

LAB CHRONICLE

OrderID:	Q1081	OrderDate:	1/14/2025 10:28:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	RW7B - 112G08005-WE13
Contact:	Ernie Wu	Location:	N41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1081-01	RW7-SP100-20250113	Water			01/13/25			01/14/25
			SVOC-SIMGroup1	8270-Modified		01/14/25	01/15/25	
Q1081-01DL	RW7-SP100-20250113DL	Water			01/13/25			01/14/25
			SVOC-SIMGroup1	8270-Modified		01/14/25	01/15/25	
Q1081-02	RW7-SP201-20250113	Water			01/13/25			01/14/25
			SVOC-SIMGroup1	8270-Modified		01/14/25	01/15/25	
Q1081-03	RW7-SP302-20250113	Water			01/13/25			01/14/25
			SVOC-SIMGroup1	8270-Modified		01/14/25	01/15/25	
Q1081-04	RW7-SP303-20250113	Water			01/13/25			01/14/25
			SVOC-SIMGroup1	8270-Modified		01/14/25	01/15/25	



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

Hit Summary Sheet SW-846

SDG No.: Q1081

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW7-SP100-20250113								
Q1081-01	RW7-SP100-20250113	WATER	1,4-Dioxane	5.200	E	0.07	0.2	0.2 ug/L
			Total Svoc :	5.20				
			Total Concentration:	5.20				
Client ID : RW7-SP100-20250113DL								
Q1081-01DL	RW7-SP100-20250113DI	WATER	1,4-Dioxane	4.600	D	0.14	0.4	0.4 ug/L
			Total Svoc :	4.60				
			Total Concentration:	4.60				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP100-20250113	SDG No.:	Q1081
Lab Sample ID:	Q1081-01	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
BN035928.D	1	01/14/25 11:00	01/15/25 11:39	PB166053

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	5.20	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.47		30 - 150		116%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.54		30 - 150		134%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.48	*	55 - 111		120%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		117%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.58	*	58 - 132		145%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	706		7.832			
1146-65-2	Naphthalene-d8	1330		10.622			
15067-26-2	Acenaphthene-d10	657		14.463			
1517-22-2	Phenanthrene-d10	1190		17.199			
1719-03-5	Chrysene-d12	1020		21.376			
1520-96-3	Perylene-d12	1190		23.678			

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:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP100-20250113DL	SDG No.:	Q1081
Lab Sample ID:	Q1081-01DL	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
BN035931.D	2	01/14/25 11:00	01/15/25 13:27	PB166053

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.60	D	0.14	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.45		30 - 150		113%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.52		30 - 150		131%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.49	*	55 - 111		122%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.42		53 - 106		106%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		138%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	697		7.831			
1146-65-2	Naphthalene-d8	1310		10.622			
15067-26-2	Acenaphthene-d10	702		14.463			
1517-22-2	Phenanthrene-d10	1450		17.198			
1719-03-5	Chrysene-d12	1310		21.376			
1520-96-3	Perylene-d12	1480		23.675			

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP201-20250113	SDG No.:	Q1081
Lab Sample ID:	Q1081-02	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
BN035929.D	1	01/14/25 11:00	01/15/25 12:15	PB166053

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	0.44		30 - 150		110%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.52		30 - 150		131%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.46	*	55 - 111		114%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43	*	53 - 106		108%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		135%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	707		7.832			
1146-65-2	Naphthalene-d8	1340		10.622			
15067-26-2	Acenaphthene-d10	689		14.458			
1517-22-2	Phenanthrene-d10	1430		17.194			
1719-03-5	Chrysene-d12	1320		21.376			
1520-96-3	Perylene-d12	1480		23.674			

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A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP302-20250113	SDG No.:	Q1081
Lab Sample ID:	Q1081-03	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
BN035930.D	1	01/14/25 11:00	01/15/25 12:51	PB166053

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	0.45		30 - 150		113%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.55		30 - 150		136%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.49	*	55 - 111		123%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43	*	53 - 106		108%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		138%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	624	7.832				
1146-65-2	Naphthalene-d8	1210	10.622				
15067-26-2	Acenaphthene-d10	641	14.458				
1517-22-2	Phenanthrene-d10	1310	17.194				
1719-03-5	Chrysene-d12	1190	21.376				
1520-96-3	Perylene-d12	1310	23.674				

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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP303-20250113	SDG No.:	Q1081
Lab Sample ID:	Q1081-04	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
BN035932.D	1	01/14/25 11:00	01/15/25 14:02	PB166053

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	0.49		30 - 150		122%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.56		30 - 150		139%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.51	*	55 - 111		128%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.49	*	53 - 106		123%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.61	*	58 - 132		152%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	634		7.832			
1146-65-2	Naphthalene-d8	1190		10.622			
15067-26-2	Acenaphthene-d10	633		14.452			
1517-22-2	Phenanthrene-d10	1320		17.199			
1719-03-5	Chrysene-d12	1180		21.376			
1520-96-3	Perylene-d12	1330		23.675			

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LOQ = Limit of Quantitation

MDL = Method Detection Limit

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M = MS/MSD acceptance criteria did not meet requirements

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A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q1081

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166053BL	PB166053BL	2-Methylnaphthalene-d10	0.4	0.50	125		30	150
		Fluoranthene-d10	0.4	0.49	122		30	150
		Nitrobenzene-d5	0.4	0.55	138	*	55	111
		2-Fluorobiphenyl	0.4	0.51	127	*	53	106
		Terphenyl-d14	0.4	0.52	130		58	132
PB166053BS	PB166053BS	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
		Fluoranthene-d10	0.4	0.40	101		30	150
		Nitrobenzene-d5	0.4	0.47	118	*	55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
PB166053BSD	PB166053BSD	2-Methylnaphthalene-d10	0.4	0.40	99		30	150
		Fluoranthene-d10	0.4	0.40	99		30	150
		Nitrobenzene-d5	0.4	0.45	113	*	55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
Q1081-01	RW7-SP100-20250113	2-Methylnaphthalene-d10	0.4	0.47	116		30	150
		Fluoranthene-d10	0.4	0.54	134		30	150
		Nitrobenzene-d5	0.4	0.48	120	*	55	111
		2-Fluorobiphenyl	0.4	0.47	117	*	53	106
		Terphenyl-d14	0.4	0.58	145	*	58	132
Q1081-01DL	RW7-SP100-20250113DL	2-Methylnaphthalene-d10	0.4	0.45	113		30	150
		Fluoranthene-d10	0.4	0.52	131		30	150
		Nitrobenzene-d5	0.4	0.49	122	*	55	111
		2-Fluorobiphenyl	0.4	0.42	106		53	106
		Terphenyl-d14	0.4	0.55	138	*	58	132
Q1081-02	RW7-SP201-20250113	2-Methylnaphthalene-d10	0.4	0.44	110		30	150
		Fluoranthene-d10	0.4	0.52	131		30	150
		Nitrobenzene-d5	0.4	0.46	114	*	55	111
		2-Fluorobiphenyl	0.4	0.43	108	*	53	106
		Terphenyl-d14	0.4	0.54	135	*	58	132
Q1081-03	RW7-SP302-20250113	2-Methylnaphthalene-d10	0.4	0.45	113		30	150
		Fluoranthene-d10	0.4	0.55	136		30	150
		Nitrobenzene-d5	0.4	0.49	123	*	55	111
		2-Fluorobiphenyl	0.4	0.43	108	*	53	106
		Terphenyl-d14	0.4	0.55	138	*	58	132
Q1081-04	RW7-SP303-20250113	2-Methylnaphthalene-d10	0.4	0.49	122		30	150
		Fluoranthene-d10	0.4	0.56	139		30	150
		Nitrobenzene-d5	0.4	0.51	128	*	55	111
		2-Fluorobiphenyl	0.4	0.49	123	*	53	106
		Terphenyl-d14	0.4	0.61	152	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1081

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN035933.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166053BS	1,4-Dioxane	0.4	0.36	ug/L	90				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1081

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN035934.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166053BSD	1,4-Dioxane	0.4	0.41	ug/L	103	13			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166053BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1081

SAS No.: Q1081 SDG NO.: Q1081

Lab File ID: BN035927.D

Lab Sample ID: PB166053BL

Instrument ID: BNA_N

Date Extracted: 01/14/2025

Matrix: (soil/water) Water

Date Analyzed: 01/15/2025

Level: (low/med) LOW

Time Analyzed: 11:03

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166053BS	PB166053BS	BN035933.D	01/15/2025
RW7-SP100-20250113	Q1081-01	BN035928.D	01/15/2025
RW7-SP201-20250113	Q1081-02	BN035929.D	01/15/2025
RW7-SP302-20250113	Q1081-03	BN035930.D	01/15/2025
PB166053BSD	PB166053BSD	BN035934.D	01/15/2025
RW7-SP303-20250113	Q1081-04	BN035932.D	01/15/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1081 SDG NO.: Q1081

Lab File ID: BN035870.D

DFTPP Injection Date: 01/02/2025

Instrument ID: BNA_N

DFTPP Injection Time: 10:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	39.9
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	39
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	43.4
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.2
275	10.0 - 60.0% of mass 198	25.6
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	9.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.1 (19.3) 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	BN035871.D	01/02/2025	11:28
SSTDICC0.2	SSTDICC0.2	BN035872.D	01/02/2025	12:04
SSTDICCC0.4	SSTDICCC0.4	BN035873.D	01/02/2025	12:40
SSTDICC0.8	SSTDICC0.8	BN035874.D	01/02/2025	13:16
SSTDICC1.6	SSTDICC1.6	BN035875.D	01/02/2025	13:52
SSTDICC3.2	SSTDICC3.2	BN035876.D	01/02/2025	14:28
SSTDICC5.0	SSTDICC5.0	BN035877.D	01/02/2025	15:04

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1081

SDG NO.: Q1081

Lab File ID: BN035925.D

DFTPP Injection Date: 01/15/2025

Instrument ID: BNA_N

DFTPP Injection Time: 09:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	54.6
68	Less than 2.0% of mass 69	0.4 (1) 1
69	Mass 69 relative abundance	46.9
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	47.2
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
275	10.0 - 60.0% of mass 198	26.4
365	Greater than 1% of mass 198	4.9
441	Present, but less than mass 443	10
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.8 (17.3) 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	BN035926.D	01/15/2025	10:27
PB166053BL	PB166053BL	BN035927.D	01/15/2025	11:03
RW7-SP100-20250113	Q1081-01	BN035928.D	01/15/2025	11:39
RW7-SP201-20250113	Q1081-02	BN035929.D	01/15/2025	12:15
RW7-SP302-20250113	Q1081-03	BN035930.D	01/15/2025	12:51
RW7-SP100-20250113DL	Q1081-01DL	BN035931.D	01/15/2025	13:27
RW7-SP303-20250113	Q1081-04	BN035932.D	01/15/2025	14:02
PB166053BS	PB166053BS	BN035933.D	01/15/2025	16:24
PB166053BSD	PB166053BSD	BN035934.D	01/15/2025	17:00
SSTDCCC0.4EC	SSTDCCC0.4	BN035935.D	01/15/2025	17:36

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1081 SAS No.: Q1081 SDG NO.: Q1081

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/15/2025

Lab File ID: BN035926.D Time Analyzed: 10:27

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	1122	7.824	1996	10.62	954	14.46
UPPER LIMIT	2244	8.324	3992	11.122	1908	14.963
LOWER LIMIT	561	7.324	998	10.122	477	13.963
EPA SAMPLE NO.						
01 PB166053BL	922	7.83	1746	10.62	846	14.46
02 RW7-SP100-20250113	706	7.83	1333	10.62	657	14.46
03 PB166053BS	941	7.82	1790	10.62	956	14.46
04 RW7-SP201-20250113	707	7.83	1337	10.62	689	14.46
05 PB166053BSD	930	7.83	1684	10.62	890	14.46
06 RW7-SP100-20250113DL	697	7.83	1310	10.62	702	14.46
07 RW7-SP302-20250113	624	7.83	1211	10.62	641	14.46
08 RW7-SP303-20250113	634	7.83	1190	10.62	633	14.45

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.: Q1081 SAS No.: Q1081 SDG NO.: Q1081

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/15/2025

Lab File ID: BN035926.D Time Analyzed: 10:27

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	1813	17.199	1614	21.376	1998	23.677
UPPER LIMIT	3626	17.699	3228	21.876	3996	24.177
LOWER LIMIT	906.5	16.699	807	20.876	999	23.177
EPA SAMPLE NO.						
01 PB166053BL	1699	17.20	1454	21.38	1672	23.68
02 RW7-SP100-20250113	1190	17.20	1015	21.38	1185	23.68
03 PB166053BS	1886	17.20	1502	21.38	1677	23.68
04 RW7-SP201-20250113	1430	17.19	1321	21.38	1476	23.67
05 PB166053BSD	1752	17.20	1461	21.38	1685	23.68
06 RW7-SP100-20250113DL	1447	17.20	1312	21.38	1477	23.68
07 RW7-SP302-20250113	1308	17.19	1187	21.38	1308	23.67
08 RW7-SP303-20250113	1322	17.20	1184	21.38	1334	23.68

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:	RW7B - 112G08005-WE13		Date Received:		
Client Sample ID:	PB166053BL		SDG No.:	Q1081	
Lab Sample ID:	PB166053BL		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
BN035927.D	1	01/14/25 11:00	01/15/25 11:03	PB166053

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	0.50		30 - 150		125%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.49		30 - 150		122%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.55	*	55 - 111		138%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.51	*	53 - 106		127%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.52		58 - 132		130%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	922		7.832			
1146-65-2	Naphthalene-d8	1750		10.622			
15067-26-2	Acenaphthene-d10	846		14.463			
1517-22-2	Phenanthrene-d10	1700		17.199			
1719-03-5	Chrysene-d12	1450		21.376			
1520-96-3	Perylene-d12	1670		23.678			

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:	RW7B - 112G08005-WE13		Date Received:		
Client Sample ID:	PB166053BS		SDG No.:	Q1081	
Lab Sample ID:	PB166053BS		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
BN035933.D	1	01/14/25 11:00	01/15/25 16:24	PB166053

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.36		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.47	*	55 - 111		118%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	941	7.824				
1146-65-2	Naphthalene-d8	1790	10.622				
15067-26-2	Acenaphthene-d10	956	14.463				
1517-22-2	Phenanthrene-d10	1890	17.199				
1719-03-5	Chrysene-d12	1500	21.376				
1520-96-3	Perylene-d12	1680	23.681				

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:	RW7B - 112G08005-WE13		Date Received:	
Client Sample ID:	PB166053BSD		SDG No.:	Q1081
Lab Sample ID:	PB166053BSD		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
BN035934.D	1	01/14/25 11:00	01/15/25 17:00	PB166053

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.41		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		99%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.45	*	55 - 111		113%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	930	7.832				
1146-65-2	Naphthalene-d8	1680	10.622				
15067-26-2	Acenaphthene-d10	890	14.463				
1517-22-2	Phenanthrene-d10	1750	17.199				
1719-03-5	Chrysene-d12	1460	21.376				
1520-96-3	Perylene-d12	1690	23.683				

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-BN010225.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Jan 02 15:39:17 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN035871.D 0.2 =BN035872.D 0.4 =BN035873.D 0.8 =BN035874.D 1.6 =BN035875.D 3.2 =BN035876.D 5.0 =BN035877.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD

1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.454	0.422	0.373	0.388	0.391	0.377	0.377	0.397	7.52
3)	n-Nitrosodimet...	0.707	0.674	0.676	0.690	0.722	0.690	0.692	0.693	2.45
4) S	2-Fluorophenol	1.031	1.009	0.952	0.958	0.997	0.956	0.968	0.981	3.13
5) S	Phenol-d6	1.351	1.255	1.180	1.197	1.215	1.163	1.170	1.219	5.44
6)	bis(2-Chloroet...	1.001	0.946	0.936	0.913	0.938	0.886	0.879	0.929	4.43
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.346	0.307	0.296	0.302	0.319	0.317	0.330	0.317	5.48
9)	Naphthalene	1.163	1.094	1.086	1.096	1.167	1.113	1.141	1.123	3.00
10)	Hexachlorobuta...	0.368	0.354	0.353	0.363	0.382	0.362	0.369	0.365	2.74
11) SURR2	Methylnaphth...	0.547	0.536	0.527	0.519	0.556	0.524	0.540	0.536	2.50
12)	2-Methylnaphth...	0.691	0.654	0.685	0.680	0.731	0.701	0.722	0.695	3.75
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.164	0.165	0.189	0.189	0.207	0.211	0.220	0.192	11.39
15) S	2-Fluorobiphenyl	1.776	1.675	1.708	1.765	1.823	1.779	1.762	1.755	2.79
16)	Acenaphthylene	1.890	1.766	1.819	1.839	1.962	1.948	1.963	1.884	4.15
17)	Acenaphthene	1.187	1.162	1.198	1.232	1.300	1.275	1.291	1.235	4.43
18)	Fluorene	1.341	1.270	1.307	1.298	1.419	1.444	1.432	1.359	5.28
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.058	0.066	0.067	0.069	0.076	0.076	0.074	0.069	9.51
21)	4-Bromophenyl-...	0.265	0.269	0.268	0.267	0.290	0.283	0.279	0.274	3.47
22)	Hexachlorobenzene	0.393	0.369	0.356	0.362	0.394	0.373	0.371	0.374	3.93
23)	Atrazine	0.169	0.191	0.176	0.171	0.198	0.190	0.193	0.184	6.36
24)	Pentachlorophenol	0.141	0.101	0.118	0.122	0.143	0.148	0.153	0.132	14.40
25)	Phenanthrene	1.131	1.132	1.142	1.144	1.228	1.193	1.200	1.167	3.36
26)	Anthracene	0.996	0.998	1.008	1.033	1.137	1.132	1.130	1.062	6.34
27) SURR	Fluoranthene-d10	0.988	0.952	0.978	0.959	1.028	1.010	1.035	0.993	3.28
28)	Fluoranthene	1.268	1.253	1.330	1.312	1.441	1.446	1.475	1.361	6.71
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.606	1.620	1.571	1.612	1.711	1.621	1.627	1.624	2.63
31) S	Terphenyl-d14	0.814	0.813	0.790	0.777	0.828	0.776	0.781	0.797	2.64
32)	Benzo(a)anthra...	1.379	1.382	1.344	1.407	1.461	1.427	1.466	1.410	3.19
33)	Chrysene	1.484	1.458	1.441	1.451	1.541	1.478	1.471	1.475	2.24
34)	Bis(2-ethylhex...	0.691	0.583	0.582	0.541	0.569	0.519	0.530	0.574	10.05
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN010225.M

36)	Indeno(1,2,3-c...	1.428	1.461	1.414	1.578	1.697	1.712	1.751	1.577	9.15
37)	Benzo(b)fluora...	1.337	1.304	1.294	1.351	1.466	1.420	1.447	1.374	5.06
38)	Benzo(k)fluora...	1.279	1.254	1.251	1.344	1.469	1.442	1.482	1.360	7.55
39) C	Benzo(a)pyrene	1.099	1.181	1.086	1.163	1.270	1.244	1.284	1.190	6.71
40)	Dibenzo(a,h)an...	1.145	1.152	1.106	1.251	1.363	1.365	1.402	1.255	9.75
41)	Benzo(g,h,i)pe...	1.335	1.316	1.245	1.407	1.490	1.501	1.530	1.403	7.72

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1081 SAS No.: Q1081 SDG No.: Q1081

Instrument ID: BNA_N Calibration Date/Time: 01/15/2025 10:27

Lab File ID: BN035926.D Init. Calib. Date(s): 01/02/2025 01/02/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:28 15:04

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.536	0.500		-6.7	20.0
Fluoranthene-d10	0.993	0.980		-1.3	20.0
2-Fluorophenol	0.981	0.948		-3.4	20.0
Phenol-d6	1.219	1.144		-6.2	20.0
Nitrobenzene-d5	0.317	0.371		17.0	20.0
2-Fluorobiphenyl	1.755	1.743		-0.7	20.0
2,4,6-Tribromophenol	0.192	0.238		24.0	20.0
Terphenyl-d14	0.797	0.752		-5.6	20.0
1,4-Dioxane	0.397	0.422		6.3	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.: Q1081 SAS No.: Q1081 SDG No.: Q1081

Instrument ID: BNA_N Calibration Date/Time: 01/15/2025 17:36

Lab File ID: BN035935.D Init. Calib. Date(s): 01/02/2025 01/02/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:28 15:04

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.536	0.523		-2.4	50.0
Fluoranthene-d10	0.993	0.980		-1.3	50.0
2-Fluorophenol	0.981	0.914		-6.8	50.0
Phenol-d6	1.219	1.108		-9.1	50.0
Nitrobenzene-d5	0.317	0.340		7.3	50.0
2-Fluorobiphenyl	1.755	1.796		2.3	50.0
2,4,6-Tribromophenol	0.192	0.267		39.1	50.0
Terphenyl-d14	0.797	0.817		2.5	50.0
1,4-Dioxane	0.397	0.388		-2.3	50.0

All other compounds must meet a minimum RRF of 0.010.



LAB CHRONICLE

OrderID:	Q1081	OrderDate:	1/14/2025 10:28:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	RW7B - 112G08005-WE13
Contact:	Ernie Wu	Location:	N41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1081-01	RW7-SP100-20250113	Water			01/13/25			01/14/25
			Metals Group4	6010D		01/14/25	01/16/25	
Q1081-04	RW7-SP303-20250113	Water			01/13/25			01/14/25
			Metals Group4	6010D		01/14/25	01/17/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q1081

Order ID: Q1081

Client: Tetra Tech NUS, Inc.

Project ID: RW7B - 112G08005-WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW7-SP100-20250113									
Q1081-01	RW7-SP100-20250113	Water	Iron	106		18.5	40.0	50.0	ug/L
Client ID : RW7-SP303-20250113									
Q1081-04	RW7-SP303-20250113	Water	Iron	18.7	J	18.5	40.0	50.0	ug/L



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP100-20250113	SDG No.:	Q1081
Lab Sample ID:	Q1081-01	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	106		1	18.5	40.0	50.0	ug/L	01/14/25 12:30	01/16/25 20:30	SW6010	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:	01/13/25
Project:	RW7B - 112G08005-WE13	Date Received:	01/14/25
Client Sample ID:	RW7-SP303-20250113	SDG No.:	Q1081
Lab Sample ID:	Q1081-04	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	18.7	J	1	18.5	40.0	50.0	ug/L	01/14/25 12:30	01/17/25 15:12	SW6010	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.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	9640	10000	96	90 - 110	P	01/16/2025	19:18	LB134315

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	92.6	100	93	80 - 120	P	01/16/2025	19:27	LB134315

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	01/16/2025	19:49	LB134315
CCV02	Iron	4780	5000	96	90 - 110	P	01/16/2025	20:43	LB134315
CCV03	Iron	4810	5000	96	90 - 110	P	01/16/2025	21:01	LB134315

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	9620	10000	96	90 - 110	P	01/17/2025	11:21	LB134334

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	102	100	102	80 - 120	P	01/17/2025	11:26	LB134334

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081

Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081

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	5080	5000	102	90 - 110	P	01/17/2025	11:56	LB134334
CCV02	Iron	4910	5000	98	90 - 110	P	01/17/2025	12:47	LB134334
CCV03	Iron	4900	5000	98	90 - 110	P	01/17/2025	13:36	LB134334
CCV04	Iron	4940	5000	99	90 - 110	P	01/17/2025	14:27	LB134334
CCV05	Iron	4740	5000	95	90 - 110	P	01/17/2025	15:34	LB134334
CCV06	Iron	4940	5000	99	90 - 110	P	01/17/2025	16:16	LB134334
CCV07	Iron	4770	5000	96	90 - 110	P	01/17/2025	17:11	LB134334
CCV08	Iron	4960	5000	99	90 - 110	P	01/17/2025	17:52	LB134334



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Fax : 908 789 8922

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	86.4	100	86	40 - 160	P	01/16/2025	19:36	LB134315
CRI01	Iron	97.7	100	98	40 - 160	P	01/17/2025	11:35	LB134334



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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Tetra Tech NUS, Inc.				SDG No.:	Q1081				
Contract:	TETR06	Lab Code:	CHEM	Case No.:	Q1081	SAS No.:	Q1081			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	100	+/-100	U	80.0	100	P	01/16/2025	19:32	LB134315

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	100	+/-100	U	80.0	100	P	01/16/2025	19:53	LB134315
CCB02	Iron	100	+/-100	U	80.0	100	P	01/16/2025	20:47	LB134315
CCB03	Iron	100	+/-100	U	80.0	100	P	01/16/2025	21:10	LB134315

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Iron	100	+/-100	U	80.0	100	P	01/17/2025	11:30	LB134334

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Iron	100	+/-100	U	80.0	100	P	01/17/2025	12:00	LB134334
CCB02	Iron	100	+/-100	U	80.0	100	P	01/17/2025	12:51	LB134334
CCB03	Iron	100	+/-100	U	80.0	100	P	01/17/2025	13:41	LB134334
CCB04	Iron	100	+/-100	U	80.0	100	P	01/17/2025	14:31	LB134334
CCB05	Iron	100	+/-100	U	80.0	100	P	01/17/2025	15:38	LB134334
CCB06	Iron	100	+/-100	U	80.0	100	P	01/17/2025	16:20	LB134334
CCB07	Iron	100	+/-100	U	80.0	100	P	01/17/2025	17:16	LB134334
CCB08	Iron	100	+/-100	U	80.0	100	P	01/17/2025	17:56	LB134334

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: Q1081

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166054BL		WATER		Batch Number:		PB166054		Prep Date:	01/14/2025	
	Iron	50.0	<50.0	U	40.0	50.0	P	01/17/2025	12:05	LB134334

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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	97800	101000	97	85600	116500	01/16/2025	19:40	LB134315
ICSAB01	Iron	97700	99300	98	84400	114500	01/16/2025	19:45	LB134315
ICSA01	Iron	95900	101000	95	85600	116500	01/17/2025	11:39	LB134334
ICSAB01	Iron	101000	99300	102	84400	114500	01/17/2025	11:43	LB134334



METAL QC DATA



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metals
- 5a -
MATRIX SPIKE SUMMARY

client:	Tetra Tech NUS, Inc.	level:	low	sdg no.:	Q1081		
contract:	TETR06	lab code:	CHEM	case no.:	Q1081	sas no.:	Q1081
matrix:	Water	sample id:	Q1081-04	client id:	RW7-SP303-20250113MS		
Percent Solids for Sample:	NA	Spiked ID:	Q1081-04MS	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	1440		18.7	J	1500	95		P



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Fax : 908 789 8922

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client:

Tetra Tech NUS, Inc.

level:

low

sdg no.:

Q1081

contract:

TETR06

lab code:

CHEM

case no.:

Q1081

sas no.:

Q1081

matrix:

Water

sample id:

Q1081-04

client id:

RW7-SP303-20250113MSD

Percent Solids for Sample:

NA

Spiked ID:

Q1081-04MSD

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	1440		18.7	J	1500	95		P

Metals
- 5b -

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
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>Q1081</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1081</u>
Matrix:	<u>Water</u>	Sample ID:	<u>Q1081-04</u>	Client ID:	<u>RW7-SP303-20250113DUP</u>
Percent Solids for Sample:	NA	Duplicate ID	Q1081-04DUP	Percent Solids for Spike Sample:	NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	18.7	J	19.5	J	4		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081
Matrix: Water **Sample ID:** Q1081-04MS **Client ID:** RW7-SP303-20250113MSD
Percent Solids for Sample: NA **Duplicate ID** Q1081-04MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	20	1440		1440		0		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** Q1081
Contract: TETR06 **Lab Code:** CHEM **Case No.:** Q1081 **SAS No.:** Q1081

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166054BS Iron	ug/L	1500	1480		99	87 - 115	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

RW7-SP303-20250113L

Lab Name: Chemtech Consulting Group

Contract: TETR06

Lab Code: CHEM

Lb No.: lb134334

Lab Sample ID : Q1081-04L

SDG No.: Q1081

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	18.7	J	250	U	100.0		P



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q1081

Contract: TETR06

Lab Code: CHEM

Case No.: Q1081

SAS No.: Q1081

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
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.: Q1081

Contract: TETR06

Lab Code: CHEM

Case No.: Q1081

SAS No.: Q1081

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

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q1081

Contract: TETR06

Lab Code: CHEM

Case No.: Q1081

SAS No.: Q1081

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

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q1081

Contract: TETR06

Lab Code: CHEM

Case No.: Q1081

SAS No.: Q1081

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

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: Q1081

Contract: TETR06

Lab Code: CHEM

Case No.: Q1081

SAS No.: Q1081

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

- 13 -

SAMPLE PREPARATION SUMMARY

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>Q1081</u>
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1081</u>
		SAS No.:	<u>Q1081</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166054							
PB166054BL	PB166054BL	MB	WATER	01/14/2025	50.0	25.0	
PB166054BS	PB166054BS	LCS	WATER	01/14/2025	50.0	25.0	
Q1081-01	RW7-SP100-20250113	SAM	WATER	01/14/2025	50.0	25.0	
Q1081-04	RW7-SP303-20250113	SAM	WATER	01/14/2025	50.0	25.0	
Q1081-04DUP	RW7-SP303-20250113DUP	DUP	WATER	01/14/2025	50.0	25.0	
Q1081-04MS	RW7-SP303-20250113MS	MS	WATER	01/14/2025	50.0	25.0	
Q1081-04MSD	RW7-SP303-20250113MSD	MSD	WATER	01/14/2025	50.0	25.0	

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1081 **Sas no.:** Q1081 **Sdg no.:** Q1081

Instrument id number: **Method:** **Run number:** LB134315

Start date: 01/16/2025 **End date:** 01/16/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1847	Fe
S1	S1	1	1852	Fe
S2	S2	1	1856	Fe
S3	S3	1	1900	Fe
S4	S4	1	1904	Fe
S5	S5	1	1909	Fe
ICV01	ICV01	1	1918	Fe
LLICV01	LLICV01	1	1927	Fe
ICB01	ICB01	1	1932	Fe
CRI01	CRI01	1	1936	Fe
ICSA01	ICSA01	1	1940	Fe
ICSAB01	ICSAB01	1	1945	Fe
CCV01	CCV01	1	1949	Fe
CCB01	CCB01	1	1953	Fe
Q1081-01	RW7-SP100-20250113	1	2030	Fe
CCV02	CCV02	1	2043	Fe
CCB02	CCB02	1	2047	Fe
CCV03	CCV03	1	2101	Fe
CCB03	CCB03	1	2110	Fe

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1081 **Sas no.:** Q1081 **Sdg no.:** Q1081

Instrument id number: **Method:** **Run number:** LB134334

Start date: 01/17/2025 **End date:** 01/17/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1051	Fe
S1	S1	1	1055	Fe
S2	S2	1	1059	Fe
S3	S3	1	1104	Fe
S4	S4	1	1108	Fe
S5	S5	1	1112	Fe
ICV01	ICV01	1	1121	Fe
LLICV01	LLICV01	1	1126	Fe
ICB01	ICB01	1	1130	Fe
CRI01	CRI01	1	1135	Fe
ICSA01	ICSA01	1	1139	Fe
ICSAB01	ICSAB01	1	1143	Fe
CCV01	CCV01	1	1156	Fe
CCB01	CCB01	1	1200	Fe
PB166054BL	PB166054BL	1	1205	Fe
PB166054BS	PB166054BS	1	1209	Fe
CCV02	CCV02	1	1247	Fe
CCB02	CCB02	1	1251	Fe
CCV03	CCV03	1	1336	Fe
CCB03	CCB03	1	1341	Fe
CCV04	CCV04	1	1427	Fe
CCB04	CCB04	1	1431	Fe
Q1081-04	RW7-SP303-20250113	1	1512	Fe
Q1081-04DUP	RW7-SP303-20250113DUP	1	1517	Fe
Q1081-04L	RW7-SP303-20250113L	5	1521	Fe
CCV05	CCV05	1	1534	Fe
CCB05	CCB05	1	1538	Fe
Q1081-04MS	RW7-SP303-20250113MS	1	1600	Fe
Q1081-04MSD	RW7-SP303-20250113MSD	1	1604	Fe
CCV06	CCV06	1	1616	Fe
CCB06	CCB06	1	1620	Fe
CCV07	CCV07	1	1711	Fe
CCB07	CCB07	1	1716	Fe
CCV08	CCV08	1	1752	Fe
CCB08	CCB08	1	1756	Fe