

# **SUB DATA PACKAGE**

PROJECT NAME: NWIRP BETHPAGE 112G08005-WE13

**PROJECT # : Q1005** 

TETRA TECH NUS, INC.
661 Andersen Drive
Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID: Q1005

**ATTENTION:** Ernie Wu





Q1005 1 of 20



# **Cover Page**

**Order ID:** Q1005

**Project ID:** NWIRP Bethpage 112G08005-WE13

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

Lab Sample Number Client Sample Number

Q1005-01 VPB190A-HYD-20241231

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 :

By Nimisha Pandya, QA/QC Supervisor at 8:46 am, Jan 16, 2025 : 1/16/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

Q1005 2 of 20

# ANALYTICAL REPORT

# PREPARED FOR

Attn: Ms. Yazmeen Gomez Chemtech Consulting Group Inc. 284 Sheffield Street Mountainside, New Jersey 07092

Generated 1/14/2025 7:58:08 AM

# **JOB DESCRIPTION**

1,4 Dioxane

# **JOB NUMBER**

810-133705-1

Eurofins Eaton Analytical South Bend 110 S Hill Street South Bend IN 46617

# **Eurofins Eaton Analytical South Bend**

#### **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

## **Authorization**

Generated 1/14/2025 7:58:08 AM

Authorized for release by

Nathan Trowbridge, Manager of Project Management

Nathan.Trowbridge@et.eurofinsus.com

(574)233-4777

Eurofins Eaton South Bend is a laboratory within Eurofins Eaton Analytical, LLC, a company within Eurofins Environment Testing Group of Companies

Q1005

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Eurofins Eaton Analytical South Bend 1/14/2025

## **Definitions/Glossary**

Client: Chemtech Consulting Group Inc. Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

**Glossary** 

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
DOI	Prooficed Quantitation Limit

PQL Practical Quantitation Limit **PRES** Presumptive

RER Relative Error Ratio (Radiochemistry) RL

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**Quality Control** 

TNTC Too Numerous To Count

QC

1/14/2025

#### **Case Narrative**

Client: Chemtech Consulting Group Inc.

Project: 1,4 Dioxane

Job ID: 810-133705-1

**Eurofins Eaton Analytical South Bend** 

Job ID: 810-133705-1

Job Narrative 810-133705-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these
  situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise
  specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The sample was received on 1/9/2025 9:45 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C.

#### GC/MS Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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## **Detection Summary**

Client: Chemtech Consulting Group Inc.

Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

Client Sample ID: VPB190A-HYD-20241231

Lab Sample ID: 810-133705-1

No Detections.

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## **Client Sample Results**

Client: Chemtech Consulting Group Inc.

Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

Client Sample ID: VPB190A-HYD-20241231 Lab Sample ID: 810-133705-1

Date Collected: 12/31/24 10:00 Matrix: Drinking Water

Date Received: 01/09/25 09:45

Method: EPA 522 - 1,4 Diox	ane (GC/MS SIM)						
Analyte	Result Qua	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.070	0.070	ug/L		01/10/25 07:32	01/10/25 22:31	1
Surrogate	%Recovery Qua	alifier Limits			Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	90	70 - 130			01/10/25 07:32	01/10/25 22:31	1

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## **Surrogate Summary**

Client: Chemtech Consulting Group Inc.

Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Drinking Water Prep Type: Total/NA

_			Percent Surrogate Recovery (Acceptance Limits)
		DXE	
Lab Sample ID	Client Sample ID	(70-130)	
810-133705-1	VPB190A-HYD-20241231	90	
LCS 810-129025/3-A	Lab Control Sample	92	
LLCS 810-129025/2-A	Lab Control Sample	93	
MBL 810-129025/1-A	Method Blank	86	
Surrogate Legend			
DXE = 1,4-Dioxane-d8 (	Surr)		

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Job ID: 810-133705-1

Client: Chemtech Consulting Group Inc.

Project/Site: 1,4 Dioxane

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MBL 810-129025/1-A Client Sample ID: Method Blank

**Matrix: Drinking Water** Analysis Batch: 129093 Prep Type: Total/NA **Prep Batch: 129025** 

Dil Fac Analyte Result Qualifier RL Unit Prepared Analyzed 1,4-Dioxane <0.062 0.070 ug/L 01/10/25 07:32 01/10/25 19:15

MBL MBL

MBL MBL

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 01/10/25 07:32 1,4-Dioxane-d8 (Surr) 86 70 - 130 01/10/25 19:15

Lab Sample ID: LCS 810-129025/3-A Client Sample ID: Lab Control Sample

**Matrix: Drinking Water** Analysis Batch: 129093

**Matrix: Drinking Water** 

Analysis Batch: 129093

Prep Type: Total/NA

**Prep Batch: 129025** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 1,4-Dioxane 10.0 9.24 ug/L 92 70 - 130

LCS LCS

Surrogate %Recovery Qualifier Limits 70 - 130 1,4-Dioxane-d8 (Surr) 92

Lab Sample ID: LLCS 810-129025/2-A **Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Prep Batch: 129025** 

Spike LLCS LLCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 1,4-Dioxane 0.0700 0.0807 ug/L 115

LLCS LLCS

Surrogate %Recovery Qualifier Limits 1,4-Dioxane-d8 (Surr) 93 70 - 130 50 - 150

Eurofins Eaton Analytical South Bend

# **QC Association Summary**

Client: Chemtech Consulting Group Inc. Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

#### GC/MS Semi VOA

#### **Prep Batch: 129025**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-133705-1	VPB190A-HYD-20241231	Total/NA	Drinking Water	522	
MBL 810-129025/1-A	Method Blank	Total/NA	<b>Drinking Water</b>	522	
LCS 810-129025/3-A	Lab Control Sample	Total/NA	<b>Drinking Water</b>	522	
LLCS 810-129025/2-A	Lab Control Sample	Total/NA	Drinking Water	522	

#### Analysis Batch: 129093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-133705-1	VPB190A-HYD-20241231	Total/NA	Drinking Water	522	129025
MBL 810-129025/1-A	Method Blank	Total/NA	Drinking Water	522	129025
LCS 810-129025/3-A	Lab Control Sample	Total/NA	Drinking Water	522	129025
LLCS 810-129025/2-A	Lab Control Sample	Total/NA	Drinking Water	522	129025

#### **Lab Chronicle**

Client: Chemtech Consulting Group Inc. Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

Client Sample ID: VPB190A-HYD-20241231

Lab Sample ID: 810-133705-1 Date Collected: 12/31/24 10:00 **Matrix: Drinking Water** 

Date Received: 01/09/25 09:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	522			129025	MW	EA SB	01/10/25 07:32
Total/NA	Analysis	522		1	129093	KO	EA SB	01/10/25 22:31

#### **Laboratory References:**

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Client: Chemtech Consulting Group Inc.

Project/Site: 1,4 Dioxane

Job ID: 810-133705-1

#### **Laboratory: Eurofins Eaton Analytical South Bend**

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	ISO/IEC 17025	5794.01	07-31-26
Alabama	State	40700	06-30-25
Alaska	State	IN00035	06-30-25
Arizona	State	AZ0432	07-26-25
Arkansas (DW)	State	EPA IN00035	06-30-25
California	State	2920	06-30-25
Colorado	State	IN00035	02-28-25
Connecticut	State	PH-0132	03-31-26
Delaware (DW)	State	IN00035	06-30-25
Florida	NELAP	E87775	06-30-25
Georgia (DW)	State	929	06-30-25
Guam	State	23-011R	07-15-25
Hawaii	State	IN035	06-30-25
Idaho (DW)	State	IN00035	12-31-25
IL Dept. of Public Health (Micro)	State	17767	06-30-25
Illinois	NELAP	200001	09-30-25
Indiana	State	C-71-01	12-31-25
Indiana (Micro)	State	M-76-07	12-31-25
lowa	State	IA Lab #098	11-01-25
Kansas	NELAP	E-10233	10-31-25
Kentucky (DW)	State	KY90056	12-31-24 *
Louisiana (DW)	State	LA014	12-31-25
Maine	State	IN00035	05-01-25
Maryland	State	209	06-30-25
Massachusetts	State	M-IN035	06-30-25
MI - RadChem Recognition	State	9926	06-01-25
Michigan	State	9926	12-31-25
Minnesota	NELAP	1989807	12-31-25
Mississippi	State	IN00035	06-30-25
• •	State	880	09-30-27
Missouri	State	CERT0026	01-01-26
Montana (DW) Nebraska	State		
		NE-OS-05-04	06-30-25
Nevada	State	IN000352024-01	07-31-25
New Hampshire	NELAP	2124	11-05-25
New Jersey	NELAP	IN598	06-30-25
New Mexico	State	IN00035	06-30-25
New York	NELAP	11398	04-01-25
North Carolina (DW)	State	18700	07-31-25
North Dakota	State	R-035	06-30-24 *
Northern Mariana Islands (DW)	State	IN00035	06-30-25
Ohio	State	87775	06-30-25
Oklahoma	NELAP	D9508	08-31-25
Oregon	NELAP	4156	09-16-25
Pennsylvania	NELAP	68-00466	04-30-25
Puerto Rico	State	IN00035	04-01-25
Rhode Island	State	LAO00343	12-30-24 *
South Carolina	State	95005001	06-30-25
South Dakota (DW)	State	IN00035	06-30-25
Tennessee	State	TN02973	06-30-25
Texas	NELAP	T104704187-22-16	12-31-25

 $<sup>^{\</sup>star}\, \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins Eaton Analytical South Bend

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## **Accreditation/Certification Summary**

Client: Chemtech Consulting Group Inc. Job ID: 810-133705-1

Project/Site: 1,4 Dioxane

#### **Laboratory: Eurofins Eaton Analytical South Bend (Continued)**

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	TCEQ Water Supply	TX207	06-30-25
USEPA UCMR 5	US Federal Programs	IN00035	12-31-25
Utah	NELAP	IN00035	07-31-25
Vermont	State	VT-8775	11-15-25
Virginia	NELAP	460275	03-14-25
Washington	State	C837	01-01-25 *
West Virginia (DW)	State	9927 C	01-31-25
Wisconsin	State	999766900	08-31-25
Wisconsin (Micro)	State	10121	12-31-25
Wyoming	State	8TMS-L	06-30-25

 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

# **Method Summary**

Client: Chemtech Consulting Group Inc.

Project/Site: 1,4 Dioxane

Job ID: 810-133705-1

Method	Method Description	Protocol	Laboratory
522	1,4 Dioxane (GC/MS SIM)	EPA	EA SB
522	Solid-Phase Extraction (SPE)	EPA	EA SB

#### Protocol References:

EPA = US Environmental Protection Agency

#### Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

# **Sample Summary**

Client: Chemtech Consulting Group Inc.

Project/Site: 1,4 Dioxane

Job ID: 810-133705-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-133705-1	VPB190A-HYD-20241231	Drinking Water	12/31/24 10:00	01/09/25 09:45

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#### 284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 Fax (908) 789-8922 **WWW.CHEMTECH.NET**

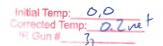


#### **CHAIN OF CUSTODY RECORD**

Sub Lab INFORMATION	CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION	
COMPANY: Eurofins Eaton Analytical South Bend ORDER ID: Q1005			BILL TO: CHEMTECH PO#: q1005	
ADDRESS: 110 South Bend	PROJECT ID:NWIRP Bethpage 112G0	08005-WE13	ADDRESS: 284, Sheffield Street	
CITY:South Bend State :IN ZIP :46617	PROJECT MANAGER Yazme	en	CITY: Mountainside State : NJ ZIP : 07092	
E-mail :Nathan.Trowbridge@et.eurofinsus.	E-mail: YAZMEEN@CHEMTECH.NET		ATTENTION :Yazmeen	
PHONE :574-233-4777	PHONE: (908) 789 8900	FAX: (908) 789 8922	PHONE : (908) 789 8900 FAX : (908) 789 8922	

Report: Level 4+Level 2+ RAW DATA Comment: \*DOD (REPORT TO THE LOD AND INCLUDE PRESENTATION FOR THE LOQ AND DL) **EDD: ADAPT** 

ID	CLIENT SAMPLE IDENTIFICATION	SAMPLE MATRIX	ANALYSIS	Preservative	Method	SAMPLE CO DATE	LLECTION TIME	# OF BOTTLES	TAT DAYS
01	VPB190A-HYD-20241231	Water	1,4 Dioxane	1:1 HNO3 to pH < 2	522	12/31/2024	10:00:00	2	10



SAM	PLE CUSTODY MUS	T BE DOCUMENTED BELOV	V EACH TIME SAMPLES CHANGES POSSESSION	INCLUDING COURIEF	R DELIVERY					
RELINQUIESHED BY SAMPLER:	DATETIME:	RECEIVED BY:	Conditions of bottles or Coolers at receipt:	□ Compliant	□ Compliant □ Non Compliant Cooler Temp					
1.	01/09/2025	1. Plytor Tarl				Ice or Cooler?				
RELINQUIESHED BY:	DATETIME: 0945	RECEIVED BY:								
2.		2.								
RELINQUIESHED BY:	DATETIME:	RECEIVED BY:			□ OVERNIGHT	Shipment Complete:				
3.		3.	Page 1 of 1		OVERNIGHT	□ <sub>YES</sub> □ <sub>NO</sub>				

















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CHAIN	OF C	JSTO	DDY F	RECC	ORD

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

Chemtech Project Number: Q1004 /Q1

						COC Number:											
	PROJECT INFORMATION				BILLING INFORMATION												
COMPANY: Tetra T	PROJECT NAME: NWIRP Bethpage					BILL TO: SEE CONTRACT PO#											
ADDRESS: 4433 C	PROJECT #: 112G0800	)5-WE1	3	LOCATIO	N: VPB-18	9	ADDRESS:										
CITY: Virginia Beac	PROJECT MANAGER:	Ernie V	√u				CITY:								STAT	re: zip;	
ATTENTION: Ernie	E-MAIL: ernie.wu@tetra	tech.co	m				ATTENTION: PHONE:										
PHONE: 757-466-49	01 FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148						ANALYSIS									
DATA	TURNAROUND INFORMATION	DATA DELI	VER/	BLE	INFOR	MATION		260B)	8270	(522							
FAX: 2 & 10 DAYS* HARD COPY: 2 & 10 DAYS* EDD 2 & 10 DAYS* * TO BE APPROVED BY CHEMTECH		□ RESEULTS ONLY □ USEPA CLP □ RESULTS + QC □ New York State ASP "B" □ New Jersey REDUCED □ New York State ASP "A" □ New Jersey CLP □ Other				VOC(SW846-8260B)	1,4 Dioxane (8270 SIM)	رم 1,4 Dioxane (	4	5	6	7	8	9			
STANDARD TURN	IAROUND TIME IS 10 BUSINESS DAYS	☐ EDD Format						PRESERVATIVES									COMMENTS
			SAM	PLE	SAMPLE 0		တ္မ	_									< Specify Preservatives
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	COMP	GRAB <b>34</b>	DATE	TIME	# of Bottles	1	2	3	4 5	5	6	7	8	9	A-HCI B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	BP-VPB-190A-TB-20241230	QA		х	12/30/24	8:00	2	2									Trip Blank
2.	VPB190A-HYD-20241231	QA		х	12/31/24	10:00	5	2	1	2							Hydrant Sample
3.	BP-VPB-190A-EB-20241231	QA		х	12/31/24	11:40	2	2									Equipment Blank
4.	BP-VPB-190A-GW-778-780	AQ		х	12/31/24	14:05	3	3									Collected extra vials due to high particulate matter
5.	BP-VPB-190A-GW-803-805	AQ		х	1/2/25	12:30	3	2	1								~ -
6.	BP-VPB-190A-GW-818-820	AQ		Х	1/2/25	14:45	2	2									
7.																	
8.																	
9.																	
10.																	
	AMPLE CUSTODY MUST BE DOCUME	NTED BELOW E	ACH T	ΓIME	SAMPL	ES CHA	ANGE	PRO	SSE	SSIC	N IN	ICLU	DIN	G CC	DURI	ER I	DELIVERY
RELINQUISHED BY			Conditions of bottles or coolers at receipt:  Compliant Non Compliant Cooler Temp  MeOH extraction requires an additional 4oz. Jar for percent solid  Comments: 48hr TAT - For VOC's see worksheet #15 of SAP 2018 for VPB program  10-DAY TAT - For 1.4 Dioxane (8270 SIM)							ice in Cooler ?:							
RELINCALISHED BY	B BY	SHIPPE				SHIPPED								Shipment Complete  YES NO			
40	1-2-25   3 	COPYFOR RETURN 1	O CLI	ENT	YELLO	W - CHEN	ATECH C	COPY	Р	INK -	SAMP	LER (	COPY				

Client: Chemtech Consulting Group Inc.

Job Number: 810-133705-1

Login Number: 133705

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Trowbridge, Peyton

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

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