

ANALYTICAL RESULTS SUMMARY

GENERAL CHEMISTRY

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 : Q2695

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2695

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2695-01

Client Sample Number

RW5-SP100-20250724

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

Signature :

APPROVED

By Sohil Jodhani, QA/QC Director at 11:52 am, Jul 30, 2025

Date: 7/30/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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 # Q2695

Test Name: Anions Group4

A. Number of Samples and Date of Receipt:

1 Water sample was received on 07/25/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Anions Group4. This data package contains results for Anions Group4.

C. Analytical Techniques:

The analysis of Anions Group4 was based on method 300.0.

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.

E. Additional Comments:

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

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

Signature

APPROVED

By Sohil Jodhani, QA/QC Director at 11:52 am, Jul 30, 2025

DATA REPORTING QUALIFIERS- INORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2695

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 07/30/2025

LAB CHRONICLE

OrderID:	Q2695	OrderDate:	7/25/2025 10:40:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2695-01	RW5-SP100-2025072 4	WATER	Anions Group4	300.0	07/24/25 10:45		07/25/25 13:16	07/25/25



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/24/25 10:45
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/25/25
Client Sample ID:	RW5-SP100-20250724	SDG No.:	Q2695
Lab Sample ID:	Q2695-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Nitrite	0.30	U	1	0.074	0.30	0.60	mg/L		07/25/25 13:16	300.0
Nitrate	3.90		1	0.095	0.25	0.50	mg/L		07/25/25 13:16	300.0
Nitrate+Nitrite	3.90		1	0.17	0.55	1.10	mg/L		07/25/25 13:16	300.0

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

Initial and Continuing Calibration Verification

Client: Tetra Tech NUS, Inc.

SDG No.: Q2695

Project: NWIRP Bethpage 112G08005-WE13

RunNo.: LB136635

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	9.5	10	95	90-110	07/21/2025
Chloride	mg/L	2.8	3	93	90-110	07/21/2025
Fluoride	mg/L	1.9	2	95	90-110	07/21/2025
Nitrite	mg/L	2.8	3	93	90-110	07/21/2025
Nitrate	mg/L	2.3	2.5	92	90-110	07/21/2025
Sulfate	mg/L	14.2	15	95	90-110	07/21/2025
Orthophosphate as P	mg/L	4.8	5	96	90-110	07/21/2025
Sample ID: CCV1						
Bromide	mg/L	10.1	10	101	90-110	07/25/2025
Chloride	mg/L	3.1	3	103	90-110	07/25/2025
Fluoride	mg/L	2	2	100	90-110	07/25/2025
Nitrite	mg/L	3	3	100	90-110	07/25/2025
Nitrate	mg/L	2.5	2.5	100	90-110	07/25/2025
Sulfate	mg/L	14.9	15	99	90-110	07/25/2025
Orthophosphate as P	mg/L	5	5	100	90-110	07/25/2025
Sample ID: CCV2						
Bromide	mg/L	10.2	10	102	90-110	07/25/2025
Chloride	mg/L	3.1	3	103	90-110	07/25/2025
Fluoride	mg/L	2	2	100	90-110	07/25/2025
Nitrite	mg/L	3	3	100	90-110	07/25/2025
Nitrate	mg/L	2.5	2.5	100	90-110	07/25/2025
Sulfate	mg/L	15.1	15	101	90-110	07/25/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	07/25/2025
Sample ID: CCV3						
Bromide	mg/L	10.2	10	102	90-110	07/25/2025
Chloride	mg/L	3.1	3	103	90-110	07/25/2025
Fluoride	mg/L	2	2	100	90-110	07/25/2025
Nitrite	mg/L	3	3	100	90-110	07/25/2025
Nitrate	mg/L	2.5	2.5	100	90-110	07/25/2025
Sulfate	mg/L	15	15	100	90-110	07/25/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	07/25/2025

Initial and Continuing Calibration Blank Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2695

Project: NWIRP Bethpage 112G08005-WE13

RunNo.: LB136635

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/21/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/21/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/21/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/21/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/21/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/21/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/21/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025

Preparation Blank Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2695

Project: NWIRP Bethpage 112G08005-WE13

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136635BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	07/25/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	07/25/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	07/25/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	07/25/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	07/25/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	07/25/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	07/25/2025

A

B

C

D

Matrix Spike Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2695
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2695-01
Client ID:	RW5-SP100-20250724MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.1		0.37	U	10	1	101		07/25/2025
Chloride	mg/L	80-120	13.4	OR	10.8	OR	3	1	87		07/25/2025
Fluoride	mg/L	80-120	2.00		0.11	U	2	1	100		07/25/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		07/25/2025
Nitrate	mg/L	80-120	6.30	OR	3.90		2.5	1	96		07/25/2025
Sulfate	mg/L	80-120	16.9		2.60	J	15	1	95		07/25/2025
Orthophosphate as P	mg/L	80-120	5.10		0.34	U	5	1	102		07/25/2025

Matrix Spike Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2695
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2695-01
Client ID:	RW5-SP100-20250724MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.0		0.37	U	10	1	100		07/25/2025
Chloride	mg/L	80-120	13.4	OR	10.8	OR	3	1	87		07/25/2025
Fluoride	mg/L	80-120	2.00		0.11	U	2	1	100		07/25/2025
Nitrite	mg/L	80-120	2.90		0.074	U	3	1	97		07/25/2025
Nitrate	mg/L	80-120	6.30	OR	3.90		2.5	1	96		07/25/2025
Sulfate	mg/L	80-120	16.7		2.60	J	15	1	94		07/25/2025
Orthophosphate as P	mg/L	80-120	5.00		0.34	U	5	1	100		07/25/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2695
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2695-01
Client ID:	RW5-SP100-20250724MSD	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
Fluoride	mg/L	+/-20	2.00		2.00		1	0		07/25/2025
Chloride	mg/L	+/-20	13.4	OR	13.4	OR	1	0		07/25/2025
Nitrate	mg/L	+/-20	6.30	OR	6.30	OR	1	0		07/25/2025
Bromide	mg/L	+/-20	10.1		10.0		1	1		07/25/2025
Sulfate	mg/L	+/-20	16.9		16.7		1	1		07/25/2025
Orthophosphate as P	mg/L	+/-20	5.10		5.00		1	2		07/25/2025
Nitrite	mg/L	+/-20	3.00		2.90		1	3		07/25/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2695
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136635

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136635BSW							
Bromide	mg/L	10	10.2		102	1	90-110	07/25/2025
Chloride	mg/L	3	3.10		103	1	90-110	07/25/2025
Fluoride	mg/L	2	2.00		100	1	90-110	07/25/2025
Nitrite	mg/L	3	3.00		100	1	90-110	07/25/2025
Nitrate	mg/L	2.5	2.50		100	1	90-110	07/25/2025
Sulfate	mg/L	15	15.0		100	1	90-110	07/25/2025
Orthophosphate as P	mg/L	5	5.10		102	1	90-110	07/25/2025



SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number:

Q2695

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 Beirpage
PROJECT #: 112G08005-WE13 LOCATION: RW5B
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:

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USERA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other
☐ EDD Format

ANALYSIS

Nitrates, Nitrites
1 2 3 4 5 6 7 8 9

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID PROJECT SAMPLE IDENTIFICATION SAMPLE MATRIX SAMPLE TYPE SAMPLE COLLECTION DATE TIME # of Bottles
1. RW5-SP100-20250724 GW X 7/24/25 10:45 1 X
2.
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 DATE/TIME
1. *Uth* 7/21/25 1. *Uth*
RELINQUISHED BY DATE/TIME RECEIVED BY DATE/TIME
2. 7/25/25 2. *Uth*
RELINQUISHED BY DATE/TIME RECEIVED FOR LAB BY DATE/TIME
3. 3. *Uth*

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4oz. Jar for percent solid
Comments:

Page 1 of 1 SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight
WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Shipment Complete
☐ YES ☐ NO

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