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ANALYTICAL RESULTS SUMMARY

SEMI-VOLATILE ORGANICS

PROJECT NAME : CTO WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : P5166

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

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Cover Page

Order ID : P5166

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
P5166-04	RW5-SP100-20241206
P5166-05	RW5-SP201-20241206
P5166-06	RW5-SP303-20241206

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : APPROVED
By Nimisha Pandya, QA/QC Supervisor at 3:24 pm, Dec 16, 2024

Date: 12/16/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager: Ernie Wu
Chemtech Project # P5166
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
3 Water samples were received on 12/06/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1. This data package contains results for SVOC-SIMGroup1.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria except for RW5-SP100-20241206 [Terphenyl-d14 - 138%], RW5-SP100-20241206DL [Terphenyl-d14 - 142%], RW5-SP201-20241206 [Terphenyl-d14 - 165%], RW5-SP303-20241206 [Nitrobenzene-d5 - 113%, Terphenyl-d14 - 184%], PB165497BL [Nitrobenzene-d5 - 113% and Terphenyl-d14 - 141%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

Sample RW5-SP100-20241206 was diluted due to high concentration.

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E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____ APPROVED
By Nimisha Pandya, QA/QC Supervisor at 3:24 pm, Dec 16, 2024

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908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value**.** This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P5166**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **SOHIL JODHANI** **Date:** **12/16/2024**

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LAB CHRONICLE

OrderID:	P5166	**OrderDate:**	12/6/2024 1:09:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	L51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5166-04	**RW5-SP100-20241206**	**Water**			**12/06/24**			**12/06/24**
			SVOC-SIMGroup1	8270-Modified		12/09/24	12/09/24	
P5166-04DL	**RW5-SP100-20241206DL**	**Water**			**12/06/24**			**12/06/24**
			SVOC-SIMGroup1	8270-Modified		12/09/24	12/10/24	
P5166-05	**RW5-SP201-20241206**	**Water**			**12/06/24**			**12/06/24**
			SVOC-SIMGroup1	8270-Modified		12/09/24	12/09/24	
P5166-06	**RW5-SP303-20241206**	**Water**			**12/06/24**			**12/06/24**
			SVOC-SIMGroup1	8270-Modified		12/09/24	12/09/24	

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Hit Summary Sheet
SW-846

SDG No.: P5166

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20241206									
P5166-04	RW5-SP100-20241206	WATER	1,4-Dioxane	8.400	E	0.07	0.2	0.2	ug/L
			Total Svoc :			**8.40**			
			Total Concentration:			**8.40**			
Client ID : RW5-SP100-20241206DL									
P5166-04DL	RW5-SP100-20241206DI	WATER	1,4-Dioxane	8.800	D	0.34	1	1	ug/L
			Total Svoc :			**8.80**			
			Total Concentration:			**8.80**			

SAMPLE DATA

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/06/24
Project:	CTO WE13	Date Received:	12/06/24
Client Sample ID:	RW5-SP100-20241206	SDG No.:	P5166
Lab Sample ID:	P5166-04	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
BN035517.D	1	12/09/24 11:27	12/09/24 21:19	PB165497

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	8.40	E	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	0.40		30 - 150		100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		138%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1840	7.301				
1146-65-2	Naphthalene-d8	4850	10.041				
15067-26-2	Acenaphthene-d10	3620	13.957				
1517-22-2	Phenanthrene-d10	9120	16.723				
1719-03-5	Chrysene-d12	7610	20.965				
1520-96-3	Perylene-d12	7090	23.062				

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:	12/06/24
Project:	CTO WE13	Date Received:	12/06/24
Client Sample ID:	RW5-SP100-20241206DL	SDG No.:	P5166
Lab Sample ID:	P5166-04DL	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
BN035527.D	5	12/09/24 11:27	12/10/24 10:45	PB165497

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	8.80	D	0.34	1.00	1.00	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		86%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		77%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	58 - 132		142%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1780	7.301				
1146-65-2	Naphthalene-d8	4600	10.041				
15067-26-2	Acenaphthene-d10	3510	13.957				
1517-22-2	Phenanthrene-d10	9370	16.736				
1719-03-5	Chrysene-d12	6990	20.974				
1520-96-3	Perylene-d12	6330	23.067				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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M = MS/MSD acceptance criteria did not meet requirements
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N = Presumptive Evidence of a Compound
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D = Dilution
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A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/06/24
Project:	CTO WE13	Date Received:	12/06/24
Client Sample ID:	RW5-SP201-20241206	SDG No.:	P5166
Lab Sample ID:	P5166-05	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	990 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
BN035518.D	1	12/09/24 11:27	12/09/24 21:55	PB165497

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	0.37		30 - 150		94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		98%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.66	*	58 - 132		165%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1760	7.301				
1146-65-2	Naphthalene-d8	4810	10.041				
15067-26-2	Acenaphthene-d10	3560	13.957				
1517-22-2	Phenanthrene-d10	8360	16.723				
1719-03-5	Chrysene-d12	7090	20.965				
1520-96-3	Perylene-d12	6750	23.059				

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/06/24
Project:	CTO WE13	Date Received:	12/06/24
Client Sample ID:	RW5-SP303-20241206	SDG No.:	P5166
Lab Sample ID:	P5166-06	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
BN035519.D	1	12/09/24 11:27	12/09/24 22:31	PB165497

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	0.45		30 - 150		112%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.52		30 - 150		129%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.45	*	55 - 111		113%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		103%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.74	*	58 - 132		184%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1260	7.301				
1146-65-2	Naphthalene-d8	3410	10.041				
15067-26-2	Acenaphthene-d10	2620	13.957				
1517-22-2	Phenanthrene-d10	6480	16.723				
1719-03-5	Chrysene-d12	5570	20.974				
1520-96-3	Perylene-d12	5310	23.065				

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
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N = Presumptive Evidence of a Compound
* = Values outside of QC limits
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() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: P5166

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	High
P5166-04	RW5-SP100-20241206	2-Methylnaphthalene-d10	0.4	0.35	87		30	150
		Fluoranthene-d10	0.4	0.40	100		30	150
		Nitrobenzene-d5	0.4	0.37	94		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.55	138	*	58	132
P5166-04DL	RW5-SP100-20241206DL	2-Methylnaphthalene-d10	0.4	0.35	86		30	150
		Fluoranthene-d10	0.4	0.39	96		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.57	142	*	58	132
P5166-05	RW5-SP201-20241206	2-Methylnaphthalene-d10	0.4	0.37	94		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.39	98		55	111
		2-Fluorobiphenyl	0.4	0.36	91		53	106
		Terphenyl-d14	0.4	0.66	165	*	58	132
P5166-06	RW5-SP303-20241206	2-Methylnaphthalene-d10	0.4	0.45	112		30	150
		Fluoranthene-d10	0.4	0.52	129		30	150
		Nitrobenzene-d5	0.4	0.45	113	*	55	111
		2-Fluorobiphenyl	0.4	0.41	103		53	106
		Terphenyl-d14	0.4	0.74	184	*	58	132
PB165497BL	PB165497BL	2-Methylnaphthalene-d10	0.4	0.46	114		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.45	113	*	55	111
		2-Fluorobiphenyl	0.4	0.43	106		53	106
		Terphenyl-d14	0.4	0.56	141	*	58	132
PB165497BS	PB165497BS	2-Methylnaphthalene-d10	0.4	0.53	133		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.41	102		55	111
		2-Fluorobiphenyl	0.4	0.40	101		53	106
		Terphenyl-d14	0.4	0.48	119		58	132
PB165497BSD	PB165497BSD	2-Methylnaphthalene-d10	0.4	0.53	133		30	150
		Fluoranthene-d10	0.4	0.37	91		30	150
		Nitrobenzene-d5	0.4	0.43	107		55	111
		2-Fluorobiphenyl	0.4	0.40	99		53	106
		Terphenyl-d14	0.4	0.48	119		58	132

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5166

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035528.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB165497BS	1,4-Dioxane	0.4	0.36	ug/L	90				70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5166

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035529.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB165497BSD	1,4-Dioxane	0.4	0.35	ug/L	88	3			70	130	20

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165497BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5166 SAS No.: P5166 SDG NO.: P5166

Lab File ID: BN035511.D Lab Sample ID: PB165497BL

Instrument ID: BNA_N Date Extracted: 12/09/2024

Matrix: (soil/water) Water Date Analyzed: 12/09/2024

Level: (low/med) LOW Time Analyzed: 17:43

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
RW5-SP303-20241206	P5166-06	BN035519.D	12/09/2024
PB165497BS	PB165497BS	BN035528.D	12/10/2024
PB165497BSD	PB165497BSD	BN035529.D	12/10/2024
RW5-SP100-20241206	P5166-04	BN035517.D	12/09/2024
RW5-SP201-20241206	P5166-05	BN035518.D	12/09/2024

COMMENTS:

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Fax : 908 789 8922

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5166 SDG NO.: P5166

Lab File ID: BN035349.D DFTPP Injection Date: 11/27/2024

Instrument ID: BNA_N DFTPP Injection Time: 14:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	28.9
70	Less than 2.0% of mass 69	0.1 (0.4) 1
127	10.0 - 80.0% of mass 198	39.4
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	27.9
365	Greater than 1% of mass 198	4.6
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14 (19.7) 2

1-Value is % mass 69 2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN035350.D	11/27/2024	15:34
SSTDICC0.2	SSTDICC0.2	BN035351.D	11/27/2024	16:10
SSTDICCC0.4	SSTDICCC0.4	BN035352.D	11/27/2024	16:46
SSTDICC0.8	SSTDICC0.8	BN035353.D	11/27/2024	17:21
SSTDICC1.6	SSTDICC1.6	BN035354.D	11/27/2024	17:57
SSTDICC3.2	SSTDICC3.2	BN035355.D	11/27/2024	18:33
SSTDICC5.0	SSTDICC5.0	BN035356.D	11/27/2024	19:09

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5166 SDG NO.: P5166

Lab File ID: BN035509.D DFTPP Injection Date: 12/09/2024

Instrument ID: BNA_N DFTPP Injection Time: 16:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	24.4
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	33.2
70	Less than 2.0% of mass 69	0.1 (0.4) 1
127	10.0 - 80.0% of mass 198	41.6
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	7
275	10.0 - 60.0% of mass 198	27.3
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	9.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.1 (18.8) 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	BN035510.D	12/09/2024	17:07
PB165497BL	PB165497BL	BN035511.D	12/09/2024	17:43
RW5-SP100-20241206	P5166-04	BN035517.D	12/09/2024	21:19
RW5-SP201-20241206	P5166-05	BN035518.D	12/09/2024	21:55
RW5-SP303-20241206	P5166-06	BN035519.D	12/09/2024	22:31
SSTDCCC0.4EC	SSTDCCC0.4	BN035523.D	12/10/2024	00:55

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P5166 SDG NO.: P5166

Lab File ID: BN035524.D DFTPP Injection Date: 12/10/2024

Instrument ID: BNA_N DFTPP Injection Time: 08:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	24.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	33.3
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	41.8
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	7.1
275	10.0 - 60.0% of mass 198	27.3
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	10.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.2 (19.7) 2

1-Value is % mass 69 2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN035525.D	12/10/2024	09:33
RW5-SP100-20241206DL	P5166-04DL	BN035527.D	12/10/2024	10:45
PB165497BS	PB165497BS	BN035528.D	12/10/2024	11:21
PB165497BSD	PB165497BSD	BN035529.D	12/10/2024	12:03
SSTDCCC0.4EC	SSTDCCC0.4	BN035530.D	12/10/2024	12:40

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5166 SAS No.: P5166 SDG NO.: P5166

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/09/2024

Lab File ID: BN035510.D Time Analyzed: 17:07

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	1975	7.3	5582	10.04	4021	13.96
	UPPER LIMIT	3950	7.8	11164	10.541	8042	14.456
	LOWER LIMIT	987.5	6.8	2791	9.541	2010.5	13.456
	EPA SAMPLE NO.						
01	PB165497BL	1641	7.30	4578	10.05	3247	13.96
02	RW5-SP303-20241206	1257	7.30	3408	10.04	2615	13.96
03	RW5-SP100-20241206	1838	7.30	4853	10.04	3623	13.96
04	RW5-SP201-20241206	1759	7.30	4808	10.04	3560	13.96

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.: P5166 SAS No.: P5166 SDG NO.: P5166

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/09/2024

Lab File ID: BN035510.D Time Analyzed: 17:07

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	9077	16.723	8166	20.965	8385	23.059
	UPPER LIMIT	18154	17.223	16332	21.465	16770	23.559
	LOWER LIMIT	4538.5	16.223	4083	20.465	4192.5	22.559
	EPA SAMPLE NO.						
01	PB165497BL	7570	16.74	6431	20.97	6251	23.07
02	RW5-SP303-20241206	6478	16.72	5571	20.97	5305	23.07
03	RW5-SP100-20241206	9117	16.72	7610	20.97	7094	23.06
04	RW5-SP201-20241206	8364	16.72	7094	20.97	6747	23.06

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.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5166 SAS No.: P5166 SDG NO.: P5166

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/10/2024

Lab File ID: BN035525.D Time Analyzed: 09:33

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	2237	7.293	6161	10.04	4478	13.96
	UPPER LIMIT	4474	7.793	12322	10.541	8956	14.457
	LOWER LIMIT	1118.5	6.793	3080.5	9.541	2239	13.457
	EPA SAMPLE NO.						
01	PB165497BSD	1941	7.29	5150	10.04	3668	13.96
02	PB165497BS	1669	7.30	4431	10.04	3092	13.96
03	RW5-SP100-20241206DL	1780	7.30	4601	10.04	3512	13.96

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.: P5166 SAS No.: P5166 SDG NO.: P5166

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/10/2024

Lab File ID: BN035525.D Time Analyzed: 09:33

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	11122	16.723	9383	20.965	8820	23.059
	UPPER LIMIT	22244	17.223	18766	21.465	17640	23.559
	LOWER LIMIT	5561	16.223	4691.5	20.465	4410	22.559
	EPA SAMPLE NO.						
01	PB165497BSD	9298	16.72	7541	20.97	6738	23.06
02	PB165497BS	7959	16.72	6696	20.96	5945	23.06
03	RW5-SP100-20241206DL	9370	16.74	6994	20.97	6330	23.07

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

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Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB165497BL			SDG No.:	P5166
Lab Sample ID:	PB165497BL			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
BN035511.D	1	12/09/24 11:27	12/09/24 17:43	PB165497

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	0.46		30 - 150		114%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.45	*	55 - 111		113%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43		53 - 106		106%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		141%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1640	7.3				
1146-65-2	Naphthalene-d8	4580	10.052				
15067-26-2	Acenaphthene-d10	3250	13.957				
1517-22-2	Phenanthrene-d10	7570	16.736				
1719-03-5	Chrysene-d12	6430	20.974				
1520-96-3	Perylene-d12	6250	23.067				

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:	PB165497BS			SDG No.:	P5166
Lab Sample ID:	PB165497BS			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
BN035528.D	1	12/09/24 11:27	12/10/24 11:21	PB165497

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.36		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.53		30 - 150		133%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		55 - 111		102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		101%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		119%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1670	7.3				
1146-65-2	Naphthalene-d8	4430	10.041				
15067-26-2	Acenaphthene-d10	3090	13.956				
1517-22-2	Phenanthrene-d10	7960	16.723				
1719-03-5	Chrysene-d12	6700	20.964				
1520-96-3	Perylene-d12	5950	23.058				

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:	PB165497BSD			SDG No.:	P5166
Lab Sample ID:	PB165497BSD			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
BN035529.D	1	12/09/24 11:27	12/10/24 12:03	PB165497

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.35		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.53		30 - 150		133%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		91%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		107%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		99%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		119%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1940	7.293				
1146-65-2	Naphthalene-d8	5150	10.041				
15067-26-2	Acenaphthene-d10	3670	13.957				
1517-22-2	Phenanthrene-d10	9300	16.723				
1719-03-5	Chrysene-d12	7540	20.965				
1520-96-3	Perylene-d12	6740	23.062				

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-BN112724.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Nov 27 23:03:24 2024
Response Via : Initial Calibration

Calibration Files
0.1 =BN035350.D 0.2 =BN035351.D 0.4 =BN035352.D 0.8 =BN035353.D 1.6 =BN035354.D 3.2 =BN035355.D 5.0 =BN035356.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	0.406	0.417	0.376	0.380	0.392	0.357	0.348	0.382	6.52
3)		n-Nitrosodimet...	0.334	0.302	0.326	0.315	0.332	0.310	0.309	0.319	3.92
4)	S	2-Fluorophenol	1.025	1.112	1.018	0.958	0.998	0.954	0.942	1.001	5.88
5)	S	Phenol-d6	1.227	1.186	1.193	1.143	1.235	1.215	1.229	1.204	2.69
6)		bis(2-Chloroet...	1.035	1.021	0.992	0.993	1.051	0.997	0.991	1.012	2.39
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.227	0.232	0.235	0.248	0.257	0.251	0.261	0.244	5.31
9)		Naphthalene	1.062	1.029	1.047	1.032	1.096	1.049	1.070	1.055	2.22
10)		Hexachlorobuta...	0.245	0.242	0.247	0.241	0.255	0.236	0.238	0.243	2.60
11)	SURR	2-Methylnaphth...	0.591	0.603	0.619	0.615	0.659	0.639	0.656	0.626	4.16
12)		2-Methylnaphth...	0.724	0.716	0.740	0.747	0.795	0.771	0.795	0.755	4.25
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.273	0.258	0.257	0.268	0.293	0.311	0.328	0.284	9.67
15)	S	2-Fluorobiphenyl	1.489	1.491	1.510	1.508	1.566	1.511	1.511	1.512	1.68
16)		Acenaphthylene	1.643	1.600	1.595	1.638	1.737	1.763	1.781	1.680	4.68
17)		Acenaphthene	1.121	1.084	1.086	1.108	1.145	1.122	1.140	1.115	2.17
18)		Fluorene	1.589	1.549	1.543	1.600	1.652	1.614	1.625	1.596	2.47
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...	0.038	0.031	0.036	0.041	0.051			0.039	19.30
21)		4-Bromophenyl-...	0.226	0.218	0.226	0.233	0.249	0.242	0.244	0.234	4.85
22)		Hexachlorobenzene	0.265	0.266	0.273	0.276	0.288	0.278	0.277	0.275	2.82
23)		Atrazine	0.155	0.155	0.154	0.156	0.175	0.179	0.191	0.167	8.98
24)		Pentachlorophenol	0.140	0.090	0.095	0.103	0.121	0.136	0.150	0.120	19.86
25)		Phenanthrene	1.092	1.046	1.067	1.092	1.148	1.121	1.125	1.099	3.20
26)		Anthracene	0.964	0.923	0.940	0.973	1.050	1.042	1.064	0.994	5.76
27)	SURR	Fluoranthene-d10	1.203	1.086	1.077	1.105	1.165	1.138	1.164	1.134	4.10
28)		Fluoranthene	1.538	1.396	1.416	1.456	1.539	1.497	1.526	1.481	3.99
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.583	1.445	1.475	1.443	1.519	1.440	1.431	1.477	3.79
31)	S	Terphenyl-d14	0.832	0.777	0.791	0.771	0.812	0.772	0.769	0.789	3.08
32)		Benzo(a)anthra...	1.431	1.343	1.355	1.375	1.451	1.411	1.429	1.399	2.98
33)		Chrysene	1.463	1.452	1.441	1.415	1.487	1.422	1.420	1.443	1.84
34)		Bis(2-ethylhex...	0.710	0.558	0.516	0.505	0.520	0.516	0.544	0.553	12.96
35)	I	Perylene-d12	----------ISTD----------								

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN112724.M

36)		Indeno(1,2,3-c...	1.411	1.489	1.532	1.554	1.660	1.615	1.685	1.564	6.22
37)		Benzo(b)fluora...	1.305	1.348	1.313	1.378	1.827	1.463	1.608	1.463	13.12
38)		Benzo(k)fluora...	1.444	1.376	1.402	1.419	1.527	1.447	1.468	1.440	3.39
39)	C	Benzo(a)pyrene	1.204	1.156	1.146	1.171	1.256	1.232	1.271	1.205	4.11
40)		Dibenzo(a,h)an...	1.104	1.187	1.194	1.226	1.315	1.280	1.332	1.234	6.55
41)		Benzo(g,h,i)pe...	1.188	1.238	1.248	1.269	1.360	1.330	1.394	1.289	5.71

(#) = Out of Range

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.: P5166 SAS No.: P5166 SDG No.: P5166

Instrument ID: BNA_N Calibration Date/Time: 12/09/2024 17:07

Lab File ID: BN035510.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.627		0.2	20.0
Fluoranthene-d10	1.134	1.031		-9.1	20.0
2-Fluorophenol	1.001	1.045		4.4	20.0
Phenol-d6	1.204	1.324		10.0	20.0
Nitrobenzene-d5	0.244	0.260		6.6	20.0
2-Fluorobiphenyl	1.512	1.514		0.1	20.0
2,4,6-Tribromophenol	0.284	0.274		-3.5	20.0
Terphenyl-d14	0.789	0.816		3.4	20.0
1,4-Dioxane	0.382	0.363		-5.0	20.0

All other compounds must meet a minimum RRF of 0.010.

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5166 SAS No.: P5166 SDG No.: P5166

Instrument ID: BNA_N Calibration Date/Time: 12/10/2024 00:55

Lab File ID: BN035523.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.625		-0.2	50.0
Fluoranthene-d10	1.134	1.005		-11.4	50.0
2-Fluorophenol	1.001	1.013		1.2	50.0
Phenol-d6	1.204	1.247		3.6	50.0
Nitrobenzene-d5	0.244	0.265		8.6	50.0
2-Fluorobiphenyl	1.512	1.447		-4.3	50.0
2,4,6-Tribromophenol	0.284	0.266		-6.3	50.0
Terphenyl-d14	0.789	0.812		2.9	50.0
1,4-Dioxane	0.382	0.386		1.0	50.0

All other compounds must meet a minimum RRF of 0.010.

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5166 SAS No.: P5166 SDG No.: P5166

Instrument ID: BNA_N Calibration Date/Time: 12/10/2024 09:33

Lab File ID: BN035525.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.622		-0.6	20.0
Fluoranthene-d10	1.134	0.995		-12.3	20.0
2-Fluorophenol	1.001	1.042		4.1	20.0
Phenol-d6	1.204	1.276		6.0	20.0
Nitrobenzene-d5	0.244	0.257		5.3	20.0
2-Fluorobiphenyl	1.512	1.496		-1.1	20.0
2,4,6-Tribromophenol	0.284	0.249		-12.3	20.0
Terphenyl-d14	0.789	0.834		5.7	20.0
1,4-Dioxane	0.382	0.382		0.0	20.0

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.: P5166 SAS No.: P5166 SDG No.: P5166

Instrument ID: BNA_N Calibration Date/Time: 12/10/2024 12:40

Lab File ID: BN035530.D Init. Calib. Date(s): 11/27/2024 11/27/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 15:34 19:09

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.626	0.609		-2.7	50.0
Fluoranthene-d10	1.134	0.937		-17.4	50.0
2-Fluorophenol	1.001	0.987		-1.4	50.0
Phenol-d6	1.204	1.206		0.2	50.0
Nitrobenzene-d5	0.244	0.255		4.5	50.0
2-Fluorobiphenyl	1.512	1.456		-3.7	50.0
2,4,6-Tribromophenol	0.284	0.253		-10.9	50.0
Terphenyl-d14	0.789	0.823		4.3	50.0
1,4-Dioxane	0.382	0.377		-1.3	50.0

All other compounds must meet a minimum RRF of 0.010.

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: P5166

COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Tetra Tech	PROJECT NAME: NWIRP Bethpage	BILL TO: PO#
ADDRESS: 4433 Corporation Ln, Suite 300	PROJECT #: 112G08005-WE13 LOCATION: RW5B	ADDRESS:
CITY: Virginia Beach STATE: VA ZIP: 23462	PROJECT MANAGER: Ernie Wu	CITY: STATE: ZIP:
ATTENTION: Ernie Wu	E-MAIL: ernie,wu@tetratech.com	ATTENTION: PHONE:
PHONE: 757-466-4901 FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148	

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESEULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other
- ☐ EDD Format

ANALYSIS

	1	2	3	4	5	6	7	8	9
1,4-Dioxane SW846 8270 SIM									

PRESERVATIVES

	1	2	3	4	5	6	7	8	9
		B							

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	1	2	3	4	5	6	7	8	9
1.	RW5-SP100-20241206	GW		x	12/6/24	12:45	1	x								
2.	RW5-SP201-20241206	GW		x	12/6/24	12:47	1	x								
3.	RW5-SP303-20241206	GW		x	12/6/24	12:53	1	x								
4.																
5.																
6.																
7.																
8.																
9.																
10.																

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME		
1. RELINQUISHED BY SAMPLER	12/4/24 1300	1. RECEIVED BY	1300 12-6-24
2. RELINQUISHED BY	DATE/TIME	2. RECEIVED BY	
3. RELINQUISHED BY	DATE/TIME 1700 12-6-24	3. RECEIVED FOR LAB BY	

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.7c
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?:
Comments:

Page of

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488