

LAB CHRONICLE

OrderID:	Q2316	OrderDate:	6/12/2025 3:59:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2316-01	RW8-SP100-2025061 2	Water			06/12/25			06/12/25
			Metals Group4	6010D		06/13/25	06/17/25	
Q2316-02	RW8-SP303-2025061 2	Water			06/12/25			06/12/25
			Metals Group4	6010D		06/13/25	06/17/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q2316

Order ID: Q2316

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-SP100-20250612									
Q2316-01	RW8-SP100-20250612	Water	Iron	953		11.7	40.0	50.0	ug/L
Client ID : RW8-SP303-20250612									
Q2316-02	RW8-SP303-20250612	Water	Iron	43.3	J	11.7	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/12/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/12/25
Client Sample ID:	RW8-SP100-20250612	SDG No.:	Q2316
Lab Sample ID:	Q2316-01	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	953		1	11.7	40.0	50.0	ug/L	06/13/25 11:35	06/17/25 19:47	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:	06/12/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/12/25
Client Sample ID:	RW8-SP303-20250612	SDG No.:	Q2316
Lab Sample ID:	Q2316-02	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	43.3	J	1	11.7	40.0	50.0	ug/L	06/13/25 11:35	06/17/25 19:51	6010D	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group4			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits



METAL CALIBRATION DATA

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316
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	06/17/2025	12:25	LB136187

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316
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	110	100	110	80 - 120	P	06/17/2025	12:41	LB136187

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316

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	4850	5000	97	90 - 110	P	06/17/2025	13:40	LB136187
CCV02	Iron	4990	5000	100	90 - 110	P	06/17/2025	14:43	LB136187
CCV03	Iron	4870	5000	97	90 - 110	P	06/17/2025	15:38	LB136187
CCV04	Iron	4980	5000	100	90 - 110	P	06/17/2025	16:30	LB136187
CCV05	Iron	4900	5000	98	90 - 110	P	06/17/2025	17:37	LB136187
CCV06	Iron	4900	5000	98	90 - 110	P	06/17/2025	18:38	LB136187
CCV07	Iron	4900	5000	98	90 - 110	P	06/17/2025	19:25	LB136187
CCV08	Iron	4770	5000	95	90 - 110	P	06/17/2025	20:17	LB136187



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Fax : 908 789 8922

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316
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	103	100	103	65 - 135	P	06/17/2025	12:50	LB136187



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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Tetra Tech NUS, Inc.				SDG No.:	Q2316				
Contract:	TETR06	Lab Code:	CHEM	Case No.:	Q2316	SAS No.:	Q2316			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	38.5	+/-50	J	80.0	100	P	06/17/2025	12:46	LB136187

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316

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	06/17/2025	13:48	LB136187
CCB02	Iron	23.4	+/-50	U	80.0	100	P	06/17/2025	14:50	LB136187
CCB03	Iron	27.5	+/-50	J	80.0	100	P	06/17/2025	15:42	LB136187
CCB04	Iron	23.4	+/-50	U	80.0	100	P	06/17/2025	16:34	LB136187
CCB05	Iron	23.4	+/-50	U	80.0	100	P	06/17/2025	17:41	LB136187
CCB06	Iron	23.4	+/-50	U	80.0	100	P	06/17/2025	18:42	LB136187
CCB07	Iron	27.8	+/-50	J	80.0	100	P	06/17/2025	19:30	LB136187
CCB08	Iron	41.7	+/-50	J	80.0	100	P	06/17/2025	20:22	LB136187

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q2316

Instrument: P5

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168475BL		WATER		Batch Number:		PB168475		Prep Date:	06/13/2025	
	Iron	11.7	<25	U	40.0	50.0	P	06/17/2025	17:10	LB136187

Metals

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INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316
ICS Source: EPA **Instrument ID:** P5

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	100000	103	85600	116500	06/17/2025	13:11	LB136187
ICSAB01	Iron	104000	99000	105	84400	114500	06/17/2025	13:22	LB136187



METAL QC DATA



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Fax : 908 789 8922

metals
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MATRIX SPIKE SUMMARY

client:

Tetra Tech NUS, Inc.

level:

low

sdg no.:

Q2316

contract:

TETR06

lab code:

CHEM

case no.:

Q2316

sas no.:

Q2316

matrix:

Water

sample id:

Q2316-02

client id:

RW8-SP303-20250612MS

Percent Solids for Sample:

NA

Spiked ID:

Q2316-02MS

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	1620		43.3	J	1500	105		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. **level:** low **sdg no.:** Q2316
contract: TETR06 **lab code:** CHEM **case no.:** Q2316 **sas no.:** Q2316
matrix: Water **sample id:** Q2316-02 **client id:** RW8-SP303-20250612MSD
Percent Solids for Sample: NA **Spiked ID:** Q2316-02MSD **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	1570		43.3	J	1500	102		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316
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

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DUPLICATE SAMPLE SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q2316</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2316</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2316-02</u>	Client ID:	<u>RW8-SP303-20250612DUP</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2316-02DUP	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	43.3	J	47.9	J	10		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q2316</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2316</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2316-02MS</u>	Client ID:	<u>RW8-SP303-20250612MSD</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2316-02MSD	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1620		1570		3		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2316 **SAS No.:** Q2316

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168475BS Iron	ug/L	1500	1580		105	87 - 115	P

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

RW8-SP303-20250612L

Lab Name: Chemtech Consulting Group

Contract: TETR06

Lab Code: CHEM

Lb No.: lb136187

Lab Sample ID : Q2316-02L

SDG No.: Q2316

Matrix (soil/water): Water

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ- ence		Q	M
Iron	43.3	J	59.0	J	36			P



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2316

Contract: TETR06

Lab Code: CHEM

Case No.: Q2316

SAS No.: Q2316

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2316

Contract: TETR06

Lab Code: CHEM

Case No.: Q2316

SAS No.: Q2316

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2316

Contract: TETR06

Lab Code: CHEM

Case No.: Q2316

SAS No.: Q2316

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2316

Contract: TETR06

Lab Code: CHEM

Case No.: Q2316

SAS No.: Q2316

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

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2316

Contract: TETR06

Lab Code: CHEM

Case No.: Q2316

SAS No.: Q2316

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

METAL
PREPARATION &
ANALYICAL
SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q2316</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2316</u>
		SAS No.:	<u>Q2316</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168475							
PB168475BL	PB168475BL	MB	WATER	06/13/2025	50.0	25.0	
PB168475BS	PB168475BS	LCS	WATER	06/13/2025	50.0	25.0	
Q2316-01	RW8-SP100-20250612	SAM	WATER	06/13/2025	50.0	25.0	
Q2316-02	RW8-SP303-20250612	SAM	WATER	06/13/2025	50.0	25.0	
Q2316-02DUP	RW8-SP303-20250612DUP	DUP	WATER	06/13/2025	50.0	25.0	
Q2316-02MS	RW8-SP303-20250612MS	MS	WATER	06/13/2025	50.0	25.0	
Q2316-02MSD	RW8-SP303-20250612MSD	MSD	WATER	06/13/2025	50.0	25.0	

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q2316 **Sas no.:** Q2316 **Sdg no.:** Q2316

Instrument id number: **Method:** **Run number:** LB136187

Start date: 06/17/2025 **End date:** 06/17/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1158	Fe
S1	S1	1	1203	Fe
S2	S2	1	1207	Fe
S3	S3	1	1211	Fe
S4	S4	1	1216	Fe
S5	S5	1	1220	Fe
ICV01	ICV01	1	1225	Fe
LLICV01	LLICV01	1	1241	Fe
ICB01	ICB01	1	1246	Fe
CRI01	CRI01	1	1250	Fe
ICSA01	ICSA01	1	1311	Fe
ICSAB01	ICSAB01	1	1322	Fe
CCV01	CCV01	1	1340	Fe
CCB01	CCB01	1	1348	Fe
CCV02	CCV02	1	1443	Fe
CCB02	CCB02	1	1450	Fe
CCV03	CCV03	1	1538	Fe
CCB03	CCB03	1	1542	Fe
CCV04	CCV04	1	1630	Fe
CCB04	CCB04	1	1634	Fe
PB168475BL	PB168475BL	1	1710	Fe
PB168475BS	PB168475BS	1	1714	Fe
CCV05	CCV05	1	1737	Fe
CCB05	CCB05	1	1741	Fe
CCV06	CCV06	1	1838	Fe
CCB06	CCB06	1	1842	Fe
CCV07	CCV07	1	1925	Fe
CCB07	CCB07	1	1930	Fe
Q2316-01	RW8-SP100-20250612	1	1947	Fe
Q2316-02	RW8-SP303-20250612	1	1951	Fe
Q2316-02DUP	RW8-SP303-20250612DUP	1	1956	Fe
Q2316-02L	RW8-SP303-20250612L	5	2000	Fe
Q2316-02MS	RW8-SP303-20250612MS	1	2004	Fe
Q2316-02MSD	RW8-SP303-20250612MSD	1	2009	Fe
CCV08	CCV08	1	2017	Fe
CCB08	CCB08	1	2022	Fe