

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: _____
Lab Code: CHEM Case No.: BM052824 SAS No.: BM052824 SDG No.: BM052824
Instrument ID: BNA_M Calibration Date/Time: 5/28/2024 1: 22:51
Lab File ID: BM045773.D Init. Calib. Date(s): _____
EPA Sample No.: SICV007 Init. Calib. Time(s): _____
GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRFICV	MIN RRF	%D	MAX%D
1,4-Dioxane	0.499	0.421	0.010	-15.6636	40.0
1,4-Dioxane-d8	0.517	0.475	0.010	-8.1244	40.0
Naphthalene	1.042	0.959	0.600	-7.9218	30.0
1-Methylnaphthalene	0.685	0.562	0.300	-18.0041	30.0
2-Methylnaphthalene	0.650	0.604	0.300	-6.9612	30.0
Acenaphthylene	1.846	1.690	0.900	-8.4481	30.0
Acenaphthene	1.338	1.174	0.500	-12.2143	30.0
Fluorene	1.486	1.342	0.700	-9.6851	30.0
Pentachlorophenol	0.021	0.012	0.010	-42.6949	50.0
Phenanthrene	1.128	1.005	0.300	-10.9179	30.0
Anthracene	1.044	0.950	0.400	-9.0279	30.0
Fluoranthene	1.851	1.640	0.400	-11.3879	30.0
Pyrene	1.911	1.713	0.500	-10.3441	30.0
Benzo (a) anthracene	1.547	1.368	0.400	-11.5988	30.0
Chrysene	1.596	1.473	0.400	-7.7502	30.0
Benzo (b) fluoranthene	1.464	1.389	0.200	-5.1593	30.0
Benzo (k) fluoranthene	1.457	1.483	0.200	1.8017	30.0
Benzo (a) pyrene	1.239	1.218	0.200	-1.7572	30.0
Indeno (1,2,3-cd) pyrene	1.381	1.581	0.200	14.5446	30.0
Dibenzo (a,h) anthracene	1.010	1.175	0.200	16.3635	30.0
Benzo (g,h,i) perylene	1.374	1.377	0.200	0.233	30.0
Fluoranthene-d10	1.380	1.213	0.400	-12.1211	30.0
2-Methylnaphthalene-d10	0.553	0.496	0.300	-10.3421	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:		SDG No.:	
Lab Sample ID:		Matrix:	
Analytical Method:			
Sample Wt/Vol:	Units:	Final Vol:	
Soil Aliquot Vol:	uL	Test:	
Extraction Type :	Decanted :	Level :	
Injection Volume :	GPC Factor :	GPC Cleanup :	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
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CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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Hit Summary Sheet
SW-846

SDG No.: BM052824

Client:

Sample ID	Client ID	Parameter	Concentration	C	MDL	RDL	Units
Client ID :							

Total Concentration:



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SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: _____
Lab Code: CHEM Case No.: BM052824 SAS No.: BM052824 SDG No.: BM052824
Instrument ID: _____ Calibration Date(s): 5/28/2024 : _____
Calibration Time(s): 19:13 _____

LAB FILE ID:		RRFAL1 = BM045767.D			RRFAL2 = BM045768.D		RRFAL3 = BM045769.D	
		RRFAL4 = BM045770.D			RRFAL5 = BM045771.D		RRFAL6 = BM045772.D	
COMPOUND	RRFAL1	RRFAL2	RRFAL3	RRFAL4	RRFAL5	RRFAL6	RRF	% RSD
1,4-Dioxane		0.508	0.476	0.500	0.506	0.503	0.499	2.6
1,4-Dioxane-d8		0.576	0.486	0.522	0.502	0.500	0.517	6.8
Naphthalene	1.082	1.064	0.979	1.057	1.026		1.042	3.9
1-Methylnaphthalene	0.719	0.695	0.639	0.695	0.678		0.685	4.4
2-Methylnaphthalene	0.675	0.662	0.602	0.663	0.645		0.650	4.4
Acenaphthylene	1.897	1.868	1.733	1.885	1.849		1.846	3.6
Acenaphthene	1.381	1.375	1.252	1.359	1.321		1.338	4.0
Fluorene	1.517	1.521	1.376	1.524	1.490		1.486	4.2
Pentachlorophenol		0.018	0.020	0.019	0.021	0.025	0.021	13.0
Phenanthrene	1.181	1.148	1.044	1.148	1.119		1.128	4.6
Anthracene	1.044	1.059	0.974	1.081	1.064		1.044	4.0
Fluoranthene	1.954	1.889	1.704	1.864	1.846		1.851	5.0
Pyrene	2.045	1.945	1.750	1.918	1.896		1.911	5.6
Benzo(a)anthracene	1.613	1.547	1.415	1.575	1.587		1.547	5.0
Chrysene	1.617	1.653	1.491	1.634	1.585		1.596	4.0
Benzo(b)fluoranthene	1.526	1.524	1.335	1.473	1.463		1.464	5.3
Benzo(k)fluoranthene	1.527	1.473	1.340	1.496	1.448		1.457	4.9
Benzo(a)pyrene	1.268	1.262	1.163	1.255	1.249		1.239	3.5
Indeno(1,2,3-cd)pyrene	1.607	1.414	1.212	1.336	1.334		1.381	10.5
Dibenzo(a,h)anthracene	1.172	1.029	0.890	0.977	0.979		1.010	10.3
Benzo(g,h,i)perylene	1.612	1.423	1.221	1.317	1.295		1.374	11.0
Fluoranthene-d10	1.453	1.420	1.265	1.394	1.370		1.380	5.2
2-Methylnaphthalene-d10	0.584	0.557	0.515	0.563	0.547		0.553	4.6

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1



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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM052824 SAS No.: BM052824 SDG NO.: BM052824

EPA Sample No.: SSTD0.4003 Date Analyzed: May 28 2024 12:00AM

Lab File ID: BM045769.D Time Analyzed: 22:51

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	8155	7.489	23967	10.26	12027	14.13
UPPER LIMIT	16310	7.989	47934	10.76	24054	14.632
LOWER LIMIT	4077.5	6.989	11983.5	9.76	6013.5	13.632
EPA SAMPLE NO.						
01 SICV007	7343	7.49	22027	10.26	11331	14.13

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.: BM052824 SAS No.: BM052824 SDG NO.: BM052824

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BM052824 SAS No.: BM052824 SDG NO.: BM052824

EPA Sample No.: SSTD0.4003 Date Analyzed: May 28 2024 12:00AM

Lab File ID: BM045769.D Time Analyzed: 22:51

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	23729	16.875	15785	21.061	17227	23.177
UPPER LIMIT	47458	17.375	31570	21.561	34454	23.677
LOWER LIMIT	11864.5	16.375	7892.5	20.561	8613.5	22.677
EPA SAMPLE NO.						
01 SICV007	22451	16.87	15015	21.06	15393	23.18

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.: BM052824 SAS No.: BM052824 SDG NO.: BM052824

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.

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: BM052824

Client: _____

Analytical Method: SFAM_SVOASIM

DataFile: _____

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
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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SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: CHEMTECH

Contract: _____

Lab Code: CHEM Case No.: BM052824

SAS No.: BM052824 SDG NO.: BM052824

Lab File ID: _____

Lab Sample ID: _____

Instrument ID: _____

Date Extracted: _____

Matrix: (soil/water) _____

Date Analyzed: _____

Level: (low/med) _____

Time Analyzed: _____

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED

COMMENTS:



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Surrogate Summary

SW-846

SDG No.: _____

Client: _____

Analytical Method: _____

Lab Sample ID	Client ID	Datafile	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
				(PPM)	(PPM)			Low	High

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: BM052824

Lab Code: CHEM

SAS No.: BM052824

SDG NO.: BM052824

Lab File ID: BM045766.D

DFTPP Injection Date: 05/28/2024

Instrument ID: BNA_M

DFTPP Injection Time: 18:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	55.1
68	Less than 2.0% of mass 69	0.6 (1.3) 1
69	Mass 69 relative abundance	48.5
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	51.9
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	6.5
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	54.5
443	15.0 - 24.0% of mass 442	10.7 (19.7) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD0.1001	SSTD0.139	BM045767.D	05/28/2024	19:13
SSTD0.2002	SSTD0.240	BM045768.D	05/28/2024	19:49
SSTD0.4003	SSTD0.441	BM045769.D	05/28/2024	20:26
SSTD0.8004	SSTD0.842	BM045770.D	05/28/2024	21:02
SSTD1.6005	SSTD1.643	BM045771.D	05/28/2024	21:39
SSTD3.2006	SSTD3.244	BM045772.D	05/28/2024	22:15
SICV007	SSTDICV0.4	BM045773.D	05/28/2024	22:51