

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 : Q2439

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



1) Signature Page	3
2) Case Narrative	4
2.1) SVOC-SIMGroup1- Case Narrative	4
2.2) Metals-AES- Case Narrative	6
2.3) Genchem- Case Narrative	7
3) Qualifier Page	8
4) QA Checklist	10
5) SVOC-SIMGroup1 Data	11
6) Metals-AES Data	34
7) Genchem Data	65
8) Shipping Document	74
8.1) CHAIN OF CUSTODY	75
8.2) Lab Certificate	76

1
2
3
4
5
6
7
8

Cover Page

Order ID : Q2439

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2439-01
Q2439-02

Client Sample Number

RW8-SP100-20250626
RW8-SP303-20250626

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

Signature : _____

Date: 7/5/2025

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 # Q2439

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 06/27/2025.

B. Parameters

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for RW8-SP100-20250626 [Terphenyl-d14 - 147%].,The Failure Surrogate is not Associated with DOD Parameter list,Therefore no Corrective Action was taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

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 # Q2439

Test Name: Metals Group4

A. Number of Samples and Date of Receipt:

2 Water samples were received on 06/27/2025.

B. Parameters:

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all parameters.

The Duplicate analysis met criteria for all parameters.

The Matrix Spike analysis met criteria for all parameters.

The Matrix Spike Duplicate analysis met criteria for all parameters.

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 # Q2439

Test Name: TDS,TSS

A. Number of Samples and Date of Receipt:

2 Water samples were received on 06/27/2025.

B. Parameters:

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

The Duplicate analysis met criteria for all parameters.

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 #: Q2439

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: PRATHA PARGHI

Date: 07/05/2025

LAB CHRONICLE

OrderID:	Q2439	OrderDate:	6/27/2025 11:04:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	A33

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2439-01	RW8-SP100-2025062 6	Water			06/26/25			06/27/25
			SVOC-SIMGroup1	8270-Modified		07/02/25	07/02/25	
Q2439-02	RW8-SP303-2025062 6	Water			06/26/25			06/27/25
			SVOC-SIMGroup1	8270-Modified		07/02/25	07/02/25	



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

Hit Summary Sheet SW-846

SDG No.: Q2439
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	RW8-SP100-20250626							
Q2439-01	RW8-SP100-20250626	WATER	1,4-Dioxane	0.080	J	0.07	0.2	0.2 ug/L
			Total Svoc :			0.08		
			Total Concentration:			0.08		



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/26/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/27/25
Client Sample ID:	RW8-SP100-20250626	SDG No.:	Q2439
Lab Sample ID:	Q2439-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037427.D	1	07/02/25 09:05	07/02/25 15:37	PB168695

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.080	J	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.59	*	58 - 132		147%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1720		7.56			
1146-65-2	Naphthalene-d8	3490		10.34			
15067-26-2	Acenaphthene-d10	2500		14.213			
1517-22-2	Phenanthrene-d10	5080		16.971			
1719-03-5	Chrysene-d12	5310		21.171			
1520-96-3	Perylene-d12	5820		23.357			

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:	06/26/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/27/25
Client Sample ID:	RW8-SP303-20250626	SDG No.:	Q2439
Lab Sample ID:	Q2439-02	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
BN037428.D	1	07/02/25 09:05	07/02/25 16:14	PB168695

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	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		69%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.50		58 - 132		124%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1780	7.568				
1146-65-2	Naphthalene-d8	3740	10.34				
15067-26-2	Acenaphthene-d10	2590	14.213				
1517-22-2	Phenanthrene-d10	4870	16.971				
1719-03-5	Chrysene-d12	5060	21.171				
1520-96-3	Perylene-d12	5460	23.354				

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.: Q2439

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168695BL	PB168695BL	2-Methylnaphthalene-d10	0.4	0.35	86		30	150
		Fluoranthene-d10	0.4	0.40	100		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB168695BS	PB168695BS	2-Methylnaphthalene-d10	0.4	0.47	117		30	150
		Fluoranthene-d10	0.4	0.36	89		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB168695BSD	PB168695BSD	2-Methylnaphthalene-d10	0.4	0.47	117		30	150
		Fluoranthene-d10	0.4	0.36	89		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.36	91		58	132
Q2439-01	RW8-SP100-20250626	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.59	147	*	58	132
Q2439-02	RW8-SP303-20250626	2-Methylnaphthalene-d10	0.4	0.33	82		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.28	69		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.50	124		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2439

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037429.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168695BS	1,4-Dioxane	0.4	0.32	ug/L	80				70	130	

A
B
C
D
E
F
G

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2439

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037430.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168695BSD	1,4-Dioxane	0.4	0.30	ug/L	75	6			70	130	20

A
B
C
D
E
F
G

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB168695BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2439

Lab File ID: BN037426.D

Lab Sample ID: PB168695BL

Instrument ID: BNA_N

Date Extracted: 07/02/2025

Matrix: (soil/water) Water

Date Analyzed: 07/02/2025

Level: (low/med) LOW

Time Analyzed: 15:01

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168695BS	PB168695BS	BN037429.D	07/02/2025
RW8-SP100-20250626	Q2439-01	BN037427.D	07/02/2025
RW8-SP303-20250626	Q2439-02	BN037428.D	07/02/2025
PB168695BSD	PB168695BSD	BN037430.D	07/02/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2439

SDG NO.: Q2439

Lab File ID: BN037385.D

DFTPP Injection Date: 06/26/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.3 (0.9) 1
69	Mass 69 relative abundance	100.0
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	4.9
441	Present, but less than mass 443	78.0
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	14.1 (18.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037386.D	06/26/2025	10:41
SSTDICC0.2	SSTDICC0.2	BN037387.D	06/26/2025	11:17
SSTDICCC0.4	SSTDICCC0.4	BN037388.D	06/26/2025	11:53
SSTDICC0.8	SSTDICC0.8	BN037389.D	06/26/2025	12:29
SSTDICC1.6	SSTDICC1.6	BN037390.D	06/26/2025	13:05
SSTDICC3.2	SSTDICC3.2	BN037391.D	06/26/2025	13:41
SSTDICC5.0	SSTDICC5.0	BN037392.D	06/26/2025	14:17

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q2439 SDG NO.: Q2439

Lab File ID: BN037424.D

DFTPP Injection Date: 07/02/2025

Instrument ID: BNA_N

DFTPP Injection Time: 13:22

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	100.0
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	4.7
441	Present, but less than mass 443	79.0
442	Greater than 50% of mass 198	100.0
443	15.0 - 24.0% of mass 442	14.8 (20.6) 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	BN037425.D	07/02/2025	14:04
PB168695BL	PB168695BL	BN037426.D	07/02/2025	15:01
RW8-SP100-20250626	Q2439-01	BN037427.D	07/02/2025	15:37
RW8-SP303-20250626	Q2439-02	BN037428.D	07/02/2025	16:14
PB168695BS	PB168695BS	BN037429.D	07/02/2025	16:50
PB168695BSD	PB168695BSD	BN037430.D	07/02/2025	17:27
SSTDCCC0.4EC	SSTDCCC0.4	BN037431.D	07/02/2025	18:03

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2439 SAS No.: Q2439 SDG NO.: Q2439

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 07/02/2025

Lab File ID: BN037425.D Time Analyzed: 14:04

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	2413	7.561	5075	10.34	3293	14.21
UPPER LIMIT	4826	8.061	10150	10.84	6586	14.713
LOWER LIMIT	1206.5	7.061	2537.5	9.84	1646.5	13.713
EPA SAMPLE NO.						
01 PB168695BL	2320	7.56	4227	10.34	2645	14.21
02 RW8-SP100-20250626	1716	7.56	3491	10.34	2495	14.21
03 PB168695BS	2121	7.56	4355	10.34	2709	14.21
04 PB168695BSD	1957	7.56	4090	10.34	2586	14.21
05 RW8-SP303-20250626	1779	7.57	3739	10.34	2590	14.21

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2439 SAS No.: Q2439 SDG NO.: Q2439

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 07/02/2025

Lab File ID: BN037425.D Time Analyzed: 14:04

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	6783	16.959	6416	21.162	6880	23.351
UPPER LIMIT	13566	17.459	12832	21.662	13760	23.851
LOWER LIMIT	3391.5	16.459	3208	20.662	3440	22.851
EPA SAMPLE NO.						
01 PB168695BL	4386	16.98	4580	21.18	5125	23.36
02 RW8-SP100-20250626	5083	16.97	5310	21.17	5822	23.36
03 PB168695BS	4952	16.97	4556	21.17	5045	23.35
04 PB168695BSD	4790	16.97	4441	21.17	5091	23.36
05 RW8-SP303-20250626	4873	16.97	5056	21.17	5456	23.35

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:	PB168695BL		SDG No.:	Q2439
Lab Sample ID:	PB168695BL		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
BN037426.D	1	07/02/25 09:05	07/02/25 15:01	PB168695

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	0.35		30 - 150		86%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	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	2320	7.56				
1146-65-2	Naphthalene-d8	4230	10.34				
15067-26-2	Acenaphthene-d10	2650	14.213				
1517-22-2	Phenanthrene-d10	4390	16.984				
1719-03-5	Chrysene-d12	4580	21.18				
1520-96-3	Perylene-d12	5130	23.363				

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:	PB168695BS	SDG No.:	Q2439
Lab Sample ID:	PB168695BS	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
BN037429.D	1	07/02/25 09:05	07/02/25 16:50	PB168695

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	0.47		30 - 150		117%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		89%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	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	2120	7.561				
1146-65-2	Naphthalene-d8	4360	10.34				
15067-26-2	Acenaphthene-d10	2710	14.213				
1517-22-2	Phenanthrene-d10	4950	16.971				
1719-03-5	Chrysene-d12	4560	21.171				
1520-96-3	Perylene-d12	5050	23.354				

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:	PB168695BSD		SDG No.:	Q2439	
Lab Sample ID:	PB168695BSD		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
BN037430.D	1	07/02/25 09:05	07/02/25 17:27	PB168695

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	0.47		30 - 150		117%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		89%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		91%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1960	7.56				
1146-65-2	Naphthalene-d8	4090	10.34				
15067-26-2	Acenaphthene-d10	2590	14.213				
1517-22-2	Phenanthrene-d10	4790	16.971				
1719-03-5	Chrysene-d12	4440	21.171				
1520-96-3	Perylene-d12	5090	23.357				

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-BN062625.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Jun 26 16:06:33 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN037386.D 0.2 =BN037387.D 0.4 =BN037388.D 0.8 =BN037389.D 1.6 =BN037390.D 3.2 =BN037391.D 5 =BN037392.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	0.470	0.369	0.366	0.377	0.363	0.331	0.379	12.38	
3)	n-Nitrosodimet...	0.377	0.374	0.366	0.385	0.374	0.371	0.375	1.73	
4) S	2-Fluorophenol	0.771	0.778	0.804	0.697	0.754	0.773	0.818	0.771	5.09
5) S	Phenol-d6	0.663	0.706	0.812	0.737	0.839	0.886	0.951	0.799	12.86
6)	bis(2-Chloroet...	0.574	0.661	0.718	0.694	0.765	0.775	0.790	0.711	10.74
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.270	0.281	0.311	0.296	0.345	0.353	0.389	0.321	13.45
9)	Naphthalene	1.042	1.001	0.999	0.972	1.048	1.050	1.096	1.030	4.06
10)	Hexachlorobuta...	0.407	0.410	0.413	0.400	0.422	0.404	0.405	0.409	1.74
11) SURR	2-Methylnaphth...	0.532	0.567	0.576	0.568	0.628	0.656	0.807	0.619	14.98
12)	2-Methylnaphth...	0.635	0.665	0.684	0.662	0.746	0.767	0.803	0.709	8.89
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.194	0.207	0.239	0.225	0.251	0.256	0.271	0.235	11.68
15) S	2-Fluorobiphenyl	1.548	1.656	1.723	1.652	1.798	1.801	1.910	1.727	6.95
16)	Acenaphthylene	1.585	1.600	1.576	1.538	1.714	1.741	1.858	1.659	6.95
17)	Acenaphthene	1.030	1.027	1.045	1.009	1.123	1.147	1.203	1.083	6.85
18)	Fluorene	1.444	1.417	1.476	1.420	1.603	1.643	1.706	1.530	7.74
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.084	0.085	0.087	0.113	0.119	0.128	0.103	19.13	
21)	4-Bromophenyl-...	0.264	0.253	0.270	0.269	0.303	0.302	0.316	0.282	8.58
22)	Hexachlorobenzene	0.310	0.299	0.302	0.291	0.311	0.301	0.311	0.303	2.45
23)	Atrazine	0.200	0.208	0.213	0.204	0.232	0.242	0.266	0.224	10.81
24)	Pentachlorophenol	0.164	0.155	0.148	0.165	0.165	0.168	0.183	0.164	7.30
25)	Phenanthrene	1.056	1.067	1.080	1.038	1.172	1.190	1.287	1.127	8.12
26)	Anthracene	0.935	0.972	0.969	0.959	1.076	1.120	1.222	1.036	10.28
27) SURR	Fluoranthene-d10	1.073	1.137	1.063	1.028	1.121	1.154	1.447	1.146	12.22
28)	Fluoranthene	1.377	1.398	1.362	1.320	1.487	1.507	1.624	1.439	7.32
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.459	1.449	1.534	1.431	1.561	1.550	1.612	1.514	4.47
31) S	Terphenyl-d14	0.800	0.794	0.868	0.796	0.878	0.892	0.943	0.853	6.77
32)	Benzo(a)anthra...	1.149	1.202	1.167	1.152	1.318	1.364	1.446	1.257	9.46
33)	Chrysene	1.630	1.573	1.583	1.491	1.554	1.510	1.551	1.556	2.98
34)	Bis(2-ethylhex...	0.509	0.504	0.466	0.481	0.488	0.537	0.498	5.00	
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN062625.M

36)	Indeno(1,2,3-c...	1.487	1.515	1.577	1.620	1.786	1.853	1.967	1.686	10.88
37)	Benzo(b)fluora...	1.329	1.305	1.318	1.320	1.464	1.504	1.632	1.410	8.93
38)	Benzo(k)fluora...	1.408	1.389	1.462	1.430	1.552	1.613	1.697	1.507	7.73
39) C	Benzo(a)pyrene	1.211	1.160	1.183	1.174	1.286	1.341	1.426	1.254	8.01
40)	Dibenzo(a,h)an...	1.050	1.138	1.211	1.229	1.394	1.485	1.561	1.296	14.53
41)	Benzo(g,h,i)pe...	1.425	1.473	1.477	1.462	1.617	1.658	1.725	1.548	7.51

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2439 SAS No.: Q2439 SDG No.: Q2439

Instrument ID: BNA_N Calibration Date/Time: 07/02/2025 14:04

Lab File ID: BN037425.D Init. Calib. Date(s): 06/26/2025 06/26/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 10:41 14:17

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.585		-5.5	20.0
Fluoranthene-d10	1.146	1.072		-6.5	20.0
2-Fluorophenol	0.771	0.839		8.8	20.0
Phenol-d6	0.799	0.809		1.3	20.0
Nitrobenzene-d5	0.321	0.308		-4.1	20.0
2-Fluorobiphenyl	1.727	1.734		0.4	20.0
2,4,6-Tribromophenol	0.235	0.224		-4.7	20.0
Terphenyl-d14	0.853	0.850		-0.4	20.0
1,4-Dioxane	0.379	0.395		4.2	20.0

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q2439 SAS No.: Q2439 SDG No.: Q2439

Instrument ID: BNA_N Calibration Date/Time: 07/02/2025 18:03

Lab File ID: BN037431.D Init. Calib. Date(s): 06/26/2025 06/26/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 10:41 14:17

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.619	0.589		-4.8	50.0
Fluoranthene-d10	1.146	1.130		-1.4	50.0
2-Fluorophenol	0.771	0.806		4.5	50.0
Phenol-d6	0.799	0.763		-4.5	50.0
Nitrobenzene-d5	0.321	0.298		-7.2	50.0
2-Fluorobiphenyl	1.727	1.660		-3.9	50.0
2,4,6-Tribromophenol	0.235	0.230		-2.1	50.0
Terphenyl-d14	0.853	0.851		-0.2	50.0
1,4-Dioxane	0.379	0.423		11.6	50.0

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

OrderID:	Q2439	OrderDate:	6/27/2025 11:04:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	A33

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2439-01	RW8-SP100-2025062 6	Water			06/26/25			06/27/25
			Metals Group4	6010D		06/30/25	07/01/25	
Q2439-02	RW8-SP303-2025062 6	Water			06/26/25			06/27/25
			Metals Group4	6010D		06/30/25	07/01/25	

Hit Summary Sheet
SW-846

SDG No.:	Q2439	Order ID:	Q2439
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-SP100-20250626								
Q2439-01	RW8-SP100-20250626	Water	Iron	824		11.7	40.0	50.0	ug/L
Client ID :	RW8-SP303-20250626								
Q2439-02	RW8-SP303-20250626	Water	Iron	89.4		11.7	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/26/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/27/25
Client Sample ID:	RW8-SP100-20250626	SDG No.:	Q2439
Lab Sample ID:	Q2439-01	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	824		1	11.7	40.0	50.0	ug/L	06/30/25 10:05	07/01/25 20:56	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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/26/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/27/25
Client Sample ID:	RW8-SP303-20250626	SDG No.:	Q2439
Lab Sample ID:	Q2439-02	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	89.4		1	11.7	40.0	50.0	ug/L	06/30/25 10:05	07/01/25 21:00	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.:** Q2439

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439

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	3700	4000	93	90 - 110	P	07/01/2025	16:17	LB136345

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2439

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439

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	107	100	107	80 - 120	P	07/01/2025	16:31	LB136345

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: Q2439

Contract: TETR06 Lab Code: CHEM Case No.: Q2439 SAS No.: Q2439

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	5170	5000	103	90 - 110	P	07/01/2025	17:07	LB136345
CCV02	Iron	4920	5000	98	90 - 110	P	07/01/2025	18:37	LB136345
CCV03	Iron	4790	5000	96	90 - 110	P	07/01/2025	19:33	LB136345
CCV04	Iron	4960	5000	99	90 - 110	P	07/01/2025	20:43	LB136345
CCV05	Iron	4750	5000	95	90 - 110	P	07/01/2025	21:26	LB136345
CCV06	Iron	4770	5000	96	90 - 110	P	07/01/2025	21:45	LB136345



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.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439
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	104	100	104	65 - 135	P	07/01/2025	16:41	LB136345



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.:	Q2439				
Contract:	TETR06	Lab Code:	CHEM	Case No.:	Q2439	SAS No.:	Q2439			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	16:37	LB136345

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	17:12	LB136345
CCB02	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	18:41	LB136345
CCB03	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	19:37	LB136345
CCB04	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	20:47	LB136345
CCB05	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	21:31	LB136345
CCB06	Iron	23.4	+/-50	U	80.0	100	P	07/01/2025	21:49	LB136345

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q2439

Instrument: P5

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168661BL		WATER		Batch Number:		PB168661		Prep Date:	06/30/2025	
	Iron	11.7	<25	U	40.0	50.0	P	07/01/2025	21:41	LB136345

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>Tetra Tech NUS, Inc.</u>	SDG No.: <u>Q2439</u>
Contract: <u>TETR06</u> Lab Code: <u>CHEM</u>	Case No.: <u>Q2439</u> SAS No.: <u>Q2439</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P5</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	91600	100000	92	85600	116500	07/01/2025	16:50	LB136345
ICSAB01	Iron	94600	99000	96	84400	114500	07/01/2025	16:54	LB136345



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client:	<u>Tetra Tech NUS, Inc.</u>	level:	<u>low</u>	sdg no.:	<u>Q2439</u>		
contract:	<u>TETR06</u>	lab code:	<u>CHEM</u>	case no.:	<u>Q2439</u>	sas no.:	<u>Q2439</u>
matrix:	<u>Water</u>	sample id:	<u>Q2439-02</u>	client id:	<u>RW8-SP303-20250626MS</u>		
Percent Solids for Sample:	NA	Spiked ID:	Q2439-02MS	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	1690		89.4		1500	107		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Tetra Tech NUS, Inc.</u>	level: <u>low</u>	sdg no.: <u>Q2439</u>
contract: <u>TETR06</u>	lab code: <u>CHEM</u>	case no.: <u>Q2439</u> sas no.: <u>Q2439</u>
matrix: <u>Water</u>	sample id: <u>Q2439-02</u>	client id: <u>RW8-SP303-20250626MSD</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q2439-02MSD</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	87 - 115	1560		89.4		1500	98		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc.

SDG No.: Q2439

Contract: TETR06

Lab Code: CHEM

Case No.: Q2439

SAS No.: Q2439

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>Q2439</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2439</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2439-02</u>	Client ID:	<u>RW8-SP303-20250626DUP</u>
Percent Solids for Sample:	<u>NA</u>	Duplicate ID	<u>Q2439-02DUP</u>	Percent Solids for Spike Sample:	<u>NA</u>

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	89.4		84.8		5		P

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

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439
Matrix: Water **Sample ID:** Q2439-02MS **Client ID:** RW8-SP303-20250626MSD
Percent Solids for Sample: NA **Duplicate ID** Q2439-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1690		1560		8		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.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168661BS Iron	ug/L	1500	1650		110	87 - 115	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

RW8-SP303-20250626L

Lab Name: Chemtech Consulting Group **Contract:** TETR06
Lab Code: CHEM **Lb No.:** lb136345 **Lab Sample ID :** Q2439-02L **SDG No.:** Q2439
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	89.4	88.5 J	1		P



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439
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

A

B

C

D

E

F

G

H

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2439

Contract: TETR06

Lab Code: CHEM

Case No.: Q2439

SAS No.: Q2439

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	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2439

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439

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	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439
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	0.0000000	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2439
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2439 **SAS No.:** Q2439
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

A

B

C

D

E

F

G

H



METAL PREPARATION & ANALYICAL SUMMARY

Metals
- 13 -

SAMPLE PREPARATION SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q2439</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2439</u>
		SAS No.:	<u>Q2439</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168661							
PB168661BL	PB168661BL	MB	WATER	06/30/2025	50.0	25.0	
PB168661BS	PB168661BS	LCS	WATER	06/30/2025	50.0	25.0	
Q2439-01	RW8-SP100-20250626	SAM	WATER	06/30/2025	50.0	25.0	
Q2439-02	RW8-SP303-20250626	SAM	WATER	06/30/2025	50.0	25.0	
Q2439-02DUP	RW8-SP303-20250626DUP	DUP	WATER	06/30/2025	50.0	25.0	
Q2439-02MS	RW8-SP303-20250626MS	MS	WATER	06/30/2025	50.0	25.0	
Q2439-02MSD	RW8-SP303-20250626MSD	MSD	WATER	06/30/2025	50.0	25.0	

metals
- 14 -
ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q2439 **Sas no.:** Q2439 **Sdg no.:** Q2439

Instrument id number: **Method:** **Run number:** LB136345

Start date: 07/01/2025 **End date:** 07/01/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1528	Fe
S1	S1	1	1533	Fe
S2	S2	1	1537	Fe
S3	S3	1	1542	Fe
S4	S4	1	1546	Fe
S5	S5	1	1550	Fe
ICV01	ICV01	1	1617	Fe
LLICV01	LLICV01	1	1631	Fe
ICB01	ICB01	1	1637	Fe
CRI01	CRI01	1	1641	Fe
ICSA01	ICSA01	1	1650	Fe
ICSAB01	ICSAB01	1	1654	Fe
CCV01	CCV01	1	1707	Fe
CCB01	CCB01	1	1712	Fe
PB168661BS	PB168661BS	1	1811	Fe
CCV02	CCV02	1	1837	Fe
CCB02	CCB02	1	1841	Fe
CCV03	CCV03	1	1933	Fe
CCB03	CCB03	1	1937	Fe
CCV04	CCV04	1	2043	Fe
CCB04	CCB04	1	2047	Fe
Q2439-01	RW8-SP100-20250626	1	2056	Fe
Q2439-02	RW8-SP303-20250626	1	2100	Fe
Q2439-02DUP	RW8-SP303-20250626DUP	1	2105	Fe
Q2439-02L	RW8-SP303-20250626L	5	2109	Fe
Q2439-02MS	RW8-SP303-20250626MS	1	2113	Fe
Q2439-02MSD	RW8-SP303-20250626MSD	1	2118	Fe
CCV05	CCV05	1	2126	Fe
CCB05	CCB05	1	2131	Fe
PB168661BL	PB168661BL	1	2141	Fe
CCV06	CCV06	1	2145	Fe
CCB06	CCB06	1	2149	Fe

LAB CHRONICLE

OrderID:	Q2439	OrderDate:	6/27/2025 11:04:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	A33

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2439-02	RW8-SP303-2025062 6	WATER			06/26/25 13:13			06/27/25
			TDS	SM2540 C			06/27/25 16:30	
			TSS	SM2540 D			07/02/25 09:30	



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/26/25 13:13
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/27/25
Client Sample ID:	RW8-SP303-20250626	SDG No.:	Q2439
Lab Sample ID:	Q2439-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TDS	3.00	J	1	1.00	10.0	10.0	mg/L		06/27/25 16:30	SM 2540 C-20
TSS	4.00	U	1	1.00	4.00	4.00	mg/L		07/02/25 09:30	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.: Q2439

Project: NWIRP Bethpage 112G08005-WE13

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136318BL							
TDS	mg/L	< 5.0000	5.0000	U	1.0	10	06/27/2025
Sample ID: LB136346BL							
TSS	mg/L	1	2.0000	J	1	4	07/02/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2439
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2439-02
Client ID:	RW8-SP303-20250626DUP	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	3.00	J	3.00	J	1	0		06/27/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2439
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2463-01
Client ID:	TW-WTS-11DUP	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	120		120		1	0.25		07/02/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2439
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136318

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136318BS							
TDS	mg/L	100	95.0		95	1	90-110	06/27/2025

Laboratory Control Sample Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2439

Project: NWIRP Bethpage 112G08005-WE13

Run No.: LB136346

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136346BS							
TSS	mg/L	550	532		97	1	90-110	07/02/2025



SHIPPING DOCUMENTS

75 of 76

Laboratory Certification

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