## Vang, Duabchi L - DNR

**From:** Vang, Duabchi L - DNR
**Sent:** Wednesday, July 7, 2021 4:41 PM
**To:** Colleen Schian
**Cc:** Horn, Shawn (Shawn.Horn@ghd.com); Tyler Fadness
**Subject:** RE: Town of Union Landfill

Hi Colleen,

Thanks for the notification and lab data. At this time you may treat the 1,4 dioxane as any other contaminant and continue on with the NR 700 process as usual. 1,4 dioxane won't be handled the same way PFAS is handled in our program at this site. I recommend confirmation sampling as you've already planned.

The emerging contaminant letter that was sent to Brian Amundson, dated August 17, 2020, was a reminder to include emerging contaminants as part of the site investigation. All open contaminated sites received this letter from the Remediation and Redevelopment Program. In addition, a statement evaluating PFAS and other emerging contaminants will be required before the final closure letter is issued. Feel free to give me a call if you would like to discuss this evaluation or if you need some additional guidance on this.

Thank you

**We are committed to service excellence.**
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Duabchi (Dee) Vang
Pronouns: she/her/hers
Phone: 715-492-1213
duabchi.vang@wisconsin.gov

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**From:** Colleen Schian <Colleen.Schian@eauclairewi.gov>
**Sent:** Thursday, July 1, 2021 9:35 AM
**To:** Vang, Duabchi L - DNR <duabchi.vang@wisconsin.gov>
**Cc:** Horn, Shawn (Shawn.Horn@ghd.com) <Shawn.Horn@ghd.com>; Tyler Fadness <Tyler.Fadness@EauclaireWi.Gov>
**Subject:** Town of Union Landfill

Dee, Per our conversation, I have attached the results regarding 1,4 dioxane. I understand that you will review the report and forward it on to the committee that is working on emerging contaminants. As we discussed, at this time we are re-testing to confirm the results and as a precautionary measure we are providing bottled water to the Candell's (PW11). We will notify you once we have the results of further testing and await your recommendations for next steps.Thanks.

Colleen Schian
Risk Manager
City of Eau Claire
203 S. Farwell St.
Eau Claire, Wi 54701
Colleen.Schian@EauClaireWI.Gov
(715)839-4908

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-200467-1
Client Project/Site: 1,4 Dioxane - Blue Valley

For:
City of Eau Claire WWTP
1000 Ferry St.
Eau Claire, Wisconsin 54703

Attn: Ty Fadness

Jodie Bracken

*Authorized for release by:*
*6/23/2021 1:27:01 PM*
Jodie Bracken, Project Management Assistant II
Jodie.Bracken@Eurofinset.com

Designee for

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Job ID: 500-200467-1

### Laboratory: Eurofins TestAmerica, Chicago

**Narrative**

**Job Narrative**
**500-200467-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 6/9/2021 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9º C.

**GC/MS Semi VOA**
Method 8270D SIM ID: The following samples were diluted to bring the concentration of target analytes within the calibration range: Candell (500-200467-2) and BV Stripping Tower (500-200467-3). Elevated reporting limits (RLs) are provided.

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

**Organic Prep**
Method 3510C: Insufficient sample volume was provided for the following samples for the 8270 SIM analysis: Bertsch (500-200467-1), Candell (500-200467-2) and BV Stripping Tower (500-200467-3).

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

# Detection Summary

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

## Client Sample ID: Bertsch — Lab Sample ID: 500-200467-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.44 | J | 0.80 | 0.40 | ug/L | 1 | | 8270D SIM ID | Total/NA |

## Client Sample ID: Candell — Lab Sample ID: 500-200467-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 130 | | 8.0 | 4.0 | ug/L | 10 | | 8270D SIM ID | Total/NA |

## Client Sample ID: BV Stripping Tower — Lab Sample ID: 500-200467-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 200 | | 16 | 8.0 | ug/L | 20 | | 8270D SIM ID | Total/NA |

This Detection Summary does not include radiochemical test results.

# Method Summary

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8270D SIM ID | Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) | SW846 | TAL BUF |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | SW846 | TAL BUF |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 500-200467-1 | Bertsch | Water | 06/07/21 11:53 | 06/09/21 10:25 | |
| 500-200467-2 | Candell | Water | 06/07/21 12:23 | 06/09/21 10:25 | |
| 500-200467-3 | BV Stripping Tower | Water | 06/08/21 10:32 | 06/09/21 10:25 | |

# Client Sample Results

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

**Client Sample ID: Bertsch**
**Date Collected: 06/07/21 11:53**
**Date Received: 06/09/21 10:25**

**Lab Sample ID: 500-200467-1**
**Matrix: Water**

**Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.44 | J | 0.80 | 0.40 | ug/L | | 06/11/21 14:29 | 06/16/21 21:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *73* | | *15 - 110* | *06/11/21 14:29* | *06/16/21 21:09* | *1* |

# Client Sample Results

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

**Client Sample ID: Candell**
**Date Collected: 06/07/21 12:23**
**Date Received: 06/09/21 10:25**

**Lab Sample ID: 500-200467-2**
**Matrix: Water**

**Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **130** | | 8.0 | 4.0 | ug/L | | 06/11/21 14:29 | 06/18/21 20:31 | 10 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *72* | | *15 - 110* | *06/11/21 14:29* | *06/18/21 20:31* | *10* |

# Client Sample Results

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

## Client Sample ID: BV Stripping Tower

**Date Collected: 06/08/21 10:32**
**Date Received: 06/09/21 10:25**

## Lab Sample ID: 500-200467-3

**Matrix: Water**

### Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **200** | | 16 | 8.0 | ug/L | | 06/11/21 14:29 | 06/18/21 20:54 | 20 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *66* | | *15 - 110* | *06/11/21 14:29* | *06/18/21 20:54* | *20* |

# Definitions/Glossary

Client: City of Eau Claire WWTP
Job ID: 500-200467-1
Project/Site: 1,4 Dioxane - Blue Valley

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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 |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# QC Association Summary

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

## GC/MS Semi VOA

### Prep Batch: 585078

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-200467-1 | Bertsch | Total/NA | Water | 3510C | |
| 500-200467-2 | Candell | Total/NA | Water | 3510C | |
| 500-200467-3 | BV Stripping Tower | Total/NA | Water | 3510C | |
| MB 480-585078/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 480-585078/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 480-585078/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 585697

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-200467-1 | Bertsch | Total/NA | Water | 8270D SIM ID | 585078 |
| MB 480-585078/1-A | Method Blank | Total/NA | Water | 8270D SIM ID | 585078 |
| LCS 480-585078/2-A | Lab Control Sample | Total/NA | Water | 8270D SIM ID | 585078 |
| LCSD 480-585078/3-A | Lab Control Sample Dup | Total/NA | Water | 8270D SIM ID | 585078 |

### Analysis Batch: 586033

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-200467-2 | Candell | Total/NA | Water | 8270D SIM ID | 585078 |
| 500-200467-3 | BV Stripping Tower | Total/NA | Water | 8270D SIM ID | 585078 |

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 480-585078/1-A**
**Matrix: Water**
**Analysis Batch: 585697**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 585078**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | <0.10 | | 0.20 | 0.10 | ug/L | | 06/11/21 14:29 | 06/16/21 17:14 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *33* | | *15 - 110* | *06/11/21 14:29* | *06/16/21 17:14* | *1* |

**Lab Sample ID: LCS 480-585078/2-A**
**Matrix: Water**
**Analysis Batch: 585697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 585078**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 1.00 | 1.08 | | ug/L | | 108 | 40 - 140 | | |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8* | *39* | | *15 - 110* |

**Lab Sample ID: LCSD 480-585078/3-A**
**Matrix: Water**
**Analysis Batch: 585697**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 585078**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 1.00 | 1.09 | | ug/L | | 109 | 40 - 140 | 1 | 20 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8* | *38* | | *15 - 110* |

# Lab Chronicle

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

## Client Sample ID: Bertsch
**Date Collected: 06/07/21 11:53**
**Date Received: 06/09/21 10:25**

**Lab Sample ID: 500-200467-1**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 585078 | 06/11/21 14:29 | CMC | TAL BUF |
| Total/NA | Analysis | 8270D SIM ID | | 1 | 585697 | 06/16/21 21:09 | RJS | TAL BUF |

## Client Sample ID: Candell
**Date Collected: 06/07/21 12:23**
**Date Received: 06/09/21 10:25**

**Lab Sample ID: 500-200467-2**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 585078 | 06/11/21 14:29 | CMC | TAL BUF |
| Total/NA | Analysis | 8270D SIM ID | | 10 | 586033 | 06/18/21 20:31 | RJS | TAL BUF |

## Client Sample ID: BV Stripping Tower
**Date Collected: 06/08/21 10:32**
**Date Received: 06/09/21 10:25**

**Lab Sample ID: 500-200467-3**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 585078 | 06/11/21 14:29 | CMC | TAL BUF |
| Total/NA | Analysis | 8270D SIM ID | | 20 | 586033 | 06/18/21 20:54 | RJS | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: City of Eau Claire WWTP
Job ID: 500-200467-1
Project/Site: 1,4 Dioxane - Blue Valley

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 998310390 | 09-01-21 |

**Eurofins TestAmerica, Chicago**
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

# Chain of Custody Record

eurofins Environment Testing America

| Client Information | Sampler: Ty Fadness | Lab PM: Fredrick Sandie | Carrier Tracking No(s): | COC No: 500-90371-40403 1 |
|---|---|---|---|---|
| Client Contact: Ty Fadness | Phone: 715-839-6121 | E Mail: sandra.fredrick@eurofinset.com | State of Origin: | Page: Page 1 of 1 |
| Company: City of Eau Claire WWTP | PWSID: | | | Job #: 500-200467 |

| | | | |
|---|---|---|---|
| Address: 1000 Ferry St. | Due Date Requested: ASAP | | |
| City: Eau Claire | TAT Requested (days): | | |
| State Zip: WI 54703 | Compliance Project: Δ Yes Δ No | 500-200467 COC | |
| Phone: | PO #: Pay by Credit Card | | |
| Email: Tyler.Fadness@EauclaireWi.Gov | WO #: | | |
| Project Name: 1 4 Dioxane | Project #: 50018749 | | |
| Site: Blue Valley | SSOW#: | | |

**Analysis Requested**

**Preservation Codes**

| | | | |
|---|---|---|---|
| A | HCL | M | Hexane |
| B | NaOH | N | None |
| C | Zn Acetate | O | AsNaO2 |
| D | Nitric Acid | P | Na2O4S |
| E | NaHSO4 | Q | Na2SO3 |
| F | MeOH | R | Na2S2O3 |
| G | Amchlor | S | H2SO4 |
| H | Ascorbic Acid | T | TSP Dodecahydrate |
| I | Ice | U | Acetone |
| J | DI Water | V | MCAA |
| K | EDTA | W | pH 4-5 |
| L | EDA | Z | other (specify) |

Other

| | Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8270D_SIM_MS_ID - 1,4-Dioxane | Total Number of containers | Special Instructions/Note |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Preservation Code: | | | N | | | |
| 1 | Bertsch | 6/7/21 | 1153 | G | Water | | N | X | | |
| 2 | Candell | 6/7/21 | 1223 | G | Water | | N | X | | |
| 3 | BV Stripping Tower | 6/8/21 | 1032 | G | Water | | N | X | | |
| | | | | | Water | | | | | |

***Possible Hazard Identification***
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

| | | | | | |
|---|---|---|---|---|---|
| Empty Kit Relinquished by: | Date | Time | Method of Shipment: | | |
| Relinquished by: | Date/Time: 6/8/21 1400 | Company | Received by: | Date/Time: 6/9/21 1025 | Company: EACHT |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time | Company |
| Relinquished by: | Date/Time | Company | Received by: | Date/Time. | Company |

| | | |
|---|---|---|
| Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks: 3.2-7.2.9 |

ORIGIN ID:PHDA (330) 966-9672
TY FADNESS
CITY OF EAU CLAIRE WWTP
1000 FERRY ST.

EAU CLAIRE, WI 54703
UNITED STATES US

SHIP DATE: 26MAR21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3409

TO

EUROFINS TESTAMERICA CHIC
2417 BOND STREET

UNIVERSITY PARK IL 604843

500-200467 Wayb

(708) 534-5200
REF: S500-90371

RMA:

FedEx
Expres

TRK#

RETURNS MON-SA
WED - 09 JUN AA
PRIORITY OVERNIGHT

FedEx
TRK# 0221 5018 6633 3017

AC JOTA

60484
IL-US
ORD

FID: 106507 08Jun2021 EAUA 56DG3/B387/1B23

**Eurofins TestAmerica, Chicago**
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Fredrick, Sandie | Carrier Tracking No(s): | COC No: 500-149430.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: sandra.fredrick@eurofinset.com | State of Origin: Wisconsin | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): State - Wisconsin | | Job #: 500-200467-1 |
| Address: 10 Hazelwood Drive, , | Due Date Requested: 6/22/2021 | | | |
| City: Amherst | TAT Requested (days): | | | |
| State, Zip: NY, 14228-2298 | | | | |
| Phone: 716-691-2600(Tel) 716-691-7991(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: 1,4 Dioxane | Project #: 50018749 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8270D_SIM_MS_ID/3510C_LVI 1,4-Dioxane | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| Bertsch (500-200467-1) | 6/7/21 | 11:53 Central | | Water | | | X | 2 | |
| Candell (500-200467-2) | 6/7/21 | 12:23 Central | | Water | | | X | 2 | |
| BV Stripping Tower (500-200467-3) | 6/8/21 | 10:32 Central | | Water | | | X | 2 | |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 | Special Instructions/QC Requirements: |

| | | | | | | |
|---|---|---|---|---|---|---|
| Empty Kit Relinquished by: | | Date: | Time: | Method of Shipment: | | |
| Relinquished by: | Date/Time: 6/9/21 1600 | Company ETA | Received by: | Date/Time: 6-10-21 1000 | Company TAB | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company | |
| Custody Seals Intact: ∆ Yes ∆ No | Custody Seal No.: | | Cooler Temperature(s) °C and Other Remarks: 2.7 TCF | | | |

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: City of Eau Claire WWTP

Job Number: 500-200467-1

**Login Number: 200467**
**List Number: 1**
**Creator: Scott, Sherri L**

**List Source: Eurofins TestAmerica, Chicago**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.9 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | 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 | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | 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"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: City of Eau Claire WWTP

Job Number: 500-200467-1

**Login Number: 200467**
**List Number: 2**
**Creator: Yeager, Brian A**

**List Source: Eurofins TestAmerica, Buffalo**
**List Creation: 06/10/21 04:11 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.7 ICE IR GUN #1 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers 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 | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | True | |
| Chlorine Residual checked. | True | |

# Isotope Dilution Summary

Client: City of Eau Claire WWTP
Project/Site: 1,4 Dioxane - Blue Valley

Job ID: 500-200467-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (15-110) | | | | | | |
| 500-200467-1 | Bertsch | 73 | | | | | | |
| 500-200467-2 | Candell | 72 | | | | | | |
| 500-200467-3 | BV Stripping Tower | 66 | | | | | | |
| LCS 480-585078/2-A | Lab Control Sample | 39 | | | | | | |
| LCSD 480-585078/3-A | Lab Control Sample Dup | 38 | | | | | | |
| MB 480-585078/1-A | Method Blank | 33 | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8