

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 : Q2937

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2937

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2937-01
Q2937-02

Client Sample Number

RW8-SP100-20250821
RW8-SP303-20250821

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: 9/1/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Ernie Wu

Order ID # Q2937

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 08/22/2025.

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 except for, RW8-SP100-20250821 [Terphenyl-d14 - 140%], RW8-SP303-20250821 [Terphenyl-d14 - 144%]. Failed surrogate is not associated with DOD, Therefore no further corrective action was taken.

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 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 <20% 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 > 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_____



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

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Ernie Wu

Order ID # Q2937

Test Name: Metals Group4

A. Number of Samples and Date of Receipt:

2 Water samples were received on 08/22/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Metals Group4, SVOC-SIMGroup1, SVOC-TCL BNA -20, 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 requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike analysis met criteria for all compounds.

The Matrix Spike Duplicate analysis met criteria for all compounds.

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 # Q2937

Test Name: TDS,TSS

A. Number of Samples and Date of Receipt:

2 Water sample was received on 08/22/2025.

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 #: Q2937

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: 09/01/2025

LAB CHRONICLE

OrderID:	Q2937	OrderDate:	8/22/2025 9:37:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	J31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2937-01	RW8-SP100-2025082 1	Water			08/21/25			08/22/25
			SVOC-SIMGroup1	8270-Modified		08/27/25	08/28/25	
Q2937-02	RW8-SP303-2025082 1	Water			08/21/25			08/22/25
			SVOC-SIMGroup1	8270-Modified		08/27/25	08/28/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q2937
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:	08/21/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/22/25
Client Sample ID:	RW8-SP100-20250821	SDG No.:	Q2937
Lab Sample ID:	Q2937-01	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
BN037650.D	1	08/27/25 08:45	08/28/25 10:42	PB169421

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	0.29		30 - 150		72%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		140%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2100	7.71				
1146-65-2	Naphthalene-d8	4810	10.487				
15067-26-2	Acenaphthene-d10	2200	14.345				
1517-22-2	Phenanthrene-d10	4470	17.086				
1719-03-5	Chrysene-d12	3710	21.268				
1520-96-3	Perylene-d12	3330	23.493				

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:	08/21/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/22/25
Client Sample ID:	RW8-SP303-20250821	SDG No.:	Q2937
Lab Sample ID:	Q2937-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 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
BN037651.D	1	08/27/25 08:45	08/28/25 11:18	PB169421

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		69%	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		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.58	*	58 - 132		144%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.71				
1146-65-2	Naphthalene-d8	4620	10.488				
15067-26-2	Acenaphthene-d10	2090	14.345				
1517-22-2	Phenanthrene-d10	4580	17.087				
1719-03-5	Chrysene-d12	3870	21.268				
1520-96-3	Perylene-d12	3370	23.496				

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.: Q2937

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB169421BL	PB169421BL	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB169421BS	PB169421BS	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.28	71		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.38	94		53	106
		Terphenyl-d14	0.4	0.36	90		58	132
PB169421BSD	PB169421BSD	2-Methylnaphthalene-d10	0.4	0.35	87		30	150
		Fluoranthene-d10	0.4	0.32	80		30	150
		Nitrobenzene-d5	0.4	0.40	101		55	111
		2-Fluorobiphenyl	0.4	0.42	105		53	106
		Terphenyl-d14	0.4	0.39	97		58	132
Q2937-01	RW8-SP100-20250821	2-Methylnaphthalene-d10	0.4	0.29	72		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.35	87		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.56	140	*	58	132
Q2937-02	RW8-SP303-20250821	2-Methylnaphthalene-d10	0.4	0.28	69		30	150
		Fluoranthene-d10	0.4	0.38	95		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.58	144	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2937

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037652.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB169421BS	1,4-Dioxane	0.4	0.30	ug/L	75				70	130	

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2937

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037653.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB169421BSD	1,4-Dioxane	0.4	0.32	ug/L	80	6			70	130		20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB169421BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2937

Lab File ID: BN037649.D

Lab Sample ID: PB169421BL

Instrument ID: BNA_N

Date Extracted: 08/27/2025

Matrix: (soil/water) Water

Date Analyzed: 08/28/2025

Level: (low/med) LOW

Time Analyzed: 10:05

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB169421BS	PB169421BS	BN037652.D	08/28/2025
RW8-SP100-20250821	Q2937-01	BN037650.D	08/28/2025
RW8-SP303-20250821	Q2937-02	BN037651.D	08/28/2025
PB169421BSD	PB169421BSD	BN037653.D	08/28/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037576.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2937
DFTPP Injection Date: 08/12/2025
DFTPP Injection Time: 15:05

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	7.1
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	87.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.2 (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
SSTDICC0.1	SSTDICC0.1	BN037578.D	08/12/2025	16:26
SSTDICC0.2	SSTDICC0.2	BN037579.D	08/12/2025	17:03
SSTDICCC0.4	SSTDICCC0.4	BN037580.D	08/12/2025	17:39
SSTDICC0.8	SSTDICC0.8	BN037581.D	08/12/2025	18:16
SSTDICC1.6	SSTDICC1.6	BN037582.D	08/12/2025	18:52
SSTDICC3.2	SSTDICC3.2	BN037583.D	08/12/2025	19:29
SSTDICC5.0	SSTDICC5.0	BN037584.D	08/12/2025	20:05

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037647.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2937
DFTPP Injection Date: 08/28/2025
DFTPP Injection Time: 08:50

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	4.1
441	Present, but less than mass 443	81.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.3 (18.9) 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	BN037648.D	08/28/2025	09:29
PB169421BL	PB169421BL	BN037649.D	08/28/2025	10:05
RW8-SP100-20250821	Q2937-01	BN037650.D	08/28/2025	10:42
RW8-SP303-20250821	Q2937-02	BN037651.D	08/28/2025	11:18
PB169421BS	PB169421BS	BN037652.D	08/28/2025	11:54
PB169421BSD	PB169421BSD	BN037653.D	08/28/2025	12:30
SSTDCCC0.4EC	SSTDCCC0.4	BN037654.D	08/28/2025	13:14

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2937

Client ID : SSTDCCC0.4

Date Analyzed: 08/28/2025

Lab File ID: BN037648.D

Time Analyzed: 09:29

Instrument ID: BNA_N

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	2763	7.71	6612	10.49	3159	14.33
UPPER LIMIT	5526	8.21	13224	10.987	6318	14.834
LOWER LIMIT	1381.5	7.21	3306	9.987	1579.5	13.834
EPA SAMPLE NO.						
01 PB169421BL	2813	7.71	6247	10.49	2646	14.35
02 RW8-SP100-20250821	2104	7.71	4814	10.49	2198	14.35
03 PB169421BS	2769	7.71	6405	10.49	2792	14.35
04 RW8-SP303-20250821	1972	7.71	4616	10.49	2088	14.35
05 PB169421BSD	2452	7.71	5588	10.49	2436	14.35

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.: Q2937

Client ID: SSTDCCC0.4

Date Analyzed: 08/28/2025

Lab File ID: BN037648.D

Time Analyzed: 09:29

Instrument ID: BNA_N

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	6462	17.086	5486	21.259	4720	23.493
UPPER LIMIT	12924	17.586	10972	21.759	9440	23.993
LOWER LIMIT	3231	16.586	2743	20.759	2360	22.993
EPA SAMPLE NO.						
01 PB169421BL	5175	17.09	4266	21.27	3908	23.50
02 RW8-SP100-20250821	4468	17.09	3707	21.27	3325	23.49
03 PB169421BS	4991	17.09	3590	21.27	3204	23.50
04 RW8-SP303-20250821	4583	17.09	3870	21.27	3373	23.50
05 PB169421BSD	4479	17.09	3451	21.27	3064	23.50

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:	PB169421BL		SDG No.:	Q2937
Lab Sample ID:	PB169421BL		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
BN037649.D	1	08/27/25 08:45	08/28/25 10:05	PB169421

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		92%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	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	2810	7.71				
1146-65-2	Naphthalene-d8	6250	10.487				
15067-26-2	Acenaphthene-d10	2650	14.345				
1517-22-2	Phenanthrene-d10	5180	17.086				
1719-03-5	Chrysene-d12	4270	21.268				
1520-96-3	Perylene-d12	3910	23.499				

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:	PB169421BS		SDG No.:	Q2937	
Lab Sample ID:	PB169421BS		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
BN037652.D	1	08/27/25 08:45	08/28/25 11:54	PB169421

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 - 150		71%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		94%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		90%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2770	7.71				
1146-65-2	Naphthalene-d8	6410	10.488				
15067-26-2	Acenaphthene-d10	2790	14.345				
1517-22-2	Phenanthrene-d10	4990	17.087				
1719-03-5	Chrysene-d12	3590	21.268				
1520-96-3	Perylene-d12	3200	23.496				

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:	PB169421BSD		SDG No.:	Q2937	
Lab Sample ID:	PB169421BSD		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
BN037653.D	1	08/27/25 08:45	08/28/25 12:30	PB169421

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.32		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		87%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		101%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.42		53 - 106		105%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		97%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2450	7.71				
1146-65-2	Naphthalene-d8	5590	10.487				
15067-26-2	Acenaphthene-d10	2440	14.345				
1517-22-2	Phenanthrene-d10	4480	17.086				
1719-03-5	Chrysene-d12	3450	21.268				
1520-96-3	Perylene-d12	3060	23.496				

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-BN081225.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Aug 13 05:00:58 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037578.D 0.2 =BN037579.D 0.4 =BN037580.D 0.8 =BN037581.D 1.6 =BN037582.D 3.2 =BN037583.D 5 =BN037584.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	0.413	0.395	0.368	0.397	0.375	0.348	0.383		6.08
3)	n-Nitrosodimet...	0.471	0.488	0.471	0.493	0.503	0.508	0.489		3.19
4) S	2-Fluorophenol	0.922	0.945	0.888	0.823	0.886	0.906	0.977	0.907	5.41
5) S	Phenol-d6	1.045	1.051	1.044	0.983	1.198	1.117	1.201	1.091	7.66
6)	bis(2-Chloroet...	0.935	0.987	0.976	0.936	1.020	1.008	1.022	0.983	3.75
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.270	0.257	0.262	0.264	0.292	0.301	0.326	0.282	9.03
9)	Naphthalene	1.044	1.050	1.037	1.012	1.089	1.096	1.127	1.065	3.78
10)	Hexachlorobuta...	0.252	0.258	0.262	0.253	0.267	0.264	0.265	0.260	2.22
11) SURR2	Methylnaphth...	0.488	0.492	0.508	0.493	0.543	0.578	0.705	0.544	14.39
12)	2-Methylnaphth...	0.589	0.631	0.635	0.629	0.701	0.731	0.760	0.668	9.39
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.139	0.149	0.156	0.160	0.185	0.203	0.234	0.175	19.39
15) S	2-Fluorobiphenyl	2.226	2.243	2.300	2.251	2.341	2.391	2.440	2.313	3.50
16)	Acenaphthylene	1.740	1.760	1.710	1.653	1.850	1.858	1.980	1.793	6.15
17)	Acenaphthene	1.144	1.150	1.172	1.154	1.283	1.286	1.348	1.220	6.86
18)	Fluorene	1.466	1.510	1.524	1.521	1.686	1.693	1.770	1.596	7.38
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.042	0.046	0.047	0.061	0.070		0.053		22.37
21)	4-Bromophenyl-...	0.226	0.236	0.234	0.237	0.265	0.271	0.292	0.251	9.77
22)	Hexachlorobenzene	0.360	0.360	0.356	0.332	0.364	0.354	0.370	0.356	3.37
23)	Atrazine	0.127	0.126	0.130	0.134	0.160	0.176		0.142	14.76
24)	Pentachlorophenol		0.108	0.113	0.113	0.139	0.152		0.125	15.36
25)	Phenanthrene	1.146	1.162	1.170	1.138	1.281	1.269	1.347	1.216	6.72
26)	Anthracene	0.950	0.985	0.995	0.988	1.145	1.186	1.286	1.077	11.93
27) SURR	Fluoranthene-d10	0.932	0.966	0.954	0.935	1.050	1.110	1.419	1.052	16.61
28)	Fluoranthene	1.241	1.264	1.299	1.291	1.503	1.533	1.648	1.397	11.53
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.539	1.486	1.464	1.403	1.502	1.520	1.552	1.495	3.38
31) S	Terphenyl-d14	0.814	0.801	0.796	0.763	0.833	0.853	0.901	0.823	5.45
32)	Benzo(a)anthra...	1.266	1.275	1.263	1.253	1.351	1.458	1.487	1.336	7.40
33)	Chrysene	1.547	1.515	1.433	1.379	1.511	1.489	1.551	1.489	4.21
34)	Bis(2-ethylhex...		0.518	0.522	0.483	0.522	0.593	0.671	0.551	12.47
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN081225.M

36)	Indeno(1,2,3-c...	1.446	1.462	1.612	1.568	1.816	1.883	2.011	1.686	13.01
37)	Benzo(b)fluora...	1.351	1.375	1.338	1.432	1.615	1.674	1.825	1.516	12.52
38)	Benzo(k)fluora...	1.597	1.580	1.651	1.628	1.821	1.797	1.898	1.710	7.36
39) C	Benzo(a)pyrene	1.146	1.136	1.149	1.157	1.322	1.382	1.508	1.257	11.77
40)	Dibenzo(a,h)an...	1.023	1.118	1.222	1.215	1.439	1.516	1.621	1.308	16.85
41)	Benzo(g,h,i)pe...	1.207	1.274	1.262	1.261	1.467	1.532	1.643	1.378	12.17

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
Lab Code: ACE SDG No.: Q2937
Instrument ID: BNA_N Calibration Date/Time: 08/28/2025 09:29
Lab File ID: BN037648.D Init. Calib. Date(s): 08/12/2025 08/12/2025
EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 16:26 20:05
GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.501		-7.9	20.0
Fluoranthene-d10	1.052	0.951		-9.6	20.0
2-Fluorophenol	0.907	0.875		-3.5	20.0
Phenol-d6	1.091	1.043		-4.4	20.0
Nitrobenzene-d5	0.282	0.280		-0.7	20.0
2-Fluorobiphenyl	2.313	2.244		-3.0	20.0
2,4,6-Tribromophenol	0.175	0.185		5.7	20.0
Terphenyl-d14	0.823	0.762		-7.4	20.0
1,4-Dioxane	0.383	0.415		8.4	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.: Q2937
 Instrument ID: BNA_N Calibration Date/Time: 08/28/2025 13:14
 Lab File ID: BN037654.D Init. Calib. Date(s): 08/12/2025 08/12/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 16:26 20:05
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.487		-10.5	50.0
Fluoranthene-d10	1.052	0.948		-9.9	50.0
2-Fluorophenol	0.907	0.826		-8.9	50.0
Phenol-d6	1.091	0.993		-9.0	50.0
Nitrobenzene-d5	0.282	0.284		0.7	50.0
2-Fluorobiphenyl	2.313	2.318		0.2	50.0
2,4,6-Tribromophenol	0.175	0.191		9.1	50.0
Terphenyl-d14	0.823	0.798		-3.0	50.0
1,4-Dioxane	0.383	0.395		3.1	50.0

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

OrderID:	Q2937	OrderDate:	8/22/2025 9:37:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	J31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2937-01	RW8-SP100-2025082 1	Water			08/21/25			08/22/25
			Metals Group4	6010D		08/25/25	08/26/25	
Q2937-02	RW8-SP303-2025082 1	Water			08/21/25			08/22/25
			Metals Group4	6010D		08/25/25	08/26/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q2937 **Order ID:** Q2937
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 : Q2937-01	RW8-SP100-20250821 RW8-SP100-20250821	Water	Iron	5190		11.7	40.0	50.0	ug/L
Client ID : Q2937-02	RW8-SP303-20250821 RW8-SP303-20250821	Water	Iron	1240		11.7	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	08/21/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/22/25
Client Sample ID:	RW8-SP100-20250821	SDG No.:	Q2937
Lab Sample ID:	Q2937-01	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	5190		1	11.7	40.0	50.0	ug/L	08/25/25 10:10	08/26/25 13:51	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:	08/21/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/22/25
Client Sample ID:	RW8-SP303-20250821	SDG No.:	Q2937
Lab Sample ID:	Q2937-02	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	1240		1	11.7	40.0	50.0	ug/L	08/25/25 10:10	08/26/25 13:56	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.: Q2937

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	3960	4000	99	90 - 110	P	08/26/2025	11:14	LB136973

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

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	97.1	100	97	80 - 120	P	08/26/2025	11:20	LB136973

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

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	08/26/2025	11:50	LB136973
CCV02	Iron	5260	5000	105	90 - 110	P	08/26/2025	12:41	LB136973
CCV03	Iron	5080	5000	102	90 - 110	P	08/26/2025	13:30	LB136973
CCV04	Iron	5230	5000	105	90 - 110	P	08/26/2025	14:20	LB136973



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.: Q2937

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	96.8	100	97	65 - 135	P	08/26/2025	11:29	LB136973



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.: Q2937

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	08/26/2025	11:24	LB136973

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2937
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	08/26/2025	11:54	LB136973
CCB02	Iron	23.4	+/-50	U	80.0	100	P	08/26/2025	12:45	LB136973
CCB03	Iron	23.4	+/-50	U	80.0	100	P	08/26/2025	13:35	LB136973
CCB04	Iron	23.4	+/-50	U	80.0	100	P	08/26/2025	14:24	LB136973

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB169379BL		WATER		Batch Number:		PB169379		Prep Date:	08/25/2025	
	Iron	11.7	<25	U	40.0	50.0	P	08/26/2025	12:54	LB136973

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>Tetra Tech NUS, Inc.</u>	SDG No.: <u>Q2937</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	99200	101000	98	85600	116500	08/26/2025	11:33	LB136973
ICSAB01	Iron	100000	99300	101	84400	114500	08/26/2025	11:37	LB136973



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client:	Tetra Tech NUS, Inc.	level:	low	sdg no.:	Q2937
contract:	TETR06			lab code:	ACE
matrix:	Water	sample id:	Q2937-02	client id:	RW8-SP303-20250821MS
Percent Solids for Sample:	NA	Spiked ID:	Q2937-02MS	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	2620		1240		1500	92		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. level: low sdg no.: Q2937
contract: TETR06 lab code: ACE
matrix: Water sample id: Q2937-02 client id: RW8-SP303-20250821MSD
Percent Solids for Sample: NA Spiked ID: Q2937-02MSD 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	2730		1240		1500	99		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

Contract: TETR06

Lab Code: ACE

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:	<u>Tetra Tech NUS, Inc.</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q2937</u>
Contract:	<u>TETR06</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2937-02</u>	Client ID:	<u>RW8-SP303-20250821DUP</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2937-02DUP	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1240		1240		0		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>Q2937</u>
Contract:	<u>TETR06</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2937-02MS</u>	Client ID:	<u>RW8-SP303-20250821MSD</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2937-02MSD	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	2620		2730		4		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.:

Q2937

Contract:

TETR06

Lab Code:

ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB169379BS Iron	ug/L	1500	1410		94	87 - 115	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

RW8-SP303-20250821L

Lab Name: Alliance **Contract:** TETR06
Lab Code: ACE **Lb No.:** lb136973 **Lab Sample ID :** Q2937-02L **SDG No.:** Q2937
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	1240	1390	12		P



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

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:				
		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.: Q2937

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.: Q2937

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.: Q2937

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.: Q2937

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:				
		Sn	Ti	Tl	V	Zn
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000



METAL PREPARATION & ANALYICAL SUMMARY

Metals
- 13 -

SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

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: PB169379							
PB169379BL	PB169379BL	MB	WATER	08/25/2025	50.0	25.0	
PB169379BS	PB169379BS	LCS	WATER	08/25/2025	50.0	25.0	
Q2937-01	RW8-SP100-20250821	SAM	WATER	08/25/2025	50.0	25.0	
Q2937-02	RW8-SP303-20250821	SAM	WATER	08/25/2025	50.0	25.0	
Q2937-02DUP	RW8-SP303-20250821DUP	DUP	WATER	08/25/2025	50.0	25.0	
Q2937-02MS	RW8-SP303-20250821MS	MS	WATER	08/25/2025	50.0	25.0	
Q2937-02MSD	RW8-SP303-20250821MSD	MSD	WATER	08/25/2025	50.0	25.0	

metals
- 14 -
ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc.

Contract: TETR06

Lab code: ACE

Sdg no.: Q2937

Instrument id number: _____

Method: _____

Run number: LB136973

Start date: 08/26/2025

End date: 08/26/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1049	Fe
S1	S1	1	1053	Fe
S2	S2	1	1058	Fe
S3	S3	1	1102	Fe
S4	S4	1	1106	Fe
S5	S5	1	1110	Fe
ICV01	ICV01	1	1114	Fe
LLICV01	LLICV01	1	1120	Fe
ICB01	ICB01	1	1124	Fe
CRI01	CRI01	1	1129	Fe
ICSA01	ICSA01	1	1133	Fe
ICSAB01	ICSAB01	1	1137	Fe
CCV01	CCV01	1	1150	Fe
CCB01	CCB01	1	1154	Fe
CCV02	CCV02	1	1241	Fe
CCB02	CCB02	1	1245	Fe
PB169379BL	PB169379BL	1	1254	Fe
PB169379BS	PB169379BS	1	1258	Fe
CCV03	CCV03	1	1330	Fe
CCB03	CCB03	1	1335	Fe
Q2937-01	RW8-SP100-20250821	1	1351	Fe
Q2937-02	RW8-SP303-20250821	1	1356	Fe
Q2937-02DUP	RW8-SP303-20250821DUP	1	1400	Fe
Q2937-02L	RW8-SP303-20250821L	5	1404	Fe
Q2937-02MS	RW8-SP303-20250821MS	1	1408	Fe
Q2937-02MSD	RW8-SP303-20250821MSD	1	1412	Fe
CCV04	CCV04	1	1420	Fe
CCB04	CCB04	1	1424	Fe

LAB CHRONICLE

OrderID:	Q2937	OrderDate:	8/22/2025 9:37:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	J31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2937-02	RW8-SP303-2025082 1	WATER			08/21/25 13:13			08/22/25
			TDS	SM2540 C			08/22/25 12:30	
			TSS	SM2540 D			08/26/25 13:00	



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	08/21/25 13:13
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/22/25
Client Sample ID:	RW8-SP303-20250821	SDG No.:	Q2937
Lab Sample ID:	Q2937-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TDS	5.00	J	1	1.00	10.0	10.0	mg/L		08/22/25 12:30	SM 2540 C-20
TSS	4.00	U	1	1.00	4.00	4.00	mg/L		08/26/25 13:00	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.: Q2937

Project: NWIRP Bethpage 112G08005-WE13

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136926BL							
TDS	mg/L	1	5.0000	J	1.0	10	08/22/2025
Sample ID: LB136966BL							
TSS	mg/L	1	2.0000	J	1	4	08/26/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2937
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2937-02
Client ID:	RW8-SP303-20250821DUP	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	5.00	J	5.00	J	1	0		08/22/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2937
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2940-01
Client ID:	COMP(1-6)DUP	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	80.3		80.4		1	0.12		08/26/2025

Laboratory Control Sample Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

Project: NWIRP Bethpage 112G08005-WE13

Run No.: LB136926

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136926BS							
TDS	mg/L	100	95.0		95	1	90-110	08/22/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2937
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136966

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136966BS							
TSS	mg/L	550	532		97	1	90-110	08/26/2025



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 2937

COC Number:

CLIENT INFORMATION

COMPANY: Tetra Tech

ADDRESS: 4433 Corporation Ln, Suite 300

CITY: Virginia Beach STATE: VA ZIP: 23462

ATTENTION: Ernie Wu

PHONE: 757-466-4901

FAX: 757-461-4148

PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage

PROJECT #: 112G08005-WE13 LOCATION: RW8

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetrattech.com

PHONE: 757-466-4901

FAX: 757-461-4148

BILLING INFORMATION

BILL TO:

PO#

ADDRESS:

CITY:

STATE:

ZIP:

ATTENTION:

PHONE:

ANALYSIS

1,4-Dioxane SW846 8270
S/M

Iron, Total

TSS

TDS

1

2

3

4

5

6

7

8

9

PRESERVATIVES

1

2

3

4

5

6

7

8

9

COMMENTS

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

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*

HARD COPY: 10 DAYS*

EDD: 10 DAYS*

* TO BE APPROVED BY CHEMTECH

STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY☐ RESULTS + QC☐ New Jersey REDUCED☐ New Jersey CLP☐ EDD Format☐ USEPA CLP☐ New York State ASP "B"☐ New York State ASP "A"☐ OtherCHEMTECH
SAMPLE
IDPROJECT
SAMPLE IDENTIFICATIONSAMPLE
MATRIXSAMPLE
TYPE

COMP GRAB

SAMPLE
COLLECTION

DATE TIME

of Bottles

1. RW8-SP100-20250821

GW

X

8/21/25

13:05

2

X

X

2. RW8-SP303-20250821

GW

X

8/21/25

13:13

4

X

X

X

X

pH 1.3

pH 1.3

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

RELINQUISHED BY SAMPLER

DATE/TIME

RECEIVED BY

RELINQUISHED BY

DATE/TIME

RECEIVED BY

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp

MeOH extraction requires an additional 4oz. Jar for percent solid

☐ Ice in Cooler?:

Comments:

Page _____ of _____

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

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	TX-C25-00189
Virginia	460312