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LAB CHRONICLE

OrderID:	P5316	**OrderDate:**	12/17/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5316-01	**TT-304-IDWSO-20241217-1**	**SOIL**			**12/17/24**			**12/17/24**
			SVOCMS Group2	8270E		12/18/24	12/20/24	

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Hit Summary Sheet
SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :									
				0.000					
			Total Svoc :		**0.00**				
			Total Concentration:		**0.00**				

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	TT-304-IDWSO-20241217-1	SDG No.:	P5316
Lab Sample ID:	P5316-01	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	68.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140945.D	1	12/18/24 11:35	12/20/24 12:51	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	190	U	120	190	250	ug/Kg
95-48-7	2-Methylphenol	190	U	120	190	250	ug/Kg
65794-96-9	3+4-Methylphenols	390	U	120	390	480	ug/Kg
91-20-3	Naphthalene	190	U	120	190	250	ug/Kg
208-96-8	Acenaphthylene	190	U	130	190	250	ug/Kg
83-32-9	Acenaphthene	190	U	120	190	250	ug/Kg
86-73-7	Fluorene	190	U	120	190	250	ug/Kg
87-86-5	Pentachlorophenol	390	U	110	390	480	ug/Kg
120-12-7	Anthracene	190	U	120	190	250	ug/Kg
206-44-0	Fluoranthene	190	U	120	190	250	ug/Kg
129-00-0	Pyrene	190	U	120	190	250	ug/Kg
56-55-3	Benzo(a)anthracene	190	U	120	190	250	ug/Kg
218-01-9	Chrysene	190	U	120	190	250	ug/Kg
205-99-2	Benzo(b)fluoranthene	190	U	120	190	250	ug/Kg
207-08-9	Benzo(k)fluoranthene	190	U	120	190	250	ug/Kg
50-32-8	Benzo(a)pyrene	190	U	140	190	250	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	190	U	110	190	250	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	190	U	120	190	250	ug/Kg
191-24-2	Benzo(g,h,i)perylene	190	U	120	190	250	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	92.6		35 - 115		62%	SPK: 150
13127-88-3	Phenol-d6	97.5		34 - 127		65%	SPK: 150
4165-60-0	Nitrobenzene-d5	59.0		37 - 122		59%	SPK: 100
321-60-8	2-Fluorobiphenyl	56.2		44 - 115		56%	SPK: 100
118-79-6	2,4,6-Tribromophenol	86.1		39 - 132		57%	SPK: 150
1718-51-0	Terphenyl-d14	48.0	*	54 - 127		48%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	57900	6.845				
1146-65-2	Naphthalene-d8	221000	8.128				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	TT-304-IDWSO-20241217-1	SDG No.:	P5316
Lab Sample ID:	P5316-01	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	68.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140945.D	1	12/18/24 11:35	12/20/24 12:51	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	123000	9.886				
1517-22-2	Phenanthrene-d10	210000	11.374				
1719-03-5	Chrysene-d12	174000	14.033				
1520-96-3	Perylene-d12	136000	15.533				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
P5306-09MS	OU4-VSL-11-121224MS	2-Fluorophenol	150	131	88		35	115
		Phenol-d6	150	134	90		34	127
		Nitrobenzene-d5	100	89.0	89		37	122
		2-Fluorobiphenyl	100	84.0	84		44	115
		2,4,6-Tribromophenol	150	122	82		39	132
		Terphenyl-d14	100	91.0	91		54	127
P5306-09MSD	OU4-VSL-11-121224MSD	2-Fluorophenol	150	142	95		35	115
		Phenol-d6	150	140	94		34	127
		Nitrobenzene-d5	100	89.7	90		37	122
		2-Fluorobiphenyl	100	86.8	87		44	115
		2,4,6-Tribromophenol	150	134	90		39	132
		Terphenyl-d14	100	92.3	92		54	127
P5316-01	TT-304-IDWSO-20241217-1	2-Fluorophenol	150	92.6	62		35	115
		Phenol-d6	150	97.5	65		34	127
		Nitrobenzene-d5	100	59.0	59		37	122
		2-Fluorobiphenyl	100	56.2	56		44	115
		2,4,6-Tribromophenol	150	86.1	57		39	132
		Terphenyl-d14	100	48.0	48	*	54	127
PB165705BL	PB165705BL	2-Fluorophenol	150	150	100		35	115
		Phenol-d6	150	153	102		34	127
		Nitrobenzene-d5	100	107	107		37	122
		2-Fluorobiphenyl	100	103	103		44	115
		2,4,6-Tribromophenol	150	146	97		39	132
		Terphenyl-d14	100	110	110		54	127
PB165705BS	PB165705BS	2-Fluorophenol	150	143	96		35	115
		Phenol-d6	150	136	91		34	127
		Nitrobenzene-d5	100	91.6	92		37	122
		2-Fluorobiphenyl	100	105	105		44	115
		2,4,6-Tribromophenol	150	135	90		39	132
		Terphenyl-d14	100	121	121		54	127

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: P5306-09MS		**Client Sample ID: OU4-VSL-11-121224MS**						**DataFile: BF140948.D**			
Phenol	1800	0	2000	ug/Kg	111				34	121	
2-Methylphenol	1800	0	1900	ug/Kg	106				32	122	
3+4-Methylphenols	1800	0	2000	ug/Kg	111				34	119	
Naphthalene	1800	0	1800	ug/Kg	100				35	123	
Acenaphthylene	1800	0	2000	ug/Kg	111				32	132	
Acenaphthene	1800	0	1900	ug/Kg	106				40	123	
Fluorene	1800	0	1800	ug/Kg	100				43	125	
Pentachlorophenol	3500	0	2800	ug/Kg	80				25	133	
Anthracene	1800	0	1900	ug/Kg	106				47	123	
Fluoranthene	1800	0	1700	ug/Kg	94				50	127	
Pyrene	1800	0	2000	ug/Kg	111				47	127	
Benzo(a)anthracene	1800	0	1900	ug/Kg	106				49	126	
Chrysene	1800	0	1800	ug/Kg	100				50	124	
Benzo(b)fluoranthene	1800	0	1700	ug/Kg	94				45	132	
Benzo(k)fluoranthene	1800	0	2000	ug/Kg	111				47	132	
Benzo(a)pyrene	1800	0	2000	ug/Kg	111				45	129	
Indeno(1,2,3-cd)pyrene	1800	0	2400	ug/Kg	133				45	133	
Dibenz(a,h)anthracene	1800	0	2300	ug/Kg	128				45	134	
Benzo(g,h,i)perylene	1800	0	2200	ug/Kg	122				43	134	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: P5306-09MSD		**Client Sample ID: OU4-VSL-11-121224MSD**						**DataFile: BF140949.D**			
Phenol	1800	0	2100	ug/Kg	117		5		34	121	20
2-Methylphenol	1800	0	2000	ug/Kg	111		5		32	122	20
3+4-Methylphenols	1800	0	2000	ug/Kg	111		0		34	119	20
Naphthalene	1800	0	1900	ug/Kg	106		6		35	123	20
Acenaphthylene	1800	0	2100	ug/Kg	117		5		32	132	20
Acenaphthene	1800	0	2000	ug/Kg	111		5		40	123	20
Fluorene	1800	0	1900	ug/Kg	106		6		43	125	20
Pentachlorophenol	3600	0	3000	ug/Kg	83		4		25	133	20
Anthracene	1800	0	2200	ug/Kg	122		14		47	123	20
Fluoranthene	1800	0	2000	ug/Kg	111		17		50	127	20
Pyrene	1800	0	2000	ug/Kg	111		0		47	127	20
Benzo(a)anthracene	1800	0	1900	ug/Kg	106		0		49	126	20
Chrysene	1800	0	1900	ug/Kg	106		6		50	124	20
Benzo(b)fluoranthene	1800	0	1900	ug/Kg	106		12		45	132	20
Benzo(k)fluoranthene	1800	0	2000	ug/Kg	111		0		47	132	20
Benzo(a)pyrene	1800	0	2100	ug/Kg	117		5		45	129	20
Indeno(1,2,3-cd)pyrene	1800	0	2400	ug/Kg	133		0		45	133	20
Dibenz(a,h)anthracene	1800	0	2400	ug/Kg	133		4		45	134	20
Benzo(g,h,i)perylene	1800	0	2200	ug/Kg	122		0		43	134	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270E **DataFile:** BF140944.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB165705BS	Phenol	1700	1600	ug/Kg	94				34	121	
	2-Methylphenol	1700	1600	ug/Kg	94				32	122	
	3+4-Methylphenols	1700	1700	ug/Kg	100				34	119	
	Naphthalene	1700	1600	ug/Kg	94				35	123	
	Acenaphthylene	1700	1800	ug/Kg	106				32	132	
	Acenaphthene	1700	1800	ug/Kg	106				40	123	
	Fluorene	1700	1500	ug/Kg	88				43	125	
	Pentachlorophenol	3300	2900	ug/Kg	88				25	133	
	Anthracene	1700	2000	ug/Kg	118				47	123	
	Fluoranthene	1700	1900	ug/Kg	112				50	127	
	Pyrene	1700	1900	ug/Kg	112				47	127	
	Benzo(a)anthracene	1700	1800	ug/Kg	106				49	126	
	Chrysene	1700	1800	ug/Kg	106				50	124	
	Benzo(b)fluoranthene	1700	1800	ug/Kg	106				45	132	
	Benzo(k)fluoranthene	1700	1800	ug/Kg	106				47	132	
	Benzo(a)pyrene	1700	1900	ug/Kg	112				45	129	
	Indeno(1,2,3-cd)pyrene	1700	2200	ug/Kg	129				45	133	
	Dibenz(a,h)anthracene	1700	2100	ug/Kg	124				45	134	
	Benzo(g,h,i)perylene	1700	2100	ug/Kg	124				43	134	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165705BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Lab File ID: BF140943.D Lab Sample ID: PB165705BL

Instrument ID: BNA_F Date Extracted: 12/18/2024

Matrix: (soil/water) SOIL Date Analyzed: 12/20/2024

Level: (low/med) LOW Time Analyzed: 11:41

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB165705BS	PB165705BS	BF140944.D	12/20/2024
TT-304-IDWSO-20241217-1	P5316-01	BF140945.D	12/20/2024
OU4-VSL-11-121224MS	P5306-09MS	BF140948.D	12/20/2024
OU4-VSL-11-121224MSD	P5306-09MSD	BF140949.D	12/20/2024

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5316 SDG NO.: P5316

Lab File ID: BF140854.D DFTPP Injection Date: 12/16/2024

Instrument ID: BNA_F DFTPP Injection Time: 11:21

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	35.6
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	48.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	28.9
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	13.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.9 (19.4) 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
SSTDICC2.5	SSTDICC2.5	BF140855.D	12/16/2024	12:13
SSTDICC005	SSTDICC005	BF140856.D	12/16/2024	12:39
SSTDICC010	SSTDICC010	BF140857.D	12/16/2024	13:05
SSTDICC020	SSTDICC020	BF140858.D	12/16/2024	14:00
SSTDICCC040	SSTDICCC040	BF140859.D	12/16/2024	14:26
SSTDICC050	SSTDICC050	BF140860.D	12/16/2024	15:23
SSTDICC060	SSTDICC060	BF140861.D	12/16/2024	15:49
SSTDICC080	SSTDICC080	BF140862.D	12/16/2024	16:15

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5316 SDG NO.: P5316

Lab File ID: BF140941.D DFTPP Injection Date: 12/20/2024

Instrument ID: BNA_F DFTPP Injection Time: 09:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	29.6
68	Less than 2.0% of mass 69	0.6 (1.9) 1
69	Mass 69 relative abundance	32.2
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	44.8
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	30.8
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	16.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.7 (18.7) 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
SSTDCCC040	SSTDCCC040	BF140942.D	12/20/2024	11:15
PB165705BL	PB165705BL	BF140943.D	12/20/2024	11:41
PB165705BS	PB165705BS	BF140944.D	12/20/2024	12:07
TT-304-IDWSO-20241217-1	P5316-01	BF140945.D	12/20/2024	12:51
OU4-VSL-11-121224MS	P5306-09MS	BF140948.D	12/20/2024	14:10
OU4-VSL-11-121224MSD	P5306-09MSD	BF140949.D	12/20/2024	14:36
SSTDCCC040EC	SSTDCCC040	BF140959.D	12/20/2024	19:24

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

EPA Sample No.: SSTDCCC040 Date Analyzed: 12/20/2024

Lab File ID: BF140942.D Time Analyzed: 11:15

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	74814	6.851	271589	8.13	162319	9.89
	UPPER LIMIT	149628	7.351	543178	8.634	324638	10.386
	LOWER LIMIT	37407	6.351	135795	7.634	81159.5	9.386
	EPA SAMPLE NO.						
01	PB165705BL	64872	6.85	228592	8.13	136709	9.89
02	PB165705BS	71247	6.85	255665	8.13	141292	9.89
03	TT-304-IDWSO-20241217-1	57889	6.85	220576	8.13	122567	9.89
04	OU4-VSL-11-121224MS	55385	6.85	209218	8.13	115521	9.89
05	OU4-VSL-11-121224MSD	45949	6.85	175670	8.13	102157	9.89

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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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

EPA Sample No.: SSTDCCC040 Date Analyzed: 12/20/2024

Lab File ID: BF140942.D Time Analyzed: 11:15

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	282660	11.38	164316	14.033	129329	15.533
	UPPER LIMIT	565320	11.88	328632	14.533	258658	16.033
	LOWER LIMIT	141330	10.88	82158	13.533	64664.5	15.033
	EPA SAMPLE NO.						
01	PB165705BL	270487	11.38	174504	14.03	118300	15.52
02	PB165705BS	237962	11.38	149220	14.03	113763	15.52
03	TT-304-IDWSO-20241217-1	209736	11.37	174197	14.03	135546	15.53
04	OU4-VSL-11-121224MS	219277	11.38	133308	14.03	114231	15.52
05	OU4-VSL-11-121224MSD	188148	11.38	131096	14.05	113765	15.56

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.

QC SAMPLE DATA

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB165705BL			SDG No.:	P5316
Lab Sample ID:	PB165705BL			Matrix:	SOIL
Analytical Method:	SW8270			% Solid:	100
Sample Wt/Vol:	30.02	Units: g		Final Vol:	1000 uL
Soil Aliquot Vol:		uL		Test:	SVOCMS Group2
Extraction Type :		Decanted : N		Level :	LOW
Injection Volume :		GPC Factor : 1.0		GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140943.D	1	12/18/24 08:56	12/20/24 11:41	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	130	U	82.8	130	170	ug/Kg
95-48-7	2-Methylphenol	130	U	80.5	130	170	ug/Kg
65794-96-9	3+4-Methylphenols	270	U	79.7	270	330	ug/Kg
91-20-3	Naphthalene	130	U	82.5	130	170	ug/Kg
208-96-8	Acenaphthylene	130	U	86.4	130	170	ug/Kg
83-32-9	Acenaphthene	130	U	81.0	130	170	ug/Kg
86-73-7	Fluorene	130	U	85.4	130	170	ug/Kg
87-86-5	Pentachlorophenol	270	U	77.2	270	330	ug/Kg
120-12-7	Anthracene	130	U	84.3	130	170	ug/Kg
206-44-0	Fluoranthene	130	U	81.6	130	170	ug/Kg
129-00-0	Pyrene	130	U	82.9	130	170	ug/Kg
56-55-3	Benzo(a)anthracene	130	U	80.6	130	170	ug/Kg
218-01-9	Chrysene	130	U	79.4	130	170	ug/Kg
205-99-2	Benzo(b)fluoranthene	130	U	81.0	130	170	ug/Kg
207-08-9	Benzo(k)fluoranthene	130	U	82.5	130	170	ug/Kg
50-32-8	Benzo(a)pyrene	130	U	92.9	130	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	130	U	78.0	130	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	130	U	81.1	130	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	130	U	80.0	130	170	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	150		35 - 115		100%	SPK: 150
13127-88-3	Phenol-d6	153		34 - 127		102%	SPK: 150
4165-60-0	Nitrobenzene-d5	107		37 - 122		107%	SPK: 100
321-60-8	2-Fluorobiphenyl	103		44 - 115		103%	SPK: 100
118-79-6	2,4,6-Tribromophenol	146		39 - 132		97%	SPK: 150
1718-51-0	Terphenyl-d14	110		54 - 127		110%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	64900	6.845				
1146-65-2	Naphthalene-d8	229000	8.128				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB165705BL			SDG No.:	P5316
Lab Sample ID:	PB165705BL			Matrix:	SOIL
Analytical Method:	SW8270			% Solid:	100
Sample Wt/Vol:	30.02	Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group2
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140943.D	1	12/18/24 08:56	12/20/24 11:41	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	137000	9.886				
1517-22-2	Phenanthrene-d10	270000	11.375				
1719-03-5	Chrysene-d12	175000	14.027				
1520-96-3	Perylene-d12	118000	15.521				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB165705BS	SDG No.:	P5316
Lab Sample ID:	PB165705BS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140944.D	1	12/18/24 08:56	12/20/24 12:07	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	1600		82.9	130	170	ug/Kg
95-48-7	2-Methylphenol	1600		80.6	130	170	ug/Kg
65794-96-9	3+4-Methylphenols	1700		79.8	270	330	ug/Kg
91-20-3	Naphthalene	1600		82.6	130	170	ug/Kg
208-96-8	Acenaphthylene	1800		86.5	130	170	ug/Kg
83-32-9	Acenaphthene	1800		81.1	130	170	ug/Kg
86-73-7	Fluorene	1500		85.5	130	170	ug/Kg
87-86-5	Pentachlorophenol	2900	E	77.3	270	330	ug/Kg
120-12-7	Anthracene	2000		84.4	130	170	ug/Kg
206-44-0	Fluoranthene	1900		81.7	130	170	ug/Kg
129-00-0	Pyrene	1900		83.0	130	170	ug/Kg
56-55-3	Benzo(a)anthracene	1800		80.7	130	170	ug/Kg
218-01-9	Chrysene	1800		79.5	130	170	ug/Kg
205-99-2	Benzo(b)fluoranthene	1800		81.1	130	170	ug/Kg
207-08-9	Benzo(k)fluoranthene	1800		82.6	130	170	ug/Kg
50-32-8	Benzo(a)pyrene	1900		93.0	130	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2200		78.1	130	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	2100		81.2	130	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2100		80.1	130	170	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	143		35 - 115		96%	SPK: 150
13127-88-3	Phenol-d6	136		34 - 127		91%	SPK: 150
4165-60-0	Nitrobenzene-d5	91.6		37 - 122		92%	SPK: 100
321-60-8	2-Fluorobiphenyl	105		44 - 115		105%	SPK: 100
118-79-6	2,4,6-Tribromophenol	135		39 - 132		90%	SPK: 150
1718-51-0	Terphenyl-d14	121		54 - 127		121%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	71200	6.851				
1146-65-2	Naphthalene-d8	256000	8.128				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB165705BS			SDG No.:	P5316
Lab Sample ID:	PB165705BS			Matrix:	SOIL
Analytical Method:	SW8270			% Solid:	100
Sample Wt/Vol:	30.01	Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group2
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140944.D	1	12/18/24 08:56	12/20/24 12:07	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	141000	9.886				
1517-22-2	Phenanthrene-d10	238000	11.38				
1719-03-5	Chrysene-d12	149000	14.033				
1520-96-3	Perylene-d12	114000	15.521				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
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() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/12/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MS	SDG No.:	P5316
Lab Sample ID:	P5306-09MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.6
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140948.D	1	12/18/24 08:56	12/20/24 14:10	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	2000		88.3	140	180	ug/Kg
95-48-7	2-Methylphenol	1900		85.8	140	180	ug/Kg
65794-96-9	3+4-Methylphenols	2000		85.0	290	350	ug/Kg
91-20-3	Naphthalene	1800		88.0	140	180	ug/Kg
208-96-8	Acenaphthylene	2000		92.1	140	180	ug/Kg
83-32-9	Acenaphthene	1900		86.4	140	180	ug/Kg
86-73-7	Fluorene	1800		91.0	140	180	ug/Kg
87-86-5	Pentachlorophenol	2800		82.3	290	350	ug/Kg
120-12-7	Anthracene	1900		89.9	140	180	ug/Kg
206-44-0	Fluoranthene	1700		87.0	140	180	ug/Kg
129-00-0	Pyrene	2000		88.4	140	180	ug/Kg
56-55-3	Benzo(a)anthracene	1900		85.9	140	180	ug/Kg
218-01-9	Chrysene	1800		84.7	140	180	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700		86.4	140	180	ug/Kg
207-08-9	Benzo(k)fluoranthene	2000		88.0	140	180	ug/Kg
50-32-8	Benzo(a)pyrene	2000		99.0	140	180	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2400		83.2	140	180	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	2300		86.5	140	180	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2200		85.3	140	180	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	131		35 - 115		88%	SPK: 150
13127-88-3	Phenol-d6	134		34 - 127		90%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.0		37 - 122		89%	SPK: 100
321-60-8	2-Fluorobiphenyl	84.0		44 - 115		84%	SPK: 100
118-79-6	2,4,6-Tribromophenol	122		39 - 132		82%	SPK: 150
1718-51-0	Terphenyl-d14	91.0		54 - 127		91%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	55400	6.851				
1146-65-2	Naphthalene-d8	209000	8.128				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/12/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MS	SDG No.:	P5316
Lab Sample ID:	P5306-09MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.6
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140948.D	1	12/18/24 08:56	12/20/24 14:10	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	116000	9.886				
1517-22-2	Phenanthrene-d10	219000	11.38				
1719-03-5	Chrysene-d12	133000	14.033				
1520-96-3	Perylene-d12	114000	15.521				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/12/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MSD	SDG No.:	P5316
Lab Sample ID:	P5306-09MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.6
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140949.D	1	12/18/24 08:56	12/20/24 14:36	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	2100		88.3	140	180	ug/Kg
95-48-7	2-Methylphenol	2000		85.9	140	180	ug/Kg
65794-96-9	3+4-Methylphenols	2000		85.0	290	350	ug/Kg
91-20-3	Naphthalene	1900		88.0	140	180	ug/Kg
208-96-8	Acenaphthylene	2100		92.2	140	180	ug/Kg
83-32-9	Acenaphthene	2000		86.4	140	180	ug/Kg
86-73-7	Fluorene	1900		91.1	140	180	ug/Kg
87-86-5	Pentachlorophenol	3000	E	82.4	290	350	ug/Kg
120-12-7	Anthracene	2200		89.9	140	180	ug/Kg
206-44-0	Fluoranthene	2000		87.1	140	180	ug/Kg
129-00-0	Pyrene	2000		88.4	140	180	ug/Kg
56-55-3	Benzo(a)anthracene	1900		86.0	140	180	ug/Kg
218-01-9	Chrysene	1900		84.7	140	180	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		86.4	140	180	ug/Kg
207-08-9	Benzo(k)fluoranthene	2000		88.0	140	180	ug/Kg
50-32-8	Benzo(a)pyrene	2100		99.1	140	180	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2400		83.2	140	180	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	2400		86.5	140	180	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2200		85.3	140	180	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	142		35 - 115		95%	SPK: 150
13127-88-3	Phenol-d6	140		34 - 127		94%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.7		37 - 122		90%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.8		44 - 115		87%	SPK: 100
118-79-6	2,4,6-Tribromophenol	134		39 - 132		90%	SPK: 150
1718-51-0	Terphenyl-d14	92.3		54 - 127		92%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	45900	6.851				
1146-65-2	Naphthalene-d8	176000	8.128				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/12/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MSD	SDG No.:	P5316
Lab Sample ID:	P5306-09MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.6
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140949.D	1	12/18/24 08:56	12/20/24 14:36	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	102000	9.886				
1517-22-2	Phenanthrene-d10	188000	11.38				
1719-03-5	Chrysene-d12	131000	14.045				
1520-96-3	Perylene-d12	114000	15.562				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
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J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CALIBRATION SUMMARY

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF121624.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Dec 16 16:59:50 2024
Response Via : Initial Calibration

Calibration Files
2.5 =BF140855.D 5 =BF140856.D 10 =BF140857.D 20 =BF140858.D 40 =BF140859.D 50 =BF140860.D 60 =BF140861.D 80 =BF1408
62.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.547	0.536	0.537	0.503	0.520	0.527	0.492	0.523	3.76
3)		Pyridine		1.203	1.182	1.284	1.222	1.221	1.235	1.136	1.212	3.78
4)		n-Nitrosodimet...		0.598	0.593	0.626	0.603	0.621	0.648	0.587	0.611	3.58
5)	S	2-Fluorophenol		1.211	1.236	1.279	1.199	1.231	1.242	1.107	1.215	4.45
6)		Aniline		1.408	1.461	1.448	1.374	1.364	1.369	1.208	1.376	6.06
7)	S	Phenol-d6		1.692	1.661	1.661	1.567	1.576	1.623	1.485	1.609	4.45
8)		2-Chlorophenol		1.343	1.379	1.357	1.301	1.313	1.351	1.230	1.325	3.75
9)		Benzaldehyde		1.048	1.051	0.993	0.864	0.823	0.800	0.663	0.892	16.27
10)	C	Phenol		1.756	1.690	1.733	1.630	1.643	1.688	1.534	1.668	4.44
11)		bis(2-Chloroet...		1.277	1.242	1.281	1.227	1.237	1.267	1.176	1.244	2.93
12)		1,3-Dichlorobe...		1.584	1.540	1.557	1.469	1.495	1.530	1.394	1.510	4.21
13)	C	1,4-Dichlorobe...		1.607	1.601	1.583	1.497	1.495	1.546	1.397	1.532	4.91
14)		1,2-Dichlorobe...		1.521	1.495	1.509	1.436	1.403	1.434	1.322	1.446	4.86
15)		Benzyl Alcohol		1.146	1.143	1.236	1.150	1.143	1.179	1.056	1.151	4.64
16)		2,2'-oxybis(1-...		1.563	1.495	1.519	1.438	1.438	1.443	1.359	1.465	4.53
17)		2-Methylphenol		1.081	1.105	1.080	1.039	1.039	1.067	0.993	1.058	3.51
18)		Hexachloroethane		0.600	0.580	0.585	0.556	0.557	0.580	0.535	0.570	3.86
19)	P	n-Nitroso-di-n...	1.005	1.030	1.004	0.999	0.922	0.938	0.949	0.873	0.965	5.52
20)		3+4-Methylphenols		1.503	1.491	1.440	1.355	1.360	1.396	1.273	1.403	5.82
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.526	0.503	0.520	0.493	0.496	0.518	0.446	0.500	5.41
23)	S	Nitrobenzene-d5		0.406	0.401	0.420	0.393	0.397	0.415	0.366	0.400	4.42
24)		Nitrobenzene		0.418	0.411	0.425	0.402	0.408	0.429	0.375	0.410	4.40
25)		Isophorone		0.681	0.672	0.690	0.651	0.664	0.700	0.631	0.670	3.55
26)	C	2-Nitrophenol		0.183	0.185	0.193	0.187	0.191	0.201	0.180	0.189	3.79
27)		2,4-Dimethylph...		0.221	0.220	0.225	0.220	0.219	0.228	0.210	0.220	2.61
28)		bis(2-Chloroet...		0.431	0.414	0.429	0.417	0.418	0.426	0.394	0.418	3.04
29)	C	2,4-Dichloroph...		0.300	0.310	0.313	0.299	0.301	0.316	0.290	0.304	3.07
30)		1,2,4-Trichlor...		0.360	0.354	0.357	0.341	0.342	0.362	0.325	0.349	3.77
31)		Naphthalene		1.138	1.125	1.126	1.067	1.090	1.124	1.020	1.099	3.86
32)		Benzoic acid			0.173	0.192	0.212	0.220	0.237	0.220	0.209	10.98
33)		4-Chloroaniline		0.371	0.375	0.377	0.361	0.358	0.363	0.349	0.365	2.74
34)	C	Hexachlorobuta...		0.239	0.235	0.244	0.232	0.233	0.239	0.219	0.235	3.42
35)		Caprolactam		0.085	0.090	0.090	0.090	0.089	0.092	0.097	0.091	3.88
36)	C	4-Chloro-3-met...		0.342	0.347	0.347	0.338	0.332	0.342	0.348	0.342	1.72
37)		2-Methylnaphth...		0.744	0.734	0.740	0.721	0.700	0.719	0.729	0.727	2.08
38)		1-Methylnaphth...		0.758	0.743	0.716	0.706	0.686	0.706	0.716	0.719	3.36

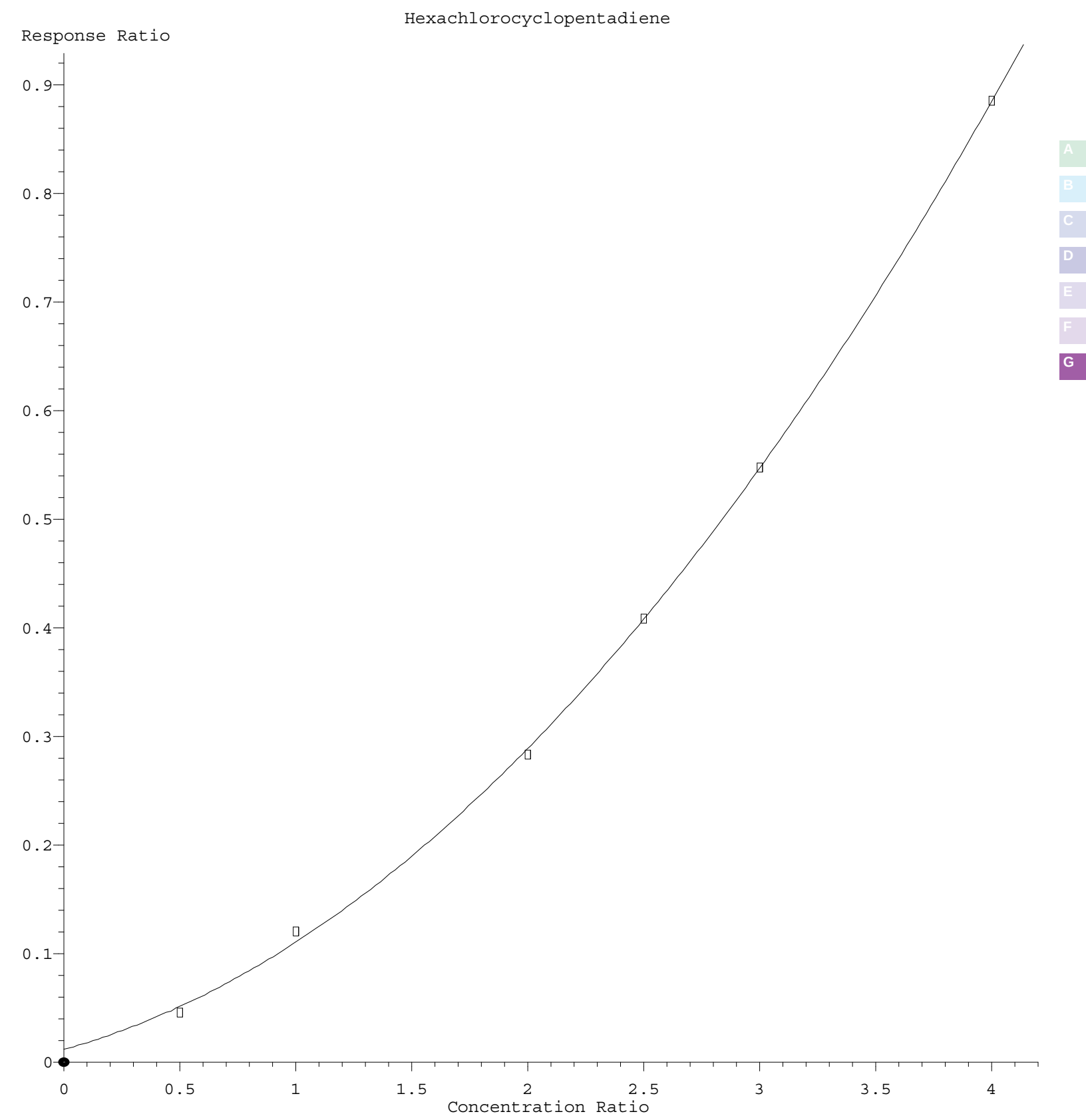
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF121624.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.622	0.573	0.641	0.580	0.576	0.622	0.689	0.615	6.88
41)	P	Hexachlorocycl...		0.091	0.120	0.142	0.163	0.183	0.221	0.153	30.05
42)	S	2,4,6-Tribromo...	0.235	0.236	0.242	0.240	0.235	0.243	0.225	0.237	2.56
43)	C	2,4,6-Trichlor...	0.348	0.339	0.386	0.364	0.357	0.395	0.446	0.376	9.68
44)		2,4,5-Trichlor...	0.413	0.365	0.426	0.397	0.395	0.426	0.475	0.414	8.28
45)	S	2-Fluorobiphenyl	1.560	1.410	1.538	1.369	1.345	1.445	1.517	1.455	5.85
46)		1,1'-Biphenyl	1.678	1.512	1.639	1.513	1.463	1.575	1.752	1.590	6.54
47)		2-Chloronaphth...	1.236	1.157	1.254	1.169	1.124	1.206	1.370	1.217	6.69
48)		2-Nitroaniline	0.350	0.346	0.372	0.358	0.341	0.378	0.428	0.367	8.14
49)		Acenaphthylene	1.874	1.821	1.880	1.734	1.696	1.783	1.727	1.788	4.09
50)		Dimethylphthalate	1.431	1.367	1.438	1.359	1.308	1.417	1.549	1.410	5.45
51)		2,6-Dinitrotol...	0.320	0.317	0.328	0.312	0.303	0.321	0.355	0.322	5.06
52)	C	Acenaphthene	1.228	1.190	1.166	1.113	1.100	1.148	1.049	1.142	5.25
53)		3-Nitroaniline	0.322	0.316	0.328	0.316	0.325	0.325	0.307	0.320	2.29
54)	P	2,4-Dinitrophenol		0.088	0.108	0.134	0.145	0.160	0.157	0.132	21.60
55)		Dibenzofuran	1.920	1.876	1.830	1.728	1.705	1.746	1.583	1.770	6.48
56)	P	4-Nitrophenol		0.091	0.133	0.165	0.169	0.176	0.167	0.150	21.61
57)		2,4-Dinitrotol...	0.435	0.438	0.440	0.419	0.421	0.426	0.389	0.424	4.12
58)		Fluorene	1.573	1.522	1.492	1.444	1.429	1.425	1.335	1.460	5.29
59)		2,3,4,6-Tetrac...	0.297	0.312	0.345	0.354	0.356	0.356	0.341	0.337	6.99
60)		Diethylphthalate	1.562	1.484	1.496	1.439	1.446	1.461	1.346	1.462	4.48
61)		4-Chlorophenyl...	0.780	0.750	0.759	0.716	0.727	0.728	0.674	0.733	4.62
62)		4-Nitroaniline	0.329	0.333	0.339	0.338	0.343	0.339	0.320	0.334	2.37
63)		Azobenzene	1.482	1.411	1.394	1.368	1.358	1.334	1.273	1.375	4.74
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.099	0.109	0.117	0.118	0.129	0.109	0.113	8.96
66)	c	n-Nitrosodiphe...	0.639	0.679	0.644	0.599	0.592	0.626	0.527	0.615	7.90
67)		4-Bromophenyl-...	0.225	0.248	0.236	0.220	0.214	0.231	0.192	0.224	7.97
68)		Hexachlorobenzene	0.257	0.280	0.268	0.246	0.245	0.258	0.223	0.254	7.24
69)		Atrazine	0.200	0.204	0.193	0.168	0.153	0.157	0.127	0.172	16.48
70)	C	Pentachlorophenol		0.062	0.082	0.098	0.102	0.106	0.106	0.093	18.65
71)		Phenanthrene	1.125	1.081	1.072	0.983	0.988	1.013	0.937	1.028	6.45
72)		Anthracene	1.091	1.064	1.053	0.970	0.978	1.000	0.934	1.013	5.66
73)		Carbazole	1.086	1.018	1.026	0.952	0.972	0.970	0.920	0.992	5.58
74)		Di-n-butylphth...	1.245	1.206	1.232	1.129	1.185	1.186	0.968	1.164	8.12
75)	C	Fluoranthene	1.364	1.291	1.251	1.130	1.138	1.175	0.943	1.184	11.51
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine		0.319	0.401	0.404	0.493	0.454	0.378	0.408	14.76
78)		Pyrene	1.904	1.719	1.650	1.699	1.761	1.769	1.948	1.779	6.12
79)	S	Terphenyl-d14	1.354	1.247	1.218	1.206	1.212	1.260	1.381	1.268	5.58
80)		Butylbenzylpht...	0.650	0.616	0.621	0.646	0.672	0.681	0.696	0.654	4.59
81)		Benzo(a)anthra...	1.494	1.473	1.421	1.359	1.388	1.418	1.369	1.417	3.60
82)		3,3'-Dichlorob...	0.429	0.427	0.449	0.412	0.432	0.446	0.399	0.428	4.14
83)		Chrysene	1.361	1.284	1.364	1.271	1.254	1.283	1.206	1.289	4.40
84)		Bis(2-ethylhex...	0.804	0.807	0.875	0.821	0.855	0.890	0.855	0.844	3.99
85)	c	Di-n-octyl pht...	1.267	1.170	1.348	1.223	1.341	1.324	1.263	1.277	5.17

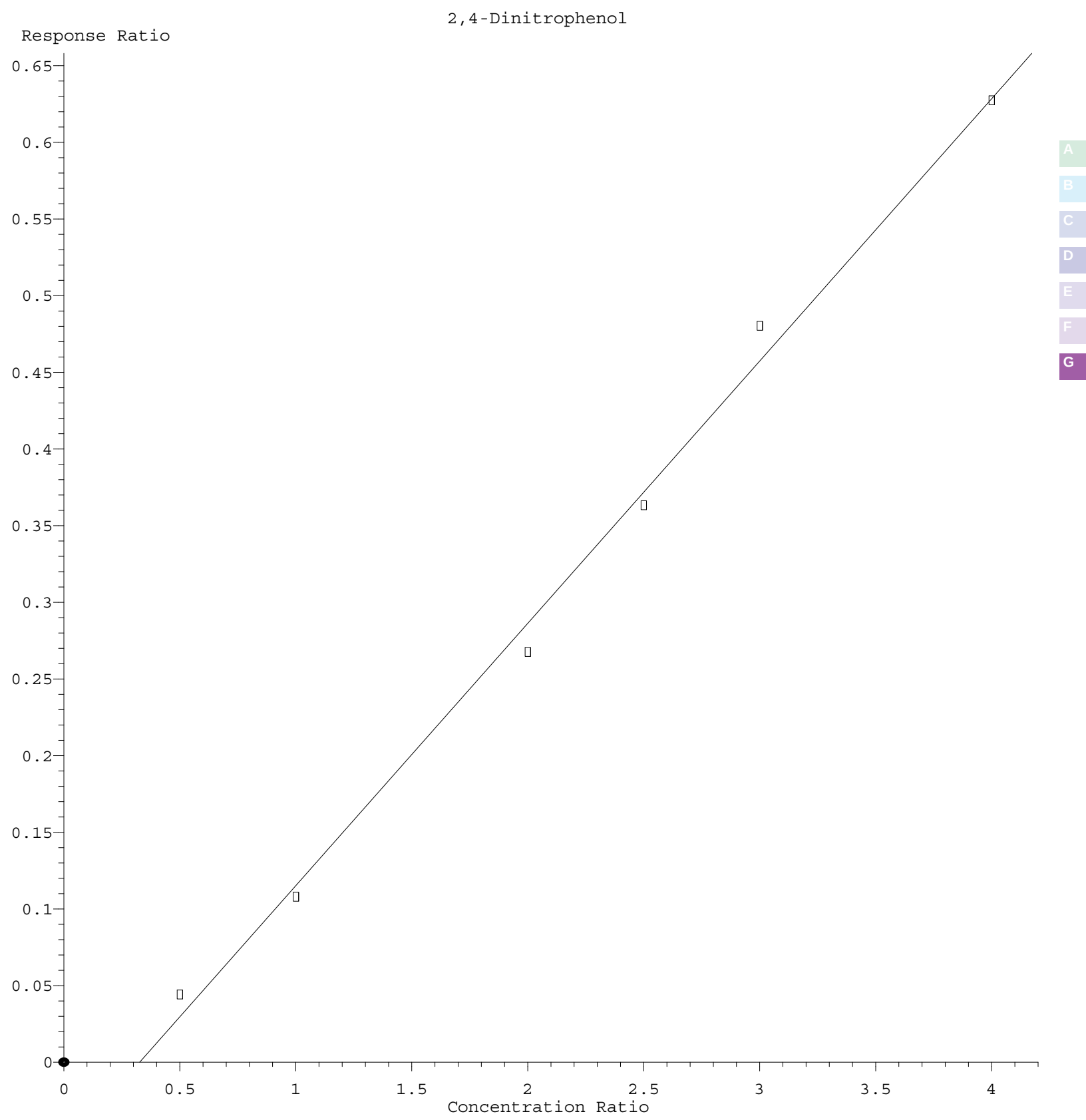
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF121624.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.130	1.174	1.330	1.269	1.109	1.330	1.395	1.248	8.90
88)		Benzo(b)fluora...	1.454	1.466	1.450	1.294	1.263	1.442	1.349	1.388	6.11
89)		Benzo(k)fluora...	1.318	1.250	1.223	1.224	1.142	1.182	0.996	1.191	8.57
90)	C	Benzo(a)pyrene	1.099	1.084	1.134	1.073	1.056	1.122	1.042	1.087	3.10
91)		Dibenzo(a,h)an...	0.913	0.986	1.092	1.058	0.918	1.116	1.154	1.034	9.30
92)		Benzo(g,h,i)pe...	0.961	0.972	1.094	1.073	0.944	1.098	1.225	1.052	9.53

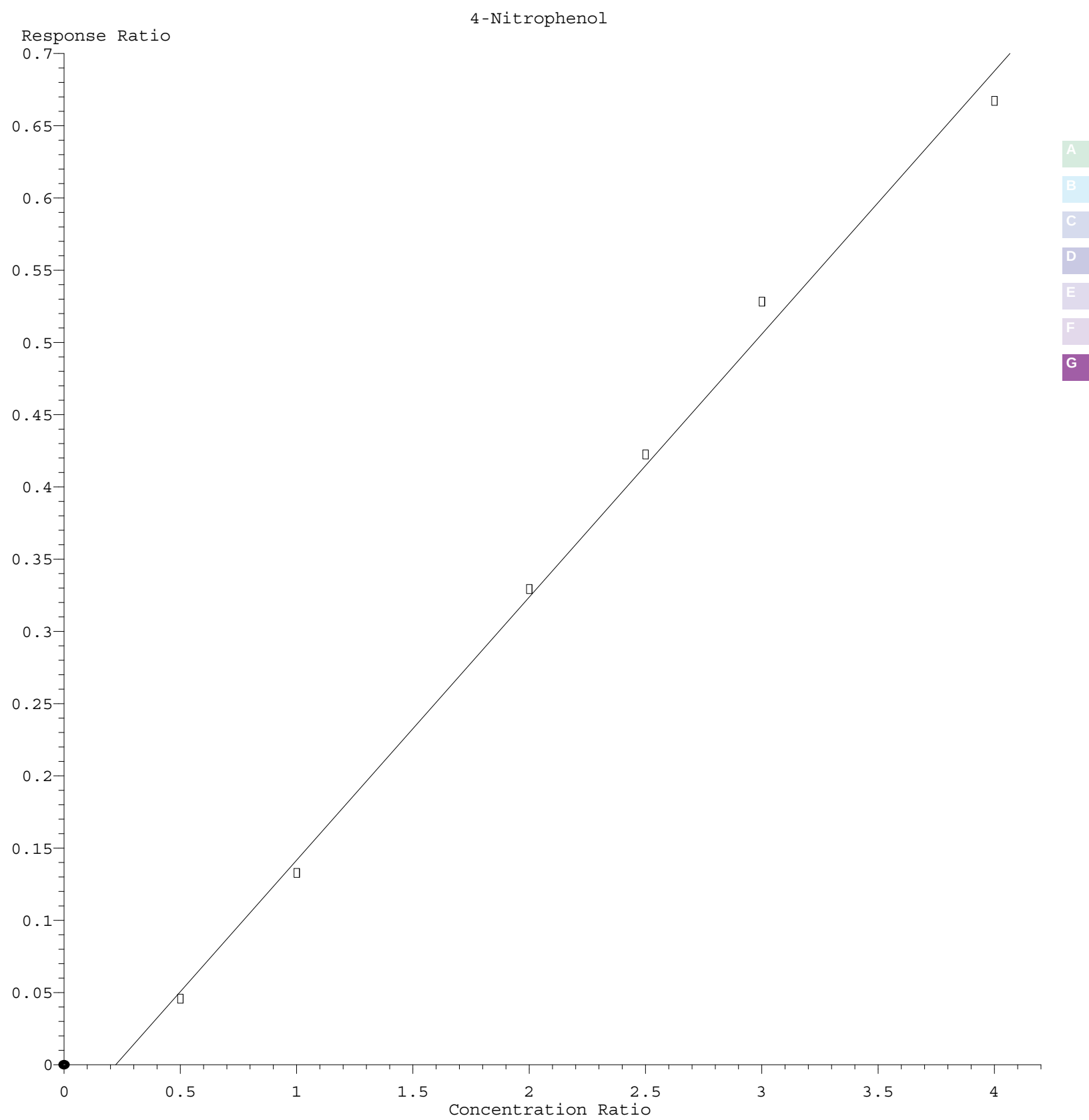
(#) = Out of Range



R = 3.984e-002 A*A + 5.892e-002 A + 1.177e-002
Coef of Det (r^2) = 0.999663 Curve Fit: Quadratic
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF121624.M
Calibration Table Last Updated: Mon Dec 16 16:59:50 2024



Response = 1.713e-001 * Amt - 5.602e-002
Coef of Det (r^2) = 0.995067 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF121624.M
Calibration Table Last Updated: Mon Dec 16 16:59:50 2024



Response = 1.822e-001 * Amt - 4.046e-002
Coef of Det (r^2) = 0.995956 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF121624.M
Calibration Table Last Updated: Mon Dec 16 16:59:50 2024

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: BNA_F Calibration Date/Time: 12/20/2024 11:15

Lab File ID: BF140942.D Init. Calib. Date(s): 12/16/2024 12/16/2024

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:13 16:15

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.215	1.104		-9.1	
Phenol-d6	1.609	1.494		-7.1	
Phenol	1.668	1.561		-6.4	20.0
2-Methylphenol	1.058	1.007		-4.8	
3+4-Methylphenols	1.403	1.351		-3.7	
Nitrobenzene-d5	0.400	0.385		-3.8	
Naphthalene	1.099	1.079		-1.8	
2-Fluorobiphenyl	1.455	1.340		-7.9	
Acenaphthylene	1.788	1.741		-2.6	
Acenaphthene	1.142	1.107		-3.1	20.0
Fluorene	1.460	1.356		-7.1	
2,4,6-Tribromophenol	0.237	0.214		-9.7	
Pentachlorophenol	0.093	0.077		-17.2	20.0
Anthracene	1.013	0.983		-3.0	
Fluoranthene	1.184	1.083		-8.5	20.0
Pyrene	1.779	1.904		7.0	
Terphenyl-d14	1.268	1.393		9.9	
Benzo(a)anthracene	1.417	1.356		-4.3	
Chrysene	1.289	1.279		-0.8	
Benzo(b)fluoranthene	1.388	1.319		-5.0	
Benzo(k)fluoranthene	1.191	1.123		-5.7	
Benzo(a)pyrene	1.087	1.066		-1.9	20.0
Indeno(1,2,3-cd)pyrene	1.248	1.605		28.6	
Dibenzo(a,h)anthracene	1.034	1.335		29.1	
Benzo(g,h,i)perylene	1.052	1.276		21.3	

All other compounds must meet a minimum RRF of 0.010.

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: BNA_F Calibration Date/Time: 12/20/2024 19:24

Lab File ID: BF140959.D Init. Calib. Date(s): 12/16/2024 12/16/2024

EPA Sample No.: SSTDCCC040EC Init. Calib. Time(s): 12:13 16:15

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.215	1.203		-1.0	50.0
Phenol-d6	1.609	1.593		-1.0	50.0
Phenol	1.668	1.653		-0.9	50.0
2-Methylphenol	1.058	1.065		0.7	50.0
3+4-Methylphenols	1.403	1.384		-1.4	50.0
Nitrobenzene-d5	0.400	0.389		-2.8	50.0
Naphthalene	1.099	1.086		-1.2	50.0
2-Fluorobiphenyl	1.455	1.388		-4.6	50.0
Acenaphthylene	1.788	1.788		0.0	50.0
Acenaphthene	1.142	1.133		-0.8	50.0
Fluorene	1.460	1.425		-2.4	50.0
2,4,6-Tribromophenol	0.237	0.232		-2.1	50.0
Pentachlorophenol	0.093	0.075		-19.4	50.0
Anthracene	1.013	0.994		-1.9	50.0
Fluoranthene	1.184	1.218		2.9	50.0
Pyrene	1.779	1.725		-3.0	50.0
Terphenyl-d14	1.268	1.207		-4.8	50.0
Benzo(a)anthracene	1.417	1.404		-0.9	50.0
Chrysene	1.289	1.227		-4.8	50.0
Benzo(b)fluoranthene	1.388	1.367		-1.5	50.0
Benzo(k)fluoranthene	1.191	1.086		-8.8	50.0
Benzo(a)pyrene	1.087	1.030		-5.2	50.0
Indeno(1,2,3-cd)pyrene	1.248	1.208		-3.2	50.0
Dibenzo(a,h)anthracene	1.034	0.996		-3.7	50.0
Benzo(g,h,i)perylene	1.052	0.977		-7.1	50.0

All other compounds must meet a minimum RRF of 0.010.