



LAB CHRONICLE

OrderID:	P4710	OrderDate:	11/4/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4710-02	BP-BPOW6-7-GW-202 41030	Water			10/30/24			11/04/24
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	
P4710-03	BP-BPOW6-11-GW-20 241031	Water			10/31/24			11/04/24
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	
P4710-04	BP-BPOW6-8-GW-202 41101	Water			11/01/24			11/04/24
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	



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

Hit Summary Sheet
SW-846

SDG No.: P4710
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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	10/30/24
Project:	CTO WE13		Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-7-GW-20241030		SDG No.:	P4710
Lab Sample ID:	P4710-02		Matrix:	Water
Analytical Method:	SW8270SIM		% Solid:	0
Sample Wt/Vol:	980	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034905.D	1	11/06/24 08:45	11/08/24 13:05	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5190	7.575				
1146-65-2	Naphthalene-d8	15100	10.34				
15067-26-2	Acenaphthene-d10	6740	14.201				
1517-22-2	Phenanthrene-d10	13600	16.957				
1719-03-5	Chrysene-d12	8570	21.152				
1520-96-3	Perylene-d12	6880	23.321				

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	10/31/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-11-GW-20241031	SDG No.:	P4710
Lab Sample ID:	P4710-03	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034906.D	1	11/06/24 08:45	11/08/24 13:41	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5460	7.575				
1146-65-2	Naphthalene-d8	15800	10.34				
15067-26-2	Acenaphthene-d10	7290	14.208				
1517-22-2	Phenanthrene-d10	14800	16.952				
1719-03-5	Chrysene-d12	9380	21.149				
1520-96-3	Perylene-d12	7760	23.318				

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

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B = Analyte Found in Associated Method Blank

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() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	11/01/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-8-GW-20241101	SDG No.:	P4710
Lab Sample ID:	P4710-04	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034907.D	1	11/06/24 08:45	11/08/24 14:17	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		111%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5710	7.575				
1146-65-2	Naphthalene-d8	16700	10.34				
15067-26-2	Acenaphthene-d10	7610	14.208				
1517-22-2	Phenanthrene-d10	15600	16.952				
1719-03-5	Chrysene-d12	9490	21.149				
1520-96-3	Perylene-d12	7810	23.318				

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

Surrogate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P4710-02	BP-BPOW6-7-GW-20241030	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.38	96		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.46	114		58	132
P4710-03	BP-BPOW6-11-GW-20241031	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
P4710-04	BP-BPOW6-8-GW-20241101	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.39	96		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.44	111		58	132
PB164705BL	PB164705BL	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
PB164705BS	PB164705BS	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
		Fluoranthene-d10	0.4	0.33	81		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB164705BSD	PB164705BSD	2-Methylnaphthalene-d10	0.4	0.39	98		30	150
		Fluoranthene-d10	0.4	0.33	82		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.38	95		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034908.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB164705BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034909.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB164705BSD	1,4-Dioxane	0.4	0.28	ug/L	70	4			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164705BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P4710

SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034910.D

Lab Sample ID: PB164705BL

Instrument ID: BNA_N

Date Extracted: 11/06/2024

Matrix: (soil/water) Water

Date Analyzed: 11/08/2024

Level: (low/med) LOW

Time Analyzed: 16:05

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BP-BPOW6-7-GW-20241030	P4710-02	BN034905.D	11/08/2024
BP-BPOW6-11-GW-20241031	P4710-03	BN034906.D	11/08/2024
BP-BPOW6-8-GW-20241101	P4710-04	BN034907.D	11/08/2024
PB164705BS	PB164705BS	BN034908.D	11/08/2024
PB164705BSD	PB164705BSD	BN034909.D	11/08/2024

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034883.D

DFTPP Injection Date: 11/07/2024

Instrument ID: BNA_N

DFTPP Injection Time: 08:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	64.6
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	64.5
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	19.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	6.6
442	Greater than 50% of mass 198	37.1
443	15.0 - 24.0% of mass 442	8.9 (24) 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
SSTDICC0.1	SSTDICC0.1	BN034885.D	11/07/2024	10:02
SSTDICC0.2	SSTDICC0.2	BN034886.D	11/07/2024	10:48
SSTDICCC0.4	SSTDICCC0.4	BN034887.D	11/07/2024	11:24
SSTDICC0.8	SSTDICC0.8	BN034888.D	11/07/2024	12:00
SSTDICC1.6	SSTDICC1.6	BN034889.D	11/07/2024	12:36
SSTDICC3.2	SSTDICC3.2	BN034890.D	11/07/2024	13:13
SSTDICC5.0	SSTDICC5.0	BN034891.D	11/07/2024	13:49

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4710

SDG NO.: P4710

Lab File ID: BN034897.D

DFTPP Injection Date: 11/08/2024

Instrument ID: BNA_N

DFTPP Injection Time: 07:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	65.5
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	56.3
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	63.8
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	6.7
275	10.0 - 60.0% of mass 198	20.3
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	7
442	Greater than 50% of mass 198	43.5
443	15.0 - 24.0% of mass 442	8.1 (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
SSTDCCC0.4	SSTDCCC0.4	BN034898.D	11/08/2024	08:29
BP-BPOW6-7-GW-20241030	P4710-02	BN034905.D	11/08/2024	13:05
BP-BPOW6-11-GW-20241031	P4710-03	BN034906.D	11/08/2024	13:41
BP-BPOW6-8-GW-20241101	P4710-04	BN034907.D	11/08/2024	14:17
PB164705BS	PB164705BS	BN034908.D	11/08/2024	14:53
PB164705BSD	PB164705BSD	BN034909.D	11/08/2024	15:29
PB164705BL	PB164705BL	BN034910.D	11/08/2024	16:05
SSTDCCC0.4EC	SSTDCCC0.4	BN034911.D	11/08/2024	16:41

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG NO.: P4710

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/08/2024

Lab File ID: BN034898.D Time Analyzed: 08:29

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	6102	7.575	18171	10.34	8711	14.20
UPPER LIMIT	12204	8.075	36342	10.84	17422	14.701
LOWER LIMIT	3051	7.075	9085.5	9.84	4355.5	13.701
EPA SAMPLE NO.						
01 BP-BPOW6-8-GW-20241101	5705	7.58	16698	10.34	7609	14.21
02 PB164705BL	6271	7.58	17552	10.34	7420	14.20
03 PB164705BS	6394	7.58	18264	10.34	8109	14.21
04 PB164705BSD	6255	7.58	17867	10.34	7947	14.21
05 BP-BPOW6-7-GW-20241030	5186	7.58	15083	10.34	6739	14.20
06 BP-BPOW6-11-GW-20241031	5457	7.58	15845	10.34	7293	14.21

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.: P4710 SAS No.: P4710 SDG NO.: P4710

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/08/2024

Lab File ID: BN034898.D Time Analyzed: 08:29

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	17291	16.957	11255	21.143	9481	23.315
UPPER LIMIT	34582	17.457	22510	21.643	18962	23.815
LOWER LIMIT	8645.5	16.457	5627.5	20.643	4740.5	22.815
EPA SAMPLE NO.						
01 BP-BPOW6-8-GW-20241101	15639	16.95	9493	21.15	7807	23.32
02 PB164705BL	15255	16.96	8049	21.15	6373	23.32
03 PB164705BS	16416	16.95	9189	21.15	6982	23.32
04 PB164705BSD	15963	16.95	9019	21.15	6770	23.32
05 BP-BPOW6-7-GW-20241030	13647	16.96	8571	21.15	6880	23.32
06 BP-BPOW6-11-GW-20241031	14785	16.95	9375	21.15	7760	23.32

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	PB164705BL		SDG No.:	P4710
Lab Sample ID:	PB164705BL		Matrix:	Water
Analytical Method:	SW8270SIM		% Solid:	0
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034910.D	1	11/06/24 08:45	11/08/24 16:05	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6270	7.575				
1146-65-2	Naphthalene-d8	17600	10.34				
15067-26-2	Acenaphthene-d10	7420	14.201				
1517-22-2	Phenanthrene-d10	15300	16.957				
1719-03-5	Chrysene-d12	8050	21.151				
1520-96-3	Perylene-d12	6370	23.317				

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB164705BS		SDG No.:	P4710	
Lab Sample ID:	PB164705BS		Matrix:	Water	
Analytical Method:	SW8270SIM		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034908.D	1	11/06/24 08:45	11/08/24 14:53	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6390	7.575				
1146-65-2	Naphthalene-d8	18300	10.34				
15067-26-2	Acenaphthene-d10	8110	14.208				
1517-22-2	Phenanthrene-d10	16400	16.952				
1719-03-5	Chrysene-d12	9190	21.149				
1520-96-3	Perylene-d12	6980	23.318				

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	PB164705BSD		SDG No.:	P4710
Lab Sample ID:	PB164705BSD		Matrix:	Water
Analytical Method:	SW8270SIM		% Solid:	0
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-SIMGroup1
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034909.D	1	11/06/24 08:45	11/08/24 15:29	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.28		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		98%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		82%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6260	7.575				
1146-65-2	Naphthalene-d8	17900	10.34				
15067-26-2	Acenaphthene-d10	7950	14.208				
1517-22-2	Phenanthrene-d10	16000	16.952				
1719-03-5	Chrysene-d12	9020	21.149				
1520-96-3	Perylene-d12	6770	23.315				

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



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN110724.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Nov 07 15:02:36 2024
 Response Via : Initial Calibration

Calibration Files

0.1 =BN034885.D 0.2 =BN034886.D 0.4 =BN034887.D 0.8 =BN034888.D 1.6 =BN034889.D 3.2 =BN034890.D 5.0 =BN034891.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD

1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.563	0.562	0.474	0.530	0.498	0.470	0.441	0.505	9.43
3)	n-Nitrosodimet...	0.697	0.715	0.621	0.753	0.712	0.643	0.632	0.682	7.32
4) S	2-Fluorophenol	1.137	1.131	1.007	1.180	1.146	1.082	1.120	1.115	5.00
5) S	Phenol-d6	1.438	1.439	1.299	1.582	1.550	1.495	1.557	1.480	6.62
6)	bis(2-Chloroet...	1.316	1.267	1.170	1.389	1.336	1.230	1.230	1.277	5.84
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.314	0.301	0.280	0.327	0.324	0.313	0.324	0.312	5.36
9)	Naphthalene	1.110	1.086	1.028	1.181	1.166	1.089	1.111	1.110	4.63
10)	Hexachlorobuta...	0.183	0.180	0.167	0.189	0.182	0.168	0.169	0.177	4.89
11) SURR	2-Methylnaphth...	0.527	0.519	0.491	0.579	0.577	0.548	0.575	0.545	6.30
12)	2-Methylnaphth...	0.647	0.641	0.612	0.725	0.723	0.691	0.717	0.679	6.76
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.083	0.094	0.087	0.121	0.129	0.142	0.167	0.118	26.52
15) S	2-Fluorobiphenyl	1.753	1.737	1.540	1.788	1.747	1.620	1.642	1.690	5.32
16)	Acenaphthylene	1.833	1.826	1.672	2.034	2.040	2.003	2.097	1.929	8.00
17)	Acenaphthene	1.292	1.281	1.176	1.430	1.412	1.352	1.403	1.335	6.83
18)	Fluorene	1.614	1.600	1.463	1.774	1.779	1.680	1.727	1.662	6.78
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.033	0.032	0.040	0.044	0.052	0.062	0.044		26.24
21)	4-Bromophenyl-...	0.212	0.201	0.202	0.220	0.219	0.216	0.222	0.213	4.05
22)	Hexachlorobenzene	0.262	0.255	0.252	0.268	0.260	0.252	0.248	0.257	2.61
23)	Atrazine	0.128	0.136	0.133	0.162	0.169	0.173	0.180	0.154	13.84
24)	Pentachlorophenol	0.055	0.055	0.074	0.079	0.092	0.107	0.077		26.61
25)	Phenanthrene	1.218	1.168	1.162	1.303	1.276	1.239	1.221	1.227	4.22
26)	Anthracene	0.965	0.963	0.963	1.121	1.116	1.119	1.156	1.058	8.39
27) SURR	Fluoranthene-d10	0.801	0.845	0.801	0.971	0.976	0.947	0.972	0.902	9.15
28)	Fluoranthene	1.112	1.183	1.135	1.414	1.418	1.385	1.391	1.291	10.85
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	2.180	2.005	1.990	2.107	2.033	1.945	1.916	2.025	4.53
31) S	Terphenyl-d14	0.788	0.750	0.743	0.777	0.750	0.715	0.722	0.749	3.54
32)	Benzo(a)anthra...	1.450	1.472	1.423	1.663	1.663	1.622	1.622	1.559	6.80
33)	Chrysene	1.632	1.632	1.583	1.768	1.709	1.625	1.601	1.650	3.95
34)	Bis(2-ethylhex...	0.984	0.873	0.720	0.881	0.838	0.922	1.048	0.895	11.77
35) I	Perylene-d12	-----ISTD-----								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\

Method File : 8270-SIM-BN110724.M

36)	Indeno(1,2,3-c...	1.810	1.753	1.680	1.845	1.868	1.733	1.785	1.782	3.68
37)	Benzo(b)fluora...	1.685	1.601	1.752	1.900	1.814	1.765	1.784	1.757	5.40
38)	Benzo(k)fluora...	1.763	1.746	1.724	1.982	1.931	1.812	1.835	1.828	5.30
39) C	Benzo(a)pyrene	1.308	1.249	1.339	1.475	1.469	1.438	1.492	1.396	6.85
40)	Dibenzo(a,h)an...	1.389	1.356	1.304	1.423	1.447	1.347	1.386	1.379	3.48
41)	Benzo(g,h,i)pe...	1.482	1.434	1.483	1.485	1.509	1.407	1.445	1.464	2.44

(#) = Out of Range

A

C

D

E

F

G

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: BNA_N Calibration Date/Time: 11/08/2024 08:29

Lab File ID: BN034898.D Init. Calib. Date(s): 11/07/2024 11/07/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 10:02 13:49

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.545	0.496		-9.0	20.0
Fluoranthene-d10	0.902	0.852		-5.5	20.0
2-Fluorophenol	1.115	0.972		-12.8	20.0
Phenol-d6	1.480	1.313		-11.3	20.0
Nitrobenzene-d5	0.312	0.279		-10.6	20.0
2-Fluorobiphenyl	1.690	1.536		-9.1	20.0
2,4,6-Tribromophenol	0.118	0.098		-16.9	20.0
Terphenyl-d14	0.749	0.697		-6.9	20.0
1,4-Dioxane	0.505	0.457		-9.5	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG No.: P4710

Instrument ID: BNA_N Calibration Date/Time: 11/08/2024 16:41

Lab File ID: BN034911.D Init. Calib. Date(s): 11/07/2024 11/07/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 10:02 13:49

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.545	0.486		-10.8	50.0
Fluoranthene-d10	0.902	0.830		-8.0	50.0
2-Fluorophenol	1.115	0.993		-10.9	50.0
Phenol-d6	1.480	1.324		-10.5	50.0
Nitrobenzene-d5	0.312	0.275		-11.9	50.0
2-Fluorobiphenyl	1.690	1.539		-8.9	50.0
2,4,6-Tribromophenol	0.118	0.094		-20.3	50.0
Terphenyl-d14	0.749	0.739		-1.3	50.0
1,4-Dioxane	0.505	0.476		-5.7	50.0

All other compounds must meet a minimum RRF of 0.010.