

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 : Q3142

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q3142

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q3142-01
Q3142-02

Client Sample Number

RW8-SP100-20250918
RW8-SP303-20250918

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: 9/27/2025

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 # Q3142

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 09/18/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested:

. This data package contains results for SVOC-SIMGroup1(8270-Modified).

C. Analytical Techniques:

SVOC-SIMGroup1 : 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 except following.

The Blank Spike Duplicate met requirements for all compounds except following.

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:

SVOC-SIMGroup1 : 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.

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 # Q3142

Test Name: Metals Group4

A. Number of Samples and Date of Receipt:

2 Water samples were received on 09/18/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Metals Group4. 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_____



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 # Q3142

Test Name: TDS,TSS

A. Number of Samples and Date of Receipt:

2 Water samples were received on 09/18/2025.

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 #: Q3142

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: 09/27/2025

LAB CHRONICLE

OrderID:	Q3142	OrderDate:	9/18/2025 4:02:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	J51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3142-01	RW8-SP100-20250918	Water			09/18/25			09/18/25
			SVOC-SIMGroup1	8270-Modified		09/23/25	09/25/25	
Q3142-02	RW8-SP303-20250918	Water			09/18/25			09/18/25
			SVOC-SIMGroup1	8270-Modified		09/23/25	09/25/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q3142
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:	09/18/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	09/18/25
Client Sample ID:	RW8-SP100-20250918	SDG No.:	Q3142
Lab Sample ID:	Q3142-01	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
BN037893.D	1	09/23/25 08:40	09/25/25 17:38	PB169793

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		75%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		97%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.51		58 - 132		126%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	7270	7.818				
1146-65-2	Naphthalene-d8	21100	10.626				
15067-26-2	Acenaphthene-d10	11800	14.473				
1517-22-2	Phenanthrene-d10	24800	17.223				
1719-03-5	Chrysene-d12	22600	21.402				
1520-96-3	Perylene-d12	21600	23.735				

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:	09/18/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	09/18/25
Client Sample ID:	RW8-SP303-20250918	SDG No.:	Q3142
Lab Sample ID:	Q3142-02	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
BN037894.D	1	09/23/25 08:40	09/25/25 18:15	PB169793

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		74%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		120%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	8050	7.825				
1146-65-2	Naphthalene-d8	23000	10.626				
15067-26-2	Acenaphthene-d10	12300	14.473				
1517-22-2	Phenanthrene-d10	25700	17.223				
1719-03-5	Chrysene-d12	22100	21.402				
1520-96-3	Perylene-d12	19800	23.735				

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.: Q3142

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB169793BL	PB169793BL	2-Methylnaphthalene-d10	0.4	0.33	82		30	150
		Fluoranthene-d10	0.4	0.35	88		30	150
		Nitrobenzene-d5	0.4	0.38	96		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.40	100		58	132
PB169793BS	PB169793BS	2-Methylnaphthalene-d10	0.4	0.37	92		30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.38	95		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB169793BSD	PB169793BSD	2-Methylnaphthalene-d10	0.4	0.35	88		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
Q3142-01	RW8-SP100-20250918	2-Methylnaphthalene-d10	0.4	0.30	75		30	150
		Fluoranthene-d10	0.4	0.39	97		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.51	126		58	132
Q3142-02	RW8-SP303-20250918	2-Methylnaphthalene-d10	0.4	0.29	74		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.29	74		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.48	120		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3142

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037886.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB169793BS	1,4-Dioxane	0.4	0.33	ug/L	83				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3142

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037887.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB169793BSD	1,4-Dioxane	0.4	0.30	ug/L	75	10			70	130		20

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB169793BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q3142

Lab File ID: BN037884.D

Lab Sample ID: PB169793BL

Instrument ID: BNA_N

Date Extracted: 09/23/2025

Matrix: (soil/water) Water

Date Analyzed: 09/25/2025

Level: (low/med) LOW

Time Analyzed: 12:07

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB169793BS	PB169793BS	BN037886.D	09/25/2025
PB169793BSD	PB169793BSD	BN037887.D	09/25/2025
RW8-SP100-20250918	Q3142-01	BN037893.D	09/25/2025
RW8-SP303-20250918	Q3142-02	BN037894.D	09/25/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037860.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q3142
DFTPP Injection Date: 09/23/2025
DFTPP Injection Time: 11:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.7 (1.8) 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	6.9
365	Greater than 1% of mass 198	4.2
441	Present, but less than mass 443	72.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.7 (20.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037861.D	09/23/2025	12:13
SSTDICC0.2	SSTDICC0.2	BN037862.D	09/23/2025	12:49
SSTDICCC0.4	SSTDICCC0.4	BN037863.D	09/23/2025	13:25
SSTDICC0.8	SSTDICC0.8	BN037864.D	09/23/2025	14:02
SSTDICC1.6	SSTDICC1.6	BN037865.D	09/23/2025	14:38
SSTDICC3.2	SSTDICC3.2	BN037866.D	09/23/2025	15:15
SSTDICC5.0	SSTDICC5.0	BN037867.D	09/23/2025	15:51

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BN037882.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q3142
DFTPP Injection Date: 09/25/2025
DFTPP Injection Time: 10:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.8 (1.8) 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	7.1
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	81.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.7 (20.9) 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	BN037883.D	09/25/2025	11:31
PB169793BL	PB169793BL	BN037884.D	09/25/2025	12:07
PB169793BS	PB169793BS	BN037886.D	09/25/2025	13:21
PB169793BSD	PB169793BSD	BN037887.D	09/25/2025	13:57
RW8-SP100-20250918	Q3142-01	BN037893.D	09/25/2025	17:38
RW8-SP303-20250918	Q3142-02	BN037894.D	09/25/2025	18:15
SSTDCCC0.4EC	SSTDCCC0.4	BN037901.D	09/25/2025	22:31

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q3142

Client ID : SSTDCCC0.4

Date Analyzed: 09/25/2025

Lab File ID: BN037883.D

Time Analyzed: 11:31

Instrument ID: BNA_N

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	5686	7.818	16943	10.63	8938	14.47
UPPER LIMIT	11372	8.318	33886	11.126	17876	14.973
LOWER LIMIT	2843	7.318	8471.5	10.126	4469	13.973
EPA SAMPLE NO.						
01 RW8-SP100-20250918	7267	7.82	21101	10.63	11824	14.47
02 RW8-SP303-20250918	8049	7.83	22980	10.63	12284	14.47
03 PB169793BL	6424	7.82	17072	10.63	8141	14.47
04 PB169793BS	8698	7.82	23812	10.63	11731	14.47
05 PB169793BSD	6010	7.82	16163	10.63	7938	14.47

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.: Q3142

Client ID: SSTDCCC0.4

Date Analyzed: 09/25/2025

Lab File ID: BN037883.D

Time Analyzed: 11:31

Instrument ID: BNA_N

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	18224	17.223	15951	21.402	15181	23.73
UPPER LIMIT	36448	17.723	31902	21.902	30362	24.23
LOWER LIMIT	9112	16.723	7975.5	20.902	7590.5	23.23
EPA SAMPLE NO.						
01 RW8-SP100-20250918	24782	17.22	22644	21.40	21595	23.74
02 RW8-SP303-20250918	25675	17.22	22098	21.40	19813	23.74
03 PB169793BL	16191	17.22	13560	21.40	12617	23.73
04 PB169793BS	23564	17.22	19236	21.40	16484	23.73
05 PB169793BSD	15792	17.22	12693	21.40	10583	23.73

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:	PB169793BL		SDG No.:	Q3142
Lab Sample ID:	PB169793BL		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
BN037884.D	1	09/23/25 08:40	09/25/25 12:07	PB169793

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		82%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		88%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		96%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		100%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6420	7.818				
1146-65-2	Naphthalene-d8	17100	10.626				
15067-26-2	Acenaphthene-d10	8140	14.473				
1517-22-2	Phenanthrene-d10	16200	17.223				
1719-03-5	Chrysene-d12	13600	21.402				
1520-96-3	Perylene-d12	12600	23.73				

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:	PB169793BS		SDG No.:	Q3142
Lab Sample ID:	PB169793BS		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
BN037886.D	1	09/23/25 08:40	09/25/25 13:21	PB169793

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.33		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		92%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		95%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	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	8700	7.818				
1146-65-2	Naphthalene-d8	23800	10.626				
15067-26-2	Acenaphthene-d10	11700	14.473				
1517-22-2	Phenanthrene-d10	23600	17.223				
1719-03-5	Chrysene-d12	19200	21.402				
1520-96-3	Perylene-d12	16500	23.733				

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:	PB169793BSD		SDG No.:	Q3142	
Lab Sample ID:	PB169793BSD		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
BN037887.D	1	09/23/25 08:40	09/25/25 13:57	PB169793

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	0.35		30 - 150		88%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	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	6010	7.818				
1146-65-2	Naphthalene-d8	16200	10.626				
15067-26-2	Acenaphthene-d10	7940	14.473				
1517-22-2	Phenanthrene-d10	15800	17.223				
1719-03-5	Chrysene-d12	12700	21.402				
1520-96-3	Perylene-d12	10600	23.733				

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-BN092325.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Sep 24 11:00:01 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037861.D 0.2 =BN037862.D 0.4 =BN037863.D 0.8 =BN037864.D 1.6 =BN037865.D 3.2 =BN037866.D 5 =BN037867.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	0.410	0.403	0.425	0.410	0.376	0.406	4.04	
3)	n-Nitrosodimet...	0.541	0.517	0.526	0.561	0.549	0.547	0.540	3.03	
4) S	2-Fluorophenol	0.944	0.921	0.856	0.839	0.908	0.923	0.998	0.913	5.84
5) S	Phenol-d6	1.190	1.200	1.118	1.088	1.211	1.236	1.353	1.199	7.15
6)	bis(2-Chloroet...	1.133	1.096	1.082	1.066	1.150	1.124	1.143	1.113	2.89
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.299	0.289	0.289	0.290	0.310	0.320	0.338	0.305	6.14
9)	Naphthalene	1.105	1.089	1.048	1.051	1.123	1.137	1.160	1.102	3.84
10)	Hexachlorobuta...	0.198	0.184	0.182	0.183	0.192	0.188	0.188	0.188	2.94
11) SURR2	Methylnaphth...	0.515	0.518	0.499	0.504	0.553	0.587	0.714	0.556	13.74
12)	2-Methylnaphth...	0.678	0.681	0.668	0.682	0.754	0.775	0.802	0.720	7.68
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.148	0.142	0.135	0.139	0.163	0.184	0.152	12.15	
15) S	2-Fluorobiphenyl	1.660	1.631	1.559	1.547	1.654	1.650	1.762	1.638	4.36
16)	Acenaphthylene	1.698	1.721	1.663	1.680	1.907	1.951	2.094	1.816	9.23
17)	Acenaphthene	1.262	1.230	1.198	1.208	1.351	1.371	1.437	1.294	7.16
18)	Fluorene	1.455	1.455	1.452	1.466	1.664	1.717	1.748	1.565	8.77
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.041	0.044	0.046	0.058	0.071	0.084	0.057	29.75	
21)	4-Bromophenyl-...	0.252	0.247	0.244	0.244	0.272	0.275	0.291	0.261	7.07
22)	Hexachlorobenzene	0.317	0.312	0.305	0.300	0.324	0.323	0.332	0.316	3.53
23)	Atrazine	0.180	0.181	0.172	0.178	0.205	0.224	0.249	0.199	14.70
24)	Pentachlorophenol	0.101	0.092	0.097	0.116	0.136	0.108	16.50		
25)	Phenanthrene	1.301	1.271	1.230	1.224	1.358	1.379	1.452	1.316	6.37
26)	Anthracene	1.034	1.035	1.023	1.057	1.209	1.275	1.361	1.142	12.10
27) SURR	Fluoranthene-d10	0.880	0.918	0.887	0.900	1.004	1.085	1.370	1.006	17.59
28)	Fluoranthene	1.278	1.315	1.311	1.358	1.555	1.617	1.713	1.450	12.07
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.576	1.600	1.521	1.476	1.607	1.595	1.679	1.579	4.12
31) S	Terphenyl-d14	0.799	0.791	0.753	0.735	0.798	0.809	0.893	0.797	6.34
32)	Benzo(a)anthra...	1.376	1.359	1.294	1.285	1.423	1.483	1.567	1.398	7.27
33)	Chrysene	1.508	1.526	1.462	1.446	1.559	1.512	1.569	1.512	3.03
34)	Bis(2-ethylhex...	0.592	0.487	0.476	0.518	0.569	0.676	0.553	13.57	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN092325.M

36)	Indeno(1,2,3-c...	1.715	1.672	1.658	1.707	1.887	1.996	2.159	1.828	10.52
37)	Benzo(b)fluora...	1.599	1.606	1.641	1.590	1.810	1.848	1.981	1.725	8.95
38)	Benzo(k)fluora...	1.620	1.586	1.597	1.628	1.875	1.917	1.926	1.736	9.26
39) C	Benzo(a)pyrene	1.254	1.296	1.231	1.254	1.413	1.492	1.610	1.364	10.61
40)	Dibenzo(a,h)an...	1.285	1.283	1.303	1.333	1.495	1.587	1.705	1.427	11.87
41)	Benzo(g,h,i)pe...	1.407	1.381	1.404	1.397	1.521	1.613	1.773	1.499	9.85

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q3142
 Instrument ID: BNA_N Calibration Date/Time: 09/25/2025 11:31
 Lab File ID: BN037883.D Init. Calib. Date(s): 09/23/2025 09/23/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:13 15:51
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.556	0.515		-7.4	20.0
Fluoranthene-d10	1.006	0.915		-9.0	20.0
2-Fluorophenol	0.913	0.967		5.9	20.0
Phenol-d6	1.199	1.243		3.7	20.0
Nitrobenzene-d5	0.305	0.321		5.2	20.0
2-Fluorobiphenyl	1.638	1.650		0.7	20.0
2,4,6-Tribromophenol	0.152	0.143		-5.9	20.0
Terphenyl-d14	0.797	0.754		-5.4	20.0
1,4-Dioxane	0.406	0.421		3.7	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.: Q3142
 Instrument ID: BNA_N Calibration Date/Time: 09/25/2025 22:31
 Lab File ID: BN037901.D Init. Calib. Date(s): 09/23/2025 09/23/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:13 15:51
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.556	0.514		-7.6	50.0
Fluoranthene-d10	1.006	0.920		-8.5	50.0
2-Fluorophenol	0.913	0.982		7.6	50.0
Phenol-d6	1.199	1.281		6.8	50.0
Nitrobenzene-d5	0.305	0.313		2.6	50.0
2-Fluorobiphenyl	1.638	1.527		-6.8	50.0
2,4,6-Tribromophenol	0.152	0.142		-6.6	50.0
Terphenyl-d14	0.797	0.761		-4.5	50.0
1,4-Dioxane	0.406	0.415		2.2	50.0

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

OrderID:	Q3142	OrderDate:	9/18/2025 4:02:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	J51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3142-01	RW8-SP100-20250918	Water			09/18/25			09/18/25
			Metals Group4	6010D		09/22/25	09/24/25	
Q3142-02	RW8-SP303-20250918	Water			09/18/25			09/18/25
			Metals Group4	6010D		09/22/25	09/24/25	

Hit Summary Sheet
SW-846

SDG No.:	Q3142	Order ID:	Q3142
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-SP100-20250918									
Q3142-01	RW8-SP100-20250918	Water	Iron	651		11.7	40.0	50.0	ug/L
Client ID : RW8-SP303-20250918									
Q3142-02	RW8-SP303-20250918	Water	Iron	49.3	J	11.7	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	09/18/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	09/18/25
Client Sample ID:	RW8-SP100-20250918	SDG No.:	Q3142
Lab Sample ID:	Q3142-01	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	651		1	11.7	40.0	50.0	ug/L	09/22/25 10:40	09/24/25 15:11	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:	09/18/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	09/18/25
Client Sample ID:	RW8-SP303-20250918	SDG No.:	Q3142
Lab Sample ID:	Q3142-02	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	49.3	J	1	11.7	40.0	50.0	ug/L	09/22/25 10:40	09/24/25 15:15	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.: Q3142

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	09/24/2025	11:34	LB137295

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

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	115	100	115	80 - 120	P	09/24/2025	11:44	LB137295

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

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	5200	5000	104	90 - 110	P	09/24/2025	12:21	LB137295
CCV02	Iron	5020	5000	100	90 - 110	P	09/24/2025	13:40	LB137295
CCV03	Iron	4740	5000	95	90 - 110	P	09/24/2025	14:42	LB137295
CCV04	Iron	4960	5000	99	90 - 110	P	09/24/2025	15:41	LB137295
CCV05	Iron	4990	5000	100	90 - 110	P	09/24/2025	16:31	LB137295
CCV06	Iron	4900	5000	98	90 - 110	P	09/24/2025	17:33	LB137295
CCV07	Iron	4850	5000	97	90 - 110	P	09/24/2025	18:37	LB137295
CCV08	Iron	4890	5000	98	90 - 110	P	09/24/2025	19:03	LB137295



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.: Q3142

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	94.1	100	94	65 - 135	P	09/24/2025	12:00	LB137295



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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q3142</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>ACE</u>

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	09/24/2025	11:56	LB137295

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

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	09/24/2025	12:26	LB137295
CCB02	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	13:44	LB137295
CCB03	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	14:46	LB137295
CCB04	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	15:46	LB137295
CCB05	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	16:35	LB137295
CCB06	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	17:37	LB137295
CCB07	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	18:42	LB137295
CCB08	Iron	23.4	+/-50	U	80.0	100	P	09/24/2025	19:07	LB137295

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB169760BL		WATER		Batch Number:		PB169760		Prep Date:	09/22/2025	
	Iron	11.7	<25	U	40.0	50.0	P	09/24/2025	15:25	LB137295

A

B

C

D

E

F

G

H

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q3142</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	103000	101000	102	85600	116500	09/24/2025	12:04	LB137295
ICSAB01	Iron	103000	99300	104	84400	114500	09/24/2025	12:08	LB137295



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client:	Tetra Tech NUS, Inc.	level:	low	sdg no.:	Q3142
contract:	TETR06			lab code:	ACE
matrix:	Water	sample id:	Q3151-02	client id:	1402MS
Percent Solids for Sample:	NA	Spiked ID:	Q3151-02MS	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	1930		510		1500	95		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client:	Tetra Tech NUS, Inc.	level:	low	sdg no.:	Q3142
contract:	TETR06			lab code:	ACE
matrix:	Water	sample id:	Q3151-02	client id:	1402MSD
Percent Solids for Sample:	NA	Spiked ID:	Q3151-02MSD	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	1860		510		1500	90		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

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>Q3142</u>
Contract:	<u>TETR06</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q3151-02</u>	Client ID:	<u>1402DUP</u>
Percent Solids for Sample:	NA	Duplicate ID	Q3151-02DUP	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	510		421		19		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>Q3142</u>
Contract:	<u>TETR06</u>			Lab Code:	<u>ACE</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q3151-02MS</u>	Client ID:	<u>1402MSD</u>
Percent Solids for Sample:	NA	Duplicate ID	Q3151-02MSD	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1930		1860		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:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q3142</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>ACE</u>

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB169760BS Iron	ug/L	1500	1430		95	87 - 115	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

1402L

Lab Name: Alliance **Contract:** TETR06
Lab Code: ACE **Lb No.:** lb137295 **Lab Sample ID :** Q3151-02L **SDG No.:** Q3142
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	510	413	19		P



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

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.: Q3142

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:				
		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.: Q3142

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:				
		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.: Q3142

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:				
		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.: Q3142

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
- 13 -

SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q3142

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: PB169760							
PB169760BL	PB169760BL	MB	WATER	09/22/2025	50.0	25.0	
PB169760BS	PB169760BS	LCS	WATER	09/22/2025	50.0	25.0	
Q3142-01	RW8-SP100-20250918	SAM	WATER	09/22/2025	50.0	25.0	
Q3142-02	RW8-SP303-20250918	SAM	WATER	09/22/2025	50.0	25.0	
Q3151-02DUP	1402DUP	DUP	WATER	09/22/2025	50.0	25.0	
Q3151-02MS	1402MS	MS	WATER	09/22/2025	50.0	25.0	
Q3151-02MSD	1402MSD	MSD	WATER	09/22/2025	50.0	25.0	

metals
- 14 -
ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc.

Contract: TETR06

Lab code: ACE

Sdg no.: Q3142

Instrument id number: _____

Method: _____

Run number: LB137295

Start date: 09/24/2025

End date: 09/24/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1054	Fe
S1	S1	1	1058	Fe
S2	S2	1	1103	Fe
S3	S3	1	1107	Fe
S4	S4	1	1110	Fe
S5	S5	1	1115	Fe
ICV01	ICV01	1	1134	Fe
LLICV01	LLICV01	1	1144	Fe
ICB01	ICB01	1	1156	Fe
CRI01	CRI01	1	1200	Fe
ICSA01	ICSA01	1	1204	Fe
ICSAB01	ICSAB01	1	1208	Fe
CCV01	CCV01	1	1221	Fe
CCB01	CCB01	1	1226	Fe
CCV02	CCV02	1	1340	Fe
CCB02	CCB02	1	1344	Fe
CCV03	CCV03	1	1442	Fe
CCB03	CCB03	1	1446	Fe
Q3151-02DUP	1402DUP	1	1450	Fe
Q3151-02L	1402L	5	1455	Fe
Q3151-02MS	1402MS	1	1459	Fe
Q3151-02MSD	1402MSD	1	1503	Fe
Q3142-01	RW8-SP100-20250918	1	1511	Fe
Q3142-02	RW8-SP303-20250918	1	1515	Fe
PB169760BL	PB169760BL	1	1525	Fe
PB169760BS	PB169760BS	1	1533	Fe
CCV04	CCV04	1	1541	Fe
CCB04	CCB04	1	1546	Fe
CCV05	CCV05	1	1631	Fe
CCB05	CCB05	1	1635	Fe
CCV06	CCV06	1	1733	Fe
CCB06	CCB06	1	1737	Fe
CCV07	CCV07	1	1837	Fe
CCB07	CCB07	1	1842	Fe
CCV08	CCV08	1	1903	Fe
CCB08	CCB08	1	1907	Fe

LAB CHRONICLE

OrderID:	Q3142	OrderDate:	9/18/2025 4:02:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	J51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3142-01	RW8-SP100-20250918	WATER			09/18/25 13:05			09/18/25
			TDS	SM2540 C			09/19/25 15:40	
			TSS	SM2540 D			09/19/25 16:00	
Q3142-02	RW8-SP303-20250918	WATER			09/18/25 13:13			09/18/25
			TDS	SM2540 C			09/19/25 15:40	
			TSS	SM2540 D			09/19/25 16:00	



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	09/18/25 13:05
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	09/18/25
Client Sample ID:	RW8-SP100-20250918	SDG No.:	Q3142
Lab Sample ID:	Q3142-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TDS	4.00	J	1	1.00	10.0	10.0	mg/L		09/19/25 15:40	SM 2540 C-20
TSS	4.00	U	1	1.00	4.00	4.00	mg/L		09/19/25 16:00	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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	09/18/25 13:13
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	09/18/25
Client Sample ID:	RW8-SP303-20250918	SDG No.:	Q3142
Lab Sample ID:	Q3142-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TDS	4.00	J	1	1.00	10.0	10.0	mg/L		09/19/25 15:40	SM 2540 C-20
TSS	4.00	U	1	1.00	4.00	4.00	mg/L		09/19/25 16:00	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.: Q3142

Project: NWIRP Bethpage 112G08005-WE13

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137243BL							
TDS	mg/L	< 5.0000	5.0000	U	1.0	10	09/19/2025
Sample ID: LB137250BL							
TSS	mg/L	1	2.0000	J	1	4	09/19/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q3142
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q3102-01
Client ID:	UAS-WAYNEDUP	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	93.2		93.1		1	0.11		09/19/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q3142
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q3142-01
Client ID:	RW8-SP100-20250918DUP	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	4.00	J	4.00	J	1	0		09/19/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q3142
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB137243

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137243BS							
TDS	mg/L	100	94.0		94	1	90-110	09/19/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q3142
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB137250

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137250BS							
TSS	mg/L	550	532		97	1	90-110	09/19/2025



SHIPPING DOCUMENTS



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax: (908) 78-8922

www.chemtech.net

Chemtech Project Number:

Q3142

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@tetratech.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
SIM

Iron, Total

TSS

TDS

1

2

3

4

5

6

7

8

9

PRESERVATIVES

COMMENTS

CHEMTECH
SAMPLE
IDPROJECT
SAMPLE IDENTIFICATIONSAMPLE
MATRIXSAMPLE
TYPE
COMP GRABSAMPLE
COLLECTION
DATE TIME

of Bottles

B

1

2

3

4

5

6

7

8

9

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

1.

RW8-SP100-20250918

GW

X

9/18/25

13:05

4

X

X

X

X

2.

RW8-SP303-20250918

GW

X

9/18/25

13:13

4

X

X

X

X

3.

4.

5.

6.

7.

8.

9.

10.

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

RELINQUISHED BY SAMPLER

DATE/TIME

RECEIVED BY

1.

9/18/25

Conditions of bottles or coolers at receipt:

☐ Compliant☐ Non Compliant☐ Cooler Temp

21°C

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

☐ Ice in Cooler?:

RELINQUISHED BY

DATE/TIME

RECEIVED BY

2.

9-18-25

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

3.

9-18-25

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.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312