CHEMTECH

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract:

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG No.: BN031524

Instrument ID: BNA_N Calibration Date/Time: 3/14/2024 1: 22:49

Lab File ID: BN030409.D Init. Calib. Date(s):

EPA Sample No.: SICV201 Init. Calib. Time(s):

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

COMPOUND	RRF	RRFICV	MIN RRF	%D	MAX%D
1,4-Dioxane	0.531	0.491	0.010	-7.6071	40.0
1,4-Dioxane-d8	0.488	0.493	0.010	1.0423	40.0
Naphthalene	1.080	1.113	0.600	3.0873	30.0
1-Methylnaphthalene	0.671	0.659	0.300	-1.7381	30.0
2-Methylnaphthalene	0.632	0.657	0.300	3.8012	30.0
Acenaphthylene	1.907	1.934	0.900	1.4074	30.0
Acenaphthene	1.397	1.387	0.500	-0.7313	30.0
Fluorene	1.537	1.564	0.700	1.7205	30.0
Pentachlorophenol	0.115	0.105	0.010	-8.316	50.0
Phenanthrene	1.179	1.168	0.300	-0.9202	30.0
Anthracene	1.077	1.040	0.400	-3.464	30.0
Fluoranthene	1.582	1.563	0.400	-1.2333	30.0
Pyrene	1.691	1.694	0.500	0.2109	30.0
Benzo(a)anthracene	1.342	1.314	0.400	-2.0856	30.0
Chrysene	1.543	1.574	0.400	2.0091	30.0
Benzo(b)fluoranthene	1.341	1.366	0.200	1.8219	30.0
Benzo(k)fluoranthene	1.632	1.605	0.200	-1.671	30.0
Benzo(a)pyrene	1.417	1.390	0.200	-1.9149	30.0
Indeno(1,2,3-cd)pyrene	1.871	1.864	0.200	-0.4113	30.0
Dibenzo(a,h)anthracene	1.429	1.418	0.200	-0.8025	30.0
Benzo(g,h,i)perylene	1.672	1.604	0.200	-4.0505	30.0
Fluoranthene-d10	1.231	1.210	0.400	-1.714	30.0
2-Methylnaphthalene-d10	0.553	0.553	0.300	0.0019	30.0

All other compounds must meet a minimum RRF of 0.010.

CHEMTECH

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

CHEMTECH

Hit Summary Sheet
SW-846

SDG No.: BN031524

Client:

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

Total Concentration:

CHEMTECH

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SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract:

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG No.: BN031524

Instrument ID: Calibration Date(s): 3/14/2024

Calibration Time(s): 19:12

LAB FILE ID: RRFAL1 = BN030403.D RRFAL2 = BN030404.D RRFAL3 = BN030405.D
RRFAL4 = BN030406.D RRFAL5 = BN030407.D RRFAL6 = BN030408.D

COMPOUND	RRFAL1	RRFAL2	RRFAL3	RRFAL4	RRFAL5	RRFAL6	RRF	% RSD
1,4-Dioxane		0.623	0.510	0.515	0.496	0.511	0.531	9.7
1,4-Dioxane-d8		0.537	0.476	0.492	0.461	0.473	0.488	6.1
Naphthalene	1.091	1.079	1.073	1.101	1.055		1.080	1.6
1-Methylnaphthalene	0.625	0.648	0.673	0.716	0.691		0.671	5.3
2-Methylnaphthalene	0.551	0.596	0.634	0.696	0.685		0.632	9.6
Acenaphthylene	1.952	1.911	1.838	1.943	1.890		1.907	2.4
Acenaphthene	1.460	1.405	1.347	1.409	1.363		1.397	3.2
Fluorene	1.524	1.503	1.481	1.615	1.564		1.537	3.5
Pentachlorophenol		0.113	0.101	0.116	0.119	0.127	0.115	8.3
Phenanthrene	1.211	1.194	1.151	1.186	1.151		1.179	2.3
Anthracene	1.089	1.089	1.042	1.090	1.077		1.077	1.9
Fluoranthene	1.572	1.594	1.574	1.608	1.563		1.582	1.2
Pyrene	1.727	1.745	1.675	1.692	1.613		1.691	3.0
Benzo(a)anthracene	1.293	1.329	1.285	1.402	1.398		1.342	4.2
Chrysene	1.566	1.574	1.482	1.581	1.512		1.543	2.8
Benzo(b)fluoranthene	1.335	1.301	1.297	1.400	1.374		1.341	3.4
Benzo(k)fluoranthene	1.694	1.670	1.587	1.614	1.595		1.632	2.9
Benzo(a)pyrene	1.503	1.388	1.380	1.421	1.391		1.417	3.6
Indeno(1,2,3-cd)pyrene	1.892	1.874	1.820	1.895	1.876		1.871	1.6
Dibenzo(a,h)anthracene	1.395	1.424	1.395	1.464	1.467		1.429	2.5
Benzo(g,h,i)perylene	1.702	1.708	1.645	1.670	1.635		1.672	2.0
Fluoranthene-d10	1.227	1.245	1.231	1.245	1.206		1.231	1.3
2-Methylnaphthalene-d10	0.470	0.514	0.562	0.616	0.602		0.553	11.1

All other compounds must meet a minimum RRF of 0.010.

CHEMTECH

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG NO.: BN031524

EPA Sample No.: SSTD0.4246 Date Analyzed: Mar 14 2024 12:00AM

Lab File ID: BN030405.D Time Analyzed: 22:49

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	1755	7.608	3947	10.38	2264	14.25
	UPPER LIMIT	3510	8.108	7894	10.883	4528	14.754
	LOWER LIMIT	877.5	7.108	1973.5	9.883	1132	13.754
	EPA SAMPLE NO.						
01	SICV201	1867	7.60	4210	10.38	2426	14.25

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.

CHEMTECH

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG NO.: BN031524

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.

CHEMTECH

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG NO.: BN031524

EPA Sample No.: SSTD0.4246 Date Analyzed: Mar 14 2024 12:00AM

Lab File ID: BN030405.D Time Analyzed: 22:49

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	4302	17.013	3730	21.215	4309	23.422
	UPPER LIMIT	8604	17.513	7460	21.715	8618	23.922
	LOWER LIMIT	2151	16.513	1865	20.715	2154.5	22.922
	EPA SAMPLE NO.						
01	SICV201	4856	17.01	4417	21.22	5159	23.43

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.

CHEMTECH

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG NO.: BN031524

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.

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: BN031524

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	

CHEMTECH

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SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: CHEMTECH Contract:

Lab Code: CHEM Case No.: BN031524 SAS No.: BN031524 SDG NO.: BN031524

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:

CHEMTECH

Surrogate Summary

SW-846

SDG No.: _____

Client: _____

Analytical Method:

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

CHEMTECH

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: BN031524

Lab Code: CHEM SAS No.: BN031524 SDG NO.: BN031524

Lab File ID: BN030402.D DFTPP Injection Date: 03/14/2024

Instrument ID: BNA_N DFTPP Injection Time: 18:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	33.1
68	Less than 2.0% of mass 69	0.8 (1.8) 1
69	Mass 69 relative abundance	42.8
70	Less than 2.0% of mass 69	0.1 (0.3) 1
127	10.0 - 80.0% of mass 198	43.8
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	29.3
365	Greater than 1% of mass 198	5.7
441	Present, but less than mass 443	11.8
442	Greater than 50% of mass 198	68.5
443	15.0 - 24.0% of mass 442	12.7 (18.6) 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
SSTD0.1244	SSTD0.168	BN030403.D	03/14/2024	19:12
SSTD0.2245	SSTD0.269	BN030404.D	03/14/2024	19:49
SSTD0.4246	SSTD0.470	BN030405.D	03/14/2024	20:25
SSTD0.8247	SSTD0.871	BN030406.D	03/14/2024	21:01
SSTD1.6248	SSTD1.672	BN030407.D	03/14/2024	21:37
SSTD3.2249	SSTD3.273	BN030408.D	03/14/2024	22:13
SICV201	SSTDICV0.4	BN030409.D	03/14/2024	22:49