

ANALYTICAL RESULTS SUMMARY

GENERAL CHEMISTRY
METALS
SEMI-VOLATILE ORGANICS

PROJECT NAME : NWIRP BETHPAGE 112G08005-WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q2604

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2604

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2604-01
Q2604-02

Client Sample Number

RW8-SP100-20250711
RW8-SP303-20250711

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 : _____

Date: 7/25/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Erine Wu

Order ID # Q2604

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 07/15/2025.

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-GGA. The 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 were met for all analysis.

The Internal Standards Areas were met for all analysis.

The Retention Times were met for all analysis.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

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.

E. Additional Comments:

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

The Sample RW8-SP100-20250711 has the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

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 <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount



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for all compounds using Linear Regression when the %RSD value for a compound is > 20% 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_____



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CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Ernie Wu

Order ID # Q2604

Test Name: Metals Group4

A. Number of Samples and Date of Receipt:

2 Water samples were received on 07/15/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Metals Group4, SVOC-SIMGroup1, TDS and TSS. 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 criteria for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike analysis met criteria for all compounds.

The Matrix Spike Duplicate (RW8-SP100-20250711MSD) analysis met criteria for all compounds except for Iron due to Chemical Interference during digestion Process.

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_____



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CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Ernie Wu

Order ID # Q2604

Test Name: TDS,TSS

A. Number of Samples and Date of Receipt:

2 Water samples were received on 07/15/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: TDS,TSS. This data package contains results for TDS,TSS.

C. Analytical Techniques:

The analysis of TDS was based on method SM2540 C and The analysis of TSS was based on method SM2540 D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

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

The Calibration met the 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_____

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 #: Q2604

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: 07/25/2025

LAB CHRONICLE

OrderID:	Q2604	OrderDate:	7/15/2025 10:29:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	O11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2604-01	RW8-SP100-2025071 1	Water			07/11/25			07/15/25
			SVOC-SIMGroup1	8270-Modified		07/15/25	07/16/25	
Q2604-02	RW8-SP303-2025071 1	Water			07/11/25			07/15/25
			SVOC-SIMGroup1	8270-Modified		07/15/25	07/16/25	



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Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: Q2604
Client: Tetra Tech NUS, Inc.

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



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/11/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW8-SP100-20250711	SDG No.:	Q2604
Lab Sample ID:	Q2604-01	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
BN037514.D	1	07/15/25 11:40	07/16/25 12:16	PB168868

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		77%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		101%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1760	7.724				
1146-65-2	Naphthalene-d8	4260	10.509				
15067-26-2	Acenaphthene-d10	2260	14.355				
1517-22-2	Phenanthrene-d10	4520	17.099				
1719-03-5	Chrysene-d12	3750	21.277				
1520-96-3	Perylene-d12	3700	23.516				

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:	07/11/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW8-SP303-20250711	SDG No.:	Q2604
Lab Sample ID:	Q2604-02	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
BN037515.D	1	07/15/25 11:40	07/16/25 12:53	PB168868

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	0.30		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		95%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.42		53 - 106		105%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.53		58 - 132		131%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1670	7.725				
1146-65-2	Naphthalene-d8	4000	10.509				
15067-26-2	Acenaphthene-d10	2070	14.356				
1517-22-2	Phenanthrene-d10	4340	17.099				
1719-03-5	Chrysene-d12	3980	21.277				
1520-96-3	Perylene-d12	3910	23.516				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2604

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168868BL	PB168868BL	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.33	81		30	150
		Nitrobenzene-d5	0.4	0.37	91		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.43	107		58	132
PB168868BS	PB168868BS	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.31	79		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.40	99		58	132
PB168868BSD	PB168868BSD	2-Methylnaphthalene-d10	0.4	0.36	89		30	150
		Fluoranthene-d10	0.4	0.30	76		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
Q2604-01	RW8-SP100-20250711	2-Methylnaphthalene-d10	0.4	0.31	77		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.32	81		55	111
		2-Fluorobiphenyl	0.4	0.40	101		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
Q2604-02	RW8-SP303-20250711	2-Methylnaphthalene-d10	0.4	0.30	76		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
		Nitrobenzene-d5	0.4	0.33	81		55	111
		2-Fluorobiphenyl	0.4	0.42	105		53	106
		Terphenyl-d14	0.4	0.53	131		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2604

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037516.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168868BS	1,4-Dioxane	0.4	0.31	ug/L	78				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2604</u>	Analytical Method:	<u>8270-Modified</u>
Client:	<u>Tetra Tech NUS, Inc.</u>	DataFile:	<u>BN037517.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB168868BSD	1,4-Dioxane	0.4	0.29	ug/L	73	7			70	130		20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB168868BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2604

Lab File ID: BN037511.D

Lab Sample ID: PB168868BL

Instrument ID: BNA_N

Date Extracted: 07/15/2025

Matrix: (soil/water) Water

Date Analyzed: 07/16/2025

Level: (low/med) LOW

Time Analyzed: 10:27

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168868BS	PB168868BS	BN037516.D	07/16/2025
RW8-SP100-20250711	Q2604-01	BN037514.D	07/16/2025
RW8-SP303-20250711	Q2604-02	BN037515.D	07/16/2025
PB168868BSD	PB168868BSD	BN037517.D	07/16/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037497.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2604
DFTPP Injection Date: 07/15/2025
DFTPP Injection Time: 10:57

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
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
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	83.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.4 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037499.D	07/15/2025	12:36
SSTDICC0.2	SSTDICC0.2	BN037500.D	07/15/2025	13:12
SSTDICCC0.4	SSTDICCC0.4	BN037501.D	07/15/2025	13:49
SSTDICC0.8	SSTDICC0.8	BN037502.D	07/15/2025	14:25
SSTDICC1.6	SSTDICC1.6	BN037503.D	07/15/2025	15:01
SSTDICC3.2	SSTDICC3.2	BN037504.D	07/15/2025	15:38
SSTDICC5.0	SSTDICC5.0	BN037505.D	07/15/2025	16:14

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037509.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2604
DFTPP Injection Date: 07/16/2025
DFTPP Injection Time: 09:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.5) 1
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	6.8
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	83.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.5 (17.9) 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	BN037510.D	07/16/2025	09:50
PB168868BL	PB168868BL	BN037511.D	07/16/2025	10:27
RW8-SP100-20250711	Q2604-01	BN037514.D	07/16/2025	12:16
RW8-SP303-20250711	Q2604-02	BN037515.D	07/16/2025	12:53
PB168868BS	PB168868BS	BN037516.D	07/16/2025	13:29
PB168868BSD	PB168868BSD	BN037517.D	07/16/2025	14:06
SSTDCCC0.4EC	SSTDCCC0.4	BN037518.D	07/16/2025	15:34

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2604

Client ID : SSTDCCC0.4

Date Analyzed: 07/16/2025

Lab File ID: BN037510.D

Time Analyzed: 09:50

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	2448	7.724	6343	10.51	3548	14.36
UPPER LIMIT	4896	8.224	12686	11.009	7096	14.855
LOWER LIMIT	1224	7.224	3171.5	10.009	1774	13.855
EPA SAMPLE NO.						
01 PB168868BL	3101	7.72	7573	10.51	3896	14.36
02 PB168868BS	1941	7.72	4724	10.51	2338	14.36
03 PB168868BSD	1974	7.72	4747	10.51	2348	14.36
04 RW8-SP100-20250711	1757	7.72	4258	10.51	2264	14.36
05 RW8-SP303-20250711	1670	7.73	3997	10.51	2071	14.36

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: Alliance

Lab Code: ACE

SDG NO.: Q2604

Client ID: SSTDCCC0.4

Date Analyzed: 07/16/2025

Lab File ID: BN037510.D

Time Analyzed: 09:50

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	6984	17.086	5489	21.277	5154	23.513
UPPER LIMIT	13968	17.586	10978	21.777	10308	24.013
LOWER LIMIT	3492	16.586	2744.5	20.777	2577	23.013
EPA SAMPLE NO.						
01 PB168868BL	7545	17.10	5013	21.28	4525	23.51
02 PB168868BS	4406	17.10	3170	21.28	2673	23.52
03 PB168868BSD	4399	17.10	3154	21.28	2636	23.52
04 RW8-SP100-20250711	4524	17.10	3752	21.28	3699	23.52
05 RW8-SP303-20250711	4336	17.10	3975	21.28	3913	23.52

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:	NWIRP Bethpage 112G08005-WE13		Date Received:		
Client Sample ID:	PB168868BL		SDG No.:	Q2604	
Lab Sample ID:	PB168868BL		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
BN037511.D	1	07/15/25 11:40	07/16/25 10:27	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		91%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		107%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3100	7.724				
1146-65-2	Naphthalene-d8	7570	10.509				
15067-26-2	Acenaphthene-d10	3900	14.355				
1517-22-2	Phenanthrene-d10	7550	17.099				
1719-03-5	Chrysene-d12	5010	21.277				
1520-96-3	Perylene-d12	4530	23.513				

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:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168868BS		SDG No.:	Q2604
Lab Sample ID:	PB168868BS		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
BN037516.D	1	07/15/25 11:40	07/16/25 13:29	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.31		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	0.31		30 - 150		79%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		99%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1940	7.724				
1146-65-2	Naphthalene-d8	4720	10.509				
15067-26-2	Acenaphthene-d10	2340	14.355				
1517-22-2	Phenanthrene-d10	4410	17.099				
1719-03-5	Chrysene-d12	3170	21.277				
1520-96-3	Perylene-d12	2670	23.516				

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:	NWIRP Bethpage 112G08005-WE13		Date Received:	
Client Sample ID:	PB168868BSD		SDG No.:	Q2604
Lab Sample ID:	PB168868BSD		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
BN037517.D	1	07/15/25 11:40	07/16/25 14:06	PB168868

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		89%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.724				
1146-65-2	Naphthalene-d8	4750	10.509				
15067-26-2	Acenaphthene-d10	2350	14.356				
1517-22-2	Phenanthrene-d10	4400	17.099				
1719-03-5	Chrysene-d12	3150	21.277				
1520-96-3	Perylene-d12	2640	23.519				

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-BN071525.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Jul 16 02:38:11 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037499.D 0.2 =BN037500.D 0.4 =BN037501.D 0.8 =BN037502.D 1.6 =BN037503.D 3.2 =BN037504.D 5 =BN037505.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD

1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.409	0.395	0.371	0.398	0.380	0.354	0.385		5.29
3)	n-Nitrosodimet...	0.466	0.464	0.465	0.508	0.499	0.501	0.484		4.31
4) S	2-Fluorophenol	1.038	1.011	0.985	0.908	0.982	0.971	1.030	0.989	4.42
5) S	Phenol-d6	1.448	1.238	1.190	1.105	1.201	1.229	1.275	1.241	8.52
6)	bis(2-Chloroet...	1.082	1.052	1.024	0.983	1.037	1.033	1.016	1.033	2.99
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.311	0.288	0.283	0.270	0.300	0.305	0.336	0.299	7.20
9)	Naphthalene	1.069	1.054	1.046	1.009	1.091	1.073	1.126	1.067	3.45
10)	Hexachlorobuta...	0.229	0.237	0.235	0.223	0.245	0.236	0.246	0.236	3.44
11) SURR2	Methylnaphth...	0.556	0.534	0.541	0.522	0.562	0.590	0.711	0.574	11.24
12)	2-Methylnaphth...	0.704	0.655	0.678	0.665	0.716	0.736	0.756	0.701	5.34
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.197	0.173	0.173	0.176	0.194	0.215	0.248	0.197	13.98
15) S	2-Fluorobiphenyl	1.818	1.794	2.045	2.024	2.277	2.205	2.397	2.080	10.91
16)	Acenaphthylene	1.723	1.708	1.719	1.684	1.830	1.895	1.981	1.792	6.30
17)	Acenaphthene	1.239	1.160	1.172	1.150	1.238	1.251	1.320	1.218	5.03
18)	Fluorene	1.592	1.488	1.485	1.486	1.605	1.606	1.717	1.569	5.56
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.044	0.041	0.047	0.057	0.070	0.080	0.057		27.89
21)	4-Bromophenyl-...	0.248	0.247	0.243	0.242	0.268	0.272	0.274	0.256	5.58
22)	Hexachlorobenzene	0.315	0.330	0.328	0.321	0.345	0.340	0.338	0.331	3.26
23)	Atrazine	0.173	0.161	0.159	0.158	0.181	0.200	0.220	0.179	13.24
24)	Pentachlorophenol	0.131	0.125	0.126	0.151	0.170	0.189	0.149		17.64
25)	Phenanthrene	1.167	1.163	1.160	1.129	1.248	1.248	1.273	1.198	4.70
26)	Anthracene	1.025	1.025	1.013	1.023	1.160	1.176	1.232	1.093	8.45
27) SURR	Fluoranthene-d10	1.023	0.998	0.962	0.928	1.041	1.078	1.385	1.060	14.34
28)	Fluoranthene	1.358	1.310	1.290	1.270	1.429	1.431	1.585	1.382	7.96
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.754	1.559	1.607	1.549	1.607	1.665	1.539	1.612	4.74
31) S	Terphenyl-d14	0.926	0.815	0.844	0.811	0.854	0.902	0.865	0.859	4.94
32)	Benzo(a)anthra...	1.414	1.357	1.341	1.285	1.429	1.464	1.517	1.401	5.63
33)	Chrysene	1.452	1.461	1.434	1.358	1.488	1.490	1.528	1.459	3.70
34)	Bis(2-ethylhex...	0.603	0.564	0.538	0.603	0.693	0.779	0.630		14.26
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN071525.M

36)	Indeno(1,2,3-c...	1.493	1.528	1.514	1.559	1.771	1.805	1.991	1.666	11.48
37)	Benzo(b)fluora...	1.464	1.378	1.454	1.436	1.589	1.617	1.692	1.518	7.53
38)	Benzo(k)fluora...	1.516	1.420	1.486	1.470	1.661	1.689	1.724	1.567	7.75
39) C	Benzo(a)pyrene	1.189	1.152	1.192	1.176	1.320	1.369	1.469	1.267	9.51
40)	Dibenzo(a,h)an...	1.201	1.218	1.216	1.256	1.444	1.483	1.627	1.349	12.46
41)	Benzo(g,h,i)pe...	1.247	1.283	1.309	1.297	1.482	1.497	1.663	1.397	10.98

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q2604
 Instrument ID: BNA_N Calibration Date/Time: 07/16/2025 09:50
 Lab File ID: BN037510.D Init. Calib. Date(s): 07/15/2025 07/15/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:36 16:14
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.534		-7.0	20.0
Fluoranthene-d10	1.060	0.921		-13.1	20.0
2-Fluorophenol	0.989	0.945		-4.4	20.0
Phenol-d6	1.241	1.176		-5.2	20.0
Nitrobenzene-d5	0.299	0.281		-6.0	20.0
2-Fluorobiphenyl	2.080	2.104		1.2	20.0
2,4,6-Tribromophenol	0.197	0.158		-19.8	20.0
Terphenyl-d14	0.859	0.818		-4.8	20.0
1,4-Dioxane	0.385	0.402		4.4	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q2604
 Instrument ID: BNA_N Calibration Date/Time: 07/16/2025 15:34
 Lab File ID: BN037518.D Init. Calib. Date(s): 07/15/2025 07/15/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:36 16:14
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.525		-8.5	50.0
Fluoranthene-d10	1.060	0.943		-11.0	50.0
2-Fluorophenol	0.989	0.896		-9.4	50.0
Phenol-d6	1.241	1.092		-12.0	50.0
Nitrobenzene-d5	0.299	0.280		-6.4	50.0
2-Fluorobiphenyl	2.080	2.170		4.3	50.0
2,4,6-Tribromophenol	0.197	0.155		-21.3	50.0
Terphenyl-d14	0.859	0.847		-1.4	50.0
1,4-Dioxane	0.385	0.391		1.6	50.0

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

OrderID:	Q2604	OrderDate:	7/15/2025 10:29:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	O11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2604-01	RW8-SP100-2025071 1	Water			07/11/25			07/15/25
			Metals Group4	6010D		07/16/25	07/17/25	
Q2604-02	RW8-SP303-2025071 1	Water			07/11/25			07/15/25
			Metals Group4	6010D		07/16/25	07/17/25	



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

Hit Summary Sheet
SW-846

SDG No.:	Q2604	Order ID:	Q2604
Client:	Tetra Tech NUS, Inc.	Project ID:	NWIRP Bethpage 112G08005-WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW8-SP100-20250711									
Q2604-01	RW8-SP100-20250711	Water	Iron	770		11.7	40.0	50.0	ug/L
Client ID : RW8-SP303-20250711									
Q2604-02	RW8-SP303-20250711	Water	Iron	101		11.7	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/11/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW8-SP100-20250711	SDG No.:	Q2604
Lab Sample ID:	Q2604-01	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	770	N	1	11.7	40.0	50.0	ug/L	07/16/25 10:05	07/17/25 18:07	6010D	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:	07/11/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW8-SP303-20250711	SDG No.:	Q2604
Lab Sample ID:	Q2604-02	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	101	N	1	11.7	40.0	50.0	ug/L	07/16/25 10:05	07/17/25 17:30	6010D	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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Contract: TETR06

Lab Code: ACE

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	4310	4000	108	90 - 110	P	07/17/2025	13:30	LB136533

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Contract: TETR06

Lab Code: ACE

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	110	100	110	80 - 120	P	07/17/2025	13:37	LB136533

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Contract: TETR06

Lab Code: ACE

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	5040	5000	101	90 - 110	P	07/17/2025	14:20	LB136533
CCV02	Iron	5080	5000	102	90 - 110	P	07/17/2025	14:58	LB136533
CCV03	Iron	5030	5000	101	90 - 110	P	07/17/2025	15:50	LB136533
CCV04	Iron	5040	5000	101	90 - 110	P	07/17/2025	16:42	LB136533
CCV05	Iron	4970	5000	99	90 - 110	P	07/17/2025	17:58	LB136533
CCV06	Iron	4770	5000	95	90 - 110	P	07/17/2025	19:24	LB136533
CCV07	Iron	4890	5000	98	90 - 110	P	07/17/2025	20:16	LB136533



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.: Q2604

Contract: TETR06

Lab Code: ACE

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	103	100	103	65 - 135	P	07/17/2025	13:46	LB136533



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.:** Q2604
Contract: TETR06 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	13:41	LB136533

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2604
Contract: TETR06 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	14:25	LB136533
CCB02	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	15:02	LB136533
CCB03	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	15:56	LB136533
CCB04	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	16:46	LB136533
CCB05	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	18:02	LB136533
CCB06	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	19:28	LB136533
CCB07	Iron	23.4	+/-50	U	80.0	100	P	07/17/2025	20:20	LB136533

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168883BL		WATER		Batch Number:		PB168883		Prep Date:	07/16/2025	
	Iron	18.0	<25	U	37.5	50.0	P	07/17/2025	17:22	LB136533

A

B

C

D

E

F

G

H

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>Tetra Tech NUS, Inc.</u>	SDG No.: <u>Q2604</u>
Contract: <u>TETR06</u>	Lab Code: <u>ACE</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	98300	101000	97	85600	116500	07/17/2025	13:51	LB136533
ICSAB01	Iron	97600	99300	98	84400	114500	07/17/2025	13:56	LB136533



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client:	Tetra Tech NUS, Inc.	level:	low	sdg no.:	Q2604
contract:	TETR06			lab code:	ACE
matrix:	Water	sample id:	Q2604-01	client id:	RW8-SP100-20250711MS
Percent Solids for Sample:	NA	Spiked ID:	Q2604-01MS	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	2260		770		1500	99		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. level: low sdg no.: Q2604
contract: TETR06 lab code: ACE
matrix: Water sample id: Q2604-01 client id: RW8-SP100-20250711MSD
Percent Solids for Sample: NA Spiked ID: Q2604-01MSD Percent Solids for Spike Sample: NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	2540		770		1500	118	N	P

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q2604</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Level:	<u>LOW</u>
Sample ID:	<u>Q2604-01</u>	Client ID:	<u>RW8-SP100-20250711A</u>
	Spiked ID:	<u>Q2604-01A</u>	

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	2170		770		1500	93		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q2604</u>
Contract:	<u>TETR06</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2604-01</u>	Client ID:	<u>RW8-SP100-20250711DUP</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2604-01DUP	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	770		736		5		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:	<u>Tetra Tech NUS, Inc.</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q2604</u>
Contract:	<u>TETR06</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2604-01MS</u>	Client ID:	<u>RW8-SP100-20250711MSD</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2604-01MSD	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	2260		2540		12		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.:

Q2604

Contract:

TETR06

Lab Code:

ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168883BS Iron	ug/L	1500	1460		97	87 - 115	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

RW8-SP100-20250711L

Lab Name: Alliance **Contract:** TETR06
Lab Code: ACE **Lb No.:** lb136533 **Lab Sample ID :** Q2604-01L **SDG No.:** Q2604
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	770	762	1		P



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Contract: TETR06

Lab Code: ACE

Instrument ID:

Date:

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement 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.: Q2604

Contract: TETR06

Lab Code: ACE

Instrument ID:

Date:

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement 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.: Q2604

Contract: TETR06

Lab Code: ACE

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

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Contract: TETR06

Lab Code: ACE

Instrument ID:

Date:

Interelement 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.: Q2604

Contract: TETR06

Lab Code: ACE

Instrument ID:

Date:

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement 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: Tetra Tech NUS, Inc.

SDG No.: Q2604

Contract: TETR06

Lab Code: ACE

Method: _____

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168883							
PB168883BL	PB168883BL	MB	WATER	07/16/2025	50.0	25.0	
PB168883BS	PB168883BS	LCS	WATER	07/16/2025	50.0	25.0	
Q2604-01	RW8-SP100-20250711	SAM	WATER	07/16/2025	50.0	25.0	
Q2604-01DUP	RW8-SP100-20250711DUP	DUP	WATER	07/16/2025	50.0	25.0	
Q2604-01MS	RW8-SP100-20250711MS	MS	WATER	07/16/2025	50.0	25.0	
Q2604-01MSD	RW8-SP100-20250711MSD	MSD	WATER	07/16/2025	50.0	25.0	
Q2604-02	RW8-SP303-20250711	SAM	WATER	07/16/2025	50.0	25.0	

metals
- 14 -
ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc.

Contract: TETR06

Lab code: ACE

Sdg no.: Q2604

Instrument id number:

Method:

Run number: LB136533

Start date: 07/17/2025

End date: 07/17/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1305	Fe
S1	S1	1	1309	Fe
S2	S2	1	1313	Fe
S3	S3	1	1318	Fe
S4	S4	1	1322	Fe
S5	S5	1	1326	Fe
ICV01	ICV01	1	1330	Fe
LLICV01	LLICV01	1	1337	Fe
ICB01	ICB01	1	1341	Fe
CRI01	CRI01	1	1346	Fe
ICSA01	ICSA01	1	1351	Fe
ICSAB01	ICSAB01	1	1356	Fe
CCV01	CCV01	1	1420	Fe
CCB01	CCB01	1	1425	Fe
CCV02	CCV02	1	1458	Fe
CCB02	CCB02	1	1502	Fe
CCV03	CCV03	1	1550	Fe
CCB03	CCB03	1	1556	Fe
CCV04	CCV04	1	1642	Fe
CCB04	CCB04	1	1646	Fe
PB168883BL	PB168883BL	1	1722	Fe
PB168883BS	PB168883BS	1	1726	Fe
Q2604-02	RW8-SP303-20250711	1	1730	Fe
CCV05	CCV05	1	1758	Fe
CCB05	CCB05	1	1802	Fe
Q2604-01	RW8-SP100-20250711	1	1807	Fe
Q2604-01DUP	RW8-SP100-20250711DUP	1	1811	Fe
Q2604-01L	RW8-SP100-20250711L	5	1815	Fe
Q2604-01MS	RW8-SP100-20250711MS	1	1820	Fe
Q2604-01MSD	RW8-SP100-20250711MSD	1	1824	Fe
Q2604-01A	RW8-SP100-20250711A	1	1828	Fe
CCV06	CCV06	1	1924	Fe
CCB06	CCB06	1	1928	Fe
CCV07	CCV07	1	2016	Fe
CCB07	CCB07	1	2020	Fe

LAB CHRONICLE

OrderID:	Q2604	OrderDate:	7/15/2025 10:29:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	O11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2604-02	RW8-SP303-2025071 1	WATER			07/11/25 13:13			07/15/25
			TDS	SM2540 C			07/17/25 12:30	
			TSS	SM2540 D			07/17/25 15:00	



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/11/25 13:13
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/15/25
Client Sample ID:	RW8-SP303-20250711	SDG No.:	Q2604
Lab Sample ID:	Q2604-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TDS	11.0		1	1.00	10.0	10.0	mg/L		07/17/25 12:30	SM 2540 C-20
TSS	4.40		1	1.00	4.00	4.00	mg/L		07/17/25 15:00	SM 2540 D-20

Comments:

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
H = Sample Analysis Out Of Hold Time

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



QC RESULT SUMMARY

Preparation Blank Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2604

Project: NWIRP Bethpage 112G08005-WE13

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136528BL							
TDS	mg/L	< 5.0000	5.0000	U	1.0	10	07/17/2025
Sample ID: LB136530BL							
TSS	mg/L	1	2.0000	J	1	4	07/17/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2604
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2604-02
Client ID:	RW8-SP303-20250711DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TDS	mg/L	+/-5	11.0		11.0		1	0		07/17/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2604
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2615-02
Client ID:	COMPDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TSS	mg/L	+/-5	145		144		1	0.69		07/17/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2604
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136528

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136528BS							
TDS	mg/L	100	95.0		95	1	90-110	07/17/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2604
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136530

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136530BS							
TSS	mg/L	550	533		97	1	90-110	07/17/2025



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: Q 2604											
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: RW8		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		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		☐ RESEULTS ONLY ☐ USEPA CLP ☐ RESULTS + QC ☐ New York State ASP "B" ☐ New Jersey REDUCED ☐ New York State ASP "A" ☐ New Jersey CLP ☐ Other _____ ☐ EDD Format _____		<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">1,4-Dioxane SW846 8270</td> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> </table>		1,4-Dioxane SW846 8270	1	2	3	4	5	6	7	8	9
1,4-Dioxane SW846 8270	1	2	3	4	5	6	7	8	9						
				PRESERVATIVES											
				COMMENTS											
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP GRAB	SAMPLE COLLECTION DATE TIME	# of Bottles										
1.	RW8-SP100-20250711	GW		7/11/25 13:05	2										
2.	RW8-SP303-20250711	GW		7/11/25 13:13	4										
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

1		B		3		4		5		6		7		8		9	
1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9

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

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 <u>24.5</u> MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler? <u>yes</u> Comments:		
1.	7/14/25 13:00	1.			
RELINQUISHED BY	DATE/TIME	RECEIVED BY			
2.	7/15/25 10:15	2.	SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight CHEMTECH: ☐ Picked Up ☐ Overnight		
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY			
3.		3.	Page _____ of _____		
			Shipment Complete ☐ YES ☐ NO		

WHITE - CHEMTECH COPY FOR 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