

ANALYTICAL RESULTS SUMMARY

METALS
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 : Q1477

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q1477

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q1477-01
Q1477-02
Q1477-03
Q1477-04

Client Sample Number

RW7-SP100-20250228
RW7-SP201-20250228
RW7-SP302-20250228
RW7-SP303-20250228

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 9:43 am, Mar 17, 2025

Date: 3/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1477

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

4 Water samples were received on 03/03/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Metals Group3, Metals Group4 and 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 PB166992BL [2-Fluorobiphenyl - 160%], PB166992BS [2-Fluorobiphenyl - 142%], PB166992BSD [2-Fluorobiphenyl - 154%], RW7-SP100-20250228 [2-Fluorobiphenyl - 129%, Terphenyl-d14 - 136%], RW7-SP201-20250228 [2-Fluorobiphenyl - 125%], RW7-SP302-20250228 [2-Fluorobiphenyl - 139%] and RW7-SP303-20250228 [2-Fluorobiphenyl - 122%], The above 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 File ID BN036524.D met the requirements except for 2,4,6-Tribromophenol and 2-Fluorobiphenyl, The failure compounds not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.

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 9:43 am, Mar 17, 2025



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

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1477

Test Name: Metals Group4

A. Number of Samples and Date of Receipt:

4 Water samples were received on 03/03/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Metals Group3, Metals Group4 and SVOC-SIMGroup1. This data package contains results for Metals Group4.

C. Analytical Techniques:

The analysis of Metals Group4 was based on method 6010D and digestion based on method 3010 (waters).

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

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

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 9:43 am, Mar 17, 2025

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers “P” for ICP instrument “PM” for ICP when Microwave Digestion is used “CV” for Manual Cold Vapor AA “AV” for automated Cold Vapor AA “CA” for MIDI-Distillation Spectrophotometric “AS” for Semi -Automated Spectrophotometric “C” for Manual Spectrophotometric “T” for Titrimetric “NR” for analyte not required to be analyzed
OR	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

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 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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1477

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 Custody

✓

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: 03/17/2025

LAB CHRONICLE

OrderID:	Q1477	OrderDate:	3/3/2025 10:23:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	H41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1477-01	RW7-SP100-20250228	Water			02/28/25			03/03/25
			SVOC-SIMGroup1	8270-Modified		03/05/25	03/05/25	
Q1477-02	RW7-SP201-20250228	Water			02/28/25			03/03/25
			SVOC-SIMGroup1	8270-Modified		03/05/25	03/05/25	
Q1477-03	RW7-SP302-20250228	Water			02/28/25			03/03/25
			SVOC-SIMGroup1	8270-Modified		03/05/25	03/05/25	
Q1477-04	RW7-SP303-20250228	Water			02/28/25			03/03/25
			SVOC-SIMGroup1	8270-Modified		03/05/25	03/05/25	



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

Hit Summary Sheet SW-846

SDG No.: Q1477
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	RW7-SP100-20250228							
Q1477-01	RW7-SP100-20250228	WATER	1,4-Dioxane	5.500	0.08	0.24	0.24	ug/L
Total Svoc :				5.50				
Total Concentration:				5.50				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/28/25
Project:	CTO WE13	Date Received:	03/03/25
Client Sample ID:	RW7-SP100-20250228	SDG No.:	Q1477
Lab Sample ID:	Q1477-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	820 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036526.D	1	03/05/25 09:15	03/05/25 16:18	PB166992

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	5.50		0.080	0.24	0.24	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.51		30 - 150		127%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		91%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.52	*	53 - 106		129%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		136%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2030	7.731				
1146-65-2	Naphthalene-d8	4620	10.519				
15067-26-2	Acenaphthene-d10	2880	14.366				
1517-22-2	Phenanthrene-d10	6250	17.111				
1719-03-5	Chrysene-d12	6120	21.294				
1520-96-3	Perylene-d12	5520	23.554				

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:	02/28/25
Project:	CTO WE13	Date Received:	03/03/25
Client Sample ID:	RW7-SP201-20250228	SDG No.:	Q1477
Lab Sample ID:	Q1477-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036527.D	1	03/05/25 09:15	03/05/25 16:54	PB166992

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	0.31		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		118%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.50	*	53 - 106		125%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.50		58 - 132		125%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1910	7.732				
1146-65-2	Naphthalene-d8	4450	10.519				
15067-26-2	Acenaphthene-d10	2800	14.366				
1517-22-2	Phenanthrene-d10	6070	17.111				
1719-03-5	Chrysene-d12	6270	21.295				
1520-96-3	Perylene-d12	5880	23.554				

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:	02/28/25
Project:	CTO WE13	Date Received:	03/03/25
Client Sample ID:	RW7-SP302-20250228	SDG No.:	Q1477
Lab Sample ID:	Q1477-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036528.D	1	03/05/25 09:15	03/05/25 17:30	PB166992

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	0.33		30 - 150		83%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.51		30 - 150		127%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		96%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.56	*	53 - 106		139%	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	2900	7.732				
1146-65-2	Naphthalene-d8	6910	10.52				
15067-26-2	Acenaphthene-d10	4230	14.366				
1517-22-2	Phenanthrene-d10	8980	17.111				
1719-03-5	Chrysene-d12	9610	21.295				
1520-96-3	Perylene-d12	8800	23.554				

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:	02/28/25
Project:	CTO WE13	Date Received:	03/03/25
Client Sample ID:	RW7-SP303-20250228	SDG No.:	Q1477
Lab Sample ID:	Q1477-04	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	830 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036529.D	1	03/05/25 09:15	03/05/25 18:07	PB166992

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.24	U	0.080	0.24	0.24	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.30		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		114%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.49	*	53 - 106		122%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1830	7.732				
1146-65-2	Naphthalene-d8	4150	10.519				
15067-26-2	Acenaphthene-d10	2620	14.366				
1517-22-2	Phenanthrene-d10	5710	17.111				
1719-03-5	Chrysene-d12	5790	21.295				
1520-96-3	Perylene-d12	5270	23.557				

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

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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.: Q1477

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166992BL	PB166992BL	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.42	104		55	111
		2-Fluorobiphenyl	0.4	0.64	160	*	53	106
		Terphenyl-d14	0.4	0.43	108		58	132
PB166992BS	PB166992BS	2-Methylnaphthalene-d10	0.4	0.49	122		30	150
		Fluoranthene-d10	0.4	0.39	98		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.57	142	*	53	106
		Terphenyl-d14	0.4	0.46	114		58	132
PB166992BSD	PB166992BSD	2-Methylnaphthalene-d10	0.4	0.50	124		30	150
		Fluoranthene-d10	0.4	0.40	100		30	150
		Nitrobenzene-d5	0.4	0.41	102		55	111
		2-Fluorobiphenyl	0.4	0.62	154	*	53	106
		Terphenyl-d14	0.4	0.46	115		58	132
Q1477-01	RW7-SP100-20250228	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.51	127		30	150
		Nitrobenzene-d5	0.4	0.37	91		55	111
		2-Fluorobiphenyl	0.4	0.52	129	*	53	106
		Terphenyl-d14	0.4	0.55	136	*	58	132
Q1477-02	RW7-SP201-20250228	2-Methylnaphthalene-d10	0.4	0.31	76		30	150
		Fluoranthene-d10	0.4	0.47	118		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.50	125	*	53	106
		Terphenyl-d14	0.4	0.50	125		58	132
Q1477-03	RW7-SP302-20250228	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.51	127		30	150
		Nitrobenzene-d5	0.4	0.38	96		55	111
		2-Fluorobiphenyl	0.4	0.56	139	*	53	106
		Terphenyl-d14	0.4	0.48	119		58	132
Q1477-04	RW7-SP303-20250228	2-Methylnaphthalene-d10	0.4	0.30	76		30	150
		Fluoranthene-d10	0.4	0.46	114		30	150
		Nitrobenzene-d5	0.4	0.31	78		55	111
		2-Fluorobiphenyl	0.4	0.49	122	*	53	106
		Terphenyl-d14	0.4	0.49	123		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1477

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036530.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB166992BS	1,4-Dioxane	0.4	0.36	ug/L	90				70	130	

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1477

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036531.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166992BSD	1,4-Dioxane	0.4	0.38	ug/L	95	5			70	130	20

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166992BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1477

SAS No.: Q1477 SDG NO.: Q1477

Lab File ID: BN036525.D

Lab Sample ID: PB166992BL

Instrument ID: BNA_N

Date Extracted: 03/05/2025

Matrix: (soil/water) Water

Date Analyzed: 03/05/2025

Level: (low/med) LOW

Time Analyzed: 15:42

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166992BS	PB166992BS	BN036530.D	03/05/2025
RW7-SP100-20250228	Q1477-01	BN036526.D	03/05/2025
RW7-SP201-20250228	Q1477-02	BN036527.D	03/05/2025
RW7-SP302-20250228	Q1477-03	BN036528.D	03/05/2025
PB166992BSD	PB166992BSD	BN036531.D	03/05/2025
RW7-SP303-20250228	Q1477-04	BN036529.D	03/05/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1477 SDG NO.: Q1477

Lab File ID: BN036408.D

DFTPP Injection Date: 02/10/2025

Instrument ID: BNA_N

DFTPP Injection Time: 11:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	51.4
68	Less than 2.0% of mass 69	0.3 (0.7) 1
69	Mass 69 relative abundance	47.7
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	48.3
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	24.7
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	7.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.5 (20.1) 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	BN036409.D	02/10/2025	12:25
SSTDICC0.2	SSTDICC0.2	BN036410.D	02/10/2025	13:01
SSTDICCC0.4	SSTDICCC0.4	BN036411.D	02/10/2025	13:36
SSTDICC0.8	SSTDICC0.8	BN036412.D	02/10/2025	14:12
SSTDICC1.6	SSTDICC1.6	BN036413.D	02/10/2025	14:48
SSTDICC3.2	SSTDICC3.2	BN036414.D	02/10/2025	15:24
SSTDICC5.0	SSTDICC5.0	BN036415.D	02/10/2025	16:00

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1477

SDG NO.: Q1477

Lab File ID: BN036523.D

DFTPP Injection Date: 03/05/2025

Instrument ID: BNA_N

DFTPP Injection Time: 12:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	57.3
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	52.6
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	50.2
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	25
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	9.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.4 (19.2) 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	BN036524.D	03/05/2025	13:31
PB166992BL	PB166992BL	BN036525.D	03/05/2025	15:42
RW7-SP100-20250228	Q1477-01	BN036526.D	03/05/2025	16:18
RW7-SP201-20250228	Q1477-02	BN036527.D	03/05/2025	16:54
RW7-SP302-20250228	Q1477-03	BN036528.D	03/05/2025	17:30
RW7-SP303-20250228	Q1477-04	BN036529.D	03/05/2025	18:07
PB166992BS	PB166992BS	BN036530.D	03/05/2025	18:43
PB166992BSD	PB166992BSD	BN036531.D	03/05/2025	19:18
SSTDCCC0.4EC	SSTDCCC0.4	BN036532.D	03/05/2025	19:55

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1477 SAS No.: Q1477 SDG NO.: Q1477

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/05/2025

Lab File ID: BN036524.D Time Analyzed: 13:31

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	2348	7.732	5891	10.51	3887	14.37
UPPER LIMIT	4696	8.232	11782	11.009	7774	14.866
LOWER LIMIT	1174	7.232	2945.5	10.009	1943.5	13.866
EPA SAMPLE NO.						
01 PB166992BL	2434	7.72	5613	10.51	3101	14.37
02 RW7-SP100-20250228	2030	7.73	4623	10.52	2883	14.37
03 PB166992BS	2101	7.73	4843	10.52	2666	14.37
04 RW7-SP201-20250228	1905	7.73	4453	10.52	2798	14.37
05 RW7-SP302-20250228	2903	7.73	6906	10.52	4230	14.37
06 RW7-SP303-20250228	1825	7.73	4151	10.52	2616	14.37
07 PB166992BSD	1886	7.73	4343	10.52	2423	14.37

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.: Q1477 SAS No.: Q1477 SDG NO.: Q1477

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/05/2025

Lab File ID: BN036524.D Time Analyzed: 13:31

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	7928	17.111	7302	21.295	7292	23.551
UPPER LIMIT	15856	17.611	14604	21.795	14584	24.051
LOWER LIMIT	3964	16.611	3651	20.795	3646	23.051
EPA SAMPLE NO.						
01 PB166992BL	6620	17.11	5887	21.30	5416	23.56
02 RW7-SP100-20250228	6253	17.11	6117	21.29	5519	23.55
03 PB166992BS	5405	17.11	4446	21.30	4016	23.56
04 RW7-SP201-20250228	6074	17.11	6274	21.30	5876	23.55
05 RW7-SP302-20250228	8982	17.11	9606	21.30	8798	23.55
06 RW7-SP303-20250228	5706	17.11	5791	21.30	5265	23.56
07 PB166992BSD	4936	17.11	4101	21.30	3858	23.56

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	PB166992BL		SDG No.:	Q1477
Lab Sample ID:	PB166992BL		Matrix:	Water
Analytical Method:	SW8270ESIM		% 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 :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036525.D	1	03/05/25 09:15	03/05/25 15:42	PB166992

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		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		102%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.64	*	53 - 106		160%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2430	7.724				
1146-65-2	Naphthalene-d8	5610	10.509				
15067-26-2	Acenaphthene-d10	3100	14.366				
1517-22-2	Phenanthrene-d10	6620	17.111				
1719-03-5	Chrysene-d12	5890	21.304				
1520-96-3	Perylene-d12	5420	23.56				

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:	PB166992BS		SDG No.:	Q1477	
Lab Sample ID:	PB166992BS		Matrix:	Water	
Analytical Method:	SW8270ESIM		% 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 :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036530.D	1	03/05/25 09:15	03/05/25 18:43	PB166992

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	0.49		30 - 150		122%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		98%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		97%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.57	*	53 - 106		142%	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	2100	7.732				
1146-65-2	Naphthalene-d8	4840	10.519				
15067-26-2	Acenaphthene-d10	2670	14.366				
1517-22-2	Phenanthrene-d10	5410	17.111				
1719-03-5	Chrysene-d12	4450	21.304				
1520-96-3	Perylene-d12	4020	23.557				

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:	PB166992BSD		SDG No.:	Q1477	
Lab Sample ID:	PB166992BSD		Matrix:	Water	
Analytical Method:	SW8270ESIM		% 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 :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036531.D	1	03/05/25 09:15	03/05/25 19:18	PB166992

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	0.50		30 - 150		124%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		55 - 111		102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.62	*	53 - 106		154%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		115%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1890	7.732				
1146-65-2	Naphthalene-d8	4340	10.52				
15067-26-2	Acenaphthene-d10	2420	14.366				
1517-22-2	Phenanthrene-d10	4940	17.111				
1719-03-5	Chrysene-d12	4100	21.295				
1520-96-3	Perylene-d12	3860	23.557				

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-BN021025.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Tue Feb 11 01:17:14 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036409.D 0.2 =BN036410.D 0.4 =BN036411.D 0.8 =BN036412.D 1.6 =BN036413.D 3.2 =BN036414.D 5.0 =BN036415.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	0.555	0.437	0.433	0.414	0.411	0.433	0.381	0.438	12.66
3)	n-Nitrosodimet...	0.906	0.779	0.764	0.724	0.708	0.769	0.670	0.760	9.90
4) S	2-Fluorophenol	1.009	0.954	0.936	0.920	0.914	0.999	0.885	0.945	4.80
5) S	Phenol-d6	1.134	1.007	1.032	1.062	1.099	1.267	1.164	1.109	8.00
6)	bis(2-Chloroet...	1.382	1.070	1.086	1.129	1.120	1.225	1.107	1.160	9.48
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.500	0.363	0.365	0.370	0.367	0.417	0.381	0.395	12.70
9)	Naphthalene	1.400	1.141	1.116	1.088	1.075	1.186	1.073	1.154	10.01
10)	Hexachlorobuta...	0.319	0.293	0.283	0.272	0.264	0.282	0.253	0.281	7.67
11) SURR2	Methylnaphth...	0.647	0.583	0.602	0.588	0.597	0.668	0.618	0.615	5.19
12)	2-Methylnaphth...	0.833	0.712	0.738	0.721	0.726	0.816	0.750	0.757	6.40
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.196	0.181	0.186	0.184	0.195	0.226	0.219	0.198	8.90
15) S	2-Fluorobiphenyl	1.409	1.390	1.377	1.491	1.564	1.738	1.558	1.504	8.57
16)	Acenaphthylene	1.807	1.667	1.692	1.683	1.734	1.964	1.820	1.767	5.98
17)	Acenaphthene	1.245	1.125	1.146	1.128	1.175	1.273	1.169	1.180	4.89
18)	Fluorene	1.696	1.630	1.661	1.627	1.669	1.829	1.646	1.680	4.17
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.071	0.067	0.069	0.074	0.084	0.107		0.078	19.60
21)	4-Bromophenyl-...	0.243	0.227	0.231	0.232	0.236	0.264	0.238	0.239	5.15
22)	Hexachlorobenzene	0.305	0.296	0.284	0.287	0.289	0.317	0.285	0.295	4.11
23)	Atrazine	0.196	0.190	0.187	0.186	0.194	0.229	0.213	0.199	8.00
24)	Pentachlorophenol	0.140	0.125	0.122	0.122	0.134	0.170	0.167	0.140	14.74
25)	Phenanthrene	1.233	1.090	1.095	1.112	1.138	1.273	1.153	1.156	6.12
26)	Anthracene	0.990	0.933	0.967	0.978	1.015	1.167	1.088	1.020	7.92
27) SURR	Fluoranthene-d10	1.109	1.043	1.063	1.059	1.098	1.258	1.156	1.112	6.70
28)	Fluoranthene	1.441	1.323	1.353	1.356	1.404	1.607	1.461	1.421	6.76
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.584	1.568	1.534	1.490	1.488	1.629	1.492	1.541	3.59
31) S	Terphenyl-d14	0.860	0.847	0.852	0.829	0.834	0.913	0.843	0.854	3.27
32)	Benzo(a)anthra...	1.257	1.276	1.293	1.255	1.300	1.471	1.362	1.316	5.86
33)	Chrysene	1.449	1.456	1.360	1.414	1.404	1.527	1.366	1.425	4.08
34)	Bis(2-ethylhex...	0.902	0.875	0.777	0.745	0.761	0.861	0.819	0.820	7.45
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN021025.M

36)	Indeno(1,2,3-c...	1.182	1.289	1.378	1.390	1.446	1.630	1.471	1.398	10.13
37)	Benzo(b)fluora...	1.174	1.220	1.260	1.290	1.333	1.529	1.416	1.317	9.24
38)	Benzo(k)fluora...	1.258	1.253	1.363	1.326	1.347	1.532	1.413	1.356	7.08
39) C	Benzo(a)pyrene	1.091	1.081	1.102	1.114	1.145	1.309	1.206	1.150	7.12
40)	Dibenzo(a,h)an...	0.906	1.021	1.075	1.087	1.154	1.304	1.176	1.103	11.40
41)	Benzo(g,h,i)pe...	1.140	1.212	1.254	1.230	1.269	1.400	1.249	1.250	6.27

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1477 SAS No.: Q1477 SDG No.: Q1477

Instrument ID: BNA_N Calibration Date/Time: 03/05/2025 13:31

Lab File ID: BN036524.D Init. Calib. Date(s): 02/10/2025 02/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:25 16:00

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.615	0.591		-3.9	20.0
Fluoranthene-d10	1.112	1.110		-0.2	20.0
2-Fluorophenol	0.945	0.961		1.7	20.0
Phenol-d6	1.109	1.154		4.1	20.0
Nitrobenzene-d5	0.395	0.401		1.5	20.0
2-Fluorobiphenyl	1.504	2.119		40.9	20.0
2,4,6-Tribromophenol	0.198	0.158		-20.2	20.0
Terphenyl-d14	0.854	0.840		-1.6	20.0
1,4-Dioxane	0.438	0.436		-0.5	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.: Q1477 SAS No.: Q1477 SDG No.: Q1477

Instrument ID: BNA_N Calibration Date/Time: 03/05/2025 19:55

Lab File ID: BN036532.D Init. Calib. Date(s): 02/10/2025 02/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:25 16:00

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.615	0.573		-6.8	50.0
Fluoranthene-d10	1.112	1.079		-3.0	50.0
2-Fluorophenol	0.945	0.895		-5.3	50.0
Phenol-d6	1.109	1.058		-4.6	50.0
Nitrobenzene-d5	0.395	0.402		1.8	50.0
2-Fluorobiphenyl	1.504	1.873		24.5	50.0
2,4,6-Tribromophenol	0.198	0.155		-21.7	50.0
Terphenyl-d14	0.854	0.861		0.8	50.0
1,4-Dioxane	0.438	0.457		4.3	50.0

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

OrderID:	Q1477	OrderDate:	3/3/2025 10:23:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	H41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1477-01	RW7-SP100-20250228	Water			02/28/25			03/03/25
			Metals Group4	6010D		03/04/25	03/12/25	
Q1477-04	RW7-SP303-20250228	Water			02/28/25			03/03/25
			Metals Group4	6010D		03/04/25	03/12/25	

Hit Summary Sheet SW-846

SDG No.:	Q1477	Order ID:	Q1477
Client:	Tetra Tech NUS, Inc.	Project ID:	CTO WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW7-SP100-20250228									
Q1477-01	RW7-SP100-20250228	Water	Iron	248		18.5	40.0	50.0	ug/L
Client ID : RW7-SP303-20250228									
Q1477-04	RW7-SP303-20250228	Water	Iron	32.2	J	18.5	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/28/25
Project:	CTO WE13	Date Received:	03/03/25
Client Sample ID:	RW7-SP100-20250228	SDG No.:	Q1477
Lab Sample ID:	Q1477-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-89-6	Iron	248		1	18.5	40.0	50.0	ug/L	03/04/25 09:10	03/12/25 18:40	SW6010	SW3010

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments: Metals Group4

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/28/25
Project:	CTO WE13	Date Received:	03/03/25
Client Sample ID:	RW7-SP303-20250228	SDG No.:	Q1477
Lab Sample ID:	Q1477-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-89-6	Iron	32.2	J	1	18.5	40.0	50.0	ug/L	03/04/25 09:10	03/12/25 18:44	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group4			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits



METAL CALIBRATION DATA



F

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Iron	114	100	114	80 - 120	P	03/12/2025	10:56	LB135011

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: Q1477
 Contract: TETR06 Lab Code: CHEM Case No.: Q1477 SAS No.: Q1477
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Iron	4790	5000	96	90 - 110	P	03/12/2025	11:29	LB135011
CCV02	Iron	4890	5000	98	90 - 110	P	03/12/2025	12:20	LB135011
CCV03	Iron	4740	5000	95	90 - 110	P	03/12/2025	13:10	LB135011
CCV04	Iron	4970	5000	100	90 - 110	P	03/12/2025	14:24	LB135011
CCV05	Iron	4840	5000	97	90 - 110	P	03/12/2025	15:25	LB135011
CCV06	Iron	4770	5000	96	90 - 110	P	03/12/2025	16:25	LB135011
CCV07	Iron	4870	5000	97	90 - 110	P	03/12/2025	17:25	LB135011
CCV08	Iron	4810	5000	96	90 - 110	P	03/12/2025	18:23	LB135011
CCV09	Iron	4960	5000	99	90 - 110	P	03/12/2025	18:49	LB135011

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Iron	9860	10000	99	90 - 110	P	03/13/2025	12:07	LB135035

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Iron	101	100	101	80 - 120	P	03/13/2025	12:13	LB135035

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: Q1477
Contract: TETR06 Lab Code: CHEM Case No.: Q1477 SAS No.: Q1477
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Iron	4890	5000	98	90 - 110	P	03/13/2025	12:53	LB135035
CCV02	Iron	5130	5000	103	90 - 110	P	03/13/2025	13:49	LB135035
CCV03	Iron	4990	5000	100	90 - 110	P	03/13/2025	14:40	LB135035
CCV04	Iron	4780	5000	96	90 - 110	P	03/13/2025	15:38	LB135035
CCV05	Iron	5120	5000	102	90 - 110	P	03/13/2025	16:28	LB135035
CCV06	Iron	5040	5000	101	90 - 110	P	03/13/2025	17:21	LB135035
CCV07	Iron	5150	5000	103	90 - 110	P	03/13/2025	18:12	LB135035
CCV08	Iron	4880	5000	98	90 - 110	P	03/13/2025	18:53	LB135035
CCV09	Iron	5230	5000	105	90 - 110	P	03/13/2025	19:12	LB135035



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

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Iron	98.7	100	99	40 - 160	P	03/12/2025	11:05	LB135011
CRI01	Iron	110	100	110	40 - 160	P	03/13/2025	12:21	LB135035



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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Tetra Tech NUS, Inc.				SDG No.:	Q1477				
Contract:	TETR06	Lab Code:	CHEM	Case No.:	Q1477	SAS No.:	Q1477			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	100	+/-100	U	80.0	100	P	03/12/2025	11:01	LB135011

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	100	+/-100	U	80.0	100	P	03/12/2025	11:34	LB135011
CCB02	Iron	100	+/-100	U	80.0	100	P	03/12/2025	12:24	LB135011
CCB03	Iron	100	+/-100	U	80.0	100	P	03/12/2025	13:14	LB135011
CCB04	Iron	100	+/-100	U	80.0	100	P	03/12/2025	14:28	LB135011
CCB05	Iron	100	+/-100	U	80.0	100	P	03/12/2025	15:29	LB135011
CCB06	Iron	100	+/-100	U	80.0	100	P	03/12/2025	16:30	LB135011
CCB07	Iron	100	+/-100	U	80.0	100	P	03/12/2025	17:30	LB135011
CCB08	Iron	100	+/-100	U	80.0	100	P	03/12/2025	18:27	LB135011
CCB09	Iron	100	+/-100	U	80.0	100	P	03/12/2025	18:53	LB135011

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q1477</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>
		Case No.:	<u>Q1477</u>
		SAS No.:	<u>Q1477</u>

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	100	+/-100	U	80.0	100	P	03/13/2025	12:17	LB135035

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	100	+/-100	U	80.0	100	P	03/13/2025	12:58	LB135035
CCB02	Iron	100	+/-100	U	80.0	100	P	03/13/2025	13:54	LB135035
CCB03	Iron	100	+/-100	U	80.0	100	P	03/13/2025	14:48	LB135035
CCB04	Iron	100	+/-100	U	80.0	100	P	03/13/2025	15:42	LB135035
CCB05	Iron	100	+/-100	U	80.0	100	P	03/13/2025	16:32	LB135035
CCB06	Iron	100	+/-100	U	80.0	100	P	03/13/2025	17:25	LB135035
CCB07	Iron	45.6	+/-100	J	80.0	100	P	03/13/2025	18:35	LB135035
CCB08	Iron	100	+/-100	U	80.0	100	P	03/13/2025	19:03	LB135035
CCB09	Iron	100	+/-100	U	80.0	100	P	03/13/2025	19:21	LB135035

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q1477

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166963BL		WATER		Batch Number:		PB166963		Prep Date:	03/04/2025	
	Iron	50.0	<50.0	U	40.0	50.0	P	03/13/2025	13:02	LB135035

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>Tetra Tech NUS, Inc.</u>	SDG No.: <u>Q1477</u>
Contract: <u>TETR06</u> Lab Code: <u>CHEM</u>	Case No.: <u>Q1477</u> SAS No.: <u>Q1477</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P4</u>

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Iron	104000	101000	103	85600	116500	03/12/2025	11:09	LB135011
ICSAB01	Iron	102000	99300	103	84400	114500	03/12/2025	11:14	LB135011
ICSA01	Iron	103000	101000	102	85600	116500	03/13/2025	12:25	LB135035
ICSAB01	Iron	100000	99300	101	84400	114500	03/13/2025	12:30	LB135035



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>Tetra Tech NUS, Inc.</u>	level: <u>low</u>	sdg no.: <u>Q1477</u>
contract: <u>TETR06</u>	lab code: <u>CHEM</u>	case no.: <u>Q1477</u> sas no.: <u>Q1477</u>
matrix: <u>Water</u>	sample id: <u>Q1478-07</u>	client id: <u>IDW-AQ-IW-03-COMP-022825MS</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q1478-07MS</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	5430		3820		1500	108		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Tetra Tech NUS, Inc.</u>	level: <u>low</u>	sdg no.: <u>Q1477</u>
contract: <u>TETR06</u>	lab code: <u>CHEM</u>	case no.: <u>Q1477</u> sas no.: <u>Q1477</u>
matrix: <u>Water</u>	sample id: <u>Q1478-07</u>	client id: <u>IDW-AQ-IW-03-COMP-022825MSD</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q1478-07MSD</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	5120		3820		1500	87		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc.

SDG No.: Q1477

Contract: TETR06

Lab Code: CHEM

Case No.: Q1477

SAS No.: Q1477

Matrix:

Level: LOW

Client ID:

Sample ID:

Spiked ID:

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Matrix: Water **Sample ID:** Q1478-07 **Client ID:** IDW-AQ-IW-03-COMP-022825DUP
Percent Solids for Sample: NA **Duplicate ID** Q1478-07DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	3820		3940		3		P

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Matrix: Water **Sample ID:** Q1478-07MS **Client ID:** IDW-AQ-IW-03-COMP-022825MSD
Percent Solids for Sample: NA **Duplicate ID** Q1478-07MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	5430		5120		6		P

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166963BS Iron	ug/L	1500	1420		95	80 - 120	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

IDW-AQ-IW-03-COMP-022825L

Lab Name: Chemtech Consulting Group **Contract:** TETR06
Lab Code: CHEM **Lb No.:** lb135011 **Lab Sample ID :** Q1478-07L **SDG No.:** Q1477
Matrix (soil/water): Water **Level (low/med):** LOW
Concentration Units: ug/L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	M
Iron	3820	3800	0		P



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q1477

Contract: TETR06

Lab Code: CHEM

Case No.: Q1477

SAS No.: Q1477

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250

A

B

C

D

E

F

G

H

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1477
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1477 **SAS No.:** Q1477
Instrument ID: _____ **Date:** _____
Interement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q1477

Contract: TETR06

Lab Code: CHEM

Case No.: Q1477

SAS No.: Q1477

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Sn	Ti	Tl	V	Zn
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000



METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q1477</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1477</u>
		SAS No.:	<u>Q1477</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166963							
PB166963BL	PB166963BL	MB	WATER	03/04/2025	50.0	25.0	
PB166963BS	PB166963BS	LCS	WATER	03/04/2025	50.0	25.0	
Q1477-01	RW7-SP100-20250228	SAM	WATER	03/04/2025	50.0	25.0	
Q1477-04	RW7-SP303-20250228	SAM	WATER	03/04/2025	50.0	25.0	
Q1478-07DUP	IDW-AQ-IW-03-COMP-022825DUP	DUP	WATER	03/04/2025	50.0	25.0	
Q1478-07MS	IDW-AQ-IW-03-COMP-022825MS	MS	WATER	03/04/2025	50.0	25.0	
Q1478-07MSD	IDW-AQ-IW-03-COMP-022825MSD	MSD	WATER	03/04/2025	50.0	25.0	

metals
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ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

Lab code: CHEM **Case no.:** Q1477 **Sas no.:** Q1477 **Sdg no.:** Q1477

Instrument id number: **Method:** **Run number:** LB135011

Start date: 03/12/2025 **End date:** 03/12/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1027	Fe
S1	S1	1	1031	Fe
S2	S2	1	1035	Fe
S3	S3	1	1039	Fe
S4	S4	1	1044	Fe
S5	S5	1	1048	Fe
ICV01	ICV01	1	1052	Fe
LLICV01	LLICV01	1	1056	Fe
ICB01	ICB01	1	1101	Fe
CRI01	CRI01	1	1105	Fe
ICSA01	ICSA01	1	1109	Fe
ICSAB01	ICSAB01	1	1114	Fe
CCV01	CCV01	1	1129	Fe
CCB01	CCB01	1	1134	Fe
CCV02	CCV02	1	1220	Fe
CCB02	CCB02	1	1224	Fe
CCV03	CCV03	1	1310	Fe
CCB03	CCB03	1	1314	Fe
CCV04	CCV04	1	1424	Fe
CCB04	CCB04	1	1428	Fe
CCV05	CCV05	1	1525	Fe
CCB05	CCB05	1	1529	Fe
CCV06	CCV06	1	1625	Fe
CCB06	CCB06	1	1630	Fe
CCV07	CCV07	1	1725	Fe
CCB07	CCB07	1	1730	Fe
Q1478-07DUP	IDW-AQ-IW-03-COMP-022825	1	1752	Fe
Q1478-07L	IDW-AQ-IW-03-COMP-022825	5	1756	Fe
Q1478-07MS	IDW-AQ-IW-03-COMP-022825	1	1800	Fe
Q1478-07MSD	IDW-AQ-IW-03-COMP-022825	1	1805	Fe
CCV08	CCV08	1	1823	Fe
CCB08	CCB08	1	1827	Fe
Q1477-01	RW7-SP100-20250228	1	1840	Fe
Q1477-04	RW7-SP303-20250228	1	1844	Fe
CCV09	CCV09	1	1849	Fe
CCB09	CCB09	1	1853	Fe

metals
- 14 -
ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

Lab code: CHEM **Case no.:** Q1477 **Sas no.:** Q1477 **Sdg no.:** Q1477

Instrument id number: **Method:** **Run number:** LB135035

Start date: 03/13/2025 **End date:** 03/13/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1142	Fe
S1	S1	1	1146	Fe
S2	S2	1	1150	Fe
S3	S3	1	1154	Fe
S4	S4	1	1159	Fe
S5	S5	1	1203	Fe
ICV01	ICV01	1	1207	Fe
LLICV01	LLICV01	1	1213	Fe
ICB01	ICB01	1	1217	Fe
CRI01	CRI01	1	1221	Fe
ICSA01	ICSA01	1	1225	Fe
ICSAB01	ICSAB01	1	1230	Fe
CCV01	CCV01	1	1253	Fe
CCB01	CCB01	1	1258	Fe
PB166963BL	PB166963BL	1	1302	Fe
PB166963BS	PB166963BS	1	1306	Fe
CCV02	CCV02	1	1349	Fe
CCB02	CCB02	1	1354	Fe
CCV03	CCV03	1	1440	Fe
CCB03	CCB03	1	1448	Fe
CCV04	CCV04	1	1538	Fe
CCB04	CCB04	1	1542	Fe
CCV05	CCV05	1	1628	Fe
CCB05	CCB05	1	1632	Fe
CCV06	CCV06	1	1721	Fe
CCB06	CCB06	1	1725	Fe
CCV07	CCV07	1	1812	Fe
CCB07	CCB07	1	1835	Fe
CCV08	CCV08	1	1853	Fe
CCB08	CCB08	1	1903	Fe
CCV09	CCV09	1	1912	Fe
CCB09	CCB09	1	1921	Fe



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:

Q1477

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: RW7B			ADDRESS:												
CITY: Virginia Beach STATE: VA ZIP: 23462			PROJECT MANAGER: Ernie Wu			CITY: STATE: ZIP:												
ATTENTION: Ernie Wu			E-MAIL: ernie.wu@tetrattech.com			ATTENTION: PHONE:												
PHONE: 757-466-4901 FAX: 757-461-4148			PHONE: 757-466-4901 FAX: 757-461-4148															
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			ANALYSIS												
FAX: 10 DAYS* HARD COPY: 10 DAYS* EDD 10 DAYS* * TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS			☐ RESULTS ONLY ☐ USEPA CLP ☐ RESULTS + QC ☐ New York State ASP "B" ☐ New Jersey REDUCED ☐ New York State ASP "A" ☐ New Jersey CLP ☐ Other _____ ☐ EDD Format _____			1,4-Dioxane SW846 8270 SIM Iron												
						PRESERVATIVES												
						COMMENTS												
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	PRESERVATIVES									<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9		
1.	RW7-SP100-20250228	GW		x	2/28/25	12:15	2	x	x									
2.	RW7-SP201-20250228	GW		x	2/28/25	12:17	1	x										
3.	RW7-SP302-20250228	GW		x	2/28/25	12:27	1	x										
4.	RW7-SP303-20250228	GW		x	2/28/25	12:29	2	x	x									
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY																		
RELINQUISHED BY SAMPLER		DATE/TIME	RECEIVED BY		Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 4.3													
1. [Signature]		2/28/25/1600	1. [Signature]		MeOH extraction requires an additional 4oz. Jar for percent solid													
RELINQUISHED BY		DATE/TIME	RECEIVED BY		Comments:													
2. [Signature]		3-3-25	2. [Signature]		IR Curt #1													
RELINQUISHED BY		DATE/TIME	RECEIVED FOR LAB BY		SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight													
3. [Signature]			3. [Signature]		CHEMTECH: ☐ Picked Up ☐ Overnight													
					Page _____ of _____					Shipment Complete					☐ YES ☐ NO			

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Samples 1,4 recd without metal Bottles

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