

Notice: Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do **not** use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located.

See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 12/18)

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Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name Wahl	First Scott	MI	Organization/ Business Name Tyco Fire Products LP
Mailing Address 2700 Industrial Parkway South		City Marinette	State WI
		ZIP Code 54143	
Phone # (include area code)	Fax # (include area code)	Email	

The requester listed above: (select all that apply)

- Is currently the owner
 Is considering selling the Property
 Is renting or leasing the Property
 Is considering acquiring the Property
 Is a lender with a mortgagee interest in the Property
 Other. Explain the status of the Property with respect to the applicant:

Contact Information (to be contacted with questions about this request)

Select if same as requester

Contact Last Name Verburg	First Ben	MI	Organization/ Business Name Arcadis
Mailing Address 126 N Jefferson Street, Suite 400		City Milwaukee	State WI
		ZIP Code 53202	
Phone # (include area code) (414) 276-7742	Fax # (include area code)	Email Ben.Verburg@arcadis.com	

Environmental Consultant (if applicable)

Contact Last Name Verburg	First Ben	MI	Organization/ Business Name Arcadis
Mailing Address 126 N Jefferson Street, Suite 400		City Milwaukee	State WI
		ZIP Code 53202	
Phone # (include area code) (414) 276-7742	Fax # (include area code)	Email Ben.Verburg@arcadis.com	

Section 2. Property Information

Property Name Tyco Fire Technology Center - PFCs	FID No. (if known) 438005590
BRRTS No. (if known) 0238580694	Parcel Identification Number
Street Address 2700 Industrial Parkway South	City Marinette
	State WI
	ZIP Code 54143
County Marinette	Municipality where the Property is located <input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of Marinette
	Property is composed of: <input type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels
	Property Size Acres 380

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

No Yes

Date requested by: _____

Reason: _____

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

No. **Include the fee that is required for your request in Section 3, 4 or 5.**

Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

Section 3. Technical Assistance or Post-Closure Modifications;

Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: [Numbers in brackets are for WI DNR Use]

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of \$350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- Hazardous Waste Determination - **Include a fee of \$700.**
- Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
 - Include a fee of \$300 for sites with residual soil contamination; and
 - Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

Phase I Environmental Site Assessment Report - Date: _____

Phase II Environmental Site Assessment Report - Date: _____

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Legal Description of Property (required for all liability requests and specialized agreements)

Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

Groundwater Soil Sediment Other medium - Describe: _____

Date of Collection: _____

A copy of the closure letter and submittal materials

Draft tax cancellation agreement

Draft agreement for assignment of tax foreclosure judgment

Other report(s) or information - Describe: 2021 Foam Monitoring Interim Action Report; WDNR Fee Check No.: 328009

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

Yes - Date (if known): _____

No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at:

dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

I am the person submitting this request (requester)

I prepared this request for: Scott Wahl

Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.


Signature

2/8/2022
Date Signed

Senior Environmental Specialist
Title

(312) 520-0305
Telephone Number (include area code)

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Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a [DNR regional brownfields specialist](#) with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

DNR NORTHERN REGION

Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION

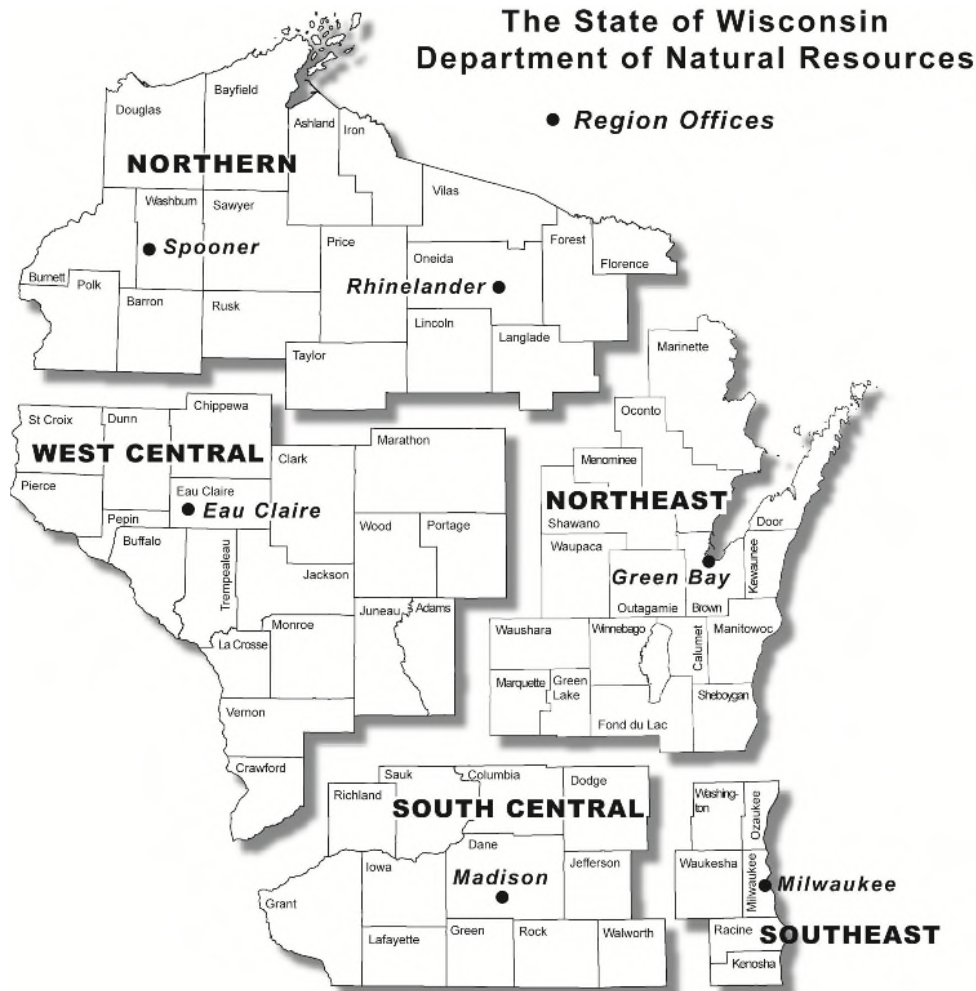
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION

Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee Enclosed? <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

Alyssa Sellwood
Complex Sites Project Manager – Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
101 South Webster Street
Madison, Wisconsin 53703

Arcadis U.S., Inc.
126 North Jefferson
Street
Suite 400
Milwaukee
Wisconsin 53202
Phone: 414 276 7742
Fax: 414 276 7603
www.arcadis.com

Date: February 15, 2022

Our Ref: 30015296

Subject: 2021 Foam Monitoring Interim Action Report and Foam Monitoring Work Plan Modifications
Tyco Fire Technology Center
BRRTS #: 02-38-580694

Dear Ms. Sellwood,

Arcadis U.S., Inc. (Arcadis) has prepared this 2021 Foam Monitoring Interim Action Report and Foam Monitoring Work Plan Modifications on behalf of Tyco Fire Products LP (Tyco) summarizing foam monitoring and removal activities completed in 2021 on waterways (Ditches A, B, C, D, and E) in the City of Marinette, Wisconsin, and the Town of Peshtigo, Wisconsin, and the monitoring and foam collection plan for the ditches moving forward. The foam monitoring work plan modifications included herein formalize the future monitoring and collection actions in the ditches and was prepared based on approval (received via email on October 27, 2021) by the Wisconsin Department of Natural Resources (WDNR) of an inspection frequency reduction. All work related to foam collection activities performed in 2021 was completed per the Revised Foam Monitoring Work Plan submitted to WDNR on April 14, 2021.

Site Location and Contact Information

The Tyco Fire Technology Center is located at 2700 Industrial Parkway South in Marinette, Wisconsin (Site), as shown on **Figure 1**. The Site location is also described as:

- **Public Land Survey System Description:** NE ¼ of the NE ¼ of Section 13, Township 30N, Range 23E.
- **County:** Marinette.
- **Coordinates:** Coordinates describing the approximate locations of the Site boundaries are shown in **Figure 1**.

Contact information for the responsible party (Tyco) is listed below:

- **Name:** Denice Nelson - Senior Director, Remediation and Strategy
- **Address:** 5757 N. Green Bay Avenue, Milwaukee, Wisconsin 53209
- **Telephone Number:** 651-280-7259.

Field Implementation

Tyco began daily visual inspections of Ditches A, B, C, D, and E on March 17, 2021. Floating booms were deployed on Ditch B (March 19, 2021) and Ditches A, C, D, and E (April 1, 2021) after the dissipation of ice at the locations shown in **Figure 2**. Notifications were made to WDNR, U.S. Army Corps. Of Engineers, the Town

Peshtigo and the City of Marinette prior to implementing the interim action. Daily inspections and foam removal activities concluded on November 30, 2021, and all floating booms were removed from Ditches A-E due to the onset of freezing conditions.

Foam Observations and Removal

No foam accumulation was observed on Ditches A, D, or E during daily inspections throughout the 2021 monitoring period. Foam was observed and collected 17 times on Ditch B and 1 time on Ditch C. A summary of the daily inspection logs for Ditches A, B, C (East Branch), C (Southwest Branch), D, and E are provided as **Tables 1, 2, 3, 4, 5, and 6**, respectively. Observed foam was collected via manual skimming with a pool skimmer and transferred into sealed, leak proof 55-gallon drums and stored at the Tyco Fire Training Center (FTC) pending disposal, as described in the Waste Characterization and Disposal section below. Per the 2021 Revised Foam Monitoring Work Plan, the WDNR project manager was notified via email within 2 days of a foam accumulation event.

A cumulative total of approximately 71 gallons of uncollapsed foam were removed from Ditch B and approximately 2 gallons of uncollapsed foam were removed from Ditch C throughout the 2021 reporting period. The structure of the foam collected during the reporting period naturally collapsed over time reducing to approximately 5.7 gallons of liquid.

Foam observations dates, locations, and foam volume removal estimates are shown on **Figure 2**. Photos and descriptions of the observed foam and descriptions of weather conditions are included as **Attachment 1**.

Waste Characterization and Disposal

Per the 2021 Revised Foam Monitoring Work Plan, all foam was removed from the site within 90 days of collection. Foam was first collected on March 19, 2021 and was containerized in a leak proof 55-gallon drum and stored at the FTC pending transport offsite on July 15, 2021 by Endpoint Solutions Corporation (Endpoint). Per the 2021 Revised Foam Monitoring Work Plan, foam collected from all monitored ditches was consolidated into a single drum. One analytical sample was collected from the drum on May 19, 2021 and submitted to Eurofins TestAmerica of West Sacramento, California (Eurofins Sacramento) for analysis of per- and polyfluoroalkyl substances (PFAS) by US Environmental Protection Agency (U.S. EPA) Method 537 Modified and Resource Conservation and Recovery Act metals by U.S. EPA Methods 6020A/7470A under standard chain-of-custody procedures. The drum contained approximately 4 gallons of collapsed foam collected between March 19, 2021 and May 19, 2021 at the time of sampling. The drum was sealed following sampling and no additional material was added.

Foam was next collected on May 21, 2021 and was containerized in a new leak proof 55-gallon drum and stored at the FTC pending transport offsite on August 17, 2021 by Endpoint. Per the 2021 Revised Foam Monitoring Work Plan, foam collected from all monitored ditches was consolidated into a single drum. One analytical sample was collected from the drum on July 20, 2021 and submitted to Eurofins Sacramento for analysis of PFAS by U.S. EPA Method 537 Modified under standard chain-of-custody procedures. The drum contained approximately 1.7 gallons of collapsed foam collected between May 21, 2021 and July 20, 2021 at the time of sampling. The drum was sealed following sampling and no additional material was added.

Both drums were transported to Endpoint's waste transfer facility located in Hartford, Wisconsin. The contents of both drums were combined at Endpoint's facility and are currently pending disposal. Spent booms were transferred to drums and are being stored at the FTC pending disposal.

Ms. Alyssa Sellwood
WDNR
February 15, 2022

Transportation documentation is included in **Attachment 2**. Volumes listed on the manifests (35 gallons) included in **Attachment 2** represent estimates of the completely collapsed foam and foam generated by agitation during transportation from the FTC to Endpoint's facility and are not representative of completely collapsed foam (5.7 gallons). Final disposal documentation will be submitted to WDNR under separate cover after disposal is complete.

Analytical Results and Significance

WDNR was notified of the characterization sample results of the samples collected on May 19, 2021 and July 20, 2021 in letters dated June 18, 2021 and August 16, 2021, respectively. Analytical results of the characterization samples are presented in **Table 7**. Laboratory analytical reports are included in **Attachment 3**.

Historically, aqueous film-forming foams were used as part of the firefighting, development, and quality testing activities conducted at the Site. Outdoor use of PFAS-containing foam was discontinued at the Site in 2017. Surface water foam is generated by turbulence caused by naturally occurring elements such as stream obstructions, changes in stream flow direction, and wind. Furthermore, natural decomposition of plants in surface water bodies release organic compounds which make it easier for foam to form¹.

Tyco has been monitoring the surface water in area ditches since 2018 as part of the site investigation process. Investigation and modeling data indicate that PFAS is migrating through groundwater from the FTC to the east where it can upwell to surface water resulting in detectable concentrations within the surface water. The PFAS concentrations in foam are predictably higher than the concentrations in groundwater or surface water due to the physical properties of PFAS at the molecular level. PFAS is ubiquitous in the environment and amplification of its concentration in foam will occur regardless of the source^{2,3}. In instances where PFAS are present in the water, the foam has been found to accumulate PFAS at higher concentrations than is present in the water. This effect has been demonstrated within the State of Wisconsin at Starkweather Creek⁴ and in the City of Peshtigo at a dam within the Peshtigo River⁵ where WDNR collected simultaneous samples of foam and surface water for PFAS analyses. In all instances, the concentration of PFAS in foam was amplified as compared to the concentrations of PFAS in the underlying surface water. However, the concentrations of PFAS in surface water cannot be used to accurately estimate the concentrations of PFAS in foam. As an example, perfluorooctanesulfonic acid (PFOS) concentrations were amplified by between 200 and 2,700 times in these reported samples compared to the concentrations of PFOS in the underlying surface water. The increase in concentrations has been observed to be even greater in similar studies conducted by the State of Michigan where the observed PFAS concentrations in surface water were compared to PFAS concentrations in foam⁶. Any observed surface water foam is not aqueous film forming foam (AFFF).

The significance of these results include:

1. Foam is naturally occurring in the environment

¹ [PFAS Response - PFAS Foam on Lakes and Streams \(michigan.gov\)](#)

² <https://www.epa.gov/sciencematters/understanding-pfas-environment>

³ Rankin, K., Mabury, S.A., Jenkins, T.M. and Washington, J.W., 2016. A North American and global survey of perfluoroalkyl substances in surface soils: Distribution patterns and mode of occurrence. *Chemosphere*, 161, pp.333-341

⁴ <https://dnr.wi.gov/topic/Contaminants/documents/pfas/Starkweather20191219.pdf> (accessed 2/8/2022)

⁵ <https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/jci/PeshtigoRiver20191030.pdf> (access 2/8/2022)

⁶ <https://www.epa.gov/sciencematters/understanding-pfas-environment>

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2. Some PFAS in the collected foam comes from historic FTC operations and some comes from PFAS that is ubiquitous in the environment^{2,3}
3. PFAS concentrations amplify in foam
4. Collecting and properly disposing of foams also removes PFAS from the environment because PFAS aggregates in foam.
5. Any observed surface water foam is not AFFF.

Work Plan Modifications

Tyco submitted a proposal to modify the frequency of foam inspections to WDNR on September 20, 2021. WDNR approved the work plan modifications in an email dated October 27, 2021. The approved changes are outlined below and will be implemented at the start of the 2022 monitoring season.

- Inspections of Ditches A, C, D, and E will be conducted on a weekly basis
- Inspections of Ditch B will be conducted twice per week (i.e., once every 3 to 5 days)
- If foam observations are reported to Tyco by others in the community prior to a routine inspection, Tyco will collect the foam as soon as possible and daily inspections will resume at the location where the foam was sighted until foam is not observed for 3 consecutive days.

All other monitoring, collection, waste characterization and disposal, and reporting will continue to be conducted per the 2021 Revised Foam Monitoring Work Plan.

Closing

Tyco has completed the foam monitoring and removal tasks for 2021. Floating booms were removed from Ditches A, B, C, D, and E on November 30, 2021 due to the onset of freezing conditions. In 2022, new booms will be deployed and inspection and foam removal activities will resume per the 2021 Revised Foam Monitoring Work Plan and the modifications described herein when allowed by ambient weather conditions.

Please do not hesitate to contact me if there are any questions.

Sincerely,
Arcadis U.S., Inc.



Ben Verburg, PE
Principal Engineer

Email: Ben.Verburg@arcadis.com

Direct Line: 414-277-6231

CC.

Scott Wahl (Tyco)
Denice Nelson (Tyco)
Scott Potter (Arcadis)

Ms. Alyssa Sellwood
WDNR
February 15, 2022

Enclosures:

NR 712.09 Certification

Tables

- 1 Ditch A Inspection Summary
- 2 Ditch B Inspection Summary
- 3 Ditch C (East Branch) Inspection Summary
- 4 Ditch C (Southwest Branch) Inspection Summary
- 5 Ditch D Inspection Summary
- 6 Ditch E Inspection Summary
- 7 Laboratory Analytical Results

Figures

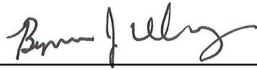
- 1 Site Location Map
- 2 Boom Deployment and Foam Removal Locations

Attachments

- 1 Foam Observation Photo Log
- 2 Transportation and Disposal Documentation
- 3 Laboratory Analytical Reports

NR 712.09 Certification

I, Benjamin J. Verburg, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wisconsin Administrative Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wisconsin Administrative Code; and that all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wisconsin Administrative Code.



Principal Engineer, 31794

Signature, title and P.E. number



P.E. stamp

Tables

Table 1
Ditch A Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch A									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
3/17/2021	0.01	3	East	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/18/2021	0	12.3	Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/19/2021	0	4	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/20/2021	0	8.5	Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/21/2021	0	10	South	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/22/2021	0	6	South-Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/23/2021	0.07	7	East-Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/24/2021	0.31	3	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/25/2021	0	5	East-Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/26/2021	0	4.7	Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/27/2021	0	9	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/28/2021	0.15	21	Northwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/29/2021	0	8	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/30/2021	0	11	West	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/31/2021	0	7	West-Northwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/1/2021	0	9	North-Northwest	New	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/2/2021	0	4.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/3/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/4/2021	0	3.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/5/2021	0	6.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/6/2021	0.04	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/7/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/8/2021	0.14	4.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/9/2021	0.03	5.5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/10/2021	0.16	1.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/11/2021	0.32	3.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/12/2021	0.11	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/13/2021	0.01	9.3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/14/2021	0.15	4.5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/15/2021	0.04	10.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/16/2021	0.04	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/17/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/18/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/19/2021	0	12	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/20/2021	0	3.3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/21/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/22/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/23/2021	0	12	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/24/2021	0.03	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/25/2021	0	9.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/26/2021	0.13	7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/27/2021	0.69	8	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/28/2021	0.4	9	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/29/2021	0.09	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/30/2021	0.02	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 1
Ditch A Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch A									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
5/1/2021	0	7	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/2/2021	0.08	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/3/2021	0.38	5.7	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/4/2021	0.01	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/5/2021	0	10	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/6/2021	0	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/7/2021	0.11	4.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/8/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/9/2021	0	9	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/10/2021	0.01	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/11/2021	0.01	15	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/12/2021	0	13	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/13/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/14/2021	0	12	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/15/2021	0	9	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/16/2021	0.01	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/17/2021	0	9	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/18/2021	0	12	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/19/2021	0.45	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/20/2021	0.01	4	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/21/2021	0.03	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/22/2021	0.01	7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/23/2021	0.02	9	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/24/2021	0.06	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/25/2021	0.07	12	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/26/2021	0	9	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/27/2021	0.12	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/28/2021	0	3	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/29/2021	0	2.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/30/2021	0	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/31/2021	0.56	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/1/2021	0.01	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/2/2021	0.09	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/3/2021	0.01	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/4/2021	0	2	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/5/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/6/2021	0	9	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/7/2021	0	6.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/8/2021	0	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/9/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/10/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/11/2021	0	3.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/12/2021	0	3.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/13/2021	0.2	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/14/2021	0	6.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level

Table 1
Ditch A Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch A									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
6/15/2021	0	6.5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/16/2021	0	6	South	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/17/2021	0	10	Southwest	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/18/2021	0	7.5	West	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/19/2021	0	8	East	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/20/2021	0.06	5	East-Southeast	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/21/2021	0.16	12	North-Northwest	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/22/2021	0	6.5	Northeast	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/23/2021	0	4	Southwest	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/24/2021	0.37	3	South	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/25/2021	0.01	1	South	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/26/2021	0	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/27/2021	2.18	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/28/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/29/2021	0.71	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/30/2021	0.74	1.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/1/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/2/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/3/2021	0	7	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/4/2021	0	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/5/2021	1.87	7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/6/2021	0.39	8.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/7/2021	0.73	10.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/8/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/9/2021	0	5.7	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/10/2021	0	3.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/11/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/12/2021	0	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/13/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/14/2021	0.75	3.5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/15/2021	0.22	8	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/16/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/17/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/18/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/19/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/20/2021	0	6	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/21/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/22/2021	0	3.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/23/2021	0.86	4	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/24/2021	0.82	2	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/25/2021	0	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/26/2021	0.37	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/27/2021	0.59	3	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/28/2021	0.15	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/29/2021	0.01	7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/30/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/31/2021	0	4.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 1
Ditch A Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch A									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
8/1/2021	0.00	2	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/2/2021	0.00	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/3/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/4/2021	0.00	2	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/5/2021	0.00	5.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/6/2021	0.00	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/7/2021	0.12	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/8/2021	0.76	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/9/2021	0.01	5.7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/10/2021	0.32	1	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/11/2021	0.27	5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/12/2021	0.00	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/13/2021	0.00	1	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/14/2021	0.00	4.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/15/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/16/2021	0.00	6	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/17/2021	0.00	7.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/18/2021	0.00	5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/19/2021	0.00	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/20/2021	0.00	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/21/2021	0.00	5.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/22/2021	0.00	1.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/23/2021	0.00	0	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/24/2021	0.07	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/25/2021	0.01	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/26/2021	0.04	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/27/2021	1.23	1.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/28/2021	0.23	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/29/2021	0.13	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/30/2021	0.00	3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/31/2021	0	1.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/1/2021	0	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/2/2021	0	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/3/2021	0	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/4/2021	0.04	4	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/5/2021	0.01	6.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/6/2021	0	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/7/2021	0.38	4.3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/8/2021	0.01	4.1	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/9/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/10/2021	0.01	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/11/2021	0	9	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/12/2021	0	0	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/13/2021	0	4.7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/14/2021	0.49	10.7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

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Tyco Fire Products LP
Marinette, Wisconsin



Ditch A									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
9/15/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/16/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/17/2021	0	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/18/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/19/2021	0	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/20/2021	0.18	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/21/2021	0.12	5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/22/2021	0	9.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/23/2021	0	7.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/24/2021	0.09	8	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/25/2021	0	5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/26/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/27/2021	0	5.3	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/28/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/29/2021	0.01	0	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/30/2021	0.02	3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/1/2021	0.01	0	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/2/2021	0.03	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/3/2021	0.07	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/4/2021	0.01	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/5/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/6/2021	0.01	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/7/2021	0.25	4	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/8/2021	0.04	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/9/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/10/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/11/2021	0.07	2.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/12/2021	0.08	7.3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/13/2021	0	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/14/2021	0	7.3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/15/2021	0	8	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/16/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/17/2021	0	0	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/18/2021	0	7.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/19/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/20/2021	0.15	5.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/21/2021	0.2	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/22/2021	0	2	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/23/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/24/2021	0	4	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/25/2021	0	7.7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/26/2021	0	4.3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/27/2021	0	3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/28/2021	0.06	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/29/2021	0.02	7.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 1
Ditch A Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch A									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
10/30/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/31/2021	0	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/1/2021	0	6.2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/2/2021	0	7	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/3/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/4/2021	0	5.5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/5/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/6/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/7/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/8/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/9/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/10/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/11/2021	0.53	7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/12/2021	0.01	4.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/13/2021	0	6.7	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/14/2021	0.08	6	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/15/2021	0	5.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/16/2021	0	6.3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/17/2021	0	6	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/18/2021	0	10.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/19/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/20/2021	0	8	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/21/2021	0.03	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/22/2021	0	6.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/23/2021	0	0	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/24/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/25/2021	0	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/26/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/27/2021	0.04	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/28/2021	0.04	8.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/29/2021	0	2	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/30/2021	0.19	4	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Booms Removed
Total:								0	

Notes:

Daily visual inspections of Ditch A began on 3/17/21
Booms were deployed at Ditch A on 4/1/21.
Booms were removed at Ditch A on 11/30/21 due to the onset of freezing conditions.
Foam volumes are approximate based on the visual observation at the time of collection
Yellow shaded = Foam Observed

Table 2
Ditch B Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch B									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
3/17/2021	0.01	3	East	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/18/2021	0	12.3	Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/19/2021	0	4	Southeast	None	Downstream	West Bay Shore St Crossing; Upstream of Ditch B TS Intake	White/Tan, Some Froth; White, frothy	2	--
3/20/2021	0	8.5	Southwest	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/21/2021	0	10	South	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/22/2021	0	6	South-Southwest	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/23/2021	0.07	7	East-Northeast	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/24/2021	0.31	3	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/25/2021	0	5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/26/2021	0	4.7	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/27/2021	0	9	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/28/2021	0.15	21	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/29/2021	0	8	Southeast	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	Wind pushing water back upstream
3/30/2021	0	11	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/31/2021	0	7	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/1/2021	0	9	North-Northwest	Good	Downstream	West Bay Shore St Crossing	White/Tan, Some Froth	10	--
4/2/2021	0	4.5	Southwest	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	4	--
4/3/2021	0	5	West-Northwest	Good	Downstream	West Bay Shore St Crossing	Brown, Some Froth	5	--
4/4/2021	0	3.5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/5/2021	0	6.3	Southeast	Good	Downstream	West Bay Shore St Crossing	Brown, Some Froth	5	--
4/6/2021	0.04	5	Southeast	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	Pushing back upstream at mouth
4/7/2021	0	5	Northeast	Good	Downstream	West Bay Shore St Crossing	Brown, Some Froth	3	--
4/8/2021	0.14	4.5	Northeast	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	Upstream at mouth of ditch
4/9/2021	0.03	5.5	Southeast	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/10/2021	0.16	1.5	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/11/2021	0.32	3.5	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/12/2021	0.11	2	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/13/2021	0.01	9.3	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/14/2021	0.15	4.5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/15/2021	0.04	10.5	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/16/2021	0.04	4	Northwest	Good	Downstream	West Bay Shore St Crossing	White/Brown, Some Froth	3	--
4/17/2021	0	5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/18/2021	0	5	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/19/2021	0	12	Northwest	Good	Downstream	West Bay Shore St Crossing	Brown, Some Froth	3	--
4/20/2021	0	3.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/21/2021	0	6	South	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	3	--
4/22/2021	0	7	Southwest	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	Wind pushing water upstream
4/23/2021	0	12	West	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	2	--
4/24/2021	0.03	5	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/25/2021	0	9.5	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/26/2021	0.13	7	East-Southeast	Good	Water pushing in at mouth	No Foam Observed	No Foam Observed	No Foam Observed	Water pushing in at mouth
4/27/2021	0.69	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/28/2021	0.4	9	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/29/2021	0.09	8	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 2
Ditch B Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch B									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
4/30/2021	0.02	11	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/1/2021	0	7	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/2/2021	0.08	6	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/3/2021	0.38	5.7	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/4/2021	0.01	10.5	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/5/2021	0	10	Southeast	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	3	--
5/6/2021	0	2	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/7/2021	0.11	4.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/8/2021	0	4	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/9/2021	0	9	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/10/2021	0.01	3	Southeast	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	4	--
5/11/2021	0.01	15	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/12/2021	0	13	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/13/2021	0	3	East	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	4	--
5/14/2021	0	12	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/15/2021	0	9	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/16/2021	0.01	6	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/17/2021	0	9	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/18/2021	0	12	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/19/2021	0.45	5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/20/2021	0.01	4	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/21/2021	0.03	6	South-Southeast	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	3	--
5/22/2021	0.01	7	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/23/2021	0.02	9	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/24/2021	0.06	4.3	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/25/2021	0.07	12	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/26/2021	0	9	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/27/2021	0.12	6	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/28/2021	0	3	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/29/2021	0	2.5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/30/2021	0	5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/31/2021	0.56	7	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/1/2021	0.01	5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/2/2021	0.09	6	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/3/2021	0.01	5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/4/2021	0	2	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/5/2021	0	9	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/6/2021	0	9	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/7/2021	0	6.5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/8/2021	0	6	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/9/2021	0	6.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/10/2021	0	5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/11/2021	0	3.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/12/2021	0	3.5	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/13/2021	0.2	5	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/14/2021	0	6.5	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/15/2021	0	6.5	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/16/2021	0	6	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 2
Ditch B Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch B									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
6/17/2021	0	10	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/18/2021	0	7.5	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/19/2021	0	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/20/2021	0.06	5	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/21/2021	0.16	12	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/22/2021	0	6.5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/23/2021	0	4	Southwest	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	Wind pushing water upstream at mouth of ditch
6/24/2021	0.37	3	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/25/2021	0.01	1	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/26/2021	0	6	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/27/2021	2.18	7	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/28/2021	0	3	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/29/2021	0.71	5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/30/2021	0.74	1.5	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/1/2021	0	6.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/2/2021	0	4	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/3/2021	0	7	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/4/2021	0	4	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/5/2021	1.87	7	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/6/2021	0.39	8.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/7/2021	0.73	10.5	Northeast	Good	Downstream	West Bay Shore St Crossing	Tan/Brown, Some Froth	2	--
7/8/2021	0	6.5	East-Northeast	Good	Downstream	West Bay Shore St Crossing	Tan, Some Froth	10	--
7/9/2021	0	5.7	South-Southeast	Good	Downstream	West Bay Shore St Crossing	Tan, Some Froth	5	--
7/10/2021	0	3.5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/11/2021	0	5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/12/2021	0	6	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/13/2021	0	3	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/14/2021	0.75	3.5	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/15/2021	0.22	8	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/16/2021	0	5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/17/2021	0	4	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/18/2021	0	2	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/19/2021	0	5	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/20/2021	0	6	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/21/2021	0	4	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/22/2021	0	3.5	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/23/2021	0.86	4	East-Southeast	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/24/2021	0.82	2	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/25/2021	0	8	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/26/2021	0.37	4	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/27/2021	0.59	3	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/28/2021	0.15	4	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/29/2021	0.01	7	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/30/2021	0	4	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/31/2021	0	4.5	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/1/2021	0.00	2	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/2/2021	0.00	2	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 2
Ditch B Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch B									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
8/3/2021	0.00	3	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/4/2021	0.00	2	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/5/2021	0.00	5.3	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/6/2021	0.00	3	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/7/2021	0.12	1	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/8/2021	0.76	1	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/9/2021	0.01	5.7	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/10/2021	0.32	1	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/11/2021	0.27	5	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/12/2021	0.00	6	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/13/2021	0.00	1	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/14/2021	0.00	4.5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/15/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/16/2021	0.00	6	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/17/2021	0.00	7.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/18/2021	0.00	5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/19/2021	0.00	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/20/2021	0.00	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/21/2021	0.00	5.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/22/2021	0.00	1.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/23/2021	0.00	0	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/24/2021	0.07	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/25/2021	0.01	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/26/2021	0.04	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/27/2021	1.23	1.5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/28/2021	0.23	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/29/2021	0.13	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/30/2021	0.00	3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/31/2021	0	1.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/1/2021	0	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/2/2021	0	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/3/2021	0	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/4/2021	0.04	4	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/5/2021	0.01	6.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/6/2021	0	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/7/2021	0.38	4.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/8/2021	0.01	4.1	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/9/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/10/2021	0.01	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/11/2021	0	9	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/12/2021	0	0	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/13/2021	0	4.7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/14/2021	0.49	10.7	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/15/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/16/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/17/2021	0	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/18/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/19/2021	0	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/20/2021	0.18	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 2
Ditch B Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch B									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
9/21/2021	0.12	5	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/22/2021	0	9.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/23/2021	0	7.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/24/2021	0.09	8	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/25/2021	0	5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/26/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/27/2021	0	5.3	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/28/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/29/2021	0.01	0	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/30/2021	0.02	3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/1/2021	0.01	0	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/2/2021	0.03	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/3/2021	0.07	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/4/2021	0.01	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/5/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/6/2021	0.01	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/7/2021	0.25	4	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/8/2021	0.04	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/9/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/10/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/11/2021	0.07	2.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/12/2021	0.08	7.3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/13/2021	0	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/14/2021	0	7.3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/15/2021	0	8	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/16/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/17/2021	0	0	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/18/2021	0	7.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/19/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/20/2021	0.15	5.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/21/2021	0.2	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/22/2021	0	2	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/23/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/24/2021	0	4	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/25/2021	0	7.7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/26/2021	0	4.3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/27/2021	0	3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/28/2021	0.06	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/29/2021	0.02	7.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/30/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/31/2021	0	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/1/2021	0	6.2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/2/2021	0	7	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/3/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/4/2021	0	5.5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/5/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/6/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/7/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 2
Ditch B Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch B									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
11/8/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/9/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/10/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/11/2021	0.53	7	Southeast	Good	Upstream	No Foam Observed	No Foam Observed	No Foam Observed	--
11/12/2021	0.01	4.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/13/2021	0	6.7	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/14/2021	0.08	6	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/15/2021	0	5.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/16/2021	0	6.3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/17/2021	0	6	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/18/2021	0	10.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/19/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/20/2021	0	8	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/21/2021	0.03	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/22/2021	0	6.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/23/2021	0	0	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/24/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/25/2021	0	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/26/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/27/2021	0.04	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/28/2021	0.04	8.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/29/2021	0	2	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/30/2021	0.19	4	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Booms Removed
Total:								71	

Notes:

Daily visual inspections of Ditch B began on 3/17/21
Booms were deployed at Ditch B on 3/19/21.
Booms were removed at Ditch B on 11/30/21 due to the onset of freezing conditions.
Foam volumes are approximate based on the visual observation at the time of collection
Yellow shaded = Foam Observed

Table 3
Ditch C (East Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (East Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
3/17/2021	0.01	3	East	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/18/2021	0	12.3	Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/19/2021	0	4	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/20/2021	0	8.5	Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/21/2021	0	10	South	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/22/2021	0	6	South-Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/23/2021	0.07	7	East-Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/24/2021	0.31	3	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/25/2021	0	5	East-Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/26/2021	0	4.7	Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/27/2021	0	9	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/28/2021	0.15	21	Northwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/29/2021	0	8	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/30/2021	0	11	West	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/31/2021	0	7	West-Northwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/1/2021	0	9	North-Northwest	New	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/2/2021	0	4.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/3/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/4/2021	0	3.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/5/2021	0	6.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/6/2021	0.04	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/7/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/8/2021	0.14	4.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/9/2021	0.03	5.5	Southeast	Good	Upstream at mouth of creek	West Bay Shore St Crossing	White, Frothy	2	Foam on bay side of boom
4/10/2021	0.16	1.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/11/2021	0.32	3.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/12/2021	0.11	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/13/2021	0.01	9.3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/14/2021	0.15	4.5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/15/2021	0.04	10.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/16/2021	0.04	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/17/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/18/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/19/2021	0	12	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/20/2021	0	3.3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/21/2021	0	6	South	Good	Upstream at mouth	No Foam Observed	No Foam Observed	No Foam Observed	--
4/22/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/23/2021	0	12	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/24/2021	0.03	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/25/2021	0	9.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/26/2021	0.13	7	East-Southeast	Good	water pushing in at mouth	No Foam Observed	No Foam Observed	No Foam Observed	--
4/27/2021	0.69	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/28/2021	0.4	9	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/29/2021	0.09	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/30/2021	0.02	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/1/2021	0	7	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/2/2021	0.08	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 3
Ditch C (East Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (East Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
5/3/2021	0.38	5.7	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/4/2021	0.01	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/5/2021	0	10	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/6/2021	0	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/7/2021	0.11	4.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/8/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/9/2021	0	9	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/10/2021	0.01	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/11/2021	0.01	15	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/12/2021	0	13	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/13/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/14/2021	0	12	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/15/2021	0	9	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/16/2021	0.01	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/17/2021	0	9	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/18/2021	0	12	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/19/2021	0.45	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/20/2021	0.01	4	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/21/2021	0.03	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/22/2021	0.01	7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/23/2021	0.02	9	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/24/2021	0.06	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/25/2021	0.07	12	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/26/2021	0	9	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/27/2021	0.12	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/28/2021	0	3	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/29/2021	0	2.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/30/2021	0	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/31/2021	0.56	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/1/2021	0.01	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/2/2021	0.09	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/3/2021	0.01	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/4/2021	0	2	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/5/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/6/2021	0	9	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/7/2021	0	6.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/8/2021	0	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/9/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/10/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/11/2021	0	3.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/12/2021	0	3.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/13/2021	0.2	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/14/2021	0	6.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/15/2021	0	6.5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/16/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/17/2021	0	10	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/18/2021	0	7.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 3
Ditch C (East Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (East Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
6/19/2021	0	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/20/2021	0.06	5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/21/2021	0.16	12	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/22/2021	0	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/23/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/24/2021	0.37	3	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/25/2021	0.01	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/26/2021	0	6	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/27/2021	2.18	7	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/28/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/29/2021	0.71	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/30/2021	0.74	1.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/1/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/2/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/3/2021	0	7	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/4/2021	0	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/5/2021	1.87	7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/6/2021	0.39	8.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/7/2021	0.73	10.5	Northeast	Good	Pushing upstream at mouth of ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
7/8/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/9/2021	0	5.7	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/10/2021	0	3.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/11/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/12/2021	0	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/13/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/14/2021	0.75	3.5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/15/2021	0.22	8	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/16/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/17/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/18/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/19/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/20/2021	0	6	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/21/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/22/2021	0	3.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/23/2021	0.86	4	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/24/2021	0.82	2	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/25/2021	0	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/26/2021	0.37	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/27/2021	0.59	3	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/28/2021	0.15	4	South	Good	Pushing upstream at mouth of creek	No Foam Observed	No Foam Observed	No Foam Observed	--
7/29/2021	0.01	7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/30/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/31/2021	0	4.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/1/2021	0.00	2	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/2/2021	0.00	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/3/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/4/2021	0.00	2	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 3
Ditch C (East Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (East Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
8/5/2021	0.00	5.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/6/2021	0.00	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/7/2021	0.12	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/8/2021	0.76	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/9/2021	0.01	5.7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/10/2021	0.32	1	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/11/2021	0.27	5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/12/2021	0.00	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/13/2021	0.00	1	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/14/2021	0.00	4.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/15/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/16/2021	0.00	6	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/17/2021	0.00	7.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/18/2021	0.00	5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/19/2021	0.00	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/20/2021	0.00	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/21/2021	0.00	5.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/22/2021	0.00	1.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/23/2021	0.00	0	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/24/2021	0.07	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/25/2021	0.01	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/26/2021	0.04	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/27/2021	1.23	1.5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/28/2021	0.23	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/29/2021	0.13	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/30/2021	0.00	3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/31/2021	0	1.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/1/2021	0	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/2/2021	0	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/3/2021	0	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/4/2021	0.04	4	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/5/2021	0.01	6.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/6/2021	0	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/7/2021	0.38	4.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/8/2021	0.01	4.1	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/9/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/10/2021	0.01	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/11/2021	0	9	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/12/2021	0	0	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/13/2021	0	4.7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/14/2021	0.49	10.7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/15/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/16/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/17/2021	0	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/18/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/19/2021	0	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/20/2021	0.18	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/21/2021	0.12	5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 3
Ditch C (East Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (East Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
9/22/2021	0	9.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/23/2021	0	7.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/24/2021	0.09	8	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/25/2021	0	5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/26/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/27/2021	0	5.3	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/28/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/29/2021	0.01	0	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/30/2021	0.02	3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/1/2021	0.01	0	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/2/2021	0.03	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/3/2021	0.07	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/4/2021	0.01	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/5/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/6/2021	0.01	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/7/2021	0.25	4	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/8/2021	0.04	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/9/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/10/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/11/2021	0.07	2.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/12/2021	0.08	7.3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/13/2021	0	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/14/2021	0	7.3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/15/2021	0	8	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/16/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/17/2021	0	0	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/18/2021	0	7.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/19/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/20/2021	0.15	5.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/21/2021	0.2	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/22/2021	0	2	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/23/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/24/2021	0	4	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/25/2021	0	7.7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/26/2021	0	4.3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/27/2021	0	3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/28/2021	0.06	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/29/2021	0.02	7.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/30/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/31/2021	0	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/1/2021	0	6.2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/2/2021	0	7	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/3/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/4/2021	0	5.5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/5/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/6/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/7/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 3
Ditch C (East Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (East Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
11/8/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/9/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/10/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/11/2021	0.53	7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/12/2021	0.01	4.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/13/2021	0	6.7	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/14/2021	0.08	6	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/15/2021	0	5.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/16/2021	0	6.3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/17/2021	0	6	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/18/2021	0	10.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/19/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/20/2021	0	8	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/21/2021	0.03	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/22/2021	0	6.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/23/2021	0	0	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/24/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/25/2021	0	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/26/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/27/2021	0.04	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/28/2021	0.04	8.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/29/2021	0	2	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/30/2021	0.19	4	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Booms Removed
Total:								2	

Notes:

Daily visual inspections of Ditch C began on 3/17/21
Booms were deployed at Ditch C on 4/1/21.
Booms were removed at Ditch C on 11/30/21 due to the onset of freezing conditions.
Foam volumes are approximate based on the visual observation at the time of collection
Yellow shaded = Foam Observed

Table 4
Ditch C (Southwest Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (Southwest Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
3/17/2021	0.01	3	East	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Ice upstream.
3/18/2021	0	12.3	Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level. Ice upstream.
3/19/2021	0	4	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level. Ice upstream.
3/20/2021	0	8.5	Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
3/21/2021	0	10	South	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
3/22/2021	0	6	South-Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
3/23/2021	0.07	7	East-Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
3/24/2021	0.31	3	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/25/2021	0	5	East-Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/26/2021	0	4.7	Southwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/27/2021	0	9	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/28/2021	0.15	21	Northwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/29/2021	0	8	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/30/2021	0	11	West	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/31/2021	0	7	West-Northwest	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/1/2021	0	9	North-Northwest	New	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
4/2/2021	0	4.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/3/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/4/2021	0	3.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/5/2021	0	6.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/6/2021	0.04	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/7/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/8/2021	0.14	4.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/9/2021	0.03	5.5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/10/2021	0.16	1.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/11/2021	0.32	3.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/12/2021	0.11	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/13/2021	0.01	9.3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
4/14/2021	0.15	4.5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/15/2021	0.04	10.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/16/2021	0.04	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
4/17/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/18/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/19/2021	0	12	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/20/2021	0	3.3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/21/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/22/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/23/2021	0	12	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/24/2021	0.03	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/25/2021	0	9.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/26/2021	0.13	7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/27/2021	0.69	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/28/2021	0.4	9	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/29/2021	0.09	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/30/2021	0.02	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/1/2021	0	7	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/2/2021	0.08	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 4
Ditch C (Southwest Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (Southwest Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
5/3/2021	0.38	5.7	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/4/2021	0.01	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/5/2021	0	10	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/6/2021	0	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/7/2021	0.11	4.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/8/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/9/2021	0	9	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/10/2021	0.01	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
5/11/2021	0.01	15	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
5/12/2021	0	13	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
5/13/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/14/2021	0	12	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/15/2021	0	9	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/16/2021	0.01	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/17/2021	0	9	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/18/2021	0	12	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/19/2021	0.45	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/20/2021	0.01	4	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/21/2021	0.03	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
5/22/2021	0.01	7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/23/2021	0.02	9	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/24/2021	0.06	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/25/2021	0.07	12	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/26/2021	0	9	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/27/2021	0.12	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/28/2021	0	3	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/29/2021	0	2.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/30/2021	0	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/31/2021	0.56	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/1/2021	0.01	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/2/2021	0.09	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/3/2021	0.01	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/4/2021	0	2	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/5/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/6/2021	0	9	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/7/2021	0	6.5	South-Southeast	Good	No water at boom	No Foam Observed	No Foam Observed	No Foam Observed	--
6/8/2021	0	6	South-Southeast	Good	No water at boom	No Foam Observed	No Foam Observed	No Foam Observed	--
6/9/2021	0	6.5	East-Northeast	Good	No water at boom	No Foam Observed	No Foam Observed	No Foam Observed	--
6/10/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/11/2021	0	3.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/12/2021	0	3.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/13/2021	0.2	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/14/2021	0	6.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/15/2021	0	6.5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/16/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/17/2021	0	10	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/18/2021	0	7.5	West	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/19/2021	0	8	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 4
Ditch C (Southwest Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (Southwest Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
6/20/2021	0.06	5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/21/2021	0.16	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/22/2021	0	6.5	Northeast	Good	No water in ditch	No Foam Observed	No Foam Observed	No Foam Observed	--
6/23/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/24/2021	0.37	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/25/2021	0.01	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/26/2021	0	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/27/2021	2.18	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/28/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/29/2021	0.71	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/30/2021	0.74	1.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/1/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/2/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/3/2021	0	7	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/4/2021	0	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/5/2021	1.87	7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/6/2021	0.39	8.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/7/2021	0.73	10.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/8/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/9/2021	0	5.7	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/10/2021	0	3.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/11/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/12/2021	0	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/13/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/14/2021	0.75	3.5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/15/2021	0.22	8	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/16/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/17/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/18/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/19/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/20/2021	0	6	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/21/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/22/2021	0	3.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/23/2021	0.86	4	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/24/2021	0.82	2	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/25/2021	0	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/26/2021	0.37	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/27/2021	0.59	3	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/28/2021	0.15	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/29/2021	0.01	7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/30/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/31/2021	0	4.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/1/2021	0.00	2	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/2/2021	0.00	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/3/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/4/2021	0.00	2	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/5/2021	0.00	5.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/6/2021	0.00	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 4
Ditch C (Southwest Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (Southwest Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
8/7/2021	0.12	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/8/2021	0.76	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/9/2021	0.01	5.7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/10/2021	0.32	1	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/11/2021	0.27	5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/12/2021	0.00	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/13/2021	0.00	1	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/14/2021	0.00	4.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/15/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/16/2021	0.00	6	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/17/2021	0.00	7.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/18/2021	0.00	5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/19/2021	0.00	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/20/2021	0.00	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/21/2021	0.00	5.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/22/2021	0.00	1.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/23/2021	0.00	0	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/24/2021	0.07	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/25/2021	0.01	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/26/2021	0.04	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/27/2021	1.23	1.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/28/2021	0.23	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/29/2021	0.13	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/30/2021	0.00	3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/31/2021	0	1.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/1/2021	0	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/2/2021	0	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/3/2021	0	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/4/2021	0.04	4	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/5/2021	0.01	6.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/6/2021	0	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/7/2021	0.38	4.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/8/2021	0.01	4.1	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/9/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/10/2021	0.01	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/11/2021	0	9	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/12/2021	0	0	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/13/2021	0	4.7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/14/2021	0.49	10.7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/15/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/16/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/17/2021	0	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/18/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/19/2021	0	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/20/2021	0.18	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/21/2021	0.12	5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/22/2021	0	9.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/23/2021	0	7.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 4
Ditch C (Southwest Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (Southwest Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
9/24/2021	0.09	8	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/25/2021	0	5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/26/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/27/2021	0	5.3	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/28/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/29/2021	0.01	0	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/30/2021	0.02	3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/1/2021	0.01	0	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/2/2021	0.03	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/3/2021	0.07	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/4/2021	0.01	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/5/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/6/2021	0.01	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/7/2021	0.25	4	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/8/2021	0.04	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/9/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/10/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/11/2021	0.07	2.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/12/2021	0.08	7.3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/13/2021	0	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/14/2021	0	7.3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/15/2021	0	8	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/16/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/17/2021	0	0	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/18/2021	0	7.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/19/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/20/2021	0.15	5.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/21/2021	0.2	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/22/2021	0	2	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/23/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/24/2021	0	4	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/25/2021	0	7.7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/26/2021	0	4.3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/27/2021	0	3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/28/2021	0.06	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/29/2021	0.02	7.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/30/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/31/2021	0	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/1/2021	0	6.2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/2/2021	0	7	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/3/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/4/2021	0	5.5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/5/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/6/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/7/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/8/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/9/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 4
Ditch C (Southwest Branch) Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch C (Southwest Branch)									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
11/10/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/11/2021	0.53	7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/12/2021	0.01	4.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/13/2021	0	6.7	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/14/2021	0.08	6	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/15/2021	0	5.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/16/2021	0	6.3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/17/2021	0	6	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/18/2021	0	10.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/19/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/20/2021	0	8	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/21/2021	0.03	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/22/2021	0	6.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/23/2021	0	0	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/24/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/25/2021	0	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/26/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/27/2021	0.04	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/28/2021	0.04	8.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/29/2021	0	2	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/30/2021	0.19	4	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Booms Removed
Total:								0	

Notes:
Daily visual inspections of Ditch C began on 3/17/21
Booms were deployed at Ditch C on 4/1/21.
Booms were removed at Ditch C on 11/30/21 due to the onset of freezing conditions.
Foam volumes are approximate based on the visual observation at the time of collection
Yellow shaded = Foam Observed

Table 5
Ditch D Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch D									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
3/17/2021	0.01	3	East	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/18/2021	0	12.3	Northeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/19/2021	0	4	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/20/2021	0	8.5	Southwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/21/2021	0	10	South	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/22/2021	0	6	South-Southwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/23/2021	0.07	7	East-Northeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/24/2021	0.31	3	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/25/2021	0	5	East-Northeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/26/2021	0	4.7	Southwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/27/2021	0	9	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/28/2021	0.15	21	Northwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/29/2021	0	8	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/30/2021	0	11	West	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/31/2021	0	7	West-Northwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/1/2021	0	9	North-Northwest	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/2/2021	0	4.5	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/3/2021	0	5	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/4/2021	0	3.5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/5/2021	0	6.3	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/6/2021	0.04	5	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/7/2021	0	5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/8/2021	0.14	4.5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/9/2021	0.03	5.5	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/10/2021	0.16	1.5	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/11/2021	0.32	3.5	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/12/2021	0.11	2	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/13/2021	0.01	9.3	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/14/2021	0.15	4.5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/15/2021	0.04	10.5	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/16/2021	0.04	4	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/17/2021	0	5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/18/2021	0	5	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/19/2021	0	12	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/20/2021	0	3.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/21/2021	0	6	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/22/2021	0	7	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/23/2021	0	12	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/24/2021	0.03	5	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/25/2021	0	9.5	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/26/2021	0.13	7	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/27/2021	0.69	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/28/2021	0.4	9	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/29/2021	0.09	8	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/30/2021	0.02	11	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/1/2021	0	7	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/2/2021	0.08	6	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 5
Ditch D Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch D									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
5/3/2021	0.38	5.7	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/4/2021	0.01	10.5	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/5/2021	0	10	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/6/2021	0	2	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/7/2021	0.11	4.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/8/2021	0	4	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/9/2021	0	9	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/10/2021	0.01	3	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/11/2021	0.01	15	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/12/2021	0	13	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/13/2021	0	3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/14/2021	0	12	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/15/2021	0	9	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/16/2021	0.01	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/17/2021	0	9	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/18/2021	0	12	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/19/2021	0.45	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/20/2021	0.01	4	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/21/2021	0.03	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/22/2021	0.01	7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/23/2021	0.02	9	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/24/2021	0.06	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/25/2021	0.07	12	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/26/2021	0	9	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/27/2021	0.12	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/28/2021	0	3	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/29/2021	0	2.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/30/2021	0	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/31/2021	0.56	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/1/2021	0.01	5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/2/2021	0.09	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/3/2021	0.01	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/4/2021	0	2	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/5/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/6/2021	0	9	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/7/2021	0	6.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/8/2021	0	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/9/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/10/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/11/2021	0	3.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/12/2021	0	3.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/13/2021	0.2	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/14/2021	0	6.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/15/2021	0	6.5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/16/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/17/2021	0	10	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/18/2021	0	7.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 5
Ditch D Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch D									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
6/19/2021	0	8	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/20/2021	0.06	5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/21/2021	0.16	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/22/2021	0	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/23/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Low water level.
6/24/2021	0.37	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/25/2021	0.01	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/26/2021	0	6	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/27/2021	2.18	7	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/28/2021	0	3	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/29/2021	0.71	5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
6/30/2021	0.74	1.5	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/1/2021	0	6.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/2/2021	0	4	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/3/2021	0	7	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/4/2021	0	4	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/5/2021	1.87	7	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/6/2021	0.39	8.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/7/2021	0.73	10.5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/8/2021	0	6.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/9/2021	0	5.7	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/10/2021	0	3.5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/11/2021	0	5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/12/2021	0	6	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/13/2021	0	3	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/14/2021	0.75	3.5	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/15/2021	0.22	8	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/16/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/17/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/18/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/19/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/20/2021	0	6	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/21/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/22/2021	0	3.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/23/2021	0.86	4	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/24/2021	0.82	2	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/25/2021	0	8	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/26/2021	0.37	4	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/27/2021	0.59	3	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/28/2021	0.15	4	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/29/2021	0.01	7	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/30/2021	0	4	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/31/2021	0	4.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/1/2021	0.00	2	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/2/2021	0.00	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/3/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/4/2021	0.00	2	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/5/2021	0.00	5.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 5
Ditch D Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch D									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
8/6/2021	0.00	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/7/2021	0.12	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/8/2021	0.76	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/9/2021	0.01	5.7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/10/2021	0.32	1	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/11/2021	0.27	5	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/12/2021	0.00	6	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/13/2021	0.00	1	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/14/2021	0.00	4.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/15/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/16/2021	0.00	6	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/17/2021	0.00	7.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/18/2021	0.00	5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/19/2021	0.00	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/20/2021	0.00	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/21/2021	0.00	5.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/22/2021	0.00	1.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/23/2021	0.00	0	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/24/2021	0.07	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/25/2021	0.01	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/26/2021	0.04	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/27/2021	1.23	1.5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
8/28/2021	0.23	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/29/2021	0.13	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/30/2021	0.00	3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/31/2021	0	1.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/1/2021	0	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/2/2021	0	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/3/2021	0	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/4/2021	0.04	4	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/5/2021	0.01	6.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/6/2021	0	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/7/2021	0.38	4.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
9/8/2021	0.01	4.1	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/9/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/10/2021	0.01	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/11/2021	0	9	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/12/2021	0	0	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/13/2021	0	4.7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/14/2021	0.49	10.7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/15/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/16/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/17/2021	0	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/18/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/19/2021	0	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/20/2021	0.18	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/21/2021	0.12	5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/22/2021	0	9.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 5
Ditch D Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch D									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
9/23/2021	0	7.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/24/2021	0.09	8	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/25/2021	0	5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/26/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/27/2021	0	5.3	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/28/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/29/2021	0.01	0	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/30/2021	0.02	3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/1/2021	0.01	0	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/2/2021	0.03	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/3/2021	0.07	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/4/2021	0.01	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/5/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/6/2021	0.01	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/7/2021	0.25	4	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/8/2021	0.04	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/9/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/10/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/11/2021	0.07	2.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/12/2021	0.08	7.3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/13/2021	0	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/14/2021	0	7.3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/15/2021	0	8	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/16/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/17/2021	0	0	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/18/2021	0	7.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/19/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/20/2021	0.15	5.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/21/2021	0.2	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/22/2021	0	2	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/23/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/24/2021	0	4	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/25/2021	0	7.7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/26/2021	0	4.3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/27/2021	0	3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/28/2021	0.06	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/29/2021	0.02	7.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/30/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/31/2021	0	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/1/2021	0	6.2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/2/2021	0	7	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/3/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/4/2021	0	5.5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/5/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/6/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/7/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/8/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 5
Ditch D Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch D									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
11/9/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/10/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/11/2021	0.53	7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/12/2021	0.01	4.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/13/2021	0	6.7	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/14/2021	0.08	6	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/15/2021	0	5.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/16/2021	0	6.3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/17/2021	0	6	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/18/2021	0	10.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/19/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/20/2021	0	8	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/21/2021	0.03	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/22/2021	0	6.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/23/2021	0	0	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/24/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/25/2021	0	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/26/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/27/2021	0.04	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/28/2021	0.04	8.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/29/2021	0	2	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/30/2021	0.19	4	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Booms Removed
Total:								0	

Notes:

Daily visual inspections of Ditch D began on 3/17/21
Booms were deployed at Ditch D on 4/1/21.
Booms were removed at Ditch D on 11/30/21 due to the onset of freezing conditions.
Foam volumes are approximate based on the visual observation at the time of collection
Yellow shaded = Foam Observed

Table 6
Ditch E Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch E									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
3/17/2021	0.01	3	East	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/18/2021	0	12.3	Northeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/19/2021	0	4	Southeast	None	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
3/20/2021	0	8.5	Southwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/21/2021	0	10	South	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/22/2021	0	6	South-Southwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/23/2021	0.07	7	East-Northeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/24/2021	0.31	3	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/25/2021	0	5	East-Northeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/26/2021	0	4.7	Southwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/27/2021	0	9	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/28/2021	0.15	21	Northwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/29/2021	0	8	Southeast	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/30/2021	0	11	West	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
3/31/2021	0	7	West-Northwest	None	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/1/2021	0	9	North-Northwest	New	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/2/2021	0	4.5	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/3/2021	0	5	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/4/2021	0	3.5	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/5/2021	0	6.3	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/6/2021	0.04	5	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/7/2021	0	5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/8/2021	0.14	4.5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/9/2021	0.03	5.5	Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/10/2021	0.16	1.5	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/11/2021	0.32	3.5	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/12/2021	0.11	2	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/13/2021	0.01	9.3	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/14/2021	0.15	4.5	West-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/15/2021	0.04	10.5	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/16/2021	0.04	4	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/17/2021	0	5	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/18/2021	0	5	South	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/19/2021	0	12	Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/20/2021	0	3.3	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/21/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/22/2021	0	7	Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/23/2021	0	12	West	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/24/2021	0.03	5	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/25/2021	0	9.5	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/26/2021	0.13	7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
4/27/2021	0.69	8	East	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/28/2021	0.4	9	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/29/2021	0.09	8	West-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
4/30/2021	0.02	11	North	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/1/2021	0	7	South-Southwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/2/2021	0.08	6	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 6
Ditch E Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch E									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
5/3/2021	0.38	5.7	North-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/4/2021	0.01	10.5	North-Northwest	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/5/2021	0	10	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/6/2021	0	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/7/2021	0.11	4.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
5/8/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/9/2021	0	9	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/10/2021	0.01	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/11/2021	0.01	15	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/12/2021	0	13	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/13/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/14/2021	0	12	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/15/2021	0	9	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/16/2021	0.01	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/17/2021	0	9	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/18/2021	0	12	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/19/2021	0.45	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/20/2021	0.01	4	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/21/2021	0.03	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/22/2021	0.01	7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/23/2021	0.02	9	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/24/2021	0.06	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/25/2021	0.07	12	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/26/2021	0	9	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/27/2021	0.12	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/28/2021	0	3	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/29/2021	0	2.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/30/2021	0	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
5/31/2021	0.56	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/1/2021	0.01	5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/2/2021	0.09	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/3/2021	0.01	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/4/2021	0	2	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/5/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/6/2021	0	9	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/7/2021	0	6.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/8/2021	0	6	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/9/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/10/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/11/2021	0	3.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/12/2021	0	3.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/13/2021	0.2	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/14/2021	0	6.5	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/15/2021	0	6.5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/16/2021	0	6	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/17/2021	0	10	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/18/2021	0	7.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/19/2021	0	8	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level

Table 6
Ditch E Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch E									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
6/20/2021	0.06	5	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/21/2021	0.16	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/22/2021	0	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/23/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/24/2021	0.37	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/25/2021	0.01	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Very low water level
6/26/2021	0	6	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/27/2021	2.18	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/28/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/29/2021	0.71	5	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
6/30/2021	0.74	1.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/1/2021	0	6.5	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/2/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/3/2021	0	7	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/4/2021	0	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/5/2021	1.87	7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/6/2021	0.39	8.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/7/2021	0.73	10.5	Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/8/2021	0	6.5	East-Northeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/9/2021	0	5.7	South-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/10/2021	0	3.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/11/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/12/2021	0	6	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/13/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/14/2021	0.75	3.5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/15/2021	0.22	8	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/16/2021	0	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/17/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/18/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/19/2021	0	5	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/20/2021	0	6	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/21/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/22/2021	0	3.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/23/2021	0.86	4	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/24/2021	0.82	2	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/25/2021	0	8	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/26/2021	0.37	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/27/2021	0.59	3	East-Southeast	Good	Downstream	No Foam Observed	No Foam Observed	No Foam Observed	--
7/28/2021	0.15	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/29/2021	0.01	7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/30/2021	0	4	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
7/31/2021	0	4.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/1/2021	0.00	2	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/2/2021	0.00	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/3/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/4/2021	0.00	2	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/5/2021	0.00	5.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/6/2021	0.00	3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/7/2021	0.12	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 6
Ditch E Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch E									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
8/8/2021	0.76	1	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/9/2021	0.01	5.7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/10/2021	0.32	1	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/11/2021	0.27	5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/12/2021	0.00	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/13/2021	0.00	1	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/14/2021	0.00	4.5	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/15/2021	0.00	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/16/2021	0.00	6	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/17/2021	0.00	7.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/18/2021	0.00	5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/19/2021	0.00	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/20/2021	0.00	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/21/2021	0.00	5.5	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/22/2021	0.00	1.5	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/23/2021	0.00	0	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/24/2021	0.07	2	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/25/2021	0.01	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/26/2021	0.04	2	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/27/2021	1.23	1.5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/28/2021	0.23	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/29/2021	0.13	6	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/30/2021	0.00	3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
8/31/2021	0	1.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/1/2021	0	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/2/2021	0	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/3/2021	0	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/4/2021	0.04	4	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/5/2021	0.01	6.5	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/6/2021	0	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/7/2021	0.38	4.3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/8/2021	0.01	4.1	North-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/9/2021	0	2	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/10/2021	0.01	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/11/2021	0	9	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/12/2021	0	0	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/13/2021	0	4.7	East-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/14/2021	0.49	10.7	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/15/2021	0	3	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/16/2021	0	7	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/17/2021	0	12	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/18/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/19/2021	0	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/20/2021	0.18	4.3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/21/2021	0.12	5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/22/2021	0	9.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/23/2021	0	7.5	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/24/2021	0.09	8	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 6
Ditch E Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch E									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
9/25/2021	0	5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/26/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/27/2021	0	5.3	East-Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/28/2021	0	4	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/29/2021	0.01	0	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
9/30/2021	0.02	3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/1/2021	0.01	0	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/2/2021	0.03	2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/3/2021	0.07	3	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/4/2021	0.01	6.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/5/2021	0	3	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/6/2021	0.01	4	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/7/2021	0.25	4	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/8/2021	0.04	5	East	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/9/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/10/2021	0	5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/11/2021	0.07	2.5	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/12/2021	0.08	7.3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/13/2021	0	1	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/14/2021	0	7.3	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/15/2021	0	8	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/16/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/17/2021	0	0	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/18/2021	0	7.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/19/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/20/2021	0.15	5.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/21/2021	0.2	11	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/22/2021	0	2	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/23/2021	0	4	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/24/2021	0	4	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/25/2021	0	7.7	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/26/2021	0	4.3	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/27/2021	0	3	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/28/2021	0.06	3	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/29/2021	0.02	7.5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/30/2021	0	5	Northeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
10/31/2021	0	10.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/1/2021	0	6.2	South-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/2/2021	0	7	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/3/2021	0	3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/4/2021	0	5.5	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/5/2021	0	4	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/6/2021	0	9	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/7/2021	0	4	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/8/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/9/2021	0	4	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/10/2021	0	3	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--

Table 6
Ditch E Inspection Summary
Tyco Fire Products LP
Marinette, Wisconsin



Ditch E									
Date	Weather Conditions			Inspection Summary					
	Precipitation (inches)	Wind Speed (miles per hour)	Wind Direction	Boom Condition	Ditch Flow Observations	Foam Observation Location	Foam Description	Uncollapsed Foam Volume Collected (gal)	Comments
11/11/2021	0.53	7	Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/12/2021	0.01	4.3	Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/13/2021	0	6.7	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/14/2021	0.08	6	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/15/2021	0	5.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/16/2021	0	6.3	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/17/2021	0	6	Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/18/2021	0	10.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/19/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/20/2021	0	8	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/21/2021	0.03	4	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/22/2021	0	6.7	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/23/2021	0	0	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/24/2021	0	3	West-Southwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/25/2021	0	7	North	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/26/2021	0	4	West	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/27/2021	0.04	0	South	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/28/2021	0.04	8.5	North-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/29/2021	0	2	South-Southeast	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	--
11/30/2021	0.19	4	West-Northwest	Good	No flow observed	No Foam Observed	No Foam Observed	No Foam Observed	Booms Removed
Total:								0	

Notes:

Daily visual inspections of Ditch E began on 3/17/21

Booms were deployed at Ditch E on 4/1/21.

Booms were removed at Ditch E on 11/30/21 due to the onset of freezing conditions.

Foam volumes are approximate based on the visual observation at the time of collection

Yellow shaded = Foam Observed

Table 7
Laboratory Analytical Results
Tyco Fire Products LP
Marinette, Wisconsin



	Sample ID	DRUM 1	COLLAPSED SW FOAM (7-20-21)
	Sample Date	5/19/2021	7/20/2021
Per- and Polyfluoroalkyl Substances			
	Units		
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	ng/L	<670 U	2,500 J+
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	ng/L	<320 U	<3.2 U
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (HFPO-DA)	ng/L	<1,500 U	<15 U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ng/L	<400 U	<4.0 U
4:2 Fluorotelomer sulfonate	ng/L	<240 U	94
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	ng/L	47,000	66,000 DJ+
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	ng/L	45,000 J-	73,000 DJ+
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (F-53 Major)	ng/L	<240 U	12 J
N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)	ng/L	<870 U	<8.7 U
N-Ethyl perfluorooctane sulfonamide ethanol (N-EtFOSE)	ng/L	<850 U	210 J+
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	ng/L	4,500 J	27,000 D
N-Methyl perfluorooctane sulfonamide (N-MeFOSA)	ng/L	<430 U	46
N-Methyl perfluorooctane sulfonamidoethanol (N-MeFOSE)	ng/L	<1,400 U	<14 U
N-Methylperfluorooctane sulfonamidoacetic acid (MeFOSAA)	ng/L	<1,200 U	1,200 JN
Perfluorobutane sulfonic acid (PFBS)	ng/L	<200 U	<2.0 U
Perfluorobutanoic acid (PFBA)	ng/L	<2,400 U	240
Perfluorodecane sulfonic acid (PFDS)	ng/L	<320 U	1,100
Perfluorodecanoic acid (PFDA)	ng/L	4,200	53,000 D
Perfluorododecane sulfonic acid (PFDOS)	ng/L	<970 U	<9.7 U
Perfluorododecanoic acid (PFDoA)	ng/L	<550 U	1,100
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	240 J	2,700 D
Perfluoroheptanoic acid (PFHpA)	ng/L	1,300 J	1,800
Perfluorohexadecanoic acid (PFHxDA)	ng/L	<890 U	<8.9 U
Perfluorohexane sulfonic acid (PFHxS)	ng/L	<570 U	1,700 J+
Perfluorohexanoic acid (PFHxA)	ng/L	3,400	6,200 D
Perfluorononane sulfonic acid (PFNS)	ng/L	<370 U	<3.7 U
Perfluorononanoic acid (PFNA)	ng/L	15,000	240,000 D
Perfluorooctadecanoic acid	ng/L	<940 U	<9.4 U
Perfluorooctane sulfonamide (PFOSA)	ng/L	7,900	99,000 D
Perfluorooctane sulfonic acid (PFOS)	ng/L	64,000	750,000 EDJ
Perfluorooctanoic acid (PFOA)	ng/L	23,000	220,000 D
Perfluoropentane sulfonic acid (PFPeSA)	ng/L	<300 U	5.1 J
Perfluoropentanoic acid (PFPeA)	ng/L	540 J	590
Perfluorotetradecanoic acid (PFTeDA)	ng/L	<730 U	55
Perfluorotridecanoic acid (PFTrDA)	ng/L	<1,300 U	180 JN
Perfluoroundecanoic acid (PFUdA)	ng/L	2,100	18,000 D
Metals			
Arsenic	µg/L	19	--
Barium	µg/L	450	--
Cadmium	µg/L	<0.84 U	--
Chromium	µg/L	14 J	--
Lead	µg/L	3.6	--
Mercury	µg/L	<0.098 U	--

Table 7
Laboratory Analytical Results
Tyco Fire Products LP
Marinette, Wisconsin



	Sample ID	DRUM 1	COLLAPSED SW FOAM (7-20-21)
	Sample Date	5/19/2021	7/20/2021
Selenium	µg/L	<4.9 U	--
Silver	µg/L	<0.58 U	--

Notes:

<= Compound not detected at method detection limit

-- = Not sampled

ng/L = Nanograms per liter

µg/L = Micrograms per liter

Data Qualifiers:

D = Dilution required for sample analysis

EDJ = Diluted sample result greater than the calibration range

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample

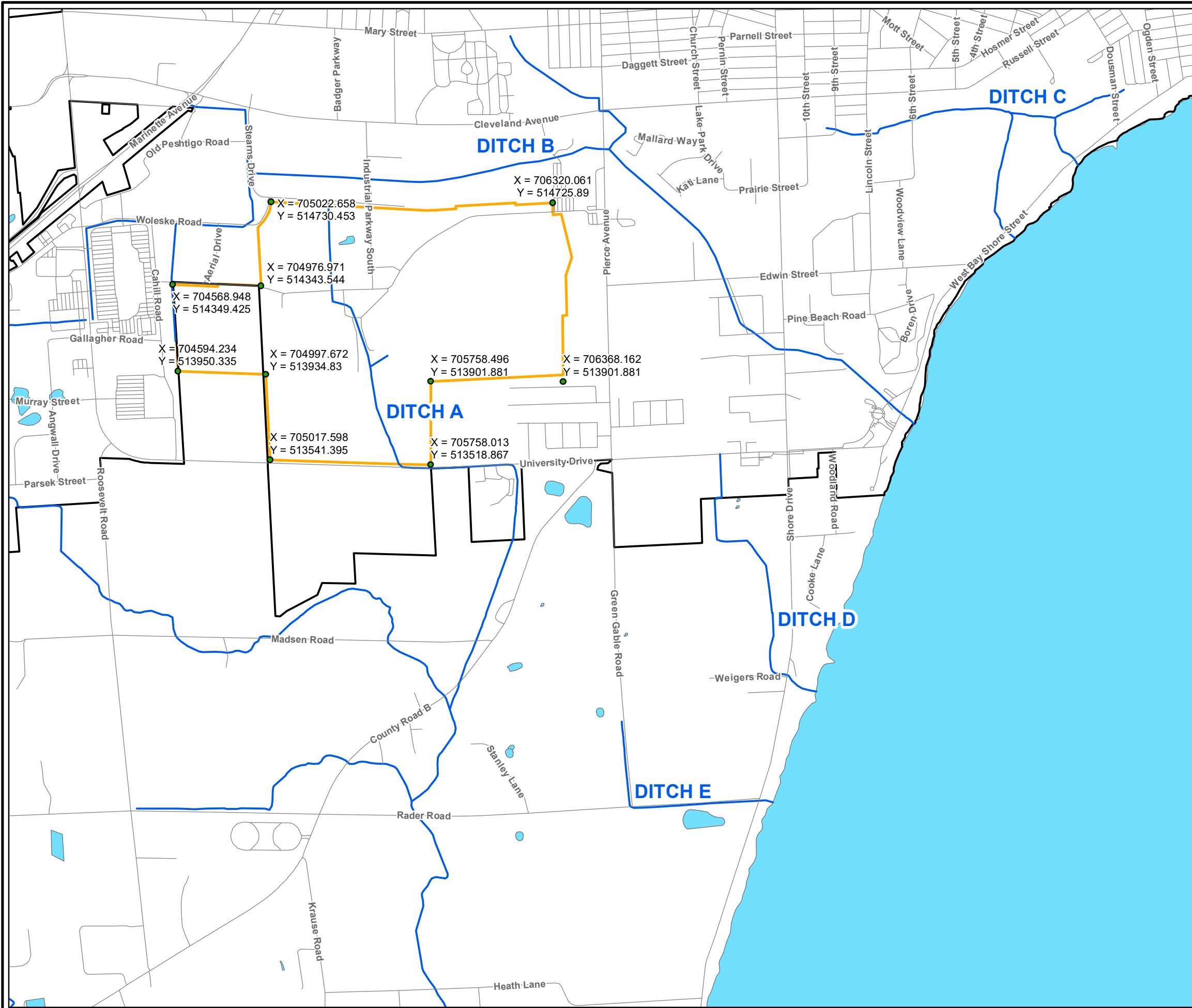
J- = The result is an estimated quantity. The associated numerical value is expected to have a negative or low bias

J+ = The result is an estimated quantity. The associated numerical value is expected to have a positive or high bias

JN = The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

Figures

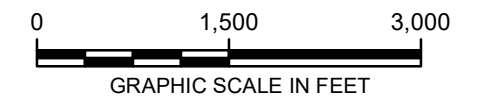


LEGEND:

- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY

NOTES:

1. CITY BOUNDARY DATA SOURCE: WISCONSIN LEGISLATIVE TECHNOLOGY SERVICES BUREAU, WISCONSIN COUNTY CLERKS AND LAND INFORMATION OFFICES, ACCESSED FALL 2017.
2. DITCH/STREAM AND WATERBODY DATA SOURCE: U.S. GEOLOGICAL SURVEY NATIONAL HYDROGRAPHY DATASET, ACCESSED FALL 2017.
3. ROAD DATA SOURCE: OPEN STREET MAP, ACCESSED FALL 2017.
4. APPROXIMATE SITE PROPERTY BOUNDARY COORDINATES ARE IN WISCONSIN TRANSVERSE MERCATOR 91 METERS.

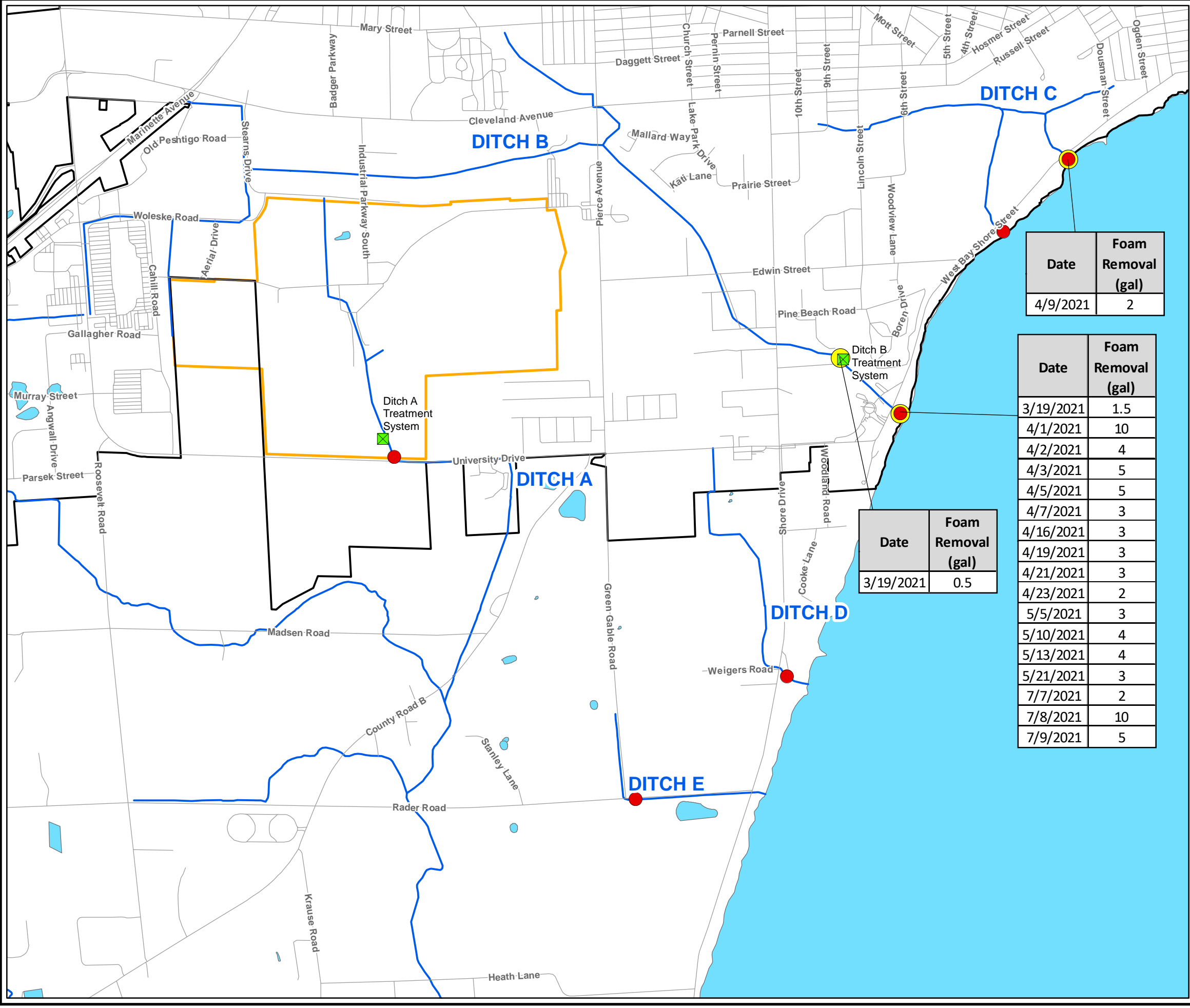


TYCO FIRE PRODUCTS, LP
 MARINETTE, WISCONSIN

SITE LOCATION MAP



T:\ENV\TYCO\MXD\FTC_ditches\Fig2_Boom_Deployment_and_Foam_Removal_Locations.mxd 2/8/2022 10:32:27 AM Last Saved By: MEsfifanos



LEGEND:

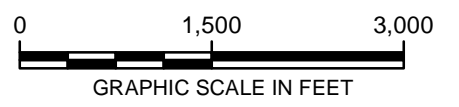
- APPROXIMATE BOOM DEPLOYMENT LOCATIONS
- APPROXIMATE FOAM REMOVAL LOCATION
- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY
- ✕ SURFACE WATER TREATMENT SYSTEM

Date	Foam Removal (gal)
4/9/2021	2

Date	Foam Removal (gal)
3/19/2021	1.5
4/1/2021	10
4/2/2021	4
4/3/2021	5
4/5/2021	5
4/7/2021	3
4/16/2021	3
4/19/2021	3
4/21/2021	3
4/23/2021	2
5/5/2021	3
5/10/2021	4
5/13/2021	4
5/21/2021	3
7/7/2021	2
7/8/2021	10
7/9/2021	5

Date	Foam Removal (gal)
3/19/2021	0.5

- NOTES:**
- CITY BOUNDARY DATA SOURCE: WISCONSIN LEGISLATIVE TECHNOLOGY SERVICES BUREAU, WISCONSIN COUNTY CLERKS AND LAND INFORMATION OFFICES, ACCESSED FALL 2017.
 - DITCH/STREAM AND WATERBODY DATA SOURCE: U.S. GEOLOGICAL SURVEY NATIONAL HYDROGRAPHY DATASET, ACCESSED FALL 2017.
 - ROAD DATA SOURCE: OPEN STREET MAP, ACCESSED FALL 2017.
 - FOAM REMOVAL VOLUMES ARE APPROXIMATE BASED ON VISUAL OBSERVATION AT THE TIME OF COLLECTION.
 - BOOMS WERE DEPLOYED ON DITCHES A, B, C, D, AND E BETWEEN 3/19/21 AND 4/1/21.
 - BOOMS WERE REMOVED FROM DITCHES A, B, C, D, AND E ON 11/30/21.



TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN

**BOOM DEPLOYMENT AND
FOAM REMOVAL LOCATIONS**

ARCADIS | **FIGURE 2**

Attachment 1

Foam Observation Photo Log

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 1

Date: 3/19/21

Weather: Sunny, 4 mph wind (SE), no precipitation

Description: White/tan, some froth

Uncollapsed Volume Collected: 1.5 gal

Location: Ditch B. West Bay Shore Street crossing.



Photo: 2

Date: 3/19/21

Weather: Sunny, 4 mph wind (SE), no precipitation

Description: White, frothy

Uncollapsed Volume Collected: 0.5 gal

Location: Ditch B. Approximately 30 feet upstream of Ditch B Treatment System intake.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 3

Date: 4/1/21

Weather: Sunny, 9 mph wind (NNW), no precipitation

Description: White/tan, some froth

Uncollapsed Volume Collected: 10 gal

Location: Ditch B. West Bay Shore Street crossing.

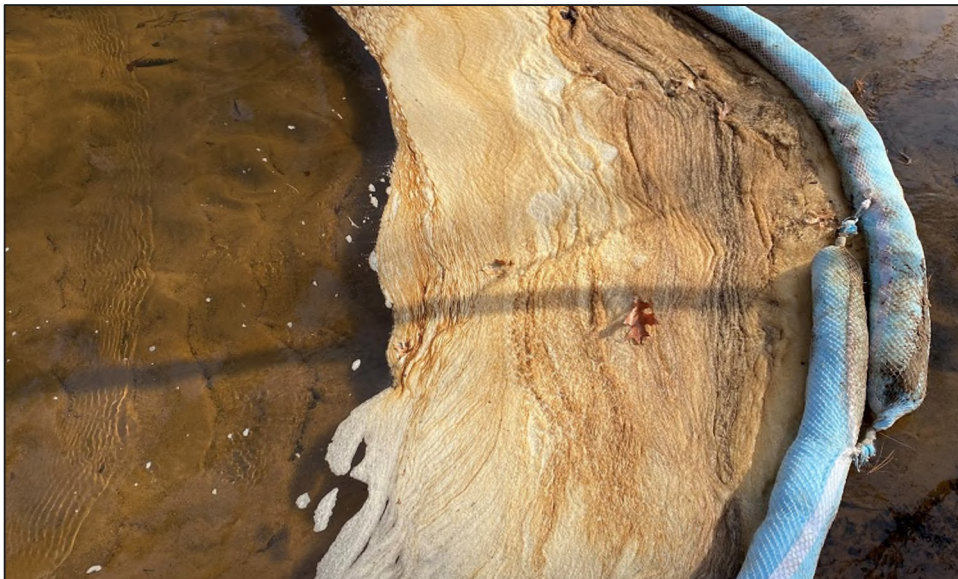


Photo: 4

Date: 4/2/21

Weather: Sunny, 4.5 mph wind (SW), no precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 4 gal

Location: Ditch B. West Bay Shore Street crossing.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 5

Date: 4/3/21

Weather: Sunny, 5 mph wind (WNW), no precipitation

Description: Brown, some froth

Uncollapsed Volume Collected: 5 gal

Location: Ditch B. West Bay Shore Street crossing.

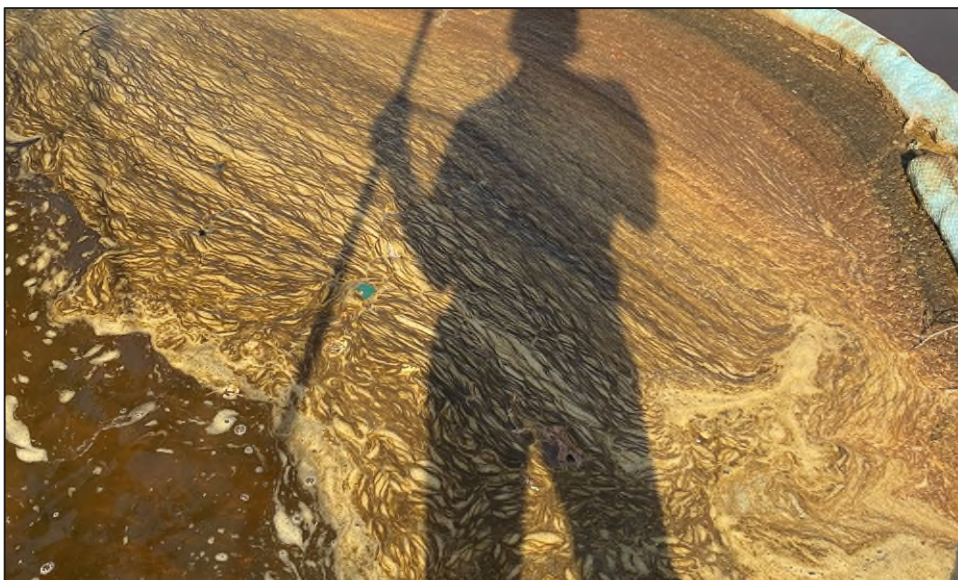


Photo: 6

Date: 4/5/21

Weather: Sunny, 6.3 mph wind (SE), no precipitation

Description: Brown, some froth

Uncollapsed Volume Collected: 5 gal

Location: Ditch B. West Bay Shore Street crossing.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 6

Date: 4/7/21

Weather: Sunny, 5 mph wind (NE), no precipitation

Description: Brown, some froth

Uncollapsed Volume Collected: 3 gal

Location: Ditch B. West Bay Shore Street crossing.



Photo: 7

Date: 4/9/21

Weather: Cloudy, 5.5 mph wind (SE), 0.03 inches of precipitation

Description: White, frothy

Uncollapsed Volume Collected: 2 gal

Location: Ditch C (East Branch). West Bay Shore Street crossing. Bay side of boom.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 8

Date: 4/16/21

Weather: Sunny, 4 mph wind (NW), 0.04 inches of precipitation

Description: White/brown, some froth

Uncollapsed Volume Collected: 3 gal

Location: Ditch B. West Bay Shore Street crossing.

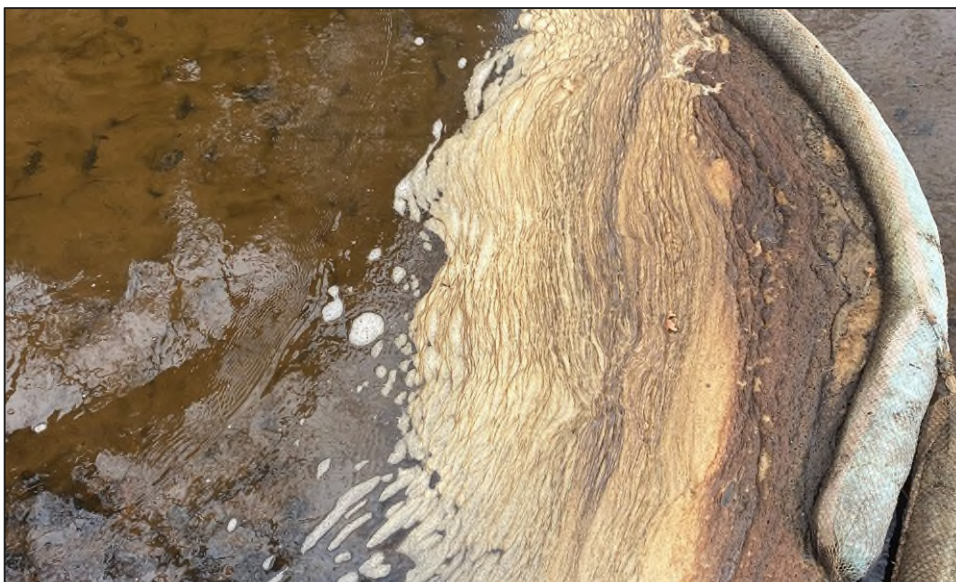


Photo: 9

Date: 4/19/21

Weather: Cloudy, 12 mph wind (NW), no precipitation

Description: Brown, some froth

Uncollapsed Volume Collected: 3 gal

Location: Ditch B. West Bay Shore Street crossing.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 10

Date: 4/21/21

Weather: Cloudy, 6 mph wind (S), no precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 3 gal

Location: Ditch B. West Bay Shore Street crossing.



Photo: 11

Date: 4/23/21

Weather: Sunny, 12 mph wind (W), no precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 2 gal

Location: Ditch B. West Bay Shore Street crossing.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 12

Date: 5/5/21

Weather: Sunny, 10 mph wind (SE), no precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 3 gal

Location: Ditch B. West Bay Shore Street crossing.



Photo: 13

Date: 5/10/21

Weather: Partly Cloudy, 3 mph wind (SE), 0.01 inches precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 4 gal

Location: Ditch B. West Bay Shore Street crossing

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 14

Date: 5/13/21

Weather: Sunny, 3 mph wind (E), No precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 4 gal

Location: Ditch B. West Bay Shore Street crossing.



Photo: 15

Date: 5/21/21

Weather: Partly cloudy, 6 mph wind (SSE), No precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 3 gal

Location: Ditch B. West Bay Shore Street crossing.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 16

Date: 7/7/21

Weather: Cloudy, 10.5 mph wind (NE), 0.73 inches of precipitation

Description: Tan/brown, some froth

Uncollapsed Volume Collected: 2 gal

Location: Ditch B. West Bay Shore Street crossing.



Photo: 17

Date: 7/8/21

Weather: Sunny, 6 mph wind (NE), No precipitation

Description: Tan, some froth

Uncollapsed Volume Collected: 10 gal

Location: Ditch B. West Bay Shore Street crossing.

Foam Observation Photographs

Tyco Fire Products LP
Marinette, WI



Photo: 18

Date: 7/9/21

Weather: Sunny, 5 mph
wind (SE), No precipitation

Description: Tan, some
froth

**Uncollapsed Volume
Collected:** 5 gal

Location: Ditch B. West Bay
Shore Street crossing.

Attachment 2

Transportation and Disposal Documentation

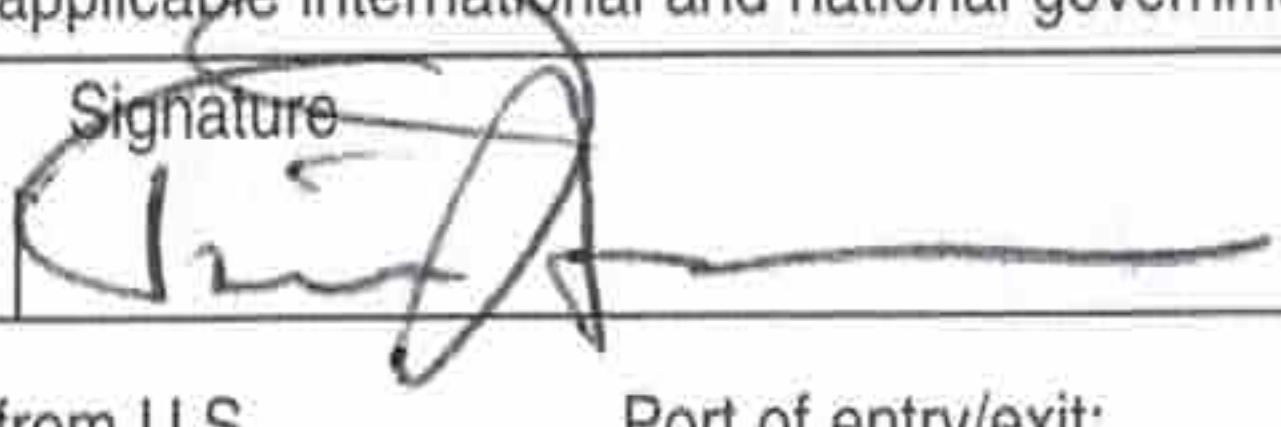
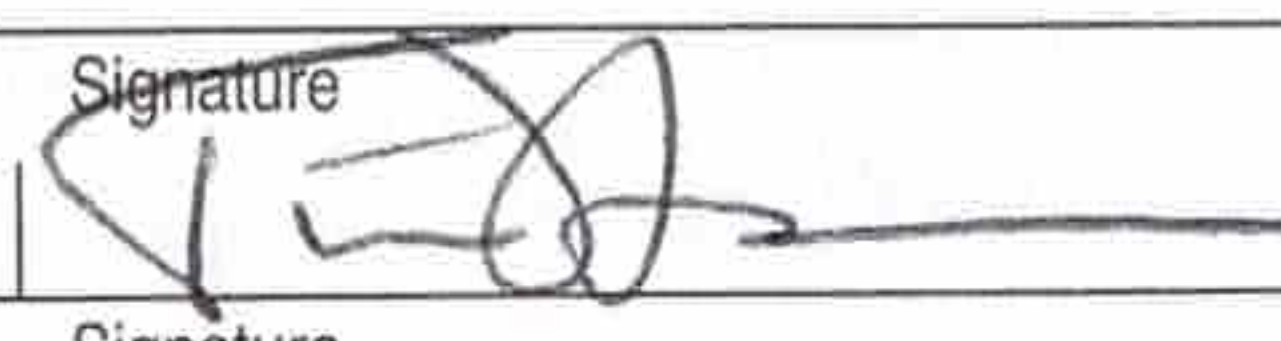
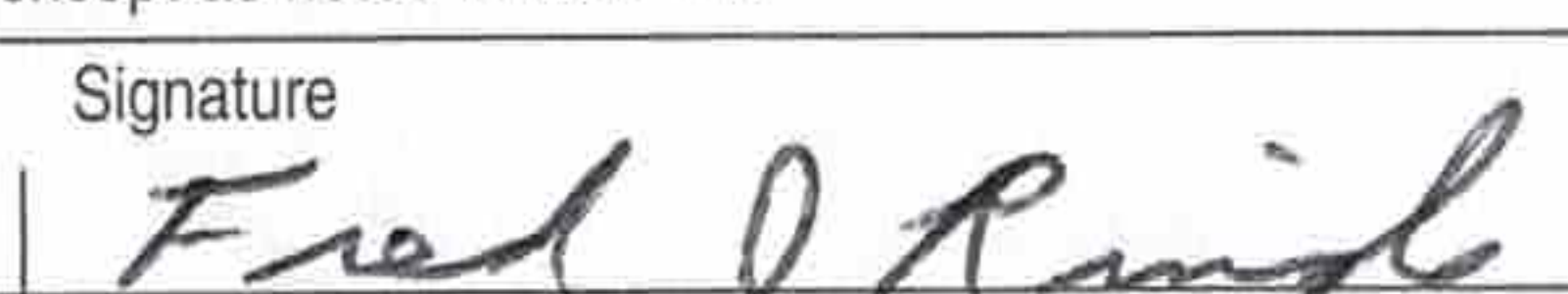
NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number W I T 5 8 0 0 1 1 8 5 0	2. Page 1 of 1	3. Emergency Response Phone (262) 339-8762	4. Waste Tracking Number W026-001-09	
5. Generator's Name and Mailing Address JCI/Tyco 1 Stanton Street Marinette WI 54143		Generator's Site Address (if different than mailing address) JCI/Tyco 2700 Industrial Parkway S Marinette WI 54143			
Generator's Phone: 715 733-7411 Ext. 84025					
6. Transporter 1 Company Name Endpoint Waste Solutions Corp.			U.S. EPA ID Number W I R 0 0 0 1 7 0 0 2 7		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Endpoint Waste Solutions Corp. 1024 Western Drive Hartford WI 53027			U.S. EPA ID Number L i c e n s e 4 7 0 4		
Facility's Phone: 414 427-1200					
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
1. Non-RCRA, Non-DOT		0001	DF	0030	G
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information 1. Surface Water Foam Profile# OR347460					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offeror's Printed/Typed Name Kirk Kapfhammer (behalf of Tyco/JCI)			Signature <i>Kirk J. Kapfhammer</i>		Month Day Year 7 15 21
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Kirk Kapfhammer (behalf of Tyco/JCI)			Signature <i>Kirk J. Kapfhammer</i>		Month Day Year 7 15 21
Transporter 2 Printed/Typed Name			Signature		Month Day Year
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number: _____					
17b. Alternate Facility (or Generator)			U.S. EPA ID Number		
Facility's Phone: _____					
17c. Signature of Alternate Facility (or Generator)					Month Day Year
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Fred J Ringle			Signature <i>Fred J Ringle</i>		Month Day Year 07 15 21

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number W I T 5 8 0 0 1 1 8 5 0	2. Page 1 of 1	3. Emergency Response Phone (262) 339-8762	4. Waste Tracking Number W028-001-10	
5. Generator's Name and Mailing Address JCI/Tyco 1 Stanton Street Marinette WI 54143		Generator's Site Address (if different than mailing address) JCI/Tyco 2700 Industrial Parkway S Marinette WI 54143			
Generator's Phone: 715 753-7411 Ext. 84025		U.S. EPA ID Number W I R 0 0 0 1 7 0 0 2 7			
6. Transporter 1 Company Name Endpoint Waste Solutions Corp.		U.S. EPA ID Number			
7. Transporter 2 Company Name		U.S. EPA ID Number			
8. Designated Facility Name and Site Address Endpoint Waste Solutions Corp. 1024 Western Drive Hartford WI 53027		U.S. EPA ID Number L i c e n s e 4 7 0 4			
Facility's Phone: 414 427-1200					
GENERATOR	9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
	1. Non-RCRA, Non-DOT	0001	DF	0005	G
	2.				
	3.				
4.					
13. Special Handling Instructions and Additional Information 1. Surface Water Foam Profile# OR347460 1x5 gal DF					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offeror's Printed/Typed Name Tim Hanson (Behalf of JCI/Tyco)		Signature 		Month	Day Year
				8	17 21
INT'L	15. International Shipments <input type="checkbox"/> Import to U.S. <input checked="" type="checkbox"/> Export from U.S.		Port of entry/exit: _____		
	Transporter Signature (for exports only): _____		Date leaving U.S.: _____		
TRANSPORTER	16. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name Tim Hanson		Signature 		Month Day Year 8 17 21
	Transporter 2 Printed/Typed Name		Signature		Month Day Year
DESIGNATED FACILITY	17. Discrepancy				
	17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection				
	Manifest Reference Number: _____				
	17b. Alternate Facility (or Generator)		U.S. EPA ID Number		
Facility's Phone: _____					
17c. Signature of Alternate Facility (or Generator)		Month Day Year			
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Fred J Ringle		Signature 		Month	Day Year
				08	17 21

Attachment 3

Laboratory Analytical Reports

ANALYTICAL REPORT

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

Laboratory Job ID: 500-199411-1

Client Project/Site: Marinette, WI 30015296.00016 Collapsed
Foam

For:
ARCADIS U.S., Inc.
126 North Jefferson Street
Suite 400
Milwaukee, Wisconsin 53202

Attn: Lisa Rutkowski



Authorized for release by:
5/28/2021 10:56:36 AM

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

LINKS

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results through
TotalAccess

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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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Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Job ID: 500-199411-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-199411-1

Comments

No additional comments.

Receipt

The sample was received on 5/20/2021 9:20 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 was 1.6° C.

Metals

Method 6020A: The following sample was diluted due to the nature of the sample matrix: Drum 1 (500-199411-1). 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.

LCMS

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-8:2 FTS in the following sample: Drum 1 (500-199411-1). The sample was re-analyzed with concurring results. As a result, the data may be potentially low biased for 8:2 FTS. The client was contacted and gave permission to report.

Method 537 (modified): Results for sample Drum 1 (500-199411-1) was reported from the analysis of a diluted extract due to high concentration of target analytes. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

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

Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-492294. 3535-PFC Aqueous

Method 3535: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: Drum 1 (500-199411-1). A 10x dilution was made on the sample, then fortified with IDA and extracted. The reporting limits (RLs) have been adjusted proportionately. preparation batch 320-492294 3535_PFC_28D Aqueous

Method 3535: Sample is Brown in color and opaque. Sample has a moderate amount of sediment. Drum 1 (500-199411-1) preparation batch 320-492294 3535_PFC_28D Aqueous

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

Detection Summary

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Client Sample ID: Drum 1

Lab Sample ID: 500-199411-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	540	J	2000	490	ng/L	100		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3400		2000	580	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1300	J	2000	250	ng/L	100		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	23000		2000	850	ng/L	100		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	15000		2000	270	ng/L	100		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	4200		2000	310	ng/L	100		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	2100		2000	1100	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	240	J	2000	190	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	64000		2000	540	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	7900		2000	980	ng/L	100		537 (modified)	Total/NA
NEtFOSAA	4500	J	5000	1300	ng/L	100		537 (modified)	Total/NA
6:2 FTS	47000		5000	2500	ng/L	100		537 (modified)	Total/NA
8:2 FTS	45000		2000	460	ng/L	100		537 (modified)	Total/NA
Arsenic	19		5.0	1.2	ug/L	5		6020A	Total Recoverable
Barium	450		13	3.7	ug/L	5		6020A	Total Recoverable
Chromium	14	J	25	5.7	ug/L	5		6020A	Total Recoverable
Lead	3.6		2.5	0.93	ug/L	5		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-199411-1	Drum 1	Water	05/19/21 13:05	05/20/21 09:20	

1

2

3

4

5

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Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Client Sample ID: Drum 1

Lab Sample ID: 500-199411-1

Date Collected: 05/19/21 13:05

Matrix: Water

Date Received: 05/20/21 09:20

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<5000		5000	2400	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoropentanoic acid (PFPeA)	540	J	2000	490	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorohexanoic acid (PFHxA)	3400		2000	580	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoroheptanoic acid (PFHpA)	1300	J	2000	250	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorooctanoic acid (PFOA)	23000		2000	850	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorononanoic acid (PFNA)	15000		2000	270	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorodecanoic acid (PFDA)	4200		2000	310	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoroundecanoic acid (PFUnA)	2100		2000	1100	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorododecanoic acid (PFDoA)	<2000		2000	550	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorotridecanoic acid (PFTriA)	<2000		2000	1300	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorotetradecanoic acid (PFTeA)	<2000		2000	730	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoro-n-hexadecanoic acid (PFHxDA)	<2000		2000	890	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoro-n-octadecanoic acid (PFODA)	<2000		2000	940	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorobutanesulfonic acid (PFBS)	<2000		2000	200	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoropentanesulfonic acid (PFPeS)	<2000		2000	300	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorohexanesulfonic acid (PFHxS)	<2000		2000	570	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluoroheptanesulfonic Acid (PFHpS)	240	J	2000	190	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorooctanesulfonic acid (PFOS)	64000		2000	540	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorononanesulfonic acid (PFNS)	<2000		2000	370	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorodecanesulfonic acid (PFDS)	<2000		2000	320	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorododecanesulfonic acid (PFDoS)	<2000		2000	970	ng/L		05/24/21 21:46	05/25/21 22:32	100
Perfluorooctanesulfonamide (FOSA)	7900		2000	980	ng/L		05/24/21 21:46	05/25/21 22:32	100
NEtFOSA	<2000		2000	870	ng/L		05/24/21 21:46	05/25/21 22:32	100
NMeFOSA	<2000		2000	430	ng/L		05/24/21 21:46	05/25/21 22:32	100
NMeFOSAA	<5000		5000	1200	ng/L		05/24/21 21:46	05/25/21 22:32	100
NEtFOSAA	4500	J	5000	1300	ng/L		05/24/21 21:46	05/25/21 22:32	100
NMeFOSE	<4000		4000	1400	ng/L		05/24/21 21:46	05/25/21 22:32	100
NEtFOSE	<2000		2000	850	ng/L		05/24/21 21:46	05/25/21 22:32	100
4:2 FTS	<2000		2000	240	ng/L		05/24/21 21:46	05/25/21 22:32	100
6:2 FTS	47000		5000	2500	ng/L		05/24/21 21:46	05/25/21 22:32	100
8:2 FTS	45000		2000	460	ng/L		05/24/21 21:46	05/25/21 22:32	100
10:2 FTS	<2000		2000	670	ng/L		05/24/21 21:46	05/25/21 22:32	100
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2000		2000	400	ng/L		05/24/21 21:46	05/25/21 22:32	100
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<4000		4000	1500	ng/L		05/24/21 21:46	05/25/21 22:32	100
F-53B Major	<2000		2000	240	ng/L		05/24/21 21:46	05/25/21 22:32	100
F-53B Minor	<2000		2000	320	ng/L		05/24/21 21:46	05/25/21 22:32	100
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150				05/24/21 21:46	05/25/21 22:32	100
13C5 PFPeA	89		25 - 150				05/24/21 21:46	05/25/21 22:32	100
13C2 PFHxA	91		25 - 150				05/24/21 21:46	05/25/21 22:32	100
13C4 PFHpA	66		25 - 150				05/24/21 21:46	05/25/21 22:32	100
13C4 PFOA	105		25 - 150				05/24/21 21:46	05/25/21 22:32	100

Eurofins TestAmerica, Chicago

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Client Sample ID: Drum 1

Lab Sample ID: 500-199411-1

Date Collected: 05/19/21 13:05

Matrix: Water

Date Received: 05/20/21 09:20

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	90		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C2 PFDA	71		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C2 PFUnA	79		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C2 PFDoA	69		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C2 PFTeDA	56		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C2 PFHxDA	50		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C3 PFBS	87		25 - 150	05/24/21 21:46	05/25/21 22:32	100
18O2 PFHxS	76		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C4 PFOS	79		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C8 FOSA	92		10 - 150	05/24/21 21:46	05/25/21 22:32	100
d3-NMeFOSAA	105		25 - 150	05/24/21 21:46	05/25/21 22:32	100
d5-NEtFOSAA	89		25 - 150	05/24/21 21:46	05/25/21 22:32	100
d-N-MeFOSA-M	47		10 - 150	05/24/21 21:46	05/25/21 22:32	100
d-N-EtFOSA-M	60		10 - 150	05/24/21 21:46	05/25/21 22:32	100
d7-N-MeFOSE-M	54		10 - 150	05/24/21 21:46	05/25/21 22:32	100
d9-N-EtFOSE-M	57		10 - 150	05/24/21 21:46	05/25/21 22:32	100
M2-4:2 FTS	97		25 - 150	05/24/21 21:46	05/25/21 22:32	100
M2-6:2 FTS	86		25 - 150	05/24/21 21:46	05/25/21 22:32	100
M2-8:2 FTS	238	*5+	25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C3 HFPO-DA	75		25 - 150	05/24/21 21:46	05/25/21 22:32	100
13C2 10:2 FTS	90		25 - 150	05/24/21 21:46	05/25/21 22:32	100

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		5.0	1.2	ug/L		05/20/21 18:19	05/26/21 00:23	5
Barium	450		13	3.7	ug/L		05/20/21 18:19	05/25/21 18:43	5
Cadmium	<2.5		2.5	0.84	ug/L		05/20/21 18:19	05/25/21 18:43	5
Chromium	14	J	25	5.7	ug/L		05/20/21 18:19	05/25/21 18:43	5
Lead	3.6		2.5	0.93	ug/L		05/20/21 18:19	05/26/21 00:23	5
Selenium	<13		13	4.9	ug/L		05/20/21 18:19	05/26/21 00:23	5
Silver	<2.5		2.5	0.58	ug/L		05/20/21 18:19	05/25/21 18:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	0.098	ug/L		05/21/21 09:25	05/24/21 08:20	1

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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 Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-492294/1-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492294

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<5.0		5.0	2.4	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	0.49	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	0.58	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	0.25	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	0.85	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	0.27	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	0.31	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	1.1	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	0.55	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorotridecanoic acid (PFTriA)	<2.0		2.0	1.3	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorotetradecanoic acid (PFTeA)	<2.0		2.0	0.73	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<2.0		2.0	0.89	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoro-n-octadecanoic acid (PFODA)	<2.0		2.0	0.94	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	0.20	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	0.30	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	0.57	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	<2.0		2.0	0.19	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	0.54	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorononanesulfonic acid (PFNS)	<2.0		2.0	0.37	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorodecanesulfonic acid (PFDS)	<2.0		2.0	0.32	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorododecanesulfonic acid (PFDoS)	<2.0		2.0	0.97	ng/L		05/24/21 21:46	05/25/21 22:04	1
Perfluorooctanesulfonamide (FOSA)	<2.0		2.0	0.98	ng/L		05/24/21 21:46	05/25/21 22:04	1
NEtFOSA	<2.0		2.0	0.87	ng/L		05/24/21 21:46	05/25/21 22:04	1
NMeFOSA	<2.0		2.0	0.43	ng/L		05/24/21 21:46	05/25/21 22:04	1
NMeFOSAA	<5.0		5.0	1.2	ng/L		05/24/21 21:46	05/25/21 22:04	1
NEtFOSAA	<5.0		5.0	1.3	ng/L		05/24/21 21:46	05/25/21 22:04	1
NMeFOSE	<4.0		4.0	1.4	ng/L		05/24/21 21:46	05/25/21 22:04	1
NEtFOSE	<2.0		2.0	0.85	ng/L		05/24/21 21:46	05/25/21 22:04	1
4:2 FTS	<2.0		2.0	0.24	ng/L		05/24/21 21:46	05/25/21 22:04	1
6:2 FTS	<5.0		5.0	2.5	ng/L		05/24/21 21:46	05/25/21 22:04	1
8:2 FTS	<2.0		2.0	0.46	ng/L		05/24/21 21:46	05/25/21 22:04	1
10:2 FTS	<2.0		2.0	0.67	ng/L		05/24/21 21:46	05/25/21 22:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	0.40	ng/L		05/24/21 21:46	05/25/21 22:04	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<4.0		4.0	1.5	ng/L		05/24/21 21:46	05/25/21 22:04	1
F-53B Major	<2.0		2.0	0.24	ng/L		05/24/21 21:46	05/25/21 22:04	1
F-53B Minor	<2.0		2.0	0.32	ng/L		05/24/21 21:46	05/25/21 22:04	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	91		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C5 PFPeA	86		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 PFHxA	84		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C4 PFHpA	90		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C4 PFOA	96		25 - 150	05/24/21 21:46	05/25/21 22:04	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-492294/1-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492294

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C5 PFNA	91		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 PFDA	92		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 PFUnA	84		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 PFDoA	91		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 PFTeDA	88		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 PFHxDA	100		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C3 PFBS	82		25 - 150	05/24/21 21:46	05/25/21 22:04	1
18O2 PFHxS	90		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C4 PFOS	85		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C8 FOSA	95		10 - 150	05/24/21 21:46	05/25/21 22:04	1
d3-NMeFOSAA	90		25 - 150	05/24/21 21:46	05/25/21 22:04	1
d5-NEtFOSAA	90		25 - 150	05/24/21 21:46	05/25/21 22:04	1
d-N-MeFOSA-M	79		10 - 150	05/24/21 21:46	05/25/21 22:04	1
d-N-EtFOSA-M	76		10 - 150	05/24/21 21:46	05/25/21 22:04	1
d7-N-MeFOSE-M	85		10 - 150	05/24/21 21:46	05/25/21 22:04	1
d9-N-EtFOSE-M	75		10 - 150	05/24/21 21:46	05/25/21 22:04	1
M2-4:2 FTS	99		25 - 150	05/24/21 21:46	05/25/21 22:04	1
M2-6:2 FTS	104		25 - 150	05/24/21 21:46	05/25/21 22:04	1
M2-8:2 FTS	99		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C3 HFPO-DA	85		25 - 150	05/24/21 21:46	05/25/21 22:04	1
13C2 10:2 FTS	101		25 - 150	05/24/21 21:46	05/25/21 22:04	1

Lab Sample ID: LCS 320-492294/2-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoropentanoic acid (PFPeA)	40.0	40.7		ng/L		102	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	44.6		ng/L		112	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	44.6		ng/L		112	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.6		ng/L		99	60 - 135
Perfluorononanoic acid (PFNA)	40.0	43.8		ng/L		110	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	41.1		ng/L		103	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	43.3		ng/L		108	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	43.1		ng/L		108	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	47.4		ng/L		119	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	43.1		ng/L		108	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	42.1		ng/L		105	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	43.5		ng/L		109	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	39.3		ng/L		111	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	47.9		ng/L		128	60 - 135

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-492294/2-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanesulfonic acid (PFHxS)	36.4	41.2		ng/L		113	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.5		ng/L		101	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	38.9		ng/L		105	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	43.1		ng/L		112	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	38.3		ng/L		99	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	41.1		ng/L		106	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	39.1		ng/L		98	60 - 135
NEtFOSA	40.0	44.8		ng/L		112	60 - 135
NMeFOSA	40.0	41.2		ng/L		103	60 - 135
NMeFOSAA	40.0	44.5		ng/L		111	60 - 135
NEtFOSAA	40.0	42.9		ng/L		107	60 - 135
NMeFOSE	40.0	40.6		ng/L		102	60 - 135
NEtFOSE	40.0	44.3		ng/L		111	60 - 135
4:2 FTS	37.4	39.3		ng/L		105	60 - 135
6:2 FTS	37.9	37.9		ng/L		100	60 - 135
8:2 FTS	38.3	42.7		ng/L		111	60 - 135
10:2 FTS	38.6	36.0		ng/L		93	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	40.2		ng/L		107	60 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	40.0	47.3		ng/L		118	60 - 135
F-53B Major	37.3	44.7		ng/L		120	60 - 135
F-53B Minor	37.7	38.6		ng/L		103	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	90		25 - 150
13C5 PFPeA	88		25 - 150
13C2 PFHxA	89		25 - 150
13C4 PFHpA	90		25 - 150
13C4 PFOA	94		25 - 150
13C5 PFNA	89		25 - 150
13C2 PFDA	93		25 - 150
13C2 PFUnA	85		25 - 150
13C2 PFDoA	87		25 - 150
13C2 PFTeDA	88		25 - 150
13C2 PFHxDA	100		25 - 150
13C3 PFBS	85		25 - 150
18O2 PFHxS	87		25 - 150
13C4 PFOS	90		25 - 150
13C8 FOSA	94		10 - 150
d3-NMeFOSAA	87		25 - 150
d5-NEtFOSAA	86		25 - 150
d-N-MeFOSA-M	79		10 - 150
d-N-EtFOSA-M	76		10 - 150

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-492294/2-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492294

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
d7-N-MeFOSE-M	77		10 - 150
d9-N-EtFOSE-M	75		10 - 150
M2-4:2 FTS	85		25 - 150
M2-6:2 FTS	95		25 - 150
M2-8:2 FTS	86		25 - 150
13C3 HFPO-DA	88		25 - 150
13C2 10:2 FTS	98		25 - 150

Lab Sample ID: LCSD 320-492294/3-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 492294

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	41.6		ng/L		104	60 - 135	0	30
Perfluoropentanoic acid (PFPeA)	40.0	41.8		ng/L		104	60 - 135	3	30
Perfluorohexanoic acid (PFHxA)	40.0	41.8		ng/L		104	60 - 135	7	30
Perfluoroheptanoic acid (PFHpA)	40.0	42.2		ng/L		105	60 - 135	6	30
Perfluorooctanoic acid (PFOA)	40.0	41.3		ng/L		103	60 - 135	4	30
Perfluorononanoic acid (PFNA)	40.0	41.9		ng/L		105	60 - 135	4	30
Perfluorodecanoic acid (PFDA)	40.0	42.2		ng/L		105	60 - 135	2	30
Perfluoroundecanoic acid (PFUnA)	40.0	47.6		ng/L		119	60 - 135	10	30
Perfluorododecanoic acid (PFDoA)	40.0	44.8		ng/L		112	60 - 135	4	30
Perfluorotridecanoic acid (PFTriA)	40.0	43.9		ng/L		110	60 - 135	8	30
Perfluorotetradecanoic acid (PFTeA)	40.0	45.4		ng/L		114	60 - 135	5	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	40.0		ng/L		100	60 - 135	5	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	42.2		ng/L		105	60 - 135	3	30
Perfluorobutanesulfonic acid (PFBS)	35.4	39.5		ng/L		112	60 - 135	1	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	41.2		ng/L		110	60 - 135	15	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.6		ng/L		103	60 - 135	9	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	43.8		ng/L		115	60 - 135	13	30
Perfluorooctanesulfonic acid (PFOS)	37.1	43.5		ng/L		117	60 - 135	11	30
Perfluorononanesulfonic acid (PFNS)	38.4	44.7		ng/L		116	60 - 135	4	30
Perfluorodecanesulfonic acid (PFDS)	38.6	43.3		ng/L		112	60 - 135	12	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	40.8		ng/L		105	60 - 135	1	30
Perfluorooctanesulfonamide (FOSA)	40.0	37.4		ng/L		94	60 - 135	4	30
NEtFOSA	40.0	44.7		ng/L		112	60 - 135	0	30
NMeFOSA	40.0	41.5		ng/L		104	60 - 135	1	30
NMeFOSAA	40.0	41.9		ng/L		105	60 - 135	6	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-492294/3-A
Matrix: Water
Analysis Batch: 492608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 492294

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NEtFOSAA	40.0	47.1		ng/L		118	60 - 135	9	30
NMeFOSE	40.0	38.7		ng/L		97	60 - 135	5	30
NEtFOSE	40.0	46.1		ng/L		115	60 - 135	4	30
4:2 FTS	37.4	38.4		ng/L		103	60 - 135	2	30
6:2 FTS	37.9	35.4		ng/L		93	60 - 135	7	30
8:2 FTS	38.3	43.7		ng/L		114	60 - 135	2	30
10:2 FTS	38.6	40.7		ng/L		106	60 - 135	12	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	44.6		ng/L		118	60 - 135	10	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	40.0	38.2		ng/L		96	60 - 135	21	30
F-53B Major	37.3	45.9		ng/L		123	60 - 135	3	30
F-53B Minor	37.7	44.2		ng/L		117	60 - 135	13	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
13C4 PFBA	96		25 - 150
13C5 PFPeA	96		25 - 150
13C2 PFHxA	98		25 - 150
13C4 PFHpA	90		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	89		25 - 150
13C2 PFDA	91		25 - 150
13C2 PFUnA	81		25 - 150
13C2 PFDoA	86		25 - 150
13C2 PFTeDA	83		25 - 150
13C2 PFHxDA	95		25 - 150
13C3 PFBS	91		25 - 150
18O2 PFHxS	89		25 - 150
13C4 PFOS	84		25 - 150
13C8 FOSA	95		10 - 150
d3-NMeFOSAA	98		25 - 150
d5-NEtFOSAA	87		25 - 150
d-N-MeFOSA-M	82		10 - 150
d-N-EtFOSA-M	71		10 - 150
d7-N-MeFOSE-M	77		10 - 150
d9-N-EtFOSE-M	74		10 - 150
M2-4:2 FTS	92		25 - 150
M2-6:2 FTS	103		25 - 150
M2-8:2 FTS	97		25 - 150
13C3 HFPO-DA	101		25 - 150
13C2 10:2 FTS	91		25 - 150

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-600086/1-A
Matrix: Water
Analysis Batch: 600816

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<2.5		2.5	0.73	ug/L		05/20/21 18:19	05/25/21 18:36	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-600086/1-A
Matrix: Water
Analysis Batch: 600816

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600086

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	<0.50		0.50	0.17	ug/L		05/20/21 18:19	05/25/21 18:36	1
Chromium	<5.0		5.0	1.1	ug/L		05/20/21 18:19	05/25/21 18:36	1
Silver	<0.50		0.50	0.12	ug/L		05/20/21 18:19	05/25/21 18:36	1

Lab Sample ID: MB 500-600086/1-A
Matrix: Water
Analysis Batch: 600933

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600086

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<1.0		1.0	0.23	ug/L		05/20/21 18:19	05/26/21 00:16	1
Lead	<0.50		0.50	0.19	ug/L		05/20/21 18:19	05/26/21 00:16	1
Selenium	<2.5		2.5	0.98	ug/L		05/20/21 18:19	05/26/21 00:16	1

Lab Sample ID: LCS 500-600086/2-A
Matrix: Water
Analysis Batch: 600816

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 600086

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Barium	2000	2000		ug/L		100	80 - 120	
Cadmium	50.0	49.7		ug/L		99	80 - 120	
Chromium	200	204		ug/L		102	80 - 120	
Silver	50.0	51.3		ug/L		103	80 - 120	

Lab Sample ID: LCS 500-600086/2-A
Matrix: Water
Analysis Batch: 600933

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 600086

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Arsenic	100	94.8		ug/L		95	80 - 120	
Lead	100	107		ug/L		107	80 - 120	
Selenium	100	96.7		ug/L		97	80 - 120	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-600211/12-A
Matrix: Water
Analysis Batch: 600524

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 600211

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.20		0.20	0.098	ug/L		05/21/21 09:25	05/24/21 08:16	1

Lab Sample ID: LCS 500-600211/13-A
Matrix: Water
Analysis Batch: 600524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 600211

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Mercury	2.00	2.09		ug/L		105	80 - 120	

Lab Chronicle

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Client Sample ID: Drum 1

Lab Sample ID: 500-199411-1

Date Collected: 05/19/21 13:05

Matrix: Water

Date Received: 05/20/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			492294	05/24/21 21:46	JER	TAL SAC
Total/NA	Analysis	537 (modified)		100	492608	05/25/21 22:32	RS1	TAL SAC
Total Recoverable	Prep	3005A			600086	05/20/21 18:19	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	600816	05/25/21 18:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			600086	05/20/21 18:19	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	600933	05/26/21 00:23	FXG	TAL CHI
Total/NA	Prep	7470A			600211	05/21/21 09:25	MJG	TAL CHI
Total/NA	Analysis	7470A		1	600524	05/24/21 08:20	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-21

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Chain of Custody Record

University Park, IL 60484-3101
phone 708 534 5200 fax 708 534 5211

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact		Project Manager: Lisa Rutkowski	
Arcadis U S , Inc 126 North Jefferson Street, Suite 400 Milwaukee, WI 53202		Email: N/A	
Phor 500-199411 FAX		Tel/Fax: N/A	
Project Name Marinette, WI Site Marinette, WI P O # 30015296 00016 (Collapsed Foam)		Sampler: <i>Jacob Ramirez</i> Lab Contact: <i>Sandle Fredrick</i> Carrier: FedEx	
500-199411 COC		Date: <i>5-19-21</i> COC No <i>1</i> 1 of 1 COCs	
Analysis Turnaround Time		For Lab Use Only:	
<input checked="" type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Walk-in Client. <input type="checkbox"/>	
TAT if different from Below _____		Lab Sampling <input type="checkbox"/>	
<input type="checkbox"/> 2 weeks		Lab Project Number	
<input checked="" type="checkbox"/> 1 week		50018970	
<input type="checkbox"/> 2 days		<i>500-199411</i>	
<input type="checkbox"/> 1 day		Sample Specific Notes	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 537 Modified (36 Compounds)	RCRA Metals (6020A, 7470A)
Drum 1	<i>5-19-21</i>	<i>1305</i>	G	W	3	N	N	X	X
<i>JR</i>									
<i>JR</i>									

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact Yes No

Custody Seal No _____ Cooler Temp (°C) Obs'd *16* Corr'd _____ Therm ID No _____

Relinquished by <i>Jacob Ramirez</i>	Company: <i>Barley Excavating</i>	Date/Time <i>5-19-21/1305</i>	Received by: <i>Fed Ex</i>	Company	Date/Time
Relinquished by	Company	Date/Time	Received by:	Company	Date/Time
Relinquished by:	Company	Date/Time	Received in Laboratory by <i>Shirley Scott</i>	Company <i>ETA-CHT</i>	Date/Time <i>5/20/21 0920</i>



ORIGIN ID:PHDA (906) 863-9373
JOE BARLEY
BARLEY EXCAVATING
1824 10TH AVE

SHIP DATE: 11MAR21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3409

MENOMINEE, MI 49858
UNITED STATES US

TO

EUROFINS TESTAMERICA CHICAGO
2417 BOND STREET



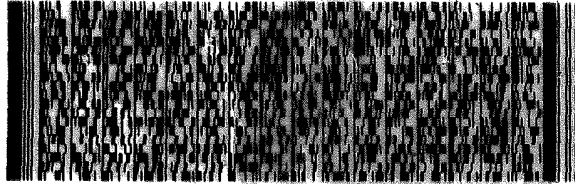
UNIVERSITY PARK IL 604843101

(708) 634-5200

REF: 8600-90001

500-199411 Wayb

RMA: ||| ||| |||



RETURNS MON-SAT

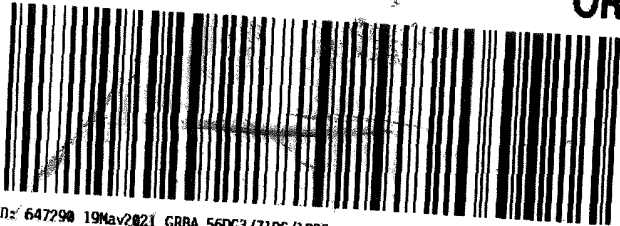
FedEx

TRK# 9509 0062 7990
02221

140 - 20 MAY AA
PRIORITY OVERNIGHT

NA JOTA

60484
IL-US
ORD



FTD: 647290 19Mar2021 GRBA 560G3/71DC/1B23

48qt.

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Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 500-199411-1

Login Number: 199411

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	1.6
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 <math><6\text{mm}</math> (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: ARCADIS U.S., Inc.

Job Number: 500-199411-1

Login Number: 199411

List Number: 2

Creator: Cahill, Nicholas P

List Source: Eurofins TestAmerica, Sacramento

List Creation: 05/21/21 06:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1451723
Sample custody seals, if present, are intact.	N/A	
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	1.2c
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?	False	Received project as a subcontract.
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



500-199411 Field Sheet

Job: _____

Tracking #: 1893 4452 0099

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Therm. ID: 2-07 Corr. Factor: (+/-) N/A °C

Ice Wet Gel _____ Other _____

Cooler Custody Seal: 1451723

Cooler ID: _____

Temp Observed: 1.2 °C Corrected: 1.2 °C
From: Temp Blank Sample

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature is acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frozen samples show signs of thaw?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initials: NC Date: 5-21-21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample custody seal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Samples w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: JH Date: 5/21/21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NCM Filed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Log Release checked in TALS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Initials: JH Date: 5/21/21

WR3-17C

Isotope Dilution Summary

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-199411-1	Drum 1	92	89	91	66	105	90	71	79
LCS 320-492294/2-A	Lab Control Sample	90	88	89	90	94	89	93	85
LCSD 320-492294/3-A	Lab Control Sample Dup	96	96	98	90	95	89	91	81
MB 320-492294/1-A	Method Blank	91	86	84	90	96	91	92	84

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	PFHxDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)
500-199411-1	Drum 1	69	56	50	87	76	79	92	105
LCS 320-492294/2-A	Lab Control Sample	87	88	100	85	87	90	94	87
LCSD 320-492294/3-A	Lab Control Sample Dup	86	83	95	91	89	84	95	98
MB 320-492294/1-A	Method Blank	91	88	100	82	90	85	95	90

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	d5NEFOS (25-150)	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)
500-199411-1	Drum 1	89	47	60	54	57	97	86	238 *5+
LCS 320-492294/2-A	Lab Control Sample	86	79	76	77	75	85	95	86
LCSD 320-492294/3-A	Lab Control Sample Dup	87	82	71	77	74	92	103	97
MB 320-492294/1-A	Method Blank	90	79	76	85	75	99	104	99

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)	M102FTS (25-150)
500-199411-1	Drum 1	75	90
LCS 320-492294/2-A	Lab Control Sample	88	98
LCSD 320-492294/3-A	Lab Control Sample Dup	101	91
MB 320-492294/1-A	Method Blank	85	101

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHxA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2 PFTeDA
- PFHxDA = 13C2 PFHxDA
- C3PFBS = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS
- PFOSA = 13C8 FOSA
- d3NMFOS = d3-NMeFOSAA
- d5NEFOS = d5-NEtFOSAA
- dMeFOSA = d-N-MeFOSA-M
- dEtFOSA = d-N-EtFOSA-M
- NMFM = d7-N-MeFOSE-M
- NEFM = d9-N-EtFOSE-M
- M242FTS = M2-4:2 FTS

Isotope Dilution Summary

Client: ARCADIS U.S., Inc.

Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-199411-1

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

HFPODA = 13C3 HFPO-DA

M102FTS = 13C2 10:2 FTS

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-202623-1

Client Project/Site: Marinette, WI 30015296.00016 Collapsed
Foam

For:
ARCADIS U.S., Inc.
126 North Jefferson Street
Suite 400
Milwaukee, Wisconsin 53202

Attn: Lisa Rutkowski



Authorized for release by:
8/1/2021 7:34:11 PM

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

LINKS

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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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Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Job ID: 500-202623-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-202623-1

Comments

No additional comments.

Receipt

The sample was received on 7/21/2021 9:50 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 was 2.1° C.

Receipt Exceptions

Samples received with extremely dark discoloration. Collapsed SW Foam (7-20-21) (500-202623-1)

LCMS

Method 537 (modified): The laboratory control sample duplicate (LCSD) for preparation batch 320-509481 and analytical batch 320-509839 recovered outside control limits for the following analytes: NMeFOSE and NEtFOSE. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 537 (modified): Internal standard (ISTD) response for the following sample was outside control limits: Collapsed SW Foam (7-20-21) (500-202623-1). The sample was analyzed at a dilution and the ISTD response was within control limits. The ISTD is not used to quantitate the target analytes. Both sets of data are reported.

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: Collapsed SW Foam (7-20-21) (500-202623-1). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 537 (modified): The concentration of several analytes associated with the following sample exceeded the instrument calibration range: Collapsed SW Foam (7-20-21) (500-202623-1). These analytes have been qualified; however, the peaks did not saturate the instrument detector. The samples were diluted within calibration range, and both sets of data were reported.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.
Collapsed SW Foam (7-20-21) (500-202623-1)

Method 537 (modified): Results for sample Collapsed SW Foam (7-20-21) (500-202623-1) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits. The percent recovery for the internal standard in the 100X analysis is 113% after the dilution factor was applied to the labeled internal standard area count.

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-509961 recovered above the upper control limit for Perfluorotetradecanoic acid (PFTeA). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 537 (modified): The concentration of Perfluorooctanesulfonic acid (PFOS) associated with the following sample exceeded the instrument calibration range: Collapsed SW Foam (7-20-21) (500-202623-1). This analyte has been qualified; however, the peak did not saturate the instrument detector. Historical data indicate that for the isotope dilution method, dilution and re-analysis will not produce significantly different results from those reported above the calibration range. Data has been reported per client approval.

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-509829 recovered above the upper control limit for Perfluorotetradecanoic acid (PFTeA). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 320-509829/3).

Method 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: Collapsed SW Foam (7-20-21) (500-202623-1). Generally, data quality is not considered affected if the IDA

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Job ID: 500-202623-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. The recovery of the IDA in the undiluted extracted was within control limits.

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

Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-509481. 3535 PFC Aqueous 320-509481

Method 3535: The following sample was black prior to extraction: Collapsed SW Foam (7-20-21) (500-202623-1) 3535 PFC Aqueous 320-509481

Method 3535: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: Collapsed SW Foam (7-20-21) (500-202623-1). A 10x (25mL) dilution was made on the sample, then fortified with IDA and extracted. The reporting limits have been adjusted proportionately. 3535 PFC Aqueous 320-509481

Method 3535: The following sample is yellow at final volume: Collapsed SW Foam (7-20-21) (500-202623-1) 3535 PFC Aqueous 320-509481

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-511910. 3535_PFC Aqueous

Method 3535: Sample is dark brown and opaque. Collapsed SW Foam (7-20-21) (500-202623-1) preparation batch 320-511910 3535_PFC Aqueous

Method 3535: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: Collapsed SW Foam (7-20-21) (500-202623-1). A 10x dilution was made on the sample, which was then fortified with IDA and extracted. The reporting limits (RLs) have been adjusted proportionately. preparation batch 320-511910 3535_PFC Aqueous

Method 3535: Extract is a golden-yellow color. Collapsed SW Foam (7-20-21) (500-202623-1) preparation batch 320-511910 3535_PFC Aqueous

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

Detection Summary

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Client Sample ID: Collapsed SW Foam (7-20-21)

Lab Sample ID: 500-202623-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	240		50	24	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	590		20	4.9	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5700	E	20	5.8	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1800		20	2.5	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	140000	E	20	8.5	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	160000	E	20	2.7	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	50000	E	20	3.1	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	18000	E	20	11	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	1100		20	5.5	ng/L	1		537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTriA)	180	I	20	13	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	55		20	7.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	5.1	J	20	3.0	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1700		20	5.7	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	7300	E	20	1.9	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	930000	E	20	5.4	ng/L	1		537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	1100		20	3.2	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	87000	E	20	9.8	ng/L	1		537 (modified)	Total/NA
NMeFOSA	46		20	4.3	ng/L	1		537 (modified)	Total/NA
NMeFOSAA	1200	I	50	12	ng/L	1		537 (modified)	Total/NA
NEtFOSAA	32000	E	50	13	ng/L	1		537 (modified)	Total/NA
NEtFOSE	210	*+	20	8.5	ng/L	1		537 (modified)	Total/NA
4:2 FTS	94		20	2.4	ng/L	1		537 (modified)	Total/NA
6:2 FTS	51000	E	50	25	ng/L	1		537 (modified)	Total/NA
8:2 FTS	49000	E	20	4.6	ng/L	1		537 (modified)	Total/NA
10:2 FTS	2500		20	6.7	ng/L	1		537 (modified)	Total/NA
F-53B Major	12	J	20	2.4	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	550	J	2000	490	ng/L	100		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	6200		2000	580	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	1800	J	2000	250	ng/L	100		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	220000		2000	850	ng/L	100		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA) - DL	240000		2000	270	ng/L	100		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA) - DL	53000		2000	310	ng/L	100		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA) - DL	18000		2000	1100	ng/L	100		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA) - DL	1200	J	2000	550	ng/L	100		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	1800	J	2000	570	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS) - DL	2700		2000	190	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	750000	E	2000	540	ng/L	100		537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS) - DL	600	J I	2000	370	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA) - DL	99000		2000	980	ng/L	100		537 (modified)	Total/NA
NEtFOSAA - DL	27000		5000	1300	ng/L	100		537 (modified)	Total/NA
6:2 FTS - DL	66000		5000	2500	ng/L	100		537 (modified)	Total/NA
8:2 FTS - DL	73000		2000	460	ng/L	100		537 (modified)	Total/NA
10:2 FTS - DL	2700		2000	670	ng/L	100		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-202623-1	Collapsed SW Foam (7-20-21)	Water	07/20/21 09:30	07/21/21 09:50

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Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Client Sample ID: Collapsed SW Foam (7-20-21)

Lab Sample ID: 500-202623-1

Date Collected: 07/20/21 09:30

Matrix: Water

Date Received: 07/21/21 09:50

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	240		50	24	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoropentanoic acid (PFPeA)	590		20	4.9	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorohexanoic acid (PFHxA)	5700	E	20	5.8	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoroheptanoic acid (PFHpA)	1800		20	2.5	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorooctanoic acid (PFOA)	140000	E	20	8.5	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorononanoic acid (PFNA)	160000	E	20	2.7	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorodecanoic acid (PFDA)	50000	E	20	3.1	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoroundecanoic acid (PFUnA)	18000	E	20	11	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorododecanoic acid (PFDoA)	1100		20	5.5	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorotridecanoic acid (PFTriA)	180	I	20	13	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorotetradecanoic acid (PFTeA)	55		20	7.3	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<20		20	8.9	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoro-n-octadecanoic acid (PFODA)	<20		20	9.4	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorobutanesulfonic acid (PFBS)	<20		20	2.0	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoropentanesulfonic acid (PFPeS)	5.1	J	20	3.0	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorohexanesulfonic acid (PFHxS)	1700		20	5.7	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	7300	E	20	1.9	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorooctanesulfonic acid (PFOS)	930000	E	20	5.4	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorononanesulfonic acid (PFNS)	<20		20	3.7	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorodecanesulfonic acid (PFDS)	1100		20	3.2	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorododecanesulfonic acid (PFDoS)	<20		20	9.7	ng/L		07/22/21 19:30	07/24/21 01:46	1
Perfluorooctanesulfonamide (FOSA)	87000	E	20	9.8	ng/L		07/22/21 19:30	07/24/21 01:46	1
NEtFOSA	<20		20	8.7	ng/L		07/22/21 19:30	07/24/21 01:46	1
NMeFOSA	46		20	4.3	ng/L		07/22/21 19:30	07/24/21 01:46	1
NMeFOSAA	1200	I	50	12	ng/L		07/22/21 19:30	07/24/21 01:46	1
NEtFOSAA	32000	E	50	13	ng/L		07/22/21 19:30	07/24/21 01:46	1
NMeFOSE	<40	*+	40	14	ng/L		07/22/21 19:30	07/24/21 01:46	1
NEtFOSE	210	*+	20	8.5	ng/L		07/22/21 19:30	07/24/21 01:46	1
4:2 FTS	94		20	2.4	ng/L		07/22/21 19:30	07/24/21 01:46	1
6:2 FTS	51000	E	50	25	ng/L		07/22/21 19:30	07/24/21 01:46	1
8:2 FTS	49000	E	20	4.6	ng/L		07/22/21 19:30	07/24/21 01:46	1
10:2 FTS	2500		20	6.7	ng/L		07/22/21 19:30	07/24/21 01:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<20		20	4.0	ng/L		07/22/21 19:30	07/24/21 01:46	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<40		40	15	ng/L		07/22/21 19:30	07/24/21 01:46	1
F-53B Major	12	J	20	2.4	ng/L		07/22/21 19:30	07/24/21 01:46	1
F-53B Minor	<20		20	3.2	ng/L		07/22/21 19:30	07/24/21 01:46	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	120		25 - 150				07/22/21 19:30	07/24/21 01:46	1
13C5 PFPeA	131		25 - 150				07/22/21 19:30	07/24/21 01:46	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Client Sample ID: Collapsed SW Foam (7-20-21)

Lab Sample ID: 500-202623-1

Date Collected: 07/20/21 09:30

Matrix: Water

Date Received: 07/21/21 09:50

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	131		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C4 PFHpA	122		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C4 PFOA	68		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C5 PFNA	41		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C2 PFDA	49		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C2 PFUnA	86		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C2 PFDoA	66		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C2 PFTeDA	32		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C2 PFHxDA	26		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C3 PFBS	217	*5+	25 - 150	07/22/21 19:30	07/24/21 01:46	1
18O2 PFHxS	181	*5+	25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C4 PFOS	49		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C8 FOSA	50		10 - 150	07/22/21 19:30	07/24/21 01:46	1
d3-NMeFOSAA	49		25 - 150	07/22/21 19:30	07/24/21 01:46	1
d5-NEtFOSAA	59		25 - 150	07/22/21 19:30	07/24/21 01:46	1
d-N-MeFOSA-M	80		10 - 150	07/22/21 19:30	07/24/21 01:46	1
d-N-EtFOSA-M	73		10 - 150	07/22/21 19:30	07/24/21 01:46	1
d7-N-MeFOSE-M	64		10 - 150	07/22/21 19:30	07/24/21 01:46	1
d9-N-EtFOSE-M	64		10 - 150	07/22/21 19:30	07/24/21 01:46	1
M2-4:2 FTS	286	*5+	25 - 150	07/22/21 19:30	07/24/21 01:46	1
M2-6:2 FTS	247	*5+	25 - 150	07/22/21 19:30	07/24/21 01:46	1
M2-8:2 FTS	680	*5+	25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C3 HFPO-DA	148		25 - 150	07/22/21 19:30	07/24/21 01:46	1
13C2 10:2 FTS	151	*5+	25 - 150	07/22/21 19:30	07/24/21 01:46	1

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<5000		5000	2400	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoropentanoic acid (PFPeA)	550	J	2000	490	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorohexanoic acid (PFHxA)	6200		2000	580	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoroheptanoic acid (PFHpA)	1800	J	2000	250	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorooctanoic acid (PFOA)	220000		2000	850	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorononanoic acid (PFNA)	240000		2000	270	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorodecanoic acid (PFDA)	53000		2000	310	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoroundecanoic acid (PFUnA)	18000		2000	1100	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorododecanoic acid (PFDoA)	1200	J	2000	550	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorotridecanoic acid (PFTriA)	<2000		2000	1300	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorotetradecanoic acid (PFTeA)	<2000		2000	730	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoro-n-hexadecanoic acid (PFHxDA)	<2000		2000	890	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoro-n-octadecanoic acid (PFODA)	<2000		2000	940	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorobutanesulfonic acid (PFBS)	<2000		2000	200	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoropentanesulfonic acid (PFPeS)	<2000		2000	300	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorohexanesulfonic acid (PFHxS)	1800	J	2000	570	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluoroheptanesulfonic Acid (PFHpS)	2700		2000	190	ng/L		07/22/21 19:30	07/24/21 13:09	100

Eurofins TestAmerica, Chicago

Client Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Client Sample ID: Collapsed SW Foam (7-20-21)

Lab Sample ID: 500-202623-1

Date Collected: 07/20/21 09:30

Matrix: Water

Date Received: 07/21/21 09:50

Method: 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	750000	E	2000	540	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorononanesulfonic acid (PFNS)	600	J I	2000	370	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorodecanesulfonic acid (PFDS)	<2000		2000	320	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorododecanesulfonic acid (PFDoS)	<2000		2000	970	ng/L		07/22/21 19:30	07/24/21 13:09	100
Perfluorooctanesulfonamide (FOSA)	99000		2000	980	ng/L		07/22/21 19:30	07/24/21 13:09	100
NEtFOSA	<2000		2000	870	ng/L		07/22/21 19:30	07/24/21 13:09	100
NMeFOSA	<2000		2000	430	ng/L		07/22/21 19:30	07/24/21 13:09	100
NMeFOSAA	<5000		5000	1200	ng/L		07/22/21 19:30	07/24/21 13:09	100
NEtFOSAA	27000		5000	1300	ng/L		07/22/21 19:30	07/24/21 13:09	100
NMeFOSE	<4000	*+	4000	1400	ng/L		07/22/21 19:30	07/24/21 13:09	100
NEtFOSE	<2000	*+	2000	850	ng/L		07/22/21 19:30	07/24/21 13:09	100
4:2 FTS	<2000		2000	240	ng/L		07/22/21 19:30	07/24/21 13:09	100
6:2 FTS	66000		5000	2500	ng/L		07/22/21 19:30	07/24/21 13:09	100
8:2 FTS	73000		2000	460	ng/L		07/22/21 19:30	07/24/21 13:09	100
10:2 FTS	2700		2000	670	ng/L		07/22/21 19:30	07/24/21 13:09	100
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2000		2000	400	ng/L		07/22/21 19:30	07/24/21 13:09	100
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<4000		4000	1500	ng/L		07/22/21 19:30	07/24/21 13:09	100
F-53B Major	<2000		2000	240	ng/L		07/22/21 19:30	07/24/21 13:09	100
F-53B Minor	<2000		2000	320	ng/L		07/22/21 19:30	07/24/21 13:09	100

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	66		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C5 PFPeA	68		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C2 PFHxA	61		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C4 PFHpA	72		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C4 PFOA	61		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C5 PFNA	59		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C2 PFDA	66		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C2 PFUnA	62		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C2 PFDoA	34		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C2 PFTeDA	17	*5-	25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C2 PFHxDA	11	*5-	25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C3 PFBS	73		25 - 150	07/22/21 19:30	07/24/21 13:09	100
18O2 PFHxS	63		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C4 PFOS	64		25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C8 FOSA	55		10 - 150	07/22/21 19:30	07/24/21 13:09	100
d3-NMeFOSAA	64		25 - 150	07/22/21 19:30	07/24/21 13:09	100
d5-NEtFOSAA	64		25 - 150	07/22/21 19:30	07/24/21 13:09	100
d-N-MeFOSA-M	42		10 - 150	07/22/21 19:30	07/24/21 13:09	100
d-N-EtFOSA-M	42		10 - 150	07/22/21 19:30	07/24/21 13:09	100
d7-N-MeFOSE-M	36		10 - 150	07/22/21 19:30	07/24/21 13:09	100
d9-N-EtFOSE-M	30		10 - 150	07/22/21 19:30	07/24/21 13:09	100
M2-4:2 FTS	87		25 - 150	07/22/21 19:30	07/24/21 13:09	100
M2-6:2 FTS	210	*5+	25 - 150	07/22/21 19:30	07/24/21 13:09	100
M2-8:2 FTS	845	*5+	25 - 150	07/22/21 19:30	07/24/21 13:09	100
13C3 HFPO-DA	69		25 - 150	07/22/21 19:30	07/24/21 13:09	100

Eurofins TestAmerica, Chicago

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Client Sample ID: Collapsed SW Foam (7-20-21)

Lab Sample ID: 500-202623-1

Date Collected: 07/20/21 09:30

Matrix: Water

Date Received: 07/21/21 09:50

Method: 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

<u>Isotope Dilution</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
13C2 10:2 FTS	52		25 - 150	07/22/21 19:30	07/24/21 13:09	100

- 1
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Definitions/Glossary

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
E	Result exceeded calibration range.
I	Value is EMPC (estimated maximum possible concentration).
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.
α	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 Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-509481/1-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509481

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<5.0		5.0	2.4	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	0.49	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	0.58	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	0.25	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	0.85	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	0.27	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	0.31	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	1.1	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	0.55	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorotridecanoic acid (PFTriA)	<2.0		2.0	1.3	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorotetradecanoic acid (PFTeA)	<2.0		2.0	0.73	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<2.0		2.0	0.89	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoro-n-octadecanoic acid (PFODA)	<2.0		2.0	0.94	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	0.20	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	0.30	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	0.57	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluoroheptanesulfonic Acid (PFHpS)	<2.0		2.0	0.19	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	0.54	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorononanesulfonic acid (PFNS)	<2.0		2.0	0.37	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorodecanesulfonic acid (PFDS)	<2.0		2.0	0.32	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorododecanesulfonic acid (PFDoS)	<2.0		2.0	0.97	ng/L		07/22/21 19:30	07/24/21 01:19	1
Perfluorooctanesulfonamide (FOSA)	<2.0		2.0	0.98	ng/L		07/22/21 19:30	07/24/21 01:19	1
NEtFOSA	<2.0		2.0	0.87	ng/L		07/22/21 19:30	07/24/21 01:19	1
NMeFOSA	<2.0		2.0	0.43	ng/L		07/22/21 19:30	07/24/21 01:19	1
NMeFOSAA	<5.0		5.0	1.2	ng/L		07/22/21 19:30	07/24/21 01:19	1
NEtFOSAA	<5.0		5.0	1.3	ng/L		07/22/21 19:30	07/24/21 01:19	1
NMeFOSE	<4.0		4.0	1.4	ng/L		07/22/21 19:30	07/24/21 01:19	1
NEtFOSE	<2.0		2.0	0.85	ng/L		07/22/21 19:30	07/24/21 01:19	1
4:2 FTS	<2.0		2.0	0.24	ng/L		07/22/21 19:30	07/24/21 01:19	1
6:2 FTS	<5.0		5.0	2.5	ng/L		07/22/21 19:30	07/24/21 01:19	1
8:2 FTS	<2.0		2.0	0.46	ng/L		07/22/21 19:30	07/24/21 01:19	1
10:2 FTS	<2.0		2.0	0.67	ng/L		07/22/21 19:30	07/24/21 01:19	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	0.40	ng/L		07/22/21 19:30	07/24/21 01:19	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<4.0		4.0	1.5	ng/L		07/22/21 19:30	07/24/21 01:19	1
F-53B Major	<2.0		2.0	0.24	ng/L		07/22/21 19:30	07/24/21 01:19	1
F-53B Minor	<2.0		2.0	0.32	ng/L		07/22/21 19:30	07/24/21 01:19	1
	MB	MB							
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	98		25 - 150				07/22/21 19:30	07/24/21 01:19	1
13C5 PFPeA	101		25 - 150				07/22/21 19:30	07/24/21 01:19	1
13C2 PFHxA	93		25 - 150				07/22/21 19:30	07/24/21 01:19	1
13C4 PFHpA	104		25 - 150				07/22/21 19:30	07/24/21 01:19	1
13C4 PFOA	104		25 - 150				07/22/21 19:30	07/24/21 01:19	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-509481/1-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509481

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C5 PFNA	102		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C2 PFDA	100		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C2 PFUnA	94		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C2 PFDoA	83		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C2 PFTeDA	68		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C2 PFHxDA	61		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C3 PFBS	106		25 - 150	07/22/21 19:30	07/24/21 01:19	1
18O2 PFHxS	102		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C4 PFOS	102		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C8 FOSA	92		10 - 150	07/22/21 19:30	07/24/21 01:19	1
d3-NMeFOSAA	94		25 - 150	07/22/21 19:30	07/24/21 01:19	1
d5-NEtFOSAA	91		25 - 150	07/22/21 19:30	07/24/21 01:19	1
d-N-MeFOSA-M	65		10 - 150	07/22/21 19:30	07/24/21 01:19	1
d-N-EtFOSA-M	65		10 - 150	07/22/21 19:30	07/24/21 01:19	1
d7-N-MeFOSE-M	71		10 - 150	07/22/21 19:30	07/24/21 01:19	1
d9-N-EtFOSE-M	65		10 - 150	07/22/21 19:30	07/24/21 01:19	1
M2-4:2 FTS	130		25 - 150	07/22/21 19:30	07/24/21 01:19	1
M2-6:2 FTS	135		25 - 150	07/22/21 19:30	07/24/21 01:19	1
M2-8:2 FTS	140		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C3 HFPO-DA	100		25 - 150	07/22/21 19:30	07/24/21 01:19	1
13C2 10:2 FTS	115		25 - 150	07/22/21 19:30	07/24/21 01:19	1

Lab Sample ID: LCS 320-509481/2-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoropentanoic acid (PFPeA)	40.0	44.0		ng/L		110	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	43.4		ng/L		109	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	44.6		ng/L		112	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	45.1		ng/L		113	60 - 135
Perfluorononanoic acid (PFNA)	40.0	45.1		ng/L		113	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	43.1		ng/L		108	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	44.4		ng/L		111	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	43.6		ng/L		109	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	41.5		ng/L		104	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	39.7		ng/L		99	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	47.5		ng/L		119	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	35.8		ng/L		90	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	34.8		ng/L		99	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	34.7		ng/L		92	60 - 135

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-509481/2-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.1		ng/L		102	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	41.7		ng/L		110	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	42.5		ng/L		115	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	39.8		ng/L		104	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	39.7		ng/L		103	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	38.7		ng/L		100	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	42.5		ng/L		106	60 - 135
NEtFOSA	40.0	41.2		ng/L		103	60 - 135
NMeFOSA	40.0	38.2		ng/L		95	60 - 135
NMeFOSAA	40.0	44.1		ng/L		110	60 - 135
NEtFOSAA	40.0	44.7		ng/L		112	60 - 135
NMeFOSE	40.0	47.1		ng/L		118	60 - 135
NEtFOSE	40.0	43.5		ng/L		109	60 - 135
4:2 FTS	37.4	34.6		ng/L		93	60 - 135
6:2 FTS	37.9	38.5		ng/L		102	60 - 135
8:2 FTS	38.3	41.3		ng/L		108	60 - 135
10:2 FTS	38.6	33.2		ng/L		86	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	39.0		ng/L		104	60 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	40.0	43.6		ng/L		109	60 - 135
F-53B Major	37.3	37.2		ng/L		100	60 - 135
F-53B Minor	37.7	32.2		ng/L		85	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	97		25 - 150
13C5 PFPeA	97		25 - 150
13C2 PFHxA	96		25 - 150
13C4 PFHpA	96		25 - 150
13C4 PFOA	96		25 - 150
13C5 PFNA	95		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	96		25 - 150
13C2 PFDoA	83		25 - 150
13C2 PFTeDA	77		25 - 150
13C2 PFHxDA	67		25 - 150
13C3 PFBS	107		25 - 150
18O2 PFHxS	103		25 - 150
13C4 PFOS	103		25 - 150
13C8 FOSA	95		10 - 150
d3-NMeFOSAA	94		25 - 150
d5-NEtFOSAA	95		25 - 150
d-N-MeFOSA-M	82		10 - 150
d-N-EtFOSA-M	82		10 - 150

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-509481/2-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509481

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
d7-N-MeFOSE-M	69		10 - 150
d9-N-EtFOSE-M	71		10 - 150
M2-4:2 FTS	129		25 - 150
M2-6:2 FTS	127		25 - 150
M2-8:2 FTS	126		25 - 150
13C3 HFPO-DA	99		25 - 150
13C2 10:2 FTS	111		25 - 150

Lab Sample ID: LCSD 320-509481/3-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 509481

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Perfluorobutanoic acid (PFBA)	40.0	41.8		ng/L		104	60 - 135	4	30
Perfluoropentanoic acid (PFPeA)	40.0	44.7		ng/L		112	60 - 135	2	30
Perfluorohexanoic acid (PFHxA)	40.0	42.9		ng/L		107	60 - 135	1	30
Perfluoroheptanoic acid (PFHpA)	40.0	41.1		ng/L		103	60 - 135	8	30
Perfluorooctanoic acid (PFOA)	40.0	45.0		ng/L		112	60 - 135	0	30
Perfluorononanoic acid (PFNA)	40.0	44.5		ng/L		111	60 - 135	1	30
Perfluorodecanoic acid (PFDA)	40.0	40.8		ng/L		102	60 - 135	5	30
Perfluoroundecanoic acid (PFUnA)	40.0	46.0		ng/L		115	60 - 135	4	30
Perfluorododecanoic acid (PFDoA)	40.0	46.0		ng/L		115	60 - 135	5	30
Perfluorotridecanoic acid (PFTriA)	40.0	39.0		ng/L		97	60 - 135	6	30
Perfluorotetradecanoic acid (PFTeA)	40.0	42.7		ng/L		107	60 - 135	7	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	45.0		ng/L		113	60 - 135	5	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	36.8		ng/L		92	60 - 135	3	30
Perfluorobutanesulfonic acid (PFBS)	35.4	33.5		ng/L		95	60 - 135	4	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	34.1		ng/L		91	60 - 135	2	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.0		ng/L		99	60 - 135	3	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	42.1		ng/L		111	60 - 135	1	30
Perfluorooctanesulfonic acid (PFOS)	37.1	41.3		ng/L		111	60 - 135	3	30
Perfluorononanesulfonic acid (PFNS)	38.4	38.7		ng/L		101	60 - 135	3	30
Perfluorodecanesulfonic acid (PFDS)	38.6	39.1		ng/L		101	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	37.0		ng/L		95	60 - 135	5	30
Perfluorooctanesulfonamide (FOSA)	40.0	46.3		ng/L		116	60 - 135	8	30
NEtFOSA	40.0	40.5		ng/L		101	60 - 135	2	30
NMeFOSA	40.0	38.6		ng/L		97	60 - 135	1	30
NMeFOSAA	40.0	44.8		ng/L		112	60 - 135	2	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-509481/3-A
Matrix: Water
Analysis Batch: 509839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 509481

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NEtFOSAA	40.0	51.3		ng/L		128	60 - 135	14	30
NMeFOSE	40.0	58.2	*+	ng/L		146	60 - 135	21	30
NEtFOSE	40.0	58.7	*+	ng/L		147	60 - 135	30	30
4:2 FTS	37.4	37.4		ng/L		100	60 - 135	8	30
6:2 FTS	37.9	39.1		ng/L		103	60 - 135	2	30
8:2 FTS	38.3	40.6		ng/L		106	60 - 135	2	30
10:2 FTS	38.6	34.3		ng/L		89	60 - 135	3	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	39.7		ng/L		105	60 - 135	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	40.0	43.1		ng/L		108	60 - 135	1	30
F-53B Major	37.3	38.1		ng/L		102	60 - 135	2	30
F-53B Minor	37.7	31.1		ng/L		83	60 - 135	3	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
13C4 PFBA	93		25 - 150
13C5 PFPeA	89		25 - 150
13C2 PFHxA	91		25 - 150
13C4 PFHpA	97		25 - 150
13C4 PFOA	93		25 - 150
13C5 PFNA	92		25 - 150
13C2 PFDA	90		25 - 150
13C2 PFUnA	87		25 - 150
13C2 PFDoA	76		25 - 150
13C2 PFTeDA	76		25 - 150
13C2 PFHxDA	74		25 - 150
13C3 PFBS	102		25 - 150
18O2 PFHxS	98		25 - 150
13C4 PFOS	98		25 - 150
13C8 FOSA	89		10 - 150
d3-NMeFOSAA	90		25 - 150
d5-NEtFOSAA	90		25 - 150
d-N-MeFOSA-M	77		10 - 150
d-N-EtFOSA-M	78		10 - 150
d7-N-MeFOSE-M	67		10 - 150
d9-N-EtFOSE-M	66		10 - 150
M2-4:2 FTS	122		25 - 150
M2-6:2 FTS	125		25 - 150
M2-8:2 FTS	133		25 - 150
13C3 HFPO-DA	95		25 - 150
13C2 10:2 FTS	106		25 - 150

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Client Sample ID: Collapsed SW Foam (7-20-21)

Lab Sample ID: 500-202623-1

Date Collected: 07/20/21 09:30

Matrix: Water

Date Received: 07/21/21 09:50

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3535			509481	07/22/21 19:30	VP	TAL SAC
Total/NA	Analysis	537 (modified)		1	509839	07/24/21 01:46	S1M	TAL SAC
Total/NA	Prep	3535	DL		509481	07/22/21 19:30	VP	TAL SAC
Total/NA	Analysis	537 (modified)	DL	100	509961	07/24/21 13:09	S1M	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Eurofins TestAmerica, Chicago

2417 Bond Street

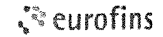
University Park, IL 60484-3101
phone 708 534 5200 fax 708 534 5211



500-202623 COC

Dep: Wgt: 10.00 LBS SPECIAL: 0.00
DV: 0.00 HANDLING: 0.00
TOTAL: 0.00

Sves PRIORITY OVERNIGHT Master 5049 4009 1409
TRACK 5049 4009 1468



TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Regulatory Program

Project Manager: Lisa Rutkowski

Client Contact	Email: N/A	Sampler: Jacob Rominger	Date: 7-20-21	COC No 1
Arcadis U S , Inc.	Tel/Fax: N/A	Lab Contact: Sandle Fredrick	Carrier: FedEx	1 of 1 GOCs
126 North Jefferson Street, Suite 400	Analysis Turnaround Time			For Lab Use Only: Walk-in Client Lab Sampling.
Milwaukee, WI 53202	<input checked="" type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS			
Phone	TAT if different from Below _____			
FAX	<input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day			
Project Name Marinette, WI	Lab Project Number			50018970
Site Marinette, WI				500-202623
P O # 30015296.00016 (Collapsed Foam)				Sample Specific Notes.

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 537 Modified (36 Compounds)
Collapsed SW Foam (7-20-21)	7-20-21	9.30	G	W	3	N	N	X
<div style="position: absolute; top: 50px; left: 50px; font-size: 2em; opacity: 0.5;">STR</div> <div style="position: absolute; top: 50px; right: 50px; font-size: 2em; opacity: 0.5;">STR</div>								

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temp (°C) Obs'd 21	Corr'd:	Therm ID No
Relinquished by: Jacob Rominger	Company: Barley Excavating	Date/Time: 7-20-21 9:30	Received by: Fed Ex	Company:
Relinquished by:	Company:	Date/Time:	Received by:	Company:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [Signature]	Company: TA



500-202823 Wayt



Enviro Testing

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07:21
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ORIGIN ID:PHDA (806) 863-9373
JOE BARLEY
BARLEY EXCAVATING INC
1824 10TH AVE
MENDOTA, MI 49858
UNITED STATES US

SHI
ACTUAL
CAD:

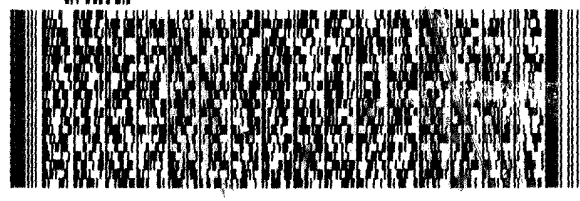
TO

EUROFINS TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101

(708) 634-6200
REF: S600-87041

RMA: III III III



FedEx Express



FedEx
TRK# 5049 4009 1458
0221

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PRIORITY OVERNIGHT

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60484
IL-US



Eurofins TestAmerica, Chicago

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

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact: Shipping/Receiving		Phone:		Fredrick, Sandie		E-Mail: sandra.fredrick@eurofinset.com		State of Origin: Wisconsin	
Company: TestAmerica Laboratories, Inc.		Address: 880 Riverside Parkway,		Due Date Requested: 8/3/2021		Accreditations Required (See note): State - Wisconsin; State Program - Wisconsin		Page: Page 1 of 1	
City: West Sacramento		State, Zip: CA, 95605		TAT Requested (days):		Job #: 500-202623-1		Preservation Codes:	
Phone: 916-373-5600(Tel) 916-372-1059(Fax)		Email:		PO #:		Analysis Requested		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)	
Project Name: Marinette, WI 30015296.00016 Collapsed Foam		Project #: 50018970		WO #:		Field Filtered Sample (Yes or No)		Other:	
Site:		SSOW#:		Perform MS/MSD (Yes or No)		Total Number of containers		Special Instructions/Note:	
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)	
Collapsed SW Foam (7-20-21) (500-202623-1)		7/20/21		09:30 Central		Water		X	
Preservation Code:		X		X		X		3	
<p>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 compliance to Eurofins TestAmerica.</p>									
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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: <i>Shin Scott</i>		Date/Time: 7/21/21 1500		Company: <i>ETAC</i>		Received by: <i>[Signature]</i>		Date/Time: 7/22/21 9:40	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 1571348		Cooler Temperature(s) °C and Other Remarks: 3.50					



Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 500-202623-1

Login Number: 202623

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	2.1
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 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 <math><6\text{mm}</math> (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: ARCADIS U.S., Inc.

Job Number: 500-202623-1

Login Number: 202623

List Number: 2

Creator: Cahill, Nicholas P

List Source: Eurofins TestAmerica, Sacramento

List Creation: 07/22/21 02:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1151348
Sample custody seals, if present, are intact.	N/A	
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	3.5c
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?	False	Received project as a subcontract.
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
TestAmerica

Sacramento
Sample Receiving Notes



500-202623 Field Sheet

Tracking #: 189344526649

Job: _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Therm. ID: L-07 Corr. Factor: (+/-) - °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal: 1151348

Cooler ID: -

Temp Observed: 3.5 °C Corrected: 3.5 °C
From: Temp Blank Sample

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature is acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frozen samples show signs of thaw?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initials: VS Date: 7/22/20

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples compromised/tampered with?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample containers have legible labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample custody seal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Containers are not broken or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample date/times are provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate containers are used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample bottles are completely filled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample preservatives verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Samples w/o discrepancies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Zero headspace?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alkalinity has no headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Multiphasic samples are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: VS Date: 7/22/20

Notes: Samples have
discoloration. Job #
500-200623
Samples 1A, 1B, 1C
- Collapsed SW Foam
VS 7/22/20

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NCM Filed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Log Release checked in TALS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Initials: VS Date: 7/22/20

WR3 10B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

eurofins
Environment Testing
TestAmerica

1511348

ORIGIN ID: JOTA (708) 534-5200
SAMPLE LOGIN
TESTAMERICA LABS
2417 BOND ST

SHIP DATE: 21 JUL 21
ACTWT: 19.00 LB MAN
CAD: 033264/CAFE3504

UNIVERSITY PARK, IL 60484
UNITED STATES US

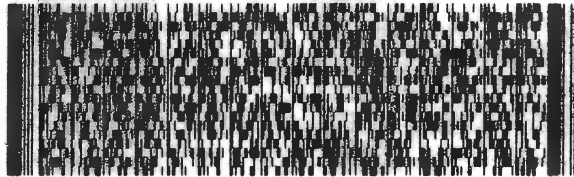
BILL SENDER

TO **SAMPLE RECEIPT**
TESTAMERICA
880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605

(916) 373-8600
REF: 202007 623 SS

11 000000100000 1001 1010 0000 0110 11 000000000000 0000 01 00 00



FedEx
Express



eurofins
Environment Testing
TestAmerica

1511348

SIGNATURE

DATE

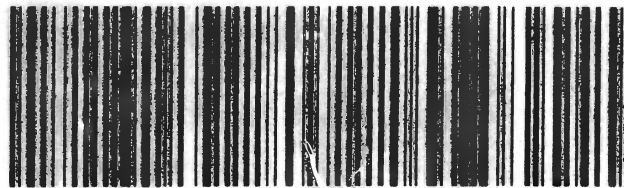
Custody Se

TRK# 1893 4452 6649
0201

THU - 22 JUL 10:30A
PRIORITY OVERNIGHT

NH BLUA

95605
CA-US SMF



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Isotope Dilution Summary

Client: ARCADIS U.S., Inc.
 Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-202623-1	Collapsed SW Foam (7-20-21)	120	131	131	122	68	41	49	86
500-202623-1 - DL	Collapsed SW Foam (7-20-21)	66	68	61	72	61	59	66	62
LCS 320-509481/2-A	Lab Control Sample	97	97	96	96	96	95	95	96
LCSD 320-509481/3-A	Lab Control Sample Dup	93	89	91	97	93	92	90	87
MB 320-509481/1-A	Method Blank	98	101	93	104	104	102	100	94

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	PFHxDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)
500-202623-1	Collapsed SW Foam (7-20-21)	66	32	26	217 *5+	181 *5+	49	50	49
500-202623-1 - DL	Collapsed SW Foam (7-20-21)	34	17 *5-	11 *5-	73	63	64	55	64
LCS 320-509481/2-A	Lab Control Sample	83	77	67	107	103	103	95	94
LCSD 320-509481/3-A	Lab Control Sample Dup	76	76	74	102	98	98	89	90
MB 320-509481/1-A	Method Blank	83	68	61	106	102	102	92	94

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	d5NEFOS (25-150)	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)
500-202623-1	Collapsed SW Foam (7-20-21)	59	80	73	64	64	286 *5+	247 *5+	680 *5+
500-202623-1 - DL	Collapsed SW Foam (7-20-21)	64	42	42	36	30	87	210 *5+	845 *5+
LCS 320-509481/2-A	Lab Control Sample	95	82	82	69	71	129	127	126
LCSD 320-509481/3-A	Lab Control Sample Dup	90	77	78	67	66	122	125	133
MB 320-509481/1-A	Method Blank	91	65	65	71	65	130	135	140

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)	M102FTS (25-150)
500-202623-1	Collapsed SW Foam (7-20-21)	148	151 *5+
500-202623-1 - DL	Collapsed SW Foam (7-20-21)	69	52
LCS 320-509481/2-A	Lab Control Sample	99	111
LCSD 320-509481/3-A	Lab Control Sample Dup	95	106
MB 320-509481/1-A	Method Blank	100	115

Surrogate Legend

PFBA = 13C4 PFBA
 PFPeA = 13C5 PFPeA
 PFHxA = 13C2 PFHxA
 C4PFHA = 13C4 PFHpA
 PFOA = 13C4 PFOA
 PFNA = 13C5 PFNA
 PFDA = 13C2 PFDA
 PFUnA = 13C2 PFUnA
 PFDaA = 13C2 PFDaA
 PFTDA = 13C2 PFTeDA
 PFHxDA = 13C2 PFHxDA
 C3PFBS = 13C3 PFBS
 PFHxS = 18O2 PFHxS
 PFOS = 13C4 PFOS
 PFOSA = 13C8 FOSA
 d3NMFOS = d3-NMeFOSAA
 d5NEFOS = d5-NEtFOSAA
 dMeFOSA = d-N-MeFOSA-M

Isotope Dilution Summary

Client: ARCADIS U.S., Inc.

Project/Site: Marinette, WI 30015296.00016 Collapsed Foam

Job ID: 500-202623-1

dEtFOSA = d-N-EtFOSA-M
NMFm = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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