg	-1361				0	0	
Pyrene	19.1	540	340	ug/Kg	-1047	*			35	142	
Benzo(a)anthracene	19.1	330	210	ug/Kg	-628				0	0	
Chrysene	19.1	320	210	ug/Kg	-576				0	0	
Benzo(b)fluoranthene	19.1	460	250	ug/Kg	-1099				0	0	
Benzo(k)fluoranthene	19.1	130	96	ug/Kg	-178				0	0	
Benzo(a)pyrene	19.1	220	120	ug/Kg	-524				0	0	
Indeno(1,2,3-cd)pyrene	19.1	120	74	ug/Kg	-241				0	0	
Dibenzo(a,h)anthracene	19.1	45	35	ug/Kg	-52				0	0	
Benzo(g,h,i)perylene	19.1	24	14	ug/Kg	-52				0	0	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: BM061224

Client: _____

Analytical Method: SFAM_SVOASIM

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	P2642-03MSD	Client Sample ID:	A4C18MSD					DataFile:	BM045997.D		
1,4-Dioxane	95.6		52	ug/Kg	54		7		15	120	50
Naphthalene	19.1	21	24	ug/Kg	16		48	*	0	0	0
1-Methylnaphthalene	19.1	9.3	18	ug/Kg	46		10	*	0	0	0
2-Methylnaphthalene	19.1	12	20	ug/Kg	42		11	*	0	0	0
Acenaphthylene	19.1	25	24	ug/Kg	-5				0	0	0
Acenaphthene	19.1	38	33	ug/Kg	-26	*	48	*	31	137	19
Fluorene	19.1	40	35	ug/Kg	-26		48	*	0	0	0
Pentachlorophenol	38.3	3.8	25	ug/Kg	55		10		17	109	47
Phenanthrene	19.1	460	280	ug/Kg	-942		6	*	0	0	0
Anthracene	19.1	92	60	ug/Kg	-168		13	*	0	0	0
Fluoranthene	19.1	700	400	ug/Kg	-1571		14	*	0	0	0
Pyrene	19.1	540	310	ug/Kg	-1204	*	14		35	142	36
Benzo(a)anthracene	19.1	330	200	ug/Kg	-681		8	*	0	0	0
Chrysene	19.1	320	180	ug/Kg	-733		24	*	0	0	0
Benzo(b)fluoranthene	19.1	460	230	ug/Kg	-1204		9	*	0	0	0
Benzo(k)fluoranthene	19.1	130	95	ug/Kg	-183		3	*	0	0	0
Benzo(a)pyrene	19.1	220	110	ug/Kg	-576		9	*	0	0	0
Indeno(1,2,3-cd)pyrene	19.1	120	69	ug/Kg	-267		10	*	0	0	0
Dibenzo(a,h)anthracene	19.1	45	33	ug/Kg	-63		19	*	0	0	0
Benzo(g,h,i)perylene	19.1	24	13	ug/Kg	-58		11	*	0	0	0

Surrogate Summary

SW-846

SDG No.: **BM061224**

Client: _____

Analytical Method: **SFAM_SVOASIM**

Lab Sample ID	Client ID	Datafile	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
								Low	High
P2642-01	A4C18	BM045995.D	1,4-Dioxane-d8	8	5.10	64		15	120
			Fluoranthene-d10	0.4	0.37	93		30	130
			2-Methylnaphthalene-d10	0.4	0.33	81		20	140
P2642-01DL	A4C18DL	BM045999.D	1,4-Dioxane-d8	8	5.38	67		15	120
			Fluoranthene-d10	0.4	0.34	85		30	130
			2-Methylnaphthalene-d10	0.4	0.32	80		20	140
P2642-02MS	A4C18MS	BM045996.D	1,4-Dioxane-d8	0.8	0.54	67		15	120
			Fluoranthene-d10	0.4	0.34	86		30	130
			2-Methylnaphthalene-d10	0.4	0.30	75		20	140
P2642-03MSD	A4C18MSD	BM045997.D	1,4-Dioxane-d8	0.8	0.46	58		15	120
			Fluoranthene-d10	0.4	0.31	79		30	130
			2-Methylnaphthalene-d10	0.4	0.28	71		20	140
P2642-18	A4DG2	BM045994.D	1,4-Dioxane-d8	8	3.62	45		15	120
			Fluoranthene-d10	0.4	0.39	97		30	130
			2-Methylnaphthalene-d10	0.4	0.29	72		20	140
PB161249BL	PB161249BL	BM045993.D	1,4-Dioxane-d8	8	6.32	79		15	120
			Fluoranthene-d10	0.4	0.36	89		30	130
			2-Methylnaphthalene-d10	0.4	0.31	77		20	140
PB161249BS	PB161249BS	BM045998.D	1,4-Dioxane-d8	0.8	0.77	97		15	120
			Fluoranthene-d10	0.4	0.35	88		30	130
			2-Methylnaphthalene-d10	0.4	0.36	89		20	140

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: BM061224

Lab Code: CHEM

SAS No.: BM061224

SDG NO.: BM061224

Lab File ID: BM045991.D

DFTPP Injection Date: 06/12/2024

Instrument ID: BNA_M

DFTPP Injection Time: 10:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	77.7
68	Less than 2.0% of mass 69	1.1 (1.7) 1
69	Mass 69 relative abundance	61.4
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	56.8
197	Less than 2.0% of mass 198	0.3
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	25
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	54.8
443	15.0 - 24.0% of mass 442	10.5 (19.1) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD0.4126	SSTDCCC0.4	BM045992.D	06/12/2024	10:50
SBLK249	PB161249BL	BM045993.D	06/12/2024	11:26
A4DG2	P2642-18	BM045994.D	06/12/2024	12:02
A4C18	P2642-01	BM045995.D	06/12/2024	13:05
A4C18MS	P2642-02MS	BM045996.D	06/12/2024	13:41
A4C18MSD	P2642-03MSD	BM045997.D	06/12/2024	14:17
SLCS249	PB161249BS	BM045998.D	06/12/2024	14:54
A4C18DL	P2642-01DL	BM045999.D	06/12/2024	15:54
SSTD0.4127	SSTDCCC0.4EC	BM046000.D	06/12/2024	16:45