State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

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



**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 from 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.

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

The requester listed above: (select all that apply)

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

### Environmental Consultant (if applicable)

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

## Section 2. Property Information

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

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 fo**

## 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: _____

- [ ] Legal Description of Property (required for all liability requests and specialized agreements)
- [x] 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
- [x] Other medium - Describe: Potable Water

Date of Collection: April 1, 2020 - March 31, 2021

- [ ] A copy of the closure letter and submittal materials
- [ ] Draft tax cancellation agreement
- [ ] Draft agreement for assignment of tax foreclosure judgment
- [x] Other report(s) or information - Describe: Potable Well Sampling Program Annual Summary Report - FTC

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)
- [x] 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: Lisa M Rutowski

Date Signed: 7/14/21

Title: Project Environmental Specialist

Telephone Number (include area code): (414) 276-7742

## 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.

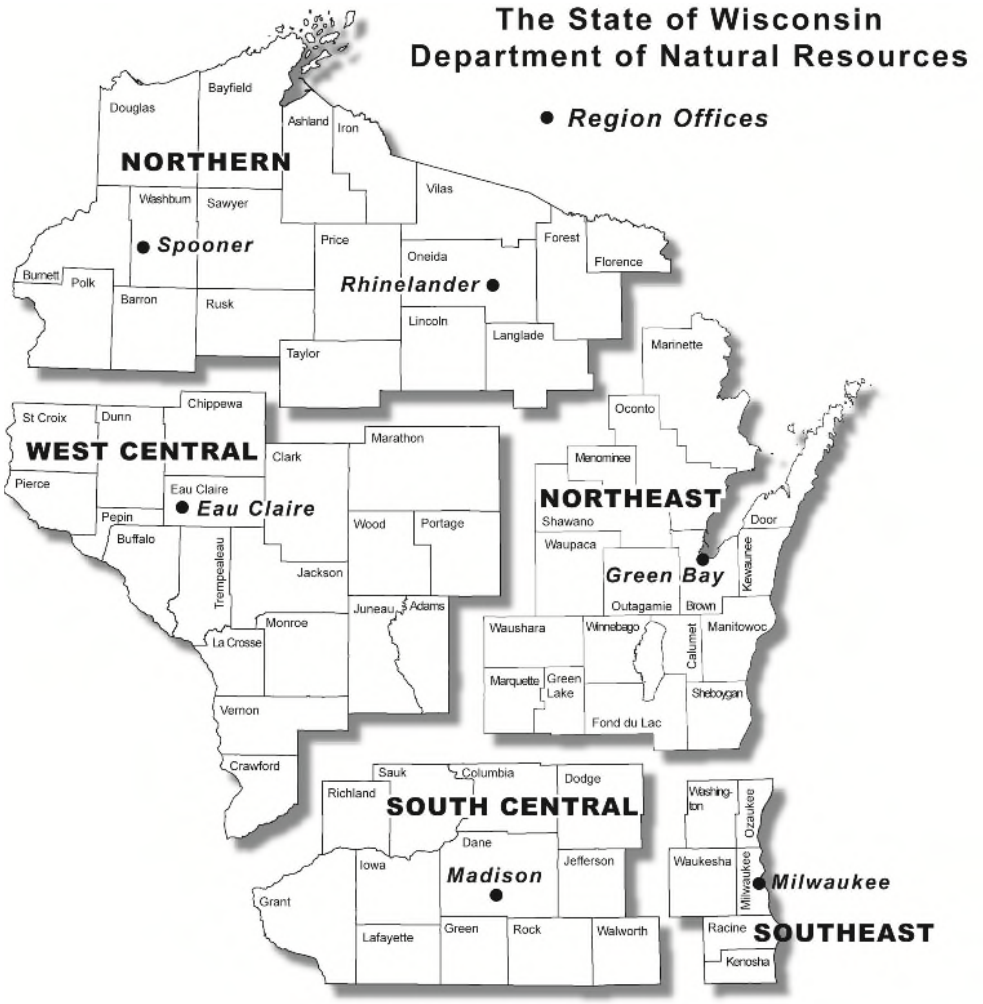
**DNR NORTHERN REGION**
Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

**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? ◯ Yes ◯ No | Fee Amount $ | Date Additional Information Requested | Date Requested for DNR Response Letter |
| Date Approved | Final Determination | | |

Tyco Fire Products LP

# Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area

**Tyco Fire Technology Center**
**2700 Industrial Parkway**
**Marinette, Wisconsin 54143**

BRRTS# 02-38-580694

August 2021

# Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area

**Tyco Fire Technology Center**
**2700 Industrial Parkway**
**Marinette, Wisconsin 54143**

August 6, 2021

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**Appendix C. Private Drinking Water Well Trend Plots – No Trend**

# Acronyms And Abbreviations

| | |
|---|---|
| AFFF | aqueous film-forming foam |
| Arcadis | Arcadis U.S., Inc. |
| BRRTS | Bureau of Remediation and Redevelopment Tracking System |
| Call Line | Tyco Environmental Assessment Call Line |
| COC | chain-of-custody |
| FTC | Fire Technology Center |
| HAL | Health Advisory Level |
| HDPE | high-density polyethylene |
| ID | identification |
| MS/MSD | matrix spike/matrix spike duplicate |
| ng/L | nanograms per liter |
| ND | not detected |
| OTA | Outdoor Testing/Training Area |
| PFAS | per- and poly-fluorinated alkyl substances |
| PFOA | perfluorooctanoic acid |
| PFOS | perfluorooctanesulfonic acid |
| POET | point-of-entry treatment |
| PTFE | polytetrafluoroethylene |
| PWSA | potable well sampling area |
| RL | reporting limit |
| Site | Tyco Fire Technology Center located at 2700 Industrial Parkway South, Marinette, Wisconsin |
| TA SAC | Eurofins TestAmerica Sacramento |
| Tyco | Tyco Fire Products LP |
| USEPA | United States Environmental Protection Agency |
| WDHS | Wisconsin Department of Health Services |
| WDNR | Wisconsin Department of Natural Resources |

# Executive Summary

This report describes the private drinking water well sampling program Tyco Fire Products LP (Tyco) initiated in December 2017 under the oversight of the Wisconsin Department of Natural Resources (WDNR) and summarizes the monitoring activities conducted and data received from April 1, 2020 through March 31, 2021. Private drinking water well sampling activities were conducted within the potable well sampling area (PWSA) adjacent to the Tyco Fire Technology Center in Marinette, Wisconsin (the Site) to determine which, if any, private drinking water wells had measurable levels of per- and poly-fluorinated alkyl substances (PFAS) potentially related to the Site. The PWSA is within the Town of Peshtigo and City of Marinette, Wisconsin, and is roughly bounded to the north by University Drive, to the west by County Road B, to the south by Rader Road, and to the east by Green Bay. Approximately 172 different private drinking water wells have been sampled through March 31, 2021.

Outdoor testing of aqueous film forming foam (AFFF) with PFAS began in the 1960s, therefor the age of the plume is similar to the age of outdoor testing at the FTC. The findings of multiple site investigations concluded that the primary transport mechanism for PFAS from the FTC is groundwater (Arcadis 2018b, 2020b,d,e,f). Groundwater flow throughout the study area is controlled by natural processes, moving from higher elevations to lower elevations toward Green Bay and Ditch B, bounded by bedrock to prevent flow to the west. These findings and conditions have led to existing conditions where the plume is mature and contained within our existing PWSA (Arcadis 2020f).

Private drinking water wells were sampled and analyzed between April 1, 2020 and March 31, 2021 for the 36 compound PFAS list and compared to the WDHS Cycle 11 proposed groundwater enforcement standards (ES).

- 51.2% of wells had results that did not exceed the laboratory reporting limits (RL).
- 27.3% of wells had detectable results below the WDHS Cycle 11 proposed groundwater ES for all 18 PFAS compounds that have criterion. While these proposed concentrations are not drinking water standards, and only proposed criterion, they are mentioned here for discussion purposes.
- 21.5% of wells had results greater than a proposed ES for any one of the 18 PFAS compounds that have proposed criterion.

Private drinking water wells are generally grouped into categories as described above. Detections above the proposed ES, detections between the proposed ES and the laboratory reporting limit (RL), or no detections above the laboratory RL. Wells are categorized based on the most conservative results for that well to date. The analytical results since April 1, 2020 show several wells with results below their most conservative category and several category changes due to increasing concentrations of perfluorooctanoic acid (PFOA) and/or perfluorooctanesulfonic acid (PFOS). This variability in concentrations is primarily due to a minor redistribution of mass within the plume associated with continued groundwater pumping at each private drinking water well and ongoing contributions of PFAS from septic systems at each house (Sudebi, et al, 2015), not because the plume is expanding.

There are 10 wells with increasing concentrations of PFOA and/or PFOS that resulted in category changes. It is important to note that there are six wells categorized here as being in the “Detections above the proposed ES” category even though 72% of test results at those wells were below the proposed ES. Moreover, there is one well included in the “Detections between RL and proposed ES” category even though seven of eight (87.5%) test results for the well were below the laboratory RL.

For 21 category changes from not detected above RL to detected between the RL and ES, the category change resulted from the testing for a new and additional analyte, not from PFOA and/or PFOS concentration changes. Specifically, we found low-level detections of perfluorooctanesulfonamide (FOSA). Again, this was the first time FOSA was included in laboratory analysis, and as such, any detections or categorical changes due to FOSA are attributable to an expanding analyte list, not a change in plume conditions. FOSA is not a known component of Tyco products, but is frequently found in other consumer and industrial products; therefore, the source of the FOSA in these wells is unknown at this time.

Trend plots were developed using the USEPA Groundwater Statistics Tool (Version 2, 2018) for each well with multiple detectable concentrations of PFOA and/or PFOS for at least 4 sampling events. PFOA and PFOS were specifically selected due to availability of results. Of the 38 wells meeting trend plot analysis criteria, seven wells have decreasing concentrations, 18 wells are not demonstrating trends, and 13 wells have increasing trends. Again, this variability in concentrations is primarily due to a minor redistribution of mass within the plume associated with continued groundwater pumping at each private drinking water well and ongoing contributions of PFAS from septic systems at each house (Sudebi, et al, 2015), not because the plume is expanding. All trends occurred in shallow wells with depths ranging from 15 to 62 feet below ground surface.

The PWSA was defined using data collected from desktop studies of local geology and analytical data from field investigations, as well as findings from multiple Site investigation reports (Arcadis 2018b, 2020e), the *Conceptual Site Model* (Arcadis 2020d) and *Southern Area Groundwater Evaluation Report* (Arcadis 2020b) which together have provided multiple lines of physical and chemical evidence that indicate some detections of PFAS in groundwater south of the PWSA are associated with as-yet unidentified sources that are unrelated to the Site.

In summary, the results reported here are as expected and in keeping with our model. The results continue to validate the conclusions and analyses reported in the CSM for the FTC and demonstrate that, shaped by geology and in light of the historic duration of activities contributing to PFAS contamination in the groundwater plume, the plume is mature and defined.

In conjunction with the sampling program, Tyco proactively arranged for bottled water to be made available at no cost to residents with private drinking water wells whose properties were included in the PWSA. Additionally, starting in 2018, Tyco arranged for point of entry treatment (POET) systems to be installed and maintained at no cost to residents with private drinking water wells within the PWSA if sampling results detected PFAS concentrations at or above the United States Environmental Protection Agency (USEPA) Lifetime Health Advisory Level (HAL) or if detected PFOA or PFOS concentrations have been confirmed above the laboratory RL for these compounds. Tyco revised the POET program to align with Wisconsin Department of Health (WDHS) Cycle 11 recommended groundwater ES and currently offers POET systems to private well users within the PWSA with results above WDHS proposed criteria. To date, POET systems have been installed at 45 property locations.

Private drinking water wells and POET systems within the PWSA will continue to be monitored as presented in the WDNR-approved March 16, 2021 *Revised Long-Term Potable Well Sampling Plan* and the *Response to Comments – Response to 3rd Revised Long-Term Potable Well Sampling Plan* (Arcadis 2021c). An updated *Revised Long-Term Potable Well Sampling Plan* will be submitted by October 1, 2021. Residents within the PWSA will continue to receive bottled water service or free POET system maintenance for properties with a POET system installed while Tyco works with WDNR and municipal authorities to determine and implement a long-term drinking water solution for affected properties that currently rely solely on private drinking water wells.

Tyco is committed to providing a long-term drinking water solution for the PWSA in accordance with the *Comprehensive Alternative Water Management Plan*. In the interim period, Tyco will continue the private drinking

water well sampling program and POET monitoring program as outlined in the WDNR-approved *Revised Long-Term Potable Well Sampling Plan* submitted by Arcadis on March 16, 2021. The WDNR conditionally approved this plan in a letter dated June 18, 2021 and Arcadis submitted a *Response to Comments – Response to 3rd Revised Long-Term Potable Well Sampling Plan* on July 16, 2021. An updated plan will be submitted to WDNR by October 1, 2021. It is important to note that Tyco is voluntarily providing the POET systems and bottled water as a good faith effort to ensure safe drinking water despite the fact that the WDHS proposed groundwater enforcement standards are only recommended or advisory levels.

# 1 Introduction

On behalf of Tyco Fire Products LP (Tyco), Arcadis U.S., Inc. (Arcadis) prepared this *Potable Well Sampling Program Annual Summary Report – FTC Sampling Area* (report) for the Tyco Fire Technology Center (FTC) located at 2700 Industrial Parkway South in Marinette, Wisconsin (the Site). This report describes the drinking water well sampling program including the monitoring activities conducted and data received from April 1, 2020 through March 31, 2021. The report was prepared as requested by WDNR and in compliance with a letter dated June 18, 2021, *Response to 3rd Revised Long-Term Potable Well Sampling Plan*.

The United States Environmental Protection Agency (USEPA) classifies PFAS as a category of emerging contaminants. In May 2016, USEPA issued a drinking water lifetime Health Advisory Level (HAL) for two PFAS compounds, the individual and combined values of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), of 70 nanograms per liter (ng/L), which is equivalent to parts per trillion. In June 2019, the Wisconsin Department of Health Services (WDHS) proposed a groundwater enforcement standard of 20 ng/L for PFOA and PFOS, individually and combined. In November 2020, WDHS proposed groundwater enforcement standards for 18 PFAS compounds including a combined criteria of 20 ng/L for 6 of these PFAS compounds. After participating in the WDNR PFAS Listening Session on January 20, 2021, Tyco evaluated the feedback from residents and neighbors in the community and elected to accelerate the previously planned schedule for the Private Drinking Water Well Sampling Program and provide an additional round of sampling for wells within the Point of Entry Treatment System (POET) System Monitoring Program. As a result, all private drinking water well owners within the Private Well Sampling Program were offered an opportunity to be sampled during winter 2021. This accelerated program provided analysis of 36 PFAS compounds to be able to perform an adequate analysis of the data compared to the WDHS Cycle 11 proposed groundwater standards. A total of 113 well owners agreed to be sampled as part of the accelerated winter 2021 quarterly sampling event of the total of 172 different private drinking water wells located generally to the east and southeast of the Site that were previously sampled within the PWSA as part of the overall private drinking water well sampling program. While these WDHS Cycle 11 proposed groundwater enforcement standards are considered potential future groundwater standards and not present drinking water standards, it is included in this report for discussion purposes.

# 2 Background

## 2.1 Site Description and History

The Site is a fire suppressant training, testing, research, and development facility built in the early 1960s. The Site encompasses approximately 380 acres with approximately 9 acres used as the Outdoor Testing/Training Area (OTA). The Site lies approximately 1 mile west of the Green Bay shoreline and 1.6 miles south of the Menominee River, which is the border with Michigan. The developed area of the Site is contained within an approximately 60-acre central campus comprising 10 buildings and the OTA. The OTA includes the Firefighting School area (where firefighting scenarios are simulated) and the Research and Development area (where product testing occurs). The locations of the Fire Technology Center (FTC) and the OTA are shown on Figure 1. The remainder of the Site consists of areas used for tank assembly, warehousing, offices, classrooms, paved parking, and roads, or is undeveloped (consisting primarily of undisturbed wooded land).

The Site is bordered by industrial and commercial properties to the west, and industrial, commercial, and Marinette School District property to the north. Agricultural land, a cemetery, a community recreational center, and undeveloped land owned by the University of Wisconsin Board of Regents and private owners border the Site to the east and south.

Aqueous film-forming foam (AFFF) historically has been used at the OTA as part of research and development, quality testing, and firefighting training activities. A detailed history of the use of foams at the OTA was provided in Tyco's response to the Additional Information Request from the Wisconsin Department of Natural Resources (WDNR), submitted March 12, 2018. While multiple PFAS compounds have been included in historical and recent investigation analyses, the primary focus of the recent site investigation was on PFOA and/or PFOS, which have been present in various formulations of these foams. AFFF has not been tested outdoors at the OTA since 2017.

# 3 Private Drinking Water Well Sampling Program

Tyco initiated the private drinking water well sampling program in December 2017 in compliance with WDNR Bureau of Remediation and Redevelopment Tracking System (BRRTS) #02-38-580694. The objective of the sampling program has been to determine whether private drinking water wells in the sampling area contain detectable levels of PFAS. The PWSA (Figure 2) is within the Town of Peshtigo and City of Marinette, Wisconsin, and is bounded roughly to the north by University Drive, to the west by County Road B, to the south by Rader Road, and to the east by Green Bay. The PWSA was defined using data collected from desktop studies of local geology and analytical data from field investigations, as well as findings from multiple Site investigation reports (Arcadis 2018b, 2020e), the *Conceptual Site Model* (Arcadis 2020d) and *Southern Area Groundwater Evaluation Report* (Arcadis 2020b). Groundwater flow throughout the study area is controlled by natural processes, moving from higher elevations to lower elevations toward Green Bay and Ditch B, bounded by bedrock to prevent flow to the west. These findings and conditions have led to existing conditions where the plume is mature and contained within our existing PWSA (Arcadis 2020f). Working in conjunction with WDNR, Tyco assessed available sampling data and expanded the PWSA as data indicated was necessary. Initially, 68 private drinking water wells were included in the PWSA, followed by the addition of 103 private drinking water wells by the winter 2019 sampling event. A total of 172 different private drinking water wells have been sampled through March 31, 2021.

In conjunction with the sampling program, Tyco arranged for bottled water to be made available at no cost to residents with private drinking water wells for those properties within the PWSA. The distribution of bottled water is managed in accordance with the *Comprehensive Alternative Water Management Plan* submitted to WDNR in March 2020 (Arcadis 2020a).

Additionally, since February 2018 Tyco has arranged for POET systems to be installed and maintained, at no cost to residents, for those properties with private drinking water wells with PFAS concentrations detected at or above the USEPA lifetime HAL. Beginning July 2018, POET systems have also been offered to property owners where detected PFOA or PFOS concentrations have been confirmed above the laboratory reporting limits (RLs) for these compounds. Since November 2020, POET systems have been offered to property owners with PFAS concentrations exceeding the Cycle 11 proposed groundwater enforcement standards. To date, POET systems have been installed at 45 property locations.

Private drinking water wells and POET systems within the PWSA will continue to be monitored as presented in the WDNR-approved *Revised Long-Term Potable Well Sampling Plan* (Arcadis 2021b). Residents within the PWSA will continue to be offered bottled water service or POET system maintenance for properties with a POET system while Tyco works with WDNR and municipal authorities to determine and implement a long-term drinking water solution for affected properties that currently rely solely on private drinking water wells.

## 3.1 Quarterly Private Drinking Water Well Sampling

The quarterly private drinking water well sampling program was initiated in December 2017 and has continued quarterly with the exception of the spring and summer 2020 events due to the COVID-19 pandemic.

On March 16, 2020, Arcadis and Tyco suspended field sampling operations after the “Safer at Home” executive order by the Governor of Wisconsin and “Social Distancing” guidelines were enacted by the State of Wisconsin and the federal government. Those recommendations were extended by Wisconsin Governor Tony Evers on April 16, 2020 to remain active until at least May 26, 2020. Limited sampling resumed during the Fall 2020 event.

On January 8, 2021, Tyco mailed postcards to property owners and tenants within the PWSA eligible for seasonal sampling based on the current *Revised Long-Term Potable Well Sampling Plan* (Arcadis 2020c). Those postcards requested access to sample their private drinking water well during the winter 2021 event and provided a toll-free phone number (the Tyco Environmental Assessment Call Line [Call Line]) where the resident could speak with a project representative to schedule their sampling appointment. The number of wells sampled during each quarterly event from April 1, 2020 through March 31, 2021 are illustrated in Exhibit 1. Only three known or suspected private drinking water wells within the PWSA have not been sampled through the winter 2021 sampling event due to property abandonment or lack of responsiveness.

**Exhibit 1. Number of Private Drinking Water Wells Sampled Between April 2020 and March 2021**

| | Spring 2020 (April-June) | Summer 2020 (July-September) | Fall 2020 (October-December) | Winter 2021 (January-March) |
|---|---|---|---|---|
| Number of Private Drinking Water Wells Sampled | 0 | 0 | 4 | 113 |

Sampling results were provided to property owners and tenants in letters mailed within 10 business days of Arcadis receiving results from the laboratory. Copies of these letters were also provided to WDNR and the data was also included in bi-weekly database submissions.

## 3.2 POET Monitoring

The POET monitoring program was initiated in February 2018 for property locations where private drinking water wells had detected PFOA and PFOS concentrations above the USEPA lifetime HAL. In July 2018, the program was expanded to include property locations where detected PFOA and PFOS concentrations were above the laboratory RL for at least two sampling events. To date, 45 POET systems have been installed at property locations. Private drinking water wells that have POET systems installed are identified on Figures 3, 4 and 5, relative to well depth.

Influent and treated water for each well with a POET system were sampled for PFAS on a monthly or quarterly schedule based on prior data from that particular system to determine POET system efficiency. Routine maintenance is conducted on each system. Sediment filters are typically replaced every 3 months, ultraviolet lamps and quartz sleeves are replaced once every year, and granular activated carbon tanks are replaced when breakthrough is observed, which varies based on water usage and concentrations of PFAS for each well. Once a POET system has been sampled for at least 12 months, maintenance reverts to an approved GAC changeout schedule for most wells. POET systems with varying or significantly increasing influent concentrations are sampled quarterly to monitor for breakthrough and the GAC changeout schedule is reflective of quarterly sampling results. The sampling and maintenance status of each POET system is outlined in Table 1. POET systems sampling or maintenance status is subject to change based on available data.

Beginning in September 2020, in accordance with requests from WDNR, all POET samples were analyzed for 36 PFAS compounds using Modified Method 537. In 2017, when the private drinking water well sampling program began, only 6 PFAS compounds were available for testing using Method 537. Tyco moved to a Modified Method

537 in July 2018 to sample for 14 PFAS compounds. Sampling results were provided to property owners and tenants in letters mailed within 10 business days of Arcadis receiving results from the laboratory. Copies of these letters were also provided to WDNR and the data was also included in bi-weekly database submissions.

# 4 Sampling Procedures

The detection of PFAS compounds, including at low concentrations, can be influenced by common PFAS-containing materials that may be present at the sampling site. Therefore, the following sampling protocols were strictly followed by sampling personnel.

## 4.1 Methods

Sample collection methods were designed to avoid cross-contamination from PFAS-containing materials, which was of utmost importance given the very low detection limits for PFOA and PFOS analyses that were conducted. As such, materials with any potential to contain PFAS were not used during the sampling, including, for example, polytetrafluoroethylene (PTFE) pipe tape, pipe thread pastes that contain PTFE, PTFE sample tubing, food wrappers, water resistant/proof clothing, and waterproof field books. Additionally, where possible, the sampling team avoided collecting samples from potable water outfalls and taps fitted with Teflon tape or other PFAS-containing materials; however, stainless steel and polyvinyl chloride materials were considered acceptable.

For quality control purposes, field blanks, field duplicate samples, and matrix spike/matrix spike duplicate (MS/MSD) samples were collected for approximately every sample delivery group, every 10 samples, and every 20 samples, respectively. For smaller sample delivery groups, one field blank, one field duplicate, and one MS/MSD was collected per group. The samples were collected, stored, and handled as described in the *Quality Assurance Project Plan* submitted to the WDNR on March 16, 2021 (Arcadis 2021a).

The following sample identification (ID) nomenclature was used to assign unique identifiers:

- Private Drinking Water Wells:
  - WS-XXX, where WS = water sample and XXX = the number assigned to the well.
- Private Drinking Water Wells with POET Systems:
  - WS-XXX, where WS = water sample and XXX = the number assigned to the well.
  - POET-YY-MID, where POET = point of entry treatment system sample, YY = the number assigned to the POET system not equivalent to the well number, and MID = midpoint of POET system sampling location.
  - POET-YY-POST, where POET = point of entry treatment system sample, YY = the number assigned to the POET system not equivalent to the well number, and POST = post-POET system sampling location.

Samples were collected in 250 milliliter high-density polyethylene (HDPE) bottles provided by the laboratory. The bottles were labeled with the sample ID and the date/time collected immediately after sealing the bottles, and then the bottles were placed and sealed in a Ziploc® or similar bag. This information was also recorded on the chain-of-custody (COC) form provided by the laboratory, in a Potable Water Supply Sample Log, and in the sampling team's field notes. A signed copy of the COC form was provided to the laboratory whenever a sample cooler was delivered to the laboratory. A copy of each COC form was kept with the field notes and sample logs.

The COC form was marked for analysis with a standard turnaround time (approximately 3 weeks). Samples were placed in coolers, with enough ice to keep the sample temperature between 0 and 4ºC until delivered to the laboratory. Only "wet" ice was used, with no use of "blue ice" or similar cold storage packets. PFAS sample coolers were shipped via FedEx Priority Overnight delivery to:

Sample Receiving
Eurofins TestAmerica Sacramento (TA SAC)
880 Riverside Parkway
West Sacramento, California 95605-1500

Samples collected starting September 2020 were analyzed for 36 PFAS compounds using Modified Method 537.

# 5 Quality Assurance/Quality Control

Quality assurance and quality control processes were performed in accordance with the *Quality Assurance Project Plan* (Arcadis 2021a). After receipt of sampling analysis results from the laboratory, Arcadis conducted a preliminary data quality review (Level 2 data validation). The sample results were communicated to property owners and tenants after completion of the preliminary data quality review, as outlined in the "Project Communication" section below. After completion of the preliminary data quality review, Arcadis conducted a more comprehensive, Level 4 data validation. The timeframe for completion of Level 4 validation was approximately four weeks after receipt of the complete Level 4 data package from the laboratory; however, the length of time varied based on the amount of time required for the laboratory to send additional quality assurance and quality control information to Arcadis and the number of samples under review. Any changes to the reported sampling results after completion of the Level 4 validation, were provided to the property owners and tenants and to WDNR.

Data were reviewed in accordance with USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-2017-002, January 2017 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999, as appropriate).

Results were qualified as follows in accordance with the National Functional Guidelines:

- D = Dilution required for sample analysis.
- 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 positive or high bias.
- J- = The result is an estimated quantity. The associated numerical value is expected to have a negative or low bias.
- JN = The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative ID. The associated numerical value is an estimated concentration only.
- R = The results are rejected.
- U = The compound was analyzed for but not detected (ND). The associated value is the compound quantitation limit.
- UB = Compound considered non-detect at the listed value due to associated blank contamination.

# 6 Private Drinking Water Well Results

This section summarizes the private drinking water well results. The results from the most recent sampling events, April 1, 2020 through March 31, 2021, are included in Table 2. Exhibit 2 below shows the most conservative[1] cumulative results by category through March 31, 2021 when compared to the WDHS Cycle 11 proposed groundwater enforcement standards. The specific wells identified by cumulative category through the Winter 2021 event are included in Table 3 and illustrated on Figures 3, 4 and 5, relative to well depth.

The data summarized below show that concentrations in some private drinking water wells are changing. Section 6.1 summarizes sampling results from the most recent event relative to recommended ES and historical results. Wells are categorized based on the most conservative results for that well to date. The three categories are:

1. Not detected above RL
2. Detection between RL and recommended ES
3. Detection above recommended ES

The analytical results since April 1, 2020 show several wells with results below their most conservative category and several category changes due to either increasing concentrations of PFOA and/or PFOS or the presence of low levels of perfluorooctanesulfonamide (FOSA). This was the first time FOSA was included in analysis, as such, any detections or categorical changes due to FOSA are attributable to an expanding analyte list, not a change in plume conditions.

**Exhibit 2. Category Summary Through Winter 2021 Sampling Event**

| | Not Detected Above RL | Detection Between RL and Recommended ES | Detection Above Recommended ES | Total |
|---|---|---|---|---|
| **Number of Wells** | **88** | **47** | **37** | **172** |

Section 6.2 summarizes a trend analysis conducted at the request of WDNR. Seven wells have decreasing trends, 18 wells are not demonstrating trends, 13 wells have increasing trends. As stated above, this variability in concentrations is primarily due to a minor redistribution of mass within the plume associated with continued groundwater pumping at each private drinking water well and ongoing contributions of PFAS from septic systems at each house (Sudebi, et al, 2015), not because the plume is expanding.

## 6.1 Evaluation of Private Drinking Water Well Data

A total of 172 different private drinking water wells within the PWSA have been sampled during quarterly sampling events from December 2017 to March 31, 2021. One of these wells was determined to not be a private drinking water well and sampling was discontinued. Two additional wells are associated with the former Bay Area Medical

[1] Wells are divided into three potential categories: detection above recommended ES, detection between RL and recommended ES, and not detected above RL. Wells with results in multiple categories are classified in the category that would reflect the greatest amount of PFAS.

Center and are no longer in use; therefore, sampling was discontinued, resulting in a total of 169 private drinking water wells currently eligible for sampling.

Through the winter 2021 sampling event, 51.2% of the wells had results not detected above the RL and 27.3% had results below the WDHS proposed groundwater enforcement standard. Therefore, a total of 78.5% of the wells have PFAS concentrations below the WDHS proposed groundwater enforcement standards. Only 21.5% had results greater than the proposed ESs. As noted above, while the WDHS Cycle 11 proposed groundwater standards are potential future groundwater standards, and not present drinking water standards, they are included in this report for discussion purposes.

The analytical results since April 1, 2020 show several wells with results below their most conservative category and several category changes due to either increasing concentrations of PFOA and/or PFOS or the presence of low levels of FOSA. Variability in concentrations is primarily due to a minor redistribution of mass within the plume associated with continued groundwater pumping at each private drinking water well and ongoing contributions of PFAS from septic systems at each house (Sudebi, et al, 2015), not because the plume is expanding.

There are 10 wells with increasing concentrations of PFOA and/or PFOS that resulted in category changes. It is important to note that there are six wells categorized here as being in the “Detections above the proposed ES” category even though 72% of test results at those wells fell below the proposed ES. Moreover, there is one well included in the “Detections between RL and proposed ES” category even though seven of eight (87.5%) test results for the well were below the laboratory RL. There were 21 category changes from “not detected above RL” to “detected between the RL and ES” due to low-level detections of FOSA. It should be noted that FOSA was not included in the 6-compound analyte list for Method 537 or the 14-compound analyte list for Modified Method 537 so these category changes are more a function of additional analytes and not a function of any changed condition of the plume. FOSA is not a known component of Tyco products, but is frequently found in other consumer and industrial products; therefore, the source of the FOSA in these wells is unknown at this time. Exhibit 3 summarizes the wells with results below their current category and wells that changed categories as a result of the most recent sampling event. Table 2 presents the results from April 1, 2020 through March 31, 2021 and Figures 3, 4 and 5 present the cumulative categories for each well relative to well depth through the winter 2021 sampling event.

**Exhibit 3. Private Drinking Water Well Categorical Changes**

| Results Below Current Category | | Results Above Previous Category | | | |
|---|---|---|---|---|---|
| >ES → RL<ES | RL<ES → <RL | Change to RL<ES due to FOSA | | Change to RL<ES | Change to >ES |
| WS-024 | WS-064 | WS-015 | WS-079 | WS-044 | WS-048 |
| WS-037 | | WS-031 | WS-083 | WS-066 | WS-060 |
| WS-109 | | WS-040 | WS-103 | WS-087 | WS-069B |
| WS-121A | | WS-041 | WS-107 | WS-102 | WS-082B |
| WS-147 | | WS-042 | WS-120 | WS-152 | WS-082C |
| WS-159 | | WS-055 | WS-123 | | |
| | | WS-059 | WS-135 | | |
| | | WS-069A | WS-136 | | |
| | | WS-071 | WS-142 | | |
| | | WS-074 | WS-150 | | |
| | | WS-077 | | | |

The historical data since December 2017 indicates the majority of wells with detections above the RL are shallow wells between 15 and 65 feet deep based on available well construction forms or homeowner-provided information. Exceptions include WS-023, which is reported to be approximately 100 feet deep, WS-054, which is reported to be approximately 95 feet deep, and WS-017, which is reported to be approximately 120 feet deep. Detections of FOSA above the RL were observed in wells of varying depth. Well depth information was not available from homeowners or well construction forms for all wells sampled. Shallow wells are depicted on Figure 3, deep wells are depicted on Figure 4 and wells of unknown depth are depicted on Figure 5.

The area with the highest concentrations of PFAS in the private drinking water wells sampled was south and slightly east of the FTC property boundaries in the vicinity of County Road B, University Drive, and Green Gable Road. In that area, concentrations of PFOA and PFOS combined ranged from 3.9 J ng/L to 690 ng/L.

## 6.2 Evaluation of Private Drinking Water Well Trend Data

Trend plots were developed using the USEPA Groundwater Statistics Tool (Version 2, 2018) for each well with multiple detectable concentrations of PFOA and/or PFOS with at least 4 sampling events. Trend plots with the USEPA Groundwater Statistics Tool rely on a minimum of 4 sample points to create a trend so wells with less than 4 results with detectable concentrations above the RL were excluded for this analysis. PFOA and PFOS were specifically selected due to availability of results. This specific tool was designed to provide a statistical evaluation of data collected from monitoring wells to determine whether a remediation technology is effectively treating groundwater concentrations for a specific contaminant of concern relative to a maximum contaminant level. As such, outputs from the tool were updated to replace “cleanup levels” with “recommended ES”. In this setting, the tool is used to determine whether there are trends for PFOA+PFOS concentrations in each well

relative to the proposed enforcement standard, not to assess a remedial action or promote site closure. This tool provides statistical mean, trend, and UCL calculations while simultaneously testing for detection frequency, outliers, and normality. Outputs from the tool illustrating wells with adequate sampling points showing increasing, decreasing, or no trends are included as Appendices A, B and C respectively. These wells are also categorized in Table 5 and identified on Figure 6. In all, 20 private drinking water wells demonstrated trends of either increasing or decreasing PFAS concentrations. Of those wells, 19 are sand points and one (WS-009) is a shallow drilled well, less than 80 feet deep. WS-106 was a shallow sand point that was replaced with a shallow drilled well in March 2021 and renamed WS-106R. For the purposes of evaluating trends, only the results from WS-106 were considered.

**Exhibit 4. Private Drinking Water Well Trend Categories**

| Increasing Trend | Decreasing Trend | No Trend |
|---|---|---|
| WS-018 | WS-009 | WS-008 |
| WS-025 | WS-013 | WS-019 |
| WS-030 | WS-024 | WS-023 |
| WS-048 | WS-038 | WS-036 |
| WS-053 | WS-052 | WS-037 |
| WS-057 | WS-097 | WS-049 |
| WS-061B | WS-146A | WS-054 |
| WS-068[1] | | WS-058 |
| WS-069B[1] | | WS-062 |
| WS-096 | | WS-082D |
| WS-106[1] | | WS-090 |
| WS-124 | | WS-099 |
| WS-146B | | WS-100 |
| | | WS-109 |
| | | WS-121A |
| | | WS-121B |
| | | WS-129 |
| | | WS-133 |

[1]Trend results were not displayed by the USEPA Groundwater Statistics Tool due to negative concentrations being predicted by the linear regression.

The increasing trends are illustrated in Appendix A. Of the 13 wells with increasing trends, four wells (WS-018, WS-048, WS-061B, and WS-106) demonstrate categorical changes from detections below the proposed ES to detections above the proposed ES within the timeline graphed. Trend lines for two wells (WS-053 and WS-124)

demonstrate increasing concentrations below the proposed ES while the remaining seven wells with increasing trend lines are above the proposed ES.

The decreasing trends are illustrated in Appendix B. Of the 7 wells with decreasing trends, two wells (WS-009 and WS-024) demonstrate categorical changes from detections at or above the proposed ES to detections below the proposed ES within the timeline graphed. Trend lines for two wells (WS-013 and WS-097) demonstrate decreasing concentrations below the proposed ES while the remaining three wells with decreasing trend lines are above the proposed ES.

The residential area comprising Woodland Road, Oakwood Beach Road, Cooke Lane, and Shore Drive has approximately 14 shallow wells or sand points. Five of those wells have increasing trends (WS-018, WS-025, WS-048, WS-061B, and WS-096), four wells have decreasing trends (WS-009, WS-013, WS-024, and WS-038), four wells did not demonstrate trends (WS-019, WS-036, WS-049, and WS-062) and one well did not have enough data to conduct a trend analysis (WS-055). Similarly, in the area where University Drive connects with Green Gable Road and County Road B, two wells have increasing trends (WS-057 and WS-146B), two wells have decreasing trends (WS-052 and WS-146A), two wells did not demonstrate trends (WS-008 and WS-058), and five wells did not have enough data to conduct a trend analysis (WS-007A, WS-007B, WS-060, WS-070, and WS-101). This variability in concentrations is primarily due to a minor redistribution of mass within the plume associated with continued groundwater pumping at each private drinking water well and ongoing contributions of PFAS from septic systems at each house (Sudebi, et al, 2015), not because the plume is expanding.

# 7 Conclusions and Recommendations

The results reported here are as expected and in keeping with our models (Arcadis 2020d,f). The results continue to validate the conclusions and analyses reported in the CSM for the FTC and demonstrate that, shaped by geology and in light of the historic duration of activities contributing to PFAS contamination in the groundwater plume, the plume is mature and defined (Arcadis 2020d). Tyco is committed to providing a long-term drinking water solution for the PWSA and will continue actively engaging with municipal governments and state agencies to achieve that goal. Tyco will continue to provide short-term drinking water solutions such as bottled water service and POET systems in accordance with the *Comprehensive Alternative Water Management Plan* (Arcadis 2020a). In the interim period, Tyco recommends continuing the private drinking water well sampling program and POET monitoring program as outlined in the WDNR-approved *Revised Long-Term Potable Well Sampling Plan* (Arcadis 2021b) and the *Response to Comments – Response to 3rd Revised Long-Term Potable Well Sampling Plan* (Arcadis 2021c). An updated version of the Revised Long-Term Potable Well Sampling Plan will be submitted to the WDNR by October 1, 2021. Tyco will continue to work with property owners, community leaders, and other state, and local agencies on the sampling work and will continue to keep the community informed of these activities.

# 8 References

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USEPA. 2018. Groundwater Statistics Tool User's Guide. September.

USEPA. 2017. National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-2017-002. January.

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# Tables

**Table 1**
**POET System Program Status**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| Well Sample ID | POET ID | Sampling/Maintenance Status | Category |
|---|---|---|---|
| WS-007A | POET-43 | Quarterly Sampling | >ES |
| WS-008 | POET-7 | Maintenance | |
| WS-018 | POET-29 | Maintenance | |
| WS-019 | POET-5 | Maintenance | |
| WS-024 | POET-11 | Maintenance | |
| WS-025 | POET-28 | Maintenance | |
| WS-030 | POET-31 | Maintenance | |
| WS-036 | POET-3 | Maintenance | |
| WS-037 | POET-32 | Maintenance | |
| WS-038 | POET-19 | Maintenance | |
| WS-052 | POET-2 | Maintenance | |
| WS-054 | POET-30 | Maintenance | |
| WS-057 | POET-34 | Maintenance | |
| WS-058 | POET-1 | Maintenance | |
| WS-061B | POET-27 | Maintenance | |
| WS-062 | POET-44 | Quarterly Sampling | |
| WS-068 | POET-12 | Quarterly Sampling | |
| WS-090 | POET-4 | Quarterly Sampling | |
| WS-096 | POET-6 | Maintenance | |
| WS-106 / WS-106R | POET-37 | Quarterly Sampling | |
| WS-109 | POET-17 | Maintenance | |
| WS-121A | POET-16 | Maintenance | |
| WS-146A | POET-8 | Winterized | |
| WS-146B | POET-9 | Uninstalled | |
| WS-163 | POET-41 | Quarterly Sampling | |
| WS-009 | POET-26 | Maintenance | RL< ES |
| WS-013 | POET-10 | Maintenance | |
| WS-017 | POET-40 | Maintenance | |
| WS-023 | POET-14 | Maintenance | |
| WS-042 | POET-45 | Quarterly Sampling | |
| WS-049 | POET-35 | Maintenance | |
| WS-053 | POET-21 | Maintenance | |
| WS-067 | POET-39 | Maintenance | |
| WS-097 | POET-13 | Maintenance | |
| WS-099 | POET-15 | Maintenance | |
| WS-100 | POET-24 | Maintenance | |
| WS-111 | POET-18 | Maintenance | |
| WS-121B | POET-36 | Maintenance | |
| WS-129 | POET-38 | Maintenance | |
| WS-133 | POET-33 | Maintenance | |
| WS-152 | POET-42 | Quarterly Sampling | |
| WS-032 | POET-25 | Maintenance | <RL |
| WS-092 | POET-22 | Maintenance | |
| WS-115 | POET-20 | Maintenance | |
| WS-126 | POET-23 | Maintenance | |

**Notes:**
Sampling/Maintenance status subject to change based on available data
ES = Wisconsin Department of Health Services Proposed Groundwater Enforcement Standard
ID = Identification
POET = Point of Entry Treatment
RL = Reporting Limit

**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-001 | WS-005 | WS-005 | WS-008 | WS-008 | WS-009 | WS-010 | WS-010 | WS-011 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-001 (021021) | WS-005 (012821) | DUP-385 (012821) | WS-008 (123020) | WS-008 (030121) | WS-009 (030821) | WS-010 (020421) | DUP-388 (020421) | WS-011 (031621) |
| | | Sample Date | 2/10/2021 | 1/28/2021 | 1/28/2021 | 12/30/2020 | 3/1/2021 | 3/8/2021 | 2/4/2021 | 2/4/2021 | 3/16/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | POET | POET | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | FD | N | N | N | N | FD | N |
| | | General Well Depth | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Deep |
| | | Detailed Well Depth | 62 | 30 | 30 | 23 | 23 | 62 | 100 | 100 | 104 |
| | | Source | + | - | - | - | - | +, - | - | - | +, - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.79 U | <0.80 U | <0.75 U | ***330*** | ***560 D*** | *14* | <0.79 U | <0.74 U | <0.77 U |
| PFOS | 20 (1) | 2 (1) | <0.50 U | <0.51 U | <0.47 U | ***18*** | ***19*** | *0.93 J* | <0.50 U | <0.47 U | <0.49 U |
| PFBS | 450,000 | 90,000 | <0.19 U | <0.19 U | <0.18 U | 4.4 | 5.3 | <0.19 U | <0.19 U | <0.17 U | <0.18 U |
| PFHpA | -- | -- | <0.23 U | 0.23 J | <0.22 U | 120 | 160 | 5.5 | <0.23 U | <0.22 U | <0.23 U |
| PFHxS | 40 | 4 | <0.53 U | <0.53 U | <0.50 U | ***130*** | ***190*** | 2.0 | <0.53 U | <0.50 U | <0.52 U |
| PFNA | 30 | 3 | <0.25 U | <0.25 U | <0.24 U | *23* | *27* | 1.4 J | <0.25 U | <0.24 U | <0.24 U |
| PFDA | 300 | 60 | <0.29 U | <0.29 U | <0.27 U | 2.5 | 2.0 | <0.29 U | <0.29 U | <0.27 U | <0.28 U |
| PFDoA | 500 | 100 | <0.51 U | <0.51 U | <0.48 U | <0.50 U | <0.53 U | <0.51 U | <0.51 U | <0.48 U | <0.50 U |
| PFHxA | 150,000 | 30,000 | <0.54 U | 1.5 J | 1.6 J | 160 | 240 | 6.8 | <0.54 U | <0.51 U | <0.52 U |
| PFTeA | 10,000 | 2,000 | <0.68 U | <0.68 U | <0.64 U | <0.67 U | <0.70 U | <0.68 U | <0.68 U | <0.64 U | <0.66 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U |
| PFUnA | 3,000 | 600 | <1.0 U | <1.0 U | <0.97 U | <1.0 U | <1.1 U | <1.0 U | <1.0 U | <0.96 U | <0.99 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.2 U | 3.4 J | 3.6 J | 61 | 87 | 4.7 | <2.2 U | <2.1 U | <2.2 U |
| PFPeA | -- | -- | <0.45 U | 3.3 | 3.2 | 250 | 430 D | 12 | <0.46 U | <0.43 U | <0.44 U |
| PFHxDA | -- | -- | <0.82 U | <0.83 U | <0.78 U | <0.81 U | <0.85 U | <0.83 U | <0.83 U | <0.78 U | <0.80 U |
| PFODA | 400,000 | 80,000 | <0.87 U | <0.88 U | <0.83 U | <0.86 U | <0.90 U | <0.87 U | <0.87 U | <0.82 U | <0.85 U |
| PFPeS | -- | -- | <0.28 U | <0.28 U | <0.26 U | 4.9 | 8.2 | <0.28 U | <0.28 U | <0.26 U | <0.27 U |
| PFHpS | -- | -- | <0.18 U | <0.18 U | <0.17 U | 0.89 J | 1.1 J | <0.18 U | <0.18 U | <0.17 U | <0.17 U |
| PFNS | -- | -- | <0.34 U | <0.35 U | <0.32 U | <0.34 U | <0.36 U | <0.34 U | <0.34 U | <0.32 U | <0.33 U |
| PFDS | -- | -- | <0.30 U | <0.30 U | <0.28 U | <0.29 U | <0.31 U | <0.30 U | <0.30 U | <0.28 U | <0.29 U |
| PFDoS | -- | -- | <0.90 U | <0.91 U | <0.85 U | <0.89 U | <0.93 U | <0.90 U | <0.90 U | <0.85 U | <0.88 U |
| FOSA | 20 (1) | 2 (1) | 0.91 J | 1.0 J | 1.2 J | <0.89 U | <0.94 U | <0.91 U | <0.91 U | <0.85 U | <0.89 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.81 U | <0.81 U | <0.76 U | <0.79 U | <0.84 U | <0.81 U | <0.81 U | <0.76 U | <0.79 U |
| NMeFOSA | -- | -- | <0.40 U | <0.40 U | <0.38 U | <0.39 U | <0.41 U | <0.40 U | <0.40 U | <0.37 U | <0.39 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.79 U | <0.80 U | <0.75 U | <0.78 U | <0.82 U | <0.79 U | <0.79 U | <0.74 U | <0.77 U |
| 4:2 FTS | -- | -- | <0.22 U | <0.22 U | <0.21 U | 2.0 | 3.6 | 0.47 J | <0.22 U | <0.21 U | <0.22 U |
| 6:2 FTS | -- | -- | <2.3 U | <2.3 U | <2.2 U | 100 J- | 170 | 17 | <2.3 U | <2.2 U | <2.3 U |
| 8:2 FTS | -- | -- | <0.43 U | <0.43 U | <0.40 U | 3.2 | 2.9 | 1.2 J | <0.43 U | <0.40 U | <0.42 U |
| 10:2 FTS | -- | -- | <0.62 U | <0.63 U | <0.59 U | <0.61 U | <0.64 U | <0.62 U | <0.62 U | <0.58 U | <0.61 U |
| DONA | 3,000 | 600 | <0.37 U | <0.37 U | <0.35 U | <0.36 U | <0.38 U | <0.37 U | <0.37 U | <0.35 U | <0.36 U |
| GenX | 300 | 30 | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U |
| F-53B Major | -- | -- | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U |
| F-53B Minor | -- | -- | <0.30 U | <0.30 U | <0.28 U | <0.29 U | <0.31 U | <0.30 U | <0.30 U | <0.28 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-012 | WS-013 | WS-014 | WS-015 | WS-016 | WS-017 | WS-017 | WS-017 | WS-018 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-012 (020921) | WS-013 (020121) | WS-014 (020221) | WS-015 (031621) | WS-016 (031121) | WS-017 (092320) | WS-017 (121620) | WS-017 (030221) | WS-018 (030221) |
| | | Sample Date | 2/9/2021 | 2/1/2021 | 2/2/2021 | 3/16/2021 | 3/11/2021 | 9/23/2020 | 12/16/2020 | 3/2/2021 | 3/2/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | POET | POET | POET | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Deep | Shallow | Deep | Deep | Deep | Deep | Deep | Deep | Shallow |
| | | Detailed Well Depth | 510 | 15 | 264 | 82 | 175 | 120 | 120 | 120 | 26-28 |
| | | Source | +, - | - | +, - | + | - | +, - | +, - | +, - | - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.76 U | *6.8* | <0.75 U | <0.78 U | <0.77 U | <0.74 U | <0.80 U | <0.76 U | *19* |
| PFOS | 20 (1) | 2 (1) | <0.48 U | *1.8 JN* | <0.48 U | <0.50 U | <0.49 U | *0.56 J* | <0.51 U | <0.48 U | *4.1* |
| PFBS | 450,000 | 90,000 | <0.18 U | 11 | <0.18 U | <0.18 U | <0.18 U | <0.17 U | <0.19 U | <0.18 U | 4.7 |
| PFHpA | -- | -- | <0.22 U | 3.1 | <0.22 U | <0.23 U | <0.23 U | <0.22 U | <0.23 U | <0.22 U | 6.4 |
| PFHxS | 40 | 4 | <0.51 U | 1.4 J | <0.51 U | <0.52 U | <0.52 U | <0.50 U | <0.53 U | <0.51 U | 2.8 |
| PFNA | 30 | 3 | <0.24 U | <0.24 U | <0.24 U | <0.25 U | <0.24 U | <0.24 U | <0.25 U | <0.24 U | 1.8 J |
| PFDA | 300 | 60 | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.27 U | <0.29 U | <0.28 U | <0.29 U |
| PFDoA | 500 | 100 | <0.49 U | <0.50 U | <0.49 U | <0.50 U | <0.50 U | <0.48 U | <0.52 U | <0.49 U | <0.51 U |
| PFHxA | 150,000 | 30,000 | <0.52 U | 6.4 | <0.51 U | 0.62 J | <0.53 U | <0.51 U | <0.54 U | <0.52 U | 12 |
| PFTeA | 10,000 | 2,000 | <0.65 U | <0.66 U | <0.65 U | <0.67 U | <0.66 U | <0.64 U | <0.68 U | <0.65 U | <0.68 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.99 U | <1.0 U | <0.98 U | <1.0 U | <1.0 U | <0.96 U | <1.0 U | <0.98 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.2 U | 5.6 | <2.1 U | <2.2 U | <2.2 U | <2.1 U | <2.2 U | <2.1 U | 7.7 |
| PFPeA | -- | -- | <0.44 U | 4.0 | <0.43 U | <0.45 U | <0.44 U | 0.49 J | <0.46 U | <0.44 U | 12 |
| PFHxDA | -- | -- | <0.80 U | <0.81 U | <0.79 U | <0.82 U | <0.81 U | <0.78 U | <0.83 U | <0.80 U | <0.83 U |
| PFODA | 400,000 | 80,000 | <0.84 U | <0.85 U | <0.83 U | <0.86 U | <0.85 U | <0.82 U | <0.88 U | <0.84 U | <0.87 U |
| PFPeS | -- | -- | <0.27 U | 0.74 J | <0.27 U | <0.28 U | <0.27 U | <0.26 U | <0.28 U | <0.27 U | 0.47 J |
| PFHpS | -- | -- | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.18 U | <0.17 U | 0.74 J |
| PFNS | -- | -- | <0.33 U | <0.34 U | <0.33 U | <0.34 U | <0.34 U | <0.32 U | <0.35 U | <0.33 U | <0.34 U |
| PFDS | -- | -- | <0.29 U | <0.29 U | <0.28 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.29 U | <0.30 U |
| PFDoS | -- | -- | <0.87 U | <0.88 U | <0.86 U | <0.89 U | <0.88 U | <0.85 U | <0.91 U | <0.87 U | <0.90 U |
| FOSA | 20 (1) | 2 (1) | <0.88 U | <0.89 U | <0.87 U | *6.5* | 1.6 J | *2.6* | <0.92 U | <0.88 U | <0.91 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.78 U | <0.79 U | <0.77 U | <0.80 U | <0.79 U | <0.76 U | <0.81 U | <0.78 U | <0.81 U |
| NMeFOSA | -- | -- | <0.39 U | <0.39 U | <0.38 U | <0.39 U | <0.39 U | <0.38 U | <0.40 U | <0.38 U | <0.40 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.76 U | <0.77 U | <0.75 U | <0.78 U | <0.77 U | <0.74 U | <0.80 U | <0.76 U | <0.79 U |
| 4:2 FTS | -- | -- | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U |
| 6:2 FTS | -- | -- | <2.2 U | <2.3 U | <2.2 U | <2.3 U | <2.3 U | <2.2 U | <2.3 U | <2.2 U | <2.3 U |
| 8:2 FTS | -- | -- | <0.41 U | <0.42 U | <0.41 U | <0.42 U | <0.42 U | <0.40 U | <0.43 U | <0.41 U | <0.43 U |
| 10:2 FTS | -- | -- | <0.60 U | <0.61 U | <0.59 U | <0.61 U | <0.61 U | <0.59 U | <0.63 U | <0.60 U | <0.62 U |
| DONA | 3,000 | 600 | <0.36 U | <0.36 U | <0.35 U | <0.37 U | <0.36 U | <0.35 U | <0.37 U | <0.36 U | <0.37 U |
| GenX | 300 | 30 | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U |
| F-53B Major | -- | -- | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | 0.23 J | <0.22 U | <0.21 U | <0.22 U |
| F-53B Minor | -- | -- | <0.29 U | <0.29 U | <0.28 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.29 U | <0.30 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-018 | WS-019 | WS-019 | WS-020 | WS-022 | WS-022 | WS-023 | WS-024 | WS-025 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | DUP-397 (030221) | WS-019 (120420) | WS-019 (020121) | WS-020 (020221) | WS-022 (020221) | DUP-387 (020221) | WS-023 (020121) | WS-024 (020221) | WS-025 (020221) |
| | | Sample Date | 3/2/2021 | 12/4/2020 | 2/1/2021 | 2/2/2021 | 2/2/2021 | 2/2/2021 | 2/1/2021 | 2/2/2021 | 2/2/2021 |
| | | Sample Event | Winter 2021 | POET | POET | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | FD | N | N | N | N | FD | N | N | N |
| | | General Well Depth | Shallow | Shallow | Shallow | | | | Deep | Shallow | Shallow |
| | | Detailed Well Depth | 26-28 | 20 | 20 | | | | 100 | <20 | 30-40 |
| | | Source | - | - | - | | | | - | - | - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | *20* | ***59*** | ***96*** | <0.78 U | <0.73 U | <0.76 U | *5.4* | 1.9 | ***28*** |
| PFOS | 20 (1) | 2 (1) | *4.8 JN* | ***17*** | ***15*** | <0.50 UB | <0.46 U | <0.48 U | *0.56 J* | <0.50 U | <0.49 U |
| PFBS | 450,000 | 90,000 | 5.8 | 12 | 8.0 | <0.18 U | <0.17 U | <0.18 U | 0.23 J | 0.54 J | 0.30 J |
| PFHpA | -- | -- | 6.5 | 28 | 49 | <0.23 U | <0.21 U | <0.22 U | 2.4 | 0.33 J | 11 |
| PFHxS | 40 | 4 | 3.2 | *10* | *14* | <0.52 U | <0.49 U | <0.51 U | 1.0 J | 0.61 J | 2.0 |
| PFNA | 30 | 3 | 1.8 | *8.7* | *8.7* | <0.25 U | <0.23 U | <0.24 U | <0.26 UB | <0.25 U | 0.62 J |
| PFDA | 300 | 60 | <0.27 U | 2.1 | 1.8 | <0.28 U | <0.27 U | <0.28 U | <0.29 U | <0.29 U | <0.28 U |
| PFDoA | 500 | 100 | <0.47 U | <0.50 U | <0.49 U | <0.51 U | <0.47 U | <0.49 U | <0.52 U | <0.51 U | <0.49 U |
| PFHxA | 150,000 | 30,000 | 14 | 36 | 58 | <0.53 U | <0.50 U | <0.52 U | 5.2 | 0.61 J | 16 |
| PFTeA | 10,000 | 2,000 | <0.63 U | <0.66 U | 0.66 JN | <0.67 U | <0.62 U | <0.65 U | <0.69 U | <0.68 U | <0.66 U |
| PFTriA | -- | -- | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.95 U | <1.0 U | <0.98 U | <1.0 U | <0.94 U | <0.98 U | <1.0 U | <1.0 U | <0.99 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | 8.4 | 28 | 30 | <2.2 U | <2.1 U | <2.1 U | <2.3 U | <2.2 U | 6.9 |
| PFPeA | -- | -- | 13 | 47 | 91 J+ | <0.45 U | <0.42 U | <0.44 U | 8.9 | 0.66 J | 28 |
| PFHxDA | -- | -- | <0.77 U | <0.81 U | <0.79 U | <0.82 U | <0.76 U | <0.79 U | <0.84 U | <0.83 U | <0.80 U |
| PFODA | 400,000 | 80,000 | <0.81 U | <0.86 U | <0.84 U | <0.86 U | <0.80 U | <0.84 U | <0.89 U | <0.87 U | <0.85 U |
| PFPeS | -- | -- | 0.47 J | 0.90 J | 2.0 J+ | <0.28 U | <0.26 U | <0.27 U | <0.28 U | <0.28 U | 0.39 J |
| PFHpS | -- | -- | 0.78 J | <0.17 U | <0.17 U | <0.17 U | <0.16 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U |
| PFNS | -- | -- | <0.32 U | <0.34 U | <0.33 U | <0.34 U | <0.32 U | <0.33 U | <0.35 U | <0.34 U | <0.33 U |
| PFDS | -- | -- | <0.28 U | <0.29 U | <0.29 U | <0.29 U | <0.27 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U |
| PFDoS | -- | -- | <0.84 U | <0.88 U | <0.87 U | <0.89 U | <0.83 U | <0.87 U | <0.92 U | <0.90 U | <0.87 U |
| FOSA | 20 (1) | 2 (1) | <0.85 U | <0.89 U | <0.87 U | <0.90 U | <0.84 U | <0.87 U | <0.93 U | <0.91 U | <0.88 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.75 U | <0.79 U | <0.78 U | <0.80 U | <0.74 U | <0.78 U | <0.82 U | <0.81 U | <0.78 U |
| NMeFOSA | -- | -- | <0.37 U | <0.39 U | <0.38 U | <0.39 U | <0.37 U | <0.38 U | <0.41 U | <0.40 U | <0.39 U |
| NMeFOSE | -- | -- | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.73 U | <0.77 U | <0.76 U | <0.78 U | <0.73 U | <0.76 U | <0.80 U | <0.79 U | <0.76 U |
| 4:2 FTS | -- | -- | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.21 U | 0.28 J | <0.22 U | 1.4 J |
| 6:2 FTS | -- | -- | <2.2 U | 6.9 | 20 | <2.3 U | <2.1 U | <2.2 U | 18 | <2.3 U | 44 |
| 8:2 FTS | -- | -- | <0.40 U | 1.5 J | 1.7 J | <0.42 U | <0.39 U | <0.41 U | <0.43 U | <0.43 U | <0.41 U |
| 10:2 FTS | -- | -- | <0.58 U | <0.61 U | <0.60 U | <0.62 U | <0.57 U | <0.60 U | <0.63 U | <0.62 U | <0.60 U |
| DONA | 3,000 | 600 | <0.35 U | <0.36 U | <0.36 U | <0.37 U | <0.34 U | <0.36 U | <0.38 U | <0.37 U | <0.36 U |
| GenX | 300 | 30 | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U |
| F-53B Major | -- | -- | <0.21 U | 0.22 J | <0.21 U | <0.22 U | <0.21 U | <0.21 U | <0.23 U | <0.22 U | <0.22 U |
| F-53B Minor | -- | -- | <0.28 U | <0.29 U | <0.29 U | <0.29 U | <0.27 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-026 | WS-026 | WS-027 | WS-029 | WS-030 | WS-030 | WS-031 | WS-031 | WS-032 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-026 (021021) | DUP-391 (021021) | WS-027 (031621) | WS-029 (030221) | WS-030 (030121) | DUP-395 (030121) | WS-031 (031621) | DUP-402 (031621) | WS-032 (030221) |
| | | Sample Date | 2/10/2021 | 2/10/2021 | 3/16/2021 | 3/2/2021 | 3/1/2021 | 3/1/2021 | 3/16/2021 | 3/16/2021 | 3/2/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | FD | N | N | N | FD | N | FD | N |
| | | General Well Depth | | | Deep | Deep | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | Detailed Well Depth | | | 110 | 90 | 28 | 28 | | | |
| | | Source | | | + | - | +, - | +, - | | | |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.78 U | <0.79 U | <0.75 U | <0.81 U | ***100*** | ***110*** | <0.75 U | <0.75 U | <0.80 U |
| PFOS | 20 (1) | 2 (1) | <0.50 U | <0.50 U | <0.48 U | <0.51 U | ***0.77 J*** | <0.52 U | <0.48 U | <0.48 U | <0.51 U |
| PFBS | 450,000 | 90,000 | <0.18 U | <0.19 U | <0.18 U | <0.19 U | <0.19 U | 0.30 J | <0.18 U | <0.18 U | <0.19 U |
| PFHpA | -- | -- | <0.23 U | <0.23 U | <0.22 U | <0.24 U | 1.9 | 2.2 | <0.22 U | <0.22 U | <0.24 U |
| PFHxS | 40 | 4 | <0.52 U | <0.53 U | <0.50 U | <0.54 U | 1.1 J | 0.75 J | <0.50 U | <0.50 U | <0.54 U |
| PFNA | 30 | 3 | <0.25 U | <0.25 U | <0.24 U | <0.26 U | <0.26 U | <0.26 U | <0.24 U | <0.24 U | <0.26 U |
| PFDA | 300 | 60 | <0.28 U | <0.29 U | <0.27 U | <0.30 U | <0.29 U | <0.30 U | <0.27 U | <0.27 U | <0.29 U |
| PFDoA | 500 | 100 | <0.50 U | <0.51 U | <0.49 U | <0.52 U | <0.52 U | <0.53 U | <0.49 U | <0.49 U | <0.52 U |
| PFHxA | 150,000 | 30,000 | <0.53 U | <0.54 U | <0.51 U | <0.55 U | 3.3 | 3.3 | <0.51 U | <0.51 U | <0.55 U |
| PFTeA | 10,000 | 2,000 | <0.67 U | <0.68 U | <0.64 U | <0.70 U | <0.69 U | <0.70 U | <0.64 U | <0.65 U | <0.69 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <1.0 U | <1.0 U | <0.97 U | <1.0 U | <1.0 U | <1.1 U | <0.97 U | <0.97 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.2 U | <2.2 U | <2.1 U | <2.3 U | 4.1 J | 3.9 J | <2.1 U | <2.1 U | <2.3 U |
| PFPeA | -- | -- | <0.45 U | <0.45 U | <0.43 U | <0.47 U | 2.8 | 2.9 | <0.43 U | <0.43 U | <0.46 U |
| PFHxDA | -- | -- | <0.82 U | <0.83 U | <0.79 U | <0.85 U | <0.85 U | <0.85 U | <0.78 U | <0.79 U | <0.84 U |
| PFODA | 400,000 | 80,000 | <0.86 U | <0.87 U | <0.83 U | <0.90 U | <0.89 U | <0.90 U | <0.83 U | <0.83 U | <0.89 U |
| PFPeS | -- | -- | <0.28 U | <0.28 U | <0.26 U | <0.29 U | <0.29 U | <0.29 U | <0.26 U | <0.27 U | <0.28 U |
| PFHpS | -- | -- | <0.17 U | <0.18 U | <0.17 U | <0.18 U | <0.18 U | <0.18 U | <0.17 U | <0.17 U | <0.18 U |
| PFNS | -- | -- | <0.34 U | <0.34 U | <0.33 U | <0.35 U | <0.35 U | <0.35 U | <0.33 U | <0.33 U | <0.35 U |
| PFDS | -- | -- | <0.29 U | <0.30 U | <0.28 U | <0.30 U | <0.30 U | <0.31 U | <0.28 U | <0.28 U | <0.30 U |
| PFDoS | -- | -- | <0.89 U | <0.90 U | <0.86 U | <0.92 U | <0.92 U | <0.93 U | <0.86 U | <0.86 U | <0.92 U |
| FOSA | 20 (1) | 2 (1) | 1.4 J | <0.91 U | 1.1 J | <0.93 U | <0.93 U | <0.94 U | 2.0 | *3.1* | <0.93 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.80 U | <0.81 U | <0.77 U | <0.83 U | <0.83 U | <0.83 U | <0.77 U | <0.77 U | <0.82 U |
| NMeFOSA | -- | -- | <0.39 U | <0.40 U | <0.38 U | <0.41 U | <0.41 U | <0.41 U | <0.38 U | <0.38 U | <0.41 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.78 U | <0.79 U | <0.75 U | <0.81 U | <0.81 U | <0.81 U | <0.75 U | <0.75 U | <0.80 U |
| 4:2 FTS | -- | -- | <0.22 U | <0.22 U | <0.21 U | <0.23 U | <0.23 U | <0.23 U | <0.21 U | <0.21 U | <0.23 U |
| 6:2 FTS | -- | -- | <2.3 U | <2.3 U | <2.2 U | <2.4 U | <2.4 U | <2.4 U | <2.2 U | <2.2 U | <2.4 U |
| 8:2 FTS | -- | -- | <0.42 U | <0.43 U | <0.41 U | <0.44 U | <0.44 U | <0.44 U | <0.41 U | <0.41 U | <0.43 U |
| 10:2 FTS | -- | -- | <0.61 U | <0.62 U | <0.59 U | <0.64 U | <0.64 U | <0.64 U | <0.59 U | <0.59 U | <0.63 U |
| DONA | 3,000 | 600 | <0.37 U | <0.37 U | <0.35 U | <0.38 U | <0.38 U | <0.38 U | <0.35 U | <0.35 U | <0.38 U |
| GenX | 300 | 30 | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U |
| F-53B Major | -- | -- | <0.22 U | <0.22 U | <0.21 U | <0.23 U | <0.23 U | <0.23 U | <0.21 U | <0.21 U | <0.23 U |
| F-53B Minor | -- | -- | <0.29 U | <0.30 U | <0.28 U | <0.30 U | <0.30 U | <0.31 U | <0.28 U | <0.28 U | <0.30 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-033 | WS-034 | WS-035 | WS-035 | WS-037 | WS-038 | WS-038 | WS-039 | WS-040 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-033 (030221) | WS-034 (022321) | WS-035 (030821) | DUP-399 (030821) | WS-037 (033121) | WS-038 (120120) | WS-038 (030221) | WS-039 (021221) | WS-040 (022321) |
| | | Sample Date | 3/2/2021 | 2/23/2021 | 3/8/2021 | 3/8/2021 | 3/31/2021 | 12/1/2020 | 3/2/2021 | 2/12/2021 | 2/23/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | POET | POET | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | FD | N | N | N | N | N |
| | | General Well Depth | Deep | Shallow | | | Shallow | Shallow | Shallow | Deep | Deep |
| | | Detailed Well Depth | 125 | | | | 23 | 28 | 28 | 80 | 124 |
| | | Source | + | | | | - | +, - | +, - | - | + |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.72 U | <0.79 U | *6.1* | *6.0* | *13* | ***22*** | ***19*** | <0.76 U | <0.73 U |
| PFOS | 20 (1) | 2 (1) | <0.46 U | <0.50 U | <0.50 U | <0.49 U | *1.3 J* | ***2.6*** | ***2.2*** | <0.48 U | <0.46 U |
| PFBS | 450,000 | 90,000 | <0.17 U | <0.19 U | <0.19 U | <0.18 U | 0.32 J | 1.0 J | 1.6 J | <0.18 U | <0.17 U |
| PFHpA | -- | -- | <0.21 U | <0.23 U | 3.6 | 3.1 | 14 | 4.9 | 3.8 | <0.22 U | <0.21 U |
| PFHxS | 40 | 4 | <0.49 U | <0.53 U | <0.53 U | <0.52 U | 1.1 J | 0.88 J | 1.0 J | <0.51 U | <0.49 U |
| PFNA | 30 | 3 | <0.23 U | <0.25 U | <0.25 U | <0.24 U | 0.68 J | <0.26 U | <0.24 U | <0.24 U | <0.23 U |
| PFDA | 300 | 60 | <0.26 U | <0.29 U | <0.29 U | <0.28 U | <0.28 U | <0.30 U | <0.28 U | <0.28 U | <0.27 U |
| PFDoA | 500 | 100 | <0.47 U | <0.51 U | <0.51 U | <0.50 U | <0.49 U | <0.53 U | <0.50 U | <0.49 U | <0.47 U |
| PFHxA | 150,000 | 30,000 | <0.49 U | <0.54 U | 16 | 20 | 29 | 10 | 8.3 | <0.52 U | <0.50 U |
| PFTeA | 10,000 | 2,000 | <0.62 U | <0.68 U | <0.68 U | <0.66 U | <0.65 U | <0.71 U | <0.66 U | <0.65 U | <0.62 U |
| PFTriA | -- | -- | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.1 U |
| PFUnA | 3,000 | 600 | <0.94 U | <1.0 U | <1.0 U | <1.0 U | <0.98 U | <1.1 U | <0.99 U | <0.98 U | <0.94 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.1 U |
| NMeFOSAA | -- | -- | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.0 U |
| PFBA | 10,000 | 2,000 | <2.0 U | <2.2 U | 6.0 | 6.4 | 14 | 8.5 | 7.3 | <2.1 U | <2.1 U |
| PFPeA | -- | -- | <0.42 U | <0.46 U | 11 | 12 | 62 | 9.6 | 8.6 | <0.44 U | <0.42 U |
| PFHxDA | -- | -- | <0.76 U | <0.83 U | <0.83 U | <0.81 U | <0.80 U | <0.86 U | <0.80 U | <0.79 U | <0.76 U |
| PFODA | 400,000 | 80,000 | <0.80 U | <0.87 U | <0.88 U | <0.85 U | <0.84 U | <0.91 U | <0.85 U | <0.84 U | <0.80 U |
| PFPeS | -- | -- | <0.26 U | <0.28 U | <0.28 U | <0.27 U | 0.27 J | <0.29 U | <0.27 U | <0.27 U | <0.26 U |
| PFHpS | -- | -- | <0.16 U | <0.18 U | <0.18 U | <0.17 U | <0.17 U | <0.18 U | <0.17 U | <0.17 U | <0.16 U |
| PFNS | -- | -- | <0.32 U | <0.34 U | <0.35 U | <0.34 U | <0.33 U | <0.36 U | <0.33 U | <0.33 U | <0.32 U |
| PFDS | -- | -- | <0.27 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.31 U | <0.29 U | <0.28 U | <0.27 U |
| PFDoS | -- | -- | <0.83 U | <0.90 U | <0.90 U | <0.88 U | <0.87 U | <0.94 U | <0.88 U | <0.86 U | <0.83 U |
| FOSA | 20 (1) | 2 (1) | 1.6 J | 1.2 J | <0.91 U | <0.89 U | *1.1 J* | <0.95 U | <0.89 U | <0.87 U | *3.2* |
| NEtFOSA | 20 (1) | 2 (1) | <0.74 U | <0.81 U | <0.81 U | <0.79 U | <0.78 U | <0.84 U | <0.79 U | <0.77 U | <0.74 U |
| NMeFOSA | -- | -- | <0.37 U | <0.40 U | <0.40 U | <0.39 U | <0.38 U | <0.42 U | <0.39 U | <0.38 U | <0.37 U |
| NMeFOSE | -- | -- | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.2 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.72 U | <0.79 U | <0.79 U | <0.77 U | <0.76 U | <0.82 U | <0.77 U | <0.76 U | <0.73 U |
| 4:2 FTS | -- | -- | <0.20 U | <0.22 U | <0.22 U | 0.42 J | <0.21 U | <0.23 U | <0.22 U | <0.21 U | <0.21 U |
| 6:2 FTS | -- | -- | <2.1 U | <2.3 U | <2.3 U | <2.3 U | 53 | <2.4 U | <2.3 U | <2.2 U | <2.1 U |
| 8:2 FTS | -- | -- | <0.39 U | <0.43 U | <0.43 U | <0.42 U | <0.41 U | <0.44 U | <0.42 U | <0.41 U | <0.39 U |
| 10:2 FTS | -- | -- | <0.57 U | <0.62 U | <0.63 U | <0.61 U | <0.60 U | <0.65 U | <0.61 U | <0.60 U | <0.57 U |
| DONA | 3,000 | 600 | <0.34 U | <0.37 U | <0.37 U | <0.36 U | <0.36 U | <0.39 U | <0.36 U | <0.36 U | <0.34 U |
| GenX | 300 | 30 | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.5 U | <1.4 U | <1.3 U | <1.3 U |
| F-53B Major | -- | -- | <0.20 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.23 U | <0.22 U | <0.21 U | <0.21 U |
| F-53B Minor | -- | -- | <0.27 U | <0.30 U | <0.30 U | <0.29 U | <0.29 U | <0.31 U | <0.29 U | <0.28 U | <0.27 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-040 | WS-041 | WS-042 | WS-044 | WS-045 | WS-046 | WS-048 | WS-050 | WS-052 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | DUP-393 (022321) | WS-041 (021021) | WS-042 (021021) | WS-044 (031621) | WS-045 (031021) | WS-046 (033021) | WS-048 (021021) | WS-050 (031121) | WS-052 (020121) |
| | | Sample Date | 2/23/2021 | 2/10/2021 | 2/10/2021 | 3/16/2021 | 3/10/2021 | 3/30/2021 | 2/10/2021 | 3/11/2021 | 2/1/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | FD | N | N | N | N | N | N | N | N |
| | | General Well Depth | Deep | | Deep | Shallow | Deep | | Shallow | Deep | Shallow |
| | | Detailed Well Depth | 124 | | 110 | 28 | 180 | | 20 | 90 | 22 |
| | | Source | + | | + | - | - | | - | - | - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.71 U | <0.79 U | <0.80 U | *2.0* | <0.76 U | *1.2 J* | ***30*** | <0.75 U | ***130*** |
| PFOS | 20 (1) | 2 (1) | <0.45 U | <0.50 U | <0.51 U | *2.4* | <0.48 U | <0.48 U | <0.49 U | <0.48 U | ***41*** |
| PFBS | 450,000 | 90,000 | <0.17 U | <0.19 U | <0.19 U | <0.19 U | <0.18 U | <0.18 U | 0.69 J | <0.18 U | 2.9 |
| PFHpA | -- | -- | <0.21 U | <0.23 U | <0.23 U | <0.24 U | <0.22 U | <0.22 U | 2.9 | <0.22 U | 53 |
| PFHxS | 40 | 4 | <0.47 U | <0.53 U | <0.54 U | <0.54 U | <0.51 U | <0.51 U | 1.1 J | <0.51 U | *32* |
| PFNA | 30 | 3 | <0.22 U | <0.25 U | <0.25 U | <0.26 U | <0.24 U | <0.24 U | 0.33 J | <0.24 U | *14* |
| PFDA | 300 | 60 | <0.26 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.28 U | <0.28 U | <0.28 U | 1.4 J |
| PFDoA | 500 | 100 | <0.46 U | <0.51 U | <0.52 U | <0.52 U | <0.49 U | <0.49 U | <0.50 U | <0.49 U | <0.51 U |
| PFHxA | 150,000 | 30,000 | <0.48 U | 0.58 J | <0.54 U | <0.55 U | <0.52 U | <0.51 U | 10 | <0.51 U | 96 |
| PFTeA | 10,000 | 2,000 | <0.61 U | <0.68 U | <0.69 U | <0.69 U | <0.65 U | <0.65 U | <0.67 U | <0.65 U | <0.68 U |
| PFTriA | -- | -- | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.91 U | <1.0 U | <1.0 U | <1.0 U | <0.98 U | <0.98 U | <1.0 U | <0.98 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.0 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.0 U | <2.2 U | <2.3 U | <2.3 U | <2.1 U | <2.1 U | 4.8 | <2.1 U | 29 |
| PFPeA | -- | -- | <0.41 U | <0.46 U | <0.46 U | <0.47 U | <0.44 U | <0.43 U | 11 | <0.43 U | 150 |
| PFHxDA | -- | -- | <0.74 U | <0.83 U | <0.84 U | <0.85 U | <0.80 U | <0.79 U | <0.81 U | <0.79 U | <0.82 U |
| PFODA | 400,000 | 80,000 | <0.78 U | <0.87 U | <0.88 U | <0.89 U | <0.84 U | <0.83 U | <0.86 U | <0.83 U | <0.87 U |
| PFPeS | -- | -- | <0.25 U | <0.28 U | <0.28 U | <0.29 U | <0.27 U | <0.27 U | <0.27 U | <0.27 U | 3.7 |
| PFHpS | -- | -- | <0.16 U | <0.18 U | <0.18 U | <0.18 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | 0.90 J |
| PFNS | -- | -- | <0.31 U | <0.34 U | <0.35 U | <0.35 U | <0.33 U | <0.33 U | <0.34 U | <0.33 U | <0.34 U |
| PFDS | -- | -- | <0.27 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.30 U |
| PFDoS | -- | -- | <0.81 U | <0.90 U | <0.91 U | <0.92 U | <0.87 U | <0.86 U | <0.88 U | <0.86 U | <0.90 U |
| FOSA | 20 (1) | 2 (1) | *2.3* | *4.0* | *5.0* | *3.3* | <0.88 U | *6.6 J+* | <0.89 U | <0.87 U | <0.91 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.72 U | <0.81 U | <0.82 U | <0.83 U | <0.78 U | <0.77 U | <0.79 U | <0.77 U | <0.80 U |
| NMeFOSA | -- | -- | <0.36 U | <0.40 U | <0.40 U | <0.41 U | <0.38 U | <0.38 U | <0.39 U | <0.38 U | <0.40 U |
| NMeFOSE | -- | -- | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.71 U | <0.79 U | <0.80 U | <0.81 U | <0.76 U | <0.75 U | <0.77 U | <0.75 U | <0.79 U |
| 4:2 FTS | -- | -- | <0.20 U | <0.22 U | <0.23 U | <0.23 U | <0.21 U | <0.21 U | <0.22 U | <0.21 U | 3.1 |
| 6:2 FTS | -- | -- | <2.1 U | <2.3 U | <2.3 U | <2.4 U | <2.2 U | <2.2 U | <2.3 U | <2.2 U | 270 |
| 8:2 FTS | -- | -- | <0.38 U | <0.43 U | <0.43 U | <0.44 U | <0.41 U | <0.41 U | <0.42 U | <0.41 U | 90 |
| 10:2 FTS | -- | -- | <0.56 U | <0.62 U | <0.63 U | <0.64 U | <0.60 U | <0.59 U | <0.61 U | <0.59 U | <0.62 U |
| DONA | 3,000 | 600 | <0.33 U | <0.37 U | <0.38 U | <0.38 U | <0.36 U | <0.35 U | <0.36 U | <0.35 U | <0.37 U |
| GenX | 300 | 30 | <1.2 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U |
| F-53B Major | -- | -- | <0.20 U | <0.22 U | <0.23 U | <0.23 U | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U |
| F-53B Minor | -- | -- | <0.27 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.30 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-053 | WS-054 | WS-055 | WS-057 | WS-058 | WS-059 | WS-059 | WS-060 | WS-061A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-053 (030121) | WS-054 (020121) | WS-055 (020521) | WS-057 (020121) | WS-058 (030121) | WS-059 (102120) | DUP-373 (102120) | WS-060 (031621) | WS-061A (010521) |
| | | Sample Date | 3/1/2021 | 2/1/2021 | 2/5/2021 | 2/1/2021 | 3/1/2021 | 10/21/2020 | 10/21/2020 | 3/16/2021 | 1/5/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Fall 2020 | Fall 2020 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | FD | N | N |
| | | General Well Depth | Shallow | Deep | Shallow | Shallow | Shallow | Deep | Deep | Shallow | Deep |
| | | Detailed Well Depth | 30 | 95 | | | | 125 | 125 | 25-30 | 124 |
| | | Source | +, - | + | | | | +, - | +, - | - | +, - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | *3.5* | ***71*** | <0.77 U | ***92*** | ***320*** | <0.76 U | <0.75 U | *20* | <0.82 U |
| PFOS | 20 (1) | 2 (1) | *2.2* | <0.50 U | 0.51 J | *19* | **2.0** | <0.49 U | <0.48 U | *4.1* | <0.52 U |
| PFBS | 450,000 | 90,000 | 1.1 J | 0.32 J | <0.18 U | 3.9 | 6.7 | <0.18 U | <0.18 U | 2.0 | <0.19 U |
| PFHpA | -- | -- | 0.78 J | 3.6 | <0.23 U | 37 | 250 | <0.22 U | <0.22 U | 15 | <0.24 U |
| PFHxS | 40 | 4 | 1.4 J | 1.4 J | <0.51 U | *17* | ***73*** | <0.51 U | <0.51 U | 3.4 | <0.55 U |
| PFNA | 30 | 3 | <0.27 U | <0.25 UB | <0.24 U | *5.1* | 2.2 | <0.24 U | <0.24 U | 1.0 J | <0.26 U |
| PFDA | 300 | 60 | <0.30 U | <0.29 U | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.26 U | <0.30 U |
| PFDoA | 500 | 100 | <0.54 U | <0.51 U | <0.50 U | <0.50 U | <0.50 U | <0.49 U | <0.49 U | <0.46 U | <0.53 U |
| PFHxA | 150,000 | 30,000 | 2.5 | 15 | <0.52 U | 48 | 290 | <0.52 U | <0.51 U | 26 | <0.56 U |
| PFTeA | 10,000 | 2,000 | <0.72 U | <0.68 U | <0.66 U | <0.66 U | <0.66 U | <0.66 U | <0.65 U | <0.61 U | <0.70 U |
| PFTriA | -- | -- | <1.3 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U |
| PFUnA | 3,000 | 600 | <1.1 U | <1.0 U | <0.99 U | <1.0 U | <1.0 U | <0.99 U | <0.98 U | <0.92 U | <1.1 U |
| NEtFOSAA | 20 (1) | 2 (1) | *4.9* | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U |
| NMeFOSAA | -- | -- | 2.6 J | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.2 U |
| PFBA | 10,000 | 2,000 | 3.7 J | 3.9 J | <2.2 U | 21 | 140 | <2.2 U | <2.1 U | 15 | <2.3 U |
| PFPeA | -- | -- | 2.9 | 12 | 0.55 J | 63 | 610 D | <0.44 U | <0.43 U | 30 | <0.47 U |
| PFHxDA | -- | -- | <0.88 U | <0.82 U | <0.80 U | <0.81 U | <0.81 U | <0.80 U | <0.79 U | <0.74 U | <0.85 U |
| PFODA | 400,000 | 80,000 | <0.92 U | <0.87 U | <0.85 U | <0.85 U | <0.85 U | <0.85 U | <0.83 U | <0.78 U | <0.90 U |
| PFPeS | -- | -- | <0.30 U | 0.44 J | <0.27 U | 1.9 | 7.9 | <0.27 U | <0.27 U | 0.33 J | <0.29 U |
| PFHpS | -- | -- | <0.19 U | <0.18 U | <0.17 U | 0.28 J | 0.62 J | <0.17 U | <0.17 U | <0.16 U | <0.18 U |
| PFNS | -- | -- | <0.36 U | <0.34 U | <0.33 U | <0.34 U | <0.34 U | <0.33 U | <0.33 U | <0.31 U | <0.36 U |
| PFDS | -- | -- | <0.31 U | <0.30 U | <0.29 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.27 U | <0.31 U |
| PFDoS | -- | -- | <0.95 U | <0.90 U | <0.87 U | <0.88 U | <0.88 U | <0.87 U | <0.86 U | <0.81 U | <0.93 U |
| FOSA | 20 (1) | 2 (1) | <0.96 U | <0.91 U | *2.1* | <0.89 U | <0.89 U | 1.9 | 1.0 J | 1.3 J | <0.94 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.86 U | <0.81 U | <0.78 U | <0.79 U | <0.79 U | <0.78 U | <0.77 U | <0.73 U | <0.84 U |
| NMeFOSA | -- | -- | <0.42 U | <0.40 U | <0.39 U | <0.39 U | <0.39 U | <0.39 U | <0.38 U | <0.36 U | <0.41 U |
| NMeFOSE | -- | -- | <1.4 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.84 U | <0.79 U | <0.77 U | <0.77 U | <0.77 U | <0.76 U | <0.75 U | <0.71 U | <0.82 U |
| 4:2 FTS | -- | -- | <0.24 U | <0.22 U | <0.22 U | <0.22 U | 2.1 | <0.22 U | <0.21 U | <0.20 U | <0.23 U |
| 6:2 FTS | -- | -- | <2.5 U | 5.6 | <2.3 U | <2.3 U | 220 | <2.2 U | <2.2 U | <2.1 U | <2.4 U |
| 8:2 FTS | -- | -- | <0.45 U | <0.43 U | <0.41 U | <0.42 U | <0.42 U | <0.41 U | <0.41 U | <0.38 U | <0.44 U |
| 10:2 FTS | -- | -- | <0.66 U | <0.62 U | <0.60 U | <0.61 U | <0.61 U | <0.60 U | <0.59 U | <0.56 U | <0.64 U |
| DONA | 3,000 | 600 | <0.39 U | <0.37 U | <0.36 U | <0.36 U | <0.36 U | <0.36 U | <0.35 U | <0.33 U | <0.38 U |
| GenX | 300 | 30 | <1.5 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U |
| F-53B Major | -- | -- | <0.24 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.20 U | <0.23 U |
| F-53B Minor | -- | -- | <0.31 U | <0.30 U | <0.29 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.27 U | <0.31 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-061A | WS-062 | WS-062 | WS-063 | WS-064 | WS-065 | WS-066 | WS-067 | WS-067 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | DUP-381 (010521) | WS-062 (031021) | DUP-400 (031021) | WS-063 (020221) | WS-064 (020921) | WS-065 (031721) | WS-066 (021221) | WS-067 (121720) | WS-067 (031121) |
| | | Sample Date | 1/5/2021 | 3/10/2021 | 3/10/2021 | 2/2/2021 | 2/9/2021 | 3/17/2021 | 2/12/2021 | 12/17/2020 | 3/11/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | POET | POET |
| | | Sample Type | FD | N | FD | N | N | N | N | N | N |
| | | General Well Depth | Deep | Shallow | Shallow | Deep | Shallow | Deep | Shallow | | |
| | | Detailed Well Depth | 124 | 15 | 15 | 124 | 25 | 95 | 77 | | |
| | | Source | +, - | - | - | +, - | - | +, - | +, - | | |
| **Chemical Name** | **Recommended Enforcement Standard (ES)** | **Recommended Preventive Action Limit (PAL)** | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.82 U | ***24*** | ***25*** | <0.77 U | <0.73 U | <0.82 U | *4.6* | <0.81 U | <0.75 U |
| PFOS | 20 (1) | 2 (1) | <0.52 U | ***1.9*** | ***2.3*** | 0.67 J | 0.67 J | <0.52 U | <0.50 U | <0.51 U | 0.69 JN |
| PFBS | 450,000 | 90,000 | <0.19 U | 3.6 | 3.2 | <0.18 U | 0.25 J | <0.19 U | <0.18 U | <0.19 U | <0.18 U |
| PFHpA | -- | -- | <0.24 U | 13 | 12 | <0.23 U | 0.39 J | <0.24 U | 0.36 J | <0.24 U | <0.22 U |
| PFHxS | 40 | 4 | <0.55 U | 1.9 | 1.8 | <0.52 U | <0.49 U | <0.55 U | <0.52 U | <0.54 U | <0.50 U |
| PFNA | 30 | 3 | <0.26 U | <0.22 U | <0.24 U | <0.25 U | <0.23 U | <0.26 U | <0.25 U | <0.26 U | <0.24 U |
| PFDA | 300 | 60 | <0.30 U | <0.25 U | <0.28 U | <0.28 U | <0.27 U | <0.30 U | <0.28 U | <0.29 U | <0.27 U |
| PFDoA | 500 | 100 | <0.53 U | <0.45 U | <0.50 U | <0.50 U | <0.47 U | <0.53 U | <0.51 U | <0.52 U | <0.49 U |
| PFHxA | 150,000 | 30,000 | <0.56 U | 28 | 32 | <0.53 U | 0.75 J | <0.56 U | 0.70 J | <0.55 U | <0.51 U |
| PFTeA | 10,000 | 2,000 | <0.70 U | <0.60 U | <0.66 U | <0.66 U | <0.63 U | <0.70 U | <0.67 U | <0.69 U | <0.65 U |
| PFTriA | -- | -- | <1.3 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <1.1 U | <0.90 U | <0.99 U | <1.0 U | <0.95 U | <1.1 U | <1.0 U | <1.0 U | <0.97 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.3 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.2 U | <0.98 U | <1.1 U | <1.1 U | <1.0 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.3 U | 23 | 24 | <2.2 U | 2.6 J | <2.3 U | <2.2 U | <2.3 U | <2.1 U |
| PFPeA | -- | -- | <0.47 U | 33 | 35 | <0.44 U | 1.1 J | <0.47 U | 0.65 J | <0.47 U | <0.43 U |
| PFHxDA | -- | -- | <0.86 U | <0.73 U | <0.80 U | <0.81 U | <0.77 U | <0.86 U | <0.82 U | <0.85 U | <0.79 U |
| PFODA | 400,000 | 80,000 | <0.90 U | <0.77 U | <0.85 U | <0.85 U | <0.81 U | <0.90 U | <0.86 U | <0.89 U | <0.83 U |
| PFPeS | -- | -- | <0.29 U | 0.51 J | 0.48 J | <0.27 U | <0.26 U | <0.29 U | <0.28 U | <0.29 U | <0.27 U |
| PFHpS | -- | -- | <0.18 U | <0.16 U | <0.17 U | <0.17 U | <0.16 U | <0.18 U | <0.17 U | <0.18 U | <0.17 U |
| PFNS | -- | -- | <0.36 U | <0.30 U | <0.33 U | <0.34 U | <0.32 U | <0.36 U | <0.34 U | <0.35 U | <0.33 U |
| PFDS | -- | -- | <0.31 U | <0.26 U | <0.29 U | <0.29 U | <0.28 U | <0.31 U | <0.29 U | <0.30 U | <0.28 U |
| PFDoS | -- | -- | <0.93 U | <0.79 U | <0.88 U | <0.88 U | <0.84 U | <0.93 U | <0.89 U | <0.92 U | <0.86 U |
| FOSA | 20 (1) | 2 (1) | <0.94 U | <0.80 U | <0.88 U | <0.89 U | <0.84 U | <0.94 U | *0.90 J* | <0.93 U | *2.7* |
| NEtFOSA | 20 (1) | 2 (1) | <0.84 U | <0.71 U | <0.78 U | <0.79 U | <0.75 U | <0.84 U | <0.80 U | <0.83 U | <0.77 U |
| NMeFOSA | -- | -- | <0.41 U | <0.35 U | <0.39 U | <0.39 U | <0.37 U | <0.41 U | <0.40 U | <0.41 U | <0.38 U |
| NMeFOSE | -- | -- | <1.3 U | <1.1 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.82 U | <0.69 U | <0.77 U | <0.77 U | <0.73 U | <0.82 U | <0.78 U | <0.81 U | <0.75 U |
| 4:2 FTS | -- | -- | <0.23 U | <0.20 U | <0.22 U | <0.22 U | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U |
| 6:2 FTS | -- | -- | <2.4 U | <2.0 U | <2.3 U | <2.3 U | <2.2 U | <2.4 U | <2.3 U | <2.4 U | <2.2 U |
| 8:2 FTS | -- | -- | <0.44 U | <0.38 U | <0.42 U | <0.42 U | <0.40 U | <0.44 U | <0.42 U | <0.44 U | <0.41 U |
| 10:2 FTS | -- | -- | <0.64 U | <0.55 U | <0.60 U | <0.61 U | <0.58 U | <0.64 U | <0.62 U | <0.64 U | <0.59 U |
| DONA | 3,000 | 600 | <0.38 U | <0.33 U | <0.36 U | <0.36 U | <0.34 U | <0.39 U | <0.37 U | <0.38 U | <0.35 U |
| GenX | 300 | 30 | <1.4 U | <1.2 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U |
| F-53B Major | -- | -- | <0.23 U | <0.20 U | <0.22 U | <0.22 U | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U |
| F-53B Minor | -- | -- | <0.31 U | <0.26 U | <0.29 U | <0.29 U | <0.28 U | <0.31 U | <0.29 U | <0.30 U | 0.36 J |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-068 | WS-068 | WS-068 | WS-068 (PACE) | WS-069A | WS-069B | WS-071 | WS-072 | WS-073 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-068 (120120) | WS-068 (030221) | WS-068 (032421) | WS-068 (032421) | WS-069A (033021) | WS-069B (033021) | WS-071 (021221) | WS-072 (031121) | WS-073 (020421) |
| | | Sample Date | 12/1/2020 | 3/2/2021 | 3/24/2021 | 3/24/2021 | 3/30/2021 | 3/30/2021 | 2/12/2021 | 3/11/2021 | 2/4/2021 |
| | | Sample Event | POET | POET | POET | POET | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Shallow | Shallow | Shallow | Shallow | Deep | Shallow | Shallow | | Deep |
| | | Detailed Well Depth | 30 | 30 | 30 | 30 | 520 | 17-20 | 40 | | 110 |
| | | Source | - | - | - | - | +, - | - | - | | +, - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | ***480 D*** | ***620 D*** | ***620 D*** | ***570*** | <0.78 U | ***50*** | <0.76 U | <0.76 U | <0.72 U |
| PFOS | 20 (1) | 2 (1) | <0.48 U | ***4.4 JN*** | ***3.3*** | <8.9 U | <0.50 U | ***0.90 J*** | <0.48 U | <0.48 U | <0.46 U |
| PFBS | 450,000 | 90,000 | 2.9 | 3.2 | 3.4 | 3.8 J | <0.18 U | 0.72 J | <0.18 U | <0.18 U | <0.17 U |
| PFHpA | -- | -- | 73 | 85 | 78 J+ | 68 | <0.23 U | 4.0 | <0.22 U | <0.22 U | <0.21 U |
| PFHxS | 40 | 4 | ***46*** | ***54*** | ***53*** | ***44*** | <0.52 U | 0.61 J | <0.51 U | <0.51 U | <0.48 U |
| PFNA | 30 | 3 | *16* | *10* | *8.7* | *7.2 J* | <0.25 U | <0.23 U | <0.24 U | <0.24 U | <0.23 U |
| PFDA | 300 | 60 | <0.28 U | <0.28 U | <0.30 U | <2.3 U | 0.32 J | <0.27 U | <0.28 U | <0.28 U | <0.26 U |
| PFDoA | 500 | 100 | <0.49 U | <0.49 U | <0.53 U | <2.1 U | <0.50 U | <0.48 U | <0.49 U | <0.49 U | <0.47 U |
| PFHxA | 150,000 | 30,000 | 110 | 130 | 120 J+ | 120 | <0.53 U | 5.9 | <0.52 U | <0.52 U | <0.49 U |
| PFTeA | 10,000 | 2,000 | <0.65 U | <0.65 U | <0.71 U | <2.7 U | <0.67 U | <0.63 U | <0.65 U | <0.65 U | <0.62 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.3 U | <2.4 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| PFUnA | 3,000 | 600 | <0.98 U | <0.98 U | <1.1 U | <2.8 U | <1.0 U | <0.96 U | <0.98 U | <0.98 U | <0.93 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.3 U | <3.3 UJ | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.2 U | <4.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.0 U |
| PFBA | 10,000 | 2,000 | 30 | 34 | 36 | 31 | <2.2 U | 6.3 | <2.1 U | <2.1 U | <2.0 U |
| PFPeA | -- | -- | 160 | 170 | 200 | 170 | <0.45 U | 5.8 | <0.44 U | <0.44 U | <0.42 U |
| PFHxDA | -- | -- | <0.80 U | <0.79 U | <0.86 U | <3.6 U | <0.82 U | <0.77 U | <0.79 U | <0.80 U | <0.76 U |
| PFODA | 400,000 | 80,000 | <0.84 U | <0.84 U | <0.91 U | <4.5 U | <0.86 U | <0.82 U | <0.84 U | <0.84 U | <0.80 U |
| PFPeS | -- | -- | 2.9 | 3.4 | 3.1 | NA | <0.28 U | <0.26 U | <0.27 U | <0.27 U | <0.25 U |
| PFHpS | -- | -- | <0.17 U | 0.28 J | 0.25 J | <2.2 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.16 U |
| PFNS | -- | -- | <0.33 U | <0.33 U | <0.36 U | <3.2 U | <0.34 U | <0.32 U | <0.33 U | <0.33 U | <0.31 U |
| PFDS | -- | -- | <0.29 U | <0.29 U | <0.31 U | <3.5 UJ | <0.29 U | <0.28 U | <0.29 U | <0.29 U | <0.27 U |
| PFDoS | -- | -- | <0.87 U | <0.87 U | <0.94 U | <4.7 U | <0.89 U | <0.84 U | <0.86 U | <0.87 U | <0.82 U |
| FOSA | 20 (1) | 2 (1) | <0.88 U | <0.88 U | <0.95 U | <2.7 U | *6.1* | ***1.9*** | *2.9* | <0.88 U | 1.1 J |
| NEtFOSA | 20 (1) | 2 (1) | <0.78 U | <0.78 U | <0.84 U | <6.0 U | <0.80 U | <0.76 U | <0.78 U | <0.78 U | <0.74 U |
| NMeFOSA | -- | -- | <0.38 U | <0.38 U | <0.42 U | <5.6 U | <0.39 U | <0.37 U | <0.38 U | <0.38 U | <0.37 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.4 U | <5.7 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.76 U | <0.76 U | <0.82 U | <4.2 U | <0.78 U | <0.74 U | <0.76 U | <0.76 U | <0.72 U |
| 4:2 FTS | -- | -- | 1.6 J | 2.0 | 2.0 J- | <3.9 U | <0.22 U | <0.21 U | <0.21 U | <0.21 U | <0.20 U |
| 6:2 FTS | -- | -- | 81 | 98 | 91 | 70 | <2.3 U | <2.2 U | <2.2 U | <2.2 U | <2.1 U |
| 8:2 FTS | -- | -- | <0.41 U | <0.41 U | <0.44 U | <7.1 UJ | <0.42 U | <0.40 U | <0.41 U | <0.41 U | <0.39 U |
| 10:2 FTS | -- | -- | <0.60 U | <0.60 U | <0.65 U | <5.4 UJ | <0.61 U | <0.58 U | <0.60 U | <0.60 U | <0.57 U |
| DONA | 3,000 | 600 | <0.36 U | <0.36 U | <0.39 U | <2.2 U | <0.37 U | <0.35 U | <0.36 U | <0.36 U | <0.34 U |
| GenX | 300 | 30 | <1.3 U | <1.3 U | <1.5 U | <9.2 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U |
| F-53B Major | -- | -- | <0.21 U | <0.21 U | <0.23 U | <2.1 U | <0.22 U | <0.21 U | <0.21 U | <0.21 U | <0.20 U |
| F-53B Minor | -- | -- | <0.29 U | <0.29 U | <0.31 U | <2.9 U | <0.29 U | <0.28 U | <0.29 U | <0.29 U | <0.27 U |

Notes on Page 19.

**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-074 | WS-075 | WS-077 | WS-078 | WS-079 | WS-082 | WS-082B | WS-082C | WS-082D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-074 (031621) | WS-075 (031021) | WS-077 (030221) | WS-078 (031721) | WS-079 (031721) | WS-082 (031121) | WS-082B (031121) | WS-082C (031121) | WS-082D (031121) |
| | | Sample Date | 3/16/2021 | 3/10/2021 | 3/2/2021 | 3/17/2021 | 3/17/2021 | 3/11/2021 | 3/11/2021 | 3/11/2021 | 3/11/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Deep | Deep | Deep | Deep | Deep | | Shallow | Shallow | Shallow |
| | | Detailed Well Depth | 182 | 100 | 120 | 129 | 97 | | 19 | 20 | 28 |
| | | Source | +. - | +. - | - | +, - | +, - | | - | - | +, - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.80 U | <0.76 U | <0.82 U | <0.75 U | *0.79 J* | <0.75 U | ***72*** | ***81*** | ***770 D*** |
| PFOS | 20 (1) | 2 (1) | *0.58 J* | <0.48 U | <0.52 U | <0.48 U | *1.1 J* | <0.48 U | ***1.5 J*** | <0.49 U | <0.50 U |
| PFBS | 450,000 | 90,000 | <0.19 U | <0.18 U | <0.19 U | <0.18 U | <0.18 U | <0.18 U | 2.0 | 0.64 J | <0.18 U |
| PFHpA | -- | -- | <0.24 U | <0.22 U | <0.24 U | <0.22 U | <0.23 U | <0.22 U | 1.5 J | 2.6 | 14 |
| PFHxS | 40 | 4 | <0.54 U | <0.51 U | <0.55 U | <0.50 U | <0.52 U | <0.50 U | <0.50 U | 1.3 J | <0.52 U |
| PFNA | 30 | 3 | <0.26 U | <0.24 U | <0.26 U | <0.24 U | <0.25 U | <0.24 U | <0.24 U | <0.24 U | <0.25 U |
| PFDA | 300 | 60 | <0.29 U | <0.28 U | <0.30 U | <0.27 U | <0.28 U | <0.27 U | <0.27 U | <0.28 U | <0.29 U |
| PFDoA | 500 | 100 | <0.52 U | <0.49 U | <0.53 U | <0.49 U | <0.50 U | <0.49 U | <0.49 U | <0.50 U | <0.51 U |
| PFHxA | 150,000 | 30,000 | <0.55 U | <0.52 U | <0.56 U | <0.51 U | <0.53 U | <0.51 U | 4.2 | 4.4 | 21 |
| PFTeA | 10,000 | 2,000 | <0.69 U | <0.65 U | <0.70 U | <0.64 U | <0.67 U | <0.64 U | <0.65 U | <0.66 U | <0.67 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <1.0 U | <0.98 U | <1.1 U | <0.97 U | <1.0 U | <0.97 U | <0.97 U | <1.0 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.3 U | <2.1 U | <2.3 U | <2.1 U | <2.2 U | <2.1 U | 3.0 J | 3.9 J | 4.3 J |
| PFPeA | -- | -- | <0.46 U | <0.44 U | <0.47 U | <0.43 U | <0.45 U | <0.43 U | 1.7 J | 2.7 | 14 |
| PFHxDA | -- | -- | <0.84 U | <0.80 U | <0.85 U | <0.79 U | <0.81 U | <0.79 U | <0.79 U | <0.81 U | <0.82 U |
| PFODA | 400,000 | 80,000 | <0.89 U | <0.84 U | <0.90 U | <0.83 U | <0.86 U | <0.83 U | <0.83 U | <0.85 U | <0.86 U |
| PFPeS | -- | -- | <0.28 U | <0.27 U | <0.29 U | <0.26 U | <0.27 U | <0.26 U | <0.27 U | 0.38 J | <0.28 U |
| PFHpS | -- | -- | <0.18 U | <0.17 U | <0.18 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U |
| PFNS | -- | -- | <0.35 U | <0.33 U | <0.36 U | <0.33 U | <0.34 U | <0.33 U | <0.33 U | <0.34 U | <0.34 U |
| PFDS | -- | -- | <0.30 U | <0.29 U | <0.31 U | <0.28 U | <0.29 U | <0.28 U | <0.28 U | <0.29 U | <0.29 U |
| PFDoS | -- | -- | <0.92 U | <0.87 U | <0.93 U | <0.86 U | <0.89 U | <0.86 U | <0.86 U | <0.88 U | <0.89 U |
| FOSA | 20 (1) | 2 (1) | *2.1* | <0.88 U | *2.6* | <0.87 U | *3.6* | 0.95 J | <0.87 U | <0.89 U | <0.90 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.82 U | <0.78 U | <0.84 U | <0.77 U | <0.79 U | <0.77 U | <0.77 U | <0.79 U | <0.80 U |
| NMeFOSA | -- | -- | <0.41 U | <0.39 U | <0.41 U | <0.38 U | <0.39 U | <0.38 U | <0.38 U | <0.39 U | <0.40 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.80 U | <0.76 U | <0.82 U | <0.75 U | <0.78 U | <0.75 U | <0.75 U | <0.77 U | <0.78 U |
| 4:2 FTS | -- | -- | <0.23 U | <0.21 U | <0.23 U | <0.21 U | <0.22 U | <0.21 U | <0.21 U | <0.22 U | <0.22 U |
| 6:2 FTS | -- | -- | <2.4 U | <2.2 U | <2.4 U | <2.2 U | <2.3 U | <2.2 U | <2.2 U | <2.3 U | <2.3 U |
| 8:2 FTS | -- | -- | <0.43 U | <0.41 U | <0.44 U | <0.41 U | <0.42 U | <0.41 U | <0.41 U | <0.42 U | <0.42 U |
| 10:2 FTS | -- | -- | <0.63 U | <0.60 U | <0.64 U | <0.59 U | <0.61 U | <0.59 U | <0.59 U | <0.61 U | <0.62 U |
| DONA | 3,000 | 600 | <0.38 U | <0.36 U | <0.38 U | <0.35 U | <0.37 U | <0.35 U | <0.35 U | <0.36 U | <0.37 U |
| GenX | 300 | 30 | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U |
| F-53B Major | -- | -- | <0.23 U | <0.21 U | <0.23 U | <0.21 U | <0.22 U | <0.21 U | <0.21 U | <0.22 U | <0.22 U |
| F-53B Minor | -- | -- | <0.30 U | <0.29 U | <0.31 U | <0.28 U | <0.29 U | <0.28 U | <0.28 U | <0.29 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-083 | WS-084 | WS-085 | WS-087 | WS-090 | WS-093 | WS-094 | WS-096 | WS-097 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-083 (032321) | WS-084 (031021) | WS-085 (031721) | WS-087 (030921) | WS-090 (011921) | WS-093 (032421) | WS-094 (031121) | WS-096 (030221) | WS-097 (020321) |
| | | Sample Date | 3/23/2021 | 3/10/2021 | 3/17/2021 | 3/9/2021 | 1/19/2021 | 3/24/2021 | 3/11/2021 | 3/2/2021 | 2/3/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | POET | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Deep | Deep | Deep | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | Detailed Well Depth | 400 | 122 | 118 | 15-20 | 30 | 45 | | 27 | |
| | | Source | - | +, - | +, - | - | +, - | +, - | | - | |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.70 U | <0.76 U | <0.76 U | 1.9 | ***36*** | <0.74 U | *1.6 J* | ***110 J+*** | *3.8* |
| PFOS | 20 (1) | 2 (1) | <0.45 U | <0.48 U | <0.48 U | <0.48 U | ***0.85 J*** | <0.47 U | <0.50 U | ***2.8*** | *0.72 J* |
| PFBS | 450,000 | 90,000 | <0.17 U | <0.18 U | <0.18 U | <0.18 U | 0.52 J | 0.19 J | <0.19 U | 0.59 J | 2.5 |
| PFHpA | -- | -- | <0.21 U | <0.22 U | <0.22 U | <0.22 U | 5.3 | <0.22 U | 1.3 J | 18 | 2.5 |
| PFHxS | 40 | 4 | <0.47 U | <0.51 U | <0.51 U | <0.51 U | 3.7 | <0.50 U | <0.53 U | *11* | 0.95 J |
| PFNA | 30 | 3 | <0.22 U | <0.24 U | <0.24 U | <0.24 U | 2.1 | <0.24 U | <0.25 U | *3.3* | <0.25 U |
| PFDA | 300 | 60 | 0.27 J | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.27 U | <0.29 U | <0.29 U | <0.28 U |
| PFDoA | 500 | 100 | <0.46 U | <0.49 U | <0.49 U | <0.49 U | <0.50 U | <0.48 U | <0.51 U | <0.51 U | <0.50 U |
| PFHxA | 150,000 | 30,000 | <0.48 U | <0.52 U | <0.52 U | 1.1 J | 8.3 | <0.51 U | 1.5 J | 28 | 3.4 |
| PFTeA | 10,000 | 2,000 | <0.60 U | <0.65 U | <0.65 U | <0.65 U | <0.67 U | <0.64 U | <0.68 U | <0.68 U | <0.66 U |
| PFTriA | -- | -- | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.91 U | <0.98 U | <0.99 U | <0.99 U | <1.0 U | <0.96 U | <1.0 U | <1.0 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.1 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <0.99 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.0 U | <2.1 U | <2.2 U | <2.2 U | 3.6 J | <2.1 U | 6.2 | 12 | 6.6 |
| PFPeA | -- | -- | <0.41 U | <0.44 U | <0.44 U | 1.1 J | 11 | <0.43 U | 2.1 | 30 | 5.0 |
| PFHxDA | -- | -- | <0.74 U | <0.79 U | <0.80 U | <0.80 U | <0.82 U | <0.78 U | <0.82 U | <0.83 U | <0.81 U |
| PFODA | 400,000 | 80,000 | <0.78 U | <0.84 U | <0.84 U | <0.84 U | <0.86 U | <0.82 U | <0.87 U | <0.88 U | <0.85 U |
| PFPeS | -- | -- | <0.25 U | <0.27 U | <0.27 U | <0.27 U | 0.30 J | <0.26 U | <0.28 U | 0.68 J | <0.27 U |
| PFHpS | -- | -- | <0.16 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U |
| PFNS | -- | -- | <0.31 U | <0.33 U | <0.33 U | <0.33 U | <0.34 U | <0.32 U | <0.34 U | <0.35 U | <0.34 U |
| PFDS | -- | -- | <0.27 U | <0.28 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.30 U | <0.29 U |
| PFDoS | -- | -- | <0.80 U | <0.86 U | <0.87 U | <0.87 U | <0.89 U | <0.85 U | <0.90 U | <0.90 U | <0.88 U |
| FOSA | 20 (1) | 2 (1) | <0.81 U | <0.87 U | <0.88 U | <0.88 U | <0.90 U | *2.2* | *1.1 J* | <0.91 U | <0.89 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.72 U | <0.77 U | <0.78 U | <0.78 U | <0.80 U | <0.76 U | <0.80 U | <0.81 U | <0.79 U |
| NMeFOSA | -- | -- | <0.36 U | <0.38 U | <0.39 U | <0.39 U | <0.39 U | <0.38 U | <0.40 U | <0.40 U | <0.39 U |
| NMeFOSE | -- | -- | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.70 U | <0.76 U | <0.76 U | <0.76 U | <0.78 U | <0.74 U | <0.79 U | <0.79 U | <0.77 U |
| 4:2 FTS | -- | -- | <0.20 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U |
| 6:2 FTS | -- | -- | <2.1 U | <2.2 U | <2.2 U | <2.2 U | 6.1 | <2.2 U | <2.3 U | 3.1 J | <2.3 U |
| 8:2 FTS | -- | -- | <0.38 U | <0.41 U | <0.41 U | <0.41 U | <0.42 U | <0.40 U | <0.43 U | <0.43 U | <0.42 U |
| 10:2 FTS | -- | -- | <0.56 U | <0.60 U | <0.60 U | <0.60 U | <0.61 U | <0.59 U | <0.62 U | <0.62 U | <0.61 U |
| DONA | 3,000 | 600 | <0.33 U | <0.36 U | <0.36 U | <0.36 U | <0.37 U | <0.35 U | <0.37 U | <0.37 U | <0.36 U |
| GenX | 300 | 30 | <1.2 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.4 U |
| F-53B Major | -- | -- | <0.20 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.22 U |
| F-53B Minor | -- | -- | <0.27 U | <0.28 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.30 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-099 | WS-100 | WS-101 | WS-102 | WS-103 | WS-104 | WS-106 | WS-106 | WS-106 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-099 (030221) | WS-100 (031021) | WS-101 (031121) | WS-102 (031621) | WS-103 (030921) | WS-104 (031021) | WS-106 (112520) | WS-106 (120420) | WS-106 (012221) |
| | | Sample Date | 3/2/2021 | 3/10/2021 | 3/11/2021 | 3/16/2021 | 3/9/2021 | 3/10/2021 | 11/25/2020 | 12/4/2020 | 1/22/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | POET | POET | POET |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Shallow | Shallow | Shallow |
| | | Detailed Well Depth | 18 | 28 | 20 | | 622 | >100 | 18 | 18 | 18 |
| | | Source | - | + | - | | + | - | - | - | - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | *5.0* | *6.7* | ***8.4*** | 1.8 | <0.80 U | <0.81 U | ***350*** | ***320*** | ***370 D*** |
| PFOS | 20 (1) | 2 (1) | *1.4 J* | *1.4 J* | ***25*** | <0.50 U | <0.51 U | <0.51 U | ***2.6*** | <0.53 U | <0.47 U |
| PFBS | 450,000 | 90,000 | 1.2 J | 1.6 J | 0.61 J | <0.18 U | <0.19 U | 0.25 J | 1.8 | 1.6 J | 2.2 |
| PFHpA | -- | -- | 2.0 | 2.9 | 12 | 0.88 J | <0.23 U | <0.24 U | 33 | 33 | 40 |
| PFHxS | 40 | 4 | 1.2 J | 1.0 J | 1.7 J | <0.52 U | <0.53 U | <0.54 U | *24* | *22* | *27* |
| PFNA | 30 | 3 | <0.26 U | <0.25 U | *4.6* | <0.25 U | <0.25 U | <0.26 U | *3.8* | *4.1* | *3.3* |
| PFDA | 300 | 60 | <0.29 U | <0.28 U | <0.29 U | <0.29 U | <0.29 U | <0.29 U | <0.28 U | <0.30 U | <0.27 U |
| PFDoA | 500 | 100 | <0.52 U | <0.50 U | <0.52 U | <0.51 U | <0.52 U | <0.52 U | <0.50 U | <0.54 U | <0.48 U |
| PFHxA | 150,000 | 30,000 | 2.4 | 6.1 | 15 | 1.9 | <0.54 U | <0.55 U | 62 | 55 | 67 |
| PFTeA | 10,000 | 2,000 | <0.69 U | <0.66 U | <0.69 U | <0.67 U | <0.68 U | <0.69 U | <0.66 U | <0.71 U | <0.64 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| PFUnA | 3,000 | 600 | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <1.0 U | <0.99 U | <1.1 U | <0.96 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U |
| PFBA | 10,000 | 2,000 | 2.8 J | 4.4 J | 13 | 3.9 J | <2.3 U | <2.3 U | 18 | 17 | 18 |
| PFPeA | -- | -- | 2.2 | 4.3 | 26 | 2.7 | <0.46 U | <0.47 U | 70 | 62 | 83 |
| PFHxDA | -- | -- | <0.84 U | <0.81 U | <0.84 U | <0.82 U | <0.83 U | <0.85 U | <0.80 U | <0.87 U | <0.77 U |
| PFODA | 400,000 | 80,000 | <0.89 U | <0.85 U | <0.89 U | <0.86 U | <0.88 U | <0.89 U | <0.85 U | <0.92 U | <0.82 U |
| PFPeS | -- | -- | <0.28 U | <0.27 U | <0.28 U | <0.28 U | <0.28 U | <0.29 U | 1.5 J | 1.3 J | 1.5 J |
| PFHpS | -- | -- | <0.18 U | <0.17 U | <0.18 U | <0.17 U | <0.18 U | <0.18 U | <0.17 U | <0.18 U | <0.17 U |
| PFNS | -- | -- | <0.35 U | <0.34 U | <0.35 U | <0.34 U | <0.35 U | <0.35 U | <0.33 U | <0.36 U | <0.32 U |
| PFDS | -- | -- | <0.30 U | <0.29 U | <0.30 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U | <0.31 U | <0.28 U |
| PFDoS | -- | -- | <0.92 U | <0.88 U | <0.92 U | <0.89 U | <0.91 U | <0.92 U | <0.88 U | <0.94 U | <0.84 U |
| FOSA | 20 (1) | 2 (1) | <0.93 U | <0.89 U | <0.93 U | <0.90 U | 2.0 | <0.93 U | <0.89 U | ***1.0 J*** | <0.85 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.82 U | <0.79 U | <0.82 U | <0.80 U | <0.82 U | <0.83 U | <0.79 U | <0.85 U | <0.76 U |
| NMeFOSA | -- | -- | <0.41 U | <0.39 U | <0.41 U | <0.40 U | <0.40 U | <0.41 U | <0.39 U | <0.42 U | <0.37 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.80 U | <0.77 U | <0.80 U | <0.78 U | <0.80 U | <0.81 U | <0.77 U | <0.83 U | <0.74 U |
| 4:2 FTS | -- | -- | <0.23 U | <0.22 U | <0.23 U | <0.22 U | <0.23 U | <0.23 U | 0.73 J | 0.62 J | 0.86 J |
| 6:2 FTS | -- | -- | <2.4 U | <2.3 U | <2.4 U | <2.3 U | <2.3 U | <2.4 U | 21 | 19 | 31 |
| 8:2 FTS | -- | -- | <0.44 U | <0.42 U | <0.44 U | <0.42 U | 0.90 J | <0.44 U | <0.42 U | <0.45 U | <0.40 U |
| 10:2 FTS | -- | -- | <0.63 U | <0.61 U | <0.63 U | <0.62 U | <0.63 U | <0.64 U | <0.61 U | <0.65 U | <0.58 U |
| DONA | 3,000 | 600 | <0.38 U | <0.36 U | <0.38 U | <0.37 U | <0.38 U | <0.38 U | <0.36 U | <0.39 U | <0.35 U |
| GenX | 300 | 30 | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.4 U | <1.5 U | <1.3 U |
| F-53B Major | -- | -- | <0.23 U | <0.22 U | <0.23 U | <0.22 U | <0.23 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U |
| F-53B Minor | -- | -- | <0.30 U | <0.29 U | <0.30 U | <0.29 U | <0.30 U | <0.30 U | <0.29 U | <0.31 U | <0.28 U |

Notes on Page 19.

**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-106R | WS-107 | WS-108 | WS-109 | WS-110A | WS-111 | WS-112 | WS-113 | WS-117 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-106R (030821) | WS-107 (030321) | WS-108 (020521) | WS-109 (030321) | WS-110A (031021) | WS-111 (022321) | WS-112 (020921) | WS-113 (031721) | WS-117 (031021) |
| | | Sample Date | 3/8/2021 | 3/3/2021 | 2/5/2021 | 3/3/2021 | 3/10/2021 | 2/23/2021 | 2/9/2021 | 3/17/2021 | 3/10/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Shallow | Deep | | Shallow | Deep | Shallow | Deep | Deep | Deep |
| | | Detailed Well Depth | 37 | 109 | | | 88 | 17 | 87 | 100 | 121 |
| | | Source | + | +, - | | | +, - | - | +, - | +, - | +, - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | ***660 D*** | <0.76 U | <0.76 U | *4.2* | <0.73 U | *2.8* | <0.74 U | <0.78 U | <0.77 U |
| PFOS | 20 (1) | 2 (1) | ***1.3 J*** | <0.48 U | <0.48 U | *2.5* | <0.46 U | <0.50 U | <0.47 U | <0.50 U | <0.49 U |
| PFBS | 450,000 | 90,000 | 1.9 | <0.18 U | <0.18 U | 0.67 J | <0.17 U | 0.33 J | <0.17 U | <0.18 U | <0.18 U |
| PFHpA | -- | -- | 46 | <0.22 U | <0.22 U | 1.3 J | <0.22 U | 1.4 J | <0.22 U | <0.23 U | <0.23 U |
| PFHxS | 40 | 4 | *37* | <0.51 U | <0.51 U | 0.96 J | <0.49 U | <0.53 U | <0.50 U | <0.52 U | <0.51 U |
| PFNA | 30 | 3 | 2.5 | <0.24 U | <0.24 U | <0.24 U | <0.23 U | <0.25 U | <0.23 U | <0.25 U | <0.24 U |
| PFDA | 300 | 60 | <0.28 U | <0.28 U | <0.28 U | <0.28 U | <0.27 U | <0.29 U | <0.27 U | <0.29 U | <0.28 U |
| PFDoA | 500 | 100 | <0.50 U | <0.49 U | <0.49 U | <0.49 U | <0.47 U | <0.51 U | <0.48 U | <0.51 U | <0.50 U |
| PFHxA | 150,000 | 30,000 | 86 | <0.52 U | <0.52 U | 2.1 | <0.50 U | 2.3 JN | <0.50 U | <0.53 U | <0.52 U |
| PFTeA | 10,000 | 2,000 | <0.66 U | <0.65 U | <0.65 U | <0.65 U | <0.63 U | <0.68 U | <0.63 U | <0.67 U | <0.66 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.99 U | <0.98 U | <0.98 U | <0.99 U | <0.95 U | <1.0 U | <0.96 U | <1.0 U | <0.99 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.2 U | *5.6* | <1.1 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | 2.0 J | <1.0 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | 22 | <2.1 U | <2.1 U | 3.2 J | <2.1 U | 7.6 | <2.1 U | <2.2 U | <2.2 U |
| PFPeA | -- | -- | 110 | <0.44 U | <0.44 U | 2.7 | <0.42 U | 3.1 | <0.43 U | <0.45 U | <0.44 U |
| PFHxDA | -- | -- | <0.80 U | <0.80 U | <0.79 U | <0.80 U | <0.77 U | <0.82 U | <0.77 U | <0.82 U | <0.80 U |
| PFODA | 400,000 | 80,000 | <0.85 U | <0.84 U | <0.84 U | <0.84 U | <0.81 U | <0.87 U | <0.82 U | <0.86 U | <0.85 U |
| PFPeS | -- | -- | 2.5 | <0.27 U | <0.27 U | <0.27 U | <0.26 U | <0.28 U | <0.26 U | <0.28 U | <0.27 U |
| PFHpS | -- | -- | <0.17 U | <0.17 U | <0.17 U | <0.17 U | <0.16 U | <0.18 U | <0.17 U | <0.17 U | <0.17 U |
| PFNS | -- | -- | <0.33 U | <0.33 U | <0.33 U | <0.33 U | <0.32 U | <0.34 U | <0.32 U | <0.34 U | <0.33 U |
| PFDS | -- | -- | <0.29 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.30 U | <0.28 U | <0.29 U | <0.29 U |
| PFDoS | -- | -- | <0.88 U | <0.87 U | <0.86 U | <0.87 U | <0.84 U | <0.90 U | <0.84 U | <0.89 U | <0.88 U |
| FOSA | 20 (1) | 2 (1) | <0.89 U | *3.5* | *1.7 J* | <0.88 U | <0.84 U | <0.91 U | <0.85 U | <0.90 U | <0.88 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.79 U | <0.78 U | <0.77 U | <0.78 U | <0.75 U | <0.81 U | <0.76 U | <0.80 U | <0.79 U |
| NMeFOSA | -- | -- | <0.39 U | <0.38 U | 0.59 J | <0.39 U | <0.37 U | <0.40 U | <0.37 U | <0.40 U | <0.39 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.77 U | <0.76 U | *0.85 J* | <0.76 U | <0.73 U | <0.79 U | <0.74 U | <0.78 U | <0.77 U |
| 4:2 FTS | -- | -- | 0.96 J | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U |
| 6:2 FTS | -- | -- | 29 | <2.2 U | <2.2 U | <2.2 U | <2.2 U | <2.3 U | <2.2 U | <2.3 U | <2.3 U |
| 8:2 FTS | -- | -- | <0.42 U | <0.41 U | <0.41 U | <0.41 U | <0.40 U | <0.43 U | <0.40 U | <0.42 U | <0.42 U |
| 10:2 FTS | -- | -- | <0.61 U | <0.60 U | <0.60 U | <0.60 U | <0.58 U | <0.62 U | <0.58 U | <0.62 U | <0.60 U |
| DONA | 3,000 | 600 | <0.36 U | <0.36 U | <0.36 U | <0.36 U | <0.34 U | <0.37 U | <0.35 U | <0.37 U | <0.36 U |
| GenX | 300 | 30 | <1.4 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U |
| F-53B Major | -- | -- | 0.25 J | <0.21 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U |
| F-53B Minor | -- | -- | <0.29 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.30 U | <0.28 U | <0.29 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-118A | WS-118B | WS-119 | WS-120 | WS-121A | WS-121B | WS-122 | WS-123 | WS-125 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-118A (020121) | WS-118B (020121) | WS-119 (032421) | WS-120 (032421) | WS-121A (032321) | WS-121B (030221) | WS-122 (031021) | WS-123 (021021) | WS-125 (031021) |
| | | Sample Date | 2/1/2021 | 2/1/2021 | 3/24/2021 | 3/24/2021 | 3/23/2021 | 3/2/2021 | 3/10/2021 | 2/10/2021 | 3/10/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | N | N | N | N |
| | | General Well Depth | Shallow | Shallow | | Deep | Shallow | Shallow | Shallow | Deep | Shallow |
| | | Detailed Well Depth | 18 | 41 | | 127 | | | 20 | 98 | |
| | | Source | - | +, - | | +, - | | | - | +, - | |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.78 U | <0.76 U | <0.74 U | <0.81 U | *1.4 J* | *2.6* | <0.74 U | *0.93 J* | <0.74 U |
| PFOS | 20 (1) | 2 (1) | <0.50 U | <0.48 U | <0.47 U | <0.52 U | *1.8* | *0.66 J* | <0.47 U | *1.1 J* | <0.47 U |
| PFBS | 450,000 | 90,000 | <0.18 U | <0.18 U | <0.17 U | <0.19 U | 0.63 J | <0.19 U | 0.20 J | <0.18 U | <0.17 U |
| PFHpA | -- | -- | <0.23 U | <0.22 U | <0.22 U | <0.24 U | 0.30 J | 0.80 J | <0.22 U | <0.23 U | <0.22 U |
| PFHxS | 40 | 4 | <0.53 U | <0.51 U | <0.50 U | <0.54 U | 1.5 J | <0.56 U | 0.65 J | <0.52 U | <0.49 U |
| PFNA | 30 | 3 | <0.25 U | <0.24 U | <0.24 U | <0.26 U | <0.24 U | <0.26 U | <0.23 U | <0.25 U | <0.23 U |
| PFDA | 300 | 60 | <0.29 U | <0.28 U | <0.27 U | <0.30 U | <0.28 U | <0.30 U | <0.27 U | <0.28 U | <0.27 U |
| PFDoA | 500 | 100 | <0.51 U | <0.49 U | <0.48 U | <0.52 U | <0.49 U | <0.54 U | <0.48 U | <0.50 U | <0.48 U |
| PFHxA | 150,000 | 30,000 | <0.53 U | <0.52 U | <0.51 U | <0.55 U | <0.52 U | 2.2 | <0.50 U | <0.53 U | <0.50 U |
| PFTeA | 10,000 | 2,000 | <0.67 U | <0.65 U | <0.64 U | <0.70 U | <0.65 U | <0.71 U | <0.63 U | <0.66 U | <0.63 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U | <1.2 U | <1.1 U |
| PFUnA | 3,000 | 600 | <1.0 U | <0.98 U | <0.96 U | <1.0 U | <0.99 U | <1.1 U | <0.95 U | <1.0 U | <0.95 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.3 U | <1.1 U | <1.2 U | <1.1 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.2 U | <1.0 U | <1.1 U | <1.0 U |
| PFBA | 10,000 | 2,000 | <2.2 U | <2.1 U | <2.1 U | <2.3 U | 3.4 J | <2.3 U | <2.1 U | <2.2 U | <2.1 U |
| PFPeA | -- | -- | 0.45 J | <0.44 U | <0.43 U | <0.47 U | 0.60 J | 1.1 J | <0.43 U | <0.44 U | <0.42 U |
| PFHxDA | -- | -- | <0.82 U | <0.79 U | <0.78 U | <0.85 U | <0.80 U | <0.87 U | <0.77 U | <0.81 U | <0.77 U |
| PFODA | 400,000 | 80,000 | <0.87 U | <0.84 U | <0.82 U | <0.90 U | <0.84 U | <0.92 U | <0.82 U | <0.85 U | <0.81 U |
| PFPeS | -- | -- | <0.28 U | <0.27 U | <0.26 U | <0.29 U | 0.43 J | <0.29 U | <0.26 U | <0.27 U | <0.26 U |
| PFHpS | -- | -- | <0.18 U | <0.17 U | <0.17 U | <0.18 U | <0.17 U | <0.19 U | <0.16 U | <0.17 U | <0.16 U |
| PFNS | -- | -- | <0.34 U | <0.33 U | <0.32 U | <0.35 U | <0.33 U | <0.36 U | <0.32 U | <0.34 U | <0.32 U |
| PFDS | -- | -- | <0.29 U | <0.29 U | <0.28 U | <0.31 U | <0.29 U | <0.31 U | <0.28 U | <0.29 U | <0.28 U |
| PFDoS | -- | -- | <0.89 U | <0.86 U | <0.85 U | <0.93 U | <0.87 U | <0.94 U | <0.84 U | <0.88 U | <0.84 U |
| FOSA | 20 (1) | 2 (1) | <0.90 U | <0.87 U | 1.2 J | *4.1* | <0.88 U | <0.95 U | <0.85 U | *3.5* | 1.0 J |
| NEtFOSA | 20 (1) | 2 (1) | <0.80 U | <0.77 U | <0.76 U | <0.83 U | <0.78 U | <0.85 U | <0.75 U | <0.79 U | <0.75 U |
| NMeFOSA | -- | -- | <0.40 U | <0.38 U | <0.38 U | <0.41 U | <0.39 U | <0.42 U | <0.37 U | <0.39 U | <0.37 U |
| NMeFOSE | -- | -- | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.4 U | <1.2 U | <1.3 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.78 U | <0.76 U | <0.74 U | <0.81 U | <0.76 U | <0.83 U | <0.74 U | <0.77 U | <0.74 U |
| 4:2 FTS | -- | -- | <0.22 U | <0.21 U | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U | <0.22 U | <0.21 U |
| 6:2 FTS | -- | -- | <2.3 U | <2.2 U | <2.2 U | <2.4 U | <2.2 U | <2.4 U | <2.2 U | <2.3 U | <2.2 U |
| 8:2 FTS | -- | -- | <0.42 U | <0.41 U | <0.40 U | <0.44 U | <0.41 U | <0.45 U | <0.40 U | <0.42 U | <0.40 U |
| 10:2 FTS | -- | -- | <0.62 U | <0.60 U | <0.58 U | <0.64 U | <0.60 U | <0.65 U | <0.58 U | <0.61 U | <0.58 U |
| DONA | 3,000 | 600 | <0.37 U | <0.36 U | <0.35 U | <0.38 U | <0.36 U | <0.39 U | <0.35 U | <0.36 U | <0.35 U |
| GenX | 300 | 30 | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.5 U | <1.3 U | <1.4 U | <1.3 U |
| F-53B Major | -- | -- | <0.22 U | <0.21 U | <0.21 U | <0.23 U | <0.22 U | <0.23 U | <0.21 U | <0.22 U | <0.21 U |
| F-53B Minor | -- | -- | <0.29 U | <0.29 U | <0.28 U | <0.31 U | <0.29 U | <0.31 U | <0.28 U | <0.29 U | <0.28 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-127 | WS-127 | WS-128 | WS-128 | WS-130 | WS-131 | WS-132 | WS-135 | WS-136 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-127 (101720) | DUP-372 (101720) | WS-128 (121720) | DUP-379 (121720) | WS-130 (031021) | WS-131 (033121) | WS-132 (022321) | WS-135 (022321) | WS-136 (022321) |
| | | Sample Date | 10/17/2020 | 10/17/2020 | 12/17/2020 | 12/17/2020 | 3/10/2021 | 3/31/2021 | 2/23/2021 | 2/23/2021 | 2/23/2021 |
| | | Sample Event | Fall 2020 | Fall 2020 | Fall 2020 | Fall 2020 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | FD | N | FD | N | N | N | N | N |
| | | General Well Depth | Deep | Deep | Shallow | Shallow | Deep | Shallow | Shallow | Deep | Shallow |
| | | Detailed Well Depth | 112 | 112 | | | 506 | 28-30 | 21 | 109 | 25 |
| | | Source | + | + | | | +, - | - | - | +, - | - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.76 U | <0.77 U | <0.75 U | <0.74 U | <0.80 U | 1.2 J | <0.73 U | <0.75 U | <0.74 U |
| PFOS | 20 (1) | 2 (1) | <0.48 U | <0.49 U | <0.47 U | <0.47 U | <0.51 U | 0.57 J | <0.46 U | <0.48 U | <0.47 U |
| PFBS | 450,000 | 90,000 | <0.18 U | <0.18 U | <0.18 U | <0.17 U | <0.19 U | 0.38 J | 0.78 JN | <0.18 U | <0.18 U |
| PFHpA | -- | -- | <0.22 U | <0.23 U | <0.22 U | <0.22 U | <0.24 U | 0.61 J | <0.21 U | <0.22 U | <0.22 U |
| PFHxS | 40 | 4 | <0.51 U | <0.51 U | <0.50 U | <0.49 U | <0.54 U | <0.52 U | <0.49 U | <0.50 U | <0.50 U |
| PFNA | 30 | 3 | <0.24 U | <0.24 U | <0.24 U | <0.23 U | <0.25 U | <0.25 U | <0.23 U | <0.24 U | <0.24 U |
| PFDA | 300 | 60 | <0.28 U | <0.28 U | <0.27 U | <0.27 U | <0.29 U | <0.28 U | <0.27 U | <0.27 U | <0.27 U |
| PFDoA | 500 | 100 | <0.49 U | <0.50 U | <0.48 U | <0.48 U | <0.52 U | <0.50 U | <0.47 U | <0.49 U | <0.48 U |
| PFHxA | 150,000 | 30,000 | <0.52 U | <0.52 U | <0.51 U | <0.50 U | <0.55 U | 1.0 J | 1.0 J | <0.51 U | <0.51 U |
| PFTeA | 10,000 | 2,000 | <0.65 U | <0.66 U | <0.64 U | <0.63 U | <0.69 U | <0.67 U | <0.63 U | <0.64 U | <0.64 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U |
| PFUnA | 3,000 | 600 | <0.98 U | <0.99 U | <0.96 U | <0.95 U | <1.0 U | <1.0 U | <0.94 U | <0.97 U | <0.96 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U | <1.1 U | <1.1 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.1 U | <2.2 U | <2.1 U | <2.1 U | <2.3 U | 2.9 J | 3.4 J | <2.1 U | <2.1 U |
| PFPeA | -- | -- | <0.44 U | <0.44 U | <0.43 U | <0.42 U | <0.46 U | 1.1 J | 1.1 J | <0.43 U | <0.43 U |
| PFHxDA | -- | -- | <0.79 U | <0.80 U | <0.78 U | <0.77 U | <0.84 U | <0.81 U | <0.76 U | <0.79 U | <0.78 U |
| PFODA | 400,000 | 80,000 | <0.84 UJ | <0.85 U | <0.82 U | <0.81 U | <0.89 U | <0.86 U | <0.81 U | <0.83 U | <0.82 U |
| PFPeS | -- | -- | <0.27 U | <0.27 U | <0.26 U | <0.26 U | <0.28 U | <0.27 U | <0.26 U | <0.26 U | <0.26 U |
| PFHpS | -- | -- | <0.17 U | <0.17 U | <0.17 U | <0.16 U | <0.18 U | <0.17 U | <0.16 U | <0.17 U | <0.17 U |
| PFNS | -- | -- | <0.33 U | <0.33 U | <0.32 U | <0.32 U | <0.35 U | <0.34 U | <0.32 U | <0.33 U | <0.32 U |
| PFDS | -- | -- | <0.28 U | <0.29 U | <0.28 U | <0.28 U | <0.30 U | <0.29 U | <0.27 U | <0.28 U | <0.28 U |
| PFDoS | -- | -- | <0.86 U | <0.87 U | <0.85 U | <0.84 U | <0.91 U | <0.89 U | <0.83 U | <0.86 U | <0.85 U |
| FOSA | 20 (1) | 2 (1) | <0.87 U | <0.88 U | <0.86 U | <0.85 U | 1.1 J | <0.90 U | *2.2 J+* | *2.8* | *3.0* |
| NEtFOSA | 20 (1) | 2 (1) | <0.77 U | <0.78 U | <0.76 U | <0.75 U | <0.82 U | <0.80 U | <0.75 U | <0.77 U | <0.76 U |
| NMeFOSA | -- | -- | <0.38 U | <0.39 U | <0.38 U | <0.37 U | <0.41 U | <0.39 U | <0.37 U | <0.38 U | <0.38 U |
| NMeFOSE | -- | -- | <1.2 U | <1.3 U | <1.2 U | <1.2 U | <1.3 U | <1.3 U | <1.2 U | <1.2 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.76 U | <0.77 U | <0.75 U | <0.74 U | <0.80 U | <0.78 U | <0.73 U | <0.75 U | <0.74 U |
| 4:2 FTS | -- | -- | <0.21 U | <0.22 U | <0.21 U | <0.21 U | <0.23 U | <0.22 U | <0.21 U | <0.21 U | <0.21 U |
| 6:2 FTS | -- | -- | <2.2 U | <2.3 U | <2.2 U | <2.2 U | <2.4 U | <2.3 U | <2.1 U | <2.2 U | <2.2 U |
| 8:2 FTS | -- | -- | <0.41 U | <0.41 U | <0.40 U | <0.40 U | <0.43 U | <0.42 U | <0.39 U | <0.41 U | <0.40 U |
| 10:2 FTS | -- | -- | <0.60 U | <0.60 U | <0.59 U | <0.58 U | <0.63 U | <0.61 U | <0.57 U | <0.59 U | <0.59 U |
| DONA | 3,000 | 600 | <0.36 U | <0.36 U | <0.35 U | <0.35 U | <0.38 U | <0.37 U | <0.34 U | <0.35 U | <0.35 U |
| GenX | 300 | 30 | <1.3 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.3 U |
| F-53B Major | -- | -- | <0.21 U | <0.22 U | <0.21 U | <0.21 U | <0.23 U | <0.22 U | <0.21 U | <0.21 U | <0.21 U |
| F-53B Minor | -- | -- | <0.28 U | <0.29 U | <0.28 U | <0.28 U | <0.30 U | <0.29 U | <0.27 U | <0.28 U | <0.28 U |

Notes on Page 19.

**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-138 | WS-141 | WS-142 | WS-147 | WS-147 | WS-150 | WS-151 | WS-152 | WS-152 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-138 (031621) | WS-141 (030121) | WS-142 (031621) | WS-147 (033021) | DUP-405 (033021) | WS-150 (033021) | WS-151 (020421) | WS-152 (020321) | WS-152 (032521) |
| | | Sample Date | 3/16/2021 | 3/1/2021 | 3/16/2021 | 3/30/2021 | 3/30/2021 | 3/30/2021 | 2/4/2021 | 2/3/2021 | 3/25/2021 |
| | | Sample Event | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | POET |
| | | Sample Type | N | N | N | N | FD | N | N | N | N |
| | | General Well Depth | Deep | Deep | Deep | Shallow | Shallow | | Deep | Shallow | Shallow |
| | | Detailed Well Depth | 116 | 104 | 122 | 25 | 25 | | 162 | 28 | 28 |
| | | Source | +,- | +, - | + | - | - | | +, - | +, - | +, - |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.76 U | <0.79 U | <0.78 U | *5.8* | *5.6* | <0.75 U | <0.78 U | *3.2* | *1.6 J* |
| PFOS | 20 (1) | 2 (1) | <0.48 U | <0.50 U | <0.50 U | *8.1 JN* | *8.8* | <0.48 U | <0.50 U | <0.47 U | *1.2 J* |
| PFBS | 450,000 | 90,000 | <0.18 U | <0.19 U | <0.18 U | 1.7 J | 1.2 J | <0.18 U | <0.18 U | 1.8 | 0.72 J |
| PFHpA | -- | -- | <0.22 U | <0.23 U | <0.23 U | 1.7 J | 1.7 J | <0.22 U | <0.23 U | 6.6 | 4.5 |
| PFHxS | 40 | 4 | <0.51 U | <0.53 U | <0.53 U | 2.1 | 1.9 | <0.50 U | <0.52 U | 1.0 J | 0.67 JN |
| PFNA | 30 | 3 | <0.24 U | <0.25 U | <0.25 U | 0.63 J | 0.56 J | <0.24 U | <0.25 U | <0.23 U | <0.24 U |
| PFDA | 300 | 60 | <0.28 U | <0.29 U | <0.29 U | <0.30 U | <0.28 U | <0.27 U | <0.29 U | <0.27 U | <0.28 U |
| PFDoA | 500 | 100 | <0.49 U | <0.51 U | <0.51 U | <0.52 U | <0.49 U | <0.48 U | <0.51 U | <0.48 U | <0.50 U |
| PFHxA | 150,000 | 30,000 | <0.52 U | <0.54 U | <0.54 U | 2.2 | 2.3 | <0.51 U | <0.53 U | 9.8 | 6.4 |
| PFTeA | 10,000 | 2,000 | <0.65 U | <0.68 U | <0.67 U | <0.69 U | <0.66 U | <0.64 U | <0.67 U | <0.63 U | <0.66 U |
| PFTriA | -- | -- | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.99 U | <1.0 U | <1.0 U | <1.0 U | <0.99 U | <0.97 U | <1.0 U | <0.96 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.1 U | <1.2 U |
| NMeFOSAA | -- | -- | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <2.2 U | <2.2 U | <2.2 U | 3.7 J | 3.9 J | <2.1 U | <2.2 U | 26 | 14 |
| PFPeA | -- | -- | <0.44 U | <0.45 U | <0.45 U | 2.1 | 2.0 | <0.43 U | <0.45 U | 11 | 7.4 |
| PFHxDA | -- | -- | <0.80 U | <0.82 U | <0.82 U | <0.85 U | <0.80 U | <0.78 U | <0.82 U | <0.77 U | <0.81 U |
| PFODA | 400,000 | 80,000 | <0.84 U | <0.87 U | <0.87 U | <0.89 U | <0.84 U | <0.83 U | <0.87 U | <0.82 U | <0.85 U |
| PFPeS | -- | -- | <0.27 U | <0.28 U | <0.28 U | 0.34 J | 0.38 J | <0.26 U | <0.28 U | 0.63 J | <0.27 U |
| PFHpS | -- | -- | <0.17 U | <0.18 U | <0.18 U | 0.18 J | 0.18 J | <0.17 U | <0.17 U | <0.17 U | <0.17 U |
| PFNS | -- | -- | <0.33 U | <0.34 U | <0.34 U | <0.35 U | <0.33 U | <0.33 U | <0.34 U | <0.32 U | <0.34 U |
| PFDS | -- | -- | <0.29 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.29 U |
| PFDoS | -- | -- | <0.87 U | <0.90 U | <0.90 U | <0.92 U | <0.87 U | <0.85 U | <0.89 U | <0.84 U | <0.88 U |
| FOSA | 20 (1) | 2 (1) | <0.88 U | 1.4 J | *3.1* | *1.0 J* | <0.88 U | *9.0* | 1.2 J | <0.85 U | <0.89 U |
| NEtFOSA | 20 (1) | 2 (1) | <0.78 U | <0.81 U | <0.80 U | <0.83 U | <0.78 U | <0.77 U | <0.80 U | <0.76 U | <0.79 U |
| NMeFOSA | -- | -- | <0.39 U | <0.40 U | <0.40 U | <0.41 U | <0.39 U | <0.38 U | <0.40 U | <0.37 U | <0.39 U |
| NMeFOSE | -- | -- | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.2 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.76 U | <0.79 U | <0.78 U | <0.81 U | <0.76 U | <0.75 U | <0.78 U | <0.74 U | <0.77 U |
| 4:2 FTS | -- | -- | <0.22 U | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U |
| 6:2 FTS | -- | -- | <2.2 U | <2.3 U | <2.3 U | <2.4 U | 2.7 J | <2.2 U | <2.3 U | <2.2 U | <2.3 U |
| 8:2 FTS | -- | -- | <0.41 U | <0.43 U | <0.42 U | 0.44 J | 1.2 J | <0.41 U | <0.42 U | <0.40 U | <0.42 U |
| 10:2 FTS | -- | -- | <0.60 U | <0.62 U | <0.62 U | <0.64 U | <0.60 U | <0.59 U | <0.62 U | <0.58 U | <0.61 U |
| DONA | 3,000 | 600 | <0.36 U | <0.37 U | <0.37 U | <0.38 U | <0.36 U | <0.35 U | <0.37 U | <0.35 U | <0.36 U |
| GenX | 300 | 30 | <1.3 U | <1.4 U | <1.4 U | <1.4 U | <1.3 U | <1.3 U | <1.4 U | <1.3 U | <1.4 U |
| F-53B Major | -- | -- | <0.22 U | <0.22 U | <0.22 U | <0.23 U | <0.22 U | <0.21 U | <0.22 U | <0.21 U | <0.22 U |
| F-53B Minor | -- | -- | <0.29 U | <0.30 U | <0.30 U | <0.30 U | <0.29 U | <0.28 U | <0.29 U | <0.28 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-152 (PACE) | WS-153 | WS-156 | WS-157 | WS-158 | WS-158 | WS-159 | WS-160 | WS-161 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | WS-152 (032521) | WS-153 (020521) | WS-156 (031621) | WS-157 (030821) | WS-158 (012521) | DUP-384 (012521) | WS-159 (012521) | WS-160 (031621) | WS-161 (020921) |
| | | Sample Date | 3/25/2021 | 2/5/2021 | 3/16/2021 | 3/8/2021 | 1/25/2021 | 1/25/2021 | 1/25/2021 | 3/16/2021 | 2/9/2021 |
| | | Sample Event | POET | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 | Winter 2021 |
| | | Sample Type | N | N | N | N | N | FD | N | N | N |
| | | General Well Depth | Shallow | Shallow | Deep | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | Detailed Well Depth | 28 | 25 | 550 | | 15-18 | 15-18 | | | |
| | | Source | +, - | - | +, - | | - | - | | | |
| **Chemical Name** | **Recommended Enforcement Standard (ES)** | **Recommended Preventive Action Limit (PAL)** | | | | | | | | | |
| PFOA | 20 (1) | 2 (1) | *1.9 J* | <0.78 U | <0.76 U | <0.77 U | ***160*** | ***130*** | *7.0* | <0.78 U | <0.72 U |
| PFOS | 20 (1) | 2 (1) | *7.4* | <0.49 U | <0.48 U | *0.73 J* | ***12*** | ***13*** | *1.2 J* | *0.72 J* | <0.46 U |
| PFBS | 450,000 | 90,000 | 1.3 J | <0.18 U | <0.18 U | <0.18 U | <0.19 U | <0.18 U | 1.2 J | 0.66 J | <0.17 U |
| PFHpA | -- | -- | 3.5 | <0.23 U | <0.22 U | <0.23 U | 240 | 180 | 7.1 | <0.23 U | <0.21 U |
| PFHxS | 40 | 4 | <0.48 U | <0.52 U | <0.51 U | <0.52 U | *4.5* | *4.5* | 0.95 J | <0.53 U | <0.48 U |
| PFNA | 30 | 3 | <0.40 U | <0.25 U | <0.24 U | <0.25 U | *4.4* | *4.2* | <0.25 U | <0.25 U | <0.23 U |
| PFDA | 300 | 60 | <0.46 U | <0.28 U | <0.28 U | <0.28 U | <0.29 U | <0.27 U | <0.28 U | <0.29 U | <0.26 U |
| PFDoA | 500 | 100 | <0.41 U | <0.50 U | <0.49 U | <0.50 U | <0.51 U | <0.49 U | <0.50 U | <0.51 U | <0.47 U |
| PFHxA | 150,000 | 30,000 | 5.3 | <0.53 U | <0.52 U | <0.53 U | 270 J | 180 J | 10 | <0.54 U | <0.49 U |
| PFTeA | 10,000 | 2,000 | <0.52 U | <0.67 U | <0.66 U | <0.66 U | <0.68 U | <0.65 U | <0.66 U | <0.67 U | <0.62 U |
| PFTriA | -- | -- | <0.46 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| PFUnA | 3,000 | 600 | <0.55 U | <1.0 U | <0.99 U | <1.0 U | <1.0 U | <0.97 U | <1.0 U | <1.0 U | <0.93 U |
| NEtFOSAA | 20 (1) | 2 (1) | <0.65 U | <1.2 U | <1.2 U | <1.2 U | <1.2 U | <1.1 U | <1.2 U | <1.2 U | <1.1 U |
| NMeFOSAA | -- | -- | <0.81 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U | <1.0 U |
| PFBA | 10,000 | 2,000 | 14 | <2.2 U | <2.2 U | <2.2 U | <220 UDJ | 95 DJ | 18 | <2.2 U | <2.0 U |
| PFPeA | -- | -- | 6.7 | <0.45 U | <0.44 U | <0.45 U | 640 DJ | 410 DJ | 12 | 0.47 J | <0.42 U |
| PFHxDA | -- | -- | <0.71 U | <0.82 U | <0.80 U | <0.81 U | <0.83 U | <0.79 U | <0.81 U | <0.82 U | <0.76 U |
| PFODA | 400,000 | 80,000 | <0.87 U | <0.86 U | <0.84 U | <0.86 U | <0.88 U | <0.83 U | <0.85 UJ- | <0.87 U | <0.80 U |
| PFPeS | -- | -- | NA | <0.27 U | <0.27 U | <0.27 U | <0.28 U | 0.54 J | 0.30 J | <0.28 U | <0.25 U |
| PFHpS | -- | -- | <0.43 U | <0.17 U | <0.17 U | <0.17 U | <0.18 U | <0.17 U | <0.17 U | <0.18 U | <0.16 U |
| PFNS | -- | -- | <0.62 U | <0.34 U | <0.33 U | <0.34 U | <0.35 U | <0.33 U | <0.34 U | <0.34 U | <0.31 U |
| PFDS | -- | -- | <0.68 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.28 U | <0.29 U | <0.30 U | <0.27 U |
| PFDoS | -- | -- | <0.91 U | <0.89 U | <0.87 U | <0.88 U | <0.91 U | <0.86 U | <0.88 UJ- | <0.90 U | <0.82 U |
| FOSA | 20 (1) | 2 (1) | <0.53 U | <0.90 U | <0.88 U | *4.3* | <0.91 U | ***1.7 J*** | <0.89 U | *1.6 J* | <0.83 U |
| NEtFOSA | 20 (1) | 2 (1) | <1.2 U | <0.80 U | <0.78 U | <0.79 U | <0.81 U | <0.77 U | <0.79 U | <0.80 U | <0.74 U |
| NMeFOSA | -- | -- | <1.1 U | <0.39 U | <0.39 U | <0.39 U | <0.40 U | <0.38 U | <0.39 U | <0.40 U | <0.37 U |
| NMeFOSE | -- | -- | <1.1 U | <1.3 U | <1.3 U | <1.3 U | <1.3 U | <1.2 U | <1.3 U | <1.3 U | <1.2 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.83 U | <0.78 U | <0.76 U | <0.77 U | <0.79 U | <0.75 U | <0.77 U | <0.78 U | <0.72 U |
| 4:2 FTS | -- | -- | <0.76 U | <0.22 U | <0.22 U | <0.22 U | 0.63 J- | 0.29 J- | <0.22 U | <0.22 U | <0.20 U |
| 6:2 FTS | -- | -- | <1.7 U | <2.3 U | <2.2 U | <2.3 U | 780 DJ | 330 J- | <2.3 U | <2.3 U | <2.1 U |
| 8:2 FTS | -- | -- | <1.4 U | <0.42 U | <0.41 U | <0.42 U | 0.98 J- | NA | <0.42 U | <0.42 U | <0.39 U |
| 10:2 FTS | -- | -- | <1.0 U | <0.61 U | <0.60 U | <0.61 U | <0.63 U | <0.59 U | <0.61 U | <0.62 U | <0.57 U |
| DONA | 3,000 | 600 | <0.42 U | <0.37 U | <0.36 U | <0.36 U | <0.37 U | <0.35 U | <0.36 U | <0.37 U | <0.34 U |
| GenX | 300 | 30 | <1.8 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U | <1.4 U | <1.4 U | <1.3 U |
| F-53B Major | -- | -- | <0.42 U | <0.22 U | <0.22 U | <0.22 U | <0.22 U | <0.21 U | <0.22 U | <0.22 U | <0.20 U |
| F-53B Minor | -- | -- | <0.58 U | <0.29 U | <0.29 U | <0.29 U | <0.30 U | <0.28 U | <0.29 U | <0.30 U | <0.27 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Location | WS-161 | WS-163 | WS-163 | WS-163 | WS-163 |
|---|---|---|---|---|---|---|---|
| | | Sample ID | DUP-390 (020921) | WS-163 (100620) | DUP-371 (100620) | WS-163 (111220) | WS-163 (030821) |
| | | Sample Date | 2/9/2021 | 10/6/2020 | 10/6/2020 | 11/12/2020 | 3/8/2021 |
| | | Sample Event | Winter 2021 | Fall 2020 | Fall 2020 | POET | POET |
| | | Sample Type | FD | N | FD | N | N |
| | | General Well Depth | Shallow | | | | |
| | | Detailed Well Depth | | | | | |
| | | Source | | | | | |
| Chemical Name | Recommended Enforcement Standard (ES) | Recommended Preventive Action Limit (PAL) | | | | | |
| PFOA | 20 (1) | 2 (1) | <0.69 U | ***31 J+*** | ***32*** | ***52*** | ***180*** |
| PFOS | 20 (1) | 2 (1) | <0.44 U | <0.48 U | <0.48 U | <0.52 U | <0.50 U |
| PFBS | 450,000 | 90,000 | <0.16 U | 0.32 J+ | 0.32 J+ | 0.74 J | 1.8 |
| PFHpA | -- | -- | <0.20 U | 5.9 | 5.4 | 13 | 34 |
| PFHxS | 40 | 4 | <0.46 U | 3.3 | 3.0 | *5.3* | *13* |
| PFNA | 30 | 3 | <0.22 U | 0.40 J | 0.47 J | 0.82 J | 2.2 |
| PFDA | 300 | 60 | <0.25 U | <0.27 U | <0.28 U | <0.30 U | <0.29 U |
| PFDoA | 500 | 100 | <0.44 U | <0.49 U | <0.49 U | <0.53 U | <0.51 U |
| PFHxA | 150,000 | 30,000 | <0.47 U | 11 | 11 | 24 | 64 |
| PFTeA | 10,000 | 2,000 | <0.59 U | <0.64 U | <0.65 U | <0.70 U | <0.67 U |
| PFTriA | -- | -- | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| PFUnA | 3,000 | 600 | <0.89 U | <0.97 U | <0.98 U | <1.1 U | <1.0 U |
| NEtFOSAA | 20 (1) | 2 (1) | <1.1 U | <1.1 U | <1.2 U | <1.2 U | <1.2 U |
| NMeFOSAA | -- | -- | <0.97 U | <1.1 U | <1.1 U | <1.1 U | <1.1 U |
| PFBA | 10,000 | 2,000 | <1.9 U | 3.2 J | 3.4 J | 6.6 | 21 |
| PFPeA | -- | -- | <0.40 U | 15 | 15 | 32 | 95 |
| PFHxDA | -- | -- | <0.72 U | <1.8 UB | <1.8 UB | <0.85 U | <0.82 U |
| PFODA | 400,000 | 80,000 | <0.76 U | <0.83 U | <0.84 U | <0.90 U | <0.87 U |
| PFPeS | -- | -- | <0.24 U | <0.27 U | 0.29 J | 0.64 J | 2.6 |
| PFHpS | -- | -- | <0.15 U | <0.17 U | <0.17 U | <0.18 U | <0.18 U |
| PFNS | -- | -- | <0.30 U | <0.33 U | <0.33 U | <0.35 U | <0.34 U |
| PFDS | -- | -- | <0.26 U | <0.28 U | <0.29 U | <0.31 U | <0.29 U |
| PFDoS | -- | -- | <0.78 U | <0.86 U | <0.87 U | <0.93 U | <0.89 U |
| FOSA | 20 (1) | 2 (1) | <0.79 U | <0.87 U | <0.88 U | <0.94 U | ***0.93 J*** |
| NEtFOSA | 20 (1) | 2 (1) | <0.70 U | <0.77 U | <0.78 U | <0.83 U | <0.80 U |
| NMeFOSA | -- | -- | <0.35 U | <0.38 U | <0.38 U | <0.41 U | <0.40 U |
| NMeFOSE | -- | -- | <1.1 U | <1.2 U | <1.3 U | <1.3 U | <1.3 U |
| NEtFOSE | 20 (1) | 2 (1) | <0.69 U | <0.75 U | <0.76 U | <0.81 U | <0.78 U |
| 4:2 FTS | -- | -- | <0.19 U | 0.93 J | 0.78 J | 2.3 | 7.5 J+ |
| 6:2 FTS | -- | -- | <2.0 U | 38 | 40 | 73 | 250 |
| 8:2 FTS | -- | -- | <0.37 U | <0.41 U | <0.41 U | <0.44 U | <0.42 U |
| 10:2 FTS | -- | -- | <0.54 U | <0.59 U | <0.60 U | <0.64 U | <0.62 U |
| DONA | 3,000 | 600 | <0.32 U | <0.35 U | <0.36 U | <0.38 U | <0.37 U |
| GenX | 300 | 30 | <1.2 U | <1.3 U | <1.3 U | <1.4 U | <1.4 U |
| F-53B Major | -- | -- | <0.19 U | <0.21 U | <0.21 U | <0.23 U | <0.22 U |
| F-53B Minor | -- | -- | <0.26 U | <0.28 U | <0.29 U | <0.31 U | <0.29 U |

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**Table 2**
**Private Drinking Water Well Results**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

**Notes:**
**Concentrations above Recommended Enforcement Standard (ES) are boldfaced.**
*Concentrations above Recommended Preventive Action Limit (PAL) are italicized.*
< = Compound not detected at method detection limit.
(1) = Combined criteria for FOSA, NEtFOSE, NEtFOSA, NetFOSAA, PFOS, and PFOA
-- = No standard
FD = Field Duplicate
N = Normal sample
ng/l = nanograms per liter
- = Information gathered from sampling log according to homeowners
+ = Information gathered from well construction form
+, - = Information gathered from well construction form, but information also available from sampling log
Detailed well depth in feet
POET (Point of Entry Treatment) = Sample collected as part of the POET system monitoring program
Fall 2020, Winter 2021 = Sample collected as part of the the specified private well sampling event

**Data Qualifier:**
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
D = Dilution required for sample analysis
UJ = The compound was not detected above the reported sample method detection limit. However, the reported limit is approximate and may or may not represent the actual method detection limit.
UB = Compound considered non-detect at the listed value due to associated blank contamination.
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.

**Chemical Abbreviations:**
PFOA = Perfluorooctanoic acid (C8)
PFOS = Perfluorooctanesulfonic acid (C8)
PFBS = Perfluorobutanesulfonic acid (C4)
PFHpA = Perfluoroheptanoic acid (C7)
PFHxS = Perfluorohexanesulfonic acid (C6)
PFNA = Perfluorononanoic acid (C9)
PFDA = Perfluorodecanoic acid (C10)
PFDoA = Perfluorododecanoic acid (C12)
PFHxA = Perfluorohexanoic acid (C6)
PFTeA = Perfluorotetradecanoic acid (C14)
PFTriA = Perfluorotridecanoic acid (C13)
PFUnA = Perfluoroundecanoic acid (C11)
NEtFOSAA = N-ethylperfluorooctanesulfonamidoacetic acid (C12)
NMeFOSAA = N-methylperfluorooctanesulfonamidoacetic acid (C11)
PFBA = Perfluorobutanoic acid (C4)
PFPeA = Perfluoropentanoic acid (C5)
PFHxDA = Perfluoro-n-hexadecanoic acid (C16)
PFODA = Perfluoro-n-octadecanoic acid (C18)
PFPeS = Perfluoropentanesulfonic acid (C5)
PFHpS = Perfluoroheptanesulfonic acid (C7)
PFNS = Perfluorononanesulfonic acid (C9)
PFDS = Perfluorodecanesulfonic acid (C10)
PFDoS = Perfluorododecanesulfonic acid (C12)
FOSA = Perfluorooctanesulfonamide (C8)
NEtFOSA = N-ethylperfluorooctanesulfonamide (C10)
NMeFOSA = N-methylperfluorooctanesulfonamide (C9)
NMeFOSE = N-methylperfluorooctanesulfonamidoethanol (C11)
NEtFOSE = N-ethylperfluorooctanesulfonamidoethanol (C12)
4:2 FTS = 4:2 fluorotelomer sulfonate (C6)
6:2 FTS = 6:2 fluorotelomer sulfonate (C8)
8:2 FTS = 8:2 fluorotelomer sulfonate (C10)
10:2 FTS = 10:2 fluorotelomer sulfonate (C12)
DONA = 4,8-Dioxa-3H-perfluorononanoic acid (C7)
GenX = Hexafluoropropylene oxide dimer acid (C6)
F-53B Major = 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (C8)
F-53B Minor = 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (C10)

**Table 3**
**Private Drinking Water Well Results By Category - All Private Wells**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| Private Wells Not Detected Above the Laboratory Reporting Limit | | Private Wells with Results Between RL and Proposed ES | Private Wells with Results Exceeding the Proposed ES |
|---|---|---|---|
| WS-001 | WS-091 | WS-009 | WS-007A |
| WS-002 | WS-092 | WS-013 | WS-007B |
| WS-004 | WS-095 | WS-015 | WS-008 |
| WS-005 | WS-098 | WS-017 | WS-018 |
| WS-005B | WS-104 | WS-023 | WS-019 |
| WS-006 | WS-105 | WS-031 | WS-024 |
| WS-010 | WS-108 | WS-035 | WS-025 |
| WS-011 | WS-110A | WS-040 | WS-030 |
| WS-012 | WS-112 | WS-041 | WS-036 |
| WS-014 | WS-113 | WS-042 | WS-037 |
| WS-016 | WS-114 | WS-044 | WS-038 |
| WS-020 | WS-115 | WS-049 | WS-048 |
| WS-021 | WS-116 | WS-053 | WS-052 |
| WS-022 | WS-117 | WS-055 | WS-054 |
| WS-026 | WS-118A | WS-059 | WS-057 |
| WS-027 | WS-118B | WS-064 | WS-058 |
| WS-028 | WS-119 | WS-066 | WS-060 |
| WS-029 | WS-122 | WS-067 | WS-061B |
| WS-032 | WS-125 | WS-069A | WS-062 |
| WS-033 | WS-126 | WS-071 | WS-068 |
| WS-034 | WS-127 | WS-074 | WS-069B |
| WS-039 | WS-128 | WS-077 | WS-070 |
| WS-043 | WS-130 | WS-079 | WS-082B |
| WS-045 | WS-131 | WS-087 | WS-082C |
| WS-046 | WS-132 | WS-093 | WS-082D |
| WS-047 | WS-134 | WS-094 | WS-090 |
| WS-050 | WS-137 | WS-097 | WS-096 |
| WS-051 | WS-138 | WS-099 | WS-101 |
| WS-056 | WS-139 | WS-100 | WS-106/106R |
| WS-061A | WS-141 | WS-102 | WS-109 |
| WS-063 | WS-144 | WS-103 | WS-121A |
| WS-065 | WS-145 | WS-107 | WS-146A |
| WS-072 | WS-148 | WS-111 | WS-146B |
| WS-073 | WS-149 | WS-120 | WS-147 |
| WS-075 | WS-151 | WS-121B | WS-158 |
| WS-076 | WS-153 | WS-123 | WS-159 |
| WS-078 | WS-154 | WS-124 | WS-163 |
| WS-080 | WS-155 | WS-129 | |
| WS-081 | WS-156 | WS-133 | |
| WS-082 | WS-160 | WS-135 | |
| WS-083 | WS-161 | WS-136 | |

Notes on Page 2.

**Table 3**
**Private Drinking Water Well Results By Category - All Private Wells**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| Private Wells Not Detected Above the Laboratory Reporting Limit | | Private Wells with Results Between RL and Proposed ES | Private Wells with Results Exceeding the Proposed ES |
|---|---|---|---|
| WS-084 | WS-162 | WS-140 | |
| WS-085 | | WS-142 | |
| WS-086 | | WS-143 | |
| WS-088 | | WS-150 | |
| WS-089 | | WS-152 | |
| | | WS-157 | |
| **88** | | **47** | **37** |

**Notes:**
Data compared against Cycle 11 proposed groundwater standards;
not all compounds with proposed criteria were analyzed
Categories current through Winter 2021 Sampling Event
ES = Wisconsin Department of Health Services proposed Enforcement Standard
RL = Reporting Limit

**Table 4**
**Private Drinking Water Wells Not Sampled for 36 PFAS Compounds**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| Well Sample ID | Comments |
|---|---|
| WS-002 | Hospital well, not in use |
| WS-004 | Hospital well, not in use |
| WS-005B | Not a drinking water well |
| WS-006 | Sampled in spring 2021 event |
| WS-007A | Sampled in spring quarterly POET event |
| WS-007B | Well not accessible |
| WS-021 | Non-responsive to outreach |
| WS-028 | Non-responsive to outreach |
| WS-036 | Homeowner declined sample |
| WS-043 | Out of town for winter |
| WS-047 | Non-responsive to outreach |
| WS-049 | Homeowner declined sample |
| WS-051 | Sampled in spring 2021 event |
| WS-056 | Sampled in spring 2021 event |
| WS-061B | Non-responsive to outreach |
| WS-070 | Non-responsive to outreach |
| WS-076 | Non-responsive to outreach |
| WS-080 | Well not accessible |
| WS-081 | Non-responsive to outreach |
| WS-086 | Non-responsive to outreach |
| WS-088 | House vacant and winterized |
| WS-089 | Non-responsive to outreach |
| WS-091 | Non-responsive to outreach |
| WS-092 | Sampled in spring quarterly POET event |
| WS-095 | Non-responsive to outreach |
| WS-098 | Sampled in spring 2021 event |
| WS-105 | Sample delayed by FedEx; non-responsive to rescheduling effort |
| WS-114 | Sampled in spring 2021 event |
| WS-115 | Sample delayed by FedEx; non-responsive to rescheduling effort |
| WS-116 | Sample delayed by FedEx; non-responsive to rescheduling effort |
| WS-124 | Non-responsive to outreach |
| WS-126 | Out of town for winter; sampled in spring 2021 event |
| WS-129 | Homeowner declined sample |
| WS-133 | Sampled in spring 2021 event |
| WS-134 | Non-responsive to outreach |
| WS-137 | Sampled in spring 2021 event |
| WS-139 | Non-responsive to outreach |
| WS-140 | Non-responsive to outreach |
| WS-143 | Sampled in spring 2021 event |
| WS-144 | Seasonal property; sampled in spring 2021 event |
| WS-145 | Sampled in spring 2021 event |
| WS-146A | Vacant |
| WS-146B | Vacant |
| WS-148 | Non-responsive to outreach |
| WS-149 | Sampled in spring 2021 event |
| WS-154 | Sampled in spring 2021 event |
| WS-155 | Non-responsive to outreach |
| WS-162 | Non-responsive to outreach |

## Table 5
## Private Drinking Water Well Results By Trend - All Private Wells
## Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area
## Marinette, Wisconsin

| Not Included in Trend Analysis | | | | Increasing Trend | Decreasing Trend | No Trend |
|---|---|---|---|---|---|---|
| WS-001 | WS-046 | WS-087 | WS-130 | WS-018 | WS-009 | WS-008 |
| WS-002 | WS-047 | WS-088 | WS-131 | WS-025 | WS-013 | WS-019 |
| WS-004 | WS-050 | WS-089 | WS-132 | WS-030 | WS-024 | WS-023 |
| WS-005 | WS-051 | WS-091 | WS-134 | WS-048 | WS-038 | WS-036 |
| WS-005B | WS-055 | WS-092 | WS-135 | WS-053 | WS-052 | WS-037 |
| WS-006 | WS-056 | WS-093 | WS-136 | WS-057 | WS-097 | WS-049 |
| WS-007A | WS-059 | WS-094 | WS-137 | WS-061B | WS-146A | WS-054 |
| WS-007B | WS-060 | WS-095 | WS-138 | WS-068[1] | | WS-058 |
| WS-010 | WS-061A | WS-098 | WS-139 | WS-069B[1] | | WS-062 |
| WS-011 | WS-063 | WS-101 | WS-140 | WS-096 | | WS-082D |
| WS-012 | WS-064 | WS-102 | WS-141 | WS-106/WS-106R[1] | | WS-090 |
| WS-014 | WS-065 | WS-103 | WS-142 | WS-124 | | WS-099 |
| WS-015 | WS-066 | WS-104 | WS-143 | WS-146B | | WS-100 |
| WS-016 | WS-067 | WS-105 | WS-144 | | | WS-109 |
| WS-017 | WS-069A | WS-107 | WS-145 | | | WS-121A |
| WS-020 | WS-070 | WS-108 | WS-147 | | | WS-121B |
| WS-021 | WS-071 | WS-110A | WS-148 | | | WS-129 |
| WS-022 | WS-072 | WS-111 | WS-149 | | | WS-133 |
| WS-026 | WS-073 | WS-112 | WS-150 | | | |
| WS-027 | WS-074 | WS-113 | WS-151 | | | |
| WS-028 | WS-075 | WS-114 | WS-152 | | | |
| WS-029 | WS-076 | WS-115 | WS-153 | | | |
| WS-031 | WS-077 | WS-116 | WS-154 | | | |
| WS-032 | WS-078 | WS-117 | WS-155 | | | |
| WS-033 | WS-079 | WS-118A | WS-156 | | | |
| WS-034 | WS-080 | WS-118B | WS-157 | | | |
| WS-035 | WS-081 | WS-119 | WS-158 | | | |
| WS-039 | WS-082 | WS-120 | WS-159 | | | |
| WS-040 | WS-082B | WS-122 | WS-160 | | | |
| WS-041 | WS-082C | WS-123 | WS-161 | | | |
| WS-042 | WS-083 | WS-125 | WS-162 | | | |
| WS-043 | WS-084 | WS-126 | WS-163 | | | |
| WS-044 | WS-085 | WS-127 | | | | |
| WS-045 | WS-086 | WS-128 | | | | |
| | **134** | | | **13** | **7** | **18** |

**Notes:**

Only wells with at least 4 results of PFOA and or PFOS above reporting limit were analyzed for trends.

Data compared against Cycle 11 proposed groundwater standards for PFOA and PFOS; not all compounds with proposed criteria were analyzed.

Categories current through Winter 2021 Sampling Event.

Trend categorization based on output from USEPA Groundwater Statistics Tool (Version 2).

[1] = Trend results were not displayed by the USEPA Groundwater Statistics Tool due to negative concentrations being predicted by the linear regression.

PFOA = Perfluorooctanoic acid (C8)

PFOS = Perfluorooctanesulfonic acid (C8)

**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-008 | WS-008 (121217) | 12/12/2017 | 20 J | 550 D | 570 |
| | WS-008 (010318) | 1/3/2018 | 20 J | 670 D | 690 |
| | WS-008 (041018) | 4/10/2018 | 17 J | 580 D | 597 |
| | WS-008 (041718) | 4/17/2018 | 17 J | 640 D | 657 |
| | WS-008 (042418) | 4/24/2018 | 18 J | 580 D | 598 |
| | WS-008 (060518) | 6/5/2018 | 13 J | 420 D | 433 |
| | WS-008 (070518) | 7/5/2018 | 17 J | 630 D | 647 |
| | WS-008 (072518) | 7/25/2018 | 19 J | 610 D | 629 |
| | WS-008 (080718) | 8/7/2018 | 21 J | 530 D | 551 |
| | WS-008 (082918) | 8/29/2018 | 21 J | 580 D | 601 |
| | WS-008 (092818) | 9/28/2018 | 18 | 400 | 418 |
| | WS-008 (120418) | 12/4/2018 | 14 | 270 D | 284 |
| | WS-008 (012219) | 1/22/2019 | 23 | 470 D | 493 |
| | WS-008 (021819) | 2/18/2019 | 20 | 480 D | 500 |
| | WS-008 (032819) | 3/28/2019 | 21 | 420 D | 441 |
| | WS-008 (041819) | 4/18/2019 | 18 | 400 D | 418 |
| | WS-008 (052319) | 5/23/2019 | 16 | 330 | 346 |
| | WS-008 (061919) | 6/19/2019 | 14 | 340 | 354 |
| | WS-008 (080119) | 8/1/2019 | 15 | 340 | 355 |
| | WS-008 (082819) | 8/28/2019 | 15 | 380 | 395 |
| | WS-008 (100219) | 10/2/2019 | 13 | 320 | 333 |
| | WS-008 (102319) | 10/23/2019 | 12 | 320 | 332 |
| | WS-008 (111919) | 11/19/2019 | 12 | 310 | 322 |
| | WS-008 (123020) | 12/30/2020 | 18 | 330 | 348 |
| | WS-008 (030121) | 3/1/2021 | 19 | 560 D | 579 |
| WS-009 | WS-009 (121217) | 12/12/2017 | 0 | 18 J | 18 |
| | WS-009 (011218) | 1/12/2018 | 0 | 18 J | 18 |
| | WS-009 (040418) | 4/4/2018 | 0 | 20 J | 20 |
| | WS-009 (083118) | 8/31/2018 | 0 | 16 | 16 |
| | WS-009 (090618) | 9/6/2018 | 0 | 16 | 16 |
| | WS-009 (091118) | 9/11/2018 | 0 | 18 | 18 |
| | WS-009 (091918) | 9/19/2018 | 1.0 J | 18 | 19 |
| | WS-009 (092618) | 9/26/2018 | 1.4 J | 18 | 19.4 |
| | WS-009 (102518) | 10/25/2018 | 1.1 J | 16 | 17.1 |
| | WS-009 (112018) | 11/20/2018 | 0.91 J | 18 | 18.91 |
| | WS-009 (022819) | 2/28/2019 | 1.0 J | 17 | 18 |
| | WS-009 (032119) | 3/21/2019 | 1.0 J | 18 | 19 |
| | WS-009 (060519) | 6/5/2019 | 0 | 18 | 18 |
| | WS-009 (072519) | 7/25/2019 | 1.0 J | 18 | 19 |
| | WS-009 (082819) | 8/28/2019 | 0.99 J | 16 | 16.99 |
| | WS-009 (102919) | 10/29/2019 | 1.2 J | 16 | 17.2 |
| | WS-009 (030821) | 3/8/2021 | 0.93 J | 14 | 14.93 |
| WS-013 | WS-013 (121217) | 12/12/2017 | 0 | 9.6 J | 9.6 |
| | WS-013 (010218) | 1/2/2018 | 0 | 11 J | 11 |
| | DUP-09 (010218) | 1/2/2018 | 0 | 11 J | 11 |
| | WS-013 (040718) | 4/7/2018 | 0 | 6.7 J | 6.7 |
| | WS-013 (071618) | 7/16/2018 | 0 | 13 J | 13 |
| | WS-013 (072418) | 7/24/2018 | 0 | 13 J | 13 |
| | WS-013 (073118) | 7/31/2018 | 0 | 13 J | 13 |
| | WS-013 (080718) | 8/7/2018 | 0 | 13 J | 13 |
| | DUP-110 (080718) | 8/7/2018 | 0 | 13 J | 13 |
| | WS-013 (081418) | 8/14/2018 | 0 | 13 J | 13 |
| | WS-013 (091818) | 9/18/2018 | 1.9 | 17 | 18.9 |
| | WS-013 (101018) | 10/10/2018 | 0 | 16 | 16 |
| | WS-013 (120418) | 12/4/2018 | 0.9 J | 6.9 | 7.8 |
| | WS-013 (030819) | 3/8/2019 | 1.0 J | 3.4 J | 4.4 |
| | WS-013 (031819) | 3/18/2019 | 0 | 5.4 J | 5.4 |
| | WS-013 (040319) | 4/3/2019 | 0 | 4.1 J | 4.1 |
| | WS-013 (061119) | 6/11/2019 | 0 | 4.7 J | 4.7 |
| | WS-013 (071619) | 7/16/2019 | 1.1 J | 3.2 | 4.3 |
| | WS-013 (080819) | 8/8/2019 | 0 | 3.4 | 3.4 |
| | WS-013 (082819) | 8/28/2019 | 1.2 J | 4.1 | 5.3 |
| | WS-013 (121719) | 12/17/2019 | 1.2 J | 3.3 | 4.5 |
| | WS-013 (031720) | 3/17/2020 | 1.4 J | 2.4 | 3.8 |
| | WS-013 (020121) | 2/1/2021 | 1.8 JN | 6.8 | 8.6 |
| WS-018 | WS-018 (121217) | 12/12/2017 | 0 | 6.8 J | 6.8 |
| | WS-018 (012318) | 1/23/2018 | 0 | 20 J | 20 |
| | DUP-017 (012318) | 1/23/2018 | 0 | 18 J | 18 |
| | WS-018 (040418) | 4/4/2018 | 0 | 13 J | 13 |
| | WS-018 (091118) | 9/11/2018 | 1.2 J | 11 | 12.2 |
| | WS-018 (092018) | 9/20/2018 | 1.1 J | 12 | 13.1 |
| | WS-018 (092418) | 9/24/2018 | 1.8 J | 12 | 13.8 |
| | WS-018 (100118) | 10/1/2018 | 0 | 11 | 11 |
| | WS-018 (100818) | 10/8/2018 | 0 | 15 J | 15 |
| | WS-018 (110818) | 11/8/2018 | 1.1 J | 12 | 13.1 |
| | WS-018 (121018) | 12/10/2018 | 1.3 J | 11 | 12.3 |
| | WS-018 (040119) | 4/1/2019 | 1.0 J | 4.3 J | 5.3 |
| | WS-018 (070919) | 7/9/2019 | 2.1 | 21 | 23.1 |
| | WS-018 (082719) | 8/27/2019 | 1.6 J | 12 | 13.6 |
| | WS-018 (100719) | 10/7/2019 | 3.0 | 14 | 17 |
| | WS-018 (012820) | 1/28/2020 | 4.3 | 14 | 18.3 |
| | WS-018 (030221) | 3/2/2021 | 4.1 | 19 | 23.1 |
| | DUP-397 (030221) | 3/2/2021 | 4.8 JN | 20 | 24.8 |
| WS-019 | WS-019 (121317) | 12/13/2017 | 13 J | 110 | 123 |
| | WS-019 (010218) | 1/2/2018 | 12 J | 110 | 122 |
| | WS-019 (031918) | 3/19/2018 | 15 J | 110 | 125 |
| | WS-019 (032718) | 3/27/2018 | 12 J | 88 | 100 |
| | WS-019 (040518) | 4/5/2018 | 11 J | 83 | 94 |
| | DUP-048 (040518) | 4/5/2018 | 12 J | 85 | 97 |

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**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-019 (continued) | WS-019 (041918) | 4/19/2018 | 13 J | 94 | 107 |
| | WS-019 (060118) | 6/1/2018 | 14 J | 91 | 105 |
| | WS-019 (061118) | 6/11/2018 | 12 J | 71 | 83 |
| | WS-019 (072518) | 7/25/2018 | 15 J | 97 | 112 |
| | WS-019 (080818) | 8/8/2018 | 13 J | 58 | 71 |
| | WS-019 (082118) | 8/21/2018 | 14 J | 98 | 112 |
| | WS-019 (092518) | 9/25/2018 | 15 J | 110 J | 125 |
| | WS-019 (101718) | 10/17/2018 | 15 | 94 | 109 |
| | WS-019 (112018) | 11/20/2018 | 15 | 87 D | 102 |
| | WS-019 (121018) | 12/10/2018 | 15 | 65 D | 80 |
| | WS-019 (010719) | 1/7/2019 | 16 | 110 | 126 |
| | WS-019 (011519) | 1/15/2019 | 17 | 100 | 117 |
| | WS-019 (020419) | 2/4/2019 | 17 | 110 | 127 |
| | WS-019 (030519) | 3/5/2019 | 17 | 110 | 127 |
| | WS-019 (032919) | 3/29/2019 | 18 | 100 | 118 |
| | WS-019 (041119) | 4/11/2019 | 18 | 110 | 128 |
| | WS-019 (042419) | 4/24/2019 | 19 | 120 | 139 |
| | WS-019 (051419) | 5/14/2019 | 20 | 110 | 130 |
| | WS-019 (061219) | 6/12/2019 | 18 | 100 | 118 |
| | WS-019 (071619) | 7/16/2019 | 13 J | 66 J | 79 |
| | WS-019 (081619) | 8/16/2019 | 17 JN | 100 | 117 |
| | WS-019 (091719) | 9/17/2019 | 17 | 97 | 114 |
| | WS-019 (101519) | 10/15/2019 | 19 | 76 | 95 |
| | WS-019 (121019) | 12/10/2019 | 18 | 97 | 115 |
| | WS-019 (031720) | 3/17/2020 | 17 | 100 | 117 |
| | WS-019 (120420) | 12/4/2020 | 17 | 59 | 76 |
| | WS-019 (020121) | 2/1/2021 | 15 | 96 | 111 |
| WS-023 | WS-023 (121317) | 12/13/2017 | 0 | 6.5 J | 6.5 |
| | WS-023 (050218) | 5/2/2018 | 0 | 4.7 J | 4.7 |
| | DUP-070 (050218) | 5/2/2018 | 0 | 5.0 J | 5 |
| | WS-023 (072018) | 7/20/2018 | 0 | 5.2 J | 5.2 |
| | WS-023 (072518) | 7/25/2018 | 0 | 5.0 J | 5 |
| | WS-023 (080118) | 8/1/2018 | 0 | 4.4 J | 4.4 |
| | WS-023 (080818) | 8/8/2018 | 0 | 4.7 J | 4.7 |
| | WS-023 (081518) | 8/15/2018 | 0 | 6.2 J | 6.2 |
| | WS-023 (091218) | 9/12/2018 | 0 | 5.7 J | 5.7 |
| | WS-023 (101018) | 10/10/2018 | 0 | 6.3 | 6.3 |
| | WS-023 (011519) | 1/15/2019 | 0 | 5.2 J | 5.2 |
| | WS-023 (041719) | 4/17/2019 | 0 | 3.9 J | 3.9 |
| | WS-023 (061919) | 6/19/2019 | 0 | 5.9 | 5.9 |
| | WS-023 (082219) | 8/22/2019 | 0 | 5.5 | 5.5 |
| | WS-023 (101519) | 10/15/2019 | 0 | 8.7 | 8.7 |
| | WS-023 (020121) | 2/1/2021 | 0.56 J | 5.4 | 5.96 |
| WS-024 | WS-024 (121317) | 12/13/2017 | 0 | 37 | 37 |
| | WS-024 (040218) | 4/2/2018 | 0 | 28 | 28 |
| | WS-024 (071718) | 7/17/2018 | 0 | 23 | 23 |
| | WS-024 (072418) | 7/24/2018 | 0 | 26 | 26 |
| | WS-024 (073118) | 7/31/2018 | 0 | 24 | 24 |
| | WS-024 (081418) | 8/14/2018 | 0 | 24 | 24 |
| | WS-024 (100318) | 10/3/2018 | 1.5 J | 22 | 23.5 |
| | WS-024 (031419) | 3/14/2019 | 2.0 | 18 | 20 |
| | WS-024 (032819) | 3/28/2019 | 1.3 J | 14 | 15.3 |
| | WS-024 (041119) | 4/11/2019 | 1.4 J | 14 | 15.4 |
| | WS-024 (061219) | 6/12/2019 | 0 | 0 | 0 |
| | WS-024 (080119) | 8/1/2019 | 2.0 | 23 | 25 |
| | WS-024 (091119) | 9/11/2019 | 2.4 | 25 | 27.4 |
| | WS-024 (111119) | 11/11/2019 | 2.6 | 20 | 22.6 |
| | WS-024 (020221) | 2/2/2021 | 0 | 1.9 | 1.9 |
| WS-025 | WS-025 (121317) | 12/13/2017 | 0 | 21 | 21 |
| | WS-025 (011618) | 1/16/2018 | 0 | 23 | 23 |
| | DUP-14 (011618) | 1/16/2018 | 0 | 22 | 22 |
| | WS-025 (041118) | 4/11/2018 | 0 | 23 | 23 |
| | WS-025 (090718) | 9/7/2018 | 0 | 29 J | 29 |
| | WS-025 (091718) | 9/17/2018 | 0 | 27 | 27 |
| | WS-025 (092418) | 9/24/2018 | 0 | 26 | 26 |
| | WS-025 (100118) | 10/1/2018 | 0 | 26 | 26 |
| | WS-025 (100818) | 10/8/2018 | 0 | 28 | 28 |
| | WS-025 (111418) | 11/14/2018 | 0 | 26 | 26 |
| | WS-025 (121018) | 12/10/2018 | 0 | 22 | 22 |
| | WS-025 (012119) | 1/21/2019 | 0 | 28 | 28 |
| | WS-025 (022519) | 2/25/2019 | 0 | 26 | 26 |
| | WS-025 (051319) | 5/13/2019 | 0 | 31 | 31 |
| | WS-025 (072419) | 7/24/2019 | 0 | 32 | 32 |
| | WS-025 (090319) | 9/3/2019 | 0 | 28 | 28 |
| | WS-025 (111219) | 11/12/2019 | 0 | 33 | 33 |
| | WS-025 (012220) | 1/22/2020 | 0 | 34 | 34 |
| | WS-025 (020221) | 2/2/2021 | 0 | 28 | 28 |
| WS-030 | WS-030 (121417) | 12/14/2017 | 0 | 36 | 36 |
| | DUP-03 (121417) | 12/14/2017 | 0 | 38 | 38 |
| | WS-030 (011218) | 1/12/2018 | 0 | 45 | 45 |
| | WS-030 (040718) | 4/7/2018 | 0 | 45 | 45 |
| | WS-030 (092018) | 9/20/2018 | 0 | 47 | 47 |
| | WS-030 (092718) | 9/27/2018 | 4.1 | 42 | 46.1 |
| | WS-030 (100418) | 10/4/2018 | 0 | 38 J | 38 |
| | WS-030 (101118) | 10/11/2018 | 0 | 35 | 35 |
| | WS-030 (101818) | 10/18/2018 | 0 | 51 | 51 |
| | WS-030 (111318) | 11/13/2018 | 0 | 51 | 51 |
| | WS-030 (121318) | 12/13/2018 | 0 | 55 | 55 |
| | WS-030 (011419) | 1/14/2019 | 0 | 44 | 44 |

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**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-030 (continued) | WS-030 (031919) | 3/19/2019 | 0 | 74 | 74 |
| | WS-030 (041619) | 4/16/2019 | 0 | 44 | 44 |
| | WS-030 (051319) | 5/13/2019 | 0 | 39 | 39 |
| | WS-030 (062519) | 6/25/2019 | 0 | 25 | 25 |
| | WS-030 (073119) | 7/31/2019 | 0 | 23 | 23 |
| | WS-030 (082819) | 8/28/2019 | 0.78 J | 45 | 45.78 |
| | WS-030 (092519) | 9/25/2019 | 0.87 J | 37 | 37.87 |
| | WS-030 (010320) | 1/3/2020 | 0 | 59 | 59 |
| | WS-030 (012720) | 1/27/2020 | 0 | 58 | 58 |
| | WS-030 (031620) | 3/16/2020 | 0 | 72 | 72 |
| | WS-030 (030121) | 3/1/2021 | 0.77 J | 100 | 100.77 |
| | DUP-395 (030121) | 3/1/2021 | 0 | 110 | 110 |
| WS-036 | WS-036 (121417) | 12/14/2017 | 13 J | 75 | 88 |
| | WS-036 (010218) | 1/2/2018 | 12 J | 72 | 84 |
| | WS-036 (021618) | 2/16/2018 | 13 J | 60 | 73 |
| | WS-036 (022318) | 2/23/2018 | 8.9 J | 41 | 49.9 |
| | WS-036 (030218) | 3/2/2018 | 10 J | 54 | 64 |
| | WS-036 (030918) | 3/9/2018 | 12 J | 65 | 77 |
| | WS-036 (031518) | 3/15/2018 | 7.8 J | 39 | 46.8 |
| | WS-036 (041918) | 4/19/2018 | 7.1 J | 44 | 51.1 |
| | WS-036 (052118) | 5/21/2018 | 9.2 J | 54 | 63.2 |
| | WS-036 (082818) | 8/28/2018 | 27 J | 120 | 147 |
| | WS-036 (092818) | 9/28/2018 | 24 | 120 | 144 |
| | WS-036 (101018) | 10/10/2018 | 24 | 120 | 144 |
| | WS-036 (102418) | 10/24/2018 | 21 J | 99 | 120 |
| | WS-036 (111918) | 11/19/2018 | 23 | 76 D | 99 |
| | WS-036 (010319) | 1/3/2019 | 14 | 72 | 86 |
| | WS-036 (032019) | 3/20/2019 | 12 | 53 | 65 |
| | WS-036 (052919) | 5/29/2019 | 13 | 52 | 65 |
| | WS-036 (070919) | 7/9/2019 | 17 | 67 | 84 |
| | WS-036 (072419) | 7/24/2019 | 17 | 77 | 94 |
| | WS-036 (081219) | 8/12/2019 | 18 | 83 | 101 |
| | WS-036 (091619) | 9/16/2019 | 20 | 91 | 111 |
| | WS-036 (010820) | 1/8/2020 | 9.4 | 34 | 43.4 |
| WS-037 | WS-037 (121417) | 12/14/2017 | 0 | 18 J | 18 |
| | WS-037 (040518) | 4/5/2018 | 0 | 18 J | 18 |
| | WS-037 (092118) | 9/21/2018 | 2.7 | 16 | 18.7 |
| | WS-037 (092618) | 9/26/2018 | 1.6 J | 17 | 18.6 |
| | WS-037 (101718) | 10/17/2018 | 1.5 J | 18 | 19.5 |
| | WS-037 (111918) | 11/19/2018 | 1.4 J | 20 | 21.4 |
| | WS-037 (122118) | 12/21/2018 | 1.5 J | 26 | 27.5 |
| | WS-037 (021319) | 2/13/2019 | 2.2 | 19 | 21.2 |
| | WS-037 (031919) | 3/19/2019 | 1.1 J | 19 | 20.1 |
| | WS-037 (090619) | 9/6/2019 | 1.4 J | 13 | 14.4 |
| | WS-037 (033121) | 3/31/2021 | 1.3 J | 13 | 14.3 |
| WS-038 | WS-038 (121517) | 12/15/2017 | 0 | 39 | 39 |
| | WS-038 (011118) | 1/11/2018 | 0 | 40 | 40 |
| | WS-038 (050818) | 5/8/2018 | 0 | 30 | 30 |
| | WS-038 (080118) | 8/1/2018 | 0 | 19 | 19 |
| | WS-038 (080818) | 8/8/2018 | 0 | 22 | 22 |
| | WS-038 (081518) | 8/15/2018 | 0 | 22 | 22 |
| | WS-038 (082218) | 8/22/2018 | 0 | 22 | 22 |
| | WS-038 (082918) | 8/29/2018 | 0 | 21 | 21 |
| | WS-038 (100418) | 10/4/2018 | 1.6 J | 26 | 27.6 |
| | WS-038 (102218) | 10/22/2018 | 1.3 J | 23 J | 24.3 |
| | WS-038 (110818) | 11/8/2018 | 0.99 J | 30 | 30.99 |
| | WS-038 (120418) | 12/4/2018 | 0.86 J | 25 | 25.86 |
| | WS-038 (011419) | 1/14/2019 | 0 | 28 | 28 |
| | WS-038 (020519) | 2/5/2019 | 1.1 J | 32 | 33.1 |
| | WS-038 (021919) | 2/19/2019 | 0.99 J | 32 | 32.99 |
| | WS-038 (031419) | 3/14/2019 | 1.0 J | 33 | 34 |
| | WS-038 (032719) | 3/27/2019 | 0.84 J | 35 | 35.84 |
| | WS-038 (042419) | 4/24/2019 | 0 | 34 | 34 |
| | WS-038 (052319) | 5/23/2019 | 0.97 J | 32 | 32.97 |
| | WS-038 (062419) | 6/24/2019 | 1.4 J | 35 | 36.4 |
| | WS-038 (072519) | 7/25/2019 | 1.3 J | 35 | 36.3 |
| | WS-038 (082719) | 8/27/2019 | 1.4 J | 30 | 31.4 |
| | WS-038 (092419) | 9/24/2019 | 1.5 J | 24 | 25.5 |
| | WS-038 (102219) | 10/22/2019 | 1.3 J | 31 | 32.3 |
| | WS-038 (010320) | 1/3/2020 | 1.4 J | 22 | 23.4 |
| | WS-038 (012920) | 1/29/2020 | 1.7 J | 26 | 27.7 |
| | WS-038 (031620) | 3/16/2020 | 2.0 | 32 | 34 |
| | WS-038 (120120) | 12/1/2020 | 2.6 | 22 | 24.6 |
| | WS-038 (030221) | 3/2/2021 | 2.2 | 19 | 21.2 |
| WS-048 | WS-048 (121817) | 12/18/2017 | 0 | 16 J | 16 |
| | WS-048 (011018) | 1/10/2018 | 0 | 12 J | 12 |
| | WS-048 (061118) | 6/11/2018 | 0 | 5.7 J | 5.7 |
| | DUP-087 (061118) | 6/11/2018 | 0 | 5.7 J | 5.7 |
| | WS-048 (090518) | 9/5/2018 | 0 | 6.2 | 6.2 |
| | WS-048 (110518) | 11/5/2018 | 1.3 J | 11 | 12.3 |
| | WS-048 (051719) | 5/17/2019 | 0 | 16 | 16 |
| | WS-048 (091119) | 9/11/2019 | 0 | 9.7 | 9.7 |
| | WS-048 (111919) | 11/19/2019 | 0.77 J | 15 | 15.77 |
| | DUP-345 (111919) | 11/19/2019 | 0 | 13 | 13 |
| | WS-048 (031020) | 3/10/2020 | 0.77 J | 18 | 18.77 |
| | WS-048 (021021) | 2/10/2021 | 0 | 30 | 30 |

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**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-049 | WS-049 (121817) | 12/18/2017 | 0 | 6.7 J | 6.7 |
| | DUP-06 (121817) | 12/18/2017 | 0 | 6.7 J | 6.7 |
| | WS-049 (040518) | 4/5/2018 | 0 | 7.9 J | 7.9 |
| | WS-049 (103118) | 10/31/2018 | 2.1 | 5.3 J | 7.4 |
| | WS-049 (112618) | 11/26/2018 | 1.2 J | 5.3 | 6.5 |
| | WS-049 (010719) | 1/7/2019 | 2.3 | 5.4 | 7.7 |
| | WS-049 (012119) | 1/21/2019 | 3.2 | 5.8 | 9 |
| | WS-049 (042419) | 4/24/2019 | 2.6 | 7.2 | 9.8 |
| | WS-049 (052919) | 5/29/2019 | 1.1 J | 8.0 | 9.1 |
| | WS-049 (082319) | 8/23/2019 | 1.1 J | 6.7 | 7.8 |
| | WS-049 (121819) | 12/18/2019 | 1.3 J | 7.3 | 8.6 |
| | WS-049 (022420) | 2/24/2020 | 1.4 J | 5.3 | 6.7 |
| WS-052 | WS-052 (121817) | 12/18/2017 | 8.0 J | 410 D | 418 |
| | WS-052 (010218) | 1/2/2018 | 7.9 J | 410 D | 417.9 |
| | WS-052 (020718) | 2/7/2018 | 12 J | 420 D | 432 |
| | WS-052 (021418) | 2/14/2018 | 12 J | 360 D | 372 |
| | DUP-026 (021418) | 2/14/2018 | 14 J | 340 D | 354 |
| | WS-052 (021618) | 2/16/2018 | 11 J | 340 D | 351 |
| | WS-052 (022118) | 2/21/2018 | 12 J | 380 D | 392 |
| | WS-052 (030718) | 3/7/2018 | 13 J | 430 D | 443 |
| | WS-052 (031418) | 3/14/2018 | 12 J | 450 D | 462 |
| | WS-052 (041118) | 4/11/2018 | 13 J | 430 D | 443 |
| | WS-052 (072618) | 7/26/2018 | 11 J | 83 | 94 |
| | WS-052 (110918) | 11/9/2018 | 16 | 210 | 226 |
| | WS-052 (010819) | 1/8/2019 | 17 | 190 | 207 |
| | WS-052 (021219) | 2/12/2019 | 23 | 250 | 273 |
| | WS-052 (030719) | 3/7/2019 | 33 | 330 | 363 |
| | WS-052 (051519) | 5/15/2019 | 28 | 170 | 198 |
| | WS-052 (091119) | 9/11/2019 | 14 | 90 | 104 |
| | WS-052 (010820) | 1/8/2020 | 38 | 110 | 148 |
| | WS-052 (020121) | 2/1/2021 | 41 | 130 | 171 |
| WS-053 | WS-053 (122017) | 12/20/2017 | 0 | 3.9 J | 3.9 |
| | WS-053 (011018) | 1/10/2018 | 0 | 4.2 J | 4.2 |
| | WS-053 (041018) | 4/10/2018 | 0 | 0 | 0 |
| | WS-053 (080818) | 8/8/2018 | 0 | 3.7 J | 3.7 |
| | WS-053 (081518) | 8/15/2018 | 0 | 4.1 J | 4.1 |
| | WS-053 (082218) | 8/22/2018 | 0 | 4.2 J | 4.2 |
| | WS-053 (082818) | 8/28/2018 | 0 | 3.7 J | 3.7 |
| | WS-053 (090718) | 9/7/2018 | 0 | 4.2 J | 4.2 |
| | WS-053 (100318) | 10/3/2018 | 0 | 4.1 J | 4.1 |
| | WS-053 (110518) | 11/5/2018 | 0 | 4.3 J | 4.3 |
| | WS-053 (020419) | 2/4/2019 | 0 | 3.8 J | 3.8 |
| | WS-053 (041119) | 4/11/2019 | 0 | 3.5 J | 3.5 |
| | WS-053 (060519) | 6/5/2019 | 0 | 4.2 J | 4.2 |
| | WS-053 (081419) | 8/14/2019 | 0 | 5.8 | 5.8 |
| | WS-053 (090619) | 9/6/2019 | 0.61 J | 5.0 | 5.61 |
| | WS-053 (121819) | 12/18/2019 | 0 | 3.6 | 3.6 |
| | WS-053 (022020) | 2/20/2020 | 0.61 J | 3.7 | 4.31 |
| | WS-053 (030121) | 3/1/2021 | 2.2 | 3.5 | 5.7 |
| WS-054 | WS-054 (122017) | 12/20/2017 | 0 | 44 | 44 |
| | DUP-07 (122017) | 12/20/2017 | 0 | 40 | 40 |
| | WS-054 (011218) | 1/12/2018 | 0 | 49 | 49 |
| | WS-054 (040418) | 4/4/2018 | 0 | 39 | 39 |
| | WS-054 (091218) | 9/12/2018 | 0 | 97 | 97 |
| | WS-054 (091818) | 9/18/2018 | 0 | 78 | 78 |
| | WS-054 (092518) | 9/25/2018 | 0 | 80 | 80 |
| | WS-054 (100318) | 10/3/2018 | 0 | 86 | 86 |
| | WS-054 (100918) | 10/9/2018 | 0 | 79 | 79 |
| | WS-054 (110818) | 11/8/2018 | 0 | 100 | 100 |
| | WS-054 (120518) | 12/5/2018 | 0 | 71 D | 71 |
| | WS-054 (011419) | 1/14/2019 | 0 | 130 | 130 |
| | WS-054 (021819) | 2/18/2019 | 0 | 120 | 120 |
| | WS-054 (031219) | 3/12/2019 | 0 | 120 | 120 |
| | WS-054 (041019) | 4/10/2019 | 0 | 120 | 120 |
| | WS-054 (051419) | 5/14/2019 | 0 | 210 | 210 |
| | WS-054 (061919) | 6/19/2019 | 0 | 110 | 110 |
| | WS-054 (072419) | 7/24/2019 | 0 | 92 | 92 |
| | WS-054 (082019) | 8/20/2019 | 0 | 91 | 91 |
| | WS-054 (091119) | 9/11/2019 | 0 | 93 | 93 |
| | WS-054 (010320) | 1/3/2020 | 0 | 94 | 94 |
| | WS-054 (031720) | 3/17/2020 | 0 | 77 | 77 |
| | WS-054 (020121) | 2/1/2021 | 0 | 71 | 71 |
| WS-057 | WS-057 (010218) | 1/2/2018 | 13 J | 95 | 108 |
| | WS-057 (011818) | 1/18/2018 | 14 J | 87 | 101 |
| | DUP-15 (011818) | 1/18/2018 | 13 J | 86 | 99 |
| | WS-057 (040418) | 4/4/2018 | 12 J | 47 | 59 |
| | WS-057 (082918) | 8/29/2018 | 18 | 52 | 70 |
| | WS-057 (100918) | 10/9/2018 | 22 J | 55 J | 77 |
| | WS-057 (101718) | 10/17/2018 | 19 | 52 | 71 |
| | WS-057 (102418) | 10/24/2018 | 16 | 57 | 73 |
| | WS-057 (103118) | 10/31/2018 | 16 | 47 | 63 |
| | WS-057 (110718) | 11/7/2018 | 17 | 56 | 73 |
| | WS-057 (120518) | 12/5/2018 | 19 | 52 | 71 |
| | WS-057 (010319) | 1/3/2019 | 21 | 53 | 74 |
| | WS-057 (020619) | 2/6/2019 | 24 | 54 | 78 |
| | WS-057 (041019) | 4/10/2019 | 25 | 63 | 88 |
| | WS-057 (042419) | 4/24/2019 | 21 | 59 | 80 |
| | WS-057 (060519) | 6/5/2019 | 23 | 59 | 82 |
| | WS-057 (081419) | 8/14/2019 | 20 | 80 | 100 |

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**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-057 (continued) | WS-057 (091019) | 9/10/2019 | 22 | 80 | 102 |
| | WS-057 (110519) | 11/5/2019 | 21 | 93 | 114 |
| | WS-057 (121819) | 12/18/2019 | 22 | 90 | 112 |
| | WS-057 (021120) | 2/11/2020 | 21 | 88 | 109 |
| | WS-057 (020121) | 2/1/2021 | 19 | 92 | 111 |
| WS-058 | WS-058 (010318) | 1/3/2018 | 46 | 380 D | 426 |
| | WS-058 (011818) | 1/18/2018 | 49 | 400 D | 449 |
| | WS-058 (020718) | 2/7/2018 | 0 | 390 D | 390 |
| | WS-058 (021418) | 2/14/2018 | 59 | 320 D | 379 |
| | WS-058 (022118) | 2/21/2018 | 58 | 330 D | 388 |
| | WS-058 (022818) | 2/28/2018 | 50 | 350 DJ | 400 |
| | WS-058 (030918) | 3/9/2018 | 47 | 340 D | 387 |
| | WS-058 (040618) | 4/6/2018 | 48 | 370 D | 418 |
| | WS-058 (050218) | 5/2/2018 | 58 | 370 D | 428 |
| | WS-058 (080118) | 8/1/2018 | 48 | 380 D | 428 |
| | WS-058 (110918) | 11/9/2018 | 48 | 320 | 368 |
| | WS-058 (020619) | 2/6/2019 | 20 | 350 | 370 |
| | WS-058 (030419) | 3/4/2019 | 51 | 350 | 401 |
| | WS-058 (031919) | 3/19/2019 | 53 | 370 | 423 |
| | WS-058 (040219) | 4/2/2019 | 53 | 340 D | 393 |
| | WS-058 (060519) | 6/5/2019 | 57 | 350 | 407 |
| | WS-058 (082719) | 8/27/2019 | 3.9 | 420 D | 423.9 |
| | WS-058 (121619) | 12/16/2019 | 6.2 | 360 | 366.2 |
| | WS-058 (030220) | 3/2/2020 | 4.6 | 470 J- | 474.6 |
| | WS-058 (030121) | 3/1/2021 | 2.0 | 320 | 322 |
| WS-061B | WS-061B (030118) | 3/1/2018 | 0 | 11 J | 11 |
| | WS-061B (052918) | 5/29/2018 | 0 | 7.3 J | 7.3 |
| | WS-061B (090618) | 9/6/2018 | 1.5 J | 23 J | 24.5 |
| | WS-061B (091218) | 9/12/2018 | 0 | 22 | 22 |
| | WS-061B (091918) | 9/19/2018 | 1.9 J | 24 | 25.9 |
| | WS-061B (092618) | 9/26/2018 | 1.4 J | 27 | 28.4 |
| | WS-061B (100318) | 10/3/2018 | 0 | 24 J | 24 |
| | WS-061B (103018) | 10/30/2018 | 0 | 21 | 21 |
| | WS-061B (120418) | 12/4/2018 | 1.4 J | 21 | 22.4 |
| | WS-061B (010219) | 1/2/2019 | 1.6 J | 27 | 28.6 |
| | WS-061B (020419) | 2/4/2019 | 2.0 | 31 | 33 |
| | WS-061B (041719) | 4/17/2019 | 1.8 | 27 | 28.8 |
| | WS-061B (012820) | 1/28/2020 | 2.2 | 36 | 38.2 |
| WS-062 | WS-062 (010918) | 1/9/2018 | 0 | 30 J | 30 |
| | WS-062 (040918) | 4/9/2018 | 0 | 24 | 24 |
| | WS-062 (082218) | 8/22/2018 | 1.5 J | 21 | 22.5 |
| | WS-062 (111918) | 11/19/2018 | 1.7 J | 19 | 20.7 |
| | WS-062 (102419) | 10/24/2019 | 2.1 | 16 | 18.1 |
| | WS-062 (031021) | 3/10/2021 | 1.9 | 24 | 25.9 |
| | DUP-400 (031021) | 3/10/2021 | 2.3 | 25 | 27.3 |
| WS-068 | WS-068 (010918) | 1/9/2018 | 0 | 31 | 31 |
| | WS-068 (041118) | 4/11/2018 | 0 | 34 | 34 |
| | WS-068 (071818) | 7/18/2018 | 0 | 79 | 79 |
| | WS-068 (073018) | 7/30/2018 | 0 | 63 | 63 |
| | WS-068 (080618) | 8/6/2018 | 0 | 63 | 63 |
| | WS-068 (081318) | 8/13/2018 | 0 | 60 | 60 |
| | WS-068 (082018) | 8/20/2018 | 0 | 49 | 49 |
| | WS-068 (091718) | 9/17/2018 | 0 | 26 | 26 |
| | WS-068 (101518) | 10/15/2018 | 0 | 24 | 24 |
| | WS-068 (011519) | 1/15/2019 | 0 | 67 | 67 |
| | WS-068 (022519) | 2/25/2019 | 0 | 67 | 67 |
| | WS-068 (041719) | 4/17/2019 | 0 | 73 | 73 |
| | WS-068 (051319) | 5/13/2019 | 0 | 73 | 73 |
| | WS-068 (080619) | 8/6/2019 | 0.50 JN | 230 JN | 230.5 |
| | WS-068 (090319) | 9/3/2019 | 0 | 270 | 270 |
| | WS-068 (100119) | 10/1/2019 | 0.98 J | 300 | 300.98 |
| | WS-068 (121719) | 12/17/2019 | 1.2 J | 310 | 311.2 |
| | WS-068 (021020) | 2/10/2020 | 1.5 J | 330 | 331.5 |
| | WS-068 (120120) | 12/1/2020 | 0 | 480 D | 480 |
| | WS-068 (030221) | 3/2/2021 | 4.4 JN | 620 D | 624.4 |
| | WS-068 (032421) | 3/24/2021 | 3.3 | 620 D | 623.3 |
| WS-069B | WS-069B (010918) | 1/9/2018 | 0 | 0 | 0 |
| | WS-069B (042318) | 4/23/2018 | 0 | 2.9 J | 2.9 |
| | WS-069B (090418) | 9/4/2018 | 0 | 4.8 J | 4.8 |
| | WS-069B (102518) | 10/25/2018 | 0 | 4.3 J | 4.3 |
| | WS-069B (051519) | 5/15/2019 | 0 | 0 | 0 |
| | WS-069B (082819) | 8/28/2019 | 0.68 J | 3.5 | 4.18 |
| | WS-069B (100219) | 10/2/2019 | 1.5 J | 4.1 | 5.6 |
| | WS-069B (033021) | 3/30/2021 | 0.90 J | 50 | 50.9 |
| WS-082D | WS-082D (012718) | 1/27/2018 | 0 | 1,900 D | 1,900 |
| WS-082D Reanalysis | WS-082D (012718) | 1/27/2018 | 0 | 1,900 D | 1,900 |
| WS-082D | WS-082D (030118) | 3/1/2018 | 0 | 1,700 D | 1,700 |
| | WS-082D-PVC (03011 | 3/1/2018 | 0 | 1,600 D | 1,600 |
| | DUP-033 (030118) | 3/1/2018 | 0 | 1,800 D | 1,800 |
| | WS-082D (092718) | 9/27/2018 | 0 | 2,100 D | 2,100 |
| | DUP-156 (092718) | 9/27/2018 | 0 | 2,200 D | 2,200 |
| | WS-082D (031121) | 3/11/2021 | 0 | 770 D | 770 |
| WS-090 | WS-090 (011218) | 1/12/2018 | 0 | 290 D | 290 |
| | DUP-13 (011218) | 1/12/2018 | 0 | 300 D | 300 |
| | WS-090 (013118) | 1/31/2018 | 0 | 310 D | 310 |
| | WS-090 (030218) | 3/2/2018 | 0 | 290 D | 290 |
| | WS-090 (030918) | 3/9/2018 | 0 | 270 D | 270 |
| | WS-090 (031618) | 3/16/2018 | 0 | 260 D | 260 |
| | WS-090 (032218) | 3/22/2018 | 0 | 250 D | 250 |

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**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-090 (continued) | WS-090 (032818) | 3/28/2018 | 0 | ***210 D*** | ***210*** |
| | WS-090 (050818) | 5/8/2018 | 0 | ***160 D*** | ***160*** |
| | WS-090 (053018) | 5/30/2018 | 0 | ***78*** | ***78*** |
| | WS-090 (062218) | 6/22/2018 | 0 | ***47*** | ***47*** |
| | WS-090 (072518) | 7/25/2018 | 0 | *16 J* | *16* |
| | WS-090 (081418) | 8/14/2018 | 0 | *14 J* | *14* |
| | WS-090 (091218) | 9/12/2018 | 0 | *7.1* | *7.1* |
| | WS-090 (101718) | 10/17/2018 | 0 | *4.1 J* | *4.1* |
| | WS-090 (111918) | 11/19/2018 | 0 | *15* | *15* |
| | WS-090 (010819) | 1/8/2019 | 0 | *19* | *19* |
| | WS-090 (012119) | 1/21/2019 | 0 | ***41*** | ***41*** |
| | WS-090 (021319) | 2/13/2019 | 0 | ***130*** | ***130*** |
| | WS-090 (022619) | 2/26/2019 | 0 | ***170*** | ***170*** |
| | WS-090 (031319) | 3/13/2019 | 1.2 J | ***190*** | ***191.2*** |
| | WS-090 (041019) | 4/10/2019 | 1.5 J | ***170*** | ***171.5*** |
| | WS-090 (043019) | 4/30/2019 | 1.4 J | ***110*** | ***111.4*** |
| | WS-090 (061119) | 6/11/2019 | 0 | ***39*** | ***39*** |
| | WS-090 (071619) | 7/16/2019 | 0.56 J | ***24*** | ***24.56*** |
| | WS-090 (081919) | 8/19/2019 | 0 | *5.4* | *5.4* |
| | WS-090 (091019) | 9/10/2019 | 0 | *3.1* | *3.1* |
| | WS-090 (102319) | 10/23/2019 | 0 | *2.2* | *2.2* |
| | WS-090 (121819) | 12/18/2019 | 0 | *4.6* | *4.6* |
| | WS-090 (012720) | 1/27/2020 | 0 | *4.2* | *4.2* |
| | WS-090 (011921) | 1/19/2021 | 0.85 J | ***36*** | ***36.85*** |
| WS-096 | WS-096 (012418) | 1/24/2018 | 0 | ***87*** | ***87*** |
| | WS-096 (020718) | 2/7/2018 | 0 | ***95 J*** | ***95*** |
| | WS-096 (032118) | 3/21/2018 | *19 J* | ***86*** | ***105*** |
| | WS-096 (032818) | 3/28/2018 | 0 | ***73*** | ***73*** |
| | WS-096 (040418) | 4/4/2018 | 0 | ***82*** | ***82*** |
| | WS-096 (050218) | 5/2/2018 | 0 | ***90*** | ***90*** |
| | WS-096 (053018) | 5/30/2018 | 0 | ***77*** | ***77*** |
| | WS-096 (062718) | 6/27/2018 | 0 | ***89*** | ***89*** |
| | DUP-093 (062718) | 6/27/2018 | 0 | ***87*** | ***87*** |
| | WS-096 (080118) | 8/1/2018 | 0 | ***85*** | ***85*** |
| | WS-096 (082718) | 8/27/2018 | 0 | ***92*** | ***92*** |
| | WS-096 (102418) | 10/24/2018 | *2.8* | ***87*** | ***89.8*** |
| | WS-096 (120418) | 12/4/2018 | *2.6 J* | ***60*** | ***62.6*** |
| | WS-096 (010319) | 1/3/2019 | *3.2* | ***62*** | ***65.2*** |
| | WS-096 (020519) | 2/5/2019 | *4.0* | ***65*** | ***69*** |
| | WS-096 (022619) | 2/26/2019 | *3.1* | ***61*** | ***64.1*** |
| | WS-096 (050719) | 5/7/2019 | *2.8* | ***71*** | ***73.8*** |
| | WS-096 (060519) | 6/5/2019 | 0 | ***64*** | ***64*** |
| | WS-096 (071619) | 7/16/2019 | *2.7* | ***91*** | ***93.7*** |
| | WS-096 (082319) | 8/23/2019 | *2.9* | ***110*** | ***112.9*** |
| | WS-096 (101619) | 10/16/2019 | *2.7* | ***120*** | ***122.7*** |
| | WS-096 (110619) | 11/6/2019 | *2.6* | ***130*** | ***132.6*** |
| | WS-096 (121719) | 12/17/2019 | *2.8* | ***110*** | ***112.8*** |
| | WS-096 (030221) | 3/2/2021 | *2.8* | ***110 J+*** | ***112.8*** |
| WS-097 | WS-097 (012418) | 1/24/2018 | 0 | 0 | 0 |
| | WS-097 (050718) | 5/7/2018 | 0 | *7.2 J* | *7.2* |
| | WS-097 (072618) | 7/26/2018 | 0 | *3.3 J* | *3.3* |
| | WS-097 (073018) | 7/30/2018 | 0 | 0 | 0 |
| | WS-097 (080618) | 8/6/2018 | 0 | *3.4 J* | *3.4* |
| | WS-097 (081318) | 8/13/2018 | 0 | *4.2 J* | *4.2* |
| | WS-097 (082018) | 8/20/2018 | 0 | *4.8 J* | *4.8* |
| | WS-097 (091918) | 9/19/2018 | 0 | *3.7 J* | *3.7* |
| | WS-097 (101518) | 10/15/2018 | 0 | *4.1 J* | *4.1* |
| | WS-097 (111318) | 11/13/2018 | 0 | *2.9 J* | *2.9* |
| | WS-097 (011519) | 1/15/2019 | 0 | *3.0 J* | *3* |
| | WS-097 (022519) | 2/25/2019 | 0 | *3.0 J* | *3* |
| | WS-097 (041719) | 4/17/2019 | 0 | *2.9 J* | *2.9* |
| | WS-097 (052119) | 5/21/2019 | 0 | *3.0 J* | *3* |
| | WS-097 (072419) | 7/24/2019 | 1.8 J | 1.9 | *3.7* |
| | WS-097 (082719) | 8/27/2019 | 1.3 J | 1.8 J | *3.1* |
| | WS-097 (101519) | 10/15/2019 | 1.2 J | 1.9 | *3.1* |
| | WS-097 (121719) | 12/17/2019 | 0.53 J | *2.4* | *2.93* |
| | WS-097 (020320) | 2/3/2020 | 0.51 J | 1.7 J | *2.21* |
| | WS-097 (020321) | 2/3/2021 | 0.72 J | *3.8* | *4.52* |
| WS-099 | WS-099 (012718) | 1/27/2018 | 0 | *4.1 J* | *4.1* |
| | DUP-019 (012718) | 1/27/2018 | 0 | *4.1 J* | *4.1* |
| | WS-099 (040518) | 4/5/2018 | 0 | *5.2 J* | *5.2* |
| | WS-099 (072418) | 7/24/2018 | 0 | *5.6 J* | *5.6* |
| | WS-099 (073118) | 7/31/2018 | 0 | *5.5 J* | *5.5* |
| | WS-099 (080718) | 8/7/2018 | 0 | *5.0 J* | *5* |
| | WS-099 (081418) | 8/14/2018 | 0 | *6.0 J* | *6* |
| | WS-099 (082118) | 8/21/2018 | 0 | *6.7 J* | *6.7* |
| | WS-099 (091818) | 9/18/2018 | *3.1* | *5.6* | *8.7* |
| | WS-099 (101518) | 10/15/2018 | *2.3* | *7.7* | *10* |
| | WS-099 (120418) | 12/4/2018 | 1.1 J | *5.9* | *7* |
| | WS-099 (012219) | 1/22/2019 | *2.8* | *5.3 J* | *8.1* |
| | WS-099 (032519) | 3/25/2019 | *2.7* | *5.3 J* | *8* |
| | WS-099 (052219) | 5/22/2019 | *2.4* | *4.0 J* | *6.4* |
| | WS-099 (082019) | 8/20/2019 | 1.4 J | *3.0* | *4.4* |
| | WS-099 (101519) | 10/15/2019 | 0.77 J | *3.4* | *4.17* |
| | WS-099 (031720) | 3/17/2020 | 0.84 J | *6.6* | *7.44* |
| | WS-099 (030221) | 3/2/2021 | 1.4 J | *5.0* | *6.4* |

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**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-100 | WS-100 (013018) | 1/30/2018 | 0 | *7.7 J* | *7.7* |
| | WS-100 (041218) | 4/12/2018 | 0 | 0 | 0 |
| | DUP-059 (041218) | 4/12/2018 | 0 | 0 | 0 |
| | WS-100 (082318) | 8/23/2018 | 0 | *3.1 J* | *3.1* |
| | WS-100 (083018) | 8/30/2018 | 0 | *2.9 J* | *2.9* |
| | WS-100 (090718) | 9/7/2018 | 0 | *2.7 J* | *2.7* |
| | WS-100 (091218) | 9/12/2018 | 0 | *2.4 J* | *2.4* |
| | WS-100 (092018) | 9/20/2018 | 0 | *3.1 J* | *3.1* |
| | WS-100 (101618) | 10/16/2018 | 0 | 0 | 0 |
| | WS-100 (111418) | 11/14/2018 | 0 | *2.5 J* | *2.5* |
| | WS-100 (022619) | 2/26/2019 | 0 | *2.9 J* | *2.9* |
| | WS-100 (032819) | 3/28/2019 | 0 | 0 | 0 |
| | WS-100 (052919) | 5/29/2019 | 0 | *5.7* | *5.7* |
| | WS-100 (080719) | 8/7/2019 | 0.54 JN | *6.1* | *6.64* |
| | WS-100 (090619) | 9/6/2019 | 0.66 J | *5.9* | *6.56* |
| | WS-100 (100819) | 10/8/2019 | 0.49 J | *5.1* | *5.59* |
| | WS-100 (121819) | 12/18/2019 | 0.49 J | *5.3* | *5.79* |
| | WS-100 (030320) | 3/3/2020 | 0.55 J | *4.3* | *4.85* |
| | WS-100 (031021) | 3/10/2021 | 1.4 J | *6.7* | *8.1* |
| WS-106 | WS-106 (020218) | 2/2/2018 | 0 | 0 | 0 |
| | WS-106 (040718) | 4/7/2018 | 0 | 0 | 0 |
| | WS-106 (091818) | 9/18/2018 | 0 | *17* | *17* |
| | WS-106 (112918) | 11/29/2018 | 0.74 J | *14* | *14.74* |
| | WS-106 (120618) | 12/6/2018 | 0 | *6.7* | *6.7* |
| | WS-106 (121418) | 12/14/2018 | 0 | *7.4* | *7.4* |
| | WS-106 (122118) | 12/21/2018 | 1.9 | *3* | *4.9* |
| | WS-106 (122718) | 12/27/2018 | 0 | *7.8* | *7.8* |
| | WS-106 (013019) | 1/30/2019 | 0 | *2.7 J* | *2.7* |
| | WS-106 (022519) | 2/25/2019 | 0 | 0 | 0 |
| | WS-106 (060319) | 6/3/2019 | 0 | ***22*** | ***22*** |
| | WS-106 (070819) | 7/8/2019 | 0 | ***68*** | ***68*** |
| | WS-106 (072519) | 7/25/2019 | 0 | ***87*** | ***87*** |
| | WS-106 (101419) | 10/14/2019 | 0.73 J | ***360*** | ***360.73*** |
| | WS-106 (121619) | 12/16/2019 | 1.1 J | ***550 D*** | ***551.1*** |
| | WS-106 (012720) | 1/27/2020 | 1.1 J | ***420 D*** | ***421.1*** |
| | WS-106 (112520) | 11/25/2020 | *2.6* | ***350*** | ***352.6*** |
| | WS-106 (120420) | 12/4/2020 | 0 | ***320*** | ***320*** |
| | WS-106 (012221) | 1/22/2021 | 0 | ***370 D*** | ***370*** |
| WS-109 | WS-109 (020318) | 2/3/2018 | 0 | 0 | 0 |
| | WS-109 (042018) | 4/20/2018 | 0 | *3.1 J* | *3.1* |
| | DUP-067 (042018) | 4/20/2018 | 0 | *3.0 J* | *3* |
| | WS-109 (072618) | 7/26/2018 | 0 | 0 | 0 |
| | WS-109 (080718) | 8/7/2018 | 0 | *4.7 J* | *4.7* |
| | WS-109 (081618) | 8/16/2018 | 0 | *4.4 J* | *4.4* |
| | WS-109 (082318) | 8/23/2018 | 0 | *4.7 J* | *4.7* |
| | WS-109 (092018) | 9/20/2018 | 2.0 | *5.0 J* | *7* |
| | WS-109 (101518) | 10/15/2018 | 1.9 J | *7.1* | *9* |
| | WS-109 (021119) | 2/11/2019 | *5.0* | *13* | *18* |
| | WS-109 (032919) | 3/29/2019 | *6.4* | *12* | *18.4* |
| | WS-109 (042419) | 4/24/2019 | *11* | *20* | ***31*** |
| | WS-109 (062419) | 6/24/2019 | *9.5 J-* | *5.0 J-* | *14.5* |
| | WS-109 (081619) | 8/16/2019 | *11* | *7.5* | *18.5* |
| | WS-109 (100819) | 10/8/2019 | *13* | *8.8* | ***21.8*** |
| | WS-109 (121719) | 12/17/2019 | *7.0* | *4.6* | *11.6* |
| | WS-109 (030321) | 3/3/2021 | *2.5* | *4.2* | *6.7* |
| WS-121A | WS-121A (020618) | 2/6/2018 | 0 | *9.0 J* | *9* |
| | WS-121A (040218) | 4/2/2018 | 0 | *4.4 J* | *4.4* |
| | WS-121A (072518) | 7/25/2018 | 0 | *5.7 J* | *5.7* |
| | WS-121A (080118) | 8/1/2018 | 0 | *6.3 J* | *6.3* |
| | WS-121A (080818) | 8/8/2018 | 0 | *6.7 J* | *6.7* |
| | WS-121A (081518) | 8/15/2018 | 0 | *8.3 J* | *8.3* |
| | WS-121A (082218) | 8/22/2018 | 0 | *5.4 J* | *5.4* |
| | WS-121A (092118) | 9/21/2018 | *4.6* | *6.2* | *10.8* |
| | WS-121A (102218) | 10/22/2018 | *4.0 J* | *4.6 J* | *8.6* |
| | WS-121A (021219) | 2/12/2019 | *3.0* | *7.1* | *10.1* |
| | WS-121A (040319) | 4/3/2019 | *2.8* | *4.3 J* | *7.1* |
| | WS-121A (052919) | 5/29/2019 | *2.2* | *4.0 J* | *6.2* |
| | WS-121A (072919) | 7/29/2019 | *3.7* | *5.5* | *9.2* |
| | WS-121A (091019) | 9/10/2019 | *6.1* | *4.2* | *10.3* |
| | WS-121A (102919) | 10/29/2019 | *13* | *16* | ***29*** |
| | WS-121A (032321) | 3/23/2021 | 1.8 | 1.4 J | *3.2* |
| WS-121B | WS-121B (040218) | 4/2/2018 | 0 | 0 | 0 |
| | DUP-044 (040218) | 4/2/2018 | 0 | 0 | 0 |
| | WS-121B (081718) | 8/17/2018 | *2.6* | 0 | *2.6* |
| | WS-121B (102218) | 10/22/2018 | *2.1 J* | *3.0 J* | *5.1* |
| | WS-121B (112818) | 11/28/2018 | *2.2* | *2.9* | *5.1* |
| | WS-121B (120518) | 12/5/2018 | 1.9 | *2.7* | *4.6* |
| | WS-121B (121218) | 12/12/2018 | 1.6 J | *2.3* | *3.9* |
| | WS-121B (121918) | 12/19/2018 | 0 | *5.9* | *5.9* |
| | WS-121B (010219) | 1/2/2019 | 1.7 | *2.8 J* | *4.5* |
| | WS-121B (021219) | 2/12/2019 | 1.6 J | *3.0 J* | *4.6* |
| | WS-121B (040319) | 4/3/2019 | 1.9 | *3.2 J* | *5.1* |
| | WS-121B (052919) | 5/29/2019 | *4.3* | *3.4 J* | *7.7* |
| | WS-121B (072919) | 7/29/2019 | 0 | 1.7 J | 1.7 |
| | WS-121B (091019) | 9/10/2019 | 0.77 J | 1.4 J | *2.17* |
| | WS-121B (102919) | 10/29/2019 | 0.81 J | *2.3* | *3.11* |
| | WS-121B (020520) | 2/5/2020 | 0.50 J | 1.5 J | 2 |
| | WS-121B (030221) | 3/2/2021 | 0.66 J | *2.6* | *3.26* |

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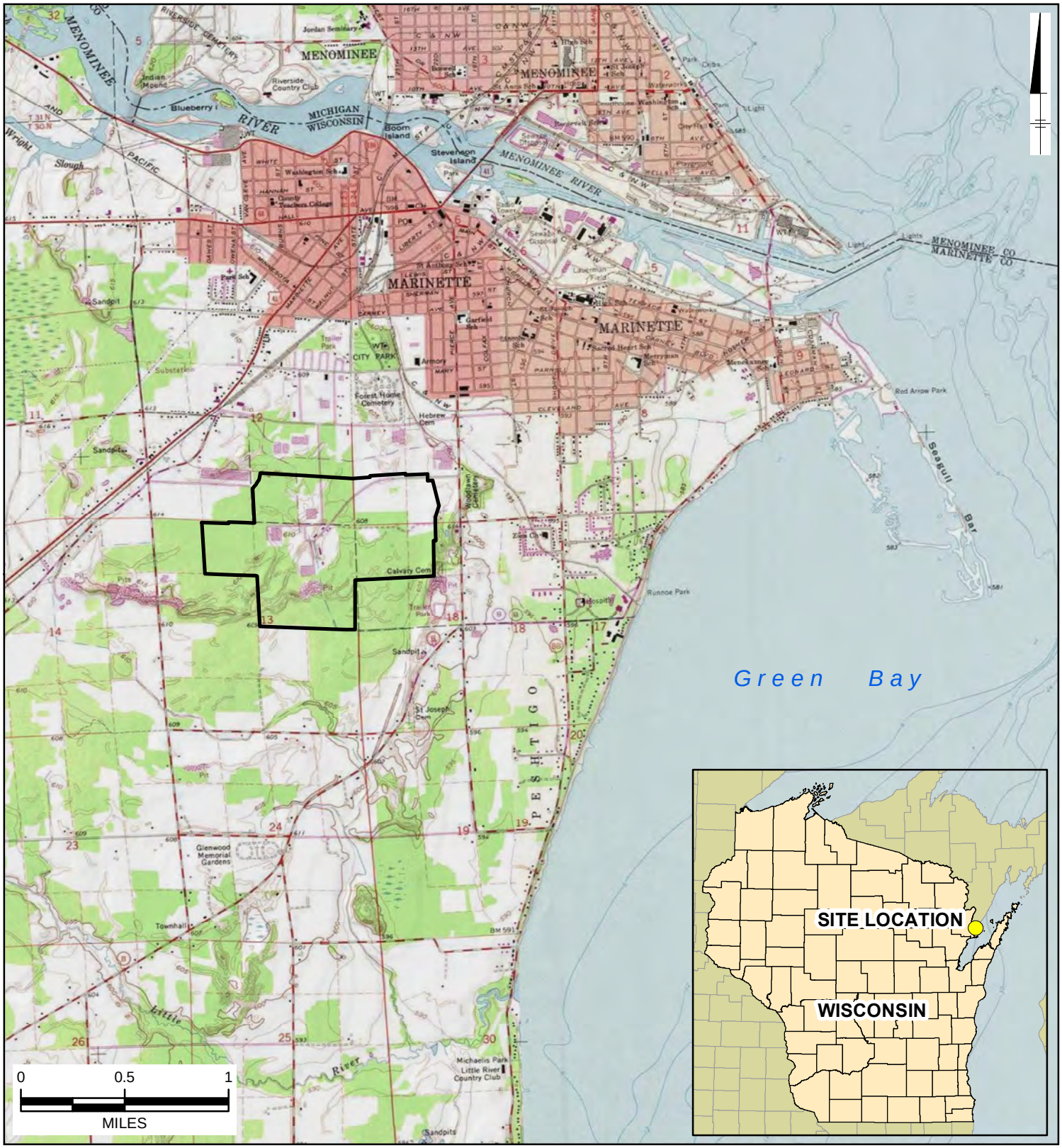
**Table 6**
**Private Drinking Water Well Historical Results for Trend Plots**
**Private Drinking Water Well Sampling Program Annual Summary Report - FTC Sampling Area**
**Marinette, Wisconsin**

| | | Chemical Name | PFOS | PFOA | PFOS+PFOA |
|---|---|---|---|---|---|
| | | Unit | ng/L | ng/L | ng/L |
| | | Recommended Enforcement Standard (ES) | 20 | 20 | 20 |
| | | Recommended Preventive Action Limit (PAL) | 2 | 2 | 2 |
| Location | Sample ID | Sample Date | | | |
| WS-124 | WS-124 (020718) | 2/7/2018 | 0 | 0 | 0 |
| | WS-124 (040918) | 4/9/2018 | 0 | 0 | 0 |
| WS-124 Reanalysis | WS-124 (040918) | 4/9/2018 | 0 | *2.4 J* | *2.4* |
| WS-124 | DUP-053 (040918) | 4/9/2018 | 0 | *3 J* | *3* |
| WS-124 Reanalysis | DUP-053 (040918) | 4/9/2018 | 0 | 0 | 0 |
| WS-124 | WS-124 (090618) | 9/6/2018 | *3.5* | *2.4 J* | *5.9* |
| | WS-124 (121318) | 12/13/2018 | *3.7 J* | *2.1 J* | *5.8* |
| | WS-124 (060519) | 6/5/2019 | *5.3* | *3.0 J* | *8.3* |
| | WS-124 (081919) | 8/19/2019 | *5.3* | *3.3* | *8.6* |
| WS-129 | WS-129 (022218) | 2/22/2018 | 0 | *3.3 J* | *3.3* |
| | DUP-029 (022218) | 2/22/2018 | 0 | *3.1 J* | *3.1* |
| | WS-129 (051418) | 5/14/2018 | 0 | *2.8 J* | *2.8* |
| | DUP-075 (051418) | 5/14/2018 | 0 | *2.7 J* | *2.7* |
| | WS-129 (090418) | 9/4/2018 | 0 | *2.8 J* | *2.8* |
| | DUP-135 (090418) | 9/4/2018 | 0 | 0 | 0 |
| | WS-129 (040419) | 4/4/2019 | *3.4* | *3.6 J* | *7* |
| | WS-129 (041719) | 4/17/2019 | *4.5* | *3.6 J* | *8.1* |
| | WS-129 (042419) | 4/24/2019 | 1.8 J | *3.3 J* | *5.1* |
| | WS-129 (050119) | 5/1/2019 | 1.6 J | *3.8 J* | *5.4* |
| | WS-129 (060419) | 6/4/2019 | 0 | *3.6 J* | *3.6* |
| | WS-129 (091719) | 9/17/2019 | 0.92 J | *2.9* | *3.82* |
| | WS-129 (101619) | 10/16/2019 | 1.0 J | *3.3* | *4.3* |
| WS-133 | WS-133 (030618) | 3/6/2018 | 0 | *8.5 J* | *8.5* |
| | DUP-035 (030618) | 3/6/2018 | 0 | *9.1 J* | *9.1* |
| | WS-133 (051418) | 5/14/2018 | 0 | *6.9 J* | *6.9* |
| | WS-133 (092618) | 9/26/2018 | *3.5* | *5.1 J* | *8.6* |
| | WS-133 (100318) | 10/3/2018 | 0 | *5.0 J* | *5* |
| | WS-133 (102318) | 10/23/2018 | 0 | *5.4 J* | *5.4* |
| | WS-133 (111918) | 11/19/2018 | 1.4 J | *5.3 J* | *6.7* |
| | WS-133 (122118) | 12/21/2018 | 1.2 J | *7.8* | *9* |
| | WS-133 (032619) | 3/26/2019 | 1.0 J | *5.8* | *6.8* |
| | WS-133 (061819) | 6/18/2019 | 0 | *6.1* | *6.1* |
| | WS-133 (072419) | 7/24/2019 | 0.97 J | *6.7* | *7.67* |
| | WS-133 (090619) | 9/6/2019 | 1.1 J | *5.7* | *6.8* |
| WS-146A | WS-146A (052918) | 5/29/2018 | 0 | ***230 D*** | ***230*** |
| | DUP-080 (052918) | 5/29/2018 | 0 | ***210 D*** | ***210*** |
| | WS-146A (061818) | 6/18/2018 | 0 | ***230 D*** | ***230*** |
| | WS-146A (062518) | 6/25/2018 | *12 J* | ***230 D*** | ***242*** |
| | WS-146A (062818) | 6/28/2018 | 0 | ***220 D*** | ***220*** |
| | WS-146A (070518) | 7/5/2018 | 0 | ***210 DJ*** | ***210*** |
| | WS-146A (071218) | 7/12/2018 | 0 | ***220 D*** | ***220*** |
| | WS-146A (072518) | 7/25/2018 | 0 | ***180 D*** | ***180*** |
| | WS-146A (081518) | 8/15/2018 | 0 | ***170 D*** | ***170*** |
| | WS-146A (052819) | 5/28/2019 | *4.6* | ***190*** | ***194.6*** |
| | WS-146A (061119) | 6/11/2019 | *5.3* | ***160*** | ***165.3*** |
| | WS-146A (070819) | 7/8/2019 | *6.5* | ***170*** | ***176.5*** |
| | WS-146A (073119) | 7/31/2019 | *6.0* | ***140*** | ***146*** |
| | WS-146A (090619) | 9/6/2019 | *6.6* | ***140*** | ***146.6*** |
| WS-146B | WS-146B (052918) | 5/29/2018 | ***41*** | ***88*** | ***129*** |
| | WS-146B (061818) | 6/18/2018 | ***44*** | ***82*** | ***126*** |
| | DUP-090 (061818) | 6/18/2018 | ***45*** | ***79*** | ***124*** |
| | WS-146B (070518) | 7/5/2018 | ***43*** | ***78*** | ***121*** |
| | WS-146B (071218) | 7/12/2018 | ***44*** | ***76*** | ***120*** |
| | WS-146B (072518) | 7/25/2018 | ***28 J*** | ***76*** | ***104*** |
| | WS-146B (080218) | 8/2/2018 | ***43*** | ***76*** | ***119*** |
| | WS-146B (052819) | 5/28/2019 | ***52*** | ***81*** | ***133*** |
| | WS-146B (061119) | 6/11/2019 | ***56*** | ***91*** | ***147*** |
| | WS-146B (070819) | 7/8/2019 | ***58*** | ***100*** | ***158*** |
| | WS-146B (073119) | 7/31/2019 | ***72*** | ***110*** | ***182*** |
| | WS-146B (090619) | 9/6/2019 | ***80*** | ***100*** | ***180*** |

**Notes:**
**Concentrations above Recommended Enforcement Standard (ES) are boldfaced.**
*Concentrations above Recommended Preventive Action Limit (PAL) are italicized.*
ng/L = nanograms per liter
PFOA = Perfluorooctanoic acid (C8)
PFOS = Perfluorooctanesulfonic acid (C8)

**Data Qualifier:**
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
D = Dilution required for sample analysis
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.

# Figures




LEGEND:

APPROXIMATE SITE PROPERTY

NOTES:

1. TOPOGRAPHIC MAP SOURCE: COPYRIGHT:© 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED, ACCESSED MARCH, 2018.

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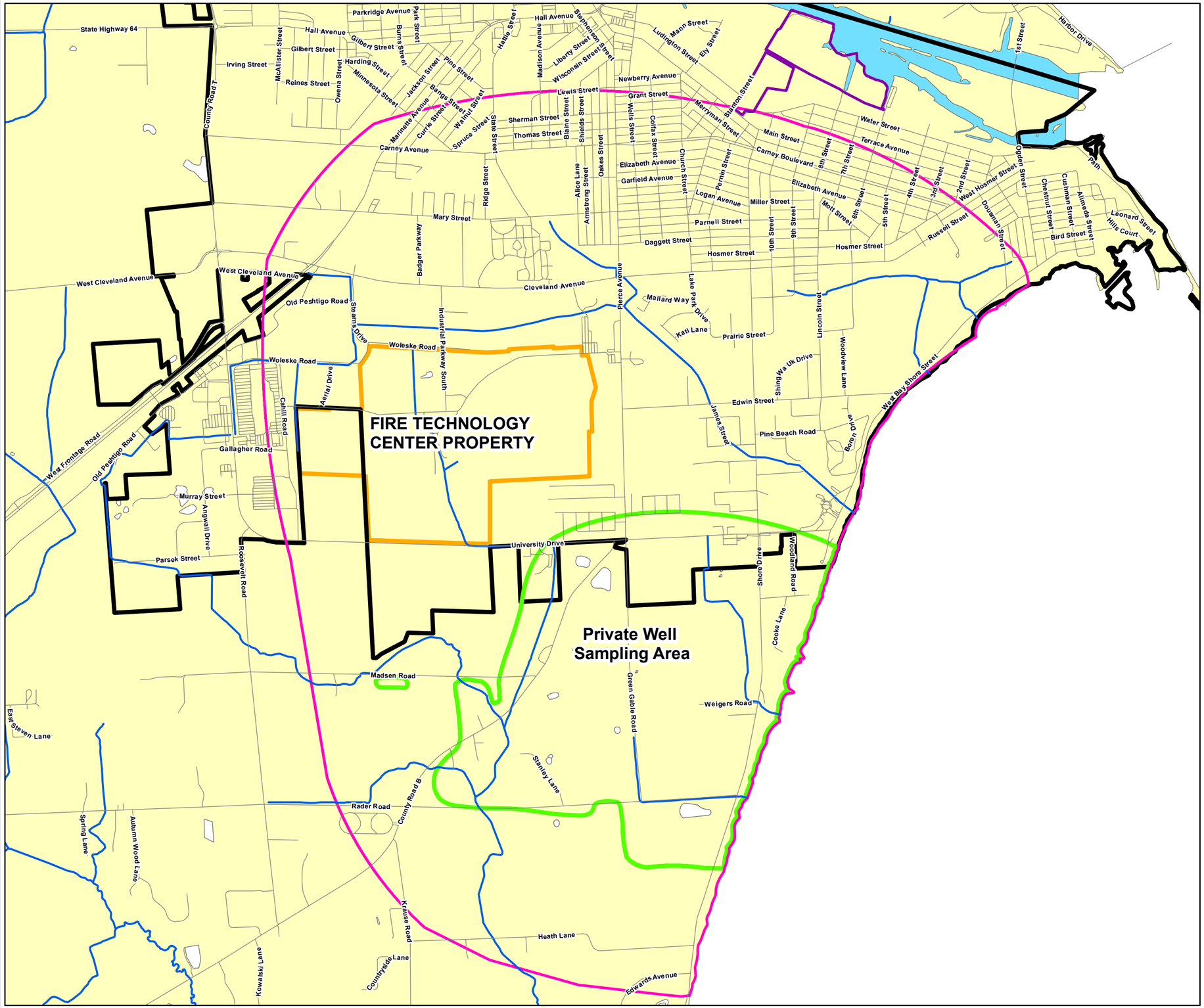
**SITE LOCATION**

ARCADIS

FIGURE
1




LEGEND:

- STANTON STREET FACILITY BOUNDARY
- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- PRIVATE WELL SAMPLING AREA
- INVESTIGATION AREA
- WATERBODY
- DITCH/STREAM
- ROAD

**8/3/2021**

NOTES:

1. WELL LOCATIONS ARE APPROXIMATE

0 1,250 2,500

GRAPHIC SCALE IN FEET

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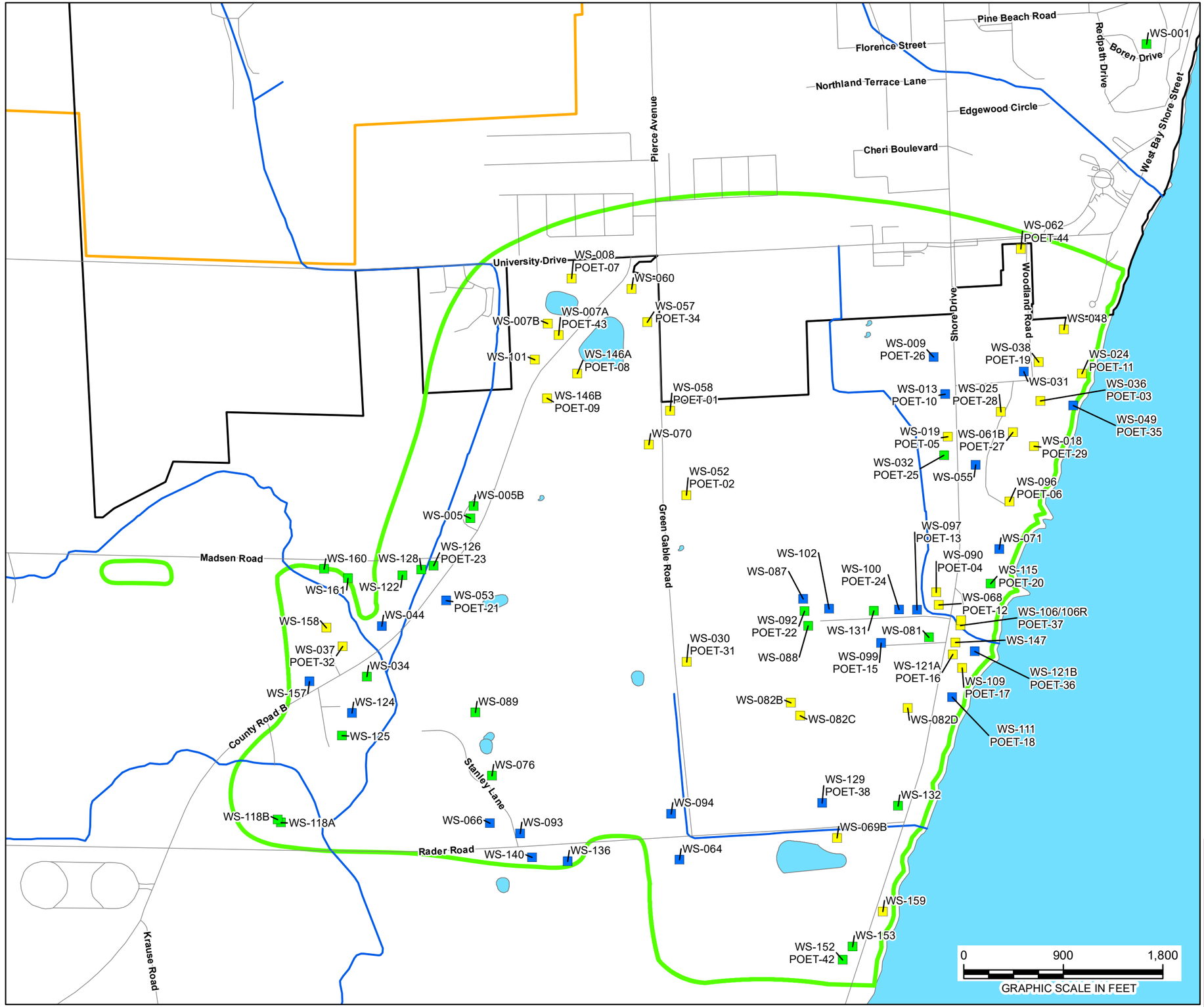
**PRIVATE DRINKING WATER WELL SAMPLING AREA**

ARCADIS

FIGURE
2




LEGEND:

**Private Drinking Water Well Location**

- PFAS NOT DETECTED ABOVE RL
- PFAS DETECTION BETWEEN RL AND ES
- PFAS DETECTION GREATER THAN ES
- APPROXIMATE SITE PROPERTY BOUNDARY
- PRIVATE WELL SAMPLING AREA
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY

WS-049 - LOCATION NAME
POET-35 - POET ID

**NOTES:**
1. THE DATA REFLECTED IS THE HIGHEST VALUE DETECTED FROM THE VARIOUS ANALYSES.
2. WELL LOCATIONS ARE APPROXIMATE.

**ABBREVIATIONS:**
PFAS = PER- AND POLYFLUOROALKYL SUBSTANCES
ES = WDHS RECOMMENDED ENFORCEMENT STANDARD
RL = REPORTING LIMIT
WDHS = WISCONSIN DEPARTMENT OF HEALTH SERVICES

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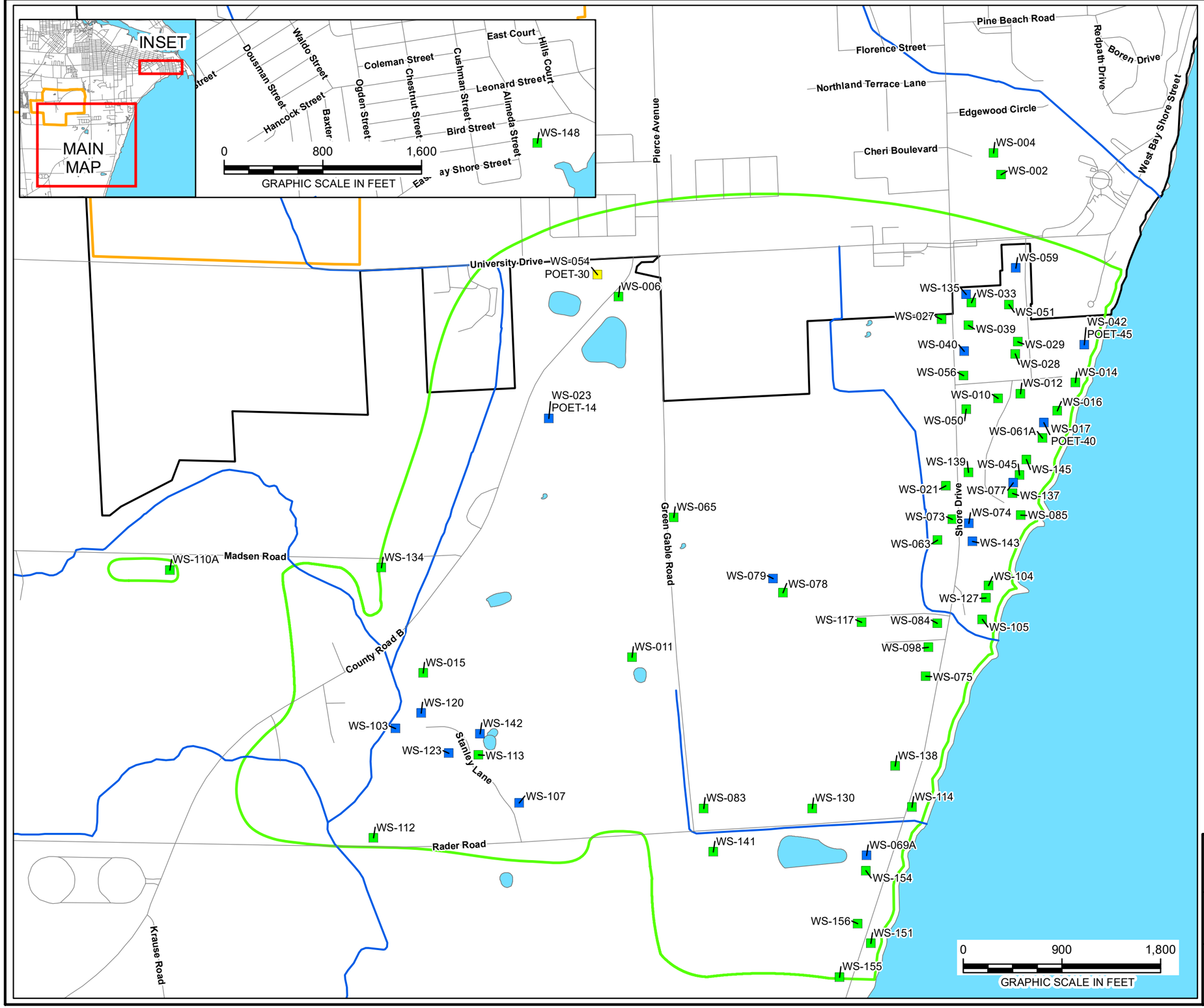
**PRIVATE DRINKING WATER WELL LOCATIONS - SHALLOW**

ARCADIS

FIGURE
3




LEGEND:

**Private Drinking Water Well Location**

- PFAS NOT DETECTED ABOVE RL
- PFAS DETECTION BETWEEN RL AND ES
- PFAS DETECTION GREATER THAN ES
- PRIVATE WELL SAMPLING AREA
- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY

WS-049 - LOCATION NAME
POET-35 - POET ID

**NOTES:**
1. THE DATA REFLECTED IS THE HIGHEST VALUE DETECTED FROM THE VARIOUS ANALYSES.
2. WELL LOCATIONS ARE APPROXIMATE.

**ABBREVIATIONS:**
PFAS = PER- AND POLYFLUOROALKYL SUBSTANCES
ES = WDHS RECOMMENDED ENFORCEMENT STANDARD
RL = REPORTING LIMIT
WDHS = WISCONSIN DEPARTMENT OF HEALTH SERVICES

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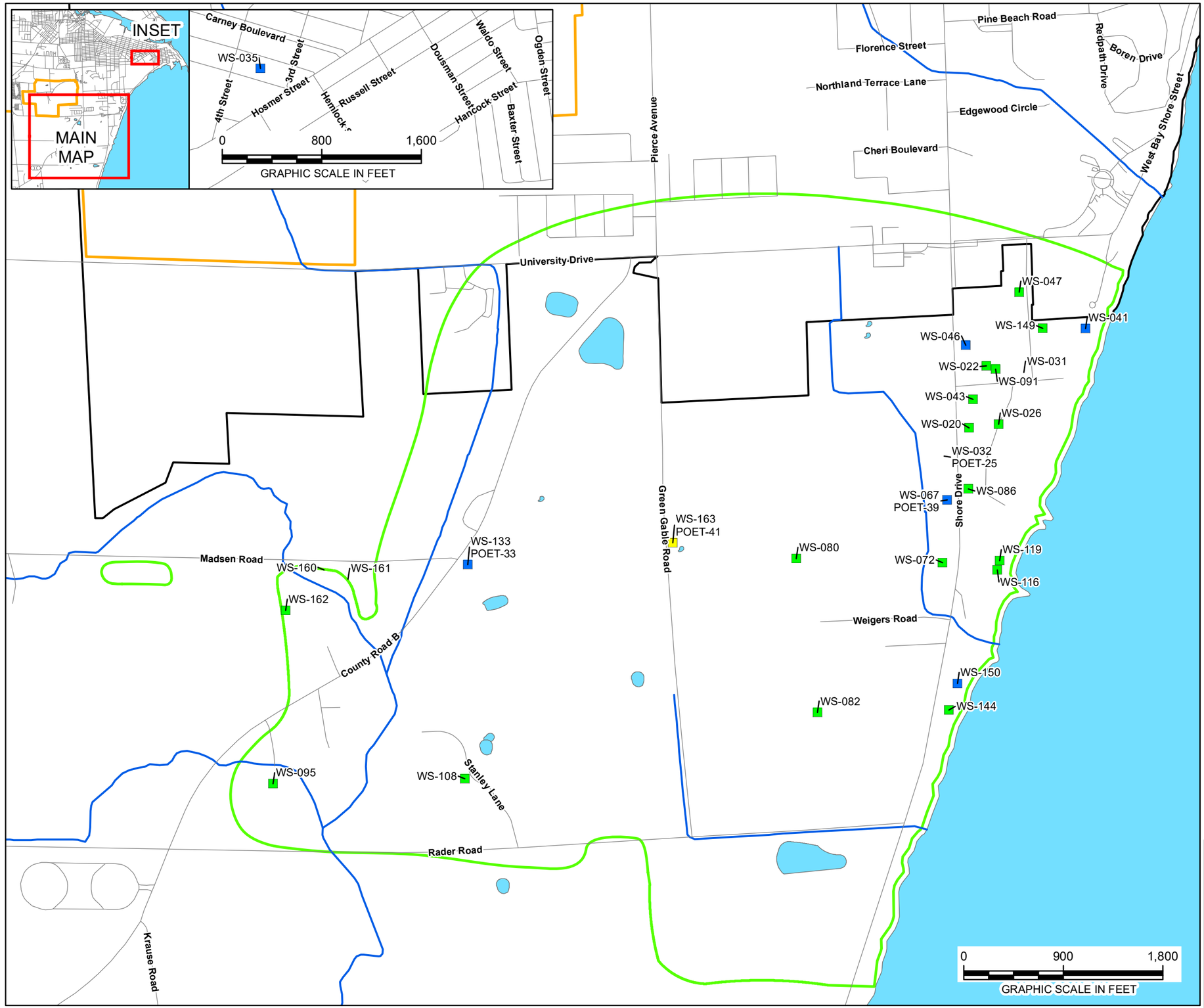
**PRIVATE DRINKING WATER WELL LOCATIONS - DEEP**

ARCADIS

FIGURE
4




LEGEND:

**Private Drinking Water Well Location**

- PFAS NOT DETECTED ABOVE RL
- PFAS DETECTION BETWEEN RL AND ES
- PFAS DETECTION GREATER THAN ES
- PRIVATE WELL SAMPLING AREA
- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY

WS-049 - LOCATION NAME
POET-35 - POET ID

**NOTES:**
1. THE DATA REFLECTED IS THE HIGHEST VALUE DETECTED FROM THE VARIOUS ANALYSES.
2. WELL LOCATIONS ARE APPROXIMATE.

**ABBREVIATIONS:**
PFAS = PER- AND POLYFLUOROALKYL SUBSTANCES
ES = WDHS RECOMMENDED ENFORCEMENT STANDARD
RL = REPORTING LIMIT
WDHS = WISCONSIN DEPARTMENT OF HEALTH SERVICES

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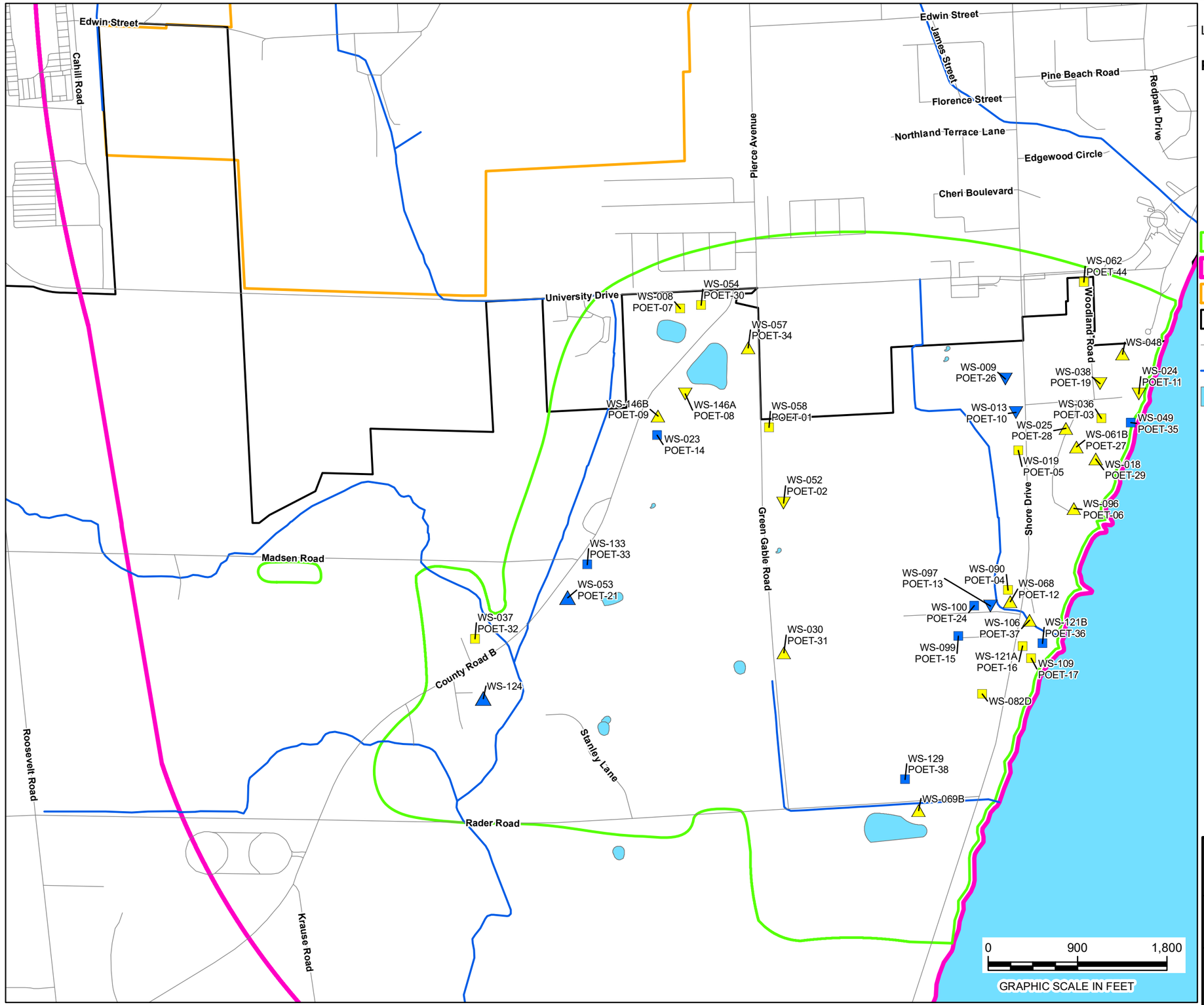
**PRIVATE DRINKING WATER WELL LOCATIONS - UNKNOWN DEPTH**

ARCADIS

FIGURE
5




LEGEND:

**Private Drinking Water Well Location**

- PFAS DETECTION BETWEEN RL AND ES (No Trend)
- PFAS DETECTION GREATER THAN ES (No Trend)
- PFAS DETECTION BETWEEN RL AND ES (Increasing PFOA + PFOS)
- PFAS DETECTION GREATER THAN ES (Increasing PFOA + PFOS)
- PFAS DETECTION BETWEEN RL AND ES (Decreasing PFOA + PFOS)
- PFAS DETECTION GREATER THAN ES (Decreasing PFOA + PFOS)
- PRIVATE WELL SAMPLING AREA
- INVESTIGATION STUDY AREA
- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- ROAD
- DITCH/STREAM
- WATERBODY

WS-049 - LOCATION NAME
POET-35 - POET ID

**NOTES:**
1. THE DATA REFLECTED IS THE HIGHEST VALUE DETECTED FROM THE VARIOUS ANALYSES.
2. WELL LOCATIONS ARE APPROXIMATE.

**ABBREVIATIONS:**
PFOA = PERFLUOROOCTANOIC ACID
PFOS = PERFLUOROOCTANCESULFONIC ACID
PFAS = PER- AND POLYFLUOROALKYL SUBSTANCES
ES = WDHS RECOMMENDED ENFORCEMENT STANDARD
RL = REPORTING LIMIT
WDHS = WISCONSIN DEPARTMENT OF HEALTH SERVICES

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**PRIVATE DRINKING WATER WELL LOCATIONS - TREND ANALYSIS**

ARCADIS

FIGURE
6

# Appendix A

## Private Drinking Water Well Trend Plots – Increasing

## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

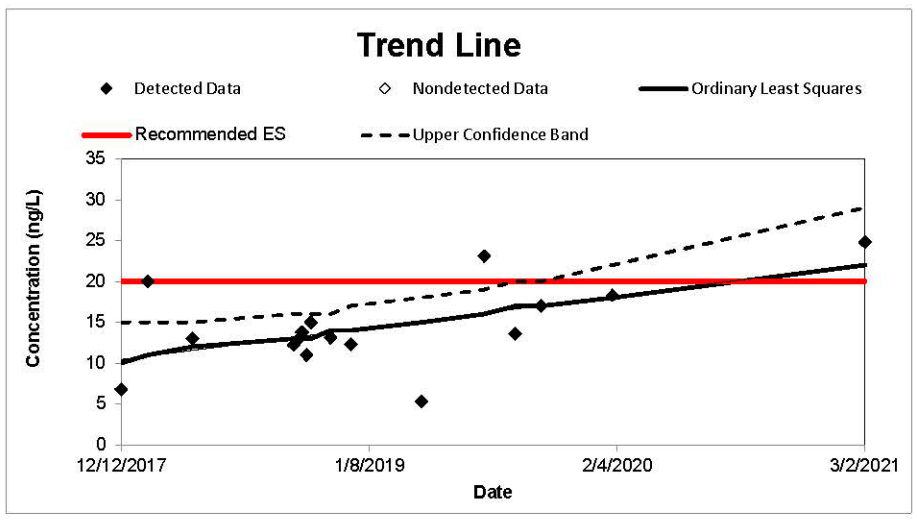
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-018 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 16 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

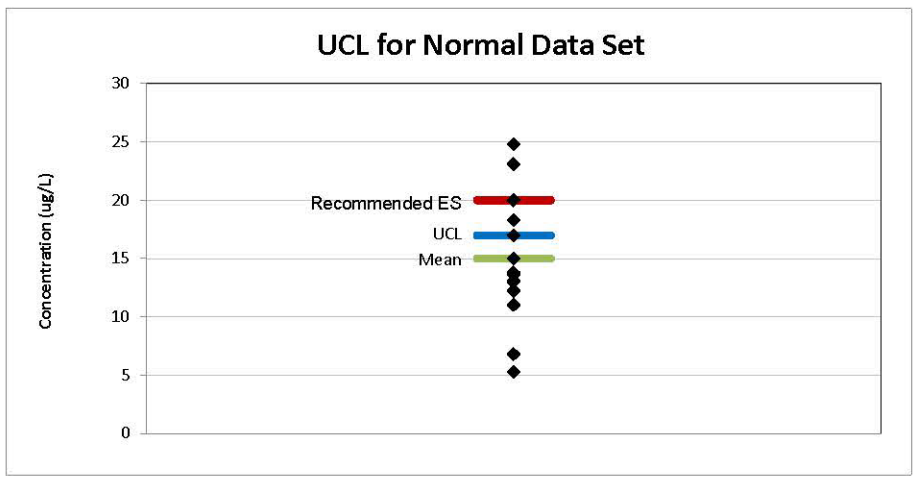
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.0099 |
| Intercept | -420 |
| $R^2$ | 0.3246 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 15 |
| 95% UCL | 17 |
| Is the 95% UCL greater than the recommended ES? | No |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

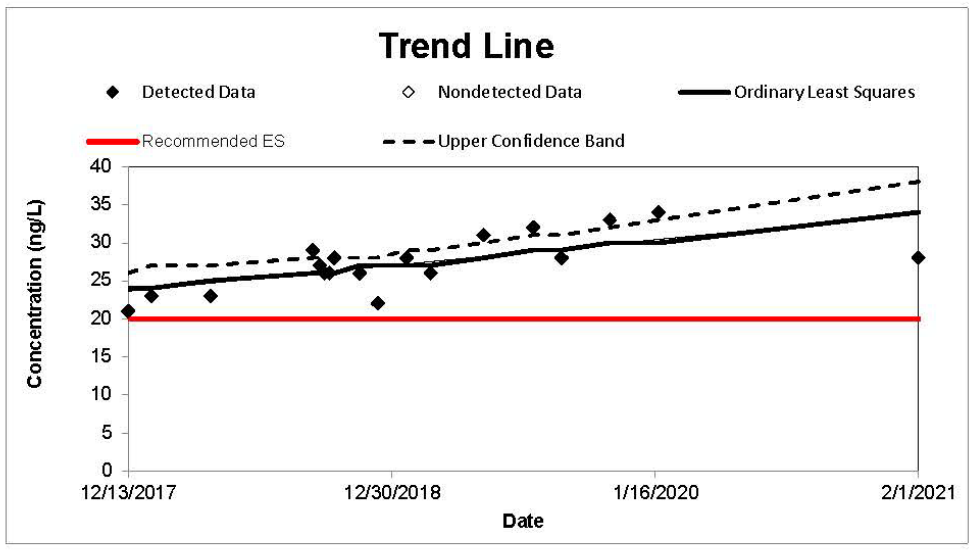
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-025 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 18 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

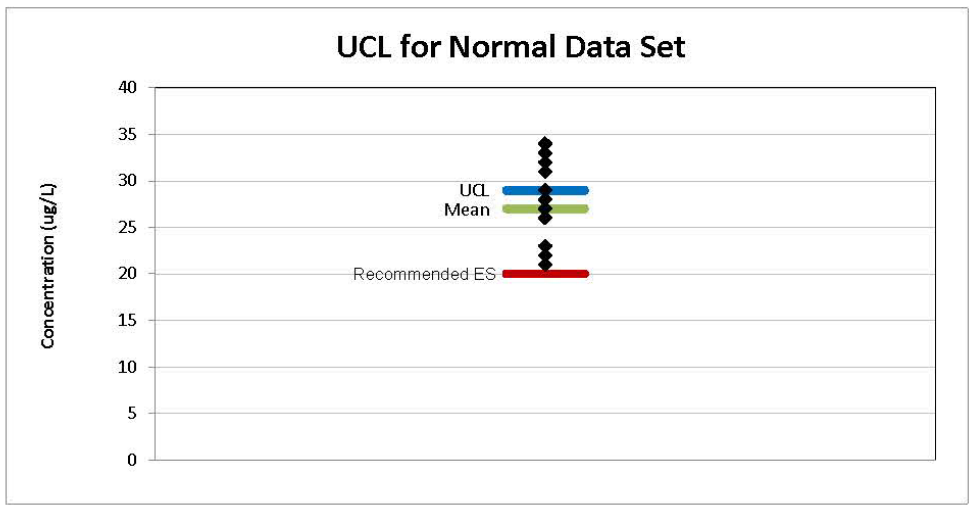
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the Recommended ES? | Yes |
| Slope | 0.0088 |
| Intercept | -360 |
| $R^2$ | 0.4528 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 27 |
| 95% UCL | 29 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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PRIVATE DRINKING WATER WELL
TREND PLOTS – INCREASING

ARCADIS

APPENDIX
A



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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Normal Residuals**

**General Information**

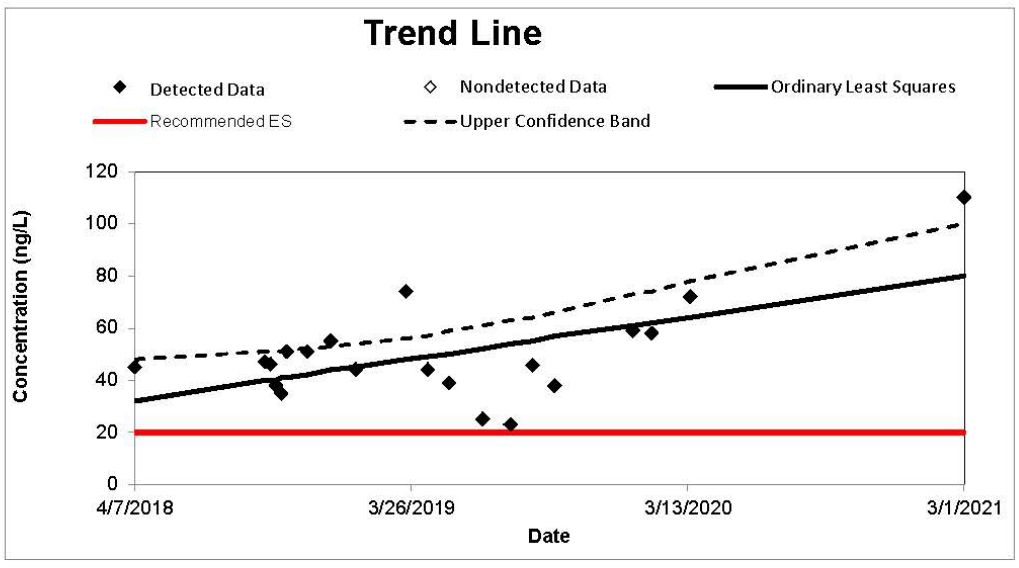
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-030 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

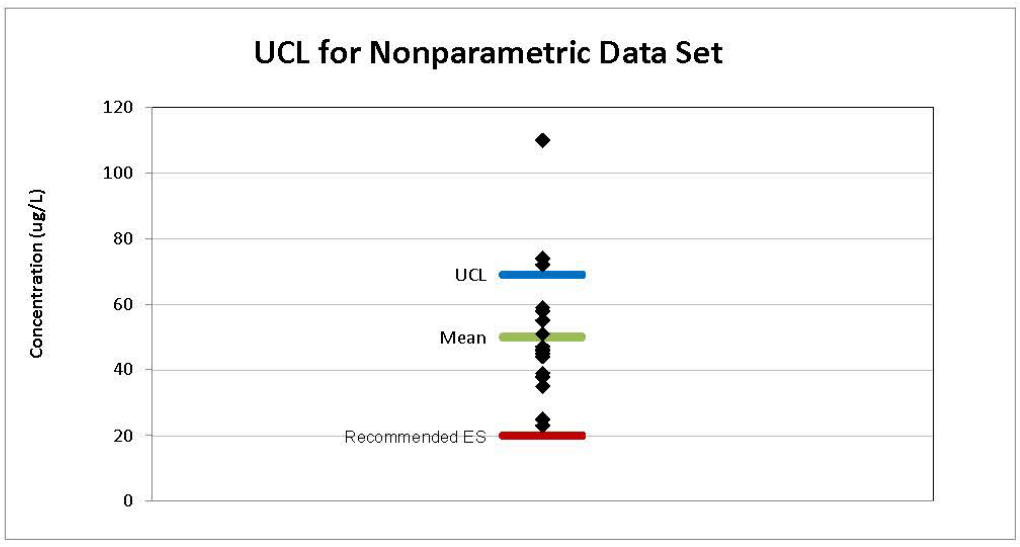
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | Yes |
| Slope | 0.046 |
| Intercept | -1900 |
| $R^2$ | 0.3467 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 50 |
| 95% UCL | 69 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

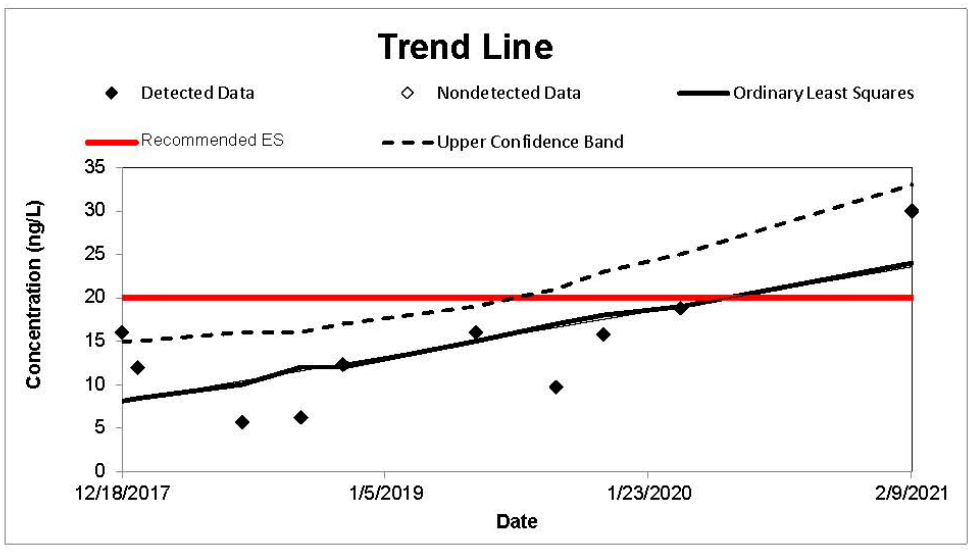
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-048 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 10 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

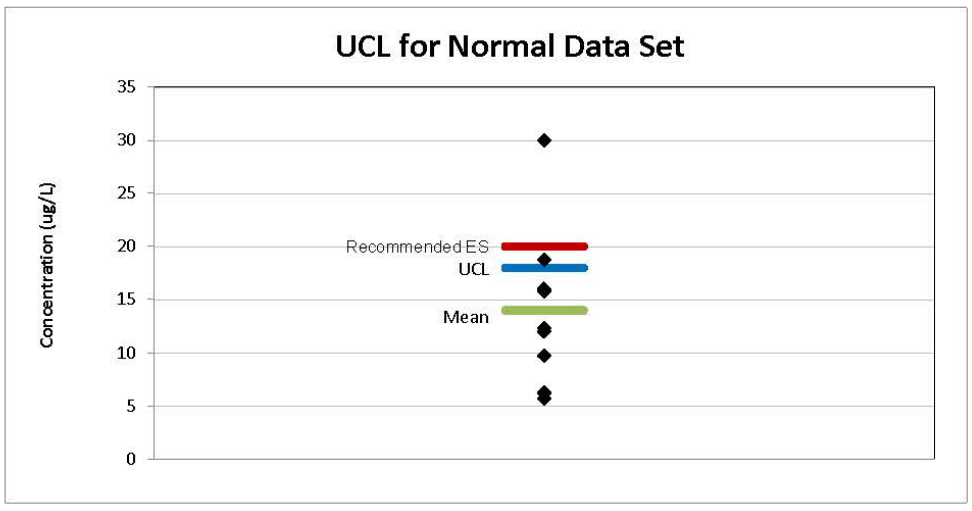
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the Recommended ES? | Yes |
| Slope | 0.013 |
| Intercept | -570 |
| $R^2$ | 0.5043 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 14 |
| 95% UCL | 18 |
| Is the 95% UCL greater than the recommended ES? | No |

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PRIVATE DRINKING WATER WELL
TREND PLOTS – INCREASING

ARCADIS

APPENDIX
A



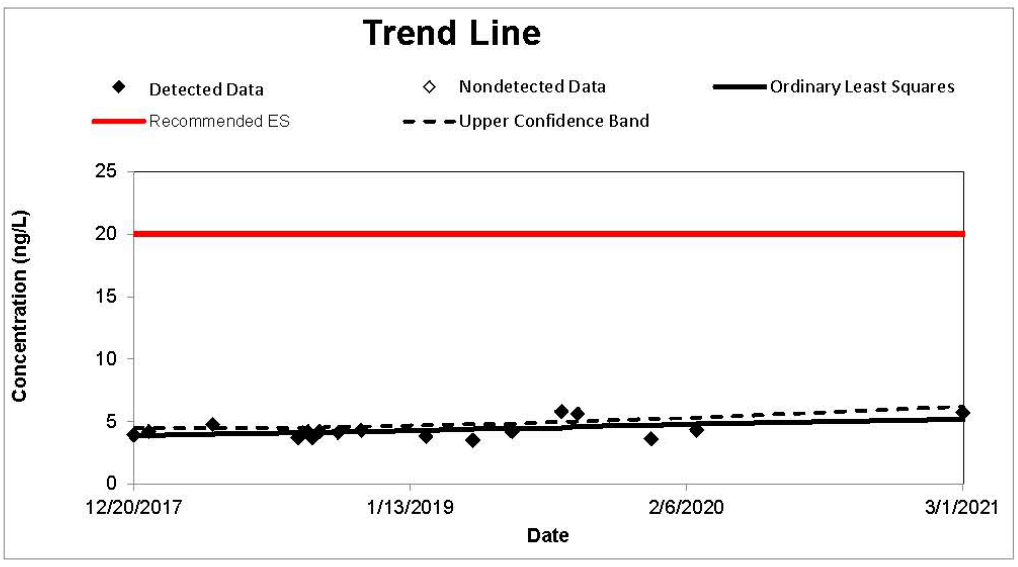
8/6/2021 3:11:38 PM

## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Normal Residuals**

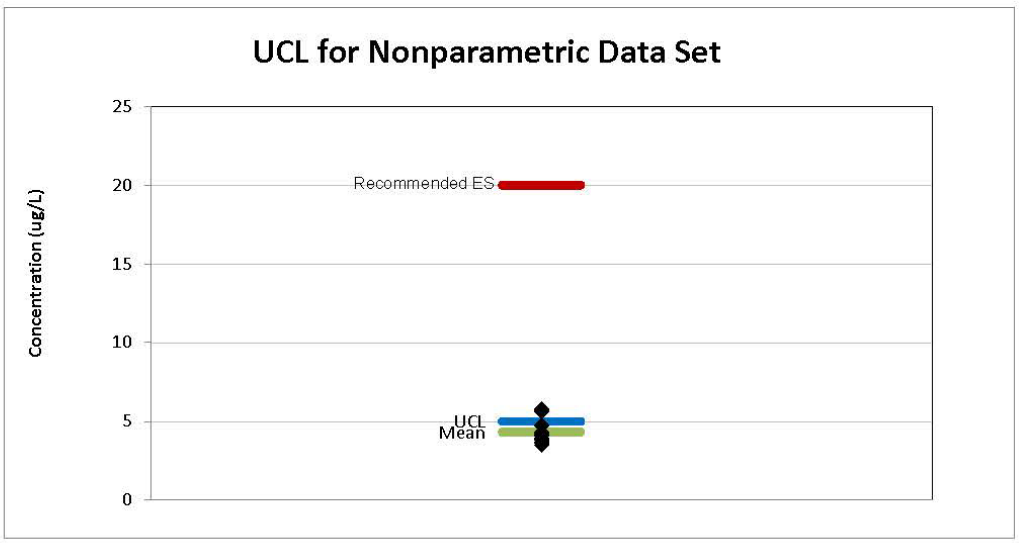
**General Information**

| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-053 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| ES Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 18 |
| Outliers present? | No |
| Number of Non-Detects | 0 |




**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | No |
| Slope | 0.0011 |
| Intercept | -45 |
| $R^2$ | 0.2299 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 7/28/2056 |




**UCL Analysis**

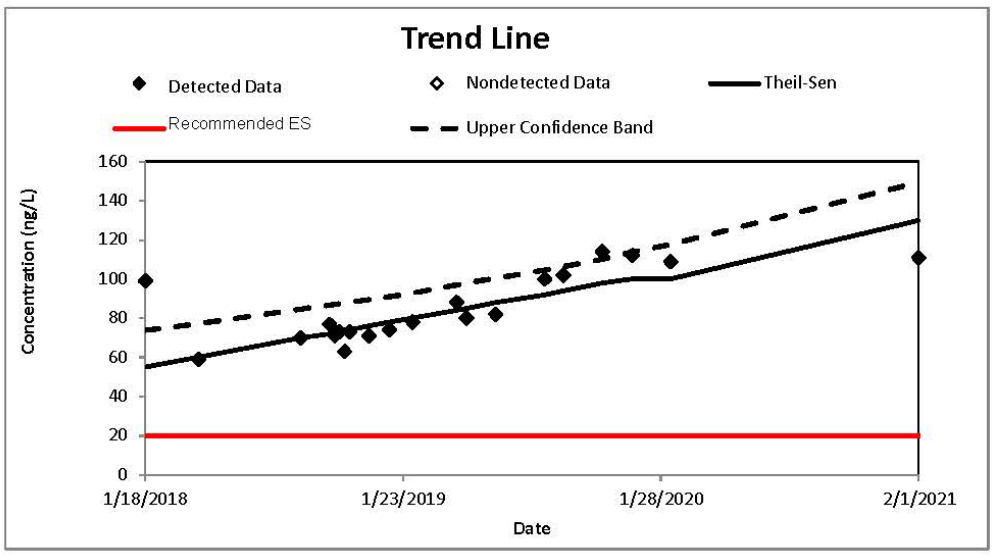
| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 4.3 |
| 95% UCL | 5 |
| Is the 95% UCL greater than the recommended ES? | No |

## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Nonparametric Residuals**

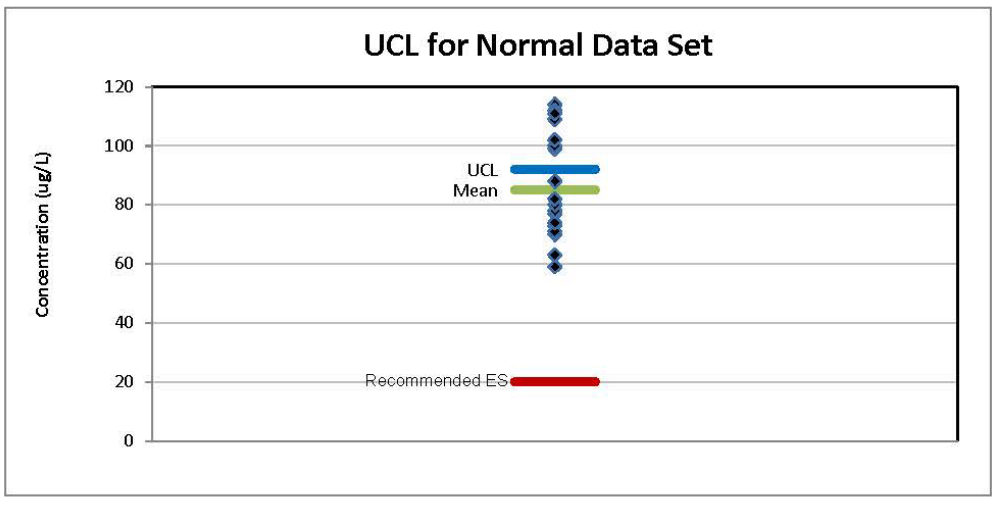
**General Information**

| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-057 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |




**Trend Analysis**

| | |
|---|---|
| Trend Type | Nonparametric |
| Method | Theil-Sen Line, Mann-Kendall Test |
| Is the Upper Confidence Band above the recommended ES? | Yes |
| Slope | 0.064 |
| Intercept | -2700 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |




**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 85 |
| 95% UCL | 92 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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## Groundwater Statistics Tool

### Site & Summary Statistics for Normal Data Sets with Normal Residuals

**General Information**

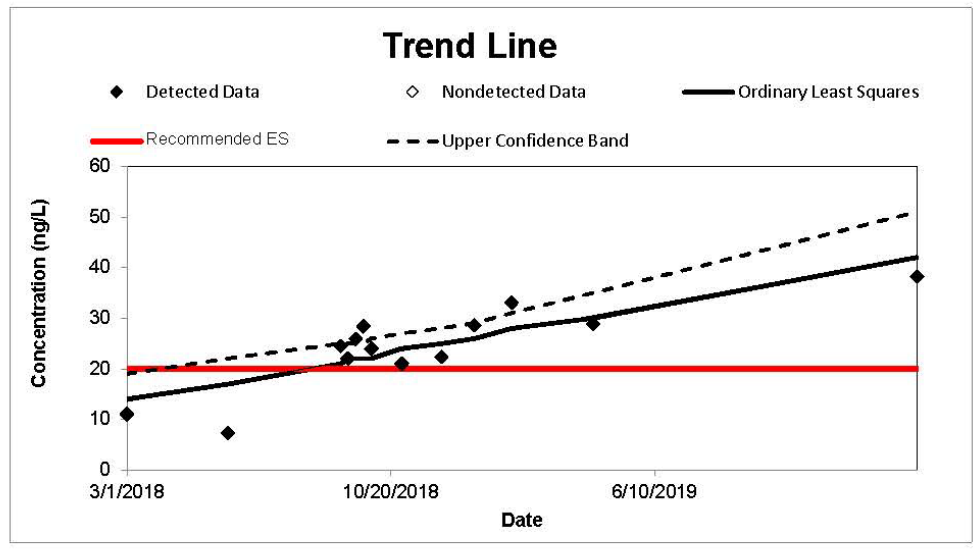
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-061B |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Cleanup | 20 |
| Recommended ES | ES |
| Source | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 13 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

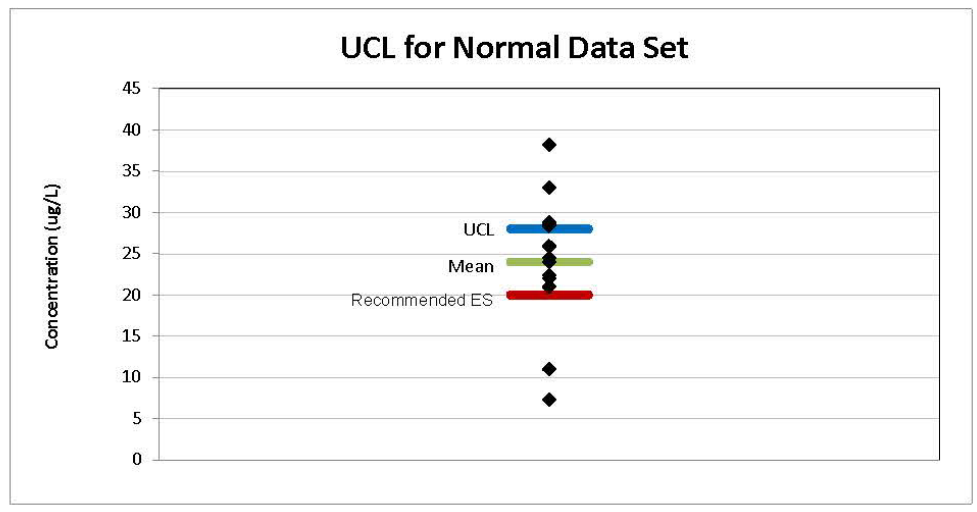
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.041 |
| Intercept | -1800 |
| $R^2$ | 0.7033 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 24 |
| 95% UCL | 28 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

### Site & Summary Statistics for Nonparametric Data Sets with Negative Predictions

**General Information**

| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-068 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

**Trend Analysis**

| | |
|---|---|
| Trend Type | Negative Predictions |
| | |
| | |
| | |
| | |
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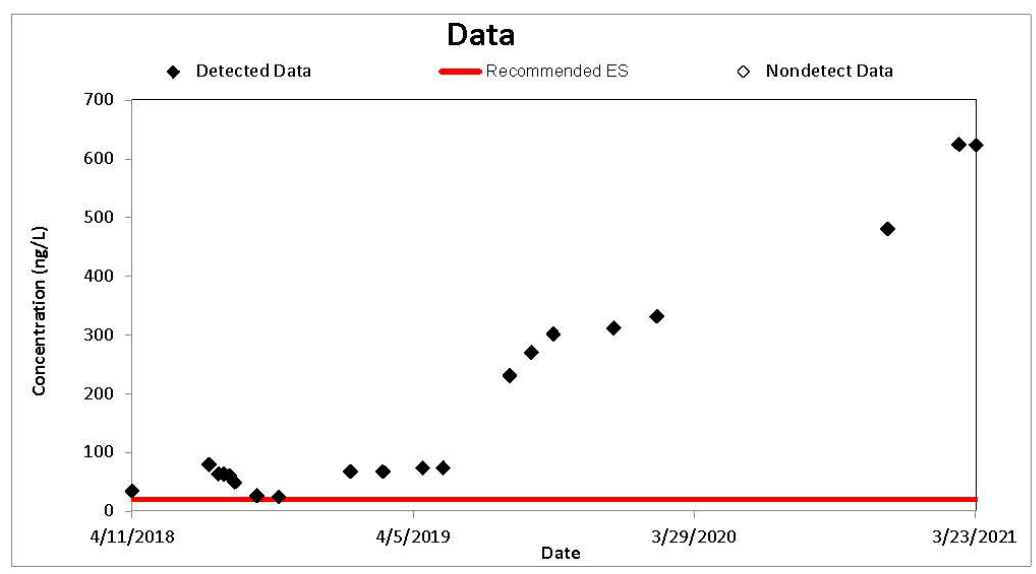
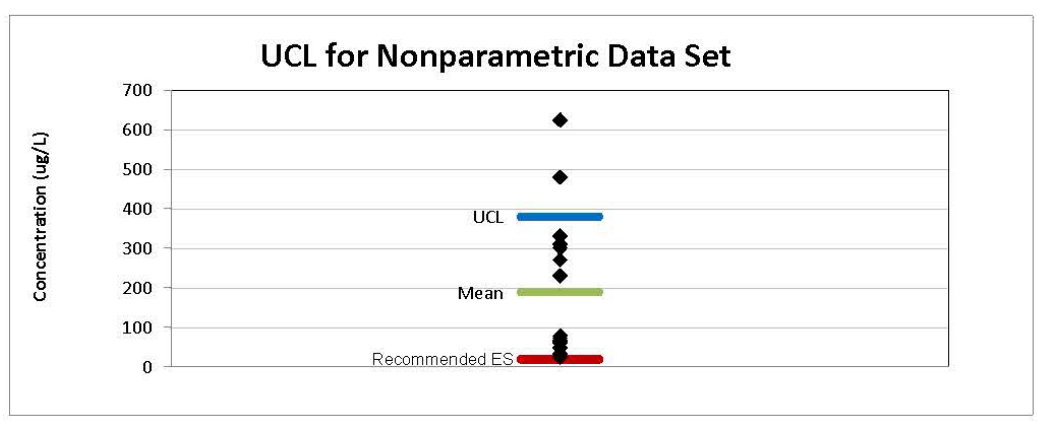
| | |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 190 |
| 95% UCL | 380 |
| Is the 95% UCL greater than the recommended ES | Yes |

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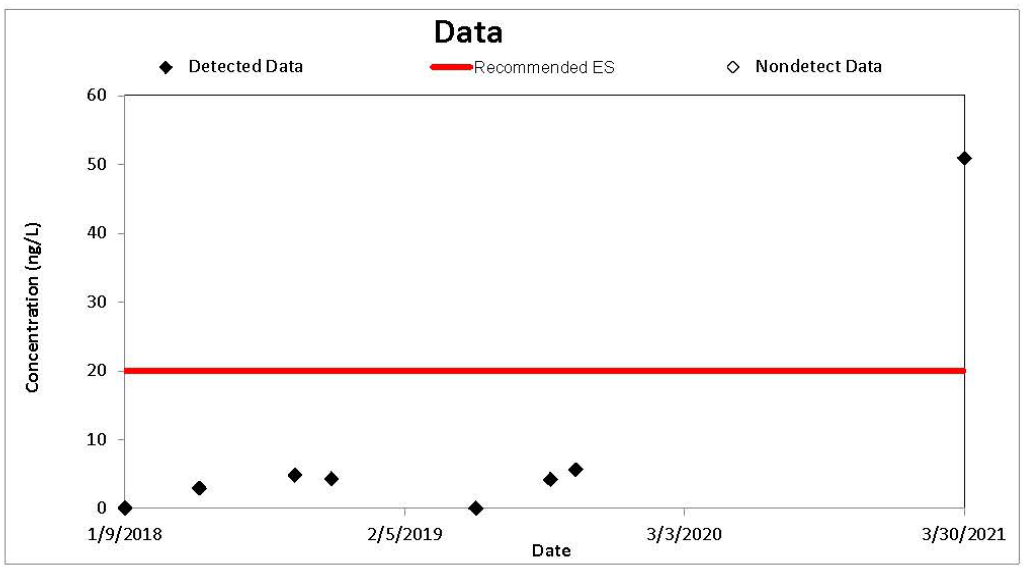
## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Negative Predictions**

**General Information**

| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-069B |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 8 |
| Outliers present? | Yes |
| Number of Non-Detects | 0 |




**Trend Analysis**

| | |
|---|---|
| Trend Type | Negative Predictions |
| | |
| | |
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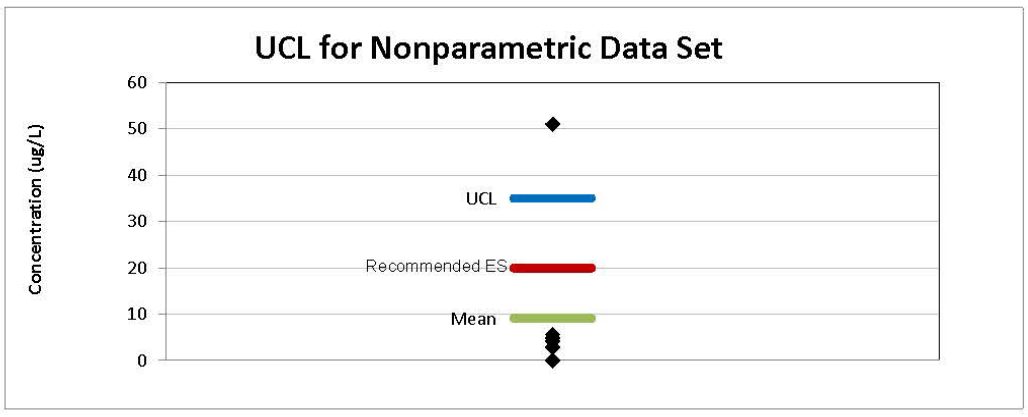
| | |




**UCL Analysis**

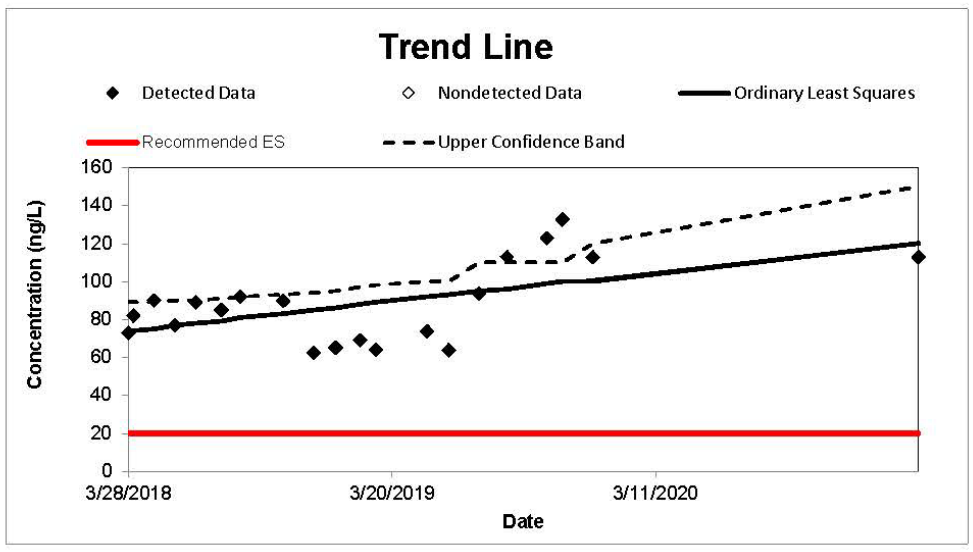
| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 9.1 |
| 95% UCL | 35 |
| Is the 95% UCL greater than the recommended ES ? | Yes |

## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

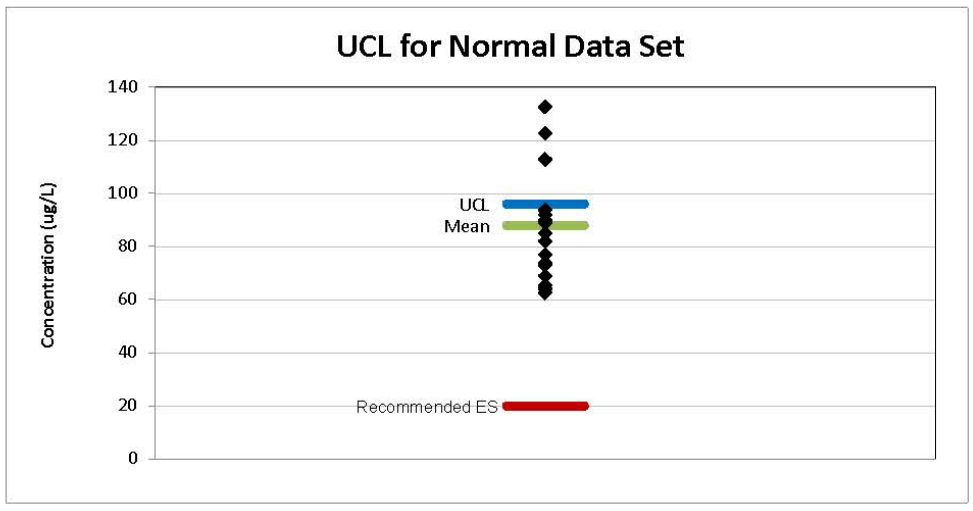
**General Information**

| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-096 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |




**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.044 |
| Intercept | -1800 |
| $R^2$ | 0.3103 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |




**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 88 |
| 95% UCL | 96 |
| Is the 95% UCL greater than the recommended ES ? | Yes |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Non-detects and Negative Predictions**

**General Information**

| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-106 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 19 |
| Outliers present? | No |
| Number of Non-Detects | 3 |

**Trend Analysis**

| | |
|---|---|
| Trend Type | Negative Predictions |
| | |
| | |
| | |
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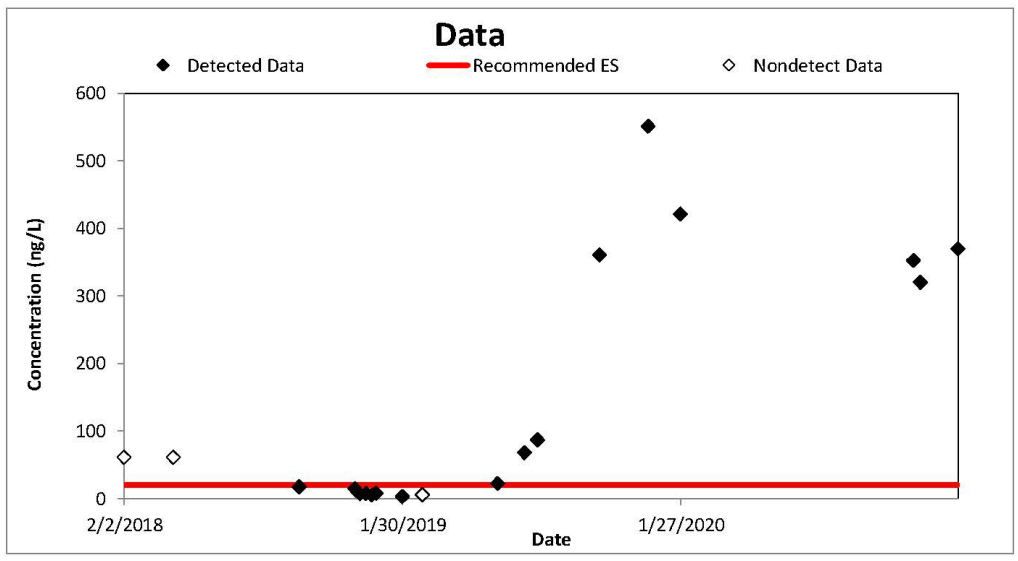
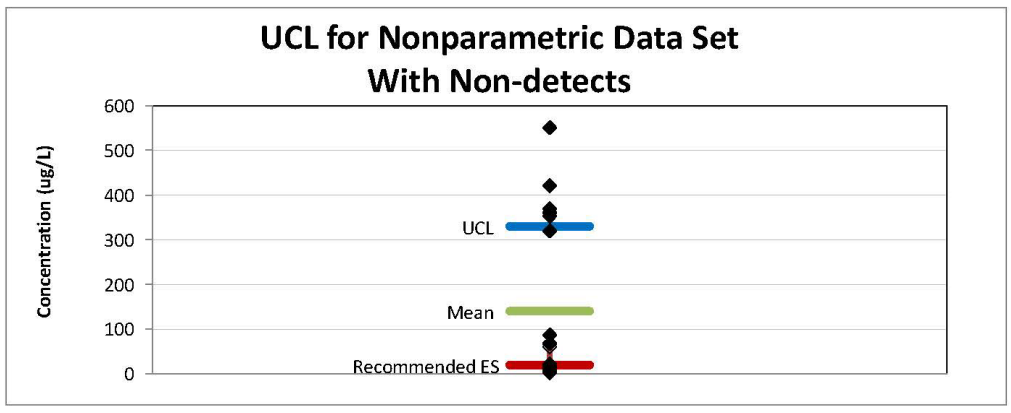
| | |
| | |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | KM Chebyshev UCL |
| Mean | 140 |
| 95% UCL | 330 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

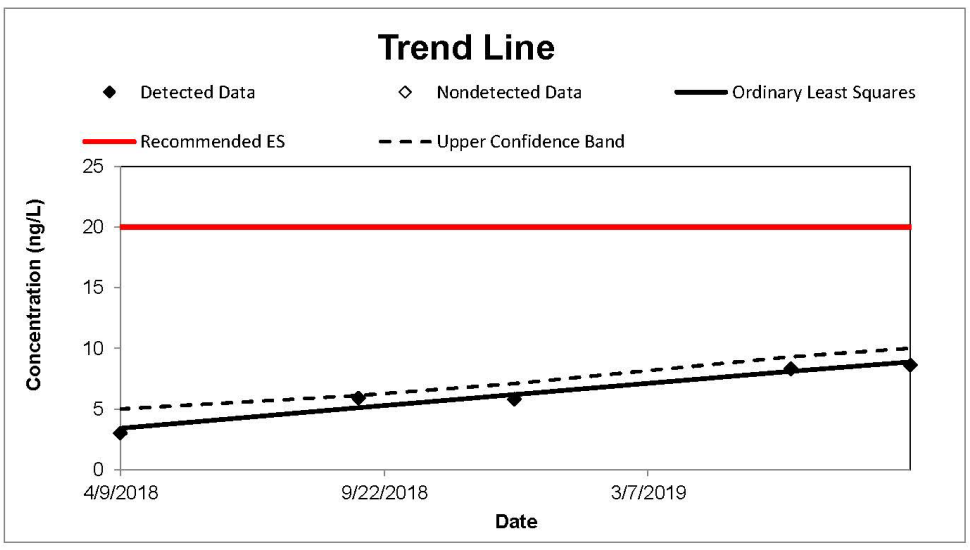
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-124 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 5 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

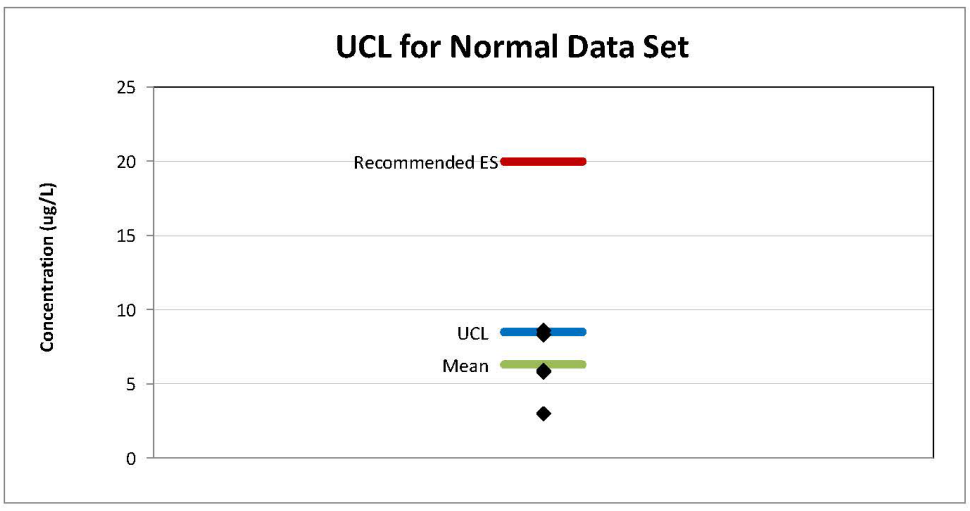
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | No |
| Slope | 0.011 |
| Intercept | -470 |
| $R^2$ | 0.9454 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 5/30/2022 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 6.3 |
| 95% UCL | 8.5 |
| Is the 95% UCL greater than the recommended ES? | No |

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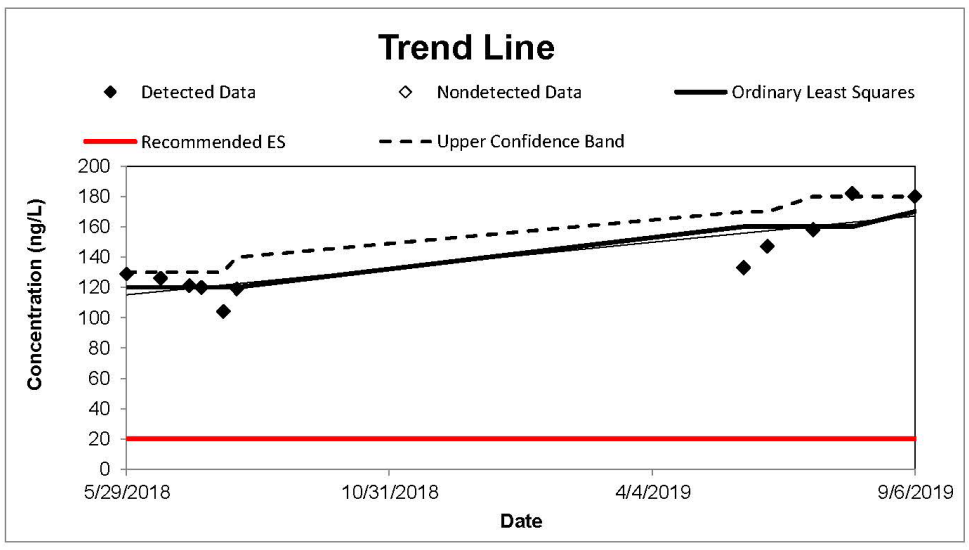
# Groundwater Statistics Tool

## Site & Summary Statistics for Normal Data Sets with Normal Residuals

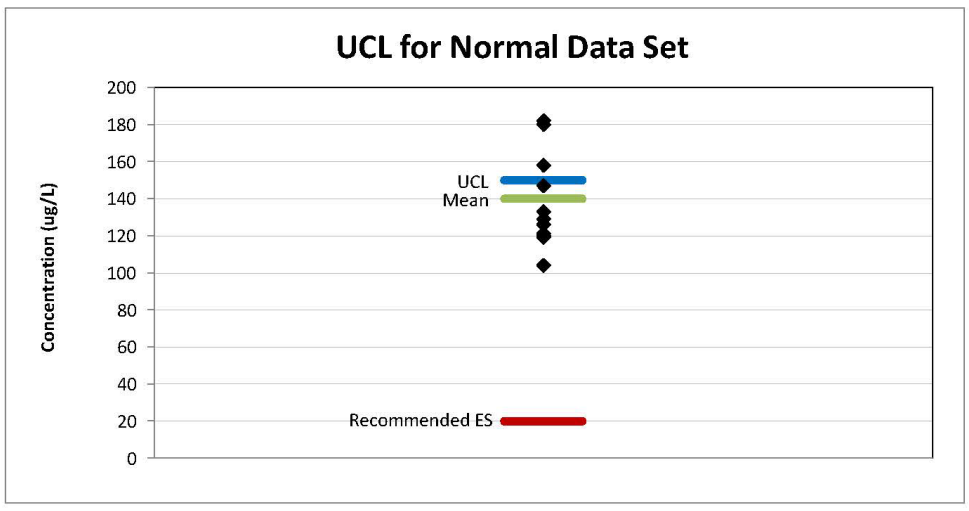
**General Information**

| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-146B |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 11 |
| Outliers present? | No |
| Number of Non-Detects | 0 |




**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.11 |
| Intercept | -4700 |
| $R^2$ | 0.7332 |
| Test Result | Increasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |




**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 140 |
| 95% UCL | 150 |
| Is the 95% UCL greater than the recommended ES? | Yes |



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# Appendix B

## Private Drinking Water Well Trend Plots – Decreasing

## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

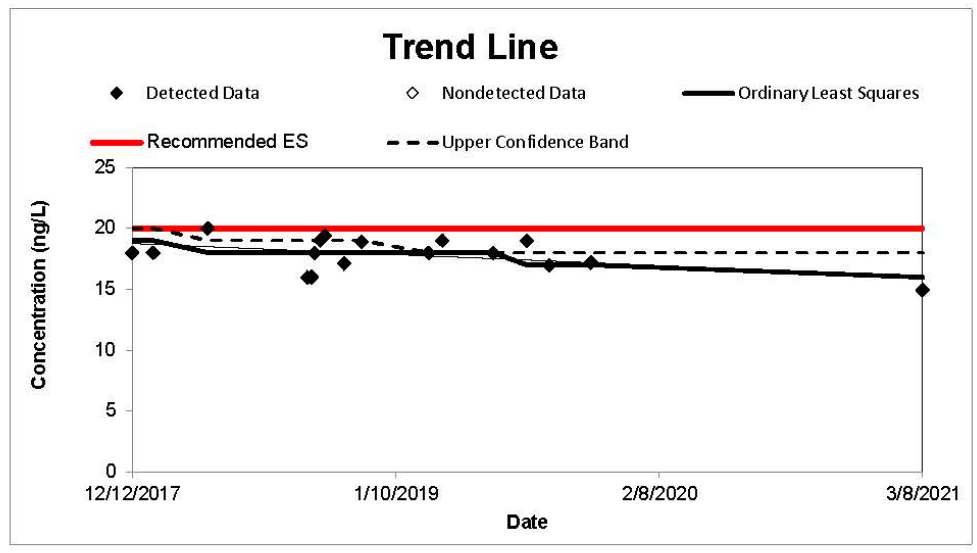
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-009 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 17 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

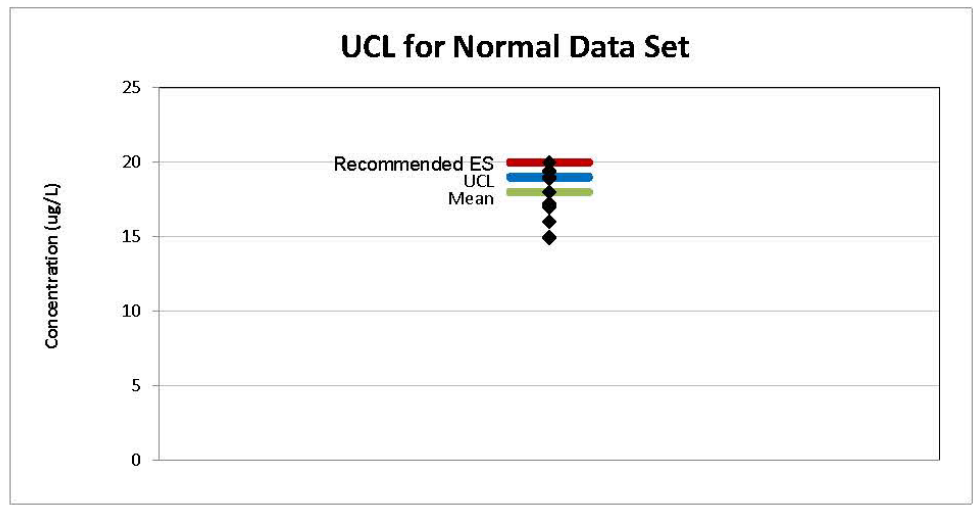
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | No |
| Slope | -0.0023 |
| Intercept | 120 |
| $R^2$ | 0.2258 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 18 |
| 95% UCL | 19 |
| Is the 95% UCL greater than the recommended ES? | No |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

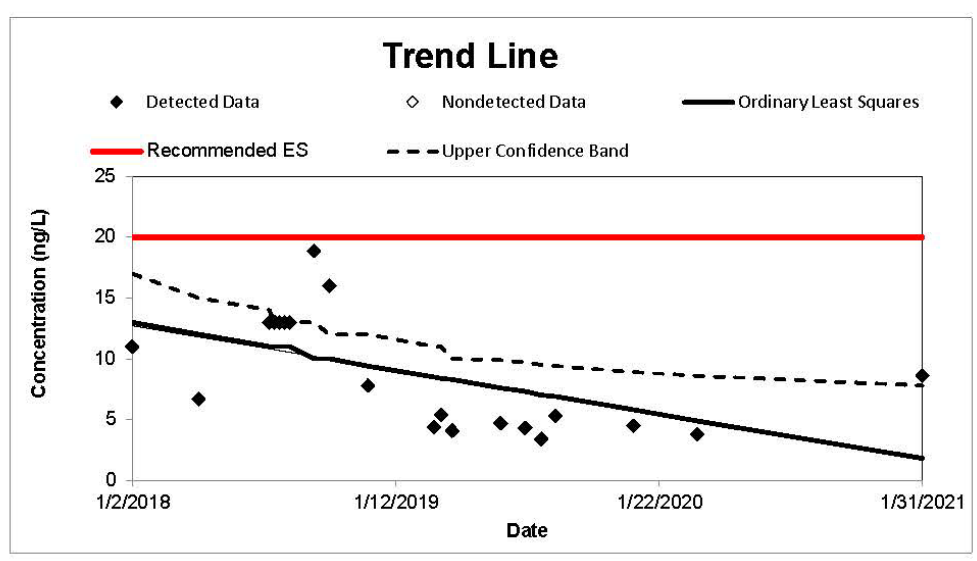
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-013 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

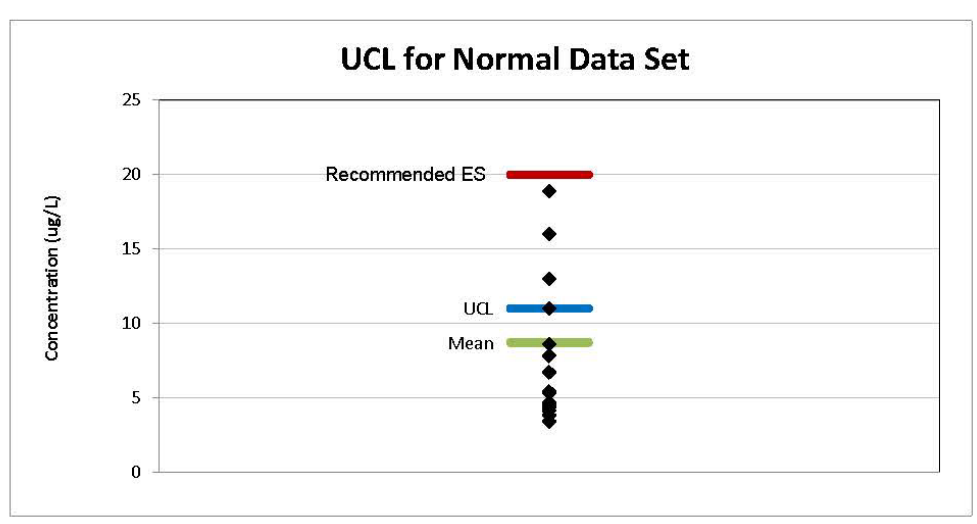
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | No |
| Slope | -0.0097 |
| Intercept | 430 |
| $R^2$ | 0.3048 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 8.7 |
| 95% UCL | 11 |
| Is the 95% UCL greater than the recommended ES? | No |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Normal Residuals**

**General Information**

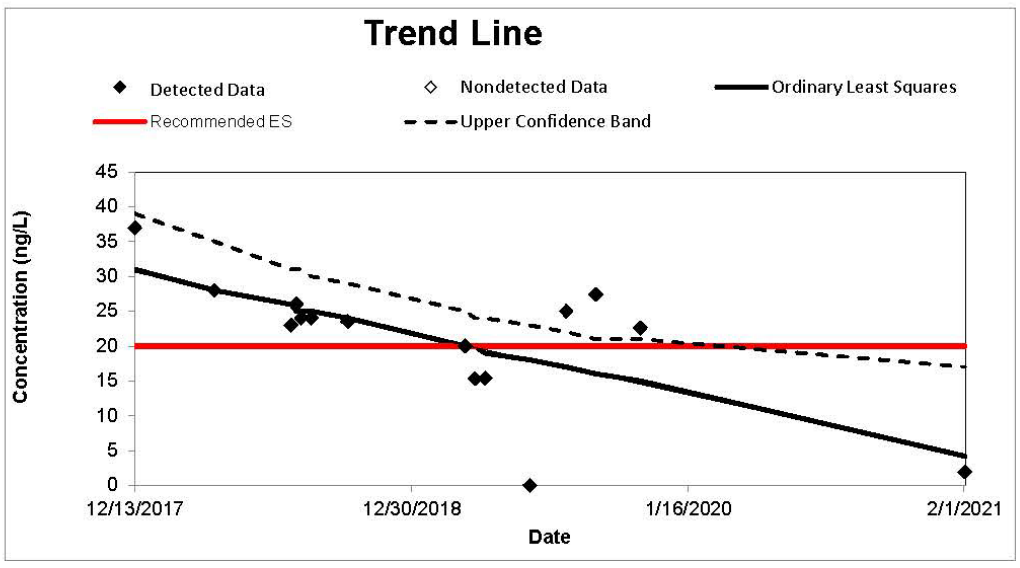
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-024 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 15 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

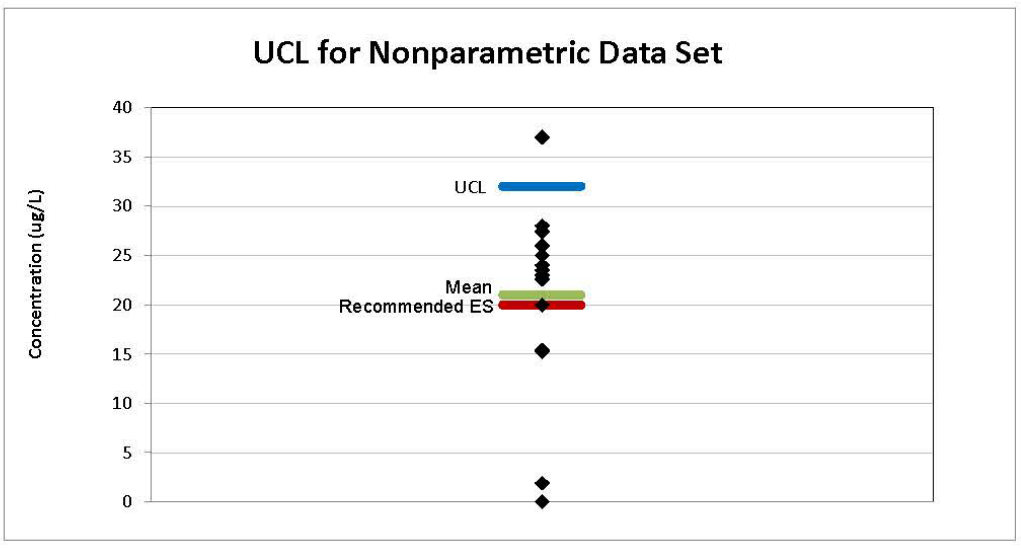
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | Yes |
| Slope | -0.023 |
| Intercept | 1000 |
| $R^2$ | 0.4719 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 21 |
| 95% UCL | 32 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

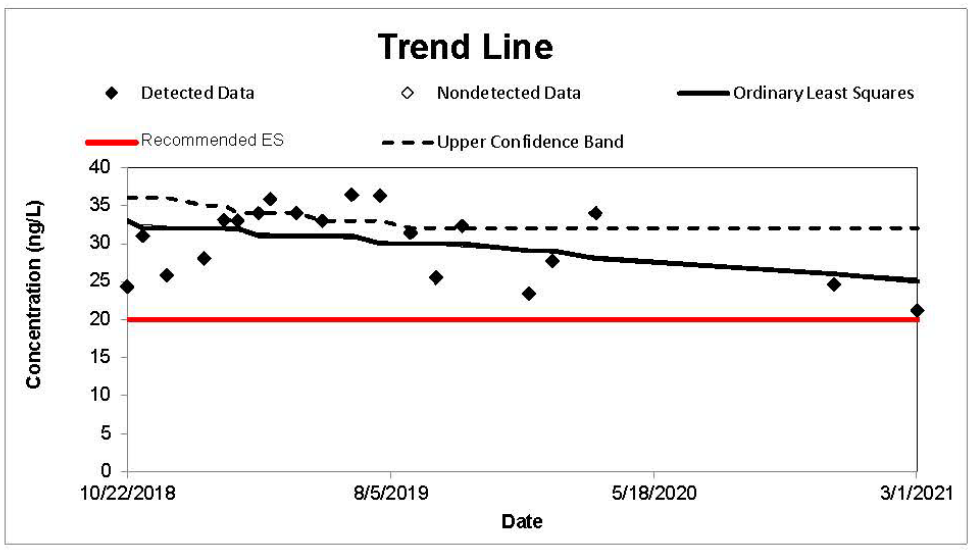
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-038 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

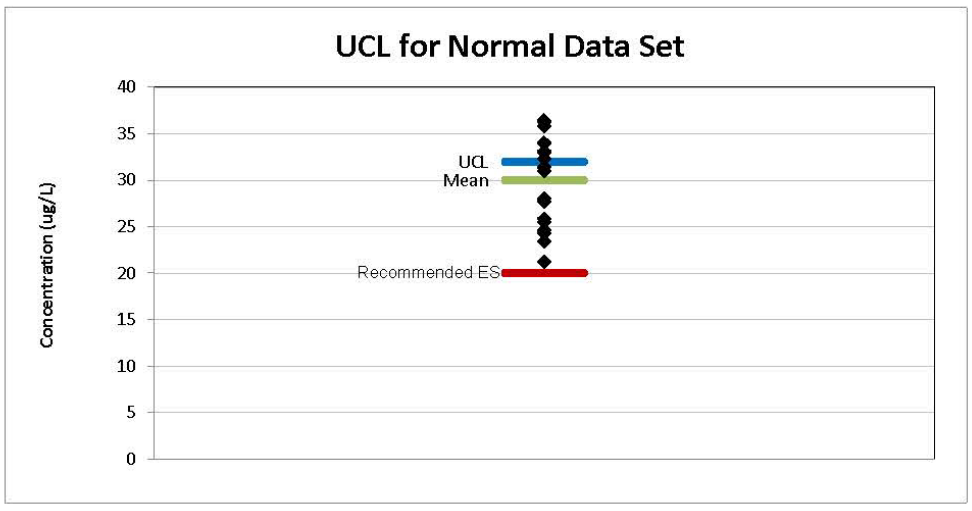
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the Recommended ES? | Yes |
| Slope | -0.0083 |
| Intercept | 390 |
| $R^2$ | 0.1713 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | 12/10/2022 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 30 |
| 95% UCL | 32 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Normal Residuals**

**General Information**

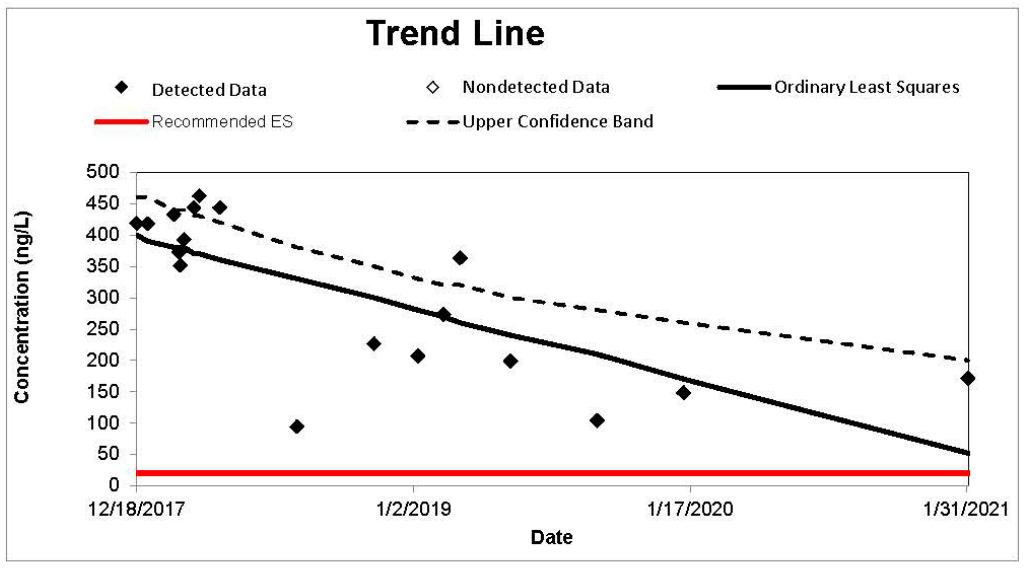
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-052 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| ES Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 18 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

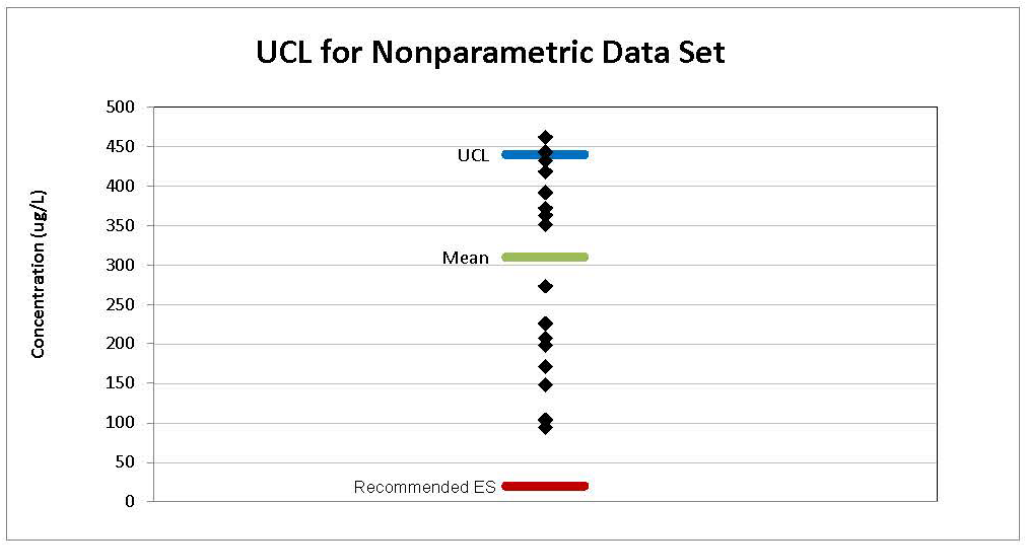
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | Yes |
| Slope | -0.3 |
| Intercept | 13000 |
| $R^2$ | 0.5396 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | 5/19/2021 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 310 |
| 95% UCL | 440 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Nonparametric Residuals**

**General Information**

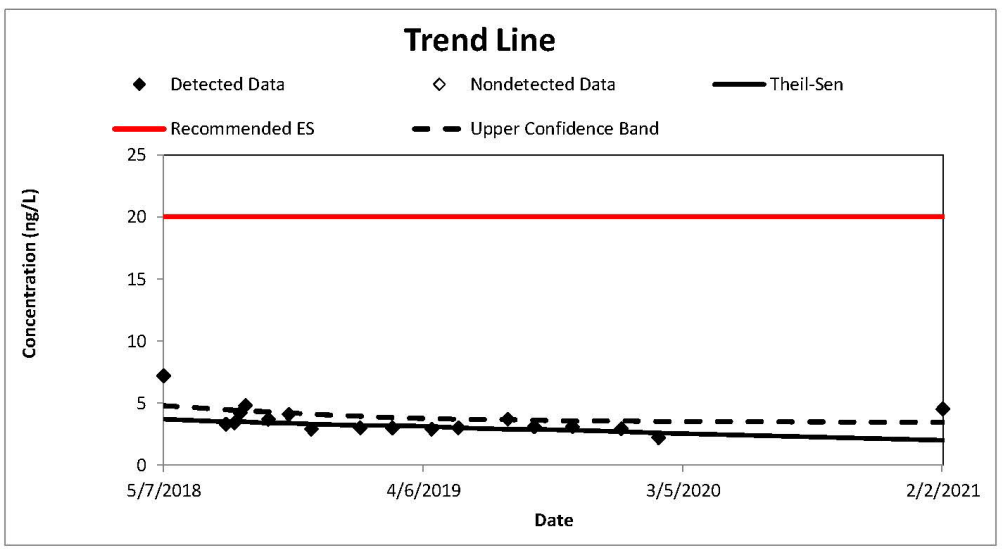
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-097 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 18 |
| Outliers present? | Yes |
| Number of Non-Detects | 0 |

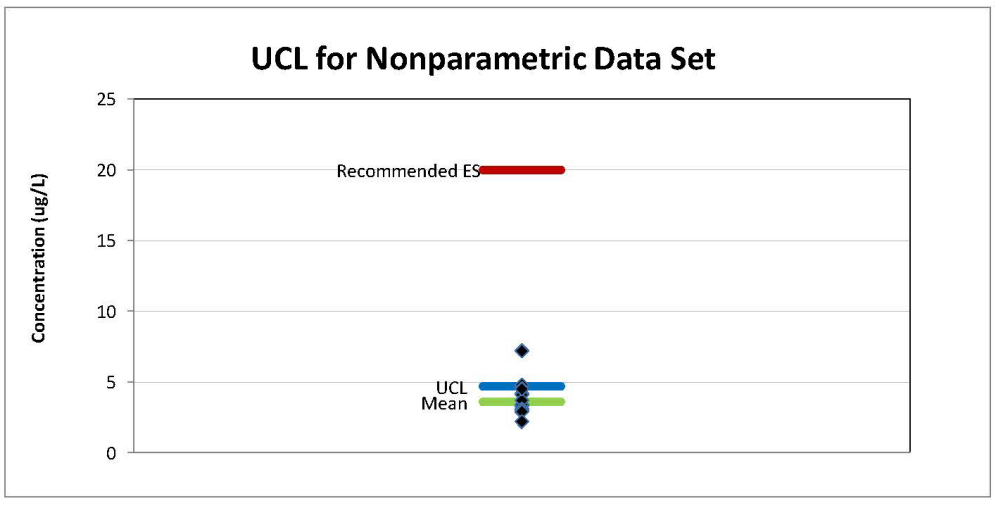
**Trend Analysis**

| | |
|---|---|
| Trend Type | Nonparametric |
| Method | Theil-Sen Line, Mann-Kendall Test |
| Is the Upper Confidence Band above the ES? | No |
| Slope | -0.0017 |
| Intercept | 77 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 3.6 |
| 95% UCL | 4.7 |
| Is the 95% UCL greater than the recommended ES? | No |

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# Groundwater Statistics Tool

## Site & Summary Statistics for Normal Data Sets with Normal Residuals

**General Information**

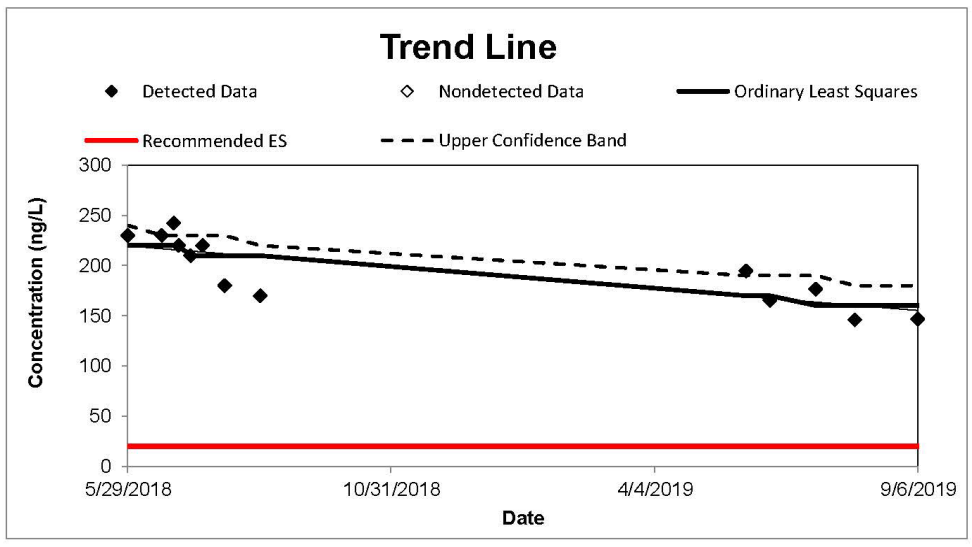
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-146A |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 13 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

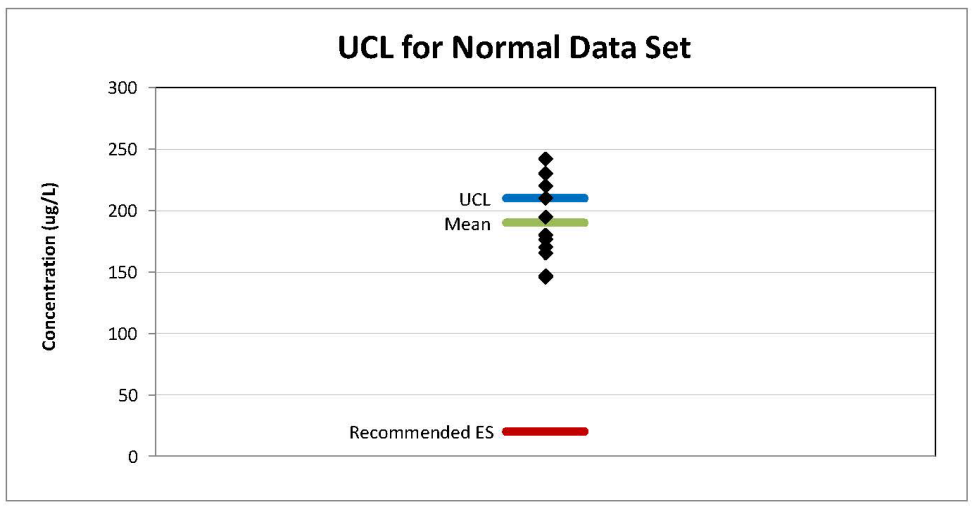
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | -0.14 |
| Intercept | 6200 |
| $R^2$ | 0.6405 |
| Test Result | Decreasing |
| When concentration is predicted to achieve the recommended ES | 5/12/2022 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 190 |
| 95% UCL | 210 |
| Is the 95% UCL greater than the recommended ES? | Yes |



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# Appendix C

## Private Drinking Water Well Trend Plots – No Trend

## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

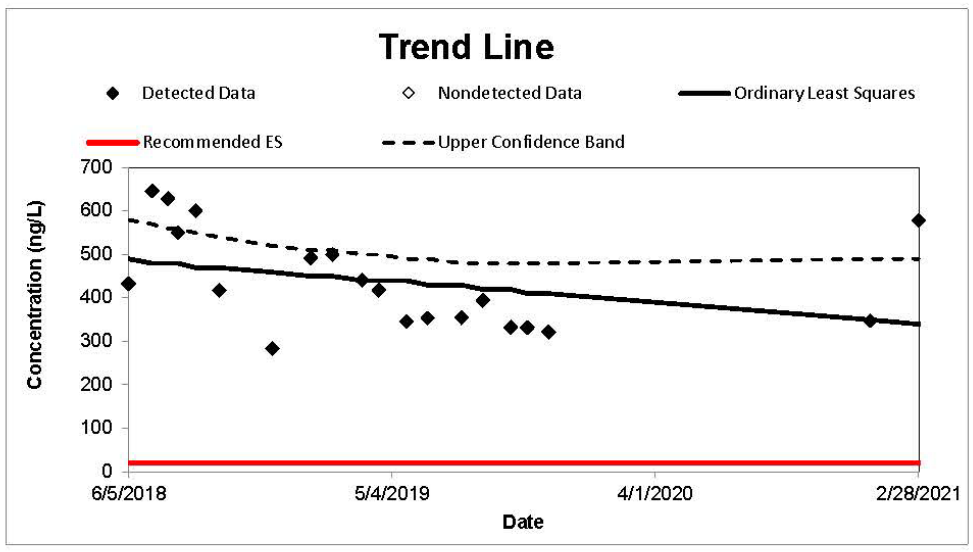
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-008 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

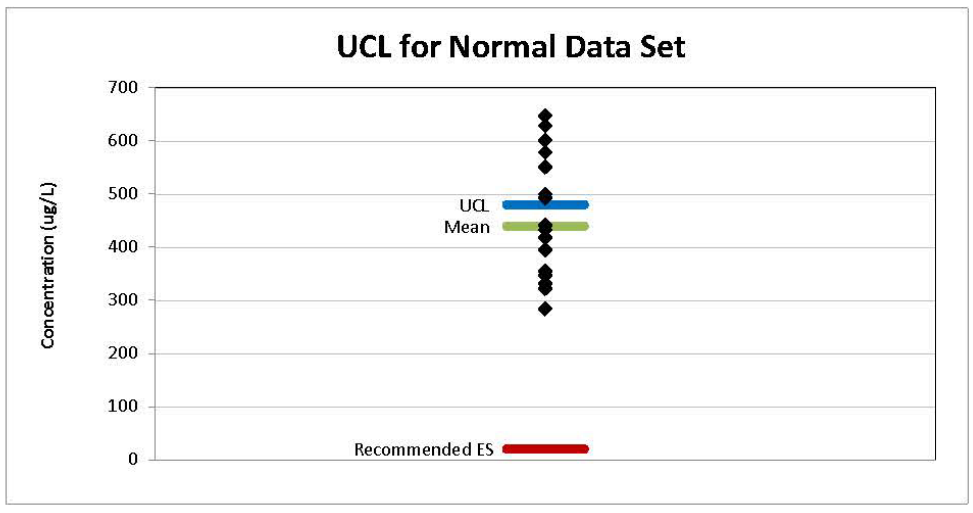
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | -0.14 |
| Intercept | 6700 |
| $R^2$ | 0.1225 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | 5/15/2027 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 440 |
| 95% UCL | 480 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

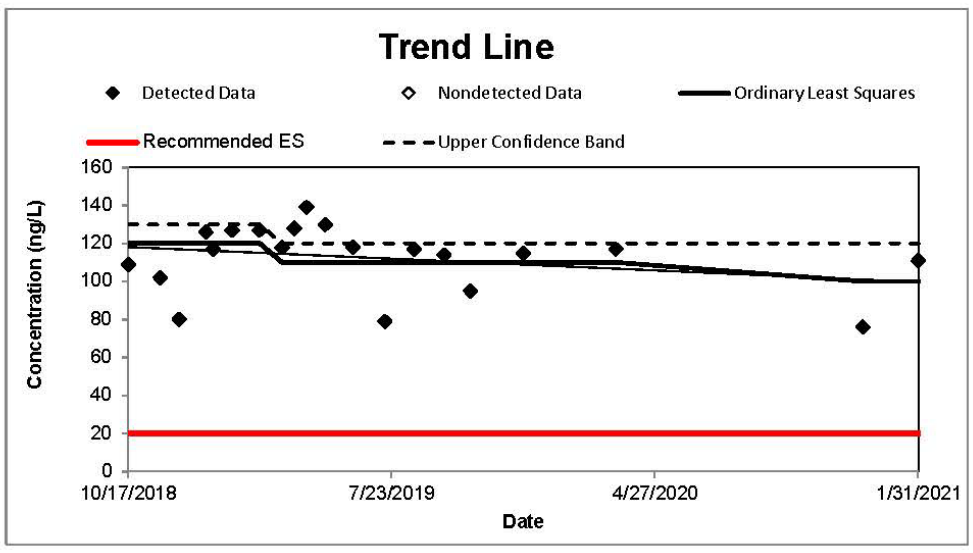
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-019 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

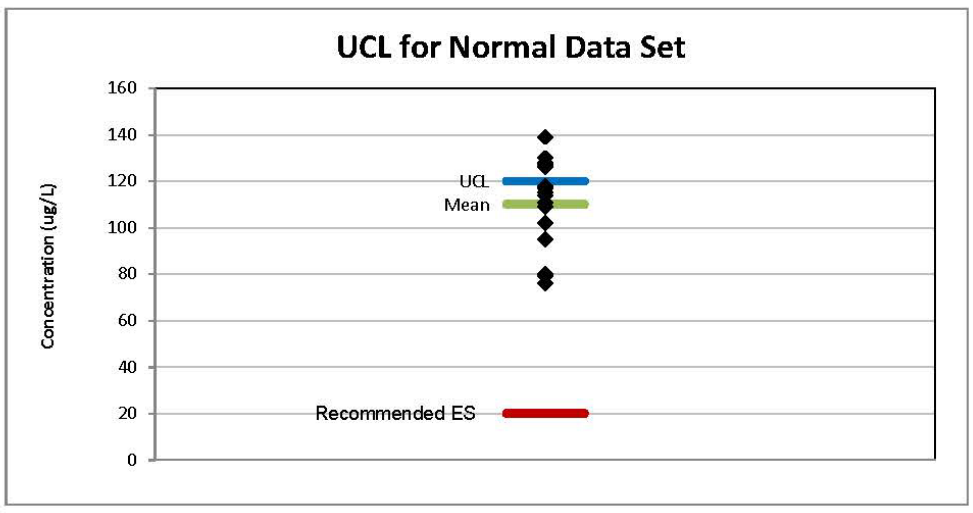
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | Yes |
| Slope | -0.022 |
| Intercept | 1100 |
| $R^2$ | 0.0819 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | 12/18/2030 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 110 |
| 95% UCL | 120 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

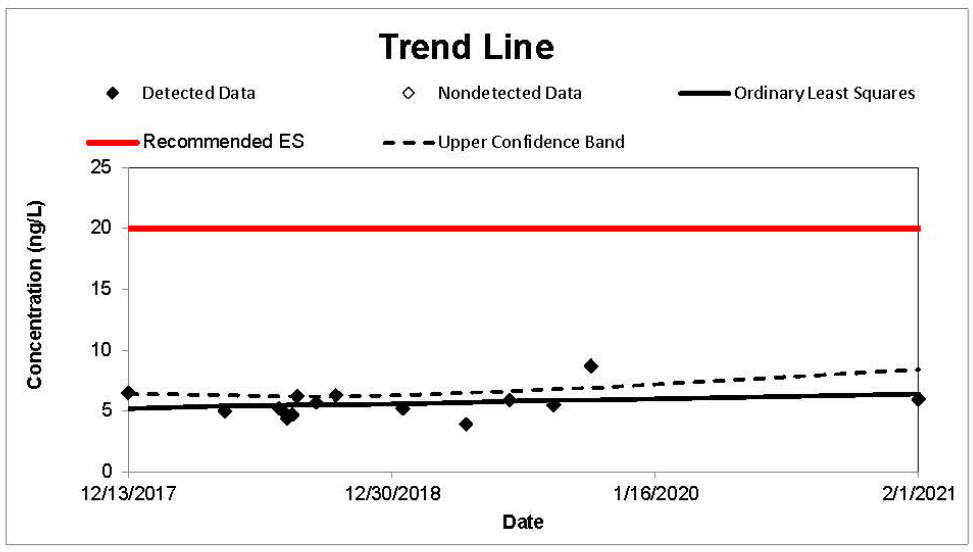
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-023 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 15 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

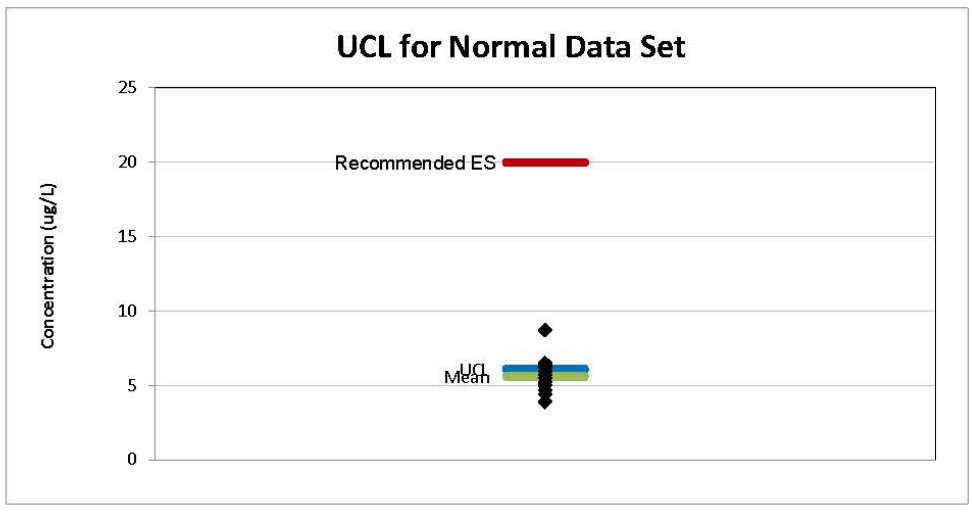
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the recommended ES? | No |
| Slope | 0.001 |
| Intercept | -39 |
| $R^2$ | 0.0657 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 4/29/2057 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 5.6 |
| 95% UCL | 6.1 |
| Is the 95% UCL greater than the recommended ES? | No |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

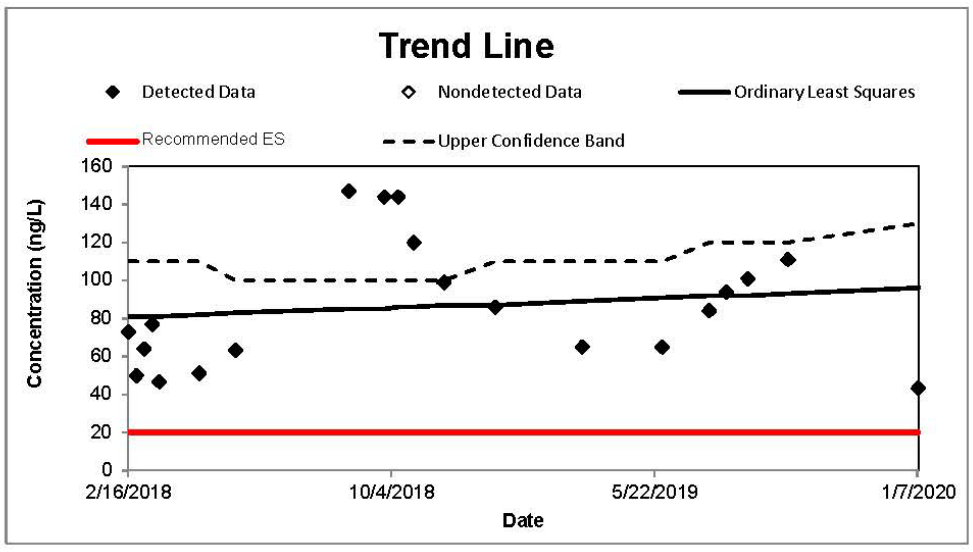
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-036 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

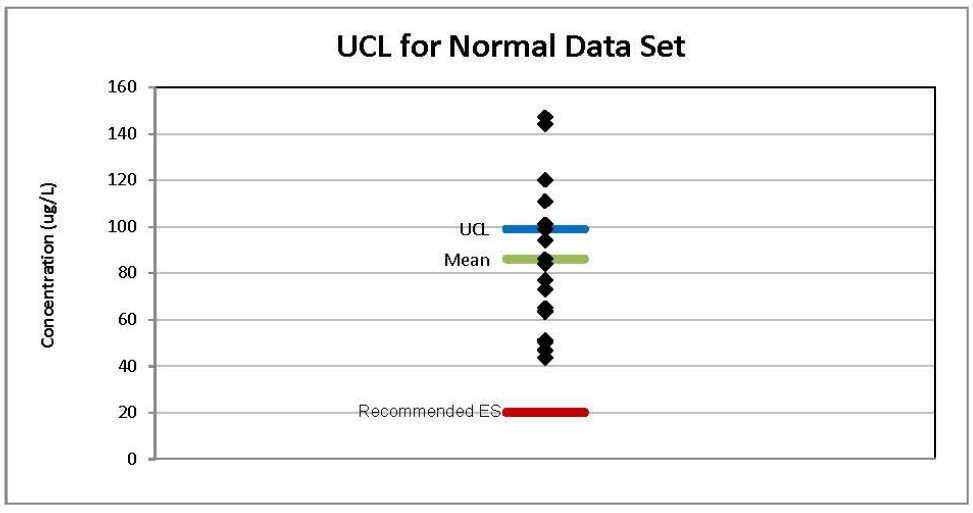
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the Recommended ES? | Yes |
| Slope | 0.022 |
| Intercept | -850 |
| $R^2$ | 0.0212 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 86 |
| 95% UCL | 99 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

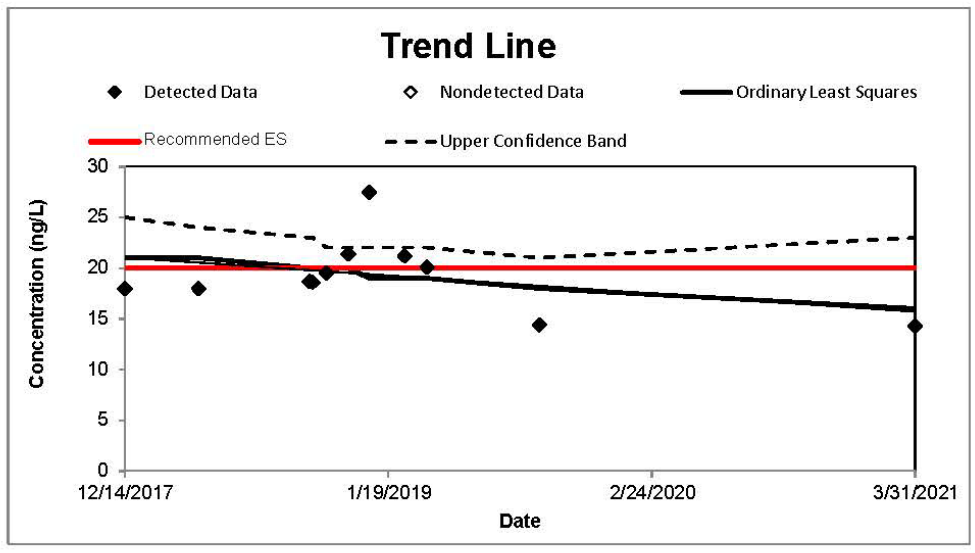
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-037 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 11 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

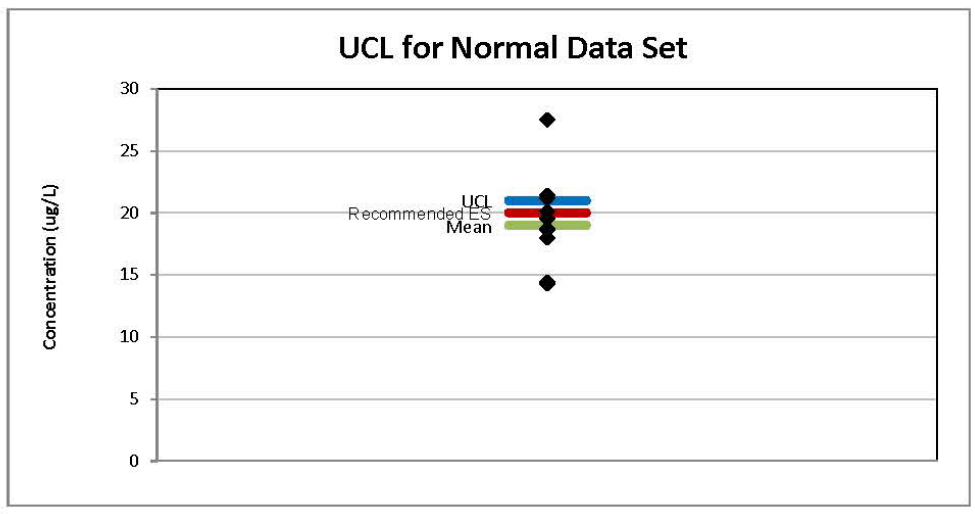
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the Recommended ES? | Yes |
| Slope | -0.0044 |
| Intercept | 210 |
| $R^2$ | 0.1505 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 19 |
| 95% UCL | 21 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

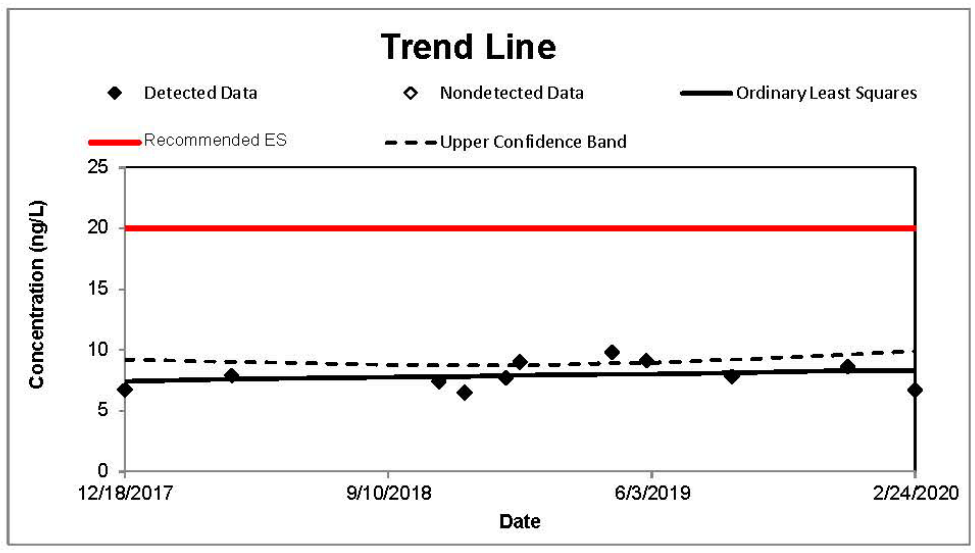
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-049 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 11 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

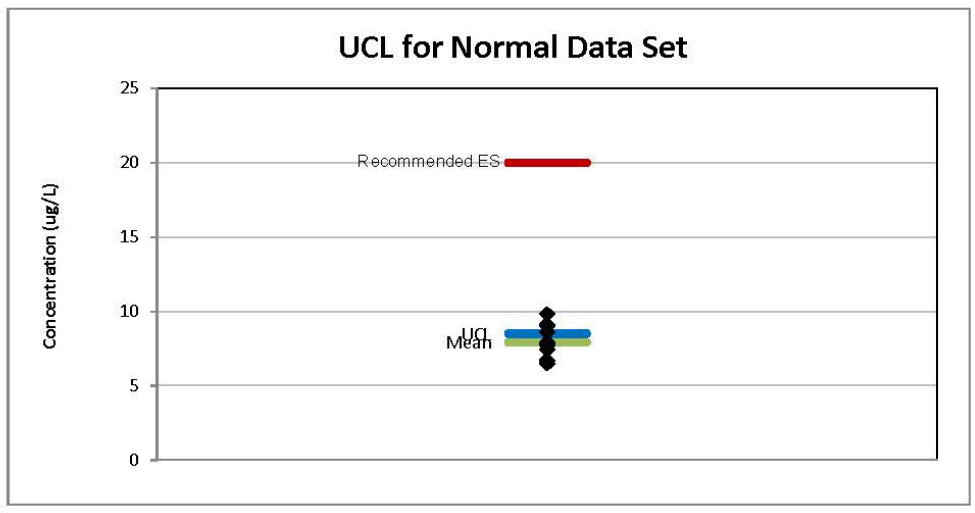
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | No |
| Slope | 0.0011 |
| Intercept | -41 |
| $R^2$ | 0.0616 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 8/26/2048 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 7.9 |
| 95% UCL | 8.5 |
| Is the 95% UCL greater than the recommended ES? | No |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Nonparametric Residuals**

**General Information**

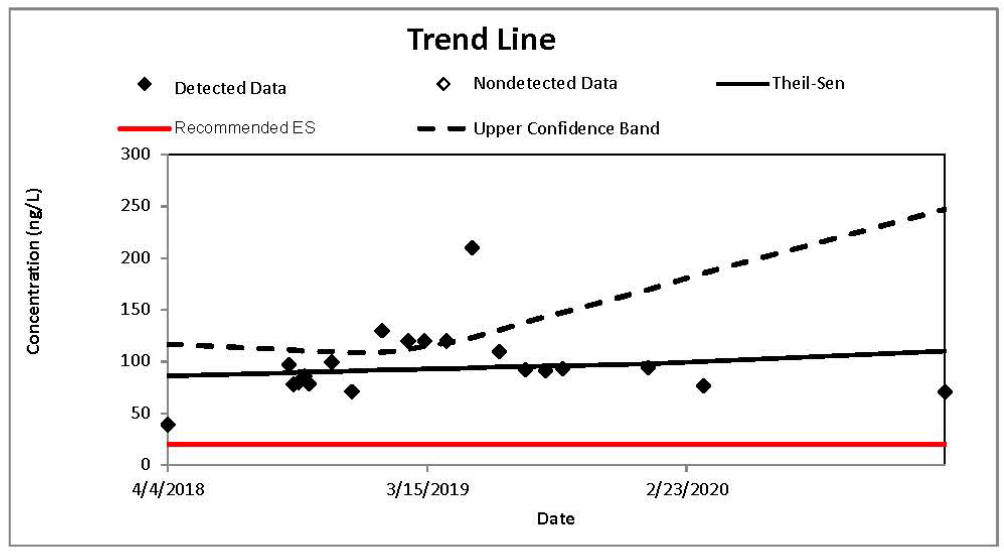
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-054 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | Yes |
| Number of Non-Detects | 0 |

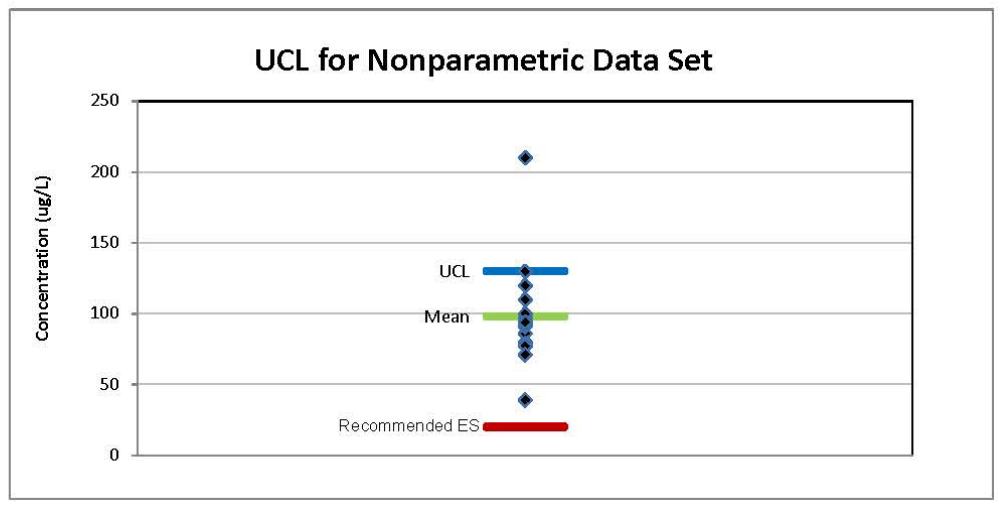
**Trend Analysis**

| | |
|---|---|
| Trend Type | Nonparametric |
| Method | Theil-Sen Line, Mann-Kendall Test |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.019 |
| Intercept | -730 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 98 |
| 95% UCL | 130 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

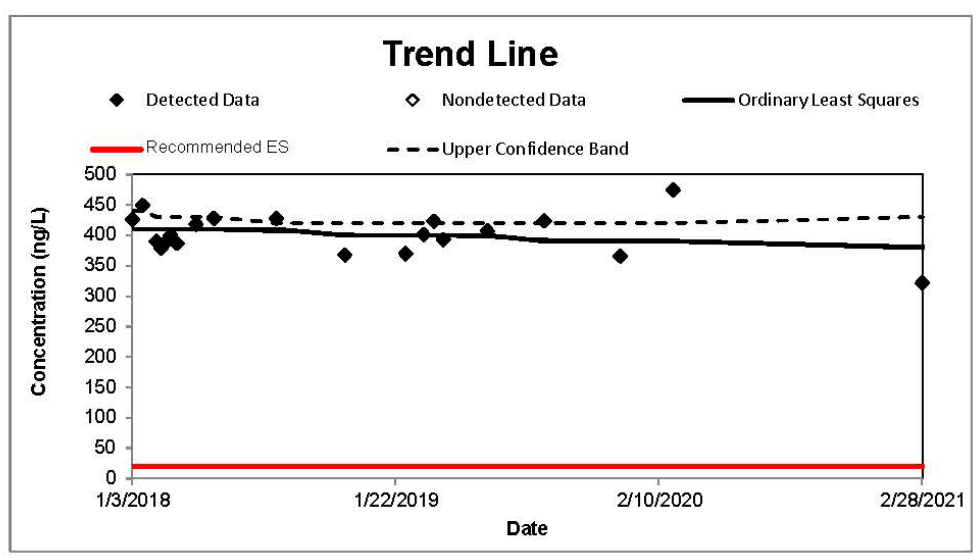
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-058 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

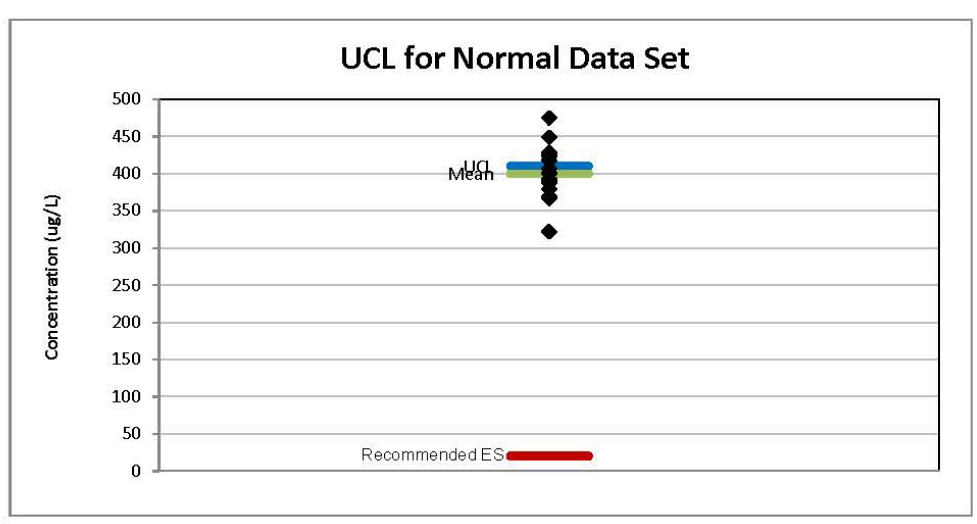
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | -0.03 |
| Intercept | 1700 |
| $R^2$ | 0.0768 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | 4/4/2054 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 400 |
| 95% UCL | 410 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

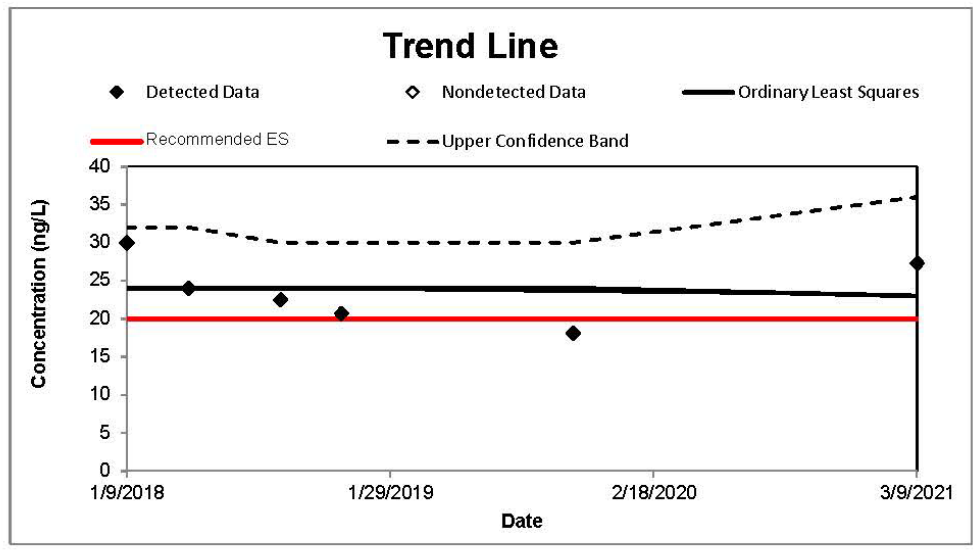
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-062 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Cleanup Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 6 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

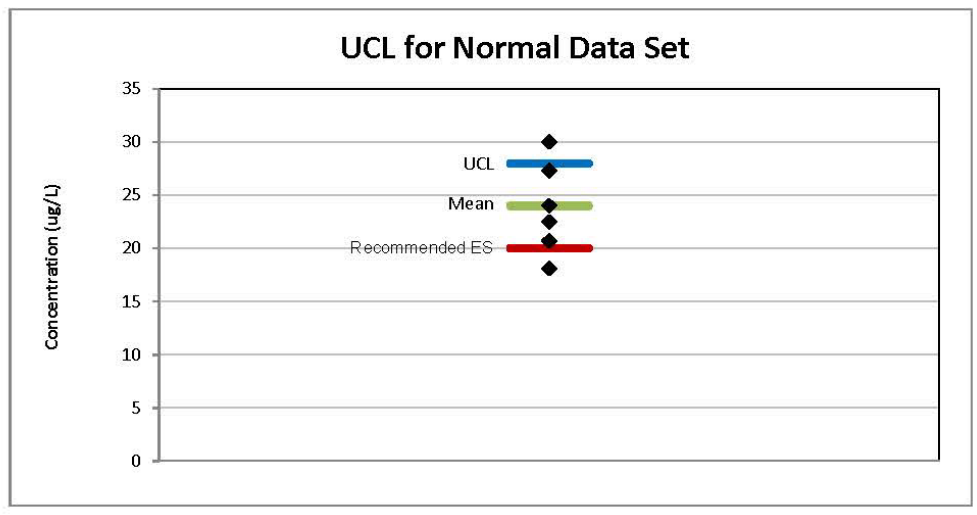
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | -0.00091 |
| Intercept | 63 |
| $R^2$ | 0.0081 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | 7/5/2030 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 24 |
| 95% UCL | 28 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

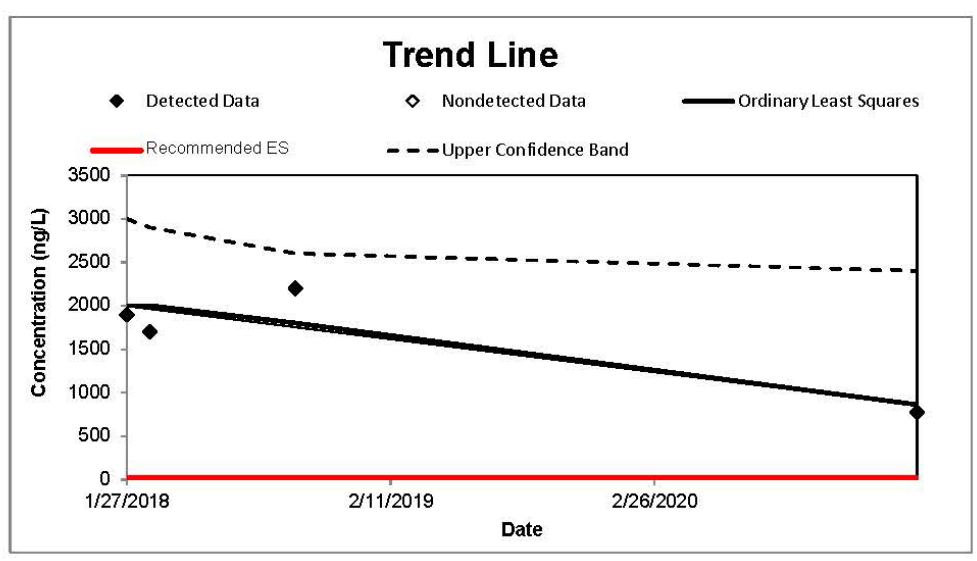
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-082D |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 4 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

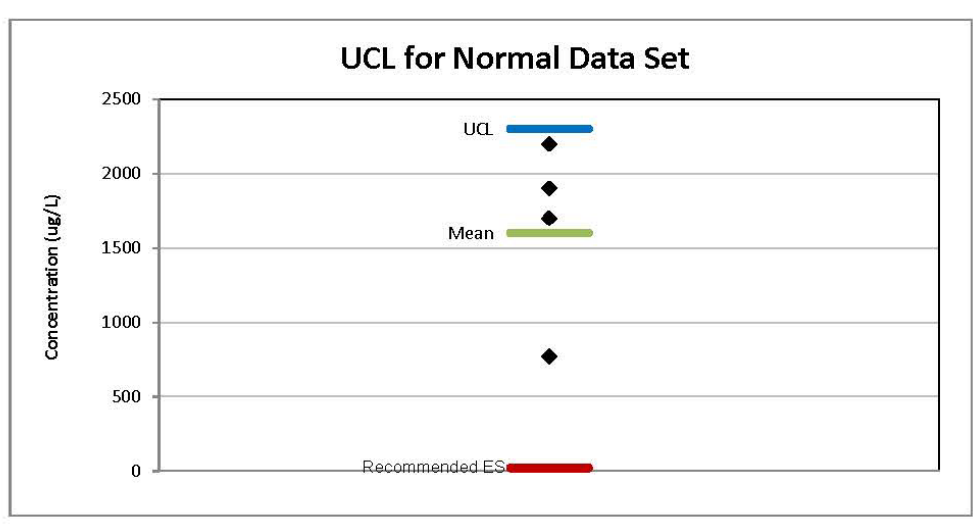
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | -1 |
| Intercept | 45000 |
| $R^2$ | 0.7497 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | 6/27/2023 |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 1600 |
| 95% UCL | 2300 |
| Is the 95% UCL greater than the recommended ES? | Yes |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Nonparametric Residuals**

**General Information**

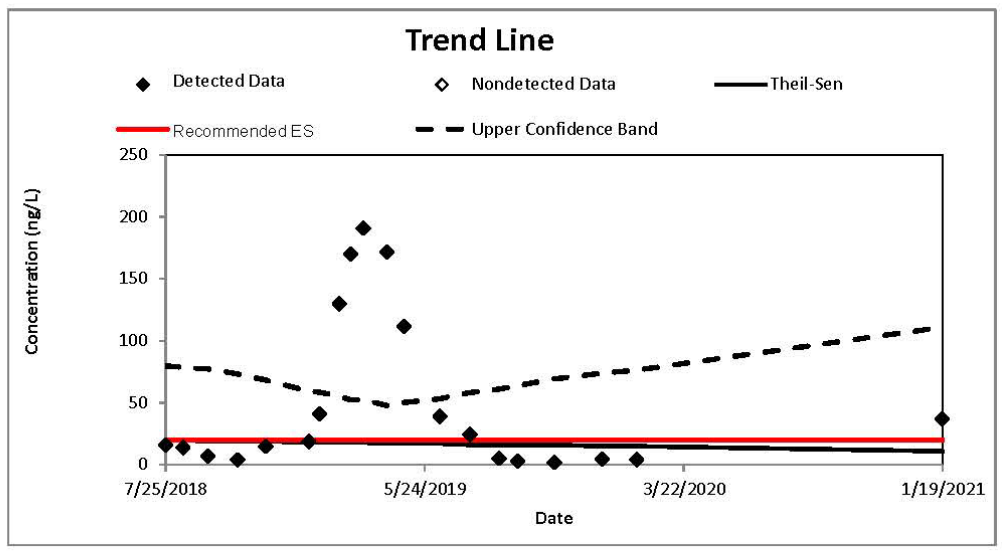
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-090 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 20 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

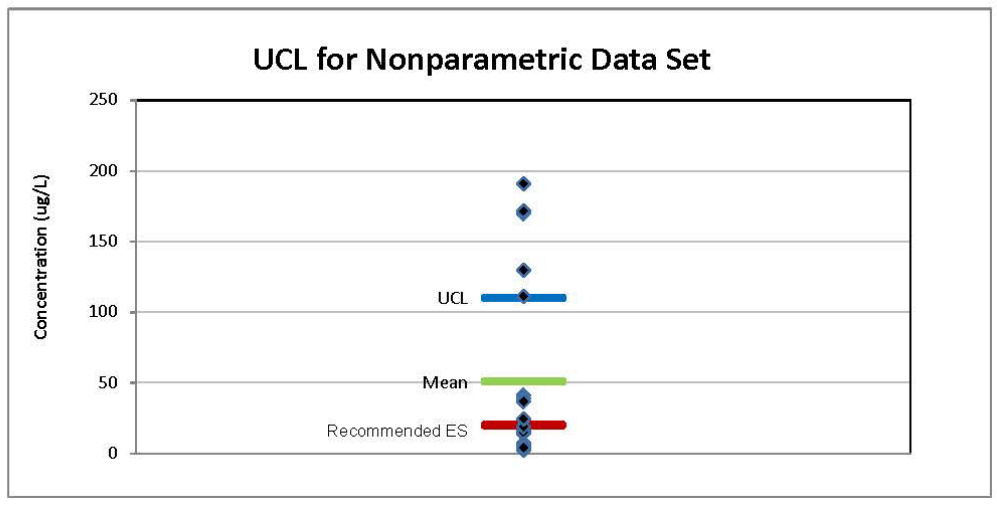
**Trend Analysis**

| | |
|---|---|
| Trend Type | Nonparametric |
| Method | Theil-Sen Line, Mann-Kendall Test |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | -0.0093 |
| Intercept | 420 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 51 |
| 95% UCL | 110 |
| Is the 95% UCL greater than the recommended ES? | Yes |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

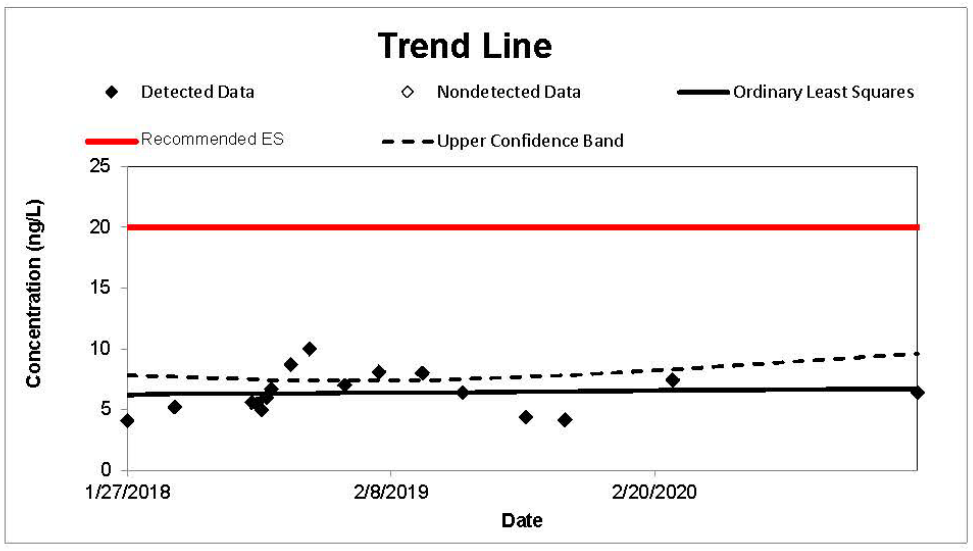
| | |
|---|---|
| Analyst | KS |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-099 |
| Chemical of Concern | PFOA + PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 17 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

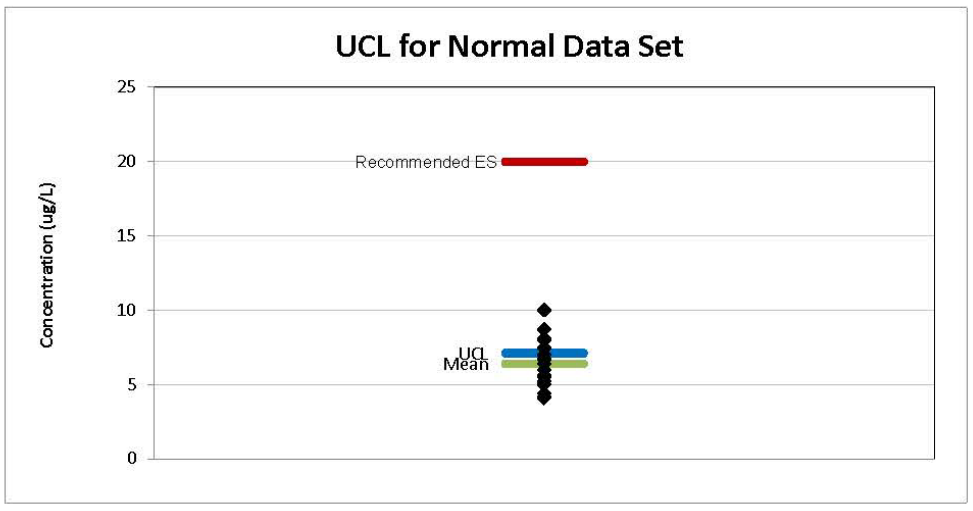
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | No |
| Slope | 0.00045 |
| Intercept | -13 |
| $R^2$ | 0.0059 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 5/3/2101 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 6.4 |
| 95% UCL | 7.1 |
| Is the 95% UCL greater than the recommended ES? | No |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Nonparametric Residuals**

**General Information**

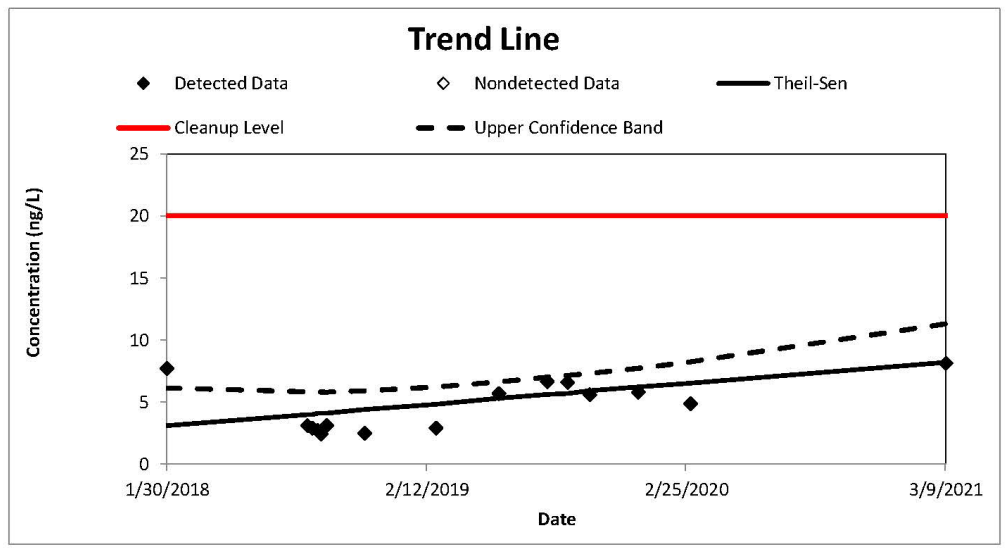
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-100 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Cleanup Level | 20 |
| Source of Cleanup Level | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 15 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

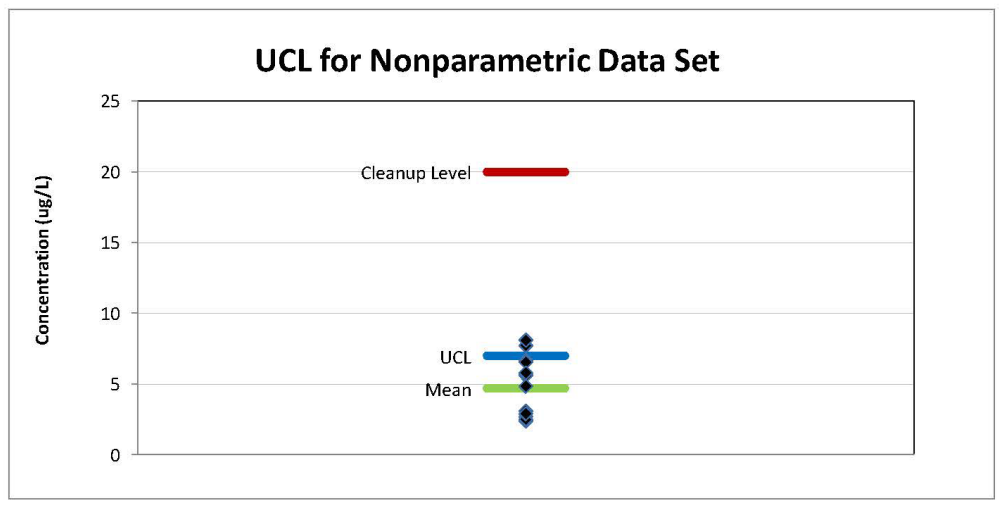
**Trend Analysis**

| | |
|---|---|
| Trend Type | Nonparametric |
| Method | Theil-Sen Line, Mann-Kendall Test |
| Is the Upper Confidence Band above the cleanup level? | No |
| Slope | 0.0046 |
| Intercept | -190 |
| Test Result | No trend |
| When concentration is predicted to achieve the cleanup level | NA |
| When concentration is predicted to exceed the cleanup level | 4/5/2028 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 4.7 |
| 95% UCL | 7 |
| Is the 95% UCL greater than the cleanup level? | No |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

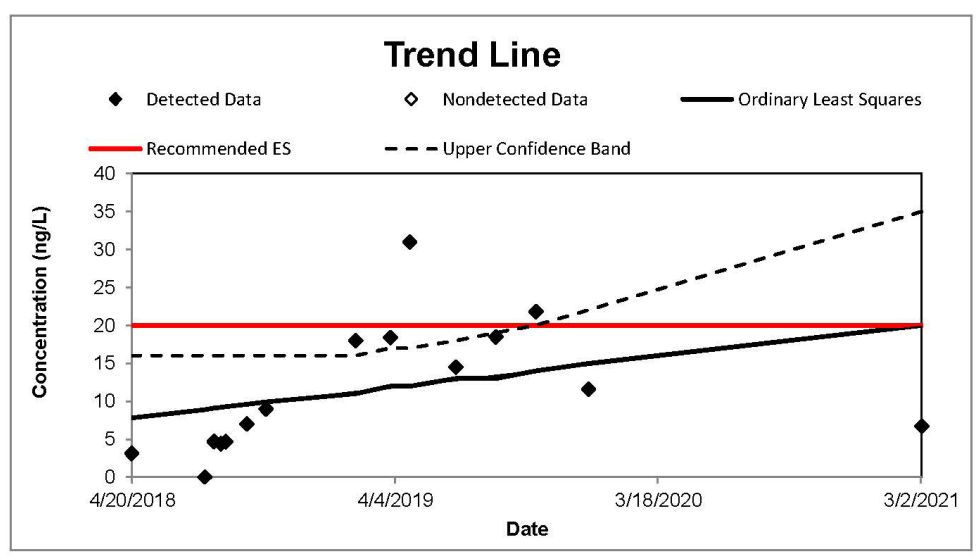
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-109 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 15 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

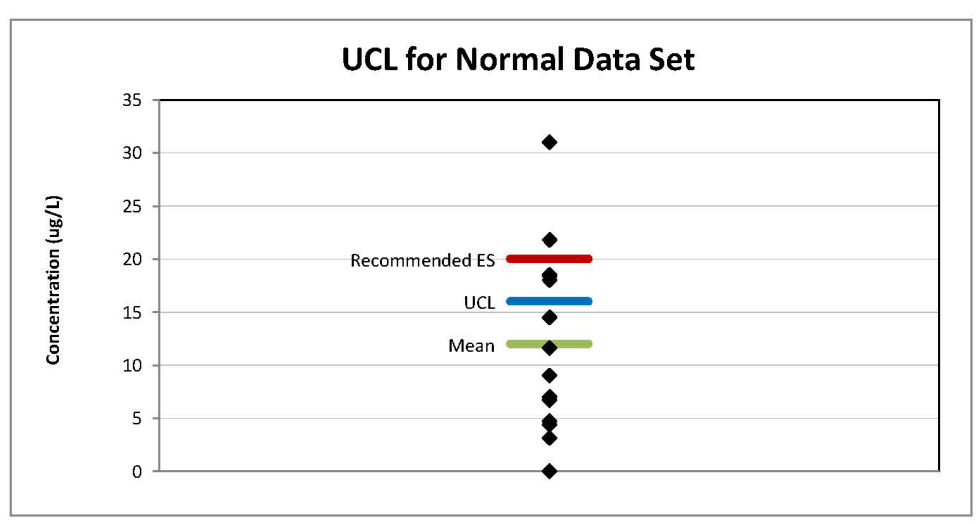
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.011 |
| Intercept | -490 |
| $R^2$ | 0.1309 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 3/16/2021 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 12 |
| 95% UCL | 16 |
| Is the 95% UCL greater than the recommended ES? | No |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Nonparametric Data Sets with Nonparametric Residuals**

**General Information**

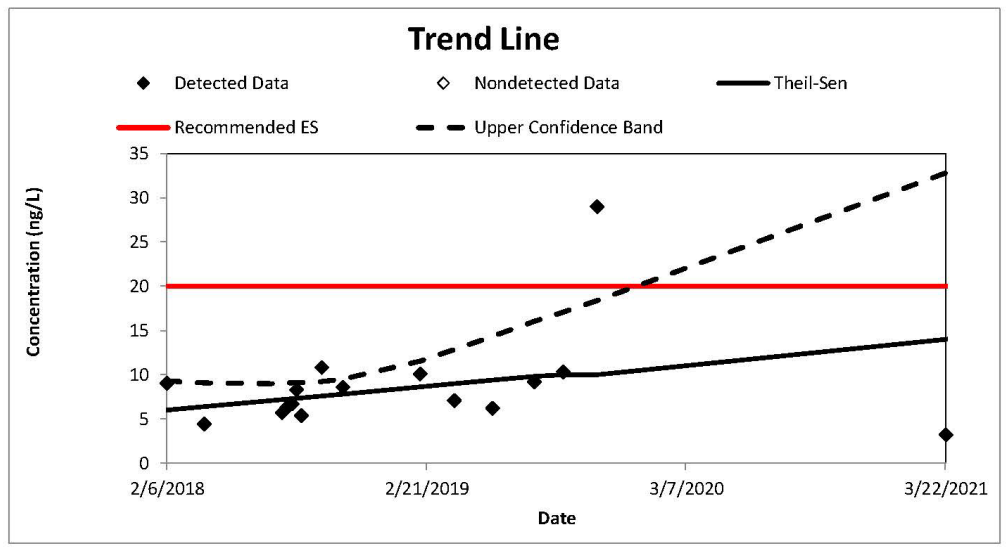
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-121A |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 16 |
| Outliers present? | Yes |
| Number of Non-Detects | 0 |

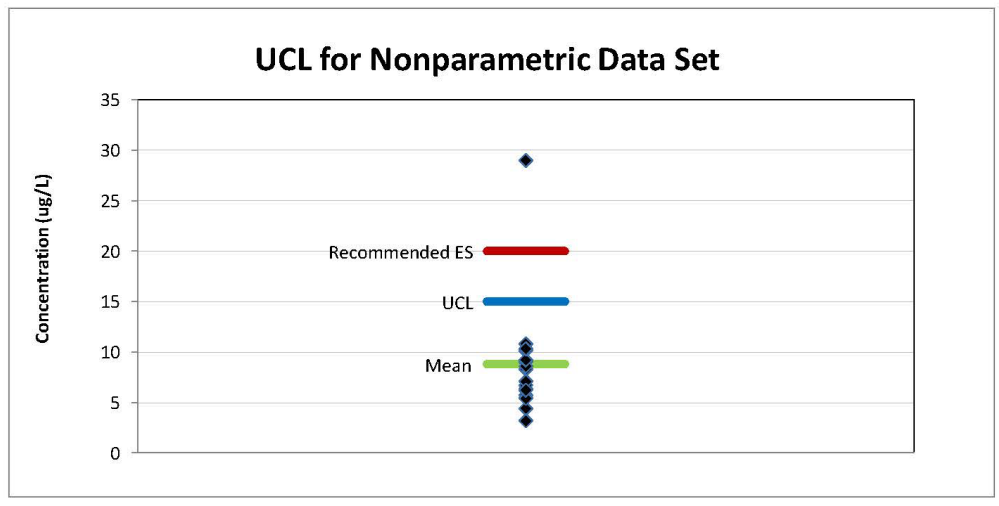
**Trend Analysis**

| | |
|---|---|
| Trend Type | Nonparametric |
| Method | Theil-Sen Line, Mann-Kendall Test |
| Is the Upper Confidence Band above the ES? | Yes |
| Slope | 0.007 |
| Intercept | -300 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | 7/19/2023 |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Nonparametric |
| Test | Chebyshev UCL |
| Mean | 8.8 |
| 95% UCL | 15 |
| Is the 95% UCL greater than the recommended ES? | No |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

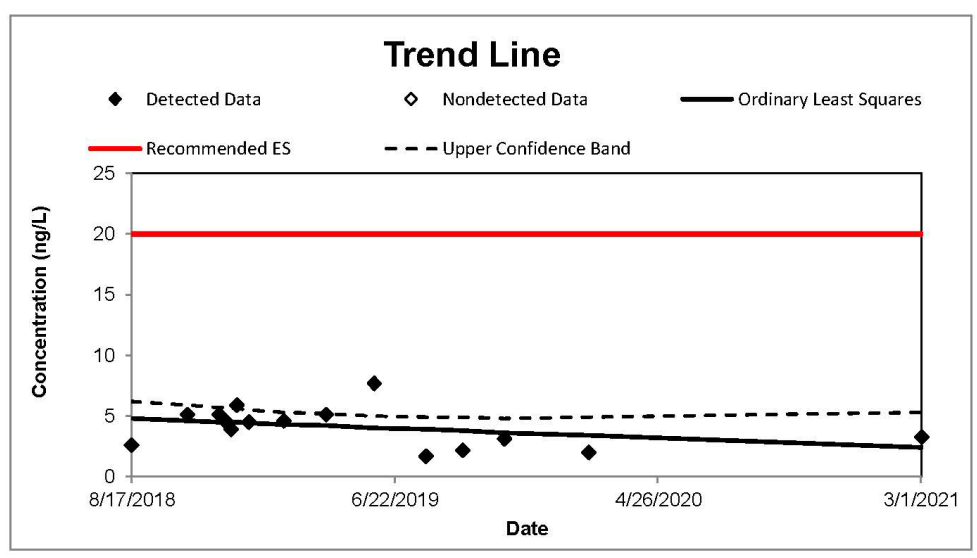
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-121B |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 15 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

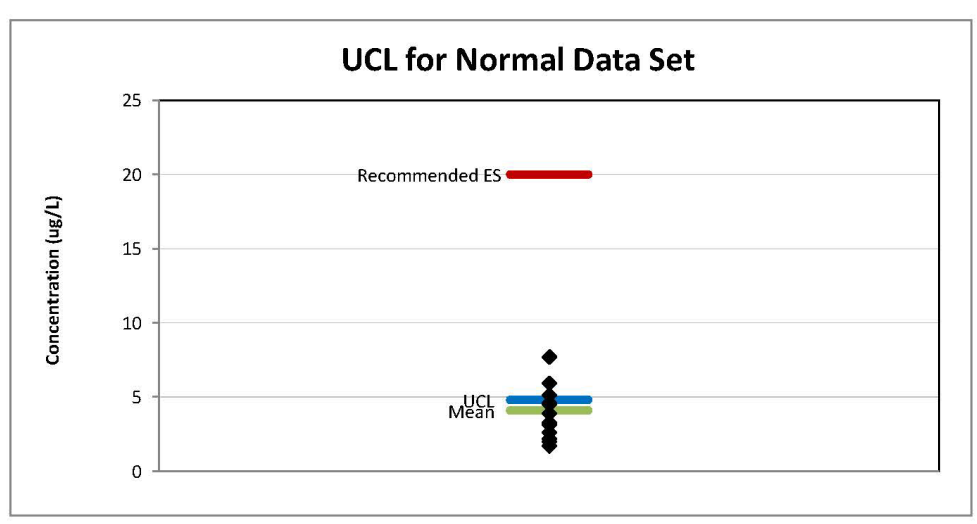
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | No |
| Slope | -0.0026 |
| Intercept | 120 |
| $R^2$ | 0.1414 |
| Test Result | No trend |
| When concentration is predicted to achieve the recommended ES | NA |
| When concentration is predicted to exceed the recommended ES | NA |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 4.1 |
| 95% UCL | 4.8 |
| Is the 95% UCL greater than the recommended ES? | No |

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## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

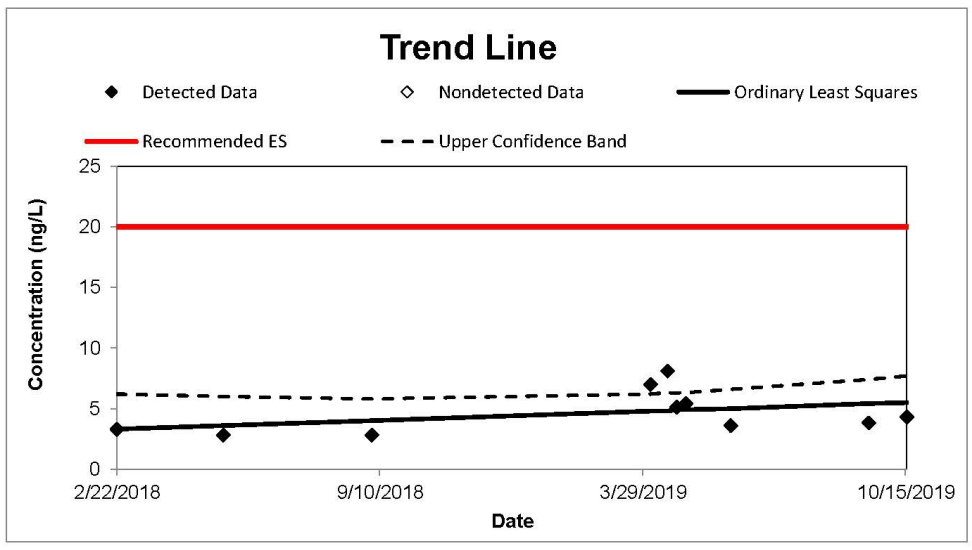
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-129 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 10 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

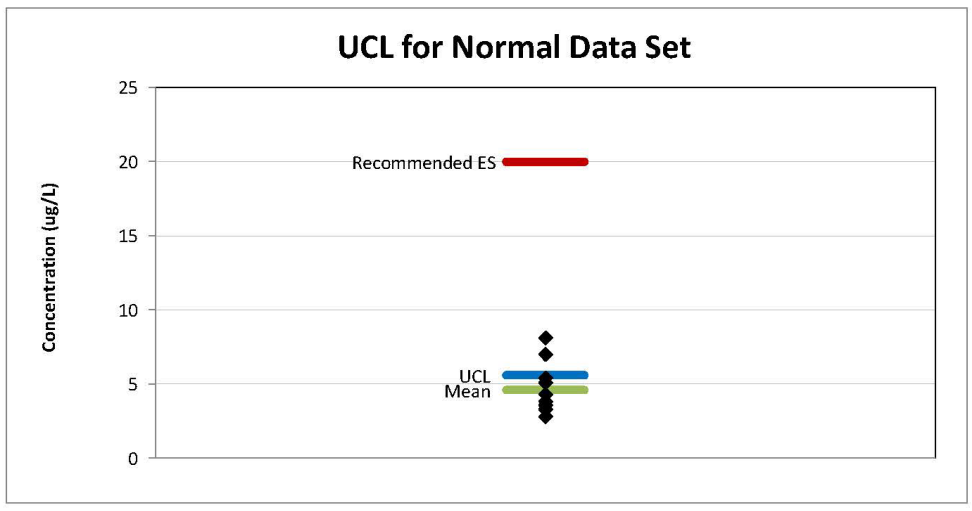
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | **No** |
| Slope | 0.0037 |
| Intercept | -150 |
| $R^2$ | 0.1693 |
| **Test Result** | **No trend** |
| **When concentration is predicted to achieve the recommended ES** | **NA** |
| **When concentration is predicted to exceed the recommended ES** | **8/26/2030** |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 4.6 |
| **95% UCL** | **5.6** |
| **Is the 95% UCL greater than the recommended ES?** | **No** |




## Groundwater Statistics Tool

**Site & Summary Statistics for Normal Data Sets with Normal Residuals**

**General Information**

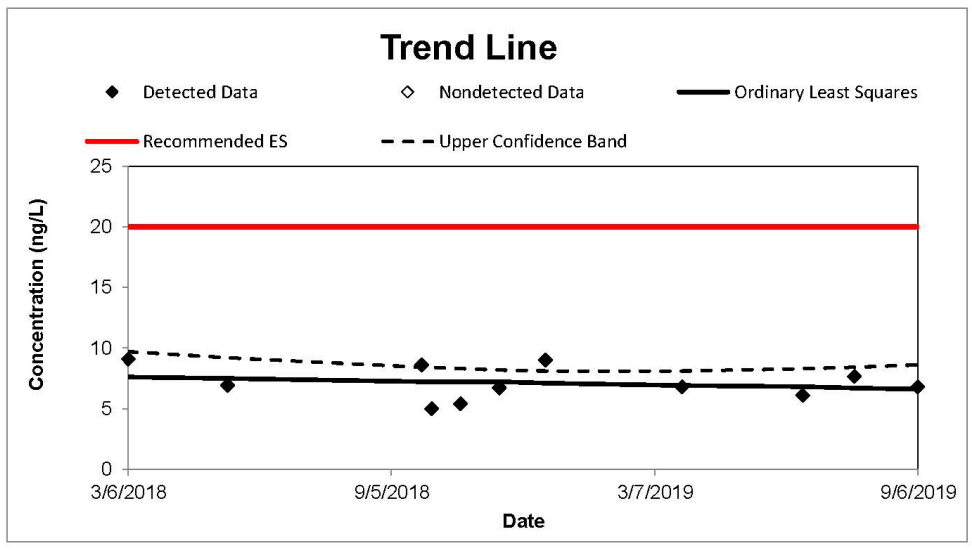
| | |
|---|---|
| Analyst | LMR |
| Date of Evaluation | 7/30/2021 |
| Site Name | FTC |
| Operable Unit | 0 |
| Type of Evaluation | Remediation |
| Well Name/Number | WS-133 |
| Chemical of Concern | PFOA+PFOS |
| Concentration Units | ng/L |
| Recommended ES | 20 |
| Source | ES |
| Confidence Level | 95% |
| Risk of False Outlier Rejection | 1% |
| Number of Results | 11 |
| Outliers present? | No |
| Number of Non-Detects | 0 |

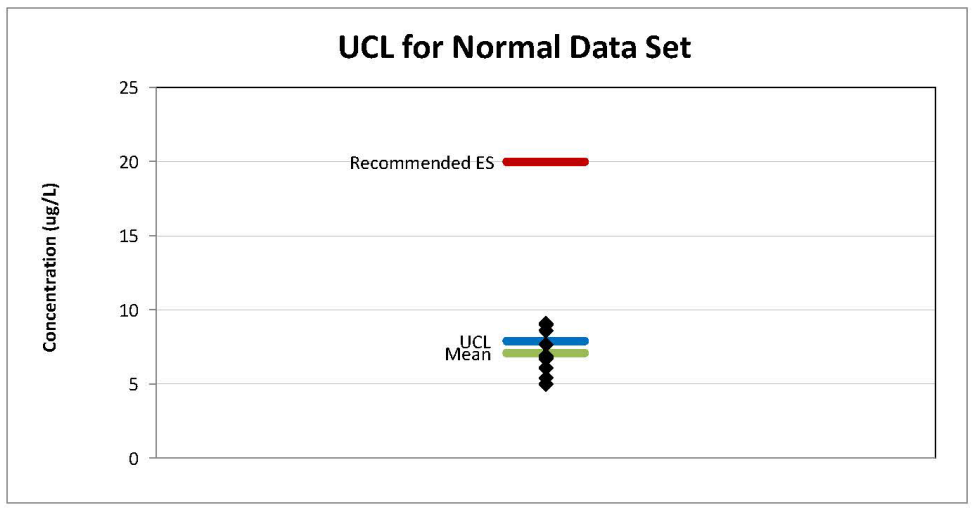
**Trend Analysis**

| | |
|---|---|
| Trend Type | Normal |
| Method | Ordinary Least Squares |
| Is the Upper Confidence Band above the ES? | **No** |
| Slope | -0.0018 |
| Intercept | 85 |
| $R^2$ | 0.0522 |
| **Test Result** | **No trend** |
| **When concentration is predicted to achieve the recommended ES** | **NA** |
| **When concentration is predicted to exceed the recommended ES** | **NA** |

**UCL Analysis**

| | |
|---|---|
| Distribution Type | Normal |
| Test | Student's t UCL |
| Mean | 7.1 |
| **95% UCL** | **7.9** |
| **Is the 95% UCL greater than the recommended ES?** | **No** |

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