

DATA PACKAGE 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 : Q2937

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



1) GENERAL CHEMISTRY DATA	2
2) Signature Page	3
3) Case Narrative	4
4) Qualifier Page	5
5) Conformance/Non Conformance	6
6) QA Checklist	7
7) Chronicle	8
8) Sample Data	9
8.1) RW8-SP303-20250821	10
9) QC Data Summary For Genchem	11
9.1) Preparation Blank Summary	12
9.2) Duplicate Sample Summary	13
9.3) Laboratory Control Sample Summary	15
10) GENCHEM RAW DATA	17
10.1) GENCHEM RAW DATA - ANALYTICAL	18
10.1.1) LB136926	18
10.1.2) LB136966	20
11) Analytical Runlogs	22
12) Standard Prep Logs	24
13) Shipping Document	26
13.1) Chain Of Custody	27
13.2) Lab Certificate	28

1
2
3
4
5
6
7
8
9
10
11
12
13

Cover Page

Order ID : Q2937

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2937-01
Q2937-02

Client Sample Number

RW8-SP100-20250821
RW8-SP303-20250821

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

Signature : _____

Date: 8/27/2025

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 # Q2937

Test Name: TDS,TSS

A. Number of Samples and Date of Receipt:

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

B. Parameters:

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

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

The Calibration met the requirements.

E. Additional Comments:

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

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

Signature_____

DATA REPORTING QUALIFIERS- INORGANIC

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

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

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q2937

MATRIX: Water

METHOD: SM2540 C,SM2540 D

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2. The Blank Spike met requirements for all compounds.			✓
3. Sample Duplicate Analysis Met QC Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
4. Digestion Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

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

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2937

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 08/27/2025

LAB CHRONICLE

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

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



SAMPLE DATA

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Report of Analysis

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

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

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits



QC RESULT SUMMARY

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Preparation Blank Summary

Client: Tetra Tech NUS, Inc.

SDG No.: Q2937

Project: NWIRP Bethpage 112G08005-WE13

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

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2937
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2937-02
Client ID:	RW8-SP303-20250821DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TDS	mg/L	+/-5	5.00	J	5.00	J	1	0		08/22/2025

Duplicate Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2937
Project:	NWIRP Bethpage 112G08005-WE13	Sample ID:	Q2940-01
Client ID:	COMP(1-6)DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TSS	mg/L	+/-5	80.3		80.4		1	0.12		08/26/2025

Laboratory Control Sample Summary

Client:	Tetra Tech NUS, Inc.	SDG No.:	Q2937
Project:	NWIRP Bethpage 112G08005-WE13	Run No.:	LB136926

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

Laboratory Control Sample Summary

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

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



RAW DATA

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TOTAL Dissolved Solids - SM2540C

Run Number: LB136926

Date: 08/25/2025

SUPERVISOR: rubina

ANALYST: jignesh

BalanceID: WC-SC-6

Filter ID: 17416528

EMPTY DISH				EMPTY DISH				OvenID:	WC OVEN-1	Thermo ID:	WET OVEN#1
TEMP IN:	104 °C	08/22/2025	11:00	TEMP OUT:	104 °C	08/22/2025	12:00				
TEMP1 IN:	103 °C	08/22/2025	12:30	TEMP1 OUT:	103 °C	08/22/2025	13:30	OvenID1:	WC OVEN-1	Thermo ID1:	WET OVEN#1
TEMP2 IN:	103 °C	08/22/2025	15:30	TEMP2 OUT:	103 °C	08/25/2025	08:00	OvenID2:	WC OVEN-2	Thermo ID2:	WET OVEN#2
TEMP3 IN:	180 °C	08/25/2025	09:30	TEMP3 OUT:	180 °C	08/25/2025	10:30	OvenID3:	WC OVEN-2	Thermo ID3:	WET OVEN#2

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @180(±2) °C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @180(±2) °C (g)	Final Empty Dish+Sample weight after 1.5hr drying @180(±2) °C (g)	Weight (g)	Result mg/L
1	LB136926BL	LB136926BL	856.3417	856.3417	100	856.3418	856.3418	856.3418	0.0001	1
2	LB136926BS	LB136926BS	102.3557	102.3557	100	102.3652	102.3652	102.3652	0.0095	95
3	Q2937-02	RW8-SP303-20250821	106.1541	106.1541	100	106.1546	106.1546	106.1546	0.0005	5
4	Q2937-02DUP	RW8-SP303-20250821DUP	110.2335	110.2335	100	110.2340	110.2340	110.2340	0.0005	5

A = Sample Volume (ml)

B = Empty Dish Weight (g)

C = 2nd Empty Dish + Sample weight after 1.5 hr drying @180(±2) °C(g)

D = Weight (g)

$$\text{Weight (g)} = C - B$$

$$\text{Result mg/L} = \frac{D}{A} * 1000 * 1000$$

WORKLIST(Hardcopy Internal Chain)

VB136926

WorkList Name : TDS Q2937 WorkList ID : 191420 Department : Wet-Chemistry Date : 08-22-2025 10:21:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2937-02	B RW8-SP303-20250821	Water	TDS	Cool 4 deg C	TETR06	J31	08/21/2025	SM2540 C

Date/Time 08/22/25 12:30
Raw Sample Received by: LB wdg
Raw Sample Relinquished by: RS (Ext-606)

Date/Time 08/22/25 16:00
Raw Sample Received by: RS (Ext-606)
Raw Sample Relinquished by: LB wdg

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TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: rubina

ANALYST: jignesh

Date: 08/26/2025

Run Number: LB136966

BalanceID: WC-SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 104 °C 08/26/2025 08:00 TEMP1 OUT: 103 °C 08/26/2025 09:00
 TEMP2 IN: 104 °C 08/26/2025 09:30 TEMP2 OUT: 103 °C 08/26/2025 10:30
 TEMP3 IN: 104 °C 08/26/2025 13:00 TEMP3 OUT: 103 °C 08/26/2025 14:30
 TEMP4 IN: 104 °C 08/26/2025 15:00 TEMP4 OUT: 103 °C 08/26/2025 16:30

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
1	LB136966BL	LB136966BL	1.4856	1.4856	100	1.4857	1.4857	1.4857	0.0001	1
2	LB136966BS	LB136966BS	1.5963	1.5963	100	1.6495	1.6495	1.6495	0.0532	532
3	Q2935-01	EFFLUENT	1.5012	1.5012	20	1.5631	1.5631	1.5631	0.0619	3095
4	Q2935-04	AERATION	1.4914	1.4914	20	1.5686	1.5686	1.5686	0.0772	3860
5	Q2937-02	RW8-SP303-20250821	1.4998	1.4998	1800	1.5008	1.5008	1.5008	0.0010	0.6
6	Q2940-01	COMP (1-6)	1.4828	1.4828	1000	1.5631	1.5631	1.5631	0.0803	80.3
7	Q2940-01DUP	COMP (1-6) DUP	1.4903	1.4903	1000	1.5707	1.5707	1.5707	0.0804	80.4
8	Q2954-11	BRIDGE	1.4847	1.4847	1000	1.5689	1.5689	1.5689	0.0842	84.2

A = Sample Volume (ml)
 B = Final Empty Dish Weight (g)
 C = Final Empty Dish + Sample weight after 1.5 hr drying @105°C(g)
 D = Weight (g)

Weight (g) = C - B

Result mg/L = $\frac{D}{A} \times 1000 \times 1000$

WORKLIST(Hardcopy Internal Chain)

W136966

WorkList Name : TSS Q2940 WorkList ID : 191497 Department : Wet-Chemistry Date : 08-26-2025 11:19:07

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2935-01	D EFFLUENT	Water	TSS	Cool 4 deg C	HOLL01	D31	08/21/2025	SM2540 D
Q2935-04	AERATION	Water	TSS	Cool 4 deg C	HOLL01	D31	08/21/2025	SM2540 D
Q2937-02	B,C RW8-SP303-20250821	Water	TSS	Cool 4 deg C	TETR06	J31	08/21/2025	SM2540 D
Q2940-01	K,L COMP(1-6)	Water	TSS	Cool 4 deg C	PSEG03	D21	08/22/2025	SM2540 D
Q2954-11	H BRIDGE	Water	TSS	Cool 4 deg C	PSEG03	D41	08/25/2025	SM2540 D

Date/Time 08/26/25 11:30
Raw Sample Received by: JD Wey
Raw Sample Relinquished by: JD CSM

Date/Time 08/26/25 17:00
Raw Sample Received by: JD CSM
Raw Sample Relinquished by: JD CSM

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136926

Review By	jignesh	Review On	8/25/2025 10:25:02 AM
Supervise By	rubina	Supervise On	8/25/2025 11:49:18 AM
SubDirectory	LB136926	Test	TDS
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136926BL	LB136926BL	MB	08/22/25 12:30		jignesh	OK
2	LB136926BS	LB136926BS	LCS	08/22/25 12:30		jignesh	OK
3	Q2937-02	RW8-SP303-2025082	SAM	08/22/25 12:30		jignesh	OK
4	Q2937-02DUP	RW8-SP303-2025082	DUP	08/22/25 12:30		jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136966

Review By	jignesh	Review On	8/26/2025 3:13:56 PM
Supervise By	rubina	Supervise On	8/26/2025 3:37:42 PM
SubDirectory	LB136966	Test	TSS
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136966BL	LB136966BL	MB	08/26/25 13:00		jignesh	OK
2	LB136966BS	LB136966BS	LCS	08/26/25 13:00		jignesh	OK
3	Q2935-01	EFFLUENT	SAM	08/26/25 13:00		jignesh	OK
4	Q2935-04	AERATION	SAM	08/26/25 13:00		jignesh	OK
5	Q2937-02	RW8-SP303-2025082	SAM	08/26/25 13:00		jignesh	OK
6	Q2940-01	COMP(1-6)	SAM	08/26/25 13:00		jignesh	OK
7	Q2940-01DUP	COMP(1-6)DUP	DUP	08/26/25 13:00		jignesh	OK
8	Q2954-11	BRIDGE	SAM	08/26/25 13:00		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2937

Test : TDS,TSS

Prepbatch ID :

Sequence ID/Qc Batch ID: LB136926, LB136966,

Standard ID :

Chemical ID :

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
				/	/	



SHIPPING DOCUMENTS

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Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312