

Mr. Joe Bevington, FM-4  
Wisconsin Department of Natural Resources  
101 S. Webster  
Madison, WI 53703  
608.264.9257

Arcadis U.S., Inc.  
126 North Jefferson Street  
Milwaukee, Wisconsin 53202  
www.arcadis.com

Subject:  
2020 Scientific Collectors Permit Annual Report for Fish Sampling in  
Private Ponds, Marinette, Wisconsin

Tyco Environmental Assessment  
Call Line:  
(800) 314-1381

Dear Mr. Bevington:

Responsible Party:  
Tyco Fire Products LP  
2700 Industrial Parkway S  
Marinette, WI 54143

This letter summarizes fish collection activities performed under Arcadis US, Inc.'s (Arcadis') Scientific Collectors Permit SCP-FM-2020-059 in private ponds in Marinette County, Wisconsin for per- and poly-fluorinated alkyl substances (PFAS). This work was conducted on behalf of Tyco Fire Products LP (Tyco) in accordance with Arcadis' 2019 Fish Tissue Sampling Work Plan to investigate the nature and extent of PFAS related to the Ansul Fire Technology Center located at 2700 Industrial Parkway South, Marinette, Wisconsin (Site; Figure 1).

Site Name:  
Tyco Fire Technology Center

On August 26 and 27, 2020, Arcadis biologists collected resident fish samples from three ponds (identified as SW14, SW37 and SW38 in Figure 2) using boat-mounted electrofishing equipment and hook-and-line methods (angling and trot lines). Sampling targeted three to five edible size fish per species for three individual species, resulting in a total of nine to 15 fish tissue samples collected from each of the three ponds. Up to 45 edible fish tissue fillet samples were proposed for collection; however, due to limited fish abundance and availability, a total of 28 edible fish tissue samples were collected (see attached Annual Report Form and counts below). The fish collected were the largest size fish captured during the sampling effort and included the following:

BRRTS No.:  
02-38-580694

- Benthic bottom feeder (e.g., bullhead, catfish, suckers) – No benthic bottom feeders were observed or collected from any of the three ponds.
- Benthopelagic panfish (e.g., perch, sunfish, crappie) – A total of 5 yellow perch were collected from SW14, 2 from SW37, and 5 from SW38, ranging in size from 6.6 to 10.9 inches. A total of 5 bluegill sunfish were collected from SW14, 5 pumpkinseed from SW37, and 1 green sunfish at SW38, ranging in size from 5.9 to 7.6 inches.

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Wisconsin Department of Natural Resources  
January 8, 2021

- Carnivorous predator (e.g., bass) – A total of 5 largemouth bass were collected from SW14, ranging in size from 11.3 to 12.8 inches. No bass or other carnivorous fish species were observed or collected from the other ponds.

Fish samples were sent to Eurofins TestAmerica in Sacramento, California and SGS AXYS Analytical Services, Ltd. in Sidney, British Columbia for PFAS (36 compounds) and percent solids analysis in skin-on, scales-off edible fillets. Information on the number of fish collected, including collection dates and locations, is presented in the attached Annual Report Form.

Submittal of this information is intended to fulfill the reporting requirements of our sampling permit. At this time, we do not wish to renew our permit for 2021. If you have any questions or require any additional information, please contact me at your convenience.

Sincerely,

Arcadis U.S., Inc.



David J. Buys  
Senior Ecologist

Copies:

Alyssa Sellwood, Wisconsin Department of Natural Resources  
Scott Wahl, Tyco Fire Products LP  
Jeff Danko, Johnson Controls, Inc.  
Shannon Dunn, Arcadis  
Scott Potter, Arcadis  
Elizabeth Hover, Arcadis

**SCIENTIFIC COLLECTORS ANNUAL REPORT**

(Due January 10 of Following Year)  
s. 29.614, Wis. Stats., and s. NR 19.11, Wis. Adm. Code  
Form 9400-381 Rev. 2-00

**Permit Number: SCP-FM-2020-059**

Please read instructions on reverse side thoroughly before completing report.  
Shaded areas for DNR use only; please leave blank.

| Species  | Age or Size Class | No. of Specimens | Date Taken |     |      | Collection Site |          |      | Disposition of Specimens or Items | Information Coding |
|--|-------------------|------------------|------------|-----|------|-----------------|----------|------|-----------------------------------|--------------------|
|  |                   |                  | Mo.        | Day | Yr.  | County          | Locality |      |                                   |                    |
| Largemouth bass ( <i>Micropterus salmoides</i> ) | 11.3-12.8 in      | 5                | 8          | 26  | 2020 | Marinette       |          | SW14 | Shipped to Eurofins Test          |                    |
| Yellow perch ( <i>Perca flavescens</i> )         | 8.9-10.9 in       | 5                | 8          | 26  | 2020 | Marinette       |          | SW14 | America in Sacramento, CA         |                    |
| Bluegill ( <i>Lepomis macrochirus</i> )          | 7.0-7.4 in        | 3                | 8          | 26  | 2020 | Marinette       |          | SW14 | and SGS AXYS Analytical           |                    |
| Bluegill ( <i>Lepomis macrochirus</i> )          | 7.2-7.6 in        | 2                | 8          | 27  | 2020 | Marinette       |          | SW14 | Services, Ltd. in Sidney, BC      |                    |
| Yellow perch ( <i>Perca flavescens</i> )         | 7.4-11.5 in       | 2                | 8          | 26  | 2020 | Marinette       |          | SW37 | for PFAS and percent solid        |                    |
| Pumkinseed ( <i>Lepomis gibbosus</i> )           | 5.9-6.2 in        | 5                | 8          | 26  | 2020 | Marinette       |          | SW37 | analysis in edible fillet tissue. |                    |
| Yellow perch ( <i>Perca flavescens</i> )         | 6.6-8.3 in        | 5                | 8          | 26  | 2020 | Marinette       |          | SW38 |                                   |                    |
| Green sunfish ( <i>Lepomis cyanellus</i> )       | 5.9 in            | 1                | 8          | 26  | 2020 | Marinette       |          | SW38 |                                   |                    |
|  |                   |                  |            |     |      |                 |          |      |                                   |                    |
|  |                   |                  |            |     |      |                 |          |      |                                   |                    |
|  |                   |                  |            |     |      |                 |          |      |                                   |                    |
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|  |                   |                  |            |     |      |                 |          |      |                                   |                    |
|  |                   |                  |            |     |      |                 |          |      |                                   |                    |

Remarks:  
All fish were collected using a boat-mounted electrofishing unit and hook-and-line methods by permittee David Buys and subpermittees Ryan Bombeck, Michael Reitz and Samantha Kitchen of Arcadis. All individual fish were submitted whole to the analytical laboratory and processed as skin-on, scales-off fillets for analysis of PFAS (36 compounds) and percent solids. Fish gender was not determined.


Do you want the DNR permit renewed? Yes  No

Do you hold a federal collecting permit? Yes  No

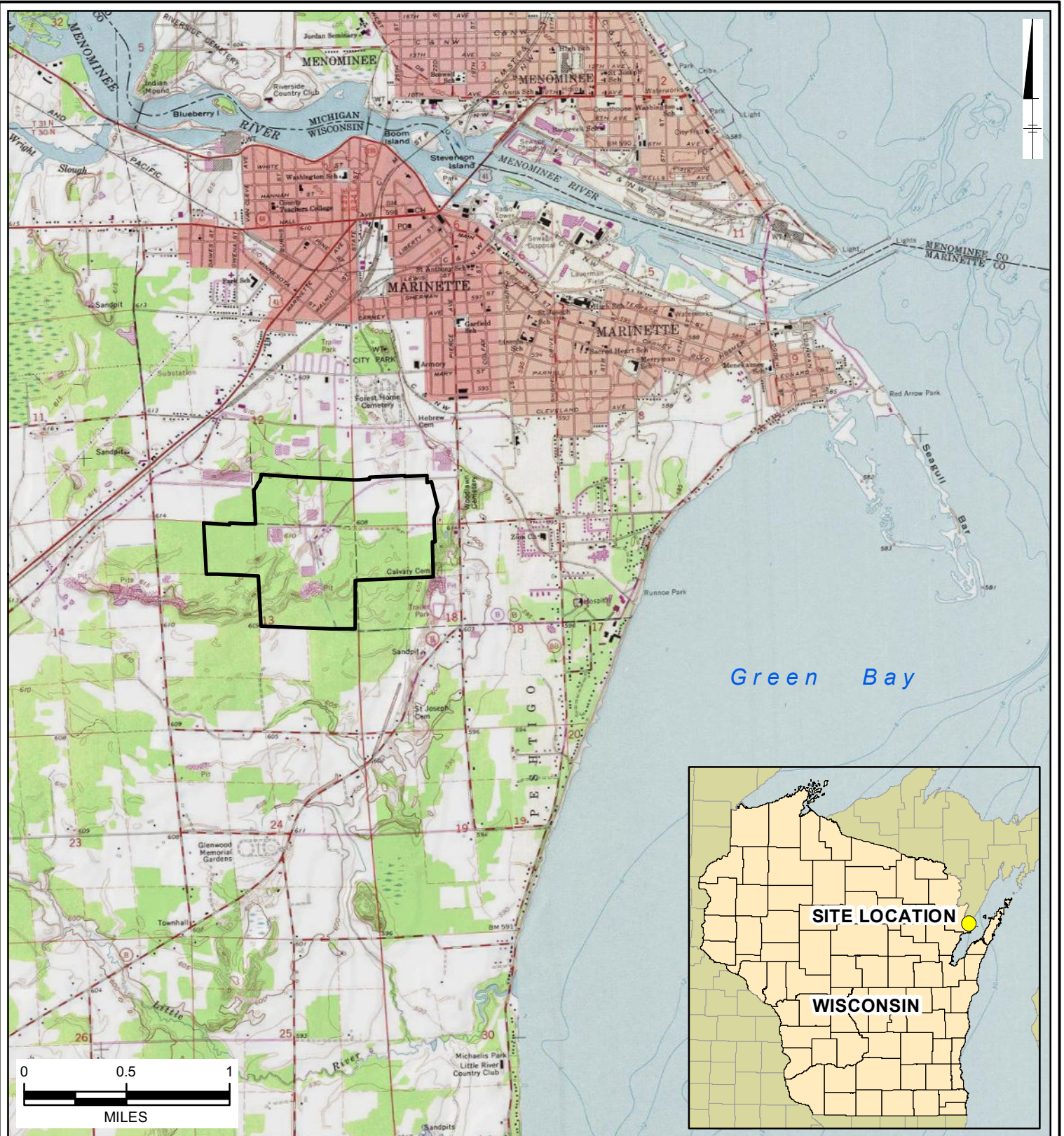
If yes, give Permit Number \_\_\_\_\_ and expiration date \_\_\_\_\_.

Were you at any time during the past year convicted of any violation of the fish or game laws of Wisconsin? Yes  No

**Note: Failure to report may result in penalty including non-renewal of the permit. S. NR 19.11, Wis. Adm. Code**

To the best of my knowledge and belief, the above facts are complete, correct and not misinterpreted in any way.  
Permittee's Signature:   
Address  
Arcadis, 110 W. Fayette St. Ste. 300, Syracuse, NY 13202





City: Minneapolis/Citrix Div/Group: IMDVC Created By: msmiller  
 TYCO Marinette WI  
 Z:\GIS\Projects\ENV\TYCO\_Marinette\_WI\MXD\2019-09\Fig1\_SiteLocation.mxd 9/26/2019 4:21:19 PM

**LEGEND:**

 APPROXIMATE SITE PROPERTY BOUNDARY

**NOTES:**

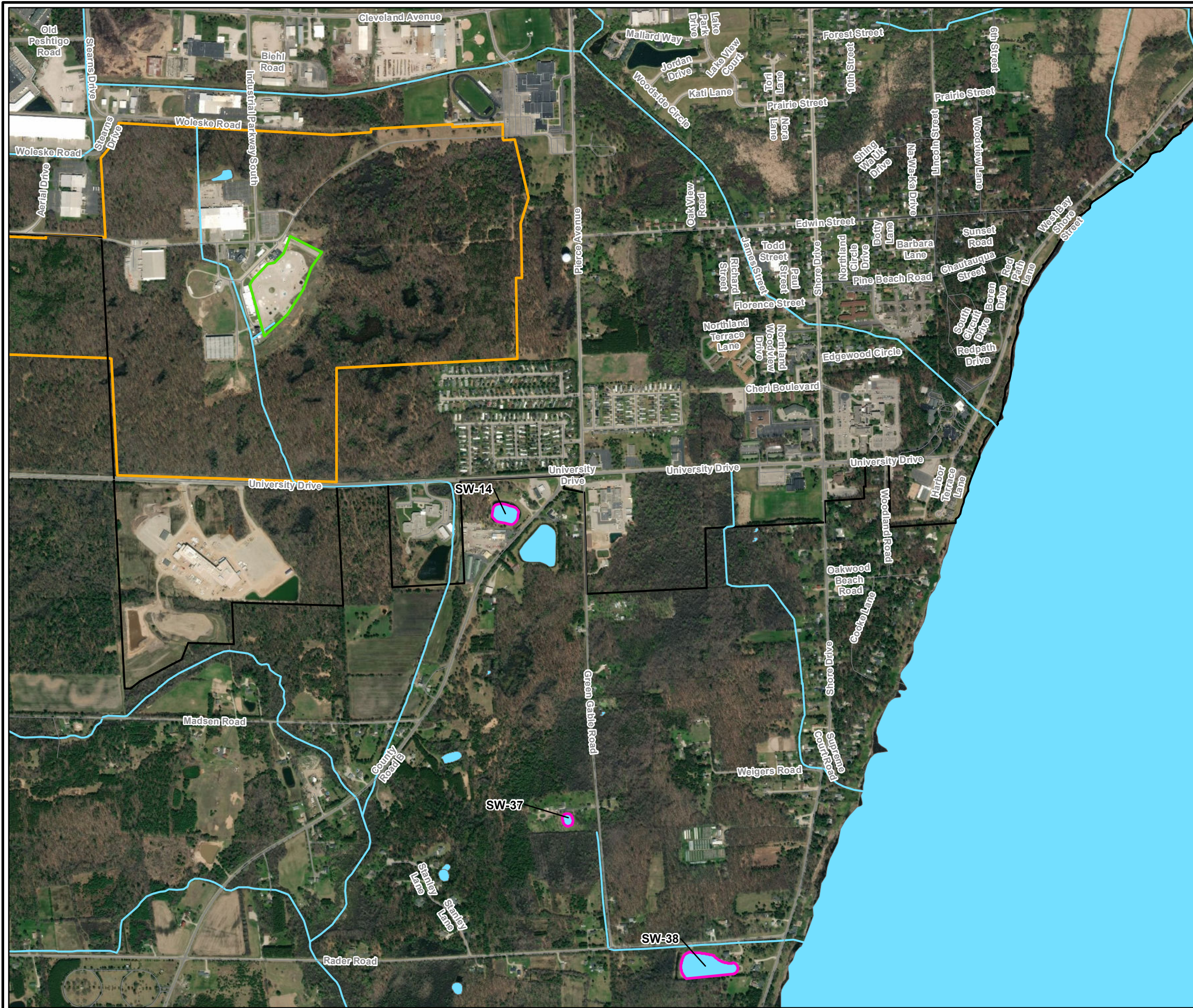
1. TOPOGRAPHIC MAP SOURCE: COPYRIGHT:© 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED, ACCESSED SEPTEMBER, 2019.

TYCO FIRE PRODUCTS, LP  
 MARINETTE, WISCONSIN  
**FISH TISSUE SAMPLING WORK PLAN**

**SITE LOCATION**

 **ARCADIS** | **FIGURE 1**

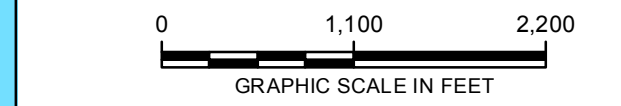




**LEGEND:**

- PROPOSED SAMPLE LOCATIONS
- OUTDOOR TESTING/TRAINING AREA
- 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 DATA SOURCE: U.S. GEOLOGICAL SURVEY NATIONAL HYDROGRAPHY DATASET, ACCESSED FALL 2017.
  3. ROAD DATA SOURCE: OPEN STREET MAP, ACCESSED FALL 2017.
  4. AERIAL IMAGERY: 4/27/2016 DIGITALGLOBE, VIVID-USA



TYCO FIRE PRODUCTS, LP  
 MARINETTE, WISCONSIN

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**FISH TISSUE SAMPLE LOCATIONS**

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**FIGURE**  
**2**