



LAB CHRONICLE

OrderID:	Q2253	OrderDate:	6/5/2025 4:32:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	D21

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2253-01	RW8-SP100-20250605	Water			06/05/25			06/05/25
			Metals Group4	6010D		06/10/25	06/10/25	
Q2253-02	RW8-SP303-20250605	Water			06/05/25			06/05/25
			Metals Group4	6010D		06/10/25	06/10/25	



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Hit Summary Sheet
SW-846

SDG No.: Q2253

Order ID: Q2253

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-SP100-20250605									
Q2253-01	RW8-SP100-20250605	Water	Iron	1380		11.7	40.0	50.0	ug/L
Client ID : RW8-SP303-20250605									
Q2253-02	RW8-SP303-20250605	Water	Iron	51.5		11.7	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	06/05/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/05/25
Client Sample ID:	RW8-SP100-20250605	SDG No.:	Q2253
Lab Sample ID:	Q2253-01	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	1380		1	11.7	40.0	50.0	ug/L	06/10/25 10:05	06/10/25 23:49	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:	06/05/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	06/05/25
Client Sample ID:	RW8-SP303-20250605	SDG No.:	Q2253
Lab Sample ID:	Q2253-02	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	51.5		1	11.7	40.0	50.0	ug/L	06/10/25 10:05	06/10/25 23:53	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

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	3770	4000	94	90 - 110	P	06/10/2025	14:37	LB136097

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	108	100	108	80 - 120	P	06/10/2025	14:41	LB136097

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	4860	5000	97	90 - 110	P	06/10/2025	15:30	LB136097
CCV02	Iron	4930	5000	99	90 - 110	P	06/10/2025	16:28	LB136097
CCV03	Iron	5390	5000	108	90 - 110	P	06/10/2025	17:36	LB136097
CCV04	Iron	5420	5000	108	90 - 110	P	06/10/2025	18:28	LB136097
CCV05	Iron	5340	5000	107	90 - 110	P	06/10/2025	19:18	LB136097
CCV06	Iron	5150	5000	103	90 - 110	P	06/10/2025	20:09	LB136097
CCV07	Iron	5190	5000	104	90 - 110	P	06/10/2025	21:04	LB136097
CCV08	Iron	5140	5000	103	90 - 110	P	06/10/2025	22:04	LB136097
CCV09	Iron	5160	5000	103	90 - 110	P	06/10/2025	22:56	LB136097
CCV10	Iron	5200	5000	104	90 - 110	P	06/10/2025	23:57	LB136097
CCV11	Iron	5060	5000	101	90 - 110	P	06/11/2025	01:35	LB136097
CCV12	Iron	4930	5000	99	90 - 110	P	06/11/2025	02:21	LB136097



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Metals

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CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253
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	111	100	111	65 - 135	P	06/10/2025	14:50	LB136097



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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

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	06/10/2025	14:45	LB136097

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. SDG No.: Q2253
Contract: TETR06 Lab Code: CHEM Case No.: Q2253 SAS No.: Q2253

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	06/10/2025	15:35	LB136097
CCB02	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	16:32	LB136097
CCB03	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	17:40	LB136097
CCB04	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	18:32	LB136097
CCB05	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	19:22	LB136097
CCB06	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	20:14	LB136097
CCB07	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	21:08	LB136097
CCB08	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	22:08	LB136097
CCB09	Iron	23.4	+/-50	U	80.0	100	P	06/10/2025	23:01	LB136097
CCB10	Iron	23.4	+/-50	U	80.0	100	P	06/11/2025	00:02	LB136097
CCB11	Iron	23.4	+/-50	U	80.0	100	P	06/11/2025	01:39	LB136097
CCB12	Iron	23.4	+/-50	U	80.0	100	P	06/11/2025	02:25	LB136097

Metals
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PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q2253

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB168384BL		WATER		Batch Number:		PB168384		Prep Date:	06/10/2025	
	Iron	11.7	<25	U	40.0	50.0	P	06/10/2025	23:41	LB136097

Metals

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INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253
ICS Source: EPA **Instrument ID:** P4

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	97000	101000	96	85600	116500	06/10/2025	14:54	LB136097
ICSAB01	Iron	99000	99300	100	84400	114500	06/10/2025	15:18	LB136097



METAL QC DATA



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metals
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MATRIX SPIKE SUMMARY

client:	Tetra Tech NUS, Inc.	level:	low	sdg no.:	Q2253		
contract:	TETR06	lab code:	CHEM	case no.:	Q2253	sas no.:	Q2253
matrix:	Water	sample id:	Q2253-02	client id:	RW8-SP303-20250605MS		
Percent Solids for Sample:	NA	Spiked ID:	Q2253-02MS	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	1490		51.5		1500	96		P

metals

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MATRIX SPIKE DUPLICATE SUMMARY

client: Tetra Tech NUS, Inc. level: low sdg no.: Q2253
contract: TETR06 lab code: CHEM case no.: Q2253 sas no.: Q2253
matrix: Water sample id: Q2253-02 client id: RW8-SP303-20250605MSD
Percent Solids for Sample: NA Spiked ID: Q2253-02MSD 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	1490		51.5		1500	96		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc.

SDG No.: Q2253

Contract: TETR06

Lab Code: CHEM

Case No.: Q2253

SAS No.: Q2253

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>Q2253</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2253</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2253-02</u>	Client ID:	<u>RW8-SP303-20250605DUP</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2253-02DUP	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	51.5		55.7		8		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q2253</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2253</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q2253-02MS</u>	Client ID:	<u>RW8-SP303-20250605MSD</u>
Percent Solids for Sample:	NA	Duplicate ID	Q2253-02MSD	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1490		1490		0		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q2253
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168384BS Iron	ug/L	1500	1620		108	87 - 115	P

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

RW8-SP303-20250605L

Lab Name: Chemtech Consulting Group

Contract: TETR06

Lab Code: CHEM

Lb No.: lb136097

Lab Sample ID : Q2253-02L

SDG No.: Q2253

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	51.5	250 U	100.0		P



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2253

Contract: TETR06

Lab Code: CHEM

Case No.: Q2253

SAS No.: Q2253

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.:** Q2253
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q2253 **SAS No.:** Q2253
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2253

Contract: TETR06

Lab Code: CHEM

Case No.: Q2253

SAS No.: Q2253

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	0.0000730	0.0000000	-0.0015250

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2253

Contract: TETR06

Lab Code: CHEM

Case No.: Q2253

SAS No.: Q2253

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q2253

Contract: TETR06

Lab Code: CHEM

Case No.: Q2253

SAS No.: Q2253

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>Q2253</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2253</u>
		SAS No.:	<u>Q2253</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168384							
PB168384BL	PB168384BL	MB	WATER	06/10/2025	50.0	25.0	
PB168384BS	PB168384BS	LCS	WATER	06/10/2025	50.0	25.0	
Q2253-01	RW8-SP100-20250605	SAM	WATER	06/10/2025	50.0	25.0	
Q2253-02	RW8-SP303-20250605	SAM	WATER	06/10/2025	50.0	25.0	
Q2253-02DUP	RW8-SP303-20250605DUP	DUP	WATER	06/10/2025	50.0	25.0	
Q2253-02MS	RW8-SP303-20250605MS	MS	WATER	06/10/2025	50.0	25.0	
Q2253-02MSD	RW8-SP303-20250605MSD	MSD	WATER	06/10/2025	50.0	25.0	

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q2253 **Sas no.:** Q2253 **Sdg no.:** Q2253

Instrument id number: **Method:** **Run number:** LB136097

Start date: 06/10/2025 **End date:** 06/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1401	Fe
S1	S1	1	1405	Fe
S2	S2	1	1409	Fe
S3	S3	1	1414	Fe
S4	S4	1	1418	Fe
S5	S5	1	1422	Fe
ICV01	ICV01	1	1437	Fe
LLICV01	LLICV01	1	1441	Fe
ICB01	ICB01	1	1445	Fe
CRI01	CRI01	1	1450	Fe
ICSA01	ICSA01	1	1454	Fe
ICSAB01	ICSAB01	1	1518	Fe
CCV01	CCV01	1	1530	Fe
CCB01	CCB01	1	1535	Fe
CCV02	CCV02	1	1628	Fe
CCB02	CCB02	1	1632	Fe
CCV03	CCV03	1	1736	Fe
CCB03	CCB03	1	1740	Fe
CCV04	CCV04	1	1828	Fe
CCB04	CCB04	1	1832	Fe
CCV05	CCV05	1	1918	Fe
CCB05	CCB05	1	1922	Fe
CCV06	CCV06	1	2009	Fe
CCB06	CCB06	1	2014	Fe
CCV07	CCV07	1	2104	Fe
CCB07	CCB07	1	2108	Fe
CCV08	CCV08	1	2204	Fe
CCB08	CCB08	1	2208	Fe
CCV09	CCV09	1	2256	Fe
CCB09	CCB09	1	2301	Fe
PB168384BL	PB168384BL	1	2341	Fe
PB168384BS	PB168384BS	1	2345	Fe
Q2253-01	RW8-SP100-20250605	1	2349	Fe
Q2253-02	RW8-SP303-20250605	1	2353	Fe
CCV10	CCV10	1	2357	Fe
CCB10	CCB10	1	0002	Fe
Q2253-02DUP	RW8-SP303-20250605DUP	1	0006	Fe
Q2253-02L	RW8-SP303-20250605L	5	0010	Fe
Q2253-02MS	RW8-SP303-20250605MS	1	0015	Fe
Q2253-02MSD	RW8-SP303-20250605MSD	1	0019	Fe
CCV11	CCV11	1	0135	Fe

metals
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ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc.

Contract: TETR06

Lab code: CHEM Case no.: Q2253 Sas no.: Q2253

Sdg no.: Q2253

Instrument id number: Method:

Run number: LB136097

Start date: 06/10/2025 End date: 06/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
CCB11	CCB11	1	0139	Fe
CCV12	CCV12	1	0221	Fe
CCB12	CCB12	1	0225	Fe