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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract:

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG No.: BM072424

Instrument ID: BNA_M Calibration Date/Time: 7/24/2024 12 15:31

Lab File ID: BM046789.D Init. Calib. Date(s):

EPA Sample No.: SICV049 Init. Calib. Time(s):

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

COMPOUND	RRF	RRFICV	MIN RRF	%D	MAX%D
1,4-Dioxane	0.320	0.307	0.010	-4.0659	40.0
1,4-Dioxane-d8	0.280	0.315	0.010	12.388	40.0
Naphthalene	1.012	1.028	0.600	1.6263	30.0
1-Methylnaphthalene	0.719	0.687	0.300	-4.4034	30.0
2-Methylnaphthalene	0.696	0.742	0.300	6.5548	30.0
Acenaphthylene	1.832	1.867	0.900	1.9276	30.0
Acenaphthene	1.243	1.220	0.500	-1.8867	30.0
Fluorene	1.554	1.496	0.700	-3.7225	30.0
Pentachlorophenol	0.181	0.144	0.010	-20.4541	50.0
Phenanthrene	1.150	1.141	0.300	-0.7371	30.0
Anthracene	1.070	1.088	0.400	1.6613	30.0
Fluoranthene	1.757	1.886	0.400	7.3455	30.0
Pyrene	1.817	1.948	0.500	7.208	30.0
Benzo(a)anthracene	1.667	1.566	0.400	-6.0344	30.0
Chrysene	1.693	1.552	0.400	-8.3221	30.0
Benzo(b)fluoranthene	1.756	1.435	0.200	-18.3101	30.0
Benzo(k)fluoranthene	1.770	1.506	0.200	-14.876	30.0
Benzo(a)pyrene	1.261	1.265	0.200	0.3708	30.0
Indeno(1,2,3-cd)pyrene	1.940	1.657	0.200	-14.6017	30.0
Dibenzo(a,h)anthracene	1.420	1.227	0.200	-13.6086	30.0
Benzo(g,h,i)perylene	1.709	1.442	0.200	-15.5989	30.0
Fluoranthene-d10	1.303	1.405	0.400	7.8204	30.0
2-Methylnaphthalene-d10	0.636	0.649	0.300	2.1401	30.0

All other compounds must meet a minimum RRF of 0.010.

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Report of Analysis

Client:				Date Collected:	
Project:				Date Received:	
Client Sample ID:	SSTD0.1043			SDG No.:	BM072424
Lab Sample ID:	SSTD0.175			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
BM046782.D	1		7/24/2024 12:00:00 AM	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	29	U	29	0	200	ug/L
91-20-3	Naphthalene	100		4.3	50	100	ug/L
90-12-0	1-Methylnaphthalene	97	J	15	50	100	ug/L
91-57-6	2-Methylnaphthalene	98	J	5.3	50	100	ug/L
208-96-8	Acenaphthylene	100		12	50	100	ug/L
83-32-9	Acenaphthene	100		7.4	50	100	ug/L
86-73-7	Fluorene	99	J	6.7	50	100	ug/L
87-86-5	Pentachlorophenol	63	U	63	100	200	ug/L
85-01-8	Phenanthrene	100		6.8	50	100	ug/L
120-12-7	Anthracene	100		8	50	100	ug/L
206-44-0	Fluoranthene	110		7.9	50	100	ug/L
129-00-0	Pyrene	100		6	50	100	ug/L
56-55-3	Benzo(a)anthracene	120		3.6	50	100	ug/L
218-01-9	Chrysene	140		7.7	50	100	ug/L
205-99-2	Benzo(b)fluoranthene	180		13	50	100	ug/L
207-08-9	Benzo(k)fluoranthene	190		9.8	50	100	ug/L
50-32-8	Benzo(a)pyrene	120		17	50	100	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	150		17	50	100	ug/L
53-70-3	Dibenzo(a,h)anthracene	140		14	50	100	ug/L
191-24-2	Benzo(g,h,i)perylene	160		22	50	100	ug/L
SURROGATES							
17647-74-4	1,4-Dioxane-d8	0	U	15-120		0	SPK: -8
93951-69-0	Fluoranthene-d10	105	*	30-130		26250	SPK: -0.4
7297-45-2	2-Methylnaphthalene-d10	99	*	30-130		24750	SPK: -0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2308	7.472				
1146-65-2	Naphthalene-d8	5418	10.231				
15067-26-2	Acenaphthene-d10	3126	14.117				

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Report of Analysis

Client:			Date Collected:		
Project:			Date Received:		
Client Sample ID:	SSTD0.1043		SDG No.:	BM072424	
Lab Sample ID:	SSTD0.175		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
BM046782.D	1		7/24/2024 12:00:00 AM	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1517-22-2	Phenanthrene-d10	5910	16.87				
1719-03-5	Chrysene-d12	4636	21.082				
1520-96-3	Perylene-d12	5525	23.206				
TENTATIVE IDENTIFIED COMPOUNDS							
E966796	Total Alkanes	29	U			99	ug/L

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Hit Summary Sheet
SW-846

SDG No.: BM072424

Client:

Sample ID	Client ID		Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**SSTD0.1043**								
SSTD0.175	SSTD0.1043	Water	Total Alkanes	*	0.000		29	200	ug/L
			Total Tics :				**0.00**		
SSTD0.175	SSTD0.1043	Water	1-Methylnaphthalene		97.000	J	15	100	ug/L
SSTD0.175	SSTD0.1043	Water	2-Methylnaphthalene		98.000	J	5.3	100	ug/L
SSTD0.175	SSTD0.1043	Water	Acenaphthene		100.000		7.4	100	ug/L
SSTD0.175	SSTD0.1043	Water	Acenaphthylene		100.000		12	100	ug/L
SSTD0.175	SSTD0.1043	Water	Anthracene		100.000		8	100	ug/L
SSTD0.175	SSTD0.1043	Water	Benzo(a)anthracene		120.000		3.6	100	ug/L
SSTD0.175	SSTD0.1043	Water	Benzo(a)pyrene		120.000		17	100	ug/L
SSTD0.175	SSTD0.1043	Water	Benzo(b)fluoranthene		180.000		13	100	ug/L
SSTD0.175	SSTD0.1043	Water	Benzo(g,h,i)perylene		160.000		22	100	ug/L
SSTD0.175	SSTD0.1043	Water	Benzo(k)fluoranthene		190.000		9.8	100	ug/L
SSTD0.175	SSTD0.1043	Water	Chrysene		140.000		7.7	100	ug/L
SSTD0.175	SSTD0.1043	Water	Dibenzo(a,h)anthracene		140.000		14	100	ug/L
SSTD0.175	SSTD0.1043	Water	Fluoranthene		110.000		7.9	100	ug/L
SSTD0.175	SSTD0.1043	Water	Fluorene		99.000	J	6.7	100	ug/L
SSTD0.175	SSTD0.1043	Water	Indeno(1,2,3-cd)pyrene		150.000		17	100	ug/L
SSTD0.175	SSTD0.1043	Water	Naphthalene		100.000		4.3	100	ug/L
SSTD0.175	SSTD0.1043	Water	Phenanthrene		100.000		6.8	100	ug/L
SSTD0.175	SSTD0.1043	Water	Pyrene		100.000		6	100	ug/L
			Total Svoc :		**2,204.00**				
			Total Concentration:		**2,204.00**				

CHEMTECH

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract:

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG No.: BM072424

Instrument ID: Calibration Date(s): 7/24/2024

Calibration Time(s): 09:37

LAB FILE ID: RRFAL2 = BM046783.D RRFAL3 = BM046784.D RRFAL4 = BM046785.D
RRFAL5 = BM046786.D RRFAL6 = BM046787.D RRFAL1 = BM046788.D

COMPOUND	RRFAL2	RRFAL3	RRFAL4	RRFAL5	RRFAL6	RRFAL1	RRF	% RSD
1,4-Dioxane	0.317	0.347	0.329	0.305	0.304		0.320	5.6
1,4-Dioxane-d8	0.280	0.273	0.289	0.280	0.279		0.280	2.1
Naphthalene	0.996	1.004	1.033	0.983		1.042	1.012	2.5
1-Methylnaphthalene	0.694	0.699	0.717	0.693		0.793	0.719	5.9
2-Methylnaphthalene	0.674	0.690	0.697	0.672		0.748	0.696	4.4
Acenaphthylene	1.826	1.803	1.918	1.841		1.772	1.832	3.0
Acenaphthene	1.238	1.212	1.275	1.230		1.262	1.243	2.0
Fluorene	1.880	1.418	1.494	1.463		1.515	1.554	12.0
Pentachlorophenol	0.184	0.163	0.166	0.166	0.226		0.181	14.5
Phenanthrene	1.126	1.124	1.155	1.117		1.226	1.150	3.9
Anthracene	1.064	1.064	1.102	1.074		1.048	1.070	1.9
Fluoranthene	1.671	1.635	1.760	1.722		1.996	1.757	8.1
Pyrene	1.700	1.708	1.810	1.765		2.104	1.817	9.2
Benzo(a)anthracene	1.728	1.617	1.633	1.546		1.810	1.667	6.2
Chrysene	1.825	1.641	1.645	1.528		1.827	1.693	7.7
Benzo(b)fluoranthene	2.049	1.677	1.697	1.521		1.837	1.756	11.3
Benzo(k)fluoranthene	2.057	1.696	1.703	1.490		1.902	1.770	12.2
Benzo(a)pyrene	1.284	1.237	1.298	1.182		1.302	1.261	4.1
Indeno(1,2,3-cd)pyrene	2.190	1.931	1.980	1.754		1.846	1.940	8.5
Dibenzo(a,h)anthracene	1.600	1.413	1.454	1.295		1.339	1.420	8.3
Benzo(g,h,i)perylene	1.896	1.685	1.699	1.562		1.702	1.709	7.0
Fluoranthene-d10	1.218	1.226	1.335	1.304		1.431	1.303	6.7
2-Methylnaphthalene-d10	0.622	0.618	0.638	0.614		0.688	0.636	4.8

All other compounds must meet a minimum RRF of 0.010.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG NO.: BM072424

EPA Sample No.: SSTD0.4045 Date Analyzed: Jul 24 2024 12:00AM

Lab File ID: BM046784.D Time Analyzed: 09:00

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	2611	7.472	6076	10.23	3515	14.12
	UPPER LIMIT	5222	7.972	12152	10.733	7030	14.618
	LOWER LIMIT	1305.5	6.972	3038	9.733	1757.5	13.618
	EPA SAMPLE NO.						
01	SSTD0.1043	2308	7.47	5418	10.23	3126	14.12
02	SICV049	2586	7.48	6278	10.23	4136	14.12

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.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG NO.: BM072424

EPA Sample No.: _____ Date Analyzed: _____

Lab File ID: _____ Time Analyzed: _____

Instrument ID: _____ GC Column: _____ ID: _____ (mm)

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD						
UPPER LIMIT						
LOWER LIMIT						
EPA SAMPLE NO.						

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG NO.: BM072424

EPA Sample No.: SSTD0.4045 Date Analyzed: Jul 24 2024 12:00AM

Lab File ID: BM046784.D Time Analyzed: 09:00

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	6760	16.871	5378	21.081	6482	23.209
	UPPER LIMIT	13520	17.371	10756	21.581	12964	23.709
	LOWER LIMIT	3380	16.371	2689	20.581	3241	22.709
	EPA SAMPLE NO.						
01	SSTD0.1043	5910	16.87	4636	21.08	5525	23.21
02	SICV049	8179	16.87	5524	21.08	6236	23.21

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG NO.: BM072424

EPA Sample No.: _____ Date Analyzed: _____

Lab File ID: _____ Time Analyzed: _____

Instrument ID: _____ GC Column: _____ ID: _____ (mm)

	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
12 HOUR STD						
UPPER LIMIT						
LOWER LIMIT						
EPA SAMPLE NO.						

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.

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: BM072424

Client:

Analytical Method: SFAM_SVOASIM **DataFile:**

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
SSTDICV0.4	1,4-Dioxane	0.4	0	ug/L	0				0	0	
	Naphthalene	0.4	0	ug/L	0				0	0	
	1-Methylnaphthalene	0.4	0	ug/L	0				0	0	
	2-Methylnaphthalene	0.4	0	ug/L	0				0	0	
	Acenaphthylene	0.4	0	ug/L	0				0	0	
	Acenaphthene	0.4	0	ug/L	0				0	0	
	Fluorene	0.4	0	ug/L	0				0	0	
	Pentachlorophenol	0.4	0	ug/L	0				0	0	
	Phenanthrene	0.4	0	ug/L	0				0	0	
	Anthracene	0.4	0	ug/L	0				0	0	
	Fluoranthene	0.4	0	ug/L	0				0	0	
	Pyrene	0.4	0	ug/L	0				0	0	
	Benzo(a)anthracene	0.4	0	ug/L	0				0	0	
	Chrysene	0.4	0	ug/L	0				0	0	
	Benzo(b)fluoranthene	0.4	0	ug/L	0				0	0	
	Benzo(k)fluoranthene	0.4	0	ug/L	0				0	0	
	Benzo(a)pyrene	0.4	0	ug/L	0				0	0	
	Indeno(1,2,3-cd)pyrene	0.4	0	ug/L	0				0	0	
	Dibenzo(a,h)anthracene	0.4	0	ug/L	0				0	0	
	Benzo(g,h,i)perylene	0.4	0	ug/L	0				0	0	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SSTD0.1043

Lab Name: CHEMTECH Contract:

Lab Code: CHEM Case No.: BM072424 SAS No.: BM072424 SDG NO.: BM072424

Lab File ID: BM046782.D Lab Sample ID: SSTD0.175

Instrument ID: BNA_M Date Extracted:

Matrix: (soil/water) Water Date Analyzed: 07/24/2024

Level: (low/med) LOW Time Analyzed: 09:00

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SSTD0.1043	SSTD0.175	BM046782.D	07/24/2024

COMMENTS:

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Surrogate Summary

SW-846

SDG No.: BM072424

Client:

Analytical Method: SFAM_SVOASIM

Lab Sample ID	Client ID	Datafile	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
SSTD0.175	SSTD0.1043	BM046782.D	1,4-Dioxane-d8	8	0.00	0	*	15	120
			Fluoranthene-d10	0.4	105.00	26250	*	30	130
			2-Methylnaphthalene-d10	0.4	99.00	24750	*	30	130

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: BM072424

Lab Code: CHEM SAS No.: BM072424 SDG NO.: BM072424

Lab File ID: BM046781.D DFTPP Injection Date: 07/24/2024

Instrument ID: BNA_M DFTPP Injection Time: 08:21

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.4
68	Less than 2.0% of mass 69	0.7 (1.7) 1
69	Mass 69 relative abundance	38.9
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	44.3
197	Less than 2.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	30.5
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	56.5
443	15.0 - 24.0% of mass 442	11.2 (19.8) 2

1-Value is % mass 69 2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD0.1043	SSTD0.175	BM046782.D	07/24/2024	09:00
SSTD0.2044	SSTD0.276	BM046783.D	07/24/2024	09:37
SSTD0.4045	SSTD0.477	BM046784.D	07/24/2024	10:13
SSTD0.8046	SSTD0.878	BM046785.D	07/24/2024	10:50
SSTD1.6047	SSTD1.679	BM046786.D	07/24/2024	11:26
SSTD3.2048	SSTD3.280	BM046787.D	07/24/2024	12:03
SSTD0.1043	SSTD0.175	BM046788.D	07/24/2024	13:40
SICV049	SSTDICV0.4	BM046789.D	07/24/2024	15:31