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LAB CHRONICLE

OrderID:	P4866	**OrderDate:**	11/14/2024 3:35:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4866-01	**RW7-SP200-20241114**	**Water**			**11/14/24**			**11/14/24**
			SVOC-SIMGroup1	8270-Modified		11/15/24	11/21/24	
P4866-02	**RW7-SP201-20241114**	**Water**			**11/14/24**			**11/14/24**
			SVOC-SIMGroup1	8270-Modified		11/15/24	11/21/24	

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Hit Summary Sheet
SW-846

SDG No.: P4866

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW7-SP200-20241114									
P4866-01	RW7-SP200-20241114	WATER	1,4-Dioxane	4.300		0.14	0.4	0.4	ug/L
			Total Svoc :		**4.30**				
			Total Concentration:		**4.30**				
Client ID : RW7-SP201-20241114									
P4866-02	RW7-SP201-20241114	WATER	1,4-Dioxane	1.300		0.07	0.2	0.2	ug/L
			Total Svoc :		**1.30**				
			Total Concentration:		**1.30**				

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	11/14/24
Project:	CTO WE13	Date Received:	11/14/24
Client Sample ID:	RW7-SP200-20241114	SDG No.:	P4866
Lab Sample ID:	P4866-01	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
BN035223.D	2	11/15/24 12:05	11/21/24 15:48	PB165012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.30		0.14	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.26		30 - 150		65%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.19		30 - 150		47%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.19	*	55 - 111		47%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		64%	SPK: 0.4
1718-51-0	Terphenyl-d14	2.64	*	58 - 132		661%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3100	7.329				
1146-65-2	Naphthalene-d8	7480	10.073				
15067-26-2	Acenaphthene-d10	2810	13.983				
1517-22-2	Phenanthrene-d10	9270	16.753				
1719-03-5	Chrysene-d12	1000	21.006				
1520-96-3	Perylene-d12	155	23.102				

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:	11/14/24
Project:	CTO WE13	Date Received:	11/14/24
Client Sample ID:	RW7-SP201-20241114	SDG No.:	P4866
Lab Sample ID:	P4866-02	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
BN035225.D	1	11/15/24 12:05	11/21/24 17:00	PB165012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	1.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		77%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		91%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.22	*	55 - 111		54%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.095	*	53 - 106		24%	SPK: 0.4
1718-51-0	Terphenyl-d14	2.29	*	58 - 132		573%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2730	7.329				
1146-65-2	Naphthalene-d8	6370	10.073				
15067-26-2	Acenaphthene-d10	3920	13.987				
1517-22-2	Phenanthrene-d10	8420	16.746				
1719-03-5	Chrysene-d12	1470	21.008				
1520-96-3	Perylene-d12	2670	23.104				

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.: P4866

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
P4866-01	RW7-SP200-20241114	2-Methylnaphthalene-d10	0.4	0.26	65		30	150
		Fluoranthene-d10	0.4	0.19	47		30	150
		Nitrobenzene-d5	0.4	0.19	47	*	55	111
		2-Fluorobiphenyl	0.4	0.26	64		53	106
		Terphenyl-d14	0.4	2.64	661	*	58	132
P4866-02	RW7-SP201-20241114	2-Methylnaphthalene-d10	0.4	0.31	77		30	150
		Fluoranthene-d10	0.4	0.37	91		30	150
		Nitrobenzene-d5	0.4	0.22	54	*	55	111
		2-Fluorobiphenyl	0.4	0.095	24	*	53	106
		Terphenyl-d14	0.4	2.29	573	*	58	132
PB165012BL	PB165012BL	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.28	69		55	111
		2-Fluorobiphenyl	0.4	0.17	42	*	53	106
		Terphenyl-d14	0.4	1.29	323	*	58	132
PB165012BS	PB165012BS	2-Methylnaphthalene-d10	0.4	0.33	82		30	150
		Fluoranthene-d10	0.4	0.26	66		30	150
		Nitrobenzene-d5	0.4	0.22	56		55	111
		2-Fluorobiphenyl	0.4	0.086	22	*	53	106
		Terphenyl-d14	0.4	2.22	556	*	58	132
PB165012BSD	PB165012BSD	2-Methylnaphthalene-d10	0.4	0.35	87		30	150
		Fluoranthene-d10	0.4	0.30	76		30	150
		Nitrobenzene-d5	0.4	0.24	60		55	111
		2-Fluorobiphenyl	0.4	0.075	19	*	53	106
		Terphenyl-d14	0.4	2.27	567	*	58	132

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4866

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035226.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB165012BS	1,4-Dioxane	0.4	0.38	ug/L	95				70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4866

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035227.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB165012BSD	1,4-Dioxane	0.4	0.39	ug/L	98	3			70	130	20

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165012BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4866 SAS No.: P4866 SDG NO.: P4866

Lab File ID: BN035220.D Lab Sample ID: PB165012BL

Instrument ID: BNA_N Date Extracted: 11/15/2024

Matrix: (soil/water) Water Date Analyzed: 11/21/2024

Level: (low/med) LOW Time Analyzed: 13:58

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB165012BS	PB165012BS	BN035226.D	11/21/2024
PB165012BSD	PB165012BSD	BN035227.D	11/21/2024
RW7-SP200-20241114	P4866-01	BN035223.D	11/21/2024
RW7-SP201-20241114	P4866-02	BN035225.D	11/21/2024

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4866 SDG NO.: P4866

Lab File ID: BN035061.D DFTPP Injection Date: 11/13/2024

Instrument ID: BNA_N DFTPP Injection Time: 12:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	19.6
68	Less than 2.0% of mass 69	0.4 (1.4) 1
69	Mass 69 relative abundance	29.1
70	Less than 2.0% of mass 69	0.2 (0.7) 1
127	10.0 - 80.0% of mass 198	35.9
197	Less than 2.0% of mass 198	0.2
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	27.6
365	Greater than 1% of mass 198	4.4
441	Present, but less than mass 443	9.3
442	Greater than 50% of mass 198	59.1
443	15.0 - 24.0% of mass 442	11.2 (19) 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	BN035062.D	11/13/2024	12:40
SSTDICC0.2	SSTDICC0.2	BN035063.D	11/13/2024	13:16
SSTDICCC0.4	SSTDICCC0.4	BN035064.D	11/13/2024	13:52
SSTDICC0.8	SSTDICC0.8	BN035065.D	11/13/2024	14:28
SSTDICC1.6	SSTDICC1.6	BN035066.D	11/13/2024	15:04
SSTDICC3.2	SSTDICC3.2	BN035067.D	11/13/2024	15:39
SSTDICC5.0	SSTDICC5.0	BN035068.D	11/13/2024	16:15

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4866 SDG NO.: P4866

Lab File ID: BN035218.D DFTPP Injection Date: 11/21/2024

Instrument ID: BNA_N DFTPP Injection Time: 12:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23.4
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	30.3
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	40
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	6.5
275	10.0 - 60.0% of mass 198	27.6
365	Greater than 1% of mass 198	4.2
441	Present, but less than mass 443	11.3
442	Greater than 50% of mass 198	68.4
443	15.0 - 24.0% of mass 442	12.7 (18.5) 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	BN035219.D	11/21/2024	13:22
PB165012BL	PB165012BL	BN035220.D	11/21/2024	13:58
RW7-SP200-20241114	P4866-01	BN035223.D	11/21/2024	15:48
RW7-SP201-20241114	P4866-02	BN035225.D	11/21/2024	17:00
PB165012BS	PB165012BS	BN035226.D	11/21/2024	17:36
PB165012BSD	PB165012BSD	BN035227.D	11/21/2024	18:12
SSTDCCC0.4EC	SSTDCCC0.4	BN035235.D	11/21/2024	23:01

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4866 SAS No.: P4866 SDG NO.: P4866

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/21/2024

Lab File ID: BN035219.D Time Analyzed: 13:22

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	3553	7.329	8594	10.07	5839		13.99
	UPPER LIMIT	7106	7.829	17188	10.573	11678		14.487
	LOWER LIMIT	1776.5	6.829	4297	9.573	2919.5		13.487
	EPA SAMPLE NO.							
01	PB165012BL	3644	7.33	8156	10.07	4996		13.98
02	RW7-SP200-20241114	3104	7.33	7479	10.07	2812	*	13.98
03	RW7-SP201-20241114	2730	7.33	6373	10.07	3921		13.99
04	PB165012BS	3340	7.33	7691	10.07	4263		13.99
05	PB165012BSD	3072	7.33	6967	10.07	4025		13.98

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.: P4866 SAS No.: P4866 SDG NO.: P4866

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/21/2024

Lab File ID: BN035219.D Time Analyzed: 13:22

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	13132	16.746	2179		21.008	7936		23.104
	UPPER LIMIT	26264	17.246	4358		21.508	15872		23.604
	LOWER LIMIT	6566	16.246	1089.5		20.508	3968		22.604
	EPA SAMPLE NO.								
01	PB165012BL	10325	16.75	2547		21.01	7086		23.11
02	RW7-SP200-20241114	9268	16.75	1000	*	21.01	155	*	23.10
03	RW7-SP201-20241114	8423	16.75	1472		21.01	2672	*	23.10
04	PB165012BS	8289	16.75	1030	*	21.01	1173	*	23.10
05	PB165012BSD	7680	16.75	1000	*	21.01	3421	*	23.10

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB165012BL			SDG No.:	P4866
Lab Sample ID:	PB165012BL			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
BN035220.D	1	11/15/24 12:05	11/21/24 13:58	PB165012

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	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		69%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.17	*	53 - 106		42%	SPK: 0.4
1718-51-0	Terphenyl-d14	1.29	*	58 - 132		323%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3640	7.329				
1146-65-2	Naphthalene-d8	8160	10.073				
15067-26-2	Acenaphthene-d10	5000	13.983				
1517-22-2	Phenanthrene-d10	10300	16.753				
1719-03-5	Chrysene-d12	2550	21.006				
1520-96-3	Perylene-d12	7090	23.105				

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:	PB165012BS			SDG No.:	P4866
Lab Sample ID:	PB165012BS			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
BN035226.D	1	11/15/24 12:05	11/21/24 17:36	PB165012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.38		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		82%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.26		30 - 150		66%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.22		55 - 111		56%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.086	*	53 - 106		22%	SPK: 0.4
1718-51-0	Terphenyl-d14	2.22	*	58 - 132		556%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3340	7.329				
1146-65-2	Naphthalene-d8	7690	10.073				
15067-26-2	Acenaphthene-d10	4260	13.986				
1517-22-2	Phenanthrene-d10	8290	16.746				
1719-03-5	Chrysene-d12	1030	21.008				
1520-96-3	Perylene-d12	1170	23.101				

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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Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB165012BSD	SDG No.:	P4866
Lab Sample ID:	PB165012BSD	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
BN035227.D	1	11/15/24 12:05	11/21/24 18:12	PB165012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.39		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		87%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.24		55 - 111		60%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.075	*	53 - 106		19%	SPK: 0.4
1718-51-0	Terphenyl-d14	2.27	*	58 - 132		567%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3070	7.329				
1146-65-2	Naphthalene-d8	6970	10.073				
15067-26-2	Acenaphthene-d10	4030	13.976				
1517-22-2	Phenanthrene-d10	7680	16.746				
1719-03-5	Chrysene-d12	1000	21.008				
1520-96-3	Perylene-d12	3420	23.098				

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

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN111324.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Nov 13 17:18:14 2024
Response Via : Initial Calibration

Calibration Files
0.1 =BN035062.D 0.2 =BN035063.D 0.4 =BN035064.D 0.8 =BN035065.D 1.6 =BN035066.D 3.2 =BN035067.D 5.0 =BN035068.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	0.410	0.382	0.335	0.371	0.367	0.348	0.329	0.363	7.76
3)		n-Nitrosodimet...	0.366	0.328	0.326	0.360	0.347	0.321	0.322	0.339	5.51
4)	S	2-Fluorophenol	1.073	1.039	0.949	1.086	1.034	0.966	0.961	1.015	5.54
5)	S	Phenol-d6	1.264	1.279	1.159	1.355	1.318	1.255	1.282	1.273	4.79
6)		bis(2-Chloroet...	0.972	0.949	0.893	1.027	0.995	0.925	0.929	0.956	4.77
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.358	0.338	0.320	0.368	0.356	0.344	0.353	0.348	4.53
9)		Naphthalene	1.088	1.009	0.977	1.116	1.085	1.010	1.027	1.044	4.96
10)		Hexachlorobuta...	0.324	0.305	0.293	0.326	0.315	0.289	0.291	0.306	5.12
11)	SURR	2-Methylnaphth...	0.694	0.683	0.664	0.762	0.753	0.703	0.731	0.713	5.13
12)		2-Methylnaphth...	0.742	0.748	0.711	0.823	0.815	0.765	0.789	0.770	5.29
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.281	0.262	0.240	0.300	0.299	0.308	0.331	0.289	10.57
15)	S	2-Fluorobiphenyl	1.701	1.576	1.460	1.735	1.687	1.599	1.614	1.624	5.73
16)		Acenaphthylene	1.715	1.616	1.488	1.822	1.775	1.756	1.795	1.709	6.93
17)		Acenaphthene	1.129	1.079	1.000	1.202	1.157	1.130	1.146	1.120	5.76
18)		Fluorene	1.704	1.591	1.463	1.755	1.708	1.656	1.659	1.648	5.86
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...	0.068	0.067	0.073	0.087	0.088	0.095	0.105	0.083	17.50
21)		4-Bromophenyl-...	0.256	0.240	0.246	0.272	0.267	0.252	0.252	0.255	4.41
22)		Hexachlorobenzene	0.275	0.259	0.253	0.277	0.273	0.258	0.258	0.264	3.79
23)		Atrazine	0.227	0.227	0.217	0.244	0.238	0.223	0.225	0.229	3.95
24)		Pentachlorophenol	0.106	0.101	0.104	0.130	0.130	0.141	0.154	0.124	16.69
25)		Phenanthrene	1.069	1.013	1.004	1.115	1.096	1.034	1.036	1.053	3.97
26)		Anthracene	0.917	0.904	0.920	1.024	1.016	0.986	1.001	0.967	5.32
27)	SURR	Fluoranthene-d10	1.196	1.178	1.169	1.288	1.284	1.222	1.240	1.225	3.91
28)		Fluoranthene	1.396	1.376	1.386	1.543	1.527	1.453	1.453	1.448	4.63
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.339	1.290	1.288	1.424	1.367	1.301	1.317	1.332	3.70
31)	S	Terphenyl-d14	0.838	0.819	0.810	0.894	0.867	0.817	0.831	0.839	3.63
32)		Benzo(a)anthra...	1.421	1.368	1.328	1.464	1.416	1.355	1.396	1.393	3.31
33)		Chrysene	1.409	1.366	1.332	1.479	1.420	1.331	1.321	1.380	4.27
34)		Bis(2-ethylhex...	0.809	0.753	0.647	0.768	0.702	0.693	0.742	0.731	7.38
35)	I	Perylene-d12	----------ISTD----------								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN111324.M

36)		Indeno(1,2,3-c...	1.609	1.515	1.522	1.730	1.659	1.550	1.585	1.596	4.88
37)		Benzo(b)fluora...	1.326	1.272	1.279	1.439	1.418	1.327	1.359	1.346	4.77
38)		Benzo(k)fluora...	1.342	1.288	1.287	1.418	1.410	1.323	1.358	1.347	3.94
39)	C	Benzo(a)pyrene	1.172	1.134	1.123	1.247	1.240	1.167	1.207	1.184	4.12
40)		Dibenzo(a,h)an...	1.248	1.195	1.210	1.375	1.322	1.235	1.265	1.264	5.06
41)		Benzo(g,h,i)pe...	1.380	1.288	1.286	1.452	1.386	1.294	1.328	1.345	4.71

(#) = Out of Range

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4866 SAS No.: P4866 SDG No.: P4866

Instrument ID: BNA_N Calibration Date/Time: 11/21/2024 13:22

Lab File ID: BN035219.D Init. Calib. Date(s): 11/13/2024 11/13/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:40 16:15

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.713	0.604		-15.3	20.0
Fluoranthene-d10	1.225	0.956		-22.0	20.0
2-Fluorophenol	1.015	1.174		15.7	20.0
Phenol-d6	1.273	1.472		15.6	20.0
Nitrobenzene-d5	0.348	0.208		-40.2	20.0
2-Fluorobiphenyl	1.624	0.299		-81.6	20.0
2,4,6-Tribromophenol	0.289	0.331		14.5	20.0
Terphenyl-d14	0.839	3.629		332.5	20.0
1,4-Dioxane	0.363	0.403		11.0	20.0

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4866 SAS No.: P4866 SDG No.: P4866

Instrument ID: BNA_N Calibration Date/Time: 11/21/2024 23:01

Lab File ID: BN035235.D Init. Calib. Date(s): 11/13/2024 11/13/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:40 16:15

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.713	0.581		-18.5	50.0
Fluoranthene-d10	1.225	0.987		-19.4	50.0
2-Fluorophenol	1.015	1.087		7.1	50.0
Phenol-d6	1.273	1.273		0.0	50.0
Nitrobenzene-d5	0.348	0.189		-45.7	50.0
2-Fluorobiphenyl	1.624	0.255		-84.3	50.0
2,4,6-Tribromophenol	0.289	0.242		-16.3	50.0
Terphenyl-d14	0.839	6.857		717.3	50.0
1,4-Dioxane	0.363	0.381		5.0	50.0

All other compounds must meet a minimum RRF of 0.010.