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November 14, 2022

Ms. Helen Dudar
NJDEP – Bureau of Case Management
Mail Code 401-05F
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401 East State Street
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NJPDES-DGW Permit Numbers NJ 0083429 and NJ 0105872
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chemours Chambers Works, Deepwater, NJ

Dear Ms. Dudar:

Enclosed is the New Jersey Pollutant Discharge Elimination System – Discharge to Groundwater (NJPDES-DGW) Semi-Annual Report for the period covering January 1 through June 30, 2022. This report fulfills the reporting requirements of NJPDES-DGW Permit NJ0105872 and also fulfills the reporting requirements of Part IV.F of NJPDES-DGW permit NJ0083429 for NJDEP Case Management.

Chemours is submitting two hard copies of the report and three electronic versions on flash drives with hard copies of the figures (because some figures are greater than 8.5” x 11”).

The first semester 2022 EDD submission (SRP Catalog ID: HB285214) was processed on October 24, 2022 as shown in the attachment to this letter.

If you have any questions or want to discuss further any aspect of the report, please call me at 302-773-1289.

Sincerely,

Andrew S. Hartten
Project Director
Corporate Remediation – NJ

cc: Eleni Kavvadias, EPA Region 2 (electronic copy submitted via OneDrive)
Kerri Standowski. NJDEP (cover letter only)
Steven J. Tambini, DRBC (electronic copy submitted via OneDrive)
Jeffrey Salabritas, NJDEP (electronic copy submitted via OneDrive)
Amy Scaffidi, NJDEP (cover letter only via email)
Chemours File (507141) (electronic via Chemours sharepoint)
AECOM Chambers Works File (60674023.22005) (hard copy)

Wallace, Christine

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November 14, 2022

Ms. Kerri Standowski
Bureau of Nonpoint Pollution Control
Division of Water Quality
P.O. Box 029
Trenton, NJ 08625-0029

NJPDES-DGW Permit Numbers NJ0083429 and NJ0105872
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chemours Chambers Works, Deepwater, NJ

Dear Ms. Standowski:

Enclosed is the New Jersey Pollutant Discharge Elimination System – Discharge to Groundwater (NJPDES-DGW) Semi-Annual Report for the period covering January 1 through June 30, 2022. This report fulfills the reporting requirements of NJPDES-DGW Permit NJ0105872 and also fulfills the reporting requirements of Part IV.F of NJPDES-DGW permit NJ0083429 for NJDEP Case Management.

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If you have any questions or want to discuss further any aspect of the report, please call me at 302-773-1289.

Sincerely,

Andrew S. Hartten
Project Director
Corporate Remediation – NJ

Enclosures

cc: Helen Dudar, NJDEP (cover letter only)
Brian Sage, NJDEP (electronic copy submitted via OneDrive)
Chemours File (cover letter only)
AECOM File (cover letter only)

Chemours Chambers Works
First Semester 2022 Semi-Annual DGW Report (November 2022)

CERTIFICATION I

"I certify under penalty of law that the information provided is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Andrew S. Hartten
Chemours Corporate Remediation Group
Principal Project Manager

11/11/22
Date

WITNESSED THIS 11 DAY OF November, 2022

Deborah L Vandenboaal
Notary Public

Chemours Chambers Works
First Semester 2022 Semi-Annual DGW Report (November 2022)

CERTIFICATION I

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Uriel Bohorquez
Chemours Secure Environmental Treatment
Operations Manager

11/9/22
Date

WITNESSED THIS 9th DAY OF November, 2022

Marian E Green
Notary Public

Marian E Green
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES JUNE 14, 2026

Chemours Chambers Works
First Semester 2022 Semi-Annual DGW Report (November 2022)

CERTIFICATION II

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Tom Ei
Chemours Corporate Remediation Group
Remediation Manager

Nov 9 2022
Date

WITNESSED THIS 9th DAY OF November, 2023

Notary Public

GWEN ANNE WILSON
MY COMMISSION EXPIRES OCT. 23, 2024
NOTARY PUBLIC STATE OF DELAWARE

First Semester 2022 Semi-Annual NJPDES-DGW Report

Chambers Works Complex
Deepwater, New Jersey

Submitted on behalf of:
The Chemours Company FC LLC

Submitted by:
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Project Number: 60674023.22005
Date: November 2022

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Executive Summary

This document summarizes the corrective action activities and groundwater quality monitoring for the first semester of 2022 (January through June) at the Chambers Works Complex (site) in Deepwater, New Jersey as required by the New Jersey Pollutant Discharge Elimination System - Discharge to Groundwater (NJPDES-DGW) Permit No. NJ0083429 and NJ0105872. The key conclusions, updates, and recommendations for the semester are as follows.

Key Conclusions

- The interceptor well system (IWS) average pumping requirement of 1 million gallons per day (MGD) was met during this reporting period.
- The site IWS continues to maintain hydraulic control of the C and D aquifers, and pumping at J05-M01E effectively controls groundwater in the E aquifer..
- Groundwater conditions along the Salem Canal portions of the sheet-pile barrier (SPB), including the eastern end of the SPB, have been investigated as part of the Supplemental Groundwater Investigations and a final summary was provided with the Second Semester 2020 (2H20) DGW report (AECOM, April 2021). The supplemental groundwater investigation confirmed the performance of the SPB in controlling groundwater from flowing south and entering or flowing beneath the Salem Canal. Flow of groundwater upgradient of the SPB to the east where it enters the C aquifer and is captured by the site IWS system. This final summary included in the 2H20 DGW report completes the investigation that was requested by U.S. Environmental Protection Agency (EPA) and New Jersey Department of Environmental Protection (NJDEP).
- Hydraulic control of the B aquifer in the manufacturing area is maintained through the pumping of the IWS and the presence of the SPB. The SPB along the Delaware River was completed in the second semester of 2017. Groundwater elevation and tidal studies to demonstrate the successful performance of the SPB were initiated in the first semester of 2018; results of which were provided in the 1H2019 DGW report (AECOM, October 2019).

Updates and Recommendations

In letters dated March 13 and April 25, 2017, NJDEP provided comments on the Second Semester 2016 NJPDES-DGW report. In response to those comments and previous ones, the following investigations have been initiated and updates are provided herein:

- As requested by NJDEP in their comment letter dated September 11, 2014, multiple sampling programs have been completed at T29-M02B starting in March 2015. T29-M02B was scheduled to be sampled for per- and polyfluorinated alkyl substances (PFAS), PCBs, volatile organic compounds (VOCs), and SVOCs in the second semester of 2021. However, due to continued access issues caused by flooding in the area, the well was inaccessible in the second half of 2021 through the first half of 2022. Flood waters have recently receded, and the well will be sample in November 2022 with results provided in the next DGW report.
- To enhance the spatial coverage of off-site PFAS monitoring wells, Chemours has agreed to install four additional monitoring well clusters. Each cluster will consist of three monitoring wells (shallow, intermediate, and deep), for a total of twelve new off-site monitoring wells, to further delineate the horizontal and

vertical distribution of PFAS in off-site groundwater. Three clusters were installed in the first half of 2022 (see section 6.1). The remaining well cluster will be installed in the second half of 2022.

Chambers Works solid waste management units (SWMUs) and areas of concern (AOCs) have been investigated, and the nature and extent of releases have been characterized in the 2014 Comprehensive Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report. As a result of routine quarterly status meetings with EPA and NJDEP, the following recommendations were made:

- The *SWMU 40 – Fuel Oil Storage Tanks Soil Results Technical Memorandum* was submitted to the agency on June 14, 2021. The findings of the report showed that two locations, SWMU40-B28 and SWMU40-B31, exceeded residential standards for direct contact of soil and none of the samples exceeded non-residential standards for direct contact. Therefore, remediation of SWMU 40 is not considered necessary as long as the institutional control limiting its use to non-residential is retained. However, because these samples were collected from the shallow soil zone and did not probe deeper, deep soil probing will be included at SWMU 40 with the Phase 2 DNAPL Investigation (see Section 6.3).
- The *Phase 1 DNAPL Investigation Report* was submitted in November 2021. The conclusion of which showed that the presence and distribution of mobile and immobile DNAPL within AOC 1 suggests that as per the NJDEP Technical Impracticability Guidance for Ground Water (NJDEP, 2013b), an application to the NJDEP for a TI determination for AOC 1 may be appropriate when evaluating the applicability and effectiveness of remedial alternatives for the site. However, while the assessment of DNAPL composition and distribution presented in this report is comprehensive, further data collection and evaluation are recommended to assess the presence and recoverability of mobile DNAPL. The *Phase 2 Remedial Alternatives Screening Report and Investigation Work Plan* was submitted, and the next phase of the investigation started in June 2022 and is expected to continue through the winter of 2023. Phase 2 includes the majority of AOCs 2 and 3, parts of AOCs 5 and 6, SWMU 40, and AOC Power and Utility (P&U) (see Section 6.3.2). A separate results summary report will be made available upon completion of the investigation and processing of the data.

Aside from changes above, no additional changes or modifications to the current programs under Permit Nos. NJ0083429 and NJ0105872 are recommended. Existing programs will continue to be evaluated, and recommendations for modification will be made as conditions warrant.

1.0 Introduction

AECOM, on behalf of The Chemours Company (Chemours), has prepared this *First Semester 2022 Semi-Annual NJPDES-DGW Report* for the Chambers Works Complex (site) located in Deepwater, Salem County, New Jersey (see Figure 1). The site covers 1,455 acres and comprises the former Carneys Point Works in the northern area of the site and the Chambers Works manufacturing area in the southern area of the site with Henby Creek generally separating the two. The site includes the western reach of Salem Canal, which crosses the southern portion of the site. To the south is the Calpine (formerly Atlantic City Electric) Deepwater Energy Center; to the east are commercial, residential, and recreational areas; to the north are more residential areas; and to the west is the Delaware River. The Classification Exception Area (CEA) for groundwater beneath the site is coincident with the property boundary as shown in Figure 1.

The Chambers Works manufacturing area occupies approximately 700 acres of the site and produces specialty intermediate chemicals and fluoropolymer chemicals and products. The site includes two sanitary landfills, A and B, permitted through the New Jersey Department of Environmental Protection (NJDEP) solid waste program (see Figure 2). There are several active waste handling areas, including the Resource Conservation and Recovery Act (RCRA) permitted secure landfill (Secure C Landfill), Chemical Waste Storage Area, and the wastewater treatment plant (WWTP).

The Secure C Landfill has been in operation since 1975. The landfill covers approximately 32 acres and consists of seven areas (formerly called “cells”). Area 1 of the Secure C Landfill was taken out of service in 1978 (closure was completed in 1979). Areas 2, 3, 4, 5A, 5B, and 7 are currently active and are permitted as a RCRA secure landfill. The entire landfill is lined including Area 1 and has leachate collection systems. Areas 2, 3, 4, 5A, 5B, and 7 have leak-detection systems between the liners to monitor for seepage through the upper liner.

1.1 Purpose of Report

This report fulfills the reporting requirements of the New Jersey Pollutant Discharge Elimination System – Discharge to Groundwater (NJPDES-DGW) Permit No. NJ0083429. The permit has an effective date of May 1, 2010 and expired on May 1, 2015. The most recent permit renewal was submitted on October 30, 2014 and is awaiting NJDEP approval. Therefore, Permit No. NJ0083429 is still in effect. The general requirements of NJ0083429 presented in this semi-annual NJPDES-DGW report include a status report on the site corrective action programs, recommendations for changes needed to the existing programs, semi-annual groundwater level monitoring and contour maps to evaluate site-wide groundwater control, and groundwater sampling and analysis to evaluate groundwater quality. Additionally, quality assurance and statistical analysis reporting are required.

This document also fulfills the reporting requirements of NJPDES-DGW Permit No. NJ0105872, which was issued by the Bureau of Non-Point Pollution Control (BNPC) for Sanitary Landfills A and B, and Areas 2, 3, 4, 5A, 5B, and 7 of the Secure C Landfill and has an effective date of December 1, 2013 and an expiration date of November 30, 2018. The most recent permit renewal was submitted on May 31, 2018 and is awaiting NJDEP approval. Therefore, Permit No. NJ0105872 is still in effect. Many of the reporting requirements of NJ0105872 overlap with NJ0083429, but the requirements that are exclusive to this report are the reporting on the Secure C Landfill leachate collection system and leak detection system flow data and an assessment of the Groundwater Protection Plan (GWPP).

1.2 Report Contents

The remainder of this report is as follows:

- Section 2.0 provides information on the site hydrogeology and groundwater corrective action and protection programs.
- Section 3.0 provides an evaluation of hydraulic control of on-site groundwater.
- Section 4.0 provides discussion on data quality and analysis.
- Section 5.0 discusses each of the groundwater quality and leachate collection/leak detection system monitoring programs as well as an evaluation of monitoring data.
- Section 6.0 provides a status update of ongoing remedial action development activities.
- Section 7.0 presents recommendations.
- Section 8.0 contains the references cited in this report.

Maps, charts, and tables included in this report are as follows:

- Semi-annual groundwater elevation contour maps for the B, C, D, and E aquifers.
- Maps showing the sum of the concentrations of all volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), total organic compounds, or predicted total organics by aquifer depending on the sampling completed for each reporting period.
- Trend charts of total organic carbon (TOC), total organic halogen (TOX), and total organic compound concentrations over time.
- Tables summarizing the instantaneous and monthly flow rates for each recovery well.
- Tables summarizing groundwater analytical results.

2.0 Site Hydrogeology and Groundwater Corrective Action and Protection Programs

This section provides information on the site hydrogeology, the groundwater corrective action and protection programs, and their operational status. These programs include the following:

- A sheet-pile barrier (SPB) installed in areas along the Salem Canal and the Delaware River. The final segment of the SPB in Area of Concern (AOC) 1 was completed in December 2017.
- The leachate collection and leak detection systems for the Secure C Landfill.
- Execution of the activities that support the reporting requirements of the approved GWPP.
- Dense non-aqueous phase liquid (DNAPL) recovery, which is intended to improve groundwater quality at the site.

Appendix A provides a detailed chronology of the monitoring activities at the site. Figures 2 and 3 show the well locations at the site and indicate their purpose, e.g., recovery well, groundwater quality sampling well, etc. Figure 3A shows the sample points for the leak detection and leachate collection systems at the Secure C Landfill.

2.1 Site Hydrogeology

The *Comprehensive RCRA Facility Investigation Report* (URS, 2014) details the regional and site-specific geology and hydrogeology. The following paragraphs summarize that text.

The site is characterized as a vertically stacked sequence of alternating coarser-grained and finer-grained units that generally act as aquifers and aquitards, respectively. Early in the site investigation history, a system was developed to use letters to designate primary hydrogeological units [DuPont Environmental Remediation Services (DERS), 1993]. Since then, site-investigation work has led to the on-going update and refinement of the understanding of the site hydrogeology as documented in *Interim Update: Hydrogeologic Model Refinement* (URS, December 2013), which includes 12 geologic cross-sections. The nomenclature includes a designation of an A zone, aquifers by letters B through F, and intervening aquitards by the letter designations of the bounding aquifers (e.g., the B/C aquitard lies between the B and C aquifers).

The A zone is primarily fill material. The vertical interval from the B through portions of the D aquifers correspond to the Pleistocene Cape May 3 and Cape May 2 Formations and collectively are part of the Pleistocene aquifer system. The vertical interval from portions of the D aquifer and the D/E aquitard to the crystalline basement rock corresponds to the Cretaceous Potomac Raritan Magothy (PRM, undifferentiated) Group. The D/E aquitard is a relatively, thick, hard clay between the D aquifer and the regional PRM aquifer system (DERS, 1993).

The water bearing zones of the PRM aquifer system have been designated as the E and F aquifers beneath the site. However, there are limited data at this depth beneath the site, and two distinct hydrologic zones have not been confirmed. Bedrock of the Wilmington Complex/Wissahickon Formation was encountered beneath the E and F aquifer interval at an elevation between -415 feet and -505 feet North American Vertical Datum of 1988 (NAVD88).

2.2 Engineering Control of Groundwater

There are four separate systems for hydraulic control of groundwater at the site:

- An interceptor well system (IWS) that controls groundwater in the B, C, and D aquifers
- Corrective action interceptor well program for Area 1 of the Secure C Landfill
- E aquifer control well J05-W01E
- A SPB along portions of the Salem Canal and Delaware River

Figure 2 shows the locations of the pumping wells as well as the existing SPB. Each pumping well is inspected daily, and groundwater flow volumes at each well are recorded. A summary of instantaneous and monthly averaged groundwater recovery rates for each well and the total gallons for each system are provided in Table 1. The following sections describe these systems in detail and provide operational status for the current reporting period.

2.2.1 Interceptor Well System (IWS)

The IWS is the primary system for site-wide groundwater control. The IWS has been in operation since 1970 and is currently pumping and treating groundwater at a monthly average rate of at least 1.0 million gallons per day (MGD).

The IWS is used to control groundwater in the B, C, and D aquifers from migrating off-site. The IWS uses four pumping wells, designated as G08-R01C, G08-R01D, K06-R02CD, M14-R02CD, and three backup wells, Q13-R01C, Q13-R01D, and R09-R02C (see Figure 2). The total pumping rate of the IWS was evaluated in 2009 and results indicated that groundwater in the C, D, and most of the B aquifers could be controlled on-site with a decrease in the total pumping rate from 1.5 to 1.0 MGD (URS, 2010). The NJPDES-DGW Permit Number NJ0083429 that became effective on May 1, 2010 reduced the IWS pumping rate to 1.0 MGD. The remainder of the B aquifer that is not controlled by the IWS has been addressed under the engineering control of groundwater initiatives, which includes the construction of the SPB to eliminate groundwater discharge to adjoining surface water.

The IWS pumping requirements were met each month during the current reporting period from January 1 to June 30, 2022. In general, the IWS wells operated continuously except for minor shutdowns for repairs and maintenance throughout the reporting period. More significant shutdowns for this reporting period included the following:

- G08-R01C was shut down on the following days: May 16-21.
- M14-R02CD was shut down on the following days: May 9-14.

IWS wells G08-R01D and K06-R02CD were operational for the entire reporting period. Backup wells Q13-R01C and Q13-R01D were not operational during the current reporting period. Backup well R09-R02C was only operational on May 18-23.

2.2.2 Corrective Action for Area 1 of the Secure C Landfill

The groundwater recovery system for the Secure C Landfill was designed and implemented to control groundwater flow from Area 1 of the Secure C Landfill. Corrective Action wells P21-R01B and Q20-R01B are used as recovery wells. P21-R01B and Q20-R01B were operational throughout the current reporting period with shutdowns for maintenance and repairs. More significant shutdowns for this reporting period included the following:

- P21-R01B was shut down on the following days: March 3-7, April 21-16, May 1-31, June 1-30.
- Q20-R01B was shut down on the following days: February 5-28, March 1-31, April 1-30, May 1-31, June 1-30.

Corrective action wells P21-R01B and Q20-R01B recovered groundwater at an average rate of 7.8 gallons per minute (gpm) and 4.2 gpm, respectively, when in operation during the current reporting period. Hydraulic containment of Area 1 is evaluated in further detail in Section 3.1.2 of this report.

2.2.3 E Aquifer Control Well J05-W01E

Early investigations indicated that organic constituents had migrated downward and impacted groundwater within the E aquifer. Investigations of these detections within the E aquifer were documented in the *Phase IV RCRA Facility Investigation* (RFI) [DuPont Corporate Remediation Group (CRG), 2005] and the *Phase IV Supplemental Report* (DuPont CRG, 2005). Based on these investigations, it was concluded that the E aquifer is impacted only where leaky well casings allowed downward migration of constituents from the overlying aquifers. To address this issue, several suspect or known leaky wells were abandoned. Pumping from well J05-W01E began in August 1995 to control E aquifer groundwater along the southern boundary of the site. The J05-W01E control well was designed to pump 200 gpm based on groundwater modeling that defined the required capture zone as reported in the *E Aquifer Technical Memorandum* (DERS, 1996).

To address the efficacy of groundwater capture in the E aquifer that was raised in NJDEP comment letters dated April 6, 2016, March 13, 2017, and April 25, 2017, the *2020 E Aquifer Capture Investigation Summary Report* was submitted as Appendix G in the 2H19 DGW Report (AECOM, April 2020). As part of this work, Chemours constructed two additional E aquifer monitoring wells (M03-M01E and R04-M01E) near the southeastern corner of the site, collected and evaluated groundwater elevation data, and constructed groundwater elevation maps to evaluate groundwater control by pumping at J05-W01E. The results of this investigation show that pumping J05-W01E at the previously determined recommended pumping rate of 200 gpm controls groundwater at the southeastern corner of the site. Groundwater samples collected from the new E aquifer wells were non-detect for per- and polyfluorinated alkyl substances (PFAS), which is an additional line of evidence that impacted groundwater from the site is not migrating to the southeast.

The first half 2022 E aquifer contour map includes the newly installed wells M03-M01E and R04-M01E as part of the E aquifer groundwater elevation measurements. In addition, sampling at these wells will continue to confirm the previous non-detect results for PFAS compounds. Groundwater sampling was performed in August 2021, results of which are presented in the *Off-Site Monitoring Wells 2021 PFAS Sampling Letter (October 2021).*

J05-W01E was operational during the entire current reporting period, except for a few minor shutdowns for repairs, and pumped at an approximate rate of 184 gpm during this period.

2.2.4 Sheet-Pile Barriers (SPBs)

SPBs have been installed in areas along the Salem Canal and the Delaware River as an engineering control to prevent site groundwater from discharging off-site. Figure 2 shows the SPB sections as follows:

- Delaware River Solid Waste Management Unit (SWMU) 5A/5B: The remedial action, including the installation of a SPB, was completed in 2002.
- SWMU 40: In the 1970s, a new seawall consisting of sheet-pile bulkheads was constructed to an elevation of approximately -33 feet NAVD88, approximately 40 feet below ground surface, as part of construction for a new tank along the Delaware River.
- Salem Canal: In 2008, a 900-foot-long section of SPB was installed along the northern bank of the canal to prevent groundwater discharge (along the AOC 6 boundary) from the B aquifer to the Salem Canal sediment and surface water. An approximate 300-foot extension for groundwater control, bank stabilization, and erosion control was installed to the Munson Dam in 2012. At the request of the U.S. Environmental Protection Agency (EPA) and NJDEP, the effectiveness of this SPB was further verified as part of the Salem Canal Supplemental Groundwater Investigation activities initiated in 2015. These investigations included synoptic groundwater elevation measurements, time-series groundwater elevation measurements using datalogging pressure transducers, and eight rounds of semi-annual groundwater quality sampling at selected wells (see Section 3.1.1).
- Salem Canal to Delaware River SPB extension: The first phase of the extension of the Salem Canal SPB westward to and then northward along the Delaware River in AOCs 2 and 3 to SWMU 40 was completed in 2015. Construction of the AOC 1 portion of the SPB was initiated in September 2017 and was completed in December 2017. The remedial action prevents the migration of groundwater from the B aquifer to the Salem Canal and Delaware River as described in the *Perimeter Area (AOCs 1, 2, & 3) Remedial Action Selection Report* (Geosyntec, 2012). In addition, in AOC 1, the SPB penetrates the C and D aquifers as well, which limits the onshore flow of river water beneath of AOC 1 that occurs due to pumping of the site IWS.

2.3 Secure C Landfill Leachate Collection and Leak Detection Systems

Areas 2, 3, 4, 5A, 5B, and 7 (see Figure 3A) of the Secure C Landfill are designed to prevent leachate from entering the environment and are monitored in accordance with the GWPP of NJPDES-DGW Permit No. NJ0105872. These six areas of the Secure C Landfill are covered under the GWPP and were constructed using double liners. Each liner is constructed with an overlying gravity-fed collection system. This type of construction results in an upper collection/liner system [called the leachate collection system (LCS)] and a lower collection/liner system [called the leak detection system (LDS)]. The LCS removes leachate collected over the primary liner and acts as the primary conveyance for leachate generated in the landfill. The LDS is designed to remove leachate if it collects between the primary and secondary liners. This double-lined system helps to evaluate the primary liner's integrity. The LDS and LCS in each area are gravity-fed to sumps. The LCS sumps and the LDS sump for Area 5A are equipped with totalizers to measure volumetric flow rates. The LDS sumps, except for Area 5A, use counters to calculate flow rates. Figure 3A shows the locations of sumps and sample points for these systems. Volumetric flow data are summarized in Table 2A.

2.3.1 Leachate Collection System (LCS) Flow Rates

The LCS daily flow is recorded in Sump 2, Sump 3, Sump 5A, Sump 5B, and Sump 7 (see Figure 3A):

- Sump 2 measures the combined leachate collection flow from Areas 2 and 3 and includes the independently measured flow from LDS 2-1, 2-2, 3-1, and 3-2.
- Sump 3 measures the leachate collection flow from Area 4 and includes the independently measured flow from LDS 4-1, 4-2, 4-3, and 4-4.
- Sump 5A measures the leachate collection flow from Area 5A, but the flow from the leak detection system at Area 5A is measured separately.
- Sump 5B measures the leachate collection flow from Area 5B and includes flow from the leak detection system.
- Sump 7 measures the leachate collection flow from Area 7 and includes the independently measured flow from LDS 7. LCS flow data from Areas 2, 3, 4, 5A, 5B, and 7 are presented in Table 2B.

2.3.2 Leak Detection System (LDS) Flow Rates

The LDS is designed to remove leachate if it collects between the primary and secondary liners. This system helps to evaluate the primary liner's integrity (see Figure 3A for LDS locations). In accordance with the Secure C Landfill operational permit, daily volumetric flow data from the leak detection sumps are reviewed for action leak rate (ALR) exceedances. The ALR is used as a metric to evaluate whether the landfill is operating as designed and is equal to 50 gallons per acre per day (gpad) for Areas 2, 3, and 4 of the Secure C Landfill. The ALR for Areas 5A, 5B, and 7 started at 150 gpad and decreased by 10 gpad each year for the first five years of operation until the ALR reached 100 gpad. An exceedance of the ALR does not necessarily indicate a leaking liner but does indicate that the system is not operating as designed. If the ALR is exceeded, it will be necessary to inspect and evaluate the system function in accordance with the operational permit for the landfill.

The leak detection system daily flow is recorded in the following collection sumps:

- Sump 2-1 measures flow from the western half of Area 2.
- Sump 2-2 measures flow from the eastern half of Area 2.
- Sump 3-1 measures flow from the western half of Area 3.
- Sump 3-2 measures flow from the eastern half of Area 3.
- Sump 4-1 measures flow from the southwestern quadrant of Area 4.
- Sump 4-2 measures flow from the southeastern quadrant of Area 4.
- Sump 4-3 measures flow from the northeastern quadrant of Area 4.
- Sump 4-4 measures flow from the northwestern quadrant of Area 4.
- Sump 5A measures flow from Area 5A.
- Sump 5B measures flow from Area 5B.
- Sump 7 measures flow from Area 7.

Leak detection system flow data are presented in Table 2A, and Action Leak Rate data are presented in Table 2B. Evaluation of the data during the current reporting period indicated there were no ALR exceedances during the current reporting period (see Table 2B).

2.4 Groundwater Protection Plan (GWPP) Summary

The GWPP is designed to protect groundwater beyond the boundaries of the Chambers Works Complex with respect to the operational units (Sanitary A and B Landfills and Areas 2, 3, 4, 5A, 5B, and 7 of the Secure C Landfill) in accordance with NJPDES-DGW Permit No. NJ0105872. The GWPP is evaluated continually to ensure the protection of human health and the environment. The GWPP was revised and submitted on November 5, 2014. The *Classification Exception Area (CEA) Biennial Certification Report* was submitted on November 25, 2020.

2.4.1 Sanitary A and B Landfills

The permit domain for the Sanitary A and B Landfills is defined as the uppermost aquifer (B aquifer) in the site area south of Henby Creek. Groundwater potentially impacted by the Sanitary A or B Landfills within the permit domain is controlled on-site by the IWS. In addition, a CEA covers the Chambers Works Complex, which includes the Sanitary A and B Landfills (see Figure 2). This CEA identifies constituents that exceed the New Jersey Class IIA groundwater standards (NJGWIIA) for the underlying aquifers. During the current reporting period, the IWS was effective at controlling groundwater within the permit domain (see Section 3.0).

2.4.2 Areas 2, 3, 4, 5A, 5B, and 7 of the Secure C Landfill

The permit domain for the Secure C Landfill is defined as the uppermost aquifer (B aquifer) in the area within 500 feet of the landfill. Groundwater potentially impacted by the Secure C Landfill within the permit domain is captured by the Corrective Action recovery wells so that groundwater quality outside the permit domain is protected. In addition, the Secure C Landfill is within the boundary of the site CEA. This CEA identifies constituents that exceed the NJGWIIA for the underlying aquifers. Groundwater control is achieved at the Secure C Landfill while the groundwater recovery wells are operating. At the request of NJDEP in letters dated March 13 and April 25, 2017, two shallow (B aquifer) wells (O21-M01B and P22-M01B; see Figure 2) were constructed in September 2017, west of the C Landfill between the landfill and the Delaware River. The purpose of these wells was to collect the data necessary to evaluate groundwater flow and water quality characteristics in this area to confirm groundwater control west of Secure C Landfill. Water levels and the sampling at these were included in first semester DGW activities and are reported in the appropriate sections below.

A capture zone continues to be demonstrated during the current water-level measurement event. Evaluation of the Detection Monitoring Program and the Leachate Collection Monitoring Program was conducted in accordance with the GWPP.

2.5 Non-Aqueous Phase Liquid (NAPL) Survey and DNAPL Recovery Program

In September 1999, a site-wide non-aqueous phase liquid (NAPL) survey program was initiated in support of the overall RCRA Corrective Action Program to 1) identify specific well locations where either light non-aqueous phase liquid (LNAPL) or DNAPL was present and 2) determine the feasibility of recovering DNAPL from specific wells.

During the initial survey, NAPL was detected in 14 out of the approximately 350 on-site wells. Of these 14 wells, three were found to contain recoverable quantities of DNAPL: two on-site monitoring wells (L13-M01B and I12-M01B) and one interceptor well (H11-R01CD) (see Figure 2). In 2001, a monthly NAPL survey and recovery program was initiated to monitor the 14 original wells for the presence of NAPL, and accumulated DNAPL was removed, if present. Since then, all newly installed monitoring wells are screened for NAPL and added to the program as appropriate. In March 2021, six newly installed wells (D14-M01A, E13-M01B, F13-M01B, F16-M04B, G15-M03B, and G16-M05B) in AOC 1 were discovered to have the presence of NAPL. These wells were added to the NAPL survey program starting in the first semester of 2022. There are currently 29 wells in the NAPL survey program. Field results for the current reporting period are summarized in Table 3.

Accumulated DNAPL is typically removed with a bailer unless the well is able to yield a sufficient volume to warrant the installation of a fixed recovery system. Fixed recovery systems are currently in use at two wells: F09-M03B and F10-P01B, which were found to be productive NAPL wells and were placed on fixed recovery systems in the fall of 2017.

3.0 Evaluation of Hydraulic Control

The depth to groundwater was measured in site wells on May 5, 2022 (see Appendix B).

A data logger located on the southern portion of the site at benchmark C13-BM01 (see Section 3.1) recorded surface-water elevations in the Delaware River for one week prior to and one week after the May 5th water-level event. The average water level for the Delaware River is estimated with a moving mean average surface-water elevation, which is calculated using the formula by Serfes (1991). The moving mean average calculated for the Delaware River for the current reporting period was 0.95 feet NAVD88.

Measured surface-water elevations in the B Basin (H16-BM02) and the Salem Canal (E05-BM01) were also used as boundary conditions for contouring the B aquifer. Additional surface-water level data used in the contouring are identified as benchmarks on the maps for reference, i.e., E05-BM02, H16-BM02, L19-BM02, T16-BM01, U20-BM01, U30-BM01, and X24-BM01.

Groundwater elevation data were examined to identify points that are not representative of the prevailing groundwater surface elevation in the aquifer. Observed inconsistencies could be due to measurement error or some other interference, such as non-steady groundwater levels following the removal of the well cap or recent changes to pumping rates. Once identified, anomalous data points are removed and are not used in contouring the groundwater elevation data.

Groundwater elevation contour maps were produced site-wide for the B through E aquifers to determine if control of site groundwater was maintained by the site IWS and other passive controls (see Figures 4 through 7). A Contour Map Reporting Form for each contour map is located in Appendix C.

While the groundwater elevation contour maps indicate the general directions of horizontal groundwater flow, there are hydraulic head differences between the aquifers (from pumping) that indicate a downward leakage through the aquitards or a direct groundwater flow connection between the aquifers where the aquitards are not present. Downward vertical hydraulic gradients are prevalent across the site, especially in the proximity of the pumping wells. However, in areas with a relatively thick section of aquitard between two aquifers, the vertical leakage or flow component may be limited. For example, in the central portion of the manufacturing area for the B and C aquifers, there are relatively large differences in hydraulic head near the pumping wells in the C and D aquifers; however, with a relatively thick B/C aquitard in this area, the vertical flow component may not be significant.

3.1 B Aquifer

3.1.1 General Recharge and Discharge Characteristics

For the Carneys Point area, groundwater entering the B aquifer is primarily from infiltration of precipitation and secondarily from surface-water sources and aquifer areas off-site to the north and east. Groundwater leaving the B aquifer includes discharge to surface water, flow into the manufacturing area, and downward flow into the C aquifer.

For the manufacturing area, groundwater entering the B aquifer is primarily from infiltration of precipitation and secondarily from non-contact cooling water discharge into ditches, surface-water sources, and from aquifer areas off-site to the east. Groundwater leaving the B aquifer includes discharge to creeks and basins, downward flow into the C aquifer.

Starting in 2008, discharge to surface-water bodies has been controlled by the installed SPB extending from the Salem Canal to the Fuel Tanks north of AOC 2. Installation of the SPB along the Delaware River through AOC 1 was completed in December 2017. Unlike the previous sections of the SPB, the SPB in AOC 1 penetrates the B, C, and D aquifers, effectively controlling groundwater in all three aquifers in AOC 1.

At the request of the EPA and NJDEP, the effectiveness of the SPB has been verified as part of the Salem Canal Supplemental Groundwater Investigation activities initiated in 2015 (AECOM, October 2019). Those investigations included synoptic groundwater elevation measurements, time-series groundwater elevation measurements using data logging pressure transducers, and eight rounds of semi-annual groundwater quality sampling at selected wells. The effectiveness of the SPB in AOCs 1, 2, and 3 has been evaluated through a tidal study that evaluated the tidal signals in the on-site aquifers before and after the completion of the SPB. The results of these investigations were reported in the AOCs 1, 2, and 3 SPB remedial action report, which was submitted in February 2019 (AECOM, February 2019).

3.1.2 B Aquifer Head Distribution Analysis

The groundwater elevation contour map for the B aquifer is presented in Figure 4. Water level data at wells H05-M04B, K08-M01B, M10-M02B, and S23-P02B were identified as anomalous during the current semester and were not used in contouring the groundwater elevation.

Based on the May groundwater measurements (see Figure 4), groundwater elevations decrease from their highest points in the southwest along the Salem Canal and the Delaware River SPB to the north and east. Further, there is a rapid drop in groundwater elevation across the SPB where it separates groundwater in the B aquifer from the influence of adjoining surface water. These conditions reflect the influence of the SPB to control groundwater by directing groundwater movement away from the canal and river and towards thinning areas of the B/C aquitard, which allows the groundwater to seep into underlying aquifers where is it captured by the site IWS. Groundwater elevation data collected at the eastern end of SPB along the Salem Canal suggest that under certain conditions, groundwater may seep around the end of the SPB and enter the Salem Canal (AECOM, February 2019).

There is an inward groundwater gradient along the western perimeter of the Carneys Point portion of Chambers Works. Moving southward, the inward gradient continues to the SWMU 5 SPB near AOC 1. This is due to the pumping of corrective action wells at the Secure C Landfill and IWS recovery well M14-R02CD near AOC 1. Water levels at the recently constructed wells that were requested by the NJDEP, O21-M01B and P22-M01B, support the determination of an inward gradient and groundwater control at the Secure C Landfill. Conclusions presented in the *Secure C Landfill Hydraulic Evaluation Report* support these findings (AECOM, October 2020).

Inward hydraulic gradients are also present along the northeastern perimeter due to natural groundwater flow onto the site as groundwater in the B aquifer migrates towards and typically discharges to the wetland areas of Henby and Bouttown creeks. At the request of NJDEP in letters dated March 13 and April 25, 2017, two shallow (B aquifer) wells, AA25-M02B and Z28-M02B were constructed to monitor groundwater along the northeastern property boundary. Groundwater elevations from these wells support the determination of groundwater flow onto the Chambers Works site in these areas.

Inward (surface water moving to groundwater) gradients are observed along the eastern reach of Salem Canal where there is no SPB as is the case during this reporting period. Towards the north at J05-M02B and L04-M01B, groundwater flows southward towards the Salem Canal whereas further to the north, groundwater flows to the north due to the influence of the site IWS system. Although site constituents have been detected above NJGWIIA at well I05-M01B, there are no exceedances at the other wells along the eastern reach of Salem Canal where the SPB is not present. Lower groundwater elevations are regularly observed in the western area of the former basins (near wells H15-M01B and H13-M01A). These groundwater elevations are generally consistent with the surface-water elevation measured at H16-BM02 and suggest that the controlled water level of the storm water basin locally influences groundwater elevations in this area. Groundwater elevations are also typically low near the former A Basin at wells L15-M01B, M15-M01B, and M15-M02B. The depressed water levels in these areas are due to the influence of the IWS pumping in the C and D aquifers and a thin or missing B/C aquitard. Groundwater elevations are usually lower within the pumping zone of the P21-R01B and Q20-R01B pumping wells for the Secure C Landfill area.

Based on historical groundwater elevation contours around the Secure C Landfill, which includes water levels measured at O21-M01B and P22-M01B that were requested by NJDEP, groundwater is effectively controlled by pumping at P21-R01B and Q20-R01B. Pumping wells P21-R01B and Q20-R01B, were pumping during the May 2022 groundwater measurement activity, capture groundwater from Area 1, Area 2, and portions of Areas 3, 4, 5A, 5B, and 7.

3.2 C Aquifer

3.2.1 General Recharge and Discharge Characteristics

Groundwater entering the C aquifer includes recharge from the B aquifer and aquifer areas off-site to the west, north, east, and south. Groundwater leaving the C aquifer includes groundwater extraction from pumping wells and the potential for downward flow into the D aquifer.

3.2.2 C Aquifer Head Distribution Analysis

The groundwater elevation contour map for the C aquifer is presented in Figure 5. IWS wells G08-R01C, M14-R02CD, and K06-R02CD were pumping during the May 2022 groundwater measurement activity. Wells H11-R01CD and K02-W01CD each penetrate multiple aquifers. Therefore, their groundwater elevations were not used to create the C aquifer groundwater elevation map.

Cones of influence are visible for each operating IWS well. Due to additional drawdown attributed to turbulent flow through a well screen, and other well losses, water levels measured at an active pumping well are not representative of the potentiometric surface in the surrounding aquifer. The water levels at G08-R01C, K06-M01C, and M14-M01C were used in conjunction with other nearby monitoring well data to estimate a representative potentiometric surface elevation at the corresponding pumping well by means of a semi-logarithmic projection of water levels to the pumping well. These estimated values at the pumping wells were then used in the contouring. Groundwater remains controlled with inward gradients (flow onto the site from off-site) along the entire manufacturing area perimeter (area of required groundwater capture) while the IWS is active. Therefore, the IWS effectively controls groundwater in the C aquifer.

3.3 D Aquifer

3.3.1 General Recharge and Discharge Characteristics

Groundwater entering the D aquifer includes recharge from the C aquifer and aquifer areas off-site to the west, north, east, and south. Groundwater leaving the D aquifer includes groundwater extraction from pumping wells and potential downward flow into the E aquifer; however, the underlying D/E aquitard effectively eliminates hydraulic connection between the D and E aquifers.

3.3.2 D Aquifer Head Distribution Analysis

The groundwater elevation contour map for the D aquifer is presented in Figure 6. IWS wells G08-R01D, K06-R02CD, and M14-R02CD were actively pumping during the May 2022 groundwater measurement event. Based on a review of the data, the water level at well H07-M01D was considered to be anomalous and was not used in the creating the groundwater map.

Cones of influence are visible for each operating IWS well. As described above for the C aquifer, representative groundwater elevations were estimated at the pumping wells G08-R01D, K06-R02CD, and M14-R02CD. These values were then used in the contouring of the potentiometric surface for the D aquifer. Groundwater remains controlled with inward gradients (flow onto the site from off-site) along the entire manufacturing area perimeter (area of required groundwater capture) while the IWS is active. Therefore, the IWS effectively controls groundwater in the D aquifer.

3.4 E Aquifer

The groundwater elevation contour map for the E aquifer is presented in Figure 7. Well J05-W01E was pumping during the May 2022 groundwater measurement event. The groundwater elevation contour map shows that groundwater generally flows toward the southern property boundary. When the J05-W01E pump is on, groundwater in the E aquifer beneath the manufacturing area is controlled by this pumping well.

An updated E aquifer investigation was undertaken in the first half of 2020. The *2020 E Aquifer Capture Investigation Summary Report* was submitted as Appendix G in the 2H19 DGW Report (AECOM, April 2020). The purpose of the E Aquifer Capture Investigation was to provide the data necessary to address the efficacy of groundwater capture in the E aquifer that was originally raised in NJDEP comment letters dated April 6, 2016, March 13, 2017, and April 25, 2017. As part of this work, Chemours constructed two additional E aquifer monitoring wells near the southeast corner of the site, collected and evaluated groundwater elevation data, and constructed groundwater elevation maps to evaluate groundwater control by pumping J05-W01E at the southeastern corner of the site. The results of this investigation show that pumping J05-W01E at the previously determined recommended pumping rate of 200 gpm controls groundwater at the southeastern corner of the site. Therefore, the groundwater in the E aquifer is effectively controlled.

4.0 Analytical Quality Assurance Program

The NJPDES-DGW Permit Nos. NJ0083429 and NJ0105872 require that all groundwater samples be collected in accordance with the *Chambers Works Quality Assurance Plan with Sampling and Analysis Plan for Groundwater and Leachate Monitoring* (QAPP; URS, 2010). In compliance with this requirement, AECOM is providing the Data Review Narrative Reports as Appendix D.

These reports indicate that all samples were collected in compliance with the groundwater monitoring programs, as defined in Permit Nos. NJ0083429 and NJ0105872. There were no holding time violations. This performance level meets the data quality objectives. One audit of field operations, conducted on January 10, 2022, confirmed compliance with the permit sampling protocol requirements. The laboratory system performance audit of Eurofins Lancaster Laboratories, Inc. was conducted in November 2021. The audit results indicated that the laboratory procedures consistently provide usable, high-quality results needed to demonstrate compliance. Any program-specific metrics that may be identified in the Data Review Narrative Reports are discussed further in the subsections of each program in Section 5.0.

4.1 Field Parameters and Analytical Results

The groundwater monitoring schedule is summarized in Table 4, and the analytical results for the current reporting period are presented in Tables 5 through 13.

In accordance with EPA guidance documents (EPA, 1989 and 1992), Chemours developed a process for correlating the sum total concentration of individual organic constituents (VOCs and SVOCs) in a groundwater sample to measurements of TOC and TOX from that same sample. The relationship of summed organic constituent concentrations to the sum of TOC and TOX measurements from that same well is variable and well dependent. To address this condition, a well-specific correction factor has been developed for each well in the Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins. Therefore, using the sum of the TOC and TOX measurements multiplied by the well correction factor can provide a nominal prediction of summed total organic constituent concentrations (predicted concentrations). These predicted concentrations are then graphically evaluated for increasing or decreasing trends in site constituents in groundwater samples.

Organic analyses were required for the seven wells of the Closure and Post-Closure Groundwater Monitoring Program (CPC) for the A, B, and C Basins during the reporting period. The values for total predicted organic constituent concentrations are plotted on a concentration scaled symbol map (see Figure 8). Plots of TOC, TOX, and total predicted organic constituents versus time for these wells are found in Figure 9, and the values are shown in Table 5. Results for the equipment blanks and trip blanks are shown in Table 11.

Of the seven wells in the CPC, four wells exhibit no increasing or decreasing trend, two wells show a decreasing trend, and one shows an increasing trend. Rising predicted organic concentrations at J16-M01B could possibly be due to the influence of nearby pumping well M14-R02CD as well as the cessation of pumping from H11-R01CD in 2009. These charts show site conditions are generally unchanging.

4.2 Summary of Statistical Report

A statistical analysis as required under Permit Nos. NJ0083429 and NJ0105872 (see Appendix E, *First Half 2022 Semi-Annual Statistical Review of Groundwater Monitoring Results,* AECOM, November 2022) was conducted. The purpose of this evaluation is to determine, based on a review of the new and existing data, if there is a continuing change to site conditions that would compromise the efficacy of remedial programs or indicate that additional investigations into changing site conditions are needed.

These statistical analyses were conducted to interpret the analytical data and identify significant trends in groundwater quality parameter concentrations. A total of 580 data sets were evaluated during this reporting period. These data sets are merged with historical results and are used in the statistical analyses, as described in Appendix E.

The statistical review for the monitoring program for the current reporting period indicated that site conditions are generally unchanged. As previously reported, departures from historical baseline conditions have been observed at some wells for some parameters. Also, as previously observed, constituents exhibiting statistically significant, though subtle, upward and downward trends are seen at a few wells. However, these changes do not suggest a change of site conditions or imply that groundwater is not under control at the site perimeter. The statistical monitoring program will continue to be reviewed each semester to determine if there is a change to site conditions that may need to be evaluated further.

5.0 Evaluation of Groundwater Quality

In compliance with the NJPDES-DGW Permit Nos. NJ0083429 and NJ0105872, 61 wells were sampled for the four groundwater monitoring programs below (see Figure 3). Table 4 summarizes the groundwater sampling schedule. The table denotes the required sampling locations, analytes, frequency, and the scheduled sampling event. Each monitoring program is listed separately. Parts 1 through 5 of Table 4 refer to the Corrective Action groundwater monitoring programs (No. NJ0083429). Part 6 refers to Post-Closure Monitoring for the RCRA Units, while Parts 7 and 8 refer to the detection monitoring and leachate characterization for Areas 2, 3, 4, 5A, 5B, and 7 of the Secure C Landfill (No. NJ0105872). Parts 9 and 10 refer to the PFAS Monitoring Program.

Some of the wells are sampled under multiple monitoring programs. The programs for the current reporting period include the following:

- Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins (seven wells) (Permit No. NJ0083429) (see Section 5.1)
- PFAS Monitoring Program (45 wells) (Permit No. NJ0083429) (see Section 5.4)
- Secure C Landfill Corrective Action Monitoring Program (five wells) (Permit No. NJ0105872) (see Section 5.5)
- Secure C Landfill Detection Monitoring Program (four wells) (Permit No. NJ0105872) (see Section 5.6)

Groundwater quality is monitored in two wells (S24-M01B and T22-M01B) to characterize background for both corrective action and detection monitoring programs at the Secure C Landfill.

The following programs did not require sampling during this reporting period as outlined in Table 4:

- PMP (38 wells) (Permit No. NJ0083429) (see Section 5.2)
- Post Closure Monitoring for RCRA Units (four wells) (Permit No. NJ0083429) (see Section 5.3)
- Leachate Collection System Monitoring Program (Permit No. NJ0105872) (see Section 5.7)

There were no modifications made to the monitoring programs during the current reporting period. Appendix A presents the complete chronology of previous modifications to monitoring programs and includes historical information and modifications to the Secure C Landfill monitoring programs.

5.1 Closure and Post-Closure Groundwater Monitoring for the A, B, and C Basins

The closure and post-closure monitoring program for the A, B, and C Basins monitors groundwater quality in the following seven wells around the perimeter of the basins:

- G16-M02B
- H13-M02B
- H14-M01B
- H16-P01B

- K13-M02B
- J16-M01B
- L14-M01B

The purpose of this sampling is to monitor groundwater quality to ensure that the closure is protective of human health and the environment and that conditions have not changed that may warrant further evaluation. Parts 1 and 2 of Table 4 summarize the frequency and analytical parameters for the closure and post-closure monitoring of the A, B, and C Basins. All seven of these wells were monitored for the Basin Closure Monitoring Program Analyte List (see Table 4, Part 2).

5.1.1 Quality Assurance

The electronic data submitted for this program were reviewed via the Environmental Information Management (EIM) Data Verification Module (DVM). Analytical results for the current reporting period are provided in Table 5. Results for the equipment blank and trip blanks can be found in Table 11. Evaluation of laboratory control samples show one analytical result has been qualified in the database. A more detailed review of the program-specific DVM results can be found in the Data Review Narrative Reports (see Appendix D).

5.1.2 Analyses and Discussion

Statistical analyses conducted on the groundwater parameters and wells in the basin closure and post-closure program are presented in Appendix E. Forty-nine groundwater parameter and monitoring well combinations were evaluated during this period. The data sets collected in this monitoring period were merged with historical data, and the statistical analyses were completed as described in Appendix E.

Statistically significant results were reported for 10 well-parameter data sets across five wells. Two well-parameter data sets had statistically significant downward trends, and two exhibited upward trends. Six data sets across three wells were observed to be outside of trend controls including both indicators (TOC and TOX) and two field parameters (pH, and specific conductance). The values for total predicted organics for each well were plotted on a concentration scaled symbol map (see Figure 8). Plots of TOC, TOX, and total organics versus time for these wells are shown in Figure 9.

Of the seven wells sampled for TOC and TOX as part of this program, four wells exhibit no increasing or decreasing trend, two wells show a decreasing trend, and one shows an increasing trend. Therefore, site conditions are generally unchanging. Rising predicted organic concentrations at J16-M01B could possibly be due to the influence of nearby pumping well M14-R02CD as well as the cessation of pumping from H11-R01CD in 2009.

5.1.3 Conclusions and Findings

In summary, the analyses indicate that most of the statistical trends are either stable or decreasing. Further, the wells with increasing statistical trends are within the hydraulic containment of the IWS and will continue to be monitored during future sampling events. Therefore, additional evaluation or sampling is not necessary, and the existing program is adequate to monitor conditions in groundwater at the A, B, and C Basins.

5.2 Chambers Works Perimeter Monitoring Program (PMP)

The Chambers Works PMP monitors groundwater quality around the perimeter of the site by sampling wells located along the Delaware River, Salem Canal, and the eastern boundary. The purpose of this monitoring is to demonstrate control of site groundwater and the on-site containment of site constituents in groundwater.

In accordance with the PMP schedule, none of the 38 PMP wells were sampled during the current reporting period. The PMP wells will be sampled in the second semester of 2022 for the analytes listed in Table 4, Parts 4 and 5.

5.3 Post-Closure Monitoring for RCRA Units

Four wells are sampled annually for the Post-Closure Monitoring of the RCRA Units Program (as part of the RCRA SWMU post-closure plan for SWMUs 21, 25, 26, and 28). The purpose of this sampling is to ensure that the closure of the RCRA units is protective of human health and the environment and to demonstrate that conditions have not changed that may warrant further evaluation. None of these wells were sampled during the current reporting period. These wells will be sampled during the second semester of 2022 for the analytes listed in Table 4, Part 6.

5.4 PFAS Monitoring Program

The PFAS Monitoring Program monitors 45 wells semi-annually for EPA Method 537 Modified list plus two extra analytes (Table 4, Part 10), in compliance with NJPDES-DGW Permit No. NJ0083429. The purpose of the monitoring program is to gather the data necessary to document the nature and extent of PFAS in groundwater on-site. Results of the sampling events are submitted to NJDEP within 90 days of sampling and are also presented in the corresponding semi-annual NJPDES-DGW report.

In accordance with the PFAS Monitoring Program, all 45 wells were sampled for PFAS as listed in Table 4, Part 9 during the current reporting period.

5.4.1 Quality Assurance

The electronic data submitted for this program were reviewed via the EIM DVM. Analytical results for the current reporting period are provided in Table 6 and shown in Figure 10. Results for the equipment blank and trip blanks can be found in Table 11. Evaluation of laboratory control samples show some of the analytical results have been qualified in the database. A more detailed review of the program-specific DVM results can be found in the Data Review Narrative Reports (see Appendix D).

5.4.2 Analyses and Discussion

With the exception of G04-M01E and C11-M01E, PFAS were detected in all 45 wells of the PFAS monitoring program. The highest PFAS detected was perfluorohexanoic acid [(PFHxA) 1,400 micrograms per liter (µg/L)] at G09-M01A. In addition to PFHxA, G09-M01A also has the highest detections of other PFAS such as perfluorooctanoic acid (PFOA) at 500 µg/L, perfluoroheptanoic acid (PFHpA) at 400 µg/L, and perfluorodecanoic acid (PFDA) at 280 µg/L. In general, PFAS were detected at their highest concentrations in the shallow wells and concentrations decreased with increasing depth.

Statistical analyses conducted on 371 unique groundwater parameters and monitoring well data sets for the PFAS monitoring program are presented in Appendix E. The data sets collected in this monitoring period were merged with historical data to initiate the statistical analysis process as described in Appendix E. Based on those analyses, three PFAS had an increasing trend at four wells.

5.4.3 Conclusions and Findings

PFAS is detected in on-site groundwater. Perfluorononanoic acid (PFNA), PFOA, and Perfluorooctanesulfonic acid (PFOS) have been detected at concentrations exceeding NJGWIIA standards. In general, PFAS concentrations were highest near process buildings in which they were used and decrease with depth and distance. The presence and extent of these compounds are further discussed in the *Conceptual Site Model (CSM) for Poly- and Perfluoroalkyl Substances* (AECOM, July 2017).

5.5 Secure C Landfill Corrective Action Groundwater Monitoring Program

The corrective action monitoring program for Area 1 of the Secure C Landfill monitors groundwater quality in the following five wells in compliance with NJPDES-DGW Permit No. NJ0083429:

- P21-M01B
- P21-M04B
- Q20-R01B (recovery well)
- Q21-M01B
- P21-R01B (recovery well)
- S24-M01B*
- T22-M01B*

* Background wells

All five wells and the two background wells are monitored semi-annually for Secure C Landfill Corrective Action (CLF-CA) target analytes (see Table 4, Part 3). The purpose of this sampling is to monitor groundwater quality to ensure that the groundwater collection system in place is protective of human health and the environment and that conditions have not changed that may reduce the effectiveness of this remediation system. In addition, two shallow B aquifer wells (P22-M01B and O21-M01B) were installed and sampled to monitor groundwater quality and the effectiveness of the Corrective Action wells in the area between the Delaware River and the western side of the Secure C Landfill. Six metals that slightly exceeded NJGWIIA standards were detected. Based on high chloride and sodium detections, groundwater from these wells is believed to show the influence of high total dissolved solids surface water recharging the shallow aquifer. These wells will continue to be sampled, and the sampling results will be used as a basis for recommendations for additional monitoring, if needed. Results of the most recent round of sampling are presented in Table 12.

5.5.1 Quality Assurance

The electronic data submitted for this program were reviewed via the EIM DVM. Analytical results for the current reporting period are provided in Table 7; background wells S24-M01B and T22-M01B are shown in Table 9. Results for the equipment blank and trip blanks can be found in Table 11. Evaluation of laboratory control samples show some of the analytical results have been qualified in the database. A more detailed review of the program-specific DVM results can be found in the Data Review Narrative Reports (see Appendix D).

5.5.2 Statistical Analyses and Analyte Discussion

Statistical analyses were conducted on 101 groundwater parameter data sets analyzed in samples collected from each of the five monitoring wells in the CLF-CA program. Statistical analyses are not required in background wells, S24-M01B and T22-M01B. The results are presented in Appendix E.

To initiate the statistical analyses, data sets from the current monitoring period were merged with historical data. Of the 101 groundwater parameter data sets analyzed, statistically significant results were identified in 29 monitoring well data sets. Of the 29 significant results, 13 statistically increasing trends were identified, and six decreasing trends were identified, 10 analytes were identified as outside of trend controls. Analytical results for organics were summed for the five CLF-CA monitoring wells (see Table 7) and the two background wells (see Table 9). Total organic concentrations for each CLF-CA well are plotted on a concentration scaled symbol map (see Figure 8).

In summary, the groundwater statistics showed that there are increasing and decreasing trends within the data sets. However, all the wells with increasing statistical trends are within the capture zone of the recovery wells.

5.5.3 Conclusions and Findings

The Corrective Action system for the Secure C Landfill, which is comprised of recovery wells P21-R01B and Q20-R01B, was designed to control groundwater flow from Area 1 of the Secure C Landfill. The current and previous groundwater investigations have continued to confirm the effectiveness of this system in achieving this remedial goal. When fully operational corrective action wells P21-R01B and Q20-R01B recovered groundwater at a rate of approximately 7.8 gpm and 4.2 gpm, respectively, during the reporting period. This system continues to effectively control groundwater at the Secure C Landfill, and all statistically significant increasing trends are within the extent of hydraulic containment.

5.6 Secure C Landfill Detection Monitoring Program

The detection monitoring program for the Secure C Landfill monitors the following four wells near Areas 2, 3, 4, 5A, 5B, and 7 of the Secure C Landfill and two background wells in compliance with NJPDES-DGW Permit No. NJ0105872:

- R19-M01B
- R19-M02B
- S19-M01B
- S19-M02B
- S24-M01B*
- T22-M01B*

* Background wells

The four wells and two background wells are monitored semi-annually for Secure C Landfill Detection Monitoring (CLF-DM) target analytes (see Table 4, Part 7). This list of target analytes is based on leachate characterization data from Areas 2, 3, 4, 5A, and 5B of the Secure C Landfill. The purpose of this detection monitoring program is to continue to demonstrate that the landfill leachate collection system is operating effectively.

5.6.1 Quality Assurance

The electronic data submitted for this program were reviewed via the EIM DVM. Data results for the current reporting period are provided in Table 8; background wells S24-M01B and T22-M01B are shown in Table 9. Results for the equipment blank and trip blanks can be found in Table 11. Evaluation of laboratory control samples confirmed proper laboratory system performance and that the matrix effects were relatively minor and did not adversely affect the usability of the results. A more detailed review of the program-specific DVM results can be found in the Data Review Narrative Reports (see Appendix D).

5.6.2 Statistical Analyses and Analyte Discussion

To perform the statistical analyses, the groundwater parameters analyzed in the four CLF-DM wells were merged with historical data as described in Appendix E. Statistical analyses are not required in background wells, S24-M01B and T22-M01B. Fifty-eight parameter data sets were statistically tested. Statistically significant results were identified in 18 data sets. Of these 18, four data sets exhibited statistically significant upward trends (ammonia, chloride, and sodium), and one exhibited a decreasing trend (dissolved oxygen). Thirteen data sets were observed to be outside of trend controls.

5.6.3 Conclusions and Findings

In summary, all the wells with increasing statistical trends are within the capture zone of the recovery wells. These findings, in conjunction with the groundwater elevation data presented in Figure 4, indicate that leachate detection system is effectively monitoring groundwater quality for the potential release of constituents from the landfill and those that are detected are within the hydraulic containment of the recovery wells.

5.7 Leachate Collection System Monitoring Program

The purpose of the LCS Monitoring Program is to characterize the landfill leachate to provide a list of primary constituents specific to the Secure C Landfill Areas 2, 3, 4, 5A, 5B, and 7. This list of primary constituents will be used to refine the CLF-DM target analyte list (see Section 5.6). The leachate generated by the landfill is sampled at the following ports in the LCS:

- Sample Port 274 (Areas 2 and 3)
- Sample Port 276 (Area 4)
- Sample Port 5A (Area 5A)
- Sample Port 5B (Area 5B)
- Sample Port 7 (Area 7)

Sample ports 274, 276, Sump 5A, Sump 5B, and Sump 7 are sampled biennially for indicator parameters, VOCs, SVOCs, and inorganics (see Table 4, Parts 7 and 8). Sampling the leachate confirms or updates the list of primary constituents (see Table 4, Part 8). Sampling was not conducted during this semester, and the next sampling event for Areas 2, 3, 4, 5A, 5B, and 7 will be in January 2023.

6.0 Ongoing Remedial Activities

The purpose of this section is to provide a status update of ongoing remedial action development activities.

6.1 Well Status Update

To enhance the spatial coverage of off-site PFAS monitoring wells, Chemours agreed to install four additional monitoring well clusters, to further delineate the horizontal and vertical distribution of PFAS in off-site groundwater. The following wells were installed in the first half of 2022:

- OSRA-M01S, OSRA-M01I, and OSRA-M01D
- OSKH-M01S, and OSKH-M01D
- OSSN-M01S, and OSSN-M01D

See Appendix F for well certification forms. The remaining well cluster will be installed in the second half of 2022.

6.2 Supplemental Monitoring Wells

At the request of NJDEP in letters dated March 13 and April 25, 2017, four shallow (B aquifer) wells, O21-M01B, P22-M01B, AA25-M02B, and Z28-M02B, were constructed in September 2017 (see Figure 2). O21-M01B and P22-M01B were constructed west of the Secure C Landfill between the landfill and the Delaware River. The purpose of these wells was to collect the data necessary to evaluate groundwater flow and water quality characteristics in this area to confirm groundwater control west of Secure C Landfill. AA25-M02B and Z28-M02B were constructed to monitor groundwater along the northeastern property boundary. Groundwater elevations from these wells support the determination of groundwater flow onto the Chambers Works site. Supplemental monitoring was also conducted at these locations; analytical results are presented in Table 12.

6.3 RCRA Corrective Action

The *Comprehensive RCRA Facility Investigation Report* (URS, October 2014) was submitted to EPA and NJDEP in October 2014. The report summarized the nature and extent of constituents released from regulated units, SWMUs, and other source areas at the facility, supported the development of a Corrective Measures Study (CMS), supported recommendations of No Further Action (NFA) or CMS for SWMUs and AOCs, and completed the requirements of the RFI phase for the site.

Chemours met with EPA and NJDEP in a routine quarterly status meeting on January 22, 2020. Based on this meeting, comments were prepared and submitted to EPA in a letter dated March 11, 2020. Chambers Works SWMUs and AOCs have been investigated, and the nature and extent of releases have been characterized in the 2014 Comprehensive RFI Report. In addition, this letter stated that based on the data collected and the remedial work that has been completed, corrective measures will be evaluated for the following two SWMUs during this phase under the RCRA program:

- SWMU 39-1: The proposed remedy of monitored natural attenuation (MNA) for groundwater was implemented according to the recommendations provided in the Garage Diesel Spill Groundwater Remedial Investigation and Remedial Action Selection Report submitted to the EPA and NJDEP on July 31, 2009. The groundwater investigation took place during the first half of 2020; and the results were summarized in the 1H20 DGW Report (AECOM, October 2020). It was recommended that the source area well N07-M01A and the downgradient well N07-M03A continue to be monitored on an annual basis. The wells were sampled again in March 2022, and results are provided in this 1H22 DGW Report. See Section 6.5 for further updates.

- SWMU 40: Three No. 6 fuel oil aboveground storage tanks were previously located near the wharf adjacent to the Delaware River. These tanks have since been demolished as part of the site's preparations for redevelopment. SWMU 40 was investigated in multiple phases. Soil at SWMU 40 has been characterized, but further CMSs and investigations are necessary to identify and fill data gaps to support the design of an appropriate remedy. The conclusions of the initial investigation were submitted to the agency as the *SWMU 40 – Fuel Oil Storage Tanks Soil Results Technical Memorandum* on June 14, 2021. The findings of the report showed that two locations, SWMU40-B28 and SWMU40-B31, exceeded residential standards and none of the samples exceeded non-residential standards. Therefore, remediation of SWMU 40 is not considered necessary as long as the institutional control limiting its use to non-residential is retained. However, because these samples were collected from the shallow soil zone and did not probe deeper, deep soil probing will be included at SWMU 40 with the Phase 2 Remedial Investigation. Five locations (40-B-37 through 40-B-41) have been chosen for further investigation (see Figure 14).

In addition, Chemours is conducting corrective measure studies (CMSs) to determine the practicability of treating or removing free product and residual product in the subsurface. These studies are also collecting the information necessary for containment of these products when treatment or removal is not practicable.

- Due to the size, complexity and variability in conditions at the Chambers Works site, Chemours initially focused on CMS activities at AOC 1 (Former Fluoroproducts Area). AOC 1 was selected as it is clear of buildings, is representative of challenges that will be encountered across the rest of the site, e.g., presence of free and residual DNAPL and impacted groundwater, and is within a preferred redevelopment area.
- Future selected AOC(s) will prioritize parcels within preferred redevelopment areas (i.e., riverside) to characterize the potential presence and treatability of free and residual products prior to new construction that may take place.

On June 18, 2020, Chemours had a Technical Consultation with NJDEP for the purpose of initiating the Technical Impracticability (TI) Waiver application process for the targeted AOC 1. The approach to seek a TI will address free and residual products, as well as groundwater quality, to demonstrate that there are sound technical or physical bases for a TI determination and the associated waiver, variance, and/or deviation from generic regulatory standards, requirements, and guidance. Chemours will conduct CMSs in phases.

6.3.1 Phase 1 DNAPL Investigation

The *AOC 1 Remedial Alternatives Screening Report and Investigation Work Plan* was submitted to EPA and NJDEP on November 10, 2020. Work began December 2020 and was ongoing in the first semester of 2021. The conclusions of the investigation were included in the *Phase 1 DNAPL Investigation Report* submitted in November 2021.

The goals of the investigation were to better define where mobile and residual DNAPL is present in the Phase 1 investigation area.

The field activities associated with the *AOC 1 Remedial Alternatives Screening Report and Investigation Work Plan* (AECOM, November 2020) were implemented between December 2020 and March 2021 as part of the Phase 1 DNAPL Investigation. Data collected during the investigation included the following:

- Tar-Specific Green Optical Screening Tool (TarGOST®) with dye-enhanced laser-induced fluorescence (dyeLIF) down-hole DNAPL detection technology was used at AOC 1 via direct push borings to delineate both the horizontal and vertical extent of DNAPL impacts.
- Soil borings were drilled using Roto-Sonic drilling technology at selected TarGOST with dyeLIF locations that were identified as indicating potential DNAPL impacts. Continuous soil cores were collected and visually inspected and tested for DNAPL impacts. Grab samples were collected for laboratory analysis and bench-scale testing of specific remedial technologies.
- Wells were installed at soil boring locations at depths where DNAPL was identified either visually or by TarGOST with dyeLIF data to determine whether mobile DNAPL is present and accumulates in wells.
- DNAPL recoverability testing is planned for the fall/winter of 2021 pending DNAPL waste characterization and determination of how to manage the produced waste. The recoverability testing results will be used to determine whether reducing the DNAPL mass via hydraulic means is feasible.

The Phase 1 DNAPL Investigation activities occurred sequentially in the order above as each investigation activity was predicated on the data collected in the previous step. The findings of this investigation were presented in the *Phase 1 DNAPL Investigation Report*, submitted to the agency in November 2021. The conclusion of which showed that the presence and distribution of mobile and immobile DNAPL within AOC 1 suggests that as per the NJDEP Technical Impracticability Guidance for Ground Water (NJDEP, 2013b), an application to the NJDEP for a TI determination for AOC 1 may be appropriate when evaluating the applicability and effectiveness of remedial alternatives for the site. However, while the assessment of DNAPL composition and distribution presented in this report is comprehensive, further data collection and evaluation is recommended to assess the presence and recoverability of mobile DNAPL.

6.3.2 Phase 2 DNAPL Investigation

The *Phase 2 Remedial Alternatives Screening Report and Investigation Work Plan* was submitted to the agency on April 26, 2022. The next phase of the investigation started in the second half of 2022 and is expected to conclude in January 2023. Phase 2 includes the majority of AOCs 2 and 3, parts of AOCs 5 and 6, SWMU 40, and AOC Power and Utility (P&U).

The objective of this Phase 2 investigation is to determine the horizontal and vertical extent of mobile and residual DNAPL in the subsurface. Mobile DNAPL can be readily drawn to monitoring wells whereas residual DNAPL and does not flow and mass reduction can only be accomplished through remedial actions or natural processes.

Data collected during this Phase 2 investigation will include the following:

- Laser-induced fluorescence (dyeLIF) down-hole technology via direct push borings will be advanced across the site to delineate both the horizontal and vertical extent of DNAPL impacts.
- Continuous soil cores will be advanced via direct push and macro-core sampling technology at borings co-located with select dyeLIF borings. Soil cores will be collected for visual inspection of impacts, laboratory analytical sampling, and samples for laboratory bench-scale testing of specific remedial technologies will be retained.
- Monitoring wells will be installed at boring locations and depths where DNAPL has been identified either visually or by dyeLIF to determine whether free DNAPL is present and accumulating.

The site investigation activities will occur sequentially in the order above as each investigation activity will be predicated on the data collected in the previous step. The locations of soil borings will be based on the findings of the dyeLIF investigation (see Figure 11), and in turn the groundwater monitoring well locations will be based on the soil boring observations.

6.3.3 Salem Canal Remedial Action

The Salem Canal Monitored Natural Recovery Framework Document (MNR Framework) presented an approach for monitored natural recovery (MNR) as a remedial alternative for sediment in the Salem Canal based on the attainment of source control following the implementation of the groundwater remedial action (URS, 2015). The MNR Framework outlined a weight-of-evidence evaluation of natural recovery processes in Salem Canal sediment based on monitoring of multiple environmental media. Comprehensive sampling and analysis of bulk sediment, pore water, groundwater and sedimentation rates were conducted in the former seep area in 2015 to provide a current assessment of groundwater and sediment conditions following the installation of the SPB to evaluate the potential for a MNR remedy to reduce ecological exposure to seep-related constituents within the biologically active zone (BAZ). Studies conducted to date indicate the potential for natural recovery of sediments through multiple processes (URS, 2013, 2015, AECOM & EHS Support, October 2019).

As part of the ongoing program to evaluate MNR as an appropriate remedial alternative, another sediment and sediment pore water sampling event was planned and completed. The *Salem Canal – 2020 MNR Sampling and Analysis Plan* was provided to NJDEP and EPA in the first half of 2020, and the field investigation was completed in the second half of 2020. The overall objective of that investigation was to collect bulk sediment, sediment pore water, and surface water data that will be used to refine the post-SPB conceptual site model and further support a weight-of-evidence approach to evaluate natural recovery processes in Salem Canal sediment. A report of the field investigation findings was submitted to the agency in February 2022.

Continued monitoring of seep-related constituents in bulk sediment within the Seep Grid Area is recommended to support the multi-media evaluation of natural recovery processes identified in the MNR Framework (URS, 2015a). As recommended in the Seep Area Bulk Sediment SAP, the next bulk sediment and monitoring event should be conducted in 2025 to allow sufficient time to measure the potential attenuation of seep-related constituents resulting from biodegradation and physical isolation processes (i.e., sedimentation and burial of seep-related constituents below the BAZ). Sampling in 2025 will enable consistent five-year sampling intervals between 2015, 2020, and 2025.

6.4 T29 Area

The T29 Area is a former laboratory waste disposal pit in Carneys Point. This area had been previously investigated and had shown no risk to ecological receptors in Bouttown Creek. Monitoring well T29-M02B was installed on February 12, 2015, developed, and subsequently sampled on March 26, 2015. Due to elevated levels of constituents in the groundwater, a second round of confirmatory sampling was performed in September 2015. Results show that although concentrations decreased from the first to second round of sampling, constituents are still in exceedance of NJGWIIA.

T29-M02B was sampled for polychlorinated biphenyls (PCBs), VOCs, and SVOCs in January 2018. In addition, one round of sampling for these same parameters was completed at surface-water stations within Bouttown Creek and Henby Creek. The purpose of this sampling is to satisfy a request from the Delaware River Basin Commission (DRBC) for additional information regarding PCBs that were previously detected at well T29-M02B. Results from these sampling events were submitted to the DRBC on March 19, 2018 in the PCB Pollutant Minimization Plan Report. Results from the January 2018 sampling event were included in the first semester 2018 DGW report. T29-M02B was sampled again in the second half of 2019, results of which were submitted with the 2H19 DGW Report. It is recommended that sampling continue on an annual basis. T29-M02B were scheduled to be sampled again in the second half of 2021; however, due to continued access issues caused by flooding in the area, the well is inaccessible and will be sampled when the water recedes.

6.5 Garage Diesel Spill Status Update

During a routine quarterly status meeting on January 22, 2020 between Chemours, EPA, and NJDEP, a request was made to outline which SWMUs and AOCs had been investigated and characterized in the 2014 Comprehensive RFI Report. A letter dated March 11, 2020 was submitted to EPA and NJDEP providing this information. It stated that corrective measures would be evaluated for SWMU 39-1. The proposed remedy of MNA for groundwater at SWMU 39-1 would be implemented according to the recommendations provided in the Garage Diesel Spill Groundwater Remedial Investigation and Remedial Action Selection Report submitted on July 31, 2009 to the EPA and NJDEP. This report recommended a Remedial Action Work Plan be completed to outline a groundwater monitoring program that consisted of sampling groundwater semi-annually to demonstrate the viability of MNA by showing declining concentration trends. A current conditions sampling event was completed in the first half of 2020, as sampling of the GDS Area wells had not occurred since 2009.The results of this investigation were reported in Appendix G of the 1H20 DGW Report (AECOM, October 2020).

It was recommended that the source area well N07-M01A and the downgradient well N07-M03A continue to be monitored on an annual basis and reported in the DGW report for five years or until the source area benzene, toluene, ethylbenzene and xylenes (BTEX) and naphthalene concentrations fall below NJGWIIA. The wells were sampled again in April 2022, and results are provided in Table 13. Concentrations of these constituents remain elevated above NJGWIIA standards in the source area well (N07-M01A). Concentrations above NJGWIIA standards were noted in the mid-plume well (N07-M03A). Chemours recommends collecting additional samples in the second semester 2022 to confirm these elevated results. As well as a round of water levels to re-evaluate groundwater flow in the area of the plume. After five years of continued monitoring, the sampling program will be re-assessed to determine if standards have been met and the sampling program can be terminated or if standards are not met and the sampling needs to continue.

7.0 Recommendations

Based on the findings of this semester and as per requests provided by NJDEP, the following additions and changes are recommended for the NJPDES-DGW program starting 2H22:

- It is recommended that sampling continue on an annual basis at T29-M02B. However, due to access issues caused by flooding in the first half of 2022, sampling will take place when access to the well can be gained.
- As discussed in the March 23, 2022 Chemours Chambers Works Quarterly Status Meeting, Chemours has agreed to install four additional well clusters to enhance the spatial coverage of off-site PFAS monitoring wells. Three clusters were installed in the first half of 2022. The remaining well cluster was installed in the second half of 2022 and will be reported in the 2H22 DGW Report.
- The *Phase 2 Remedial Alternatives Screening Report and Investigation Work Plan* was submitted to the agency on April 26, 2022. The next phase of the investigation started in the second half of 2022 and is expected to conclude in January 2023. Phase 2 includes the majority of AOCs 2 and 3, parts of AOCs 5 and 6, SWMU 40, and AOC P&U. SWMU 40 will also be included because the initial phase of samples were collected from the shallow soil zone and did not probe deeper. Therefore, deep soil probing will be included at SWMU 40 with the Phase 2 DNAPL Investigation.

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Tables

AECOM

Table 1
Groundwater Control Systems - Monthly and Instantaneous Flow Rates
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Monthly Flow (volumes reported in millions of gallons)

	Interceptor Well System (IWS)								**E Aquifer Pumping Well**	**C- Landfill Corrective Action Wells (CLCAW)**			
Well ID	Q13-R01C	Q13-R01D	R09-R02C	M14-R02CD	G08-R01C	G08-R01D	K06-R02CD		J05-W01E	Q20-R01B	P21-R01B		
Month								**Total (IWS)**	**Total (E Aquifer)**			**Total (CLCAW)**	**Total Gallons**
January	0.00	0.00	0.00	15.17	1.52	6.24	10.51	**33.44**	**7.81**	0.21	0.61	**0.82**	**42.07**
February	0.00	0.00	0.00	13.82	1.27	5.73	9.90	**30.73**	**7.56**	0.03	0.59	**0.62**	**38.90**
March	0.00	0.00	0.00	15.21	1.31	6.36	10.95	**33.82**	**8.02**	0.00	0.07	**0.07**	**41.91**
April	0.00	0.00	0.00	14.47	1.12	6.14	10.35	**32.08**	**7.10**	0.00	0.03	**0.03**	**39.22**
May	0.00	0.00	4.79	11.66	0.98	6.41	10.58	**34.43**	**8.36**	0.00	0.00	**0.00**	**42.78**
June	0.00	0.00	0.00	14.62	1.95	6.05	10.15	**32.77**	**8.95**	0.00	0.00	**0.00**	**41.72**
Well Totals	**0.00**	**0.00**	**4.79**	**84.95**	**8.14**	**36.93**	**62.44**			**0.24**	**1.3065**		
Program Totals								**197.27**	**47.79**			**1.55**	**246.60**

Instantaneous Flow Measurements (volumes reported in gallons per minute)

	Interceptor Well System (IWS)							**E Aquifer Pumping Well**	**C- Landfill Corrective Action Wells (CLCAW)**	
Well ID	Q13-R01C	Q13-R01D	R09-R02C	M14-R02CD	G08-R01C	G08-R01D	K06-R02CD	J05-W01E	Q20-M02B	P21-R01B
Month										
May 5	0	0	0	334	20	150	220	175	0	0

Table 2A
Secure C Landfill Leachate Collection System and Leak Detection System Flow Data
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Monthly Flow Volume (gallons)

Month	Leachate Collection Sump 2 (Areas 2 & 3)	Leachate Collection Sump 3 (Area 4)	Leachate Collection Sump 5A (Area 5A)	Leachate Collection Sump 5B (Area 5B)	Leachate Collection Sump 7 (Area 7)	Leak Detection Area 2	Leak Detection Area 3	Leak Detection Area 4	Leak Detection Area 5A	Leak Detection Area 5B	Leak Detection Area 7
January	74733	26184	387560	51336	430108	131	308	48	361	244	0
February	62362	95416	338800	276422	326512	131	329	65	603	549	0
March	6183	30255	329050	144640	174460	115	205	14	893	854	0
April	17224	13379	470970	91805	111480	202	213	55	353	671	0
May	128109	28915	342450	669056	143162	45	103	20	462	61	0
June	75465	95261	250340	809597	81070	46	42	20	1451	183	0
Totals	**364,076**	**289,410**	**2,119,170**	**2,042,856**	**1,266,792**	**670**	**1,200**	**222**	**4,123**	**2,562**	**0**

Table 2B
Secure C Landfill Leak Detector System Action Leak Rate (ALR) Totals
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

	Leak Detection Flow Rate (gallons per acre per day)											
	Area 2 Subcells		Area 3 Subcells		Area 4 Subcells				Area 5 Subcells		Area 7	Rain (inches)
Week Ending	2-1	2-2	3-1	3-2	4-1	4-2	4-3	4-4	5A	5B	7	
1/1/2022	0	0	0	0	0	0	3	0	5	23	0	0.64
1/8/2022	0	0	0	0	0	0	0	3	0	0	0	0.63
1/15/2022	0	0	0	0	0	1	0	0	0	7	0	0.35
1/22/2022	0	1	0	4	0	0	0	0	0	3	0	2.13
1/29/2022	3	1	1	11	0	0	0	0	17	0	0	0.02
2/5/2022	1	1	0	5	0	0	0	0	15	7	0	1.10
2/12/2022	1	1	0	2	1	0	0	3	9	7	0	0.41
2/19/2022	2	2	2	9	0	1	0	0	2	7	0	0.58
2/26/2022	0	0	0	1	0	0	0	0	5	10	0	1.01
3/5/2022	0	0	0	3	0	1	0	0	9	10	0	0.00
3/12/2022	0	1	0	3	0	0	0	0	12	7	0	1.29
3/19/2022	2	0	0	0	0	0	0	0	13	13	0	0.51
3/26/2022	0	3	1	3	0	1	0	0	13	7	0	1.21
4/2/2022	0	0	0	0	0	0	0	0	9	10	0	0.30
4/9/2022	3	1	1	4	0	1	0	0	7	3	0	3.29
4/16/2022	5	1	1	2	0	0	0	0	3	13	0	0.03
4/23/2022	0	1	1	3	0	1	0	3	1	16	0	1.77
4/30/2022	0	0	0	0	0	0	0	0	4	3	0	0.05
5/7/2022	0	0	0	0	0	1	0	0	8	0	0	1.29
5/14/2022	0	0	0	0	0	0	0	0	2	3	0	0.84
5/21/2022	0	1	1	3	0	1	0	0	5	0	0	0.80
5/28/2022	0	0	0	0	0	1	0	0	8	0	0	1.07
6/4/2022	0	0	0	0	0	1	0	0	10	3	0	0.53
6/11/2022	0	0	0	0	0	0	0	0	24	3	0	1.46
6/18/2022	0	0	0	0	0	1	0	0	19	0	0	1.49
6/25/2022	0	0	0	0	0	0	0	0	16	0	0	0.45

Table 3
Summary of DNAPL Recovery Volume
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Well ID	Start Date for Removal	System for Removal	1H22 Semester Amount Removed (gallons)	Total Volume Removed (gallons)	Notes
L13-M01B	03/2001	Pump	0	3393	Checked with bailer monthly, System off due to no DNAPL accumulation
G05-M03B	07/2003	Pump	20	1925.67	
G05-M02B	2010	Bailer	0	51.8	Was pumped from 2010-2013 but no longer productive.
J12-M01B	2002	Bailer	0	40.179	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
J12-M02B	01/2004	Bailer	0.053	2.471	
G06-M03B	2005	Bailer	0.264	14.532	
G06-M04B	2005	Bailer	0.297	8.456	
I12-M02B	2001	Bailer	0	7.713	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
M12-M02B	2004	Bailer	0	0.06	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
D15-M01C	2009	Bailer	0	0.253	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
H11-R01CD	2010	Bailer	0.304	8.896	
K11-M01B	--	Bailer	0	0	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
L12-M03B	--	Bailer	0	0	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
L13-M02B	--	Bailer	0	0	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
J10-M02B	--	Bailer	0	0	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
M12-M04B	--	Bailer	0	0	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
G06-M02B	--	Bailer	0	0	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
D15-P08B	2014	Bailer	0	212	Checked for DNAPL monthly, but no DNAPL was recovered for 1H22
F09-M03B	2015	ISCOPump	40	583	
F10-P01B	2015	ISCOPump	24	614.3	
E13-M01B	2022	ISCOPump	20	20	
F16-M04B	2022	ISCOPump	10	10	
G15-M03B	2022	ISCOPump	1.5	1.5	
F13-M01B	2022	ISCOPump	1	1	
G16-M05B	2022	ISCOPump	1.5	1.5	
MLS-1, MLS-2, MLS-3, AS-1	06/2020	Pump	0	78	Triangle Area Pilot test in progress, no DNAPL being removed

DNAPL = Dense non-aqueous phase liquid

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 1: Corrective Action Monitoring Program - Basins Post Closure
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

	Sampling Event:	Jan 2022		Jul 2022		Jan 2023		Jul 2023		Jan 2024		Jul 2024		Jan 2025		Jul 2025		Jan 2026		Jul 2026		Jan 2027		Jul 2027	
	Sampling Parameters:	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND1	Basin	IND2	Basin	IND1	Basin
Closure and Post Closure for the A, B, & C Basins (7 Wells)	G16-M02B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE
	H13-M02B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE
	H14-M01B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE
	H16-P01B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE
	K13-M02B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE
	J16-M01B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE
	L14-M01B	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE	SA	--	SA	--	SA	--	SA	--	SA	--	SA	TRiE

Notes:

Frequency

SA = Semiannually
TRiE = Triennially (every three years)
-- not required

Analyte Lists

IND1 = indicator parameters (as defined in Table 4, Part 2)
Basin = Basin Closure Monitoring Program Analyte List (as defined in Table 4, Part 2)

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 2: Corrective Action Monitoring Program - Basins Post-Closure Analytes
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Basin Closure Monitoring Program Analyte List			
Priority Pollutant Volatile Organics	**Priority Pollutant Semivolatile Organics**		**Additional Parameters**
Benzene	***Base Neutral Extractable***	Di-n-octyl phthalate	Aniline
Bromodichloromethane	Acenaphthylene	Fluoranthene	4-Chloroaniline
Bromoform	Acenaphthene	Fluorene	o-Toluidine
Bromomethane	Anthracene	Hexachlorobenzene	Trichlorofluoromethane
Carbon tetrachloride	Benzidine	Hexachlorobutadiene	Xylene
Chlorobenzene	Benzo(a) anthracene	Hexachlorocyclopentadiene	Dissolved lead
Chloroethane	Benzo(b) fluoranthene	Hexachloroethane	
Chloroform	Benzo(k) fluoranthene	Indeno(1,2,3-c,d)pyrene	
Chloromethane	Benzo(ghi) perylene	Isophorone	
Dibromochloromethane	Benzo(a) pyrene	Naphthalene	
1,1-Dichloroethane	bis(2-Chloroethoxy) methane	Nitrobenzene	**Priority Pollutant Total Metals:**
1,2-Dichloroethane	bis(2-Chloroethyl) ether	Nitrosodimethylamine	Aluminum
1,1-Dichloroethene	bis(2-Chloroisopropyl) ether	N-Nitroso-diphenyl amine	Arsenic
trans-1,2-Dichloroethene	bis(2-Ethylhexyl) phthalate	N-Nitroso-di-n-propylamine	Beryllium
1,2-Dichloropropane	4-Bromophenyl phenyl ether	Phenanthrene	Cadmium
cis-1,3-Dichloropropene	Butyl benzyl phthalate	Pyrene	Iron
trans-1,3-Dichloropropene	2-Chloronaphthalene	1,2,4-Trichlorobenzene	Lead
1,4-Dioxane	4-Chlorophenyl phenyl ether	***Acid Extractable(1)***	Nickel
Ethylbenzene	Chrysene	4-chloro-3-methylphenol	Sodium
Methylene chloride	Di-n-butylphthalate	2-Chlorophenol	
1,1,2,2-Tetrachloroethane	Dibenzo (a,h) anthracene	2,4-Dichlorophenol	
Tetrachloroethene	1,2-Dichlorobenzene	2,4-Dimethylphenol	
Toluene	1,3-Dichlorobenzene	4,6-Dinitro-2-methylphenol	
1,1,1-Trichloroethane	1,4-Dichlorobenzene	2,4-Dinitrophenol	
1,1,2-Trichloroethane	3,3-Dichlorobenzidine	2-Nitrophenol	
Trichloroethylene	Diethyl phthalate	4-Nitrophenol	
1,1,2-Trichlorotrifluoroethane	Dimethyl phthalate	Phenol	
Vinyl chloride	1,2-Diphenylhydrazine	Pentachlorophenol	
	2,4-Dinitrotoluene	2,4,6-Trichlorophenol	
	2,6-Dinitrotoluene		
IND1 Analyte List			
Indicator Parameters	**Field Parameters**		
Total Organic Carbon (TOC)	Temperature	Dissolved oxygen	
Total Organic Halogen (TOX)	Specific conductivity	Eh	
	pH		

NOTE (1): Acid extractable semi-volatile organics sampling only required in well K13-M02B

IND1 = indicator parameters (as defined in Table 4, Part 2)

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 3: Corrective Action Monitoring at the Secure C Landfill
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Sampling Parameters:		Frequency (IND1 & CLF-CA)
Monitoring Program for Corrective Action at the Secure C Landfill (5 plus 2 background wells)	P21-M01B	SA
	P21-M04B	SA
	P21-R01B	SA
	Q20-M02B	SA
	Q21-M01B	SA
	S24-M01B*	SA
	T22-M01B*	SA

***Background wells for Corrective Action and Detection Monitoring Programs at the Secure C Landfill**

SA=Semiannually

IND1 = indicator parameters (As defined in Table 4, Part 3)

CLF-CA = Secure C Landfill Corrective Action Monitoring target analytes (as defined in Table 4, Part3)

IND1 Analyte List			
Indicator Parameters	**Field Parameters**		
Total Organic Carbon (TOC)	Temperature	Dissolved oxygen	
Total Organic Halogen (TOX)	Specific conductivity	Eh	
	pH		

CLF-CA Analyte List			
Indicator Parameters	**Volatiles**	**Semivolatiles**	**Inorganics**
pH (field parameter)	1,1,2-Trichlorotrifluoroethane	1,2-dichlorobenzene	aluminum (total)
Eh (field parameter)	1,4-Dioxane	1,2,4-trichlorobenzene	ammonia
Specific Conduct (field)	benzene	1,4-dichlorobenzene	arsenic (total)
Temp (field parameter)	chlorobenzene	4-chloroaniline	chloride
TOC	chloroform	aniline	cyanide (total)
TOX	methylene chloride	n-nitrosodimethylamine	lead (total)
Total Phenolics	toluene	naphthalene	nitrate as nitrogen
Dissolved Oxygen	trichloroethylene	o-toluidine	sodium
			sulfate

IND1 = indicator parameters (As defined in Table 4, Part 3)

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 4: Perimeter Monitoring Program
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Sampling Event:			**Jan 2022**		**Jul 2022**		**Jan 2023**		**Jul 2023**		**Jan 2024**		**Jul 2024**		**Jan 2025**		**Jul 2025**		**Jan 2026**		**Jul 2026**	
Sampling Parameters:			**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**	**IND1**	**PMP**
PMP Well ID (38 Wells)	**Perimeter Section**	**Aquifer**																				
C07-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
C08-M01B*	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
C09-M01B*	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
C10-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
C11-M03B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
D14-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
D15-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
E15-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
E16-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
F16-M01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
G16-M03B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
K18-P01B	CWW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
D06-M01B	CWS	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
F05-M06B	CWS	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
G05-M02B	CWS	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
J05-M02B	CWS	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
L04-M01B	CWS	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
N04-M01B	CWE	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
P06-M01B	CWE	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
R09-M01B	CWE	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
U08-M01B	CWE	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
U12-M01A(B)	CWE	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
O26-M01B	CPW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
R31-M01B	CPW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
S32-M01B	CPW	B	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
C11-M01C	CWW	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
H17-M01B(C)	CWW	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
J05-M01B(C)	CWS	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
N04-M01C	CWE	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
P06-M02C	CWE	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
R09-M02C	CWE	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
U12-M01B(C)	CWE	C	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
C11-M02D	CWW	D	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
H17-M01C(D)	CWW	D	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
J05-M01C(D)	CWS	D	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
N04-M01D	CWE	D	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
P06-M01D	CWE	D	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B
R09-R01D	CWE	D	--	--	A	B	--	--	A	--	--	--	A	B	--	--	A	--	--	--	A	B

SAMPLING FREQUENCY
S = Semi-Annually (two times per year)
A = Annually (one time per year)
B = Biennially (one time every two years)
-- not required

* C08-M01B and C09-M01B are also sampled as part of the Post Closure monitoring for RCRA units (see Table 1, Part 6)

Analyte Lists (attached)
IND1 = indicator parameters (as defined in Table 4, Part 5)
PMP = Perimeter Monitoring Program Analyte List (as defined in Table 4, Part 5).

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 5: Perimeter Monitoring Program Analytes
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Chambers Works Perimeter Monitoring Program Analyte List			
Priority Pollutant Volatile Organics	**Priority Pollutant Semivolatile Organics**		**Additional Parameters (2)**
Benzene	***Base Neutral Extractable***	Di-n-octyl phthalate	Aniline
Bromodichloromethane	Acenaphthylene	Fluoranthene	4-Chloroaniline
Bromoform	Acenaphthene	Fluorene	1-Naphthylamine
Bromomethane	Anthracene	Hexachlorobenzene	2-Naphthylamine
Carbon tetrachloride	Benzidine	Hexachlorobutadiene	o-Toluidine
Chlorobenzene	Benzo(a) anthracene	Hexachlorocyclopentadiene	Trichlorofluoromethane
Chloroethane	Benzo(b) fluoranthene	Hexachloroethane	Xylene
Chloroform	Benzo(k) fluoranthene	Indeno(1,2,3-c,d)pyrene	Dissolved lead
Chloromethane	Benzo(ghi) perylene	Isophorone	Organic Lead
Dibromochloromethane	Benzo(a) pyrene	Naphthalene	**Priority Pollutant Total Metals:**
1,1-Dichloroethane	bis(2-Chloroethoxy) methane	Nitrobenzene	Aluminum (3)
1,2-Dichloroethane	bis(2-Chloroethyl) ether	Nitrosodimethylamine	Antimony (3)
1,1-Dichloroethene	bis(2-Chloroisopropyl) ether	N-Nitroso-diphenyl amine	Arsenic(3)
trans-1,2-Dichloroethene	bis(2-Ethylhexyl) phthalate	N-Nitroso-di-n-propylamine	Beryllium(3)
1,2-Dichloropropane	4-Bromophenyl phenyl ether	Phenanthrene	Cadmium(3)
cis-1,3-Dichloropropene	Butyl benzyl phthalate	Pyrene	Chromium (3)
trans-1,3-Dichloropropene	2-Chloronaphthalene	1,2,4-Trichlorobenzene	Iron(3)
1,4-Dioxane	4-Chlorophenyl phenyl ether	***Acid Extractable(1)***	Lead(3)
Ethylbenzene	Chrysene	4-chloro-3-methylphenol	Nickel(3)
Methylene chloride	Di-n-butylphthalate	2-Chlorophenol	Sodium(3)
1,1,2,2-Tetrachloroethane	Dibenzo (a,h) anthracene	2,4-Dichlorophenol	Cyanide (4)
Tetrachloroethene	1,2-Dichlorobenzene	2,4-Dimethylphenol	Mercury (4)
Toluene	1,3-Dichlorobenzene	4,6-Dinitro-2-methylphenol	Selenium (4)
1,1,1-Trichloroethane	1,4-Dichlorobenzene	2,4-Dinitrophenol	Silver (4)
1,1,2-Trichloroethane	3,3-Dichlorobenzidine	2-Nitrophenol	Thallium (4)
Trichloroethylene	Diethyl phthalate	4-Nitrophenol	Zinc (4)
1,1,2-Trichlorotrifluoroethane	Dimethyl phthalate	Phenol	
Vinyl chloride	1,2-Diphenylhydrazine	Pentachlorophenol	
	2,4-Dinitrotoluene	2,4,6-Trichlorophenol	
	2,6-Dinitrotoluene		
IND1 Analyte List			
Indicator Parameters	**Field Parameters**		
Total Organic Carbon (TOC)	Temperature	Dissolved oxygen	
Total Organic Halogen (TOX)	Specific conductivity	Eh	
	pH		

Note (1): Acid extractable semivolatile organics sampling required for B Aquifer CWS only.

Note (2): Additional parameters for B aquifer CWW and CWS only

Note (3): Total metals for B aquifer CWW, CWS, and CPW

Note (4): Total metals for B aquifer CPW only

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 6: Post-Closure Monitoring for RCRA Units
First Semester 2022 Semi-Annual NJPDES-DGW Report
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Deepwater, New Jersey

Sampling Parameters:		Frequency	RCRA Unit	Analytical
Post-Closure	C08-M01B*	A	SMWU 28	Iodide and Fluoride
Monitoring for	C09-M01B*	A	SMWU 25	Lead
RCRA Units	G14-M01B	A	SWMU 26	Antimony and PCB Congeners
(4 Wells)	L12-M01B	A	SWMU 21	Lead, Ethylene Dichloride, and Ethylene Dibromide

Frequency

A = Annually

Notes

* C08-M01B and C09-M01B are also sampled as part of the Perimeter Monitoring Program (see Table 4, Part 4)

PCB = Polychlorinated biphenyls

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 7: Secure C Landfill Detection Monitoring Program
First Semester 2022 Semi-Annual NJPDES-DGW Report
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Sampling Parameters:		CLF-DM	Sampling Parameters	Sampling Port No.	LCS
Detection Monitoring for Areas 2, 3, 4, 5, and 7 of the Secure C Landfill (4 wells plus 2 background wells)	***T22-M01B**	SA	**Leachate Collection System Monitoring Program at the Secure C Landfill (5 Sampling Ports)**	274	BiE
	R19-M01B	SA		276	BiE
	R19-M02B	SA		Sump 5A	BiE
	S19-M01B	SA		Sump 5B	BiE
	S19-M02B	SA		Sump 7	BiE
	***S24-M01B**	SA			

Frequency

SA = Semiannually

BiE = Biennially (every two years) - Next sampling for LCS will be in January 2023

Analyte Lists (Attached)

LCS = Leachate collection system, analyte list (as defined in Table 4, Part 8)

CLF-DM = Secure C Landfill-Detection Monitoring target analytes (as defined in Table 4, Part 8)

Notes

* Background wells for Corrective Action and Detection Monitoring Programs at the Secure C Landfill

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 8: Secure C Landfill Detection Monitoring Analytes
First Semester 2022 Semi-Annual NJPDES-DGW Report
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Leachate Collection System Analyte List				
Priority Pollutant Volatile Organics	**Priority Pollutant Semivolatile Organics**	**Additional Parameters**	**Priority Pollutant Metals**	**Additional Parameters**
Benzene	Acenaphthylene	Aniline	Antimony (total)	Aniline
Bromodichloromethane	Acenaphthene	4-Chloroaniline	Arsenic (total)	4-Chloroaniline
Bromoform	Anthracene	o-Toluidine	Beryllium (total)	o-Toluidine
Bromomethane	Benzidine	Trichlorofluoromethane	Cadmium (total)	Trichlorofluoromethane
Carbon tetrachloride	Benzo(a) anthracene	Xylene	Chromium (total)	Xylene
Chlorobenzene	Benzo(b) fluoranthene	Phenols	Copper (total)	Phenols
Chloroethene	Benzo(k) fluoranthene	Potassium	Cyanide (total)	Potassium
Chloroform	Benzo(ghi) perylene	Fluoranthene	Lead (total)	Calcium
Chloromethane	Benzo(a) pyrene	Fluorene	Mercury (total)	Magnesium
Dibromochloromethane	bis(2-Chloroethoxy) methane	Hexachlorobenzene	Nickel (total)	Sulfate
1,1-Dichloroethane	bis(2-Chloroethyl) ether	Hexachlorobutadiene	Selenium (total)	Sulfide
1,2-Dichloroethane	bis(2-Chloroisopropyl) ether	Hexachlorocyclopentadiene	Silver (total)	pH (field)
1,1-Dichloroethene	bis(2-Ethylhexyl) phthalate	Hexachloroethane	Thallium (total)	Temperature (field)
trans-1,2-Dichloroethene	4-Bromophenyl phenyl ether	Indeno(1,2,3-c,d)pyrene	Zinc (total)	Specific Conductance (field)
1,2-Dichloropropane	Butyl benzyl phthalate	Isophorone		Ammonia
cis-1,3-Dichloropropene	4-chloro-3-methylphenol	Naphthalene		Chloride
trans-1,3-Dichloropropene	2-Chloronaphthalene	Nitrobenzene		Nitrate as nitrogen
1,4-Dioxane	2-Chlorophenol	2-Nitrophenol		Sodium
Ethylbenzene	4-Chlorophenyl phenyl ether	4-Nitrophenol		
Methylene chloride	Chrysene	Nitrosodimethylamine		
1,1,2,2-Tetrachloroethane	Di-n-butylphthalate	N-Nitroso-diphenyl amine		
Tetrachloroethene	Dibenzo (a,h) anthracene	N-Nitroso-di-n-propylamine		
Toluene	1,2-Dichlorobenzene	Pentachlorophenol		
1,1,1-Trichloroethane	1,3-Dichlorobenzene	Phenanthrene		
1,1,2-Trichloroethane	1,4-Dichlorobenzene	Phenol		
Trichloroethylene	3,3-Dichlorobenzidine	Pyrene		
1,1,2-Trichlorotrifluoroethane	2,4-Dichlorophenol	1,2,4-Trichlorobenzene		
Vinyl chloride	Diethyl phthalate	2,4,6-Trichlorophenol		
	2,4-Dimethylphenol			

CLF-DM Analyte List				
Indicator Parameters	**Volatiles**	**Semivolatiles**		**Inorganics**
Total Organic Carbon (TOC)	benzene	1,2-dichlorobenzene	ethylbenzene	aluminum (total)
Total Organic Halogen (TOX)	chlorobenzene	1,2,4-trichlorobenzene	xylenes (total)	ammonia
Total Phenolics	chloroform	1,4-dichlorobenzene		arsenic (total)
Field Parameters	methylene chloride	4-chloroaniline		chloride
Dissolved Oxygen	toluene	aniline		cyanide (total)
pH	trichloroethylene	n-nitrosodimethylamine		lead (total)
Eh		naphthalene		nitrate as nitrogen
Specific Conductance		o-toluidine		sodium
Temperature		1,2-dichloropropane		sulfate

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 9: PFAS Monitoring Program
First Semester 2022 Semi-Annual NJPDES-DGW Report
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Sampling Parameters:	Well ID	Area Section	Aquifer	Frequency	Analytical	Rationale for Sampling
PFAS Monitoring Program (45 wells)	F08-M01A	Interior	A	SA	PFAS	South of Zonyl Intermediates
	G09-M01A	Interior	A	SA	PFAS	Zonyl Intermediates
	K12-M01A	Interior	A	SA	PFAS	Perfluoroelastomers/fluoroelastomers area
	R12-M01A	CPE	A	SA	PFAS	Spatial distribution
	AA25-M02B	CPE	B	SA	PFAS	Spatial distribution
	C08-M01B	CWW	B	SA	PFAS	Jackson Labs area
	C11-M03B	CWW	B	SA	PFAS	Former Antiknocks area
	D06-M01B	CWW	B	SA	PFAS	Jackson Labs area
	D15-M01B	CWW	B	SA	PFAS	Fluoroproducts area
	F07-M01B	Interior	B	SA	PFAS	Spatial distribution
	F08-M01B	Interior	B	SA	PFAS	South of Zonyl Intermediates
	G05-M02B	CWS	B	SA	PFAS	Salem Canal Seep area
	J10-M02B	Interior	B	SA	PFAS	Spatial distribution
	K13-M02B	Interior	B	SA	PFAS	South of A, B, and C Basins
	L09-M01B	Interior	B	SA	PFAS	Western edge of SWMU 8
	N08-M01B	Interior	B	SA	PFAS	South of SWMU 8
	O21-M01B	CPW	B	SA	PFAS	Spatial distribution
	P06-M01B	CWE	B	SA	PFAS	Eastern perimeter well
	P21-M01B	Interior	B	SA	PFAS	Area 1 of C-Landfill
	P22-M01B	CPW	B	SA	PFAS	Spatial distribution
	Q12-M01B	CPE	B	SA	PFAS	Spatial distribution
	R09-M02B	Interior	B	SA	PFAS	Eastern edge of SWMU 8
	S22-W01C	CPE	B	SA	PFAS	Spatial distribution
	S24-M01B	CPE	B	SA	PFAS	Spatial distribution
	T22-M01B	CPE	B	SA	PFAS	Spatial distribution
	Z28-M02B	CPE	B	SA	PFAS	Spatial distribution
	AA25-M01B	CPE	C	SA	PFAS	Eastern perimeter well
	C11-M01C	CWW	C	SA	PFAS	Former Antiknocks area
	G04-M01B	CWS	C	SA	PFAS	Southern perimeter well
	L09-M01C	Interior	C	SA	PFAS	Western edge of SWMU 8
	N08-M01C	Interior	C	SA	PFAS	South of SWMU 8
	P06-M02C	CWE	C	SA	PFAS	Eastern perimeter well
	R10-M01C	Interior	C	SA	PFAS	Eastern edge of SWMU 8
	Z28-M01B	CPE	C	SA	PFAS	Eastern perimeter well
	AA22-M01B	CPE	D	SA	PFAS	Eastern perimeter well
	AA25-M01C	CPE	D	SA	PFAS	Eastern perimeter well
	C11-M02D	CWW	D	SA	PFAS	Former Antiknocks area
	J05-M01C	CWS	D	SA	PFAS	White Products area
	L09-M01D	Interior	D	SA	PFAS	Western edge of SWMU 8
	N08-M01D	Interior	D	SA	PFAS	South of SWMU 8
	P06-M01D	CWE	D	SA	PFAS	Eastern perimeter well
	C11-M01E	CWW	E	SA	PFAS	Former Antiknocks area
	G04-M01E	CWS	E	SA	PFAS	Southern perimeter well
	P06-M01E	CWE	E	SA	PFAS	Eastern perimeter well
	R10-M01E	Interior	E	SA	PFAS	Eastern edge of SWMU 8

PFAS = Per- and Polyfluoroalkyl Substances

FREQUENCY

SA = Semi-Annually (two times per year)

AREA SECTIONS

CWW = Chambers Works Western Perimeter along Delaware River
CWS = Chambers Works Southern Perimeter along Salem Canal
CWE = Chambers Works Eastern Perimeter along Route 130
CPW = Carneys Point Western Perimeter along Delaware River
CPE = Carneys Point Eastern Perimeter along Route 130
Interior = Interior of complex
SWMU = Solid Waste Management Unit

Table 4
Chambers Works Groundwater Monitoring Schedule
Part 10: PFAS Monitoring Analytes
First Semester 2022 Semi-Annual NJPDES-DGW Report
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Chambers Works PFAS Program Analyte List*
537 Modified List (20 Analytes)
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
HFPO-DA
N-ethylperfluorooctanesulfonamidoacetic Acid (NEtFOSSA)
N-methylperfluorooctansulfonamidoacetic Acid (NMeFOSAA)
Perfluorobutanesulfonic acid (PFBS)
Perfluorobutanoic acid (PFBA)
Perfluorodecanoic acid (PFDA)
Perfluorododecanoic acid (PFDoA)
Perfluoroheptanoic acid (PFHpA)
Perfluorohexanesulfonic acid (PFHxS)
Perfluorohexanoic acid (PFHxA)
Perfluorononanoic acid (PFNA)
Perfluorooctanesulfonic acid (PFOS)
Perfluorooctanoic acid (PFOA)
Perfluoropentanoic acid (PFPA)
Perfluorotetradecanoic acid (PFTeA)
Perfluorotridecanoic acid (PFTriA)
Perfluoroundecanoic acid (PFUnA)
Field Parameters
Dissolved oxygen
Eh
Temperature
Specific conductivity
pH

*Starting in 2020, the PFOA monitoring program transitioned to EPA Method 537 Modified list plus two extra analytes.

Table 5
Summary of Analytical Results: Closure and Post-Closure for A, B, and C Basins
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		Location	G16-M02B	H13-M02B	H14-M01B	H16-P01B	J16-M01B	K13-M02B	K13-M02B	L14-M01B
		Sample Date	01/04/2022	01/04/2022	01/04/2022	01/04/2022	01/04/2022	01/04/2022	01/04/2022	01/04/2022
Analyte	**Units**	**Sample Type**	FS	FS	FS	FS	FS	DUP	FS	FS
Total Organics										
Total Organics	UG/L		27.9 P	8.53 P	36.8 P	63 P	21.3 P	--	9.9 P	7.43 P
Total Organic Halogen	UG/L		3900	630	1800	11000	1300	840	2200	530
Total Organic Carbon	UG/L		24000	7900	35000	52000	20000	7700	7700	6900
Field Measurements										
Color	None		NONE	YES	YES	YES	YES	--	NONE	NONE
Dissolved Oxygen	MG/L		0.28	0.74	0.32	0.58	0.28	--	0.42	0.35
Odor	None		NONE	NONE	NONE	YES	NONE	--	NONE	NONE
pH	STD Units		5.67	6.55	6.79	5.87	7.51	--	6.22	6.83
Redox	mV		13.8	-8	-82.1	-16.9	-186.4	--	-34	-19
Specific Conductance	umhos/cm		3020	1404	4982	2253	1853	--	970	426
Temperature	Degrees C		14.89	14.93	16.68	14.06	15.62	--	14.93	16.84
Turbidity Quantitative	NTU		27.1	36.2	8.36	100	27.7	--	1.47	1.71

Notes:
J = Analyte present. Reported value may not be accurate or precise.
-- = Not Analyzed or Not Requested for this event
FS = Field Sample
DUP = Duplicate Sample
P = Predicted
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit

Table 6
Summary of Analytical Results: PFAS Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJ Class IIA 06/20	Units	Location	G09-M01A	K12-M01A	F08-M01A	R12-M01A	K13-M02B	K13-M02B	J10-M02B	P21-M01B	C08-M01B	D06-M01B	C11-M03B	D15-M01B	P06-M01B	G04-M01B
			Sample Date	01/12/2022	01/12/2022	01/12/2022	01/17/2022	01/04/2022	01/04/2022	01/18/2022	01/06/2022	01/14/2022	01/10/2022	01/14/2022	01/10/2022	01/11/2022	01/10/2022
			Aquifer	A	A	A	A	B	B	B	B	B	B	B	B	B	B
			Sample Type	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS
Perfluorinated Compounds																	
11Cl-PF3OUdS	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	<0.0017	<0.020	<0.0018	<0.0018	<0.0018	<0.0018
9Cl-PF3ONS	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	<0.0017	<0.020	<0.0018	<0.0018	<0.0018	<0.0018
DONA	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	<0.0017	<0.020	<0.0018	<0.0018	<0.0018	<0.0018
Hfpo Dimer Acid	--	UG/L		<3.8	84 J	<0.30	1.9	0.29	0.28	0.089	0.27	0.6	0.98	0.51	0.065	0.053 J	0.28
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<3.8	<0.026	<0.30	<0.025	<0.030	<0.030	<0.029	<0.030	0.013	<0.030	0.0027 B	<0.0027	<0.0027	<0.0027
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	0.024	<0.020	<0.0018	<0.0018	<0.0018	<0.0018
Perfluorobutane Sulfonic Acid	--	UG/L		<2.5	<0.017	<0.20	0.059	<0.020	<0.020	<0.019	0.025	0.088	0.19	0.0082	0.0021	0.0028	0.0028
Perfluorobutanoic Acid	--	UG/L		150	0.11	59	6.1 J	1.6	1.6	0.17	27	0.35	0.62	0.21	0.47	0.22	0.33
Perfluorodecanoic Acid	--	UG/L		280	0.22	9.2	0.73	0.1	0.095	0.25	2.1	1.3	0.60 J	0.21	0.22	0.052 J	0.033
Perfluorododecanoic Acid	--	UG/L		<2.5	0.031	<0.20	<0.017	<0.020	<0.020	0.021	<0.020	0.034	0.027	0.013	0.012	0.0096	<0.0018
Perfluoroheptanoic Acid	--	UG/L		400	0.17	6.1	6.7	3.6	3.5	0.28	35	0.66	0.67	0.31	0.55	0.32	0.25
Perfluorohexane Sulfonic Acid	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	0.043	0.0079	<0.020	0.0077	<0.0018	<0.0018	<0.0018
Perfluorohexanoic Acid	--	UG/L		1400	0.54	160	38 J	8.7	8.2	1.7	130	2.4	5.1	1.3	1.5	0.64	1
Perfluorononanoic Acid	0.013	UG/L		220	0.063	1.8	1.2	3	2.8	0.11	4.2	0.29	0.24	0.12	0.16	0.13	0.079
Perfluoropentanoic Acid	--	UG/L		100	0.23	27	34 J	3.7	3.7	0.37	48	1.1	1.5	0.48	1.6	0.44	0.67
Perfluorotetradecanoic Acid	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	<0.0017	<0.020	<0.0018	<0.0018	0.0024	<0.0018
Perfluorotridecanoic Acid	--	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	<0.0017	<0.020	<0.0018	<0.0018	<0.0018	<0.0018
Perfluoroundecanoic Acid	--	UG/L		<2.5	0.061	0.29	0.041	<0.020	<0.020	0.063	0.052	0.088	0.071	0.016	0.046	0.0027	<0.0018
PFOA	0.014	UG/L		500	12	45	18	14	13	2.6	85	1.3	1.2	0.61	0.48	0.88	0.5
PFOS	0.013	UG/L		<2.5	<0.017	<0.20	<0.017	<0.020	<0.020	<0.019	<0.020	0.12	0.053	0.067	0.012	0.0042	0.0035
Field Parameters																	
Color	--	None		NONE	NONE	YES	NONE	--	NONE	YES	YES	YES	NONE	NONE	YES	NONE	NONE
Dissolved Oxygen	--	MG/L		1.36	11.17	3.39	1.95	--	0.42	3.49	1.26	0.5	0.05	2.42	0.81	0.7	0.33
Odor	--	None		YES	NONE	NONE	NONE	--	NONE	YES	YES	NONE	NONE	NONE	YES	NONE	NONE
pH	--	STD Units		7.23	7.62	7.66	5.75	--	6.22	6.43	6.65	7.13	7.5	6.9	6.49	6.15	6.35
Redox	--	mv		-105.3	21.3	108	222.9	--	-34	37.2	-53.6	-120.2	-91.7	-41.9	19.8	1.5	2.1
Specific Conductance	--	umhos/cm		976	829	529	1054	--	970	1060	1923	717	1129	702	511	267	1524
Temperature	--	Degrees C		11.13	10.23	12.22	14.9	--	14.93	17.51	15.91	18.35	16.9	15.54	16.81	15.08	14.36
Turbidity Quantitative	--	NTU		11.4	7.89	117	6.33	--	1.47	28.6	127	91.5	11.1	55	34.6	10.53	5.5

Notes:
Yellow shading = Greater than NJ CLASS IIA Criteria
Orange shading = Detection limit is above screening criteria
FS = Field Sample
J = Reported value may not be accurate or precise.
UJ = Not detected at stated quantitation limit may not be accurate or precise.
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit
AU* = Attenuation Unit

Table 6
Summary of Analytical Results: PFAS Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJ Class IIA 06/20	Units	Location	F07-M01B	F08-M01B	R09-M02B	R09-M02B	Q12-M01B	N08-M01B	AA25-M02B	O21-M01B	P22-M01B	L09-M01B	AA22-M01B	G05-M02B	G05-M02B	Z28-M02B
			Sample Date	01/13/2022	01/13/2022	01/13/2022	01/13/2022	01/17/2022	01/12/2022	01/07/2022	01/07/2022	01/07/2022	01/18/2022	01/17/2022	01/10/2022	01/10/2022	01/07/2022
			Aquifer	B	B	B	B	B	B	B	B	B	B	B	B	B	B
			Sample Type	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	DUP	FS	FS
Perfluorinated Compounds																	
11Cl-PF3OUdS	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019 UJ
9Cl-PF3ONS	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019
DONA	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019
Hfpo Dimer Acid	--	UG/L		1.9	1.5	0.039	0.032	0.33	0.091	0.038	0.11	0.11	0.55	0.015	0.42	0.49	0.0065
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<0.030	<0.029	<0.0025	<0.030	<0.029	<0.0027	<0.0028	<0.0026	<0.0025	<0.029	<0.0024	<0.030	<0.030	<0.0028
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019
Perfluorobutane Sulfonic Acid	--	UG/L		0.27	1.3	<0.0017	<0.020	<0.019	0.0094	0.0039	<0.0017 UJ	0.0019	<0.020	0.0025	<0.020	<0.020	0.0061
Perfluorobutanoic Acid	--	UG/L		0.39	7.1	0.24	0.23	5.1	0.31	0.18	1.1	0.91	0.22	0.19	0.8	0.81	0.05
Perfluorodecanoic Acid	--	UG/L		0.36	1.1	0.66	0.72	0.77	0.1	0.019	0.0025	0.015	0.36	0.031	1	1.1	0.014
Perfluorododecanoic Acid	--	UG/L		<0.020	0.16	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019
Perfluoroheptanoic Acid	--	UG/L		0.41	8.8	0.24	0.23	6.5	0.56	0.51	0.3	0.53	0.39	0.28	0.79	0.78	0.083
Perfluorohexane Sulfonic Acid	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	0.0043	0.0039	<0.0017	0.0072	<0.020	0.0016	<0.020	<0.020	0.0046
Perfluorohexanoic Acid	--	UG/L		1.8	12	2.2	1.9 J	15	1.1	0.7	2.6	1.8	1.7	0.45	8.2	8.5	0.17
Perfluorononanoic Acid	0.013	UG/L		0.19	0.7	0.33	0.35	2.1	0.15	0.1	0.0065	0.084	0.25	0.088	0.43	0.45	0.036
Perfluoropentanoic Acid	--	UG/L		0.62	6.5	0.43	0.44	13	0.73	0.49	2	1.5	0.47	0.36	1.8	1.9	0.1
Perfluorotetradecanoic Acid	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019
Perfluorotridecanoic Acid	--	UG/L		<0.020	<0.019	<0.0017	<0.020	<0.019	<0.0018	<0.0019	<0.0017	<0.0017	<0.020	<0.0016	<0.020	<0.020	<0.0019
Perfluoroundecanoic Acid	--	UG/L		0.061	0.21	0.0076	<0.020	<0.019	0.0062	<0.0019	<0.0017	<0.0017	0.02	<0.0016	0.1	0.11	<0.0019
PFOA	0.014	UG/L		0.88	2.4	0.49	0.46	15	1.3	0.72	0.23	1.1	1.4	0.7	1.6	1.7	0.23
PFOS	0.013	UG/L		<0.020	<0.019	0.015	<0.020	<0.019	0.0064	0.0079	<0.0017	0.009	<0.020	0.006	<0.020	<0.020	0.0097
Field Parameters																	
Color	--	None		YES	YES	--	YES	YES	NONE	YES	YES	YES	NONE	NONE	--	NONE	YES
Dissolved Oxygen	--	MG/L		0.66	0.78	--	6.98	0.44	0.8	1.98	1.15	0.66	1.11	2.69	--	4.39	4.12
Odor	--	None		NONE	NONE	--	NONE	YES	NONE	NONE	NONE	NONE	YES	NONE	--	YES	NONE
pH	--	STD Units		6.41	6.14	--	6.7	6.26	5.78	5.4	6.41	6.47	7.07	5.89	--	7.08	5.24
Redox	--	mv		-69.9	20.5	--	87.5	-69.5	78	158.8	38.1	41.2	-51.2	130.8	--	75.3	161.9
Specific Conductance	--	umhos/cm		1072	1521	--	589	1455	889	173	2182	1304	3102	249	--	5892	193
Temperature	--	Degrees C		16.51	15.6	--	14.59	15.31	17.39	11.23	12.97	12.11	14.34	13.67	--	15.25	13.65
Turbidity Quantitative	--	NTU		7.17	52.2	--	133	1058	11.98	2531 AU*	143	814 AU*	3	7.25	--	5.05	1835 AU*

Notes:
Yellow shading = Greater than NJ CLASS IIA Criteria
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UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit
AU* = Attenuation Unit

Table 6
Summary of Analytical Results: PFAS Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJ Class IIA 06/20	Units	Location	T22-M01B	S24-M01B	AA25-M01B	Z28-M01B	C11-M01C	P06-M02C	R10-M01C	N08-M01C	AA25-M01C	L09-M01C	J05-M01C	S22-W01C	C11-M02D	P06-M01D
			Sample Date	01/05/2022	01/05/2022	01/17/2022	01/17/2022	01/14/2022	01/11/2022	01/13/2022	01/12/2022	01/17/2022	01/18/2022	01/10/2022	01/06/2022	01/14/2022	01/11/2022
			Aquifer	B	B	C	C	C	C	C	C	C	C	C	C	D	D
			Sample Type	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Perfluorinated Compounds																	
11Cl-PF3OUdS	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	<0.0018	<0.0018	<0.0017	<0.0017	<0.0017	<0.020	<0.0018	<0.018	<0.0017	<0.0019
9Cl-PF3ONS	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	<0.0018	<0.0018	<0.0017	<0.0017	<0.0017	<0.020	<0.0018	<0.018	<0.0017	<0.0019
DONA	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	<0.0018	<0.0018	<0.0017	<0.0017	<0.0017	<0.020	<0.0018	<0.018	<0.0017	<0.0019
Hfpo Dimer Acid	--	UG/L		0.24	0.08	0.0076	0.0084	0.069	0.059	0.038	0.29	<0.0025	0.12	0.042	0.037	0.09	0.012
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<0.026	<0.0025	<0.0025	<0.0027	<0.0026	<0.0026	<0.0026	0.0032	<0.0025	<0.030	<0.0026	<0.027	0.0087	<0.0028
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	<0.0018	<0.0018	<0.0017	<0.0017	<0.0017	<0.020	<0.0018	<0.018	0.0025 B	<0.0019
Perfluorobutane Sulfonic Acid	--	UG/L		0.067	0.0042	<0.0017	0.013	0.0025	0.0035	0.0027	0.13	<0.0017	0.048	<0.0018	0.021	0.023	<0.0019
Perfluorobutanoic Acid	--	UG/L		3.3	0.75	0.057	0.056	0.16	0.16	0.17	1.5	0.0084	0.37	0.57	1.3	0.1	0.064
Perfluorodecanoic Acid	--	UG/L		1.2	0.021	0.0068	0.0076	0.093	0.014	0.035	0.26	0.0098	0.082	0.55	7.9	0.091	0.056
Perfluorododecanoic Acid	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	0.056	<0.0018	0.0066	0.0022	0.002	<0.020	0.022	<0.018	<0.0017	0.0086
Perfluoroheptanoic Acid	--	UG/L		11	1.1	0.11	0.13	0.14	0.27	0.6	1	0.021	0.58	0.57	3	0.12	0.11
Perfluorohexane Sulfonic Acid	--	UG/L		0.036	0.0026	0.0046	0.0091	<0.0018	0.0052	0.0017	0.023	<0.0017	<0.020	<0.0018	<0.018	0.0041	<0.0019
Perfluorohexanoic Acid	--	UG/L		16	1.8	0.2	0.25	1.1	0.5	0.78	3	0.032	1.3	2.7	4.4	0.39	0.26
Perfluorononanoic Acid	0.013	UG/L		4.5	0.13	0.024	0.027	0.042	0.059	0.064	1.3	0.0057	0.23	0.19	2.4	0.66	0.033
Perfluoropentanoic Acid	--	UG/L		9.3	1.7	0.16	0.14	0.42	0.3	0.36	1.5	0.023	0.77	1.1	2.8	0.2	0.17
Perfluorotetradecanoic Acid	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	0.0032	<0.0018	0.0029	<0.0017	<0.0017	<0.020	<0.0018	<0.018	<0.0017	<0.0019
Perfluorotridecanoic Acid	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	0.0037	<0.0018	<0.0017	<0.0017	<0.0017	<0.020	<0.0018	<0.018	<0.0017	<0.0019
Perfluoroundecanoic Acid	--	UG/L		<0.017	<0.0017	<0.0017	<0.0018	0.05	<0.0018	0.0026	0.052	<0.0017	<0.020	0.031	0.18	0.019	0.01
PFOA	0.014	UG/L		38 J	2	0.22	0.3	0.092	0.54	0.62	3	0.024	1.5	1.8	7.8	1.1	0.17
PFOS	0.013	UG/L		0.036	0.0023	0.0062	0.014 J	0.0056	0.0076	0.0079	0.034	<0.0017	<0.020	<0.0018	0.039	0.028	<0.0019
Field Parameters																	
Color	--	None		NONE	YES	NONE	YES	YES	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
Dissolved Oxygen	--	MG/L		0.95	0.26	4.23	4.81	0.27	1.09	0.56	1.02	0.55	4.49	0.48	6.23	4.94	0.72
Odor	--	None		NONE	NONE	NONE	NONE	NONE	NONE	NONE	YES	NONE	YES	NONE	NONE	NONE	NONE
pH	--	STD Units		5.86	6.47	5.21	5.45	8.08	5.32	6.06	6.43	6.29	6.11	6.19	7.34	4.45	6.6
Redox	--	mv		92	-27.4	239.4	172.8	-101.9	103.7	11.2	-98.8	-11.6	-72.9	24.9	-5.1	239.8	-63.9
Specific Conductance	--	umhos/cm		692	275	205	256	294	409	496	2237	188	1203	433	613	2813	231
Temperature	--	Degrees C		13.54	12.27	13.2	13.93	16.67	14.84	15.02	16.25	12.68	15.04	14.26	11.48	16.96	14.25
Turbidity Quantitative	--	NTU		0.64	41.3	5.97	54.7	128	3.47	1.32	3.42	1.5	0.65	3.07	7.67	5.68	9.22

Notes:
Yellow shading = Greater than NJ CLASS IIA Criteria
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FS = Field Sample
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UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit
AU* = Attenuation Unit

Table 6
Summary of Analytical Results: PFAS Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJ Class IIA 06/20	Units	Location	N08-M01D	L09-M01D	G04-M01E	P06-M01E	R10-M01E	C11-M01E
			Sample Date	01/12/2022	01/18/2022	01/10/2022	01/11/2022	01/13/2022	01/14/2022
			Aquifer	D	D	E	E	E	E
			Sample Type	FS	FS	FS	FS	FS	FS
Perfluorinated Compounds									
11Cl-PF3OUdS	--	UG/L		<0.0017	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
9Cl-PF3ONS	--	UG/L		<0.0017	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
DONA	--	UG/L		<0.0017	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
Hfpo Dimer Acid	--	UG/L		0.23	2	0.0085	0.48	0.18	<0.0025
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<0.0025	<0.030	<0.0027	<0.0026	<0.0027	<0.0025
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		<0.0017	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
Perfluorobutane Sulfonic Acid	--	UG/L		0.11	<0.020 UJ	<0.0018	<0.0017 UJ	<0.0018 UJ	<0.0017
Perfluorobutanoic Acid	--	UG/L		0.54	1.5	<0.0044	0.09	0.049	<0.0042
Perfluorodecanoic Acid	--	UG/L		0.079	0.2	0.0029	<0.0017	<0.0018	<0.0017
Perfluorododecanoic Acid	--	UG/L		<0.0017	<0.020	0.0033	<0.0017	<0.0018	<0.0017
Perfluoroheptanoic Acid	--	UG/L		0.85	1.2	0.0019	0.043	0.022	<0.0017
Perfluorohexane Sulfonic Acid	--	UG/L		0.0081 J	0.040 J	<0.0018	0.017 J	0.0024 J	<0.0017
Perfluorohexanoic Acid	--	UG/L		2.2	3.5	0.0067	0.14	0.063	<0.0017
Perfluorononanoic Acid	0.013	UG/L		0.37	0.61	<0.0018	0.0025	<0.0018	<0.0017
Perfluoropentanoic Acid	--	UG/L		1	2.1 J	0.0045	0.073 J	0.041 J	<0.0017
Perfluorotetradecanoic Acid	--	UG/L		<0.0017	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
Perfluorotridecanoic Acid	--	UG/L		<0.0017	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
Perfluoroundecanoic Acid	--	UG/L		0.0033	<0.020	<0.0018	<0.0017	<0.0018	<0.0017
PFOA	0.014	UG/L		2	3.7	0.0062	0.055	0.018	<0.0017
PFOS	0.013	UG/L		0.0083	0.048	<0.0018	<0.0017	<0.0018	<0.0017
Field Parameters									
Color	--	None		NONE	NONE	NONE	NONE	NONE	YES
Dissolved Oxygen	--	MG/L		0.83	6.27	0.27	0.91	0.65	0.52
Odor	--	None		NONE	YES	NONE	NONE	NONE	NONE
pH	--	STD Units		6.23	6.36	6.6	7.31	7.2	6.44
Redox	--	mv		-56.4	-53.5	-31.9	-67.3	-93	-67.9
Specific Conductance	--	umhos/cm		1977	2162	772	704	680	410
Temperature	--	Degrees C		15.92	14.31	15.25	14.6	15.23	15.29
Turbidity Quantitative	--	NTU		9.47	4.7	8.72	1.08	3.44	615

Notes:
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mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit
AU* = Attenuation Unit

Table 7
Summary of Analytical Results: Secure C Landfill Corrective Action Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJGWIIA	Units	Location	P21-M01B	P21-M04B	P21-R01B	P21-R01B	Q21-M01B	Q20-R01B
			Sample Date	1/6/2022	01/06/2022	01/06/2022	01/06/2022	01/06/2022	01/06/2022
			Sample Type	FS	FS	DUP	FS	FS	FS
Volatile Organic Compounds (VOCs)									
1,1,1-Trichloroethane	30	UG/L		--	--	--	--	<0.30	--
1,1,2,2-Tetrachloroethane	1	UG/L		--	--	--	--	<0.30	--
1,1,2-Trichloroethane	3	UG/L		--	--	--	--	<0.30	--
1,1,2-Trichlorotrifluoroethane	20000	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1-Dichloroethane	50	UG/L		--	--	--	--	<0.30	--
1,1-Dichloroethene	1	UG/L		--	--	--	--	<0.30	--
1,2-Dibromo-3-Chloropropane	0.02	UG/L		<0.0096	<0.0095	<0.0096	<0.0096	<0.0096	<0.0096
1,2-Dibromoethane (EDB)	0.03	UG/L		<0.0096	<0.0095	<0.0096	<0.0096	<0.0096	<0.0096
1,2-Dichlorobenzene	600	UG/L		--	--	--	--	0.20 J	--
1,2-Dichlorobenzene	600	UG/L		51 J	<0.57 UJ	2.8 J	2.8 J	<0.56 UJ	2.5 J
1,2-Dichloroethane	2	UG/L		--	--	--	--	<0.30	--
1,2-Dichloropropane	1	UG/L		--	--	--	--	<0.30	--
1,3-Dichlorobenzene	600	UG/L		--	--	--	--	<0.30	--
1,4-Dichlorobenzene	75	UG/L		--	--	--	--	<0.30	--
1,4-Dichlorobenzene	75	UG/L		<5.6 UJ	<0.57 UJ	<0.51 UJ	<0.51 UJ	<0.56 UJ	<0.53 UJ
2-Hexanone	40	UG/L		--	--	--	--	<0.40	--
Acetone	6000	UG/L		--	--	--	--	2.7 J	--
Benzene	1	UG/L		75	<0.30	<0.30	<0.30	<0.30	0.52 J
Bromodichloromethane	1	UG/L		--	--	--	--	<0.20	--
Bromoform	4	UG/L		--	--	--	--	<1.0	--
Carbon Disulfide	700	UG/L		--	--	--	--	<0.30	--
Carbon Tetrachloride	1	UG/L		--	--	--	--	<0.30	--
Chlorobenzene	50	UG/L		800	0.39 J	5.4	5.2	0.63 J	11
Chlorodibromomethane	1	UG/L		--	--	--	--	<0.20	--
Chloroform	70	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30	0.63 B
cis-1,2 Dichloroethene	70	UG/L		--	--	--	--	<0.30	--
cis-1,3-Dichloropropene	--	UG/L		--	--	--	--	<0.20	--
Cumene	700	UG/L		--	--	--	--	<0.20	--
Cyclohexane	--	UG/L		--	--	--	--	<1.0	--
Dichlorodifluoromethane	1000	UG/L		--	--	--	--	<0.20	--
Ethyl Chloride	--	UG/L		--	--	--	--	<0.20	--
Ethylbenzene	700	UG/L		--	--	--	--	<0.40	--
Methyl Acetate	7000	UG/L		--	--	--	--	<0.30	--
Methyl Bromide	10	UG/L		--	--	--	--	<0.30	--
Methyl Chloride	--	UG/L		--	--	--	--	<0.20	--
Methyl Ethyl Ketone	300	UG/L		--	--	--	--	<0.50	--
Methyl Isobutyl Ketone	--	UG/L		--	--	--	--	<0.50	--
Methyl Tertiary Butyl Ether	70	UG/L		--	--	--	--	<0.20	--
Methylene Chloride	3	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Styrene	100	UG/L		--	--	--	--	<0.30	--
Tetrachloroethene	1	UG/L		--	--	--	--	<0.30	--
Toluene	600	UG/L		8.9	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethene	100	UG/L		--	--	--	--	<0.30	--
trans-1,3-Dichloropropene	--	UG/L		--	--	--	--	<0.20	--
Trichloroethene	1	UG/L		1.3	<0.30	0.46 J	0.49 J	<0.30	0.37 J
Trichlorofluoromethane	2000	UG/L		--	--	--	--	<0.20	--
Vinyl Chloride	1	UG/L		--	--	--	--	<0.20	--
Xylenes	1000	UG/L		--	--	--	--	<0.40	--
Semi-Volatile Organic Compounds (SVOCs)									
1,2,4-Trichlorobenzene	9	UG/L		--	--	--	--	<0.30	--
1,2,4-Trichlorobenzene	9	UG/L		<5.6	<0.57	<0.51	<0.51 UJ	<0.56	<0.53
1,4-Dioxane	0.4	UG/L		75	0.36 J	2.1 J	1.6 J	4.9	1.2
2,4,5-Trichlorophenol	700	UG/L		--	--	--	--	<0.56	--
2,4,6-Trichlorophenol	20	UG/L		--	--	--	--	<0.56	--
2,4-Dichlorophenol	20	UG/L		--	--	--	--	<0.56	--
2,4-Dimethylphenol	100	UG/L		--	--	--	--	<3.3	--
2,4-Dinitrophenol	40	UG/L		--	--	--	--	<16	--
2,4-Dinitrotoluene	--	UG/L		--	--	--	--	<1.1	--
2,6-Dinitrotoluene	--	UG/L		--	--	--	--	<0.56	--
2-Chloronaphthalene	600	UG/L		--	--	--	--	<0.44	--
2-Chlorophenol	40	UG/L		--	--	--	--	<0.56	--
2-Methylnaphthalene	30	UG/L		--	--	--	--	<0.11	--

Table 7
Summary of Analytical Results: Secure C Landfill Corrective Action Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	P21-M01B	P21-M04B	P21-R01B	P21-R01B	Q21-M01B	Q20-R01B
			Sample Date	1/6/2022	01/06/2022	01/06/2022	01/06/2022	01/06/2022	01/06/2022
Analyte	NJGWIIA	Units	Sample Type	FS	FS	DUP	FS	FS	FS
2-Methylphenol (o-Cresol)	50	UG/L		--	--	--	--	<0.56	--
2-Nitroaniline	--	UG/L		--	--	--	--	<1.1	--
2-Nitrophenol	--	UG/L		--	--	--	--	<1.1	--
3,3'-Dichlorobenzidine	30	UG/L		--	--	--	--	<4.4	--
3-Nitroaniline	--	UG/L		--	--	--	--	<2.2	--
4,6-Dinitro-2-Methylphenol	0.7	UG/L		--	--	--	--	<8.9	--
4-Bromophenyl Phenyl Ether	--	UG/L		--	--	--	--	<0.56	--
4-Chloro-3-Methylphenol	--	UG/L		--	--	--	--	<1.1	--
4-Chloroaniline	30	UG/L		3000	<4.5	<4.1	<4.1	<4.4	<4.3
4-Chlorophenyl Phenyl Ether	--	UG/L		--	--	--	--	<0.56	--
4-Methylphenol (p-Cresol)	50	UG/L		--	--	--	--	<0.56	--
4-Nitroaniline	--	UG/L		--	--	--	--	<1.0	--
4-Nitrophenol	--	UG/L		--	--	--	--	<11	--
Acenaphthene	400	UG/L		--	--	--	--	<0.11	--
Acenaphthylene	--	UG/L		--	--	--	--	<0.11	--
Acetophenone	700	UG/L		--	--	--	--	<1.1	--
Aniline	6	UG/L		45 J	<1.1 UJ	<1.0 UJ	<1.0 UJ	<1.1 UJ	<1.1 UJ
Anthracene	2000	UG/L		--	--	--	--	<0.11	--
Benzaldehyde	--	UG/L		--	--	--	--	<1.1	--
Benzo(A)Anthracene	0.1	UG/L		--	--	--	--	<0.011	--
Benzo(A)Pyrene	0.1	UG/L		--	--	--	--	<0.011	--
Benzo(B)Fluoranthene	0.2	UG/L		--	--	--	--	<0.011	--
Benzo(G,H,I)Perylene	--	UG/L		--	--	--	--	<0.11	--
Benzo(K)Fluoranthene	0.5	UG/L		--	--	--	--	<0.11	--
Biphenyl	400	UG/L		--	--	--	--	<0.56	--
Bis(2-Chloro-1-Methylethyl) Ether	300	UG/L		--	--	--	--	<0.56	--
Bis(2-Chloroethoxy)Methane	--	UG/L		--	--	--	--	<0.56	--
Bis(2-Chloroethyl)Ether	7	UG/L		--	--	--	--	<0.56	--
Bis(2-Ethylhexyl)Phthalate	3	UG/L		--	--	--	--	<0.056 UJ	--
Butyl Benzyl Phthalate	100	UG/L		--	--	--	--	<2.2 UJ	--
Caprolactam	4000	UG/L		--	--	--	--	<3.3 UJ	--
Carbazole	--	UG/L		--	--	--	--	<0.56	--
Chrysene	5	UG/L		--	--	--	--	<0.11	--
Di-N-Butyl Phthalate	700	UG/L		--	--	--	--	<2.2	--
Dibenz(A,H)Anthracene	0.3	UG/L		--	--	--	--	<0.022 UJ	--
Dibenzofuran	--	UG/L		--	--	--	--	<0.56	--
Diethyl Phthalate	6000	UG/L		--	--	--	--	<2.2	--
Dimethyl Phthalate	--	UG/L		--	--	--	--	<2.2 UJ	--
Dodecanoic Acid	--	UG/L		--	--	--	--	76 J	--
Fluoranthene	300	UG/L		--	--	--	--	<0.11	--
Fluorene	300	UG/L		--	--	--	--	<0.13	--
Hexachlorobenzene	0.02	UG/L		--	--	--	--	<0.022	--
Hexachlorobutadiene	1	UG/L		--	--	--	--	<0.56 UJ	--
Hexachlorocyclopentadiene	40	UG/L		--	--	--	--	<5.6	--
Hexachloroethane	7	UG/L		--	--	--	--	<0.56 UJ	--
Indeno(1,2,3-CD)Pyrene	0.2	UG/L		--	--	--	--	<0.022	--
Isophorone	40	UG/L		--	--	--	--	<0.56	--
Methyl Cyclohexane	--	UG/L		--	--	--	--	<0.50	--
N-Dioctyl Phthalate	100	UG/L		--	--	--	--	<5.6	--
N-Nitrosodi-N-Propylamine	10	UG/L		--	--	--	--	<0.56	--
N-Nitrosodimethylamine	0.8	UG/L		--	--	--	--	<2.2 UJ	--
N-Nitrosodimethylamine	0.8	UG/L		2.9 J	0.034 J	0.15 J	0.17 J	1.6 J	0.044 J
N-Nitrosodiphenylamine	10	UG/L		--	--	--	--	<0.56	--
Naphthalene	300	UG/L		6.1	<0.11	<0.10	<0.10	<0.11	<0.11
Nitrobenzene	6	UG/L		--	--	--	--	<0.56	--
o-Toluidine	--	UG/L		300 J	<4.5 UJ	<4.1 UJ	<4.1 UJ	<4.4 UJ	<4.3 UJ
Pentachlorophenol	0.3	UG/L		--	--	--	--	<0.028	--
Phenanthrene	--	UG/L		--	--	--	--	<0.12	--
Phenol	2000	UG/L		--	--	--	--	<0.56	--
Pyrene	200	UG/L		--	--	--	--	<0.11	--

Table 7
Summary of Analytical Results: Secure C Landfill Corrective Action Monitoring Program
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJGWIIA	Units	Location Sample Date Sample Type	P21-M01B 1/6/2022 FS	P21-M04B 01/06/2022 FS	P21-R01B 01/06/2022 DUP	P21-R01B 01/06/2022 FS	Q21-M01B 01/06/2022 FS	Q20-R01B 01/06/2022 FS
Organics									
Total Organics	--	MG/L		4.3202	0.00784	--	0.01026	0.08603	0.016264
Total Organic Carbon	--	UG/L		70000 J	4800 J	10000 J	10000 J	40000 J	7100 J
Total Organic Halogen	--	UG/L		5500	870	82 J	87 J	610	180
Total Phenols	--	UG/L		54 J	<10	<10	<10	<10	<10
Metals									
Aluminum	200	UG/L		<150	9900	<150	<150	1800	<150
Arsenic	3	UG/L		26	2.7	8.2	8.3	4.5	3.7
Lead	5	UG/L		0.55	9.8	0.084 J	0.11 J	1.7	13
Sodium	50000	UG/L		120000	97000	69000	68000	280000	210000
Miscellaneous Parameters									
Ammonia	3000	UG/L		18000	1100 J	1600	1900 J	13000	1900 J
Atrazine	3	UG/L		--	--	--	--	<1.1	--
Chloride	250000	UG/L		320000	210000	91000	90000	600000	500000
Cyanide	100	UG/L		<5.0	<5.0	<5.0	<5.0	54	<5.0
Nitrate	10000	UG/L		<40	<40	390	360	<40	<40
Sulfate	250000	UG/L		91000	110000	170000	160000	320000	140000
Field Measurements									
Color	--	--		YES	YES	--	NONE	YES	YES
Dissolved Oxygen	--	MG/L		1.26	0.62	--	4.45	6.85	0.84
Odor	--	--		YES	NONE	--	NONE	NONE	NONE
pH	--	STD UNITS		6.65	5.7	--	6.22	5.89	6.67
Redox	--	MV		-53.6	77	--	117.6	71.5	-58.5
Specific Conductance	--	UMHOS/CM		1923	1026	--	1060	2009	3302
Temperature	--	DEGREES C		15.91	13.58	--	8.62	13.95	15.18
Turbidity Quantitative	--	NTU		127	101.3	--	2.48	96	58.9

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
B = Not detected substantially above the level reported in the laboratory or field blanks.
J = Analyte present. Reported value may not be accurate or precise.
R = Unusable result
UJ = Not detected. Reporting limit may not be accurate or precise.
Yellow Shading = Exceedence of NJGWIIA Criteria
Orange Shading = Detection limit is above screening criteria
-- = Not Analyzed or Not Requested for this event
< = Non detect at stated reporting limit.
FS = Field Sample
DUP = Duplicate Sample
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit

Table 8
Summary of Analytical Results: Secure C Landfill Detection Monitoring Program
First Semester 2021 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location ID	R19-M01B	R19-M01B	R19-M02B	S19-M01B	S19-M02B
			Date Sampled	01/05/2022	01/05/2022	01/05/2022	01/05/2022	01/05/2022
Analyte	**NJGWIIA**	**Units**	**Sample Type**	FS	DUP	FS	FS	FS
Volatile Organic Compounds (VOCs)								
1,1,1-Trichloroethane	30	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2,2-Tetrachloroethane	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2-Trichloroethane	3	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2-Trichlorotrifluoroethane	20000	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,1-Dichloroethane	50	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,1-Dichloroethene	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Dibromo-3-Chloropropane	0.02	UG/L		<0.0095	<0.0095	<0.0095	<0.0095	<0.0095
1,2-Dibromoethane (EDB)	0.03	UG/L		<0.0095	<0.0095	<0.0095	<0.0095	<0.0095
1,2-Dichlorobenzene	600	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	600	UG/L		<0.53 UJ	<0.51 UJ	<0.53 UJ	<0.52 UJ	<0.52 UJ
1,2-Dichloroethane	2	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Dichloropropane	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,3-Dichlorobenzene	600	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,4-Dichlorobenzene	75	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,4-Dichlorobenzene	75	UG/L		<0.53 UJ	<0.51 UJ	<0.53 UJ	<0.52 UJ	<0.52 UJ
2-Hexanone	40	UG/L		<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	6000	UG/L		<0.70	<0.70	<0.70	<0.70	<0.70
Benzene	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Bromodichloromethane	1	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	4	UG/L		<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	700	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Chlorobenzene	50	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Chlorodibromomethane	1	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	70	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
cis-1,2 Dichloroethene	70	UG/L		<0.30	<0.30	<0.30	0.33 J	<0.30
cis-1,3-Dichloropropene	--	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Cumene	700	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Cyclohexane	--	UG/L		<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	1000	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Ethyl Chloride	--	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	700	UG/L		<0.40	<0.40	<0.40	<0.40	<0.40
Methyl Acetate	7000	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Bromide	10	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Chloride	--	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Ethyl Ketone	300	UG/L		<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	--	UG/L		<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Tertiary Butyl Ether	70	UG/L		<0.20	<0.20	<0.20	0.37 J	<0.20
Methylene Chloride	3	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Styrene	100	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Tetrachloroethene	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Toluene	600	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethene	100	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	--	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene	1	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
Trichlorofluoromethane	2000	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	1	UG/L		<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes	1000	UG/L		<0.40	<0.40	<0.40	<0.40	<0.40
Semi-Volatile Organic Compounds (SVOCs)								
1,2,4-Trichlorobenzene	9	UG/L		<0.30	<0.30	<0.30	<0.30	<0.30
1,2,4-Trichlorobenzene	9	UG/L		<0.53 UJ	<0.51 UJ	<0.53 UJ	<0.52 UJ	<0.52 UJ
1,4-Dioxane	0.4	UG/L		0.27 J	0.35 J	0.20 J	0.19 J	<0.17
2,4,5-Trichlorophenol	700	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
2,4,6-Trichlorophenol	20	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
2,4-Dichlorophenol	20	UG/L		<0.53 UJ	<0.51	<0.53	<0.52	<0.52
2,4-Dimethylphenol	100	UG/L		<3.2	<3.1	<3.2	<3.1	<3.1
2,4-Dinitrophenol	40	UG/L		<15	<14	<15	<14	<15
2,4-Dinitrotoluene	--	UG/L		<1.1	<1.0	<1.1	<1.0	<1.0
2,6-Dinitrotoluene	--	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
2-Chloronaphthalene	600	UG/L		<0.42 UJ	<0.41 UJ	<0.43 UJ	<0.41 UJ	<0.42 UJ
2-Chlorophenol	40	UG/L		<0.53 UJ	<0.51	<0.53	<0.52	<0.52

Table 8
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First Semester 2021 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location ID	R19-M01B	R19-M01B	R19-M02B	S19-M01B	S19-M02B
			Date Sampled	01/05/2022	01/05/2022	01/05/2022	01/05/2022	01/05/2022
Analyte	**NJGWIIA**	**Units**	**Sample Type**	FS	DUP	FS	FS	FS
2-Methylnaphthalene	30	UG/L		<0.11 UJ	<0.10 UJ	<0.11 UJ	<0.10 UJ	<0.10 UJ
2-Methylphenol (o-Cresol)	50	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
2-Nitroaniline	--	UG/L		<1.1	<1.0	<1.1	<1.0	<1.0
2-Nitrophenol	--	UG/L		<1.1	<1.0	<1.1	<1.0	<1.0
3,3'-Dichlorobenzidine	30	UG/L		<4.2 UJ	<4.1 UJ	<4.3 UJ	<4.1 UJ	<4.2 UJ
3-Nitroaniline	--	UG/L		<2.1	<2.0	<2.1	<2.1	<2.1
4,6-Dinitro-2-Methylphenol	0.7	UG/L		<8.4	<8.1	<8.6	<8.3	<8.3
4-Bromophenyl Phenyl Ether	--	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
4-Chloro-3-Methylphenol	--	UG/L		<1.1	<1.0	<1.1	<1.0	<1.0
4-Chloroaniline	30	UG/L		<4.2	<4.1	<4.3	<4.1	<4.2
4-Chlorophenyl Phenyl Ether	--	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
4-Methylphenol (p-Cresol)	50	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
4-Nitroaniline	--	UG/L		<0.95	<0.92	<0.96	<0.93	<0.94
4-Nitrophenol	--	UG/L		<11	<10	<11	<10	<10
Acenaphthene	400	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Acenaphthylene	--	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Acetophenone	700	UG/L		<1.1	<1.0	<1.1	<1.0	<1.0
Anthracene	2000	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Benzaldehyde	--	UG/L		<1.1 UJ	<1.0 UJ	<1.1 UJ	<1.0 UJ	<1.0 UJ
Benzo(A)Anthracene	0.1	UG/L		<0.011	<0.010	<0.011	<0.010	<0.010
Benzo(A)Pyrene	0.1	UG/L		<0.011	<0.010	<0.011	<0.010	<0.010
Benzo(B)Fluoranthene	0.2	UG/L		<0.011	<0.010	<0.011	<0.010	<0.010
Benzo(G,H,I)Perylene	--	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Benzo(K)Fluoranthene	0.5	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Biphenyl	400	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Bis(2-Chloro-1-Methylethyl) Ether	300	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Bis(2-Chloroethoxy)Methane	--	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Bis(2-Chloroethyl)Ether	7	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Bis(2-Ethylhexyl)Phthalate	3	UG/L		0.18 B	0.084 B	0.19 B	0.48 J	<0.052 UJ
Butyl Benzyl Phthalate	100	UG/L		<2.1 UJ	<2.0 UJ	<2.1 UJ	<2.1 UJ	<2.1 UJ
Caprolactam	4000	UG/L		<3.2 UJ	<3.1 UJ	<3.2 UJ	<3.1 UJ	<3.1 UJ
Carbazole	--	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Chrysene	5	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Di-N-Butyl Phthalate	700	UG/L		<2.1	<2.0	<2.1	<2.1	<2.1
Dibenz(A,H)Anthracene	0.3	UG/L		<0.021	<0.020	<0.021	<0.021	<0.021
Dibenzofuran	--	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Diethyl Phthalate	6000	UG/L		<2.1	<2.0	<2.1	<2.1	<2.1
Dimethyl Phthalate	--	UG/L		<2.1 UJ	<2.0 UJ	<2.1 UJ	<2.1 UJ	<2.1 UJ
Dodecanoic Acid	--	UG/L		14 J	--	32 J	30 J	--
Fluoranthene	300	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Fluorene	300	UG/L		<0.13	<0.12	<0.13	<0.12	<0.12
Hexachlorobenzene	0.02	UG/L		<0.021	<0.020	<0.021	<0.021	<0.021
Hexachlorobutadiene	1	UG/L		<0.53 UJ	<0.51 UJ	<0.53 UJ	<0.52 UJ	<0.52 UJ
Hexachlorocyclopentadiene	40	UG/L		<5.3 UJ	<5.1 UJ	<5.3 UJ	<5.2 UJ	<5.2 UJ
Hexachloroethane	7	UG/L		<0.53 UJ	<0.51 UJ	<0.53 UJ	<0.52 UJ	<0.52 UJ
Indeno(1,2,3-CD)Pyrene	0.2	UG/L		<0.021 UJ	<0.020 UJ	<0.021 UJ	<0.021 UJ	<0.021 UJ
Isophorone	40	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Methyl Cyclohexane	--	UG/L		<0.50	<0.50	<0.50	<0.50	<0.50
N-Dioctyl Phthalate	100	UG/L		<5.3	<5.1	<5.3	<5.2	<5.2
N-Nitrosodi-N-Propylamine	10	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
N-Nitrosodimethylamine	0.8	UG/L		--	--	--	--	--
N-Nitrosodiphenylamine	10	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Naphthalene	300	UG/L		<0.11 UJ	<0.10 UJ	<0.11 UJ	<0.10 UJ	<0.10 UJ
Nitrobenzene	6	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
o-Toluidine	--	UG/L		<4.2	<4.1	<4.3	<4.1	<4.2
Octadecanoic Acid	--	UG/L		--	--	--	9.0 J	--
Pentachlorophenol	0.3	UG/L		<0.026 UJ	<0.026	<0.027	<0.026	<0.028
Phenanthrene	--	UG/L		<0.12	<0.11	<0.12	<0.11	<0.11
Phenol	2000	UG/L		<0.53	<0.51	<0.53	<0.52	<0.52
Pyrene	200	UG/L		<0.11	<0.10	<0.11	<0.10	<0.10
Organics								
Total Organics	--	MG/L		0.01445	--	0.03239	0.04037	ND

Table 8
Summary of Analytical Results: Secure C Landfill Detection Monitoring Program
First Semester 2021 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location ID	R19-M01B	R19-M01B	R19-M02B	S19-M01B	S19-M02B
			Date Sampled	01/05/2022	01/05/2022	01/05/2022	01/05/2022	01/05/2022
Analyte	**NJGWIIA**	**Units**	**Sample Type**	FS	DUP	FS	FS	FS
Total Organic Carbon	--	UG/L		7600 J	7500 J	1800 J	1300 J	1500 J
Total Organic Halogen	--	UG/L		72 B	100	24 B	43 B	61 B
Total Phenols	--	UG/L		<10	<10	<10	<10	<10
Metals								
Aluminum	200	UG/L		<150	<150	380	<150	<150
Arsenic	3	UG/L		3.9	2.5	9.6	<0.68	<0.68
Lead	5	UG/L		0.83	0.67	5.2	0.86	0.34 J
Sodium	50000	UG/L		20000	20000	15000	35000	130000
Miscellaneous Parameters								
Chloroiodomethane	--	UG/L		4.5 J	5.6 J	--	--	--
N-Hexadecanoic Acid	--	UG/L		--	--	--	20 J	--
Atrazine	3	UG/L		<1.1	<1.0	<1.1	<1.0	<1.0
Chloride	250000	UG/L		24000 J	24000	49000	100000	170000
Nitrate	10000	UG/L		58 J	<40	<40	<40	310
Sulfate	250000	UG/L		230000	240000	78000	110000	94000
Ammonia	3000	UG/L		1900 J	2900 J	<250	<250	<250
Cyanide	100	UG/L		<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ
Field Measurements								
Color	--	None		YES	--	NONE	NONE	NONE
Dissolved Oxygen	--	Mg/L		0.59	--	0.35	0.88	1.29
Odor	--	None		NONE	--	NONE	NONE	NONE
pH	--	STD Units		6.42	--	5.99	5.04	5.57
Redox	--	mv		22.3	--	32.3	127.9	104.3
Specific Conductance	--	umhos/cm		1077	--	507	605	1023
Temperature	--	Degrees C		15.96	--	16.37	15.79	15.41
Turbidity Quantitative	--	NTU		26.4	--	6.8	2.15	1.16

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
J = Analyte present. Reported value may not be accurate or precise.
R = Unusable result
UJ = Not detected. Reporting limit may not be accurate or precise
Yellow Shading = Exceedence of NJGWIIA Criteria
Orange Shading = Detection Limit is above NJGWIIA Criteria
-- = Not Analyzed or Not Requested for this event
< = Non detect at stated reporting limit.
FS = Field Sample
DUP = Duplicate Sample
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit

Table 9
Summary of Analytical Results: Secure C Landfill Background Wells
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJGWIIA	Units	Location ID Date Sampled Sample Purpose	S24-M01B 01/05/2022 FS	T22-M01B 01/05/2022 FS
Volatile Organic Compounds (VOCs)					
1,1,2-Trichlorotrifluoroethane	20000	UG/L		<0.30	<0.30
1,2-Dichlorobenzene	600	UG/L		<0.51 UJ	<0.51 UJ
1,2-Dichloropropane	1	UG/L		<0.30	<0.30
1,4-Dichlorobenzene	75	UG/L		<0.51 UJ	<0.51 UJ
Benzene	1	UG/L		<0.30	<0.30
Chlorobenzene	50	UG/L		<0.30	<0.30
Chloroform	70	UG/L		<0.30	<0.30
Ethylbenzene	700	UG/L		<0.40	<0.40
Methylene Chloride	3	UG/L		<0.30	<0.30
Toluene	600	UG/L		<0.20	<0.20
Trichloroethene	1	UG/L		<0.30	<0.30
Xylenes	1000	UG/L		<0.40	<0.40
Semi-Volatile Organic Compounds (SVOCs)					
1,2,4-Trichlorobenzene	9	UG/L		<0.51 UJ	<0.51 UJ
1,4-Dioxane	0.4	UG/L		<0.17	<0.17
4-Chloroaniline	30	UG/L		<4.1	<4.1
Aniline	6	UG/L		<1.0 UJ	<1.0 UJ
N-Nitrosodimethylamine	0.8	UG/L		<0.021 UJ	<0.020 UJ
Naphthalene	300	UG/L		<0.10 UJ	<0.10 UJ
o-Toluidine	--	UG/L		<4.1	<4.1
Organics					
Total Organics	--	MG/L		ND	ND
Total Organic Carbon	--	UG/L		2900 J	2300 J
Total Organic Halogen	--	UG/L		110	72 B
Total Phenols	--	UG/L		<10	<10
Metals					
Aluminum	200	UG/L		<150	<150
Arsenic	3	UG/L		79	<0.68
Lead	5	UG/L		0.26 J	0.18 J
Sodium	50000	UG/L		4400	71000
Miscellaneous Parameters					
Ammonia	3000	UG/L		330 J	<250
Chloride	250000	UG/L		14000 J	92000
Cyanide	100	UG/L		<5.0 UJ	<5.0 UJ
Nitrate	10000	UG/L		130	67 J
Sulfate	250000	UG/L		25000	110000
Field Measurements					
Color	--	None		YES	NONE
Dissolved Oxygen	--	Mg/L		0.26	0.95
Odor	--	None		NONE	NONE
pH	--	STD Units		6.47	5.86
Redox	--	mv		-27.4	92
Specific Conductance	--	umhos/cm		275	692
Temperature	--	Degrees C		12.27	13.54
Turbidity Quantitative	--	NTU		41.3	0.64

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
ND = Non-detect
J = Analyte present. Reported value may not be accurate or precise.
B = Not detected substantially above the level reported in the laboratory or field blanks.
UJ = Not detected. Reporting limit may not be accurate or precise
Yellow Shading = Exceedence of NJGWIIA Criteria
Orange Shading = Detection Limit is above NJGWIIA Criteria
-- = Not Analyzed or Not Requested for this event
< = Non detect at stated reporting limit.

FS = Field Sample
DUP = Duplicate Sample
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit

Table 10
Summary of Analytical Results: E Aquifer
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	G04-M01E	G04-M01E	G04-M01E	G04-M01E	G04-M02E	G04-M02E	G04-M03E	G04-M03E	G04-M04E	G04-M04E	J04-M02E	J04-M02E	J04-M03E	J04-M03E	J04-M04E	J04-M04E	J04-M05E	J04-M05E
			Sample Date	03/30/2022	03/30/2022	05/18/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/30/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022
Analyte	**NJGWIIA**	**UNITS**	**Sample Type**	FS	DUP	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Volatile Organic Compounds (VOCs)																					
1,1,1-Trichloroethane	30	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,1,2,2-Tetrachloroethane	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,1,2-Trichloroethane	3	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,1,2-Trichlorotrifluoroethane	20000	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,1-Dichloroethane	50	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,1-Dichloroethene	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,2-Dibromo-3-Chloropropane	0.02	UG/L		<0.0093	<0.0094	--	--	<0.0095	--	<0.0093	--	<0.0095	--	<0.0096	--	<0.0096	--	<0.0095	--	<0.0096	--
1,2-Dibromo-3-Chloropropane	0.02	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,2-Dibromoethane (EDB)	0.03	UG/L		<0.0093	<0.0094	--	--	<0.0095	--	<0.0093	--	<0.0095	--	<0.0096	--	<0.0096	--	<0.0095	--	<0.0096	--
1,2-Dibromoethane (EDB)	0.03	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
1,2-Dichlorobenzene	600	UG/L		0.27 J	0.25 J	--	--	<0.20	--	<0.20	--	<0.20	--	0.66 J	--	0.21 J	--	<0.20	--	<0.20	--
1,2-Dichloroethane	2	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,2-Dichloropropane	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,3-Dichlorobenzene	600	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,4-Dichlorobenzene	75	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
2-Hexanone	40	UG/L		<0.40	<0.40	--	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--
Acetone	6000	UG/L		<0.70	<0.70	--	--	<0.70	--	<0.70	--	<0.70	--	<0.70	--	<0.70	--	<0.70	--	<0.70	--
Benzene	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Bromodichloromethane	1	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Bromoform	4	UG/L		<1.0	<1.0	--	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
Carbon Disulfide	700	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Carbon Tetrachloride	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Chlorobenzene	50	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	3.9	--	<0.30	--	<0.30	--	<0.30	--
Chlorodibromomethane	1	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Chloroform	70	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
cis-1,2 Dichloroethene	70	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	0.48 J	--	<0.30	--	<0.30	--	<0.30	--
cis-1,3-Dichloropropene	--	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Cumene	700	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Cyclohexane	--	UG/L		<1.0	<1.0	--	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
Dichlorodifluoromethane	1000	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Ethane	--	UG/L		<1.0	<1.0	--	--	<1.0	--	1.2 J	--	<1.0	--	<1.0	--	<1.0	--	1.5 J	--	<1.0	--
Ethene	--	UG/L		<1.0	<1.0	--	--	<1.0	--	2.7 J	--	5.5	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
Ethyl Chloride	--	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Ethylbenzene	700	UG/L		<0.40	<0.40	--	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--
Methane	--	UG/L		2500	2200	--	--	10000	--	5100	--	820	--	900	--	2400	--	2300	--	790	--
Methyl Acetate	7000	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Methyl Bromide	10	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Methyl Chloride	--	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Methyl Ethyl Ketone	300	UG/L		<0.50	<0.50	--	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Methyl Isobutyl Ketone	--	UG/L		<0.50	<0.50	--	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Methyl Tertiary Butyl Ether	70	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Methylene Chloride	3	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Propane	--	UG/L		<1.0	<1.0	--	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
Styrene	100	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Tetrachloroethene	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	0.61 J	--	<0.30	--	<0.30	--	<0.30	--
Toluene	600	UG/L		<0.20	<0.20	--	--	0.20 J	--	<0.20	--	<0.20	--	0.39 J	--	<0.20	--	<0.20	--	0.20 J	--
trans-1,2-Dichloroethene	100	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
trans-1,3-Dichloropropene	--	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Trichloroethene	1	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
Trichlorofluoromethane	2000	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Vinyl Chloride	1	UG/L		<0.20	<0.20	--	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--	<0.20	--
Xylenes	1000	UG/L		<0.40	<0.40	--	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--	<0.40	--

Table 10
Summary of Analytical Results: E Aquifer
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	G04-M01E	G04-M01E	G04-M01E	G04-M01E	G04-M02E	G04-M02E	G04-M03E	G04-M03E	G04-M04E	G04-M04E	J04-M02E	J04-M02E	J04-M03E	J04-M03E	J04-M04E	J04-M04E	J04-M05E	J04-M05E
			Sample Date	03/30/2022	03/30/2022	05/18/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/30/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022
Analyte	**NJGWIIA**	**UNITS**	**Sample Type**	FS	DUP	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Semi-Volatile Organic Compounds (SVOCs)																					
1,2,4-Trichlorobenzene	9	UG/L		<0.30	<0.30	--	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--	<0.30	--
1,4-Dioxane	0.4	UG/L		<0.17	0.18 J	--	--	0.22 J	--	0.31 J	--	0.25 J	--	0.32 J	--	1.1	--	1	--	0.54	--
2,4,5-Trichlorophenol	700	UG/L		<0.69	<0.68	--	--	<0.69	--	<0.70	--	<0.69	--	<0.67	--	<0.67	--	<0.71	--	<0.67	--
2,4,6-Trichlorophenol	20	UG/L		<0.59	<0.58	--	--	<0.59	--	<0.60	--	<0.59	--	<0.58	--	<0.58	--	<0.61	--	<0.57	--
2,4-Dichlorophenol	20	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
2,4-Dimethylphenol	100	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
2,4-Dinitrophenol	40	UG/L		<9.8	<9.7	--	--	<9.8	--	<10	--	<9.8	--	<9.6	--	<9.6	--	<10	--	<9.6	--
2,4-Dinitrotoluene	--	UG/L		<0.98	<0.97	--	--	<0.98	--	<1.0	--	<0.98	--	<0.96	--	<0.96	--	<1.0	--	<0.96	--
2,6-Dinitrotoluene	--	UG/L		<0.69	<0.68	--	--	<0.69	--	<0.70	--	<0.69	--	<0.67	--	<0.67	--	<0.71	--	<0.67	--
2-Chloronaphthalene	600	UG/L		<0.39	<0.39	--	--	<0.39	--	<0.40	--	<0.39	--	<0.38	--	<0.38	--	<0.40	--	<0.38	--
2-Chlorophenol	40	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
2-Methylnaphthalene	30	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
2-Methylphenol (o-Cresol)	50	UG/L		<0.69 UJ	<0.68	--	--	<0.69	--	<0.70	--	<0.69	--	<0.67	--	<0.67	--	<0.71	--	<0.67	--
2-Nitroaniline	--	UG/L		<0.69	<0.68	--	--	<0.69	--	<0.70	--	<0.69	--	<0.67	--	<0.67	--	<0.71	--	<0.67	--
2-Nitrophenol	--	UG/L		<0.69	<0.68	--	--	<0.69	--	<0.70	--	<0.69	--	<0.67	--	<0.67	--	<0.71	--	<0.67	--
3,3'-Dichlorobenzidine	30	UG/L		<2.0 UJ	<1.9 UJ	--	--	<2.0 UJ	--	<2.0 UJ	--	<2.0 UJ	--	<1.9 UJ	--	<1.9 UJ	--	<2.0 UJ	--	<1.9 UJ	--
3-Nitroaniline	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
4,6-Dinitro-2-Methylphenol	0.7	UG/L		<4.9	<4.9	--	--	<4.9	--	<5.0	--	<4.9	--	<4.8	--	<4.8	--	<5.1	--	<4.8	--
4-Bromophenyl Phenyl Ether	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
4-Chloro-3-Methylphenol	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
4-Chloroaniline	30	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
4-Chlorophenyl Phenyl Ether	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
4-Methylphenol (p-Cresol)	50	UG/L		<0.49 UJ	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
4-Nitroaniline	--	UG/L		<0.59	<0.58	--	--	<0.59	--	<0.60	--	<0.59	--	<0.58	--	<0.58	--	<0.61	--	<0.57	--
4-Nitrophenol	--	UG/L		<9.8	<9.7	--	--	<9.8	--	<10	--	<9.8	--	<9.6	--	<9.6	--	<10	--	<9.6	--
Acenaphthene	400	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Acenaphthylene	--	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Acetophenone	700	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Aniline	6	UG/L		<0.98 UJ	<0.97	--	--	<0.98	--	<1.0	--	<0.98	--	<0.96	--	<0.96	--	<1.0	--	<0.96	--
Anthracene	2000	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Benzaldehyde	--	UG/L		<0.98	<0.97	--	--	<0.98	--	<1.0	--	<0.98	--	<0.96	--	<0.96	--	<1.0	--	<0.96	--
Benzo(A)Anthracene	0.1	UG/L		<0.010	<0.010	--	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--
Benzo(A)Pyrene	0.1	UG/L		<0.010 UJ	<0.010	--	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--
Benzo(B)Fluoranthene	0.2	UG/L		<0.010	<0.010	--	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--	<0.010	--
Benzo(G,H,I)Perylene	--	UG/L		0.55	0.43 J	--	--	<0.20	--	<0.20	--	<0.20	--	0.49	--	<0.19	--	<0.20	--	<0.19	--
Benzo(K)Fluoranthene	0.5	UG/L		0.21 J	0.12 J	--	--	<0.098	--	<0.10	--	<0.098	--	0.27 J	--	<0.096	--	<0.10	--	<0.096	--
Biphenyl	400	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Bis(2-Chloro-1-Methylethyl) Ether	300	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Bis(2-Chloroethoxy)Methane	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Bis(2-Chloroethyl)Ether	7	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Bis(2-Ethylhexyl)Phthalate	3	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
Butyl Benzyl Phthalate	100	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
Caprolactam	4000	UG/L		<4.9 UJ	<4.9 UJ	--	--	<4.9 UJ	--	<5.0 UJ	--	<4.9 UJ	--	<4.8 UJ	--	<4.8 UJ	--	<5.1 UJ	--	<4.8 UJ	--
Carbazole	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Chrysene	5	UG/L		0.12 J	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	0.13 J	--	<0.096	--	<0.10	--	<0.096	--
Di-N-Butyl Phthalate	700	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
Dibenz(A,H)Anthracene	0.3	UG/L		<0.020 UJ	<0.021	--	--	<0.020 UJ	--	<0.021 UJ	--	<0.020 UJ	--	<0.020	--	<0.020 UJ	--	<0.020 UJ	--	<0.020 UJ	--
Dibenzofuran	--	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Diethyl Phthalate	6000	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
Dimethyl Phthalate	--	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
Fluoranthene	300	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Fluorene	300	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Hexachlorobenzene	0.02	UG/L		<0.020	<0.021	--	--	<0.020 UJ	--	<0.021 UJ	--	<0.020 UJ	--	<0.020	--	<0.020 UJ	--	<0.020 UJ	--	<0.020 UJ	--
Hexachlorobutadiene	1	UG/L		<0.59	<0.58	--	--	<0.59	--	<0.60	--	<0.59	--	<0.58	--	<0.58	--	<0.61	--	<0.57	--
Hexachlorocyclopentadiene	40	UG/L		<4.9	<4.9	--	--	<4.9	--	<5.0	--	<4.9	--	<4.8	--	<4.8	--	<5.1	--	<4.8	--
Hexachloroethane	7	UG/L		<0.98 UJ	<0.97 UJ	--	--	<0.98	--	<1.0	--	<0.98	--	<0.96 UJ	--	<0.96	--	<1.0	--	<0.96	--
Indeno(1,2,3-CD)Pyrene	0.2	UG/L		<0.020 UJ	<0.021	--	--	<0.020	--	<0.021	--	<0.020	--	<0.020	--	<0.020 UJ	--	<0.020 UJ	--	<0.020 UJ	--
Isophorone	40	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Methyl Cyclohexane	--	UG/L		<0.50	<0.50	--	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
N-Dioctyl Phthalate	100	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
N-Nitrosodi-N-Propylamine	10	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
N-Nitrosodiphenylamine	10	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	<0.49	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Naphthalene	300	UG/L		<0.29	<0.29	--	--	<0.29	--	<0.30	--	<0.29	--	<0.29	--	<0.29	--	<0.30	--	<0.29	--
Nitrobenzene	6	UG/L		<0.78	<0.78	--	--	<0.78	--	<0.80	--	<0.78	--	<0.77	--	<0.77	--	<0.81	--	<0.77	--

Table 10
Summary of Analytical Results: E Aquifer
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	G04-M01E	G04-M01E	G04-M01E	G04-M01E	G04-M02E	G04-M02E	G04-M03E	G04-M03E	G04-M04E	G04-M04E	J04-M02E	J04-M02E	J04-M03E	J04-M03E	J04-M04E	J04-M04E	J04-M05E	J04-M05E
			Sample Date	03/30/2022	03/30/2022	05/18/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/30/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022
Analyte	**NJGWIIA**	**UNITS**	**Sample Type**	FS	DUP	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Pentachlorophenol	0.3	UG/L		<0.027	<0.027	--	--	<0.026	--	<0.026	--	<0.026	--	<0.026	--	<0.026	--	<0.026	--	<0.025	--
Pentachlorophenol	0.3	UG/L		<0.98	<0.97	--	--	<0.98	--	<1.0	--	<0.98	--	<0.96	--	<0.96	--	<1.0	--	<0.96	--
Phenanthrene	--	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Phenol	2000	UG/L		<0.49	<0.49	--	--	<0.49	--	<0.50	--	0.71 J	--	<0.48	--	<0.48	--	<0.51	--	<0.48	--
Pyrene	200	UG/L		<0.098	<0.097	--	--	<0.098	--	<0.10	--	<0.098	--	<0.096	--	<0.096	--	<0.10	--	<0.096	--
Perfluorinated Compounds																					
11Cl-PF3OUdS	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017 UJ	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
9Cl-PF3ONS	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
DONA	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Hfpo Dimer Acid	--	UG/L		--	--	0.0073 J	0.0078 J	--	0.014 J	--	0.016 J	--	0.016 J	--	<0.030	--	0.0061	--	0.012	--	0.0054
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		--	--	<0.0027	<0.0026	--	<0.0026	--	<0.0027	--	<0.0026	--	<0.030	--	<0.0026	--	<0.0026	--	<0.0027
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluorobutane Sulfonic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluorobutanoic Acid	--	UG/L		--	--	<0.0045	<0.0043	--	<0.0043	--	0.0099	--	0.018	--	<0.050	--	<0.0043	--	0.0057	--	<0.0045
Perfluorodecanoic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	0.0045	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluorododecanoic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	0.0031	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluoroheptanoic Acid	--	UG/L		--	--	0.002	0.0017	--	0.0044	--	0.005	--	0.0095	--	<0.020	--	0.0017	--	0.0059	--	0.0023 J
Perfluorohexane Sulfonic Acid	--	UG/L		--	--	<0.0018	0.0024	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluorohexanoic Acid	--	UG/L		--	--	0.0059	0.0057	--	0.012	--	0.016	--	0.034	--	<0.020	--	0.0051	--	0.017	--	0.0046
Perfluorononanoic Acid	0.013	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	0.0032	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluoropentanoic Acid	--	UG/L		--	--	0.0031	0.0031	--	0.0051	--	0.012 J	--	0.019	--	<0.020	--	0.0027	--	0.0066	--	0.0023
Perfluorotetradecanoic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluorotridecanoic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017 UJ	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Perfluoroundecanoic Acid	--	UG/L		--	--	<0.0018	<0.0017	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
PFOA	0.014	UG/L		--	--	0.0061	0.0061	--	0.013	--	0.014	--	0.022	--	<0.020	--	0.0043	--	0.0096	--	<0.0018
PFOS	0.013	UG/L		--	--	<0.0018	0.022 J	--	<0.0017	--	<0.0018	--	<0.0017	--	<0.020	--	<0.0017	--	<0.0017	--	<0.0018
Metals																					
Aluminum	200	UG/L		170 B	92 B	--	--	1800	--	820	--	1500	--	730	--	3700	--	800	--	280	--
Aluminum, Dissolved	200			<12	<12	--	--	<12	--	16 J	--	13 J	--	<12	--	<12	--	<12	--	<12	--
Antimony	6	UG/L		<0.2	<0.2	--	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Antimony, Dissolved	6			<0.21	<0.21	--	--	<0.21	--	0.37 J	--	<0.21	--	<0.21	--	<0.21	--	<0.21	--	<0.21	--
Arsenic	3	UG/L		<0.68	<0.68	--	--	<0.68	--	<0.68	--	<0.68	--	<0.68	--	2	--	<0.68	--	<0.68	--
Arsenic, Dissolved	3			<0.7	<0.7	--	--	<0.7	--	0.8 J	--	<0.7	--	<0.7	--	<0.7	--	<0.7	--	<0.7	--
Barium	6000	UG/L		130	130	--	--	230	--	55	--	57	--	140	--	150	--	180	--	98	--
Barium, Dissolved	6000			130	120	--	--	200	--	20	--	48	--	130	--	120	--	180	--	88	--
Beryllium	1	UG/L		<0.12	<0.12	--	--	0.52	--	<0.12	--	<0.12	--	0.27 J	--	0.75	--	0.15 J	--	<0.12	--
Beryllium, Dissolved	1			<0.12	<0.12	--	--	0.12 J	--	<0.12	--	<0.12	--	<0.12	--	<0.12	--	<0.12	--	<0.12	--
Cadmium	4	UG/L		<0.15	<0.15	--	--	<0.15	--	<0.15	--	<0.15	--	<0.15	--	<0.15	--	<0.15	--	<0.15	--
Cadmium, Dissolved	4			<0.16	<0.16	--	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--
Calcium	--	UG/L		22000	23000	--	--	42000	--	19000	--	18000	--	21000	--	24000	--	35000	--	23000	--
Calcium, Dissolved	--			22000	22000	--	--	41000	--	9000	--	18000	--	19000	--	23000	--	33000	--	18000	--
Chromium	70	UG/L		1.6 B	0.85 B	--	--	7.4	--	6.3	--	6.6	--	5.4	--	24	--	4.2	--	1.1 B	--
Chromium, Dissolved	70			<0.34	<0.34	--	--	<0.34	--	<0.34	--	<0.34	--	<0.34	--	0.72 B	--	<0.34	--	<0.34	--
Cobalt	100	UG/L		<0.16	<0.16	--	--	2.4	--	0.42 J	--	0.52	--	1.8	--	5.7	--	0.89	--	<0.16	--
Cobalt, Dissolved	100			<0.16	<0.16	--	--	0.19 J	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--	<0.16	--
Copper	1300	UG/L		0.97 J	<0.36	--	--	4.3	--	2.4	--	3.3	--	5	--	9.3	--	1.4 B	--	<0.36	--
Copper, Dissolved	1300			<0.37	<0.37	--	--	<0.37	--	<0.37	--	<0.37	--	<0.37	--	<0.37	--	<0.37	--	<0.37	--
Iron	300	UG/L		31000	31000	--	--	38000	--	450	--	500	--	21000	--	24000	--	16000	--	2700	--
Iron, Dissolved	300			29000	29000	--	--	35000	--	68	--	<21	--	19000	--	17000	--	14000	--	2500	--
Lead	5	UG/L		0.91 J	0.28 J	--	--	2.1	--	0.71	--	0.76	--	2	--	3.9	--	0.79	--	0.12 J	--
Lead, Dissolved	5			<0.073	<0.073	--	--	<0.073	--	<0.073	--	<0.073	--	<0.073	--	<0.073	--	<0.073	--	<0.073	--
Magnesium	--	UG/L		9300	8500	--	--	13000	--	210 R	--	230	--	6700	--	7300	--	7000	--	3400	--
Magnesium, Dissolved	--			8700	8800	--	--	12000	--	1100 R	--	41 B	--	6700	--	6100	--	6800	--	3400	--
Manganese	50	UG/L		670	690	--	--	840	--	4.1 J	--	4.1	--	430	--	470	--	350	--	33	--
Manganese, Dissolved	50			650	650	--	--	810	--	8.6 J	--	<0.98	--	390	--	390	--	330	--	30	--
Mercury	2	UG/L		0.19 B	0.16 B	--	--	0.15 B	--	0.13 B	--	0.086 B	--	0.19 B	--	0.15 B	--	0.12 B	--	0.11 B	--
Mercury, Dissolved	2			0.11 B	0.15 B	--	--	0.16 B	--	0.11 B	--	0.19 B	--	0.19 B	--	0.15 B	--	0.21 B	--	0.084 B	--
Nickel	100	UG/L		0.76 J	<0.4	--	--	3.4	--	2.3	--	2.1	--	2.2	--	10	--	1.7	--	0.58 J	--
Nickel, Dissolved	100			<0.41	<0.41	--	--	<0.41	--	1	--	0.85 J	--	<0.41	--	0.51 J	--	<0.41	--	<0.41	--
Potassium	--	UG/L		5100	5000	--	--	7100	--	97000	--	100000	--	4500	--	5500	--	8000	--	4900	--
Potassium, Dissolved	--			4700	4800	--	--	7000	--	82000	--	110000	--	4000	--	5300	--	7800	--	4900	--
Selenium	40	UG/L		<0.28	<0.28	--	--	<0.28	--	0.3 J	--	0.33 R	--	<0.28	--	<0.28	--	<0.28	--	<0.28	--
Selenium, Dissolved	40			<0.29	<0.29	--	--	<0.29	--	0.32 J	--	3.7 R	--	<0.29	--	<0.29	--	<0.29	--	<0.29	--
Silver	40	UG/L		0.12 J	<0.1	--	--	<0.1	--	<0.1	--	<0.1	--	0.12 J	--	<0.1	--	<0.1	--	<0.1	--
Silver, Dissolved	40			<0.1	<0.1	--	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--

Table 10
Summary of Analytical Results: E Aquifer
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	G04-M01E	G04-M01E	G04-M01E	G04-M01E	G04-M02E	G04-M02E	G04-M03E	G04-M03E	G04-M04E	G04-M04E	J04-M02E	J04-M02E	J04-M03E	J04-M03E	J04-M04E	J04-M04E	J04-M05E	J04-M05E
			Sample Date	03/30/2022	03/30/2022	05/18/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/31/2022	05/18/2022	03/30/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022	04/01/2022	05/17/2022
Analyte	**NJGWIIA**	**UNITS**	**Sample Type**	FS	DUP	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Sodium	50000	UG/L		92000	90000	--	--	140000	--	180000	--	200000	--	65000	--	86000	--	220000	--	290000	--
Sodium, Dissolved	50000			90000	90000	--	--	140000	--	170000	--	200000	--	61000	--	90000	--	97000	--	130000	--
Thallium	2	UG/L		<0.13	<0.13	--	--	<0.13	--	<0.13	--	<0.13	--	<0.13	--	<0.13	--	<0.13	--	<0.13	--
Thallium, Dissolved	2			<0.13	<0.13	--	--	<0.13	--	<0.13	--	0.25 J	--	<0.13	--	<0.13	--	<0.13	--	<0.13	--
Vanadium	--	UG/L		<0.79	<0.79	--	--	5.6	--	1.7 J	--	2.4 J	--	3.2 J	--	18	--	3.4 J	--	<0.79	--
Vanadium, Dissolved	--			<0.82	<0.82	--	--	<0.82	--	<0.82	--	<0.82	--	<0.82	--	<0.82	--	<0.82	--	<0.82	--
Zinc	2000	UG/L		<4	<4	--	--	17	--	4.5 J	--	<4	--	8.5 J	--	49	--	19 B	--	<4	--
Zinc, Dissolved	2000			<4.1	<4.1	--	--	<4.1	--	<4.1	--	<4.1	--	<4.1	--	<4.1	--	<4.1	--	25 B	--
Chloride	250000	UG/L		160000	160000	--	--	240000	--	290000	--	190000	--	100000	--	110000	--	130000	--	150000	--
Fluoride	2000	UG/L		<250 UJ	400 J	--	--	<2500	--	<2500	--	710	--	<250 UJ	--	300 J	--	370 J	--	620	--
Nitrate	10000	UG/L		<40	<40	--	--	<40	--	<40	--	<40	--	<40	--	<40	--	<40	--	<40	--
Nitrite	1000	UG/L		<15	<15	--	--	<15	--	<15	--	<15	--	<15	--	<15	--	<15	--	<15	--
Sulfate	250000	UG/L		<1500	2700 J	--	--	<1500	--	48000 J	--	6000	--	4300 J	--	2400 J	--	<1500	--	<1500	--
Total Organics																					
Total Organic Carbon	--	UG/L		2300	2200	--	--	3900	--	3700	--	5100	--	1800	--	2400	--	2500	--	2300	--
Total Organic Halogen	--	UG/L		83 J	100 J	--	--	110 J	--	230 J	--	87 J	--	58 J	--	38 J	--	89 J	--	83 J	--
Miscellaneous Parameters																					
Atrazine	3	UG/L		<2.0	<1.9	--	--	<2.0	--	<2.0	--	<2.0	--	<1.9	--	<1.9	--	<2.0	--	<1.9	--
Alkalinity, total	--	UG/L		110000	120000	--	--	160000	--	170000	--	330000	--	85000	--	120000	--	150000	--	190000	--
Ammonia	3000	UG/L		1800	1700	--	--	4500	--	3400	--	1000	--	620 J	--	1500 J	--	1500 J	--	<1300	--
Bromide	--	UG/L		1900 J	3200	--	--	13000 B	--	<13000	--	2800 B	--	2100 J	--	<1300	--	<1300	--	<1300	--
Phosphorus	--	UG/L		790	770	--	--	1300	--	<250	--	810	--	1100	--	1500	--	890	--	1400	--
Silica	--	UG/L		21000	20000	--	--	19000	--	24000	--	11000	--	15000	--	17000 J	--	15000	--	8400	--
Sulfide	--	UG/L		<100	<100	--	--	<100	--	<100	--	220 J	--	<100	--	<100	--	<100	--	<100	--
Total Dissolved Solids	500000	UG/L		360000	380000	--	--	490000	--	610000	--	740000	--	230000	--	230000	--	400000	--	410000	--
Phenolphthalein Alkalinity	--	UG/L		<8000	<8000	--	--	<8000	--	83000	--	180000	--	<8000	--	<8000	--	<8000	--	<8000	--
Field Measurements																					
Color	--	--		NONE	--	NONE	--	YES	NONE	NONE	NONE	NONE	NONE	YES	YES	YES	YES	NONE	NONE	NONE	NONE
Dissolved Oxygen	--	MG/L		0.37	--	1.14	--	0.86	1.89	1.16	1.71	0.35	0.7	0.42	0.72	0.46	0.7	0.26	0.2	0.38	0.56
Odor	--	--		NONE	--	NONE	--	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
pH	--	STD UNITS		6.62	--	6.59	--	6.62	6.6	10.89	7	11.38	11.26	6.68	6.64	6.81	6.78	7.45	9.13	7.31	7.2
Redox	--	MV		-105.3	--	-102.9	--	-119.1	-117.1	-60.7	-136.9	-210.9	-204.3	-94.4	-88.3	-120.1	-120.9	-238.7	-217.4	-143.6	-145.6
Specific Conductance	--	UMHOS/CM		727	--	754	--	1119	1148	1226	1184	1636	1493	531	530	670	636	773	754	755	721
Temperature	--	DEGREES C		15.22	--	16.9	--	16.3	17.45	16.53	18.55	17.29	17.82	14.08	15.36	14	15.41	14.76	15.85	15.3	15.71
Turbidity Quantitative	--	NTU		8.5	--	7.7	--	84.2	29.7	2.3	2.5	16.5	22.2	79.9	72.2	186.5	37.5	54.4	6.7	0.9	-9.6

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
Yellow Shading = Exceedence of NJGWIIA Criteria
Orange Shading = Dectection Limit is above NJGWIIA Criteria
Sample Type FS = Field Sample; DUP = Duplicate Sample
B = Comparable detection in lab or field blank
J = Estimated result due to poor lab matrix spike recovery
R = Unusable result
UJ = Non detected. Reporting limit may not be accurate or precise
-- = Not Analyzed or Requested for this event
< = Not detected at the stated reporting limit
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit

Table 11
Summary of Groundwater Analytical Results: Equipment and Trip Blanks
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location ID	EB	TB	TB-3	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK
			Date Sampled	03/29/2022	03/29/2022	01/06/2022	01/04/2022	01/05/2022	01/06/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022	01/04/2022	01/05/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022
Analyte	**NJGWIIA**	**Units**	**Sample Purpose**	EB	TB	TB	EB	EB	EB	EB	EB	EB	EB	EB	TB	TB	TB	TB	TB	TB	TB
Volatile Organic Compounds (VOCs)																					
1,1,1-Trichloroethane	30	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2,2-Tetrachloroethane	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2-Trichloroethane	3	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2-Trichlorotrifluoroethane	20000	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1-Dichloroethane	50	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1-Dichloroethene	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Dibromo-3-Chloropropane	0.02	UG/L		<0.0096	<0.0095	--	--	<0.0096	<0.0096	--	<0.0095	<0.0095	<0.0094	<0.0095	--	<0.0096	<0.0096	<0.0096	<0.0094	<0.0094	<0.0096
1,2-Dibromo-3-Chloropropane	0.02	UG/L		<0.30	<0.30	--	--	--	--	--	--	<0.30	<0.30	<0.30	--	--	--	--	<0.30	<0.30	<0.30
1,2-Dibromoethane (EDB)	0.03	UG/L		<0.0096	<0.0095	--	--	<0.0096	<0.0096	--	<0.0095	<0.0095	<0.0094	<0.0095	--	<0.0096	<0.0096	<0.0096	<0.0094	<0.0094	<0.0096
1,2-Dibromoethane (EDB)	0.03	UG/L		<0.20	<0.20	--	--	--	--	--	--	<0.20	<0.20	<0.20	--	--	--	--	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	600	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	<0.20	<0.20	--	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	600	UG/L		--	--	--	--	<0.53 UJ	<0.52 UJ	--	<0.55 UJ	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	2	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Dichloropropane	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,3-Dichlorobenzene	600	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	--	<0.30	<0.30	<0.30	--	<0.30	<0.30	--	<0.30	<0.30	<0.30
1,3-Dichlorobenzene	600	UG/L		--	--	--	--	--	--	--	<0.55 UJ	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	--	<0.30	<0.30	<0.30	--	<0.30	<0.30	--	<0.30	<0.30	<0.30
1,4-Dichlorobenzene	75	UG/L		--	--	--	--	<0.53 UJ	<0.52 UJ	--	<0.55 UJ	--	--	--	--	--	--	--	--	--	--
2-Hexanone	40	UG/L		<0.40	<0.40	--	--	<0.40	<0.40	--	<0.40	<0.40	<0.40	<0.40	--	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	6000	UG/L		<0.70	<0.70	--	--	<0.70	<0.70	--	<0.70	<0.70	<0.70	<0.70	--	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Benzene	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Bromodichloromethane	1	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	4	UG/L		<1.0	<1.0	--	--	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	700	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chlorobenzene	50	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chlorodibromomethane	1	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	70	UG/L		2.9	<0.30	--	--	<0.30	3	--	<0.30	2.5	2.3	2.1	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
cis-1,2 Dichloroethene	70	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
cis-1,3-Dichloropropene	--	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Cumene	700	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	<0.20	<0.20	--	<0.20	<0.20	<0.20
Cyclohexane	--	UG/L		<1.0	<1.0	--	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	--	<1.0	<1.0	<1.0
Dichlorodifluoromethane	1000	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	<0.20	<0.20	--	<0.20	<0.20	<0.20
Ethane	--	UG/L		--	--	--	--	--	--	--	--	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
Ethene	--	UG/L		--	--	--	--	--	--	--	--	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
Ethyl Chloride	--	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	700	UG/L		<0.40	<0.40	--	--	<0.40	<0.40	--	<0.40	<0.40	<0.40	<0.40	--	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Methane	--	UG/L		--	--	--	--	--	--	--	--	<3.0	<3.0	<3.0	--	--	--	--	--	--	--
Methyl Acetate	7000	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	--	<0.30	<0.30	<0.30	--	<0.30	<0.30	--	<0.30	<0.30	<0.30
Methyl Bromide	10	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Chloride	--	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Ethyl Ketone	300	UG/L		<0.50	<0.50	--	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	--	UG/L		<0.50	<0.50	--	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Tertiary Butyl Ether	70	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	<0.20	<0.20	--	<0.20	<0.20	<0.20
Methylene Chloride	3	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Propane	--	UG/L		--	--	--	--	--	--	--	--	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
Styrene	100	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Tetrachloroethene	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Toluene	600	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethene	100	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	--	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene	1	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	--	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Trichlorofluoromethane	2000	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	<0.20	<0.20	--	<0.20	<0.20	<0.20
Vinyl Chloride	1	UG/L		<0.20	<0.20	--	--	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes	1000	UG/L		<0.40	<0.40	--	--	<0.40	<0.40	--	<0.40	<0.40	<0.40	<0.40	--	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Semi-Volatile Organic Compounds (SVOCs)																					

Table 11
Summary of Groundwater Analytical Results: Equipment and Trip Blanks
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location ID	EB	TB	TB-3	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK
			Date Sampled	03/29/2022	03/29/2022	01/06/2022	01/04/2022	01/05/2022	01/06/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022	01/04/2022	01/05/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022
Analyte	**NJGWIIA**	**Units**	**Sample Purpose**	EB	TB	TB	EB	EB	EB	EB	EB	EB	EB	EB	TB	TB	TB	TB	TB	TB	TB
1,2,4-Trichlorobenzene	9	UG/L		<0.30	<0.30	--	--	<0.30	<0.30	--	--	<0.30	<0.30	<0.30	--	<0.30	<0.30	--	<0.30	<0.30	<0.30
1,2,4-Trichlorobenzene	9	UG/L		--	--	--	--	<0.53 UJ	<0.52	--	<0.55 UJ	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	0.4	UG/L		<0.17	<0.17	--	--	<0.17	<0.17	--	<0.17	<0.17	<0.17	<0.17	--	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1-Naphthylamine	--	UG/L		--	--	--	--	--	--	--	<8.9 UJ	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	700	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.69	<0.73	<0.73	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.59	<0.62	<0.63	--	--	--	--	--	--	--
2,4-Dichlorophenol	20	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
2,4-Dimethylphenol	100	UG/L		<3.1	--	--	--	<3.2	<3.1	--	<3.3	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
2,4-Dinitrophenol	40	UG/L		<15	--	--	--	<15	<15	--	<16	<9.9	<10	<10	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	UG/L		<1.0	--	--	--	<1.1	<1.0	--	<1.1	<0.99	<1.0	<1.0	--	--	--	--	--	--	--
2,6-Dinitrotoluene	--	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.69	<0.73	<0.73	--	--	--	--	--	--	--
2-Chloronaphthalene	600	UG/L		<0.42	--	--	--	<0.43 UJ	<0.42	--	<0.44	<0.40	<0.42	<0.42	--	--	--	--	--	--	--
2-Chlorophenol	40	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
2-Methylnaphthalene	30	UG/L		<0.10	--	--	--	<0.11 UJ	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	50	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.69	<0.73	<0.73	--	--	--	--	--	--	--
2-Nitroaniline	--	UG/L		<1.0	--	--	--	<1.1	<1.0	--	<1.1	<0.69	<0.73	<0.73	--	--	--	--	--	--	--
2-Nitrophenol	--	UG/L		<1.0	--	--	--	<1.1	<1.0	--	<1.1	<0.69	<0.73	<0.73	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	30	UG/L		<4.2 UJ	--	--	--	<4.3 UJ	<4.2	--	<4.4 UJ	<2.0 UJ	<2.1 UJ	<2.1 UJ	--	--	--	--	--	--	--
3-Nitroaniline	--	UG/L		<2.1	--	--	--	<2.1	<2.1	--	<2.2	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
4,6-Dinitro-2-Methylphenol	0.7	UG/L		<8.3	--	--	--	<8.5	<8.4	--	<8.9	<5.0	<5.2	<5.2	--	--	--	--	--	--	--
4-Bromophenyl Phenyl Ether	--	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
4-Chloro-3-Methylphenol	--	UG/L		<1.0	--	--	--	<1.1	<1.0	--	<1.1	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
4-Chloroaniline	30	UG/L		<4.2	--	--	--	<4.3	<4.2	--	<4.4	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
4-Chlorophenyl Phenyl Ether	--	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	50	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55 UJ	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
4-Nitroaniline	--	UG/L		<0.93	--	--	--	<0.96	<0.94	--	<1.0	<0.59	<0.62	<0.63	--	--	--	--	--	--	--
4-Nitrophenol	--	UG/L		<10	--	--	--	<11	<10	--	<11	<9.9	<10	<10	--	--	--	--	--	--	--
Acenaphthene	400	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Acenaphthylene	--	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Acetophenone	700	UG/L		<1.0	--	--	--	<1.1	<1.0	--	--	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Aniline	6	UG/L		<1.0 UJ	--	--	--	--	<1.0 UJ	--	<1.1 UJ	<0.99	<1.0	<1.0	--	--	--	--	--	--	--
Anthracene	2000	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Benzaldehyde	--	UG/L		<1.0 UJ	--	--	--	<1.1 UJ	<1.0	--	--	<0.99	<1.0	<1.0	--	--	--	--	--	--	--
Benzo(A)Anthracene	0.1	UG/L		<0.010	--	--	--	<0.011	<0.010	--	<0.011	<0.011	<0.011	<0.011	--	--	--	--	--	--	--
Benzo(A)Pyrene	0.1	UG/L		<0.010	--	--	--	<0.011	<0.010	--	<0.011	<0.011	<0.011	<0.011	--	--	--	--	--	--	--
Benzo(B)Fluoranthene	0.2	UG/L		<0.010	--	--	--	<0.011	<0.010	--	<0.011	<0.011	<0.011	<0.011	--	--	--	--	--	--	--
Benzo(G,H,I)Perylene	--	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.20	<0.21	<0.21	--	--	--	--	--	--	--
Benzo(K)Fluoranthene	0.5	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Biphenyl	400	UG/L		<0.52	--	--	--	<0.53	<0.52	--	--	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Bis(2-Chloro-1-Methylethyl) Ether	300	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Bis(2-Chloroethoxy)Methane	--	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Bis(2-Chloroethyl)Ether	7	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	3	UG/L		<2.1	--	--	--	--	--	--	--	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	3	UG/L		--	--	--	--	0.087 J	<0.052 UJ	--	0.18 J	--	--	--	--	--	--	--	--	--	--
Butyl Benzyl Phthalate	100	UG/L		<2.1 UJ	--	--	--	<2.1 UJ	<2.1 UJ	--	<2.2 UJ	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
Caprolactam	4000	UG/L		<3.1 UJ	--	--	--	<3.2 UJ	<3.1 UJ	--	--	<5.0 UJ	<5.2 UJ	<5.2 UJ	--	--	--	--	--	--	--
Carbazole	--	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Chrysene	5	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	700	UG/L		<2.1	--	--	--	<2.1	<2.1	--	5.0 J	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
Dibenz(A,H)Anthracene	0.3	UG/L		<0.021	--	--	--	<0.021	<0.021 UJ	--	<0.022	<0.022	<0.021 UJ	<0.021 UJ	--	--	--	--	--	--	--
Dibenzofuran	--	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Diethyl Phthalate	6000	UG/L		<2.1	--	--	--	<2.1	<2.1	--	<2.2	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
Dimethyl Phthalate	--	UG/L		<2.1 UJ	--	--	--	<2.1 UJ	<2.1 UJ	--	<2.2 UJ	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
Fluoranthene	300	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Fluorene	300	UG/L		<0.12	--	--	--	<0.13	<0.13	--	<0.13	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Hexachlorobenzene	0.02	UG/L		<0.021 UJ	--	--	--	<0.021	<0.021	--	<0.022	<0.022	<0.021 UJ	<0.021 UJ	--	--	--	--	--	--	--
Hexachlorobutadiene	1	UG/L		<0.52 UJ	--	--	--	<0.53 UJ	<0.52 UJ	--	<0.55 UJ	<0.59	<0.62	<0.63	--	--	--	--	--	--	--

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Chambers Works Complex
Deepwater, New Jersey

			Location ID	EB	TB	TB-3	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK
			Date Sampled	03/29/2022	03/29/2022	01/06/2022	01/04/2022	01/05/2022	01/06/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022	01/04/2022	01/05/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022
Analyte	**NJGWIIA**	**Units**	**Sample Purpose**	EB	TB	TB	EB	EB	EB	EB	EB	EB	EB	EB	TB	TB	TB	TB	TB	TB	TB
Hexachlorocyclopentadiene	40	UG/L		<5.2	--	--	--	<5.3 UJ	<5.2	--	<5.5	<5.0	<5.2	<5.2	--	--	--	--	--	--	--
Hexachloroethane	7	UG/L		<0.52 UJ	--	--	--	<0.53 UJ	<0.52 UJ	--	<0.55 UJ	<0.99	<1.0	<1.0	--	--	--	--	--	--	--
Indeno(1,2,3-CD)Pyrene	0.2	UG/L		<0.021	--	--	--	<0.021 UJ	<0.021	--	<0.022	<0.022	<0.021	<0.021 UJ	--	--	--	--	--	--	--
Isophorone	40	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Methyl Cyclohexane	--	UG/L		<0.50	<0.50	--	--	<0.50	<0.50	--	--	<0.50	<0.50	<0.50	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
N-Dioctyl Phthalate	100	UG/L		<5.2	--	--	--	<5.3	<5.2	--	<5.5	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
N-Nitrosodi-N-Propylamine	10	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
N-Nitrosodimethylamine	0.8	UG/L		--	--	--	--	--	<2.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	0.8	UG/L		--	--	--	--	--	<0.021 UJ	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	10	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Naphthalene	300	UG/L		<0.10	--	--	--	<0.11 UJ	<0.10	--	<0.11	<0.30	<0.31	<0.31	--	--	--	--	--	--	--
Nitrobenzene	6	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.79	<0.83	<0.84	--	--	--	--	--	--	--
o-Toluidine	--	UG/L		--	--	--	--	<4.3	<4.2 UJ	--	<4.4	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	0.3	UG/L		<0.026	--	--	--	<0.027	<0.027	--	<0.027	<0.026	<0.028	<0.027	--	--	--	--	--	--	--
Pentachlorophenol	0.3	UG/L		<1.0	--	--	--	--	--	--	--	<0.99	<1.0	<1.0	--	--	--	--	--	--	--
Phenanthrene	--	UG/L		<0.11	--	--	--	<0.12	<0.12	--	<0.12	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Phenol	2000	UG/L		<0.52	--	--	--	<0.53	<0.52	--	<0.55	<0.50	<0.52	<0.52	--	--	--	--	--	--	--
Pyrene	200	UG/L		<0.10	--	--	--	<0.11	<0.10	--	<0.11	<0.099	<0.10	<0.10	--	--	--	--	--	--	--
Perfluorinated Compounds																					
11Cl-PF3OUdS	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9Cl-PF3ONS	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DONA	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hfpo Dimer Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorobutane Sulfonic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorobutanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorodecanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorododecanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluoroheptanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorohexane Sulfonic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorohexanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorononanoic Acid	0.013	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluoropentanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorotetradecanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorotridecanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluoroundecanoic Acid	--	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PFOA	0.014	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PFOS	0.013	UG/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organics																					
Total Organic Carbon	--	UG/L		--	--	--	--	<500 UJ	<500 UJ	--	<500	<500	<500	<500	--	--	--	--	--	--	--
Total Organic Halogen	--	UG/L		--	--	<15	33 J	15 J	--	<15	<15	<15	<15	<15	<15	<15	--	<15	<15	<15	<15
Total Phenols	--	UG/L		--	--	--	--	<10	<10	--	<10	--	--	--	--	--	--	--	--	--	--
Metals																					
Aluminum	200	UG/L		--	--	--	--	<150	<150	--	--	--	--	--	--	--	--	--	--	--	--
Aluminum	200	UG/L		--	--	--	--	--	--	--	84	45	<12	<12	--	--	--	--	--	--	--
Antimony	6	UG/L		--	--	--	--	--	--	--	<0.41	<0.2	<0.2	<0.2	--	--	--	--	--	--	--
Arsenic	3	UG/L		--	--	--	--	<0.68	<0.68	--	<0.68	<0.68	<0.68	<0.68	--	--	--	--	--	--	--
Barium	6000	UG/L		--	--	--	--	--	--	--	2.7	0.78 J	<0.75	<0.75	--	--	--	--	--	--	--
Beryllium	1	UG/L		--	--	--	--	--	--	--	<0.12	<0.12	<0.12	<0.12	--	--	--	--	--	--	--
Cadmium	4	UG/L		--	--	--	--	--	--	--	<0.15	<0.15	<0.15	<0.15	--	--	--	--	--	--	--
Calcium	--	UG/L		--	--	--	--	--	--	--	880	--	--	--	--	--	--	--	--	--	--
Calcium	--	UG/L		--	--	--	--	--	--	--	--	420	150	87 J	--	--	--	--	--	--	--
Chromium	70	UG/L		--	--	--	--	--	--	--	0.51 J	0.52 J	0.36 J	0.44 J	--	--	--	--	--	--	--
Cobalt	100	UG/L		--	--	--	--	--	--	--	<0.16	<0.16	<0.16	<0.16	--	--	--	--	--	--	--
Copper	1300	UG/L		--	--	--	--	--	--	--	0.7 J	<0.36	<0.36	0.41 J	--	--	--	--	--	--	--
Iron	300	UG/L		--	--	--	--	--	--	--	86 J	--	--	--	--	--	--	--	--	--	--

Table 11
Summary of Groundwater Analytical Results: Equipment and Trip Blanks
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			Location ID	EB	TB	TB-3	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	EQBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK	TBLK
			Date Sampled	03/29/2022	03/29/2022	01/06/2022	01/04/2022	01/05/2022	01/06/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022	01/04/2022	01/05/2022	01/06/2022	01/07/2022	03/30/2022	03/31/2022	04/01/2022
Analyte	**NJGWIIA**	**Units**	**Sample Purpose**	EB	TB	TB	EB	EB	EB	EB	EB	EB	EB	EB	TB	TB	TB	TB	TB	TB	TB
Iron	300	UG/L		--	--	--	--	--	--	--	--	<20	<20	<20	--	--	--	--	--	--	--
Lead	5	UG/L		--	--	--	--	<0.071	<0.071	--	0.22 J	<0.071	<0.071	<0.071	--	--	--	--	--	--	--
Magnesium	--	UG/L		--	--	--	--	--	--	--	69 J	--	--	--	--	--	--	--	--	--	--
Magnesium	--	UG/L		--	--	--	--	--	--	--	--	28 J	21 J	22 J	--	--	--	--	--	--	--
Manganese	50	UG/L		--	--	--	--	--	--	--	<0.63	<0.95	<0.95	<0.95	--	--	--	--	--	--	--
Mercury	2	UG/L		--	--	--	--	--	--	--	0.13 J	0.16 J	0.16 J	0.17 J	--	--	--	--	--	--	--
Nickel	100	UG/L		--	--	--	--	--	--	--	<0.6	<0.4	<0.4	<0.4	--	--	--	--	--	--	--
Potassium	--	UG/L		--	--	--	--	--	--	--	<200	--	--	--	--	--	--	--	--	--	--
Potassium	--	UG/L		--	--	--	--	--	--	--	--	<65	<65	<65	--	--	--	--	--	--	--
Selenium	40	UG/L		--	--	--	--	--	--	--	<0.28	<0.28	<0.28	<0.28	--	--	--	--	--	--	--
Silicon	--	UG/L		--	--	--	--	--	--	--	4100	--	--	--	--	--	--	--	--	--	--
Silver	40	UG/L		--	--	--	--	--	--	--	--	<0.1	<0.1	<0.1	--	--	--	--	--	--	--
Sodium	50000	UG/L		--	--	--	--	750 J	400 J	--	1800	--	--	--	--	--	--	--	--	--	--
Sodium	50000	UG/L		--	--	--	--	--	--	--	--	670	250	270	--	--	--	--	--	--	--
Thallium	2	UG/L		--	--	--	--	--	--	--	<0.13	0.16 J	<0.13	<0.13	--	--	--	--	--	--	--
Vanadium	--	UG/L		--	--	--	--	--	--	--	<0.79	<0.79	<0.79	<0.79	--	--	--	--	--	--	--
Zinc	2000	UG/L		--	--	--	--	--	--	--	<3.7	--	--	--	--	--	--	--	--	--	--
Zinc	2000	UG/L		--	--	--	--	--	--	--	--	<4	<4	5 J	--	--	--	--	--	--	--
Chloride	250000	UG/L		--	--	--	--	--	--	--	--	<200	270 J	220 J	--	--	--	--	--	--	--
Chloride	250000	UG/L		--	--	--	--	<600	<600	--	<600	--	--	--	--	--	--	--	--	--	--
Fluoride	2000	UG/L		--	--	--	--	--	--	--	--	<50 UJ	<50	<50	--	--	--	--	--	--	--
Nitrate	10000	UG/L		--	--	--	--	<40	<40	--	<40	<40	<40	<40	--	--	--	--	--	--	--
Nitrite	1000	UG/L		--	--	--	--	--	--	--	--	<15	<15	<15	--	--	--	--	--	--	--
Sulfate	250000	UG/L		--	--	--	--	<300	<300	--	<300	<300	<300	<300	--	--	--	--	--	--	--
Miscellaneous Parameters																					
Alkalinity, total	--	UG/L		--	--	--	--	--	--	--	--	<8000	<8000	<8000	--	--	--	--	--	--	--
Ammonia	3000	UG/L		--	--	--	--	<250	<250	--	<250	--	--	--	--	--	--	--	--	--	--
Ammonia	3000	UG/L		--	--	--	--	--	--	--	--	<260	<250	<1300	--	--	--	--	--	--	--
Atrazine	3	UG/L		<1.0	--	--	--	<1.1	<1.0	--	--	<2.0	<2.1	<2.1	--	--	--	--	--	--	--
Bromide	--	UG/L		--	--	--	--	--	--	--	--	<250	<250	<250	--	--	--	--	--	--	--
Carbon	--	UG/L		--	--	--	1100	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	100	UG/L		--	--	--	--	<5.0 UJ	<5.0	--	<5.0	--	--	--	--	--	--	--	--	--	--
Phenolphthalein Alkalinity	--	UG/L		--	--	--	--	--	--	--	--	<8000	<8000	<8000	--	--	--	--	--	--	--
Phosphorus	--	UG/L		--	--	--	--	--	--	--	--	<250	<250	<250	--	--	--	--	--	--	--
Sulfide	--	UG/L		--	--	--	--	--	--	--	--	<100	<100	<100	--	--	--	--	--	--	--
Total Dissolved Solids	500000	UG/L		--	--	--	--	--	--	--	--	<12000	<12000	<12000	--	--	--	--	--	--	--

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
Yellow Shading = Exceedence of NJGWIIA Criteria
Orange Shading = Detection Limit is above NJGWIIA Criteria
J = Analyte present. Reported value may not be accurate
UJ = Not detected. Reporting limit may not be accurate or precise
Sample Type EB = Equipment Blank TB = Trip Blank
-- = Not Analyzed or Not Requested for this event
UG/L = micrograms/liter

Table 11
Summary of Groundwater Analytical Results: Equipment and Trip Blanks
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			TBLK	TBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FIELD BLANK
			05/17/2022	05/18/2022	01/04/2022	01/06/2022	01/07/2022	01/10/2022	01/11/2022	01/12/2022	01/13/2022	01/14/2022	01/17/2022	01/18/2022	05/17/2022	05/18/2022	01/05/2022
Analyte	**NJGWIIA**	**Units**	TB	TB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	30	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	20000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	50	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-Chloropropane	0.02	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-Chloropropane	0.02	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (EDB)	0.03	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (EDB)	0.03	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	2	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	600	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	600	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	6000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	4	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon Disulfide	700	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon Tetrachloride	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	50	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorodibromomethane	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform	70	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2 Dichloroethene	70	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cumene	700	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethane	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl Chloride	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Acetate	7000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Bromide	10	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Chloride	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Ethyl Ketone	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Isobutyl Ketone	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether	70	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propane	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	600	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane	2000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes	1000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds (SVOCs)																	

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Chambers Works Complex
Deepwater, New Jersey

Analyte	NJGWIIA	Units	TBLK 05/17/2022 TB	TBLK 05/18/2022 TB	FBLK 01/04/2022 FB	FBLK 01/06/2022 FB	FBLK 01/07/2022 FB	FBLK 01/10/2022 FB	FBLK 01/11/2022 FB	FBLK 01/12/2022 FB	FBLK 01/13/2022 FB	FBLK 01/14/2022 FB	FBLK 01/17/2022 FB	FBLK 01/18/2022 FB	FBLK 05/17/2022 FB	FBLK 05/18/2022 FB	FIELD BLANK 01/05/2022 FB
1,2,4-Trichlorobenzene	9	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	9	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	0.4	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Naphthylamine	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	700	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	20	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	600	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	30	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	50	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	30	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-Methylphenol	0.7	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl Phenyl Ether	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-Methylphenol	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	30	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl Phenyl Ether	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	50	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	400	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	700	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	6	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	2000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(A)Anthracene	0.1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(A)Pyrene	0.1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(B)Fluoranthene	0.2	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(G,H,I)Perylene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(K)Fluoranthene	0.5	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Biphenyl	400	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-Chloro-1-Methylethyl) Ether	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-Chloroethoxy)Methane	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-Chloroethyl)Ether	7	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butyl Benzyl Phthalate	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	4000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	5	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	700	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(A,H)Anthracene	0.3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl Phthalate	6000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl Phthalate	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	0.02	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 11
Summary of Groundwater Analytical Results: Equipment and Trip Blanks
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

Analyte	NJGWIIA	Units	TBLK 05/17/2022 TB	TBLK 05/18/2022 TB	FBLK 01/04/2022 FB	FBLK 01/06/2022 FB	FBLK 01/07/2022 FB	FBLK 01/10/2022 FB	FBLK 01/11/2022 FB	FBLK 01/12/2022 FB	FBLK 01/13/2022 FB	FBLK 01/14/2022 FB	FBLK 01/17/2022 FB	FBLK 01/18/2022 FB	FBLK 05/17/2022 FB	FBLK 05/18/2022 FB	FIELD BLANK 01/05/2022 FB
Hexachlorocyclopentadiene	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	7	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-CD)Pyrene	0.2	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Cyclohexane	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-N-Propylamine	10	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	0.8	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	0.8	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	10	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	6	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Toluidine	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	0.3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	0.3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	2000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	200	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perfluorinated Compounds																	
11Cl-PF3OUdS	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
9Cl-PF3ONS	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
DONA	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Hfpo Dimer Acid	--	UG/L	<0.0025	<0.0027 UJ	<0.0027	<0.0028	<0.0027	<0.0027	<0.0027	<0.0028	<0.0027	<0.0026	<0.0027	<0.0027	<0.0024	<0.0028 UJ	<0.0025
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L	<0.0025	<0.0027	<0.0027	<0.0028	<0.0027	<0.0027	<0.0027	<0.0028	<0.0027	<0.0026	<0.0027	<0.0027	<0.0024	<0.0028	<0.0025
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorobutane Sulfonic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorobutanoic Acid	--	UG/L	<0.0042	<0.0045	<0.0044	<0.0047	<0.0045	<0.0046	<0.0046	<0.0047	<0.0045	<0.0043	<0.0046	<0.0046	<0.0041	<0.0047	<0.0042
Perfluorodecanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	0.002	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorododecanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluoroheptanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorohexane Sulfonic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorohexanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorononanoic Acid	0.013	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluoropentanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorotetradecanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluorotridecanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Perfluoroundecanoic Acid	--	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
PFOA	0.014	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
PFOS	0.013	UG/L	<0.0017	<0.0018	<0.0018	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019	<0.0018	<0.0017	<0.0018	<0.0018	<0.0016	<0.0019	<0.0017
Total Organics																	
Total Organic Carbon	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Halogen	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Phenols	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals																	
Aluminum	200	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aluminum	200	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	6	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	6000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	1	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	4	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	70	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	1300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 11
Summary of Groundwater Analytical Results: Equipment and Trip Blanks
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			TBLK	TBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FBLK	FIELD BLANK
			05/17/2022	05/18/2022	01/04/2022	01/06/2022	01/07/2022	01/10/2022	01/11/2022	01/12/2022	01/13/2022	01/14/2022	01/17/2022	01/18/2022	05/17/2022	05/18/2022	01/05/2022
Analyte	**NJGWIIA**	**Units**	TB	TB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB
Iron	300	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	5	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	50	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	2	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silicon	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	40	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	50000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	50000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	2	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	2000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	2000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	250000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	250000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoride	2000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	10000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite	1000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	250000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Miscellaneous Parameters																	
Alkalinity, total	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	3000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	3000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atrazine	3	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromide	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	100	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenolphthalein Alkalinity	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dissolved Solids	500000	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
Yellow Shading = Exceedence of NJGWIIA Criteria
Orange Shading = Detection Limit is above NJGWIIA Criteria
J = Analyte present. Reported value may not be accurate
UJ = Not detected. Reporting limit may not be accurate or precise
Sample Type EB = Equipment Blank TB = Trip Blank
-- = Not Analyzed or Not Requested for this event
UG/L = micrograms/liter

Table 12
Summary of Analytical Results: Supplemental Groundwater Data
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	AA25-M02B	O21-M01B	O21-M01B	P22-M01B	Z28-M02B
			Sample Date	01/07/2022	01/07/2022	01/07/2022	01/07/2022	01/07/2022
Analytes	Units	NJGWIIA	Sample Type	FS	DUP	FS	FS	FS
Volatile Organic Compounds (VOCs)								
1,1,1-Trichloroethane	UG/L	30		<0.30	<0.30	<0.30	<3.0	<0.30
1,1,2,2-Tetrachloroethane	UG/L	1		<0.30	<0.30	<0.30	<3.0	<0.30
1,1,2-Trichloroethane	UG/L	3		<0.30	<0.30	<0.30	<3.0	<0.30
1,1,2-Trichlorotrifluoroethane	UG/L	20000		<0.30	<0.30	<0.30	<3.0	<0.30
1,1-Dichloroethane	UG/L	50		<0.30	<0.30	<0.30	<3.0	<0.30
1,1-Dichloroethene	UG/L	1		<0.30	<0.30	<0.30	<3.0	<0.30
1,2-Dibromo-3-Chloropropane	UG/L	0.02		<0.0095	<0.0095	<0.0095	<0.0094	0.011 J
1,2-Dibromoethane (EDB)	UG/L	0.03		<0.0095	<0.0095	<0.0095	<0.0094	<0.0096
1,2-Dichlorobenzene	UG/L	600		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
1,2-Dichloroethane	UG/L	2		<0.30	<0.30	<0.30	<3.0	<0.30
1,2-Dichloropropane	UG/L	1		<0.30	<0.30	<0.30	<3.0	<0.30
1,3-Dichlorobenzene	UG/L	600		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
1,4-Dichlorobenzene	UG/L	75		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
2-Hexanone	UG/L	40		<0.40	<0.40	<0.40	<4.0	<0.40
Acetone	UG/L	6000		<0.70	<0.70	<0.70	<7.0	<0.70
Benzene	UG/L	1		<0.30	<0.30	<0.30	<3.0	<0.30
Bromodichloromethane	UG/L	1		<0.20	<0.20	<0.20	<2.0	<0.20
Bromoform	UG/L	4		<1.0	<1.0	<1.0	<10	<1.0
Carbon Disulfide	UG/L	700		<0.30	<0.30	<0.30	<3.0	<0.30
Carbon Tetrachloride	UG/L	1		<0.30	<0.30	<0.30	<3.0	<0.30
Chlorobenzene	UG/L	50		<0.30	<0.30	<0.30	<3.0	<0.30
Chlorodibromomethane	UG/L	1		<0.20	<0.20	<0.20	<2.0	<0.20
Chloroform	UG/L	70		<0.30	<0.30	<0.30	<3.0	<0.30
cis-1,2 Dichloroethene	UG/L	70		<0.30	<0.30	<0.30	<3.0	<0.30
cis-1,3-Dichloropropene	UG/L	--		<0.20	<0.20	<0.20	<2.0	<0.20
Diethyl Ether	UG/L	1000		--	--	7.5 J	--	--
Ethyl Chloride	UG/L	--		<0.20	<0.20	<0.20	<2.0	<0.20
Ethylbenzene	UG/L	700		<0.40	<0.40	<0.40	<4.0	<0.40
Methyl Bromide	UG/L	10		<0.30	<0.30	<0.30	<3.0	<0.30
Methyl Chloride	UG/L	--		<0.20	<0.20	<0.20	<2.0	<0.20
Methyl Ethyl Ketone	UG/L	300		<0.50	<0.50	<0.50	<5.0	<0.50
Methyl Isobutyl Ketone	UG/L	--		<0.50	<0.50	<0.50	<5.0	<0.50
Methylene Chloride	UG/L	3		<0.30	<0.30	<0.30	<3.0	<0.30
Styrene	UG/L	100		<0.30	<0.30	<0.30	<3.0	<0.30
Tetrachloroethene	UG/L	1		<0.30	<0.30	<0.30	<3.0	<0.30
Toluene	UG/L	600		<0.20	<0.20	<0.20	<2.0	<0.20
trans-1,2-Dichloroethene	UG/L	100		<0.30	<0.30	<0.30	<3.0	<0.30
trans-1,3-Dichloropropene	UG/L	--		<0.20	<0.20	<0.20	<2.0	<0.20
Trichloroethene	UG/L	1		<0.30	<0.30	<0.30	3.5 J	<0.30
Vinyl Chloride	UG/L	1		<0.20	<0.20	<0.20	<2.0	<0.20
Xylenes	UG/L	1000		<0.40	<0.40	<0.40	<4.0	<0.40
Semi-Volatile Organic Compounds (SVOCs)								
1,2,4-Trichlorobenzene	UG/L	9		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
1,4-Dioxane	UG/L	0.4		<0.17	0.42	0.36 J	0.31 J	<0.17
1-Naphthylamine	UG/L	--		<8.7 UJ	<8.5 UJ	<8.3 UJ	<8.1 UJ	<8.5 UJ
2,4,5-Trichlorophenol	UG/L	700		<0.54	<0.53	<0.52	<0.51	<0.53
2,4,6-Trichlorophenol	UG/L	20		<0.54	<0.53	<0.52	<0.51	<0.53
2,4-Dichlorophenol	UG/L	20		<0.54	<0.53	<0.52	<0.51	<0.53
2,4-Dimethylphenol	UG/L	100		<3.2	<3.2	<3.1	<3.0	<3.2
2,4-Dinitrophenol	UG/L	40		<15	<15	<15	<14	<15
2,4-Dinitrotoluene	UG/L	--		<1.1	<1.1	<1.0	<1.0	<1.1
2,6-Dinitrotoluene	UG/L	--		<0.54	<0.53	<0.52	<0.51	<0.53
2-Chloronaphthalene	UG/L	600		<0.43	<0.43	<0.42	<0.41 UJ	<0.42
2-Chlorophenol	UG/L	40		<0.54	<0.53	<0.52	<0.51	<0.53
2-Methylnaphthalene	UG/L	30		<0.11	<0.11	<0.10	<0.10 UJ	<0.11
2-Methylphenol (o-Cresol)	UG/L	50		<0.54	<0.53	<0.52	<0.51	<0.53
2-Nitroaniline	UG/L	--		<1.1	<1.1	<1.0	<1.0	<1.1
2-Nitrophenol	UG/L	--		<1.1	<1.1	<1.0	<1.0	<1.1
3,3'-Dichlorobenzidine	UG/L	30		<4.3 UJ	<4.3 UJ	<4.2 UJ	<4.1 UJ	<4.2 UJ
3-Nitroaniline	UG/L	--		<2.2	<2.1	<2.1	<2.0	<2.1
4,6-Dinitro-2-Methylphenol	UG/L	0.7		<8.7	<8.5	<8.3	<8.1	<8.5
4-Bromophenyl Phenyl Ether	UG/L	--		<0.54	<0.53	<0.52	<0.51	<0.53

Table 12
Summary of Analytical Results: Supplemental Groundwater Data
First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	AA25-M02B	O21-M01B	O21-M01B	P22-M01B	Z28-M02B
			Sample Date	01/07/2022	01/07/2022	01/07/2022	01/07/2022	01/07/2022
Analytes	Units	NJGWIIA	Sample Type	FS	DUP	FS	FS	FS
4-Chloro-3-Methylphenol	UG/L	--		<1.1	<1.1	<1.0	<1.0	<1.1
4-Chloroaniline	UG/L	30		<4.3	<4.3	<4.2	<4.1	<4.2
4-Chlorophenyl Phenyl Ether	UG/L	--		<0.54	<0.53	<0.52	<0.51	<0.53
4-Methylphenol (p-Cresol)	UG/L	50		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
4-Nitroaniline	UG/L	--		<0.97	<0.96	<0.94	<0.91	<0.95
4-Nitrophenol	UG/L	--		<11	<11	<10	<10	<11
Acenaphthene	UG/L	400		<0.11	<0.11	<0.10	<0.10	<0.11
Acenaphthylene	UG/L	--		<0.11	<0.11	<0.10	<0.10	<0.11
Aniline	UG/L	6		<1.1 UJ	<1.1 UJ	<1.0 UJ	<1.0 UJ	<1.1 UJ
Anthracene	UG/L	2000		<0.11	<0.11	<0.10	<0.10	<0.11
Benzo(A)Anthracene	UG/L	0.1		<0.011	<0.011	<0.010	<0.010	<0.011
Benzo(A)Pyrene	UG/L	0.1		<0.011	<0.011	<0.010	<0.010	<0.011 UJ
Benzo(B)Fluoranthene	UG/L	0.2		<0.011	<0.011	<0.010	<0.010	<0.011 UJ
Benzo(G,H,I)Perylene	UG/L	--		<0.11	<0.11	<0.10	<0.10	<0.11
Benzo(K)Fluoranthene	UG/L	0.5		<0.11	<0.11	<0.10	<0.10	<0.11
Bis(2-Chloro-1-Methylethyl) Ether	UG/L	300		<0.54	<0.53	<0.52	<0.51	<0.53
Bis(2-Chloroethoxy)Methane	UG/L	--		<0.54	<0.53	<0.52	<0.51	<0.53
Bis(2-Chloroethyl)Ether	UG/L	7		<0.54	<0.53	<0.52	<0.51	<0.53
Bis(2-Ethylhexyl)Phthalate	UG/L	3		0.10 B	0.17 B	0.27 B	0.14 B	<0.053 UJ
Butyl Benzyl Phthalate	UG/L	100		<2.2 UJ	<2.1 UJ	<2.1 UJ	<2.0 UJ	<2.1 UJ
Carbazole	UG/L	--		<0.54	<0.53	<0.52	<0.51	<0.53
Chrysene	UG/L	5		<0.11	<0.11	<0.10	<0.10	<0.11
Di-N-Butyl Phthalate	UG/L	700		<2.2	4.8 B	4.9 B	<2.0	<2.1
Dibenz(A,H)Anthracene	UG/L	0.3		<0.022	<0.021	<0.021	<0.020 UJ	<0.021 UJ
Dibenzofuran	UG/L	--		<0.54	<0.53	<0.52	<0.51	<0.53
Diethyl Phthalate	UG/L	6000		<2.2	<2.1	<2.1	<2.0	<2.1
Dimethyl Phthalate	UG/L	--		<2.2 UJ	<2.1 UJ	<2.1 UJ	<2.0 UJ	<2.1 UJ
Dodecanoic Acid	UG/L	--		--	--	33 J	--	--
Fluoranthene	UG/L	300		<0.11	<0.11	<0.10	<0.10	<0.11
Fluorene	UG/L	300		<0.13	<0.13	<0.13	<0.12	<0.13
Hexachlorobenzene	UG/L	0.02		<0.022	<0.021	<0.021	<0.020	<0.021
Hexachlorobutadiene	UG/L	1		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
Hexachlorocyclopentadiene	UG/L	40		<5.4	<5.3	<5.2	<5.1 R	<5.3
Hexachloroethane	UG/L	7		<0.54 UJ	<0.53 UJ	<0.52 UJ	<0.51 UJ	<0.53 UJ
Indeno(1,2,3-CD)Pyrene	UG/L	0.2		<0.022	<0.021	<0.021	<0.020 UJ	<0.021 UJ
Isophorone	UG/L	40		<0.54	<0.53	<0.52	<0.51	<0.53
N-Dioctyl Phthalate	UG/L	100		<5.4	<5.3	<5.2	<5.1	<5.3
N-Nitrosodi-N-Propylamine	UG/L	10		<0.54	<0.53	<0.52	<0.51	<0.53
N-Nitrosodiphenylamine	UG/L	10		<0.54	<0.53	<0.52	<0.51	<0.53
Naphthalene	UG/L	300		<0.11	<0.11	<0.10	<0.10	<0.11
Nitrobenzene	UG/L	6		<0.54	<0.53	<0.52	<0.51	<0.53
o-Toluidine	UG/L	--		<4.3	<4.3	<4.2	<4.1	<4.2
Octadecanoic Acid	UG/L	--		--	6.3 J	--	--	--
Pentachlorophenol	UG/L	0.3		<0.026	<0.027	<0.027	<0.026	<0.028
Phenanthrene	UG/L	--		<0.12	<0.12	<0.11	<0.11	<0.12
Phenol	UG/L	2000		<0.54	<0.53	<0.52	<0.51	<0.53
Pyrene	UG/L	200		<0.11	<0.11	<0.10	<0.10	<0.11
Organics								
Total Organic Carbon	UG/L	--		3300 J	21000 J	20000 J	34000 J	840 J
Total Organic Halogen	UG/L	--		15 J	53 J	58 J	50 J	<15
Metals								
Aluminum	UG/L	200		35000	7300 J	14000 J	12000 J	25000
Antimony	UG/L	6		<0.41	<0.41	<0.41	<0.41	<0.41
Arsenic	UG/L	3		9.2	30	32	16	5.6
Barium	UG/L	6000		240	100 J	140 J	240	150
Beryllium	UG/L	1		5.5	0.43 J	0.8	0.56	1.9
Cadmium	UG/L	4		0.94	<0.15	0.23 J	0.17 J	0.44 J
Calcium	UG/L	--		13000	52000	53000	37000	6000
Chromium	UG/L	70		49	16 J	28 J	26	37
Cobalt	UG/L	100		25	13	16	5.4	12
Copper	UG/L	1300		22	16 J	29 J	13	18
Iron	UG/L	300		20000	130000	140000	78000	21000
Lead	UG/L	5		24 J	8.6 J	17 J	14	17 J

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First Semester 2022 Semi-Annual NPDES DGW Report
Chambers Works Complex
Deepwater, New Jersey

			Location	AA25-M02B	O21-M01B	O21-M01B	P22-M01B	Z28-M02B
			Sample Date	01/07/2022	01/07/2022	01/07/2022	01/07/2022	01/07/2022
Analytes	**Units**	**NJGWIIA**	Sample Type	FS	DUP	FS	FS	FS
Magnesium	UG/L	--		11000 J	80000 J	82000 J	44000	12000 J
Manganese	UG/L	50		480	2200	2300	2800	130
Mercury	UG/L	2		0.19 B	0.13 B	0.15 B	0.14 B	0.3 B
Nickel	UG/L	100		36	11 J	18 J	9.8	24
Potassium	UG/L	--		4000 J	9800 J	11000 J	7200 J	5400 J
Selenium	UG/L	40		<0.28	<0.28	0.28 J	0.58 J	0.37 J
Silicon	UG/L	--		44000	26000 J	37000 J	40000	47000
Sodium	UG/L	50000		5400 B	230000	240000	120000	13000
Thallium	UG/L	2		0.21 J	<0.13	<0.13	0.14 J	0.28 J
Vanadium	UG/L	--		74	22 J	41 J	32	53
Zinc	UG/L	2000		200	15 J	44 J	40	140
Miscellaneous Parameters								
Chloride	UG/L	250000		7600	260000	270000	77000	19000
Nitrate	UG/L	10000		220	<40	480 J	<40	6000
Sulfate	UG/L	250000		53000	170000	170000	5300	26000 J
Ammonia	UG/L	3000		<250	4100	3800	14000 J	<250 UJ
Cyanide	UG/L	100		<5.0	<5.0	<5.0	<5.0	<5.0
Total Phenols	UG/L	--		<10	<10	<10	<10	<10
Field Measurements								
Color	None	--		YES	--	YES	YES	YES
Dissolved Oxygen	MG/L	--		1.98	--	1.15	0.66	4.12
Odor	None	--		NONE	--	NONE	NONE	NONE
pH	STD Units	--		5.4	--	6.41	6.47	5.24
Redox	mv	--		158.8	--	38.1	41.2	161.9
Specific Conductance	umhos/cm	--		173	--	2182	1304	193
Temperature	Degrees C	--		11.23	--	12.97	12.11	13.65
Turbidity Quantitative	NTU	--		2531 AU*	--	143	814	1835 AU*

Notes
NJGWIIA = NJ Groundwater Quality Standards Class IIA
J = Estimated value due to poor lab matrix spike recovery
B = Not detected substantially above the level reported in the laboratory or field blanks
UJ = Non detect result with estimated reporting limits due to poor lab matrix spike recovery
R = Unusable Result
< = Not Detected at stated reporting limit
-- = Not Analyzed or Not Requested for this event
Yellow shading = Exceedance of NJGWIIA Criteria
Orange shading = Detection limit is above screening criteria
FS = Field Sample
DUP = Duplicate Sample
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit
AU* = Attenuation Unit

Table 13
Summary of Analytical Results: Garage Diesel Spill Area
First Semester 2022 Semi-Annual NPDES DGW Report
Chemours Chambers Work
Deepwater, New Jersey

			Location	N07-M01A	N07-M03A	N07-M03A
			Sample Date	03/29/2022	03/29/2022	03/29/2022
			Sample Type	FS	DUP	FS
Analyte	**Units**	**NJGWIIA**	**Gradient Location**	Source Area	Source Area	Mid-Plume
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	UG/L	30		<3.0	<0.30	<0.30
1,1,2,2-Tetrachloroethane	UG/L	1		<3.0	<0.30	<0.30
1,1,2-Trichloroethane	UG/L	3		<3.0	<0.30	<0.30
1,1,2-Trichlorotrifluoroethane	UG/L	20000		<3.0	<0.30	<0.30
1,1-Dichloroethane	UG/L	50		<3.0	<0.30	<0.30
1,1-Dichloroethene	UG/L	1		<3.0	<0.30	<0.30
1,2-Dibromo-3-Chloropropane	UG/L	0.02		0.059 J	<0.0098	<0.0098
1,2-Dibromo-3-Chloropropane	UG/L	0.02		<3.0	<0.30	<0.30
1,2-Dibromoethane (EDB)	UG/L	0.03		<0.050	<0.0098	<0.0098
1,2-Dibromoethane (EDB)	UG/L	0.03		<2.0	<0.20	<0.20
1,2-Dichlorobenzene	UG/L	600		<2.0	<0.20	<0.20
1,2-Dichloroethane	UG/L	2		<3.0	<0.30	<0.30
1,2-Dichloropropane	UG/L	1		<3.0	<0.30	<0.30
1,3-Dichlorobenzene	UG/L	600		<3.0	<0.30	<0.30
1,4-Dichlorobenzene	UG/L	75		<3.0	<0.30	<0.30
2-Hexanone	UG/L	40		<4.0	<0.40	<0.40
Acetone	UG/L	6000		15 J	15 J	20
Benzene	UG/L	1		1400	330 J	570 J
Bromodichloromethane	UG/L	1		<2.0	<0.20	<0.20
Bromoform	UG/L	4		<10	<1.0	<1.0
Carbon Disulfide	UG/L	700		<3.0	<0.30	<0.30
Carbon Tetrachloride	UG/L	1		<3.0	<0.30	<0.30
Chlorobenzene	UG/L	50		<3.0	<0.30	0.56 J
Chlorodibromomethane	UG/L	1		<2.0	<0.20	<0.20
Chloroform	UG/L	70		<3.0	<0.30	<0.30
cis-1,2 Dichloroethene	UG/L	70		<3.0	<0.30	<0.30
cis-1,3-Dichloropropene	UG/L	--		<2.0	<0.20	<0.20
Cumene	UG/L	700		57	4.0 J	12 J
Cyclohexane	UG/L	--		200	40 J	110 J
Dichlorodifluoromethane	UG/L	1000		<2.0	<0.20	<0.20
Ethyl Chloride	UG/L	--		<2.0	<0.20	<0.20
Ethylbenzene	UG/L	700		970	98 J	220 J
Methyl Acetate	UG/L	7000		<3.0	<0.30	<0.30
Methyl Bromide	UG/L	10		<3.0	<0.30	<0.30
Methyl Chloride	UG/L	--		<2.0	<0.20	<0.20
Methyl Ethyl Ketone	UG/L	300		25 J	<0.50	<0.50
Methyl Isobutyl Ketone	UG/L	--		<5.0	<0.50	<0.50
Methyl Tertiary Butyl Ether	UG/L	70		<2.0	<0.20	<0.20
Methylene Chloride	UG/L	3		<3.0	<0.30	<0.30
Styrene	UG/L	100		<3.0	<0.30	<0.30
Tetrachloroethene	UG/L	1		<3.0	<0.30	<0.30
Toluene	UG/L	600		5700	640 J	920 J
trans-1,2-Dichloroethene	UG/L	100		<3.0	<0.30	<0.30
trans-1,3-Dichloropropene	UG/L	--		<2.0	<0.20	<0.20
Trichloroethene	UG/L	1		<3.0	<0.30	<0.30
Trichlorofluoromethane	UG/L	2000		<2.0	<0.20	<0.20
Vinyl Chloride	UG/L	1		<2.0	<0.20	<0.20
Xylenes	UG/L	1000		5800	430 J	720 J

Table 13
Summary of Analytical Results: Garage Diesel Spill Area
First Semester 2022 Semi-Annual NPDES DGW Report
Chemours Chambers Work
Deepwater, New Jersey

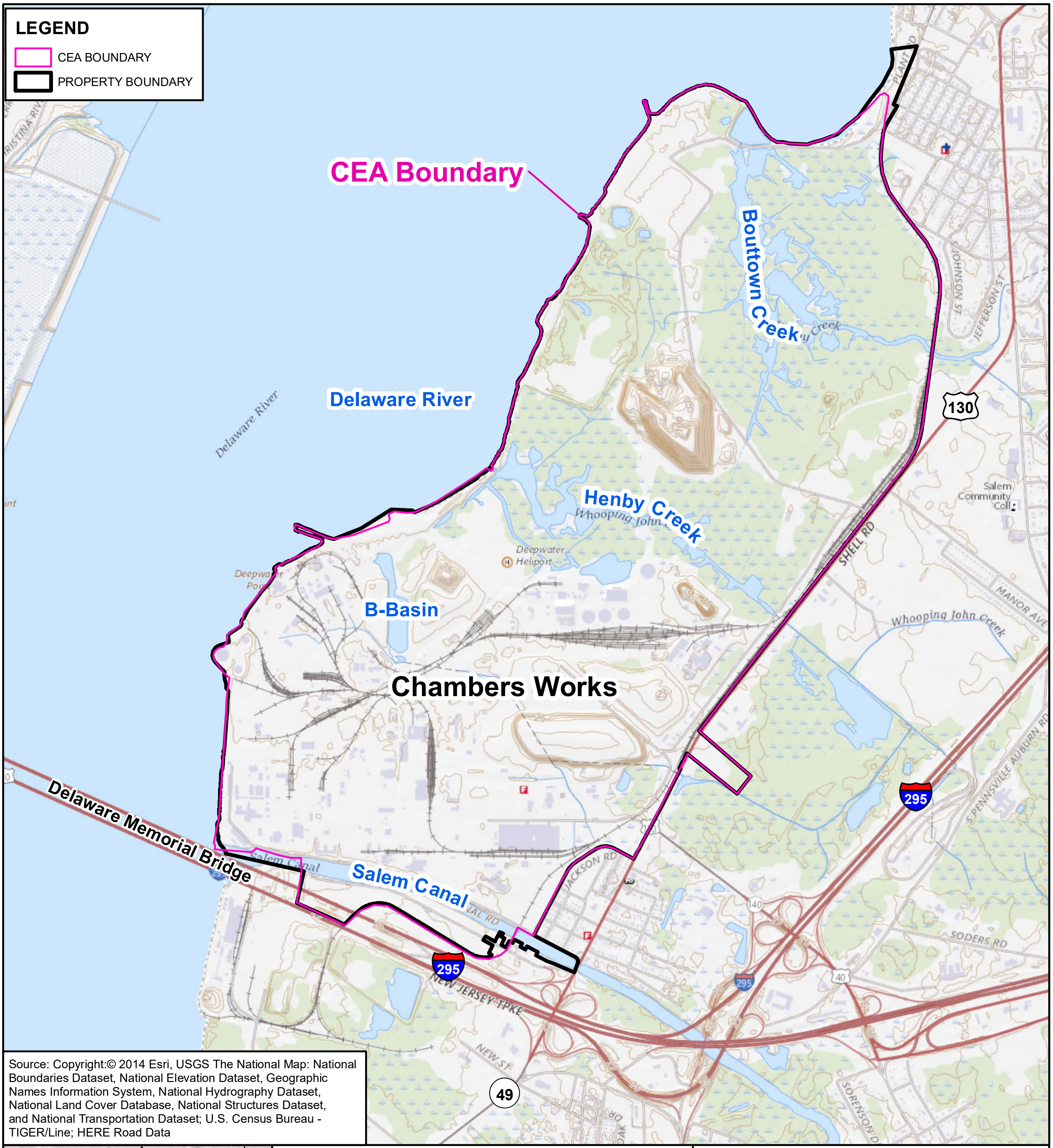
			Location	N07-M01A	N07-M03A	N07-M03A
			Sample Date	03/29/2022	03/29/2022	03/29/2022
			Sample Type	FS	DUP	FS
Analyte	**Units**	**NJGWIIA**	**Gradient Location**	Source Area	Source Area	Mid-Plume
Semi-Volatile Organic Compounds (SVOCs)						
1,2,4-Trichlorobenzene	UG/L	9		<3.0	<0.30	<0.30
1,4-Dioxane	UG/L	0.4		<0.85	<0.17	<0.17
2,4,5-Trichlorophenol	UG/L	700		<5.5	<2.8	<2.7
2,4,6-Trichlorophenol	UG/L	20		<5.5	<2.8	<2.7
2,4-Dichlorophenol	UG/L	20		<5.5	<2.8	<2.7
2,4-Dimethylphenol	UG/L	100		<33	<17	<16
2,4-Dinitrophenol	UG/L	40		<150	<78	<77
2,4-Dinitrotoluene	UG/L	--		<11	<5.6	<5.5
2,6-Dinitrotoluene	UG/L	--		<5.5	<2.8	<2.7
2-Chloronaphthalene	UG/L	600		<4.4	<2.2	<2.2
2-Chlorophenol	UG/L	40		<5.5	<2.8	<2.7
2-Methylnaphthalene	UG/L	30		390	12 J	7.6 J
2-Methylphenol (o-Cresol)	UG/L	50		<5.5	<2.8	5.5 J
2-Nitroaniline	UG/L	--		<11	<5.6	<5.5
2-Nitrophenol	UG/L	--		<11	<5.6	<5.5
3,3'-Dichlorobenzidine	UG/L	30		<44 UJ	<22 UJ	<22 UJ
3-Nitroaniline	UG/L	--		<22	<11	<11
4,6-Dinitro-2-Methylphenol	UG/L	0.7		<88	<45	<44
4-Bromophenyl Phenyl Ether	UG/L	--		<5.5	<2.8	<2.7
4-Chloro-3-Methylphenol	UG/L	--		<11	<5.6	<5.5
4-Chloroaniline	UG/L	30		<44	<22	<22
4-Chlorophenyl Phenyl Ether	UG/L	--		<5.5	<2.8	<2.7
4-Methylphenol (p-Cresol)	UG/L	50		<5.5	<2.8	<2.7
4-Nitroaniline	UG/L	--		<9.9	<5.0	<4.9
4-Nitrophenol	UG/L	--		<110	<56	<55
Acenaphthene	UG/L	400		1.7 J	<0.56	<0.55
Acenaphthylene	UG/L	--		<1.1	<0.56	<0.55
Acetophenone	UG/L	700		<11	18 J	18 J
Aniline	UG/L	6		<11 UJ	<5.6 UJ	<5.5 UJ
Anthracene	UG/L	2000		1.2 J	<0.56	<0.55
Benzaldehyde	UG/L	--		<11 UJ	<5.6 UJ	<5.5 UJ
Benzo(A)Anthracene	UG/L	0.1		0.99	0.37	0.21 J
Benzo(A)Pyrene	UG/L	0.1		0.65	0.39	0.23 J
Benzo(B)Fluoranthene	UG/L	0.2		1.2	0.65	0.47
Benzo(G,H,I)Perylene	UG/L	--		<1.1	<0.56	<0.55
Benzo(K)Fluoranthene	UG/L	0.5		<1.1	<0.56	<0.55
Biphenyl	UG/L	400		<5.5	<2.8	<2.7
Bis(2-Chloro-1-Methylethyl) Ether	UG/L	300		<5.5	<2.8	<2.7
Bis(2-Chloroethoxy)Methane	UG/L	--		<5.5	<2.8	<2.7
Bis(2-Chloroethyl)Ether	UG/L	7		<5.5	<2.8	<2.7
Bis(2-Ethylhexyl)Phthalate	UG/L	3		<22	<11	<11
Butyl Benzyl Phthalate	UG/L	100		<22 UJ	<11 UJ	<11 UJ
Caprolactam	UG/L	4000		<33 UJ	<17 UJ	<16 UJ
Carbazole	UG/L	--		<5.5	<2.8	<2.7
Chrysene	UG/L	5		1.1 J	0.56 J	<0.55
Di-N-Butyl Phthalate	UG/L	700		<22	<11	<11
Dibenz(A,H)Anthracene	UG/L	0.3		<0.22	<0.11	<0.11
Dibenzofuran	UG/L	--		<5.5	<2.8	<2.7
Diethyl Phthalate	UG/L	6000		<22	<11	<11
Dimethyl Phthalate	UG/L	--		<22 UJ	<11 UJ	<11 UJ
Fluoranthene	UG/L	300		2.9 J	0.98 J	0.81 J

Table 13
Summary of Analytical Results: Garage Diesel Spill Area
First Semester 2022 Semi-Annual NPDES DGW Report
Chemours Chambers Work
Deepwater, New Jersey

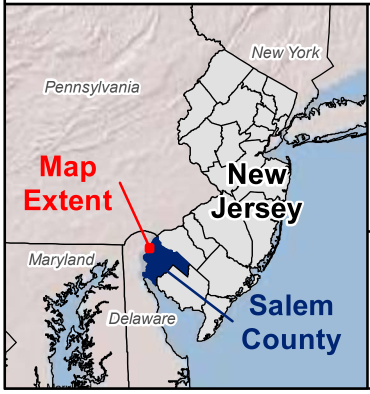
			Location	N07-M01A	N07-M03A	N07-M03A
			Sample Date	03/29/2022	03/29/2022	03/29/2022
			Sample Type	FS	DUP	FS
Analyte	**Units**	**NJGWIIA**	**Gradient Location**	Source Area	Source Area	Mid-Plume
Fluorene	UG/L	300		<1.3	<0.67	<0.66
Hexachlorobenzene	UG/L	0.02		<0.22 UJ	<0.11 UJ	<0.11 UJ
Hexachlorobutadiene	UG/L	1		<5.5 UJ	<2.8 UJ	<2.7 UJ
Hexachlorocyclopentadiene	UG/L	40		<55	<28	<27
Hexachloroethane	UG/L	7		<5.5 UJ	<2.8 UJ	<2.7 UJ
Indeno(1,2,3-CD)Pyrene	UG/L	0.2		0.51 J	0.26 J	0.19 J
Isophorone	UG/L	40		<5.5	<2.8	<2.7
Methyl Cyclohexane	UG/L	--		130	9.9 J	28 J
N-Dioctyl Phthalate	UG/L	100		<55	<28	<27
N-Nitrosodi-N-Propylamine	UG/L	10		<5.5	<2.8	<2.7
N-Nitrosodiphenylamine	UG/L	10		<5.5	<2.8	<2.7
Naphthalene	UG/L	300		430	52	39
Nitrobenzene	UG/L	6		<5.5	<2.8	<2.7
Pentachlorophenol	UG/L	0.3		<0.14	<0.028	<0.028
Pentachlorophenol	UG/L	0.3		<11	<5.6	<5.5
Phenanthrene	UG/L	--		5.1 J	<0.62	<0.60
Phenol	UG/L	2000		<5.5	2.9 J	6.1 J
Pyrene	UG/L	200		2.9 J	1.1 J	0.94 J
Miscellaneous Parameters						
Atrazine	UG/L	3		<11	<5.6	<5.5
Field Parameters						
Color	None	--		YES	--	YES
Dissolved Oxygen	MG/L	--		0.38	--	2.96
Odor	None	--		YES	--	YES
pH	STD Units	--		6.71	--	6.66
Redox	mv	--		-54.6	--	260.9
Specific Conductance	umhos/cm	--		3737	--	2254
Temperature	Degrees C	--		13.88	--	14.85
Turbidity Quantitative	NTU	--		3.5	--	19.7

Notes:
NJGWIIA = NJ Groundwater Quality Standards Class IIA
J = Estimated value due to poor lab matrix spike recovery
UJ = Non detect result with estimated reporting limits due to poor lab matrix spike recovery
< = Not Detected at stated reporting limit
-- = Not Analyzed or Not Requested for this event
Yellow shading = Exceedence of NJGWIIA Criteria
Orange shading = Detection limit is above screening criteria
FS = Field Sample
DUP = Duplicate
UG/L = micrograms/liter
MG/L = milligrams/liter
mV = millivolts
umhos/cm= micromhos
C = Celsius
NTU = Nephelometric Turbidity unit

Figures



Source: Copyright:© 2014 Esri, USGS The National Map: National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; U.S. Census Bureau - TIGER/Line; HERE Road Data



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0 1,000 2,000
Feet
1 inch = 2,000 feet

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SITE LOCATION MAP

NJPDES - DGW SEMI ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

FILE NUMBER: 22005	PROJECT NUMBER: 60674023
DESIGNED BY: M.LAYTON	DATE: 10/11/2022
DRAWN BY: G. TANASE	FIGURE NUMBER: 1
DATA QUALITY CHECK BY: S. MORGAN	

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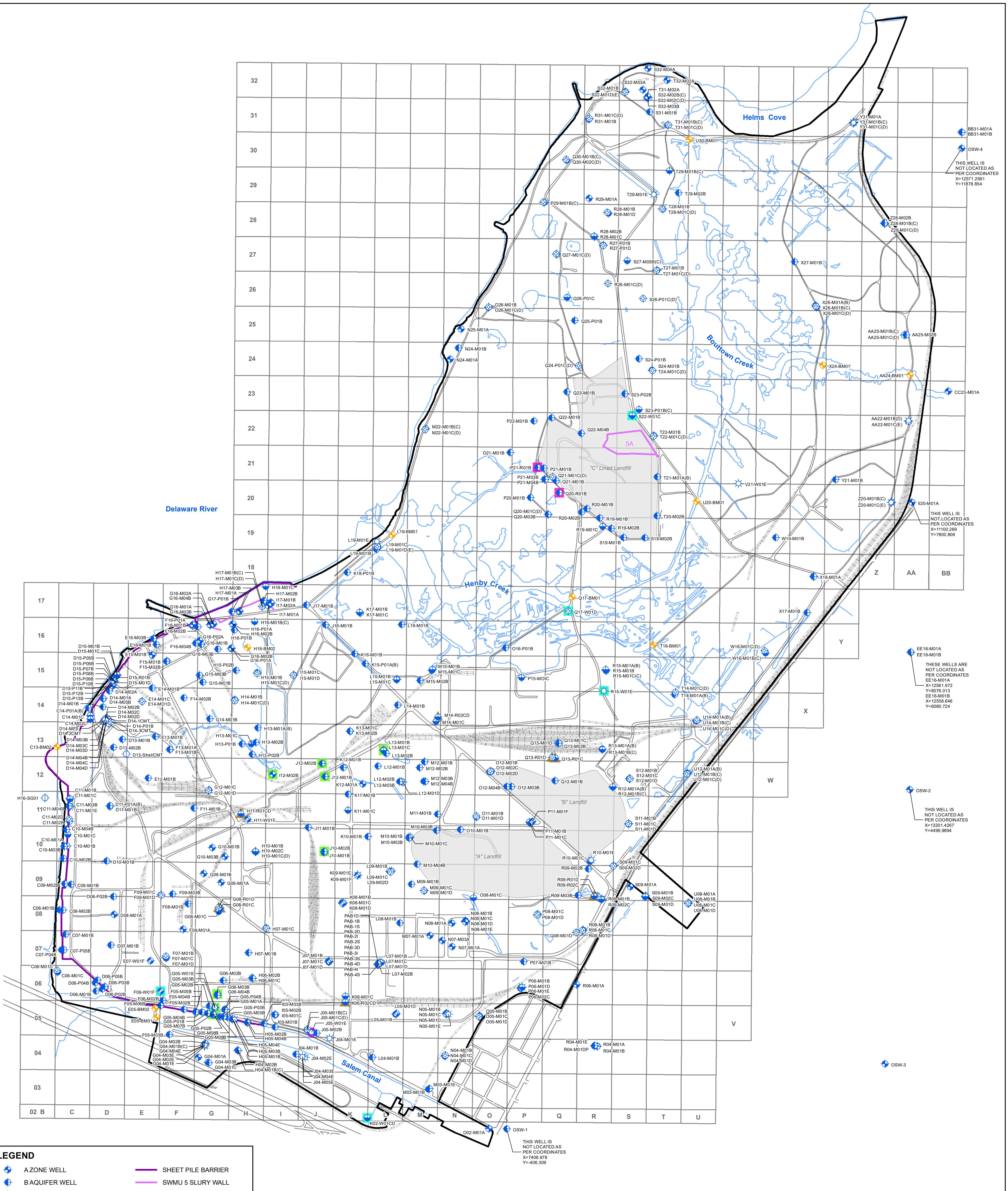

LEGEND

⌖	A ZONE WELL
⌖	B AQUIFER WELL
⌖	C AQUIFER WELL
⌖	D AQUIFER WELL
☼	E AQUIFER WELL
⌖	F AQUIFER WELL
⌖	MULTI-LEVEL WELL
⌖	BENCH MARK
—	SHEET PILE BARRIER
—	SWMU 5 SLURY WALL
▨	EXISTING LANDFILL
—	EDGE OF PAVEMENT
—	RAILROAD
—	SHORELINE
☐	PROPERTY BOUNDARY

RECOVERY WELLS:

▲	INTERCEPTOR WELL
🟪	SECURE LANDFILL "C" CORRECTIVE ACTION WELL
●	E AQUIFER RECOVERY WELL
🟩	DNAPL COLLECTION WELL

WATER SUPPLY WELLS:

🟦	PLANT SUPPLY WELL

0 375 750 1,500
Feet
1 inch = 750 feet
MAP FORMATTED FOR "C" (17" X 22") SIZE SHEET.
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FILE NUMBER: 22005
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DRAWN BY: G. TANASE
DATA QUALITY CHECK BY: S. MORGAN

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WELL LOCATION MAP

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023
DATE: 10/11/2022
FIGURE NUMBER: 2

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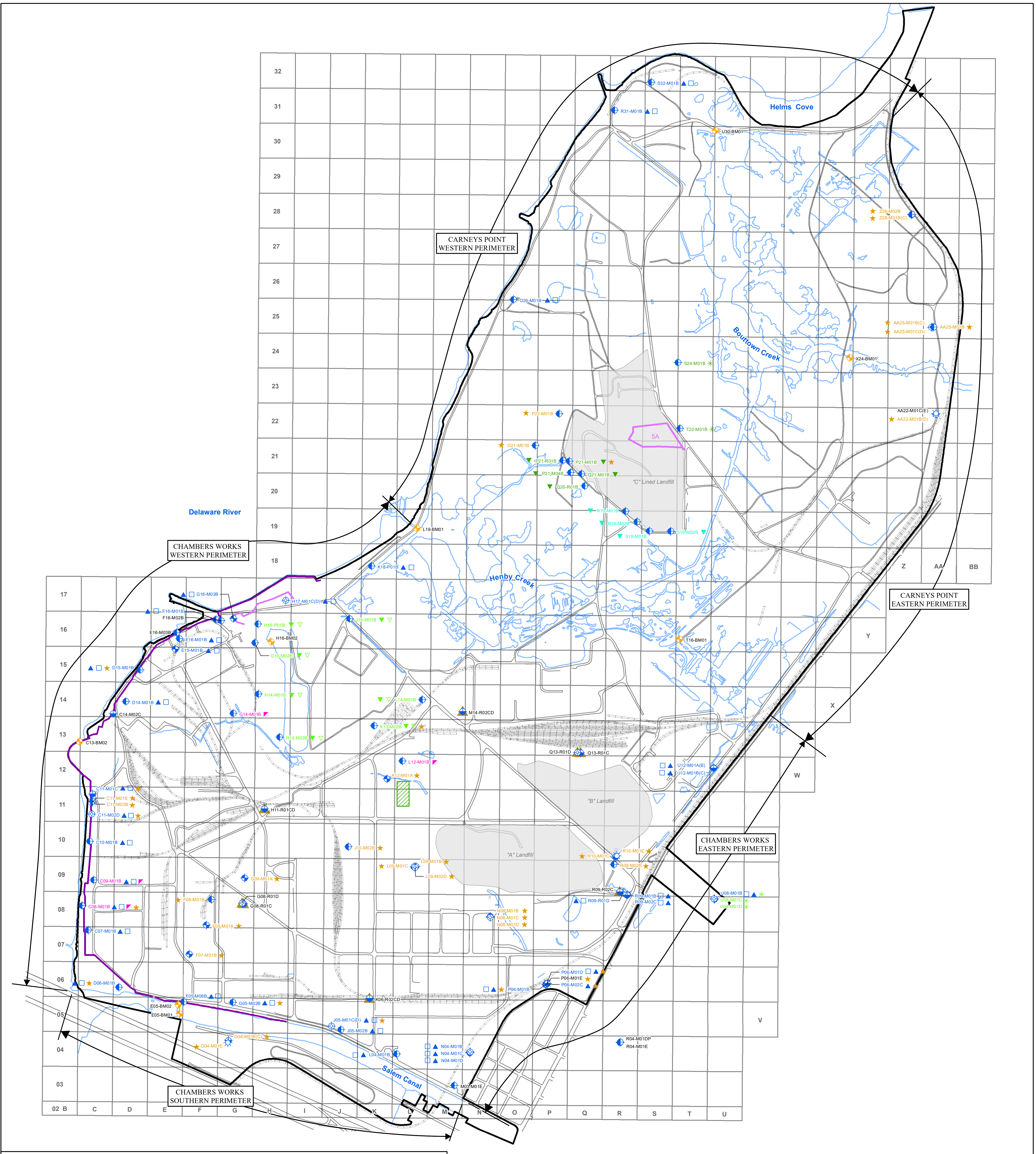

LEGEND

A ZONE WELL
B AQUIFER WELL
C AQUIFER WELL
D AQUIFER WELL
E AQUIFER WELL
F AQUIFER WELL
MULTI-LEVEL WELL
BENCH MARK
INTERCEPTOR WELL

CLOSURE AND POST CLOSURE GROUNDWATER MONITORING FOR THE A, B, AND C BASINS
✳ BACKGROUND WELL
▽ SEMIANNUAL IND1
▼ TRIENNIAL PP1

CHAMBERS WORKS FACILITY PERIMETER MONITORING PROGRAM (PMP)
▲ BIENNIAL PP1
☐ ANNUAL IND1

C LANDFILL CORRECTIVE ACTION GROUNDWATER MONITORING PROGRAM
✳ BACKGROUND WELL
▼ SEMIANNUAL C LANDFILL TARGET COMPOUNDS

C LANDFILL DETECTION MONITORING PROGRAM
▼ SEMIANNUAL C LANDFILL TARGET COMPOUNDS

RCRA POST CLOSURE MONITORING
◤ RCRA UNIT COMPOUNDS

PFOA MONITORING PROGRAM
★ SEMIANNUAL SAMPLING

▨ CHEMICAL WASTE PAD
EXISTING LANDFILL
SHEET PILE BARRIER
SWMU 5 SLURY WALL
EDGE OF PAVEMENT
RAILROAD
SHORELINE
PROPERTY BOUNDARY

0 375 750 1,500
Feet
1 inch = 750 feet
MAP FORMATTED FOR "C" (17" X 22") SIZE SHEET.
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DATA QUALITY CHECK BY:	S. MORGAN

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GROUNDWATER SAMPLING PLAN MAP

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER:	60674023
DATE:	10/11/2022
FIGURE NUMBER:	3

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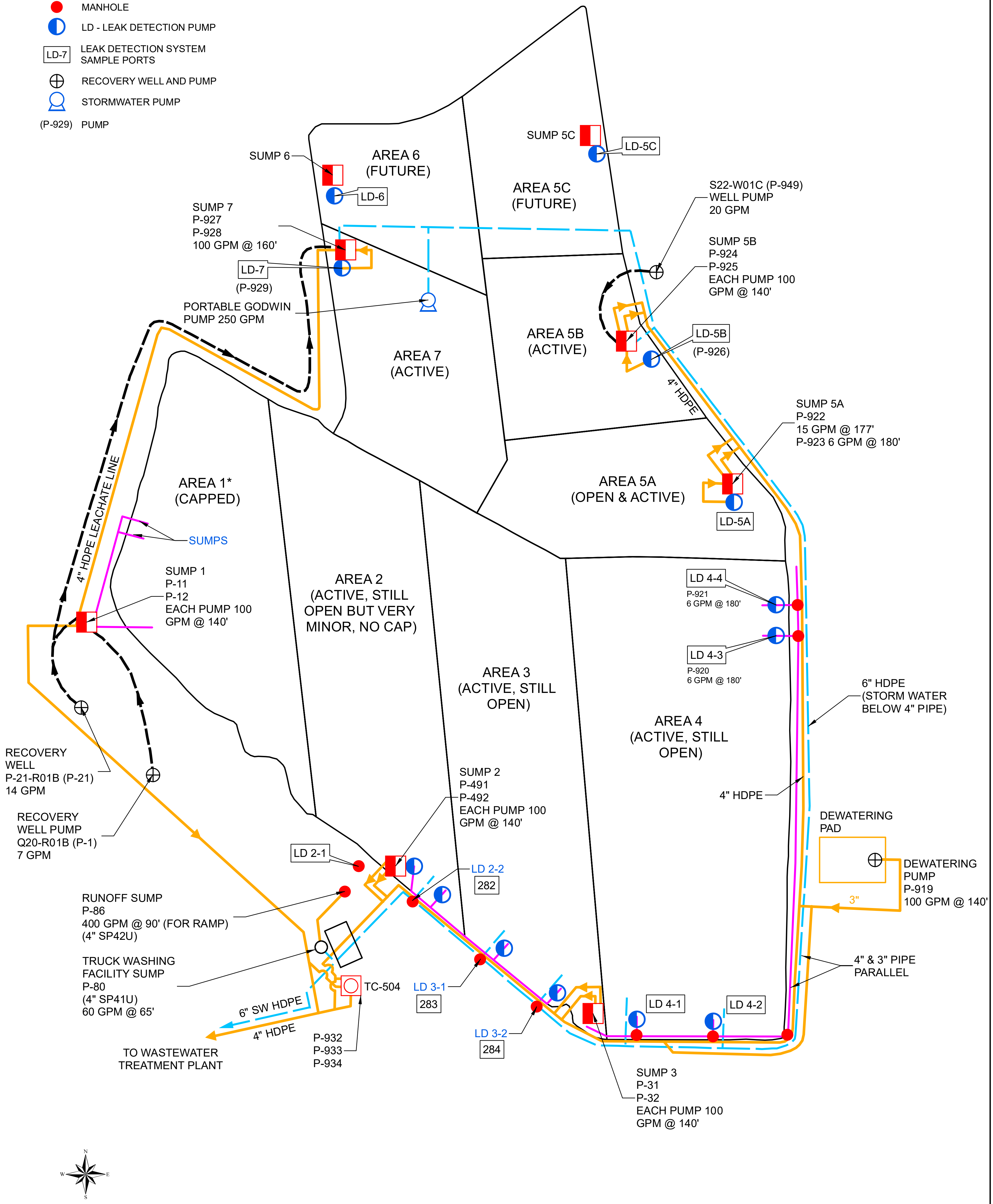
LEGEND

- — 2" LEACHATE DETECTION LINE
- — LEACHATE COLLECTION LINE
- — OVERHEAD LEACHATE PIPELINE
- – – 6" STORMWATER FORCE MAIN
- 🟥 LEACHATE COLLECTION AND PUMPING STATION
- ◯ LEACHATE TANK
- ● MANHOLE
- ◐ LD - LEAK DETECTION PUMP
- LD-7 LEAK DETECTION SYSTEM SAMPLE PORTS
- ⊕ RECOVERY WELL AND PUMP
- ♁ STORMWATER PUMP
- (P-929) PUMP

NOTES:

1. LD PUMPS SHOWN AS CONNECTED TO 4" HDPE LEACHATE PIPELINE PER DISCUSSION WITH DUPONT ON-SITE VISIT OF MARCH 8, 2007.
2. DRAWING NOT TO SCALE.

* AREA 1 HAS NO LEAK DETECTION SYSTEM.



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FILE NUMBER: 22005

DESIGNED BY: T. MCGEE

DRAWN BY: G. TANASE

DATA QUALITY CHECK BY: S. MORGAN

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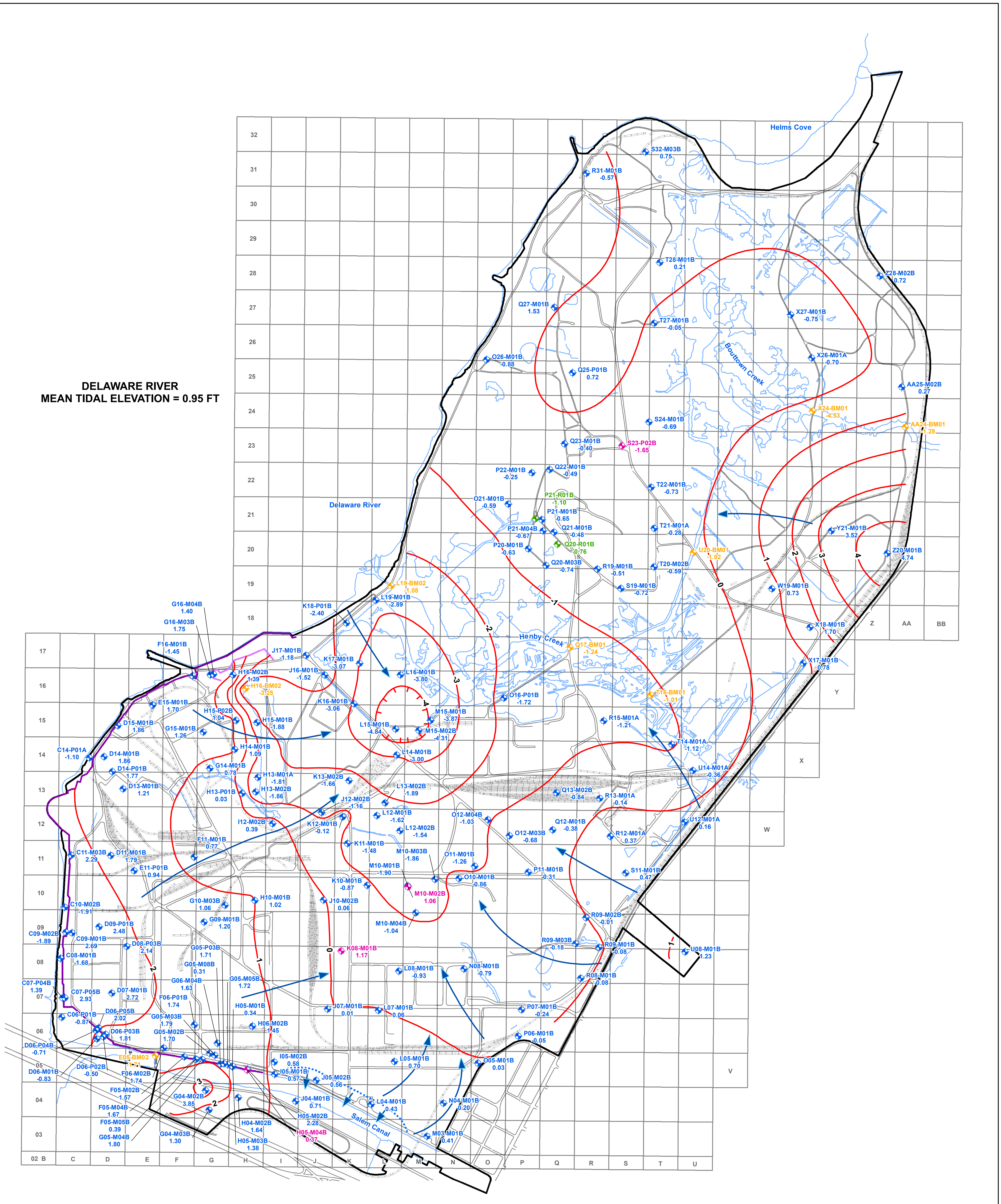
SECURE C LANDFILL LEACHATE SAMPLE REPORT LOCATION MAP

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023

DATE: 10/11/2022

FIGURE NUMBER: 3A



RECOVERY WELLS	PUMP STATUS	GPM
C LANDFILL:		
P21-R01B	OFF	0
Q20-R01B	OFF	0

LEGEND

✦	ANOMALOUS DATA POINT
✦	B AQUIFER WELL
✦	RECOVERY WELL
✦	BENCH MARK - SURFACE WATER ELEVATION MEASUREMENT
—	B AQUIFER GROUNDWATER ELEVATION CONTOUR - 1 FT INTERVAL (NAVD88)
⋯	GROUNDWATER FLOW DIVIDE
→	GENERAL GROUNDWATER FLOW
—	SHEET PILE BARRIER
—	SWMU 5 SLURRY WALL
—	EDGE OF PAVEMENT
—	RAILROAD
—	SHORELINE
☐	PROPERTY BOUNDARY

0 375 750 1,500
Feet
1 inch = 750 feet
MAP FORMATTED FOR "C" (17" X 22") SIZE SHEET.
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TASK NUMBER: 22005
DESIGNED BY: K. LOMBARDO
DRAWN BY: G. TANASE
DATA QUALITY CHECK BY: S. MORGAN

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GROUNDWATER ELEVATION CONTOUR MAP - B AQUIFER MAY 6, 2022

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023
DATE: 10/27/2022
FIGURE NUMBER: 4

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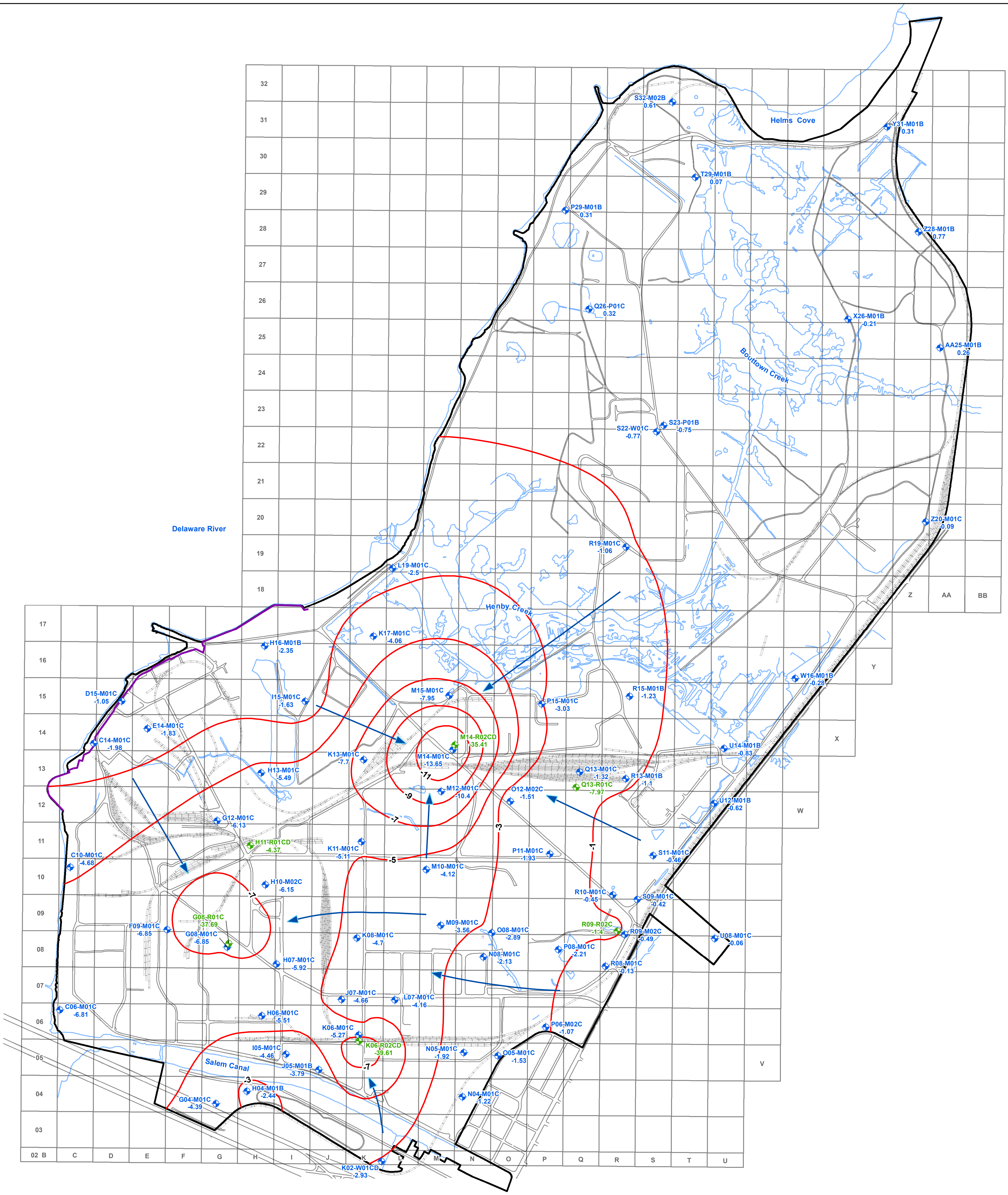

RECOVERY WELLS	PUMP STATUS	GPM
IWS:		
G08-R01C	ON	20
R09-R02C	OFF	0
Q13-R01C	OFF	0
H11-R01CD	REMOVED	NA
K06-R02CD	ON	220
M14-R02CD	ON	334
SUPPLY WELL:		
K02-W01CD	OFF	0

NOTE:

ACTUAL MEASURED WATER LEVEL ELEVATIONS FOR PUMPING WELLS SHOWN. WATER LEVELS USED IN CONTOURING CORRECTED TO ACCOUNT FOR WELL LOSSES AS FOLLOWS:

G08-R01C – 15' BASED ON SEMILOG CORRECTION FACTOR
K06-R02CD – 15' BASED ON SEMILOG CORRECTION FACTOR
M14-R02CD – 15' BASED ON SEMILOG CORRECTION FACTOR

LEGEND

- C AQUIFER WELL
- RECOVERY WELL
- C AQUIFER GROUNDWATER ELEVATION CONTOUR - 1 FT INTERVAL (NAVD88)
- GENERAL GROUNDWATER FLOW
- SHEET PILE BARRIER
- EDGE OF PAVEMENT
- RAILROAD
- SHORELINE
- PROPERTY BOUNDARY

0 375 750 1,500
Feet
1 inch = 750 feet
MAP FORMATTED FOR "C" (17" X 22") SIZE SHEET.
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GROUNDWATER ELEVATION CONTOUR MAP - C AQUIFER MAY 6, 2022

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023
DATE: 10/27/2022
FIGURE NUMBER: 5

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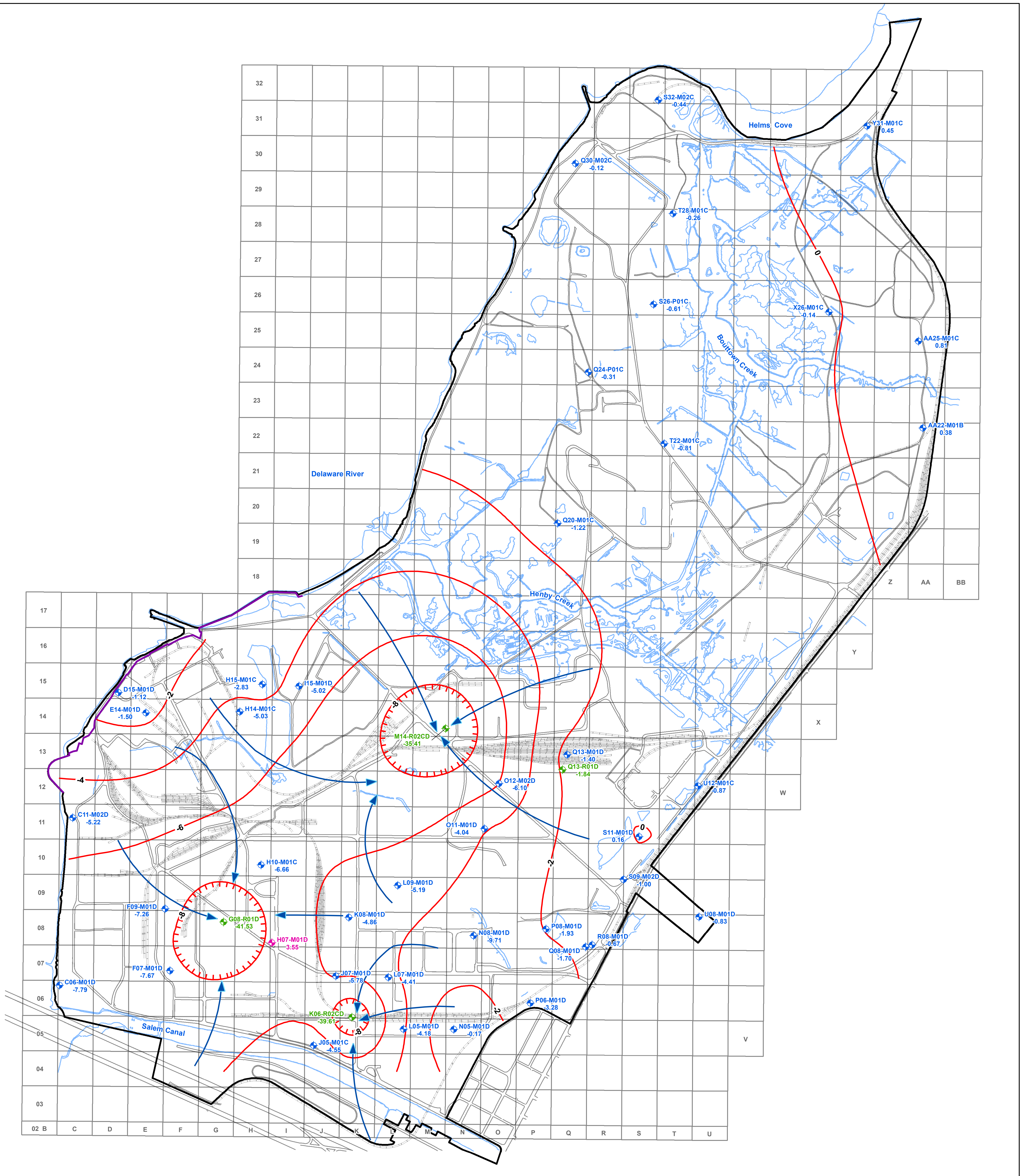

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RECOVERY WELLS	PUMP STATUS	GPM
IWS:		
G08-R01D	ON	150
Q13-R01D	OFF	0
H11-R01CD	REMOVED	NA
K06-R02CD	ON	220
M14-R02CD	ON	334
SUPPLY WELL:		
K02-W01CD	OFF	0

NOTE:

ACTUAL MEASURED WATER LEVEL ELEVATIONS FOR PUMPING WELLS SHOWN. WATER LEVELS USED IN CONTOURING CORRECTED TO ACCOUNT FOR WELL LOSSES AS FOLLOWS:

G08-R01D – 20’ BASED ON SEMILOG CORRECTION FACTOR
K06-R02CD – 20’ BASED ON SEMILOG CORRECTION FACTOR
M14-R02CD – 20’ BASED ON SEMILOG CORRECTION FACTOR

LEGEND

⊕	ANOMALOUS DATA POINT	▬	SHEET PILE BARRIER
⊕	D AQUIFER WELL	—	EDGE OF PAVEMENT
⊕	RECOVERY WELL	┼┼	RAILROAD
—	D AQUIFER GROUNDWATER ELEVATION CONTOUR - 2 FT INTERVAL (NAVD88)	—	SHORELINE
→	GENERAL GROUNDWATER FLOW	☐	PROPERTY BOUNDARY

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0 375 750 1,500
Feet
1 inch = 750 feet

MAP FORMATTED FOR "C" (17" X 22") SIZE SHEET.
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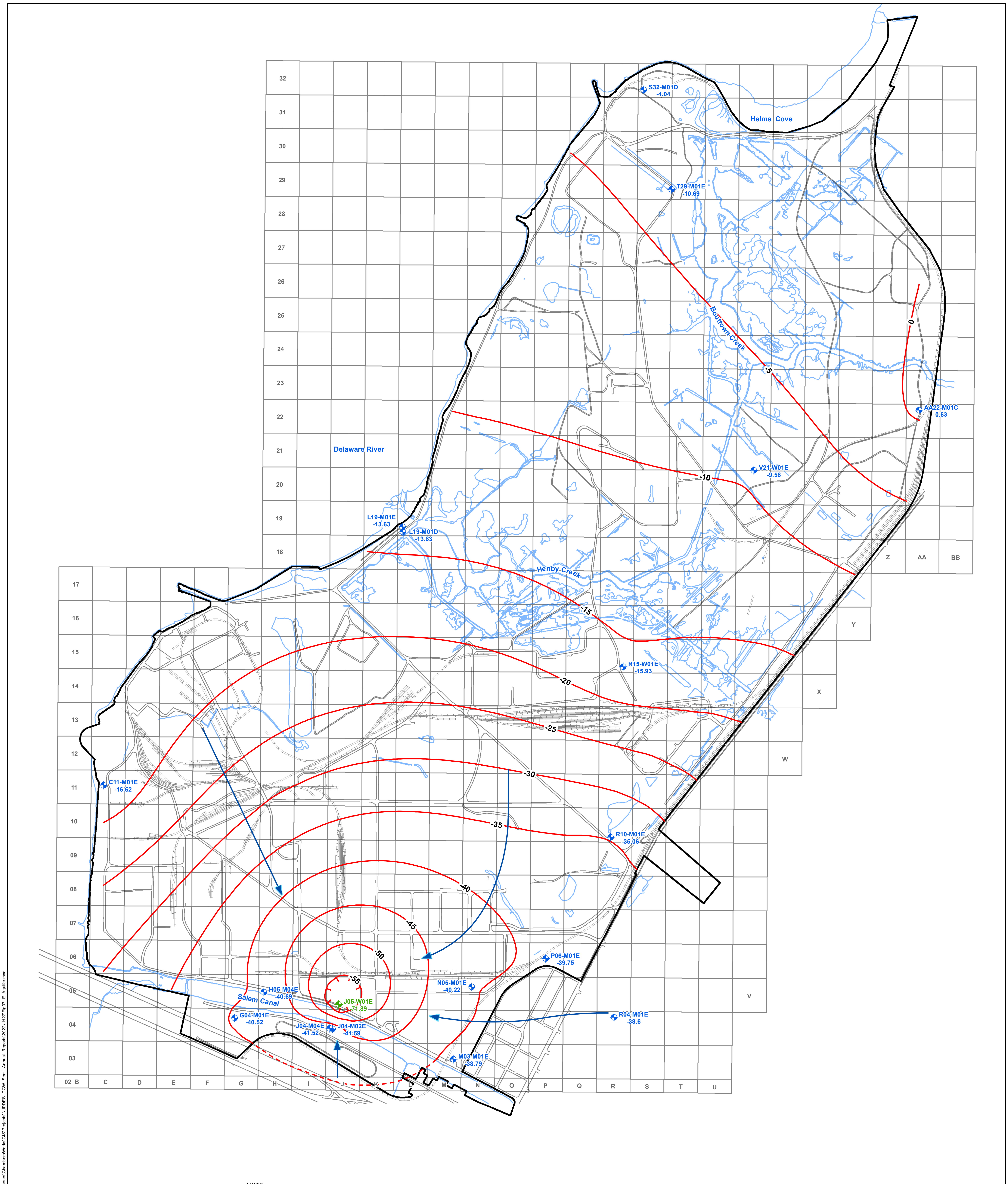
GROUNDWATER ELEVATION CONTOUR MAP - D AQUIFER
MAY 6, 2022

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023
DATE: 10/27/2022
FIGURE NUMBER: 6



RECOVERY WELLS	PUMP STATUS	GPM
J05-W01E	ON	175
SUPPLY WELL:		
R15-W01E	OFF	0

NOTE:

ACTUAL MEASURED WATER LEVEL ELEVATIONS FOR PUMPING WELLS SHOWN. WATER LEVELS USED IN CONTOURING CORRECTED TO ACCOUNT FOR WELL LOSSES AS FOLLOWS:

J05-W01E -60' BASED ON SEMILOG CORRECTION FACTOR.

LEGEND

- RECOVERY WELL
- E AQUIFER WELL
- E AQUIFER GROUNDWATER ELEVATION CONTOUR - 5 FT INTERVAL (NAVD88)
- SUPPLEMENTAL CONTOUR
- GENERAL GROUNDWATER FLOW
- EDGE OF PAVEMENT
- RAILROAD
- SHORELINE
- PROPERTY BOUNDARY

0 375 750 1,500
Feet
1 inch = 750 feet

MAP FORMATTED FOR "C" (17" X 22") SIZE SHEET.
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FILE NUMBER: 22005

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DRAWN BY: G. TANASE

DATA QUALITY CHECK BY: S. MORGAN

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GROUNDWATER ELEVATION CONTOUR MAP - E AQUIFER MAY 6, 2022

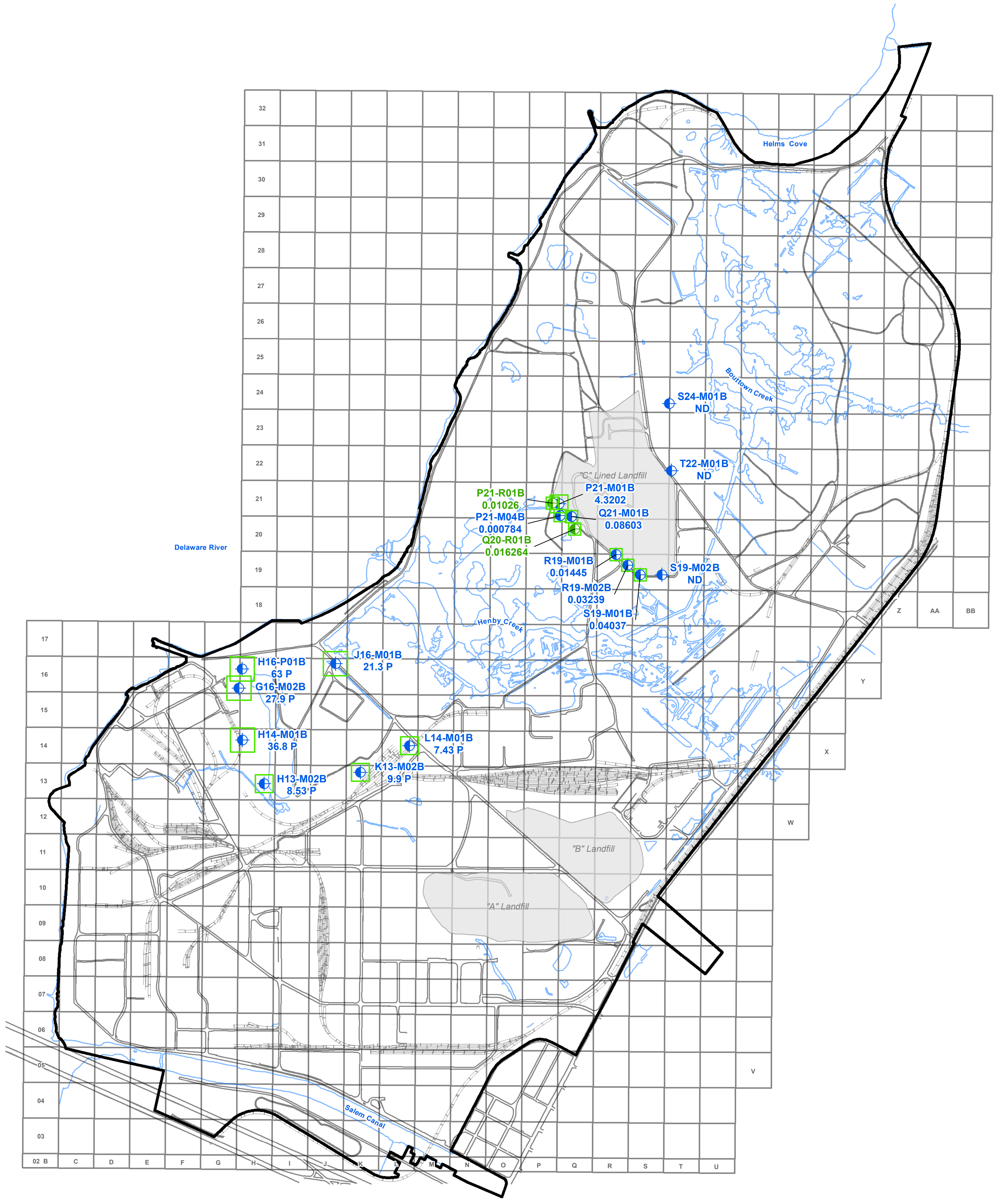
NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023

DATE: 10/11/2022

FIGURE NUMBER: 7

C:\Users\TanaseG\AECOM\GDS GIS Services - DCS AMERICAS\Chemours\ChambersWorks\GIS\Projects\NJPDES_DGW_Semi_Annual_Reports\2022\1H22\Fig07_E_Aquifer.mxd



LEGEND

◐	MONITOR WELL
◐	PUMPING WELL
☐	0.00 - 0.99
☐	1.00 - 9.99
☐	10.00 - 99.99
—	EDGE OF PAVEMENT
┼┼	RAILROAD
—	SHORELINE
▭	PROPERTY BOUNDARY

NOTES:

ND = NONE DETECTED
P = PREDICTED
ALL CONCENTRATIONS IN mg/L

0 600 1,200 2,400
Feet
1 inch = 1,200 feet
MAP FORMATTED FOR "B" (11" X 17") SIZE SHEET.
SCALE NOT VALID FOR DIFFERENT PAGE SIZE.

FILE NUMBER:	22005
DESIGNED BY:	K. DAVIS
DRAWN BY:	G. TANASE
DATA QUALITY CHECK BY:	S. MORGAN

AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

TOTAL ORGANICS CONCENTRATION SCALED SYMBOL MAP - B AQUIFER JANUARY 2022

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

PROJECT NUMBER: 60674023
DATE: 10/19/2022
FIGURE NUMBER: 8

C:\Users\TanaseG\AECOM\GDS GIS Services - DCS AMERICAS\Chemours\ChambersWorks\GIS\Projects\NJPDES_DGW_Semi_Annual_Reports\2022\1H22\Fig08_B_Aquifer_TOC.mxd

FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
G16-M02B

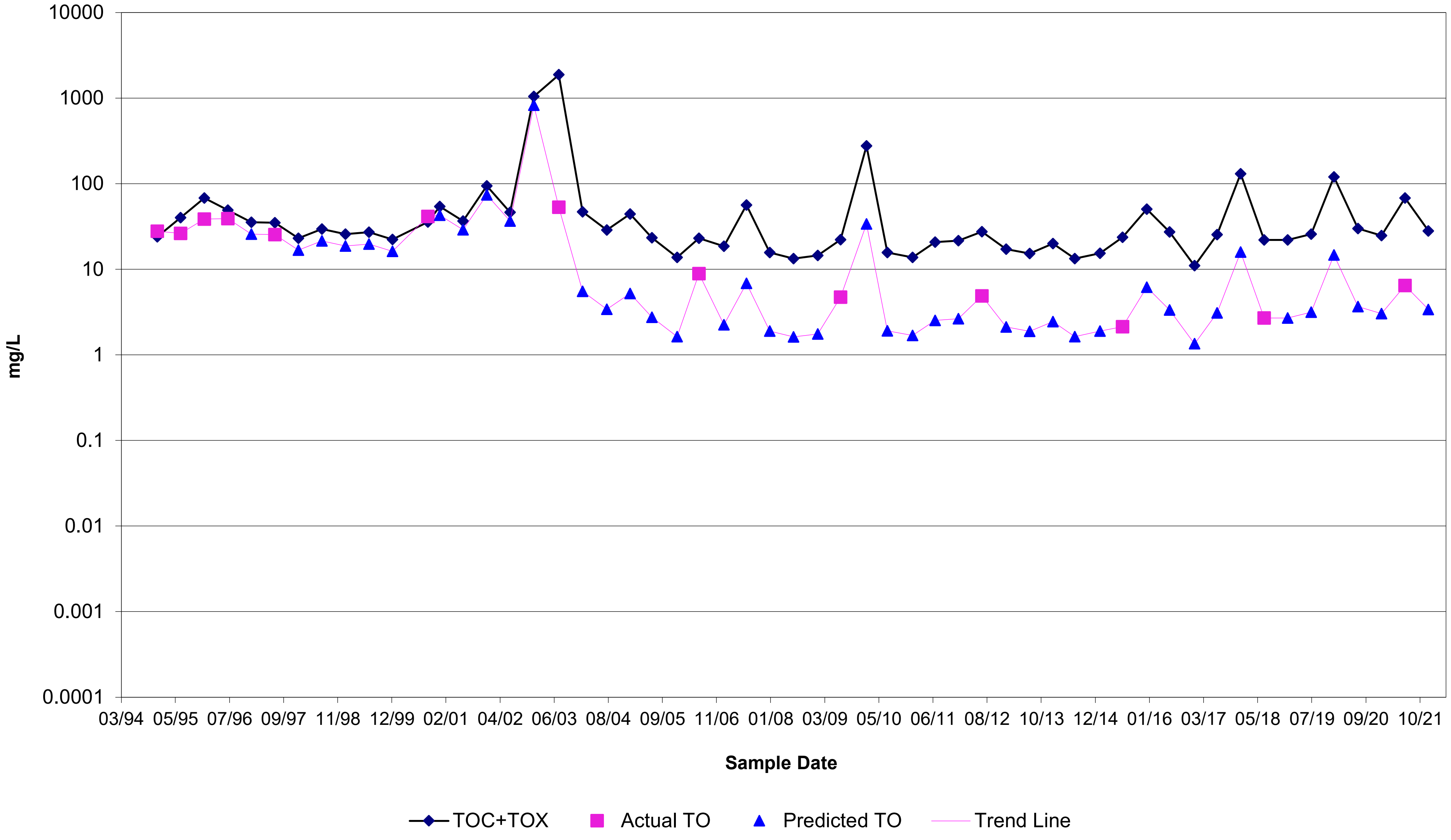


FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
H13-M02B

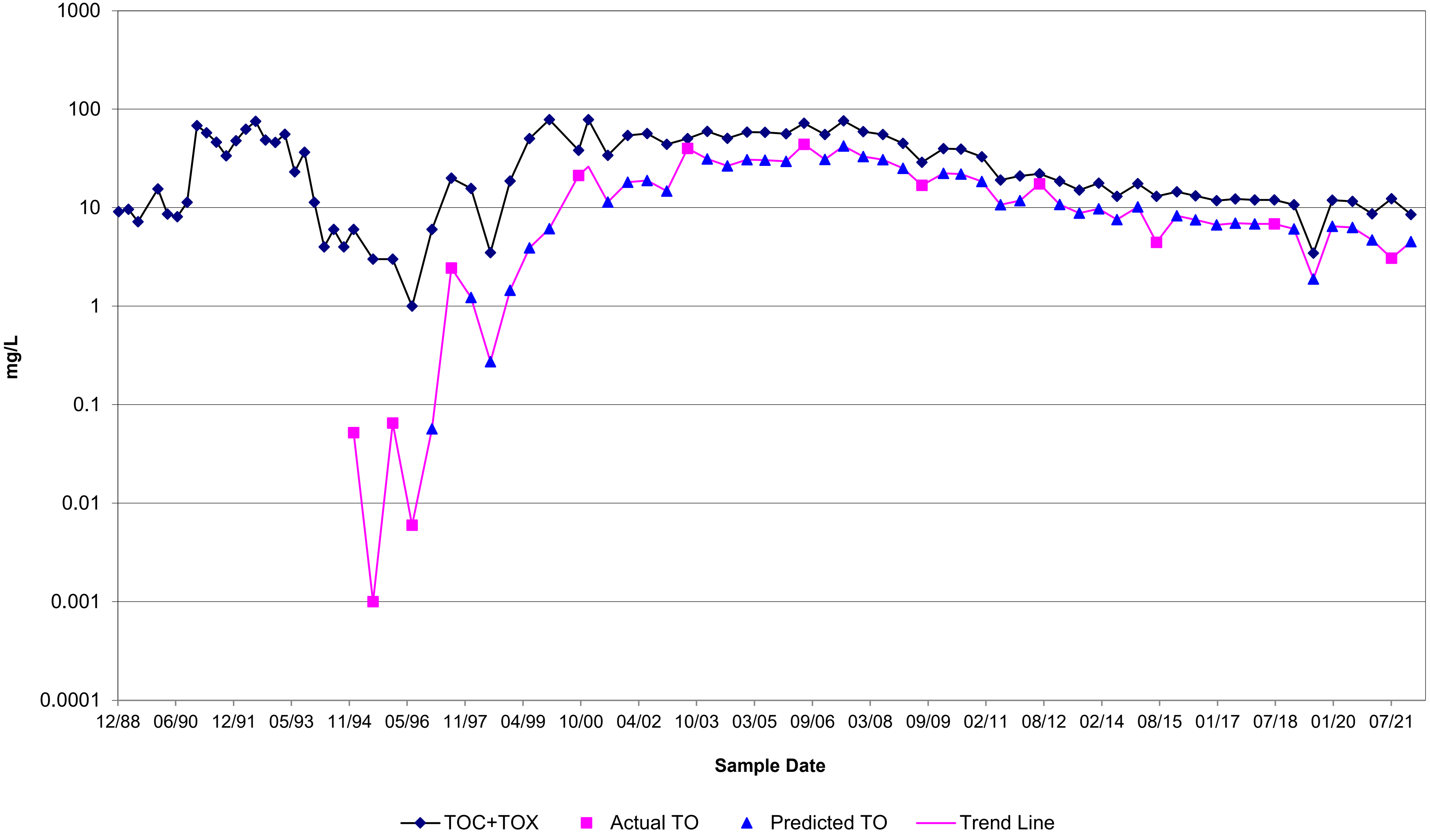


FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
H14-M01B

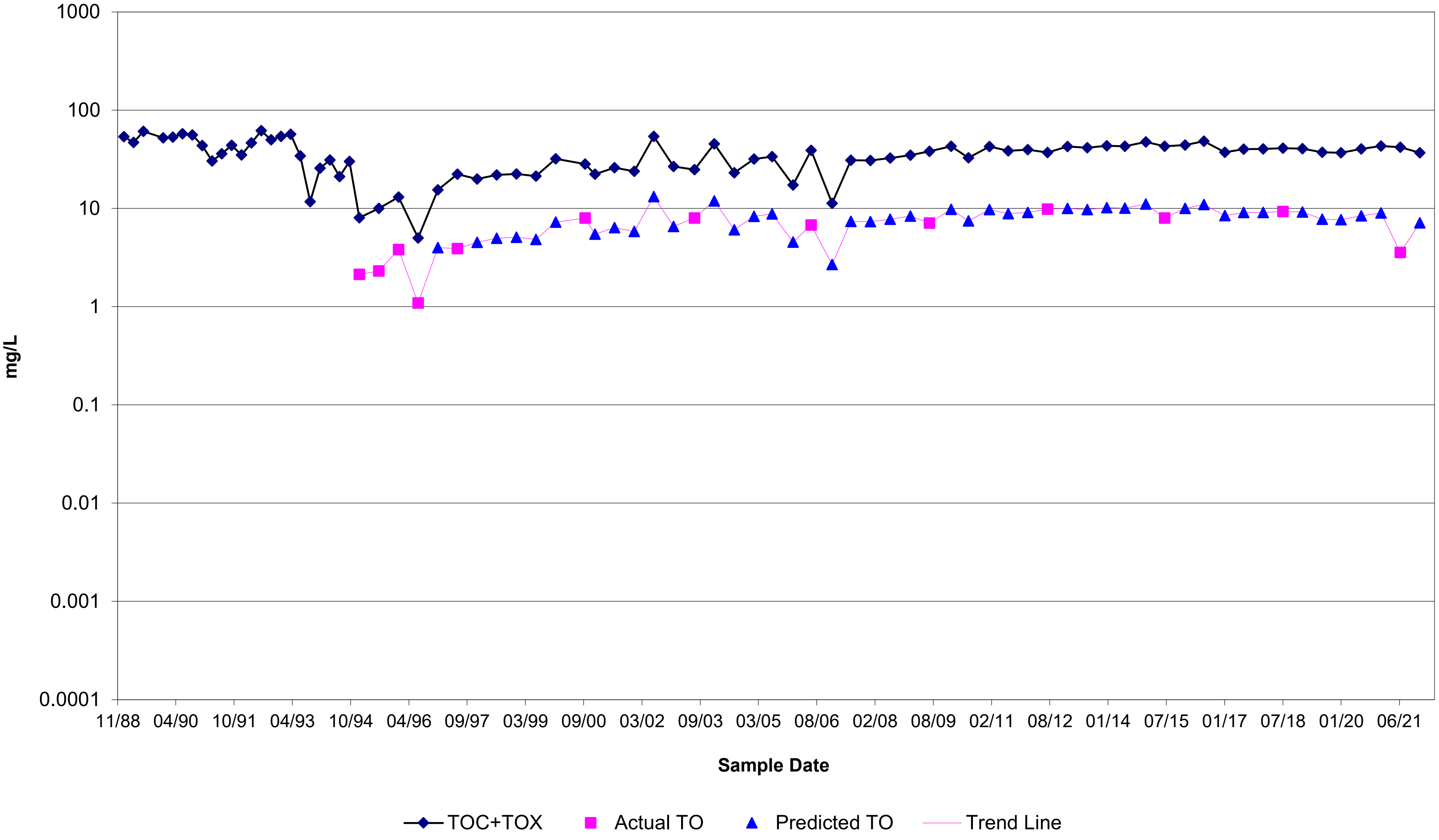


FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
H16-P01B

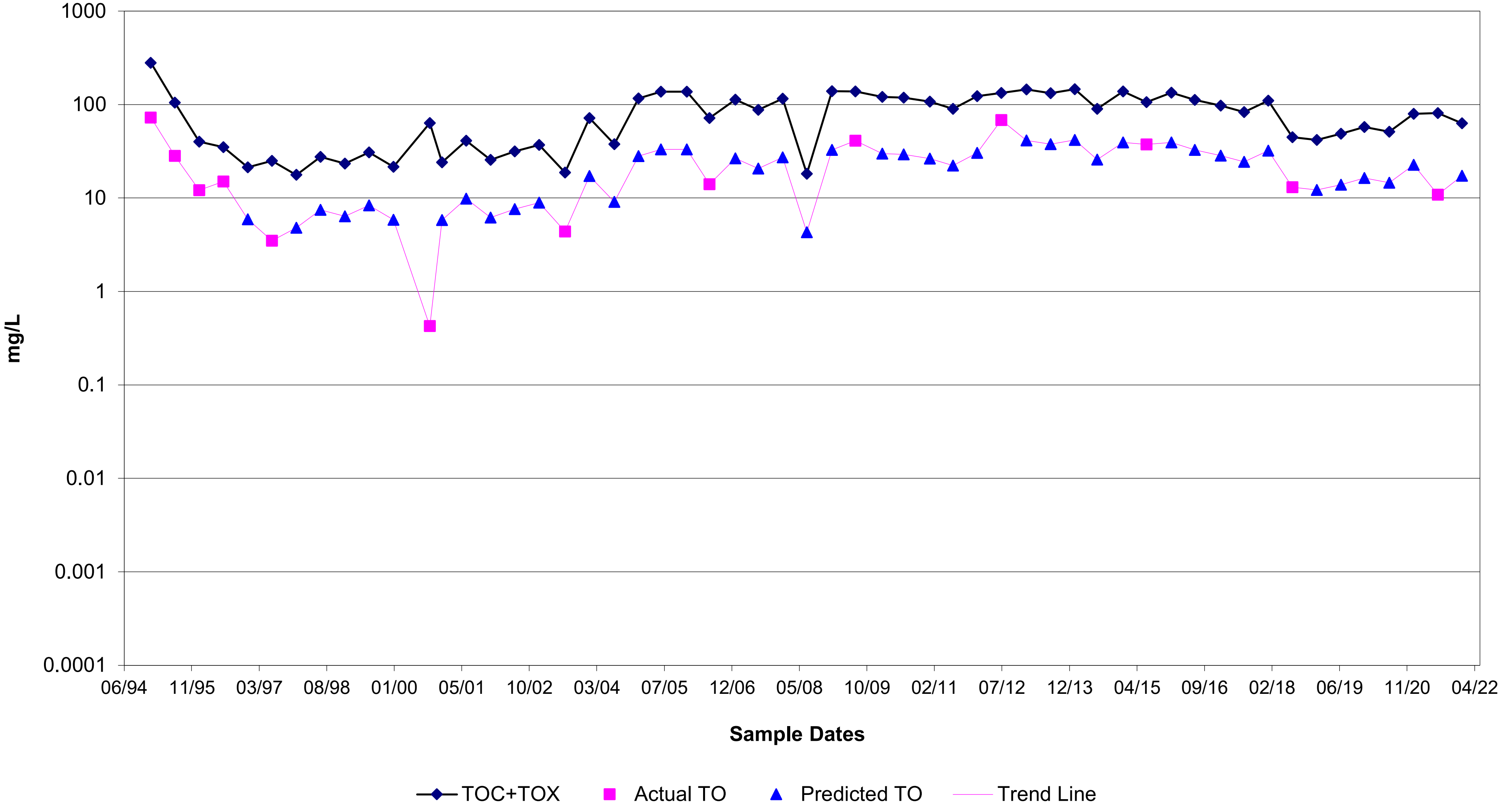


FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
J16-M01B

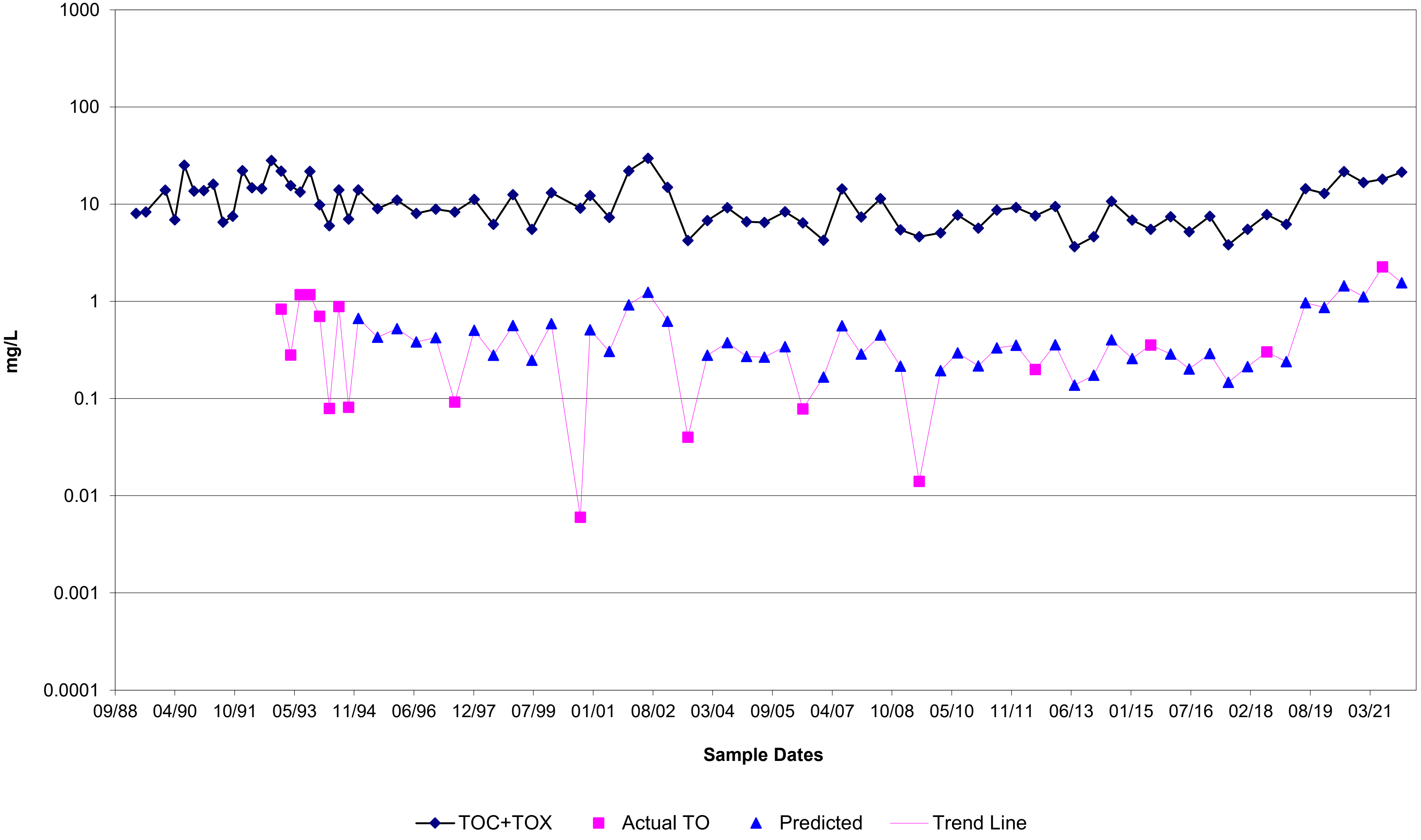


FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
K13-M02B

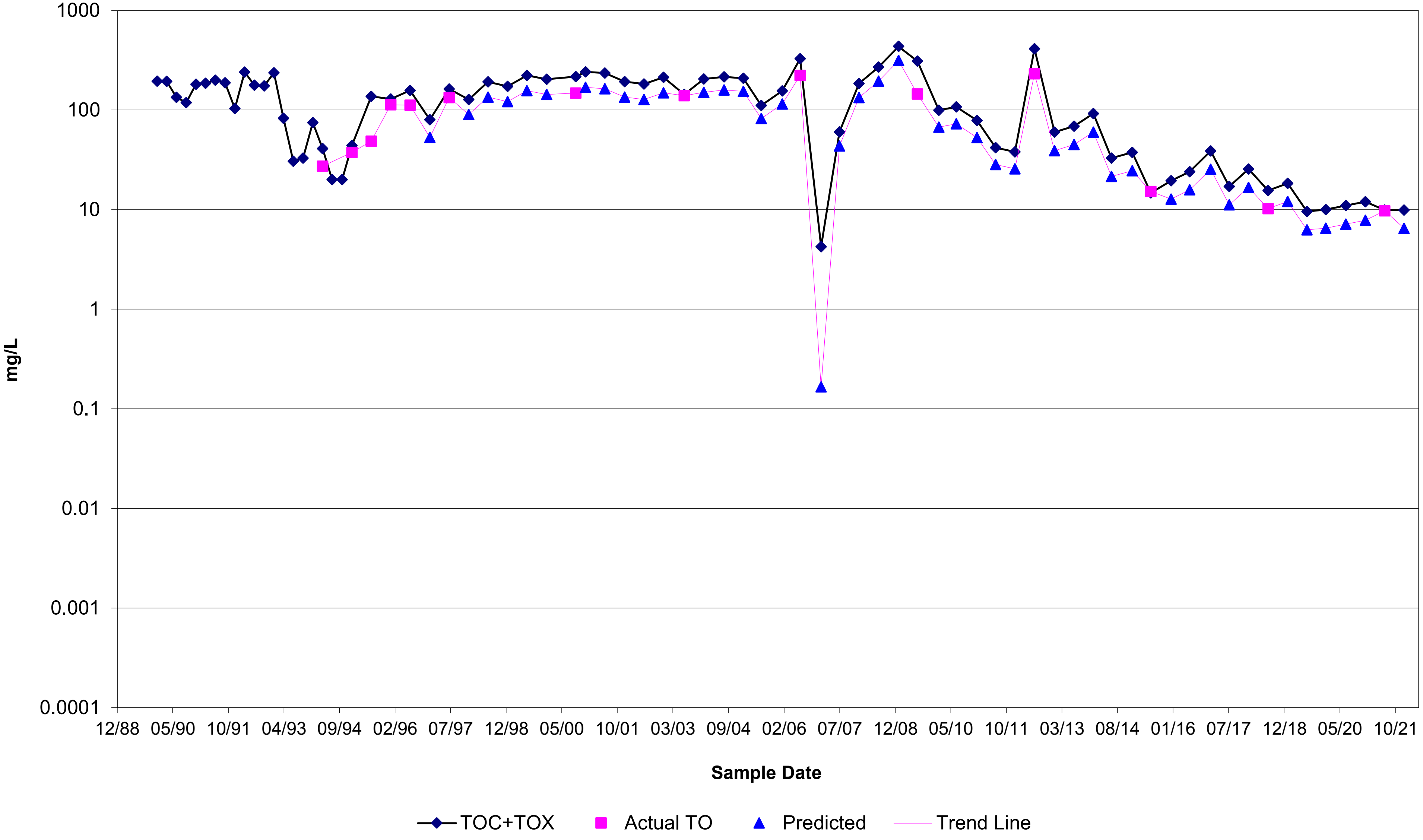
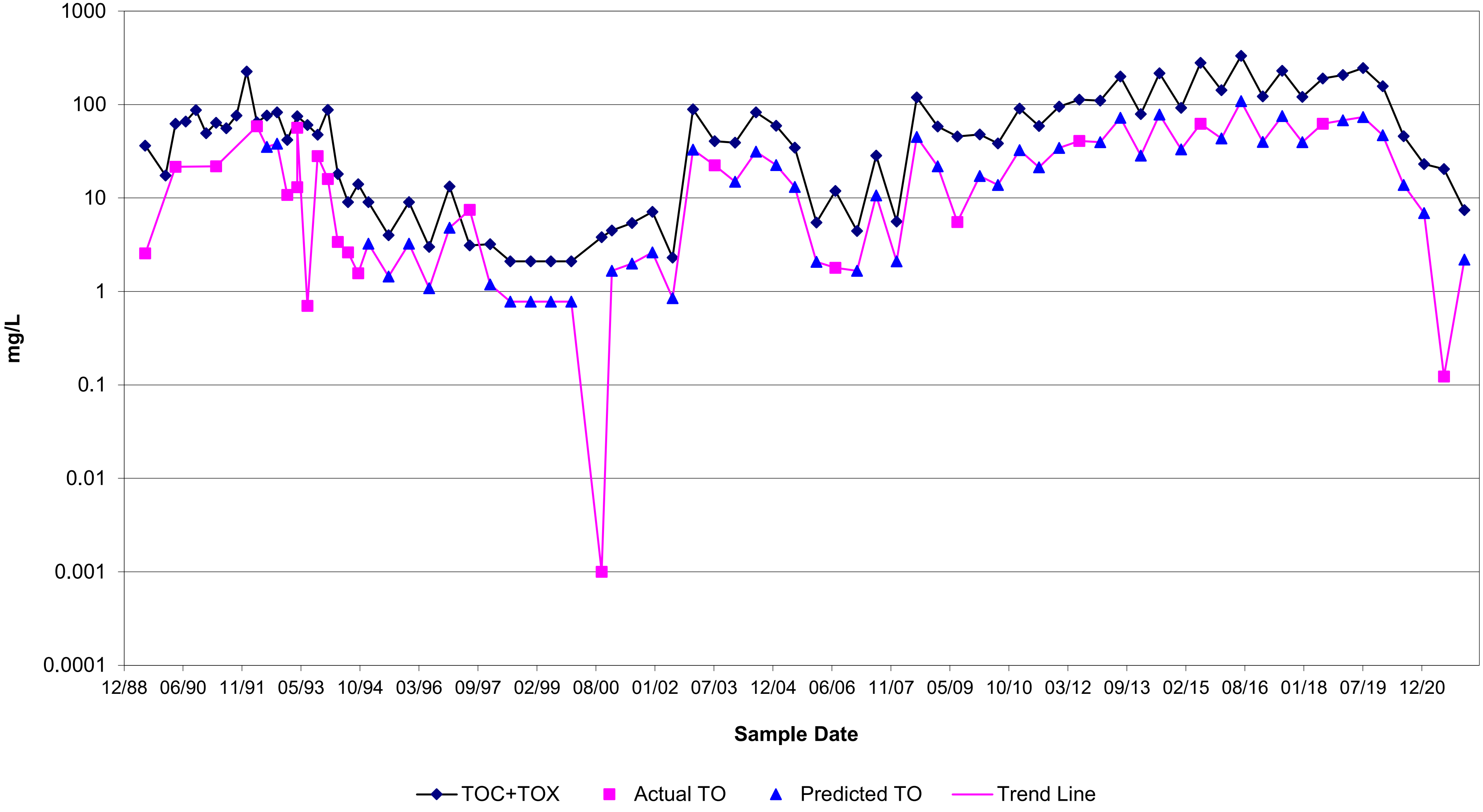
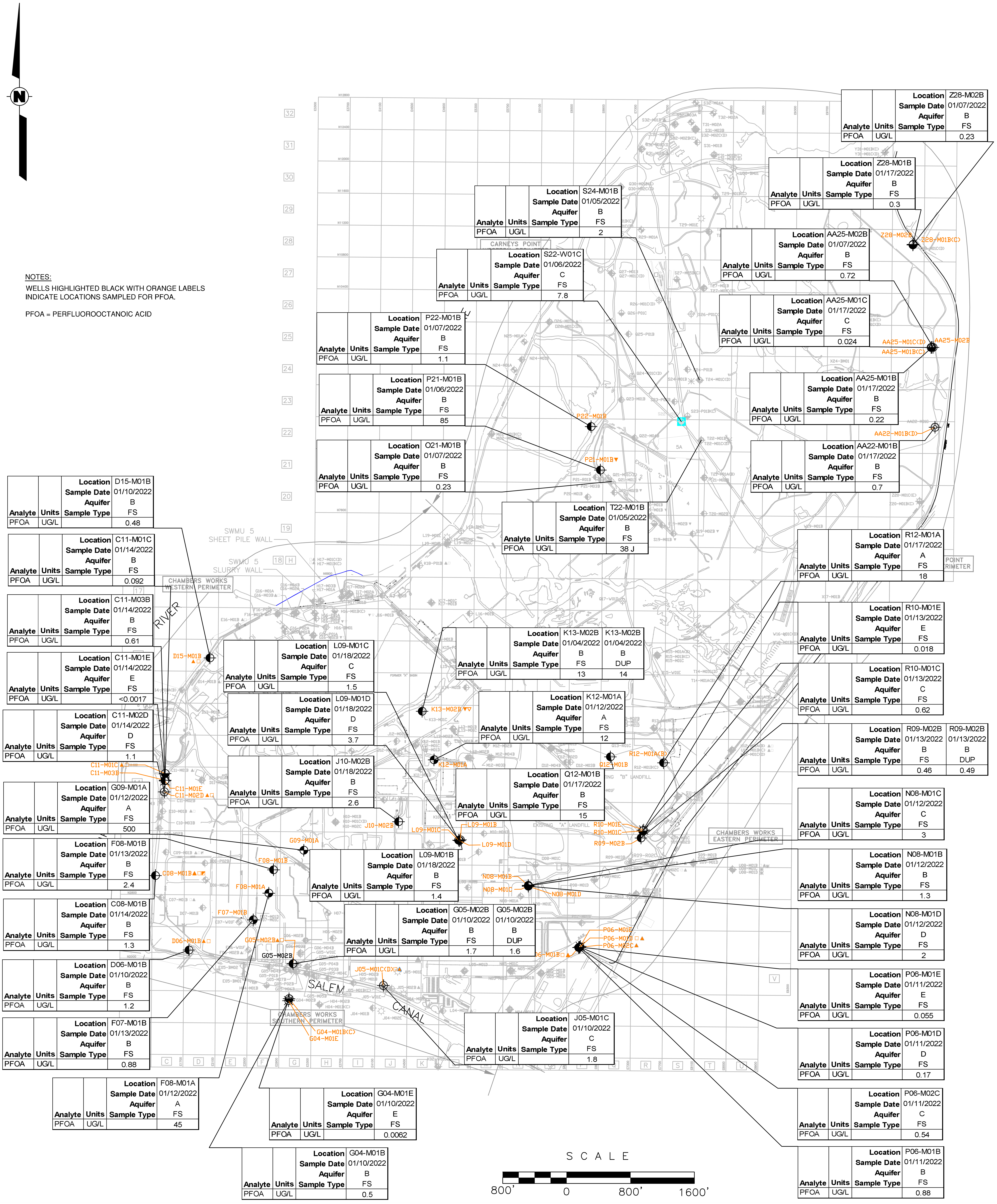


FIGURE 9
TOC + TOX, TOTAL ORGANICS versus TIME
Closure and Post-Closure Monitoring for A, B, and C Basins
L14-M01B





NOTES:

WELLS HIGHLIGHTED BLACK WITH ORANGE LABELS INDICATE LOCATIONS SAMPLED FOR PFOA.

PFOA = PERFLUOROOCTANOIC ACID

		Location	Z28-M02B
		Sample Date	01/07/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.23

		Location	Z28-M01B
		Sample Date	01/17/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.3

		Location	S24-M01B
		Sample Date	01/05/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		2

		Location	AA25-M02B
		Sample Date	01/07/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.72

		Location	S22-W01C
		Sample Date	01/06/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		7.8

		Location	P22-M01B
		Sample Date	01/07/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.1

		Location	AA25-M01C
		Sample Date	01/17/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.024

		Location	P21-M01B
		Sample Date	01/06/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		85

		Location	AA25-M01B
		Sample Date	01/17/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.22

		Location	O21-M01B
		Sample Date	01/07/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.23

		Location	AA22-M01B
		Sample Date	01/17/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.7

		Location	D15-M01B
		Sample Date	01/10/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.48

		Location	T22-M01B
		Sample Date	01/05/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		38 J

		Location	C11-M01C
		Sample Date	01/14/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.092

		Location	R12-M01A
		Sample Date	01/17/2022
		Aquifer	A
Analyte	Units	Sample Type	FS
PFOA	UG/L		18

		Location	C11-M03B
		Sample Date	01/14/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.61

		Location	R10-M01E
		Sample Date	01/13/2022
		Aquifer	E
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.018

		Location	K13-M02B	K13-M02B
		Sample Date	01/04/2022	01/04/2022
		Aquifer	B	B
Analyte	Units	Sample Type	FS	DUP
PFOA	UG/L		13	14

		Location	L09-M01C
		Sample Date	01/18/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.5

		Location	C11-M01E
		Sample Date	01/14/2022
		Aquifer	E
Analyte	Units	Sample Type	FS
PFOA	UG/L		<0.0017

		Location	R10-M01C
		Sample Date	01/13/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.62

		Location	L09-M01D
		Sample Date	01/18/2022
		Aquifer	D
Analyte	Units	Sample Type	FS
PFOA	UG/L		3.7

		Location	K12-M01A
		Sample Date	01/12/2022
		Aquifer	A
Analyte	Units	Sample Type	FS
PFOA	UG/L		12

		Location	C11-M02D
		Sample Date	01/14/2022
		Aquifer	D
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.1

		Location	R09-M02B	R09-M02B
		Sample Date	01/13/2022	01/13/2022
		Aquifer	B	B
Analyte	Units	Sample Type	FS	DUP
PFOA	UG/L		0.46	0.49

		Location	J10-M02B
		Sample Date	01/18/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		2.6

		Location	Q12-M01B
		Sample Date	01/17/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		15

		Location	G09-M01A
		Sample Date	01/12/2022
		Aquifer	A
Analyte	Units	Sample Type	FS
PFOA	UG/L		500

		Location	N08-M01C
		Sample Date	01/12/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		3

		Location	F08-M01B
		Sample Date	01/13/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		2.4

		Location	L09-M01B
		Sample Date	01/18/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.4

		Location	N08-M01B
		Sample Date	01/12/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.3

		Location	C08-M01B
		Sample Date	01/14/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.3

		Location	G05-M02B	G05-M02B
		Sample Date	01/10/2022	01/10/2022
		Aquifer	B	B
Analyte	Units	Sample Type	FS	DUP
PFOA	UG/L		1.7	1.6

		Location	N08-M01D
		Sample Date	01/12/2022
		Aquifer	D
Analyte	Units	Sample Type	FS
PFOA	UG/L		2

		Location	D06-M01B
		Sample Date	01/10/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.2

		Location	P06-M01E
		Sample Date	01/11/2022
		Aquifer	E
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.055

		Location	F07-M01B
		Sample Date	01/13/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.88

		Location	J05-M01C
		Sample Date	01/10/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		1.8

		Location	P06-M01D
		Sample Date	01/11/2022
		Aquifer	D
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.17

		Location	F08-M01A
		Sample Date	01/12/2022
		Aquifer	A
Analyte	Units	Sample Type	FS
PFOA	UG/L		45

		Location	G04-M01E
		Sample Date	01/10/2022
		Aquifer	E
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.0062

		Location	P06-M02C
		Sample Date	01/11/2022
		Aquifer	C
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.54

		Location	G04-M01B
		Sample Date	01/10/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.5

		Location	P06-M01B
		Sample Date	01/11/2022
		Aquifer	B
Analyte	Units	Sample Type	FS
PFOA	UG/L		0.88

AECOM

Sabre Building, Suite 300
4051 Ogletown Road
Newark, Delaware 19713
Phone: 302-781-5900

TITLE:

PFOA GROUNDWATER RESULTS MAP
NJPDES-DGW PFAS MONITORING PROGRAM
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS COMPLEX
DEEPWATER, NEW JERSEY

DWN: D. LITTEL	DES.: K. LOMBARDO
CHKD: S. MORGAN	APPD:
DATE: 10/10/22	REV.: 0

PROJECT NUMBER
60674023

FIGURE NO.:
10

L:\DCS\Projects\Dupont\Chambers_Works\CAD_1\1H2022 PFOA Letter Report\Figure 1 - 1H2022 PFOA GW Results Map.dwg, 3/2/2022 5:16 PM, Littel, David (Newark), PDF995.pc3, User32767, 1'-0" = 1'-0"

LEGEND

- ⊗ PROPOSED SAMPLE LOCATION
- ▭ AOC SAMPLING GRID (200 x 200 FT)
- 🟥 EXISTING BUILDING
- ▭ DEMOLISHED BUILDINGS FROM 2014 - PRESENT
- 🟨 AOC AREA
- ▭ PROPERTY BOUNDARY
- 🟩 SOURCE PRIORITIZATION TOOL HIGH POTENTIAL FOR RELEASE
- 🟦 B AQUIFER PROBABLE DNAPL SOURCE ZONE
- - - SHEET PILE BARRIER

VISUAL OF EVIDENCE

- • NO NAPL NOTED IN LOG OR OBSERVED IN SAMPLE
- 💧 NAPL VISUALLY OBSERVED IN SOIL CORE, GROUNDWATER SAMPLE, OR WELL

Notes:

Map Projection: NAD83 NJ State Plane feet
2020 Drone aerial imagery for manfacturing area only provided by AECOM. Imagery outside of that extent is 2014 provided by Axis.

N
W E
S

0 300 600
Feet

1 inch = 300 feet

MAP FORMATTED FOR "B" (11" X 17") SIZE SHEET.
TEXT SCALE NOT VALID FOR DIFFERENT PAGE SIZE.

AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

PHASE 2
NAPL INVESTIGATION

NJPDES-DGW SEMI-ANNUAL STATUS REPORT
FIRST SEMESTER 2022
CHEMOURS CHAMBERS WORKS
DEEPWATER, NEW JERSEY

TASK NUMBER: 22005	PROJECT NUMBER: 60674023
DESIGNED BY: S.MORGAN	DATE: 10/1/2022
DRAWN BY: M.LAYTON	FIGURE NUMBER: 11
DATA QUALITY CHECK BY: K. LOMBARDO	

L:\DCS\Projects\Dupont\Chambers_Works_GIS\Projects\NJPDES_DGW_Semi_Annual_Reports\2021\2H21\Fig14_Phase-2_NAPL_Investigation.mxd

Appendices

Appendix A

Chronology of Monitoring Programs

Chronology of Monitoring Programs

Well Nomenclature

The Chemours Chambers Works Complex initiated a groundwater monitoring system in the late 1960s. Analyses of groundwater samples indicated degraded water quality in the water-table aquifer. As a result, DuPont (now Chemours[1]) proposed that groundwater be withdrawn using an interceptor well system (IWS) to prevent off-site migration of groundwater in the B, C, and D aquifers at the Chambers Works Complex. The IWS was installed and placed in operation in 1970 and has been operating continuously since then.

Chemours has established a well designation system to identify wells at the Chambers Works Complex. Each well is identified by a seven-character alpha numeric code (e.g., C11-M02D) and is defined as follows:

- The first three characters denote well location on the alphanumeric grid.
- The fourth through sixth characters identify well type (i.e., M = monitor well, P = piezometer, R = recovery well, and W = water supply well) and well number.
- The seventh character is a letter that identifies the aquifer corresponding to the screened interval of the well (i.e., A, B, C, D, E, and F). Wells screened in more than one aquifer are designated by two letters (e.g., CD). As a result of the Geologic Model Refinement and Well Screen Verification Program [DuPont Environmental Remediation Services (DERS), 1993], several wells were reassigned into other aquifers. When these wells are discussed, the corrected aquifer designation is in parentheses following the well designation [e.g., G04-M01B(C)].

Monitoring Program 1984-1999

In August 1984, the New Jersey Department of Environmental Protection (NJDEP) and DuPont verbally agreed to an Administrative Consent Order (ACO). The modified ACO was signed in 1988 and mandated the continued pumping of the IWS at a minimum rate of 1.5 million gallons per day (mgd) to prevent off-site migration of the contaminated groundwater.

In November 1988, the NJDEP issued a New Jersey Pollutant Discharge Elimination System-Discharge to Groundwater (NJPDES-DGW) permit for the Chambers Works Complex. The permit required the implementation of groundwater quality monitoring and groundwater recovery programs. The groundwater quality monitoring programs included a compliance monitoring program for the Chambers Works Complex and a groundwater monitoring program for the Secure C Landfill for Areas 2 through 4 at the former Carneys Point Works. The groundwater recovery programs required continuation of the IWS and startup of the Delaware River Corrective Action Program (DRCAP) consisting of four recovery wells located along the Delaware River in the southwestern portion of the Chambers Works Complex. This program was designed to contain flow from the B aquifer to the Delaware River south of the basins and was placed online in July 1989.

In 1989, certain waste-specific constituent concentrations increased in two Secure C Landfill point-of-compliance wells located hydraulically downgradient of Areas 1 and 2. DuPont attributed concentration increases to probable releases from Area 1 and believed that the

---

[1] On February 1, 2015, ownership of the Chambers Works Site was transferred from E.I. du Pont de Nemours and Company (DuPont) to Chemours. On July 1, 2015, the Chemours Company began operating as an independent, publically traded company.

concentrations would attenuate over time as groundwater was recovered from Area 1. The *Chambers Works Remedial Action Plan for the Secure C Landfill-Cell 1* (DERS, 1991) outlined a groundwater recovery system designed to capture the groundwater from Area 1 by pumping wells P21-M01B and Q20-M02B. This system was implemented in 1991.

Waste constituents continued to be detected beyond Area 1 of the Secure C Landfill so DuPont modified the pumping program. Recovery well P21-M01B was replaced by well R20-M02B to facilitate groundwater recovery downgradient of Area 2. The *Secure C Landfill Proposed Corrective Action Program* (DERS, 1994) was approved by the NJDEP and implemented in September 1994. Well R20-M02B continues to operate today. This groundwater recovery system is designed to capture impacted groundwater from Area 1 of the Secure C Landfill.

In 1994, a risk evaluation demonstrated that discontinuing the DRCAP would not adversely affect human health and the environment. Details of this evaluation were submitted in the *Phase I RCRA Facility Investigation Report* (DERS, 1995). The NJDEP and Environmental Protection Agency (EPA) approved termination of the DRCAP system in their July 25, 1995 comments on the Phase I Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). The DRCAP system was shut off on August 25, 1995.

In the second semester of 1995, DuPont conducted a limited aquifer study to determine if the C Basin Well Point System (CBWS), established to alleviate artificially high head in the B aquifer while the C Basin was operating, was still required following backfill and closure of the basin. DuPont submitted the *C Basin Well Point System Hydraulic Groundwater Gradient Evaluation* (DERS, 1995) to the NJDEP in August 1995. The investigation confirmed that the hydraulic gradient of the groundwater within the B aquifer, west of the C Basin, is from the Delaware River into the complex and this same groundwater flow regime exists whether the CBWS is operating. The report recommended that the CBWS no longer be required. The NJDEP approved the proposed termination of the CBWS in a written correspondence, dated August 30, 1995. The system was shut off during September 1995.

In May 1996, DuPont submitted a technical memorandum assessing groundwater containment in the E aquifer along the southern boundary of the Chambers Works Complex (DERS, 1996). Modeling indicated that pumping well J05-W01E at approximately 200 gallons per minute (gpm) is sufficient to contain groundwater along the southern boundary of the Chambers Works Complex. The memorandum proposed continued evaluation of E aquifer containment along the southern plant boundary.

In 1996, DuPont evaluated the Solid Waste Management Unit (SWMU) 5 groundwater control system and concluded that the slurry wall is effective in controlling off-site groundwater migration. However, there is a potential for the A Zone groundwater to flow around the western end of the slurry wall. In order to address this potential, DuPont submitted the technical memorandum dated September 5, 1996, that proposed installing a groundwater collection trench at the western end of the slurry wall to capture groundwater that may be migrating around the slurry wall. In September 1997, DuPont installed a groundwater collection trench at the western end of the SWMU 5 slurry wall to capture A Zone groundwater that could potentially migrate around the slurry wall. The groundwater collection trench was connected to the well-point system and put online in early November 1997. In late 1998, DuPont redesigned the pumping system in order to optimize system performance and reduce pump failures.

On September 23, 1996, DuPont submitted a report on the Chambers Works groundwater optimization model (DERS, 1996). The model indicated that groundwater can be contained on-site in the B, C, and D aquifers at IWS pumping rates much lower than the permit required 1.5 mgd. DuPont proposed a test program to verify the model results and to determine the optimal IWS pumping rate to more efficiently meet the objectives of protecting human health and the environment. DuPont also requested a minor modification of NJPDES-DGW Permit No. NJ0083429 from an IWS pumping requirement of 1.5 mgd to a monthly average of 1.5 mgd. On November 19, 1996, the NJDEP approved the modification of the IWS pumping requirements from “requiring a pumping rate of 1.5 mgd” to “requiring a monthly average of 1.5 mgd until a different monthly average rate is requested by DuPont and approved by the NJDEP.”

In January 1998, DuPont installed six piezometers in the SWMU 5 area to monitor groundwater in the A Zone and to evaluate the performance of the well-point system and groundwater collection trench. DuPont also completed the field work for the Phase II RFI, which included a site-wide groundwater and DNAPL investigation and an investigation of 22 individual SWMUs.

On June 4, 1998, DuPont received agency approval to remove wells P20-M01B and Q23-M03B from the Secure C Landfill Corrective Action Program. The agency also approved the DuPont request to remove 30 wells from the quarterly water-level measurement requirements.

In February 1999, DuPont installed two recovery wells, Q13-R01C and Q13-R01D, as replacements for Q13-R01CD that was abandoned. Improvements to the pipeline were completed at the end of the year 2000. The wells were put online in March 2001.

In July 1999, DuPont added 12 monitoring wells to the Perimeter Monitoring Program (PMP) as requested by NJDEP.

In August 1999, a groundwater discharge assessment by ENVIRON International Corporation shows that concentrations in the B aquifer discharging to the Delaware River are significantly lower than the Ambient Water Quality Criteria (AWQC). DuPont presented this information to the EPA and NJDEP on February 9, 2000.

In September 1999, DuPont Corporate Remediation Group (CRG) began a Non Aqueous Phase Liquid (NAPL) Study in support of the overall RCRA Corrective Action Program at the Chambers Works Plant, as agreed upon with the EPA and NJDEP. The intent of the NAPL Program was to: 1) identify specific well locations where either LNAPL or DNAPL was present, and 2) determine the feasibility of recovering DNAPL from specific wells where the material was present in recoverable quantities. During a September 1999 well survey, NAPL was detected in 14 out of approximately 350 wells on-site. Of these 14 wells, three were found to contain recoverable quantities of DNAPL: two on-site monitoring wells (L13-M01B and I12-M01B) and one interceptor well (H11-R01CD). DNAPL samples were collected from wells L13-M01B and I12-M01B in October 1999 and from well H11-R01CD in December 1999. The samples were analyzed for polychlorinated biphenyl (PCB) Aroclors and PCB congeners using Method 8082, in order to characterize the material for disposal. The accumulated material was managed and disposed as PCB remediated waste per 40 CFR 761 requirements and RCRA hazardous waste regulations.

Monitoring Program 2000-2010

In March 2000, DuPont submitted the Salem Canal Technical Memorandum addressing the potential migration of DNAPL in the B aquifer based on the Phase II RFI Investigation. It was determined that DNAPL migration beneath the canal did not occur, but contamination was detected in the groundwater that would require additional investigation.

In April 2000, two new E aquifer monitoring wells, C11-M01E and G04-M01E, were installed. The new geologic information verifies the hydrogeologic model reported in the *Geologic Model Refinement and Well Screen Verification Program* (DERS, 1993). The updated cross sections are included in Figures 28, 29, and 30 of the *Second Semester 2000 Semi-Annual Report* (DuPont CRG, 2001).

On April 28, 2000, DuPont received agency approval to abandon 66 monitoring wells that are no longer used for quarterly groundwater elevation mapping and the ten well points that are no longer being used as part of the SWMU 5 groundwater water collection system.

In August 2000, DuPont submitted the quality assurance/quality control program; *Environmental Data Quality Assurance and Quality Control Program*, (DuPont CRG, 2000).

In October 2000, DuPont installed wells J12-M01B and J12-M02B in the vicinity of the remediated SMWU 56 ODCB Area. The wells were installed to monitor for DNAPL at the base of the B aquifer.

In 2001, DuPont instituted a monthly NAPL survey to monitor the 14 original wells, plus the two J12 wells, for the presence of NAPL. The current (2014) list of wells in the Monthly NAPL Survey includes the following wells:

- G05-M03B
- G05-M02B
- G06-M03B
- I12-M02B
- J10-M02B
- J12-M01B
- J12-M02B
- K11-M01B
- L12-M03B
- L13-M01B
- M12-M02B
- G06-M04B
- D15-M01C
- H11-R01CD
- L13-M02B
- M12-M04B
- G06-M02B

In April 2001, DuPont submitted the Salem Canal Supplemental Investigation Technical Memorandum. The memorandum concluded that groundwater flow is northwesterly towards the Salem Canal with a groundwater gradient of less than one percent. The extent of groundwater contamination is limited to a small area in the parking lot where engineering and administrative controls exist. DuPont received agency approval on August 27, 2001, for no additional work in the area and to abandon the ten temporary piezometers.

On April 16, 2001, DuPont received agency approval for the lateral expansion at the C Landfill. This includes construction of Area 5A, which provides an additional 217,000 cubic yards of waste capacity, as well as vertical expansion providing an additional 24,000 cubic yards of capacity to the existing landfill. Construction of Area 5A was completed and began accepting material in July 2001.

In May and June of 2001, DuPont abandoned 67 monitoring wells that were no longer used for quarterly groundwater elevation mapping and ten well points that were no longer being used as part of the SWMU 5 groundwater water collection system.

In July 2001, DuPont added 1,2-dichloropropane, ethylbenzene, and xylenes (total) to the Secure C Landfill Detection Monitoring Program (CLF-DM) target analyte list.

On May 21, 2002, DuPont received agency approval to reduce the frequency of groundwater elevation maps from quarterly to semi-annually.

In a department letter dated January 7, 2003, it was stated that further radioactive isotope groundwater sampling on the A and B Sanitary Landfill was not required. According to the Solid Waste Facility Permit #1713B, issued on June 7, 2001, two upgradient wells (R09-M01B and U12-M01A), one downgradient well (O12-M01B), and one interceptor well (Q13-R01C) were sampled for four quarters and screened for the presence of radioactive isotopes. The first sampling event occurred in October 2001, and the final sampling event was completed in July 2002.

In April 2002, DuPont completed work on SWMUs 5 and 43. Completed activities included the following:

- Installed a 1,400-foot long sheet-pile retaining wall to stabilize the shoreline and enhance groundwater containment in both the A Zone and B aquifer.
- Removed 11,400 cubic yards of contaminated sediment in the intertidal and subtidal zones.
- Drained the SWMU 43 pond and subsequently filled it with approximately 21,000 cubic yards of clean fill.

On February 3, 2003, DuPont received agency approval of the RFI Phase III RCRA Facility Investigation Report contingent upon a response to comments. In a DuPont email to the EPA and NJDEP, dated February 19, 2003, DuPont agreed to sample four B aquifer wells as part of the RCRA SWMU post-closure plan. The four wells added to the RCRA Units Post Closure Monitoring Program are downgradient of their respective SWMUs and will be sampled annually beginning in July 2003. Well L12-M01B will monitor SWMU 21, well C09-M01B will monitor SWMU 25, well G14-M01B will monitor SWMU 26, and well C08-M01B will monitor SWMU 28.

On December 20, 2002, the RFI Phase III tidal study was conducted after the completion of the SMWUs 5 and 43 remediation activities and submitted under separated cover to the agencies. DuPont received agency approval of the report on March 18, 2003. The semi-annual water-level sampling schedule was revised based on the results of the tidal study. Also, as agreed to with the EPA and NJDEP, DuPont added well F16-M10B to the PMP to monitor groundwater quality in the areas behind the slurry and sheet-pile walls.

In April 2005, Area 5B of the Secure C Landfill began receiving waste and was added to the Leachate Collection System Monitoring Program.

As agreed by NJDEP in a letter dated May 27, 2005, monitoring well C11-M01B was removed from the perimeter monitoring program since it has shown low piezometric head values and long lag times. A replacement well, C11-M03B was installed in the immediate vicinity in December 2005. C11-M03B was sampled as part of the PMP during the July 2006 sampling event.

On July 1, 2005 DuPont presented a long-term remedial strategy in a letter to the NJDEP in response to the April 5, 2005 Delaware River Initiative letter. In the letter it was recommended to complete an optimization study of the IWS to reduce the amount of groundwater recovered while still maintaining hydraulic containment at the site perimeter in accordance with the long-term strategy. Results of the study indicated that the optimum pumping scenario identified for the site includes five pumping wells recovering approximately 1 mgd or 700 gpm. The optimized scenario was based on the groundwater modeling reported in the October 2007 *Groundwater Flow and Optimization Models Report (*submitted as Appendix H in the October 2007 *First Semester 2007 Semi-Annual NJDEP-DGW Report*)

On December 21, 2005 The *Phase IV Supplemental RFI Work Plan* was submitted to the EPA and NJDEP. DuPont received agency approval and field activities began in August 2006.

In April 2006, monitoring wells Z20-M01B and Z20-M01C were reassigned to the B and C aquifers, respectively in April 2006. Previously, they were assigned to the C and D aquifers. A review of the local geology and hydrogeology showed that the wells were more representative as B and C aquifers wells, respectively.

Sodium was added to the Leachate Collection Detection System Analyte List as recommended in the Second Semester 2005 Semi-Annual NJPDES-DGW Report (April 2006).

NJPDES-DGW Permit No. NJ0083429, modified May 1, 2006, requires the monitoring of 33 wells for PFOA. Results will be submitted to NJDEP within 90 days of sampling. The PFOA Monitoring Program monitors 36 wells for 13 perfluorinated compounds (PFCs) semi-annually in compliance with NJPDES-DGW Permit No. NJ0083429. Results of the sampling events are submitted to NJDEP within 90 days of sampling and are also presented in the corresponding semi-annual NJPDES-DGW reports. The first sampling event occurred in July 2006.

In July 2006, corrective action well R20-M02B at the Secure C Landfill stopped pumping due, in part, to a clogged pipeline. It was also later discovered that the screen was severely damaged. The well was abandoned in November 2006. Replacement well, P21-R01B, was installed in December 2006 for the abandoned well R20-M02B. DuPont received NJDEP approval to the minor modification to its Water Allocation Permit in April 2007. New pumping well P21-R01B became operational in October 2007.

In July 2006 remediation activities began at SWMU 52 following *SWMU 52 Interim Stabilization Measure Work Plan* (January 2006) as approved by the NJDEP. NJDEP also approved the DuPont request to put the non-hazardous soils from SWMU 52 into the vault. The SWMU 52 ISM remedial activities were completed in January 2007. Upon completion of the SWMU 52 ISM, the A Basin Soil Vault was capped and closed. A Remedial Action Report for the SWMU 52 ISM was submitted in March 2007

On December 26, 2006 DuPont submitted a *Preliminary Assessment Report (PAR)*, which outlined the history of the site to the EPA and NJDEP. The PAR identified potential sources within the active Chambers Works manufacturing area where particular types of production processes were located. Eleven areas of concern (AOCs) were recommended for further investigation. The AOCs are large, cover previously investigated SWMUs. The PAR was approved by EPA (EPA, 2008) and the 11 AOCs were added to the HSWA permit, therefore becoming part of the RCRA Corrective Action Program.

In late 2006 to early 2007, the *Delaware River Groundwater to Surface-Water Investigation* was performed in accordance with the NJDEP approved work plan (DuPont, 2005). The investigation was completed in multiple phases. Phase I consisted of a bathymetric survey, geophysical investigations and intrusive sediment characterization to determine sediment thickness, underlying B aquifer thickness and the B/C clay elevation. Phase I also included a visual inspection of the sea wall during low tide to look for compromised structural integrity or groundwater seeps from the A zone.

In January 2007 twelve perfluorinated compounds were added and sampled as part of the PFOA Monitoring Program.

On February 13, 2007 the report *DuPont Chambers Works Ecological Investigation Work Plan* was submitted to NJDEP to address recommendations made in the September 18, 2006 *Baseline Ecological Investigation*. Field activities began in March 2007 and were completed in March 2008. DuPont submitted the findings of the investigation in the *Ecological Investigation Report* in March 2009. Additional sampling was completed in Bouttown Creek's ditch system in October 2009 and was documented in the Summary of Ecological Investigations in Carneys Point (URS, 2010b). A weight of evidence evaluation of ecological risks based on the findings recommended no additional investigations were necessary. In a letter dated December 6, 2010 NJDEP Bureau of Environmental Evaluation and Risk Assessment, Environmental Toxicology and Risk Assessment (BEERA/ETRA) supported the recommendation for no further investigation, provided environmental conditions in Bouttown Creek do not change dramatically.

In April 2007, three additional monitoring wells were installed and added to the PFOA Monitoring Program as requested by NJDEP after reviewing the *Site Investigation Report for*

PFOA (DuPont CRG, 2006). These wells were first sampled as part of the second semester 2007 PFOA Monitoring Program.

In August 2007, Area 7 of the Secure C Landfill began receiving waste and was added to the Leachate Collection System Monitoring Program.

In August 2007 a report titled *Phase IV Supplemental Report* was submitted to the NJDEP with updated fact sheets for each SWMU.

In December 2007, as a result of the discovery of PCB-containing NAPL during the installation of well T29-P01A, follow-up investigations was conducted in December 2007, February/March 2008 and June 2008 to delineate the source area and determine the extent of the NAPL. DuPont submitted the T29 Area Polychlorinated Biphenyls (PCB) Removal Work Plan in August 2009 to EPA’s Toxic Substances Act (TSCA) task force. EPA approved the work plan on October 16, 2009. Permits were obtained and remediation of the area began on July 2011 and was completed by August 2011.

In March 2008, Phase 2 of the Delaware River Groundwater to Surface-Water investigation which consisted of installation of temporary wells and groundwater sampling was completed. Phase 3, was also completed in March 2008. Phase 3 consisted of collecting sediment samples and conducting biodegradation study to evaluate the ability of indigenous microbes to degrade site-related constituents. The results of these investigations were submitted to the NJDEP in the *Delaware River Site Investigation Report* in December 2008.

On September 17, 2008, DuPont obtained NJDEP approval to allow a 90-day testing period of the optimized IWS (email) and began the testing period on June 26, 2009. The field test purpose was to demonstrate that the groundwater capture could be achieved at an optimized flow rate of 1.0 mgd as predicted by the model. The new IWS pumping rate of 1.0 mgd became effective with the new NJPDES-DGW Permit Number NJ0083429 on May 1, 2010.

Corrective action well P21-M03B collapsed and was abandoned on September 17, 2008. The replacement well P21-M04B was installed in January 2009. The new well was first sampled in February 2009.

In August 2008, it was determined that the J05-W01E pumping well system required pipeline replacement in order to continue the E aquifer groundwater recovery program. From August 2008 until January 2010 the J05-W01E pumping system was off-line from while the area was being evaluated as part of the IWS optimization. NJDEP agreed upon temporary pump shutdown as part of the associated IWS optimization plan in an email dated September 17, 2008. Quarterly monitoring of downgradient E aquifer wells, J04-M01E and G04-M01E, located to the south of the Salem Canal for the detection of site constituents began in July 2009. The pump and pipeline was replaced and pumping resumed in February 2010, the analytical data showed no increase in the two downgradient well; therefore, it was recommended that quarterly monitoring end, and sampling frequency at G04-M01E and J04-M01E be reduced to annual.

In 2009, a follow up ecological investigation recommendations were outline in the Delaware River Remedial Investigation Work Plan (URS, 2009). DuPont collected additional surface-water and sediment samples as outlined in the work plan in September 2009.

On February 6 2009, a work plan titled *Delaware River NAPL Delineation Work Plan* was submitted to the NJDEP. The purpose of the investigation was to address NAPL that was discovered in the B aquifer at one sample location off-shore from the Fluoroproducts area during the Phase 2 Delaware River Groundwater to Surface-Water Investigation. Off-shore delineation was completed in March 2009 and the results were reported in the August 2010 *Perimeter Investigation Report* as Appendix L.

In October 2009 a Perimeter Investigation Sampling Plan was submitted to the NJDEP and EPA. Field work was completed in late December 2009.

Monitoring Program 2010 – Present

Upon completion of the SWMU 52 ISM, the A Basin Soil Vault was capped and closed. The NJDEP has approved the A and B Basin closure conditioned on a fully executed Declaration of Environmental Restriction (DER), with the exception of the A Basin vault. A deed notice for the A and B Basins (along with 15 other SWMUs) has been approved by the NJDEP and recorded in Salem County. A copy of the recorded deed notice has been submitted to the NJDEP. The A Basin Vault leachate system became operational in March 2010, and a Remedial Action Report for the A Basin Vault was submitted in mid-2010.

On May 1, 2010 the new IWS pumping rate of 1.0 mgd became effective with the new NJPDES-DGW Permit Number NJ0083429.

In August 2010 The Perimeter Investigation Report (URS, 2010), was submitted to the NJDEP and EPA. The investigation identified three shallow groundwater plumes in the manufacturing area that may migrate to the Delaware River as a result of incomplete capture of the B aquifer by the IWS. The plumes were noted to be located in the Fluoroproducts Area (AOC 1), former Tetraethyl Lead (TEL) Area (AOC 2) and the in the western portion of the Jackson Lab area (AOC 3).

In October 2010 The Delaware River Ecological Investigation completed its third and final phase of sampling. A report was submitted with finds from the investigation and recommendations to the NJDEP (URS, 2011). DuPont received a comment letter from the NJDEP in September 2012.

In November, 2010 the DuPont Chambers Works Classification Exception Area (CEA) Biennial Certification Report was submitted to the NJDEP. A NJDEP CEA was established to provide public notice that the constituent standards for a given aquifer classification (Class II A drinking water) are not being met due to anthropogenic influences. Chambers Works CEA 1 encompasses the entire complex.

In July 2011, a shallow B aquifer pumping well D15-R01B was installed to obtain capture from the plume. Pump Test were completed from April 2012 through May 2012. An initial pre-design investigation was developed which included the installation of piezometers for pump test measurements. NAPL was observed in one piezometer, D15-P08B. D15-P08B was added to the NAPL survey and recovery list in 2014.

In 2011, it was determined that the pump associated with recovery well J05-W01E was failing and would need to be replaced. Pump replacement and well assessment activities occurred from January 30 thru the week of February 6, 2012.

On November 28, 2012, a CEA/Well Restriction Area (WRA) Permit Fact Sheet was submitted along with the *DuPont Chambers Works Classification Exception Area (CEA) Biennial Certification Report* (submitted electronically November 2, 2012).

In December 2012, the *Perimeter Area (AOCs 1, 2, & 3) Remedial Action Selection Report (RASR)* was prepared by Geosyntec Consultants and submitted to NJDEP and EPA.

In December 2012, six additional E aquifer monitoring wells were installed so as to refine the understanding of the groundwater quality in the E aquifer at the southern end of the site.

In 2013, a data gap analysis was performed for site solid waste management units (SWMUs) and areas of concern (AOCs). Data gaps identified were included in the *RFI Data Gap Sampling*

Plan (URS, 2013a). The plan was approved by NJDEP in December 2013. The data gap field investigation was completed in February 2014. The 2014 RFI report presents a comprehensive summary of data collected from prior RFI phases and associated investigations, and integrates the data and information collected during the most recent 2013-14 RFI data gap investigation.

In early 2013 the Salem Canal steel sheet-pile barrier (SPB) that was installed in 2008 was extended to the Munson Dam area. Based on March 11, 2013 water level data, groundwater elevations have risen behind the SPB, indicating the SPB is effectively inhibiting flow from the B aquifer to the Salem Canal. Additional studies to monitor the effect of the SPB on groundwater flow and quality and the condition of the sediments within the Salem Canal area were documented with detail analysis and conclusions are summarized in the *Salem Canal Groundwater Remedial Action Progress and Sediment Investigation Status Report* (URS, 2013).

In an email dated April 29, 2013, the NJDEP approved the recommendation to resume annual sampling of J04-M02E and G04-M01E.

In June 2013, DuPont installed one injection well with a cluster of 12 monitoring points within a 30-foot by 30-foot square area to support hydraulic characterization of passive aerobic biostimulation activities. As part of the hydrogeology assessment activities, in August 2013, DuPont request a 180-calendar day Permit-By-Rule (PBR) so as to discharge potassium bromide (KBr) (as a tracer for hydraulic testing), oxygen, monopotassium phosphate, and ammonium chloride as nutrients for enhancing aerobic degradation. On October 16, 2013, DuPont received the PBR approval with L07-M01B to be added to the sampling program as an upgradient well. On November 12, 2013 injection of the KBr test started. During an attempt to install the Waterloo Emitter™ into L07-M02B, the emitter failed to reach the bottom of the well and it was determined that the well collapsed. The well was replaced and the oxygen diffusion testing was started.

In a letter dated December 2, 2013, the NJDEP commented on the *2013 RFI Data Gap Sampling Plan*. NJDEP requested a review historical PFOA/PFC soil and groundwater investigations and DGW program for data gaps. Based on the site wide evaluation it was determined that potential data gaps existed in the manufacturing area that could be filled by additional sampling of 15 monitoring wells for PFOA/PFCs analytes. Samples were collected in January 2014.

In letters dated March 13 and April 25, 2017, NJDEP provided comments on the Second Semester 2016 NJPDES-DGW Report. In response to those comments, the following updates will be included to the NJPDES-DGW program going forward:

- Starting in the second semester of 2017, EPA method 537 Modified was used for the PFOA Monitoring Program. Method 537 Modified is also currently used for other monitoring programs at Chambers Works and includes perfluorotridecanoic acid (PFTrA) and perfluorotetradecanoic acid (PFTeDA), as requested by the agencies.
- Also starting in the second semester of 2017, 1,4-dioxane and Freon® 113 were added to the volatile organic compound (VOC) analyte list for all areas where VOC sampling is required.

As per the letter from Andrew Hartten (Chemours) to Eleni Kavvadias (EPA) dated October 14, 2019, Chemours will transition all groundwater and drinking water PFAS sampling programs to EPA Method 537 Modified list plus two extra analytes (Table 4, Part 10). Use of the List of 20 for PFAS sampling as part of the DGW PFOA monitoring program will begin in 2020. This change will constitute a minor modification of the currently in-place and future DGW permits.

During the first semester 2020, two wells, K12-M01C and K12-M01D, were found to be damaged and have since been abandoned. These wells were used for water level contouring, and it was determined that there are sufficient wells (i.e., K13-M01C, M12-M01C, O11-M01D, and O12-M02D) in the vicinity that the K12 well cluster did not have to be replaced to show containment in the C and D aquifers. Also, PFOA monitoring well L09-M01D was found to be damaged and was subsequently replaced with L09-M02D.

Based on the findings presented in the *Garage Diesel Spill 2020 Status Report* for the MNA of the GDS Area, it is recommended that wells N07-M01A and N07-M03A continue to be monitored on an annual basis and reported in the DGW report for five years. After five years, the sampling program should be re-assessed to determine if criteria have been met and the sampling program can be terminated or if criteria are not met and the sampling needs to continue.

During the first semester 2020, it was recommended that groundwater elevations from O21-M01B and P22-M01B at the Secure C Landfill continue to be measured and included in groundwater maps and that these wells and S24-M01B, T22-M01B, and S22-W01C be added to the PFOA Monitoring Program also included in the semi-annual DGW program.

During the first semester 2021, the following change was made to the PFOA Monitoring Program, and it will be henceforth known as the PFAS Monitoring Program. The PFAS Monitoring Program monitors 45 wells semi-annually for EPA Method 537 Modified list plus two extra analytes (Table 4, Part 10) in compliance with NJPDES-DGW Permit No. NJ0083429. The purpose of the monitoring program is to gather the data necessary to document the nature and extent of per- and polyfluorinated alkyl substances (PFAS) in groundwater on-site.

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Appendix B

Water-Level Measurements with Well Assignments by Aquifer

Appendix B
Water Levels - November 2021
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Well ID	DTW	Date	Northing	Easting	TOC NAVD88	Aquifer	NAVD88 Elev	Mapped	Comments
AA25-M02B	4.32	5/5/2022	319845.21	217831.02	4.59	B	0.27	Yes	
C06-P01B	7.52	5/5/2022	312548.33	208106.50	6.65	B	-0.87	Yes	
C07-P04B	10.12	5/5/2022	312773.80	208115.90	11.51	B	1.39	Yes	
C07-P05B	8.33	5/5/2022	312774.23	208143.06	11.26	B	2.93	Yes	
C08-M01B	11.84	5/5/2022	313232.71	208093.52	10.16	B	-1.68	Yes	
C09-M01B	8.18	5/5/2022	313525.74	208225.98	10.87	B	2.69	Yes	
C09-M02B	8.82	5/5/2022	313535.00	208153.60	6.93	B	-1.89	Yes	
C10-M02B	10.80	5/5/2022	313823.84	208140.89	8.88	B	-1.92	Yes	
C11-M03B	5.02	5/5/2022	314425.98	208214.74	7.52	B	2.50	Yes	
C11-M04B	NM	5/5/2022	314429.13	208201.35	4.35	B	NM	No	
C14-P01A	9.60	5/5/2022	315554.75	208426.07	8.50	B	-1.10	Yes	
D06-M01B	9.72	5/5/2022	312300.27	208513.18	8.89	B	-0.83	Yes	
D06-P01B	NM	5/5/2022	312544.77	208833.31	6.27	B	NM	No	
D06-P02B	10.00	5/5/2022	312324.22	208586.62	9.50	B	-0.50	Yes	
D06-P03B	3.82	5/5/2022	312350.71	208612.93	5.63	B	1.81	Yes	
D06-P04B	9.92	5/5/2022	312395.62	208503.78	9.21	B	-0.71	Yes	
D06-P05B	3.83	5/5/2022	312425.77	208531.93	5.85	B	2.02	Yes	
D07-M01B	8.24	5/5/2022	312829.78	208685.02	10.96	B	2.72	Yes	
D08-P03B	10.06	5/5/2022	313369.29	208856.72	12.20	B	2.14	Yes	
D09-P01B	8.25	5/5/2022	313597.21	208538.58	10.73	B	2.48	Yes	
D11-M01B	4.35	5/5/2022	314422.16	208672.86	6.14	B	1.79	Yes	
D11-P01B	NM	5/5/2022	314038.59	208651.48	3.30	B	NM	No	
D13-M01B	4.06	5/5/2022	315192.66	208815.88	5.27	B	1.21	Yes	
D14-M01B	3.40	5/5/2022	315566.94	208594.23	5.26	B	1.86	Yes	
D14-P01B	5.90	5/5/2022	315394.71	208689.16	7.67	B	1.77	Yes	
D15-M01B	4.20	5/5/2022	315926.26	208756.30	6.06	B	1.86	Yes	
E07-P01B	NM	5/5/2022	312926.08	209190.93	5.86	B	NM	No	
E11-P01B	5.75	5/5/2022	314247.03	208943.41	6.69	B	0.94	Yes	
E15-M01B	4.65	5/5/2022	316163.69	209158.77	6.35	B	1.70	Yes	
E15-P03B	NM	5/5/2022	315890.52	209396.23	3.92	B	NM	No	
F05-M02B	6.46	5/5/2022	312090.01	209522.65	8.03	B	1.57	Yes	
F05-M04B	4.87	5/5/2022	312061.88	209658.21	6.54	B	1.67	Yes	
F05-M05B	5.70	5/5/2022	312058.34	209657.60	6.09	B	0.39	Yes	
F06-M02B	6.20	5/5/2022	312194.06	209284.33	7.94	B	1.74	Yes	
F06-P01B	4.6	5/5/2022	312460.86	209639.86	6.34	B	1.74	Yes	
F08-M01B	NM	5/5/2022	313304.79	209572.16	8.98	B	NM	No	
F11-M01B	7.28	5/5/2022	314404.19	209638.15	8.05	B	0.77	Yes	
F16-M01B	11.30	5/5/2022	316502.90	209622.81	9.85	B	-1.45	Yes	
G04-M02B	4.29	5/5/2022	311699.06	209768.91	5.04	B	0.75	Yes	
G04-M03B	9.40	5/5/2022	311474.01	209811.25	10.70	B	1.30	Yes	
G05-M02B	5.87	5/5/2022	312128.77	209816.33	7.57	B	1.70	Yes	
G05-M03B	5.67	5/5/2022	312105.60	209877.25	7.46	B	1.79	Yes	
G05-M04B	5.78	5/5/2022	209730.26	312059.27	7.58	B	1.80	Yes	
G05-M05B	5.74	5/5/2022	210024.96	311999.63	7.46	B	1.72	Yes	
G05-M08B	4.90	5/5/2022	312004.30	209942.25	5.21	B	0.31	Yes	
G05-P03B	5.65	5/5/2022	312007.97	209981.70	7.36	B	1.71	Yes	
G06-M03B	NM	5/5/2022	312267.85	209908.77	10.04	B	NM	No	
G06-M04B	8.42	5/5/2022	312248.51	209908.22	10.05	B	1.63	Yes	

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G09-M01B	6.60	5/5/2022	313650.93	209751.79	7.80	B	1.20	Yes	
G10-M03B	8.35	5/5/2022	313847.51	209994.35	9.41	B	1.06	Yes	
G14-M01B	5.78	5/5/2022	315431.36	209820.25	6.56	B	0.78	Yes	
G15-M01B	6.06	5/5/2022	315851.23	209742.30	7.32	B	1.26	Yes	
G16-M03B	5.80	5/5/2022	316512.78	209824.01	7.55	B	1.75	Yes	
G16-M04B	6.08	5/5/2022	316520.94	209862.70	7.48	B	1.40	Yes	
H04-M02B	6.09	5/5/2022	311616.97	210149.28	7.73	B	1.64	Yes	
H05-M01B	5.78	5/5/2022	311975.53	210083.38	6.12	B	0.34	Yes	
H05-M02B	4.91	5/5/2022	311945.06	210259.40	7.19	B	2.28	Yes	
H05-M03B	5.37	5/5/2022	311982.68	210084.94	6.75	B	1.38	Yes	
H05-M04B	5.29	5/5/2022	311937.40	210252.74	5.66	B	0.37	Yes	
H06-M02B	7.66	5/5/2022	312446.99	210316.11	9.11	B	1.45	Yes	
H10-M01B	5.60	5/5/2022	313902.56	210342.77	6.62	B	1.02	Yes	
H13-M01A	11.16	5/5/2022	315327.16	210376.64	9.35	B	-1.81	Yes	
H13-M02B	13.08	5/5/2022	315159.91	210353.41	11.22	B	-1.86	Yes	
H13-P01B	5.05	5/5/2022	315142.36	210194.10	5.08	B	0.03	Yes	
H14-M01B	10.14	5/5/2022	315650.28	210110.67	11.23	B	1.09	Yes	
H15-M01B	9.50	5/5/2022	315960.96	210368.31	7.62	B	-1.88	Yes	
H15-P02B	7.88	5/5/2022	315985.72	210125.10	8.92	B	1.04	Yes	
H16-M02B	8.30	5/5/2022	316513.39	210089.12	9.69	B	1.39	Yes	
I05-M01B	7.60	5/5/2022	311886.54	210573.08	8.17	B	0.57	Yes	
I05-M02B	9.52	5/5/2022	312030.17	210568.25	10.10	B	0.58	Yes	
I05-M03B	6.88	5/5/2022	311927.52	210445.95	7.65	B	0.77	Yes	
I12-M02B	6.02	5/5/2022	314790.06	210547.29	6.41	B	0.39	Yes	
J04-M01B	7.33	5/5/2022	311573.40	210814.59	8.04	B	0.71	Yes	
J05-M02B	9.90	5/5/2022	311817.45	211053.52	10.46	B	0.56	Yes	
J07-M01B	11.18	5/5/2022	312644.57	211185.04	11.19	B	0.01	Yes	
J10-M02B	8.13	5/5/2022	313905.74	211138.36	8.19	B	0.06	Yes	
J12-M02B	6.60	5/5/2022	314921.66	211114.07	5.44	B	-1.16	Yes	
J16-M01B	6.90	5/5/2022	316510.66	211153.16	5.38	B	-1.52	Yes	
J17-M01B	10.36	5/5/2022	316739.28	210934.01	9.18	B	-1.18	Yes	
K08-M01B	11.39	5/5/2022	313316.04	211342.56	12.56	B	1.17	Yes	
K10-M01B	7.74	5/5/2022	314077.61	211642.28	6.87	B	-0.87	Yes	
K11-M01B	8.25	5/5/2022	314562.30	211414.30	6.77	B	-1.48	Yes	
K12-M01B	6.63	5/5/2022	314869.31	211359.06	6.51	B	-0.12	Yes	
K13-M02B	7.16	5/5/2022	315289.17	211433.46	5.50	B	-1.66	Yes	
K16-M01B	8.88	5/5/2022	316179.03	211489.57	5.82	B	-3.06	Yes	
K17-M01B	5.55	5/5/2022	316646.71	211553.91	2.48	B	-3.07	Yes	
K18-P01B	11.20	5/5/2022	317113.10	211403.12	8.80	B	-2.40	Yes	
L04-M01B	13.02	5/5/2022	311538.24	211690.83	13.45	B	0.43	Yes	
L05-M01B	11.90	5/5/2022	312034.84	211958.07	12.60	B	0.70	Yes	
L07-M01B	11.92	5/5/2022	312627.81	211771.34	11.98	B	0.06	Yes	
L08-M01B	12.78	5/5/2022	313082.82	212008.57	11.85	B	-0.93	Yes	
L12-M01B	9.81	5/5/2022	314884.93	211755.90	8.19	B	-1.62	Yes	
L12-M02B	12.95	5/5/2022	314709.36	212022.91	11.41	B	-1.54	Yes	
L13-M02B	7.59	5/5/2022	315030.25	211850.28	5.70	B	-1.89	Yes	
L14-M01B	11.65	5/5/2022	315587.42	211984.59	8.65	B	-3.00	Yes	
L15-M01B	9.55	5/5/2022	315886.06	211972.93	4.71	B	-4.84	Yes	

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L16-M01B	5.13	5/5/2022	316513.09	212028.31	1.33	B	-3.80	Yes	
L19-M01B	12.76	5/5/2022	317379.16	211742.32	9.87	B	-2.89	Yes	
M03-M01B	9.49	5/5/2022	311169.72	212334.59	9.90	B	0.41	Yes	
M10-M01B	16.80	5/5/2022	314071.44	212113.35	14.90	B	-1.90	Yes	
M10-M02B	13.30	5/5/2022	314059.40	212114.24	14.36	B	1.06	Yes	
M10-M03B	17.70	5/5/2022	314147.11	212428.32	15.84	B	-1.86	Yes	
M10-M04B	20.25	5/5/2022	313757.94	212205.27	19.21	B	-1.04	Yes	
M15-M01B	6.52	5/5/2022	315986.48	212376.05	2.65	B	-3.87	Yes	
M15-M02B	9.54	5/5/2022	315871.59	212240.19	5.23	B	-4.31	Yes	
N04-M01B	7.22	5/5/2022	311550.88	212525.68	7.42	B	0.20	Yes	
N08-M01B	6.30	5/5/2022	313109.14	212761.83	5.51	B	-0.79	Yes	
O05-M01B	8.07	5/5/2022	312014.88	212924.77	8.10	B	0.03	Yes	
O10-M01B	15.54	5/5/2022	314156.65	212703.59	14.68	B	-0.86	Yes	
O11-M01B	15.90	5/5/2022	314299.05	212887.70	14.64	B	-1.26	Yes	
O12-M01B	NM	5/5/2022	314821.32	213039.13	9.57	B	NM	Yes	
O12-M03B	21.97	5/5/2022	314651.47	213290.28	21.29	B	-0.68	Yes	
O12-M04B	13.21	5/5/2022	314837.45	213039.86	12.18	B	-1.03	Yes	
O16-P01B	4.91	5/5/2022	316247.17	213224.72	3.19	B	-1.72	Yes	
O21-M01B	5.37	5/5/2022	318490.47	213275.58	4.78	B	-0.59	Yes	
O26-M01B	7.12	5/5/2022	320162.40	213024.90	6.24	B	-0.88	Yes	
P06-M01B	4.59	5/5/2022	312331.23	213392.26	4.54	B	-0.05	Yes	
P07-M01B	7.42	5/5/2022	312637.48	213430.39	7.18	B	-0.24	Yes	
P11-M01B	12.96	5/5/2022	314227.93	213507.67	12.65	B	-0.31	Yes	
P20-M01B	4.89	5/5/2022	317972.50	213507.60	4.26	B	-0.63	Yes	
P21-M01B	6.48	5/5/2022	318309.77	213664.47	5.83	B	-0.65	Yes	
P21-M04B	5.57	5/5/2022	318180.43	213677.23	4.90	B	-0.67	Yes	
P21-R01B	6.30	5/5/2022	318320.01	213590.56	5.20	B	-1.10	Yes	6.3 GPM
P22-M01B	7.91	5/5/2022	318853.04	213548.95	7.66	B	-0.25	Yes	
Q12-M01B	14.05	5/5/2022	314718.45	213789.62	13.67	B	-0.38	Yes	
Q13-M02B	7.90	5/5/2022	315149.13	213834.25	7.06	B	-0.84	Yes	
Q20-M03B	2.30	5/5/2022	317781.97	213710.85	1.56	B	-0.74	Yes	
Q20-R01B	3.60	5/5/2022	318025.69	213843.98	2.82	B	-0.78	Yes	4.7 GPM
Q21-M01B	6.08	5/5/2022	318166.24	213804.58	5.60	B	-0.48	Yes	
Q22-M01B	5.14	5/5/2022	318890.12	213754.38	4.65	B	-0.49	Yes	
Q23-M01B	4.46	5/5/2022	319188.29	213927.76	4.06	B	-0.40	Yes	
Q25-P01B	2.69	5/5/2022	320011.53	214019.53	3.41	B	0.72	Yes	
Q27-M01B	10.64	5/5/2022	320769.43	213810.53	12.17	B	1.53	Yes	
R08-M01B	7.21	5/5/2022	313001.23	214115.09	7.13	B	-0.08	Yes	
R09-M01B	5.30	5/5/2022	313359.28	214328.09	5.22	B	-0.08	Yes	
R09-M02B	9.90	5/5/2022	313702.67	214173.29	9.89	B	-0.01	Yes	
R09-M03B	8.73	5/5/2022	313400.72	214054.62	8.55	B	-0.18	Yes	
R12-M01A	7.03	5/5/2022	314644.71	214455.94	7.40	B	0.37	Yes	
R13-M01A	6.90	5/5/2022	315083.34	214333.75	6.76	B	-0.14	Yes	
R15-M01A	9.42	5/5/2022	315982.12	214379.38	8.21	B	-1.21	Yes	
R19-M01B	8.49	5/5/2022	317738.22	214306.55	7.98	B	-0.51	Yes	
R31-M01B	7.81	5/5/2022	322322.80	214179.93	7.24	B	-0.57	Yes	
S11-M01B	7.85	5/5/2022	314219.32	214634.42	8.32	B	0.47	Yes	
S19-M01B	4.55	5/5/2022	317513.31	214578.90	3.83	B	-0.72	Yes	

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S23-P02B	9.99	5/5/2022	319165.31	214592.77	8.34	B	-1.65	Yes	
S24-M01B	4.68	5/5/2022	319439.44	214904.89	3.99	B	-0.69	Yes	
S32-M03B	6.38	5/5/2022	322570.00	214865.00	7.13	B	0.75	Yes	
T14-M01A	5.69	5/5/2022	315708.28	215166.28	4.57	B	-1.12	Yes	
T20-M02B	9.16	5/5/2022	317764.32	214962.08	8.57	B	-0.59	Yes	
T21-M01A	10.19	5/5/2022	318209.75	214964.87	9.91	B	-0.28	Yes	
T22-M01B	7.43	5/5/2022	318684.74	214928.99	6.70	B	-0.73	Yes	
T27-M01B	1.51	5/5/2022	320586.97	214963.53	1.46	B	-0.05	Yes	
T28-M01B	1.97	5/5/2022	321290.36	215029.99	2.18	B	0.21	Yes	
U08-M01B	3.54	5/5/2022	313306.15	215322.07	4.77	B	1.23	Yes	
U12-M01A	1.40	5/5/2022	314807.58	215314.35	1.56	B	0.16	Yes	
U14-M01A	6.83	5/5/2022	315405.88	215412.45	6.47	B	-0.36	Yes	
W19-M01B	8.32	5/5/2022	317511.94	216327.52	9.05	B	0.73	Yes	
X17-M01B	4.15	5/5/2022	316649.76	216691.37	4.93	B	0.78	Yes	
X18-M01B	8.81	5/5/2022	317063.21	216768.31	10.51	B	1.70	Yes	
X26-M01A	3.39	5/5/2022	320182.55	216788.05	2.69	B	-0.70	Yes	
X27-M01B	3.28	5/5/2022	320686.55	216547.31	2.53	B	-0.75	Yes	
Y21-M01B	3.28	5/5/2022	318180.39	217017.01	8.65	B	5.37	Yes	
Z20-M01B	6.15	5/5/2022	317921.64	217663.87	10.89	B	4.74	Yes	
Z28-M02B	5.11	5/5/2022	321133.91	217580.10	5.83	B	0.72	Yes	
AA24-BM01	4.49	5/5/2022	319383.36	217873.90	3.21	BM	-1.28	Yes	
C13-BM01	NM	5/5/2022	315365.09	208022.32	15.65	BM	NM	No	
E05-BM01	9.96	5/5/2022	311999.68	209210.29	10.15	BM	0.19	Yes	Munson Dam Canal - SE side of dam (mid rail), mid-rail black electrical tape
E05-BM02	NM	5/5/2022	312101.31	209190.35	8.29	BM	NM	No	Munson Dam River - Gate 11B (mid rail), Top rail about vertical support, above yellow ladder hanger
H16-BM02	10.82	5/5/2022	316356.19	210236.07	7.57	BM	-3.25	Yes	B-Basin - posted for reference
L19-BM02	2.50	5/5/2022	317542.71	211919.79	1.42	BM	-1.08	Yes	Henby #1 - posted for reference
Q17-BM01	5.26	5/5/2022	316830.74	213989.44	4.02	BM	-1.24	Yes	
T16-BM01	0.89	5/5/2022	316277.89	214924.33	-0.12	BM	-1.01	Yes	From water ***Henby #2 - posted for reference. Needs washer
U20-BM01	4.34	5/5/2022	317928.04	215416.89	3.32	BM	-1.02	Yes	
U30-BM01	1.70	5/5/2022	322092.02	215333.80	3.39	BM	1.69	No	Top of wall
X24-BM01	5.12	5/5/2022	319567.34	216799.96	0.59	BM	-4.53	Yes	Off head wall ***Bouttown #2 - posted for reference. Top of PVC. Underwater at time of measurement.
AA25-M01B	3.56	5/5/2022	319844.72	217815.66	3.82	C	0.26	Yes	
C06-M01C	16.62	5/5/2022	312519.67	208072.12	9.81	C	-6.81	Yes	
C10-M01C	13.36	5/5/2022	314099.44	208187.62	8.68	C	-4.68	Yes	
C11-M01C	8.95	5/5/2022	314509.50	208215.22	5.79	C	-3.16	Yes	
C14-M01C	9.64	5/5/2022	315469.72	208446.91	7.66	C	-1.98	Yes	
D15-M01C	6.88	5/5/2022	315935.38	208756.55	5.83	C	-1.05	Yes	
E14-M01C	9.02	5/5/2022	315630.10	209040.08	7.19	C	-1.83	Yes	
F09-M01C	15.76	5/5/2022	313405.25	209259.18	8.91	C	-6.85	Yes	
G04-M01C	15.00	5/5/2022	311477.98	209799.57	10.61	C	-4.39	Yes	
G08-M01C	15.58	5/5/2022	313213.48	209924.63	8.73	C	-6.85	Yes	
G08-R01C	45.95	5/5/2022	313252.91	209941.61	8.26	C	-37.69	Yes	20 GPM
G12-M01C	11.08	5/5/2022	314611.65	209810.52	4.95	C	-6.13	Yes	
H04-M01B	9.43	5/5/2022	311618.74	210144.90	6.99	C	-2.44	Yes	
H06-M01C	14.72	5/5/2022	312454.21	210308.15	9.21	C	-5.51	Yes	
H07-M01C	16.26	5/5/2022	313025.61	210472.30	10.34	C	-5.92	Yes	
H10-M02C	12.96	5/5/2022	313902.68	210348.69	6.81	C	-6.15	Yes	
H13-M01C	16.04	5/5/2022	315142.03	210300.57	10.55	C	-5.49	Yes	

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H16-M01B	8.54	5/5/2022	316547.05	210339.92	6.19	C	-2.35	Yes	
I05-M01C	14.39	5/5/2022	312029.39	210577.26	9.93	C	-4.46	Yes	
I15-M01C	9.59	5/5/2022	315933.55	210787.74	7.96	C	-1.63	Yes	
J05-M01B	11.87	5/5/2022	311857.69	210939.78	8.08	C	-3.79	Yes	
J07-M01C	15.99	5/5/2022	312633.48	211190.21	11.33	C	-4.66	Yes	
K06-M01C	15.90	5/5/2022	312242.48	211381.69	10.63	C	-5.27	Yes	
K08-M01C	17.35	5/5/2022	313312.98	211360.33	12.65	C	-4.70	Yes	
K11-M01C	13.65	5/5/2022	314378.41	211410.84	8.54	C	-5.11	Yes	
K13-M01C	13.20	5/5/2022	315285.40	211435.85	5.50	C	-7.70	Yes	
K17-M01C	5.97	5/5/2022	316652.90	211543.44	1.91	C	-4.06	Yes	
L07-M01C	15.99	5/5/2022	312628.80	211782.22	11.83	C	-4.16	Yes	
L19-M01C	12.87	5/5/2022	317406.16	211756.52	10.37	C	-2.50	Yes	
M09-M01C	20.66	5/5/2022	313452.71	212288.47	17.10	C	-3.56	Yes	
M10-M01C	18.90	5/5/2022	314072.21	212128.58	14.78	C	-4.12	Yes	
M12-M01C	19.34	5/5/2022	314937.24	212293.32	8.94	C	-10.40	Yes	
M14-M01C	20.52	5/5/2022	315399.39	212423.76	6.87	C	-13.65	Yes	
M15-M01C	9.96	5/5/2022	315995.33	212383.49	2.01	C	-7.95	Yes	
M22-M01B	10.39	5/5/2022	318767.02	212303.70	9.36	C	-1.03	Yes	
N04-M01C	7.82	5/5/2022	311555.48	212529.40	6.60	C	-1.22	Yes	
N05-M01C	12.85	5/5/2022	312046.87	212542.82	10.93	C	-1.92	Yes	
N08-M01C	7.53	5/5/2022	313104.06	212761.71	5.40	C	-2.13	Yes	
O05-M01C	10.00	5/5/2022	312010.86	212919.79	8.47	C	-1.53	Yes	
O08-M01C	14.60	5/5/2022	313370.82	212852.59	11.71	C	-2.89	Yes	
O12-M02C	13.95	5/5/2022	314827.24	213059.49	12.44	C	-1.51	Yes	
P06-M02C	5.85	5/5/2022	312328.43	213450.14	4.78	C	-1.07	Yes	
P08-M01C	11.50	5/5/2022	313186.32	213591.15	9.29	C	-2.21	Yes	
P11-M01C	14.87	5/5/2022	314244.53	213495.50	12.94	C	-1.93	Yes	
P15-M01C	4.55	5/5/2022	315903.21	213405.46	1.52	C	-3.03	Yes	
P29-M01B	9.08	5/5/2022	321369.07	213668.38	9.39	C	0.31	Yes	
Q13-M01C	7.52	5/5/2022	315150.18	213826.90	6.20	C	-1.32	Yes	
Q13-R01C	19.03	5/5/2022	314980.06	213785.95	11.06	C	-7.97	Yes	Pumping well offline
Q26-P01C	5.95	5/5/2022	320275.94	213928.21	6.27	C	0.32	Yes	
R08-M01C	7.46	5/5/2022	313000.22	214110.09	7.33	C	-0.13	Yes	
R09-M02C	5.40	5/5/2022	313354.83	214326.59	4.91	C	-0.49	Yes	
R09-R02C	5.87	5/5/2022	313392.17	214242.20	4.47	C	-1.40	Yes	Pumping well offline
R10-M01C	10.59	5/5/2022	313791.74	214193.39	10.14	C	-0.45	Yes	
R13-M01B	7.75	5/5/2022	315076.62	214336.63	6.65	C	-1.10	Yes	
R15-M01B	9.33	5/5/2022	315988.75	214377.10	8.10	C	-1.23	Yes	
R19-M01C	4.88	5/5/2022	317640.33	214339.20	3.78	C	-1.10	Yes	
S09-M01C	9.62	5/5/2022	313740.29	214463.82	9.20	C	-0.42	Yes	
S11-M01C	9.01	5/5/2022	314226.45	214637.79	8.55	C	-0.46	Yes	
S22-W01C	11.54	5/5/2022	318915.60	214679.32	10.85	C	-0.69	Yes	Pumping well offline
S23-P01B	3.06	5/5/2022	318985.66	214755.38	2.31	C	-0.75	Yes	
S32-M02B	6.01	5/5/2022	322566.22	214852.93	6.62	C	0.61	Yes	
T29-M01B	2.13	5/5/2022	321733.89	215106.34	2.20	C	0.07	Yes	
U08-M01C	4.81	5/5/2022	313308.70	215319.93	4.75	C	-0.06	Yes	
U12-M01B	2.79	5/5/2022	314803.86	215312.65	2.17	C	-0.62	Yes	
U14-M01B	7.45	5/5/2022	315410.28	215423.66	6.62	C	-0.83	Yes	

Appendix B
Water Levels - November 2021
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Well ID	DTW	Date	Northing	Easting	TOC NAVD88	Aquifer	NAVD88 Elev	Mapped	Comments
W16-M01B	1.84	5/5/2022	316186.00	216211.59	1.56	C	-0.28	Yes	
X26-M01B	2.94	5/5/2022	320163.99	216799.03	2.73	C	-0.21	Yes	
Y31-M01B	7.38	5/5/2022	322290.51	217230.98	7.69	C	0.31	Yes	
Z20-M01C	10.61	5/5/2022	317917.80	217657.89	10.52	C	-0.09	Yes	
Z28-M01B	4.49	5/5/2022	321127.64	217578.11	5.26	C	0.77	Yes	
H11-R01CD	12.30	5/5/2022	314339.37	210180.22	7.93	CD	-4.37	Yes	To bottom pump mount/ top I beam
K02-W01CD	12.22	5/5/2022	310842.54	211632.86	9.29	CD	-2.93	Yes	Pumping well offline
K06-R02CD	50.00	5/5/2022	312174.90	211382.38	10.39	CD	-39.61	Yes	220 GPM
M14-R02CD	41.00	5/5/2022	315450.37	212445.23	5.59	CD	-35.41	Yes	350 GPM
AA22-M01B	6.43	5/5/2022	318855.84	217857.16	6.81	D	0.38	Yes	
AA25-M01C	3.33	5/5/2022	319843.99	217805.47	4.14	D	0.81	Yes	
C06-M01D	17.13	5/5/2022	312538.71	208064.57	9.34	D	-7.79	Yes	
C11-M02D	10.85	5/5/2022	314438.05	208215.01	5.63	D	-5.22	Yes	
D15-M01D	6.34	5/5/2022	315857.90	208732.19	5.22	D	-1.12	Yes	
E14-M01D	8.85	5/5/2022	315627.33	209044.22	7.35	D	-1.50	Yes	
F07-M01D	15.10	5/5/2022	312701.81	209316.74	7.43	D	-7.67	Yes	
F09-M01D	16.04	5/5/2022	313404.74	209263.66	8.78	D	-7.26	Yes	
G08-R01D	50.01	5/5/2022	313254.73	209924.87	8.49	D	-41.52	Yes	150 GPM
G12-M01D	11.15	5/5/2022	314607.48	209805.11	4.89	D	-6.26	Yes	
H07-M01D	6.68	5/5/2022	313020.86	210474.13	10.23	D	3.55	Yes	
H10-M01C	13.46	5/5/2022	313902.25	210353.64	6.80	D	-6.66	Yes	
H14-M01C	13.36	5/5/2022	315640.06	210112.15	8.33	D	-5.03	Yes	
H15-M01C	10.35	5/5/2022	315949.85	210368.61	7.52	D	-2.83	Yes	
I15-M01D	13.04	5/5/2022	315930.03	210783.44	8.02	D	-5.02	Yes	
J05-M01C	12.66	5/5/2022	311855.79	210946.99	8.11	D	-4.55	Yes	
J07-M01D	16.82	5/5/2022	312642.87	211198.93	11.04	D	-5.78	Yes	
K08-M01D	17.72	5/5/2022	313306.59	211348.44	12.86	D	-4.86	Yes	
L05-M01D	16.75	5/5/2022	312040.55	211967.66	12.57	D	-4.18	Yes	
L07-M01D	16.30	5/5/2022	312627.58	211795.72	11.89	D	-4.41	Yes	
L09-M01D	18.15	5/5/2022	313670.12	211901.42	12.96	D	-5.19	Yes	
M09-M01D	21.37	5/5/2022	313456.33	212282.73	17.43	D	-3.94	Yes	
M22-M01C	10.15	5/5/2022	318754.45	212297.72	9.20	D	-0.95	Yes	
N04-M01D	11.14	5/5/2022	311560.93	212531.98	7.23	D	-3.91	Yes	
N05-M01D	14.90	5/5/2022	312038.01	212536.16	10.97	D	-3.93	Yes	
N08-M01D	7.82	5/5/2022	313099.15	212761.69	5.19	D	-2.63	Yes	
O05-M01D	NM	5/5/2022	312006.87	212914.48	8.08	D	NM	No	
O11-M01D	19.50	5/5/2022	314312.74	212885.78	15.46	D	-4.04	Yes	
O12-M02D	16.92	5/5/2022	314825.06	213049.16	10.82	D	-6.10	Yes	
O26-M01C	8.40	5/5/2022	320166.54	213028.63	7.81	D	-0.59	Yes	
P06-M01D	8.11	5/5/2022	312335.60	213404.19	4.83	D	-3.28	Yes	
P08-M01D	10.87	5/5/2022	313174.42	213583.05	8.94	D	-1.93	Yes	
Q08-M01D	7.14	5/5/2022	312973.50	214032.54	5.44	D	-1.70	Yes	
Q13-M01D	9.05	5/5/2022	315151.27	213823.03	7.65	D	-1.40	Yes	
Q13-R01D	12.52	5/5/2022	314983.13	213769.78	10.68	D	-1.84	Yes	Pumping well offline
Q17-W01D	7.02	5/5/2022	316668.64	213942.50	5.16	D	-1.86	Yes	
Q20-M01C	2.89	5/5/2022	317777.85	213714.20	1.67	D	-1.22	Yes	
Q24-P01C	6.15	5/5/2022	319488.33	214061.33	5.84	D	-0.31	Yes	
Q30-M02C	8.57	5/5/2022	321859.65	213917.88	8.45	D	-0.12	Yes	

Appendix B
Water Levels - November 2021
First Semester 2022 Semi-Annual NJPDES-DGW Report
Chambers Works Complex
Deepwater, New Jersey

Well ID	DTW	Date	Northing	Easting	TOC NAVD88	Aquifer	NAVD88 Elev	Mapped	Comments
R08-M01D	7.93	5/5/2022	312995.97	214105.70	7.26	D	-0.67	Yes	
S09-M02D	10.42	5/5/2022	313736.54	214460.89	9.42	D	-1.00	Yes	
S11-M01D	8.31	5/5/2022	314223.20	214635.96	8.47	D	0.16	Yes	
S26-P01C	3.12	5/5/2022	320262.14	214802.68	2.51	D	-0.61	Yes	
S32-M02C	6.63	5/5/2022	322578.26	214856.22	6.19	D	-0.44	Yes	
T22-M01C	7.54	5/5/2022	318679.53	214923.05	6.73	D	-0.81	Yes	
T28-M01C	2.55	5/5/2022	321292.71	215020.88	2.29	D	-0.26	Yes	
U08-M01D	5.64	5/5/2022	313312.32	215317.28	4.81	D	-0.83	Yes	
U12-M01C	2.81	5/5/2022	314797.14	215305.48	1.94	D	-0.87	Yes	
W16-M01C	1.92	5/5/2022	316214.65	216199.03	1.66	D	-0.26	Yes	
X26-M01C	2.84	5/5/2022	320173.41	216792.62	2.70	D	-0.14	Yes	
Y31-M01C	6.77	5/5/2022	322282.79	217224.56	7.23	D	0.46	Yes	
AA22-M01C	6.22	5/5/2022	318845.66	217855.24	6.85	E	0.63	Yes	
C11-M01E	22.97	5/5/2022	314417.02	208213.28	6.35	E	-16.62	Yes	
G04-M01E	48.67	5/5/2022	311666.37	209760.16	8.15	E	-40.52	Yes	
H05-M04E	46.20	5/5/2022	311970.53	210108.56	5.51	E	-40.69	Yes	
J04-M02E	49.90	5/5/2022	311535.44	210920.98	8.31	E	-41.59	Yes	
J04-M04E	49.80	5/5/2022	311544.77	210887.44	8.28	E	-41.52	Yes	
J05-W01E	82.77	5/5/2022	311827.13	210993.33	10.65	E	-72.12	Yes	175 GPM
L19-M01D	24.12	5/5/2022	317408.95	211750.29	10.29	E	-13.83	Yes	
L19-M01E	27.60	5/5/2022	317469.43	211746.40	13.97	E	-13.63	Yes	
M03-M01E	48.22	5/5/2022	311175.69	212348.52	9.43	E	-38.79	Yes	
N05-M01E	50.25	5/5/2022	312034.08	212565.18	10.03	E	-40.22	Yes	
P06-M01E	44.44	5/5/2022	312369.10	213441.00	4.69	E	-39.75	Yes	
R04-M01E	46.45	5/5/2022	311674.78	214246.22	7.85	E	-38.60	Yes	
R10-M01E	45.61	5/5/2022	313802.45	214207.26	10.55	E	-35.06	Yes	
R15-W01E	24.25	5/5/2022	315814.99	214354.84	8.31	E	-15.94	Yes	Pumping well offline
S32-M01D	10.32	5/5/2022	322632.04	214596.69	6.28	E	-4.04	Yes	
T29-M01E	17.06	5/5/2022	321458.36	214927.53	6.37	E	-10.69	Yes	
V21-W01E	16.7	5/5/2022	318134.58	215900.80	7.12	E	-9.58	Yes	
DE River	NA	5/5/2022	315365.09	208022.32	--	MMA	0.95	Yes	Delaware River Moving Mean Average

Appendix C

Contour Map Reporting Forms

Appendix C

Contour Map Reporting Form – Figure 4 (B Aquifer)
Chambers Works First Semester 2022 Semi-Annual NJPDES-DGW Report

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event?

   Yes ______ No __X__
   If yes, attach new "Well Certification – Form B – Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen?

   Yes __X__ No ______ If yes, identify these wells.

   The B aquifer is unconfined.

3. Are there any monitor wells present at the site but omitted from the contour map?

   Yes __X__ No ______
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

   Figure 4 (B Aquifer map) presents anomalous water-level data as purple well symbols. Anomalous data were noted for monitoring wells H05-M04B, K08-M01B, M10-M02B, and S23-P02B.

4. Are there any monitor wells containing separate phase product during this measuring event?

   Yes __X__ No ______

   Were any of the monitor wells with separate phase product included in the groundwater contour map?

   Yes __X__ No ______
   If yes, show the formula used to correct the water table elevation.

   No corrections to water-level measurements are necessary because the separate phase product detected was DNAPL. NAPL is inspected monthly under the NAPL Program. The NAPL Program is reported semi-annually and is part of this semi-annual DGW Report.

5. Has the groundwater flow direction changed more than 45 degrees from the previous groundwater contour map?

Yes ______ No __X__

If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map?

Yes __X__ No ______

Unless the groundwater mounds and/or depressions are caused by the groundwater remediation system, discuss the reasons for this occurrence.

Interceptor Well System controls the majority of B aquifer groundwater flow towards the site.

7. Are the wells used in the contour map screened in the same water-bearing zone?

Yes __X__ No ______

If no, justify the inclusion of those wells.

8. Were the groundwater contours:

Computer Generated ______

Computer Aided __X__

Hand-Drawn ______

If computer generated or aided, identify the interpolation method(s) used.

ArcGIS (version 2010) with kriging and hand smoothing of contour lines.

Appendix C

Contour Map Reporting Form – Figure 5 (C Aquifer)
Chambers Works First Semester 2022 Semi-Annual NJPDES-DGW Report

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event?

   Yes _________ No ____X____
   If yes, attach new "Well Certification – Form B – Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen?

   Yes _________ No ____X____ If yes, identify these wells.

   The C and D aquifers are semi-confined.

3. Are there any monitor wells present at the site but omitted from the contour map?

   Yes _________ No ____X____
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event?

   Yes _________ No ____X____

   Were any of the monitor wells with separate phase product included in the groundwater contour map?

   Yes _________ No ____X____
   If yes, show the formula used to correct the water table elevation.

5. Has the groundwater flow direction changed more than 45 degrees from the previous groundwater contour map?

   Yes _________ No ____X____

   If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map?

   Yes ____X____ No _________

   Unless the groundwater mounds and/or depressions are caused by the groundwater remediation system, discuss the reasons for this occurrence.

   Interceptor Well System controls site groundwater so that flow is toward the site.

7. Are the wells used in the contour map screened in the same water-bearing zone?

   Yes _________ No ____X____

   If no, justify the inclusion of those wells.

   M14-R02CD and K06-R02CD are pumping wells that are screened in both the C and D aquifers.

8. Were the groundwater contours:

   Computer Generated _______

   Computer Aided ___X___

   Hand-Drawn _______

   If computer generated or aided, identify the interpolation method(s) used.

   ArcGIS (version 2010) with kriging and hand smoothing of contour lines.

Appendix C

Contour Map Reporting Form – Figure 6 (D Aquifer)
Chambers Works First Semester 2022 Semi-Annual NJPDES-DGW Report

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event?

   Yes ________ No X
   If yes, attach new "Well Certification – Form B – Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen?

   Yes ________ No X If yes, identify these wells.

   The C and D aquifers are semi-confined.

3. Are there any monitor wells present at the site but omitted from the contour map?

   Yes X No ________
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

   Figure 6 (D Aquifer map) presents anomalous water-level data as purple well symbols. Anomalous data were noted for monitoring well H07-M01D.

4. Are there any monitor wells containing separate phase product during this measuring event?

   Yes ________ No X

   Were any of the monitor wells with separate phase product included in the groundwater contour map?

   Yes ________ No X
   If yes, show the formula used to correct the water table elevation.

5. Has the groundwater flow direction changed more than 45 degrees from the previous groundwater contour map?

   Yes ________ No X

   If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map?

   Yes __X__ No ______

   Unless the groundwater mounds and/or depressions are caused by the groundwater remediation system, discuss the reasons for this occurrence.

   Interceptor Well System controls site groundwater so that flow is toward the site.

7. Are the wells used in the contour map screened in the same water-bearing zone?

   Yes ______ No __X__

   If no, justify the inclusion of those wells.

   M14-R02CD and K06-R02CD are pumping wells that are screened in both the C and D aquifers.

8. Were the groundwater contours:

   Computer Generated ______

   Computer Aided __X__

   Hand-Drawn ______

   If computer generated or aided, identify the interpolation method(s) used.

   ArcGIS (version 2010) with kriging and hand smoothing of contour lines.

Appendix C

Contour Map Reporting Form – Figure 7 (E Aquifer)
Chambers Works First Semester 2022 Semi-Annual NJPDES-DGW Report

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event?

   Yes _________ No ____X____

   If yes, attach new “Well Certification – Form B – Location Certification” as found in the “Guide for the Submission of Remedial Action Workplans” (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen?

   Yes _________ No ____X____ If yes, identify these wells.

   The E aquifer is a confined aquifer.

3. Are there any monitor wells present at the site but omitted from the contour map?

   Yes _________ No ____X____

   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

   Contour maps are only generated for the E Aquifer wells listed in Table 3 of the Ground Water Remediation and RCRA Post Closure Plan for NJPDES-DGW Permit No NJ0083429.

4. Are there any monitor wells containing separate phase product during this measuring event?

   Yes _________ No ____X____

   Were any of the monitor wells with separate phase product included in the groundwater contour map?

   Yes _________ No ____X____

   If yes, show the formula used to correct the water table elevation.

5. Has the groundwater flow direction changed more than 45 degrees from the previous groundwater contour map?

   Yes __________ No ____X____

   If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map?

   Yes __________ No ____X____

   Unless the groundwater mounds and/or depressions are caused by the groundwater remediation system, discuss the reasons for this occurrence.

7. Are the wells used in the contour map screened in the same water-bearing zone?

   Yes ____X____ No __________

   If no, justify the inclusion of those wells.

8. Were the groundwater contours:

   Computer Generated _______

   Computer Aided ___X___

   Hand-Drawn _______

   If computer generated or aided, identify the interpolation method(s) used.

   ArcGIS (version 2010) with kriging and hand smoothing of contour lines.

Appendix D

Data Review Narrative Reports

submitted separately

Appendix E

First Half 2022 Semi-Annual Statistical Review of Groundwater Monitoring Results, AECOM, November 2022

First Half 2022 Semi-Annual Statistical Review of Groundwater Monitoring Results

Chemours Chambers Works
Deepwater, New Jersey

Submitted on behalf of:
The Chemours Company FC LLC

Submitted by:
AECOM
Sabre Building
Suite 300
4051 Ogletown Road
Newark, DE 19713

Project Number: 60674023.22005
Date: November 2022

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Appendix F Well Summary, Statistical Evaluation Results, Time-Series Plots, and Control Chart Analysis for the PFAS Monitoring Program

1.0 Introduction

This semi-annual statistical review was completed by AECOM for the Chemours Company (Chemours). The report describes statistical analyses conducted on groundwater analytical data collected at the Chemours Chambers Works Complex (the “complex”) from 1989 to May 2022. The results of the statistical review will be used in support of the New Jersey Pollutant Discharge Elimination System-Discharge to Groundwater (NJPDES-DGW) permit issued for the complex in November 1988.

The purpose of the report is to evaluate current groundwater quality data for significant shifts from historical baseline levels, i.e., whether there are monotonic increasing or decreasing trends, and whether current monitoring results exceed the statistically-derived baseline limits. The current statistical review was conducted with a refined set of groundwater well and analyte combinations. The first half of 2022 groundwater data set was refined to include only those analytes that were detected above the following:

- Laboratory method detection limit (MDL)
- 2020 New Jersey Class IIA Groundwater Quality Standards (NJGWIIA standards)
- 2020 NJ Class IIA screening criteria (PFNA, PFOA, and PFOS standards)

By refining the groundwater data set, the well/analyte combinations that exhibit the greatest potential for departures from historical baseline levels are emphasized.

The remainder of this report is organized into the following sections:

- Section 2.0 describes the background.
- Section 3.0 describes the groundwater monitoring programs.
- Section 4.0 presents the methodology.
- Section 5.0 presents the results.
- Section 6.0 summarizes the results and presents the conclusion.
- Section 7.0 lists the references cited.

2.0 Background

The Chambers Works Complex consists of the former Carneys Point Works in the northern area of the site and the Chambers Works manufacturing area in the southern area of the site. Groundwater at the site (both Carneys Point and the manufacturing area) is part of the site-wide Classification Exception Area (CEA) and is not used for any purpose. The area surrounding the facility consists of moderately populated residential and agricultural areas. Two surface-water bodies, the Delaware River and the Salem Canal, border the site. Surface-water bodies present within Carneys Point include Henby Creek and Bouttown Creek and associated wetlands.

2.1 Groundwater Pump and Treat System

Under natural groundwater flow conditions, the Delaware River may be a recipient of a portion of groundwater flow underlying the Chemours facility. Site-related constituents identified in groundwater include metals and inorganic compounds, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and perfluorinated compounds (PFCs). To control the off-site migration of constituents via groundwater flow, DuPont installed an Interceptor Well System (IWS), which has been in operation since 1970.

The IWS is a pump-and-treat system that recovers more than 1 million gallons of groundwater each day and transfers the groundwater to an on-site wastewater treatment plant. Once it is determined that site-related constituents in the treated groundwater meet applicable criteria, it is then pumped to the adjacent Delaware River. This activity is authorized under the NJPDES-DGW permit.

2.2 Statistical Testing and Reporting

The NJPDES-DGW permit requires the implementation of groundwater quality monitoring programs; the objective of which is to monitor the effectiveness of the IWS. In this regard, six groundwater monitoring programs are currently being implemented to evaluate groundwater quality at the complex. These six monitoring programs are as follows:

- Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins
- Perimeter Monitoring Programs (divided into four areas)
- Secure C Landfill Corrective Action Monitoring Program
- Secure C Landfill Detection Monitoring Program
- Post-Closure Monitoring for Resource Conservation and Recovery Act (RCRA) Units
- Per- and polyfluorinated alkyl substances (PFAS) Monitoring Program

Beginning in 1989, groundwater analytical data were collected under each of the six programs to remain in compliance with NJPDES-DGW Permit Nos. NJ0105872 and NJ0083429. Permit No. NJ0105872 applies to the Secure C Landfill Detection Monitoring Program. As described in the Permit, statistical testing of the groundwater analytical data and reporting are required semi-annually. Permit No. NJ0083429 stipulates that statistical testing and reporting are required semi-annually for the Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins; the

Secure C Landfill Corrective Action and Detection Monitoring Programs; and the PFAS Monitoring Program. The Perimeter Monitoring Programs and the Post-Closure monitoring for the RCRA Units are reported annually; sampling was recently conducted in January 2022.

3.0 Groundwater Monitoring Programs

Monitoring programs evaluated during the first half of 2022 include the following:

- Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins
- Secure C Landfill Corrective Action Monitoring Program
- Secure C Landfill Detection Monitoring Program
- PFAS Monitoring Program

An overview of the monitoring wells and the groundwater analytical parameters applicable to each of these groundwater monitoring programs are presented in the following sections. The definition of baseline and current monitoring periods for each program are presented in Table 1. Lists of the groundwater quality parameters for the first half of 2022 sampling of the monitoring programs are presented in the *First Semester 2022 Semi Annual NJPDES-DGW Report*.

3.1 Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins

The A, B, and C Basin Closure and Post-Closure Program addresses seven groundwater monitoring wells: G16-M02B, H13-M02B, H14-M01B, H16-P01B, J16-M01B, K13-M02B, and L14-M01B. The baseline period for this program extended from January 1, 1989 to December 31, 2006. The current monitoring program extends from January 1, 2007 to the present.

The assessment of groundwater quality at these wells involves semi-annual sampling for several indicator and field parameters, including total organic carbon (TOC), total organic halogen (TOX), dissolved oxygen (field), pH (field), reduction-oxidation potential (redox) (field), specific conductance (field), and temperature (field).

3.2 Secure C Landfill Corrective Action Monitoring Program

Five (non-background) monitoring wells are covered under the Secure C Landfill Corrective Action monitoring program: P21-M01B, P21-M04B, P21-R01B, Q20-R01B, and Q21-M01B. Well Q20-M02B was abandoned and replaced with Q20-R01B.

The baseline period for the overall program extended from January 1, 1989 to December 31, 2007, and the current monitoring period extends from January 1, 2008 to the present. Exceptions include monitoring wells P21-M04B and P21-R01B. Specifically, the baseline period for monitoring well P21-R01B extended from January 1, 2008 to December 31, 2011 and entered the monitoring phase on January 1, 2012. The baseline period for monitoring well P21-M04B extended from January 1, 2008 to December 31, 2012, and the monitoring period started on January 1, 2013.

The groundwater quality parameters monitored at each well include the following:

- **Organics:**
  - VOCs (6)
  - SVOCs (base neutral) (8)

- **Indicators and Field Parameters**
    - Total Organic Carbon (TOC)
    - Total Organic Halogen (TOX)
    - Total Phenolics
    - Dissolved Oxygen (field)
    - pH (field)
    - Redox (field)
    - Specific Conductance (field)
    - Temperature (field)
- **Inorganics:**
    - Aluminum (total)
    - Ammonia
    - Arsenic (total)
    - Chloride
    - Cyanide (total)
    - Lead (total)
    - Nitrate
    - Sodium
    - Sulfate

3.3 Secure C Landfill Detection Monitoring Program

The Secure C Landfill Detection Monitoring Program addresses four (non-background) monitoring wells: R19-M01B, R19-M02B, S19-M01B, and S19-M02B. The baseline period for this program extended from January 1, 1989 to December 31, 2007. The current monitoring program extends from January 1, 2008 to the present.

The groundwater quality parameters monitored under this program are nearly identical to those identified for the Secure C Landfill Corrective Action Program with only subtle differences. Specifically, three SVOCs were added to the 31 parameters analyzed as part of the Secure C Landfill Detection Monitoring Program in the first half of 2002.

3.4 PFAS Monitoring Program

The PFAS Monitoring Program consists of 36 monitoring wells positioned along the perimeter and interior of the complex:

AA22-M01B
AA25-M01B
AA25-M01C
C08-M01B
C11-M01C
D15-M01B
F07-M01B
F08-M01A
F08-M01B
G04-M01B
J10-M02B
K12-M01A
K13-M02B
L09-M01B
L09-M01C
P06-M01B
P06-M01D
P06-M01E
P06-M02C
P21-M01B

C11-M01E
C11-M02D
C11-M03B
D06-M01B
G04-M01E
G05-M02B
G09-M01A
J05-M01C
L09-M01D
N08-M01B
N08-M01C
N08-M01D
R09-M02B
R10-M01C
R10-M01E
Z28-M01B

The baseline period for this program extended from January 1, 2003 to December 31, 2010. The only exception is monitoring well J10-M02B, which was used to replace J10-M01B. The monitoring period for this well started in January 2015. PFCs have been monitored semi-annually at each well and consist of the following constituents:

Perfluorobutane sulfonic acid
Perfluorobutanoic acid
Perfluorodecanoic acid
Perfluorododecanoic acid
Perfluoroheptanoic acid
Perfluorohexane sulfonic acid
Perfluorohexanoic acid
Perfluorononanoic acid
Perfluorooctane sulfonamide
Perfluoropentanoic acid
Perfluoroundecanoic acid
Perfluorooctanoic acid (PFOA)
Perfluorooctyl sulfonates (PFOS)

4.0 Methodology

Statistical analyses were conducted in accordance with the U.S. Environmental Protection Agency (EPA) guidance document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance* (EPA, 2009) and guidance provided by the American Society for Testing and Materials (ASTM) titled *Standard Guide for Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs* (ASTM, 1998). Other applicable guidance documents and reference materials were consulted as necessary and are cited in this report.

The data analysis process was conducted as follows:

- Data Selection:
  - Tier I: Initial Data Selection
  - Tier II: Screening
- Final Selection of well/analyte combinations
- Trend Analysis of Final Data Sets

Details of the data analysis process are presented in the following sub-sections.

4.1 Data Selection

Individual data sets consisted of analytical data collected during the baseline and current monitoring periods. The details of Tiers I and II of the data refinement are presented in the following sub-sections

4.1.1 Tier I: Initial Data Selection

Analytes detected above the laboratory method detection limit (MDL) were retained for statistical evaluation. The baseline through January 2022 data sets were retrieved from the Chemours Enterprise Information Management (EIM) archives. Data that were rejected due to failed laboratory or field data quality objectives were not included in the statistical evaluation. Rejected results may introduce bias and were excluded. In keeping with past practices, duplicate samples collected during the current round of sampling were included in the evaluation by averaging with the primary field sample. The results are presented in Appendix A.

4.1.2 Tier II: Screening

The Tier I data were further refined to reflect constituents with concentrations above the 2020 NJGWIIA standards. The criteria used in the assessment included the higher of the groundwater quality criterion or practical quantitation level (PQL). Detections of the PFCs (PFNA, PFOA, and PFOS) in groundwater were compared to groundwater quality standards presented in the NJ Class IIA screening criteria[1]. Exceedances of the groundwater standards were expressed as a hazards quotient ratio (HQ). Constituents with ratios >1 were carried forward for data evaluation in addition to constituents without a corresponding groundwater standard (no ratio could be calculated). Field parameters were also carried forward for evaluation.

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[1] The NJ Class IIA screening criteria for PFNA = 0.1 micrograms per liter (µg/L), PFOA = 0.01µg/L, and PFOS = 0.01 µg/L (NJDEP, 2020).

4.1.3 Final Data Selection

In total, 580 well/analyte/parameter combinations across the four monitoring programs were carried forward for the trend evaluation. The complete results are presented in Appendix B; a summary is provided below:

Program	No. of Wells	No. of Analytes	No. of Field Parameters
Closure and Post Closure	7	2	5
C-Landfill Corrective Action	5	25	5
C-Landfill Detection Monitoring	4	14	5
PFOA Monitoring Program	36	17	0

4.2 Data Evaluation

The final data were evaluated with an approach that considered multiple lines of evidence:

- Time-series plots
- Mann-Kendall test for trend
- Control charts.

Each line of evidence is described in the following sub-sections. All plotting and statistical analyses were completed using R Statistical Software Version 4.2.0 (R Core Team, 2022) and RStudio Version 2022.2.3.492 (RStudio Team, 2022).

4.2.1 Time Series Plots

A time series plot was constructed for every monitoring well data set with a detected parameter in the current evaluation period. The plots were used as a graphical complement to the statistical analysis of trends, and in those cases where the data sets contained greater than 75 percent non-detects, served as the only analysis conducted. Non-detect values were plotted as 100 percent of the laboratory MDL.

4.2.2 Mann-Kendall Test for Trend

The non-parametric Mann-Kendall test for trend (Mann, 1945; Kendall, 1975; in Gilbert, 1987) was conducted on the baseline data, in addition to the combined baseline/current data sets for which no control chart had been constructed (because the baseline data showed a significant trend). The purpose of the test was to identify monotonic increasing or decreasing trends in groundwater parameters. The Mann-Kendall test for trend was conducted at a 1 percent significance level ($\alpha = 0.01$) on the baseline data before the control charts were completed (EPA, 2006). In turn, control charts were only constructed for those data sets that did not exhibit a statistically significant Mann-Kendall trend test result in baseline data.

4.2.3 Control Charts

As defined, control charts are a graphical method of determining whether the current data behave differently from the historical baseline data, i.e., whether the current data point is out-of-control (OOC). Two types of control charts, including the Shewhart and CUSUM control chart procedures, were used to identify OOC parameters. The benefits of using both types of control charts are that the Shewhart is more effective at identifying current values that exhibit large and sudden shifts from historical baseline conditions, whereas the CUSUM is more effective at identifying small but persistent changes in monitoring data over time.

Parameters with baseline data sets that exhibited significant upward or downward Mann-Kendall trends were excluded from the Shewhart-CUSUM analysis. In this regard, a requirement for a valid Shewhart-CUSUM analysis is that the mean value for a data set be statistically stable over time. Normality, i.e., not a significant departure from a normal distribution, is another assumption of the Shewhart and CUSUM procedures. A minimum of eight baseline data points, with a detection rate of more than or equal to 25 percent, was required to conduct the Shewhart-CUSUM control chart analysis.

The analytical data were determined to be OOC when (1) the current analytical data fell beyond the control limit, (2) the CUSUM value fell beyond the control limit, or (3) both the current and CUSUM values fell beyond the control limit. The following sections describe the methods and assumptions associated with the Shewhart and CUSUM control chart procedures.

Shewhart Control Chart

The Shewhart procedure computes a value that represents the control (or probability) limit for a given baseline data set and is based upon the statistical distribution appropriate to the chart. The Shewhart numerical control limit h was defaulted to a value of 5 (multiple of standard deviations (σ) above the mean [$\bar{x}$]) for a baseline sample size less than 12. If there were 12 or more baseline data points, h was set to 4 as recommended by the EPA (2009). The upper control limit (h_u) was calculated where $h_u = \bar{x} + h * \sigma$, and the lower control limit (h_l) was calculated where $h_l = \bar{x} - h * \sigma$.

The typical interpretation of a control limit is that a data point that falls within the limit is considered to be in-control. An OOC condition occurs when the data point falls outside the limit. As it applies to this current analysis, data points that are assessed to be OOC represent a departure from baseline conditions.

CUSUM Control Chart

CUSUM charts are built on the principle of Maximum Likelihood Estimation (MLE). As it applies here, the cumulative sum is not the cumulative sum of the values; rather, it represents the cumulative sum of differences between the observed monitoring period values and the baseline arithmetic mean.

The CUSUM control chart produces upper and lower cumulative sum charts for a parameter as a function of time. The control limit (h) was set at either 4 or 5 standard deviations as previously discussed. The parameter K is referred to as the reference value, and is typically set to be equal to half of the distance from the target and the shifted mean that is of interest. These control chart parameters established expected ranges for baseline parameter values and were used to identify statistically gradual groundwater parameter increases and decreases.

When testing for groundwater parameter increases only, there was a probability of approximately 6.7 percent that any subsequent data point would contribute positively to the CUSUM statistic, even when there had been no real increase from the baseline level. This was based on using a *K* value of 1 (a shift of 1σ) where $n \leq 12$, or 0.75 (a shift of 0.75σ) where $n \geq 12$. A modification to the cumulative sums *K* parameter was made to normalize the procedure for simultaneously testing shifts including increases and decreases for certain parameters, i.e., a two-sided evaluation. Specifically, when testing for positive and negative shifts from the baseline level, *K* was adjusted from 1 to 1.14 (or from 0.75 to 0.92, for $n \geq 12$). This adjustment was necessary to normalize the "two-sided" CUSUM response with the one-sided version when no baseline changes had occurred in either version of the test.

The CUSUM was calculated where $CUSUM = \bar{x} + S_i * \sigma$, and $\bar{x}$ represents the arithmetic mean, S_i represents the cumulative sum, and sigma (σ) represents the standard deviation of the baseline data set. In those instances where the testing of a one-sided CUSUM response was of interest, if the shift from baseline to be detected was an increase, the upper CUSUM computed for the *i*th subgroup was $S_i = max\left(0, S_{i-1} + (z_i - k)\right)$, where $z_i = (conc. - \bar{x})/\sigma$. If the shift to be detected was a decrease, the lower CUSUM computed for the *i*th subgroup was $S_i = min\left(0, S_{i-1} + (z_i + k)\right)$. When a current CUSUM value exceeded the upper control limit, the value was determined to be OOC.

5.0 Results

Refining the groundwater data sets increased the focus on monitoring programs with more frequent exceedances of the NJGWIIA standards. The results for each monitoring program are presented in the following sub-sections.

5.1 Closure and Post-Closure Groundwater Monitoring Program for the A, B, and C Basins

All of the 49 groundwater parameter and monitoring well data sets were identified with the Tier II screening and carried forward for evaluation. A narrative summary of the statistical analysis results is presented by monitoring well in Appendix C along with detailed descriptive baseline statistics, statistical test results, time-series plots, and control charts. A summary of just the statistically significant results is presented in Table 2.

Statistically significant results were reported for 11 well-parameter data sets across five wells. Two well-parameter data sets had statistically significant downward trends: one field parameter (dissolved oxygen) and one indicator (TOC). Two well-parameter data sets had statistically significant upward trends, including pH and TOC. Seven data sets across four wells were observed to be OOC, including both indicators (TOC and TOX) and two field parameters (pH and specific conductance). All parameters were OOC due to the CUSUM.

5.2 Secure C Landfill Corrective Action Monitoring Program

Of the 283 total well/analyte and 25 total well/field parameter combinations for this well, 101 unique groundwater parameter and monitoring well data sets were identified with the Tier II screening and carried forward for evaluation. A narrative summary of the statistical analysis results is presented by monitoring well in Appendix D along with detailed descriptive baseline statistics, statistical test results, time-series plots, and control charts. A summary of the statistically significant results is presented in Table 3.

Statistically significant results were identified in 29 well parameter data sets across four wells. Six well-parameter data sets had statistically significant downward trends, including two field parameters (redox and specific conductance), two metal/inorganic parameters (sodium and sulfate), one SVOC (N-nitrosodimethylamine), and one indicator (TOC). Thirteen well-parameter data sets had statistically significant upward trends, including two field parameters (pH and specific conductance), both indicators (TOC and TOX), four metals/inorganics (ammonia, aluminum, chloride, and sodium), and two VOCs (benzene and chlorobenzene). Ten analytes across four wells were identified OOC, including one SVOC (4-chloroaniline), two metals/inorganics (arsenic and sodium), two field parameters (redox and dissolved oxygen), and three indicators (total phenols, TOC, and TOX). All parameters were OOC due to the CUSUM with three values also being OOC for the current Shewhart value. Based on the above results, this program should continue to be monitored to identify any additional parameters that may become OOC or develop a trend over time.

5.3 Secure C Landfill Detection Monitoring Program

Of the 650 total well/analyte and 20 total well/parameter combinations for this well, 58 unique groundwater parameter and monitoring well data sets were identified with the Tier II screening and carried forward for evaluation. A narrative summary of the statistical analysis results is presented by monitoring well in Appendix E along with detailed descriptive baseline statistics, statistical test results, time-series plots, and control charts. A summary of the statistically significant results is presented in Table 4.

Statistically significant results were identified in 19 data sets across four monitoring wells. Five data sets exhibited statistically significant upward trends (ammonia, chloride, sodium, specific conductance, and arsenic), and one data set exhibited a decreasing trend (dissolved oxygen). Thirteen data sets were observed to be OOC due to the CUSUM value: four metals/inorganics (aluminum, arsenic, chloride, and lead), both indicators (TOC and TOX), and two field parameters (pH and specific conductance).

5.4 PFAS Monitoring Program

Of the 780 total well/analyte combinations for this program, 371 unique groundwater parameter and monitoring well data sets were identified with the Tier II screening and carried forward for evaluation. A narrative summary of the statistical analysis results is presented by monitoring well in Appendix F along with detailed descriptive baseline statistics, statistical test results, time-series plots, and control charts. A summary of the statistically significant results is presented in Table 5.

Only three PFAS have standards for comparisons (PFOA, PFOS, and perfluorononanoic acid). In total, 139 significant results were identified across 34 wells. Four data sets exhibited statistically significant upward trends (perfluorododecanoic acid, perfluorohexanoic acid, and perfluorobutanoic acid). Three data sets exhibited statistically significant downward trends (perfluoroheptanoic acid, perfluoropentanoic acid, and perfluorobutane sulfonic acid). In total, 132 data sets were identified to be OOC. All were OOC due to CUSUM values, and 45 were OOC due to current Shewhart values.

Based on the above results, this program may require further investigation to address issues associated with increasing trends and OCC PFOAs measurements. The program should continue to be monitored to identify potential changes in trends and OCC measurements through time.

6.0 Summary and Conclusions

This report describes statistical analyses conducted on refined groundwater analytical data collected at the complex from 1989 to January 2022. The objective of the statistical analysis is to evaluate current groundwater quality data for increasing or decreasing trends and whether there are significant shifts from historical baseline levels. The following conclusions can be reached based upon the analyses conducted:

- The data refinement placed greater emphasis on constituents that require further evaluation.
- Most parameters in a large proportion of the monitoring wells exhibit a random pattern, with a smaller subset of wells and constituents exhibiting statistically significant (and subtle) upward and downward trends.
- Certain wells exhibited detections of constituents when none had been observed during baseline. These wells and constituents will continue to be monitored.

The monitoring of groundwater quality and site-related constituents will continue at the site. The modified approach will place the greatest emphasis on well/analyte combinations that are above the appropriate standards. This information will support ongoing site evaluations and remedial decision-making.

7.0 References

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Tables

Table 1
Summary of Baseline and Current Monitoring Periods
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Monitoring Program	Baseline Period		Monitoring Period	
	Begin	End	Begin	End
Closure and Post Closure for the A, B, & C Basins	1/1/1989	12/31/2006	1/1/2007	Current
Secure C Landfill Corrective Action	1/1/1989	12/31/2007	1/1/2008	Current
All Perimeter Monitoring Programs	1/1/1989	12/31/2008	1/1/2009	Current
Exceptions:				
C08-M01B	1/1/2003	12/31/2007	1/1/2008	Current
C10-M03B	10/11/2004	12/31/2010	1/1/2011	Current
C11-M03B	1/16/2006	12/31/2011	1/1/2012	Current
F16-M01B	7/23/2003	12/31/2010	1/1/2011	Current
Secure C Landfill Detection Monitoring Program	1/1/1989	12/31/2007	1/1/2008	Current
Post Closure Monitoring for RCRA Units	7/1/2003	12/31/2010	1/1/2011	Current
PFOA	1/1/2003	12/31/2010	1/1/2011	Current
Exceptions:				
J10-M02B	1/1/2011	12/31/2014	1/1/2015	Current

Table 2
Statistically Significant Results: Closure and Post-Closure of A, B, C Basins Program
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well	Analyte Type	Analyte	Units	Current Result (January 2022)	Trend Test Results	Current Shewhart Value Out of Control?	CUSUM Value Out of Control?
G16-M02B	Field	PH	STD UNITS	5.67	**Upward**	--	--
H13-M02B	Field	DISSOLVED OXYGEN	MG/L	0.74	**Downward**	--	--
J16-M01B	Indicators	Total Organic Carbon	MG/L	20	**Downward**	--	--
L14-M01B	Indicators	Total Organic Carbon	MG/L	6.9	**Upward**	--	--
G16-M02B	Field	Specific Conductance	UMHOS/CM	3020	--	--	**Yes**
H13-M02B	Field	PH	STD UNITS	6.55	--	--	**Yes (Low)**
H16-P01B	Indicators	Total Organic Carbon	MG/L	52	--	--	**Yes**
L14-M01B	Field	PH	STD UNITS	6.83	--	--	**Yes**
G16-M02B	Indicators	Total Organic Carbon	MG/L	24	--	--	**Yes**
L14-M01B	Indicators	Total Organic Halogen	UG/L	530	--	--	**Yes**
L14-M01B	Field	PH	STD UNITS	6.83	--	--	**Yes**

Notes: “Trend Test Result” is only shown when a significant upward or downward trend was detected in the combined baseline/current data by the Mann-Kendall trend test. An out-of-control (OOC) condition was present when the current result or the current CUSUM exceeded the control limit, which is shown as “Yes” under the “Current Value/CUSUM out of Control?” column.

Table 3
Statistically Significant Results: Secure C Landfill Corrective Action Program
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well	Analyte Type	Analyte	Units	Current Result (January 2022)	Trend Test Results	Current Shewhart Value Out of Control?	CUSUM Value Out of Control?
P21-M01B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	1923	Upward	--	--
P21-M01B	Metals/Inorganics	Ammonia	MG/L	18	Upward	--	--
P21-M01B	VOCs	Benzene	UG/L	75	Upward	--	--
P21-M01B	Indicators	Total Organic Carbon	MG/L	70	Upward	--	--
P21-M01B	Indicators	Total Organic Halogen	UG/L	5500	Upward	--	--
Q21-M01B	Field	PH	STD UNITS	6.67	Upward	--	--
Q21-M01B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	3302	Upward	--	--
P21-M01B	Metals/Inorganics	Chloride	MG/L	320	Upward	--	--
P21-M01B	VOCs	Chlorobenzene	UG/L	800	Upward	--	--
P21-M01B	Metals/Inorganics	Sodium	MG/L	120	Upward	--	--
Q21-M01B	Metals/Inorganics	Aluminum	MG/L	1.8	Upward	--	--
Q21-M01B	Metals/Inorganics	Ammonia	MG/L	13	Upward	--	--
Q21-M01B	Metals/Inorganics	Chloride	MG/L	600	Upward	--	--
P21-M01B	Metals/Inorganics	Sulfate	MG/L	91	Downward	--	--
P21-M04B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	1026	Downward	--	--
P21-R01B	Metals/Inorganics	Sodium	MG/L	69	Downward	--	--
Q21-M01B	Field	REDOX	MV	-58.5	Downward	--	--
Q21-M01B	SVOCs	N-Nitrosodimethylamine	UG/L	1.6	Downward	--	--
Q21-M01B	Indicators	Total Organic Carbon	MG/L	40	Downward	--	--
P21-M01B	Field	REDOX	MV	-53.6	--	--	Yes
P21-M01B	Metals/Inorganics	Arsenic	MG/L	0.026	--	--	Yes
P21-M01B	SVOCs	4-Chloroaniline	UG/L	3000	--	Yes	Yes
P21-M01B	Indicators	Total Phenols	MG/L	0.054	--	--	Yes
P21-M04B	Indicators	Total Organic Halogen	MG/L	0.87	--	Yes	Yes
P21-R01B	Field	DISSOLVED OXYGEN	MG/L	4.45	--	--	Yes
P21-R01B	Metals/Inorganics	Arsenic	MG/L	0.00825	--	--	Yes
P21-R01B	Indicators	Total Organic Carbon	MG/L	10	--	--	Yes
Q21-M01B	Metals/Inorganics	Sodium	MG/L	280	--	Yes	Yes
Q21-M01B	Field	DISSOLVED OXYGEN	MG/L	0.84	--	--	Yes

Notes: “Trend Test Result” is only shown when a significant upward or downward trend was detected in the combined baseline/current data by the Mann-Kendall trer test. An out-of-control (OOC) condition was present when the current result or the current CUSUM exceeded the control limit, which is shown as “Yes” under the “Current Value/CUSUM out of Control?” column.

Table 4
Statistically Significant Results: Secure C Landfill Detection Monitoring Program
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well	Analyte Type	Analyte	Units	Current Result (January 2022)	Trend Test Results	Current Shewhart Value Out of Control?	CUSUM Value Out of Control?
S19-M01B	Field	DISSOLVED OXYGEN	MG/L	0.88	**Downward**	--	--
S19-M02B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	1023	**Upward**	--	--
R19-M01B	Metals/Inorganics	Ammonia	MG/L	1.9	**Upward**	--	--
R19-M01B	Metals/Inorganics	Sodium	MG/L	20	**Upward**	--	--
S19-M02B	Metals/Inorganics	Chloride	MG/L	170	**Upward**	--	--
S19-M02B	Metals/Inorganics	Sodium	MG/L	130	**Upward**	--	--
R19-M01B	Metals/Inorganics	Arsenic	MG/L	0.0032	--	--	**Yes**
R19-M01B	Metals/Inorganics	Chloride	MG/L	24	--	--	**Yes**
R19-M01B	Indicator	Total Organic Carbon	MG/L	7.55	--	--	**Yes**
R19-M01B	Indicator	Total Organic Halogen	UG/L	86	--	--	**Yes**
R19-M02B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	507	--	--	**Yes**
R19-M02B	Metals/Inorganics	Aluminum	MG/L	0.38	--	--	**Yes**
R19-M02B	Metals/Inorganics	Arsenic	MG/L	0.0096	--	--	**Yes**
R19-M02B	Metals/Inorganics	Lead	MG/L	0.0052	--	--	**Yes**
S19-M01B	Field	PH	STD UNITS	5.04	--	--	**Yes (Low)**
S19-M01B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	605	--	--	**Yes**
S19-M01B	Indicator	Total Organic Halogen	UG/L	43	--	--	**Yes**
S19-M02B	Field	SPECIFIC CONDUCTANCE	UMHOS/CM	1023	--	--	**Yes**
S19-M02B	Indicator	Total Organic Halogen	UG/L	61	--	--	**Yes**

Notes: “Trend Test Result” is only shown when a significant upward or downward trend was detected in the combined baseline/current data by the Mann-Kendall trend test. An out-of-control (OOC) condition was present when the current result or the current CUSUM exceeded the control limit, which is shown as “Yes” under the “Current Value/CUSUM out of Control?” column.

Table 5
Statistically Significant Results: PFAS Monitoring Program
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well	Analyte Type	Analyte	Units	Current Result (January 2022)	Trend Test Results	Current Shewhart Value Out of Control?	CUSUM Value Out of Control?
C08-M01B	PFCs	Perfluoroheptanoic Acid	UG/L	0.66	Downward	--	--
C08-M01B	PFCs	Perfluoropentanoic Acid	UG/L	1.1	Downward	--	--
C11-M03B	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.0077	Downward	--	--
D06-M01B	PFCs	Perfluorododecanoic Acid	UG/L	0.027	Upward	--	--
N08-M01C	PFCs	Perfluorohexanoic Acid	UG/L	3	Upward	--	--
N08-M01D	PFCs	Perfluorohexanoic Acid	UG/L	2.2	Upward	--	--
P06-M01E	PFCs	Perfluorobutanoic Acid	UG/L	0.09	Upward	--	--
AA22-M01B	PFCs	Perfluorobutanioc Acid	UG/L	0.19	--	--	Yes
AA25-M01B	PFCs	Perfluorobutanoic Acid	UG/L	0.057	--	--	Yes
AA25-M01B	PFCs	Perfluorodecanoic Acid	UG/L	0.0068	--	--	Yes
AA25-M01B	PFCs	Perfluoroheptanoic Acid	UG/L	0.11	--	--	Yes
AA25-M01B	PFCs	Perfluorohexanoic Acid	UG/L	0.2	--	--	Yes
AA25-M01B	PFCs	Perfluorononanoic Acid	UG/L	0.024	--	--	Yes
AA25-M01B	PFCs	Perfluoropentanoic Acid	UG/L	0.16	--	--	Yes
AA25-M01C	PFCs	Perfluorodecanoic Acid	UG/L	0.0098	--	Yes	Yes
AA25-M01C	PFCs	Perfluorohexanoic Acid	UG/L	0.032	--	Yes	Yes
AA25-M01C	PFCs	PFOA	UG/L	0.024	--	--	Yes
C08-M01B	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.088	--	--	Yes
C08-M01B	PFCs	Perfluorobutanoic Acid	UG/L	0.35	--	--	Yes
C08-M01B	PFCs	Perfluorodecanoic Acid	UG/L	1.3	--	--	Yes
C08-M01B	PFCs	Perfluorohexanoic Acid	UG/L	2.4	--	--	Yes
C08-M01B	PFCs	PFOS	UG/L	0.12	--	Yes	Yes
C11-M01C	PFCs	Perfluorododecanoic Acid	UG/L	0.056	--	--	Yes
C11-M01E	PFCs	Perfluorodecanoic Acid	UG/L	0.00085	--	--	Yes
C11-M01E	PFCs	Perfluorohexanoic Acid	UG/L	0.00085	--	--	Yes
C11-M01E	PFCs	Perfluorononanoic Acid	UG/L	0.00085	--	--	Yes
C11-M02D	PFCs	Perfluorodecanoic Acid	UG/L	0.091	--	--	Yes
C11-M02D	PFCs	Perfluoropentanoic Acid	UG/L	0.2	--	Yes	Yes
C11-M02D	PFCs	Perfluoroundecanoic Acid	UG/L	0.019	--	--	Yes
C11-M03B	PFCs	Perfluorododecanoic Acid	UG/L	0.013	--	Yes	Yes
C11-M03B	PFCs	Perfluoroundecanoic Acid	UG/L	0.016	--	--	Yes
C11-M03B	PFCs	PFOS	UG/L	0.067	--	Yes	Yes
D06-M01B	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.19	--	--	Yes
D06-M01B	PFCs	Perfluorobutanoic Acid	UG/L	0.62	--	Yes	Yes
D06-M01B	PFCs	Perfluorodecanoic Acid	UG/L	0.6	--	Yes	Yes
D06-M01B	PFCs	Perfluorohexanoic Acid	UG/L	5.1	--	Yes	Yes
D06-M01B	PFCs	Perfluorononanoic Acid	UG/L	0.24	--	Yes	Yes
D06-M01B	PFCs	Perfluoropentanoic Acid	UG/L	1.5	--	Yes	Yes
D06-M01B	PFCs	Perfluoroundecanoic Acid	UG/L	0.071	--	--	Yes
D06-M01B	PFCs	PFOA	UG/L	1.2	--	--	Yes
D06-M01B	PFCs	PFOS	UG/L	0.053	--	Yes	Yes
D15-M01B	PFCs	Perfluoropentanoic Acid	UG/L	1.6	--	--	Yes
F07-M01B	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.27	--	Yes	Yes
F08-M01A	PFCs	Perfluorodecanoic Acid	UG/L	9.2	--	--	Yes
F08-M01B	PFCs	Perfluorobutanoic Acid	UG/L	7.1	--	Yes	Yes
F08-M01B	PFCs	Perfluorododecanoic Acid	UG/L	0.16	--	Yes	Yes
F08-M01B	PFCs	Perfluoroheptanoic Acid	UG/L	8.8	--	Yes	Yes
F08-M01B	PFCs	Perfluoropentanoic Acid	UG/L	6.5	--	--	Yes
F08-M01B	PFCs	Perfluoroundecanoic Acid	UG/L	0.21	--	--	Yes
G04-M01E	PFCs	Perfluorobutanoic Acid	UG/L	0.0022	--	--	Yes
G04-M01E	PFCs	Perfluoropentanoic Acid	UG/L	0.0031	--	--	Yes
G04-M01E	PFCs	Perfluoroundecanoic Acid	UG/L	0.000875	--	--	Yes
G05-M02B	PFCs	Perfluorodecanoic Acid	UG/L	1.05	--	Yes	Yes
G05-M02B	PFCs	Perfluorononanoic Acid	UG/L	0.44	--	--	Yes
G09-M01A	PFCs	Perfluorobutanoic Acid	UG/L	150	--	Yes	Yes
G09-M01A	PFCs	Perfluorodecanoic Acid	UG/L	280	--	Yes	Yes
G09-M01A	PFCs	Perfluoroheptanoic Acid	UG/L	400	--	Yes	Yes
G09-M01A	PFCs	Perfluorohexanoic Acid	UG/L	1400	--	Yes	Yes
G09-M01A	PFCs	Perfluorononanoic Acid	UG/L	220	--	--	Yes

Table 5
Statistically Significant Results: PFAS Monitoring Program
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well	Analyte Type	Analyte	Units	Current Result (January 2022)	Trend Test Results	Current Shewhart Value Out of Control?	CUSUM Value Out of Control?
G09-M01A	PFCs	Perfluoropentanoic Acid	UG/L	100	--	--	Yes
G09-M01A	PFCs	PFOA	UG/L	500	--	--	Yes
J05-M01C	PFCs	Perfluorobutanoic Acid	UG/L	0.57	--	Yes	Yes
J05-M01C	PFCs	Perfluorodecanoic Acid	UG/L	0.55	--	Yes	Yes
J05-M01C	PFCs	Perfluoroheptanoic Acid	UG/L	0.57	--	Yes	Yes
J05-M01C	PFCs	Perfluorohexanoic Acid	UG/L	2.7	--	Yes	Yes
J05-M01C	PFCs	Perfluorononanoic Acid	UG/L	0.19	--	Yes	Yes
J05-M01C	PFCs	Perfluoropentanoic Acid	UG/L	1.1	--	Yes	Yes
J05-M01C	PFCs	Perfluoroundecanoic Acid	UG/L	0.0031	--	Yes	Yes
J05-M01C	PFCs	PFOA	UG/L	1.8	--	Yes	Yes
J10-M02B	PFCs	Perfluorohexanoic Acid	UG/L	1.7	--	Yes	Yes
J10-M02B	PFCs	Perfluoropentanoic Acid	UG/L	0.37	--	--	Yes
K13-M02B	PFCs	Perfluorononanoic Acid	UG/L	2.9	--	--	Yes
L09-M01B	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.01	--	--	Yes
L09-M01B	PFCs	Perfluorobutanoic Acid	UG/L	0.22	--	--	Yes
L09-M01B	PFCs	Perfluorodecanoic Acid	UG/L	0.36	--	--	Yes
L09-M01B	PFCs	Perfluorohexanoic Acid	UG/L	1.7	--	--	Yes
L09-M01C	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.048	--	--	Yes
L09-M01C	PFCs	Perfluorobutanoic Acid	UG/L	0.37	--	--	Yes
L09-M01C	PFCs	Perfluoroheptanoic Acid	UG/L	0.58	--	--	Yes
L09-M01C	PFCs	Perfluorohexanoic Acid	UG/L	1.3	--	--	Yes
L09-M01C	PFCs	Perfluoroundecanoic Acid	UG/L	0.01	--	--	Yes
L09-M01D	PFCs	Perfluorobutanoic Acid	UG/L	1.5	--	--	Yes
L09-M01D	PFCs	Perfluorodecanoic Acid	UG/L	0.2	--	Yes	Yes
L09-M01D	PFCs	Perfluoroheptanoic Acid	UG/L	1.2	--	--	Yes
L09-M01D	PFCs	Perfluorohexanoic Acid	UG/L	3.5	--	--	Yes
L09-M01D	PFCs	Perfluorononanoic Acid	UG/L	0.61	--	Yes	Yes
L09-M01D	PFCs	PFOA	UG/L	3.7	--	--	Yes
N08-M01B	PFCs	Perfluorodecanoic Acid	UG/L	0.1	--	--	Yes
N08-M01C	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.13	--	Yes	Yes
N08-M01C	PFCs	Perfluorodecanoic Acid	UG/L	0.26	--	--	Yes
N08-M01C	PFCs	Perfluoroundecanoic Acid	UG/L	0.052	--	--	Yes
N08-M01C	PFCs	PFOA	UG/L	3	--	--	Yes
N08-M01D	PFCs	Perfluorodecanoic Acid	UG/L	0.079	--	--	Yes
N08-M01D	PFCs	Perfluoroheptanoic Acid	UG/L	0.85	--	--	Yes
N08-M01D	PFCs	Perfluoropentanoic Acid	UG/L	1	--	--	Yes
N08-M01D	PFCs	Perfluoroundecanoic Acid	UG/L	0.0033	--	--	Yes
N08-M01D	PFCs	PFOA	UG/L	2	--	--	Yes
P06-M01B	PFCs	Perfluorodecanoic Acid	UG/L	0.052	--	--	Yes
P06-M01B	PFCs	Perfluorononanoic Acid	UG/L	0.13	--	--	Yes
P06-M01D	PFCs	Perfluorobutanoic Acid	UG/L	0.064	--	--	Yes
P06-M01D	PFCs	Perfluorodecanoic Acid	UG/L	0.056	--	Yes	Yes
P06-M01D	PFCs	Perfluoroheptanoic Acid	UG/L	0.11	--	Yes	Yes
P06-M01D	PFCs	Perfluorohexanoic Acid	UG/L	0.26	--	Yes	Yes
P06-M01D	PFCs	Perfluorononanoic Acid	UG/L	0.033	--	--	Yes
P06-M01D	PFCs	Perfluoropentanoic Acid	UG/L	0.17	--	--	Yes
P06-M01D	PFCs	PFOA	UG/L	0.17	--	Yes	Yes
P06-M01E	PFCs	Perfluoroheptanoic Acid	UG/L	0.043	--	--	Yes
P06-M01E	PFCs	Perfluorohexanoic Acid	UG/L	0.14	--	--	Yes
P06-M01E	PFCs	Perfluorononanoic Acid	UG/L	0.0025	--	--	Yes
P06-M01E	PFCs	Perfluoropentanoic Acid	UG/L	0.073	--	--	Yes
P06-M02C	PFCs	Perfluorodecanoic Acid	UG/L	0.014	--	Yes	Yes
P06-M02C	PFCs	Perfluorononanoic Acid	UG/L	0.059	--	Yes	Yes
P06-M02C	PFCs	PFOA	UG/L	0.54	--	--	Yes
P21-M01B	PFCs	Perfluoroheptanoic Acid	UG/L	35	--	--	Yes
P21-M01B	PFCs	Perfluorononanoic Acid	UG/L	4.2	--	--	Yes
P21-M01B	PFCs	Perfluoropentanoic Acid	UG/L	48	--	--	Yes
P21-M01B	PFCs	PFOA	UG/L	85	--	--	Yes
R09-M02B	PFCs	Perfluorodecanoic Acid	UG/L	0.69	--	Yes	Yes
R10-M01C	PFCs	Perfluorobutanoic Acid	UG/L	0.17	--	--	Yes

Table 5
Statistically Significant Results: PFAS Monitoring Program
First Half 2022
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well	Analyte Type	Analyte	Units	Current Result (January 2022)	Trend Test Results	Current Shewhart Value Out of Control?	CUSUM Value Out of Control?
R10-M01C	PFCs	Perfluorododecanoic Acid	UG/L	0.0066	--	--	Yes
R10-M01C	PFCs	Perfluoroheptanoic Acid	UG/L	0.6	--	Yes	Yes
R10-M01C	PFCs	Perfluorohexanoic Acid	UG/L	0.78	--	Yes	Yes
R10-M01C	PFCs	Perfluorononanoic Acid	UG/L	0.064	--	Yes	Yes
R10-M01C	PFCs	Perfluoropentanoic Acid	UG/L	0.36	--	--	Yes
R10-M01C	PFCs	Perfluoroundecanoic Acid	UG/L	0.0026	--	--	Yes
R10-M01C	PFCs	PFOA	UG/L	0.62	--	--	Yes
R10-M01E	PFCs	Perfluorobutanoic Acid	UG/L	0.049	--	--	Yes
R10-M01E	PFCs	Perfluorododecanoic Acid	UG/L	0.0009	--	--	Yes
R10-M01E	PFCs	Perfluorohexanoic Acid	UG/L	0.063	--	--	Yes
Z28-M01B	PFCs	Perfluorobutane Sulfonic Acid	UG/L	0.013	--	Yes	Yes
Z28-M01B	PFCs	Perfluorobutanoic Acid	UG/L	0.056	--	--	Yes
Z28-M01B	PFCs	Perfluorodecanoic Acid	UG/L	0.0076	--	Yes	Yes
Z28-M01B	PFCs	Perfluoroheptanoic Acid	UG/L	0.13	--	--	Yes
Z28-M01B	PFCs	Perfluorohexane Sulfonic Acid	UG/L	0.0091	--	--	Yes
Z28-M01B	PFCs	Perfluorohexanoic Acid	UG/L	0.25	--	--	Yes
Z28-M01B	PFCs	Perfluorononanoic Acid	UG/L	0.027	--	--	Yes
Z28-M01B	PFCs	Perfluoropentanoic Acid	UG/L	0.14	--	--	Yes
Z28-M01B	PFCs	PFOA	UG/L	0.3	--	--	Yes
Z28-M01B	PFCs	PFOS	UG/L	0.014	--	--	Yes

Notes: “Trend Test Result” is only shown when a significant upward or downward trend was detected in the combined baseline/current data by the Mann-Kendall trend test. An out-of-control (OOC) condition was present when the current result or the current CUSUM exceeded the control limit, which is shown as “Yes” under the “Current Value/CUSUM out of Control?” column.

Appendices

Appendix A

Tier I Initial Data Selection

Table A-1
Tier I Initial Data Selection Closure and Post-Closure of A, B, C
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CPC1H22-G16-M02B	G16-M02B	01/04/2022	Total Organic Carbon	7440-44-0	24	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-G16-M02B	G16-M02B	01/04/2022	Total Organic Halogen	EVS0192	3900	UG/L		Y	LIQUID	FS	Groundwater
CPC1H22-H13-M02B	H13-M02B	01/04/2022	Total Organic Carbon	7440-44-0	7.9	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-H13-M02B	H13-M02B	01/04/2022	Total Organic Halogen	EVS0192	630	UG/L		Y	LIQUID	FS	Groundwater
CPC1H22-H14-M01B	H14-M01B	01/04/2022	Total Organic Carbon	7440-44-0	35	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-H14-M01B	H14-M01B	01/04/2022	Total Organic Halogen	EVS0192	1800	UG/L		Y	LIQUID	FS	Groundwater
CPC1H22-H16-P01B	H16-P01B	01/04/2022	Total Organic Carbon	7440-44-0	52	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-H16-P01B	H16-P01B	01/04/2022	Total Organic Halogen	EVS0192	11000	UG/L		Y	LIQUID	FS	Groundwater
CPC1H22-J16-M01B	J16-M01B	01/04/2022	Total Organic Carbon	7440-44-0	20	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-J16-M01B	J16-M01B	01/04/2022	Total Organic Halogen	EVS0192	1300	UG/L		Y	LIQUID	FS	Groundwater
CPC1H22-K13-M02B	K13-M02B	01/04/2022	Total Organic Carbon	7440-44-0	7.7	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-K13-M02B	K13-M02B	01/04/2022	Total Organic Halogen	EVS0192	2200	UG/L		Y	LIQUID	FS	Groundwater
CPC1H22-L14-M01B	L14-M01B	01/04/2022	Total Organic Carbon	7440-44-0	6.9	MG/L		Y	LIQUID	FS	Groundwater
CPC1H22-L14-M01B	L14-M01B	01/04/2022	Total Organic Halogen	EVS0192	530	UG/L		Y	LIQUID	FS	Groundwater

Table A-2
Tier I Initial Data Selection Secure C Landfill Corrective Action
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLCA-P21-M01B	P21-M01B	01/06/2022	1,4-Dichlorobenzene	106-46-7	5.6	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	4-Chloroaniline	106-47-8	3000	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0096	UG/L	U,*+	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Toluene	108-88-3	8.9	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Chlorobenzene	108-90-7	800	UG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	5.6	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	1,4-Dioxane	123-91-1	75	UG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Sulfate	14808-79-8	91	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Chloride	16887-00-6	320	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Cyanide	57-12-5	0.0050	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Aniline	62-53-3	45	UG/L	J,*-,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	N-Nitrosodimethylamine	62-75-9	2.9	UG/L	*-,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Benzene	71-43-2	75	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Lead	7439-92-1	0.00055	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Sodium	7440-23-5	120	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Arsenic	7440-38-2	0.026	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Ammonia	7664-41-7	18	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Trichloroethene	79-01-6	1.3	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Naphthalene	91-20-3	6.1	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	1,2-Dichlorobenzene	95-50-1	51	UG/L	*-,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	o-Toluidine	95-53-4	300	UG/L	*-,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0096	UG/L	U	N	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Total Organic Carbon	C012	70	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M01B	P21-M01B	01/06/2022	Total Phenols	C020	0.054	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	1,4-Dichlorobenzene	106-46-7	0.57	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	4-Chloroaniline	106-47-8	4.5	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0095	UG/L	U,*+	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Chlorobenzene	108-90-7	0.39	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	0.57	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	1,4-Dioxane	123-91-1	0.36	UG/L	J	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Sulfate	14808-79-8	110	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Chloride	16887-00-6	210	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Cyanide	57-12-5	0.0050	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Aniline	62-53-3	1.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.034	UG/L	J,*-	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Aluminum	7429-90-5	9.9	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Lead	7439-92-1	0.0098	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Sodium	7440-23-5	97	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Arsenic	7440-38-2	0.0027	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-2
Tier I Initial Data Selection Secure C Landfill Corrective Action
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLCA-P21-M04B	P21-M04B	01/06/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Ammonia	7664-41-7	1.1	MG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Naphthalene	91-20-3	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	1,2-Dichlorobenzene	95-50-1	0.57	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	o-Toluidine	95-53-4	4.5	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0095	UG/L	U,*-,*+,*1	N	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Total Organic Carbon	C012	4.8	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-M04B	P21-M04B	01/06/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,4-Dichlorobenzene	106-46-7	0.51	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	4-Chloroaniline	106-47-8	4.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0096	UG/L	U,F1,*+	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Chlorobenzene	108-90-7	5.2	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	0.51	UG/L	U,F1,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,4-Dioxane	123-91-1	1.6	UG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Nitrate	14797-55-8	0.36	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Sulfate	14808-79-8	160	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Chloride	16887-00-6	90	MG/L		Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Cyanide	57-12-5	0.0050	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Aniline	62-53-3	1.0	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.17	UG/L	*-,F1	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Lead	7439-92-1	0.00011	MG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Sodium	7440-23-5	68	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Arsenic	7440-38-2	0.0083	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,F1,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Ammonia	7664-41-7	1.9	MG/L	F1	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Trichloroethene	79-01-6	0.49	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Naphthalene	91-20-3	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,2-Dichlorobenzene	95-50-1	2.8	UG/L	F1,*-,cn	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	o-Toluidine	95-53-4	4.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0096	UG/L	U,*+	N	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Total Organic Carbon	C012	10	MG/L	F1	Y	LIQUID	FS	Groundwater
CLCA-P21-R01B	P21-R01B	01/06/2022	Total Phenols	C020	0.010	MG/L	U,F1	N	LIQUID	FS	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,4-Dichlorobenzene	106-46-7	0.51	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	4-Chloroaniline	106-47-8	4.1	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0096	UG/L	U,*+	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Chlorobenzene	108-90-7	5.4	UG/L	cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,4-Dioxane	123-91-1	2.1	UG/L		Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Nitrate	14797-55-8	0.39	MG/L		Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Sulfate	14808-79-8	170	MG/L	cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Chloride	16887-00-6	91	MG/L		Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Cyanide	57-12-5	0.0050	MG/L	U	N	LIQUID	DUP	Groundwater

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Tier I Initial Data Selection Secure C Landfill Corrective Action
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Aniline	62-53-3	1.0	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.15	UG/L	*-	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Lead	7439-92-1	0.000084	MG/L	J,cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Sodium	7440-23-5	69	MG/L	cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Arsenic	7440-38-2	0.0082	MG/L	cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Ammonia	7664-41-7	1.6	MG/L		Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Trichloroethene	79-01-6	0.46	UG/L	J,cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Naphthalene	91-20-3	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,2-Dichlorobenzene	95-50-1	2.8	UG/L	*-,cn	Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	o-Toluidine	95-53-4	4.1	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0096	UG/L	U,*-,*+,*1	N	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Total Organic Carbon	C012	10	MG/L		Y	LIQUID	DUP	Groundwater
CLCA-P21-R01B-D	P21-R01B	01/06/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	DUP	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,4-Dichlorobenzene	106-46-7	0.53	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	4-Chloroaniline	106-47-8	4.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0096	UG/L	U,*+	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Chlorobenzene	108-90-7	11	UG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,4-Dioxane	123-91-1	1.2	UG/L		Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Sulfate	14808-79-8	140	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Chloride	16887-00-6	500	MG/L		Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Cyanide	57-12-5	0.0050	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Aniline	62-53-3	1.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.044	UG/L	J,*-	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Chloroform	67-66-3	0.63	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Benzene	71-43-2	0.52	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Lead	7439-92-1	0.013	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Sodium	7440-23-5	210	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Arsenic	7440-38-2	0.0037	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Ammonia	7664-41-7	1.9	MG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Trichloroethene	79-01-6	0.37	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Naphthalene	91-20-3	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,2-Dichlorobenzene	95-50-1	2.5	UG/L	*-,cn	Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	o-Toluidine	95-53-4	4.3	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0096	UG/L	U,*-,*+,*1	N	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Total Organic Carbon	C012	7.1	MG/L		Y	LIQUID	FS	Groundwater
CLCA-Q20-R01B	Q20-R01B	01/06/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Nitroaniline	100-01-6	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Nitrophenol	100-02-7	11	UG/L	U,cn	N	LIQUID	FS	Groundwater

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Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Ethylbenzene	100-41-4	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Styrene	100-42-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzaldehyde	100-52-7	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	cis-1,3-Dichloropropene	10061-01-5	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	trans-1,3-Dichloropropene	10061-02-6	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Bromophenyl Phenyl Ether	101-55-3	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Caprolactam	105-60-2	3.3	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,4-Dimethylphenol	105-67-9	3.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Methylphenol (p-Cresol)	106-44-5	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,4-Dichlorobenzene	106-46-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,4-Dichlorobenzene	106-46-7	0.56	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Chloroaniline	106-47-8	4.4	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0096	UG/L	U,*+	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2-Dichloroethane	107-06-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Isobutyl Ketone	108-10-1	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Cyclohexane	108-87-2	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Chlorobenzene	108-90-7	0.63	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Phenol	108-95-2	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Cyclohexane	110-82-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Bis(2-Chloroethyl)Ether	111-44-4	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Bis(2-Chloroethoxy)Methane	111-91-1	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.056	UG/L	U,*-	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	N-Dioctyl Phthalate	117-84-0	5.6	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Hexachlorobenzene	118-74-1	0.022	UG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Anthracene	120-12-7	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2,4-Trichlorobenzene	120-82-1	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,4-Dichlorophenol	120-83-2	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,4-Dinitrotoluene	121-14-2	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,4-Dioxane	123-91-1	4.9	UG/L		Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Chlorodibromomethane	124-48-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Tetrachloroethene	127-18-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Pyrene	129-00-0	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Dimethyl Phthalate	131-11-3	2.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Dibenzofuran	132-64-9	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Xylenes	1330-20-7	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Sulfate	14808-79-8	320	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	cis-1,2 Dichloroethene	156-59-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	trans-1,2-Dichloroethene	156-60-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Chloride	16887-00-6	600	MG/L		Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzo(G,H,I)Perylene	191-24-2	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Atrazine	1912-24-9	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Indeno(1,2,3-CD)Pyrene	193-39-5	0.022	UG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzo(B)Fluoranthene	205-99-2	0.011	UG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Fluoranthene	206-44-0	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-2
Tier I Initial Data Selection Secure C Landfill Corrective Action
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzo(K)Fluoranthene	207-08-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Acenaphthylene	208-96-8	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Chrysene	218-01-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzo(A)Pyrene	50-32-8	0.011	UG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,4-Dinitrophenol	51-28-5	16	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Dibenz(A,H)Anthracene	53-70-3	0.022	UG/L	U,*-	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4,6-Dinitro-2-Methylphenol	534-52-1	8.9	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,3-Dichlorobenzene	541-73-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Carbon Tetrachloride	56-23-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzo(A)Anthracene	56-55-3	0.011	UG/L	U	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Cyanide	57-12-5	0.054	MG/L		Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Chloro-3-Methylphenol	59-50-7	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Hexanone	591-78-6	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,6-Dinitrotoluene	606-20-2	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Aniline	62-53-3	1.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	N-Nitrosodimethylamine	62-75-9	2.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	N-Nitrosodimethylamine	62-75-9	1.6	UG/L	*-	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	N-Nitrosodi-N-Propylamine	621-64-7	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Acetone	67-64-1	2.7	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Hexachloroethane	67-72-1	0.56	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	4-Chlorophenyl Phenyl Ether	7005-72-3	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,1,1-Trichloroethane	71-55-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Bromide	74-83-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Chloride	74-87-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Aluminum	7429-90-5	1.8	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Lead	7439-92-1	0.0017	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Sodium	7440-23-5	280	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Arsenic	7440-38-2	0.0045	MG/L	cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Ethyl Chloride	75-00-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Vinyl Chloride	75-01-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Carbon Disulfide	75-15-0	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Bromoform	75-25-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Bromodichloromethane	75-27-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,1-Dichloroethane	75-34-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,1-Dichloroethene	75-35-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Trichlorofluoromethane	75-69-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Dichlorodifluoromethane	75-71-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Ammonia	7664-41-7	13	MG/L		Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Hexachlorocyclopentadiene	77-47-4	5.6	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Isophorone	78-59-1	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2-Dichloropropane	78-87-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Ethyl Ketone	78-93-3	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,1,2-Trichloroethane	79-00-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Methyl Acetate	79-20-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-2
Tier I Initial Data Selection Secure C Landfill Corrective Action
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Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,1,2,2-Tetrachloroethane	79-34-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Acenaphthene	83-32-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Diethyl Phthalate	84-66-2	2.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Di-N-Butyl Phthalate	84-74-2	2.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Phenanthrene	85-01-8	0.12	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Butyl Benzyl Phthalate	85-68-7	2.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	N-Nitrosodiphenylamine	86-30-6	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Fluorene	86-73-7	0.13	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Carbazole	86-74-8	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Hexachlorobutadiene	87-68-3	0.56	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Pentachlorophenol	87-86-5	0.028	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,4,6-Trichlorophenol	88-06-2	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Nitroaniline	88-74-4	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Nitrophenol	88-75-5	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Naphthalene	91-20-3	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Methylnaphthalene	91-57-6	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Chloronaphthalene	91-58-7	0.44	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	3,3'-Dichlorobenzidine	91-94-1	4.4	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Biphenyl	92-52-4	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Methylphenol (o-Cresol)	95-48-7	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2-Dichlorobenzene	95-50-1	0.20	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2-Dichlorobenzene	95-50-1	0.56	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	o-Toluidine	95-53-4	4.4	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2-Chlorophenol	95-57-8	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	2,4,5-Trichlorophenol	95-95-4	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0096	UG/L	U,*-,*+,*1	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Cumene	98-82-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Acetophenone	98-86-2	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Nitrobenzene	98-95-3	0.56	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	3-Nitroaniline	99-09-2	2.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Total Organic Carbon	C012	40	MG/L		Y	LIQUID	FS	Groundwater
CLCA-Q21-M01B	Q21-M01B	01/06/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLCA1H22-P21-M01B	P21-M01B	01/06/2022	Total Organic Halogen	EVS0192	5500	UG/L		Y	LIQUID	FS	Groundwater
CLCA1H22-P21-M04B	P21-M04B	01/06/2022	Total Organic Halogen	EVS0192	870	UG/L		Y	LIQUID	FS	Groundwater
CLCA1H22-P21-R01B	P21-R01B	01/06/2022	Total Organic Halogen	EVS0192	87	UG/L	J	Y	LIQUID	FS	Groundwater
CLCA1H22-P21-R01B-D	P21-R01B	01/06/2022	Total Organic Halogen	EVS0192	82	UG/L	J	Y	LIQUID	DUP	Groundwater
CLCA1H22-Q20-R01B	Q20-R01B	01/06/2022	Total Organic Halogen	EVS0192	180	UG/L		Y	LIQUID	FS	Groundwater
CLCA1H22-Q21-M01B	Q21-M01B	01/06/2022	Total Organic Halogen	EVS0192	610	UG/L		Y	LIQUID	FS	Groundwater

Table A-3
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Nitroaniline	100-01-6	0.95	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Nitrophenol	100-02-7	11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Ethylbenzene	100-41-4	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Styrene	100-42-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzaldehyde	100-52-7	1.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	cis-1,3-Dichloropropene	10061-01-5	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	trans-1,3-Dichloropropene	10061-02-6	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Bromophenyl Phenyl Ether	101-55-3	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Caprolactam	105-60-2	3.2	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,4-Dimethylphenol	105-67-9	3.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Methylphenol (p-Cresol)	106-44-5	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.53	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Chloroaniline	106-47-8	4.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0095	UG/L	U,*+,F1,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2-Dichloroethane	107-06-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Isobutyl Ketone	108-10-1	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Cyclohexane	108-87-2	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Chlorobenzene	108-90-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Phenol	108-95-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Cyclohexane	110-82-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Bis(2-Chloroethyl)Ether	111-44-4	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Bis(2-Chloroethoxy)Methane	111-91-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.18	UG/L	J,*-,F1,cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	N-Dioctyl Phthalate	117-84-0	5.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Hexachlorobenzene	118-74-1	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Anthracene	120-12-7	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.53	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,4-Dichlorophenol	120-83-2	0.53	UG/L	U,F1,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,4-Dinitrotoluene	121-14-2	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,4-Dioxane	123-91-1	0.27	UG/L	J	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Chlorodibromomethane	124-48-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Tetrachloroethene	127-18-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Pyrene	129-00-0	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Dimethyl Phthalate	131-11-3	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Dibenzofuran	132-64-9	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Xylenes	1330-20-7	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Nitrate	14797-55-8	0.058	MG/L	J	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Sulfate	14808-79-8	230	MG/L	F1	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	cis-1,2 Dichloroethene	156-59-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	trans-1,2-Dichloroethene	156-60-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Chloride	16887-00-6	24	MG/L	F1	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzo(G,H,I)Perylene	191-24-2	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Atrazine	1912-24-9	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Indeno(1,2,3-CD)Pyrene	193-39-5	0.021	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater

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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzo(B)Fluoranthene	205-99-2	0.011	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Fluoranthene	206-44-0	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzo(K)Fluoranthene	207-08-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Acenaphthylene	208-96-8	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Chrysene	218-01-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzo(A)Pyrene	50-32-8	0.011	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,4-Dinitrophenol	51-28-5	15	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Dibenz(A,H)Anthracene	53-70-3	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4,6-Dinitro-2-Methylphenol	534-52-1	8.4	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,3-Dichlorobenzene	541-73-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Carbon Tetrachloride	56-23-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzo(A)Anthracene	56-55-3	0.011	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Cyanide	57-12-5	0.0050	MG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Chloro-3-Methylphenol	59-50-7	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Hexanone	591-78-6	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,6-Dinitrotoluene	606-20-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	N-Nitrosodi-N-Propylamine	621-64-7	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Acetone	67-64-1	0.70	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Hexachloroethane	67-72-1	0.53	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	4-Chlorophenyl Phenyl Ether	7005-72-3	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,1,1-Trichloroethane	71-55-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Bromide	74-83-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Chloride	74-87-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Lead	7439-92-1	0.00083	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Sodium	7440-23-5	20	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Arsenic	7440-38-2	0.0039	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Ethyl Chloride	75-00-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Vinyl Chloride	75-01-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Carbon Disulfide	75-15-0	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Bromoform	75-25-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Bromodichloromethane	75-27-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,1-Dichloroethane	75-34-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,1-Dichloroethene	75-35-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Trichlorofluoromethane	75-69-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Dichlorodifluoromethane	75-71-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Ammonia	7664-41-7	1.9	MG/L	F1	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Hexachlorocyclopentadiene	77-47-4	5.3	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Isophorone	78-59-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2-Dichloropropane	78-87-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Ethyl Ketone	78-93-3	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,1,2-Trichloroethane	79-00-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Methyl Acetate	79-20-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,1,2,2-Tetrachloroethane	79-34-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater

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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Acenaphthene	83-32-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Diethyl Phthalate	84-66-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Di-N-Butyl Phthalate	84-74-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Phenanthrene	85-01-8	0.12	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Butyl Benzyl Phthalate	85-68-7	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	N-Nitrosodiphenylamine	86-30-6	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Fluorene	86-73-7	0.13	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Carbazole	86-74-8	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Hexachlorobutadiene	87-68-3	0.53	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Pentachlorophenol	87-86-5	0.026	UG/L	U,F1	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,4,6-Trichlorophenol	88-06-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Nitroaniline	88-74-4	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Nitrophenol	88-75-5	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Naphthalene	91-20-3	0.11	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Methylnaphthalene	91-57-6	0.11	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Chloronaphthalene	91-58-7	0.42	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	3,3'-Dichlorobenzidine	91-94-1	4.2	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Biphenyl	92-52-4	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Methylphenol (o-Cresol)	95-48-7	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.53	UG/L	U,F1,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	o-Toluidine	95-53-4	4.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2-Chlorophenol	95-57-8	0.53	UG/L	U,F1,F2,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	2,4,5-Trichlorophenol	95-95-4	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0095	UG/L	U,*+,F1,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Cumene	98-82-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Acetophenone	98-86-2	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Nitrobenzene	98-95-3	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	3-Nitroaniline	99-09-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Total Organic Carbon	C012	7.6	MG/L	F1	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B	R19-M01B	01/05/2022	Total Organic Halogen	EVS0192	72	UG/L	F1	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Nitroaniline	100-01-6	0.92	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Nitrophenol	100-02-7	10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Ethylbenzene	100-41-4	0.40	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Styrene	100-42-5	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzaldehyde	100-52-7	1.0	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	cis-1,3-Dichloropropene	10061-01-5	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	trans-1,3-Dichloropropene	10061-02-6	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Bromophenyl Phenyl Ether	101-55-3	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Caprolactam	105-60-2	3.1	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,4-Dimethylphenol	105-67-9	3.1	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Methylphenol (p-Cresol)	106-44-5	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.51	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Chloroaniline	106-47-8	4.1	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0095	UG/L	U,*+,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2-Dichloroethane	107-06-2	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Isobutyl Ketone	108-10-1	0.50	UG/L	U,cn	N	LIQUID	DUP	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Cyclohexane	108-87-2	0.50	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Chlorobenzene	108-90-7	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Phenol	108-95-2	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Cyclohexane	110-82-7	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Bis(2-Chloroethyl)Ether	111-44-4	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Bis(2-Chloroethoxy)Methane	111-91-1	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.084	UG/L	J,*-,cn	Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	N-Dioctyl Phthalate	117-84-0	5.1	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Hexachlorobenzene	118-74-1	0.020	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Anthracene	120-12-7	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.51	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,4-Dichlorophenol	120-83-2	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,4-Dinitrotoluene	121-14-2	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,4-Dioxane	123-91-1	0.35	UG/L	J	Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Chlorodibromomethane	124-48-1	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Tetrachloroethene	127-18-4	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Pyrene	129-00-0	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Dimethyl Phthalate	131-11-3	2.0	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Dibenzofuran	132-64-9	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Xylenes	1330-20-7	0.40	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Sulfate	14808-79-8	240	MG/L		Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	cis-1,2 Dichloroethene	156-59-2	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	trans-1,2-Dichloroethene	156-60-5	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Chloride	16887-00-6	24	MG/L		Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzo(G,H,I)Perylene	191-24-2	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Atrazine	1912-24-9	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Indeno(1,2,3-CD)Pyrene	193-39-5	0.020	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzo(B)Fluoranthene	205-99-2	0.010	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Fluoranthene	206-44-0	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzo(K)Fluoranthene	207-08-9	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Acenaphthylene	208-96-8	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Chrysene	218-01-9	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzo(A)Pyrene	50-32-8	0.010	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,4-Dinitrophenol	51-28-5	14	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Dibenz(A,H)Anthracene	53-70-3	0.020	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4,6-Dinitro-2-Methylphenol	534-52-1	8.1	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,3-Dichlorobenzene	541-73-1	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Carbon Tetrachloride	56-23-5	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzo(A)Anthracene	56-55-3	0.010	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Cyanide	57-12-5	0.0050	MG/L	U,*-	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Chloro-3-Methylphenol	59-50-7	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Hexanone	591-78-6	0.40	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,6-Dinitrotoluene	606-20-2	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	N-Nitrosodi-N-Propylamine	621-64-7	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Acetone	67-64-1	0.70	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Hexachloroethane	67-72-1	0.51	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	4-Chlorophenyl Phenyl Ether	7005-72-3	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,1,1-Trichloroethane	71-55-6	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Bromide	74-83-9	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Chloride	74-87-3	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Lead	7439-92-1	0.00067	MG/L	cn	Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Sodium	7440-23-5	20	MG/L	cn	Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Arsenic	7440-38-2	0.0025	MG/L	cn	Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Ethyl Chloride	75-00-3	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Vinyl Chloride	75-01-4	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Carbon Disulfide	75-15-0	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Bromoform	75-25-2	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Bromodichloromethane	75-27-4	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,1-Dichloroethane	75-34-3	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,1-Dichloroethene	75-35-4	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Trichlorofluoromethane	75-69-4	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Dichlorodifluoromethane	75-71-8	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Ammonia	7664-41-7	2.9	MG/L		Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Hexachlorocyclopentadiene	77-47-4	5.1	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Isophorone	78-59-1	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2-Dichloropropane	78-87-5	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Ethyl Ketone	78-93-3	0.50	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,1,2-Trichloroethane	79-00-5	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Methyl Acetate	79-20-9	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,1,2,2-Tetrachloroethane	79-34-5	0.30	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Acenaphthene	83-32-9	0.10	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Diethyl Phthalate	84-66-2	2.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Di-N-Butyl Phthalate	84-74-2	2.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Phenanthrene	85-01-8	0.11	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Butyl Benzyl Phthalate	85-68-7	2.0	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	N-Nitrosodiphenylamine	86-30-6	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Fluorene	86-73-7	0.12	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Carbazole	86-74-8	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Hexachlorobutadiene	87-68-3	0.51	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Pentachlorophenol	87-86-5	0.026	UG/L	U	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,4,6-Trichlorophenol	88-06-2	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Nitroaniline	88-74-4	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Nitrophenol	88-75-5	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Naphthalene	91-20-3	0.10	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Methylnaphthalene	91-57-6	0.10	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Chloronaphthalene	91-58-7	0.41	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	3,3'-Dichlorobenzidine	91-94-1	4.1	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Biphenyl	92-52-4	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Methylphenol (o-Cresol)	95-48-7	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.51	UG/L	U,*-,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	o-Toluidine	95-53-4	4.1	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2-Chlorophenol	95-57-8	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	2,4,5-Trichlorophenol	95-95-4	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0095	UG/L	U,*+,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Cumene	98-82-8	0.20	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Acetophenone	98-86-2	1.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Nitrobenzene	98-95-3	0.51	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	3-Nitroaniline	99-09-2	2.0	UG/L	U,cn	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Total Organic Carbon	C012	7.5	MG/L		Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	DUP	Groundwater
CLDM1H22-R19-M01B-D	R19-M01B	01/05/2022	Total Organic Halogen	EVS0192	100	UG/L		Y	LIQUID	DUP	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Nitroaniline	100-01-6	0.96	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Nitrophenol	100-02-7	11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Ethylbenzene	100-41-4	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Styrene	100-42-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzaldehyde	100-52-7	1.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	cis-1,3-Dichloropropene	10061-01-5	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	trans-1,3-Dichloropropene	10061-02-6	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Bromophenyl Phenyl Ether	101-55-3	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Caprolactam	105-60-2	3.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,4-Dimethylphenol	105-67-9	3.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Methylphenol (p-Cresol)	106-44-5	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.53	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Chloroaniline	106-47-8	4.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0095	UG/L	U,*+,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2-Dichloroethane	107-06-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Isobutyl Ketone	108-10-1	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Cyclohexane	108-87-2	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Chlorobenzene	108-90-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Phenol	108-95-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Cyclohexane	110-82-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Bis(2-Chloroethyl)Ether	111-44-4	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Bis(2-Chloroethoxy)Methane	111-91-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.19	UG/L	J,*-,cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	N-Dioctyl Phthalate	117-84-0	5.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Hexachlorobenzene	118-74-1	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Anthracene	120-12-7	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.53	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,4-Dichlorophenol	120-83-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,4-Dinitrotoluene	121-14-2	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,4-Dioxane	123-91-1	0.20	UG/L	J	Y	LIQUID	FS	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Chlorodibromomethane	124-48-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Tetrachloroethene	127-18-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Pyrene	129-00-0	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Dimethyl Phthalate	131-11-3	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Dibenzofuran	132-64-9	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Xylenes	1330-20-7	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Sulfate	14808-79-8	78	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	cis-1,2 Dichloroethene	156-59-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	trans-1,2-Dichloroethene	156-60-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Chloride	16887-00-6	49	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzo(G,H,I)Perylene	191-24-2	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Atrazine	1912-24-9	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Indeno(1,2,3-CD)Pyrene	193-39-5	0.021	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzo(B)Fluoranthene	205-99-2	0.011	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Fluoranthene	206-44-0	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzo(K)Fluoranthene	207-08-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Acenaphthylene	208-96-8	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Chrysene	218-01-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzo(A)Pyrene	50-32-8	0.011	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,4-Dinitrophenol	51-28-5	15	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Dibenz(A,H)Anthracene	53-70-3	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4,6-Dinitro-2-Methylphenol	534-52-1	8.6	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,3-Dichlorobenzene	541-73-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Carbon Tetrachloride	56-23-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzo(A)Anthracene	56-55-3	0.011	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Cyanide	57-12-5	0.0050	MG/L	U,*-	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Chloro-3-Methylphenol	59-50-7	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Hexanone	591-78-6	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,6-Dinitrotoluene	606-20-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	N-Nitrosodi-N-Propylamine	621-64-7	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Acetone	67-64-1	0.70	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Hexachloroethane	67-72-1	0.53	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	4-Chlorophenyl Phenyl Ether	7005-72-3	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,1,1-Trichloroethane	71-55-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Bromide	74-83-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Chloride	74-87-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Aluminum	7429-90-5	0.38	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Lead	7439-92-1	0.0052	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Sodium	7440-23-5	15	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Arsenic	7440-38-2	0.0096	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Ethyl Chloride	75-00-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Vinyl Chloride	75-01-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Carbon Disulfide	75-15-0	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Bromoform	75-25-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Bromodichloromethane	75-27-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,1-Dichloroethane	75-34-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,1-Dichloroethene	75-35-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Trichlorofluoromethane	75-69-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Dichlorodifluoromethane	75-71-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Ammonia	7664-41-7	0.25	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Hexachlorocyclopentadiene	77-47-4	5.3	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Isophorone	78-59-1	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2-Dichloropropane	78-87-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Ethyl Ketone	78-93-3	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,1,2-Trichloroethane	79-00-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Methyl Acetate	79-20-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,1,2,2-Tetrachloroethane	79-34-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Acenaphthene	83-32-9	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Diethyl Phthalate	84-66-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Di-N-Butyl Phthalate	84-74-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Phenanthrene	85-01-8	0.12	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Butyl Benzyl Phthalate	85-68-7	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	N-Nitrosodiphenylamine	86-30-6	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Fluorene	86-73-7	0.13	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Carbazole	86-74-8	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Hexachlorobutadiene	87-68-3	0.53	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Pentachlorophenol	87-86-5	0.027	UG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,4,6-Trichlorophenol	88-06-2	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Nitroaniline	88-74-4	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Nitrophenol	88-75-5	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Naphthalene	91-20-3	0.11	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Methylnaphthalene	91-57-6	0.11	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Chloronaphthalene	91-58-7	0.43	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	3,3'-Dichlorobenzidine	91-94-1	4.3	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Biphenyl	92-52-4	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Methylphenol (o-Cresol)	95-48-7	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.53	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	o-Toluidine	95-53-4	4.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2-Chlorophenol	95-57-8	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	2,4,5-Trichlorophenol	95-95-4	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0095	UG/L	U,*+,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Cumene	98-82-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Acetophenone	98-86-2	1.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Nitrobenzene	98-95-3	0.53	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	3-Nitroaniline	99-09-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Total Organic Carbon	C012	1.8	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-R19-M02B	R19-M02B	01/05/2022	Total Organic Halogen	EVS0192	24	UG/L	J	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Nitroaniline	100-01-6	0.93	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Nitrophenol	100-02-7	10	UG/L	U,cn	N	LIQUID	FS	Groundwater

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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Ethylbenzene	100-41-4	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Styrene	100-42-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzaldehyde	100-52-7	1.0	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	cis-1,3-Dichloropropene	10061-01-5	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	trans-1,3-Dichloropropene	10061-02-6	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Bromophenyl Phenyl Ether	101-55-3	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Caprolactam	105-60-2	3.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,4-Dimethylphenol	105-67-9	3.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Methylphenol (p-Cresol)	106-44-5	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Chloroaniline	106-47-8	4.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0095	UG/L	U,*+,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2-Dichloroethane	107-06-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Isobutyl Ketone	108-10-1	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Cyclohexane	108-87-2	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Chlorobenzene	108-90-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Phenol	108-95-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Cyclohexane	110-82-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Bis(2-Chloroethyl)Ether	111-44-4	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Bis(2-Chloroethoxy)Methane	111-91-1	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.48	UG/L	J,*-,cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	N-Dioctyl Phthalate	117-84-0	5.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Hexachlorobenzene	118-74-1	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Anthracene	120-12-7	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,4-Dichlorophenol	120-83-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,4-Dinitrotoluene	121-14-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,4-Dioxane	123-91-1	0.19	UG/L	J	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Chlorodibromomethane	124-48-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Tetrachloroethene	127-18-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Pyrene	129-00-0	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Dimethyl Phthalate	131-11-3	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Dibenzofuran	132-64-9	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Xylenes	1330-20-7	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Nitrate	14797-55-8	0.040	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Sulfate	14808-79-8	110	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	cis-1,2 Dichloroethene	156-59-2	0.33	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	trans-1,2-Dichloroethene	156-60-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.37	UG/L	J,cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Chloride	16887-00-6	100	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzo(G,H,I)Perylene	191-24-2	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Atrazine	1912-24-9	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Indeno(1,2,3-CD)Pyrene	193-39-5	0.021	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzo(B)Fluoranthene	205-99-2	0.010	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Fluoranthene	206-44-0	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater

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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzo(K)Fluoranthene	207-08-9	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Acenaphthylene	208-96-8	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Chrysene	218-01-9	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzo(A)Pyrene	50-32-8	0.010	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,4-Dinitrophenol	51-28-5	14	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Dibenz(A,H)Anthracene	53-70-3	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4,6-Dinitro-2-Methylphenol	534-52-1	8.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,3-Dichlorobenzene	541-73-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Carbon Tetrachloride	56-23-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzo(A)Anthracene	56-55-3	0.010	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Cyanide	57-12-5	0.0050	MG/L	U,*-	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Chloro-3-Methylphenol	59-50-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Hexanone	591-78-6	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,6-Dinitrotoluene	606-20-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	N-Nitrosodi-N-Propylamine	621-64-7	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Acetone	67-64-1	0.70	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Hexachloroethane	67-72-1	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	4-Chlorophenyl Phenyl Ether	7005-72-3	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,1,1-Trichloroethane	71-55-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Bromide	74-83-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Chloride	74-87-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Lead	7439-92-1	0.00086	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Sodium	7440-23-5	35	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Arsenic	7440-38-2	0.00068	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Ethyl Chloride	75-00-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Vinyl Chloride	75-01-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Carbon Disulfide	75-15-0	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Bromoform	75-25-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Bromodichloromethane	75-27-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,1-Dichloroethane	75-34-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,1-Dichloroethene	75-35-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Trichlorofluoromethane	75-69-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Dichlorodifluoromethane	75-71-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Ammonia	7664-41-7	0.25	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Hexachlorocyclopentadiene	77-47-4	5.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Isophorone	78-59-1	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2-Dichloropropane	78-87-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Ethyl Ketone	78-93-3	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,1,2-Trichloroethane	79-00-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Methyl Acetate	79-20-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,1,2,2-Tetrachloroethane	79-34-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Acenaphthene	83-32-9	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Diethyl Phthalate	84-66-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Di-N-Butyl Phthalate	84-74-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Phenanthrene	85-01-8	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Butyl Benzyl Phthalate	85-68-7	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	N-Nitrosodiphenylamine	86-30-6	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Fluorene	86-73-7	0.12	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Carbazole	86-74-8	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Hexachlorobutadiene	87-68-3	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Pentachlorophenol	87-86-5	0.026	UG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,4,6-Trichlorophenol	88-06-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Nitroaniline	88-74-4	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Nitrophenol	88-75-5	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Naphthalene	91-20-3	0.10	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Methylnaphthalene	91-57-6	0.10	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Chloronaphthalene	91-58-7	0.41	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	3,3'-Dichlorobenzidine	91-94-1	4.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Biphenyl	92-52-4	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Methylphenol (o-Cresol)	95-48-7	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	o-Toluidine	95-53-4	4.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2-Chlorophenol	95-57-8	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	2,4,5-Trichlorophenol	95-95-4	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0095	UG/L	U,*+,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Cumene	98-82-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Acetophenone	98-86-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Nitrobenzene	98-95-3	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	3-Nitroaniline	99-09-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Total Organic Carbon	C012	1.3	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M01B	S19-M01B	01/05/2022	Total Organic Halogen	EVS0192	43	UG/L	J	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Nitroaniline	100-01-6	0.94	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Nitrophenol	100-02-7	10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Ethylbenzene	100-41-4	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Styrene	100-42-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzaldehyde	100-52-7	1.0	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	cis-1,3-Dichloropropene	10061-01-5	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	trans-1,3-Dichloropropene	10061-02-6	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Bromophenyl Phenyl Ether	101-55-3	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Caprolactam	105-60-2	3.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,4-Dimethylphenol	105-67-9	3.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Methylphenol (p-Cresol)	106-44-5	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,4-Dichlorobenzene	106-46-7	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Chloroaniline	106-47-8	4.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2-Dibromoethane (EDB)	106-93-4	0.0095	UG/L	U,*+,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2-Dichloroethane	107-06-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Isobutyl Ketone	108-10-1	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Bis(2-Chloro-1-Methylethyl) Ether	108-60-1	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Cyclohexane	108-87-2	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater

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Chemours Chambers Works
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Toluene	108-88-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Chlorobenzene	108-90-7	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Phenol	108-95-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Cyclohexane	110-82-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Bis(2-Chloroethyl)Ether	111-44-4	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Bis(2-Chloroethoxy)Methane	111-91-1	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.052	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	N-Dioctyl Phthalate	117-84-0	5.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Hexachlorobenzene	118-74-1	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Anthracene	120-12-7	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2,4-Trichlorobenzene	120-82-1	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,4-Dichlorophenol	120-83-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,4-Dinitrotoluene	121-14-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,4-Dioxane	123-91-1	0.17	UG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Chlorodibromomethane	124-48-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Tetrachloroethene	127-18-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Pyrene	129-00-0	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Dimethyl Phthalate	131-11-3	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Dibenzofuran	132-64-9	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Xylenes	1330-20-7	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Nitrate	14797-55-8	0.31	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Sulfate	14808-79-8	94	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	cis-1,2 Dichloroethene	156-59-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	trans-1,2-Dichloroethene	156-60-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Chloride	16887-00-6	170	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzo(G,H,I)Perylene	191-24-2	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Atrazine	1912-24-9	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Indeno(1,2,3-CD)Pyrene	193-39-5	0.021	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzo(B)Fluoranthene	205-99-2	0.010	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Fluoranthene	206-44-0	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzo(K)Fluoranthene	207-08-9	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Acenaphthylene	208-96-8	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Chrysene	218-01-9	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzo(A)Pyrene	50-32-8	0.010	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,4-Dinitrophenol	51-28-5	15	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Dibenz(A,H)Anthracene	53-70-3	0.021	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4,6-Dinitro-2-Methylphenol	534-52-1	8.3	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,3-Dichlorobenzene	541-73-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Carbon Tetrachloride	56-23-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzo(A)Anthracene	56-55-3	0.010	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Cyanide	57-12-5	0.0050	MG/L	U,*-	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Chloro-3-Methylphenol	59-50-7	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Hexanone	591-78-6	0.40	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,6-Dinitrotoluene	606-20-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	N-Nitrosodi-N-Propylamine	621-64-7	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Acetone	67-64-1	0.70	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Chloroform	67-66-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Hexachloroethane	67-72-1	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	4-Chlorophenyl Phenyl Ether	7005-72-3	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Benzene	71-43-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,1,1-Trichloroethane	71-55-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Bromide	74-83-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Chloride	74-87-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Aluminum	7429-90-5	0.15	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Lead	7439-92-1	0.00034	MG/L	J,cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Sodium	7440-23-5	130	MG/L	cn	Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Arsenic	7440-38-2	0.00068	MG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Ethyl Chloride	75-00-3	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Vinyl Chloride	75-01-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methylene Chloride	75-09-2	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Carbon Disulfide	75-15-0	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Bromoform	75-25-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Bromodichloromethane	75-27-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,1-Dichloroethane	75-34-3	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,1-Dichloroethene	75-35-4	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Trichlorofluoromethane	75-69-4	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Dichlorodifluoromethane	75-71-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,1,2-Trichlorotrifluoroethane	76-13-1	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Ammonia	7664-41-7	0.25	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Hexachlorocyclopentadiene	77-47-4	5.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Isophorone	78-59-1	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2-Dichloropropane	78-87-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Ethyl Ketone	78-93-3	0.50	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,1,2-Trichloroethane	79-00-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Trichloroethene	79-01-6	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Methyl Acetate	79-20-9	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,1,2,2-Tetrachloroethane	79-34-5	0.30	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Acenaphthene	83-32-9	0.10	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Diethyl Phthalate	84-66-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Di-N-Butyl Phthalate	84-74-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Phenanthrene	85-01-8	0.11	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Butyl Benzyl Phthalate	85-68-7	2.1	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	N-Nitrosodiphenylamine	86-30-6	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Fluorene	86-73-7	0.12	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Carbazole	86-74-8	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Hexachlorobutadiene	87-68-3	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Pentachlorophenol	87-86-5	0.028	UG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,4,6-Trichlorophenol	88-06-2	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Nitroaniline	88-74-4	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Nitrophenol	88-75-5	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Naphthalene	91-20-3	0.10	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Methylnaphthalene	91-57-6	0.10	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Chloronaphthalene	91-58-7	0.42	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	3,3'-Dichlorobenzidine	91-94-1	4.2	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Biphenyl	92-52-4	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Methylphenol (o-Cresol)	95-48-7	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater

Table A-3
Tier I Initial Data Selection Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2-Dichlorobenzene	95-50-1	0.52	UG/L	U,*-,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	o-Toluidine	95-53-4	4.2	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2-Chlorophenol	95-57-8	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	2,4,5-Trichlorophenol	95-95-4	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	1,2-Dibromo-3-Chloropropane	96-12-8	0.0095	UG/L	U,*+,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Cumene	98-82-8	0.20	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Acetophenone	98-86-2	1.0	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Nitrobenzene	98-95-3	0.52	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	3-Nitroaniline	99-09-2	2.1	UG/L	U,cn	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Total Organic Carbon	C012	1.5	MG/L		Y	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Total Phenols	C020	0.010	MG/L	U	N	LIQUID	FS	Groundwater
CLDM1H22-S19-M02B	S19-M02B	01/05/2022	Total Organic Halogen	EVS0192	61	UG/L		Y	LIQUID	FS	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.015	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	PFOS	1763-23-1	0.0060	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluoroundecanoic Acid	2058-94-8	0.0016	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0016	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.36	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0024	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.45	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorododecanoic Acid	307-55-1	0.0016	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	PFOA	335-67-1	0.70	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.031	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0016	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.19	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0025	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.28	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorononanoic Acid	375-95-1	0.088	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorotetradecanoic Acid	376-06-7	0.0016	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	Perfluorotridecanoic Acid	72629-94-8	0.0016	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	9Cl-PF3ONS	756426-58-1	0.0016	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	11Cl-PF3OUdS	763051-92-9	0.0016	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA22-M01B	AA22-M01B	01/17/2022	DONA	919005-14-4	0.0016	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.0076	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	PFOS	1763-23-1	0.0062	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluoroundecanoic Acid	2058-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.16	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0025	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.20	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorododecanoic Acid	307-55-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	PFOA	335-67-1	0.22	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0068	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0046	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.057	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.11	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorononanoic Acid	375-95-1	0.024	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01B	AA25-M01B	01/17/2022	DONA	919005-14-4	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.0025	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	PFOS	1763-23-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluoroundecanoic Acid	2058-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.023	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0025	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.032	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorododecanoic Acid	307-55-1	0.0020	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	PFOA	335-67-1	0.024	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0098	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.0084	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.021	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorononanoic Acid	375-95-1	0.0057	UG/L		Y	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-AA25-M01C	AA25-M01C	01/17/2022	DONA	919005-14-4	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.60	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	PFOS	1763-23-1	0.12	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.088	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.024	UG/L	^2,cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluoropentanoic Acid	2706-90-3	1.1	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.013	UG/L	^2,cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorohexanoic Acid	307-24-4	2.4	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.034	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	PFOA	335-67-1	1.3	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorodecanoic Acid	335-76-2	1.3	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0079	UG/L	cn	Y	Liquid	FS	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.35	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.088	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.66	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorononanoic Acid	375-95-1	0.29	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-C08-M01B	C08-M01B	01/14/2022	DONA	919005-14-4	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.069	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	PFOS	1763-23-1	0.0056	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.050	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.42	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0026	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorohexanoic Acid	307-24-4	1.1	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.056	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	PFOA	335-67-1	0.092	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.093	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.16	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0025	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.14	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorononanoic Acid	375-95-1	0.042	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorotetradecanoic Acid	376-06-7	0.0032	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	Perfluorotridecanoic Acid	72629-94-8	0.0037	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01C	C11-M01C	01/14/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.0025	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	PFOS	1763-23-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0025	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorohexanoic Acid	307-24-4	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	PFOA	335-67-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.0042	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorononanoic Acid	375-95-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M01E	C11-M01E	01/14/2022	DONA	919005-14-4	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.090	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	PFOS	1763-23-1	0.028	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.019	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0025	UG/L	^2	Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.20	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0087	UG/L	^2	Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorohexanoic Acid	307-24-4	0.39	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	PFOA	335-67-1	1.1	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.091	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0041	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.10	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.023	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.12	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorononanoic Acid	375-95-1	0.66	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M02D	C11-M02D	01/14/2022	DONA	919005-14-4	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.51	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	PFOS	1763-23-1	0.067	UG/L		Y	Liquid	FS	Groundwater

Table A-4
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Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.016	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.48	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	^2	Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorohexanoic Acid	307-24-4	1.3	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.013	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	PFOA	335-67-1	0.61	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.21	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0077	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.21	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0082	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.31	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorononanoic Acid	375-95-1	0.12	UG/L		Y	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-C11-M03B	C11-M03B	01/14/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.98	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	PFOS	1763-23-1	0.053	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.071	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluoropentanoic Acid	2706-90-3	1.5	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorohexanoic Acid	307-24-4	5.1	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.027	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	PFOA	335-67-1	1.2	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.60	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.62	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.19	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.67	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorononanoic Acid	375-95-1	0.24	UG/L		Y	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D06-M01B	D06-M01B	01/10/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.065	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	PFOS	1763-23-1	0.012	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.046	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluoropentanoic Acid	2706-90-3	1.6	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorohexanoic Acid	307-24-4	1.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.012	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	PFOA	335-67-1	0.48	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.22	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.47	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0021	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.55	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorononanoic Acid	375-95-1	0.16	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-D15-M01B	D15-M01B	01/10/2022	DONA	919005-14-4	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Hfpo Dimer Acid	13252-13-6	1.9	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.061	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.62	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorohexanoic Acid	307-24-4	1.8	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	PFOA	335-67-1	0.88	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.36	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.39	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.27	UG/L	cn	Y	Liquid	FS	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.41	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorononanoic Acid	375-95-1	0.19	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F07-M01 B	F07-M01B	01/13/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Hfpo Dimer Acid	13252-13-6	1.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	PFOS	1763-23-1	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.21	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluoropentanoic Acid	2706-90-3	6.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.029	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorohexanoic Acid	307-24-4	12	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.16	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	PFOA	335-67-1	2.4	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorodecanoic Acid	335-76-2	1.1	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorobutanoic Acid	375-22-4	7.1	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	1.3	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluoroheptanoic Acid	375-85-9	8.8	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorononanoic Acid	375-95-1	0.70	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	Perfluorotridecanoic Acid	72629-94-8	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	9Cl-PF3ONS	756426-58-1	0.019	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	11Cl-PF3OUdS	763051-92-9	0.019	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01 B	F08-M01B	01/13/2022	DONA	919005-14-4	0.019	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.30	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	PFOS	1763-23-1	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.29	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluoropentanoic Acid	2706-90-3	27	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.30	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorohexanoic Acid	307-24-4	160	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	PFOA	335-67-1	45	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorodecanoic Acid	335-76-2	9.2	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorobutanoic Acid	375-22-4	59	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluoroheptanoic Acid	375-85-9	6.1	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorononanoic Acid	375-95-1	1.8	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorotetradecanoic Acid	376-06-7	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	Perfluorotridecanoic Acid	72629-94-8	0.20	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	9Cl-PF3ONS	756426-58-1	0.20	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	11Cl-PF3OUdS	763051-92-9	0.20	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-F08-M01A	F08-M01A	01/12/2022	DONA	919005-14-4	0.20	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.28	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	PFOS	1763-23-1	0.0035	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.67	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorohexanoic Acid	307-24-4	1.0	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	PFOA	335-67-1	0.50	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.033	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.33	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0028	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.25	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorononanoic Acid	375-95-1	0.079	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01B	G04-M01B	01/10/2022	DONA	919005-14-4	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0085	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	PFOS	1763-23-1	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater

Table A-4
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Chemours Chambers Works
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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0045	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0067	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.0033	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	PFOA	335-67-1	0.0062	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0029	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.0044	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0019	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorononanoic Acid	375-95-1	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G04-M01E	G04-M01E	01/10/2022	DONA	919005-14-4	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.49	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.11	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluoropentanoic Acid	2706-90-3	1.9	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorohexanoic Acid	307-24-4	8.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	PFOA	335-67-1	1.7	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorodecanoic Acid	335-76-2	1.1	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.81	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.78	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorononanoic Acid	375-95-1	0.45	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B	G05-M02B	01/10/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.42	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.10	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluoropentanoic Acid	2706-90-3	1.8	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorohexanoic Acid	307-24-4	8.2	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	PFOA	335-67-1	1.6	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorodecanoic Acid	335-76-2	1.0	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.80	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.79	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorononanoic Acid	375-95-1	0.43	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G05-M02B-D	G05-M02B	01/10/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Hfpo Dimer Acid	13252-13-6	3.8	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	PFOS	1763-23-1	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluoropentanoic Acid	2706-90-3	100	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	3.8	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorohexanoic Acid	307-24-4	1400	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorododecanoic Acid	307-55-1	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	PFOA	335-67-1	500	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorodecanoic Acid	335-76-2	280	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorobutanoic Acid	375-22-4	150	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluoroheptanoic Acid	375-85-9	400	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorononanoic Acid	375-95-1	220	UG/L	cn	Y	Liquid	FS	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorotetradecanoic Acid	376-06-7	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	Perfluorotridecanoic Acid	72629-94-8	2.5	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	9Cl-PF3ONS	756426-58-1	2.5	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	11Cl-PF3OUdS	763051-92-9	2.5	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-G09-M01A	G09-M01A	01/12/2022	DONA	919005-14-4	2.5	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.042	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	PFOS	1763-23-1	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.031	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluoropentanoic Acid	2706-90-3	1.1	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0026	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorohexanoic Acid	307-24-4	2.7	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.022	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	PFOA	335-67-1	1.8	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.55	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.57	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.57	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorononanoic Acid	375-95-1	0.19	UG/L		Y	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-J05-M01C	J05-M01C	01/10/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.089	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	PFOS	1763-23-1	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluoroundecanoic Acid	2058-94-8	0.063	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.37	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.029	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorohexanoic Acid	307-24-4	1.7	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorododecanoic Acid	307-55-1	0.021	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	PFOA	335-67-1	2.6	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.25	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.17	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.28	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorononanoic Acid	375-95-1	0.11	UG/L		Y	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorotetradecanoic Acid	376-06-7	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	Perfluorotridecanoic Acid	72629-94-8	0.019	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	9Cl-PF3ONS	756426-58-1	0.019	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	11Cl-PF3OUdS	763051-92-9	0.019	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-J10-M02B	J10-M02B	01/18/2022	DONA	919005-14-4	0.019	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Hfpo Dimer Acid	13252-13-6	84	UG/L	H	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	PFOS	1763-23-1	0.017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.061	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.23	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.026	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorohexanoic Acid	307-24-4	0.54	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.031	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	PFOA	335-67-1	12	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.22	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.11	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.17	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorononanoic Acid	375-95-1	0.063	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorotetradecanoic Acid	376-06-7	0.017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	Perfluorotridecanoic Acid	72629-94-8	0.017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	9Cl-PF3ONS	756426-58-1	0.017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	11Cl-PF3OUdS	763051-92-9	0.017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K12-M01A	K12-M01A	01/12/2022	DONA	919005-14-4	0.017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Hfpo Dimer Acid	13252-13-6	0.28	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluoroundecanoic Acid	2058-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluoropentanoic Acid	2706-90-3	3.7	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorohexanoic Acid	307-24-4	8.2	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	PFOA	335-67-1	13	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorodecanoic Acid	335-76-2	0.095	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorobutanoic Acid	375-22-4	1.6	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluoroheptanoic Acid	375-85-9	3.5	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorononanoic Acid	375-95-1	2.8	UG/L		Y	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B	K13-M02B	01/04/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Hfpo Dimer Acid	13252-13-6	0.29	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluoroundecanoic Acid	2058-94-8	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluoropentanoic Acid	2706-90-3	3.7	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorohexanoic Acid	307-24-4	8.7	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	PFOA	335-67-1	14	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorodecanoic Acid	335-76-2	0.10	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorobutanoic Acid	375-22-4	1.6	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluoroheptanoic Acid	375-85-9	3.6	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorononanoic Acid	375-95-1	3.0	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-K13-M02B-D	K13-M02B	01/04/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.55	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluoroundecanoic Acid	2058-94-8	0.020	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.47	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.029	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorohexanoic Acid	307-24-4	1.7	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	PFOA	335-67-1	1.4	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.36	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.22	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.39	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorononanoic Acid	375-95-1	0.25	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01B	L09-M01B	01/18/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.12	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluoroundecanoic Acid	2058-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.77	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorohexanoic Acid	307-24-4	1.3	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	PFOA	335-67-1	1.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.082	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.37	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.048	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.58	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorononanoic Acid	375-95-1	0.23	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater

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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-L09-M01C	L09-M01C	01/18/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01C	L09-M01C	01/18/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Hfpo Dimer Acid	13252-13-6	2.0	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	PFOS	1763-23-1	0.048	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluoroundecanoic Acid	2058-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluoropentanoic Acid	2706-90-3	2.1	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorohexanoic Acid	307-24-4	3.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	PFOA	335-67-1	3.7	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.20	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.040	UG/L	I,cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorobutanoic Acid	375-22-4	1.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluoroheptanoic Acid	375-85-9	1.2	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorononanoic Acid	375-95-1	0.61	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-L09-M01D	L09-M01D	01/18/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.091	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	PFOS	1763-23-1	0.0064	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0062	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.73	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorohexanoic Acid	307-24-4	1.1	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	PFOA	335-67-1	1.3	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.10	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0043	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.31	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0094	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.56	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorononanoic Acid	375-95-1	0.15	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01B	N08-M01B	01/12/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.29	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	PFOS	1763-23-1	0.034	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.052	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluoropentanoic Acid	2706-90-3	1.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0032	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorohexanoic Acid	307-24-4	3.0	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.0022	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	PFOA	335-67-1	3.0	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.26	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.023	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorobutanoic Acid	375-22-4	1.5	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.13	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluoroheptanoic Acid	375-85-9	1.0	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorononanoic Acid	375-95-1	1.3	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01C	N08-M01C	01/12/2022	DONA	919005-14-4	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.23	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	PFOS	1763-23-1	0.0083	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0033	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluoropentanoic Acid	2706-90-3	1.0	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0025	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorohexanoic Acid	307-24-4	2.2	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.0017	UG/L	U	N	Liquid	FS	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-N08-M01D	N08-M01D	01/12/2022	PFOA	335-67-1	2.0	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.079	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0081	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.54	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.11	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.85	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorononanoic Acid	375-95-1	0.37	UG/L		Y	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-N08-M01D	N08-M01D	01/12/2022	DONA	919005-14-4	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.053	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	PFOS	1763-23-1	0.0042	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluoroundecanoic Acid	2058-94-8	0.0027	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.44	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.64	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorododecanoic Acid	307-55-1	0.0096	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	PFOA	335-67-1	0.88	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.052	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.22	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0028	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.32	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorononanoic Acid	375-95-1	0.13	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorotetradecanoic Acid	376-06-7	0.0024	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01B	P06-M01B	01/11/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.012	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	PFOS	1763-23-1	0.0019	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluoroundecanoic Acid	2058-94-8	0.010	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0019	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.17	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0028	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.26	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorododecanoic Acid	307-55-1	0.0086	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	PFOA	335-67-1	0.17	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.056	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0019	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.064	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0019	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.11	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorononanoic Acid	375-95-1	0.033	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorotetradecanoic Acid	376-06-7	0.0019	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	Perfluorotridecanoic Acid	72629-94-8	0.0019	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	9Cl-PF3ONS	756426-58-1	0.0019	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	11Cl-PF3OUdS	763051-92-9	0.0019	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01D	P06-M01D	01/11/2022	DONA	919005-14-4	0.0019	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.48	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	PFOS	1763-23-1	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluoroundecanoic Acid	2058-94-8	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.073	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0026	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.14	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorododecanoic Acid	307-55-1	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	PFOA	335-67-1	0.055	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.017	UG/L	I,cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.090	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.043	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorononanoic Acid	375-95-1	0.0025	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M01E	P06-M01E	01/11/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater

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Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-P06-M01E	P06-M01E	01/11/2022	DONA	919005-14-4	0.0017	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.059	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	PFOS	1763-23-1	0.0076	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluoroundecanoic Acid	2058-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.30	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0026	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.50	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorododecanoic Acid	307-55-1	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	PFOA	335-67-1	0.54	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.014	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0052	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.16	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0035	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.27	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorononanoic Acid	375-95-1	0.059	UG/L		Y	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P06-M02C	P06-M02C	01/11/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Hfpo Dimer Acid	13252-13-6	0.27	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluoroundecanoic Acid	2058-94-8	0.052	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluoropentanoic Acid	2706-90-3	48	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorohexanoic Acid	307-24-4	130	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	PFOA	335-67-1	85	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorodecanoic Acid	335-76-2	2.1	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.043	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorobutanoic Acid	375-22-4	27	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.025	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluoroheptanoic Acid	375-85-9	35	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorononanoic Acid	375-95-1	4.2	UG/L		Y	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-P21-M01B	P21-M01B	01/06/2022	DONA	919005-14-4	0.020	ug/L	U,F1,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.032	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	PFOS	1763-23-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.44	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.030	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorohexanoic Acid	307-24-4	1.9	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	PFOA	335-67-1	0.46	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.72	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.23	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.23	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorononanoic Acid	375-95-1	0.35	UG/L		Y	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	Perfluorotridecanoic Acid	72629-94-8	0.020	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	9Cl-PF3ONS	756426-58-1	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	11Cl-PF3OUdS	763051-92-9	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B	R09-M02B	01/13/2022	DONA	919005-14-4	0.020	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.039	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	PFOS	1763-23-1	0.015	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0076	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.43	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0025	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorohexanoic Acid	307-24-4	2.2	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.0017	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	PFOA	335-67-1	0.49	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.66	UG/L	cn	Y	Liquid	DUP	Groundwater

Table A-4
Tier I Initial Data Selection PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Sample Type
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0017	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.24	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0017	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.24	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorononanoic Acid	375-95-1	0.33	UG/L	cn	Y	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.0017	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R09-M02B-D	R09-M02B	01/13/2022	DONA	919005-14-4	0.0017	ug/L	U,cn	N	Liquid	DUP	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.038	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	PFOS	1763-23-1	0.0079	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0026	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.36	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0026	UG/L	U	N	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.78	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.0066	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	PFOA	335-67-1	0.62	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.035	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0017	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.17	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0027	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.60	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorononanoic Acid	375-95-1	0.064	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.0029	UG/L		Y	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	Perfluorotridecanoic Acid	72629-94-8	0.0017	UG/L	U	N	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	9Cl-PF3ONS	756426-58-1	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	11Cl-PF3OUdS	763051-92-9	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-R10-M01C	R10-M01C	01/13/2022	DONA	919005-14-4	0.0017	ug/L	U	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.18	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	PFOS	1763-23-1	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.041	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.063	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	PFOA	335-67-1	0.018	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0024	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.049	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.022	UG/L	cn	Y	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorononanoic Acid	375-95-1	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-R10-M01E	R10-M01E	01/13/2022	DONA	919005-14-4	0.0018	ug/L	U,cn	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.0084	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	PFOS	1763-23-1	0.014	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluoroundecanoic Acid	2058-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.14	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0027	UG/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.25	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorododecanoic Acid	307-55-1	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	PFOA	335-67-1	0.30	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0076	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0091	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.056	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.013	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.13	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorononanoic Acid	375-95-1	0.027	UG/L		Y	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorotetradecanoic Acid	376-06-7	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	Perfluorotridecanoic Acid	72629-94-8	0.0018	UG/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	9Cl-PF3ONS	756426-58-1	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	11Cl-PF3OUdS	763051-92-9	0.0018	ug/L	U	N	Liquid	FS	Groundwater
C81H22-Z28-M01B	Z28-M01B	01/17/2022	DONA	919005-14-4	0.0018	ug/L	U	N	Liquid	FS	Groundwater

Appendix B

Tier II Screening Results

Table B-1
Tier II Screening Results Groundwater Standards
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Parameter Name	Parameter Code	New Jersey Class[a] IIA Groundwater Remediation Standard	Units
1,1,1-Trichloroethane	71-55-6	30	ug/l
1,1,2,2-Tetrachloroethane	79-34-5	1	ug/l
1,1,2-Trichloroethane	79-00-5	3	ug/l
1,1,2-Trichlorotrifluoroethane	79-34-5	1	ug/l
1,1-Dichloroethane	75-34-3	50	ug/l
1,1-Dichloroethene	75-35-4	1	ug/l
1,2,4-Trichlorobenzene	120-82-1	9	ug/l
1,2-Dichlorobenzene	95-50-1	600	ug/l
1,2-Dichloroethane	107-06-2	2	ug/l
1,2-Dichloropropane	78-87-5	1	ug/l
1,2-Diphenylhydrazine	122-66-7	20	ug/l
1,3-Dichlorobenzene	541-73-1	600	ug/l
1,4-Dichlorobenzene	106-46-7	75	ug/l
1,4-Dioxane	123-91-1	0.4	ug/l
1-Naphthylamine	134-32-7	NV	NS
2,4-Dimethylphenol	105-67-9	100	ug/l
2,4-Dinitrotoluene	121-14-2	10	ug/l
2,6-Dinitrotoluene	606-20-2	10	ug/l
2-Chlorophenol	95-57-8	40	ug/l
2-Methylnaphthalene	91-57-6	30	ug/l
2-Methylphenol (O-Cresol)	95-48-7	50	ug/l
2-Naphthylamine	91-59-8	NV	NS
3,3'-Dichlorobenzidine	91-94-1	30	ug/l
4-Bromophenyl Phenyl Ether	101-55-3	NV	ug/l
4-Chloroaniline	106-47-8	30	ug/l
4-Chlorophenyl Phenyl Ether	7005-72-3	NV	ug/l
4-Methylphenol (P-Cresol)	106-44-5	50	ug/l
Acenaphthene	83-32-9	400	ug/l
Acenaphthylene	208-96-8	100	ug/l
Acetone	67-64-1	6000	ug/l
Acetophenone	98-86-2	700	ug/l
Aluminum	7429-90-5	0.2	mg/l
Ammonia	7664-41-7	3	mg/l
Aniline	62-53-3	6	ug/l
Anthracene	120-12-7	2000	ug/l
Antimony	7440-36-0	0.006	mg/l
Arsenic	7440-38-2	0.003	mg/l
Benzene	71-43-2	1	ug/l
Benzidine	92-87-5	20	ug/l
Benzo(A)Anthracene	56-55-3	0.1	ug/l

Table B-1
Tier II Screening Results Groundwater Standards
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Parameter Name	Parameter Code	New Jersey Class[a] IIA Groundwater Remediation Standard	Units
Benzo(B)Fluoranthene	205-99-2	0.2	ug/l
Benzo(G,H,I)Perylene	191-24-2	100	ug/l
Benzo(K)Fluoranthene	207-08-9	0.5	ug/l
Benzo[A]Pyrene	50-32-8	0.1	ug/l
Beryllium	7440-41-7	0.001	mg/l
Biphenyl	92-52-4	400	ug/l
Bis(2-Ethylhexyl)Phthalate	117-81-7	3	ug/l
Butyl Benzyl Phthalate	85-68-7	100	ug/l
Cadmium	7440-43-9	0.004	mg/l
Caprolactam	105-60-2	5000	ug/l
Carbazole	86-74-8	NV	NS
Carbon Disulfide	75-15-0	700	ug/l
Carbon Tetrachloride	56-23-5	1	ug/l
Chloride	16887-00-6	250	mg/l
Chlorobenzene	108-90-7	50	ug/l
Chloroform	67-66-3	70	ug/l
Chromium	7440-47-3	0.07	mg/l
Chrysene	218-01-9	5	ug/l
cis-1,2 Dichloroethene	156-59-2	70	ug/l
Cumene	98-82-8	700	ug/l
Cyanide	57-12-5	0.1	mg/l
Cyclohexane	110-82-7	NV	NS
Dibenz(A,H)Anthracene	53-70-3	0.3	ug/l
Dibenzofuran	132-64-9	NV	NS
Diethyl Phthalate	84-66-2	6000	ug/l
Dimethyl Phthalate	131-11-3	NV	ug/l
Di-N-Butyl Phthalate	84-74-2	700	ug/l
Diphenyl Ether	101-84-8	NV	ug/l
Ethane	74-84-0	NV	NS
Ethene	74-85-1	NV	NS
Ethyl Chloride	75-00-3	5	ug/l
Ethylbenzene	100-41-4	700	ug/l
Fluoranthene	206-44-0	300	ug/l
Fluorene	86-73-7	300	ug/l
Fluoride	7782-41-4	2000	ug/l
Hexachlorobenzene	118-74-1	0.02	ug/l
Hexachlorobutadiene	87-68-3	1	ug/l
Hexachloroethane	67-72-1	7	ug/l
Indeno (1,2,3-CD) Pyrene	193-39-5	0.2	ug/l
Iron	7439-89-6	0.3	mg/l

Table B-1
Tier II Screening Results Groundwater Standards
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Parameter Name	Parameter Code	New Jersey Class[a] IIA Groundwater Remediation Standard	Units
Lead	7439-92-1	0.005	mg/l
Lead, Organic	EVS0047	0.005	mg/l
Methane	74-82-8	NS	NS
Methyl Cyclohexane	108-87-2	NS	NS
Methyl Isobutyl Ketone	108-10-1	NS	NS
Methylene Chloride	75-09-2	3	ug/l
Naphthalene	91-20-3	300	ug/l
N-Dioctyl Phthalate	82208-43-3	NS	ug/l
Nickel	7440-02-0	0.1	mg/l
Nitrate	14797-55-8	10	mg/l
Nitrobenzene	98-95-3	6	ug/l
N-Nitrosodimethylamine	62-75-9	0.8	ug/l
N-Nitrosodiphenylamine	86-30-6	10	ug/l
Organic Carbon, total - avg	EVS0852	NS	NS
O-Toluidine	95-53-4	NS	NS
Pentachlorophenol	87-86-5	0.3	ug/l
Perfluorobutane Sulfonic Acid	375-73-5	NV	NS
Perfluorobutanoic Acid	375-22-4	NV	NS
Perfluorodecanoic Acid	335-76-2	NV	NS
Perfluorododecanoic Acid	307-55-1	NV	NS
Perfluoroheptanoic Acid	375-85-9	NV	NS
Perfluorohexane Sulfonic Acid	355-46-4	NV	NS
Perfluorohexanoic Acid	307-24-4	NV	NS
Perfluorononanoic Acid	375-95-1	0.01	ug/l
Perfluorooctane Sulfonamide	754-91-6	NV	NS
Perfluoropentanoic Acid	2706-90-3	NV	NS
Perfluorotetradecanoic Acid	376-06-7	NV	ug/l
Perfluorotridecanoic Acid	72629-94-8	NV	ug/l
Perfluoroundecanoic Acid	2058-94-8	NV	NS
PFOA	335-67-1	0.01	ug/l
PFOS	1763-23-1	0.01	ug/l
Phenanthrene	85-01-8	100	ug/l
Phenol	108-95-2	2000	ug/l
Polychlorinated Biphenyl (PCB)	1336-36-3	0.5	ug/l
Pyrene	129-00-0	200	ug/l
Silver	7440-22-4	0.04	mg/l
Sodium	7440-23-5	50	mg/l
Sulfate	14808-79-8	250	mg/l
Tetrachloroethene	127-18-4	1	ug/l
Toluene	108-88-3	600	ug/l

Table B-1
Tier II Screening Results Groundwater Standards
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Parameter Name	Parameter Code	New Jersey Class[a] IIA Groundwater Remediation Standard	Units
Total Organic Carbon	C012	NV	NS
Total Organic Halogen	EVS0192	NV	NS
Total Phenols	C020	2	mg/l
trans-1,2-Dichloroethene	156-60-5	100	ug/l
Trichloroethene	79-01-6	1	ug/l
Trichlorofluoromethane	75-69-4	2000	ug/l
Vinyl Chloride	75-01-4	1	ug/l
Xylenes	1330-20-7	1000	ug/l
Zinc	7440-66-6	2	mg/l

Notes:

NV, No Screening value available

a, Higher value of Pratical Quantitation Level and Ground Water Quality chosen

Table B-2
Tier II Screening Results Closure and Post-Closure of A, B, C
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
G16-M02B	01/04/2022	Total Organic Carbon	7440-44-0	24	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	3.9	NV	--
H13-M02B	01/04/2022	Total Organic Carbon	7440-44-0	7.9	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	0.63	NV	--
H14-M01B	01/04/2022	Total Organic Carbon	7440-44-0	35	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	1.8	NV	--
H16-P01B	01/04/2022	Total Organic Carbon	7440-44-0	52	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	11	NV	--
J16-M01B	01/04/2022	Total Organic Carbon	7440-44-0	20	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	1.3	NV	--
K13-M02B	01/04/2022	Total Organic Carbon	7440-44-0	7.7	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	1.5	NV	--
L14-M01B	01/04/2022	Total Organic Carbon	7440-44-0	6.9	NV	--
	01/04/2022	Total Organic Halogen	EVS0192	0.53	NV	--

Note:
NV, No Screening value available
All results in mg/L
HQ = Hazards Quotient Ratio

Table B-3
Tier II Screening Results Secure C Landfill Corrective Action
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
P21-M01B	01/06/2022	Sulfate	14808-79-8	91	250	<1
	01/06/2022	Chloride	16887-00-6	320	250	1.28
	01/06/2022	Lead	7439-92-1	0.00055	0.005	<1
	01/06/2022	Sodium	7440-23-5	120	50	2.4
	01/06/2022	Arsenic	7440-38-2	0.026	0.003	8.666667
	01/06/2022	Ammonia	7664-41-7	18	3	6
	01/06/2022	Total Organic Carbon	C012	70	NV	--
	01/06/2022	Total Phenols	C020	0.054	NV	--
	01/06/2022	4-Chloroaniline	106-47-8	3	0.03	100
	01/06/2022	Toluene	108-88-3	0.0	0.6	<1
	01/06/2022	Chlorobenzene	108-90-7	1	0.05	16
	01/06/2022	1,4-Dioxane	123-91-1	0	0.0004	187.5
	01/06/2022	Aniline	62-53-3	0	0.006	7.5
	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.0	0.0008	3.625
	01/06/2022	Benzene	71-43-2	0	0.001	75
	01/06/2022	Trichloroethene	79-01-6	0.0	0.001	1.3
	01/06/2022	Naphthalene	91-20-3	0.0	0.3	<1
	01/06/2022	1,2-Dichlorobenzene	95-50-1	0	0.6	<1
	01/06/2022	o-Toluidine	95-53-4	0	NV	--
	01/06/2022	Total Organic Halogen	EVS0192	6	NV	--
P21-M04B	01/06/2022	Sulfate	14808-79-8	110	250	<1
	01/06/2022	Chloride	16887-00-6	210	250	<1
	01/06/2022	Aluminum	7429-90-5	9.9	0.2	49.5
	01/06/2022	Lead	7439-92-1	0.0098	0.005	1.96
	01/06/2022	Sodium	7440-23-5	97	50	1.94
	01/06/2022	Arsenic	7440-38-2	0.0027	0.003	<1
	01/06/2022	Ammonia	7664-41-7	1.1	3	<1
	01/06/2022	Total Organic Carbon	C012	4.8	NV	--
	01/06/2022	Chlorobenzene	108-90-7	0.00	0.05	<1
	01/06/2022	1,4-Dioxane	123-91-1	0.00	0.0004	<1
	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.000	0.0008	<1
	01/06/2022	Total Organic Halogen	EVS0192	1	NV	--
P21-R01B	01/06/2022	Nitrate	14797-55-8	0.3750	10	<1
	01/06/2022	Sulfate	14808-79-8	165.0000	250	<1
	01/06/2022	Chloride	16887-00-6	90.5000	250	<1
	01/06/2022	Lead	7439-92-1	0.0001	0.005	<1
	01/06/2022	Sodium	7440-23-5	68.5000	50	1.37
	01/06/2022	Arsenic	7440-38-2	0.0083	0.003	2.75
	01/06/2022	Ammonia	7664-41-7	1.7500	3	<1
	01/06/2022	Total Organic Carbon	C012	10.0000	NV	--
	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.0002	0.0008	<1
	01/06/2022	1,2-Dichlorobenzene	95-50-1	0.0028	0.6	<1
	01/06/2022	Chlorobenzene	108-90-7	0.0054	0.05	<1
	01/06/2022	1,4-Dioxane	123-91-1	0.0021	0.0004	5.25
	01/06/2022	Trichloroethene	79-01-6	0.0005	0.001	<1
	01/06/2022	Total Organic Halogen	EVS0192	0.0845	NV	--
	01/06/2022	Sulfate	14808-79-8	140	250	<1

Table B-3
Tier II Screening Results Secure C Landfill Corrective Action
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Q20-R01B	01/06/2022	Chloride	16887-00-6	500	250	2
	01/06/2022	Lead	7439-92-1	0.013	0.005	2.6
	01/06/2022	Sodium	7440-23-5	210	50	4.2
	01/06/2022	Arsenic	7440-38-2	0.0037	0.003	1.233333
	01/06/2022	Ammonia	7664-41-7	1.9	3	<1
	01/06/2022	Total Organic Carbon	C012	7.1	NV	--
	01/06/2022	Chlorobenzene	108-90-7	0	0.05	<1
	01/06/2022	1,4-Dioxane	123-91-1	0.0	0.0004	3
	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.000	0.0008	<1
	01/06/2022	Chloroform	67-66-3	0.00	0.07	<1
	01/06/2022	Benzene	71-43-2	0.00	0.001	<1
	01/06/2022	Trichloroethene	79-01-6	0.00	0.001	<1
	01/06/2022	1,2-Dichlorobenzene	95-50-1	0.0	0.6	<1
	01/06/2022	Total Organic Halogen	EVS0192	0	NV	--
Q21-M01B	01/06/2022	Sulfate	14808-79-8	320	250	1.28
	01/06/2022	Chloride	16887-00-6	600	250	2.4
	01/06/2022	Cyanide	57-12-5	0.054	0.1	0.54
	01/06/2022	Aluminum	7429-90-5	1.8	0.2	9
	01/06/2022	Lead	7439-92-1	0.0017	0.005	<1
	01/06/2022	Sodium	7440-23-5	280	50	5.6
	01/06/2022	Arsenic	7440-38-2	0.0045	0.003	1.5
	01/06/2022	Ammonia	7664-41-7	13	3	4.333333
	01/06/2022	Total Organic Carbon	C012	40	NV	--
	01/06/2022	Chlorobenzene	108-90-7	0.00	0.05	<1
	01/06/2022	1,4-Dioxane	123-91-1	0.0	0.0004	12.25
	01/06/2022	N-Nitrosodimethylamine	62-75-9	0.0	0.0008	2
	01/06/2022	Acetone	67-64-1	0.0	6	<1
	01/06/2022	1,2-Dichlorobenzene	95-50-1	0.00	0.6	<1
	01/06/2022	Total Organic Halogen	EVS0192	1	NV	--

Note:
NV, No Screening value available
All results in mg/L
HQ = Hazards Quotient Ratio

Table B-4
Tier II Screening Results Secure C Landfill Detection Monitoring
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
R19-M01B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.000132	0.003	<1
	01/05/2022	1,4-Dioxane	123-91-1	0.000270	0.0004	<1
	01/05/2022	Nitrate	14797-55-8	0.204000	10	<1
	01/05/2022	Sulfate	14808-79-8	235.000000	250	<1
	01/05/2022	Chloride	16887-00-6	24.000000	250	<1
	01/05/2022	Lead	7439-92-1	0.000750	0.005	<1
	01/05/2022	Sodium	7440-23-5	20.000000	50	<1
	01/05/2022	Arsenic	7440-38-2	0.003200	0.003	1.066667
	01/05/2022	Ammonia	7664-41-7	2.400000	3	<1
	01/05/2022	Total Organic Carbon	C012	7.550000	NV	--
	01/05/2022	Total Organic Halogen	EVS0192	0.086000	NV	--
R19-M02B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.000190	0.003	<1
	01/05/2022	1,4-Dioxane	123-91-1	0.000200	0.0004	<1
	01/05/2022	Sulfate	14808-79-8	78.000000	250	<1
	01/05/2022	Chloride	16887-00-6	49.000000	250	<1
	01/05/2022	Aluminum	7429-90-5	0.380000	0.2	1.9
	01/05/2022	Lead	7439-92-1	0.005200	0.005	1.04
	01/05/2022	Sodium	7440-23-5	15.000000	50	<1
	01/05/2022	Arsenic	7440-38-2	0.009600	0.003	3.2
	01/05/2022	Total Organic Carbon	C012	1.800000	NV	--
	01/05/2022	Total Organic Halogen	EVS0192	0.024000	NV	--
S19-M01B	01/05/2022	Bis(2-Ethylhexyl)Phthalate	117-81-7	0.000480	0.003	<1
	01/05/2022	1,4-Dioxane	123-91-1	0.000190	0.0004	<1
	01/05/2022	Sulfate	14808-79-8	110.000000	250	<1
	01/05/2022	cis-1,2 Dichloroethene	156-59-2	0.000330	0.07	<1
	01/05/2022	Methyl Tertiary Butyl Ether	1634-04-4	0.000370	0.07	<1
	01/05/2022	Chloride	16887-00-6	100.000000	250	<1
	01/05/2022	Lead	7439-92-1	0.000860	0.005	<1
	01/05/2022	Sodium	7440-23-5	35.000000	50	<1
	01/05/2022	Total Organic Carbon	C012	1.300000	NV	--
	01/05/2022	Total Organic Halogen	EVS0192	0.043000	NV	--
S19-M02B	01/05/2022	Nitrate	14797-55-8	0.310000	10	<1
	01/05/2022	Sulfate	14808-79-8	94.000000	250	<1
	01/05/2022	Chloride	16887-00-6	170.000000	250	<1
	01/05/2022	Lead	7439-92-1	0.000340	0.005	<1
	01/05/2022	Sodium	7440-23-5	130.000000	50	2.6
	01/05/2022	Total Organic Carbon	C012	1.500000	NV	--
	01/05/2022	Total Organic Halogen	EVS0192	0.061000	NV	--

Note:
NV, No Screening value available
All results in mg/L
HQ = Hazards Quotient Ratio

Table B-5
Tier II Screening Results PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
AA22-M01B	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.0000150	NV	--
	01/17/2022	PFOS	1763-23-1	0.0000060	0.000013	<1
	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.0003600	NV	--
	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.0004500	NV	--
	01/17/2022	PFOA	335-67-1	0.0007000	0.000014	50.00
	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0000310	NV	--
	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000016	NV	--
	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.0001900	NV	--
	01/17/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000025	NV	--
	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.0002800	NV	--
	01/17/2022	Perfluorononanoic Acid	375-95-1	0.0000880	0.000013	6.77
AA25-M01B	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.0000076	NV	--
	01/17/2022	PFOS	1763-23-1	0.0000062	0.000013	<1
	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.0001600	NV	--
	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.0002000	NV	--
	01/17/2022	PFOA	335-67-1	0.0002200	0.000014	15.71
	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0000068	NV	--
	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000046	NV	--
	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.0000570	NV	--
	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.0001100	NV	--
	01/17/2022	Perfluorononanoic Acid	375-95-1	0.0000240	0.000013	1.85
AA25-M01C	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.0000230	NV	--
	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.0000320	NV	--
	01/17/2022	Perfluorododecanoic Acid	307-55-1	0.0000020	NV	--
	01/17/2022	PFOA	335-67-1	0.0000240	0.000014	1.71
	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0000098	NV	--
	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.0000084	NV	--
	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.0000210	NV	--
	01/17/2022	Perfluorononanoic Acid	375-95-1	0.0000057	0.000013	<1
C08-M01B	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.0006000	NV	--
	01/14/2022	PFOS	1763-23-1	0.0001200	0.000013	9.23
	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000880	NV	--
	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0000240	NV	--
	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.0011000	NV	--
	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0000130	NV	--
	01/14/2022	Perfluorohexanoic Acid	307-24-4	0.0024000	NV	--
	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.0000340	NV	--
	01/14/2022	PFOA	335-67-1	0.0013000	0.000014	92.86
	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.0013000	NV	--
	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000079	NV	--
	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.0003500	NV	--
	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000880	NV	--
	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.0006600	NV	--
	01/14/2022	Perfluorononanoic Acid	375-95-1	0.0002900	0.000013	22.31
C11-M01C	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.0000690	NV	--
	01/14/2022	PFOS	1763-23-1	0.0000056	0.000013	<1
	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000500	NV	--
	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.0004200	NV	--
	01/14/2022	Perfluorohexanoic Acid	307-24-4	0.0011000	NV	--
	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.0000560	NV	--
	01/14/2022	PFOA	335-67-1	0.0000920	0.000014	6.57
	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.0000930	NV	--
	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.0001600	NV	--
	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000025	NV	--
	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.0001400	NV	--
	01/14/2022	Perfluorononanoic Acid	375-95-1	0.0000420	0.000013	3.23
	01/14/2022	Perfluorotetradecanoic Acid	376-06-7	0.0000032	NV	--
	01/14/2022	Perfluorotridecanoic Acid	72629-94-8	0.0000037	NV	--
	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.0000900	NV	--
	01/14/2022	PFOS	1763-23-1	0.0000280	0.000013	2.15
	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000190	NV	--
	01/14/2022	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355-31-9	0.0000025	NV	--
	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.0002000	NV	--
	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0000087	NV	--

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Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
C11-M02D	01/14/2022	Perfluorohexanoic Acid	307-24-4	0.0003900	NV	--
	01/14/2022	PFOA	335-67-1	0.0011000	0.000014	78.57
	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.0000910	NV	--
	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000041	NV	--
	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.0001000	NV	--
	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000230	NV	--
	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.0001200	NV	--
	01/14/2022	Perfluorononanoic Acid	375-95-1	0.0006600	0.000013	50.77
C11-M03B	01/14/2022	Hfpo Dimer Acid	13252-13-6	0.0005100	NV	--
	01/14/2022	PFOS	1763-23-1	0.0000670	0.000013	5.15
	01/14/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000160	NV	--
	01/14/2022	Perfluoropentanoic Acid	2706-90-3	0.0004800	NV	--
	01/14/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0000027	NV	--
	01/14/2022	Perfluorohexanoic Acid	307-24-4	0.0013000	NV	--
	01/14/2022	Perfluorododecanoic Acid	307-55-1	0.0000130	NV	--
	01/14/2022	PFOA	335-67-1	0.0006100	0.000014	43.57
	01/14/2022	Perfluorodecanoic Acid	335-76-2	0.0002100	NV	--
	01/14/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000077	NV	--
	01/14/2022	Perfluorobutanoic Acid	375-22-4	0.0002100	NV	--
	01/14/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000082	NV	--
	01/14/2022	Perfluoroheptanoic Acid	375-85-9	0.0003100	NV	--
	01/14/2022	Perfluorononanoic Acid	375-95-1	0.0001200	0.000013	9.23
D06-M01B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0009800	NV	--
	01/10/2022	PFOS	1763-23-1	0.0000530	0.000013	4.08
	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000710	NV	--
	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0015000	NV	--
	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0051000	NV	--
	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.0000270	NV	--
	01/10/2022	PFOA	335-67-1	0.0012000	0.000014	85.71
	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0006000	NV	--
	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.0006200	NV	--
	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0001900	NV	--
	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0006700	NV	--
	01/10/2022	Perfluorononanoic Acid	375-95-1	0.0002400	0.000013	18.46
D15-M01B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0000650	NV	--
	01/10/2022	PFOS	1763-23-1	0.0000120	0.000013	<1
	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000460	NV	--
	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0016000	NV	--
	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0015000	NV	--
	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.0000120	NV	--
	01/10/2022	PFOA	335-67-1	0.0004800	0.000014	34.29
	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0002200	NV	--
	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.0004700	NV	--
	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000021	NV	--
	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0005500	NV	--
	01/10/2022	Perfluorononanoic Acid	375-95-1	0.0001600	0.000013	12.31
F07-M01B	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.0019000	NV	--
	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000610	NV	--
	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.0006200	NV	--
	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.0018000	NV	--
	01/13/2022	PFOA	335-67-1	0.0008800	0.000014	62.86
	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.0003600	NV	--
	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.0003900	NV	--
	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0002700	NV	--
	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.0004100	NV	--
	01/13/2022	Perfluorononanoic Acid	375-95-1	0.0001900	0.000013	14.62
F08-M01B	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.0015000	NV	--
	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0002100	NV	--
	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.0065000	NV	--
	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.0120000	NV	--
	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.0001600	NV	--
	01/13/2022	PFOA	335-67-1	0.0024000	0.000014	171.43
	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.0011000	NV	--
	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.0071000	NV	--

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Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0013000	NV	--
	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.0088000	NV	--
	01/13/2022	Perfluorononanoic Acid	375-95-1	0.0007000	0.000013	53.85
F08-M01A	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0002900	NV	--
	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.0270000	NV	--
	01/12/2022	Perfluorohexanoic Acid	307-24-4	0.1600000	NV	--
	01/12/2022	PFOA	335-67-1	0.0450000	0.000014	3214.29
	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.0092000	NV	--
	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.0590000	NV	--
	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.0061000	NV	--
	01/12/2022	Perfluorononanoic Acid	375-95-1	0.0018000	0.000013	138.46
G04-M01B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0002800	NV	--
	01/10/2022	PFOS	1763-23-1	0.0000035	0.000013	<1
	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0006700	NV	--
	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0010000	NV	--
	01/10/2022	PFOA	335-67-1	0.0005000	0.000014	35.71
	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0000330	NV	--
	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.0003300	NV	--
	01/10/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000028	NV	--
	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0002500	NV	--
	01/10/2022	Perfluorononanoic Acid	375-95-1	0.0000790	0.000013	6.08
G04-M01E	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0000085	NV	--
	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0000045	NV	--
	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0000067	NV	--
	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.0000033	NV	--
	01/10/2022	PFOA	335-67-1	0.0000062	0.000014	<1
	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0000029	NV	--
	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0000019	NV	--
G05-M02B	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0004550	NV	--
	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0018500	NV	--
	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0083500	NV	--
	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.0008050	NV	--
	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0007850	NV	--
	01/10/2022	Perfluorononanoic Acid	375-95-1	0.0004400	0.000013	33.85
	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.0001050	NV	--
	01/10/2022	PFOA	335-67-1	0.0016500	0.000014	117.86
	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0010500	NV	--
G09-M01A	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.1000000	NV	--
	01/12/2022	Perfluorohexanoic Acid	307-24-4	1.4000000	NV	--
	01/12/2022	PFOA	335-67-1	0.5000000	0.000014	35714.29
	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.2800000	NV	--
	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.1500000	NV	--
	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.4000000	NV	--
	01/12/2022	Perfluorononanoic Acid	375-95-1	0.2200000	0.000013	16923.08
J05-M01C	01/10/2022	Hfpo Dimer Acid	13252-13-6	0.0000420	NV	--
	01/10/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000310	NV	--
	01/10/2022	Perfluoropentanoic Acid	2706-90-3	0.0011000	NV	--
	01/10/2022	Perfluorohexanoic Acid	307-24-4	0.0027000	NV	--
	01/10/2022	Perfluorododecanoic Acid	307-55-1	0.0000220	NV	--
	01/10/2022	PFOA	335-67-1	0.0018000	0.000014	128.57
	01/10/2022	Perfluorodecanoic Acid	335-76-2	0.0005500	NV	--
	01/10/2022	Perfluorobutanoic Acid	375-22-4	0.0005700	NV	--
	01/10/2022	Perfluoroheptanoic Acid	375-85-9	0.0005700	NV	--
	01/10/2022	Perfluorononanoic Acid	375-95-1	0.0001900	0.000013	14.62
J10-M02B	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.0000890	NV	--
	01/18/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000630	NV	--
	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.0003700	NV	--
	01/18/2022	Perfluorohexanoic Acid	307-24-4	0.0017000	NV	--
	01/18/2022	Perfluorododecanoic Acid	307-55-1	0.0000210	NV	--
	01/18/2022	PFOA	335-67-1	0.0026000	0.000014	185.71
	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.0002500	NV	--
	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.0001700	NV	--
	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.0002800	NV	--
	01/18/2022	Perfluorononanoic Acid	375-95-1	0.0001100	0.000013	8.46

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Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
K12-M01A	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.0840000	NV	--
	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000610	NV	--
	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.0002300	NV	--
	01/12/2022	Perfluorohexanoic Acid	307-24-4	0.0005400	NV	--
	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.0000310	NV	--
	01/12/2022	PFOA	335-67-1	0.0120000	0.000014	857.14
	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.0002200	NV	--
	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.0001100	NV	--
	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.0001700	NV	--
	01/12/2022	Perfluorononanoic Acid	375-95-1	0.0000630	0.000013	4.85
K13-M02B	01/04/2022	Hfpo Dimer Acid	13252-13-6	0.0002850	NV	--
	01/04/2022	Perfluoropentanoic Acid	2706-90-3	0.0037000	NV	--
	01/04/2022	Perfluorohexanoic Acid	307-24-4	0.0084500	NV	--
	01/04/2022	PFOA	335-67-1	0.0135000	0.000014	964.29
	01/04/2022	Perfluorodecanoic Acid	335-76-2	0.0000975	NV	--
	01/04/2022	Perfluorobutanoic Acid	375-22-4	0.0016000	NV	--
	01/04/2022	Perfluoroheptanoic Acid	375-85-9	0.0035500	NV	--
	01/04/2022	Perfluorononanoic Acid	375-95-1	0.0029000	0.000013	223.08
L09-M01B	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.0005500	NV	--
	01/18/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000200	NV	--
	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.0004700	NV	--
	01/18/2022	Perfluorohexanoic Acid	307-24-4	0.0017000	NV	--
	01/18/2022	PFOA	335-67-1	0.0014000	0.000014	100.00
	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.0003600	NV	--
	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.0002200	NV	--
	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.0003900	NV	--
	01/18/2022	Perfluorononanoic Acid	375-95-1	0.0002500	0.000013	19.23
L09-M01C	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.0001200	NV	--
	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.0007700	NV	--
	01/18/2022	Perfluorohexanoic Acid	307-24-4	0.0013000	NV	--
	01/18/2022	PFOA	335-67-1	0.0015000	0.000014	107.14
	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.0000820	NV	--
	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.0003700	NV	--
	01/18/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000480	NV	--
	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.0005800	NV	--
	01/18/2022	Perfluorononanoic Acid	375-95-1	0.0002300	0.000013	17.69
L09-M01D	01/18/2022	Hfpo Dimer Acid	13252-13-6	0.0020000	NV	--
	01/18/2022	PFOS	1763-23-1	0.0000480	0.000013	3.69
	01/18/2022	Perfluoropentanoic Acid	2706-90-3	0.0021000	NV	--
	01/18/2022	Perfluorohexanoic Acid	307-24-4	0.0035000	NV	--
	01/18/2022	PFOA	335-67-1	0.0037000	0.000014	264.29
	01/18/2022	Perfluorodecanoic Acid	335-76-2	0.0002000	NV	--
	01/18/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000400	NV	--
	01/18/2022	Perfluorobutanoic Acid	375-22-4	0.0015000	NV	--
	01/18/2022	Perfluoroheptanoic Acid	375-85-9	0.0012000	NV	--
	01/18/2022	Perfluorononanoic Acid	375-95-1	0.0006100	0.000013	46.92
N08-M01B	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.0000910	NV	--
	01/12/2022	PFOS	1763-23-1	0.0000064	0.000013	<1
	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000062	NV	--
	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.0007300	NV	--
	01/12/2022	Perfluorohexanoic Acid	307-24-4	0.0011000	NV	--
	01/12/2022	PFOA	335-67-1	0.0013000	0.000014	92.86
	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.0001000	NV	--
	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000043	NV	--
	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.0003100	NV	--
	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000094	NV	--
	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.0005600	NV	--
	01/12/2022	Perfluorononanoic Acid	375-95-1	0.0001500	0.000013	11.54
	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.0002900	NV	--
	01/12/2022	PFOS	1763-23-1	0.0000340	0.000013	2.62
	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000520	NV	--
	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.0015000	NV	--
	01/12/2022	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6	0.0000032	NV	--
	01/12/2022	Perfluorohexanoic Acid	307-24-4	0.0030000	NV	--

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Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
N08-M01C	01/12/2022	Perfluorododecanoic Acid	307-55-1	0.0000022	NV	--
	01/12/2022	PFOA	335-67-1	0.0030000	0.000014	214.29
	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.0002600	NV	--
	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000230	NV	--
	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.0015000	NV	--
	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0001300	NV	--
	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.0010000	NV	--
	01/12/2022	Perfluorononanoic Acid	375-95-1	0.0013000	0.000013	100.00
N08-M01D	01/12/2022	Hfpo Dimer Acid	13252-13-6	0.0002300	NV	--
	01/12/2022	PFOS	1763-23-1	0.0000083	0.000013	<1
	01/12/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000033	NV	--
	01/12/2022	Perfluoropentanoic Acid	2706-90-3	0.0010000	NV	--
	01/12/2022	Perfluorohexanoic Acid	307-24-4	0.0022000	NV	--
	01/12/2022	PFOA	335-67-1	0.0020000	0.000014	142.86
	01/12/2022	Perfluorodecanoic Acid	335-76-2	0.0000790	NV	--
	01/12/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000081	NV	--
	01/12/2022	Perfluorobutanoic Acid	375-22-4	0.0005400	NV	--
	01/12/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0001100	NV	--
	01/12/2022	Perfluoroheptanoic Acid	375-85-9	0.0008500	NV	--
	01/12/2022	Perfluorononanoic Acid	375-95-1	0.0003700	0.000013	28.46
P06-M01B	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.0000530	NV	--
	01/11/2022	PFOS	1763-23-1	0.0000042	0.000013	<1
	01/11/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000027	NV	--
	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.0004400	NV	--
	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.0006400	NV	--
	01/11/2022	Perfluorododecanoic Acid	307-55-1	0.0000096	NV	--
	01/11/2022	PFOA	335-67-1	0.0008800	0.000014	62.86
	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.0000520	NV	--
	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.0002200	NV	--
	01/11/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000028	NV	--
	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.0003200	NV	--
	01/11/2022	Perfluorononanoic Acid	375-95-1	0.0001300	0.000013	10.00
	01/11/2022	Perfluorotetradecanoic Acid	376-06-7	0.0000024	NV	--
P06-M01D	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.0000120	NV	--
	01/11/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000100	NV	--
	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.0001700	NV	--
	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.0002600	NV	--
	01/11/2022	Perfluorododecanoic Acid	307-55-1	0.0000086	NV	--
	01/11/2022	PFOA	335-67-1	0.0001700	0.000014	12.14
	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.0000560	NV	--
	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.0000640	NV	--
	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.0001100	NV	--
	01/11/2022	Perfluorononanoic Acid	375-95-1	0.0000330	0.000013	2.54
P06-M01E	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.0004800	NV	--
	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.0000730	NV	--
	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.0001400	NV	--
	01/11/2022	PFOA	335-67-1	0.0000550	0.000014	3.93
	01/11/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000170	NV	--
	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.0000900	NV	--
	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.0000430	NV	--
	01/11/2022	Perfluorononanoic Acid	375-95-1	0.0000025	0.000013	<1
P06-M02C	01/11/2022	Hfpo Dimer Acid	13252-13-6	0.0000590	NV	--
	01/11/2022	PFOS	1763-23-1	0.0000076	0.000013	<1
	01/11/2022	Perfluoropentanoic Acid	2706-90-3	0.0003000	NV	--
	01/11/2022	Perfluorohexanoic Acid	307-24-4	0.0005000	NV	--
	01/11/2022	PFOA	335-67-1	0.0005400	0.000014	38.57
	01/11/2022	Perfluorodecanoic Acid	335-76-2	0.0000140	NV	--
	01/11/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000052	NV	--
	01/11/2022	Perfluorobutanoic Acid	375-22-4	0.0001600	NV	--
	01/11/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000035	NV	--
	01/11/2022	Perfluoroheptanoic Acid	375-85-9	0.0002700	NV	--
	01/11/2022	Perfluorononanoic Acid	375-95-1	0.0000590	0.000013	4.54
	01/06/2022	Hfpo Dimer Acid	13252-13-6	0.0002700	NV	--
	01/06/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000520	NV	--

Table B-5
Tier II Screening Results PFOA Monitoring Program
Semi-Annual Statistical Review of Groundwater Monitoring Results
Chemours Chambers Works
November 2022

Well ID	Sample Date	Parameter Name	Parameter Code	Report Result	NJGWIIA Standard	HQ
P21-M01B	01/06/2022	Perfluoropentanoic Acid	2706-90-3	0.0480000	NV	--
	01/06/2022	Perfluorohexanoic Acid	307-24-4	0.1300000	NV	--
	01/06/2022	PFOA	335-67-1	0.0850000	0.000014	6071.43
	01/06/2022	Perfluorodecanoic Acid	335-76-2	0.0021000	NV	--
	01/06/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000430	NV	--
	01/06/2022	Perfluorobutanoic Acid	375-22-4	0.0270000	NV	--
	01/06/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000250	NV	--
	01/06/2022	Perfluoroheptanoic Acid	375-85-9	0.0350000	NV	--
	01/06/2022	Perfluorononanoic Acid	375-95-1	0.0042000	0.000013	323.08
R09-M02B	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.0000355	NV	--
	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.0020500	NV	--
	01/13/2022	PFOA	335-67-1	0.0004750	0.000014	33.93
	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.0006900	NV	--
	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.0002350	NV	--
	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.0002350	NV	--
	01/13/2022	Perfluorononanoic Acid	375-95-1	0.0003400	0.000013	26.15
	01/13/2022	PFOS	1763-23-1	0.0000150	0.000013	1.15
	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000076	NV	--
	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.0004350	NV	--
R10-M01C	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.0000380	NV	--
	01/13/2022	PFOS	1763-23-1	0.0000079	0.000013	<1
	01/13/2022	Perfluoroundecanoic Acid	2058-94-8	0.0000026	NV	--
	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.0003600	NV	--
	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.0007800	NV	--
	01/13/2022	Perfluorododecanoic Acid	307-55-1	0.0000066	NV	--
	01/13/2022	PFOA	335-67-1	0.0006200	0.000014	44.29
	01/13/2022	Perfluorodecanoic Acid	335-76-2	0.0000350	NV	--
	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000017	NV	--
	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.0001700	NV	--
	01/13/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000027	NV	--
	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.0006000	NV	--
	01/13/2022	Perfluorononanoic Acid	375-95-1	0.0000640	0.000013	4.92
	01/13/2022	Perfluorotetradecanoic Acid	376-06-7	0.0000029	NV	--
R10-M01E	01/13/2022	Hfpo Dimer Acid	13252-13-6	0.0001800	NV	--
	01/13/2022	Perfluoropentanoic Acid	2706-90-3	0.0000410	NV	--
	01/13/2022	Perfluorohexanoic Acid	307-24-4	0.0000630	NV	--
	01/13/2022	PFOA	335-67-1	0.0000180	0.000014	1.29
	01/13/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000024	NV	--
	01/13/2022	Perfluorobutanoic Acid	375-22-4	0.0000490	NV	--
	01/13/2022	Perfluoroheptanoic Acid	375-85-9	0.0000220	NV	--
Z28-M01B	01/17/2022	Hfpo Dimer Acid	13252-13-6	0.0000084	NV	--
	01/17/2022	PFOS	1763-23-1	0.0000140	0.000013	1.08
	01/17/2022	Perfluoropentanoic Acid	2706-90-3	0.0001400	NV	--
	01/17/2022	Perfluorohexanoic Acid	307-24-4	0.0002500	NV	--
	01/17/2022	PFOA	335-67-1	0.0003000	0.000014	21.43
	01/17/2022	Perfluorodecanoic Acid	335-76-2	0.0000076	NV	--
	01/17/2022	Perfluorohexane Sulfonic Acid	355-46-4	0.0000091	NV	--
	01/17/2022	Perfluorobutanoic Acid	375-22-4	0.0000560	NV	--
	01/17/2022	Perfluorobutane Sulfonic Acid	375-73-5	0.0000130	NV	--
	01/17/2022	Perfluoroheptanoic Acid	375-85-9	0.0001300	NV	--
	01/17/2022	Perfluorononanoic Acid	375-95-1	0.0000270	0.000013	2.08

Note:
NV, No Screening value available
All results in mg/L
HQ = Hazards Quotient Ratio

Appendix C

Well Summary, Statistical Evaluation Results, Time-Series Plots, and Control Chart Analysis for the Closure and Post-Closure of A, B, & C Basins Program

Narrative Well Summary:
Closure and Post-Closure for the A, B, and C Basins

The following sections present a summary of the Mann-Kendall trend test and the control chart results. Only those tests that indicated a significant trend at a 1% level of significance or an out-of-control chart result in the current event are mentioned below.

G16-M02B

The Mann-Kendall trend analysis indicates that the field parameter pH exhibited a statistically significant upward trend for all available data. The control chart analysis indicates that specific conductance (CUSUM) was out-of-control.

H13-M02B

The Mann-Kendall trend analysis indicates that the field parameter dissolved oxygen exhibits a downward trend. The control chart analysis indicates that pH is out-of-control with a downward trend.

H14-M01B

The Mann-Kendall trend analysis indicates that no parameters exhibit a statistically significant trend for all available. The control chart analysis also indicates no parameters are out of control in the current event.

H16-P01B

No statistically significant Mann-Kendall trends were observed. The control chart analysis indicates that total organic carbon (CUSUM) is out-of-control.

J16-M01B

The Mann-Kendall trend analysis indicates that the indicator total organic carbon exhibits a statistically significant downward trend for all available. The control chart analysis indicates that no parameters are out-of-control in this event.

K13-M02B

No statistically significant Mann-Kendall trends were observed. No out-of-control results were identified during this event.

L14-M01B

The Mann-Kendall trend analysis indicates that the field parameter total organic carbon exhibits a statistically significant upward trend for all available data. The control chart analysis indicates that total organic halogen (CUSUM) and pH (CUSUM) are out-of-control.

Closure and Post-Closure for the A, B, and C Basins (Program 1)

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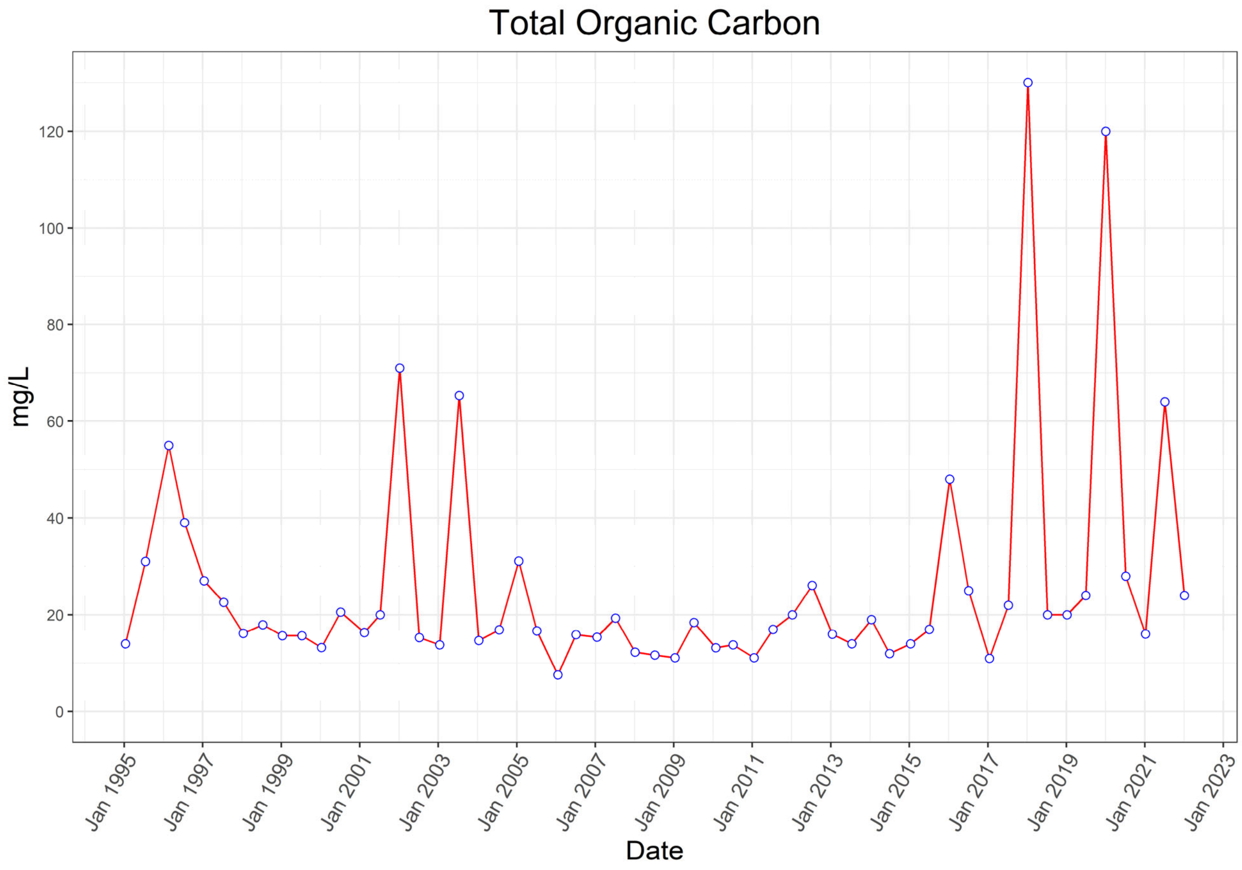

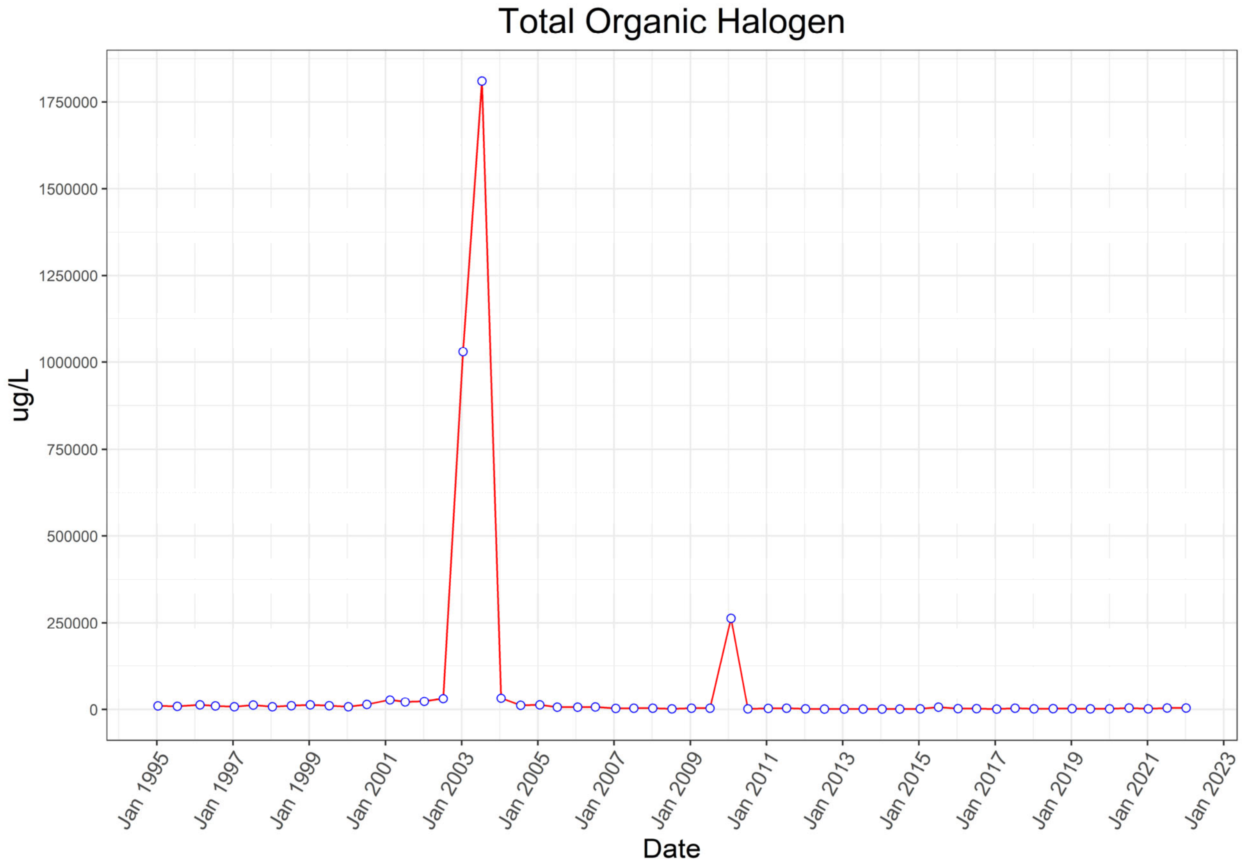

Well Name:

Field Parameters

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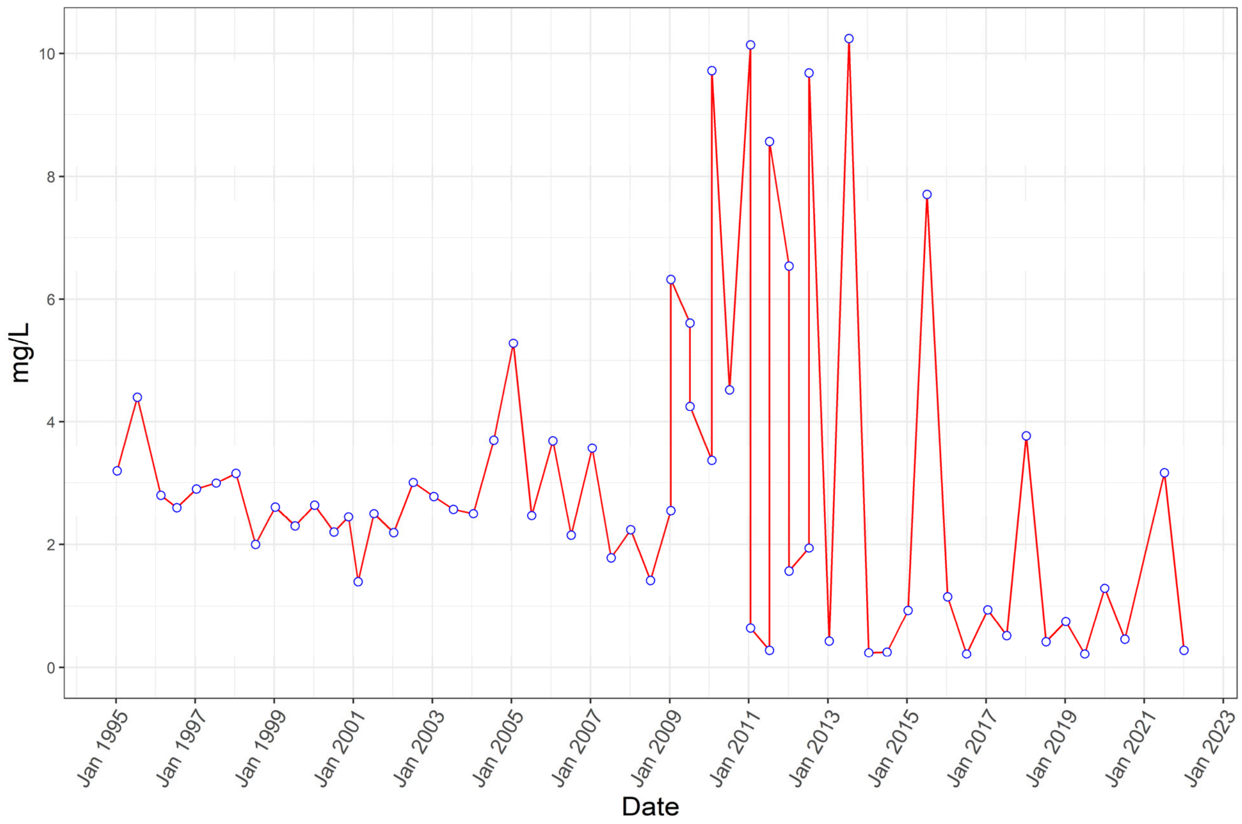
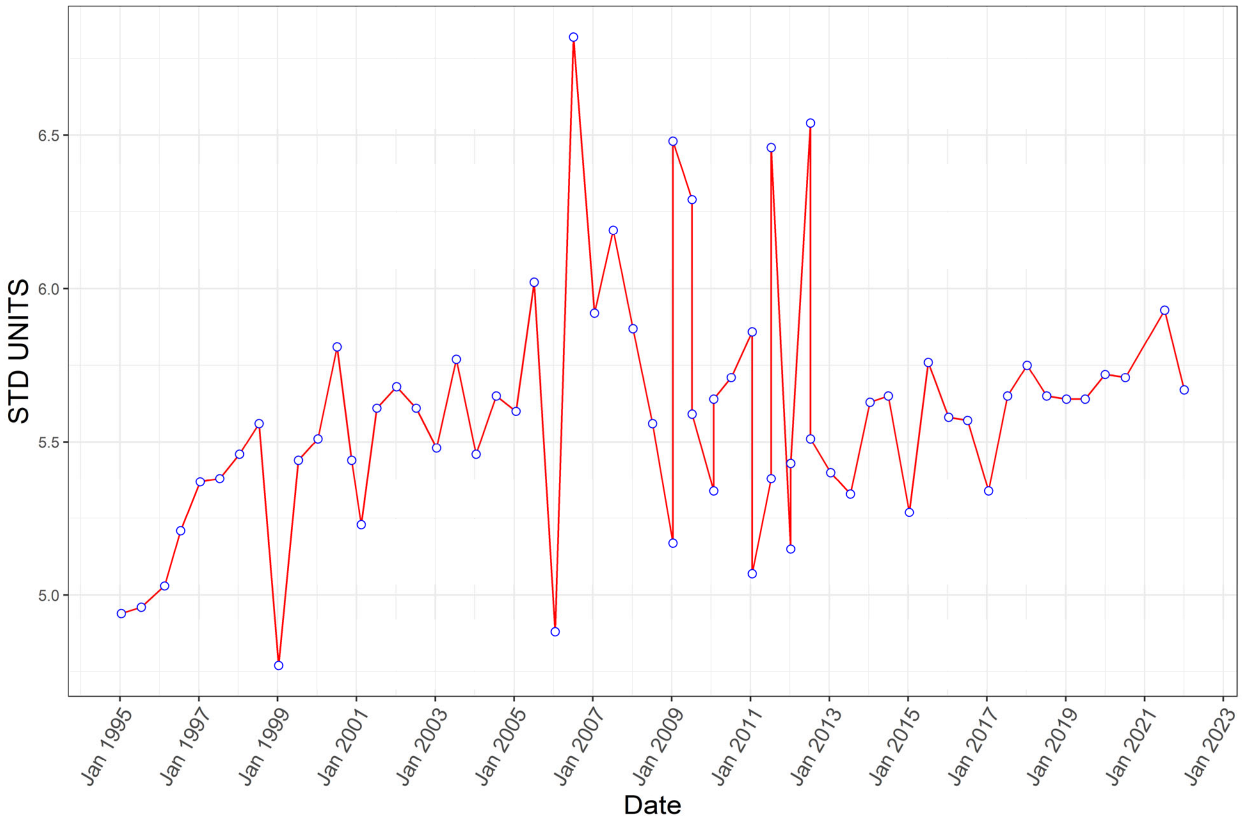


PH



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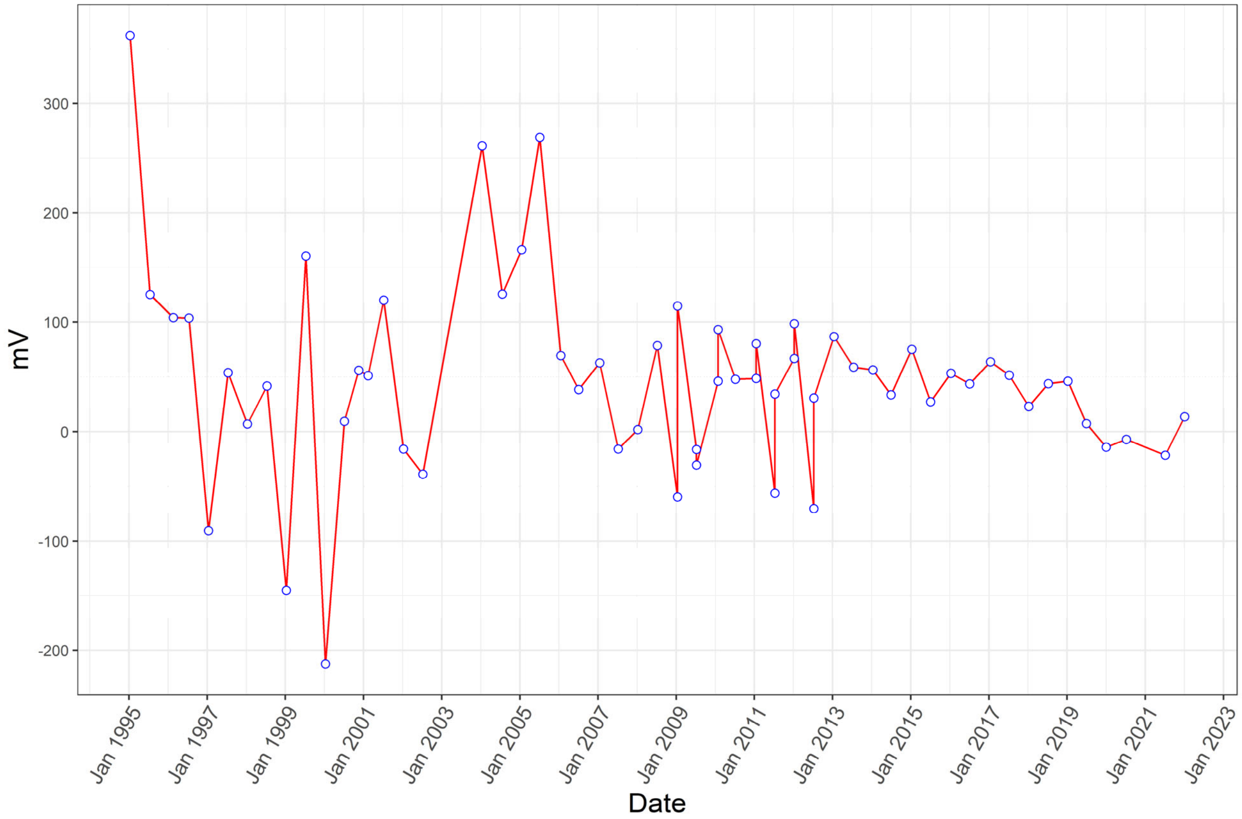
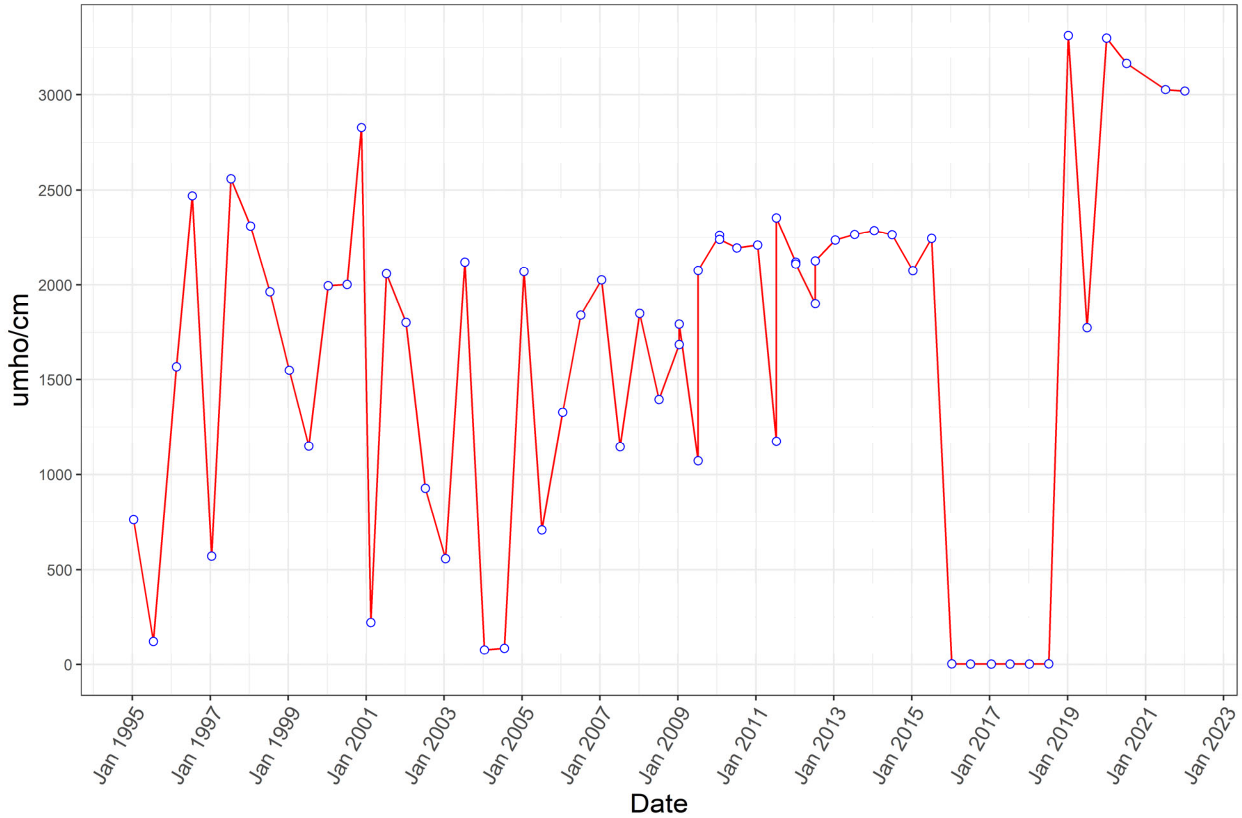
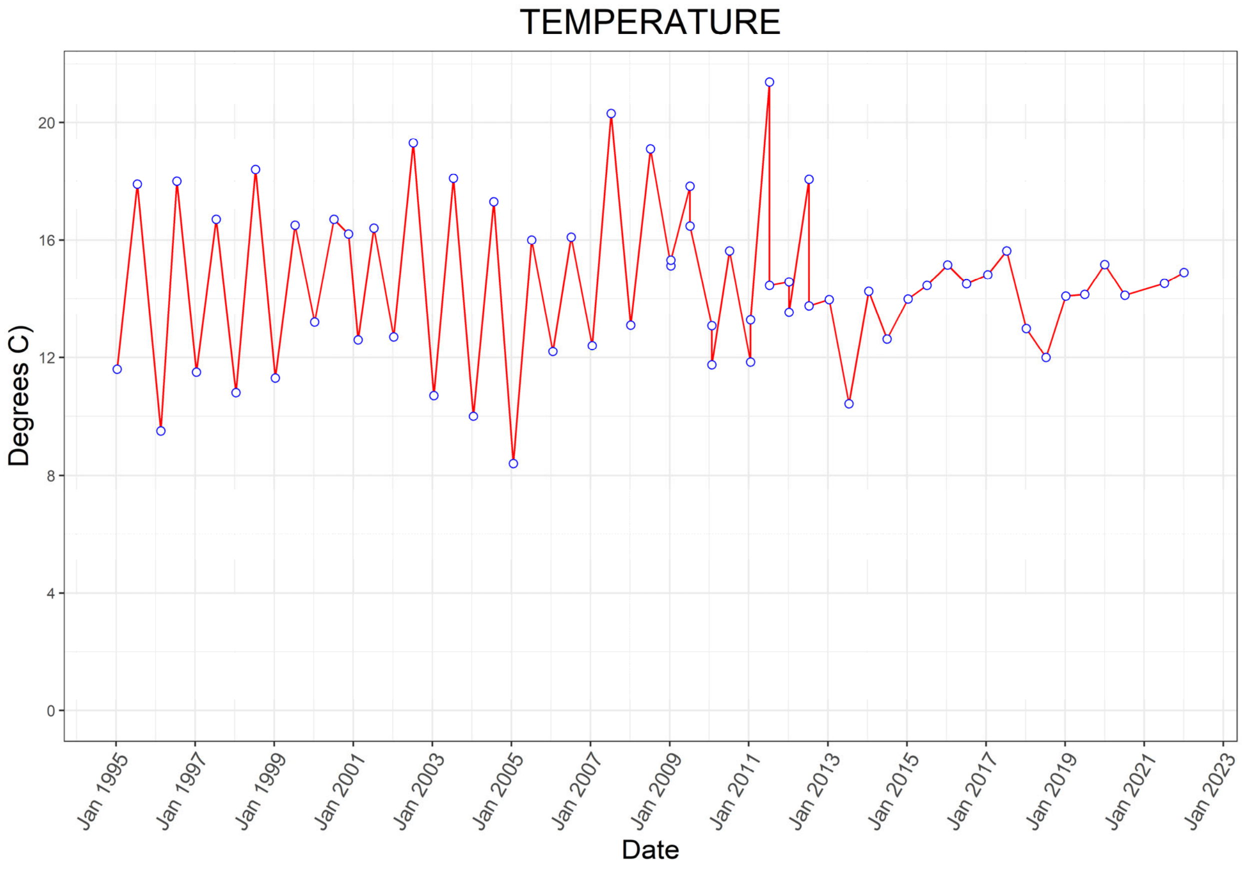


SPECIFIC CONDUCTANCE

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16
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Date
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Jan 2023

Closure and Post-Closure for the A, B, and C Basins (Program 1)

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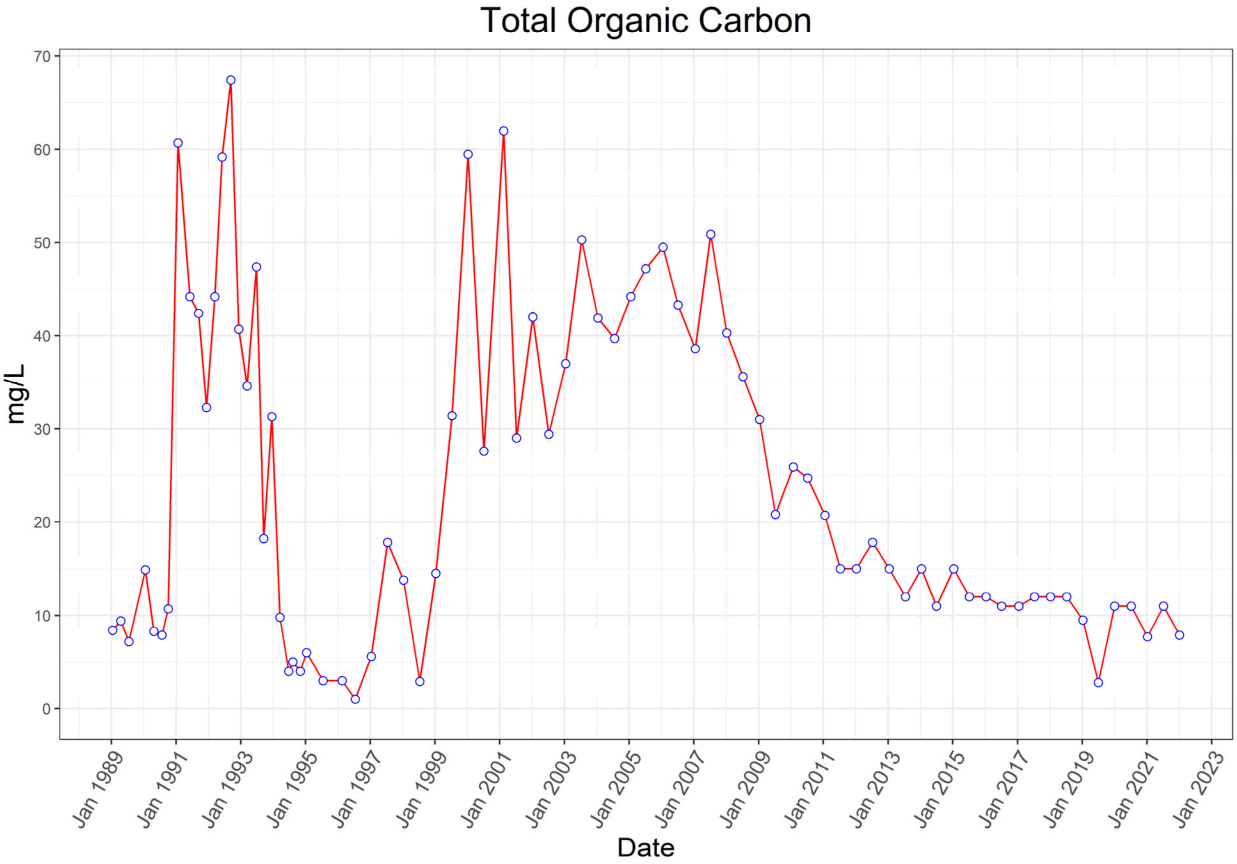
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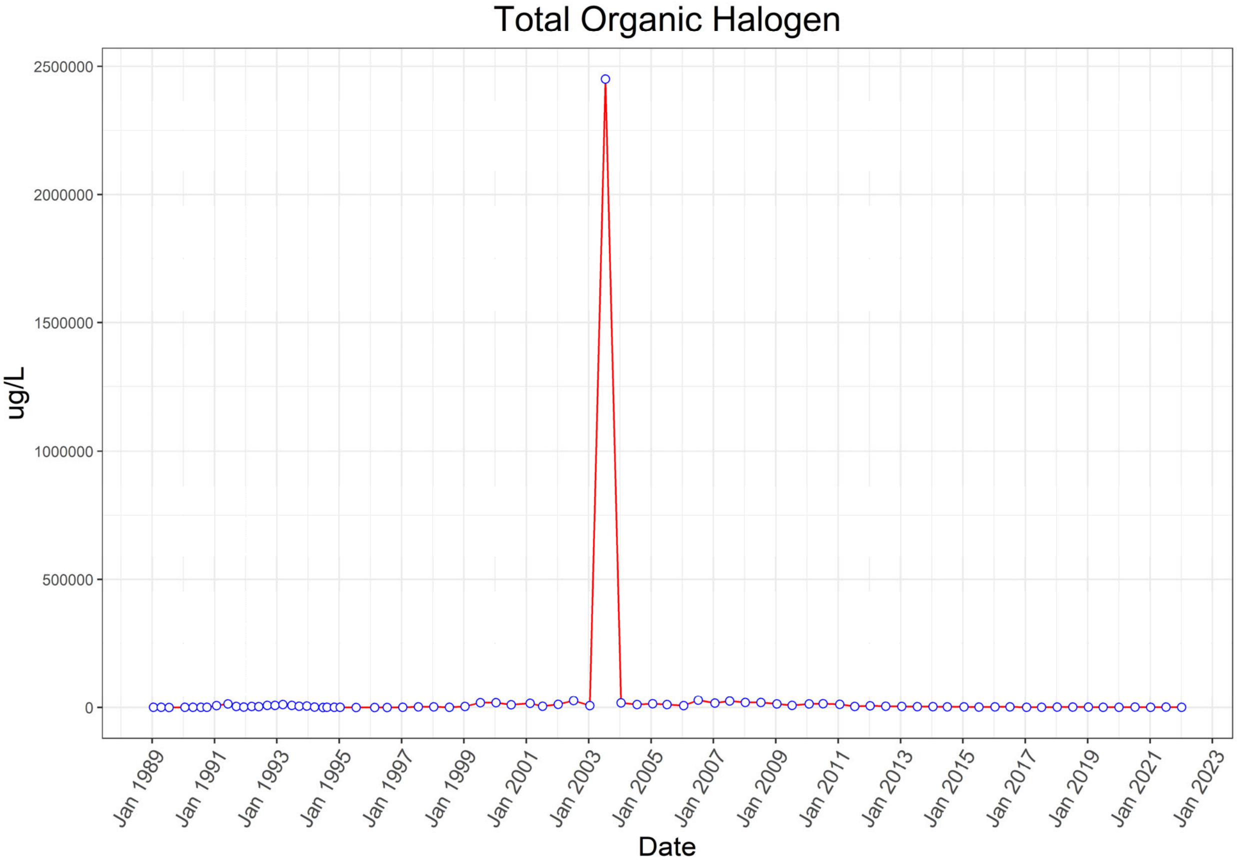
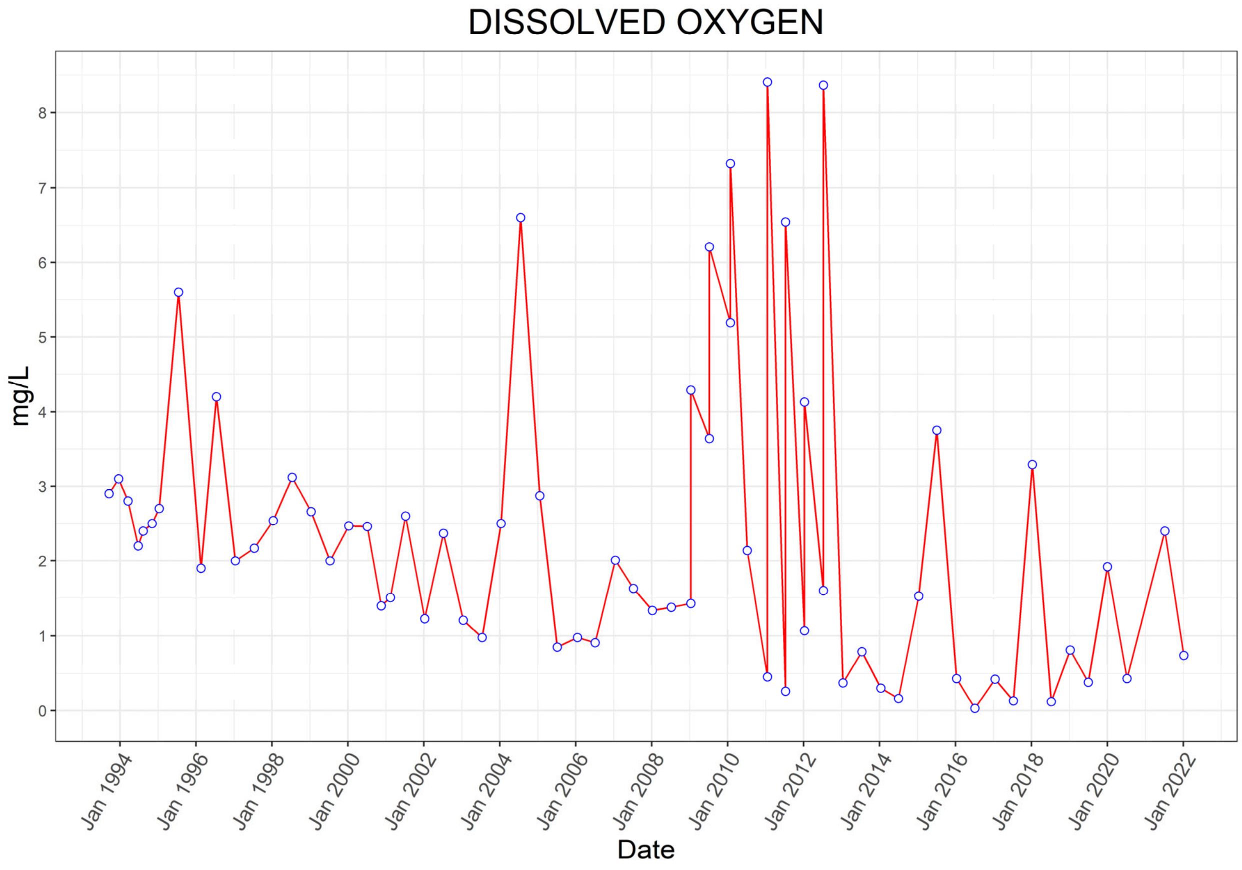
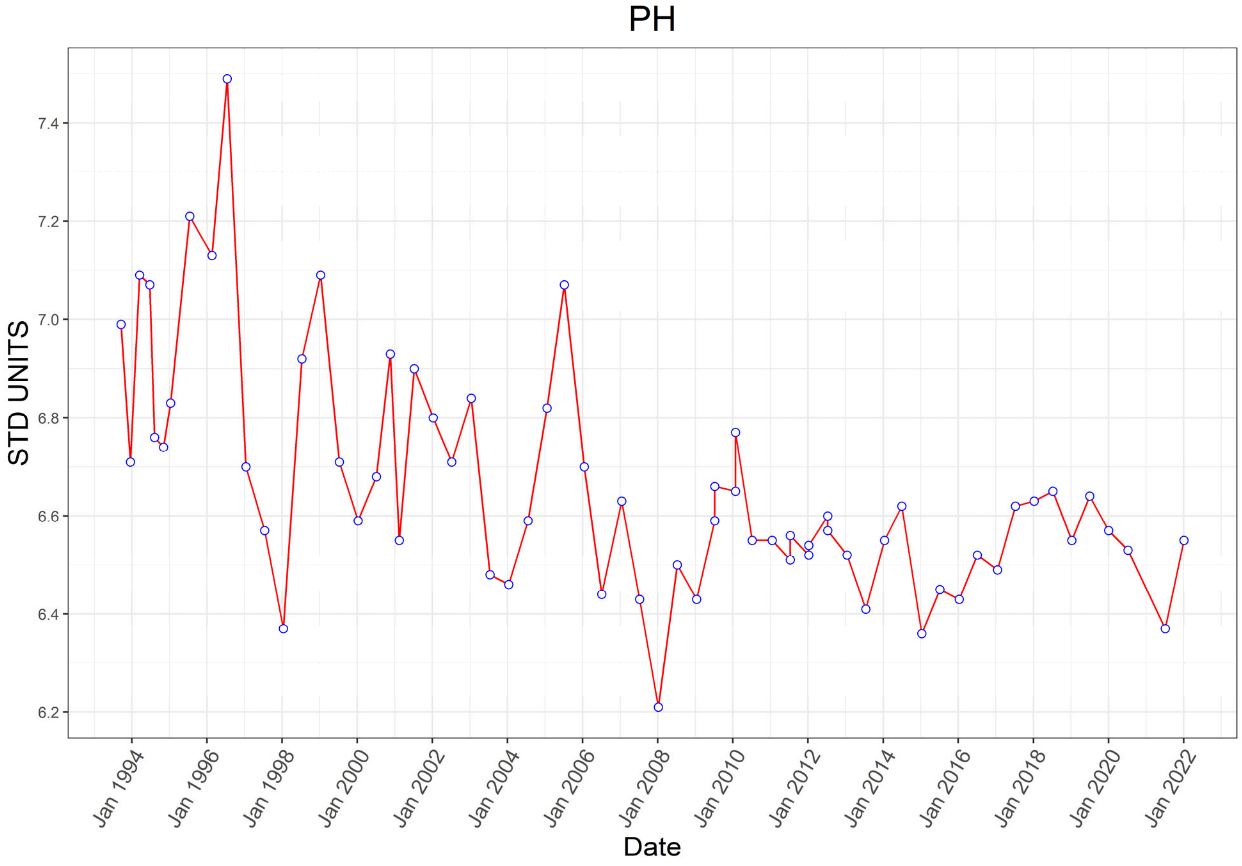
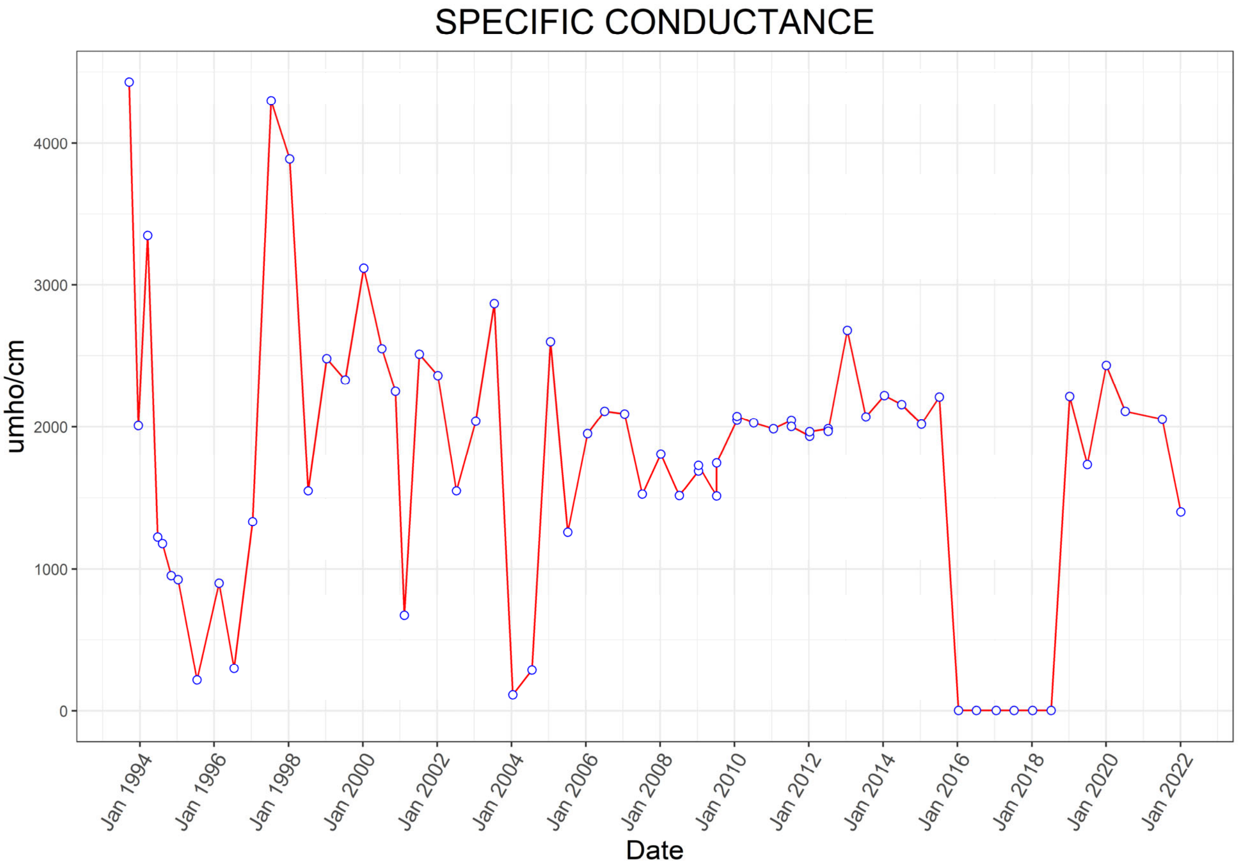

Total Organic Halogen

Well Name:

Field Parameters



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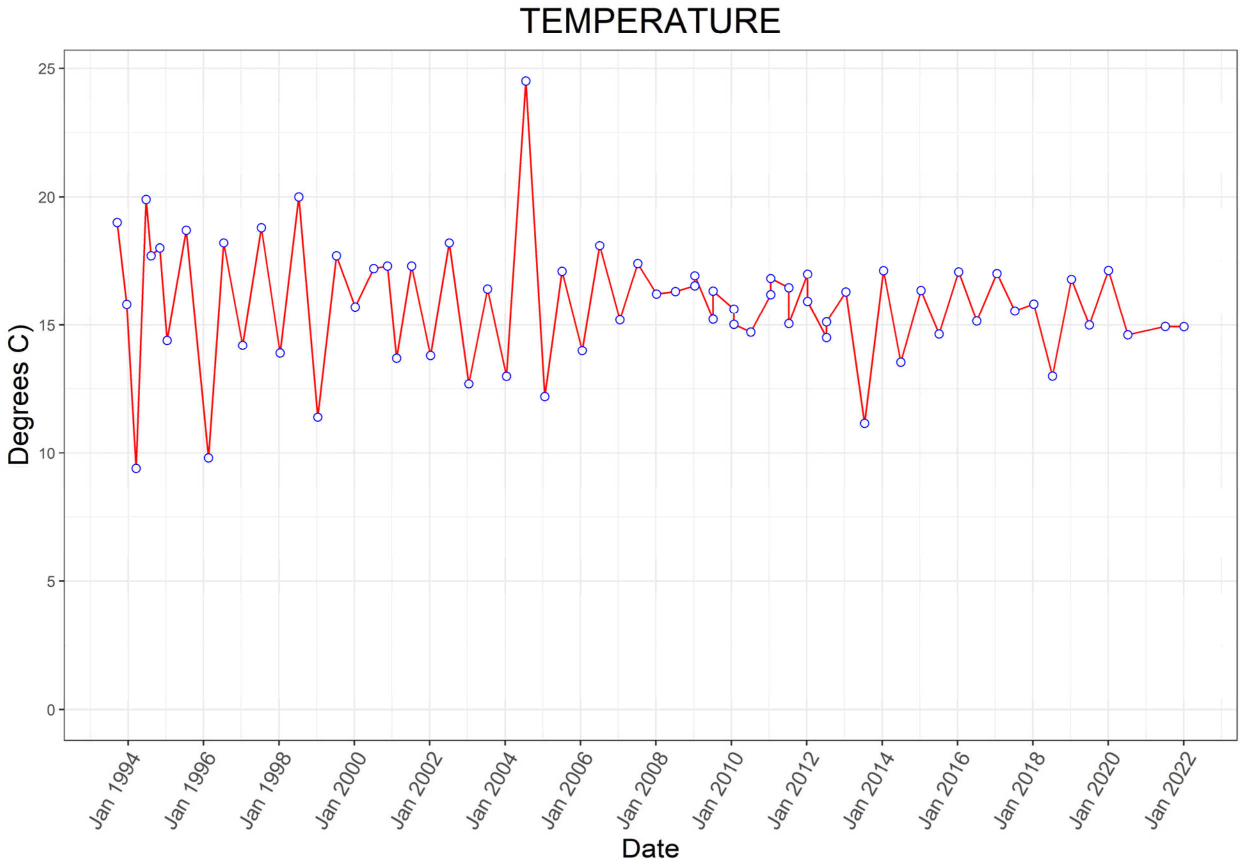
Date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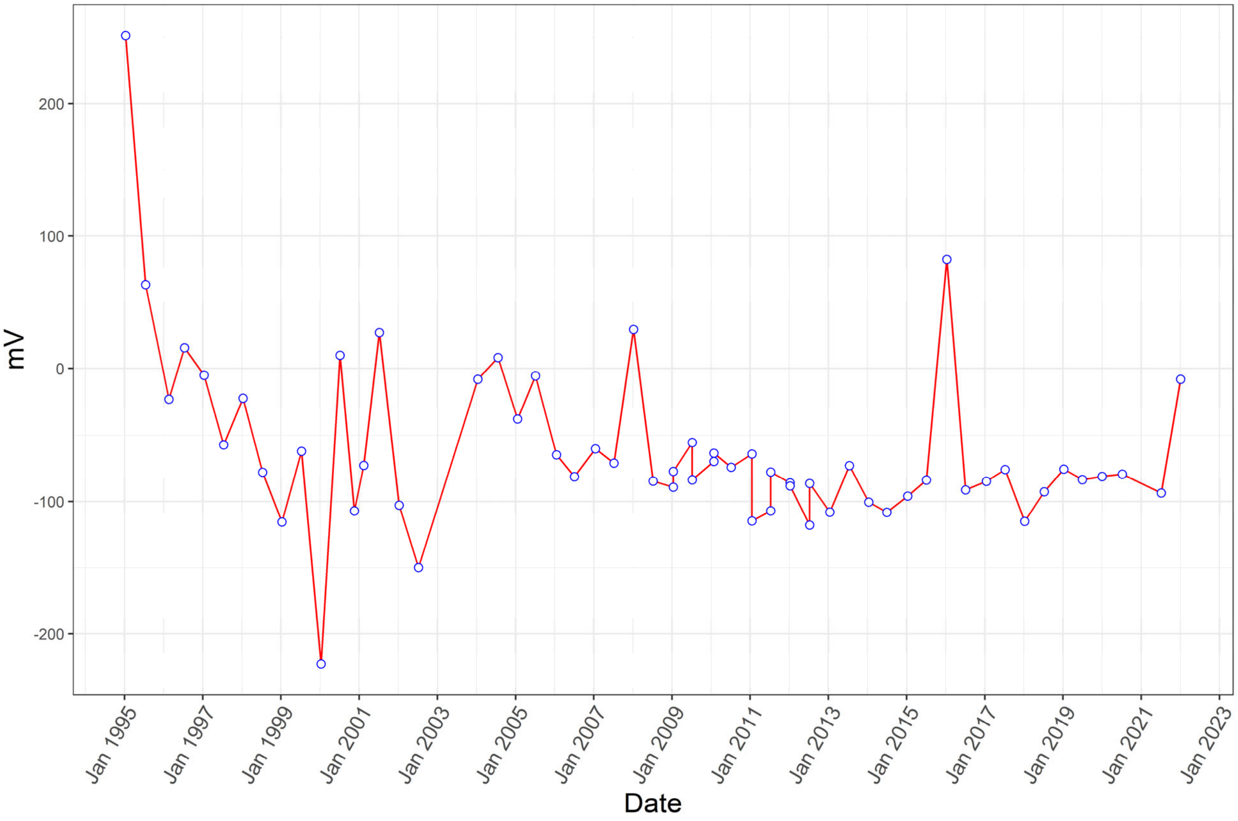
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Date

Closure and Post-Closure for the A, B, and C Basins (Program 1)

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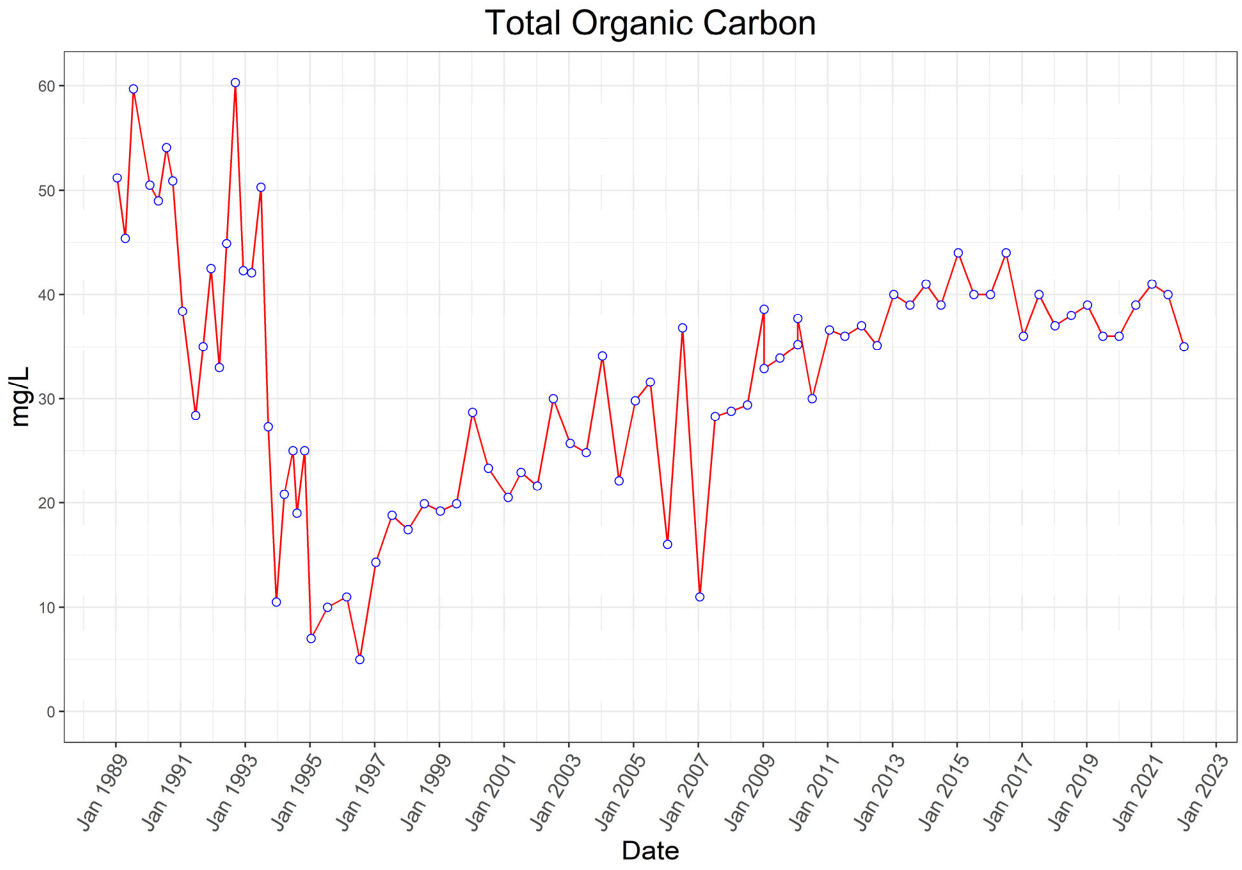

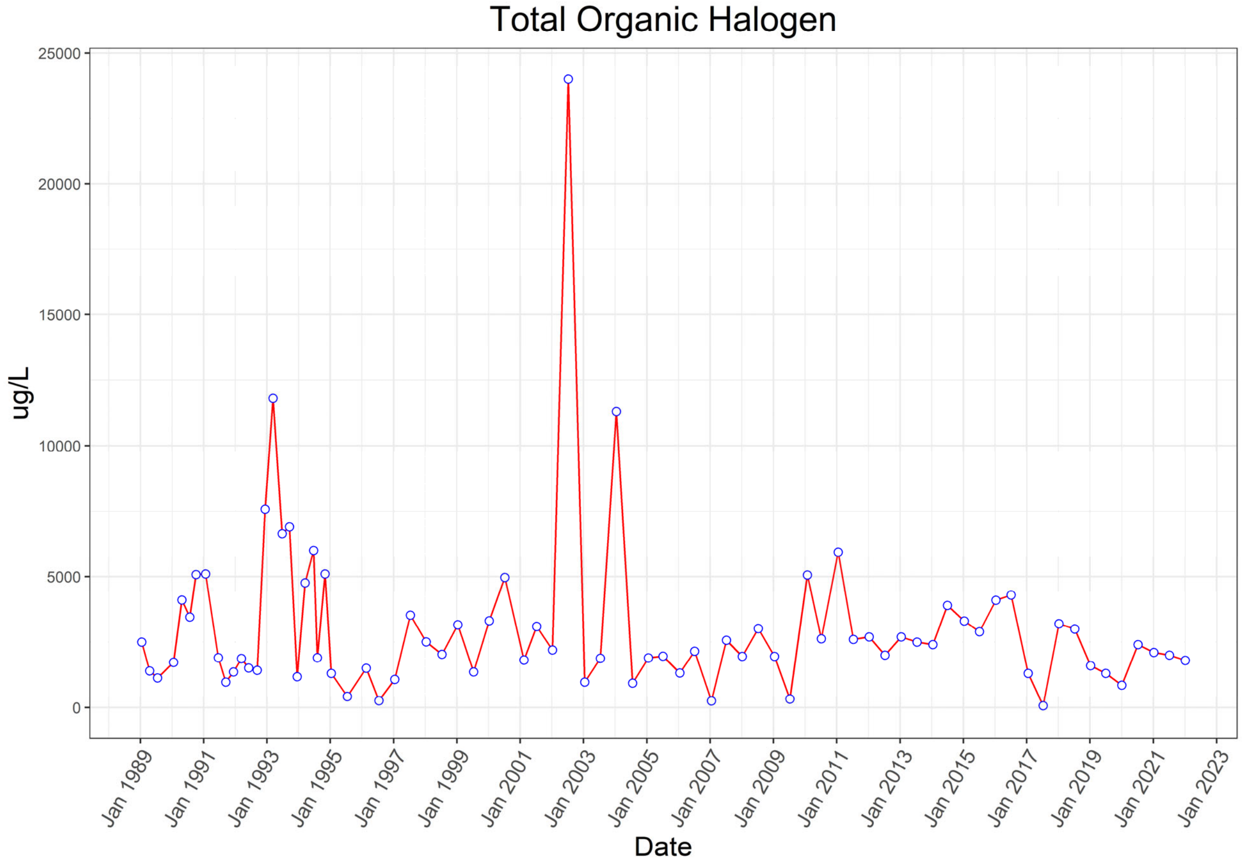

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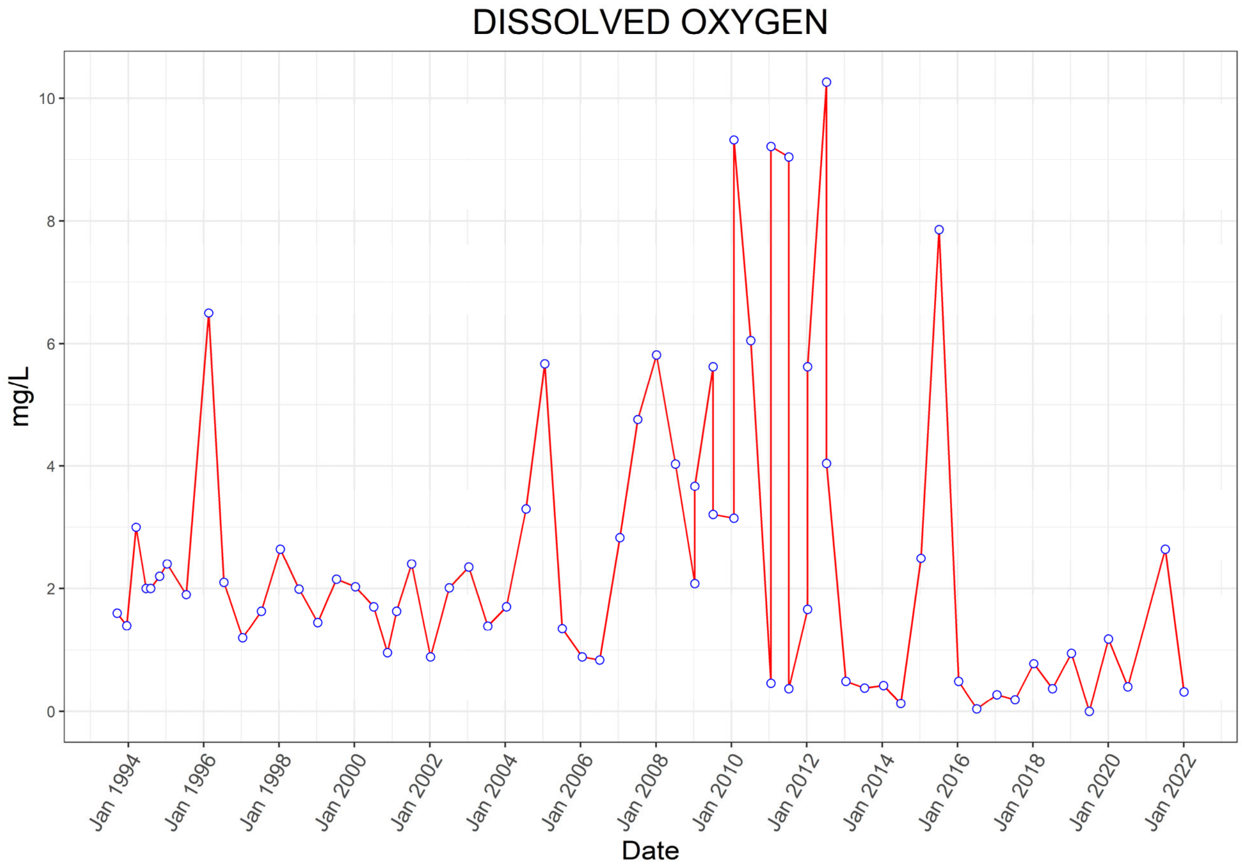

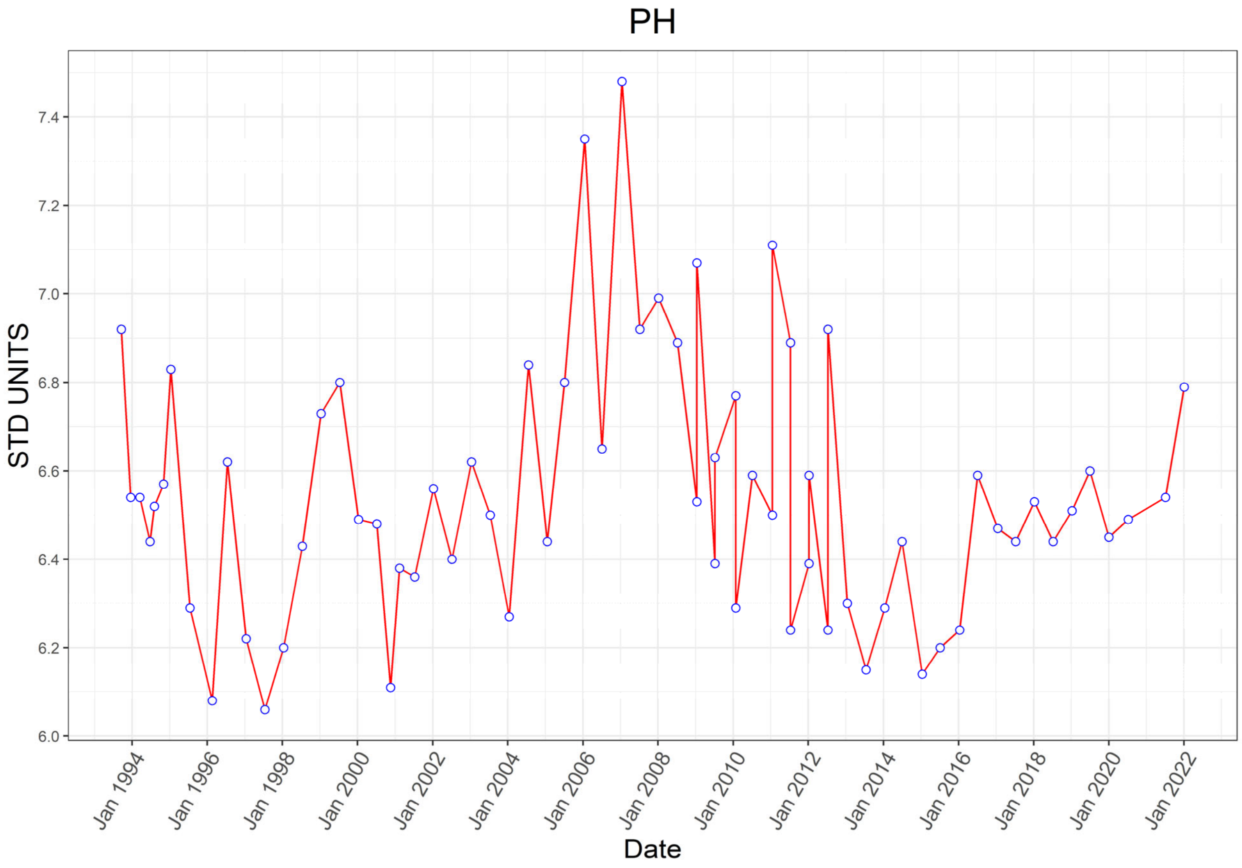

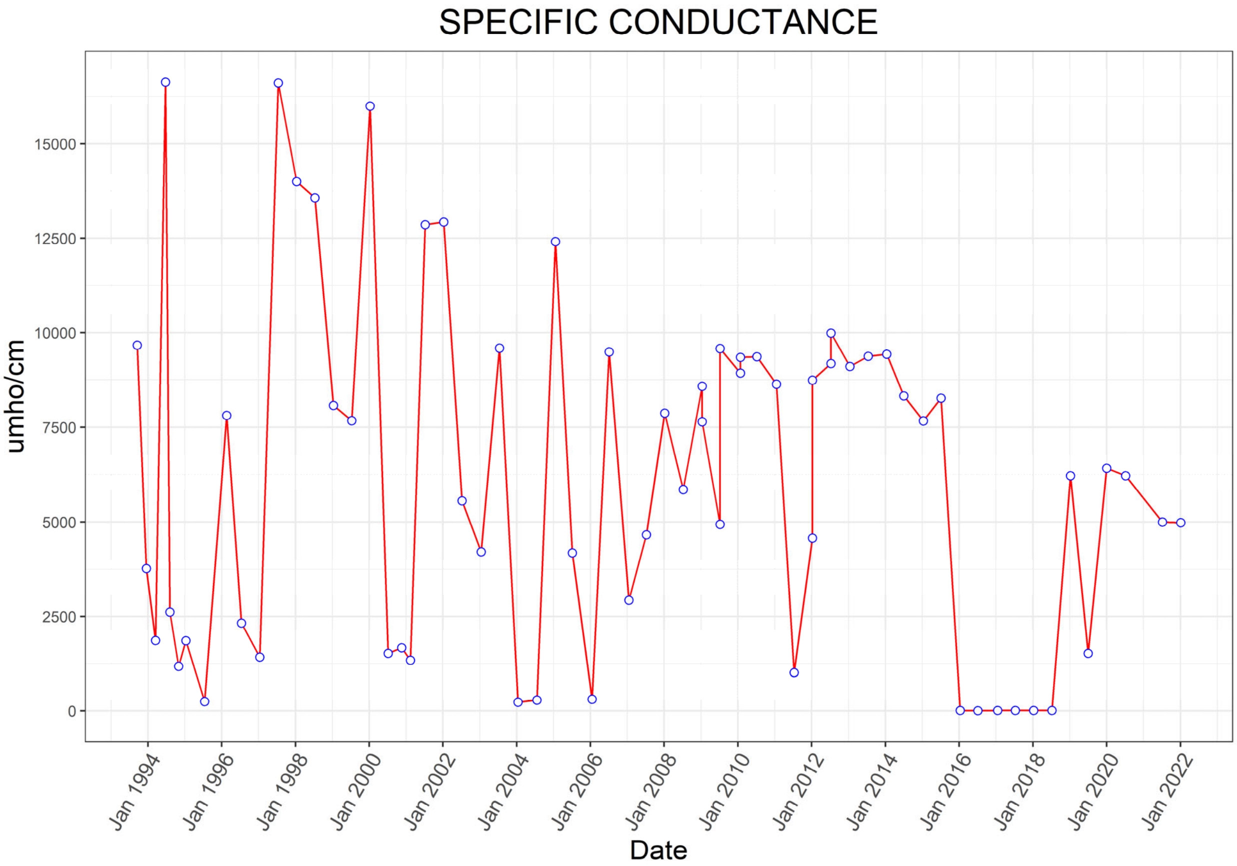
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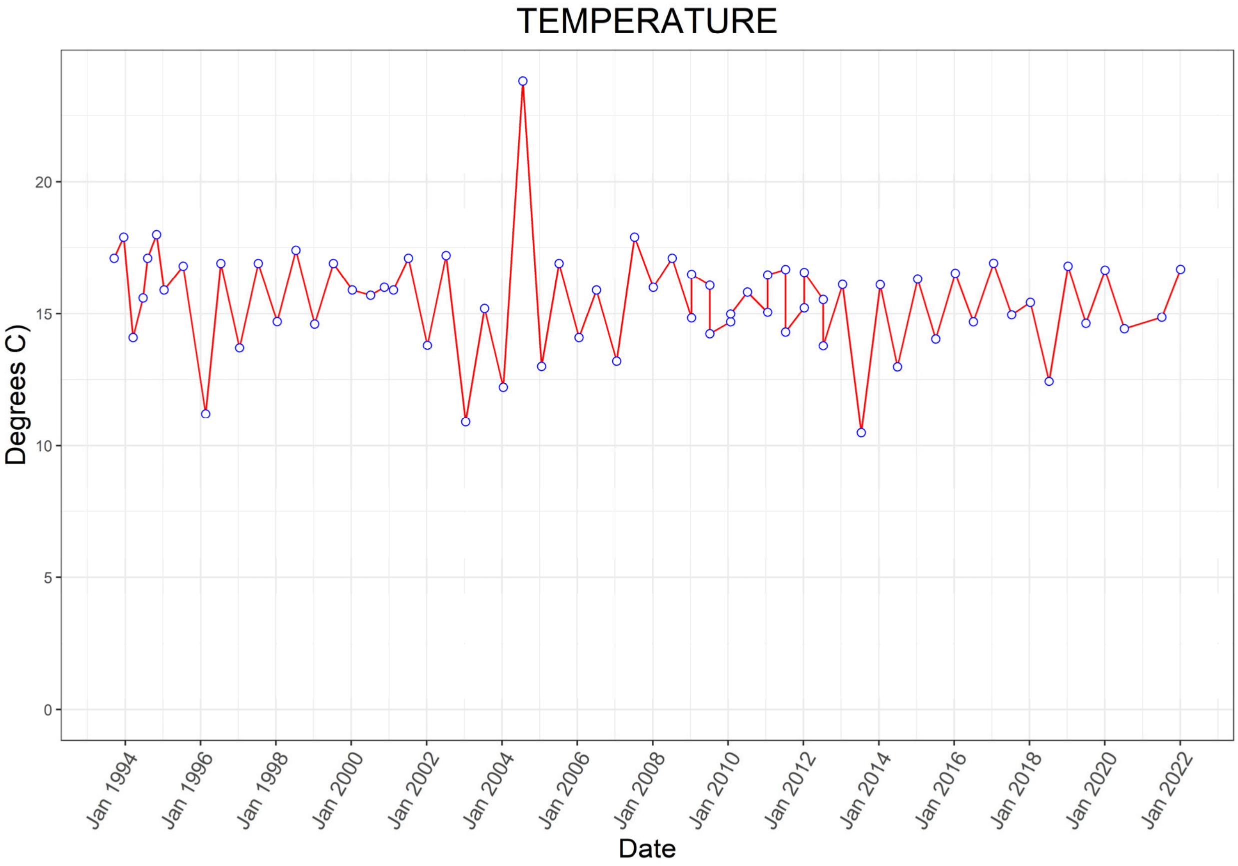
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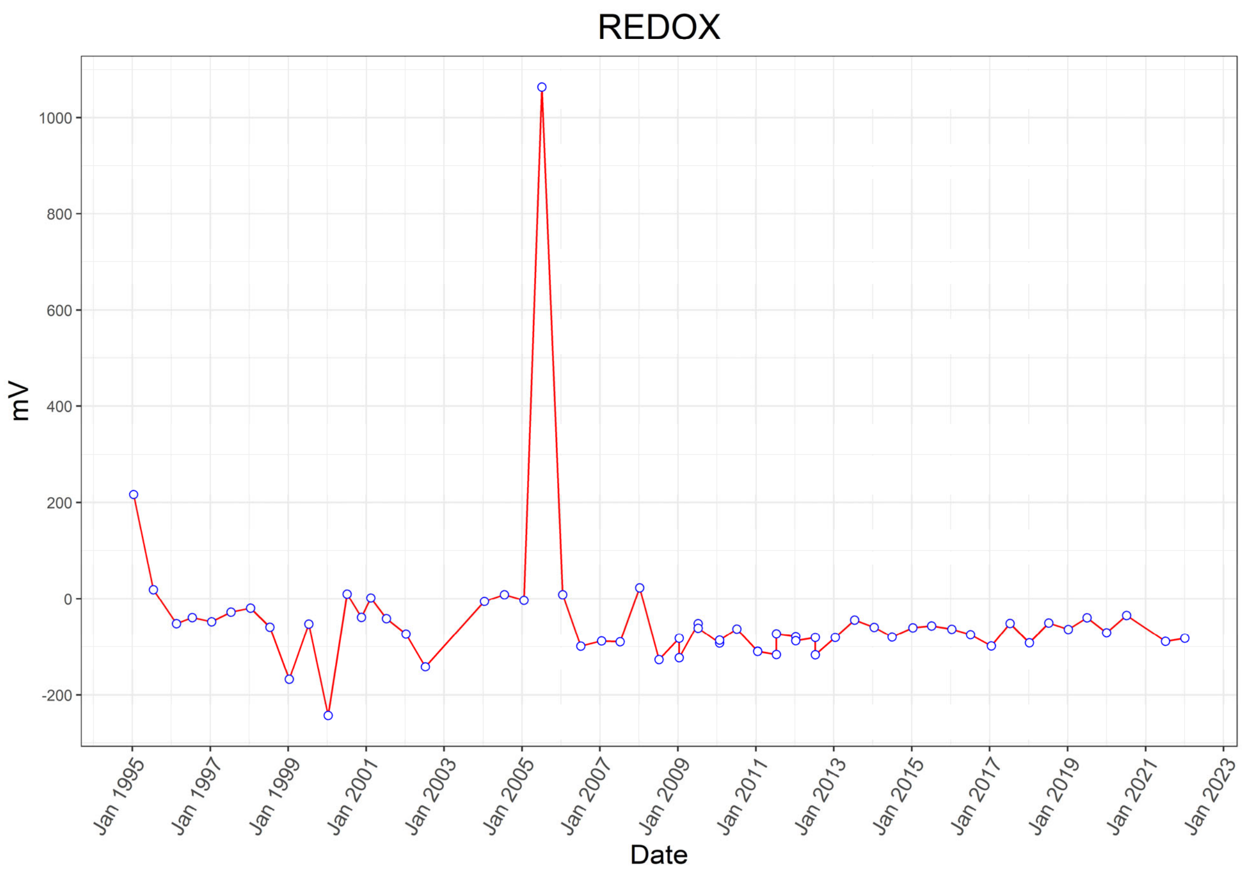
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Jan 2023

Closure and Post-Closure for the A, B, and C Basins (Program 1)

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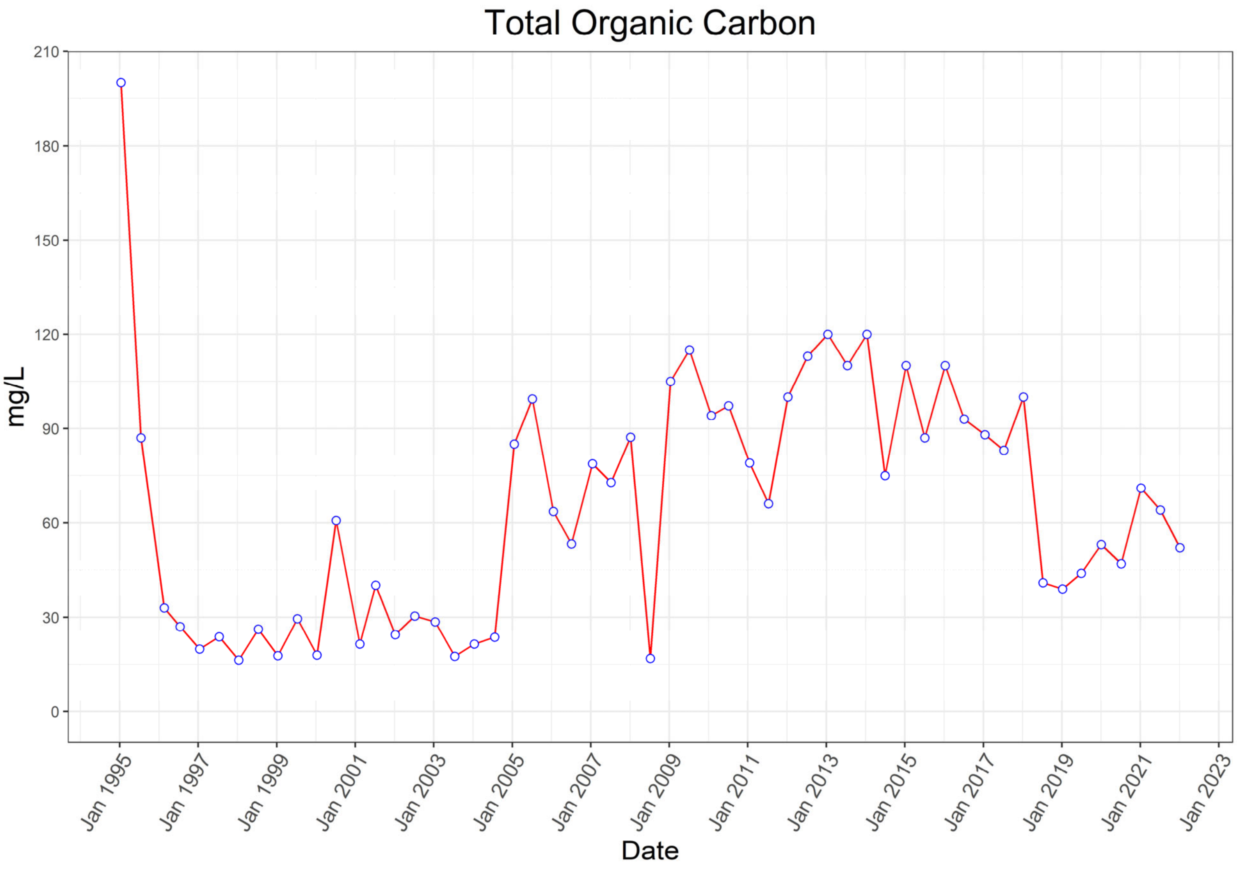

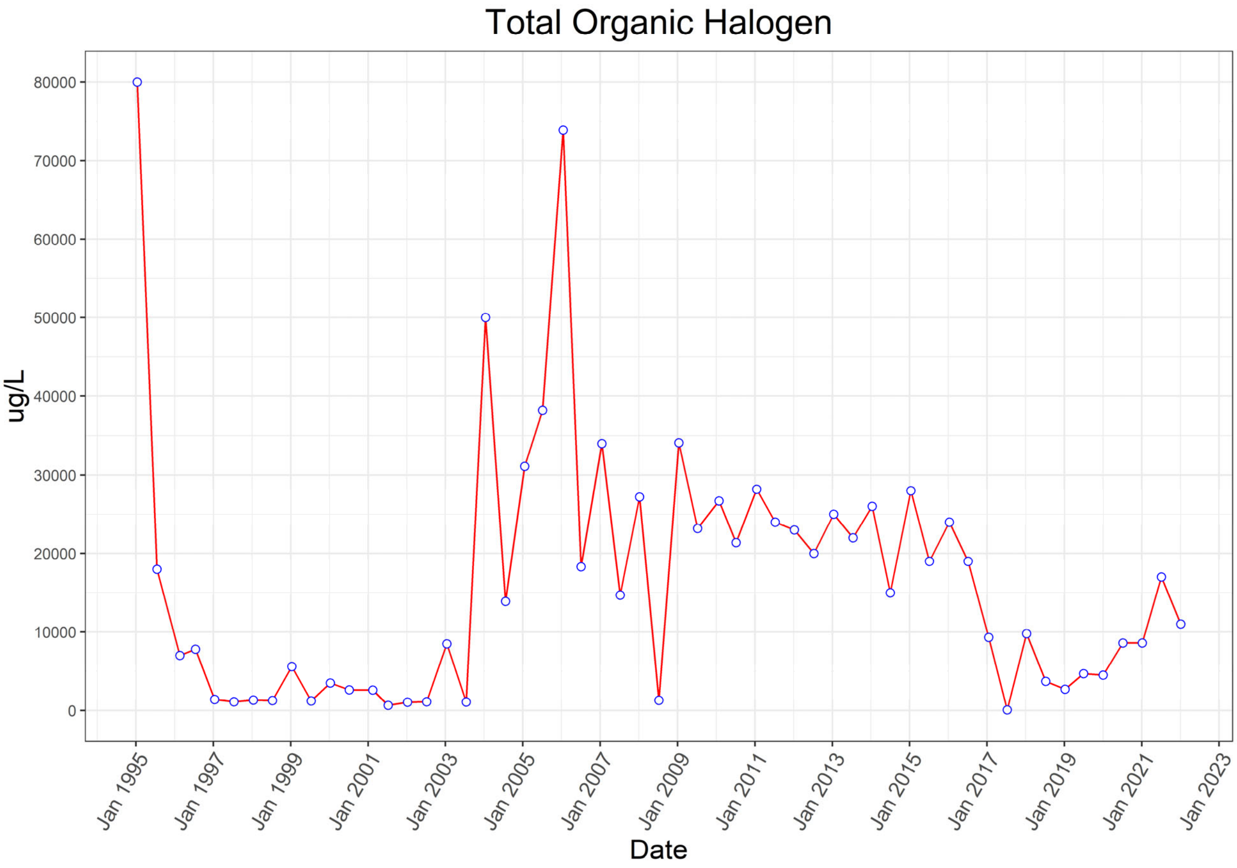

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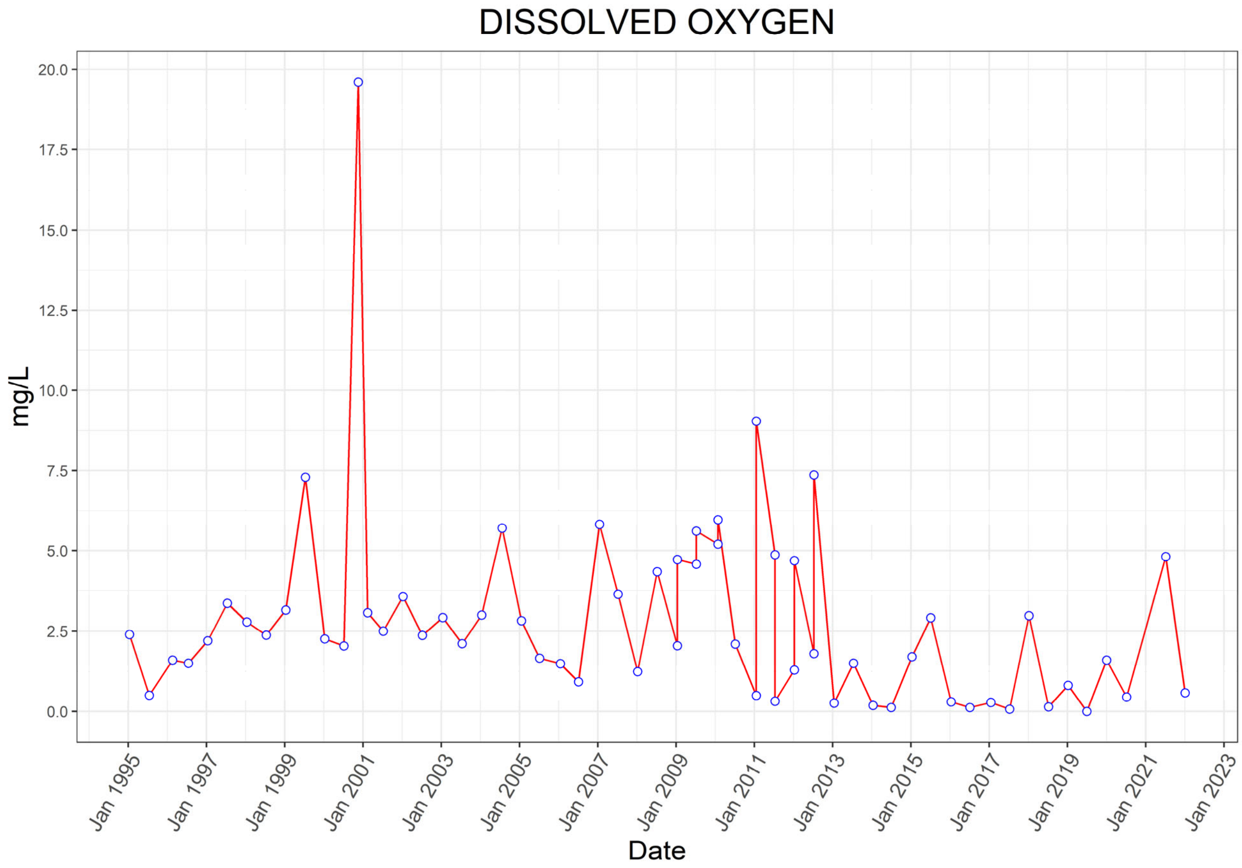

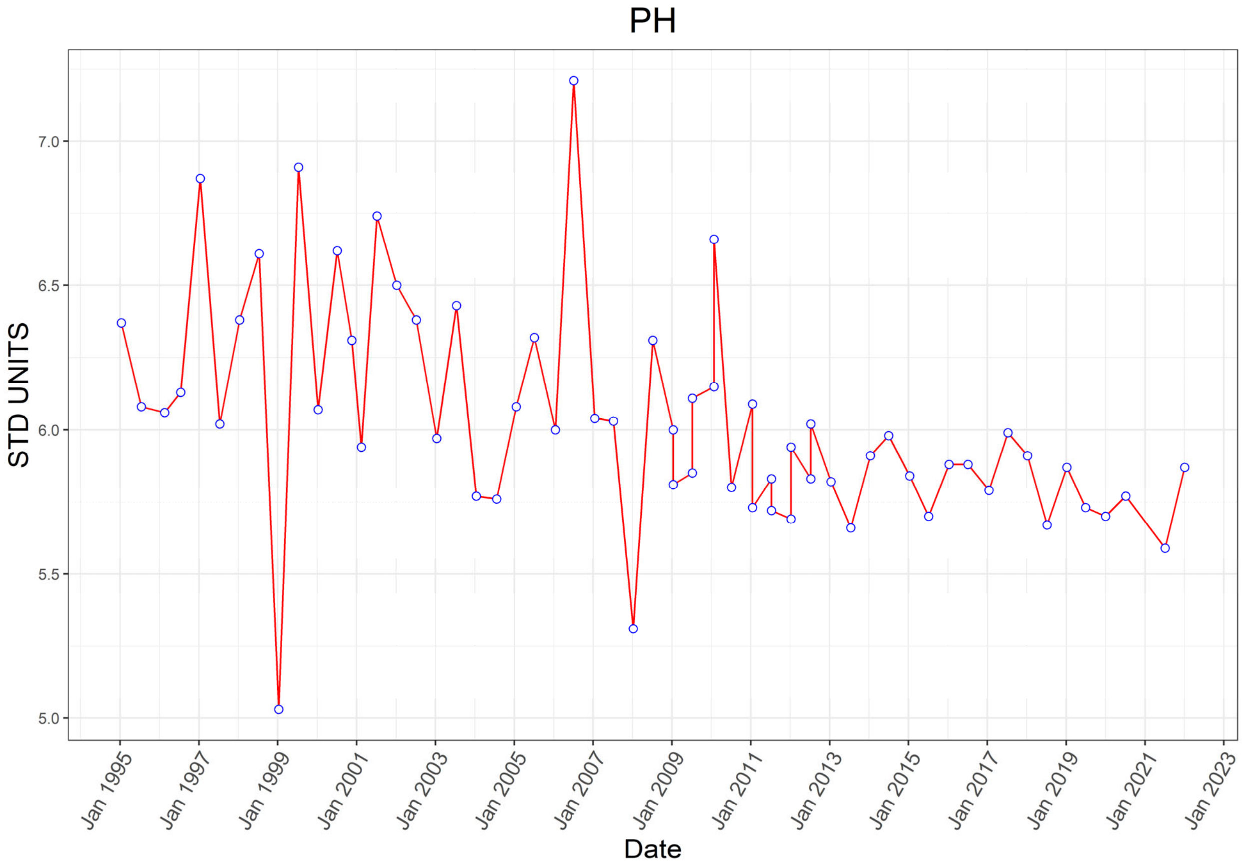

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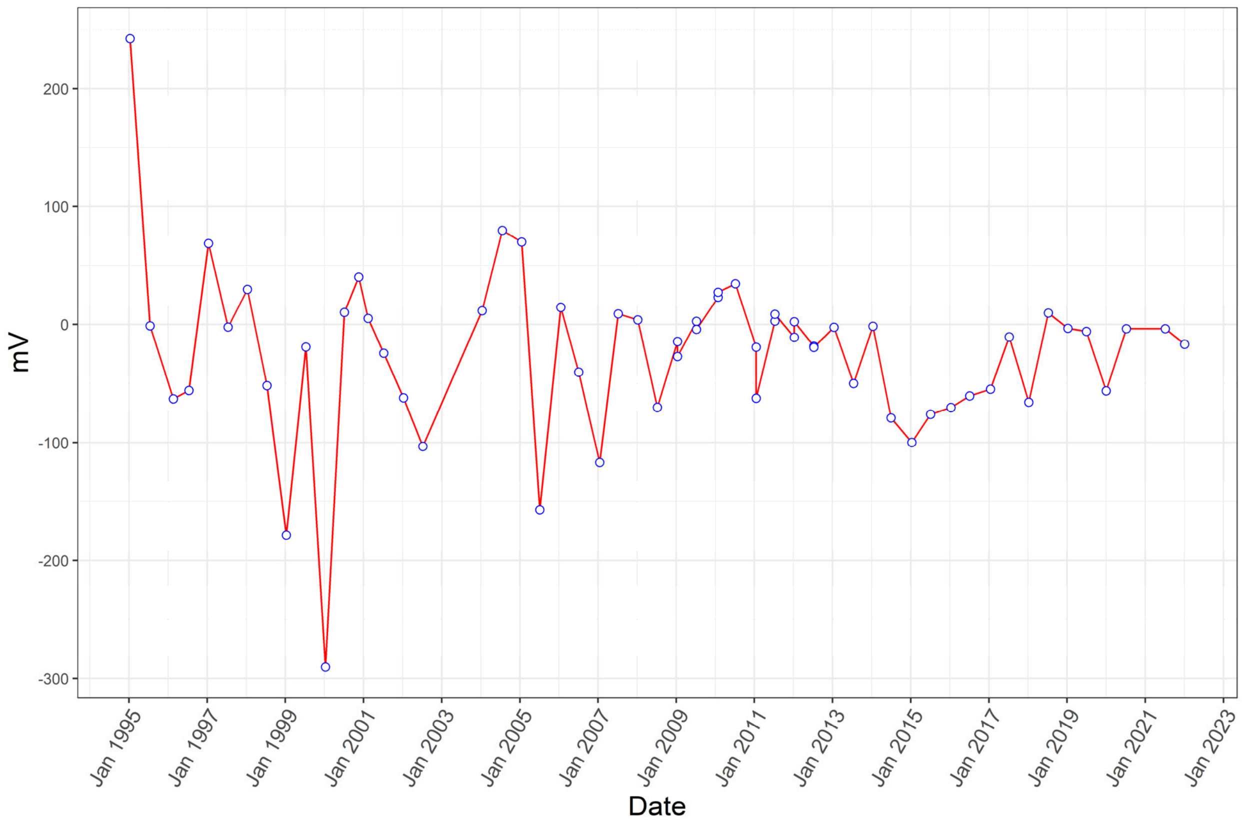

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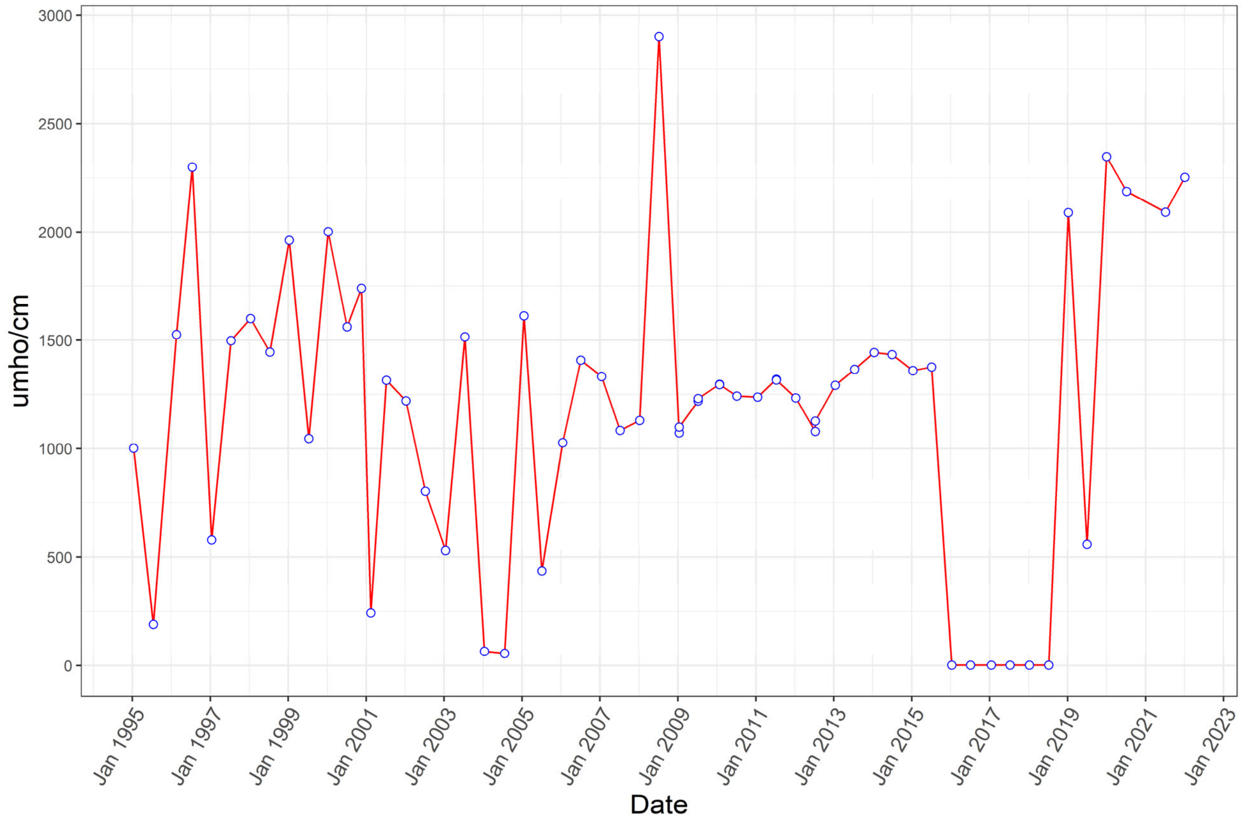

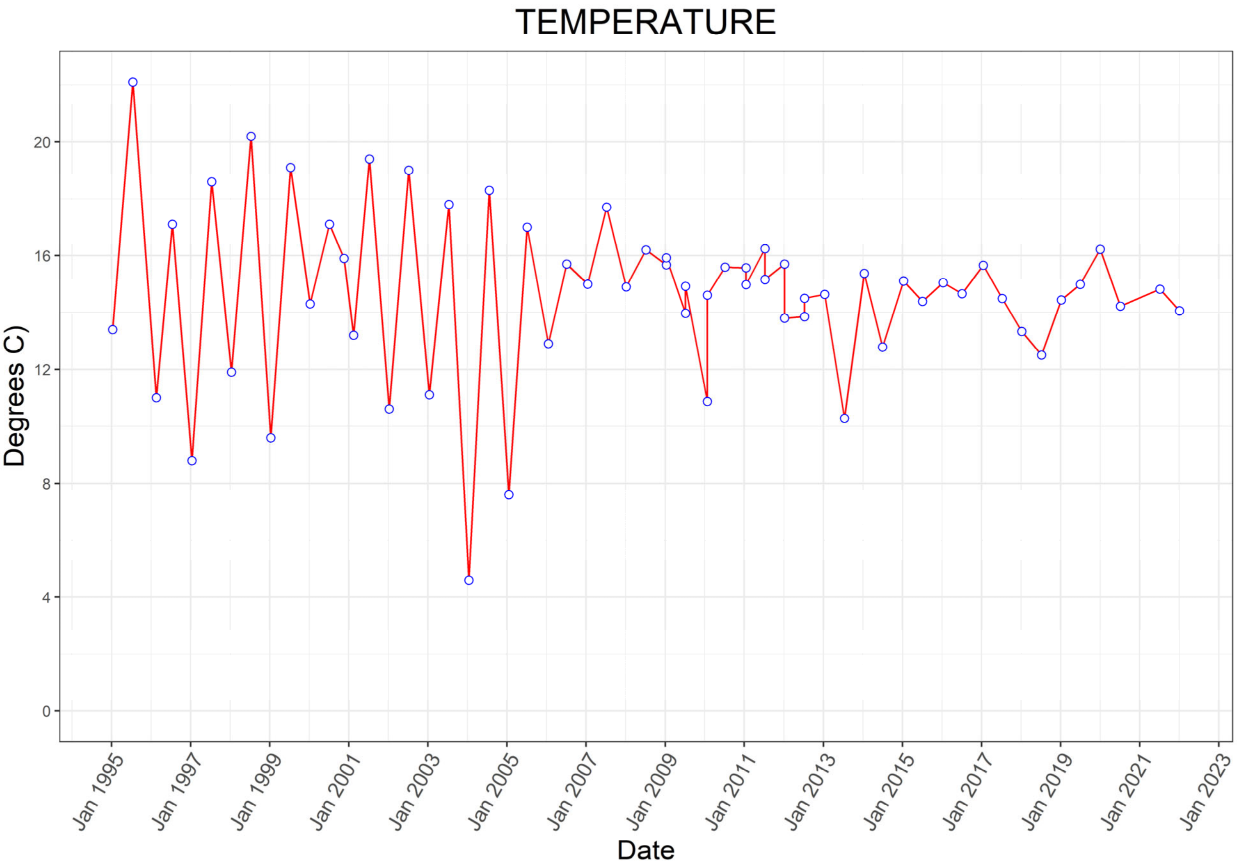
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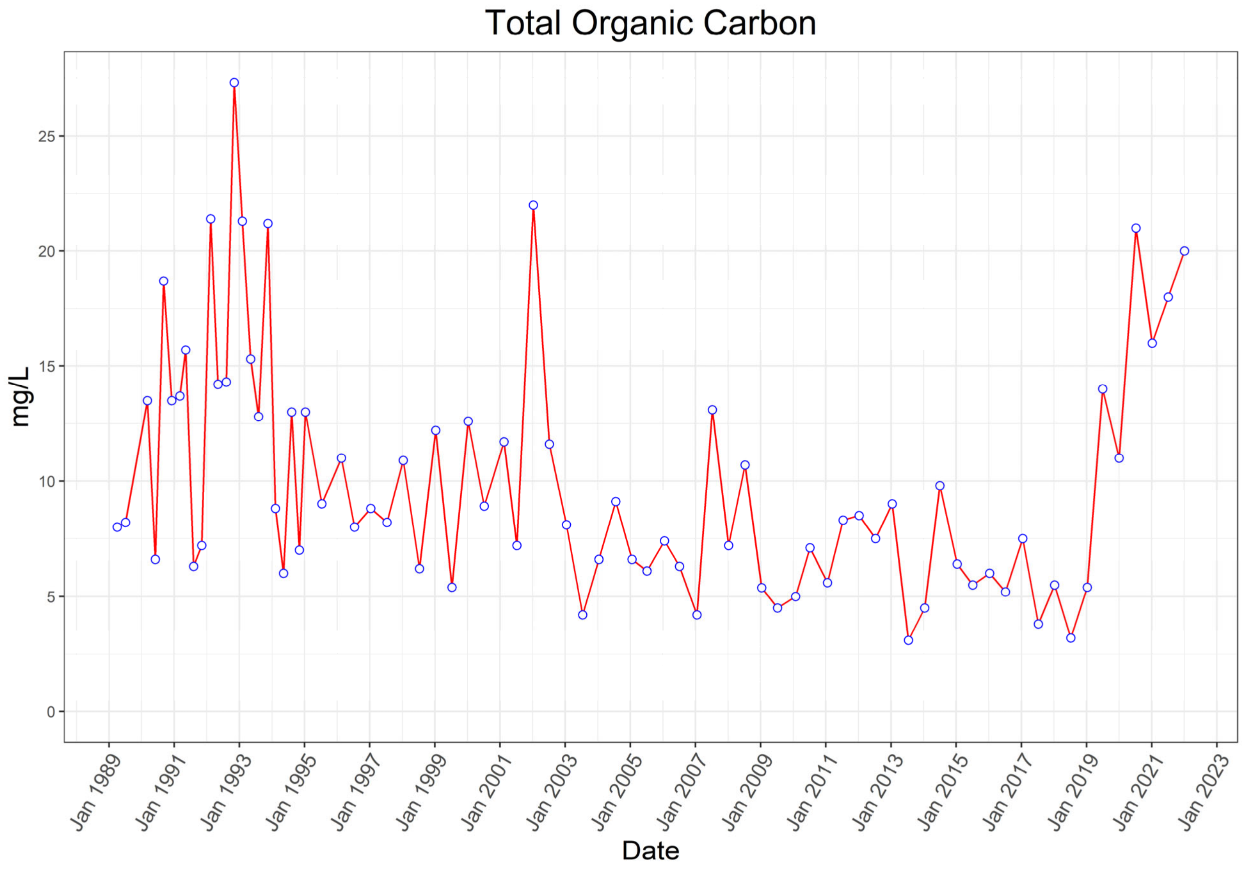
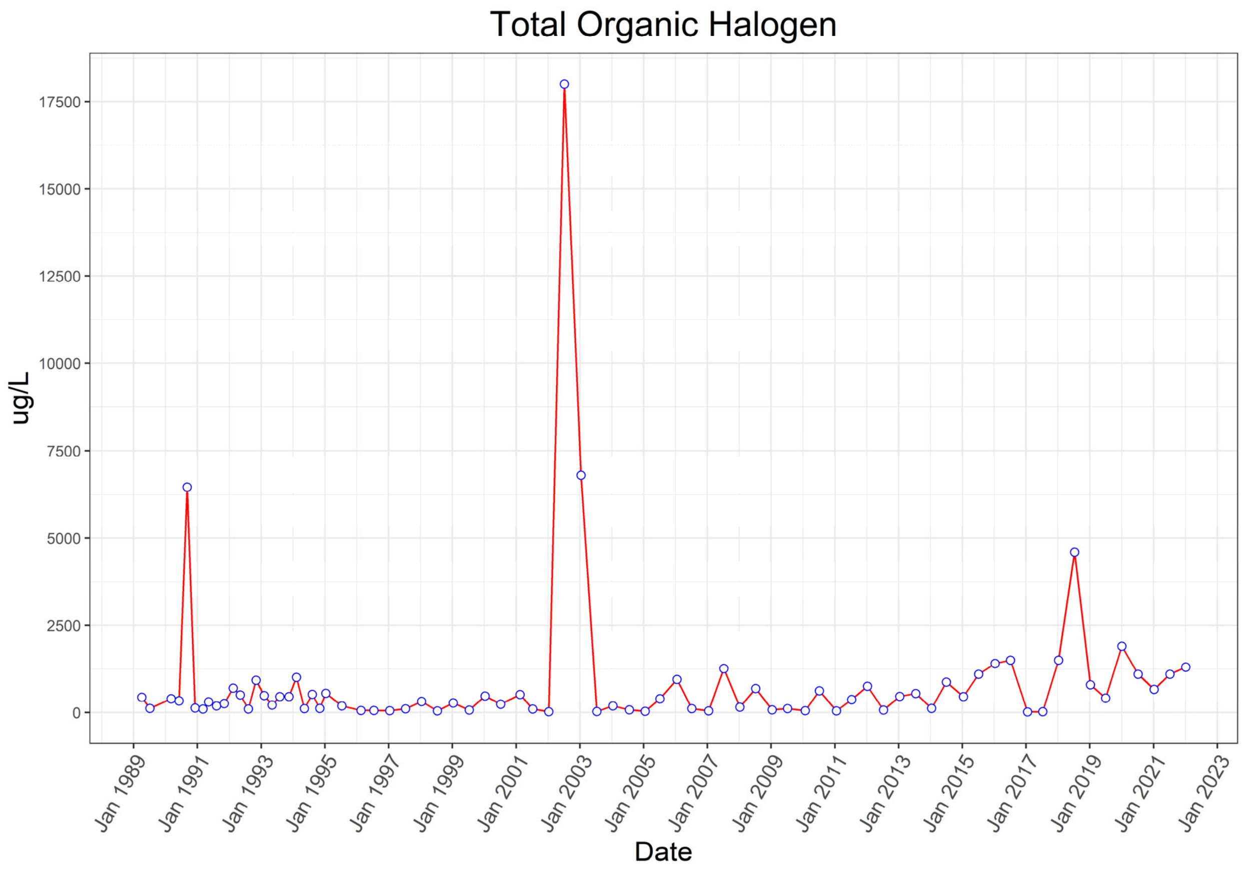
Jan 2021
Jan 2023
Date

Closure and Post-Closure for the A, B, and C Basins (Program 1)

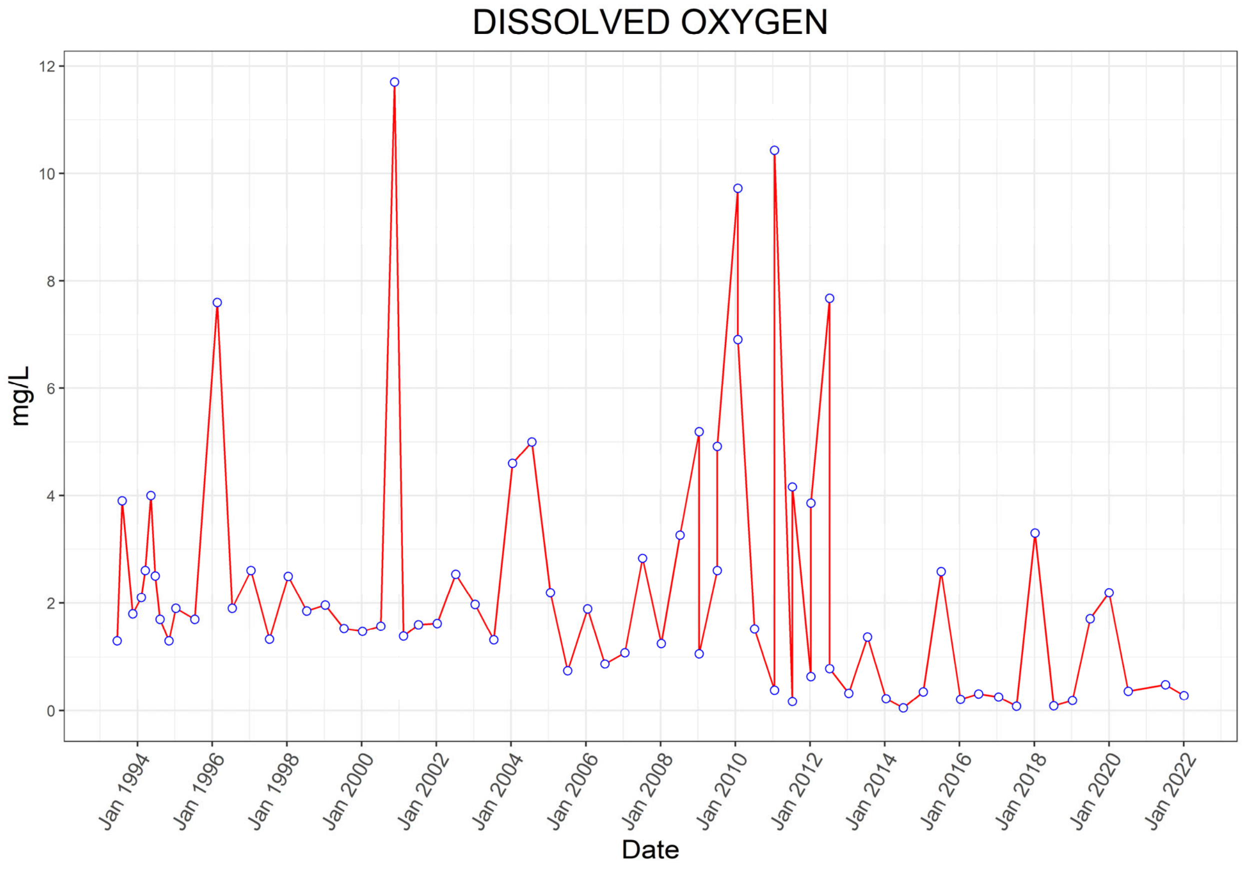
Well Name:

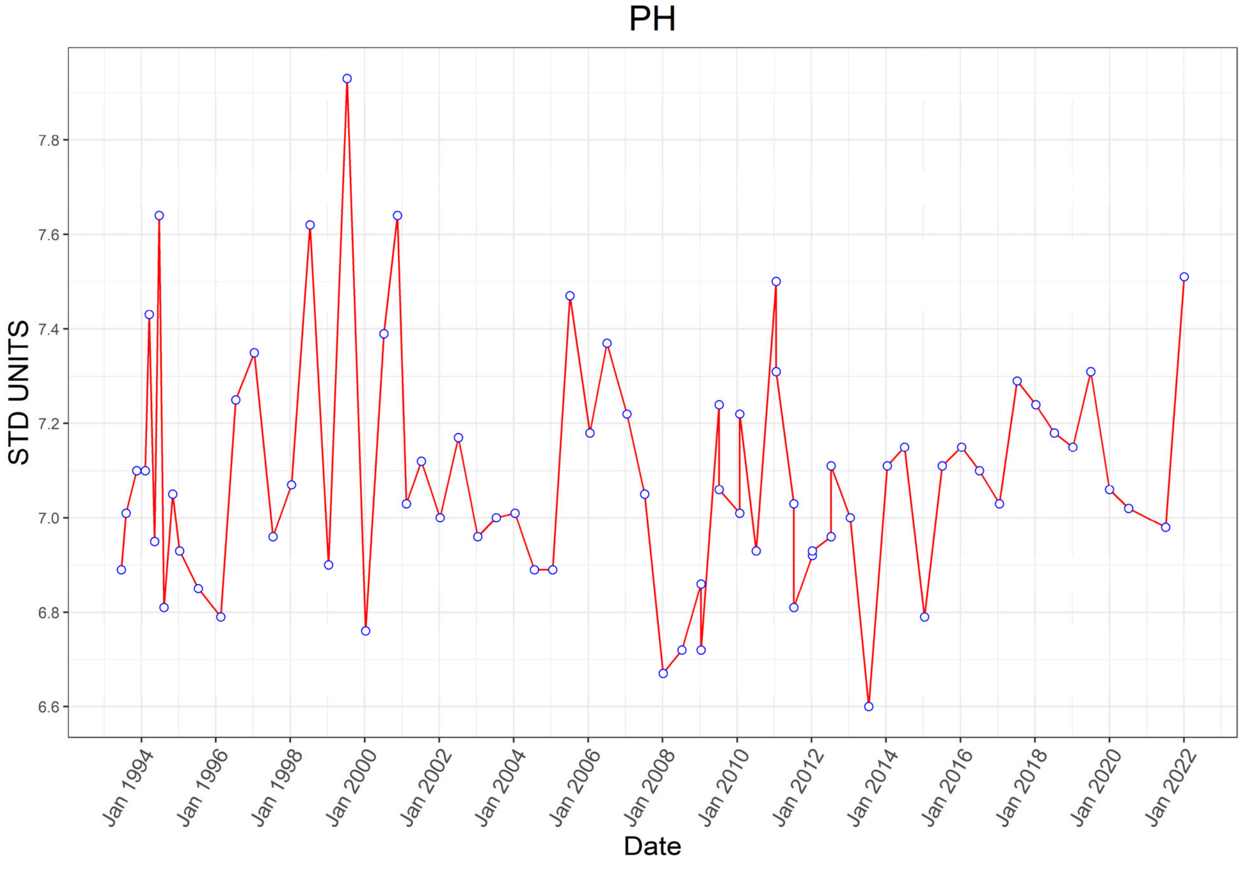


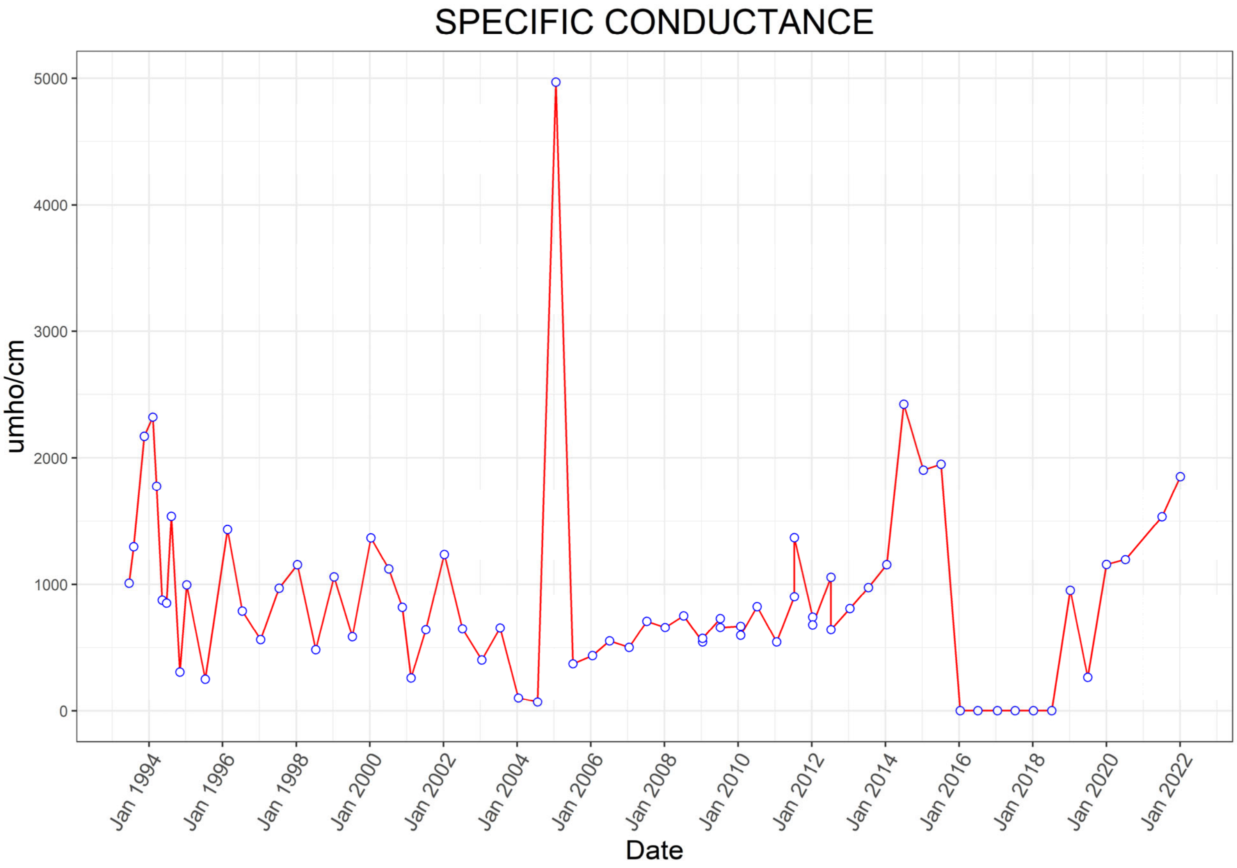


Well Name:

Field Parameters






SPECIFIC CONDUCTANCE
umho/cm
5000
4000
3000
2000
1000
0
Jan 1994
Jan 1996
Jan 1998
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Jan 2002
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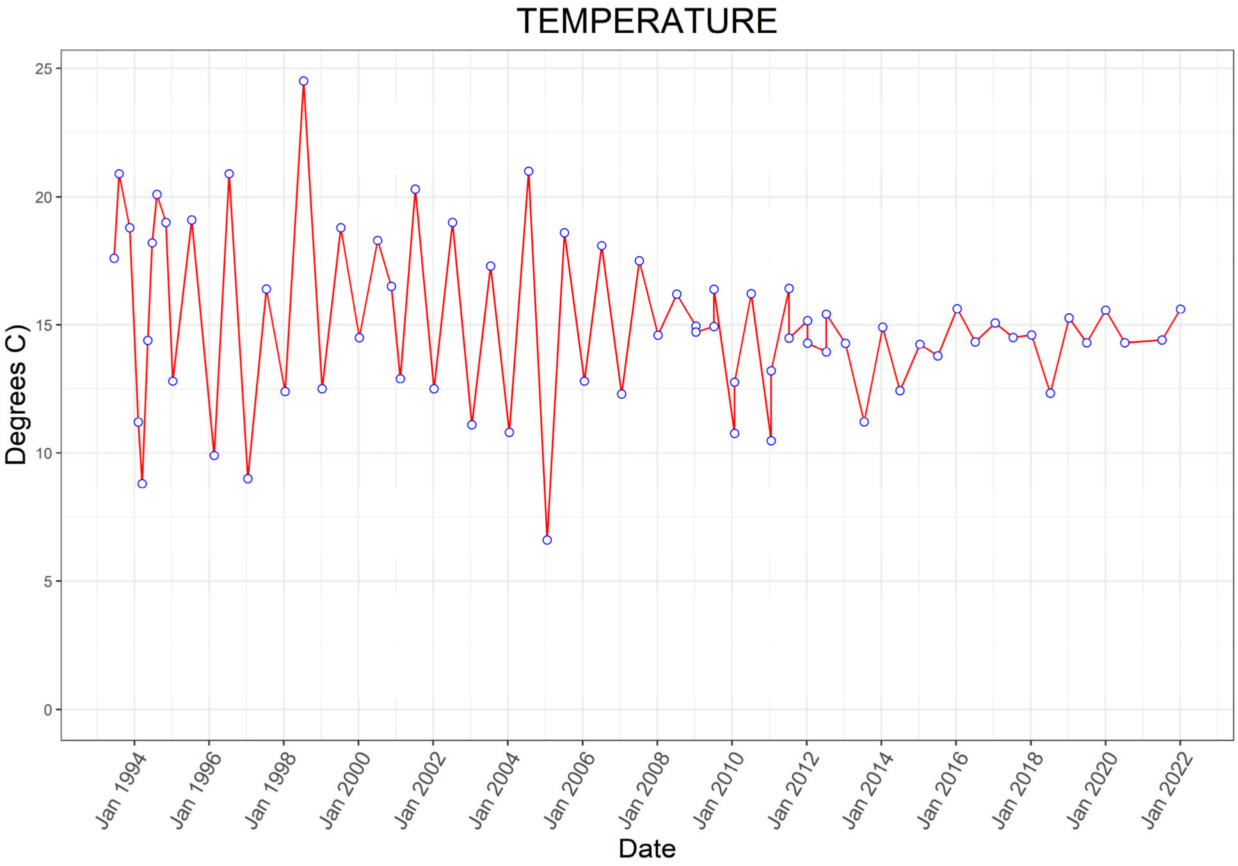
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


TEMPERATURE
Degrees C)
25
20
15
10
5
0
Jan 1994
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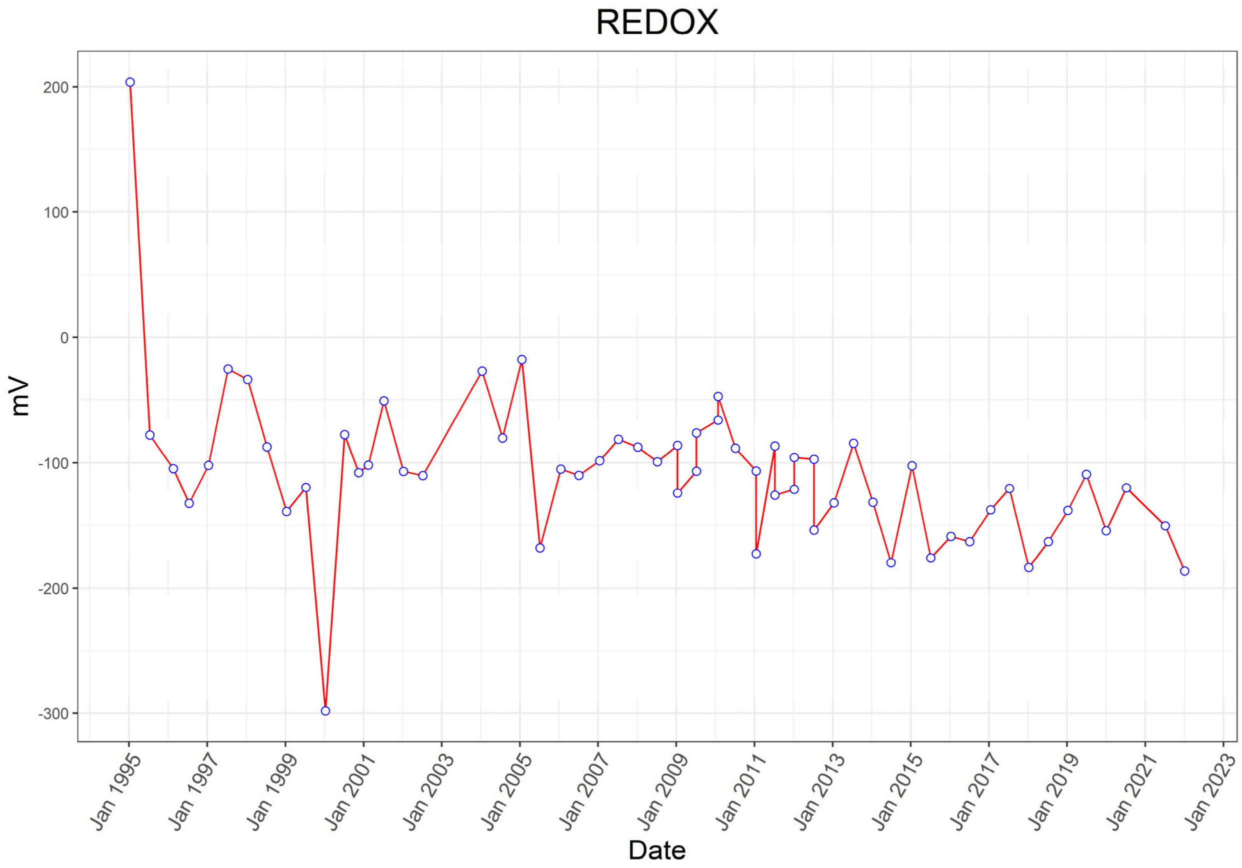
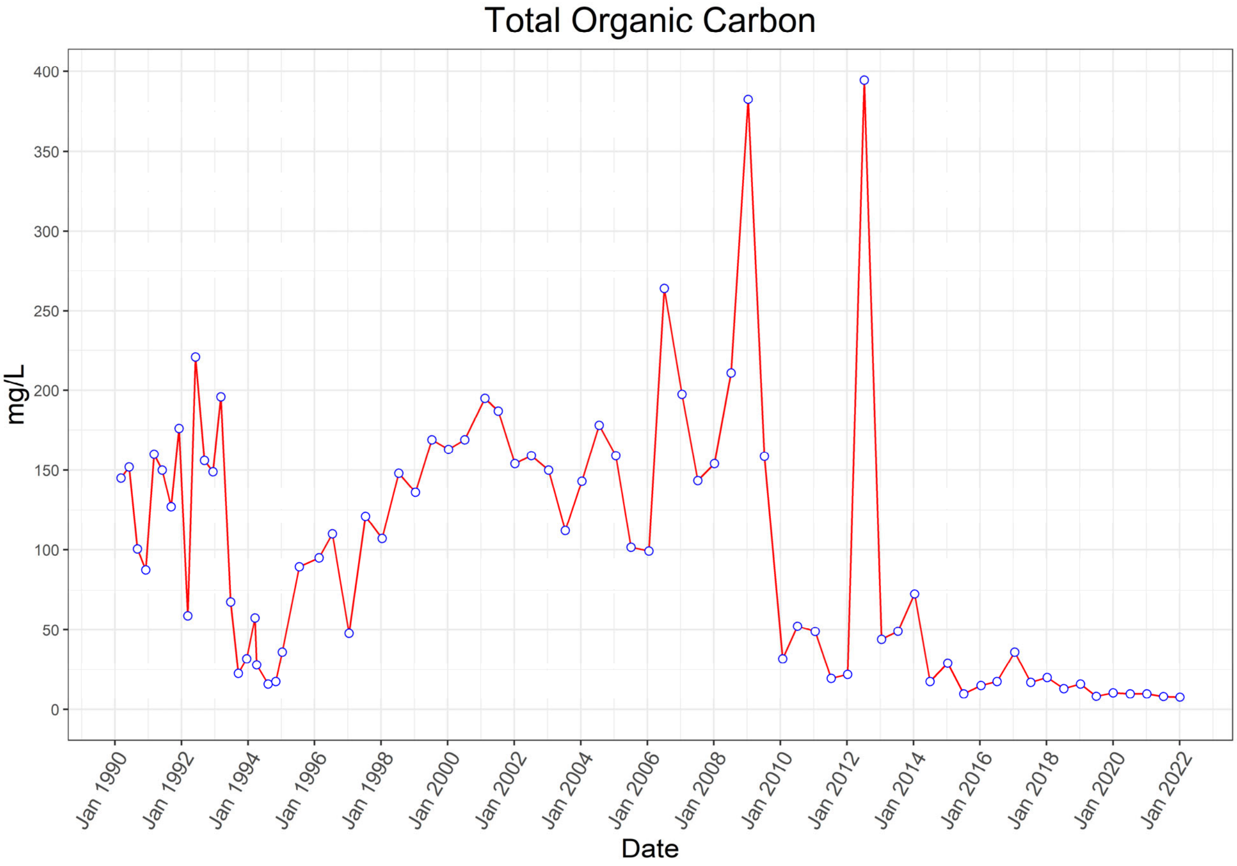
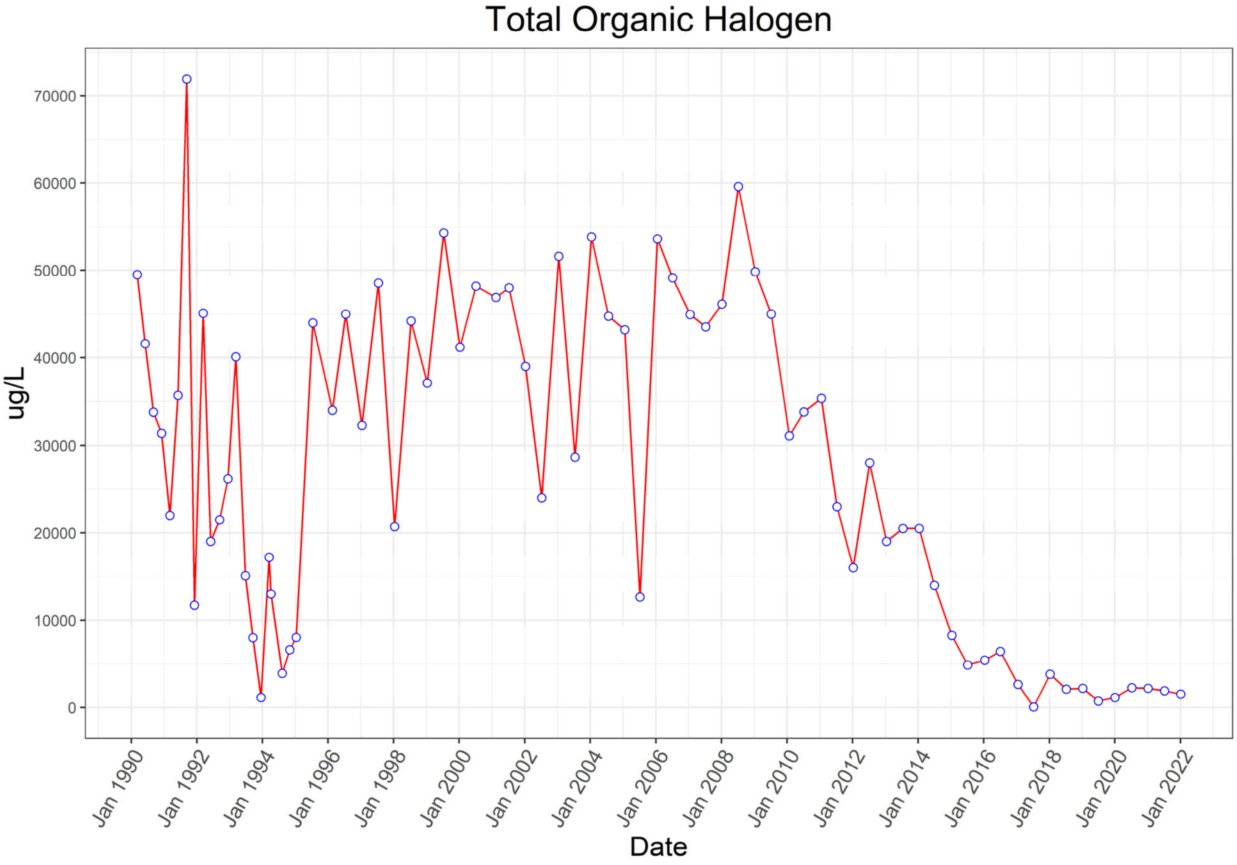
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


REDOX
200
100
0
-100
-200
-300
mV
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

Closure and Post-Closure for the A, B, and C Basins (Program 1)

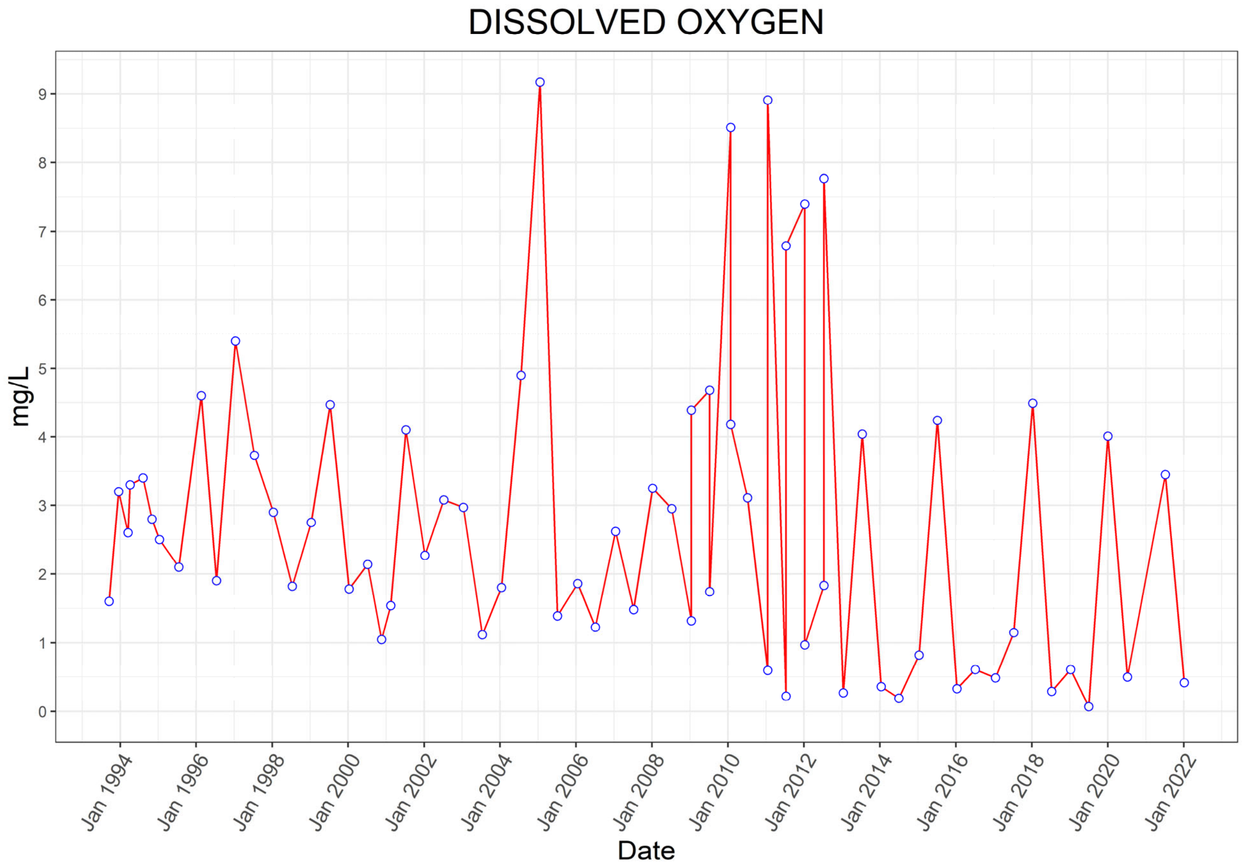
Well Name: K13-M02B

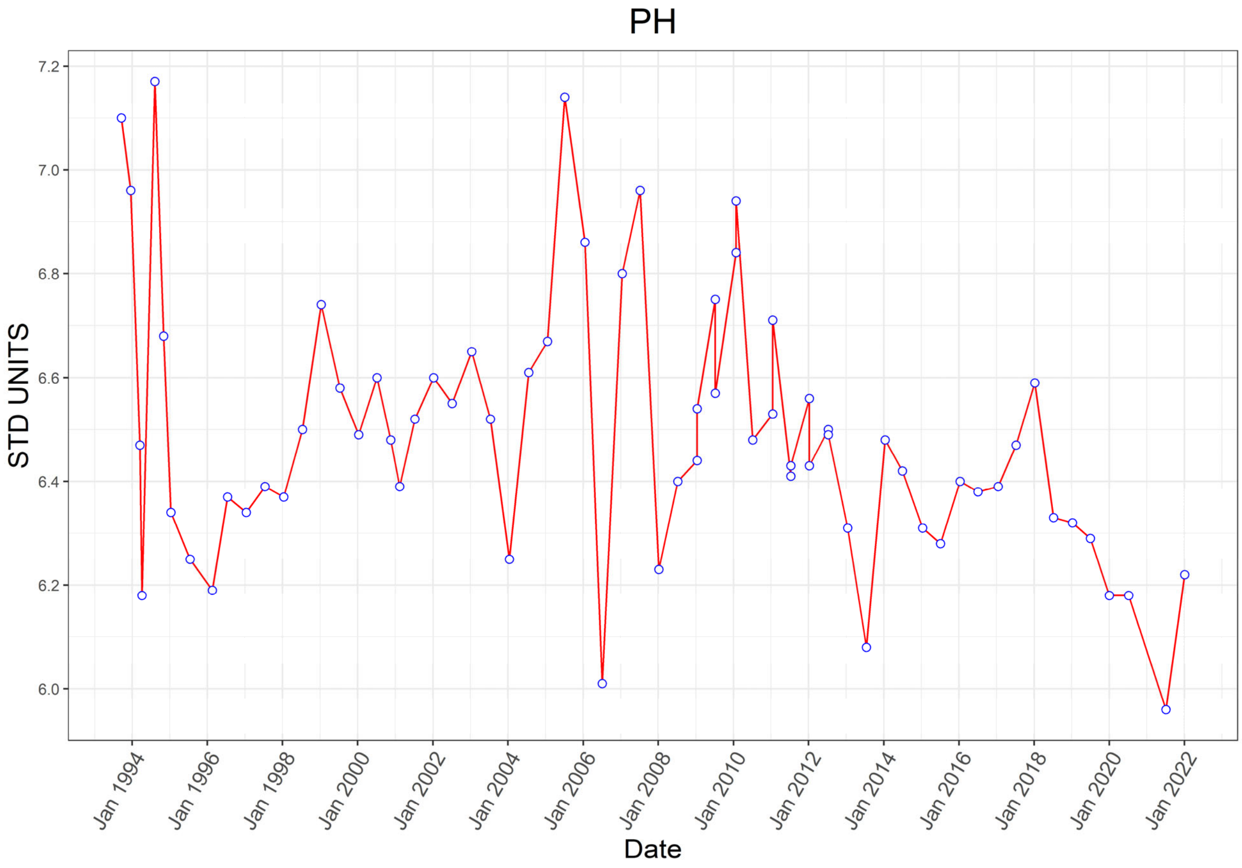


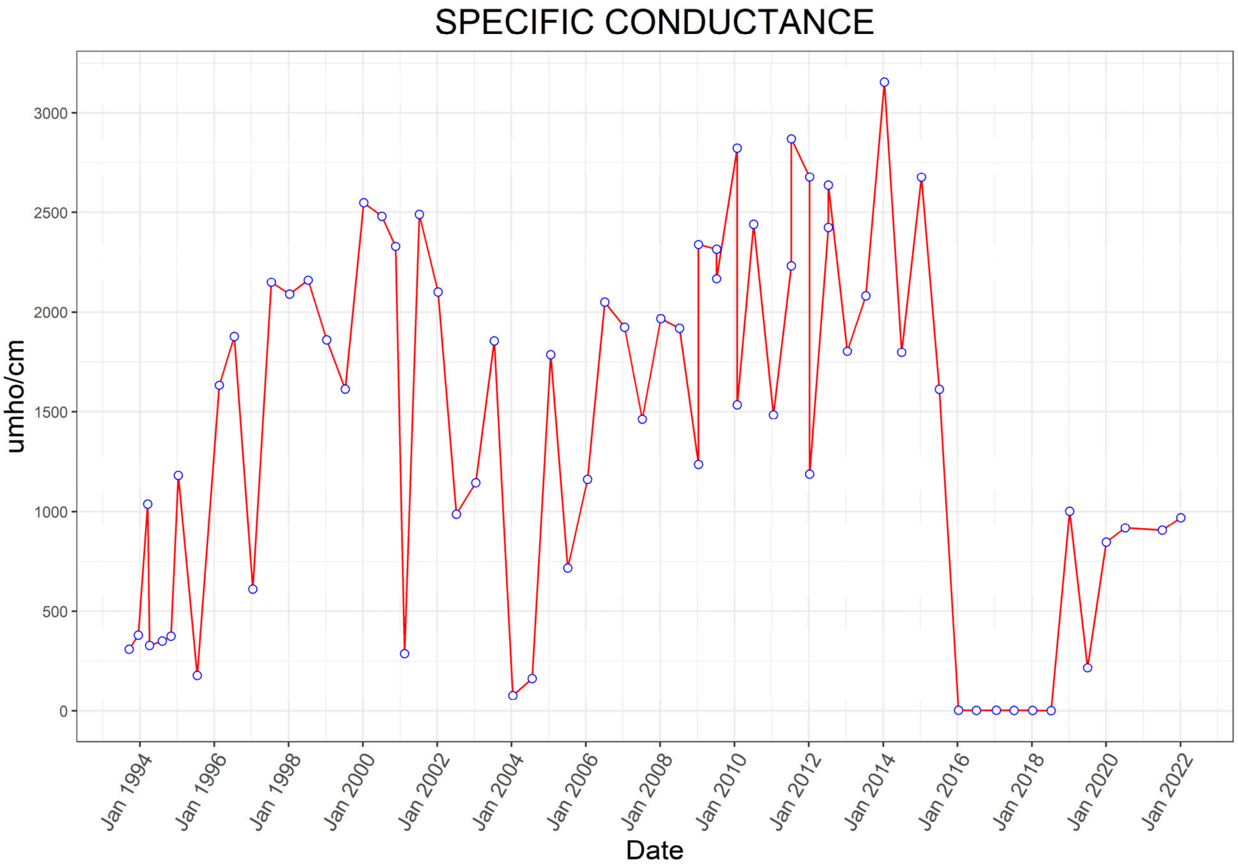


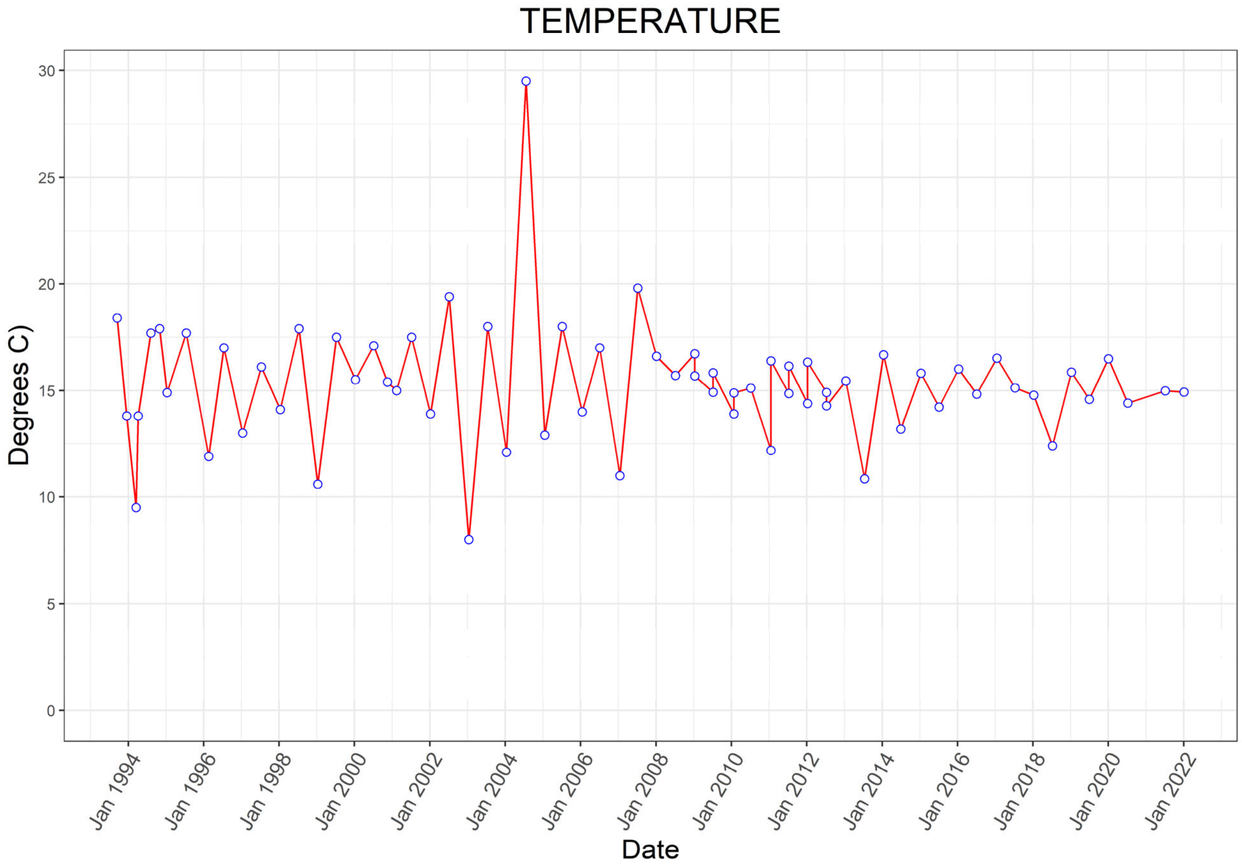
Well Name:

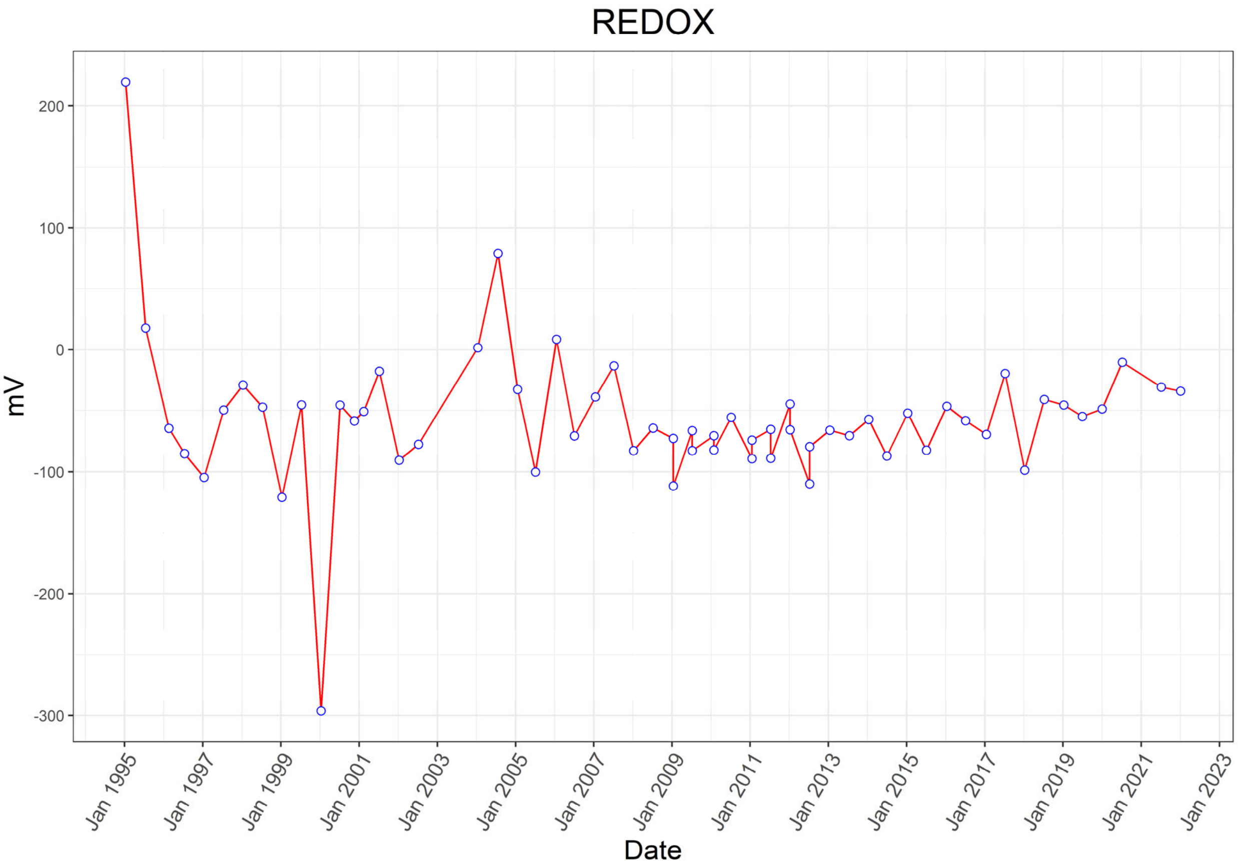
Field Parameters






SPECIFIC CONDUCTANCE


TEMPERATURE


REDOX
mV
200
100
0
-100
-200
-300
Date
Jan 1995
Jan 1997
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Jan 2001
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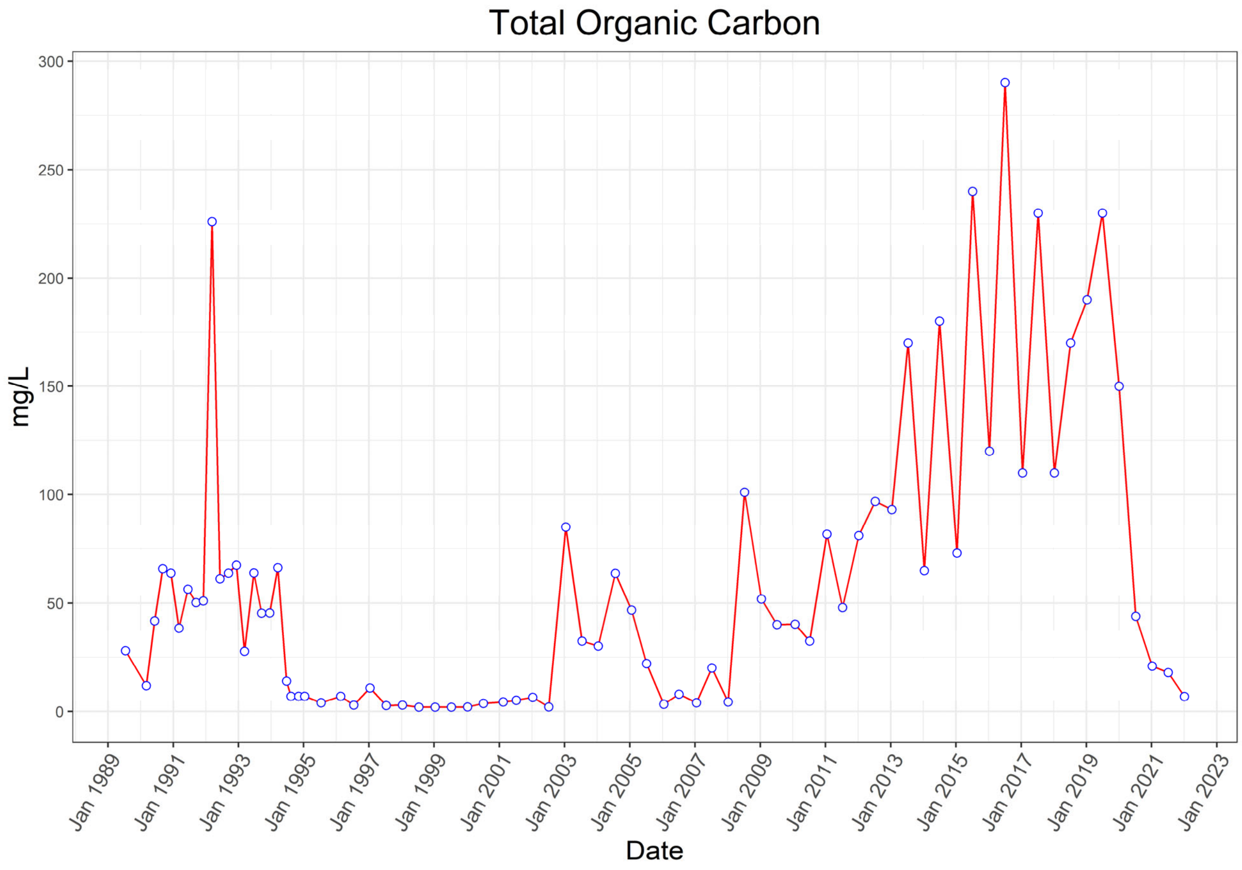
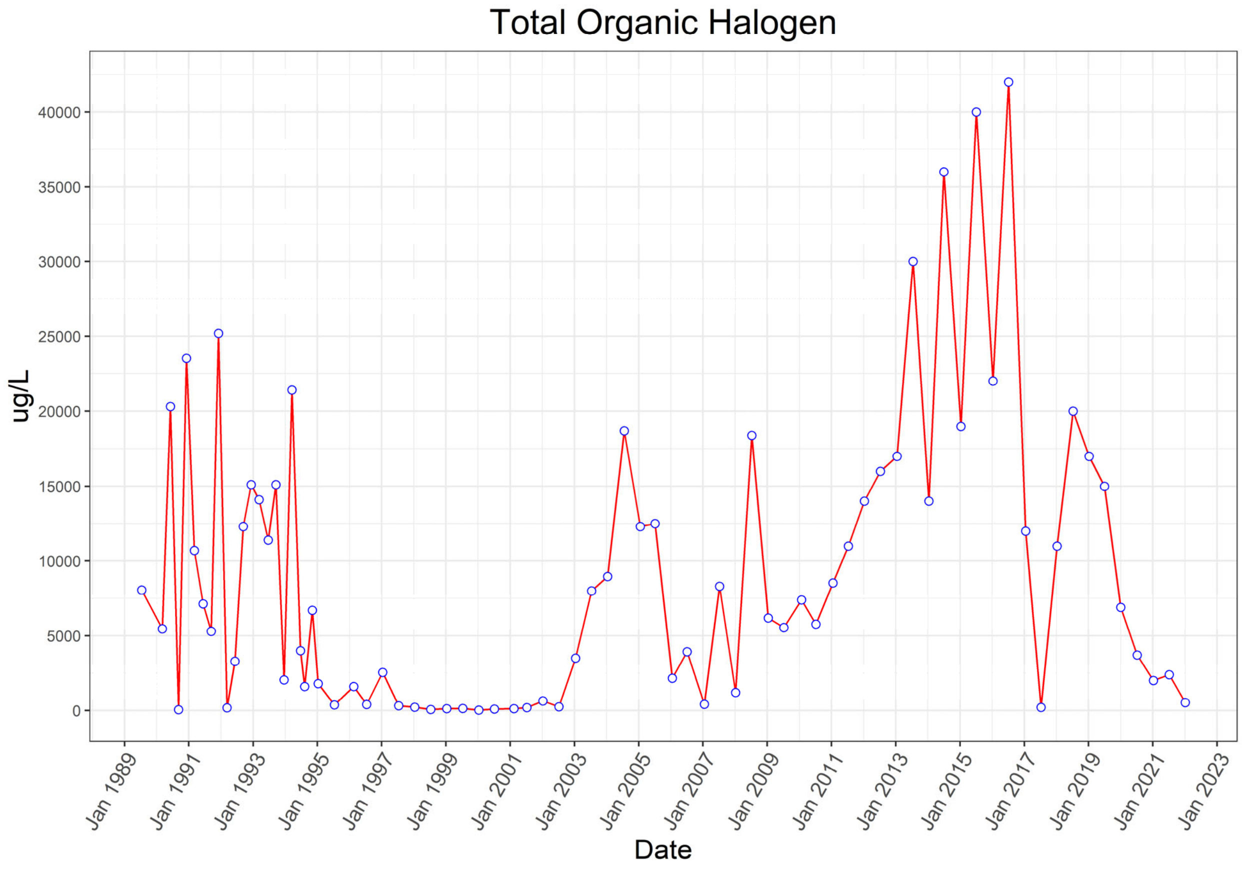
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

Closure and Post-Closure for the A, B, and C Basins (Program 1)

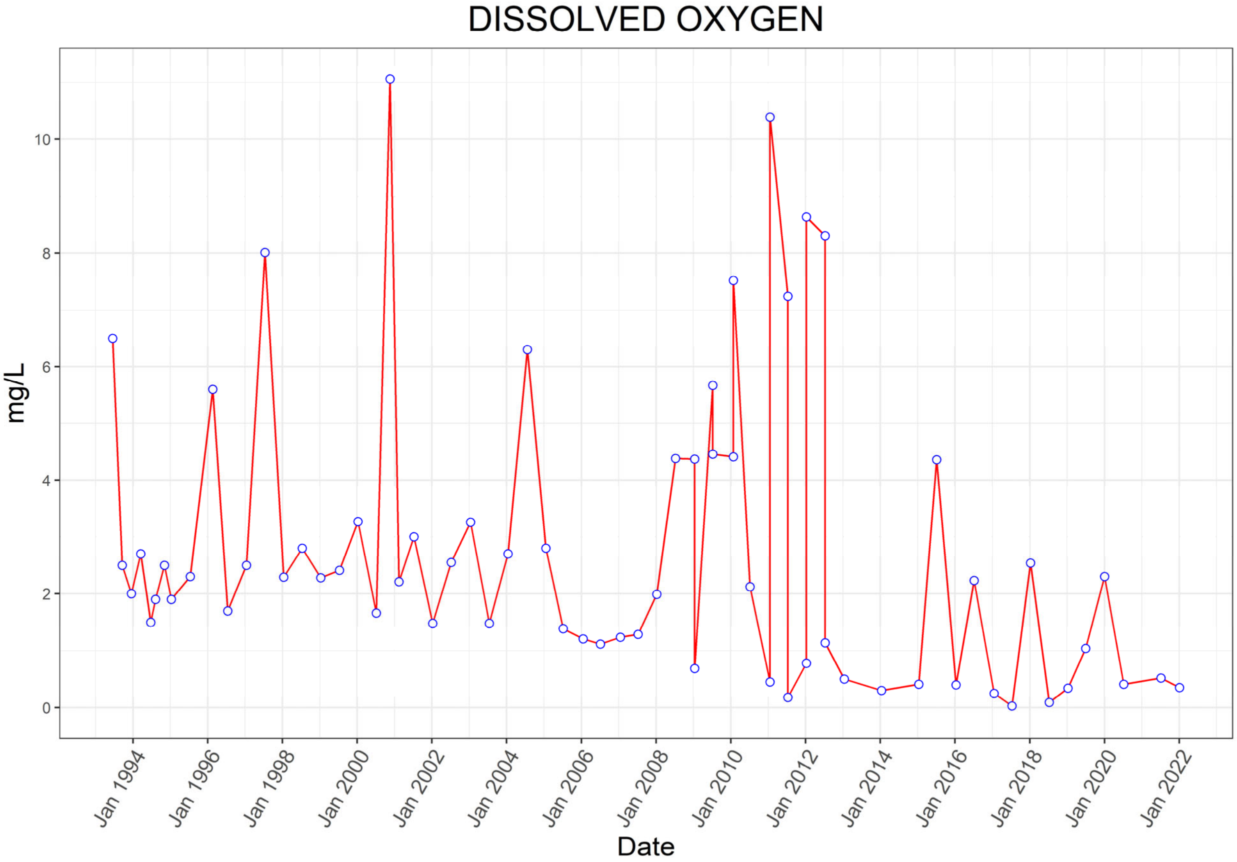
Well Name:

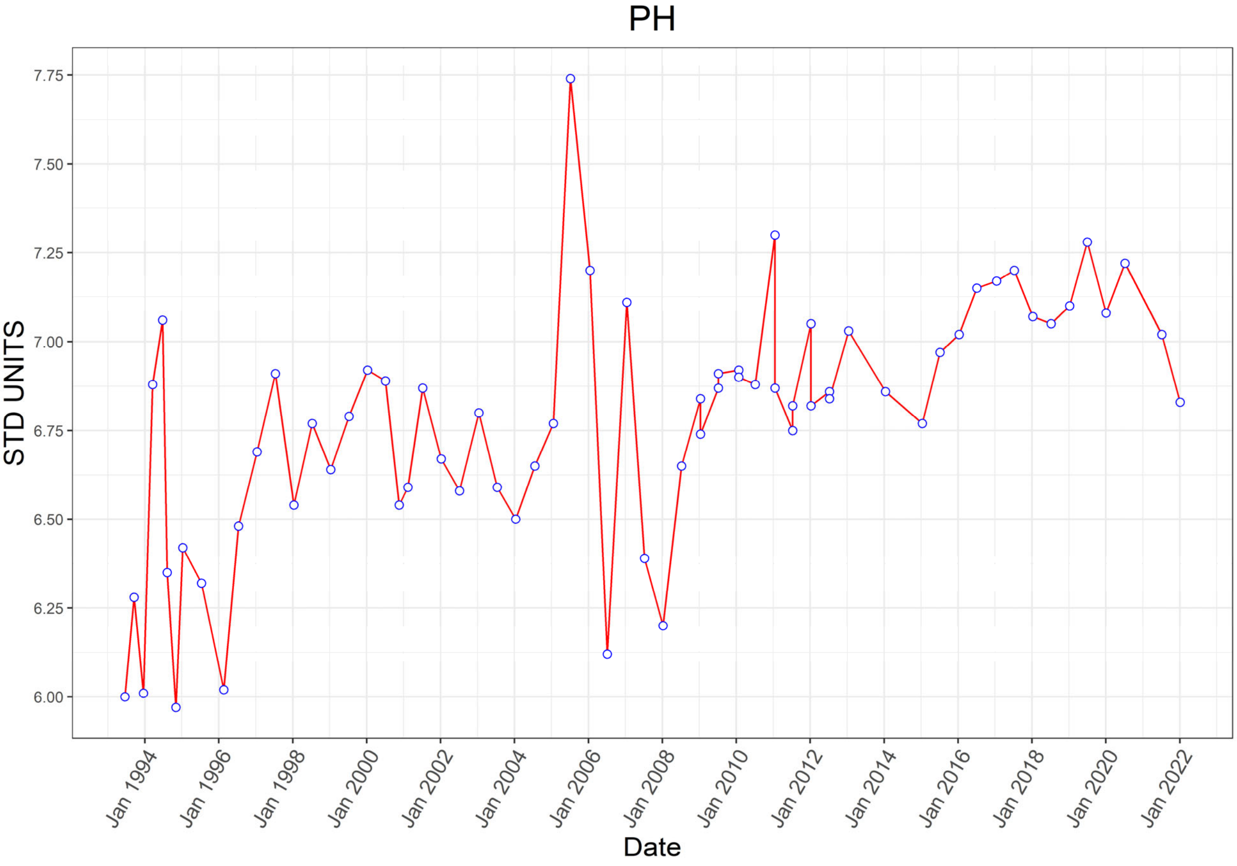


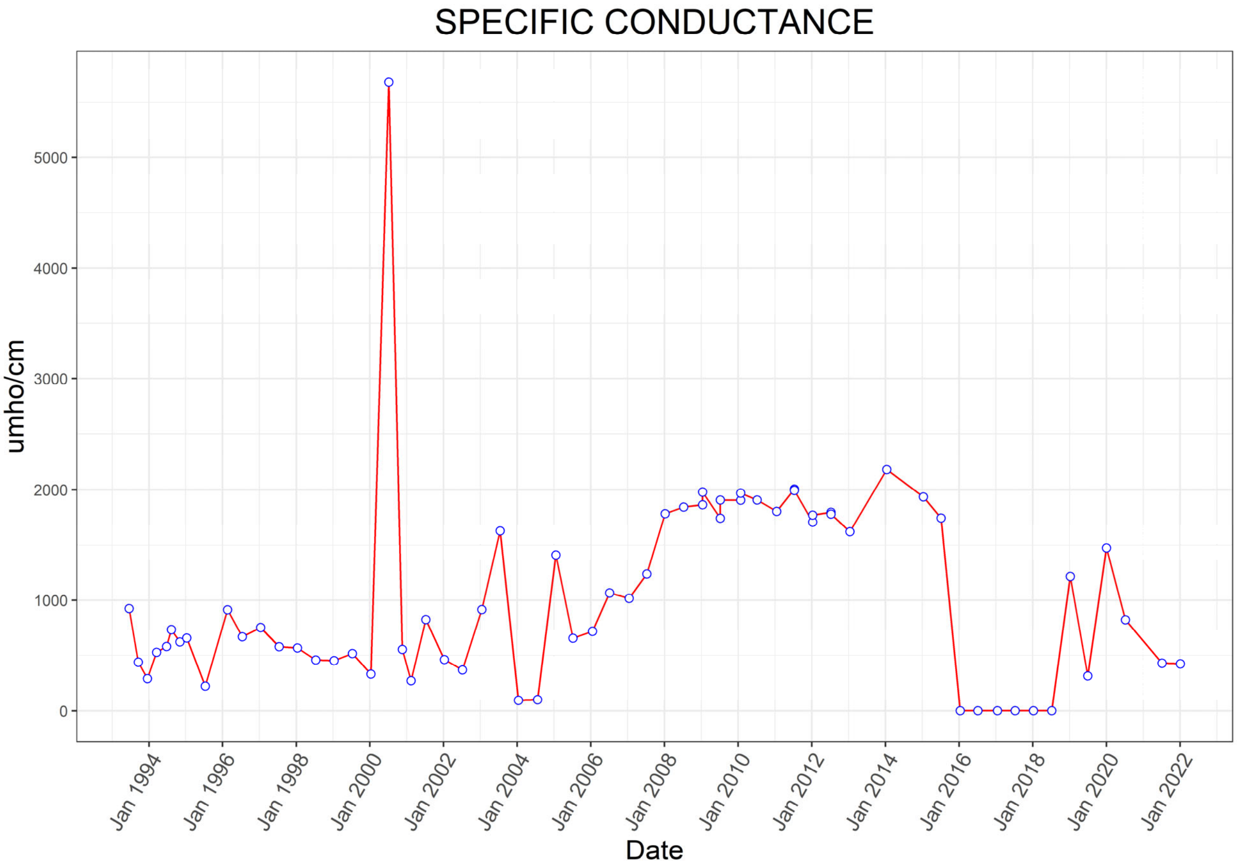


Well Name:

Field Parameters






SPECIFIC CONDUCTANCE
umho/cm
5000
4000
3000
2000
1000
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
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Jan 2008
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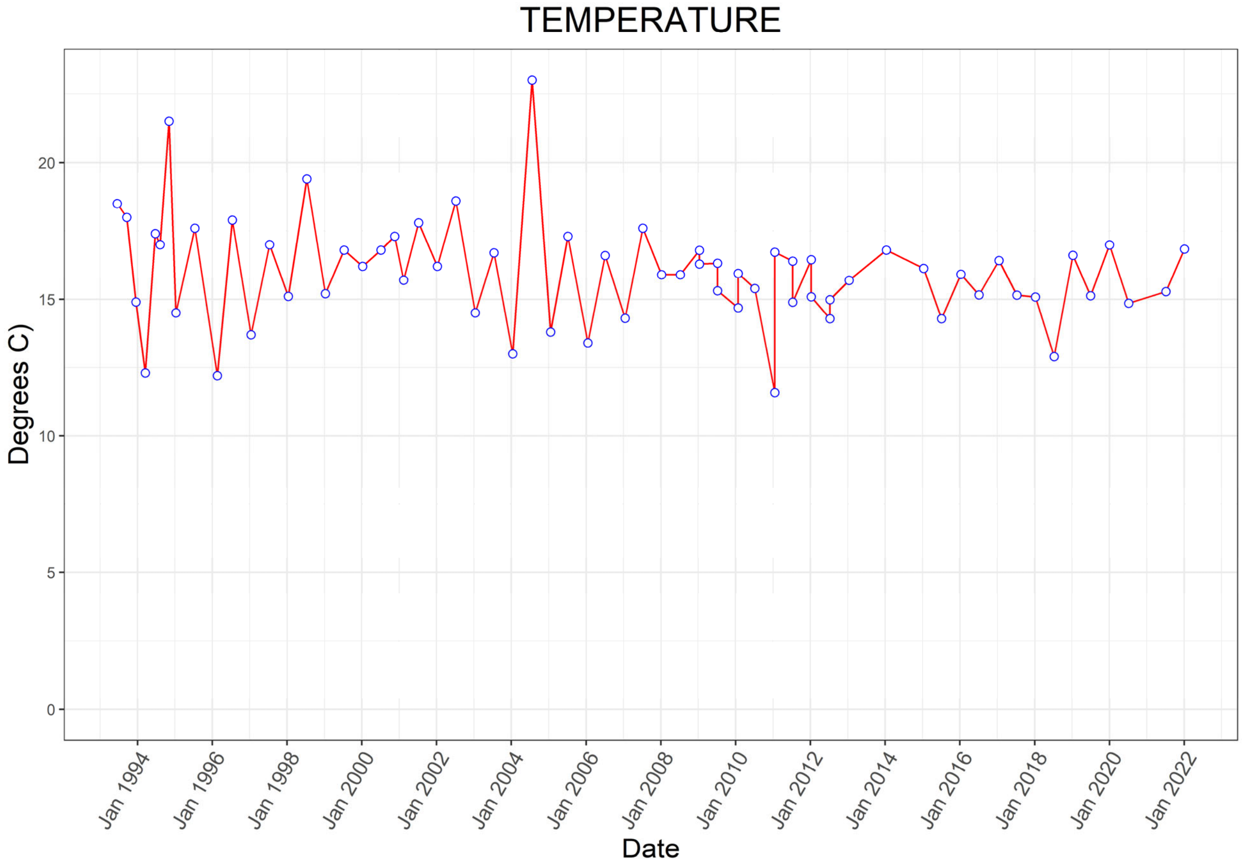
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


TEMPERATURE
Degrees C)
20
15
10
5
0
Jan 1994
Jan 1996
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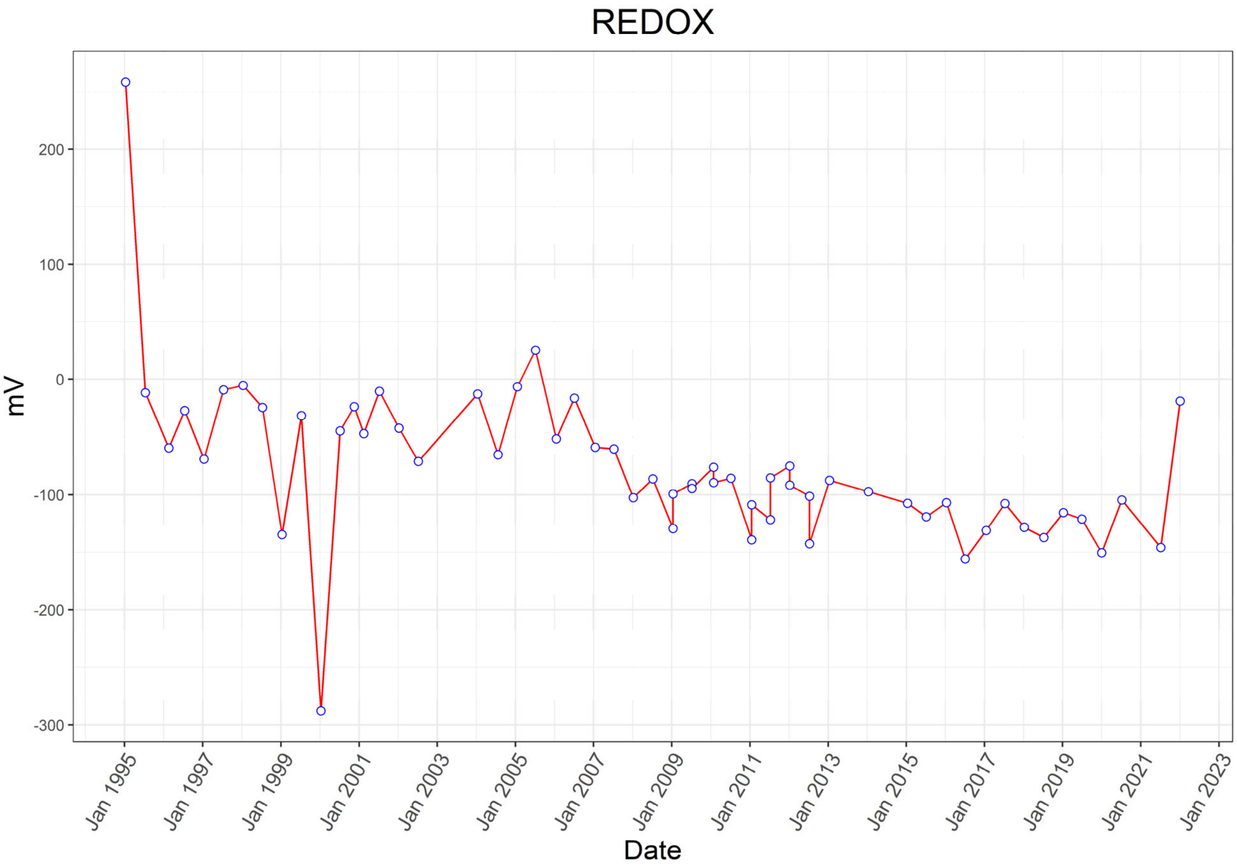
Jan 2018
Jan 2020
Jan 2022
Date


REDOX
mV
200
100
0
-100
-200
-300
Date
Jan 1995
Jan 1997
Jan 1999
Jan 2001
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Jan 2005
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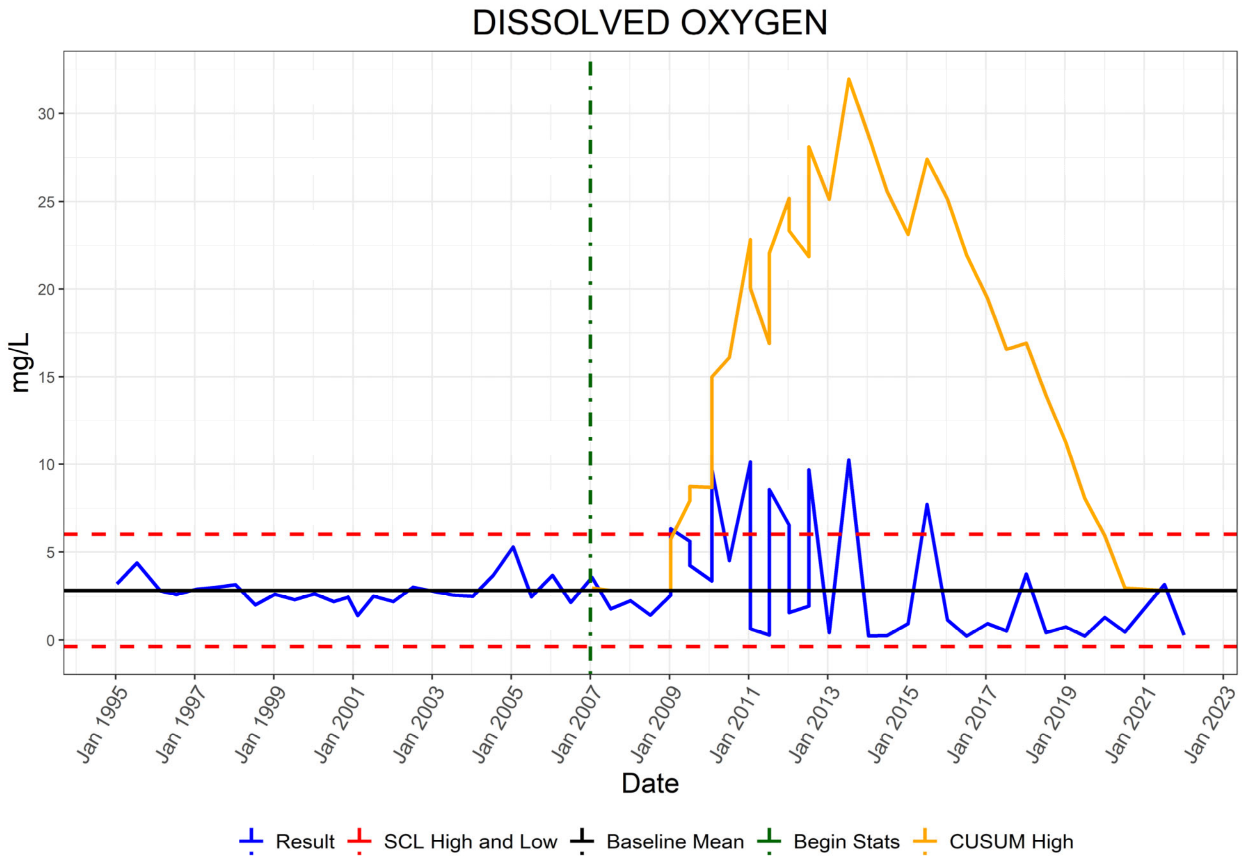
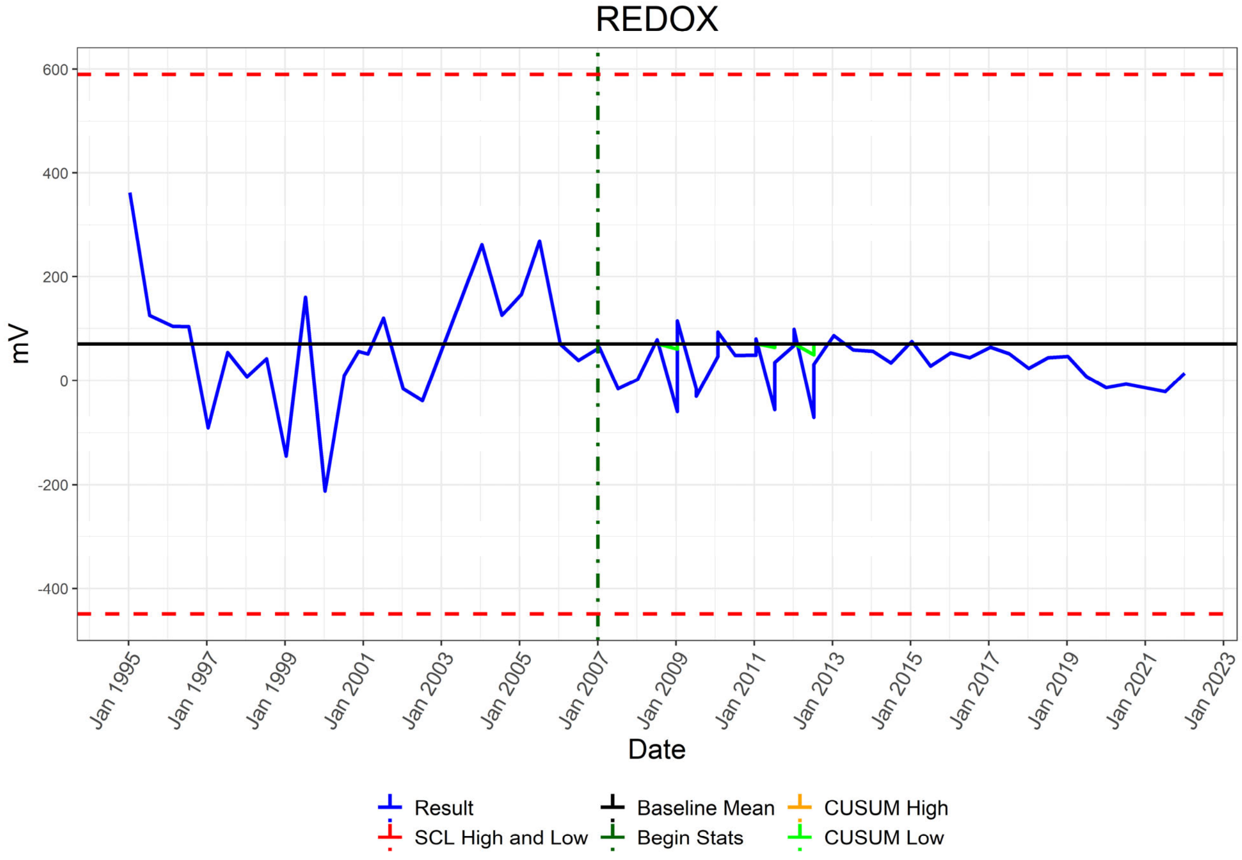
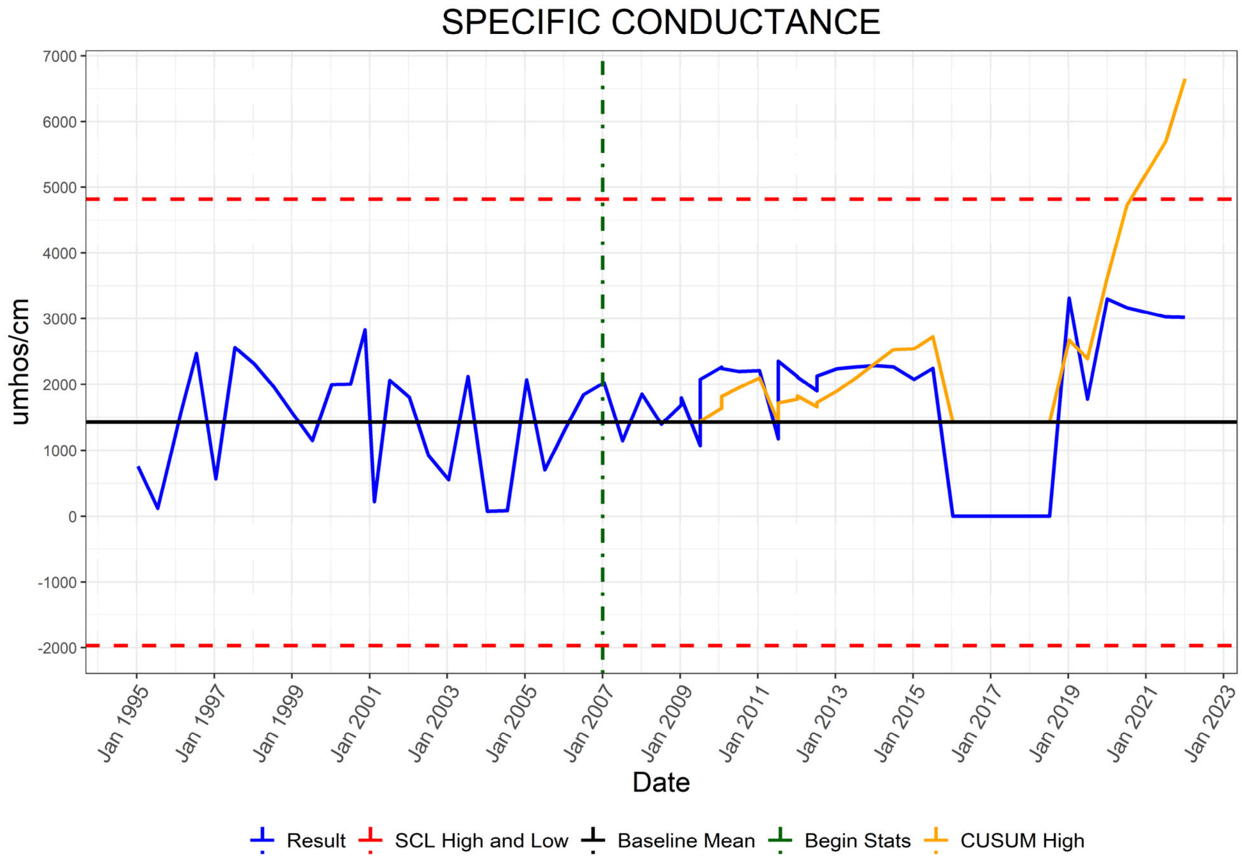
Jan 2017
Jan 2019
Jan 2021
Jan 2023

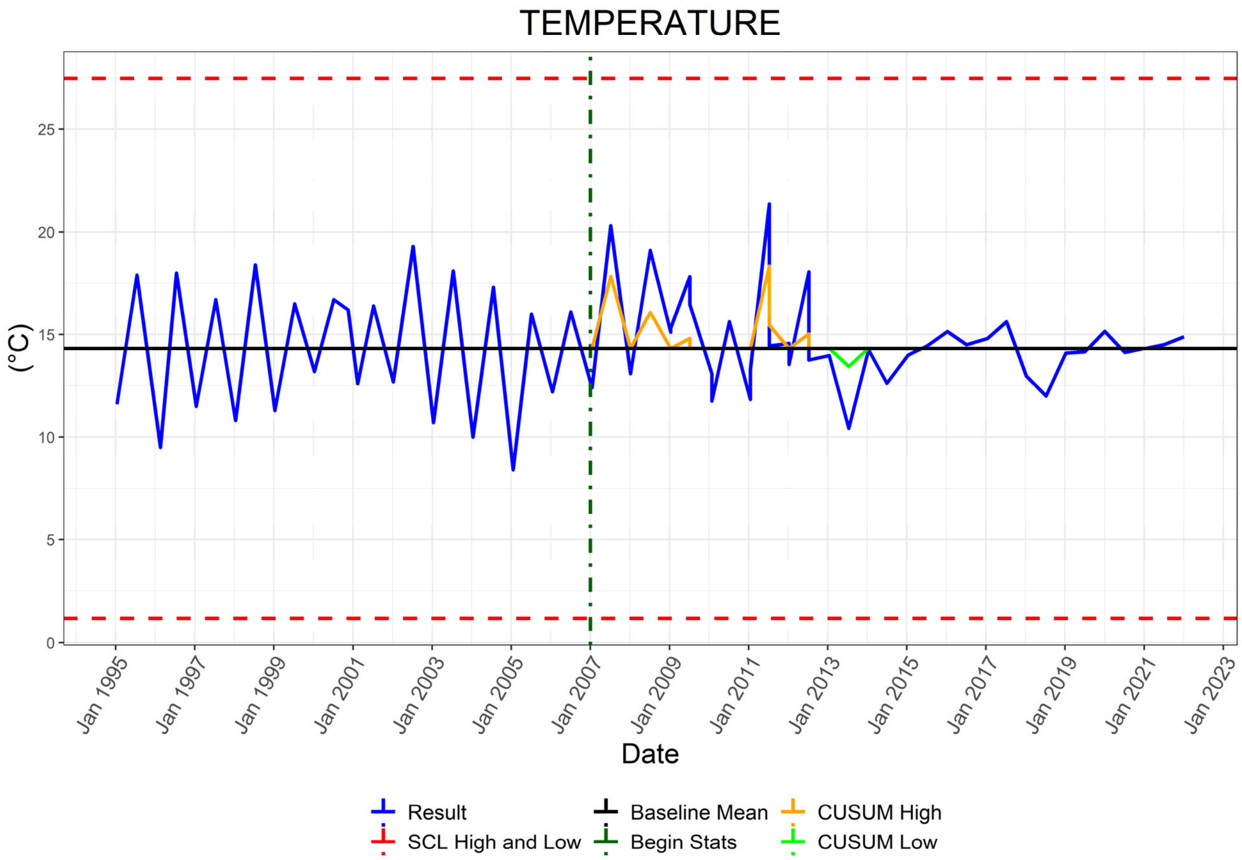
Closure and Post-Closure for the A, B, and C Basins (Program 1)

Well Name: G16-M02B



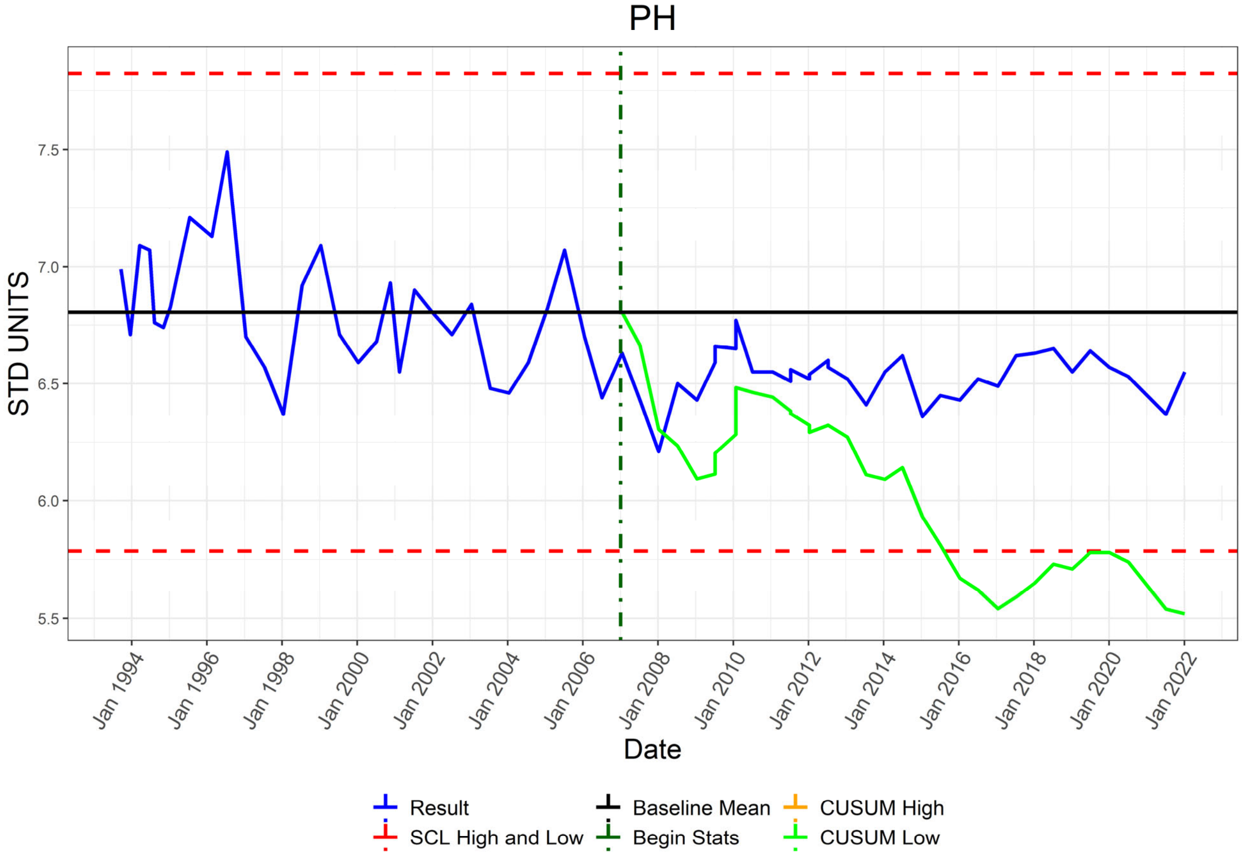


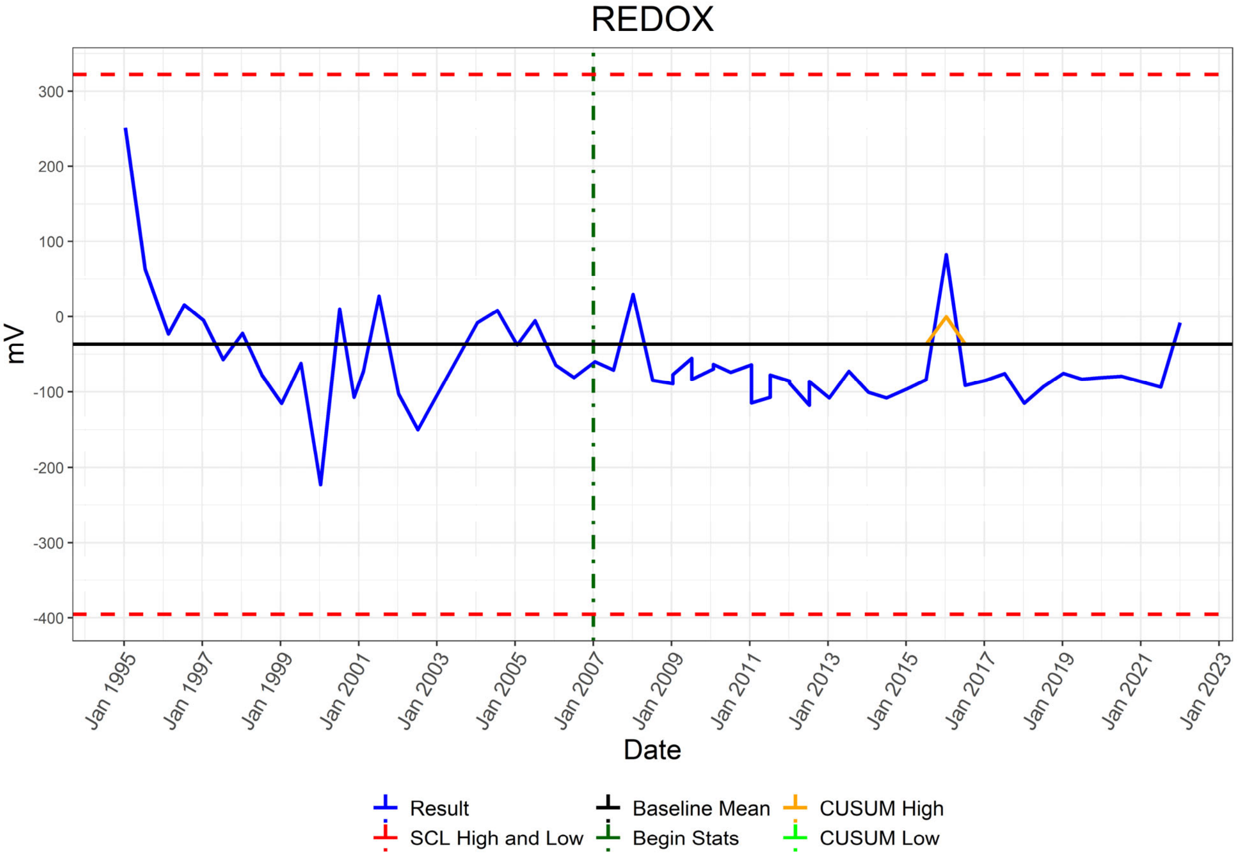

SPECIFIC CONDUCTANCE
umhos/cm
7000
6000
5000
4000
3000
2000
1000
0
-1000
-2000
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

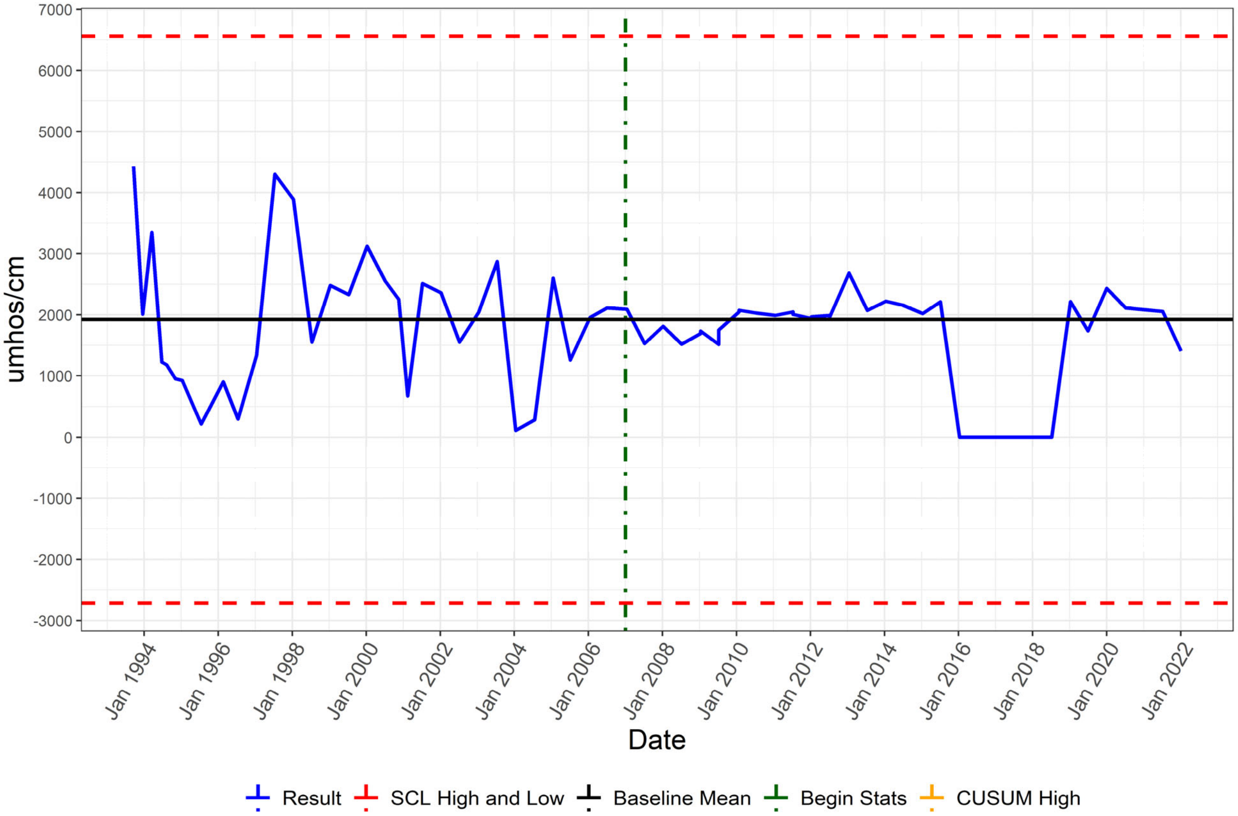

TEMPERATURE
(°C)
25
20
15
10
5
0
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

Closure and Post-Closure for the A, B, and C Basins (Program 1)

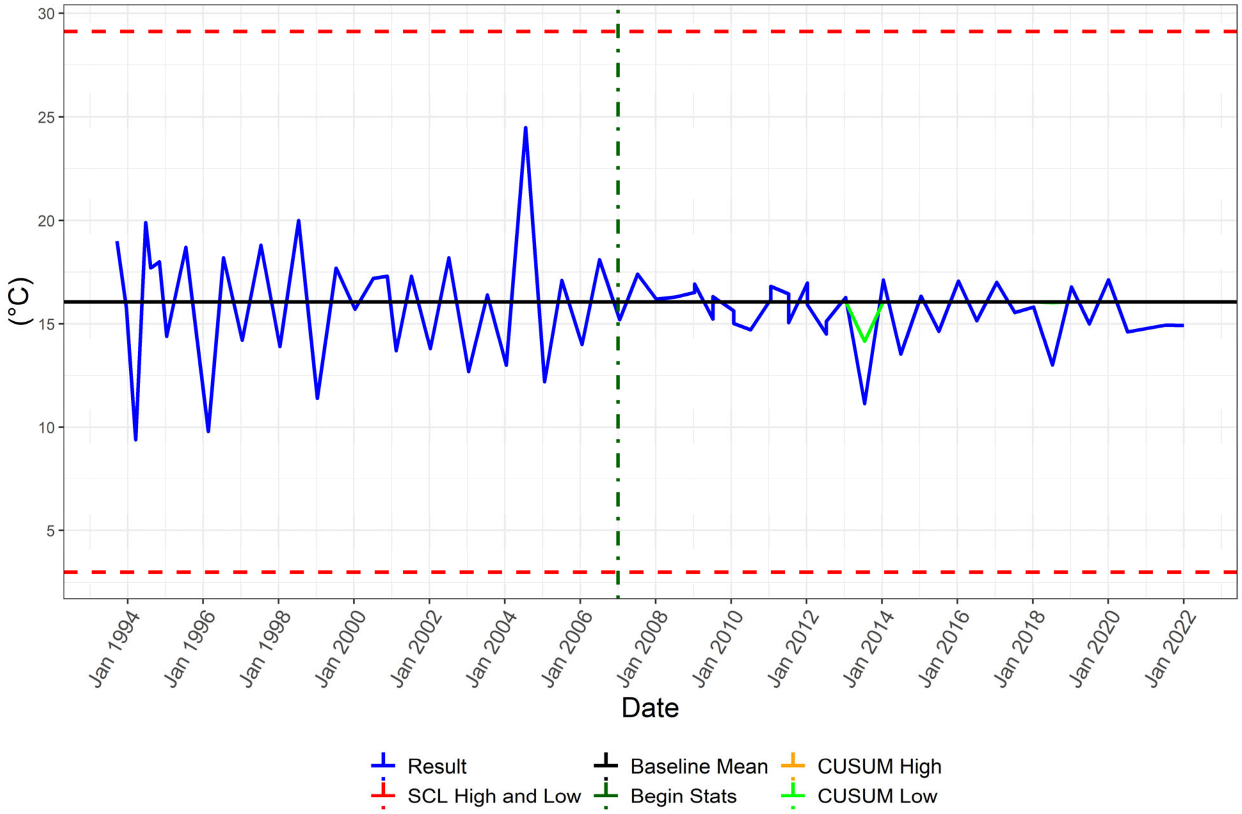
Well Name: H13-M02B







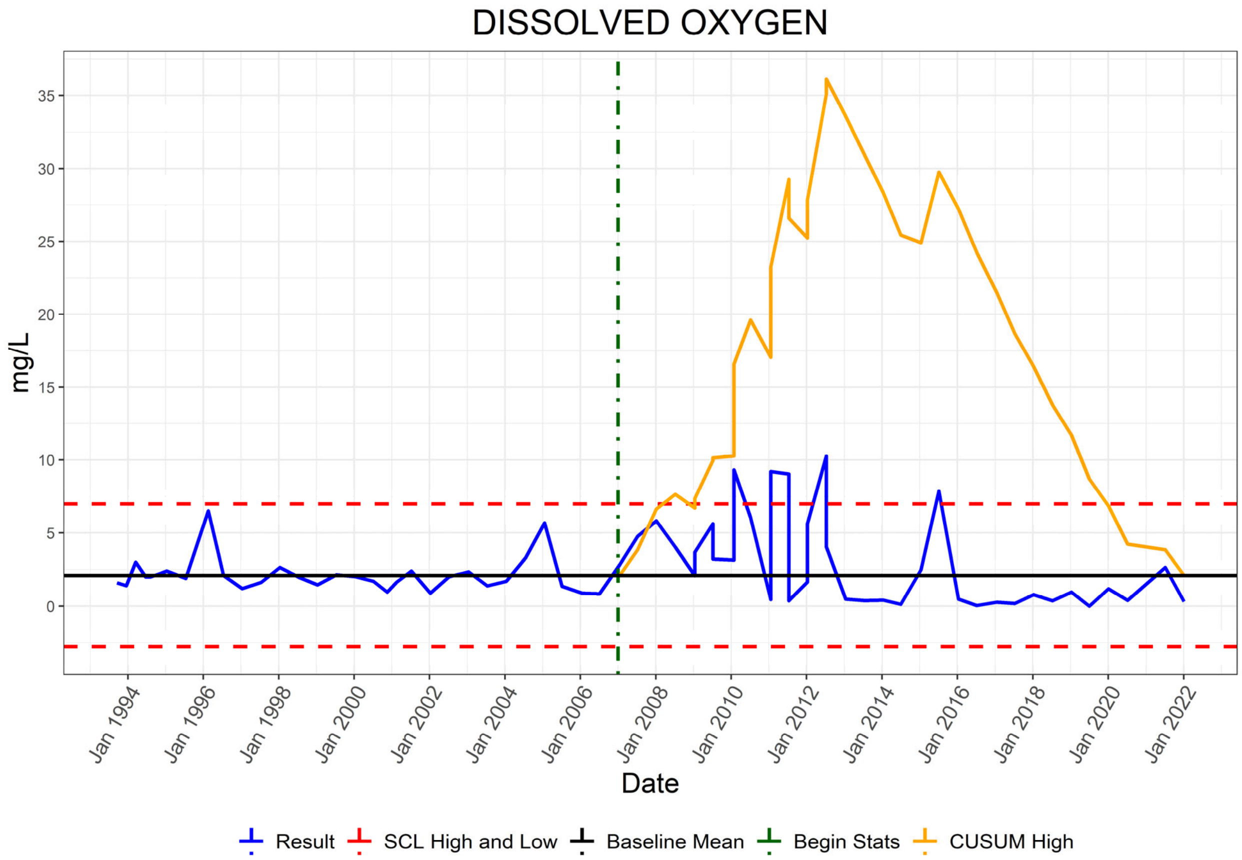
SPECIFIC CONDUCTANCE

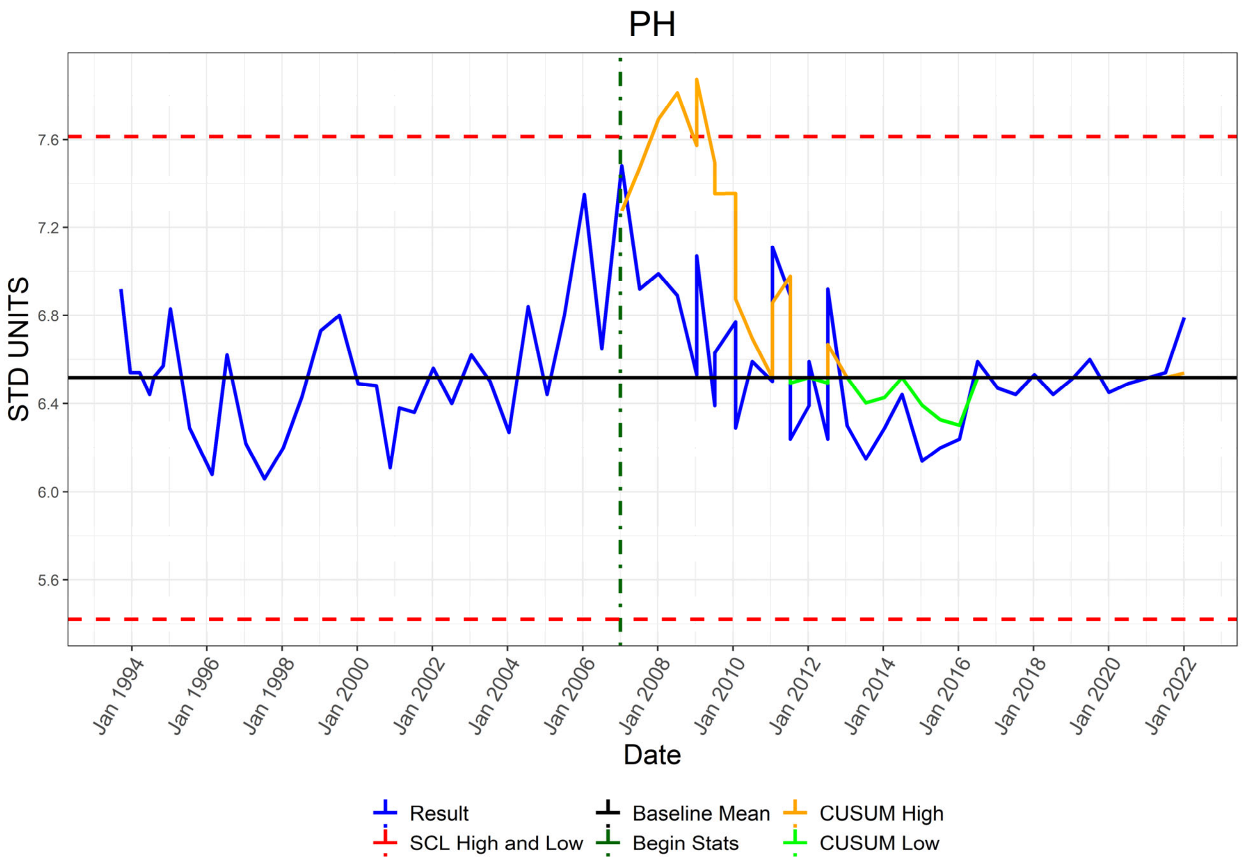


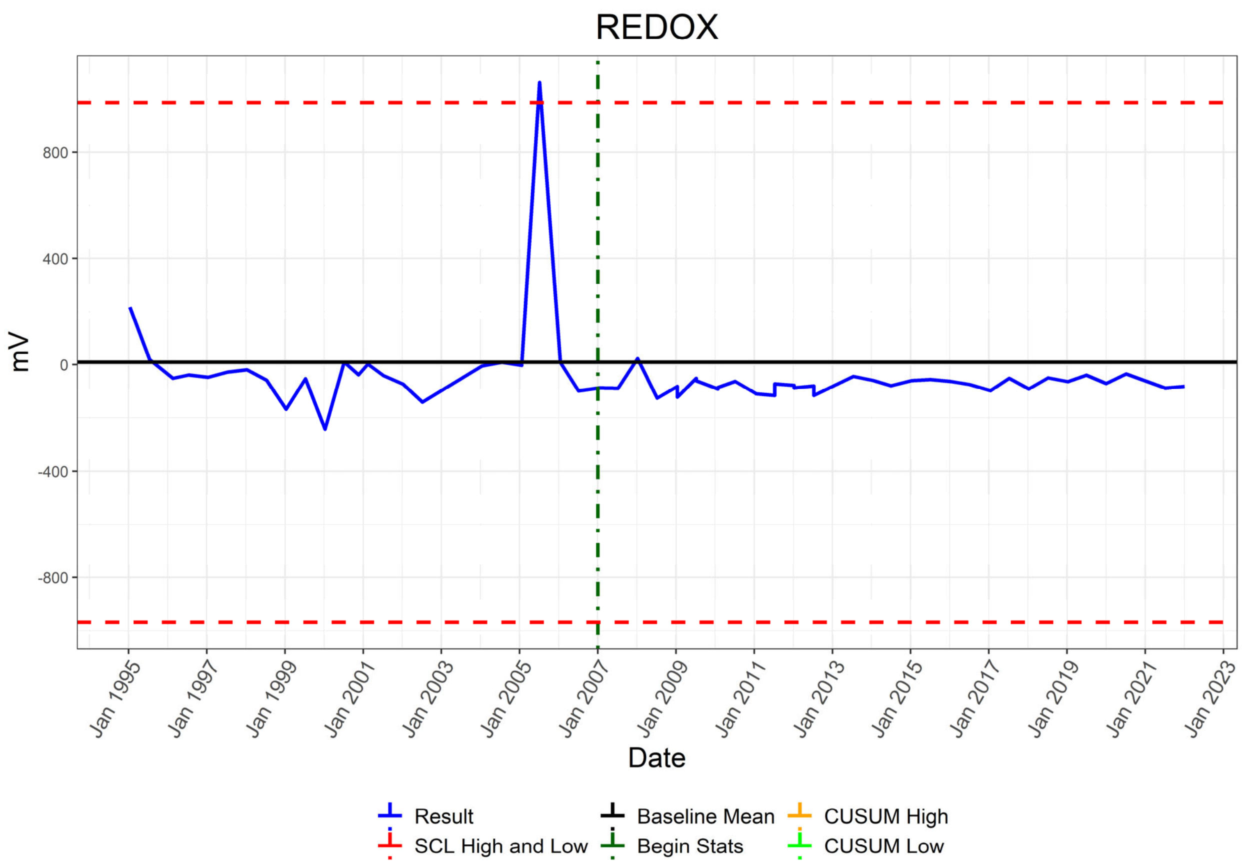
TEMPERATURE

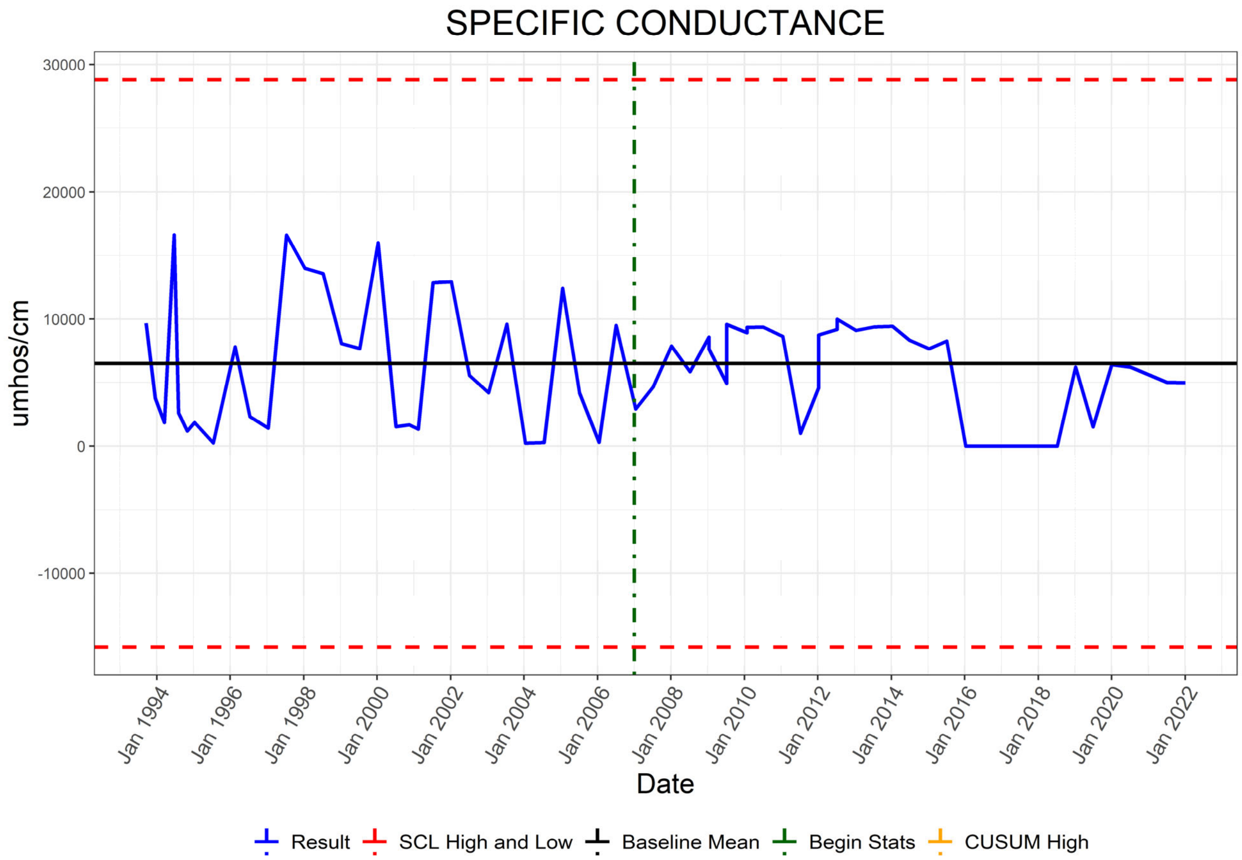
Closure and Post-Closure for the A, B, and C Basins (Program 1)

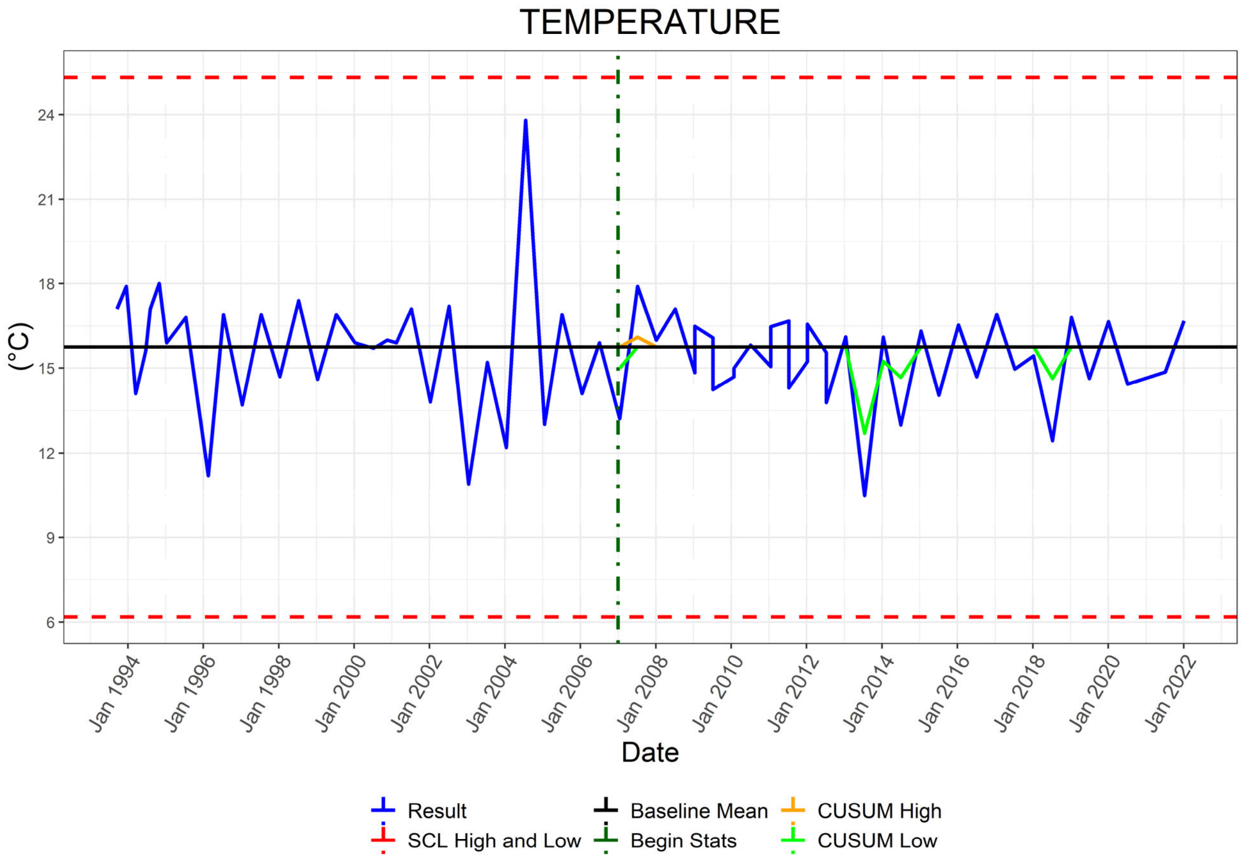
Well Name: H14-M01B





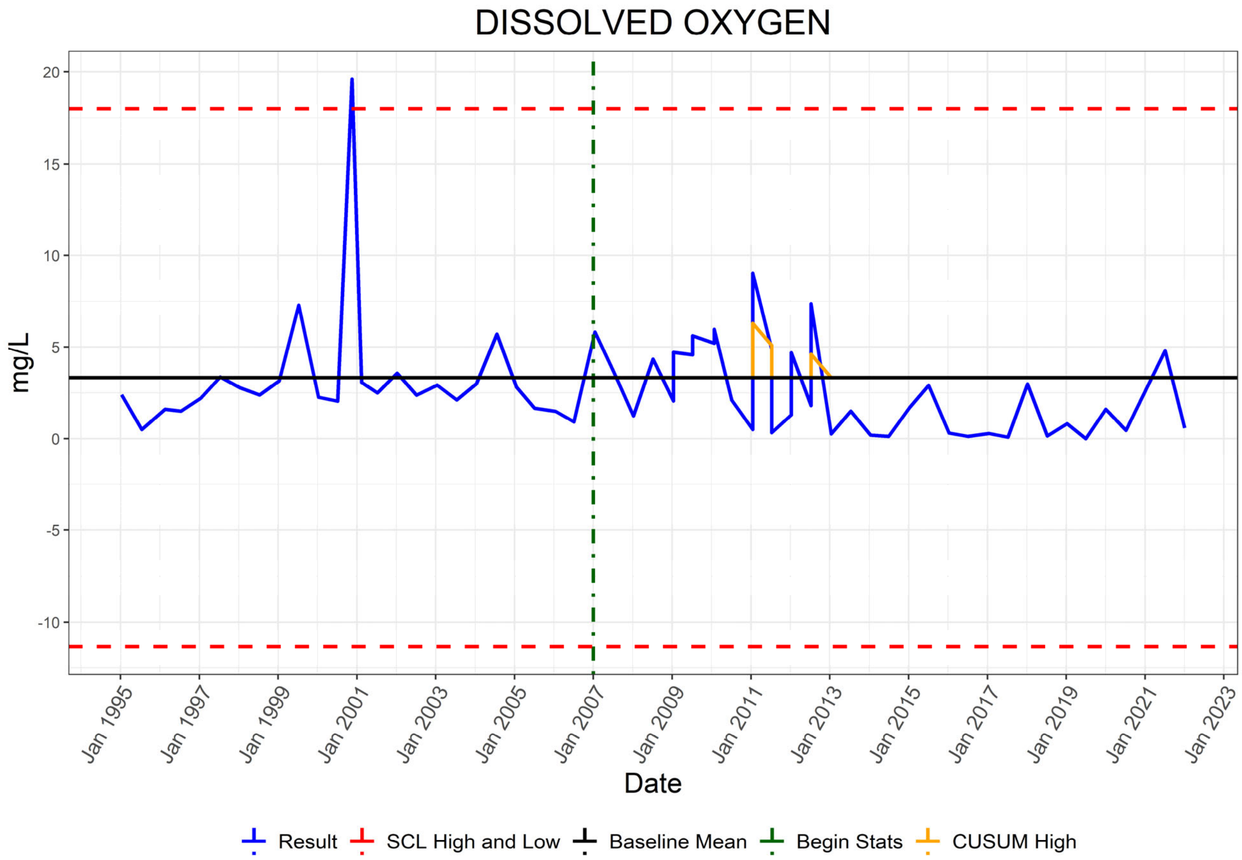

REDOX
mV
800
400
0
-400
-800
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
Baseline Mean
CUSUM High
SCL High and Low
Begin Stats
CUSUM Low

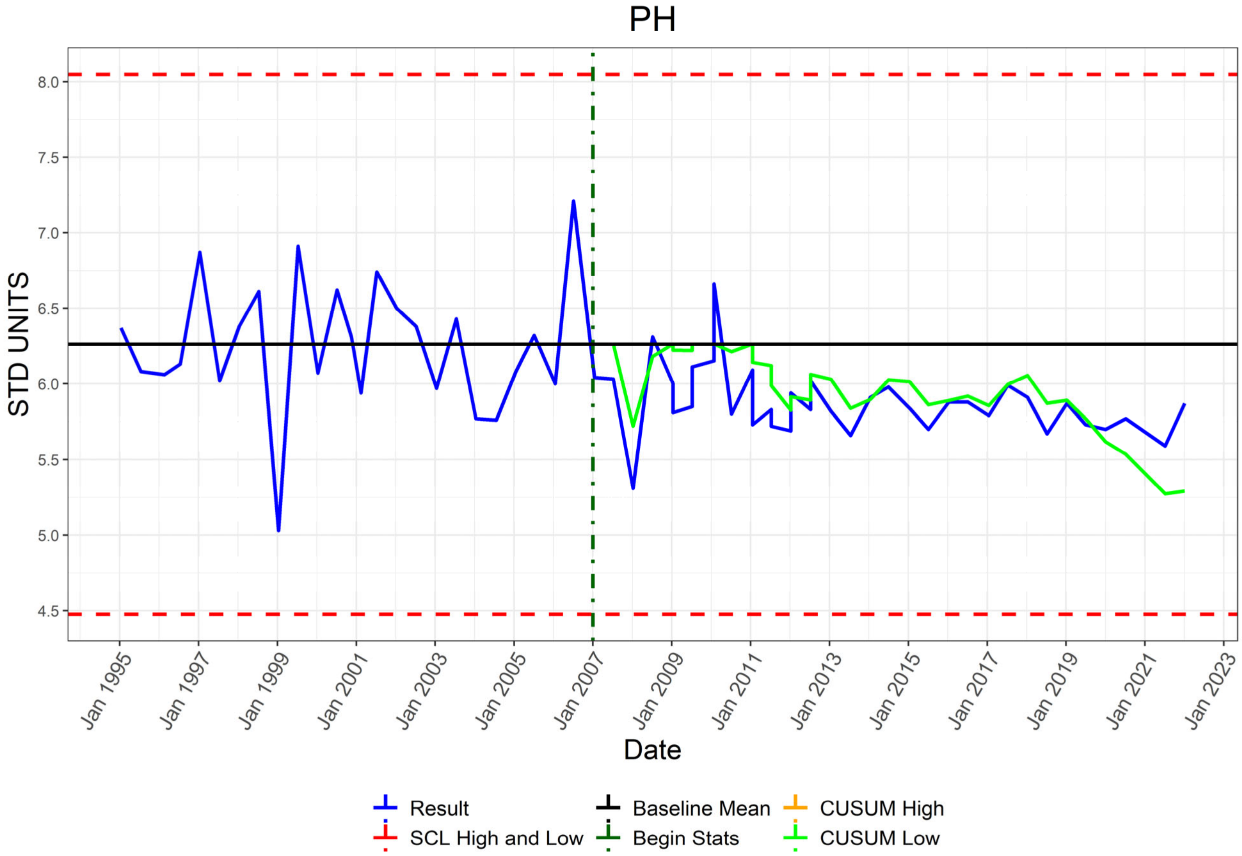

SPECIFIC CONDUCTANCE
umhos/cm
30000
20000
10000
0
-10000
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

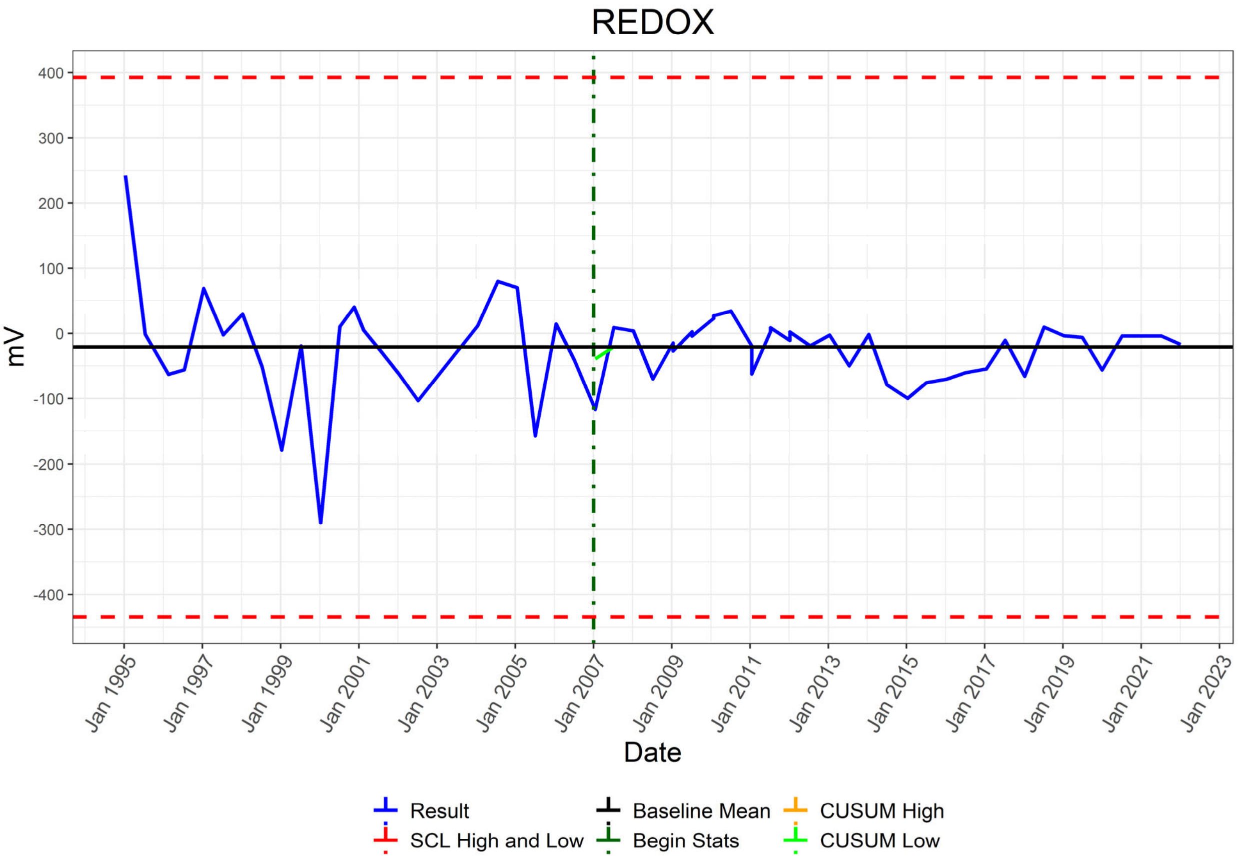

TEMPERATURE
(°C)
24
21
18
15
12
9
6
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

Closure and Post-Closure for the A, B, and C Basins (Program 1)

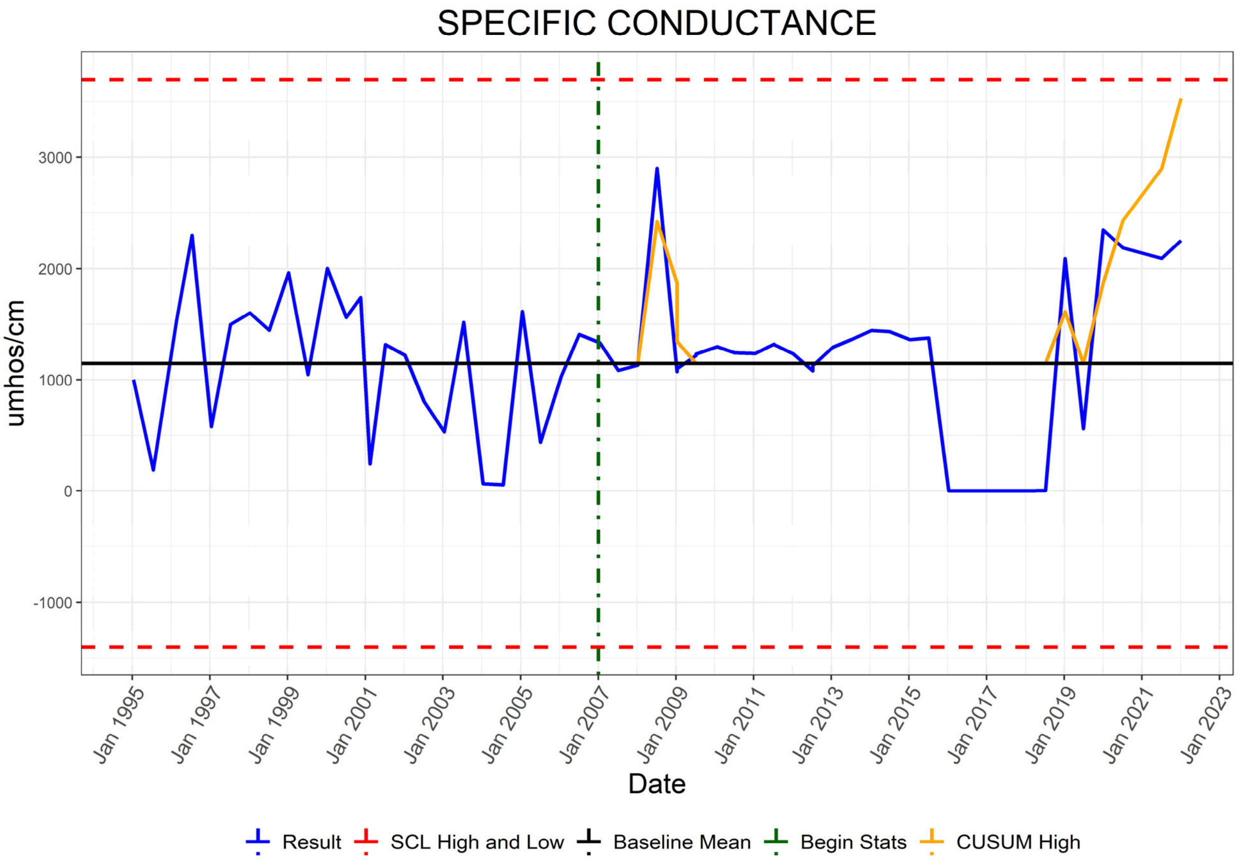
Well Name: H16-P01B





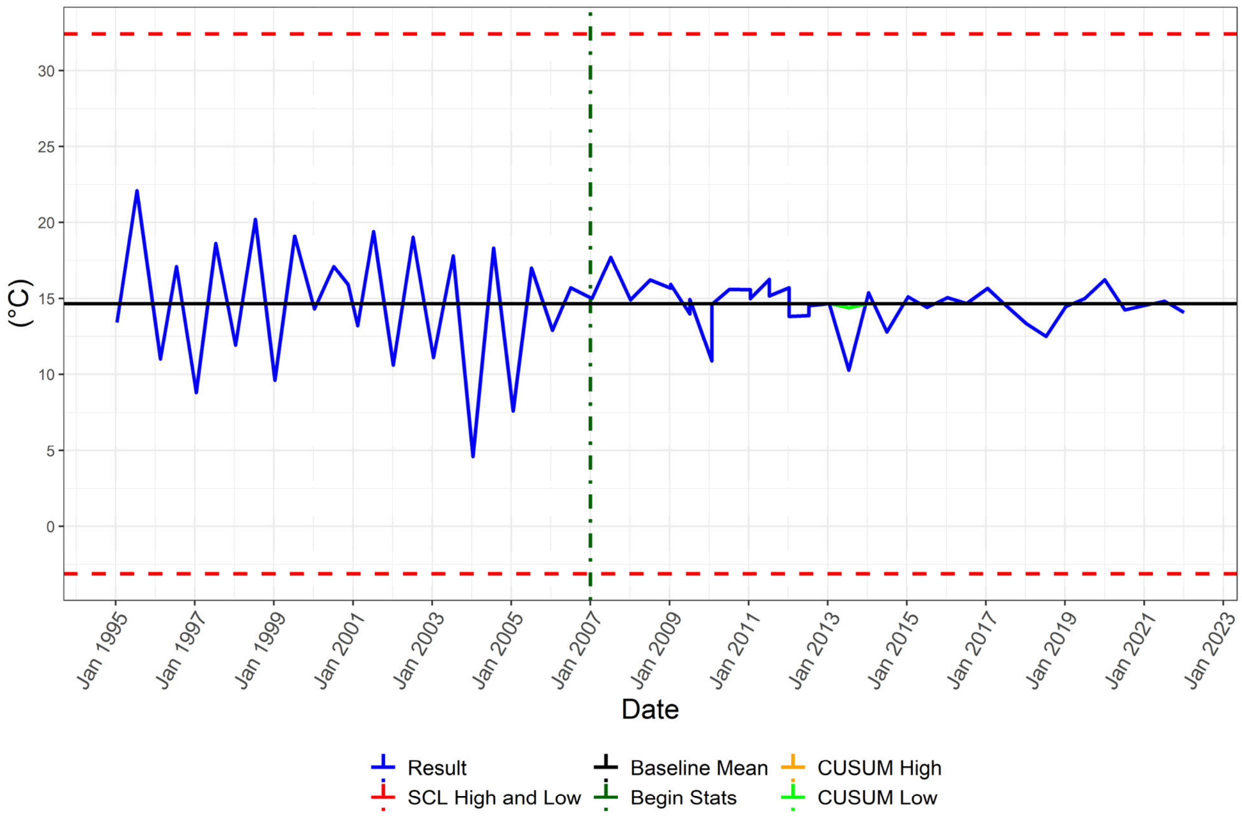


REDOX



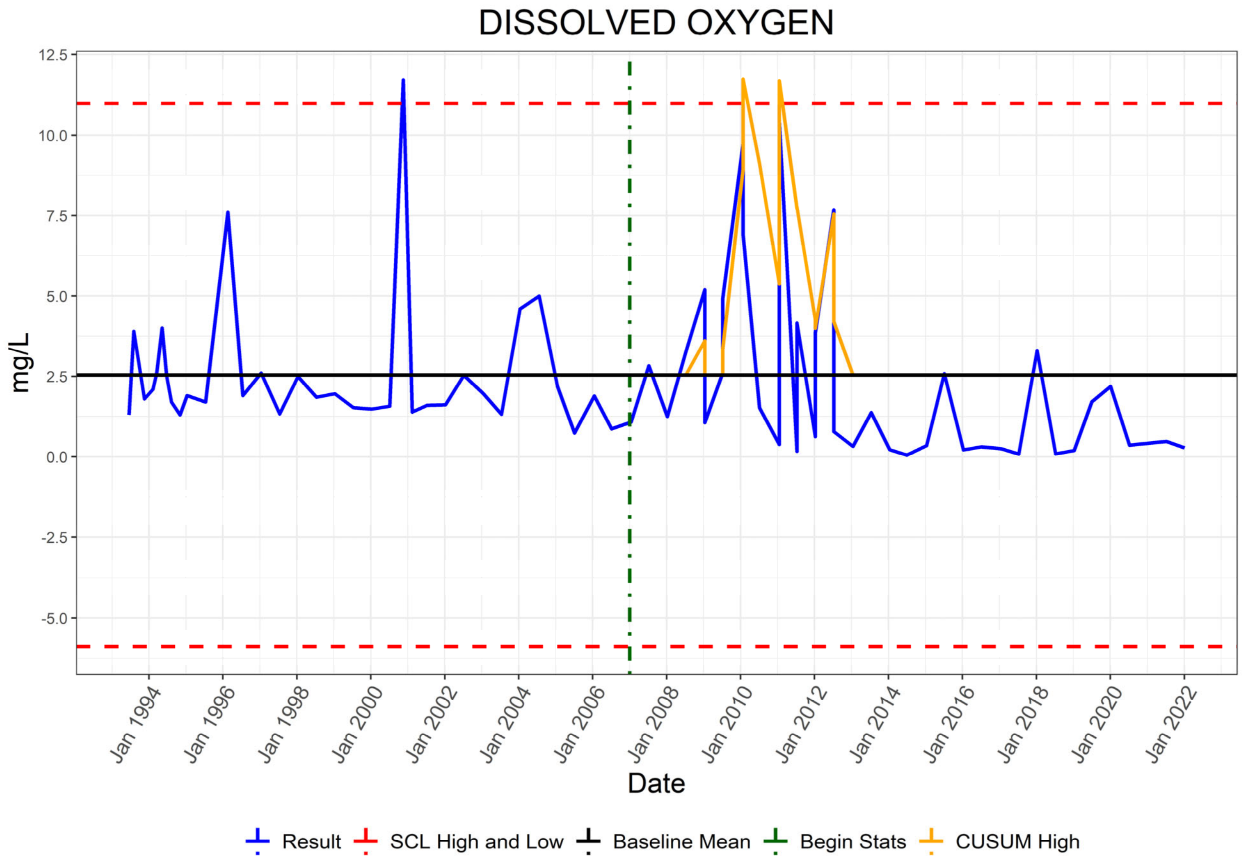
SPECIFIC CONDUCTANCE

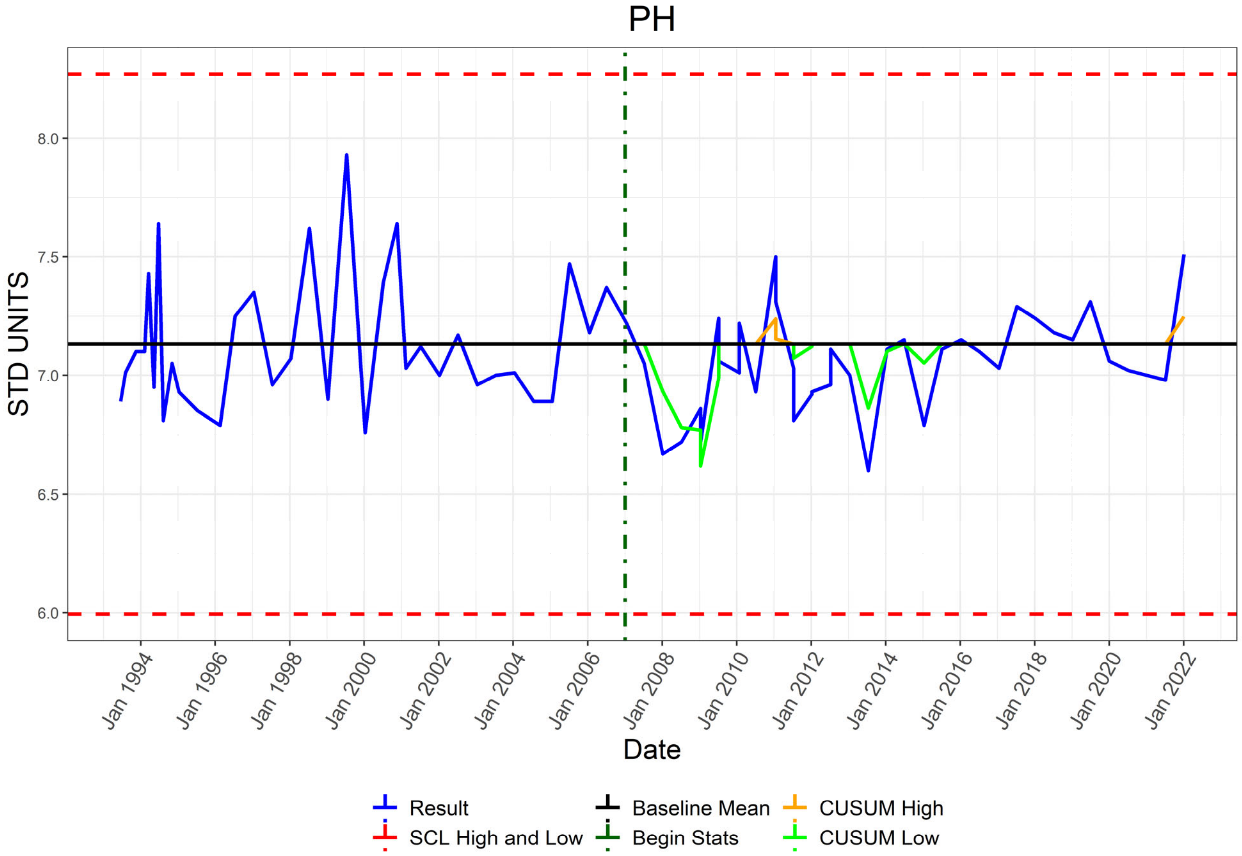
TEMPERATURE

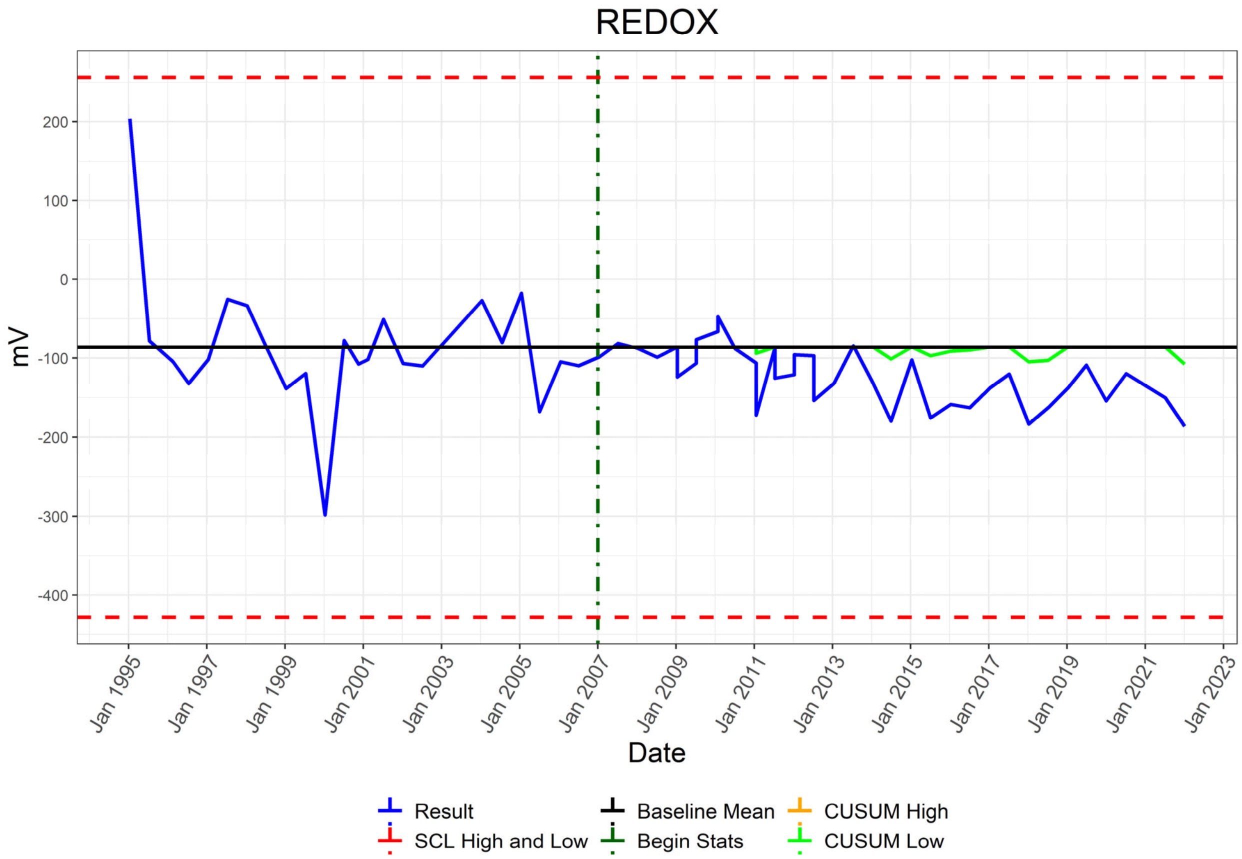


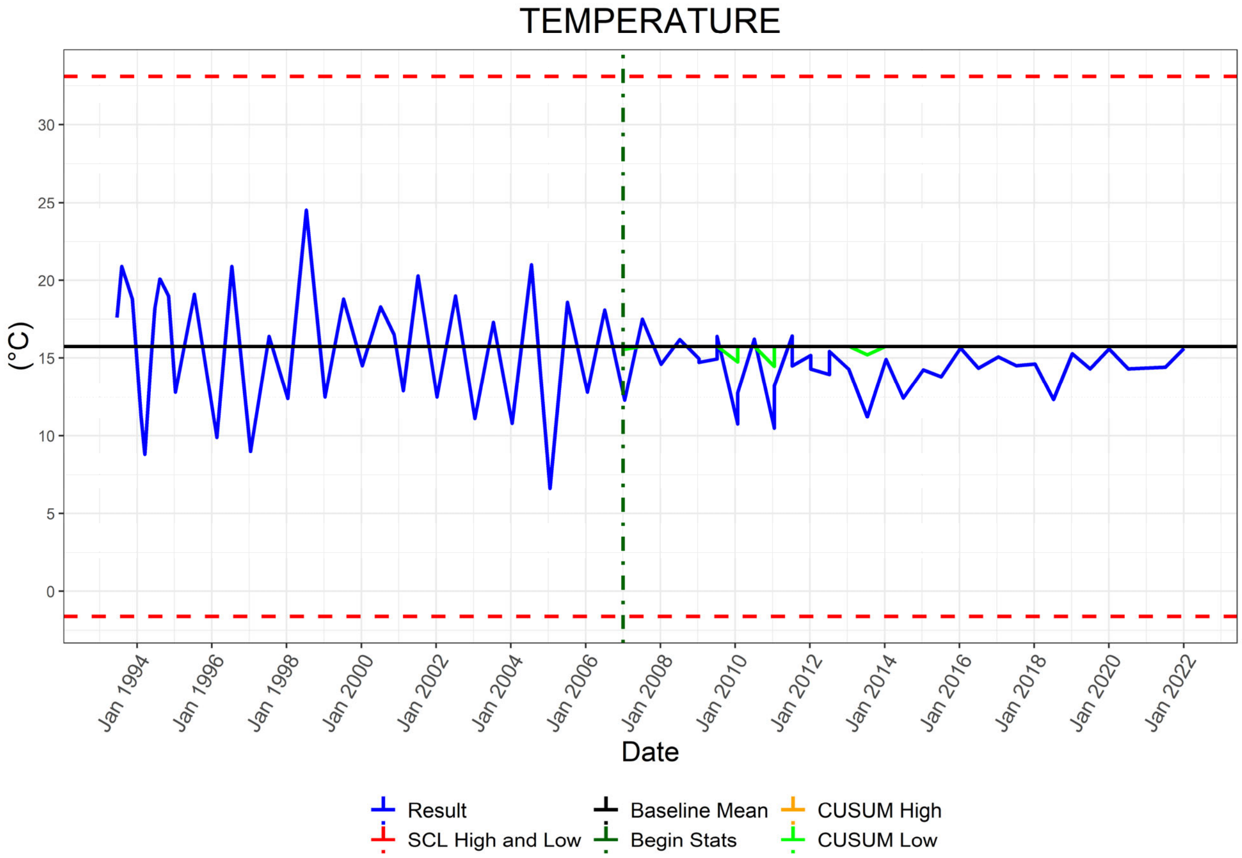
Closure and Post-Closure for the A, B, and C Basins (Program 1)

Well Name: J16-M01B

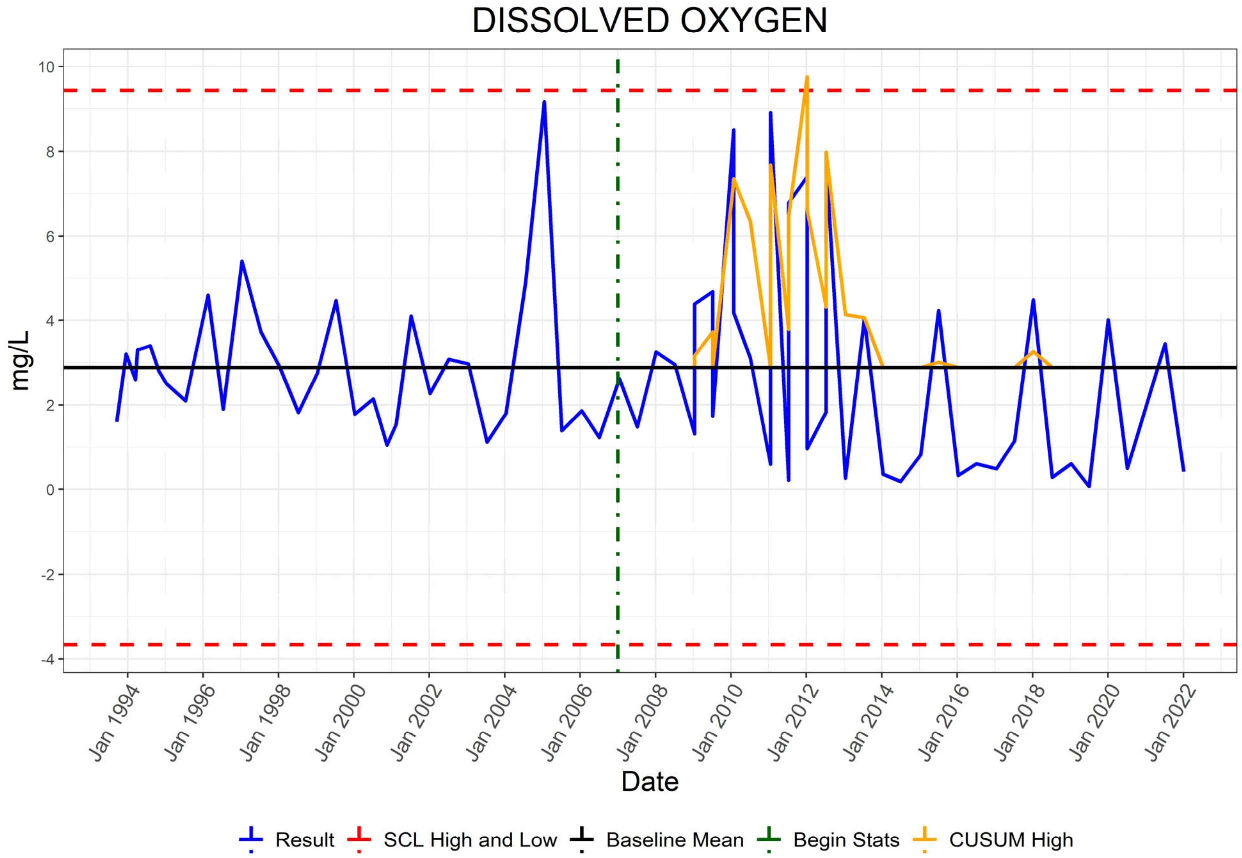


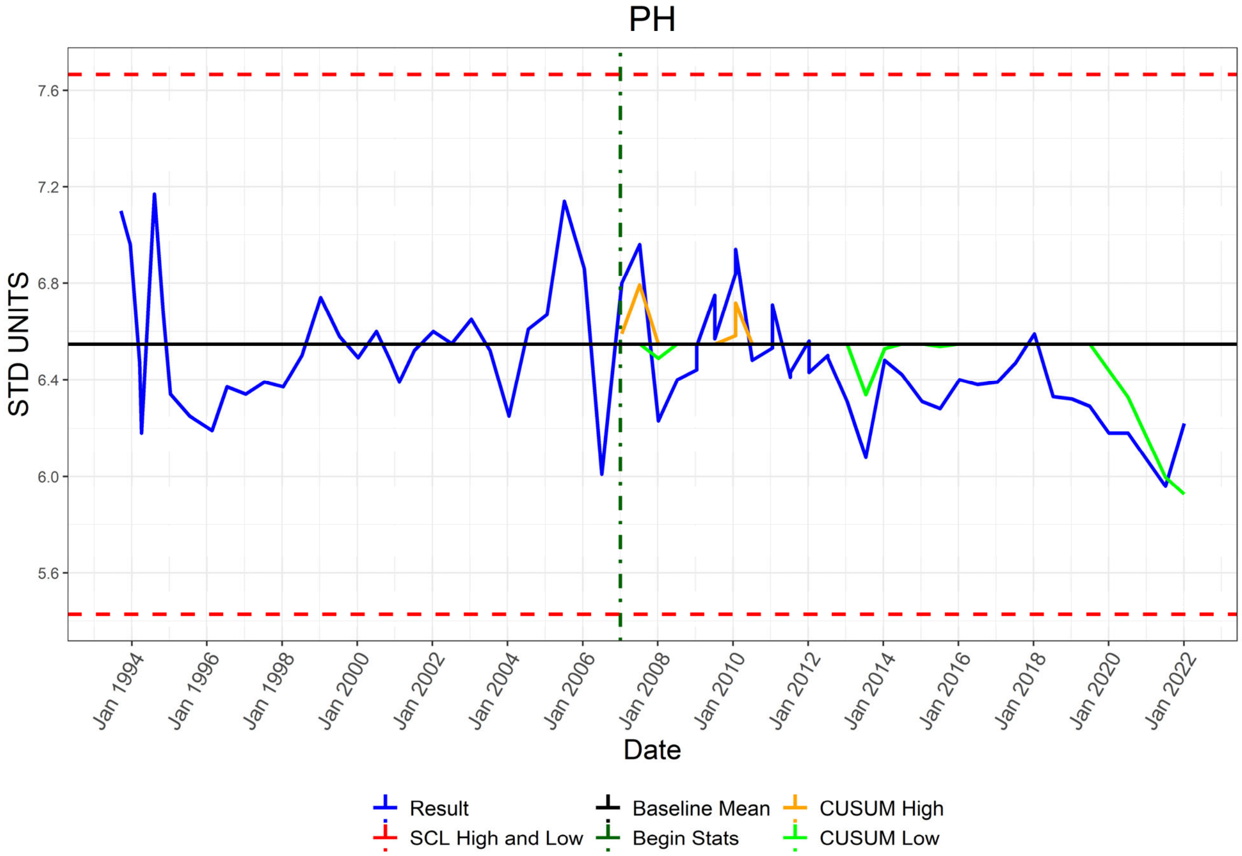


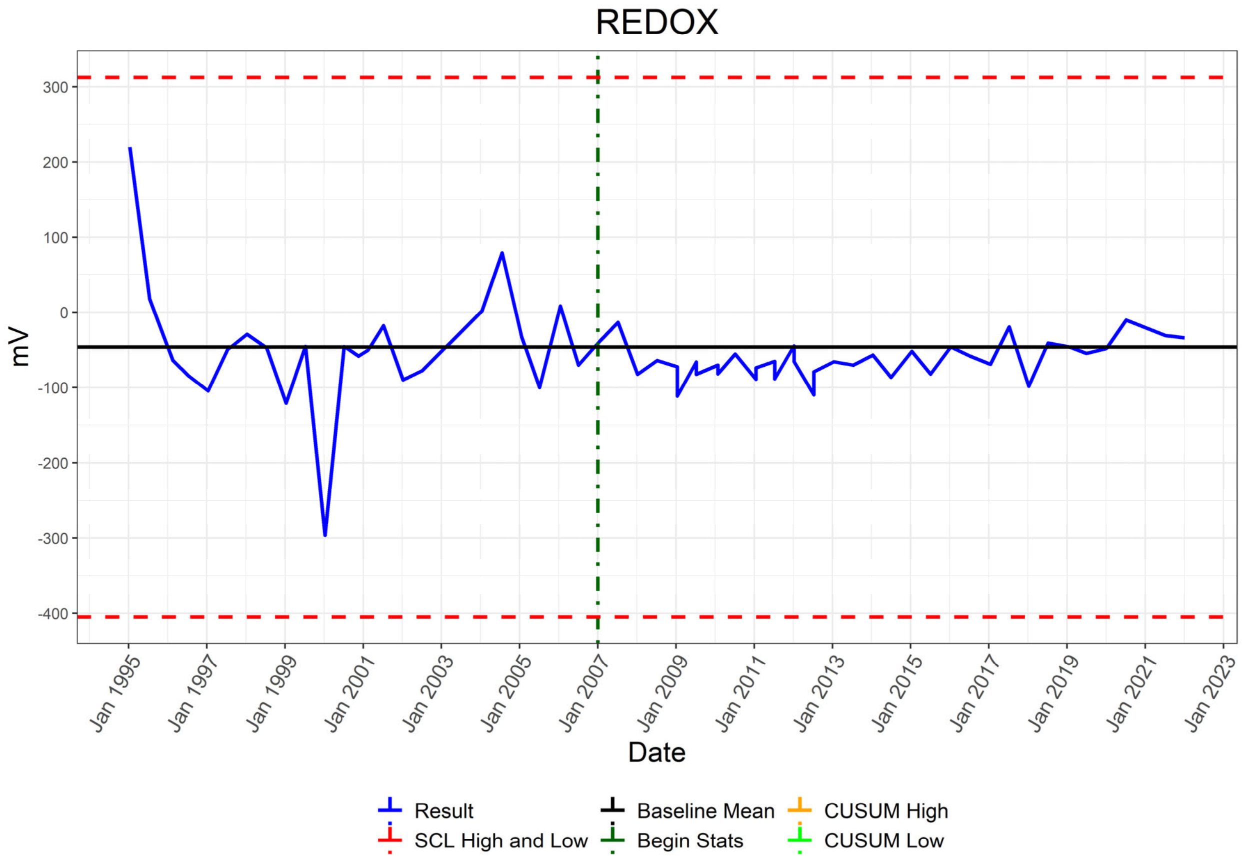

REDOX
mV
200
100
0
-100
-200
-300
-400
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

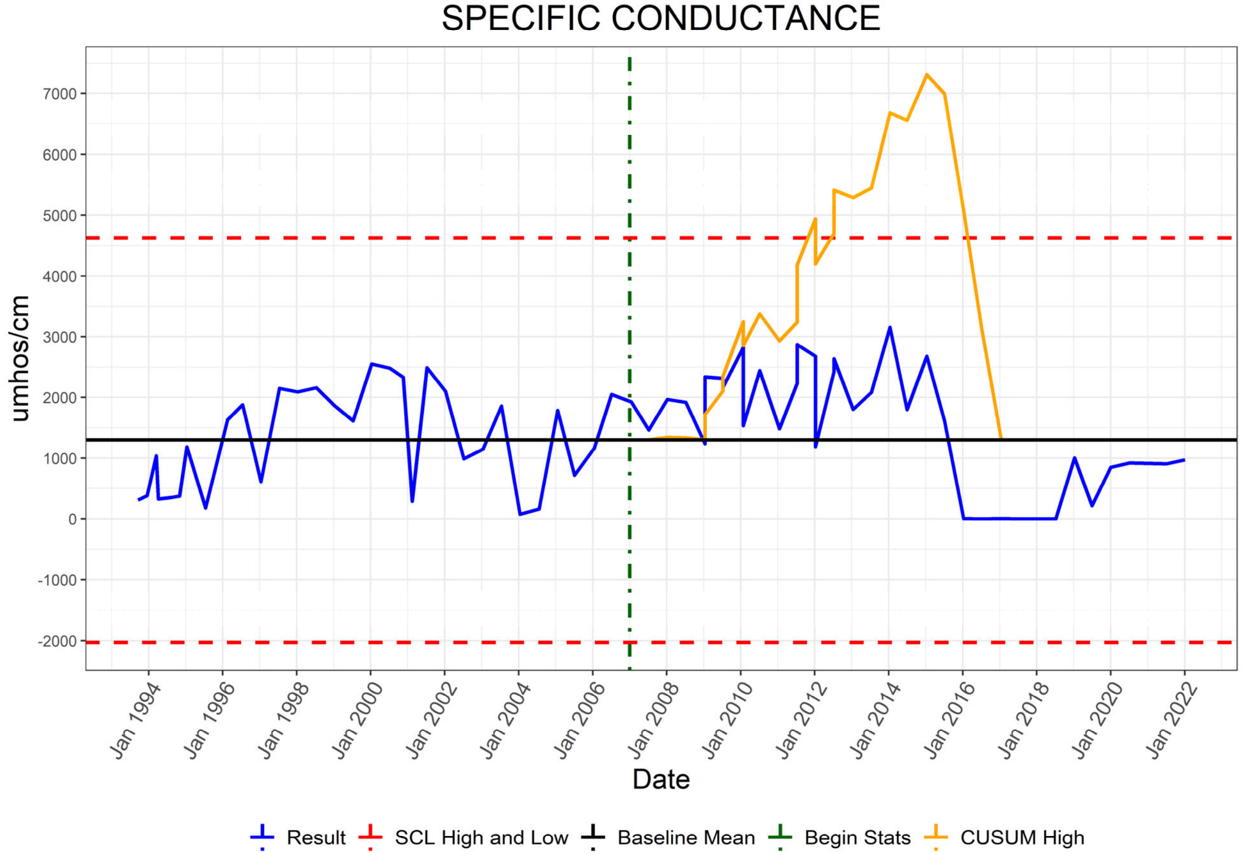

TEMPERATURE
(°C)
30
25
20
15
10
5
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

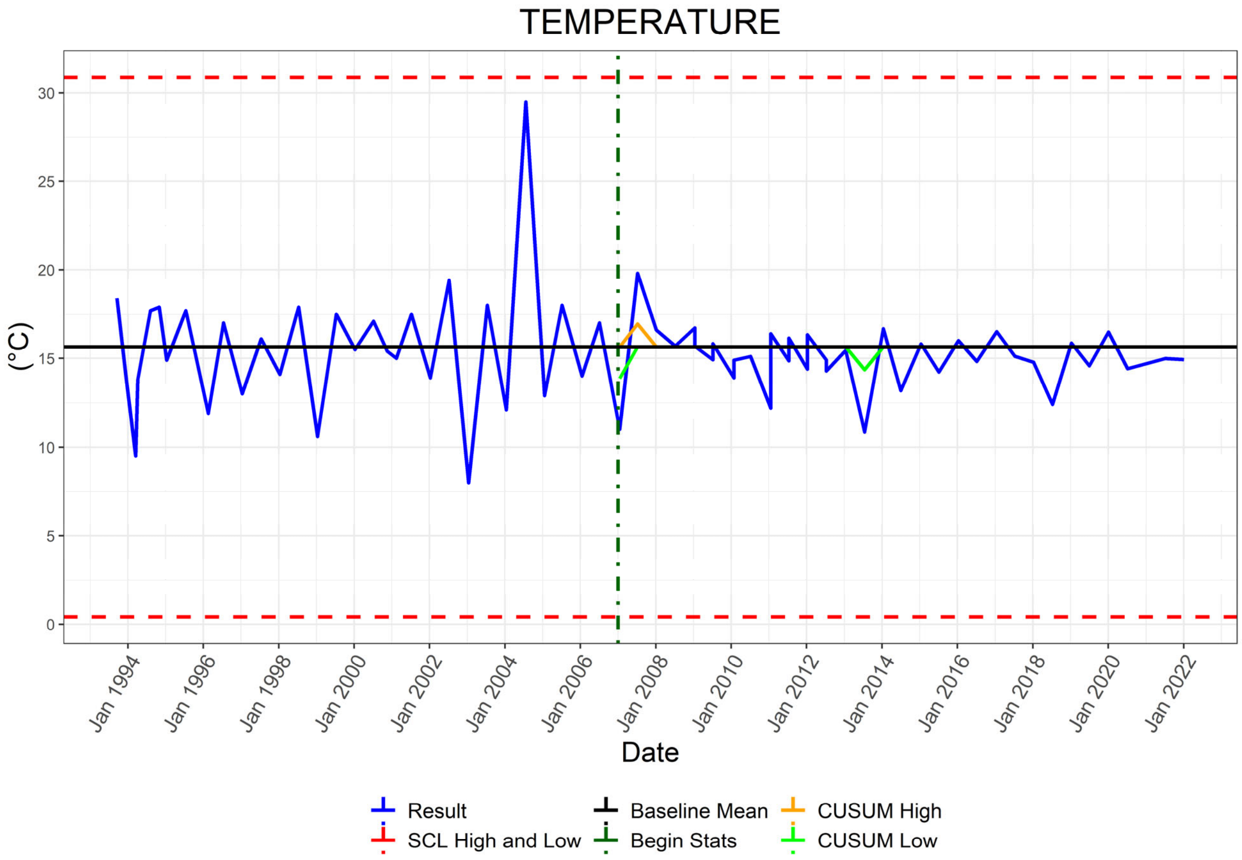
Well Name: K13-M02B





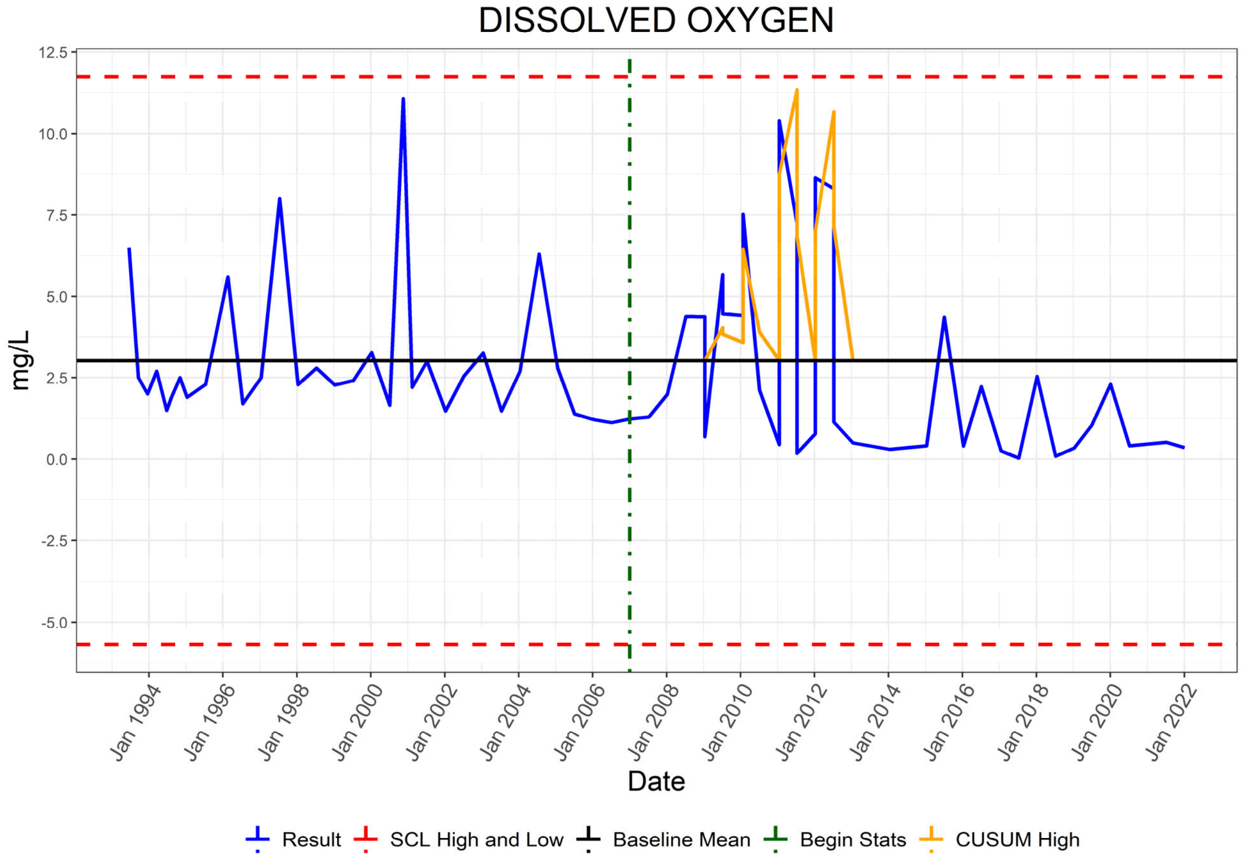

REDOX
300
200
100
0
-100
-200
-300
-400
mV
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

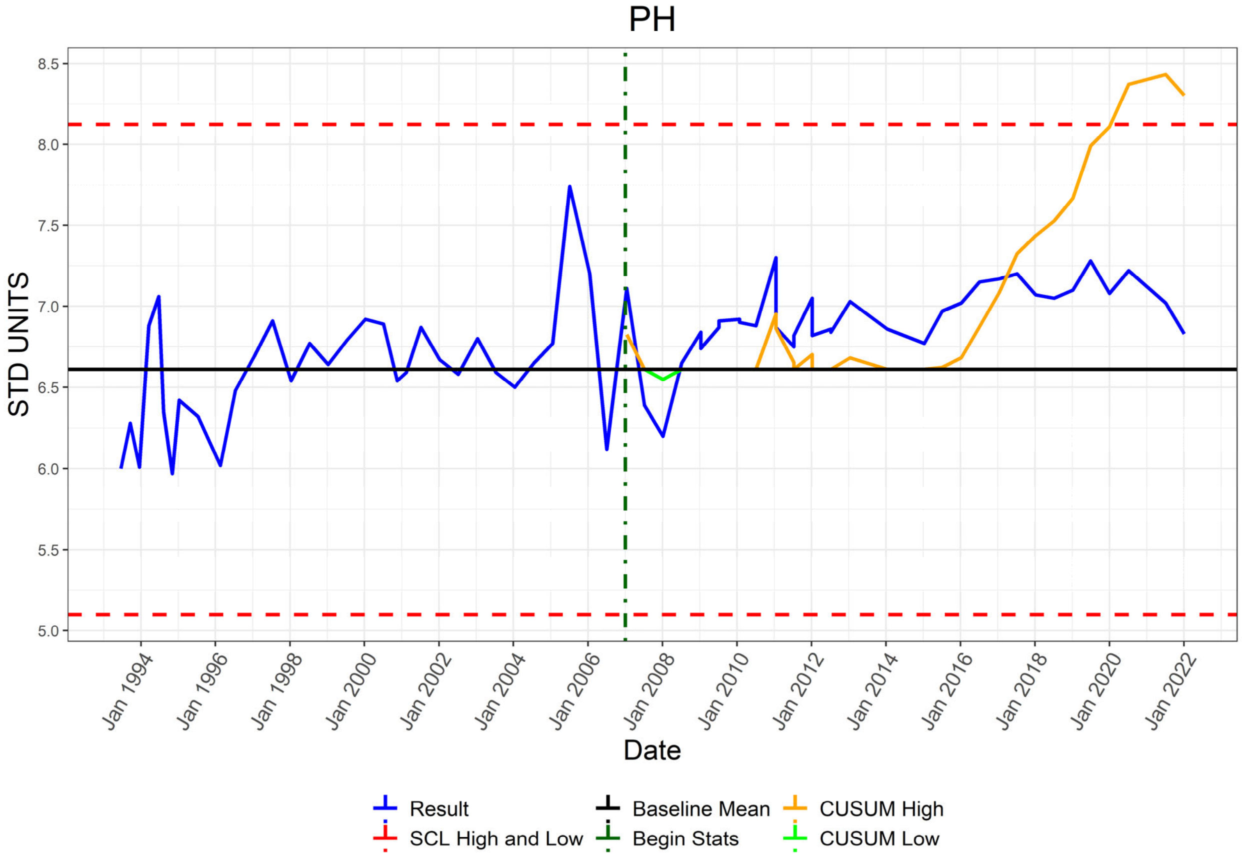

SPECIFIC CONDUCTANCE
7000
6000
5000
4000
3000
2000
1000
0
-1000
-2000
umhos/cm
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

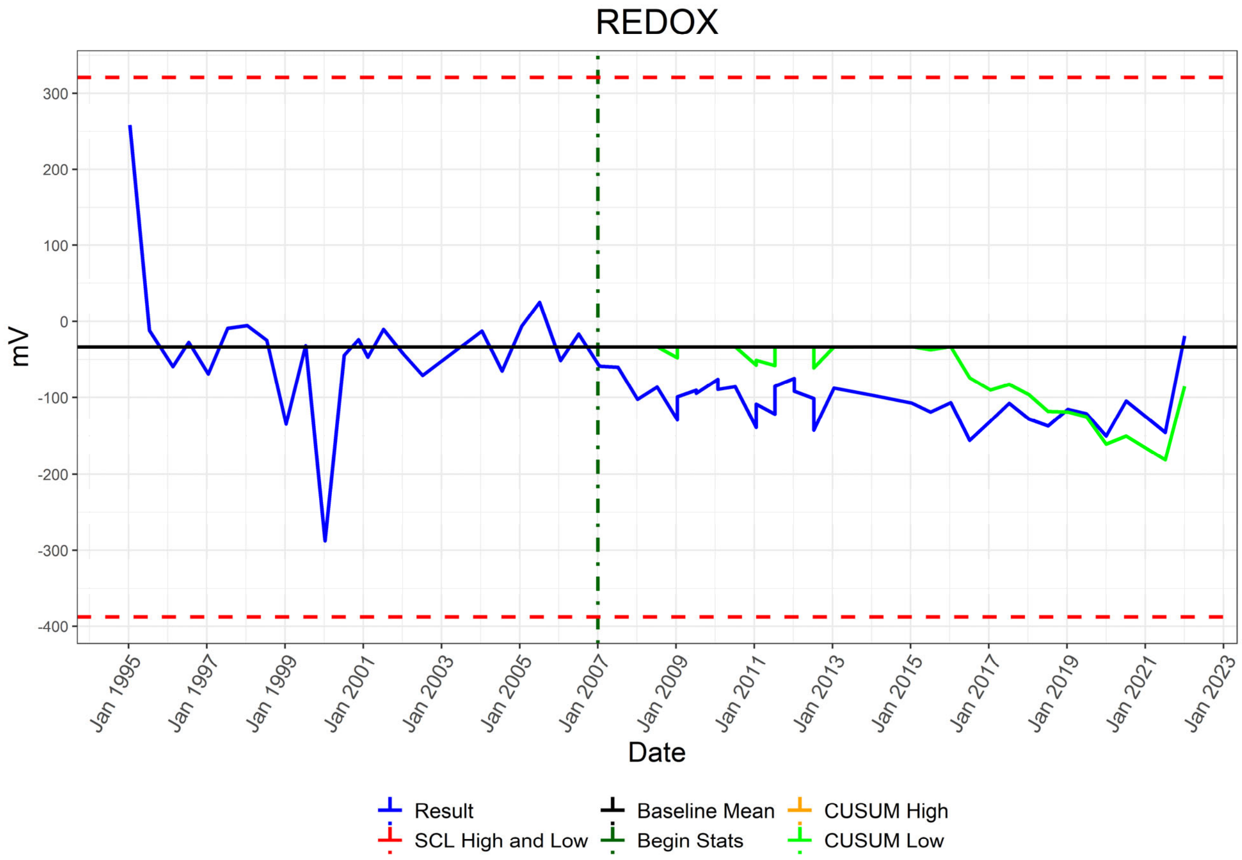

TEMPERATURE
(°C)
30
25
20
15
10
5
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

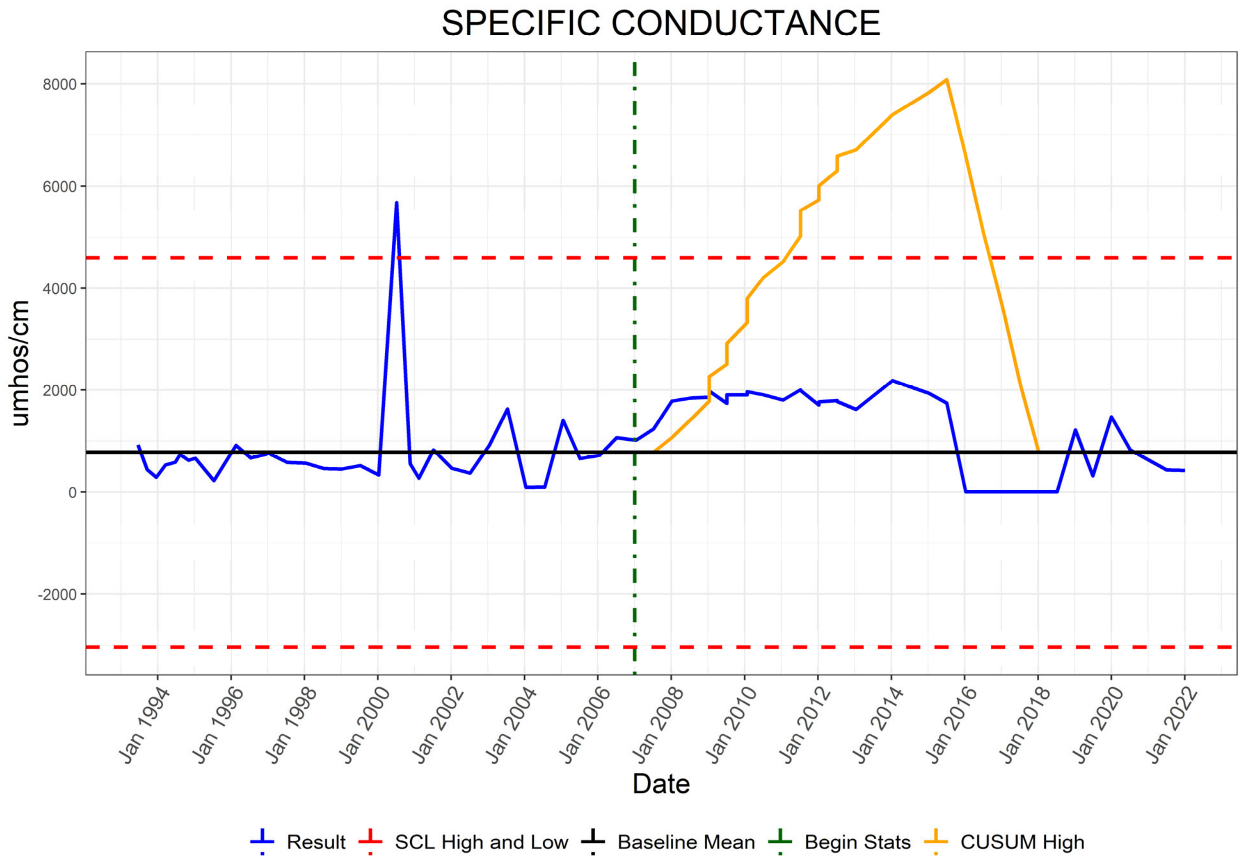
Closure and Post-Closure for the A, B, and C Basins (Program 1)

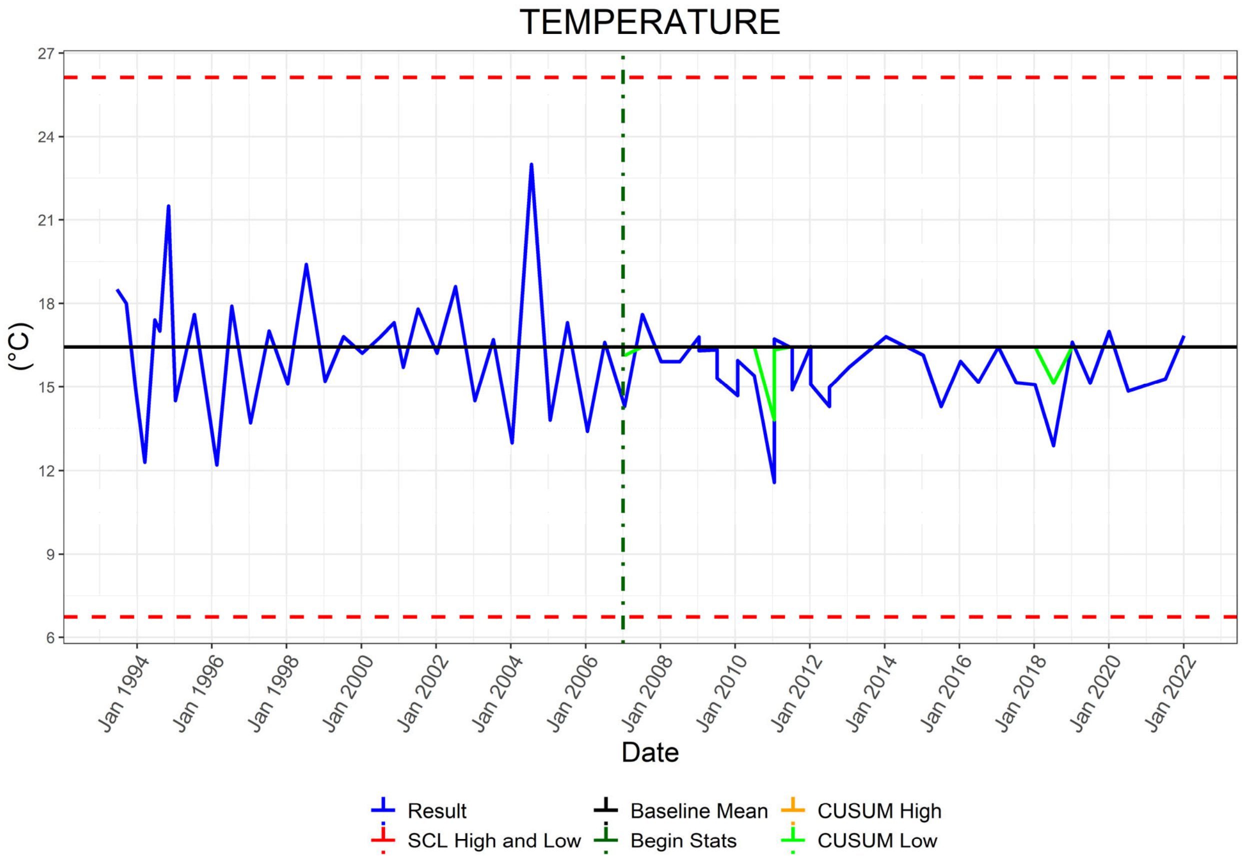
Well Name: L14-M01B





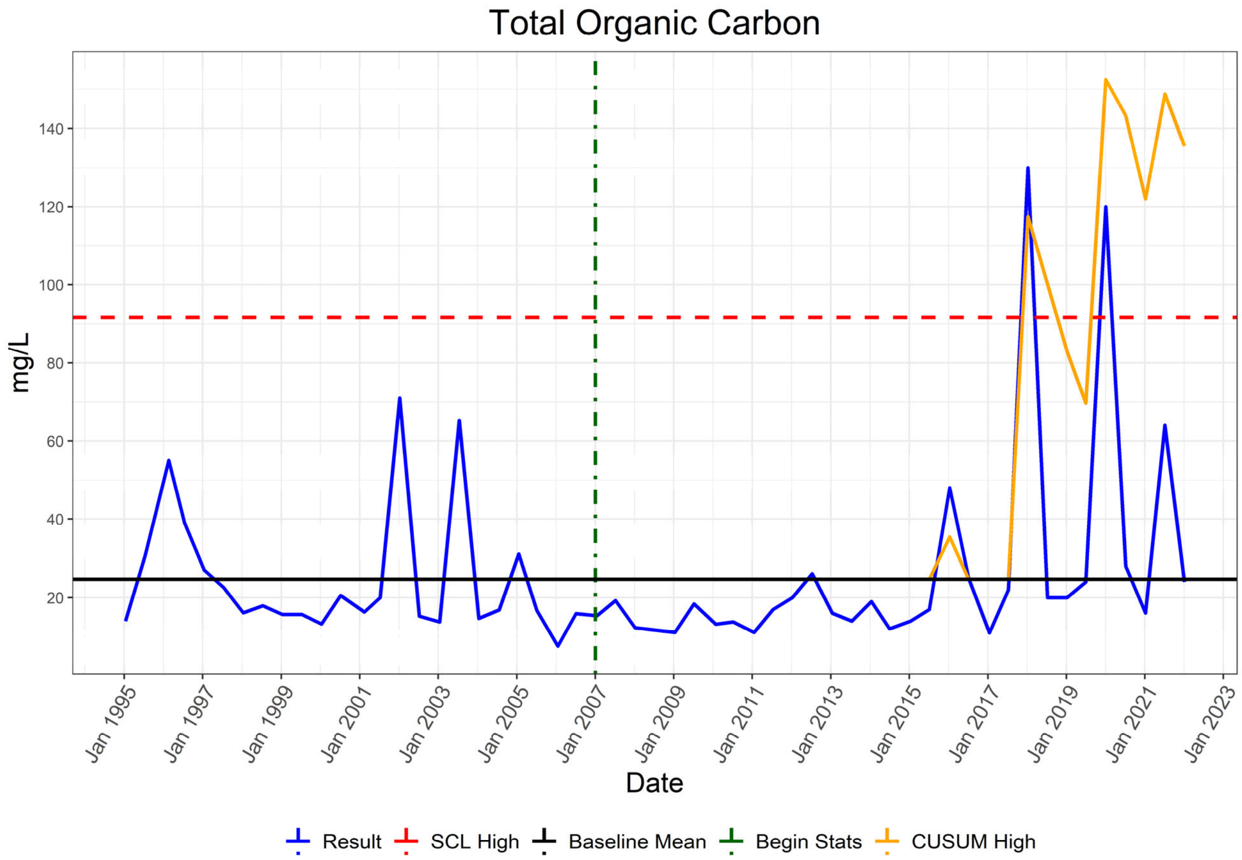

REDOX
mV
300
200
100
0
-100
-200
-300
-400
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

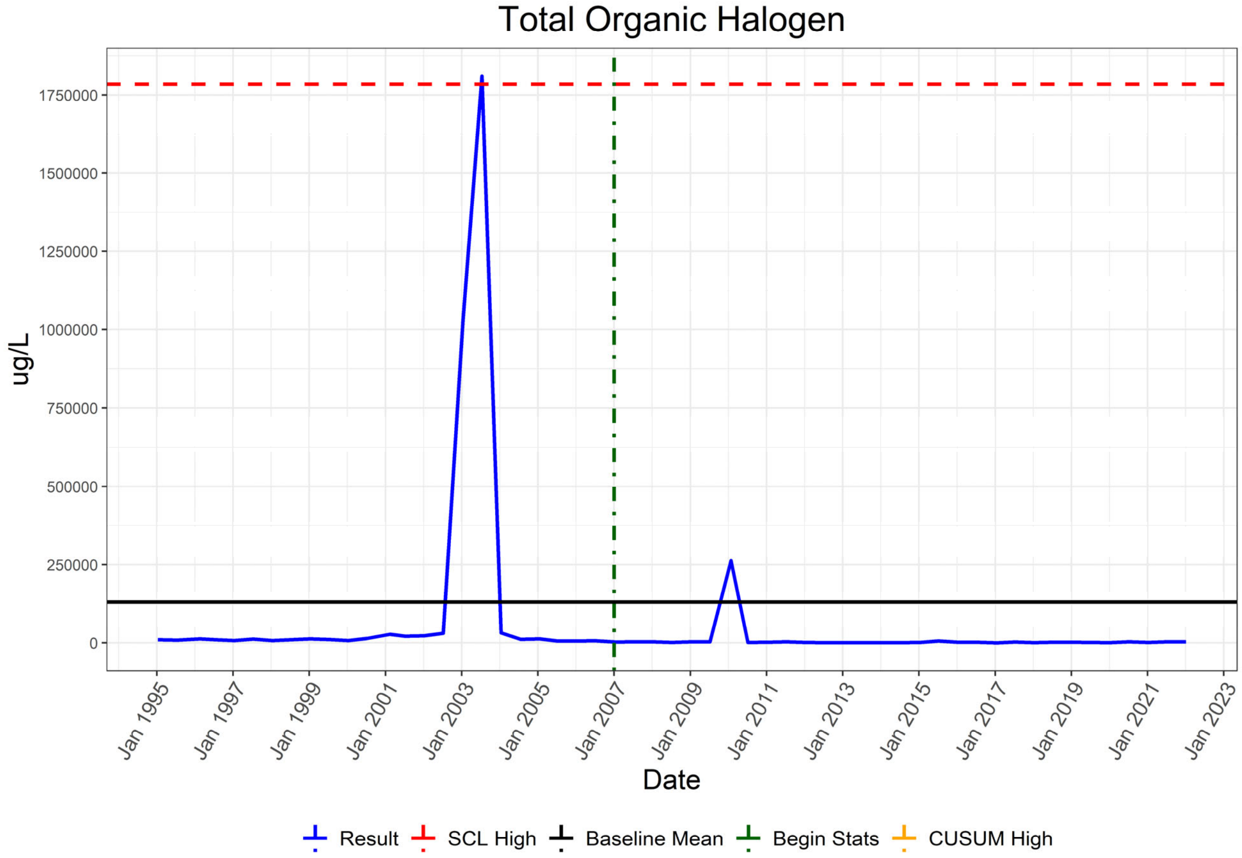

SPECIFIC CONDUCTANCE
umhos/cm
8000
6000
4000
2000
0
-2000
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High


TEMPERATURE
(°C)
27
24
21
18
15
12
9
6
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

Closure and Post-Closure for the A, B, and C Basins (Program 1)

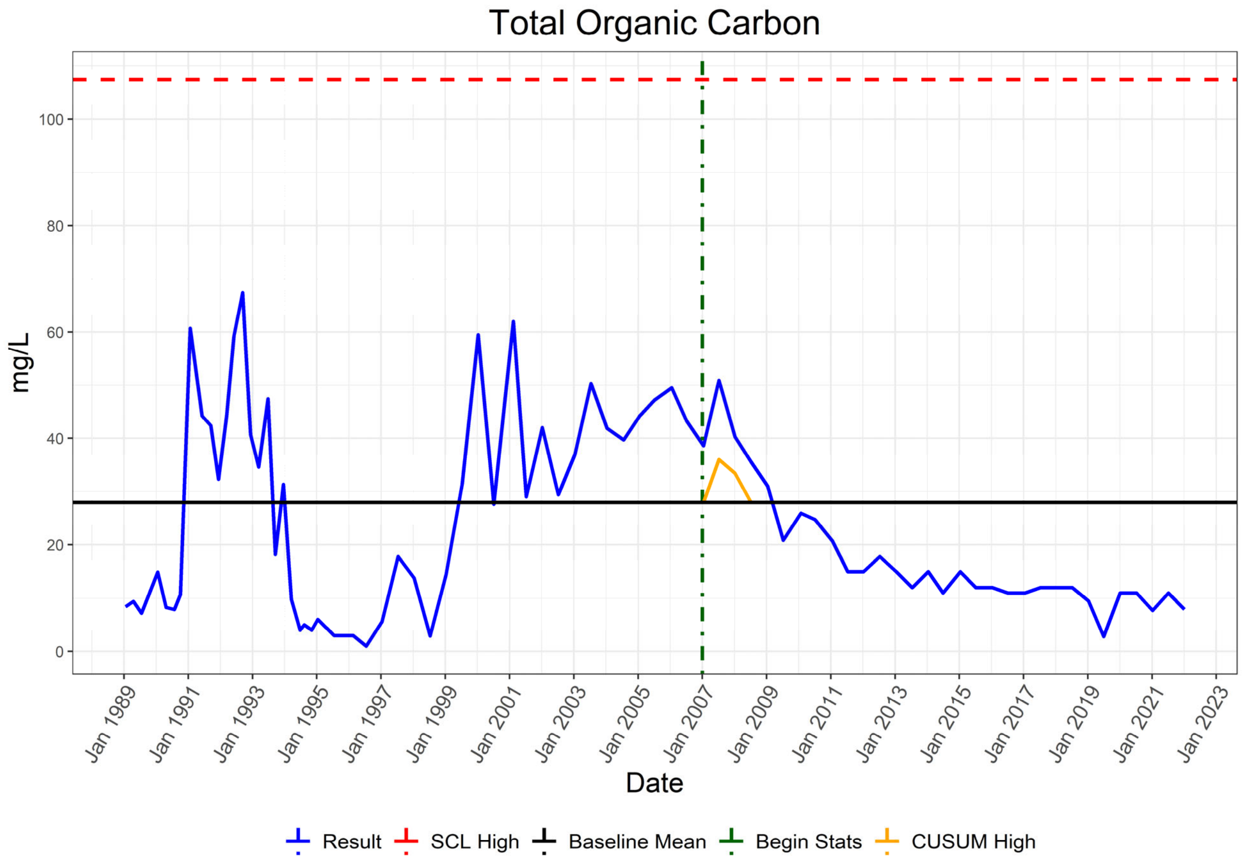
Well Name: G16-M02B





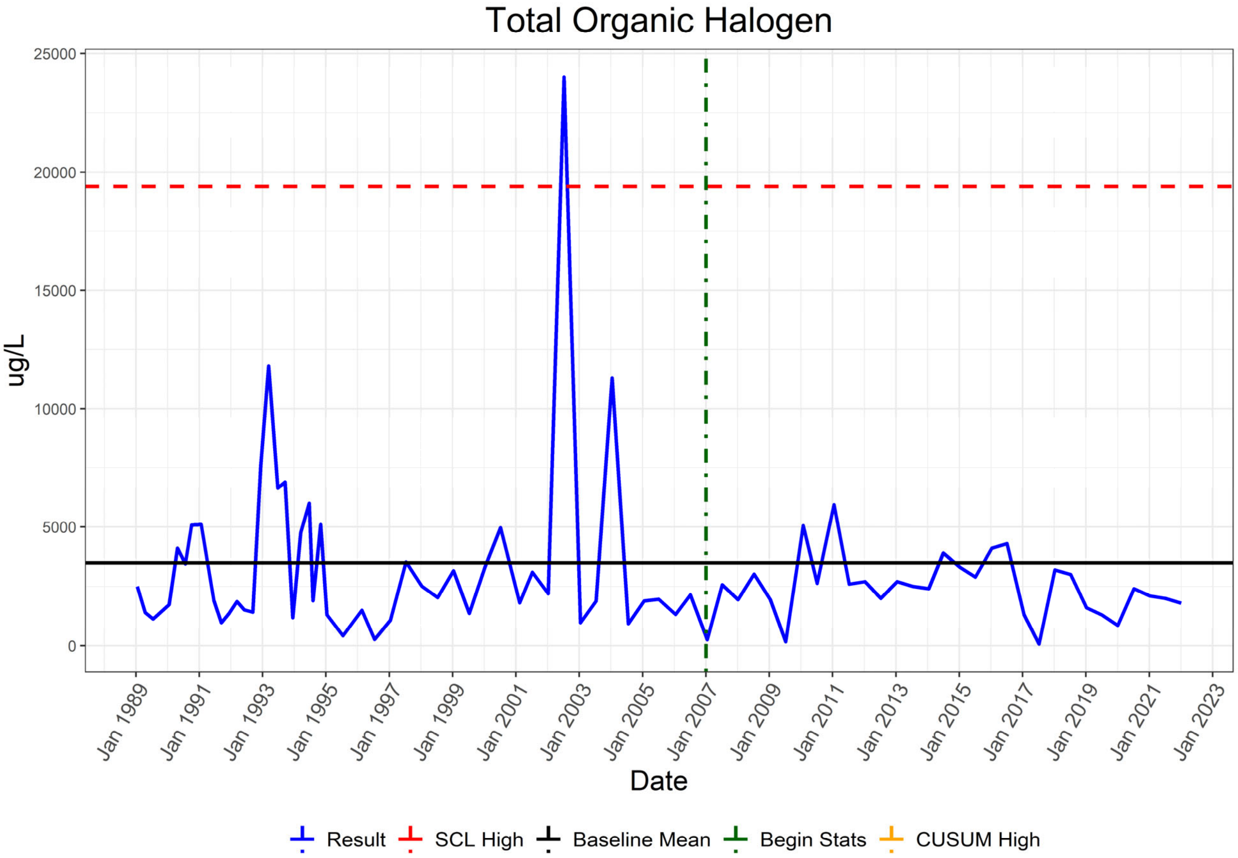
Closure and Post-Closure for the A, B, and C Basins (Program 1)

Well Name: H13-M02B



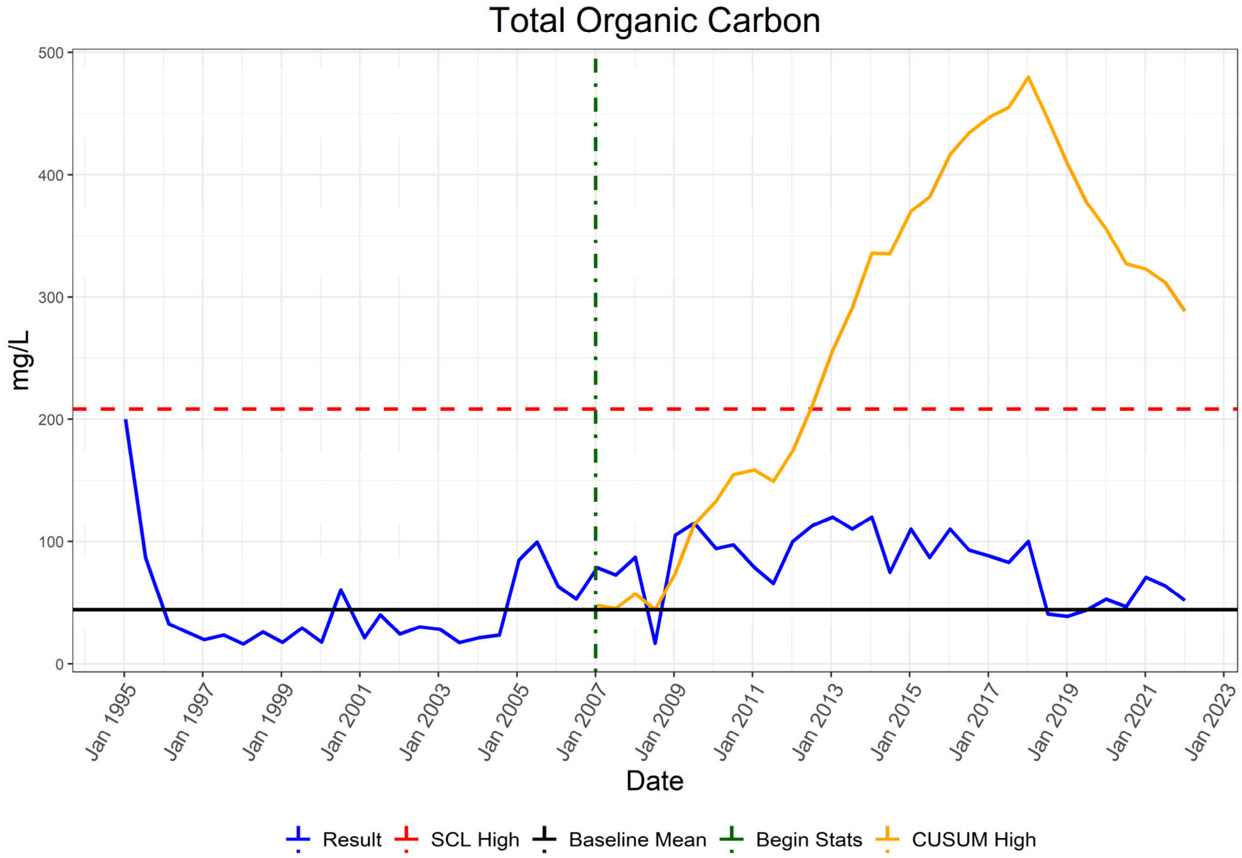
Closure and Post-Closure for the A, B, and C Basins (Program 1)

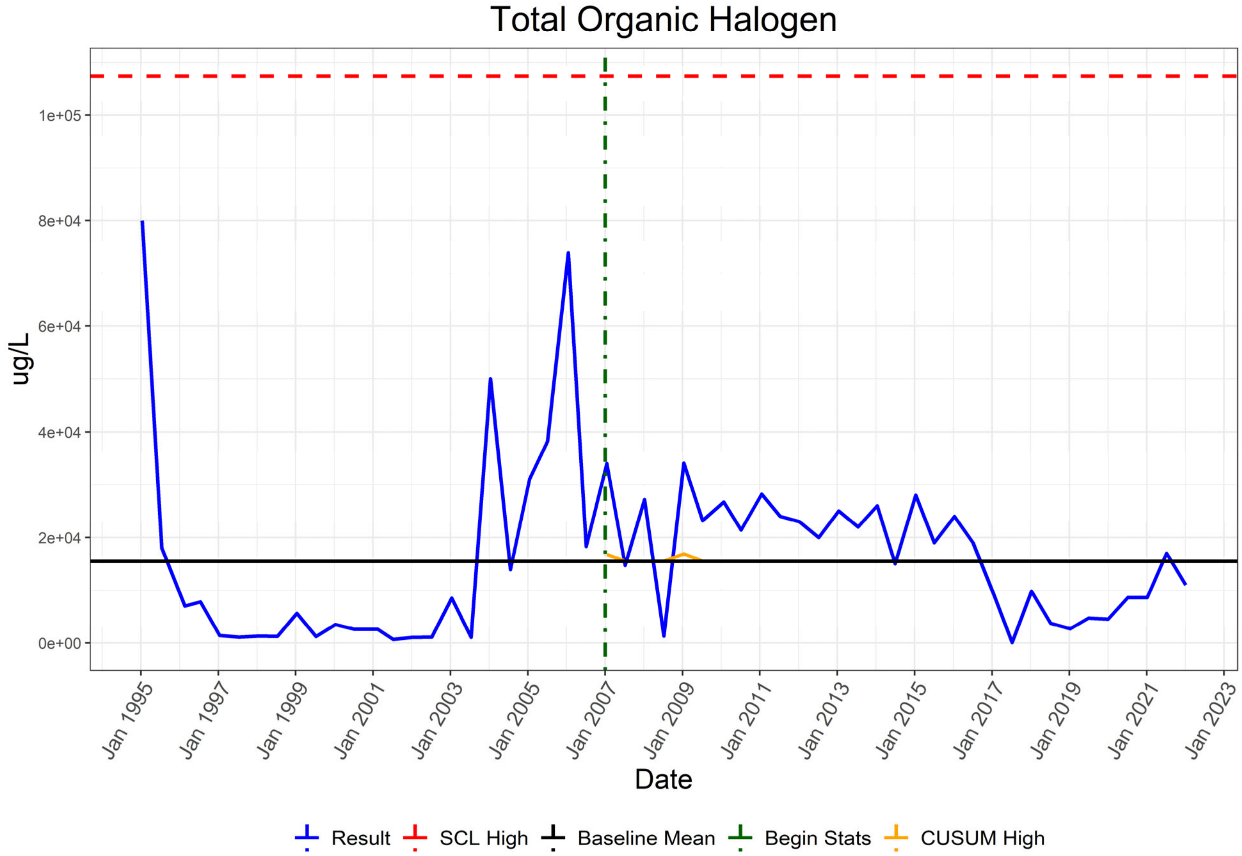
Well Name: H14-M01B



Closure and Post-Closure for the A, B, and C Basins (Program 1)

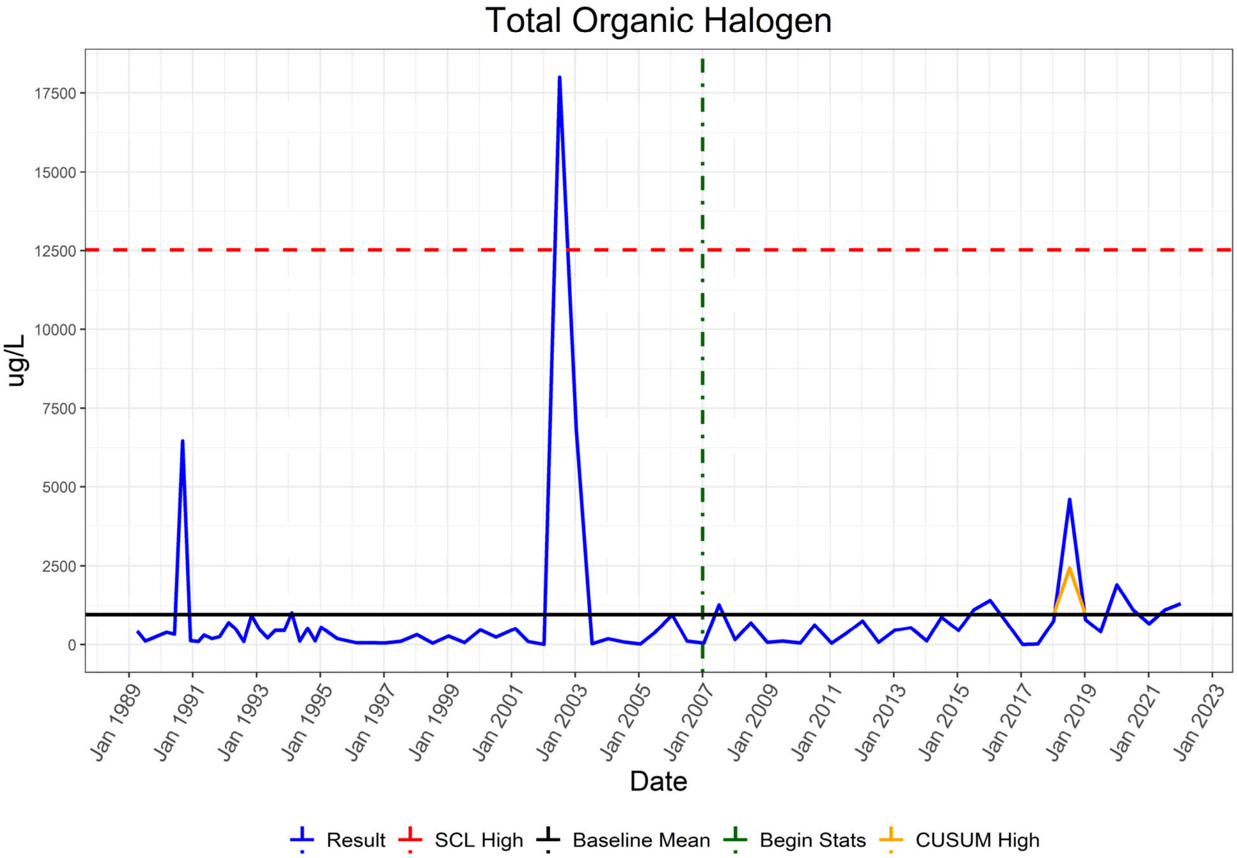
Well Name: H16-P01B





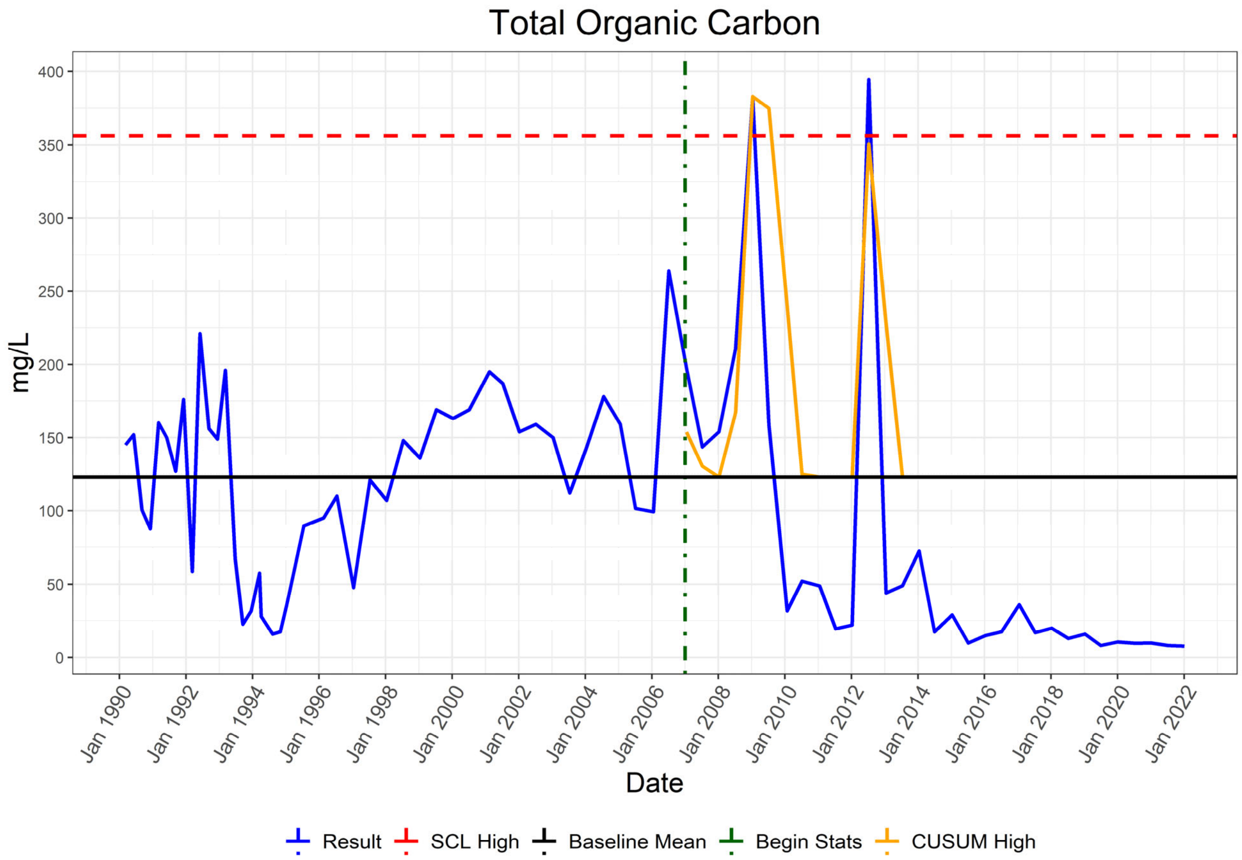
Closure and Post-Closure for the A, B, and C Basins (Program 1)

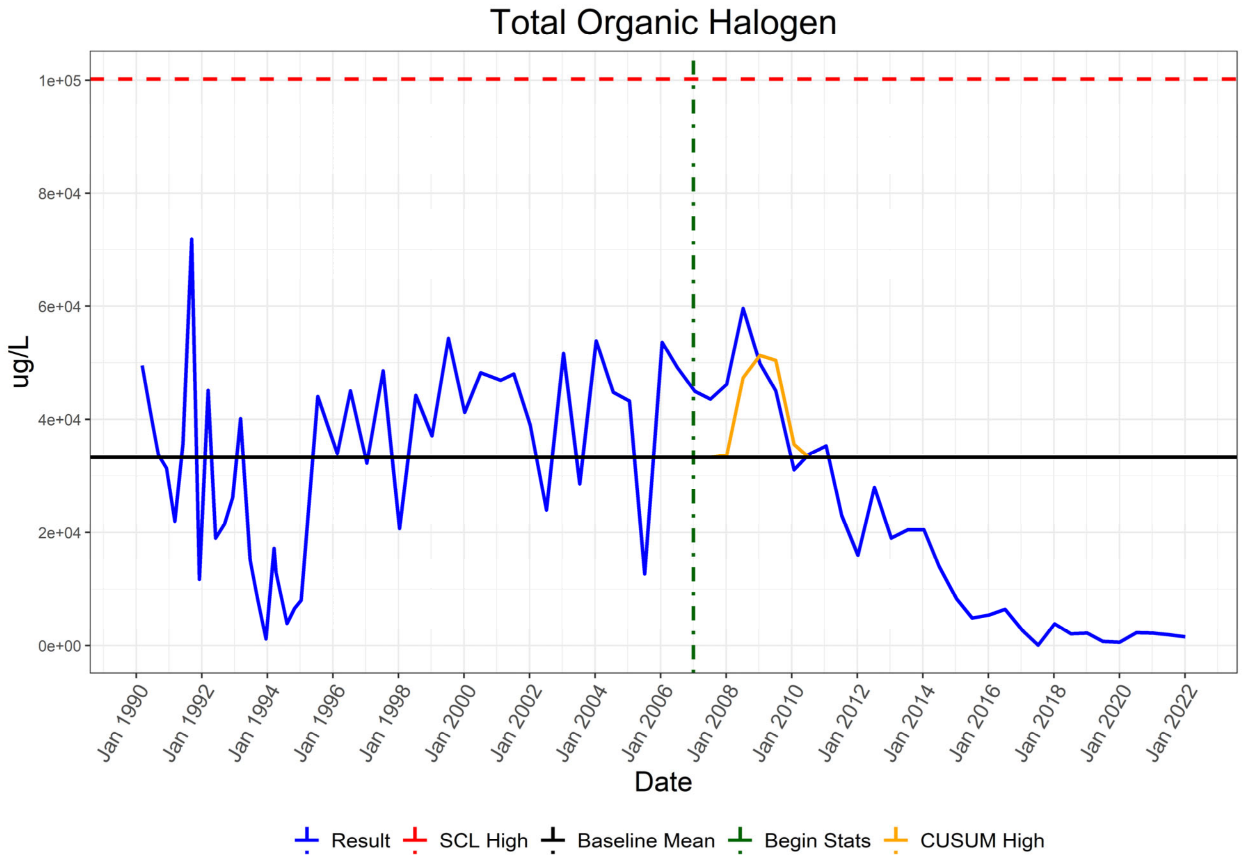
Well Name: J16-M01B



Closure and Post-Closure for the A, B, and C Basins (Program 1)

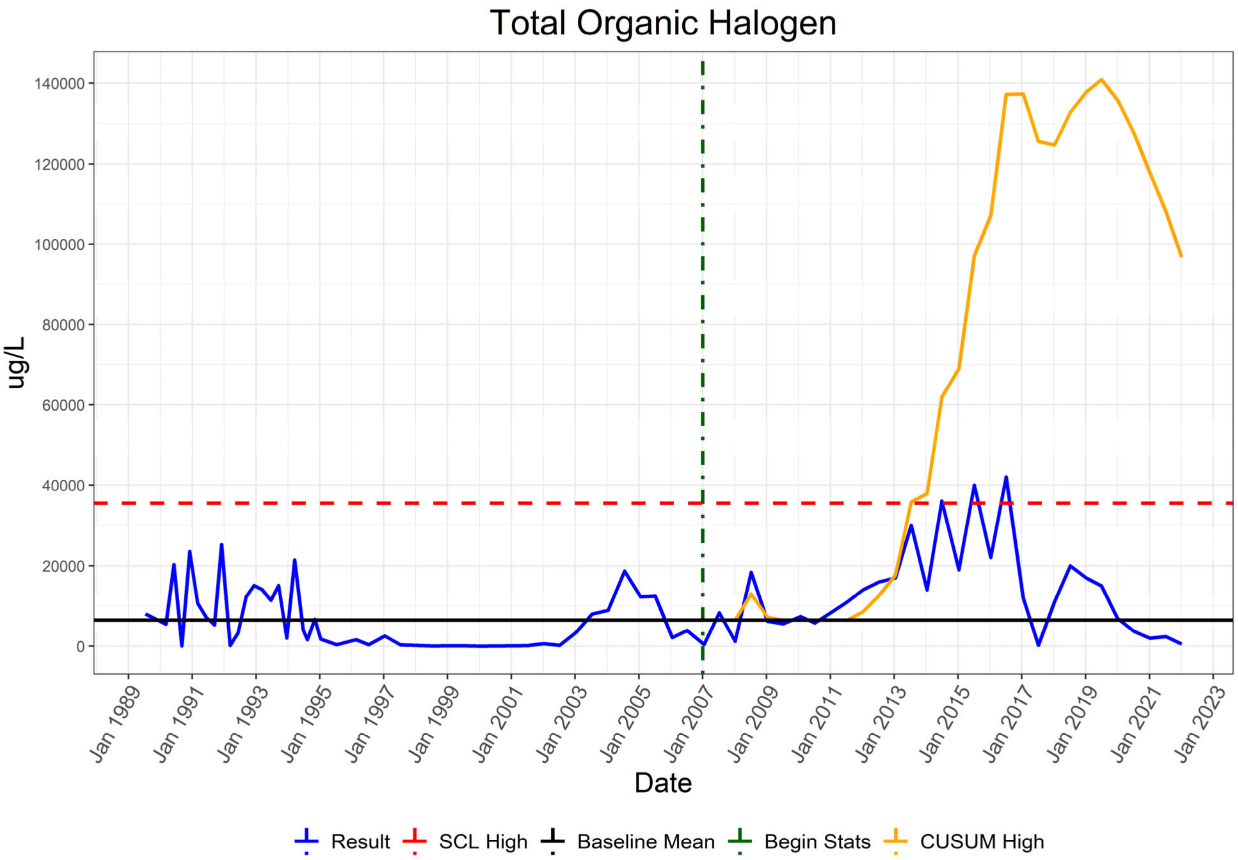
Well Name: K13-M02B





Closure and Post-Closure for the A, B, and C Basins (Program 1)

Well Name: L14-M01B



Appendix D

Well Summary, Statistical Evaluation Results, Time-Series Plots, and Control Chart Analysis for the Secure C Landfill Corrective Action Program

Narrative Well Summary:
Secure C Landfill Corrective Action Monitoring Program

The following sections present a summary of the Mann-Kendall trend test and the control chart results. Only those tests that indicated a statistically significant trend at a 1% level of significance or an out-of-control result in the current event are mentioned below.

P21-M01B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that benzene, ammonia, chloride, chlorobenzene, total organic carbon, total organic halogen, specific conductance, and sodium exhibit a statistically significant upward trend while sulfate exhibits a decreasing trend for all data. The control chart analysis indicates that arsenic (CUSUM), redox (CUSUM), 4-Chloroaniline (CUSUM and current Shewhart value) and total phenols (CUSUM) are out-of-control.

P21-M04B

Mann-Kendall evaluation of the combined baseline/current data sets indicates that specific conductance exhibits a statistically significant downward trend. The control chart analysis indicates that total organic halogen (CUSUM/current value) is out-of-control.

P21-R01B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that sodium exhibits a statistically significant downward trend. The control chart analysis indicates that dissolved oxygen (CUSUM), arsenic (CUSUM, and total organic carbon (CUSUM) are out-of-control

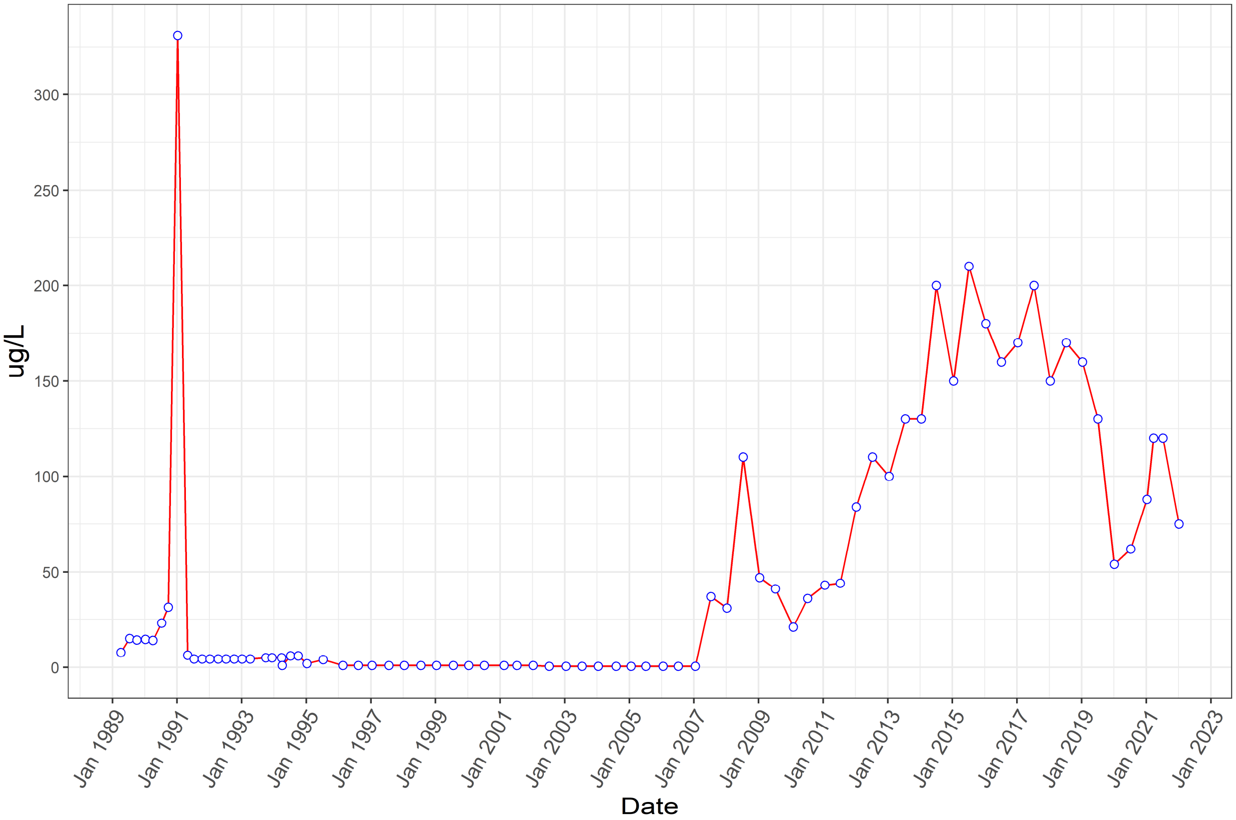
Q21-M01B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that aluminum, ammonia, chloride, pH, and specific conductance exhibit a statistically significant upward trend in all data while redox, N-Nitrosodimethylamine, and total organic carbon exhibit a statistically significant downward trend for all data. The control chart analysis indicates that sodium (CUSUM/current value) and dissolved oxygen (CUSUM) are out-of-control.

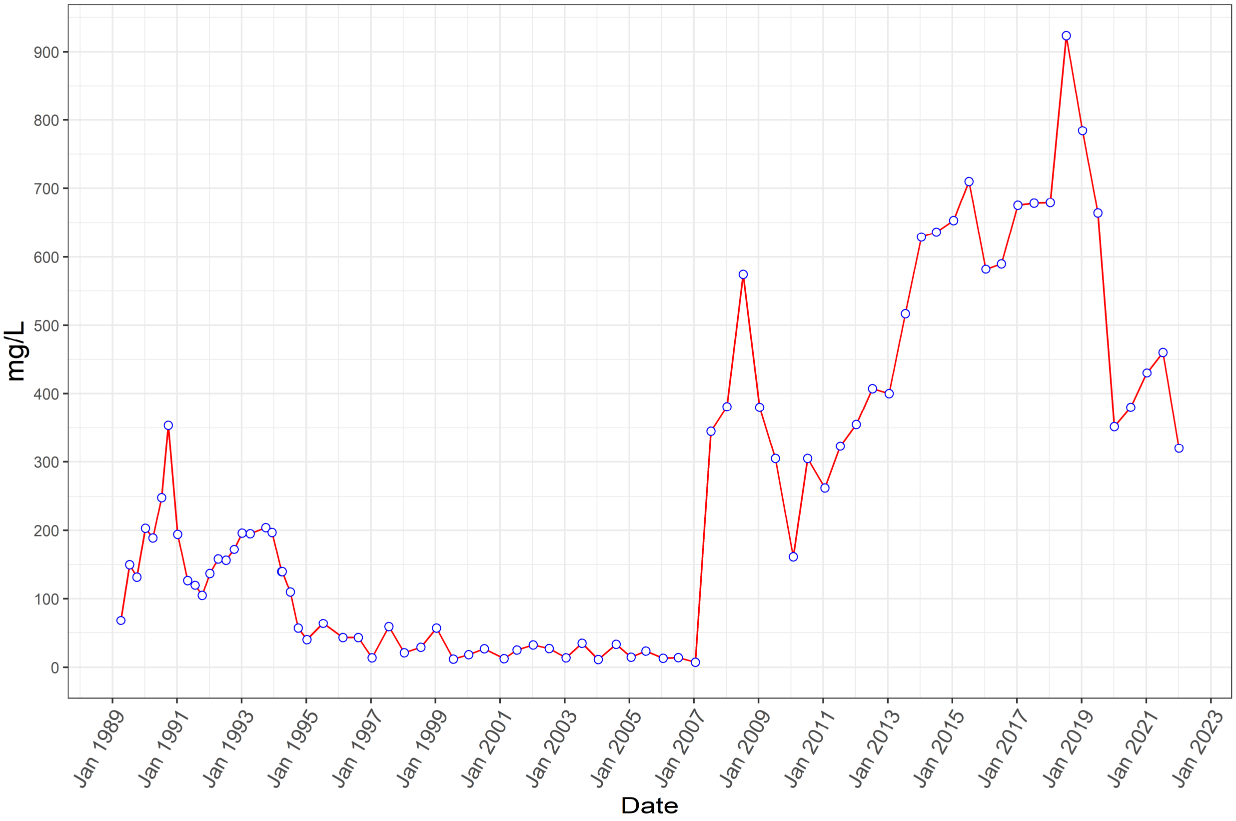
Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: P21-M01B

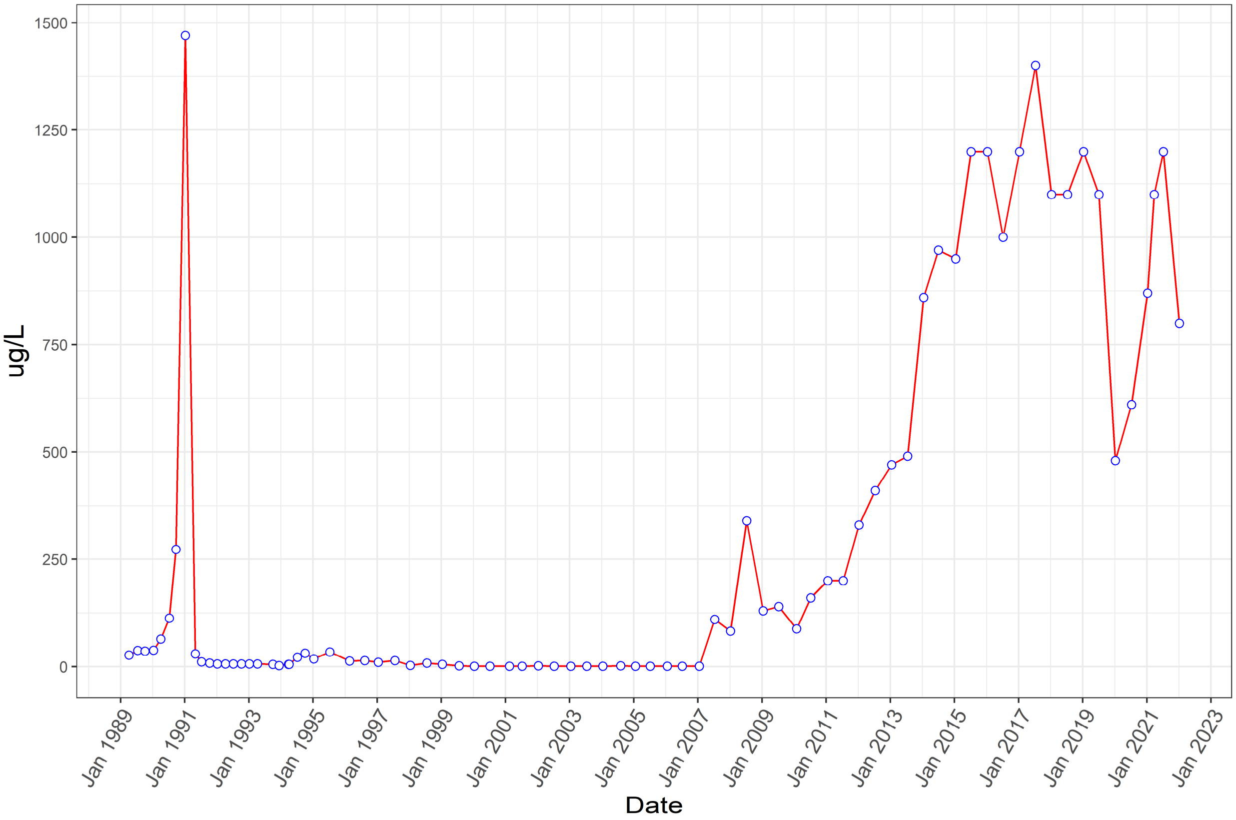
Benzene



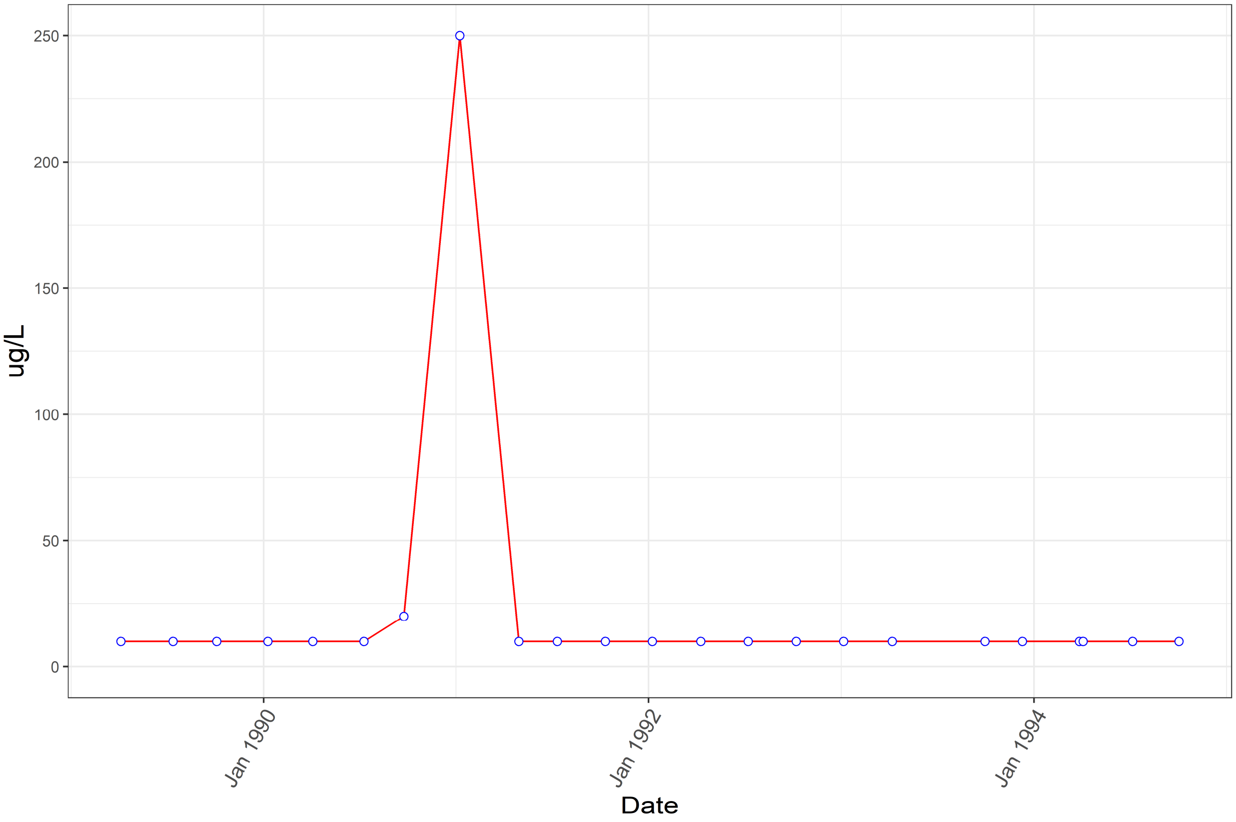
Chloride

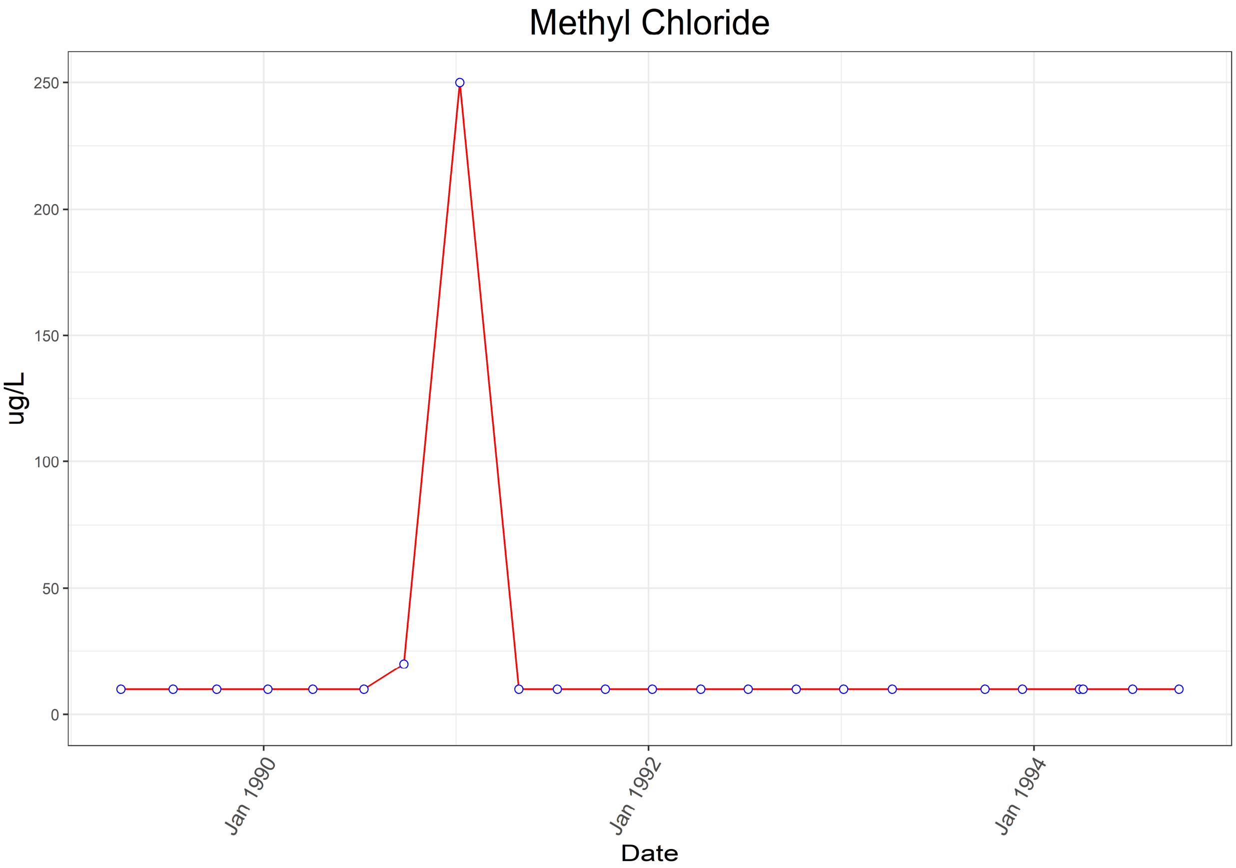


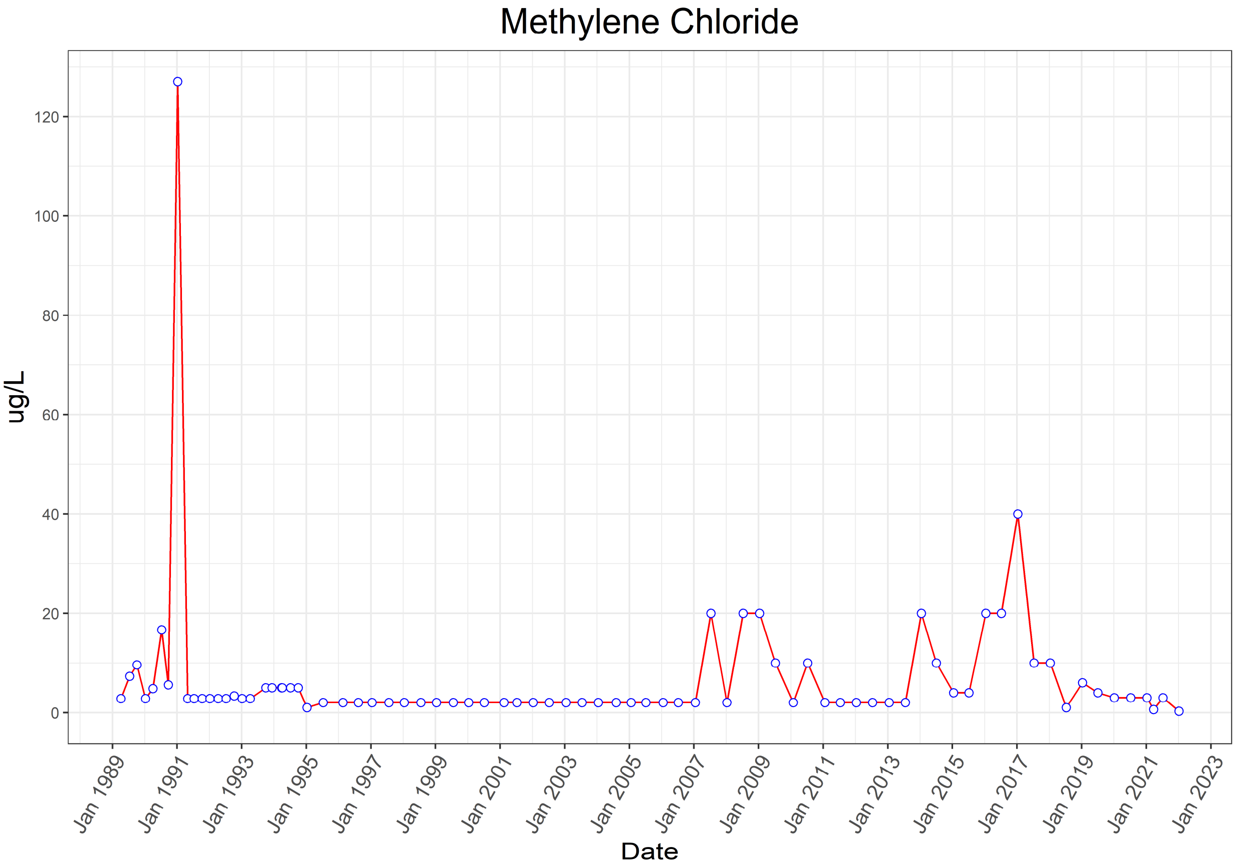
Chlorobenzene

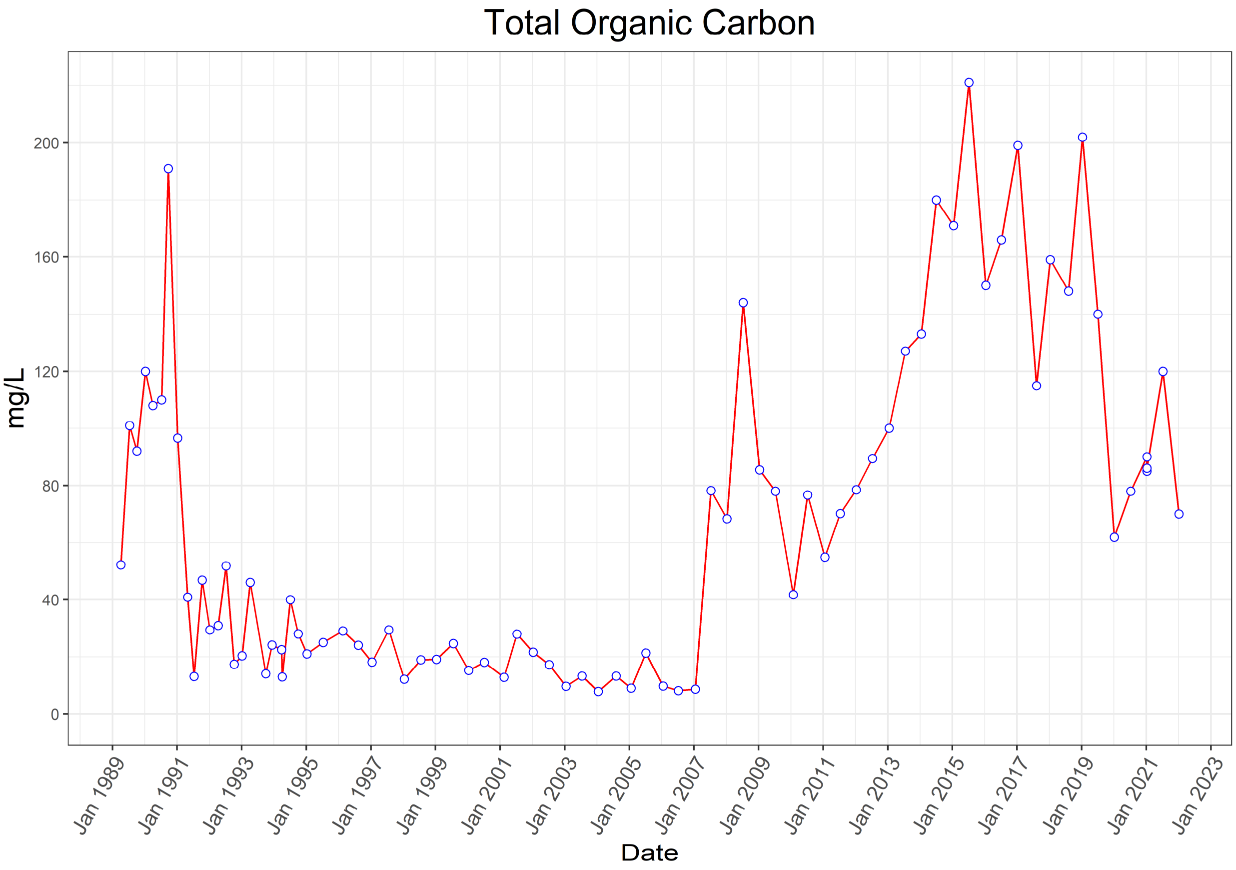


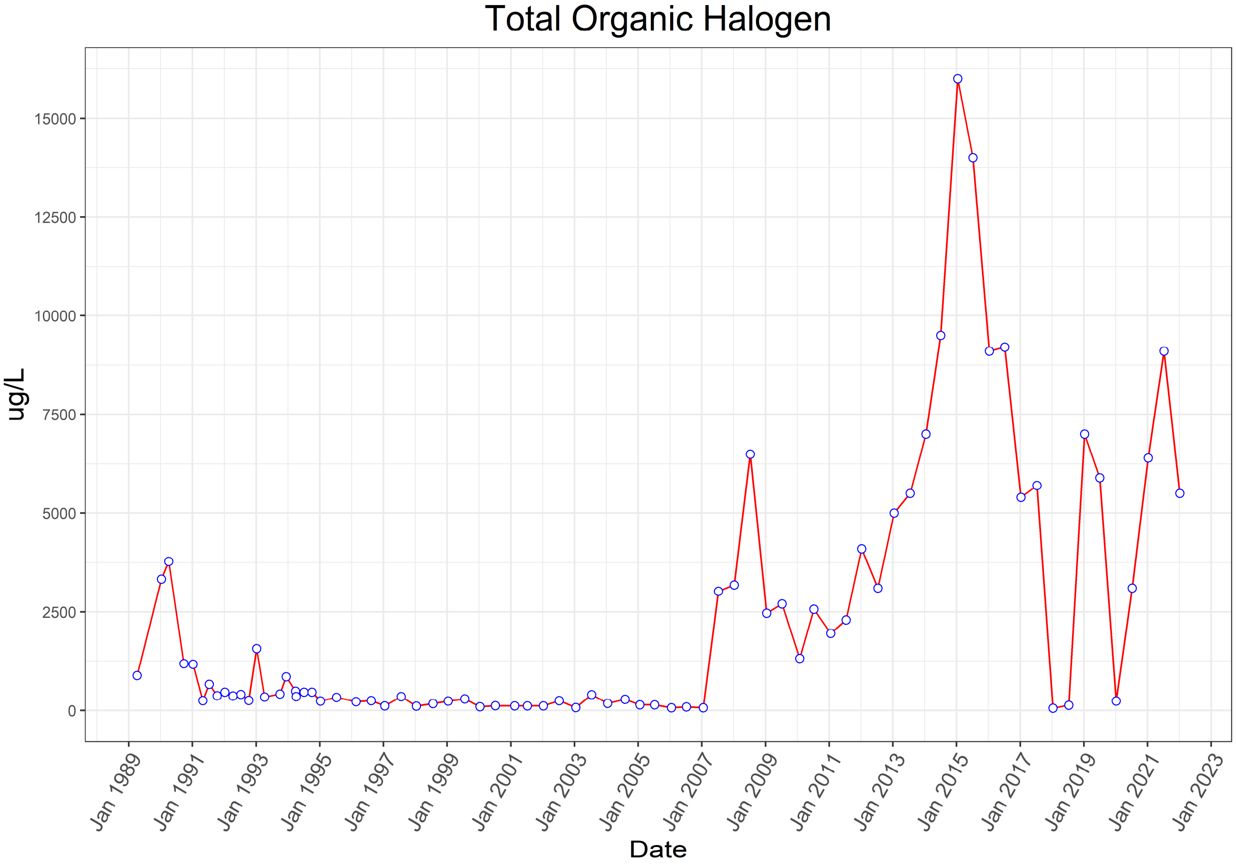
Ethyl Chloride



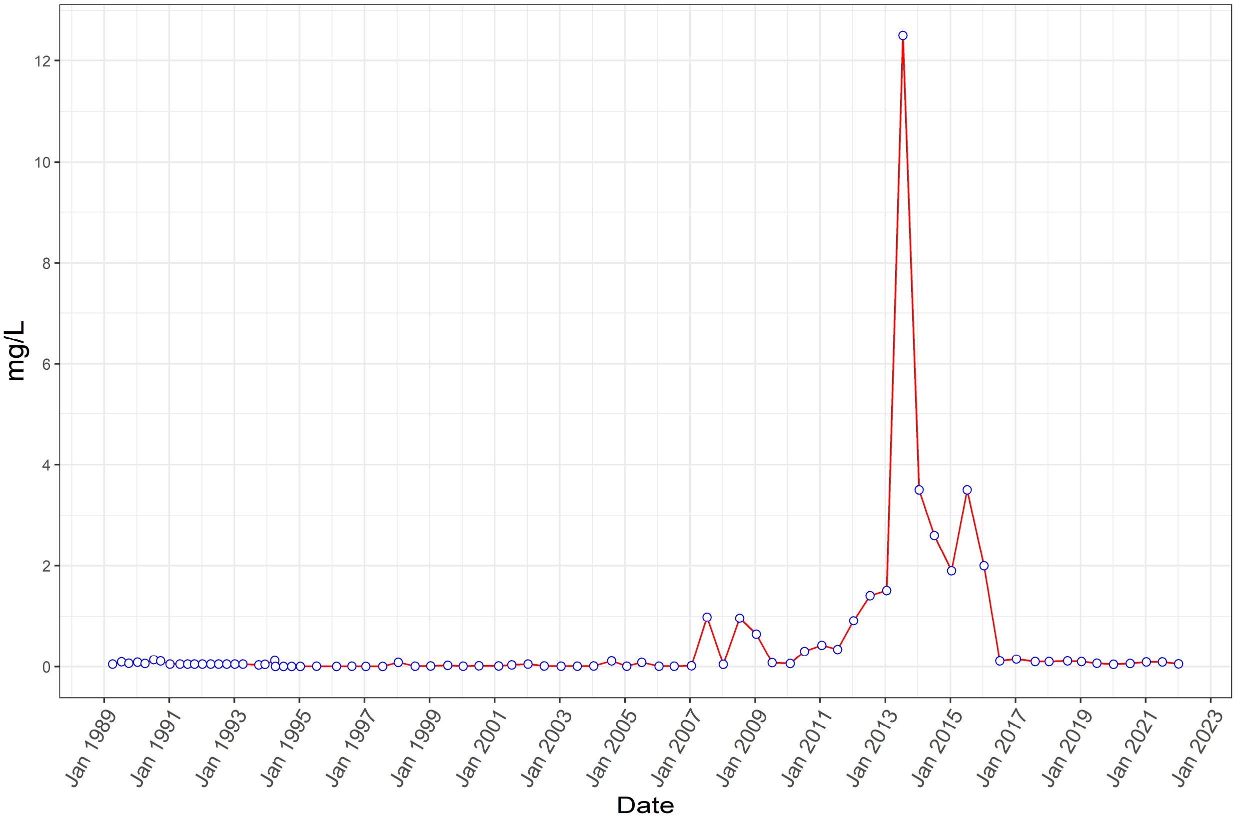

Methyl Chloride


Methylene Chloride

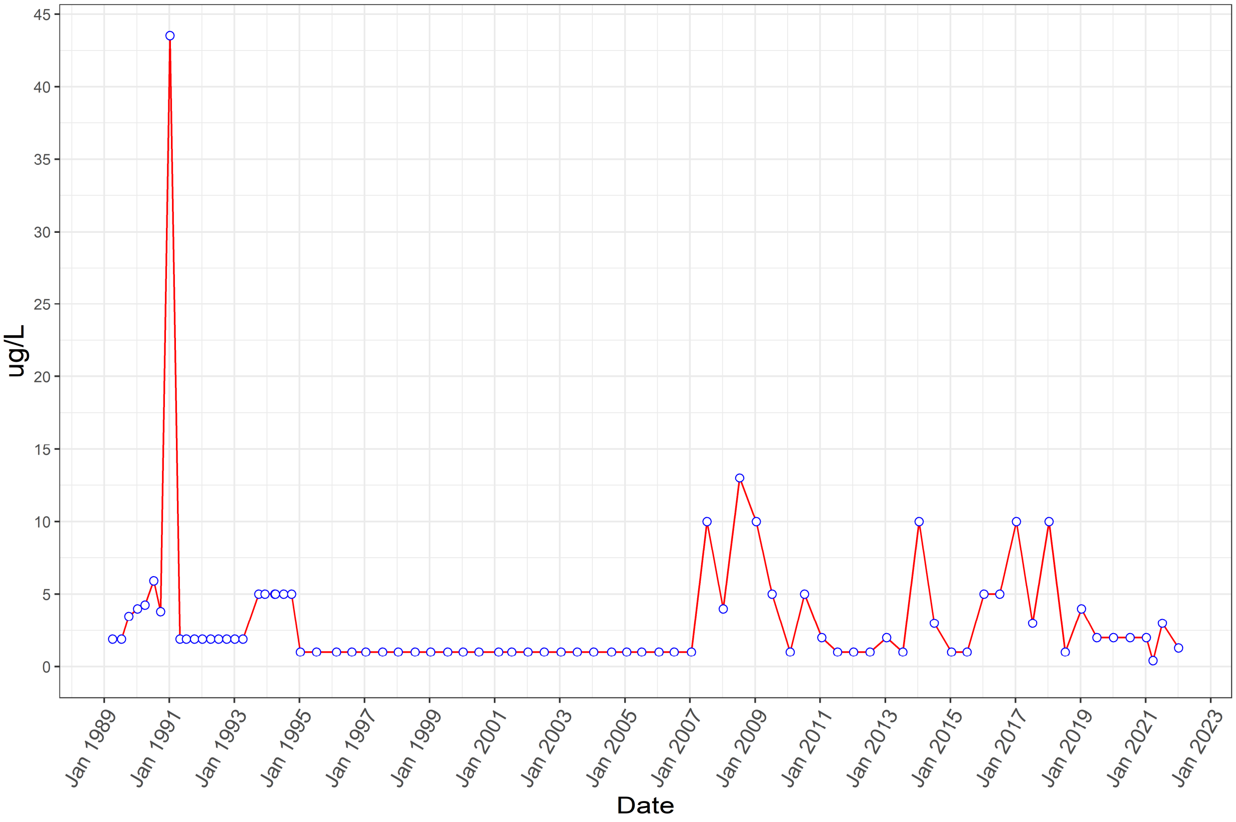

Total Organic Carbon
mg/L
0
40
80
120
160
200
Date
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

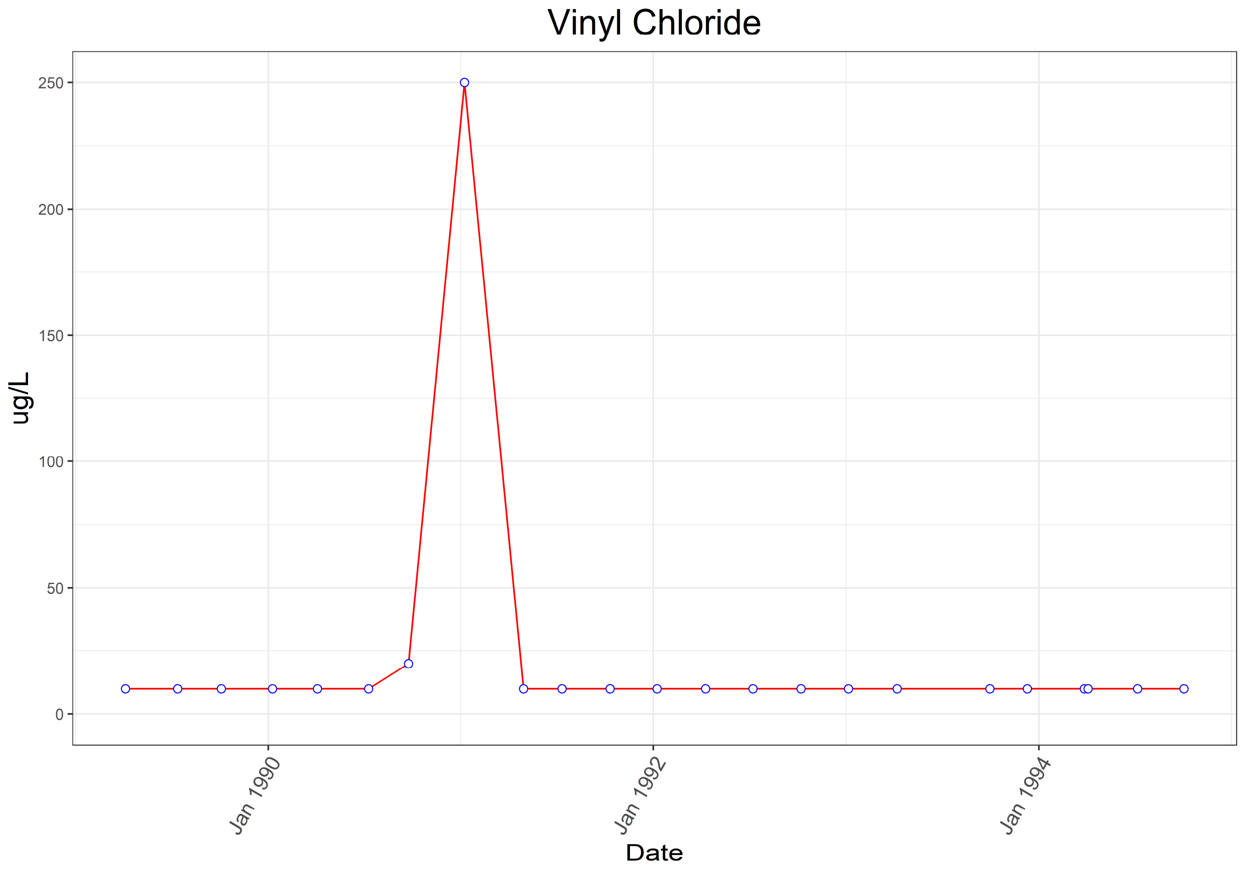

Total Organic Halogen
ug/L
0
2500
5000
7500
10000
12500
15000
Date
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

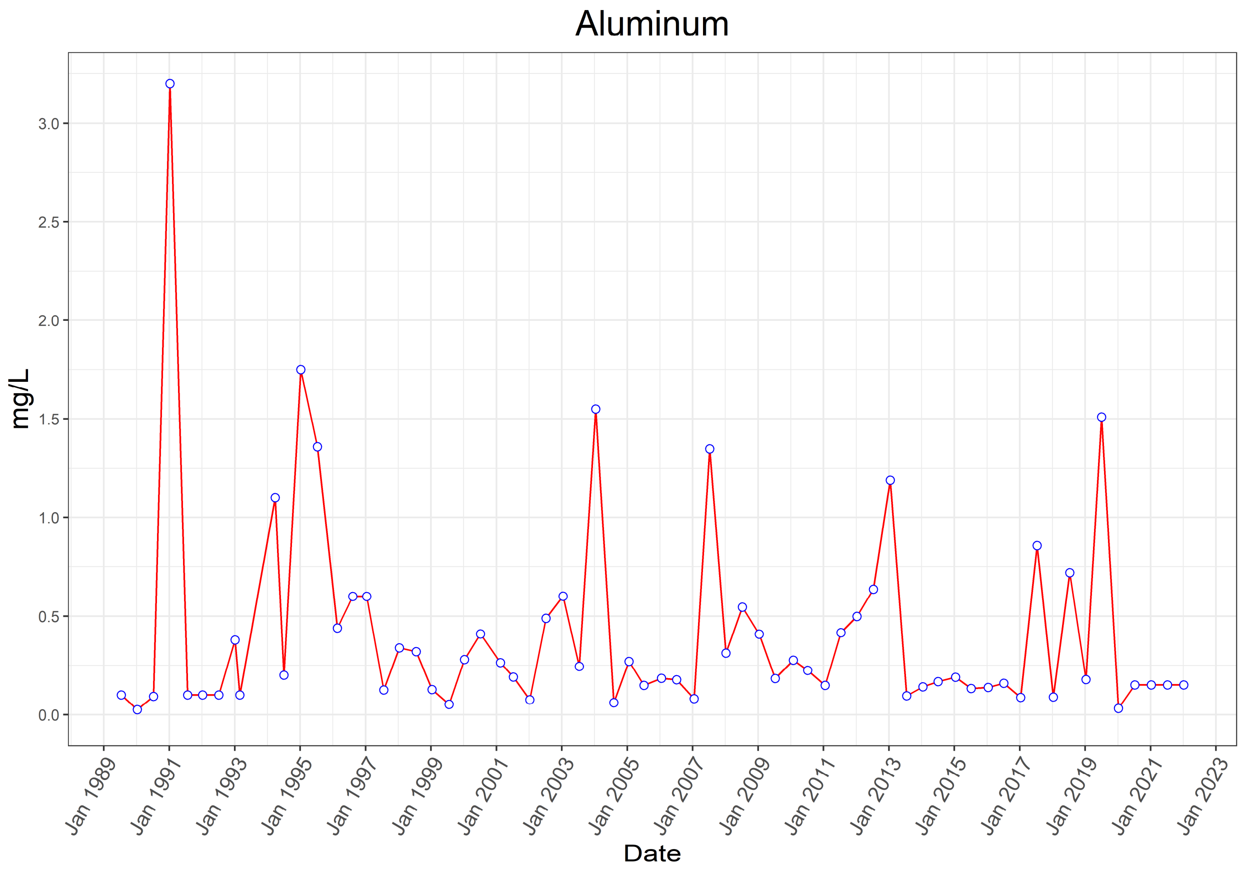
Total Phenols

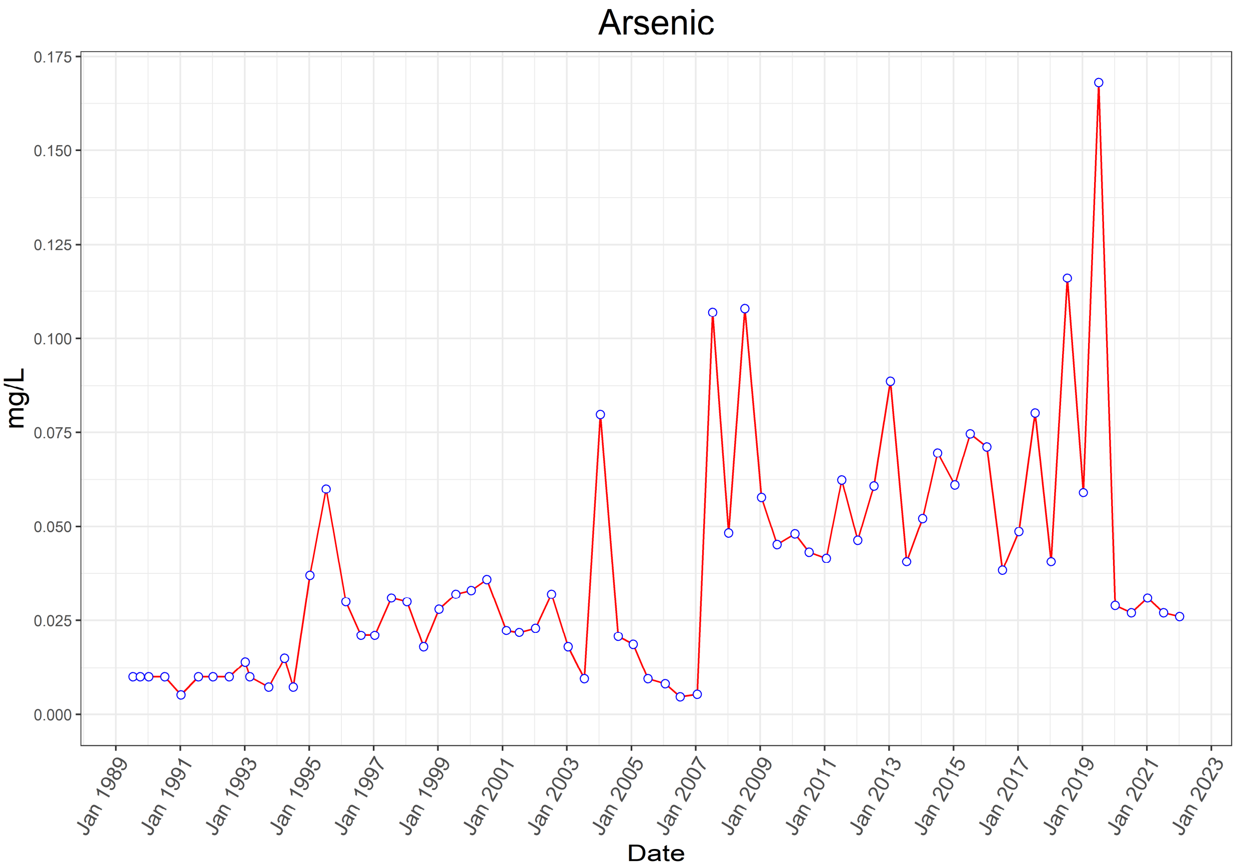


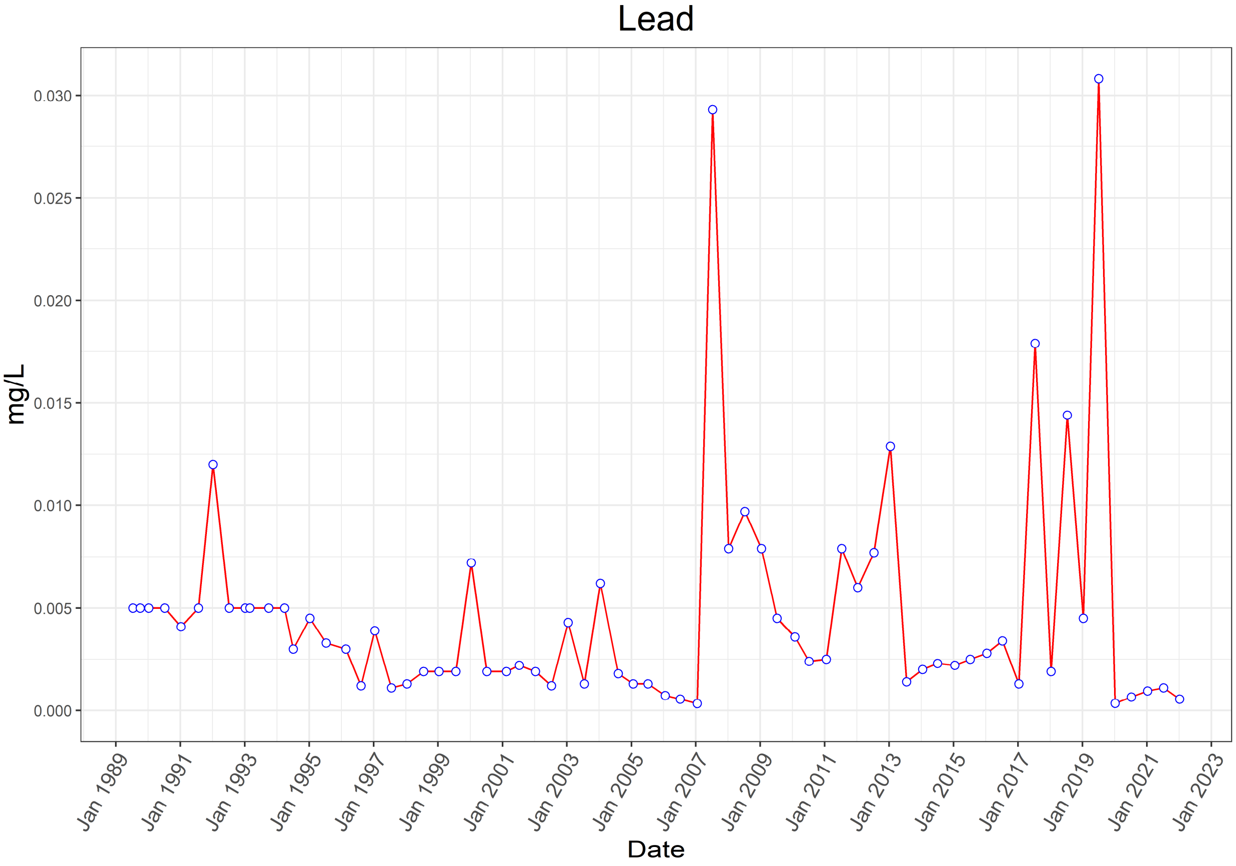
Trichloroethene

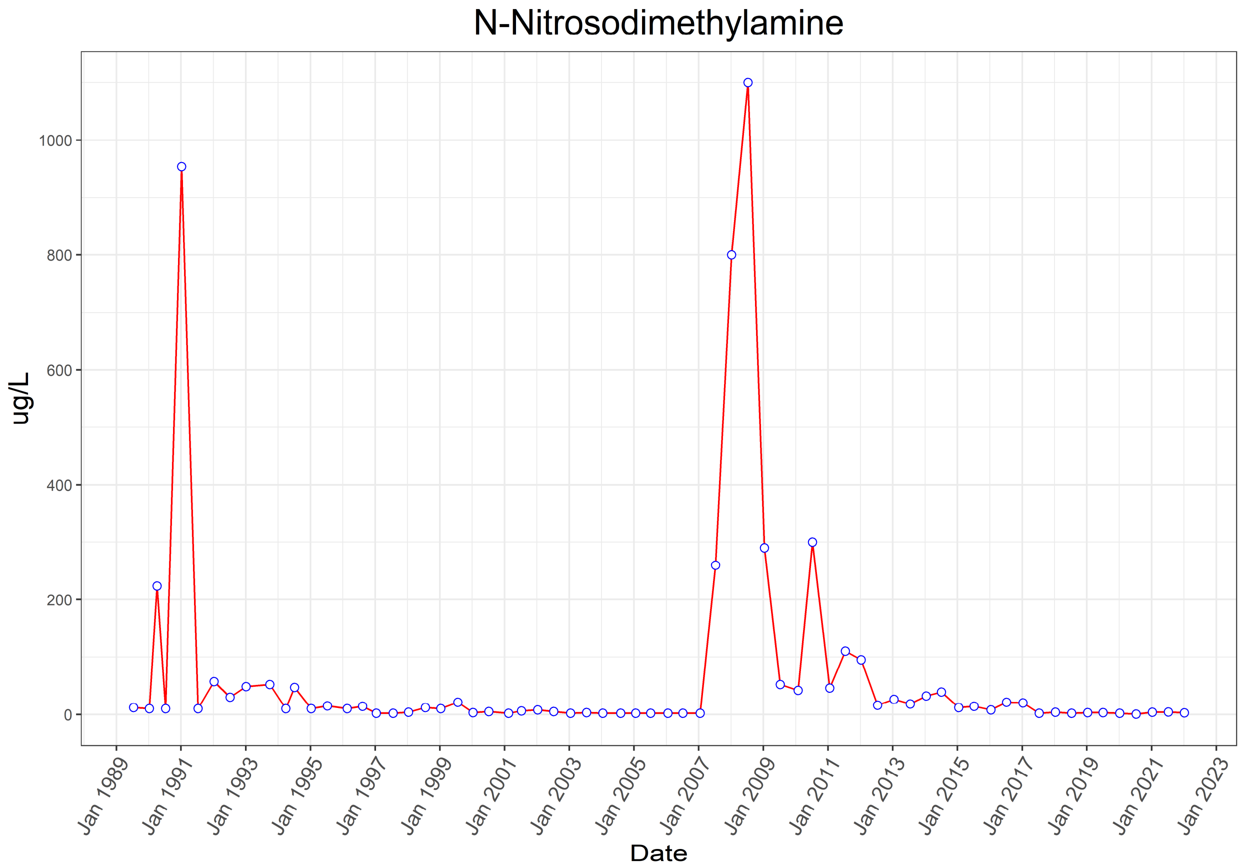


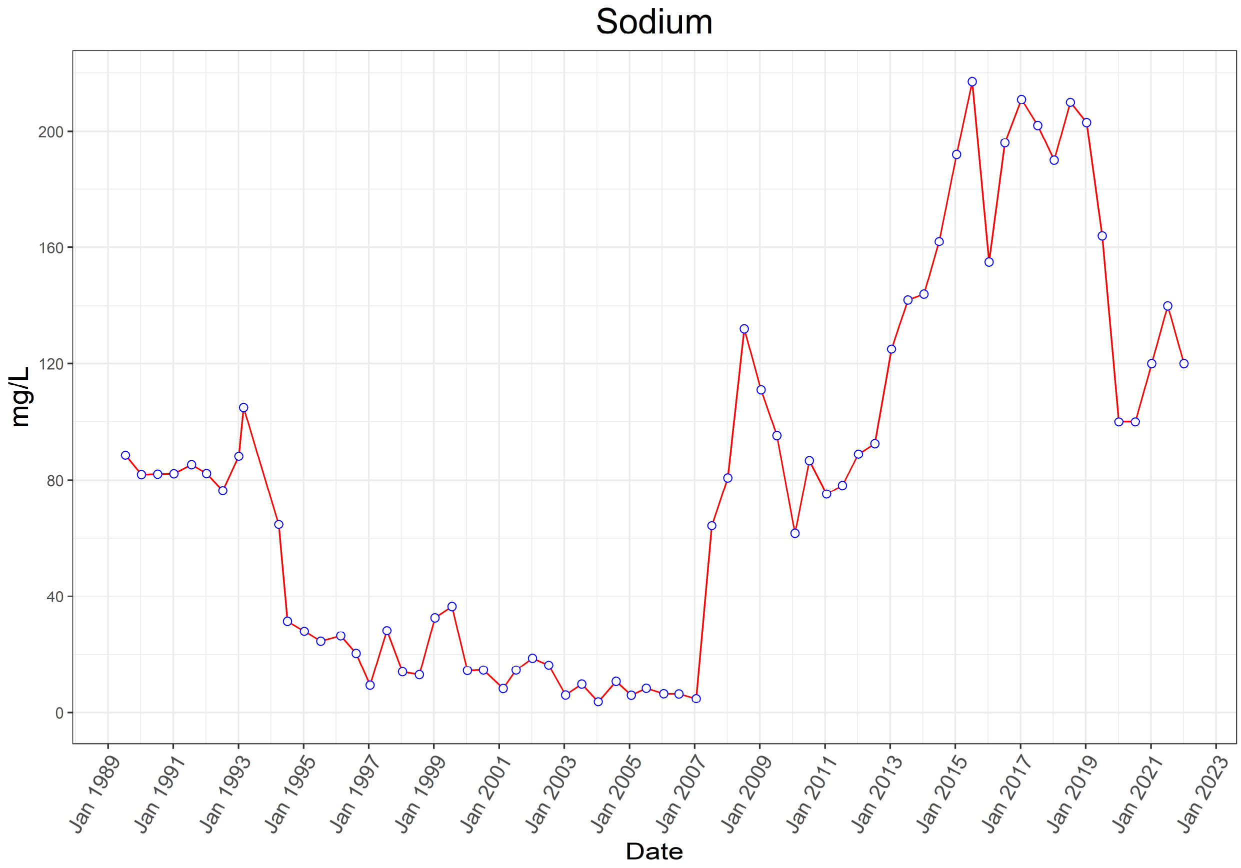

Vinyl Chloride
ug/L
250
200
150
100
50
0
Jan 1990
Jan 1992
Jan 1994
Date


Aluminum
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

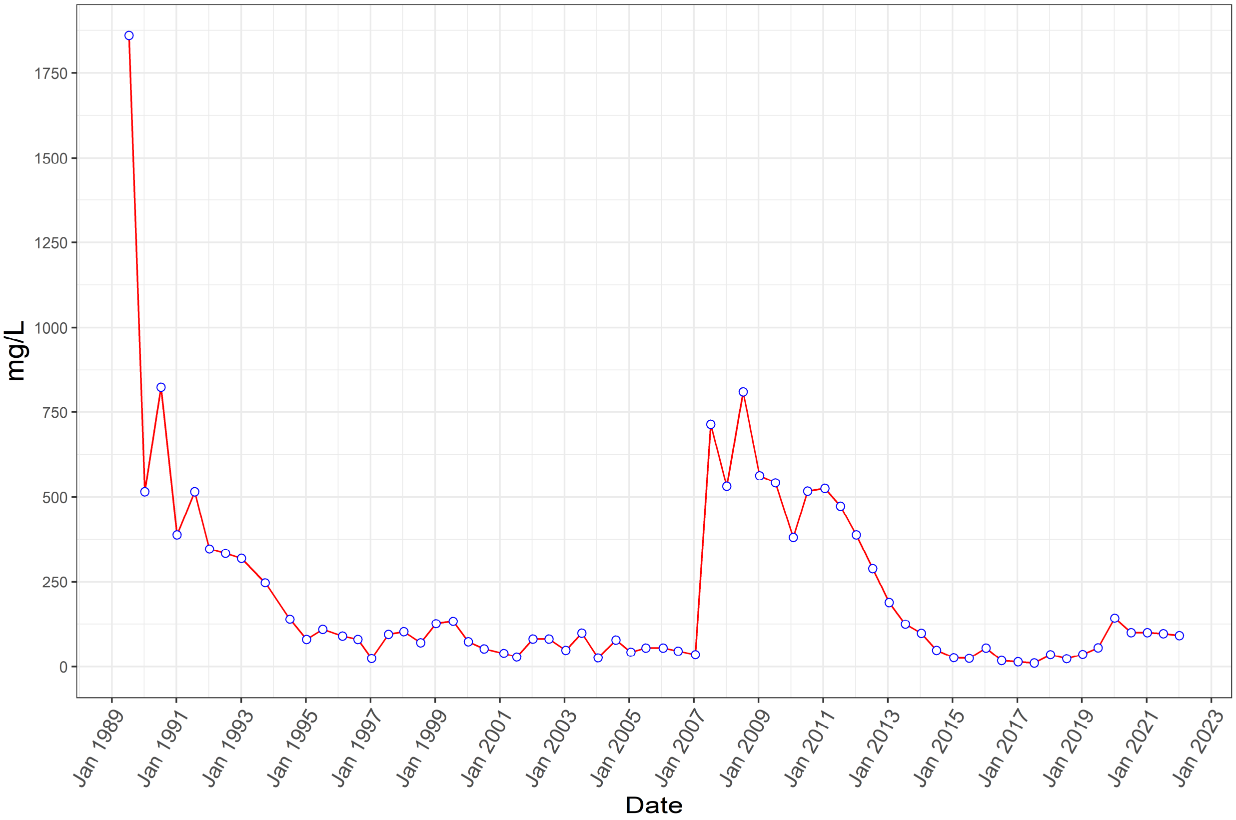

Arsenic
mg/L
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date


Lead
mg/L
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

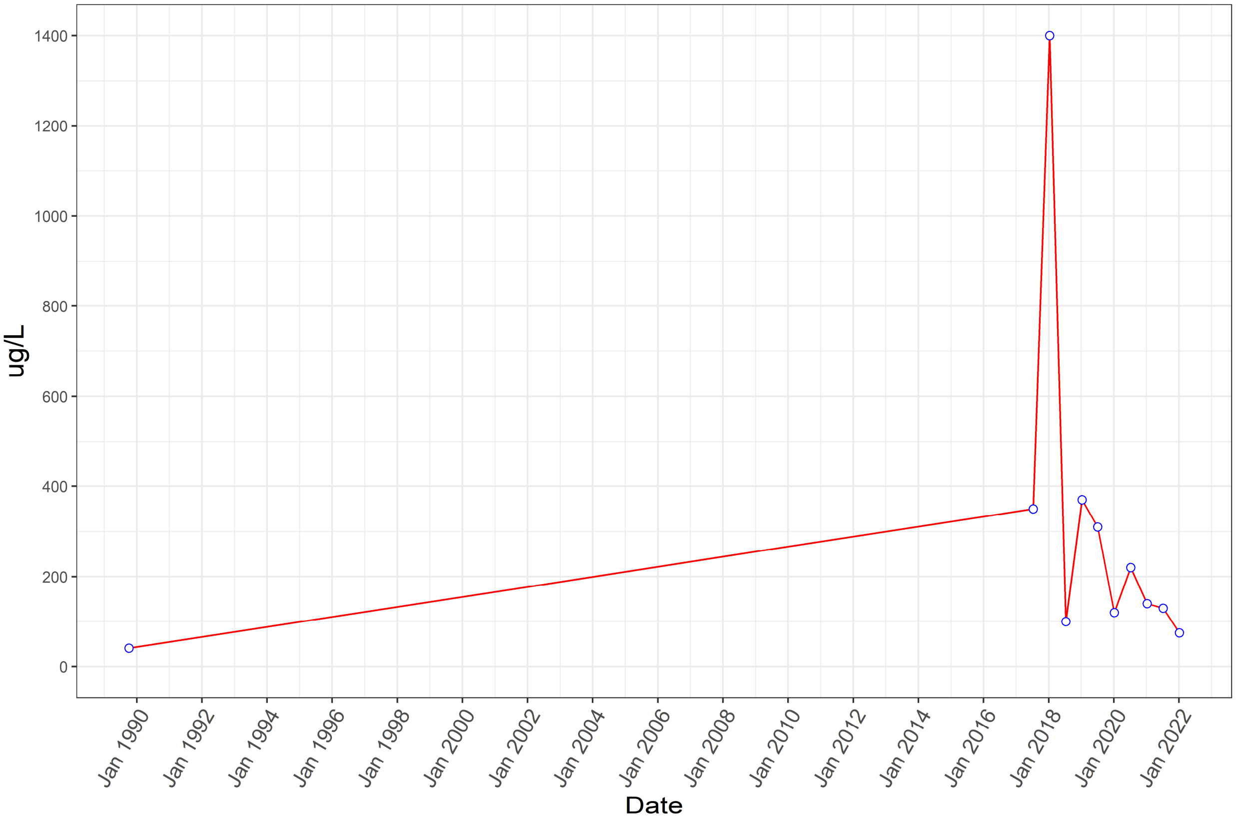

N-Nitrosodimethylamine

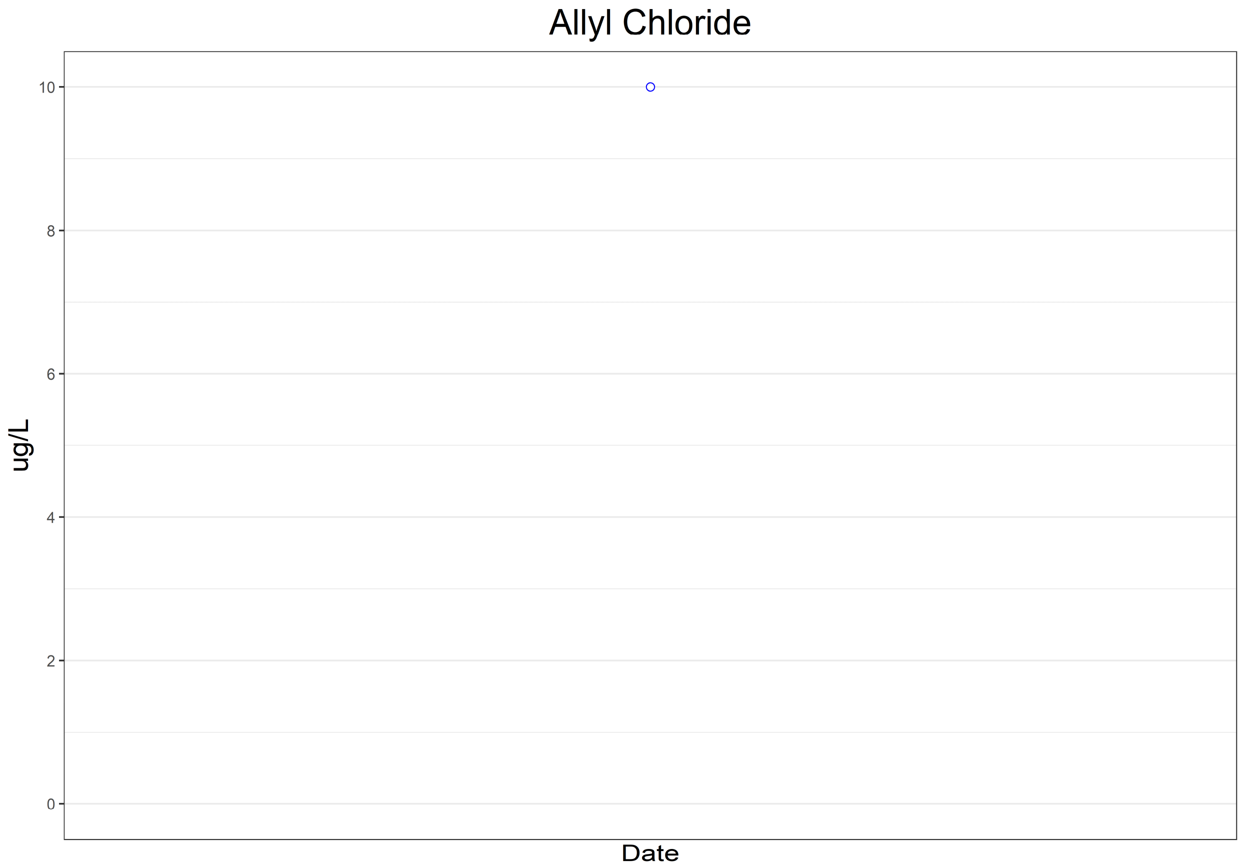

Sodium

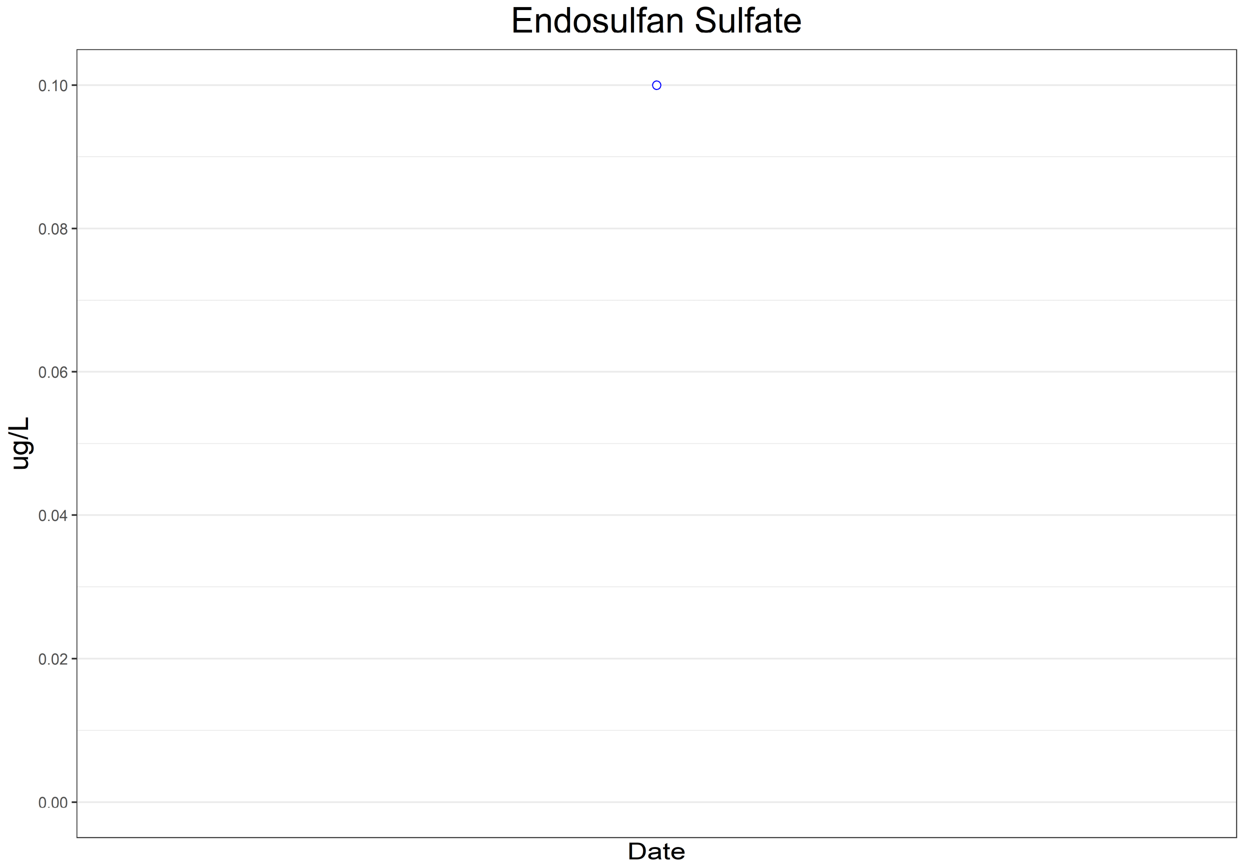
Sulfate

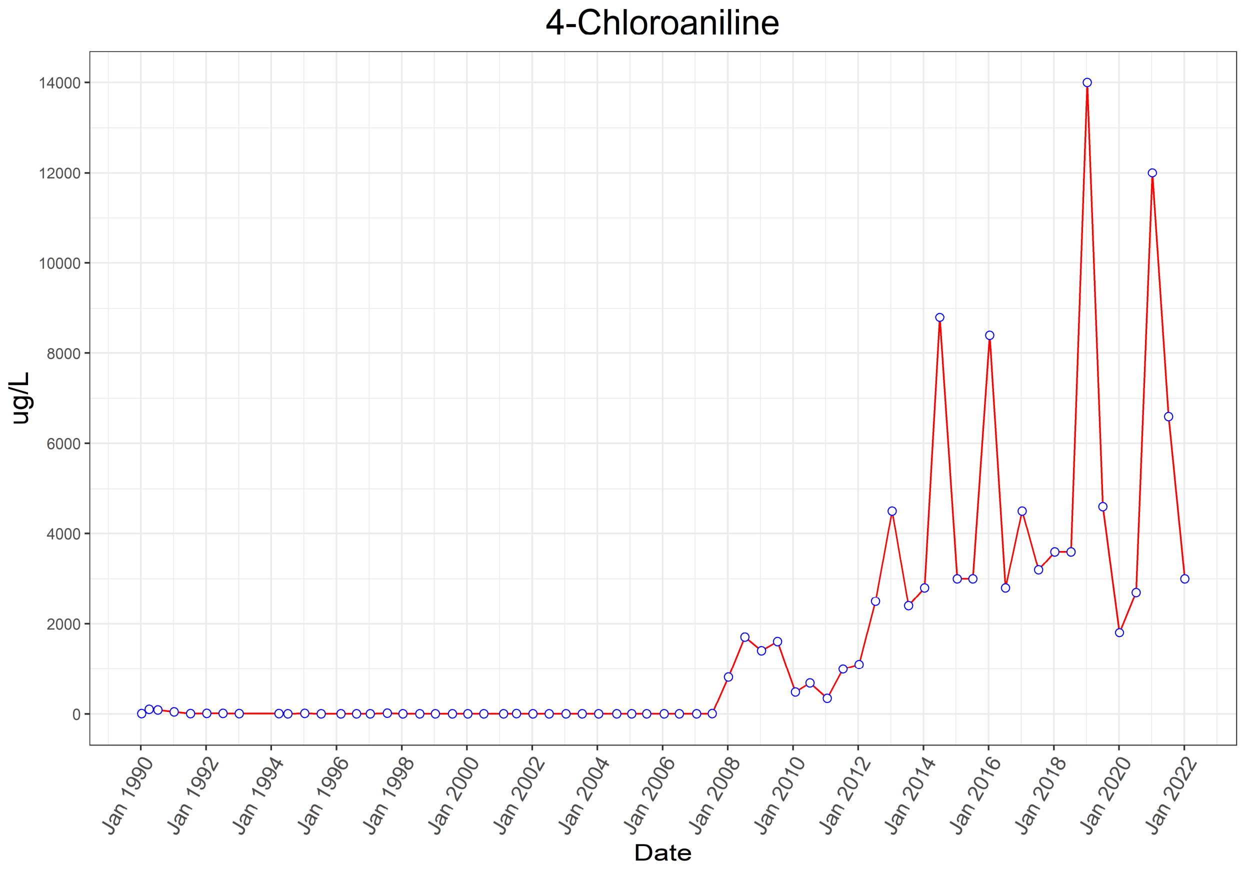


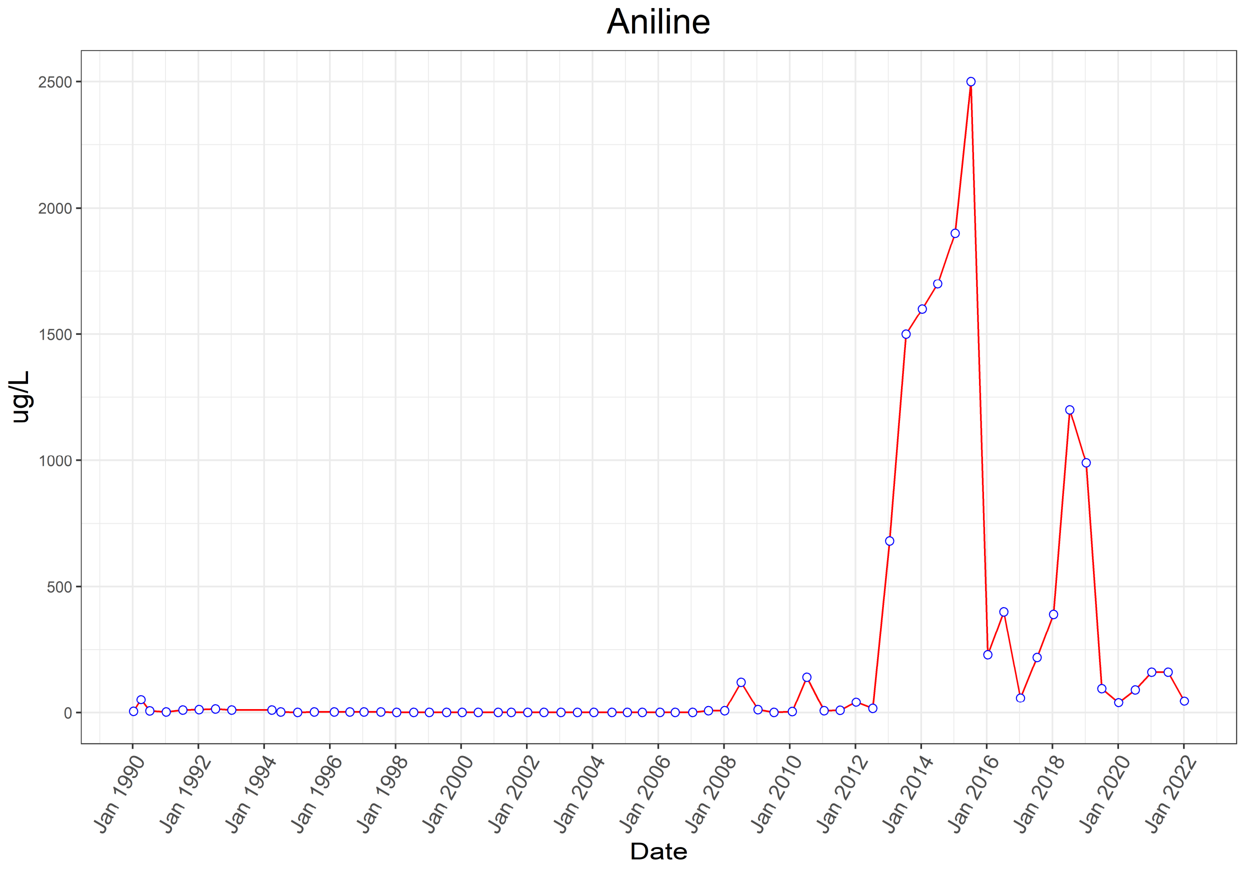
1,4-Dioxane

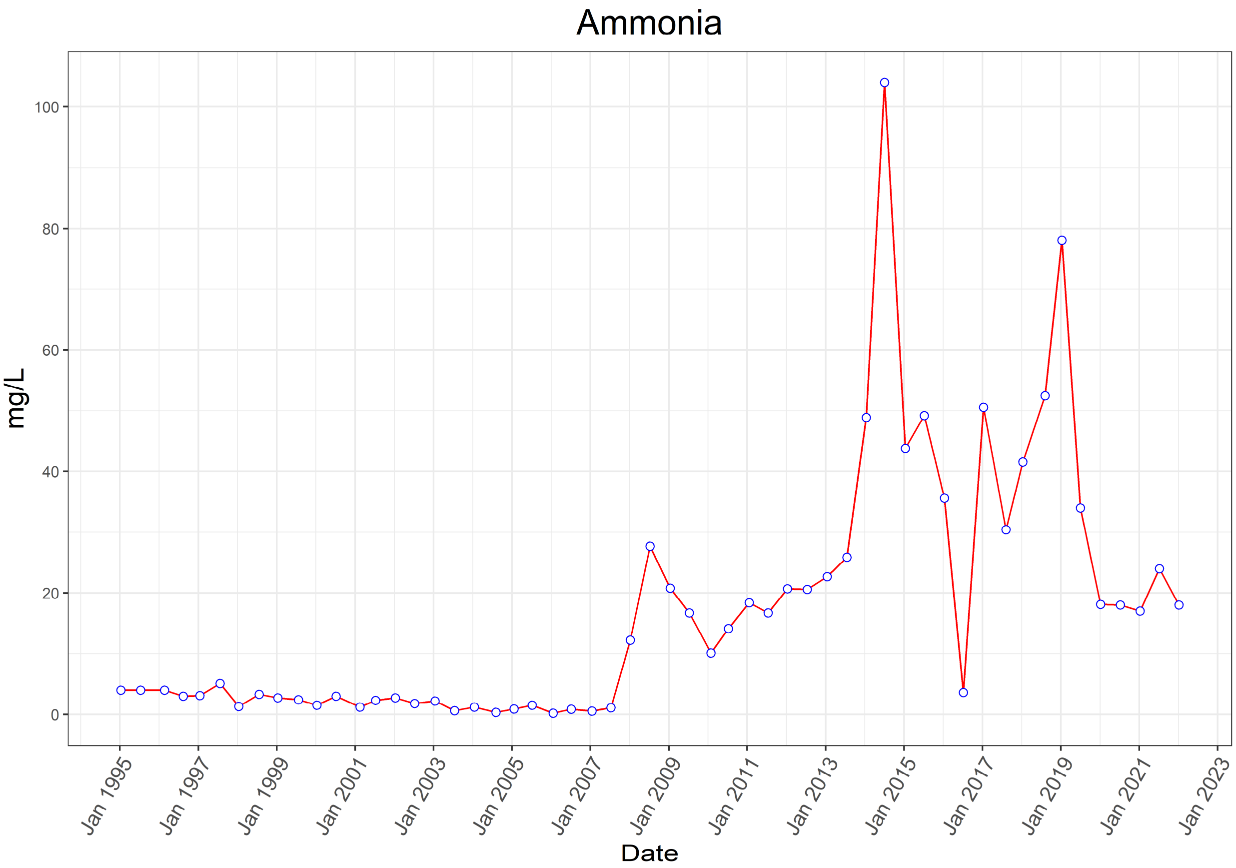



Allyl Chloride
ug/L
10
8
6
4
2
0
Date


Endosulfan Sulfate
ug/L
0.10
0.08
0.06
0.04
0.02
0.00
Date

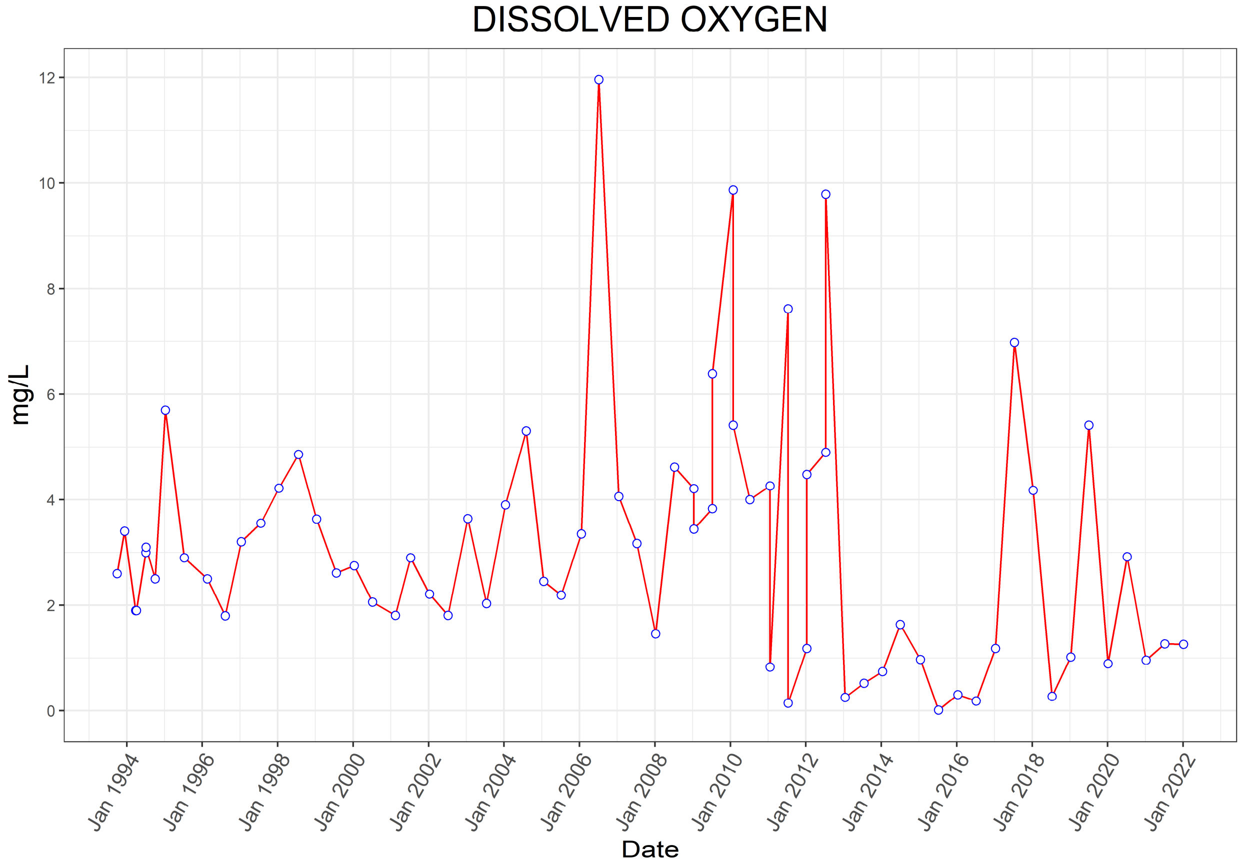

4-Chloroaniline
ug/L
14000
12000
10000
8000
6000
4000
2000
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

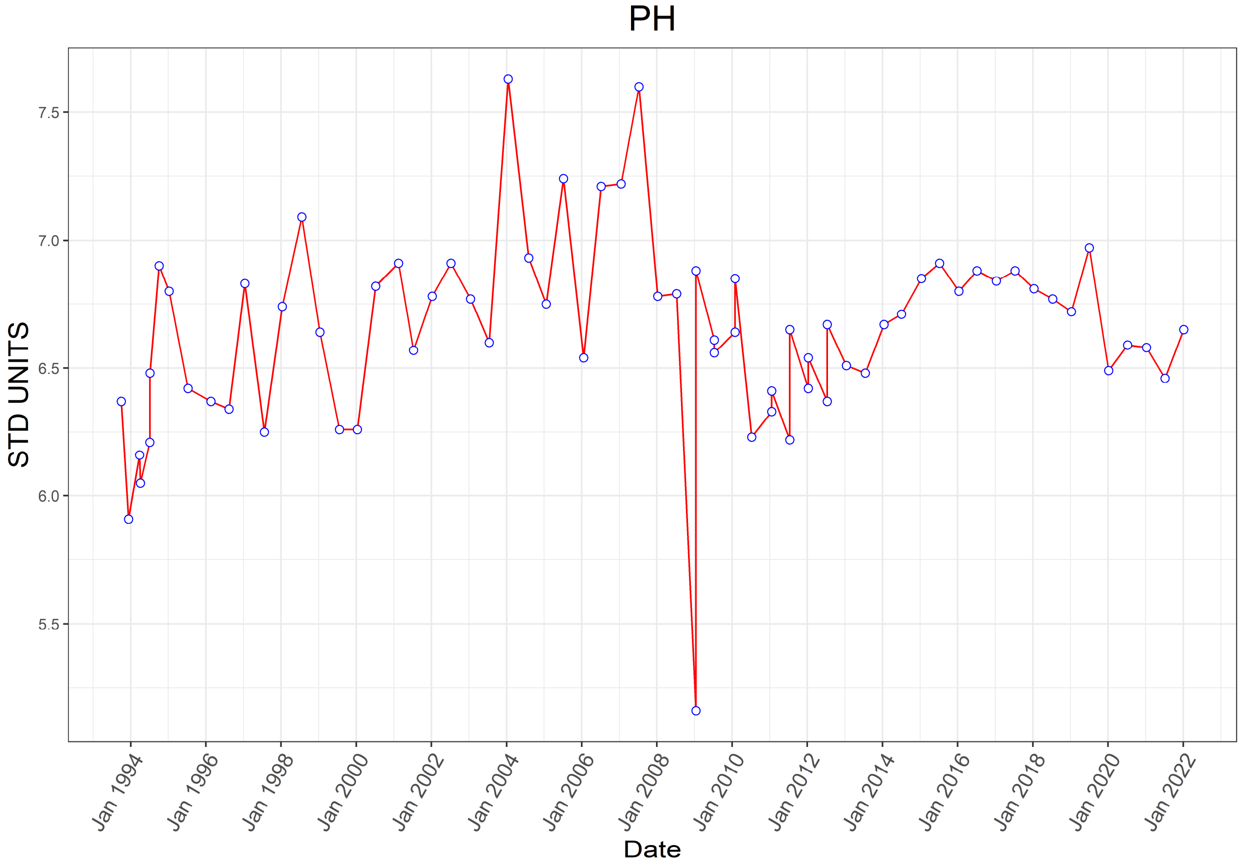

Aniline
ug/L
2500
2000
1500
1000
500
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

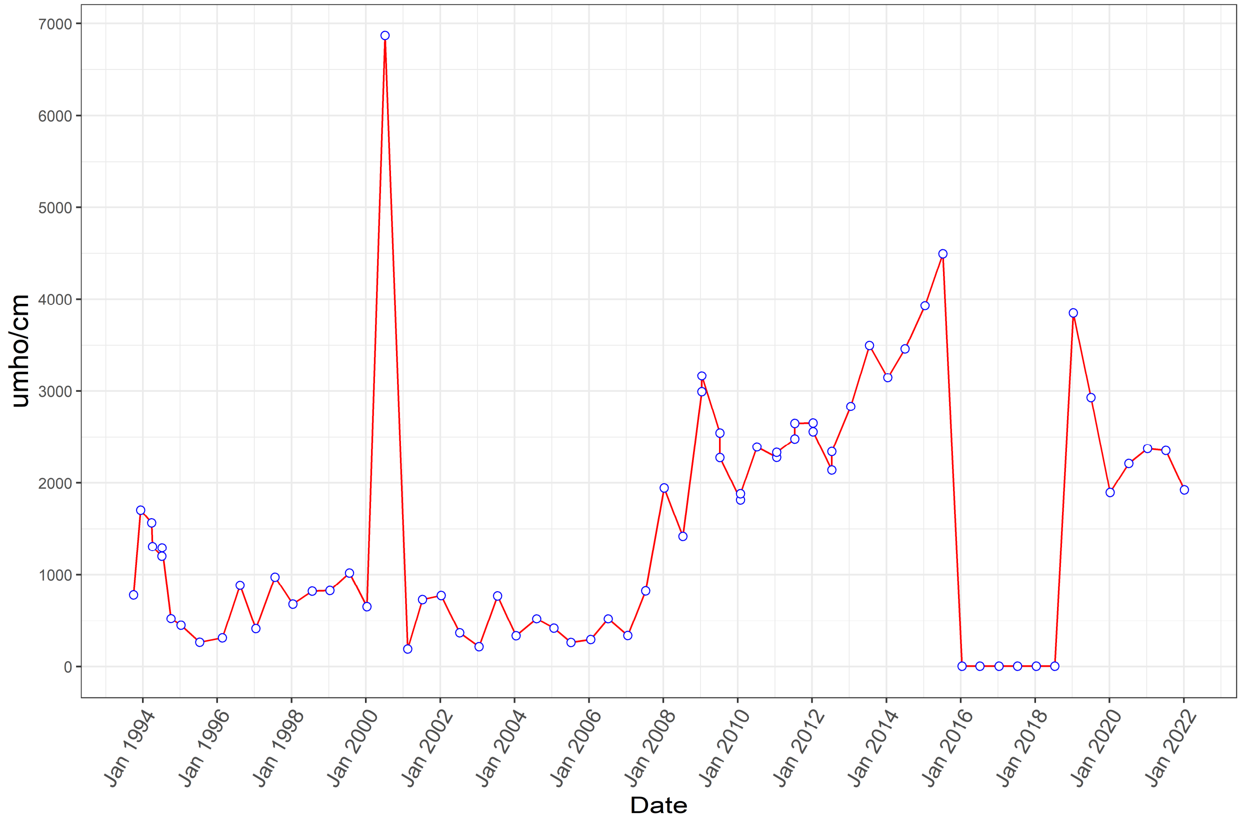

Ammonia
mg/L
100
80
60
40
20
0
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

Well Name: P21-M01B

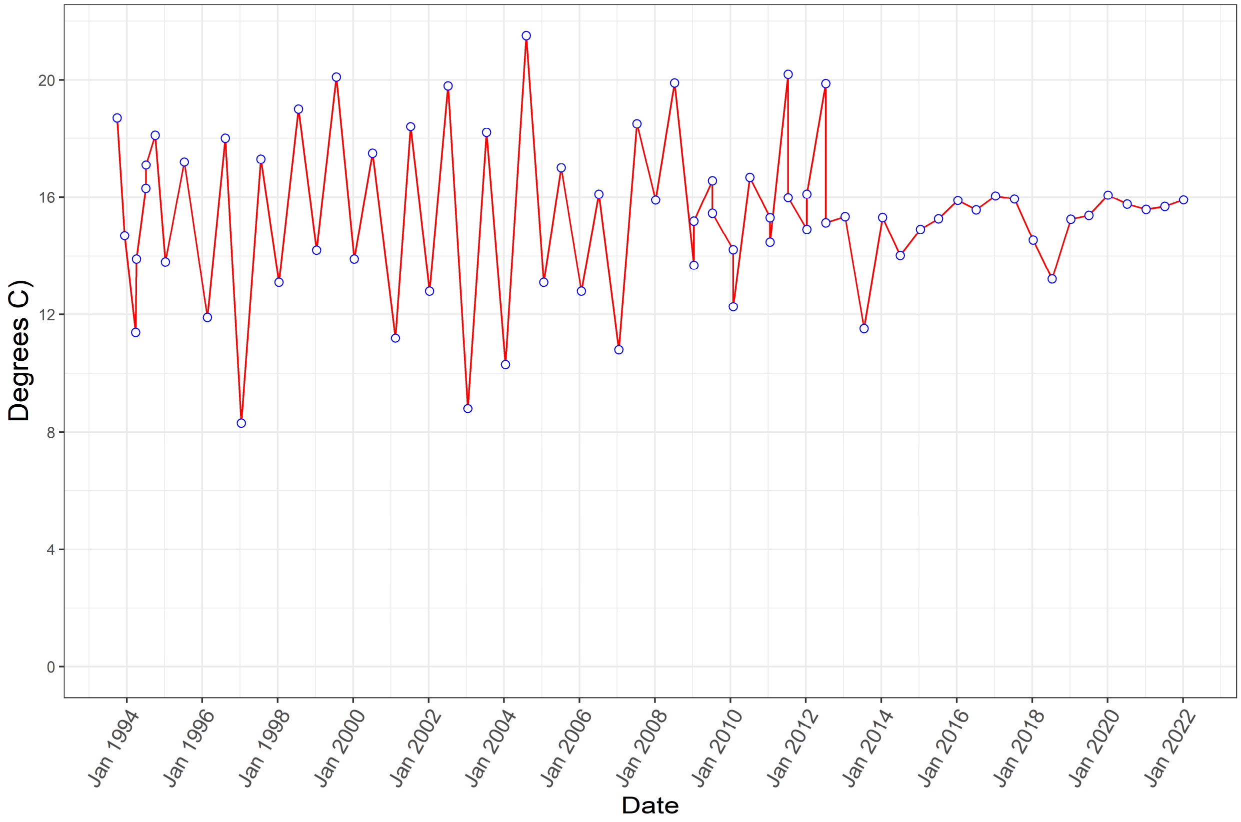
Field Parameters



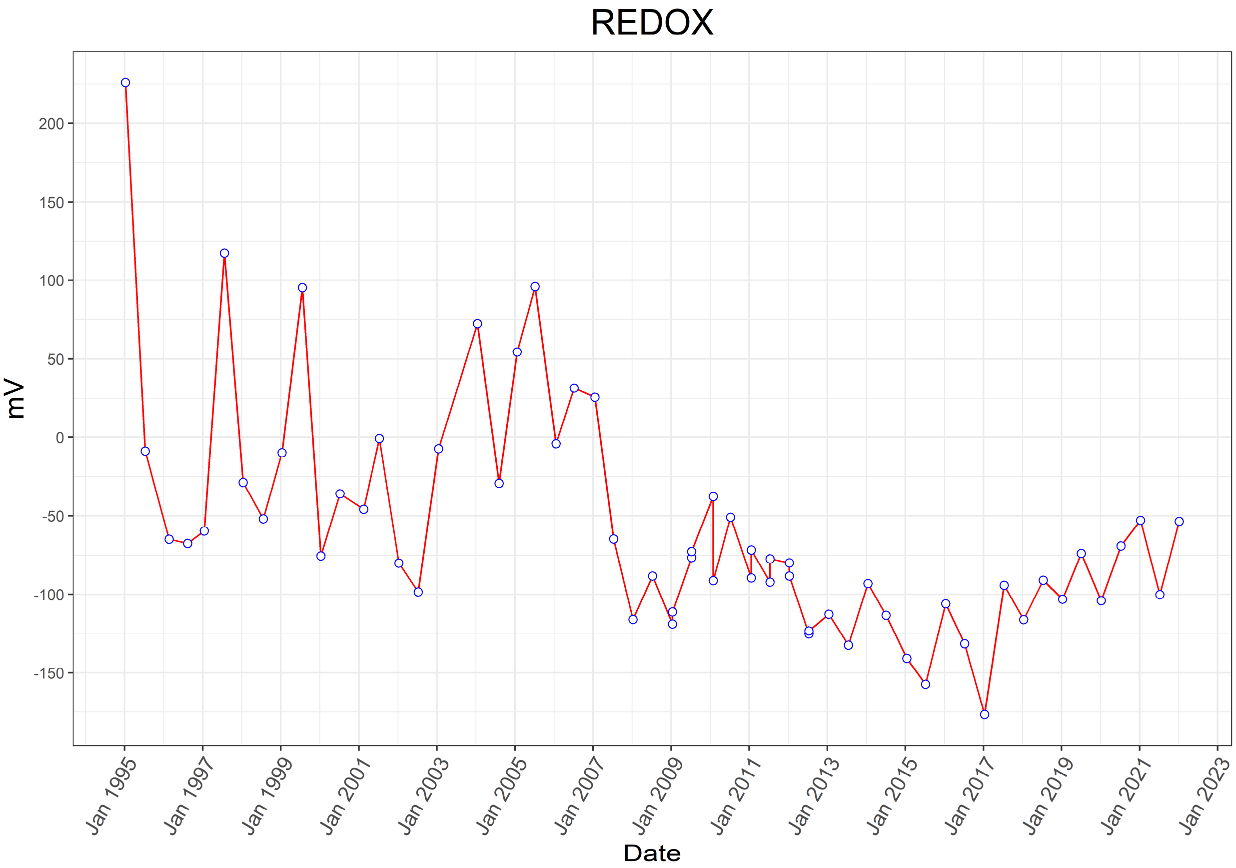




SPECIFIC CONDUCTANCE

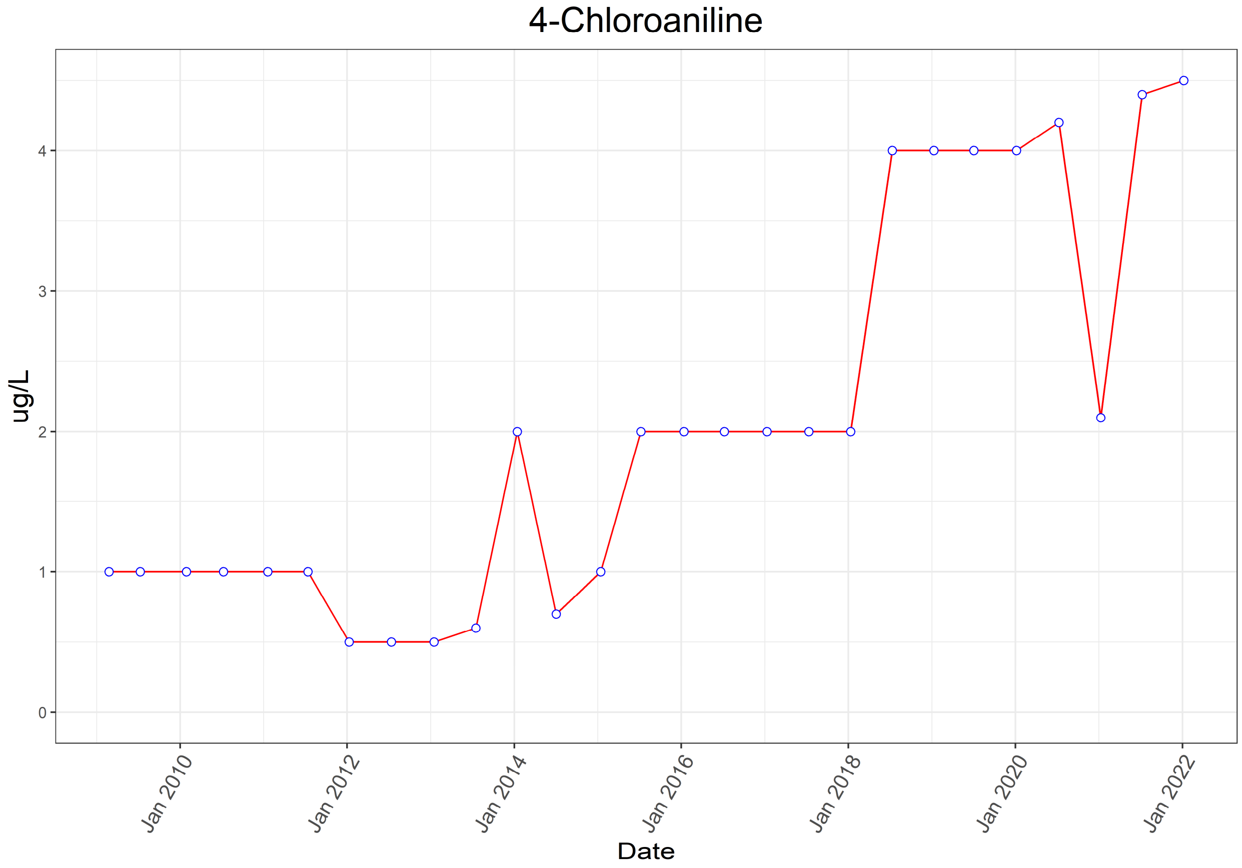


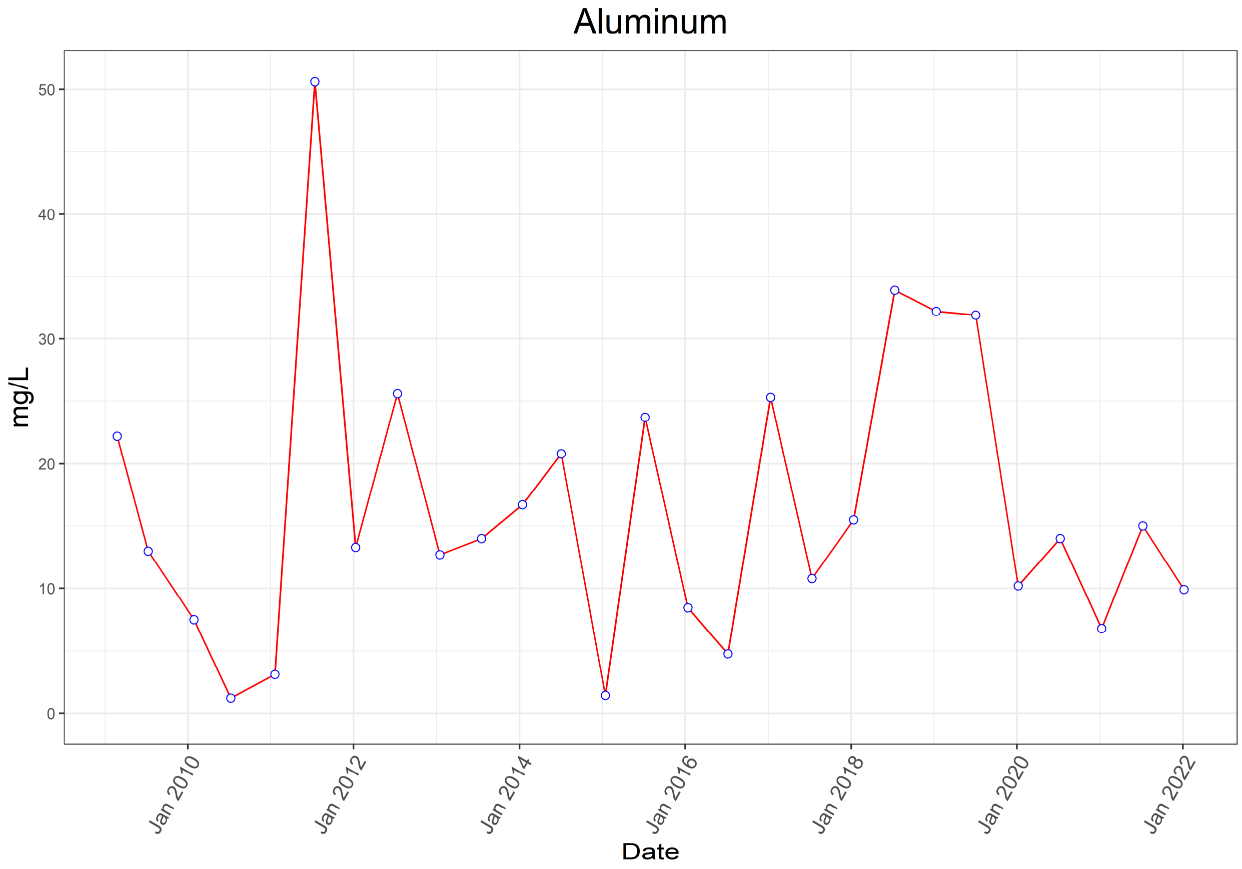
TEMPERATURE

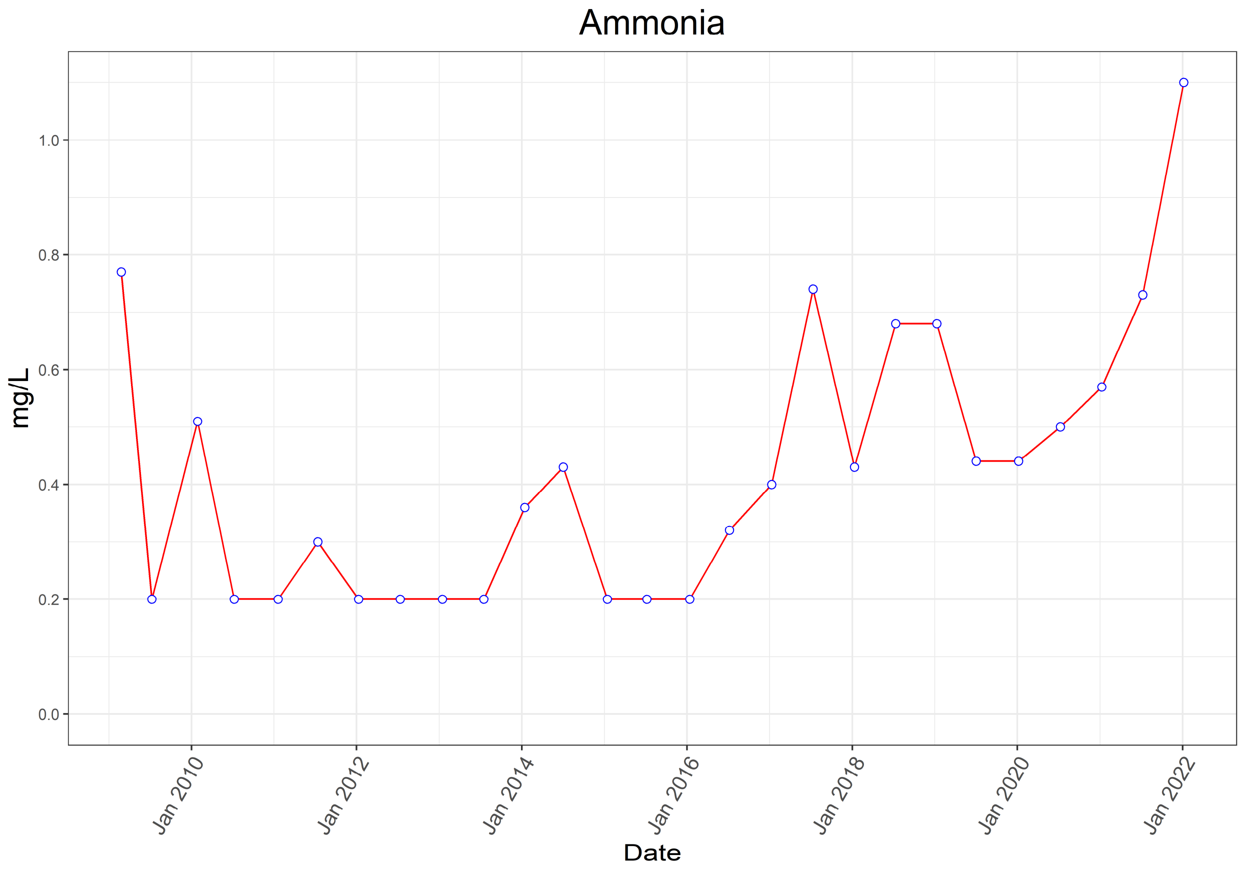

REDOX
mV
200
150
100
50
0
-50
-100
-150
Date
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

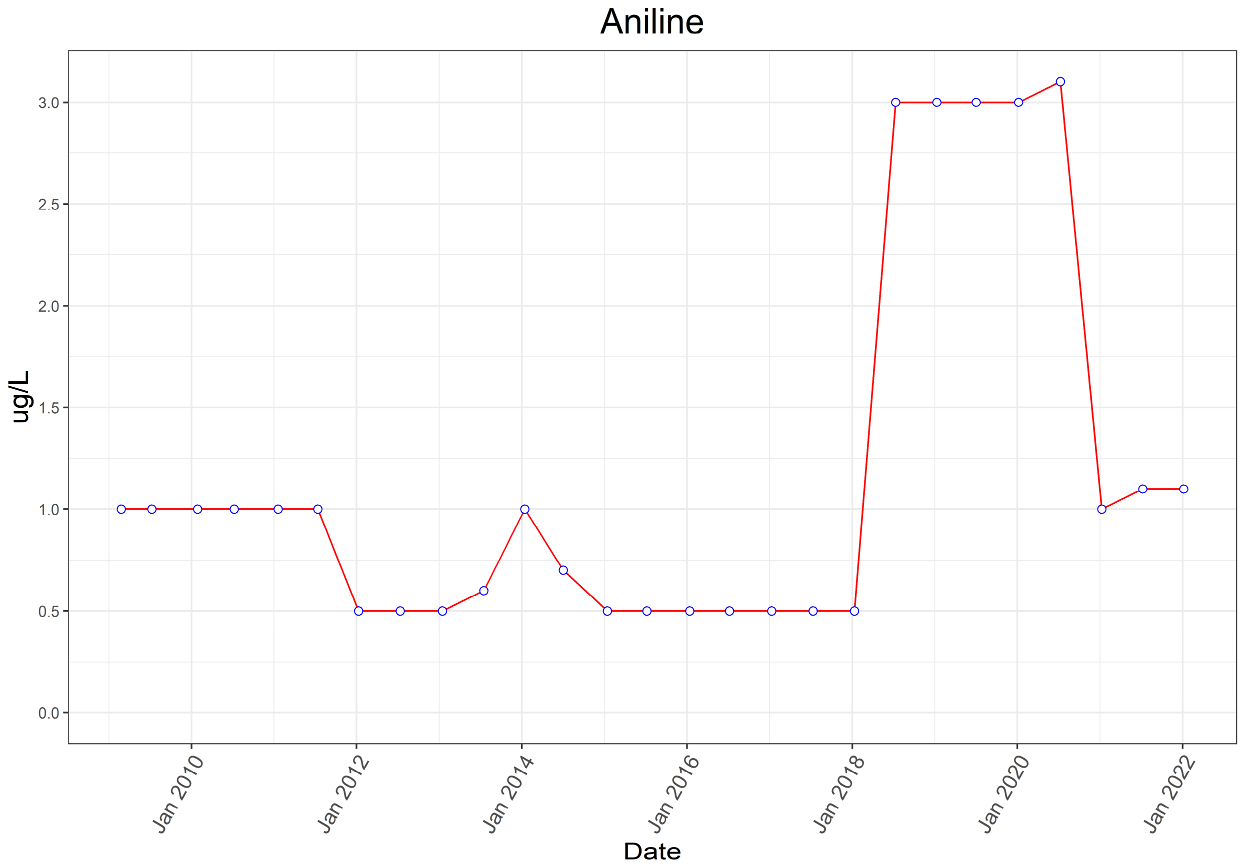
Secure C Landfill Corrective Action Monitoring Program (Program 6)

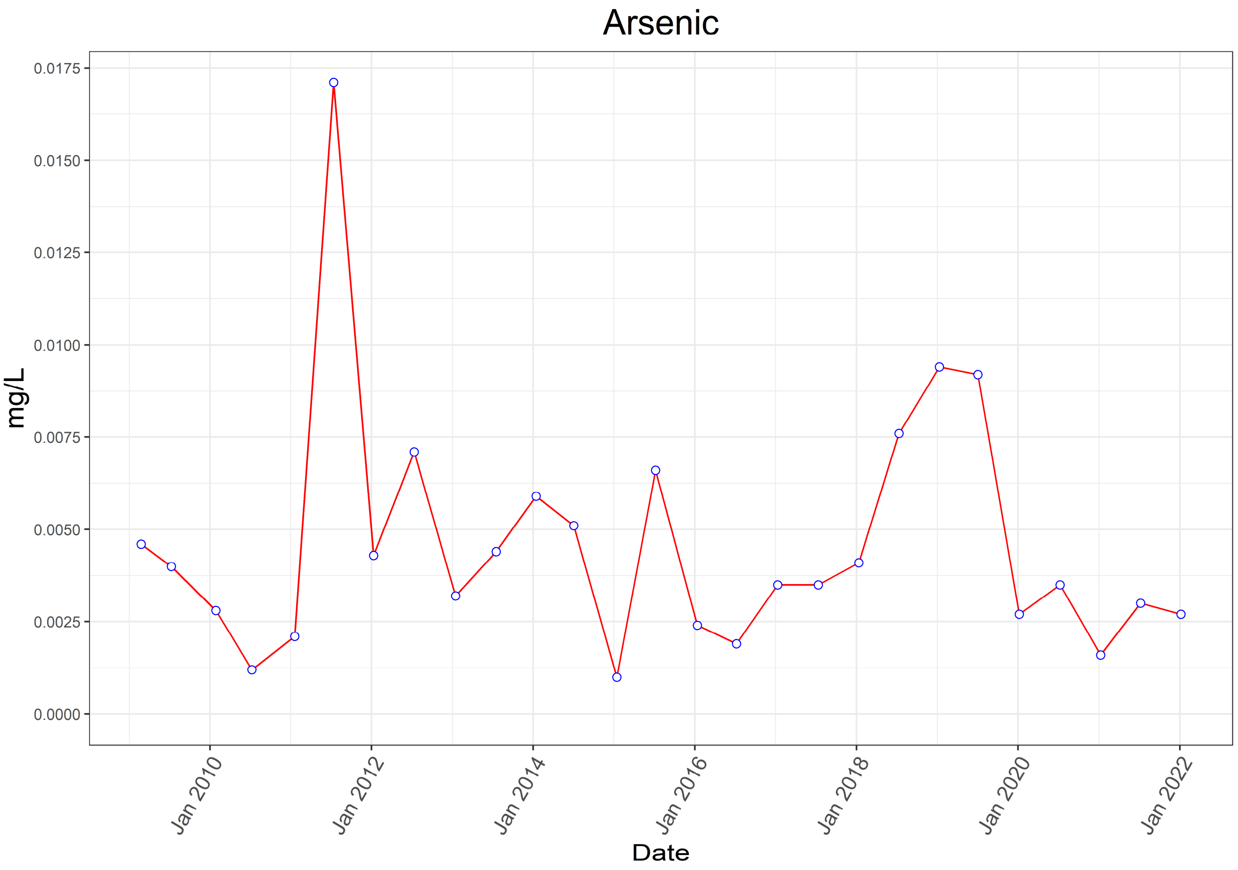
Well Name: P21-M04B

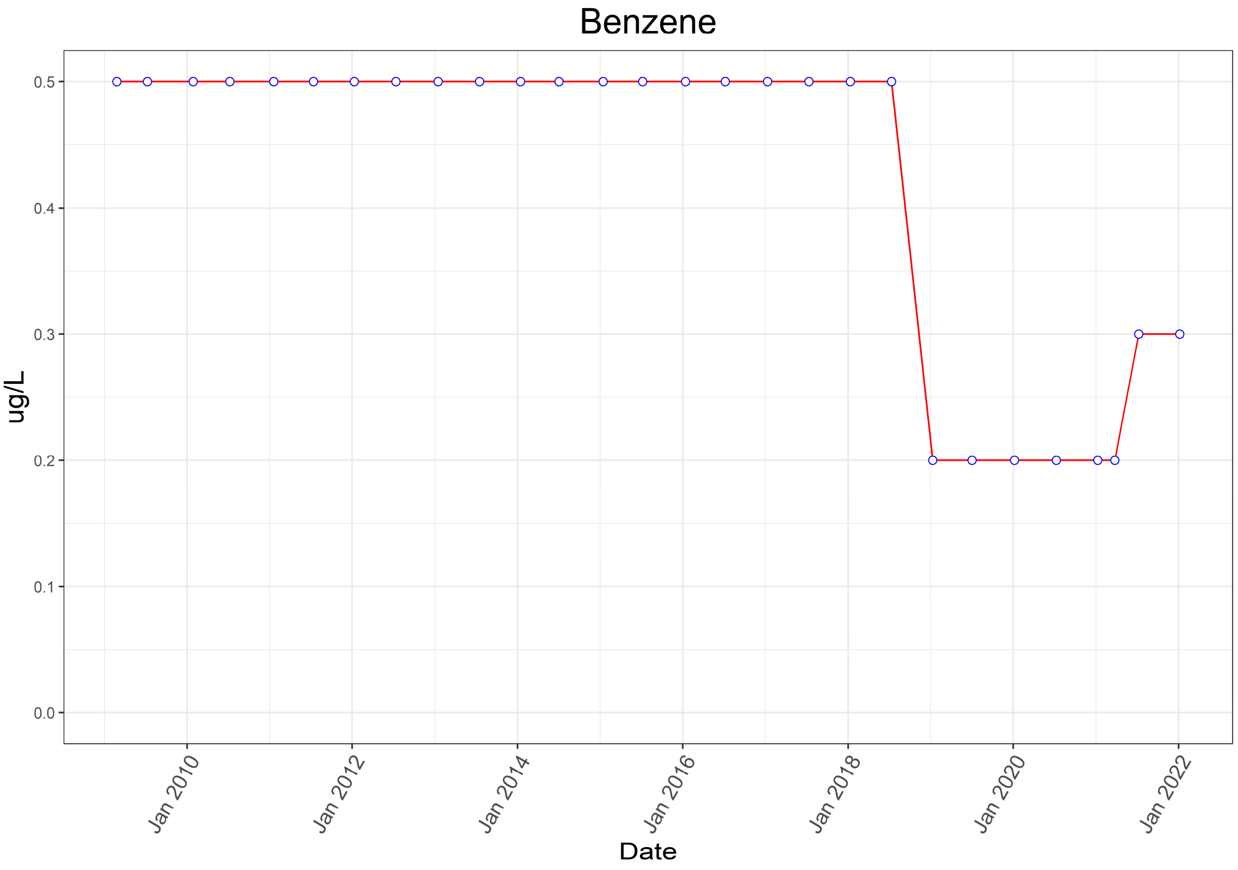


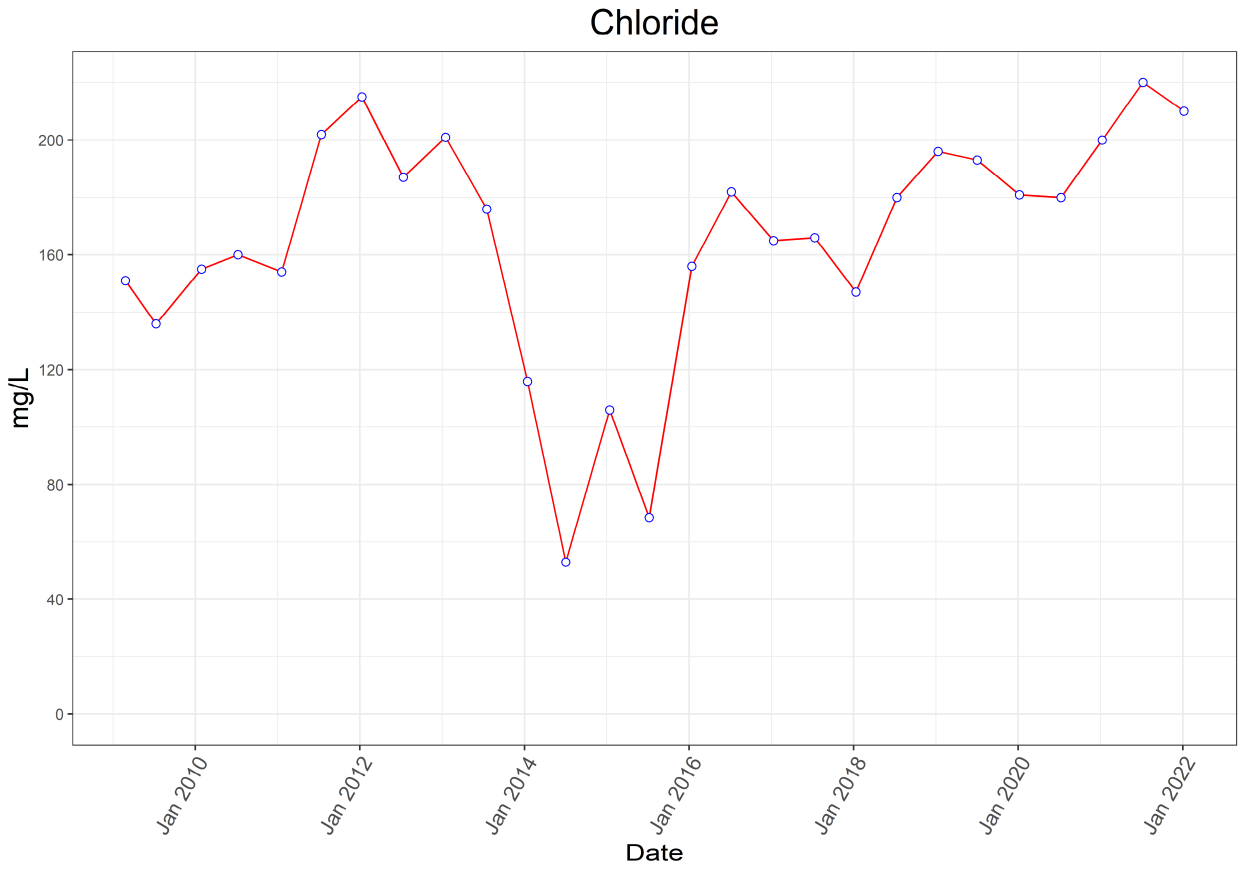


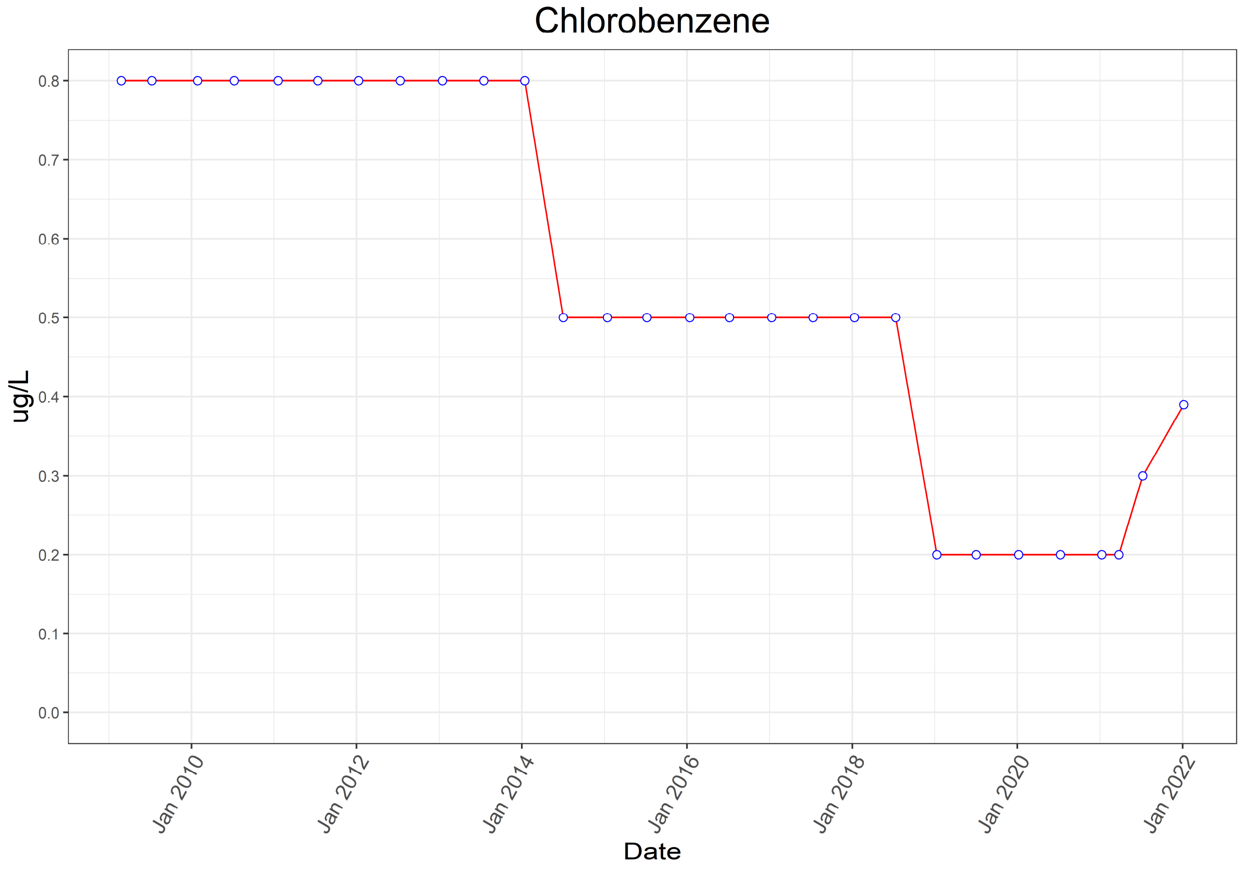

Ammonia
mg/L
0.0
0.2
0.4
0.6
0.8
1.0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

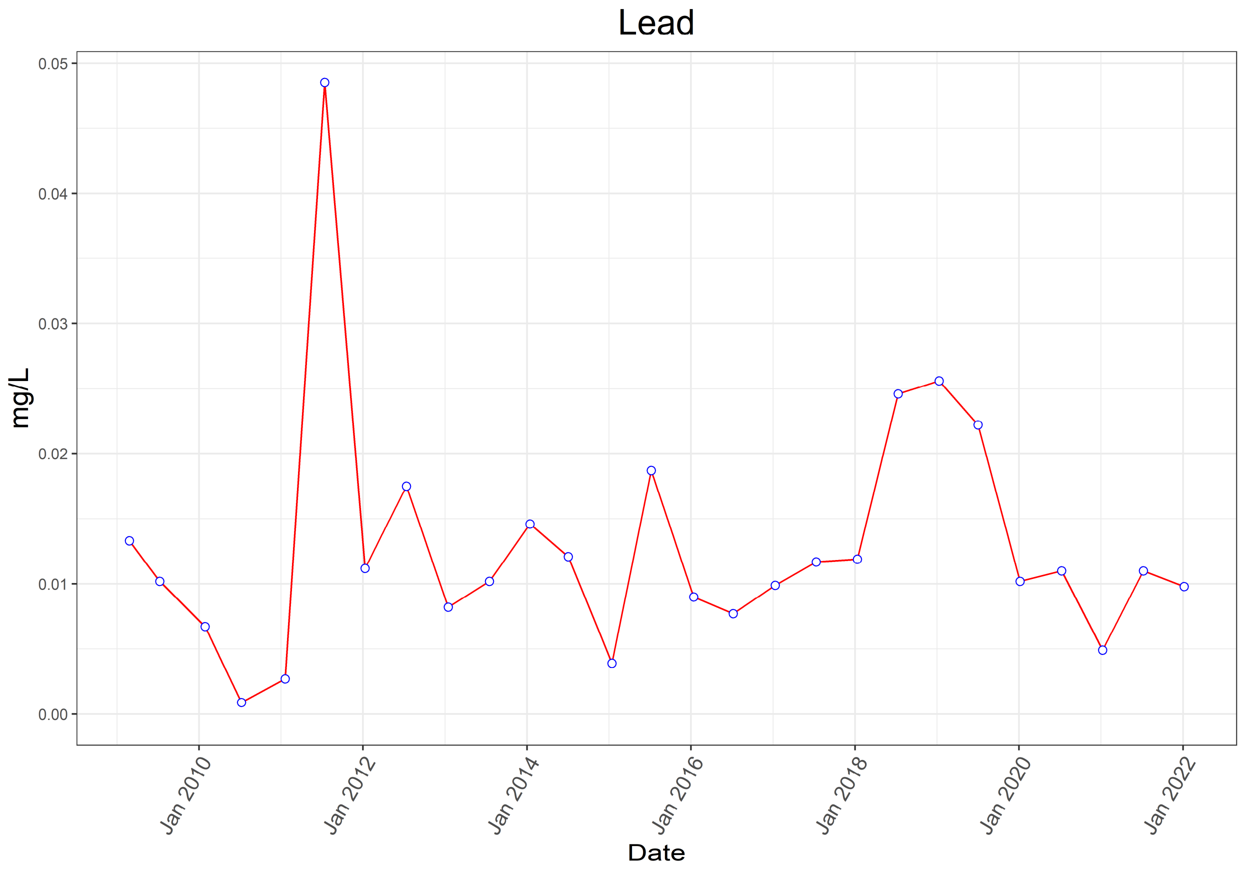

Aniline
ug/L
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

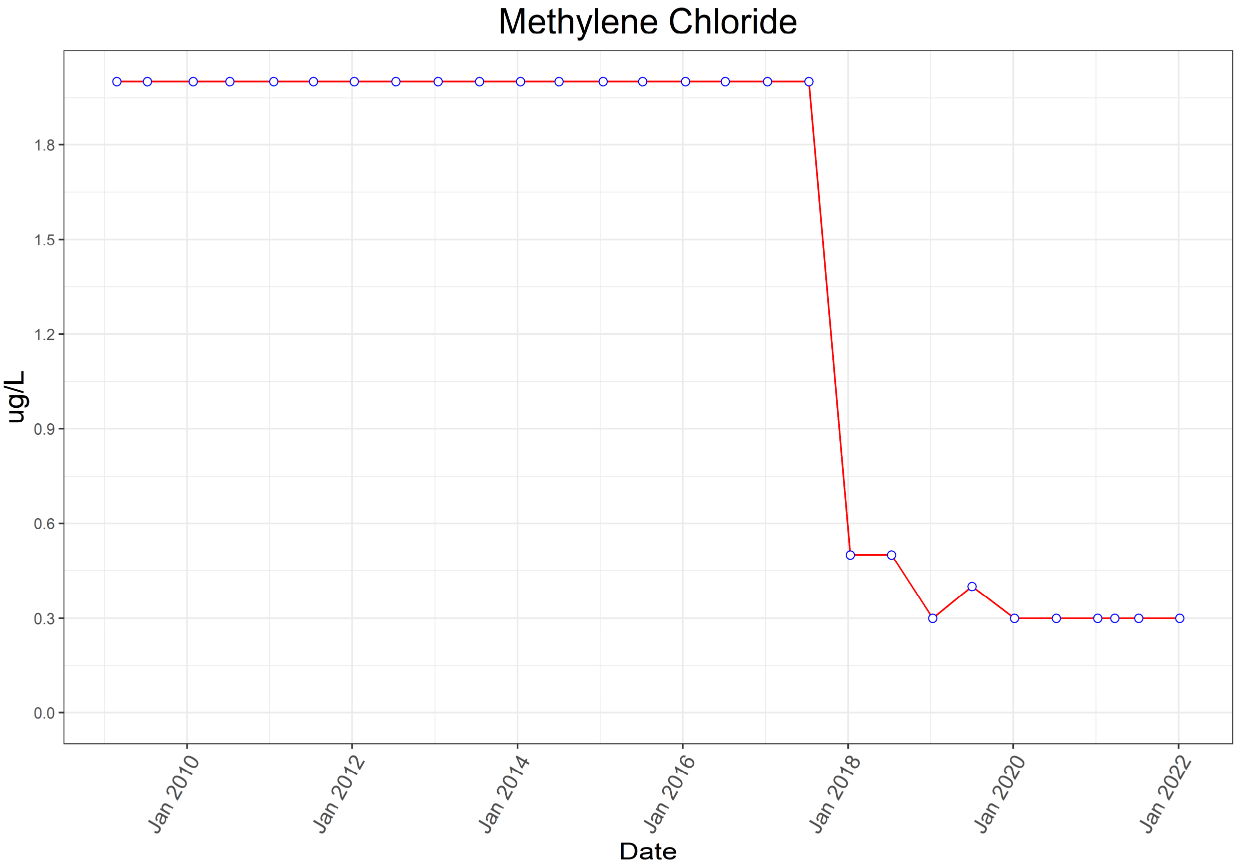

Arsenic
mg/L
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

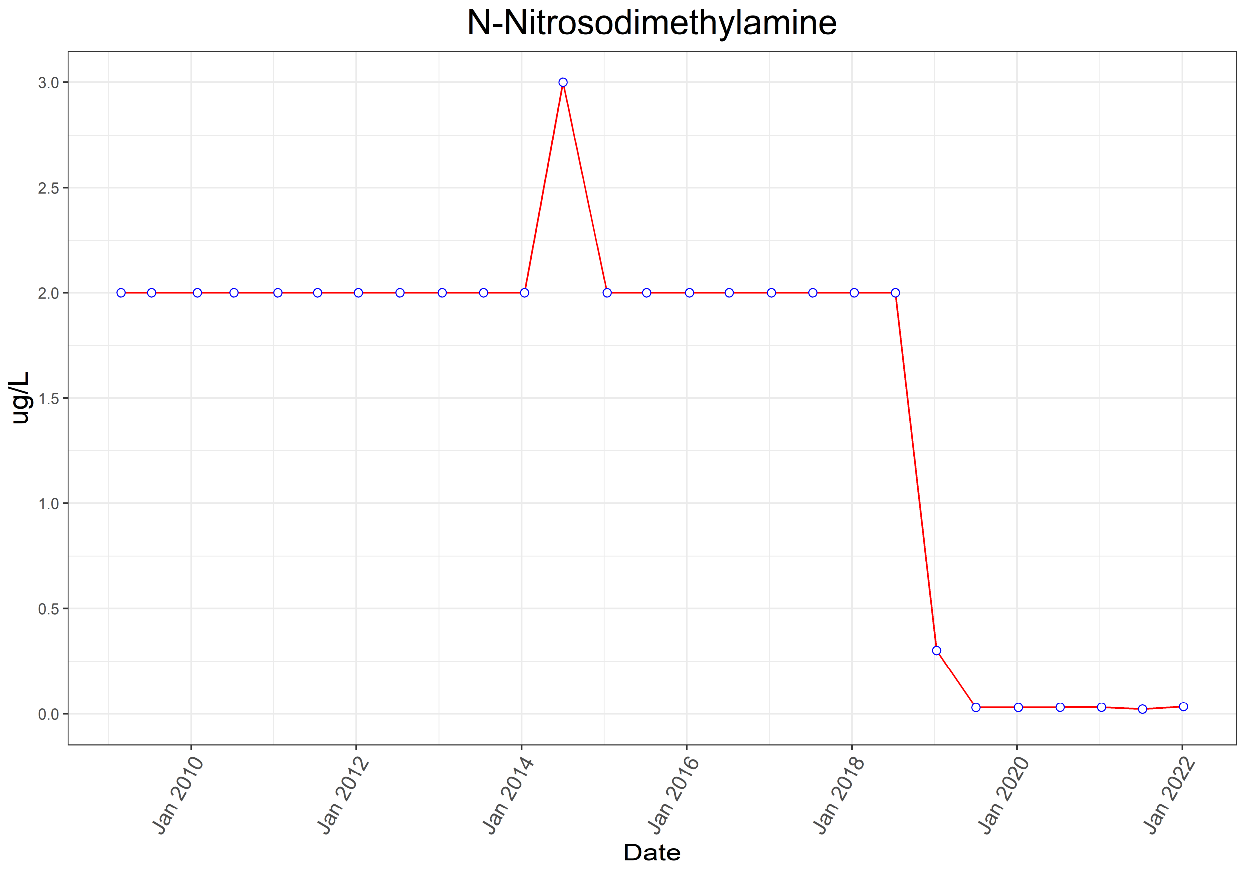

Benzene
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

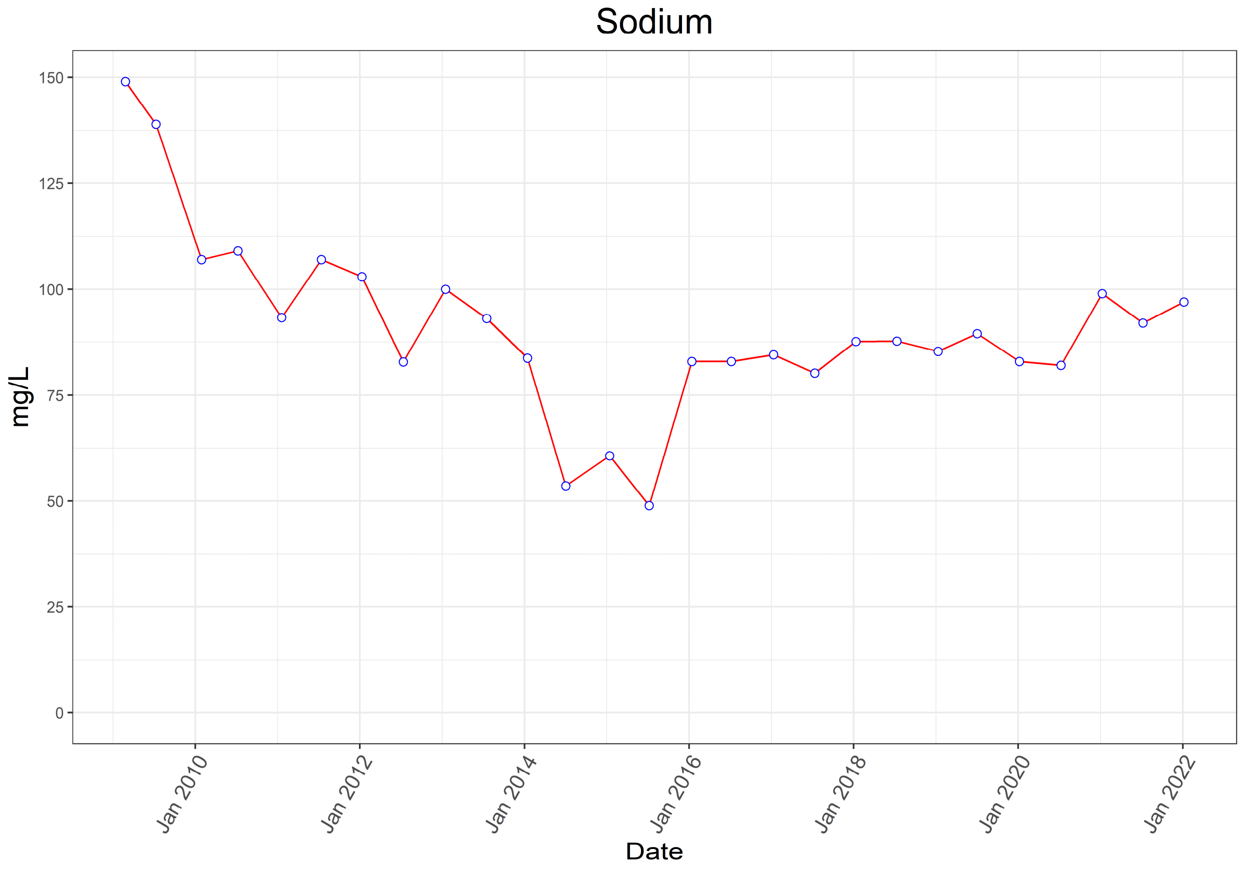

Chloride
mg/L
0
40
80
120
160
200
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

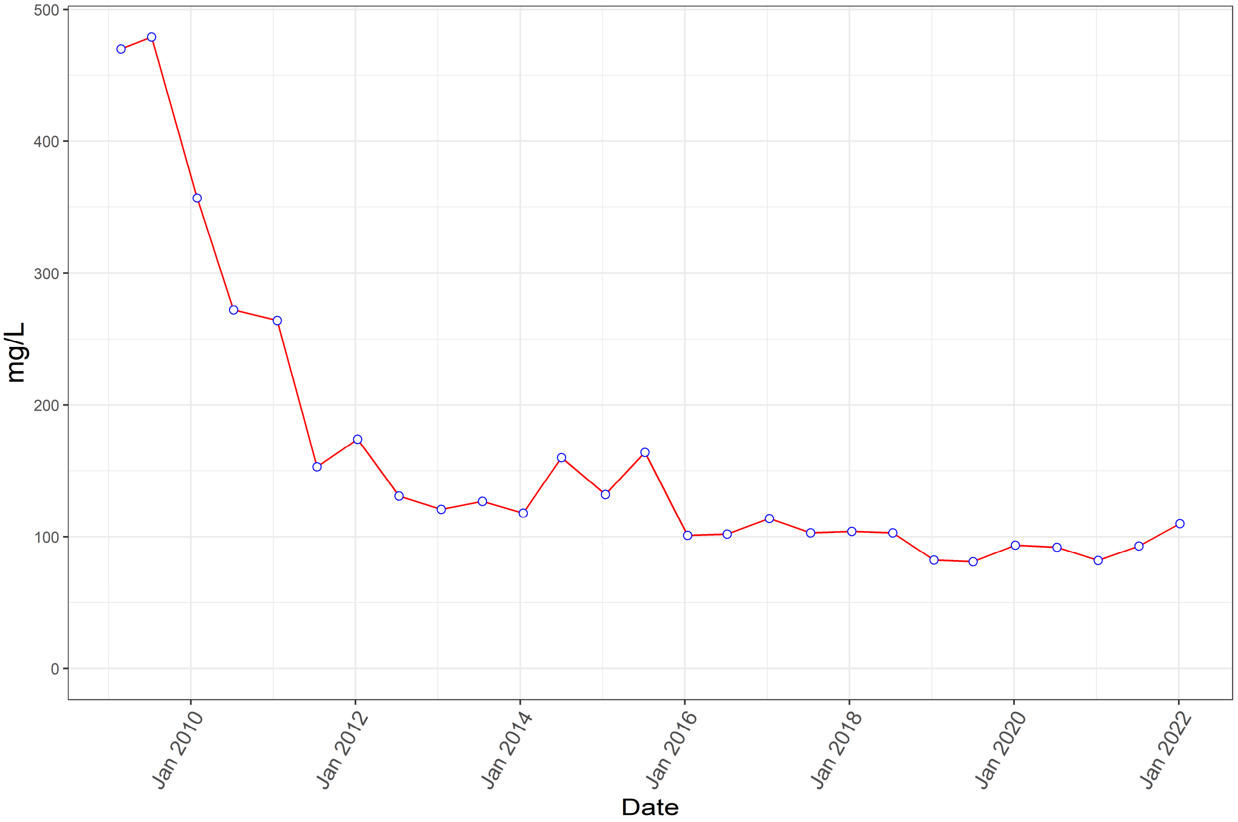

Chlorobenzene
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Lead
0.05
0.04
0.03
0.02
0.01
0.00
mg/L
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

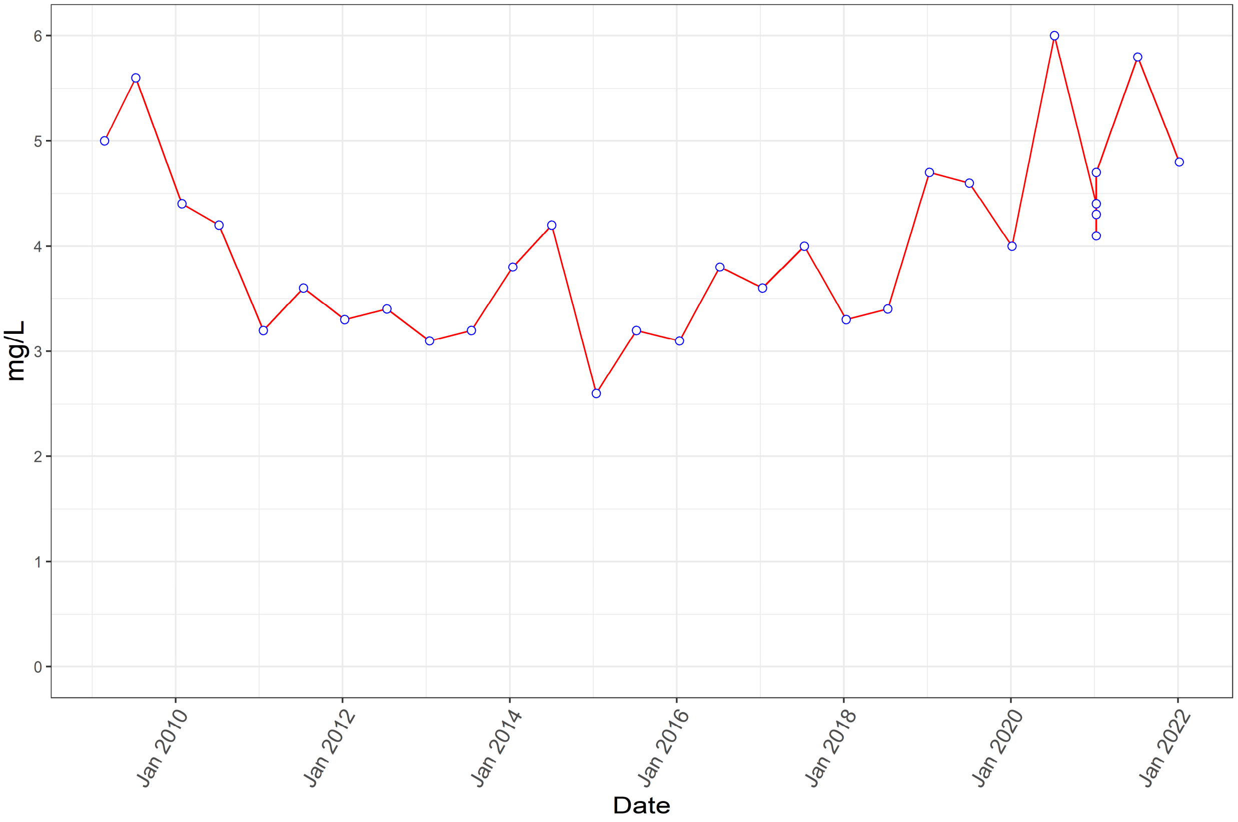

Methylene Chloride
1.8
1.5
1.2
0.9
0.6
0.3
0.0
ug/L
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


N-Nitrosodimethylamine
ug/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

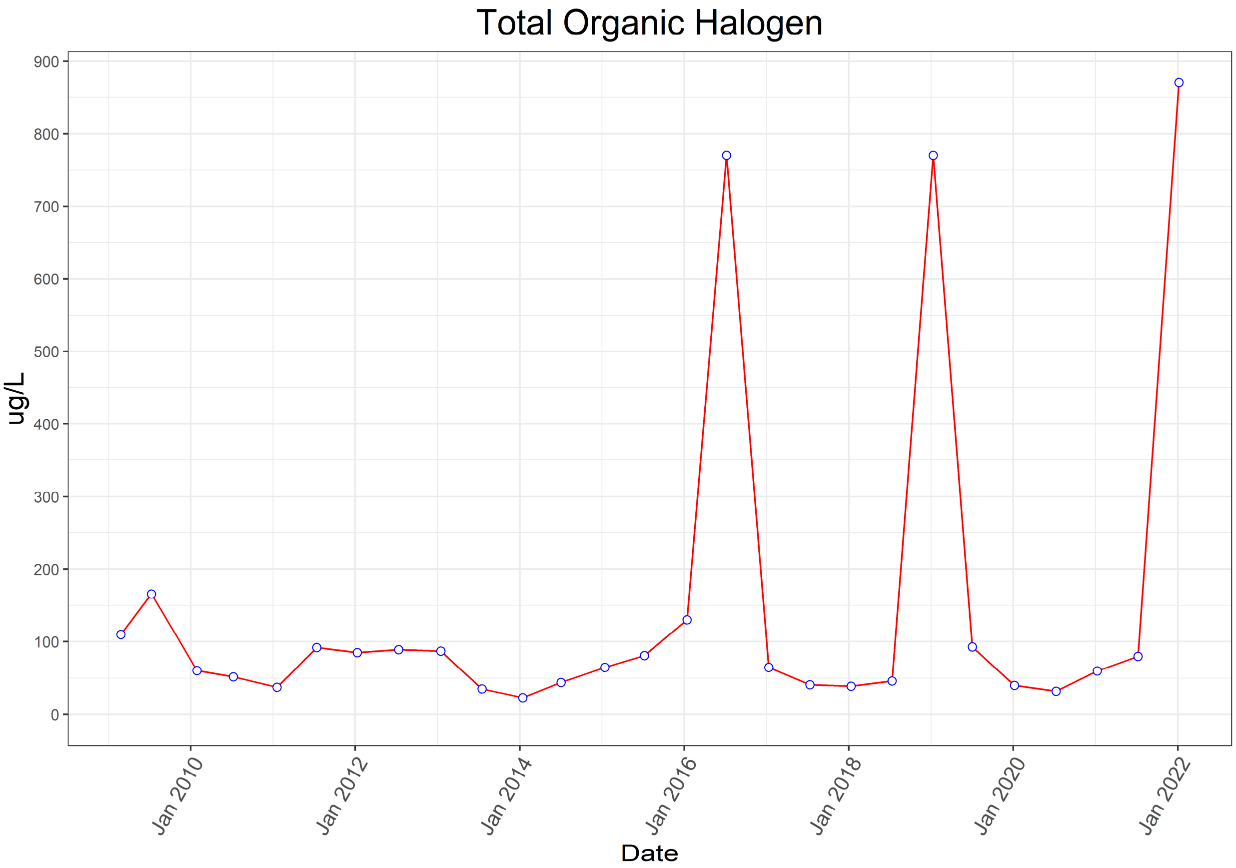

Sodium
mg/L
150
125
100
75
50
25
0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

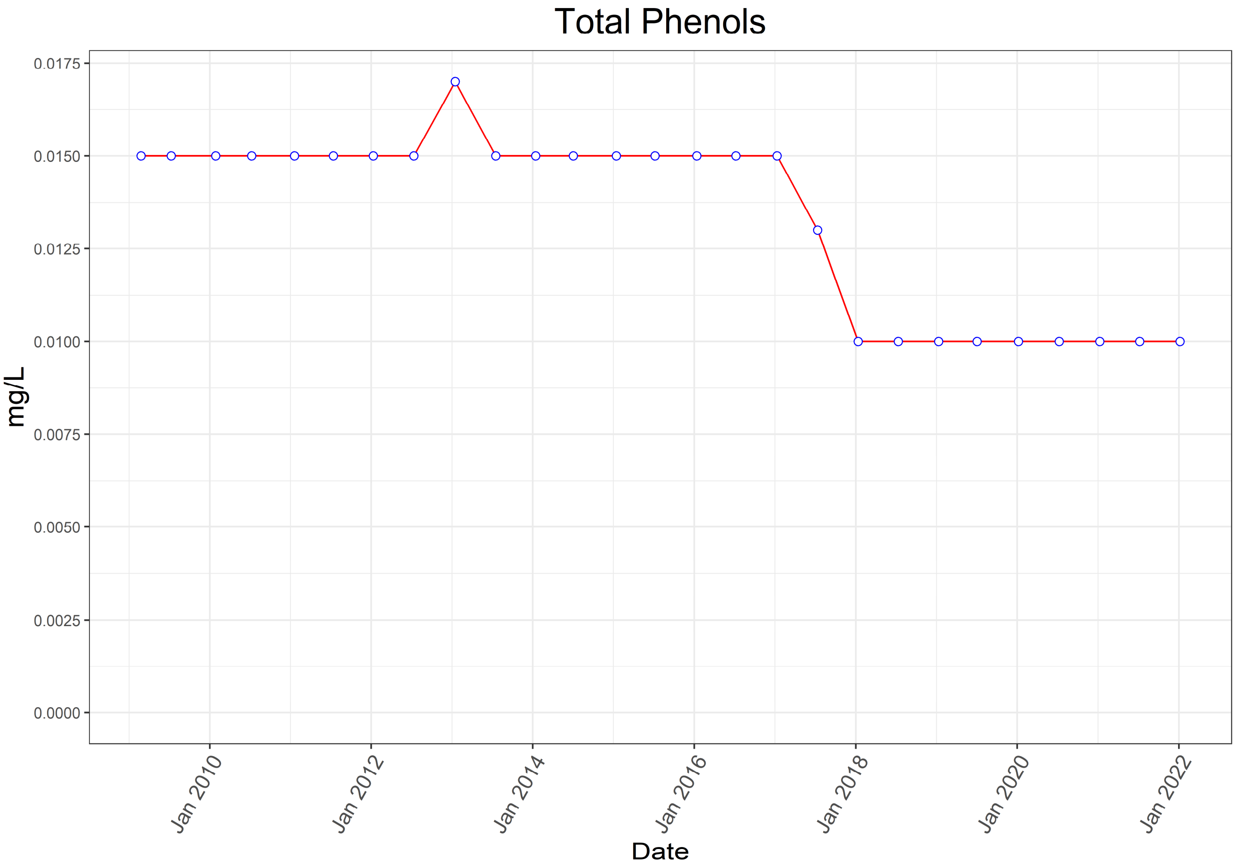


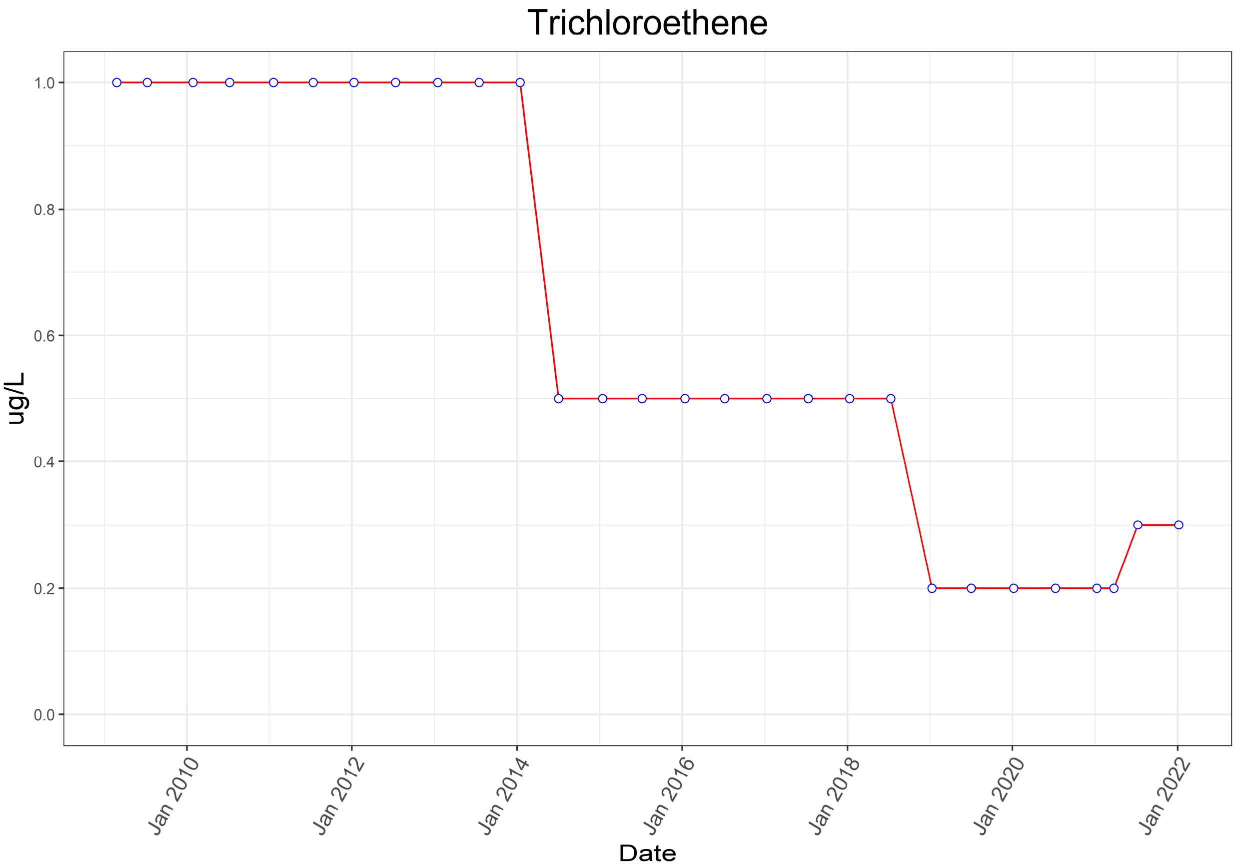
Sulfate



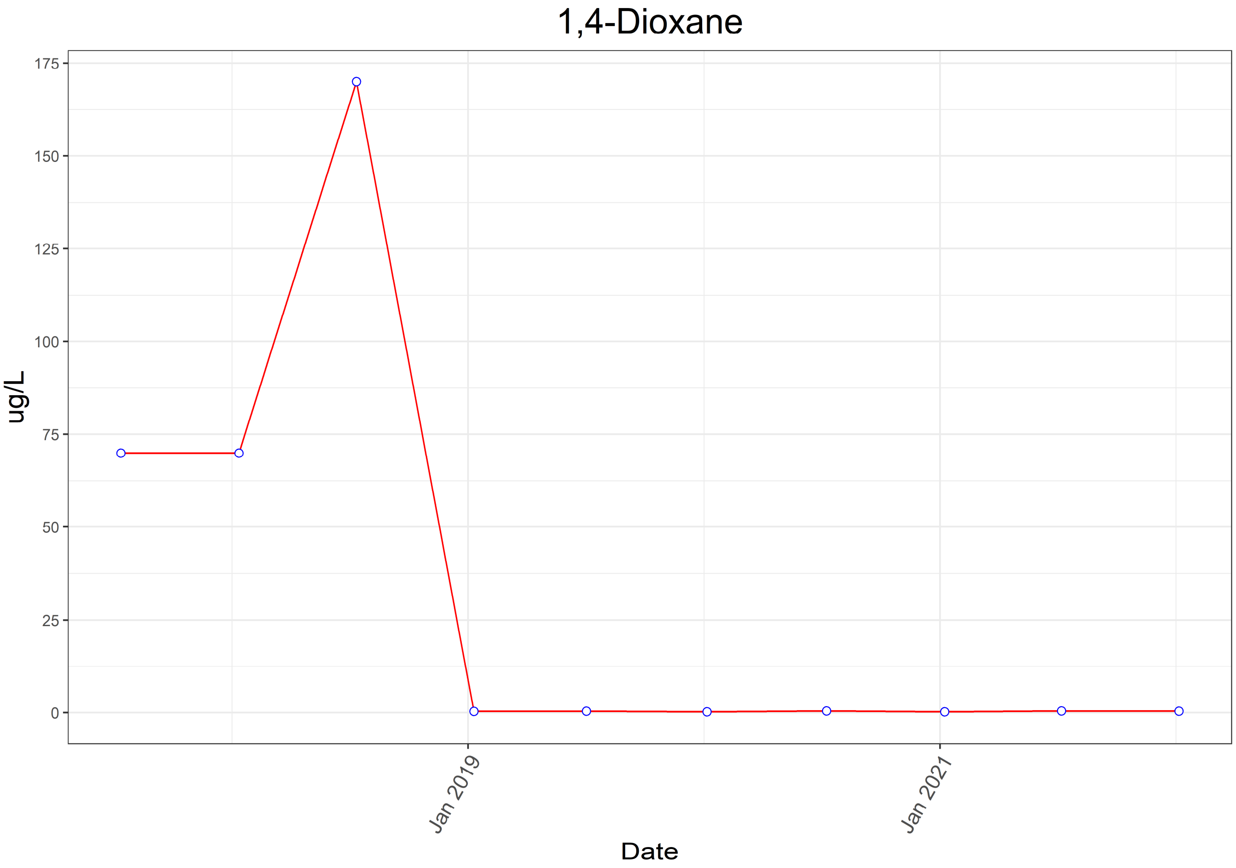
Total Organic Carbon


Total Organic Halogen
ug/L
900
800
700
600
500
400
300
200
100
0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Total Phenols
mg/L
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



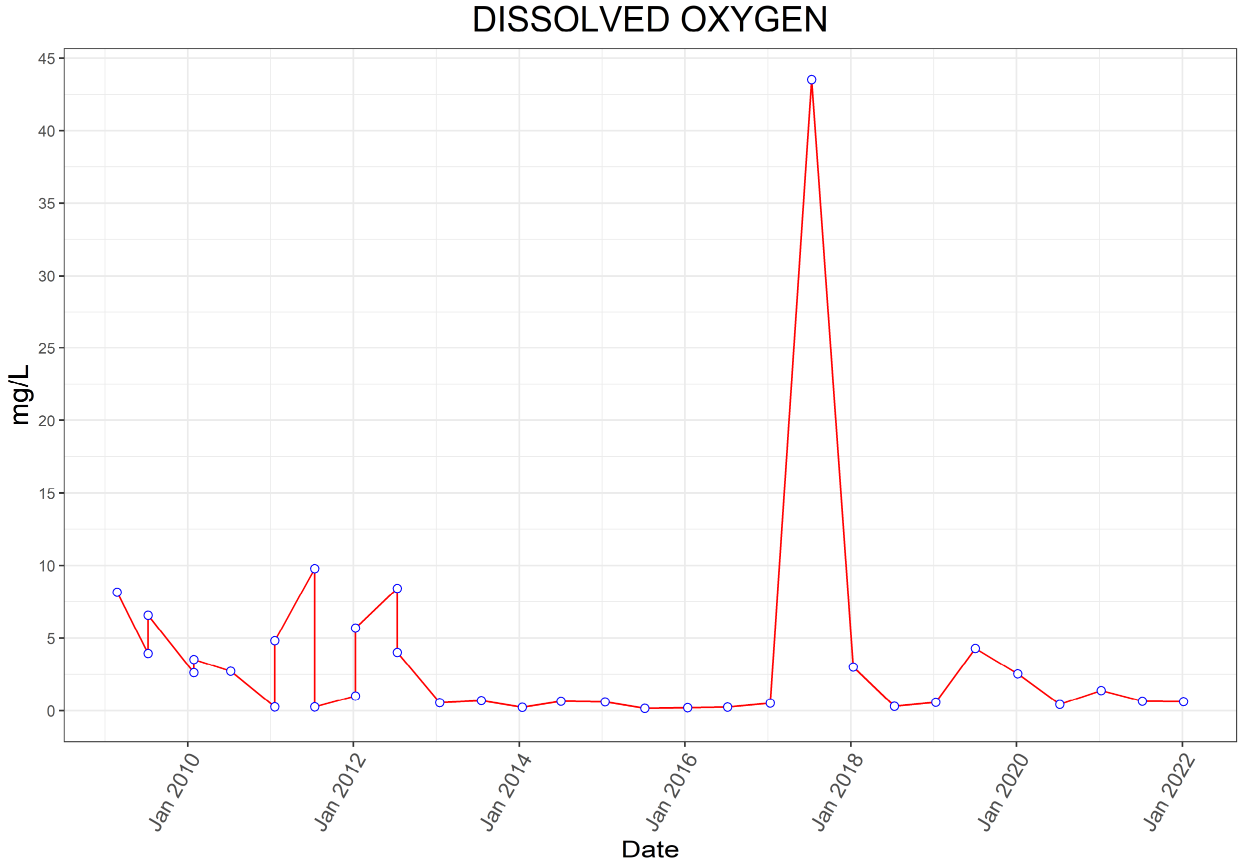
Trichloroethene

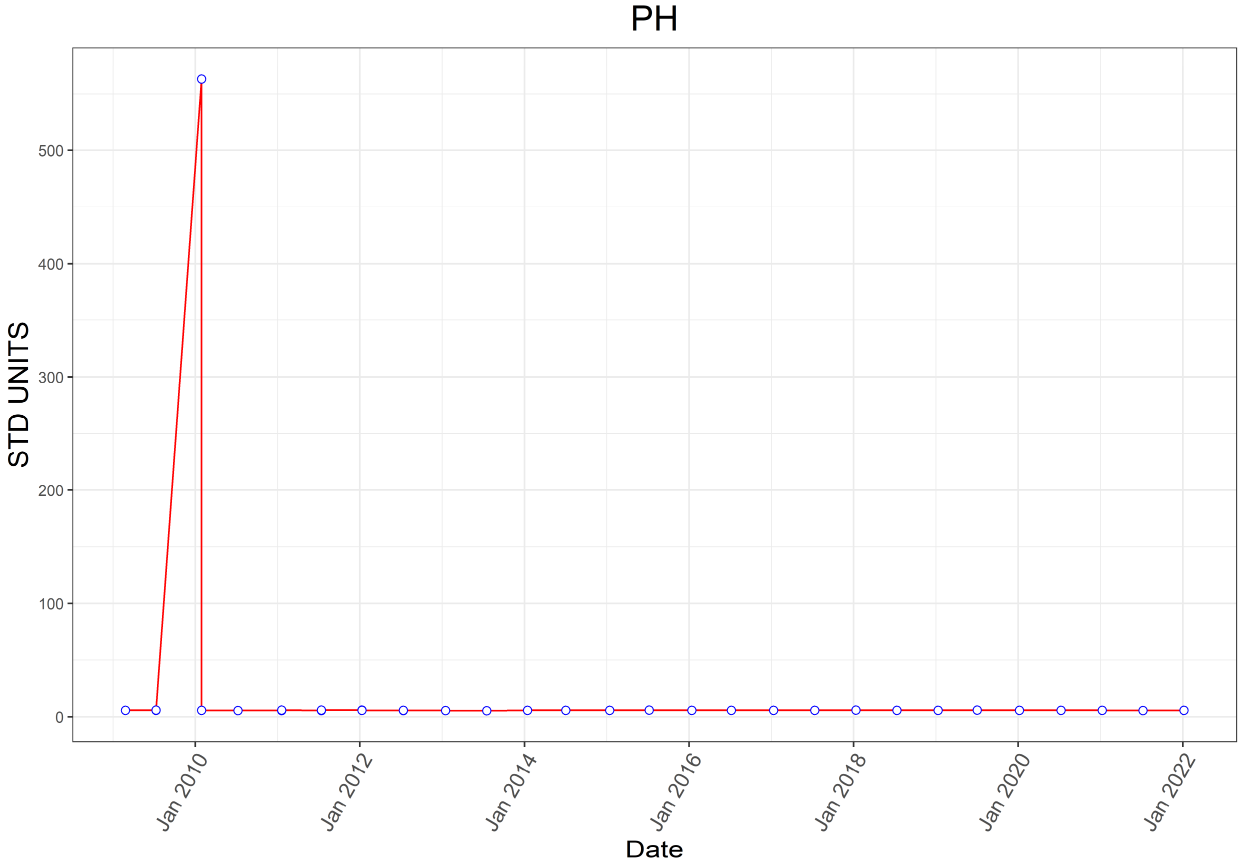


1,4-Dioxane

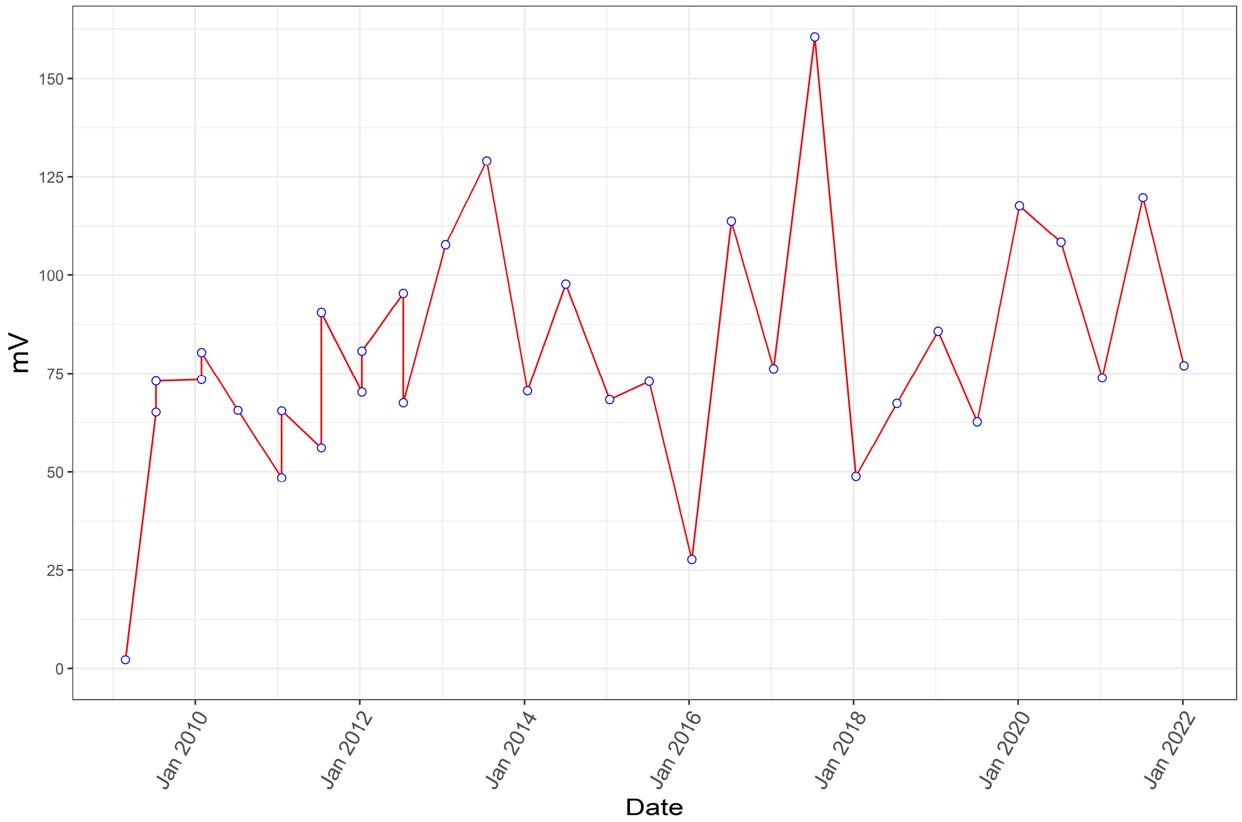
Well Name: P21-M04B

Field Parameters

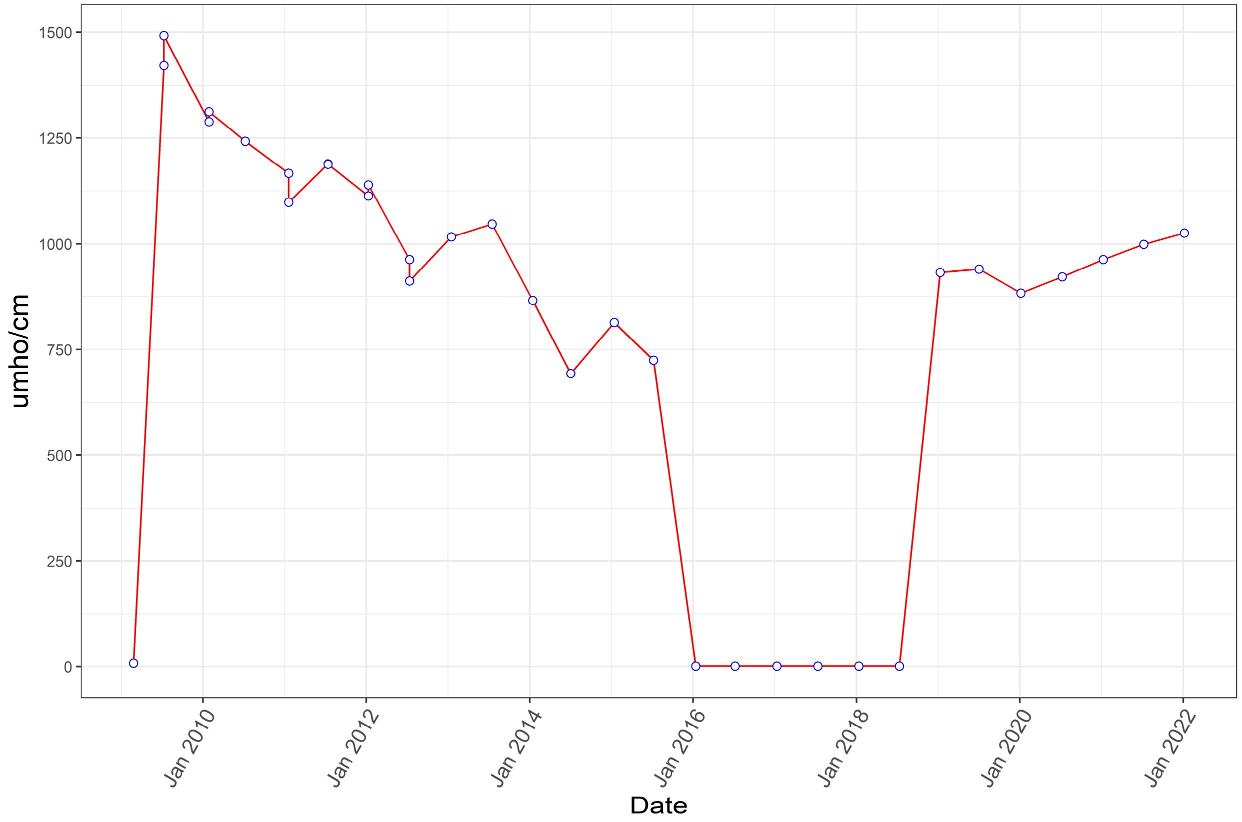


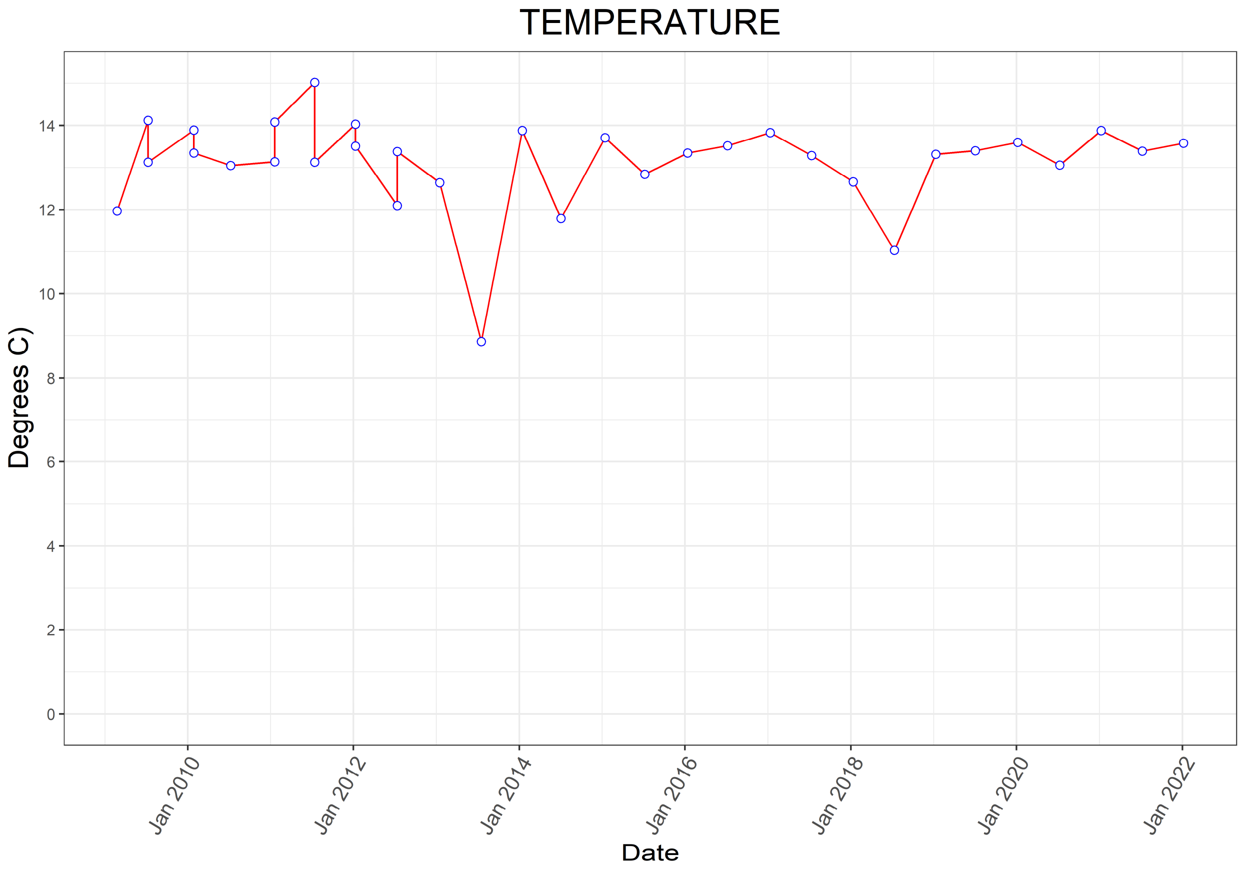


REDOX



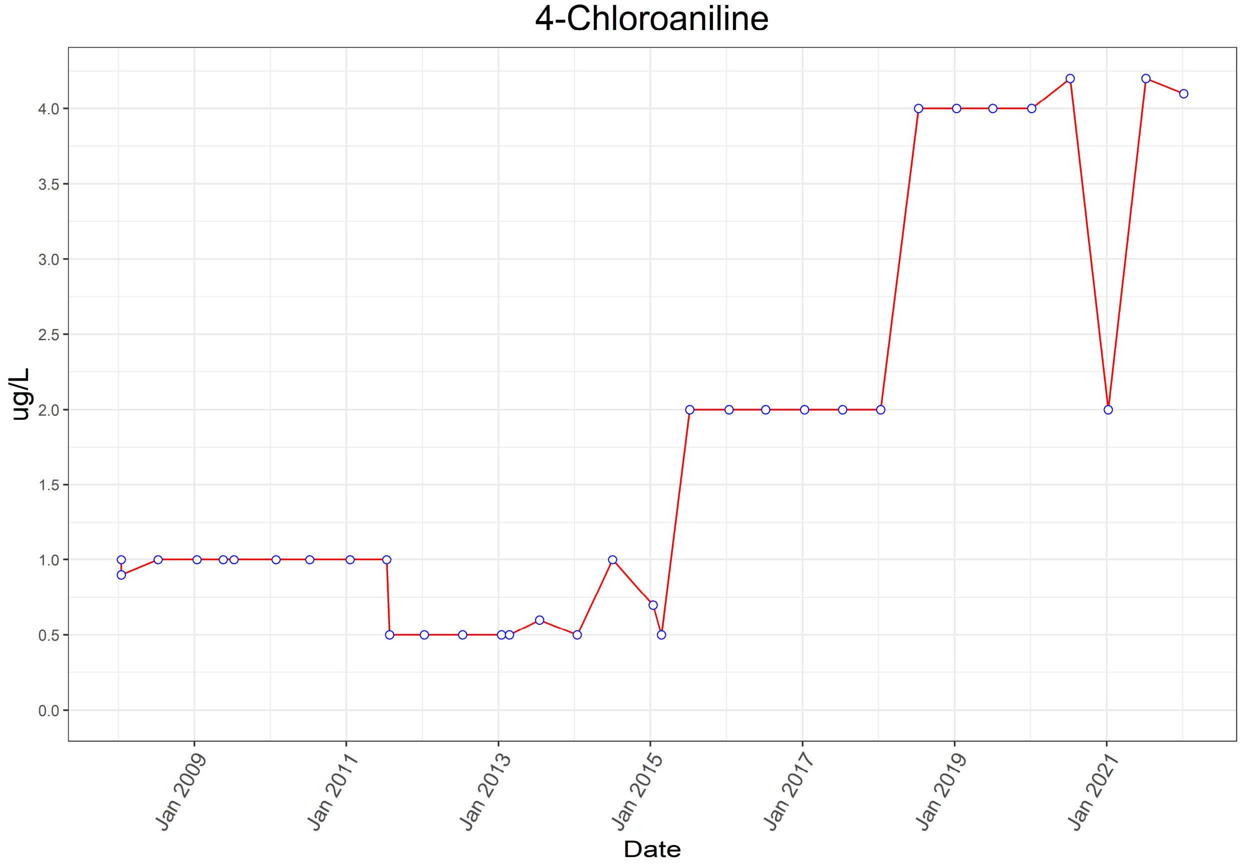
SPECIFIC CONDUCTANCE

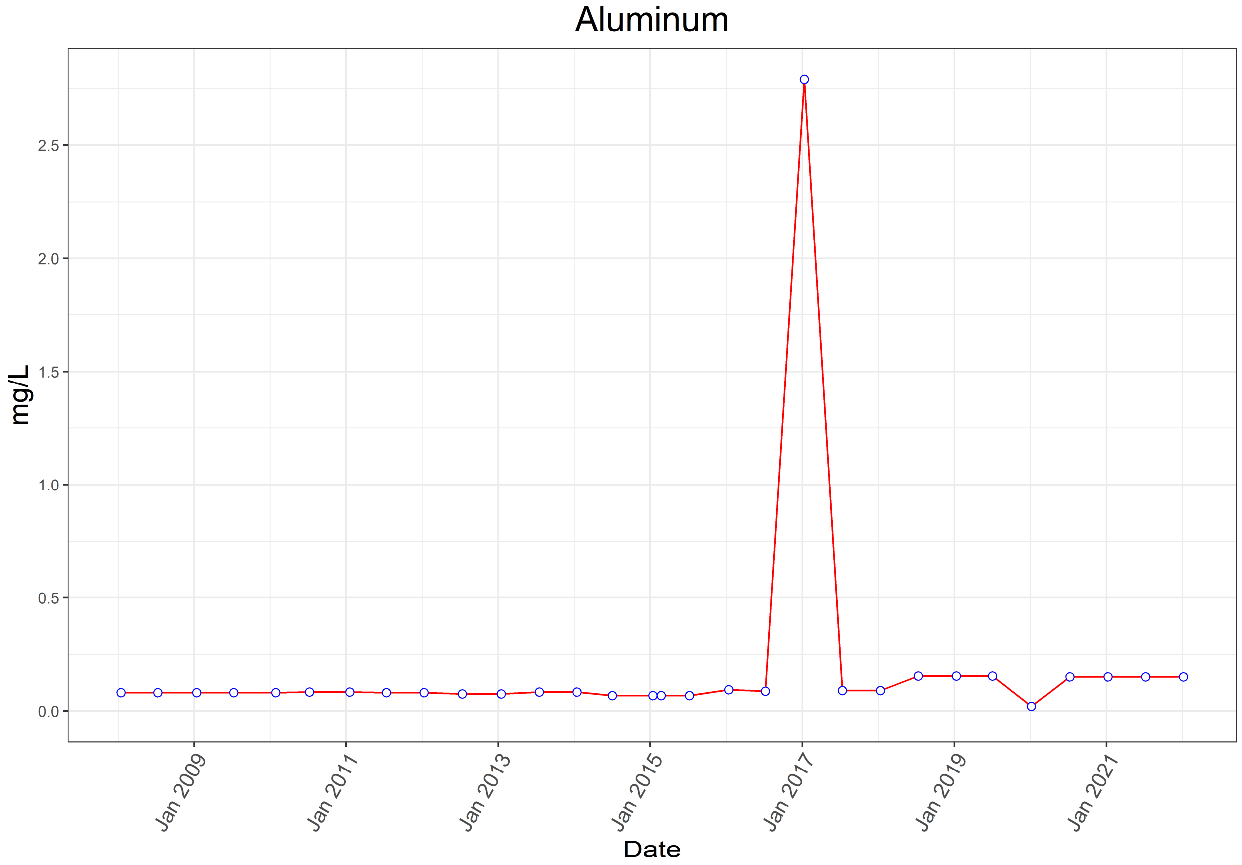


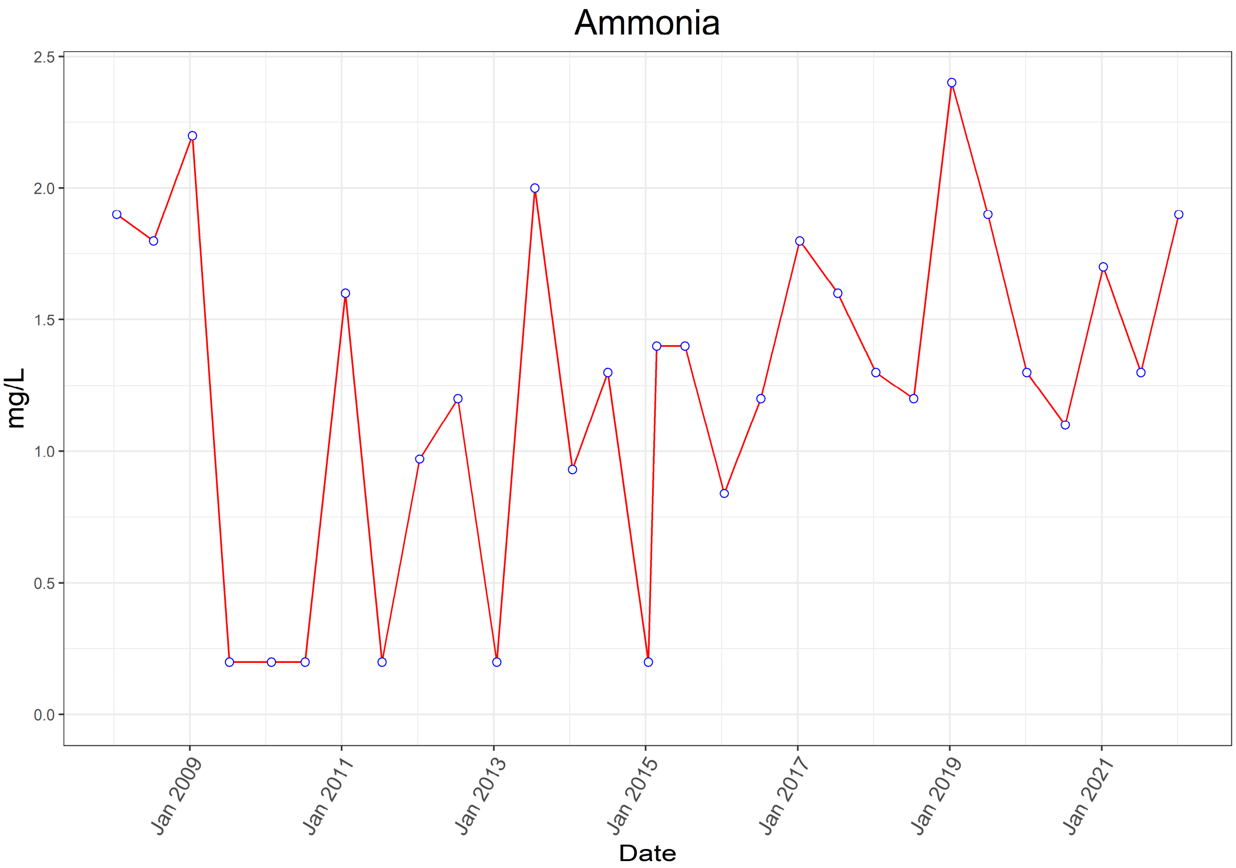

TEMPERATURE
Degrees C)
0
2
4
6
8
10
12
14
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

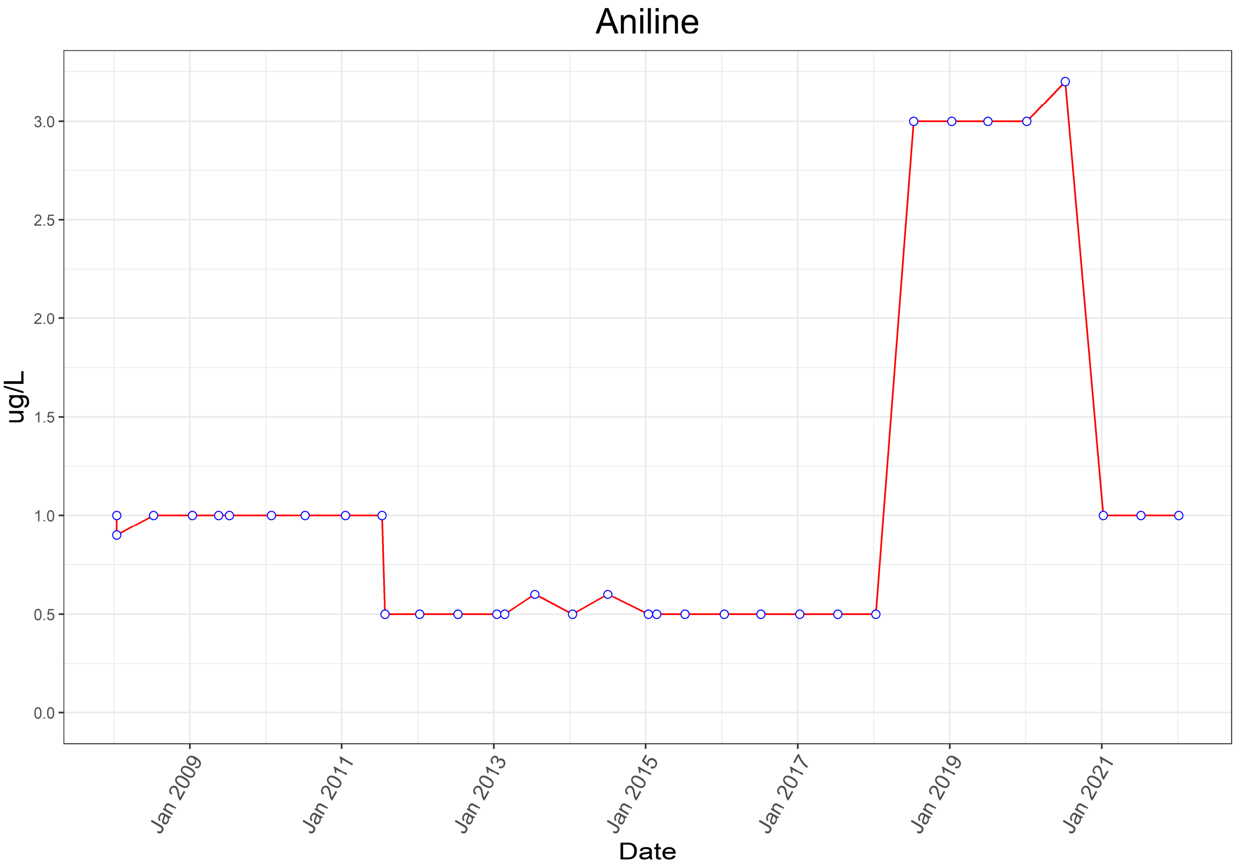
Secure C Landfill Corrective Action Monitoring Program (Program 6)

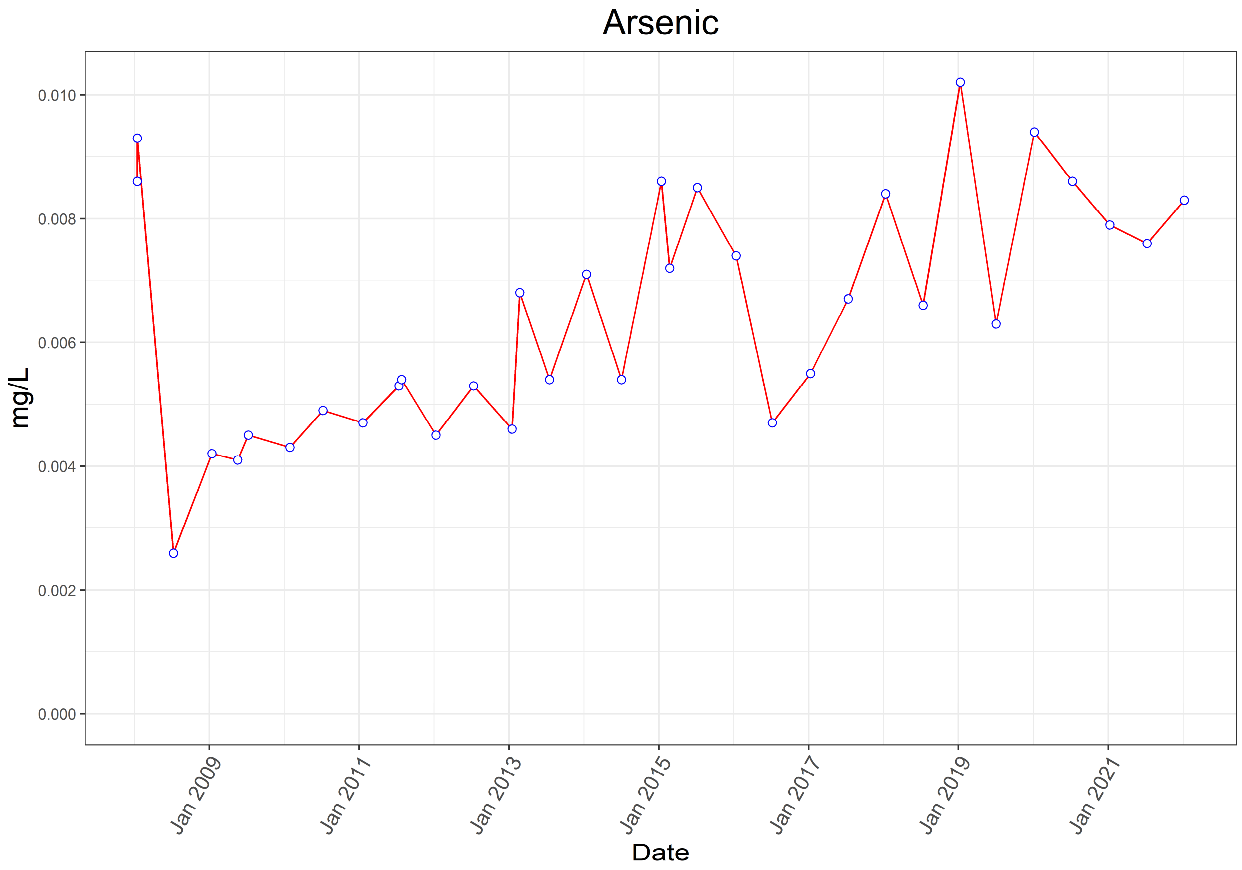
Well Name: P21-R01B

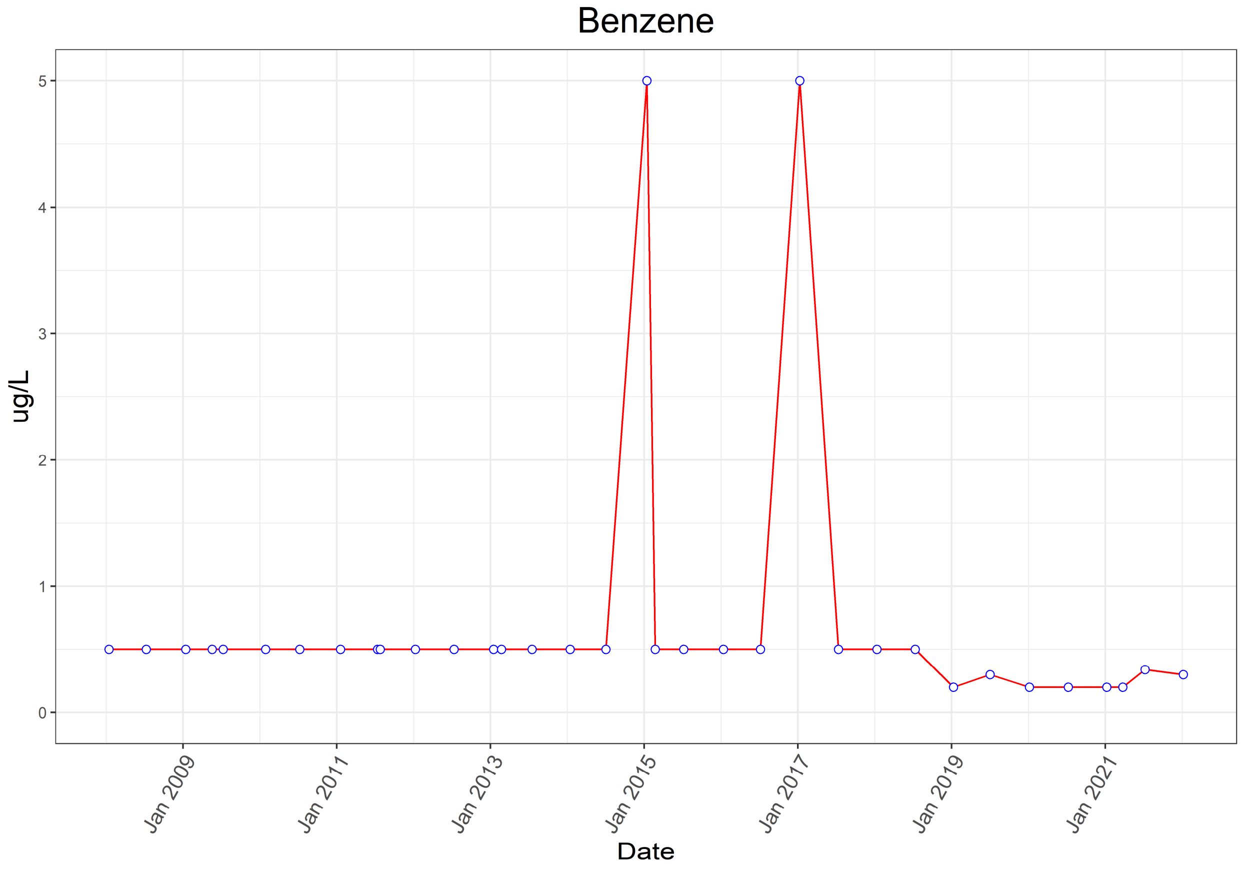


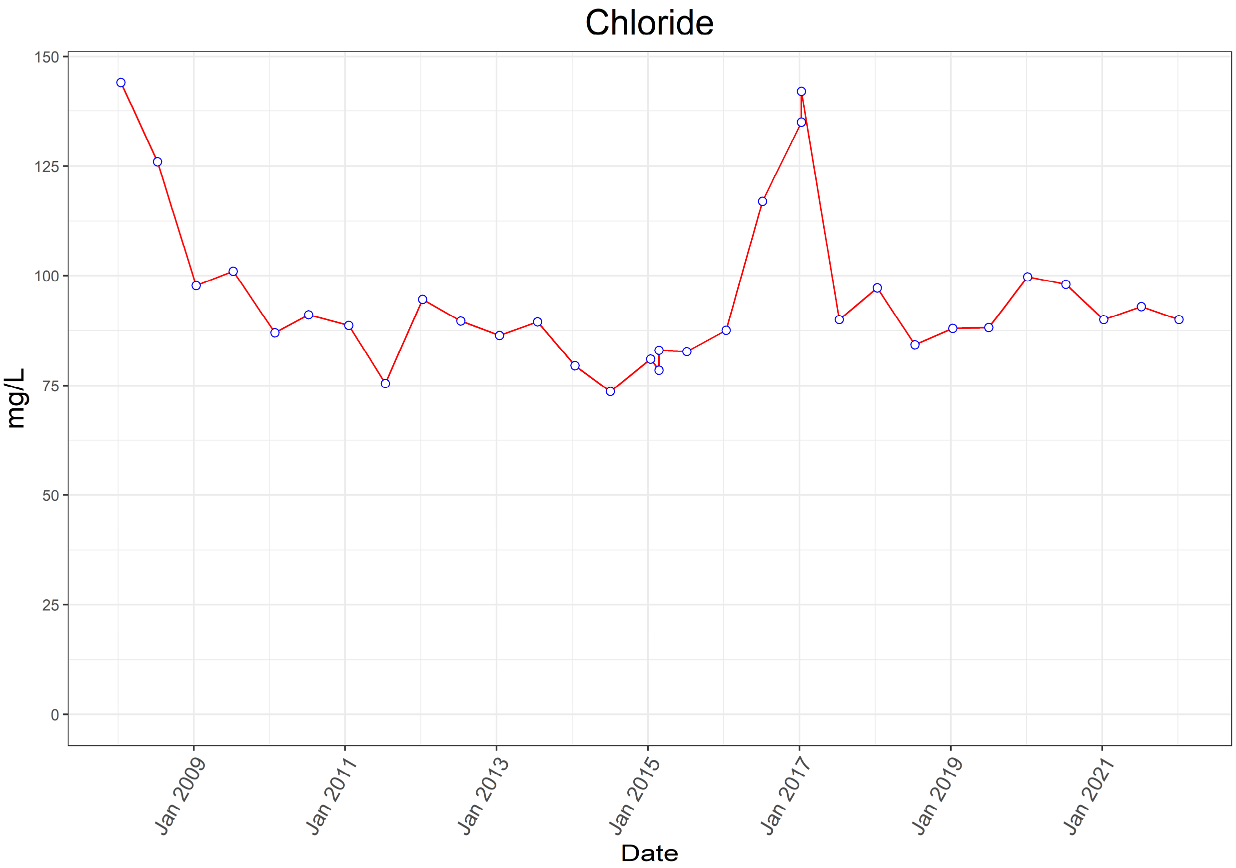


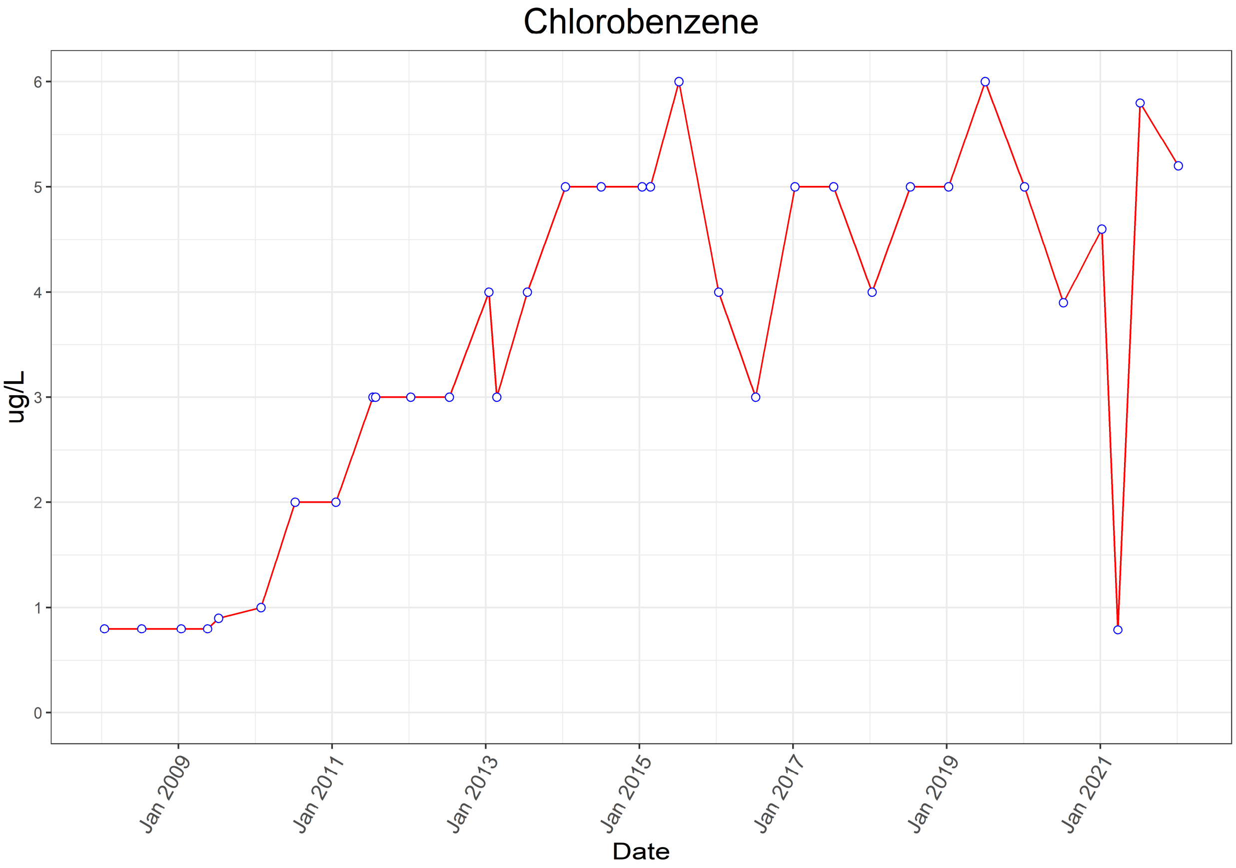

Ammonia
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date


Aniline
ug/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

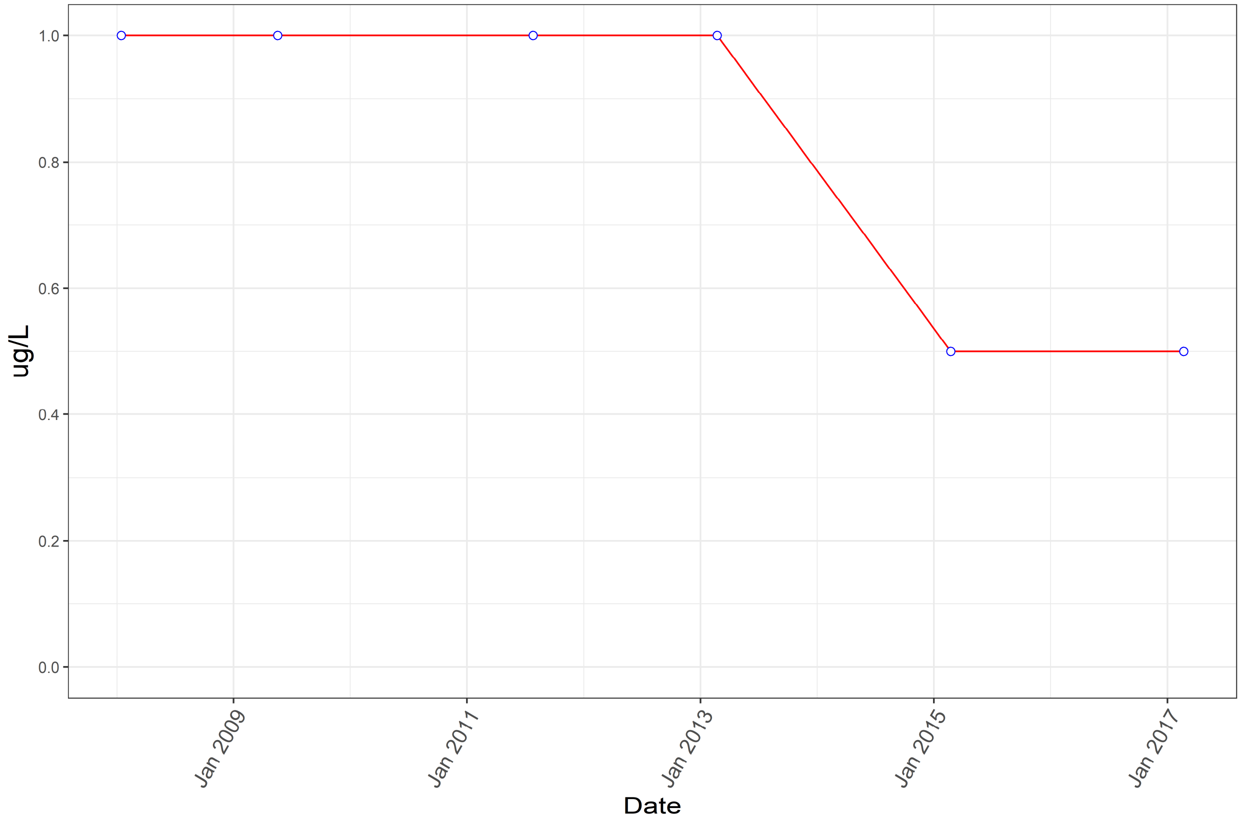

Arsenic
mg/L
0.010
0.008
0.006
0.004
0.002
0.000
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date


Benzene
ug/L
5
4
3
2
1
0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

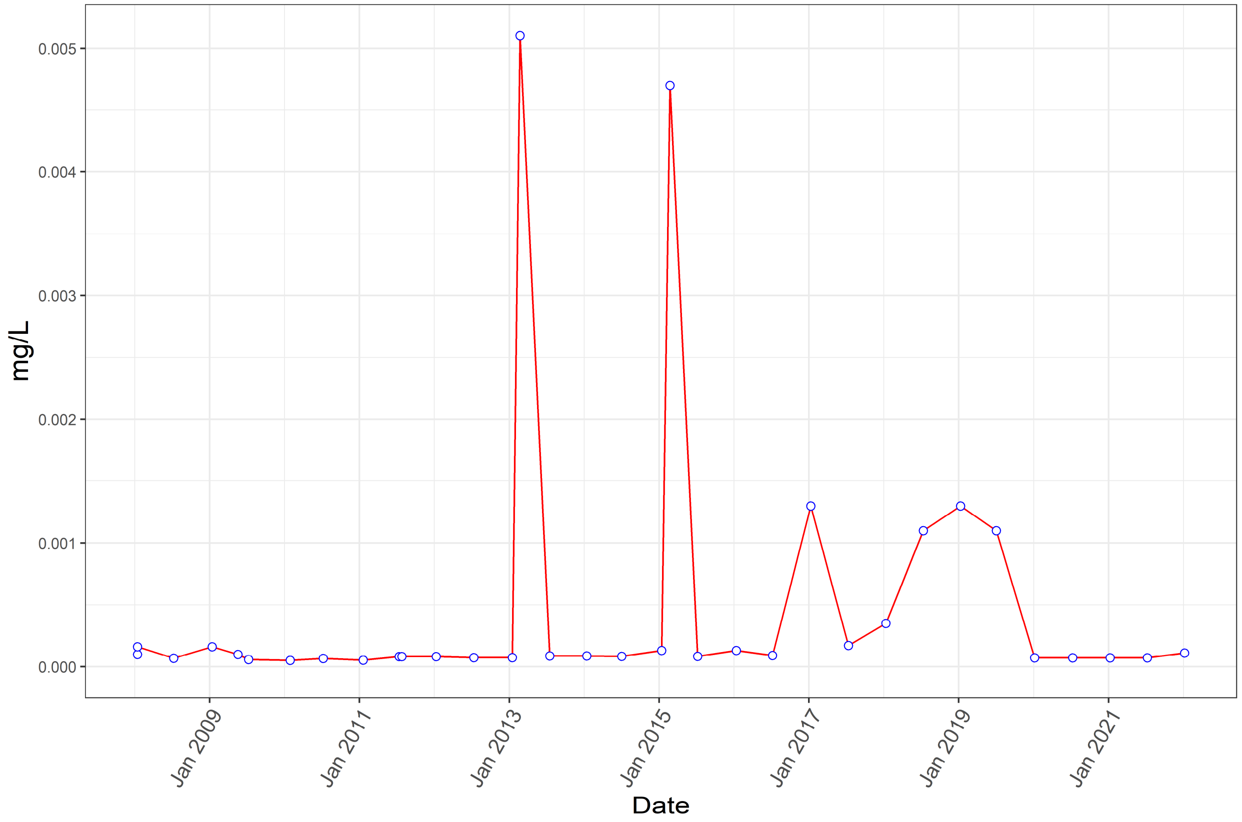

Chloride
150
125
100
75
50
25
0
mg/L
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

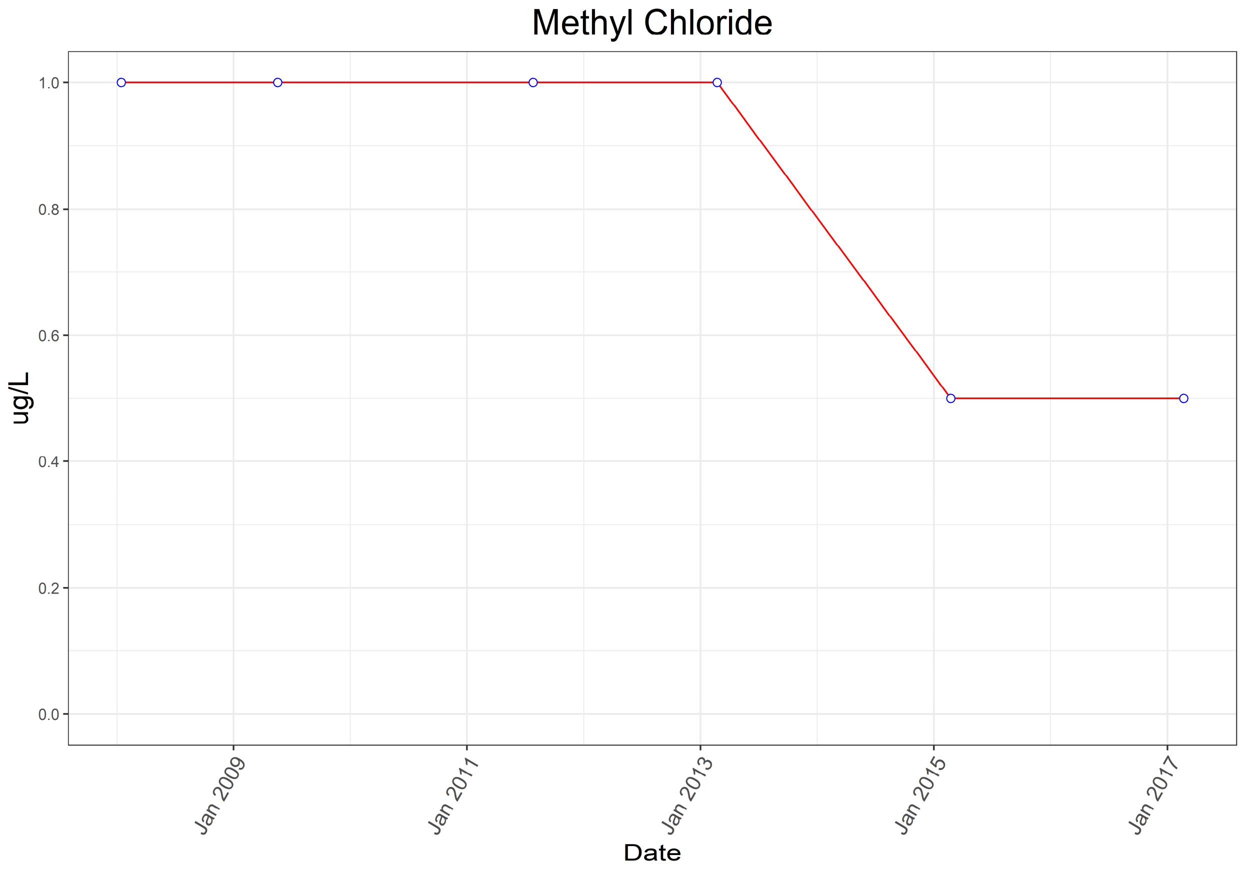

Chlorobenzene
6
5
4
3
2
1
0
ug/L
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

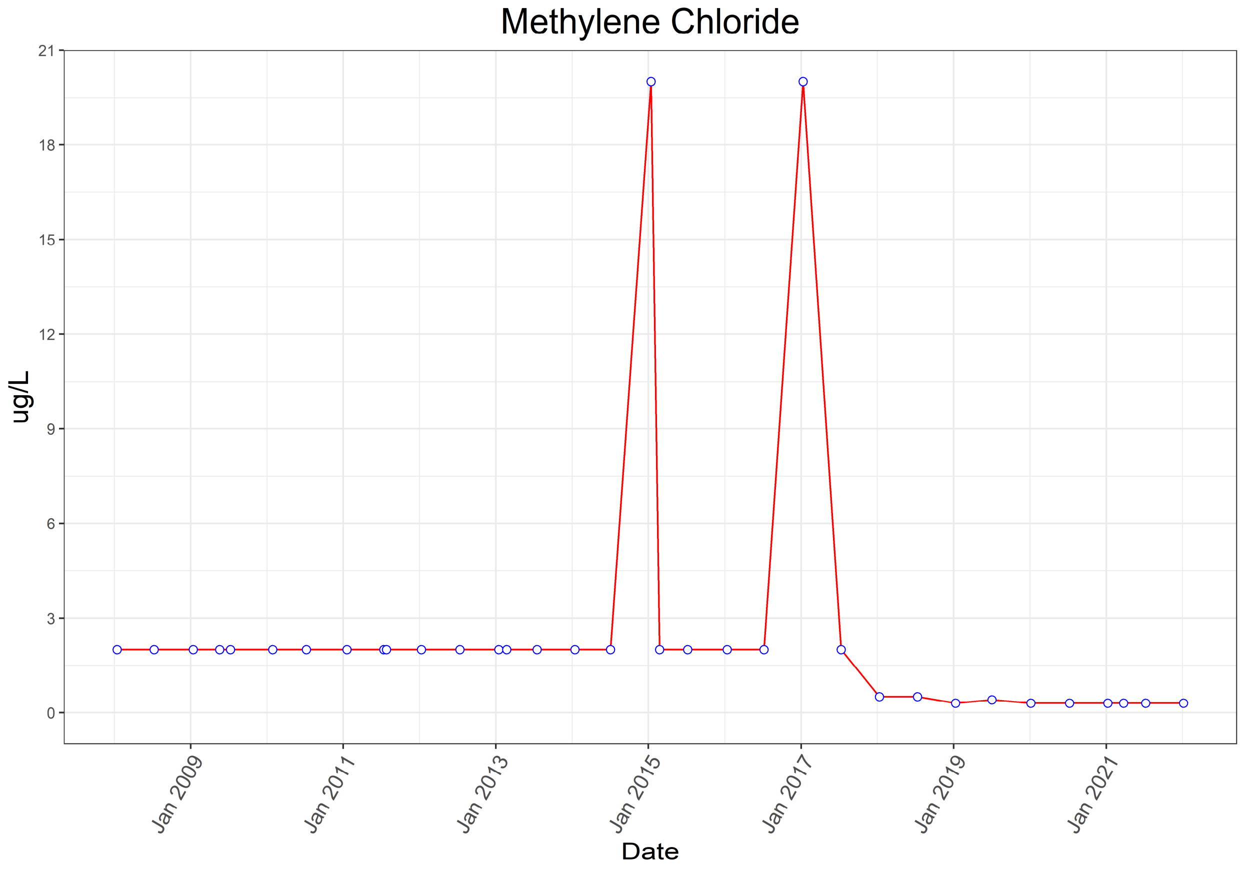
Ethyl Chloride



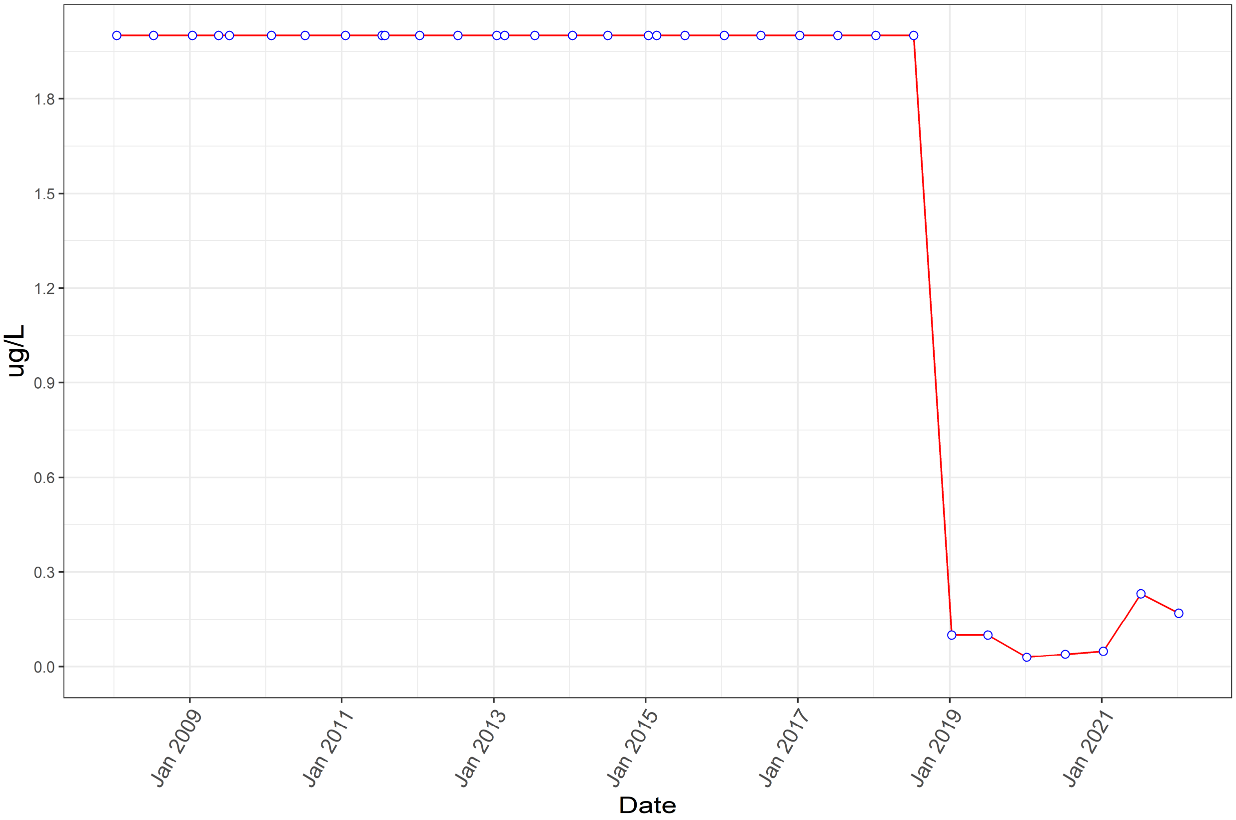
Lead



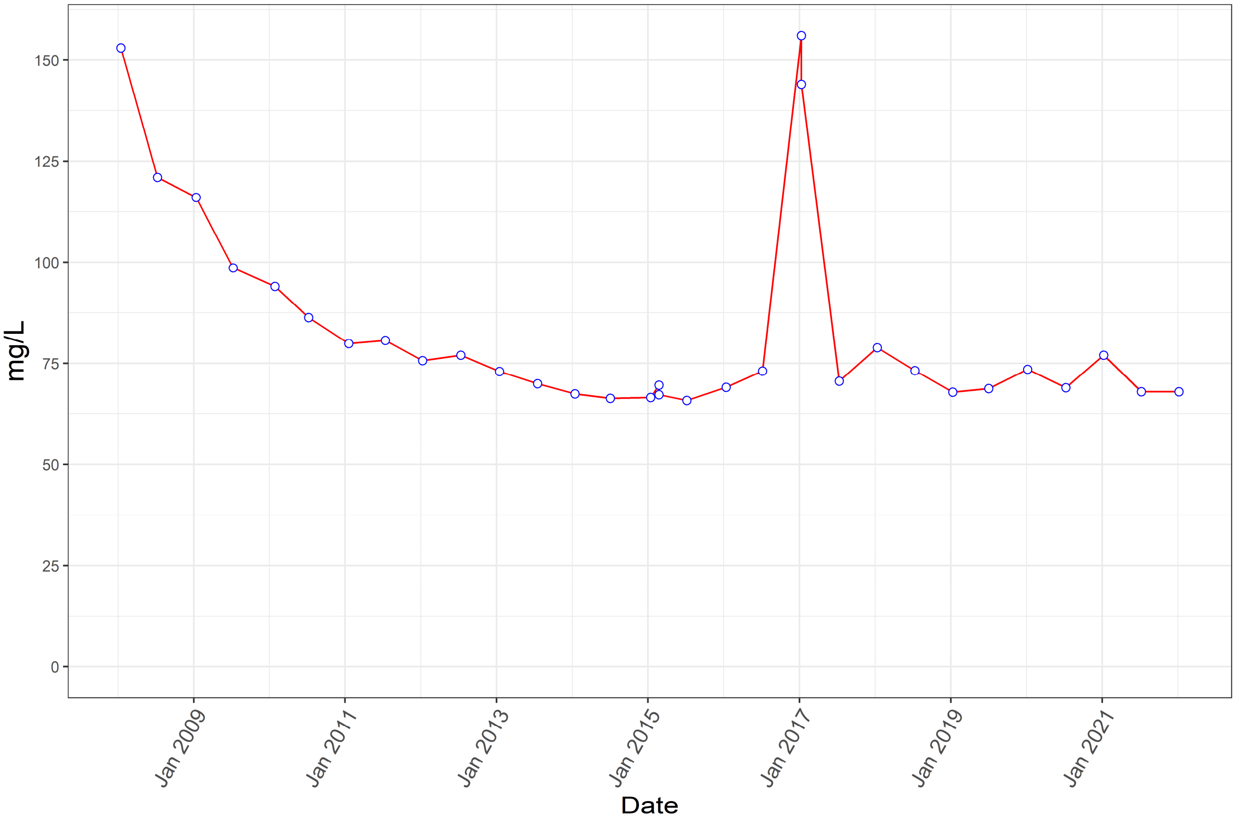

Methyl Chloride
ug/L
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Date

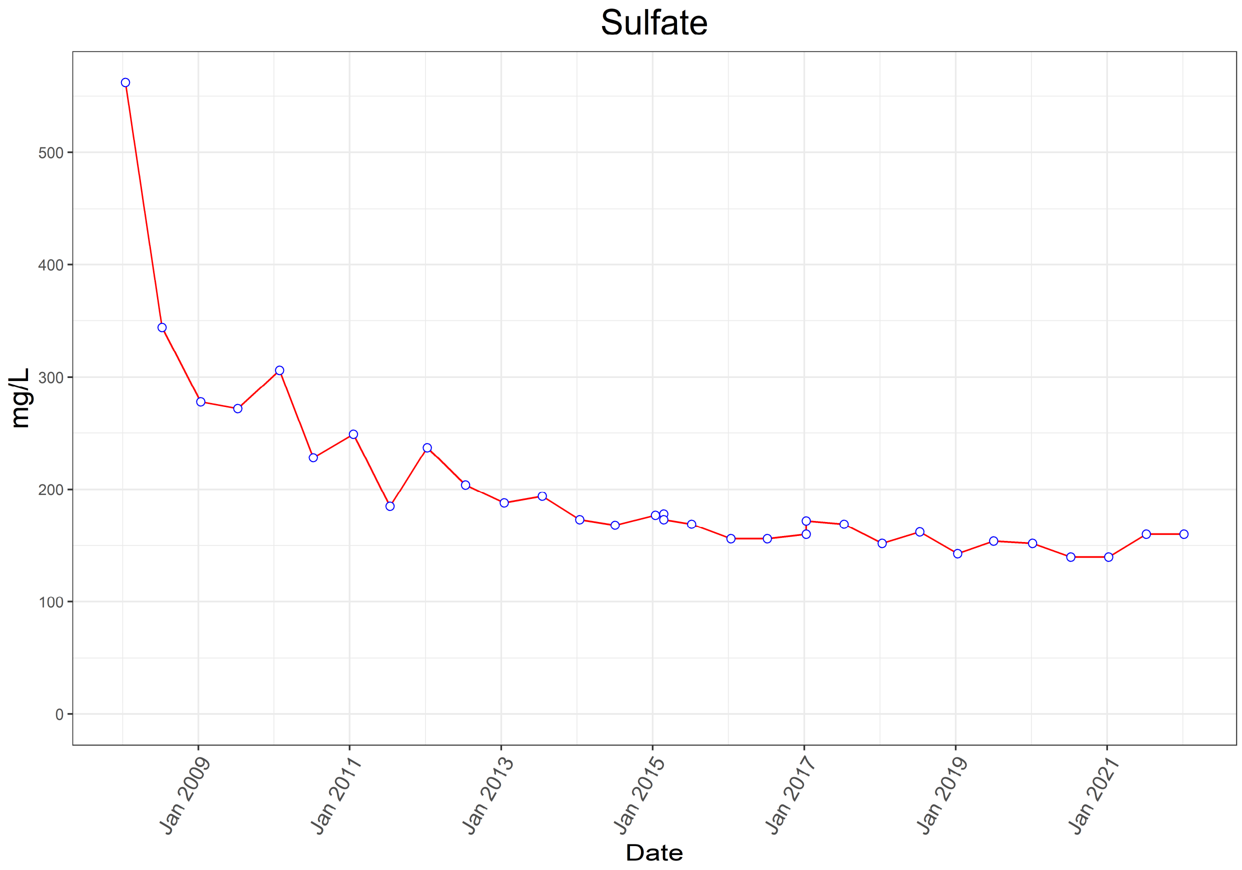

Methylene Chloride
ug/L
21
18
15
12
9
6
3
0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

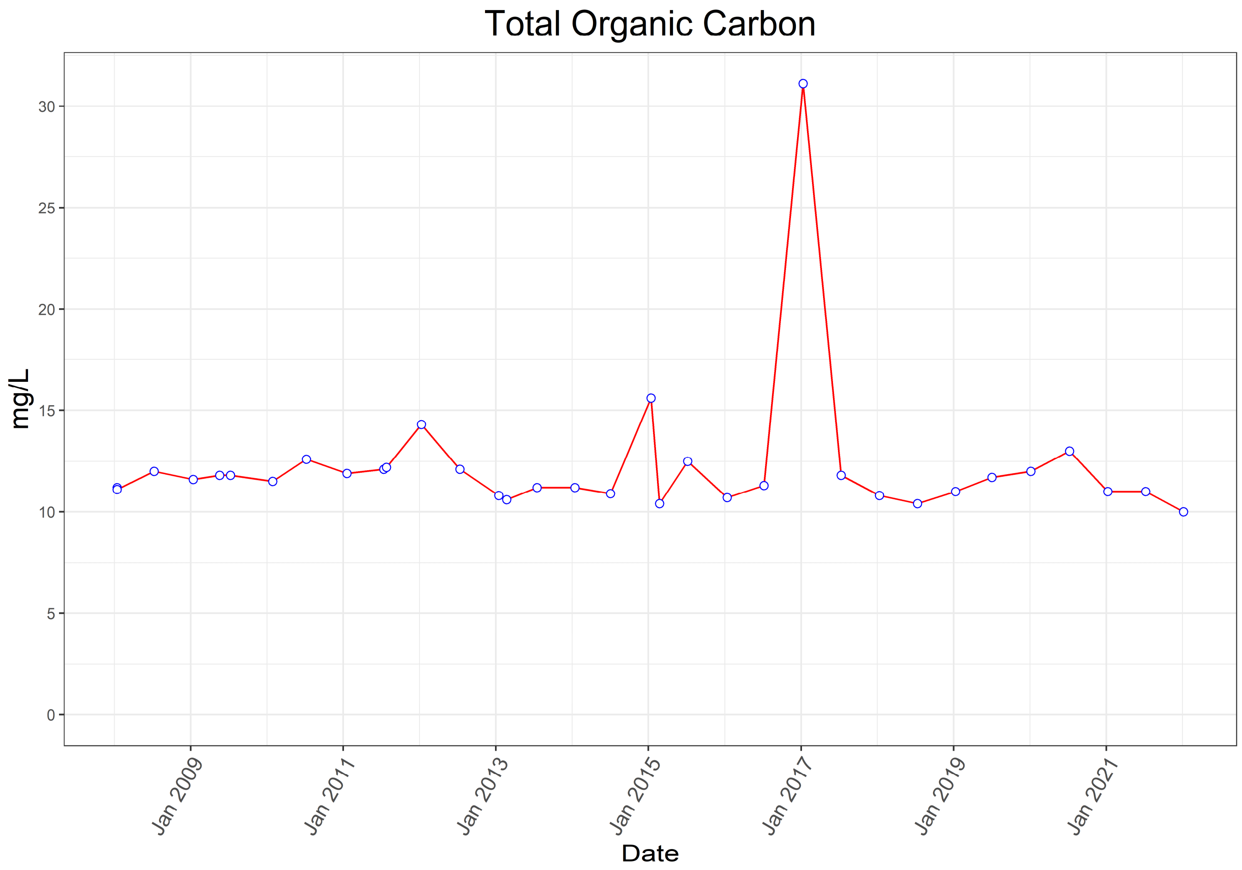
N-Nitrosodimethylamine



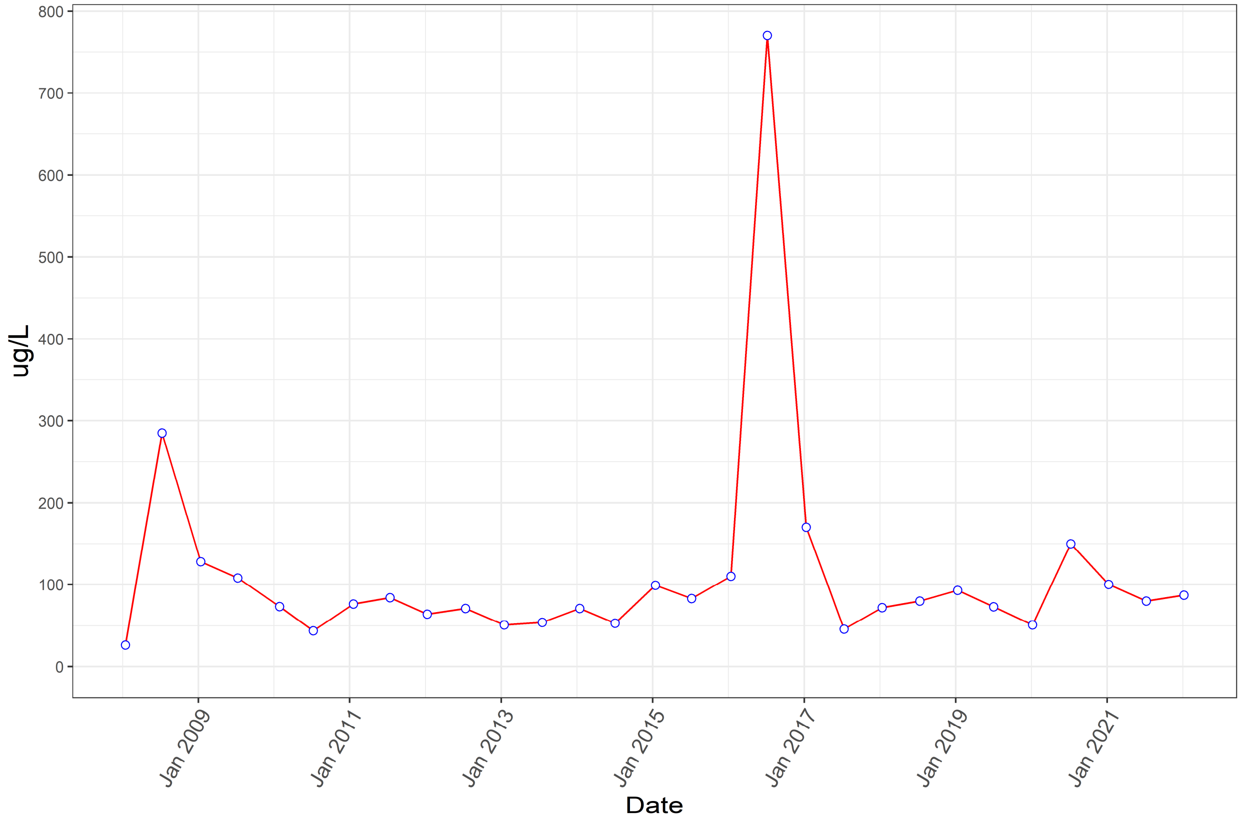
Sodium



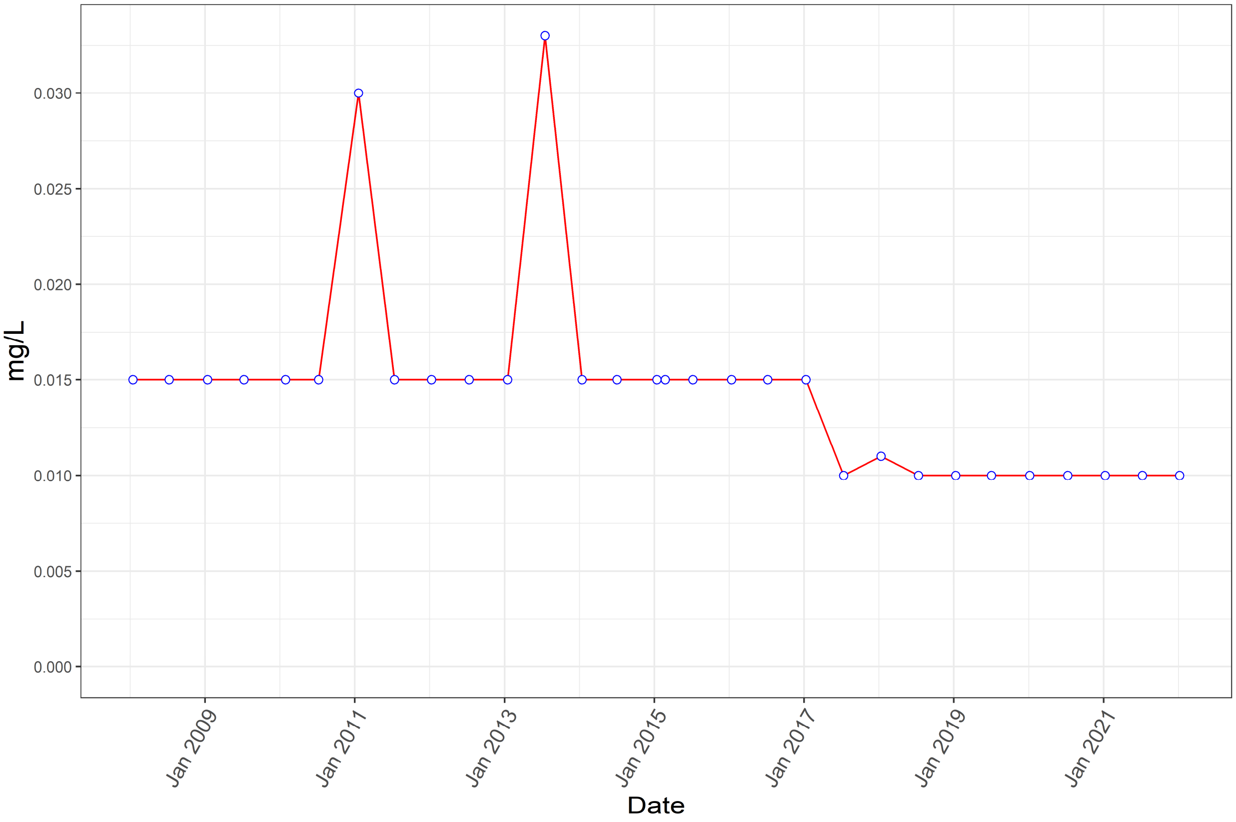

Sulfate
mg/L
0
100
200
300
400
500
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

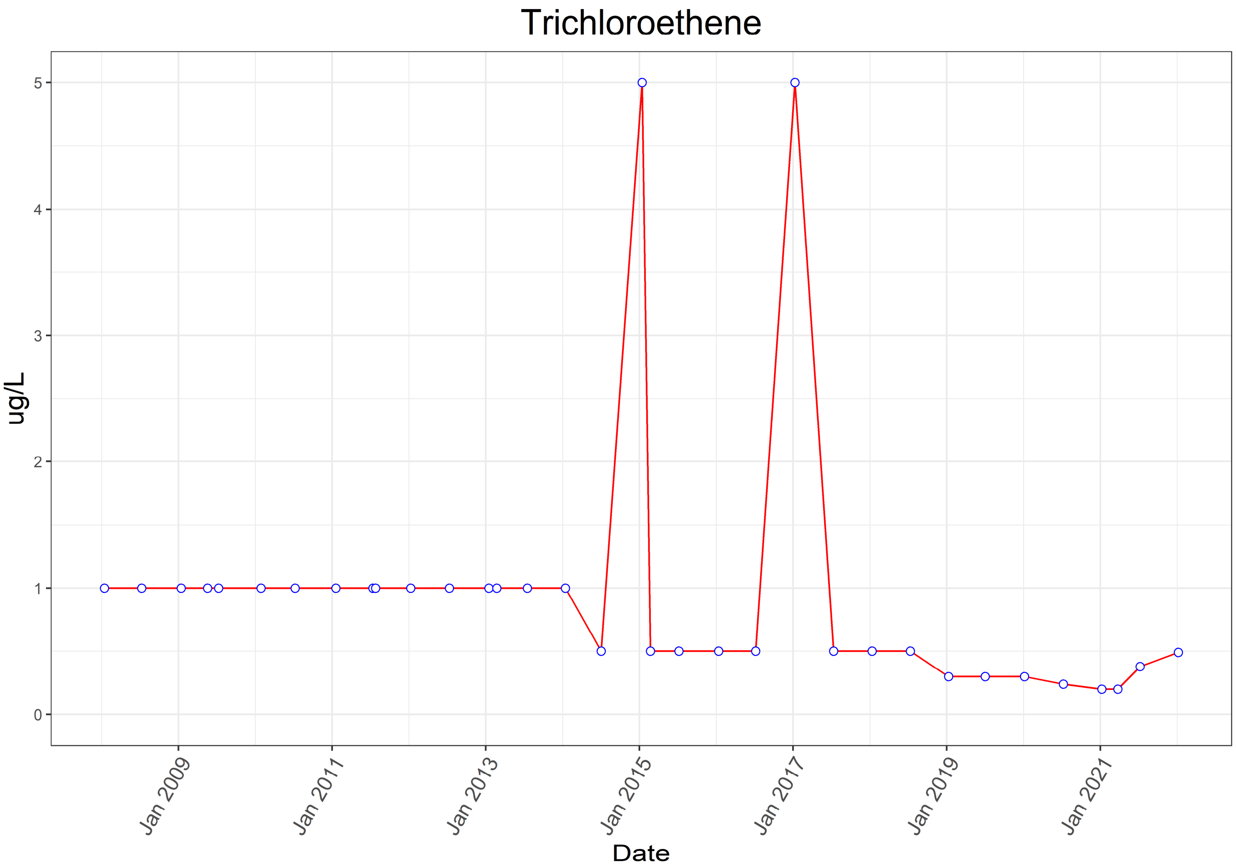

Total Organic Carbon
mg/L
0
5
10
15
20
25
30
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

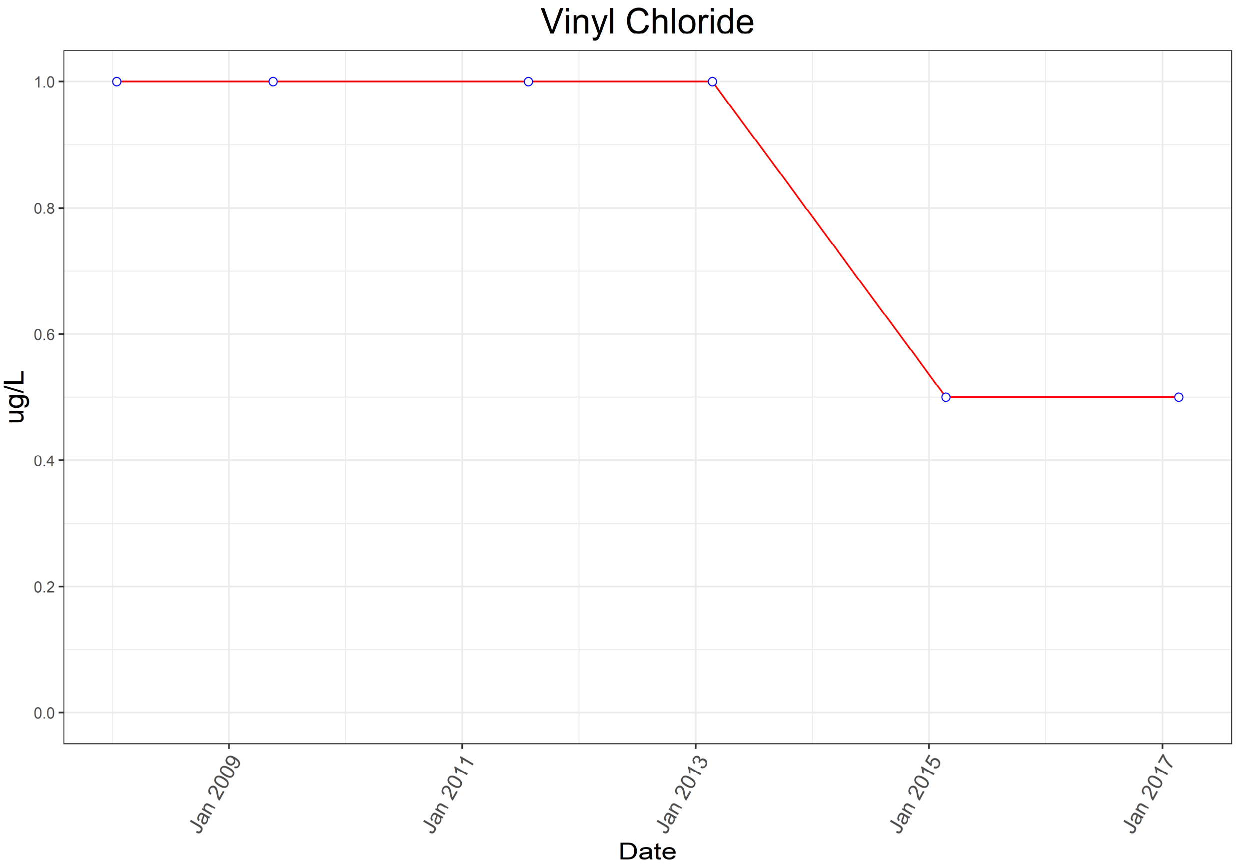
Total Organic Halogen

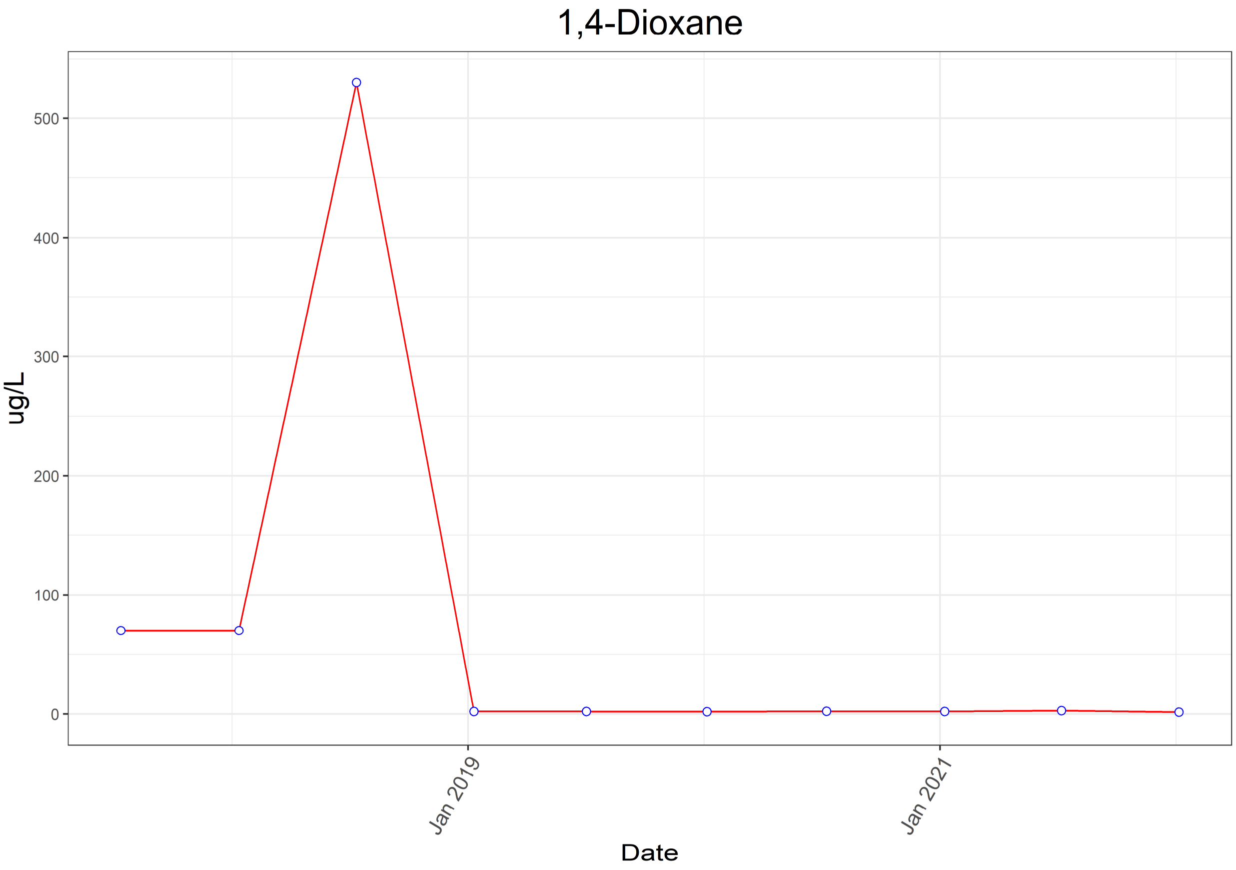


Total Phenols



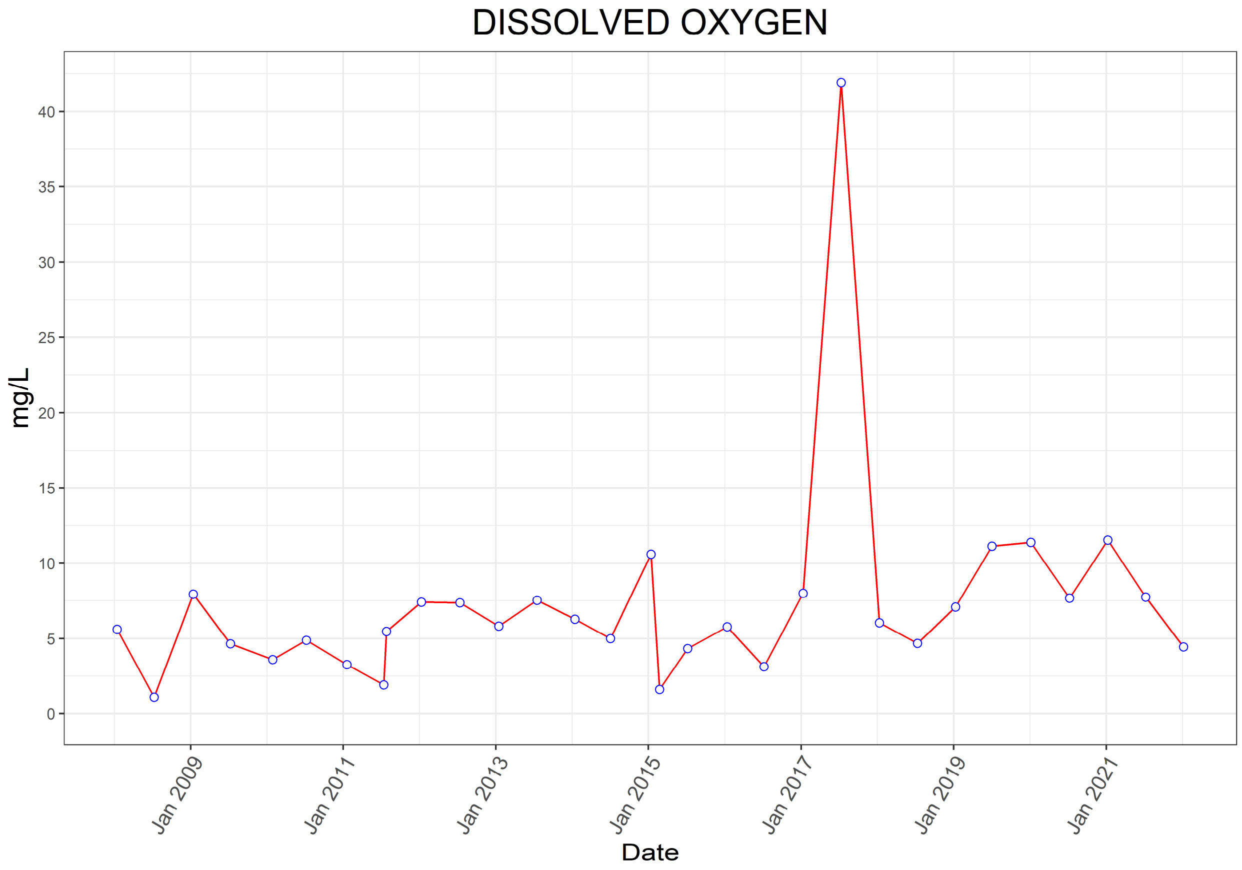

Trichloroethene
ug/L
5
4
3
2
1
0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

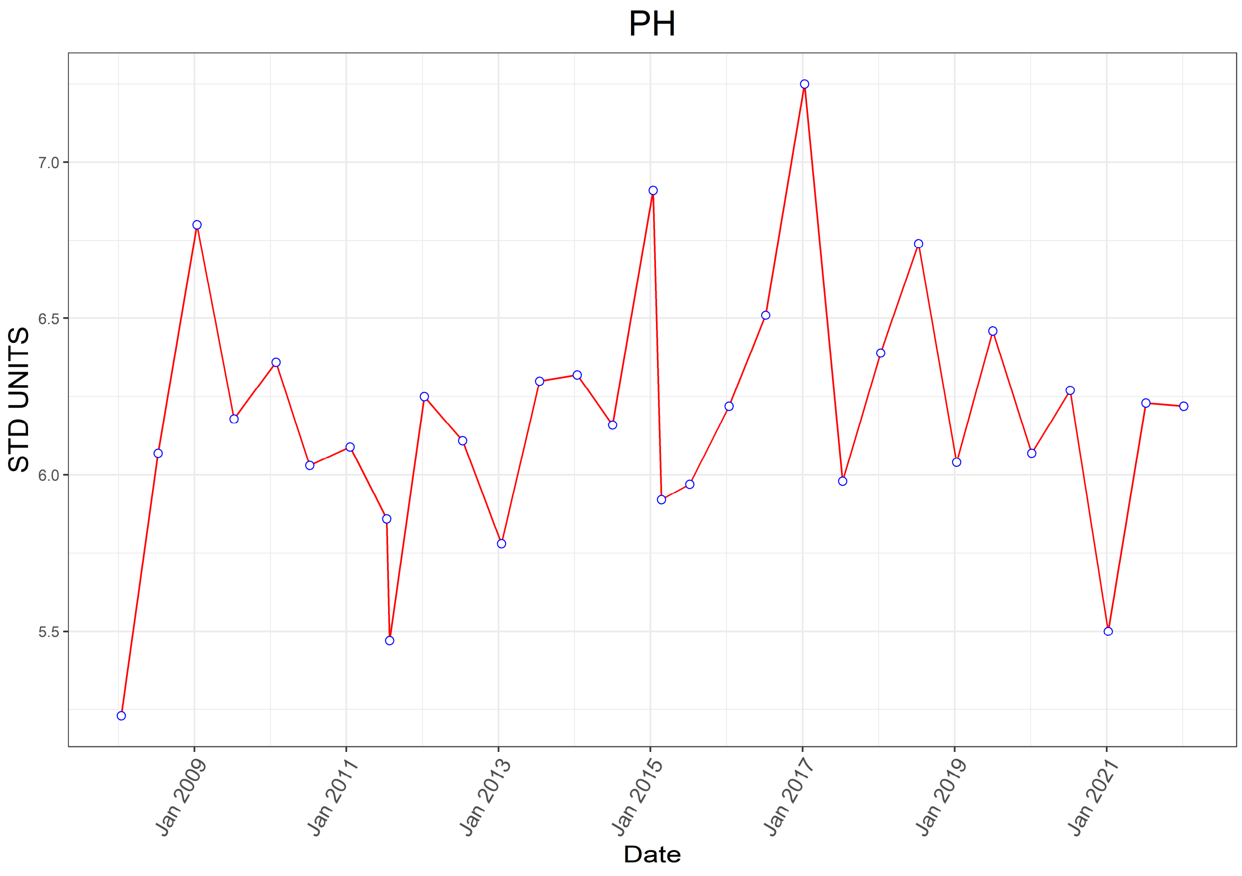

Vinyl Chloride
ug/L
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Date

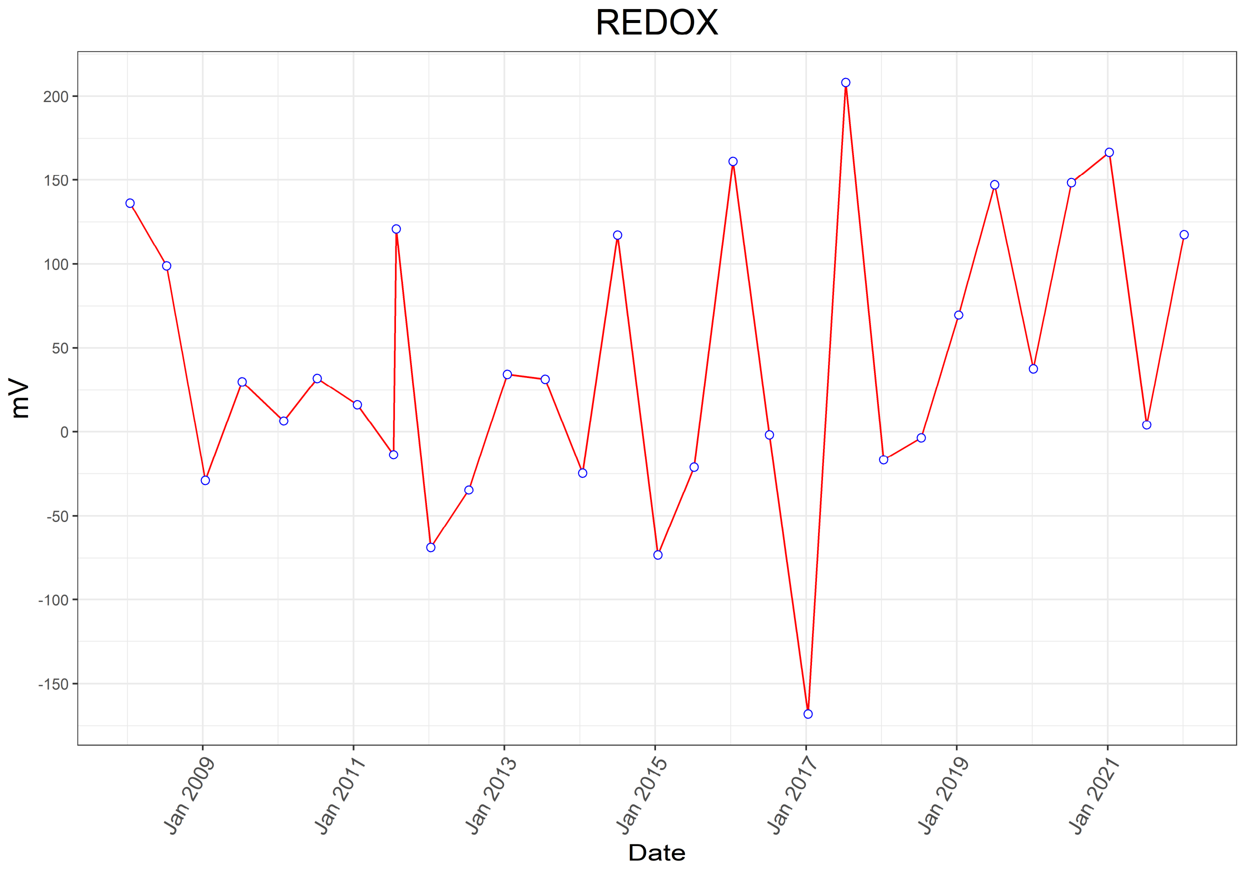

1,4-Dioxane
ug/L
500
400
300
200
100
0
Jan 2019
Jan 2021
Date

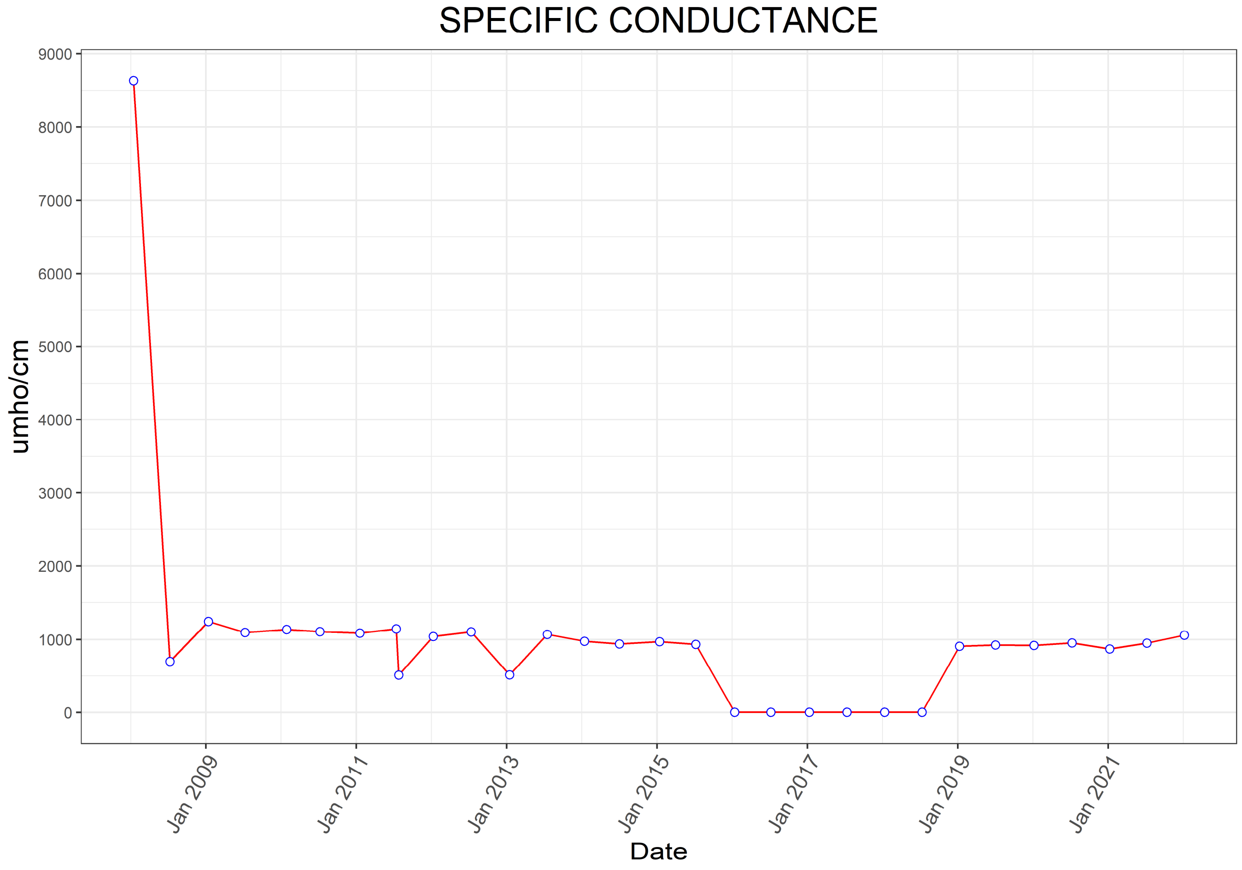
Well Name: P21-R01B

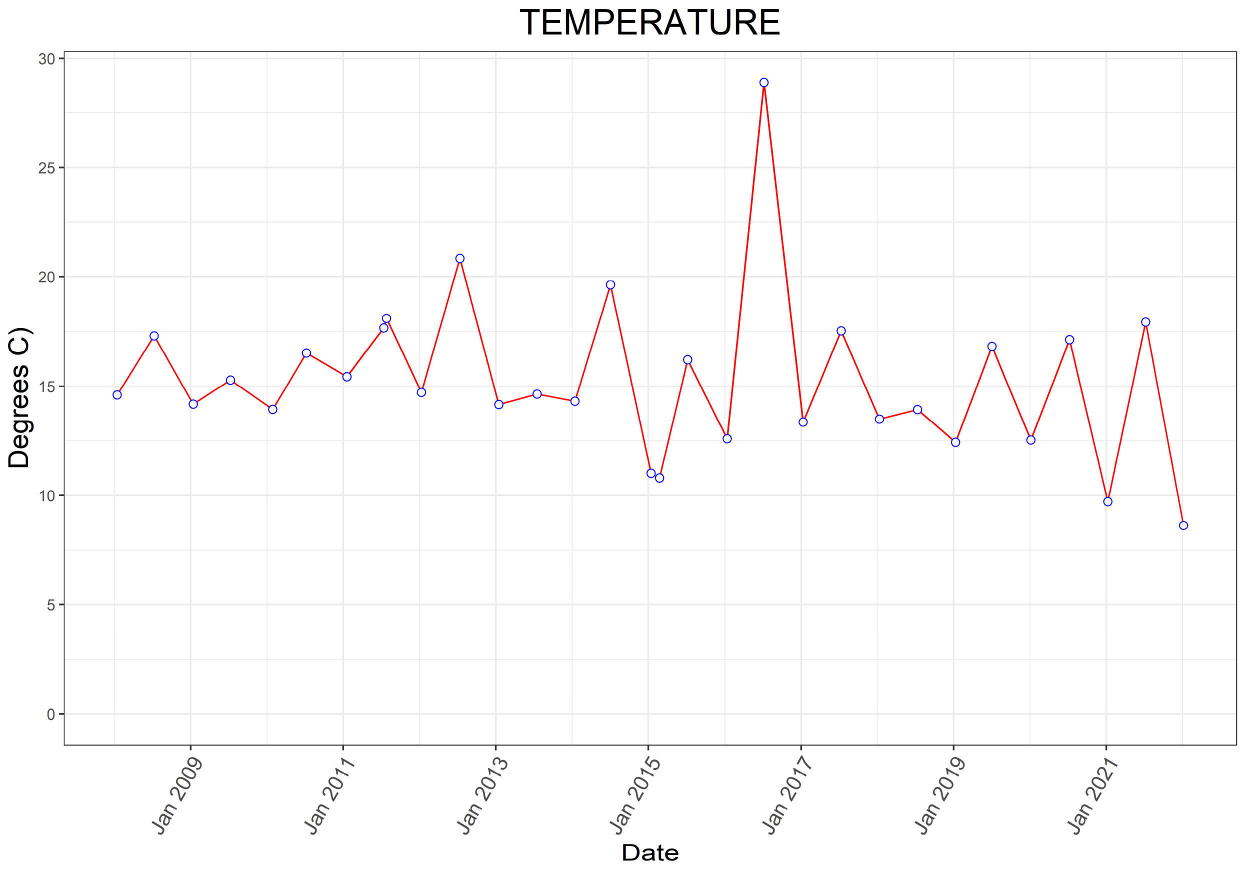
Field Parameters





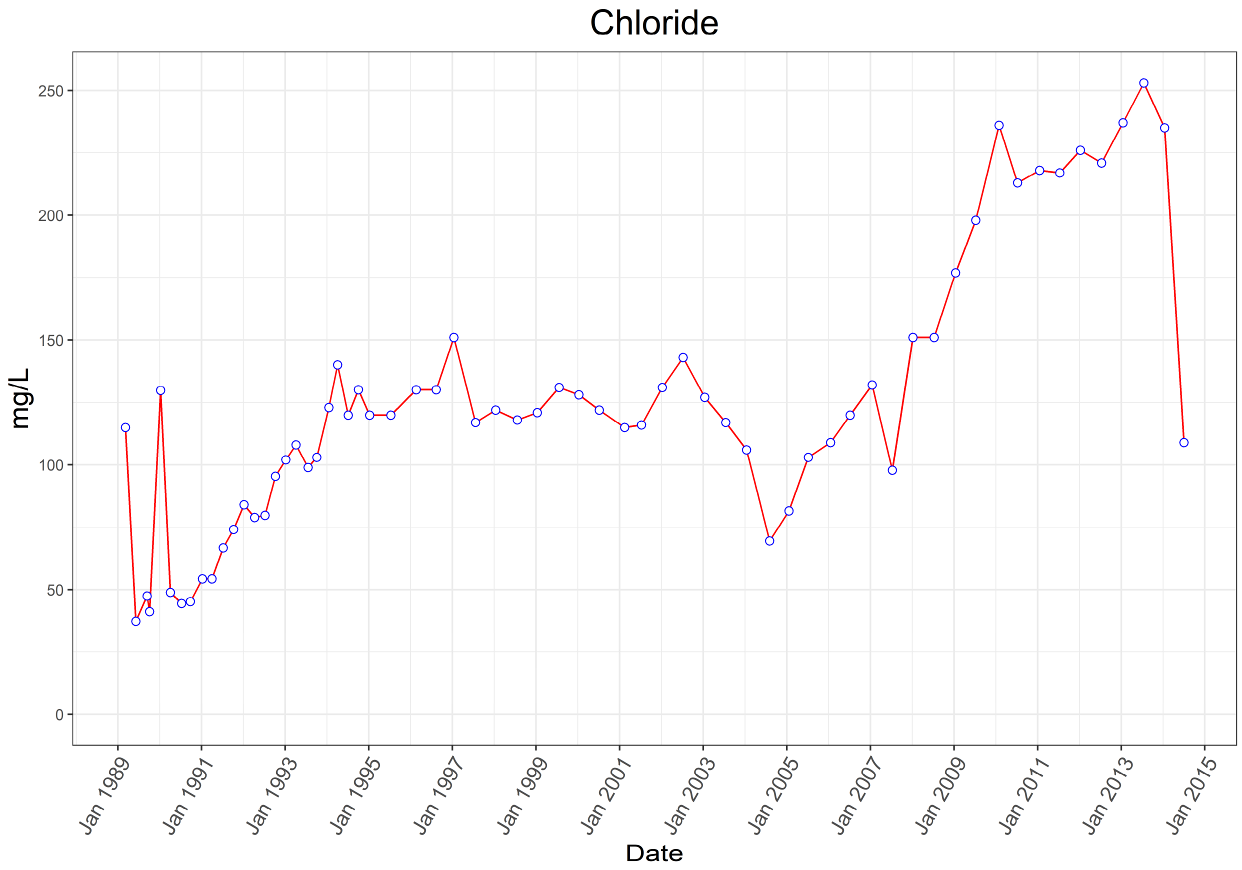

REDOX
mV
200
150
100
50
0
-50
-100
-150
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

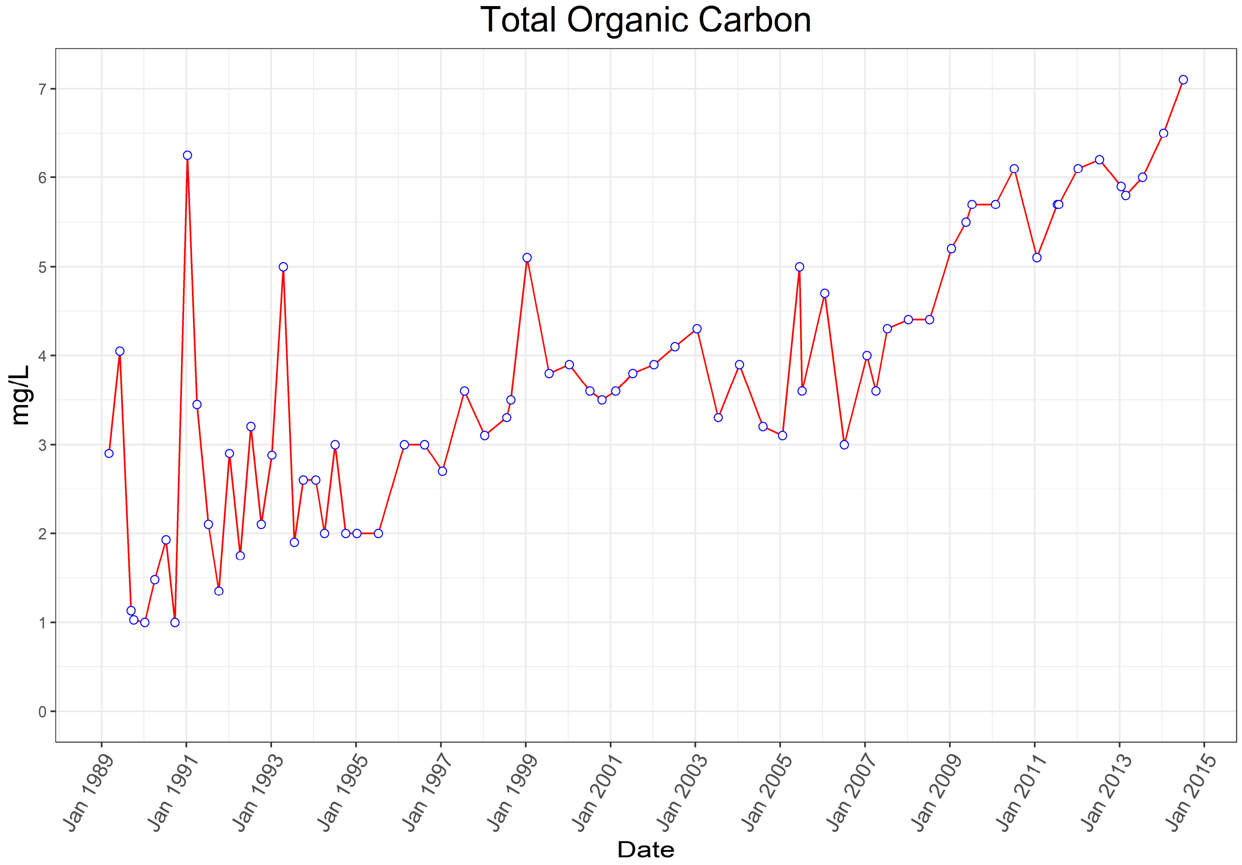

SPECIFIC CONDUCTANCE
umho/cm
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

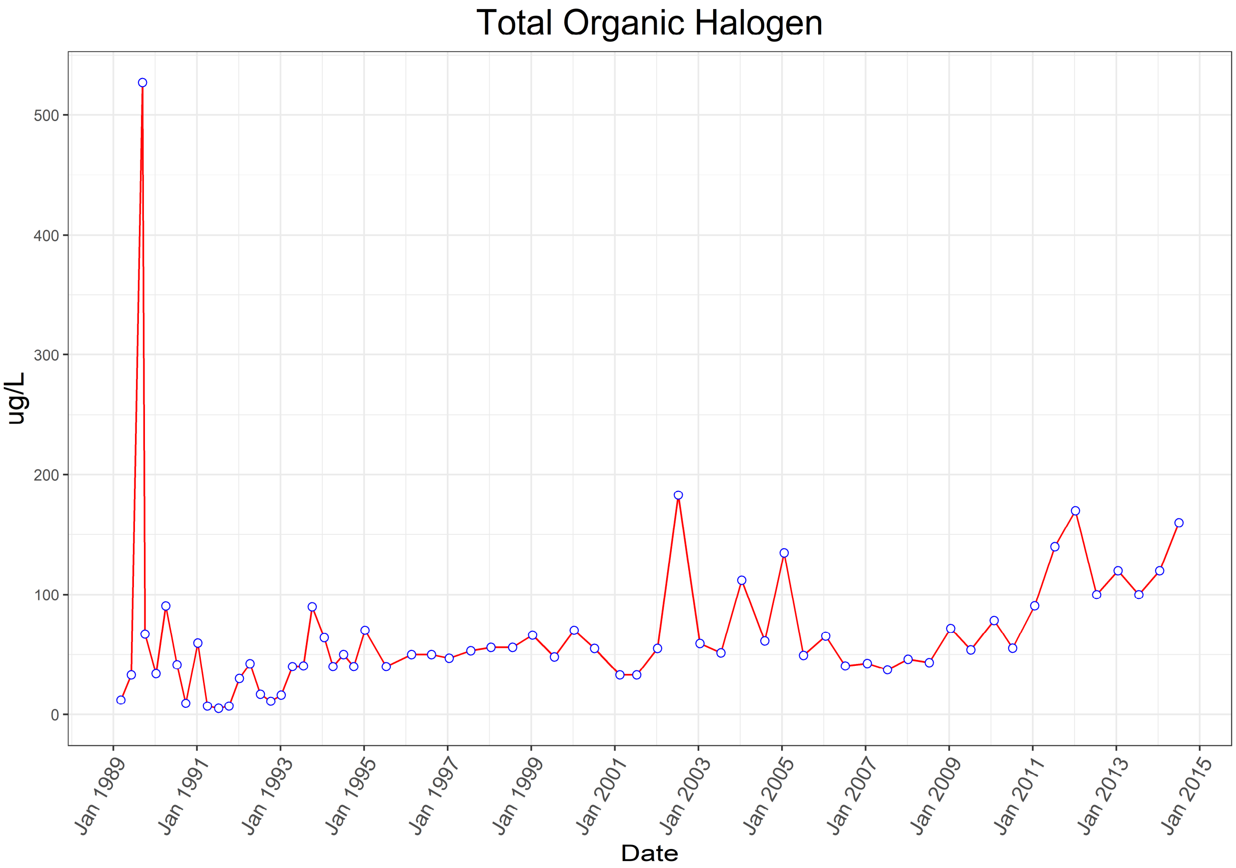

TEMPERATURE
Degrees C)
0
5
10
15
20
25
30
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date

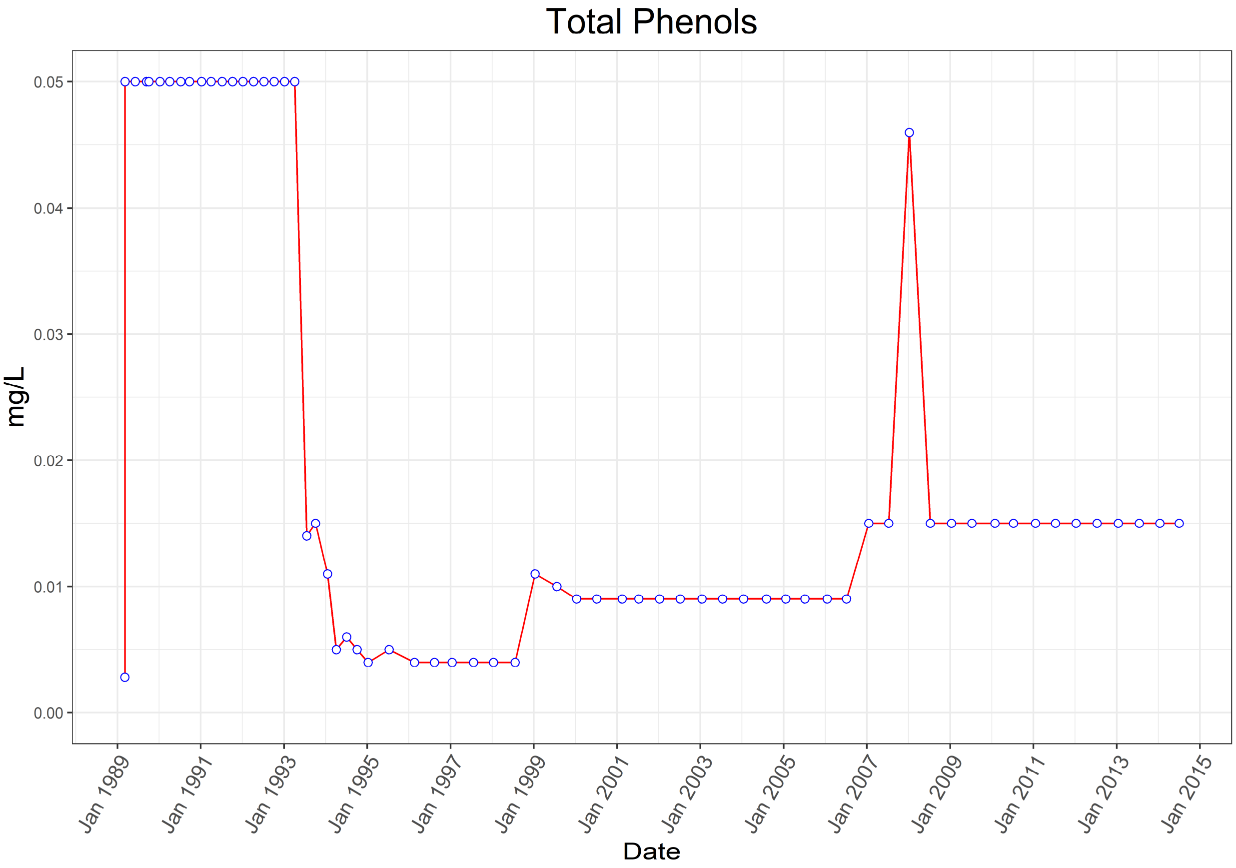
Secure C Landfill Corrective Action Monitoring Program (Program 6)

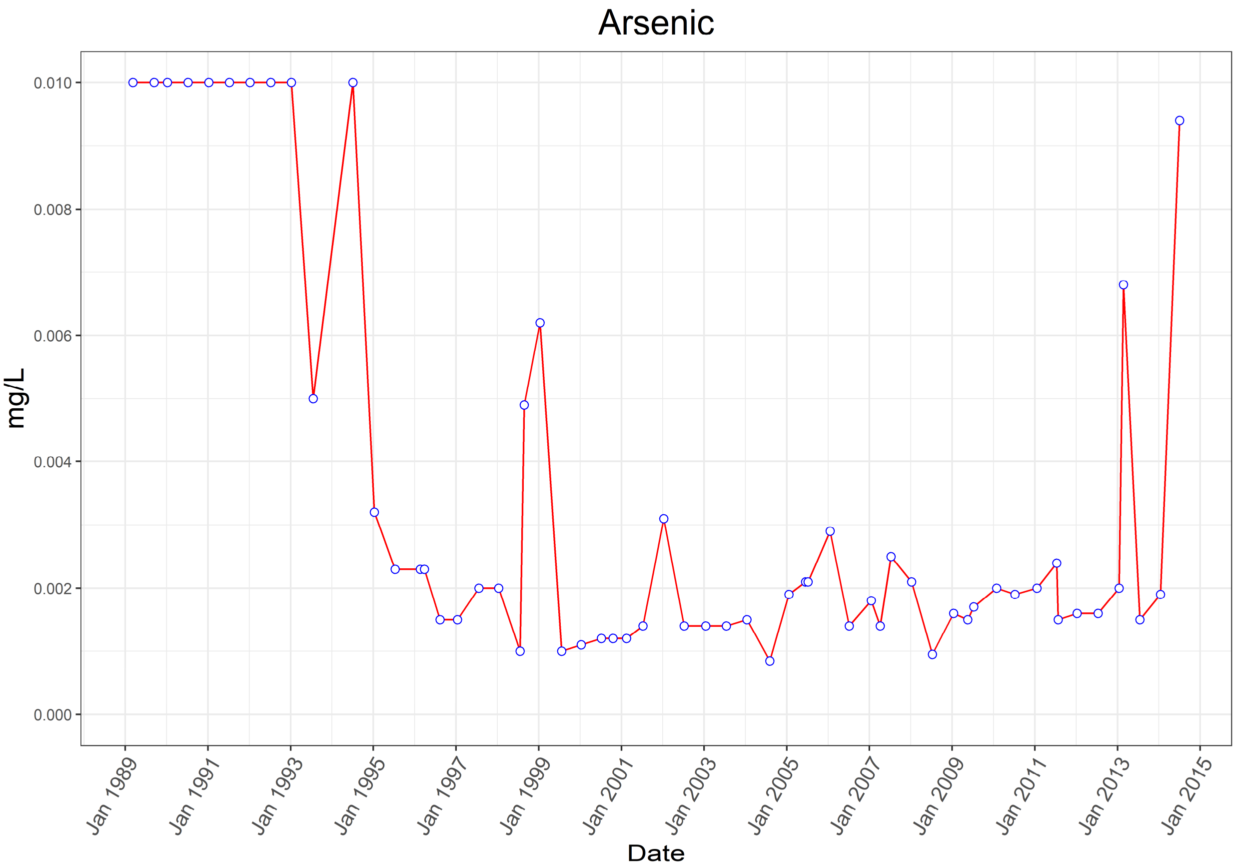
Well Name: Q20-M02B

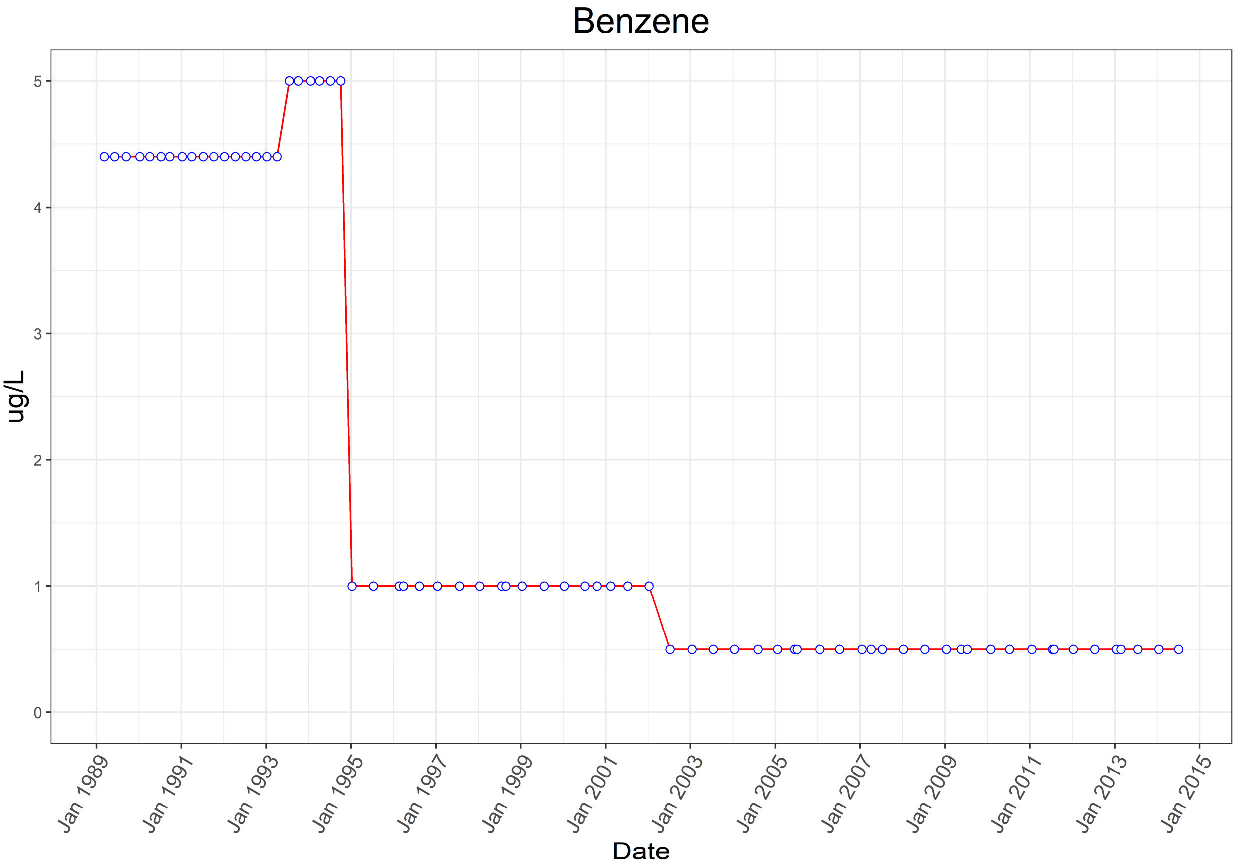




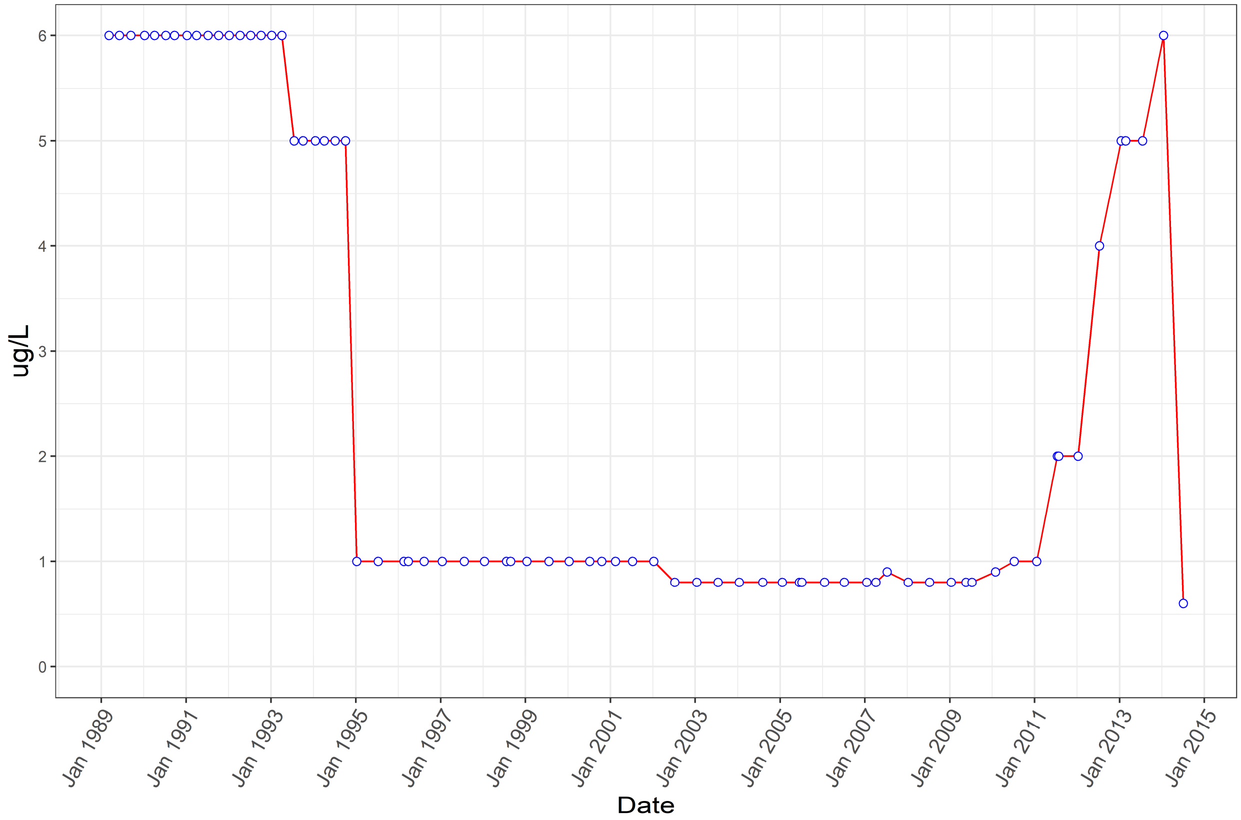

Total Organic Halogen
ug/L
500
400
300
200
100
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Date


Total Phenols
mg/L
0.05
0.04
0.03
0.02
0.01
0.00
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Date

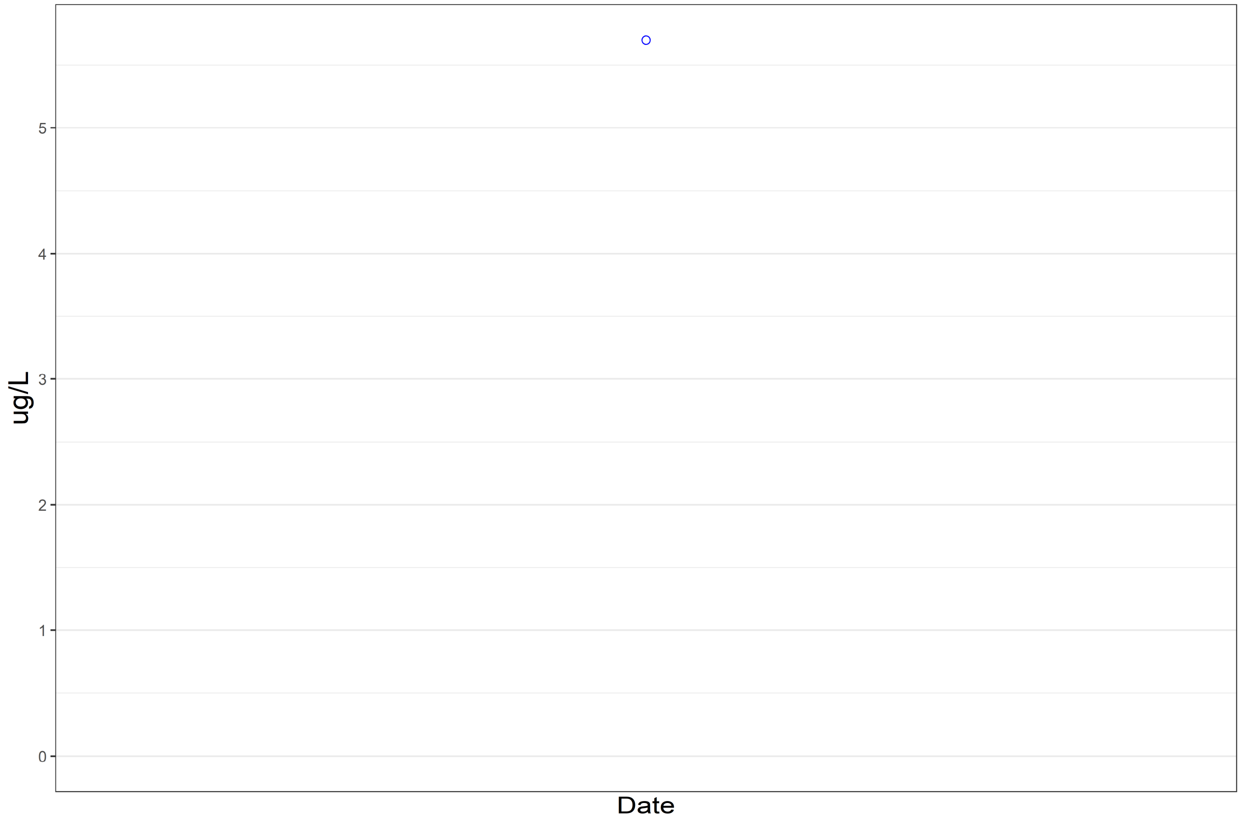

Arsenic
0.010
0.008
0.006
0.004
0.002
0.000
mg/L
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Date

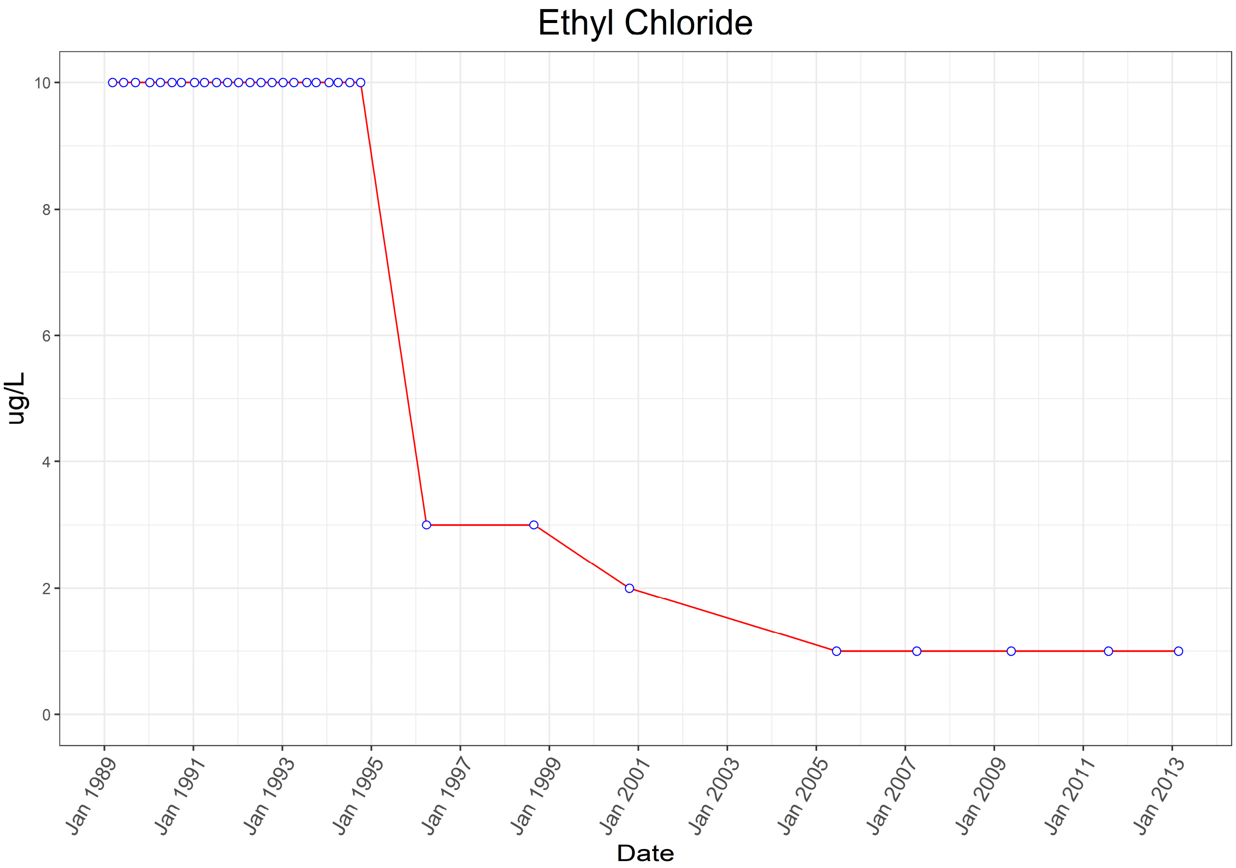

Benzene
5
4
3
2
1
0
ug/L
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Date

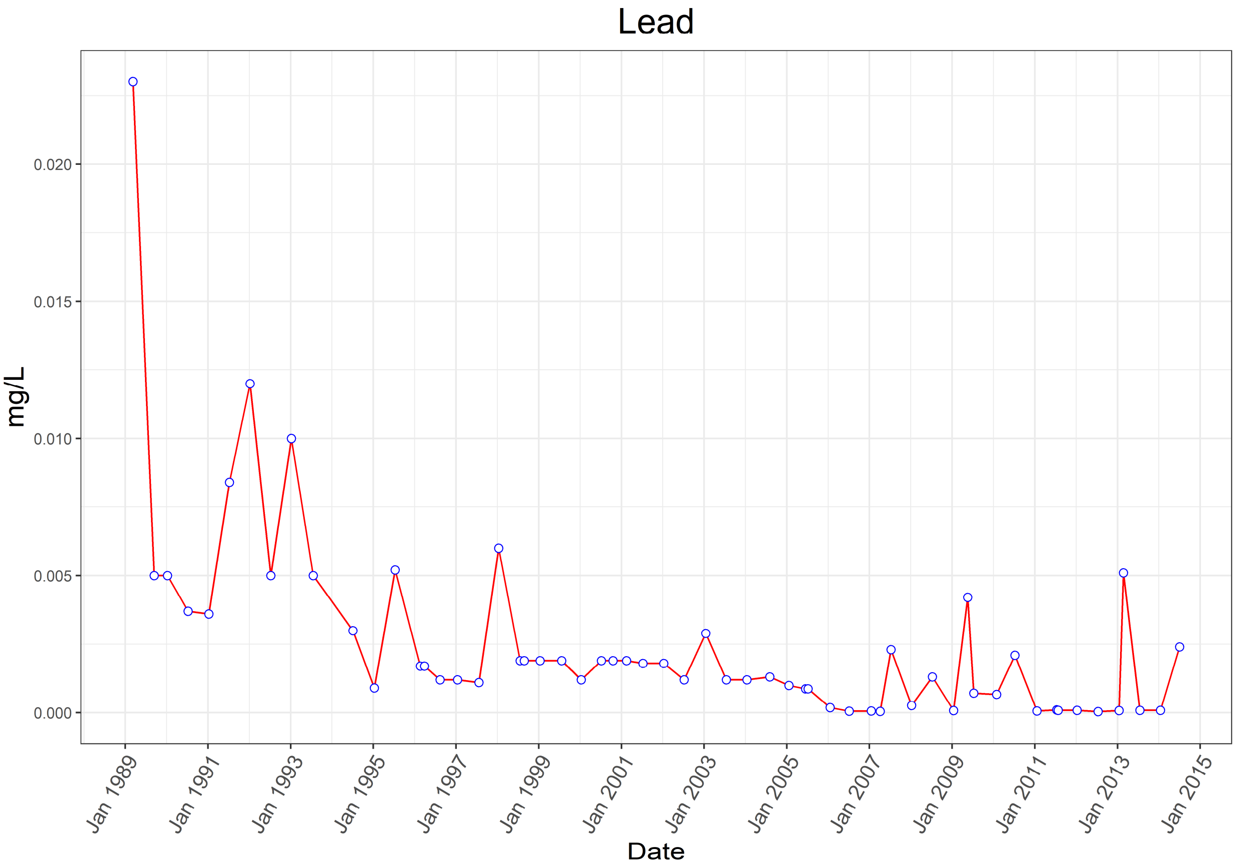
Chlorobenzene

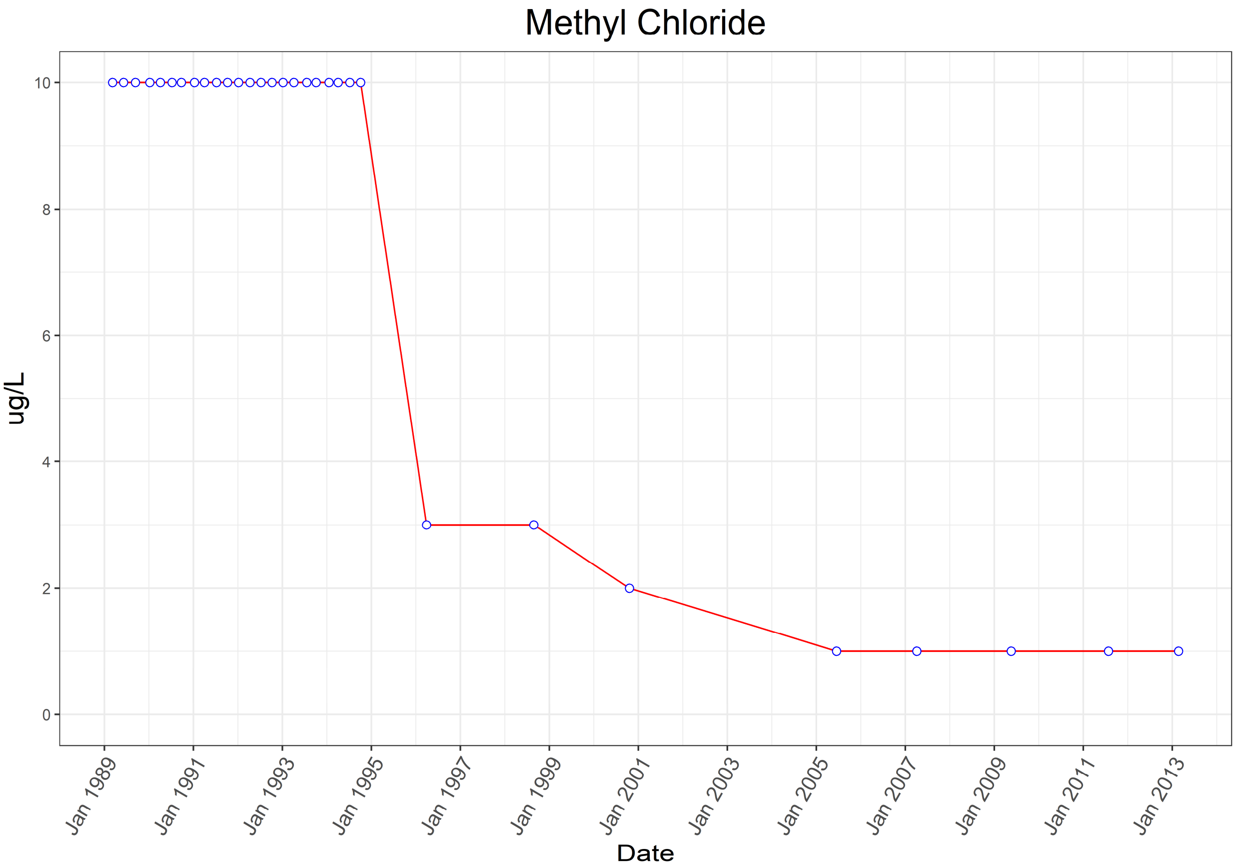


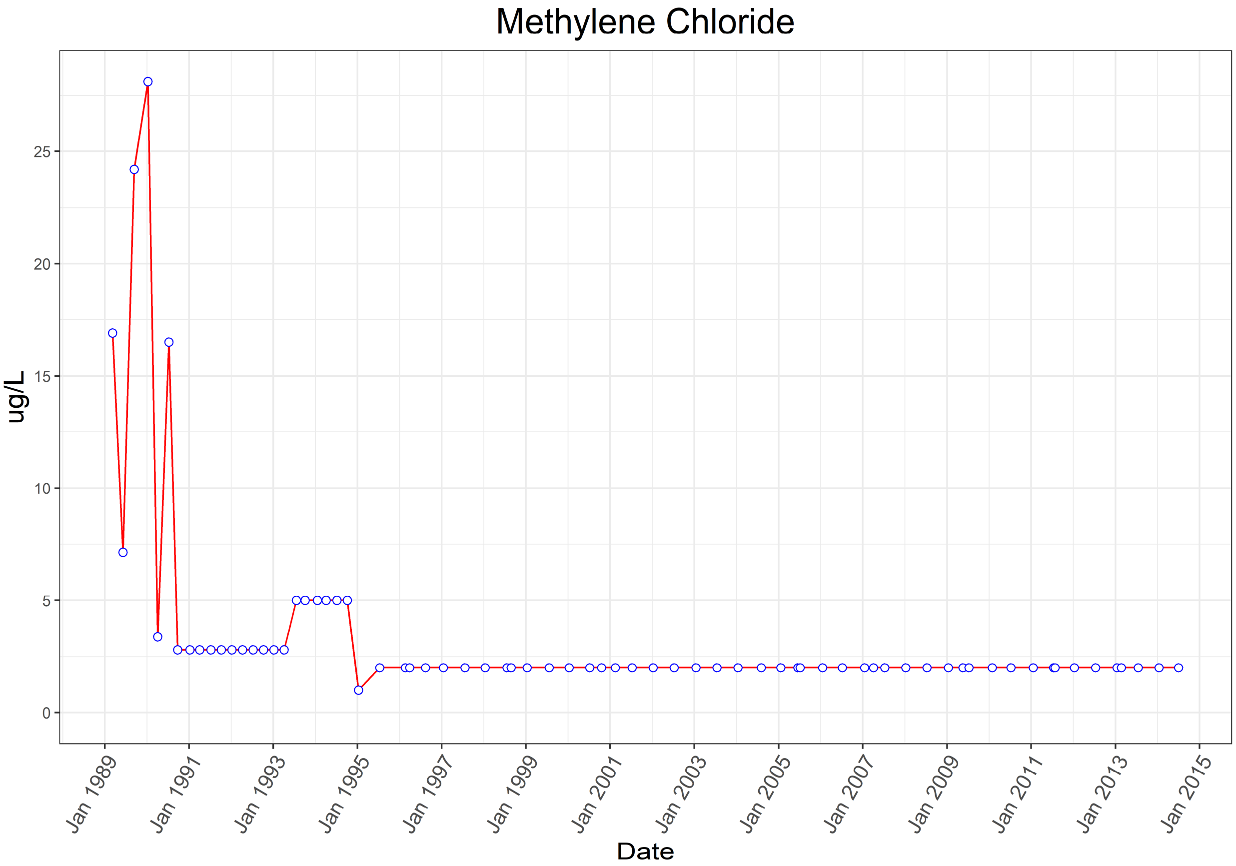
Endosulfan Sulfate



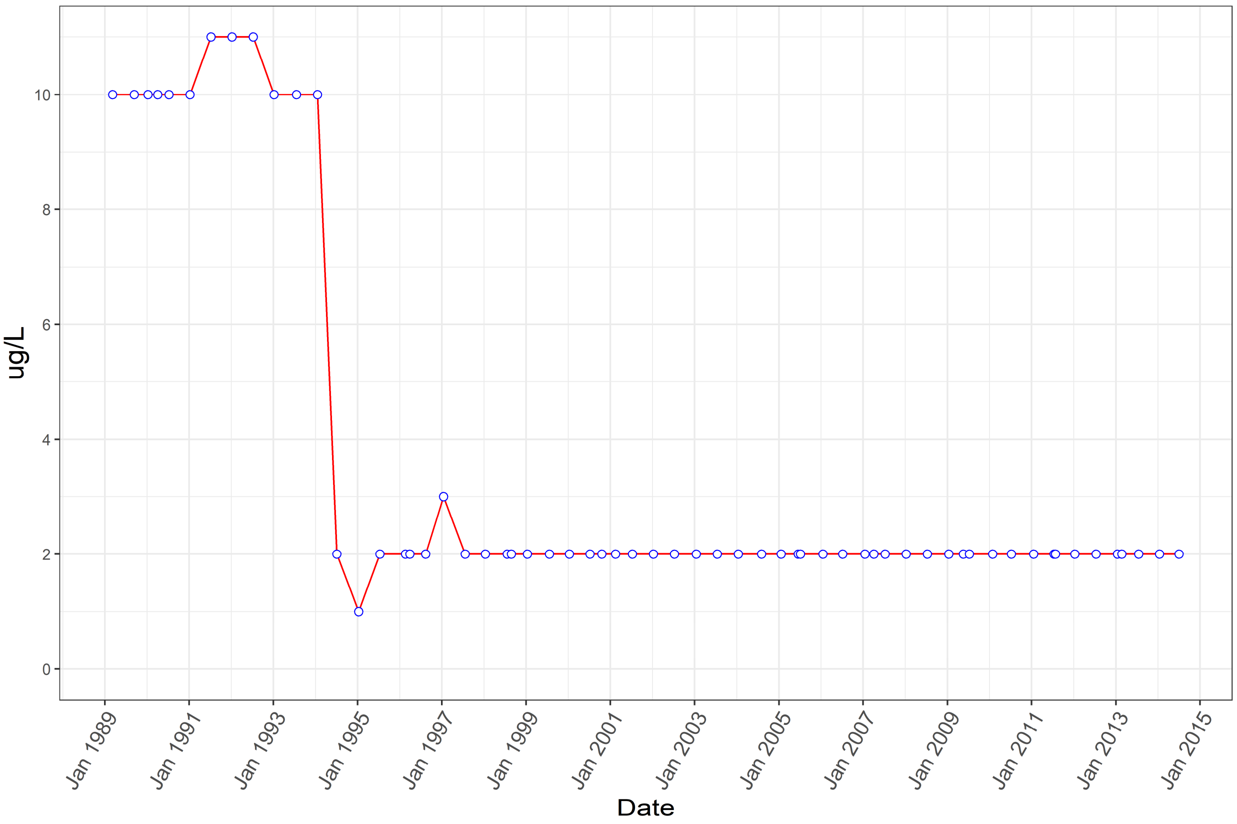

Ethyl Chloride
ug/L
10
8
6
4
2
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Date


Lead
mg/L
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Date

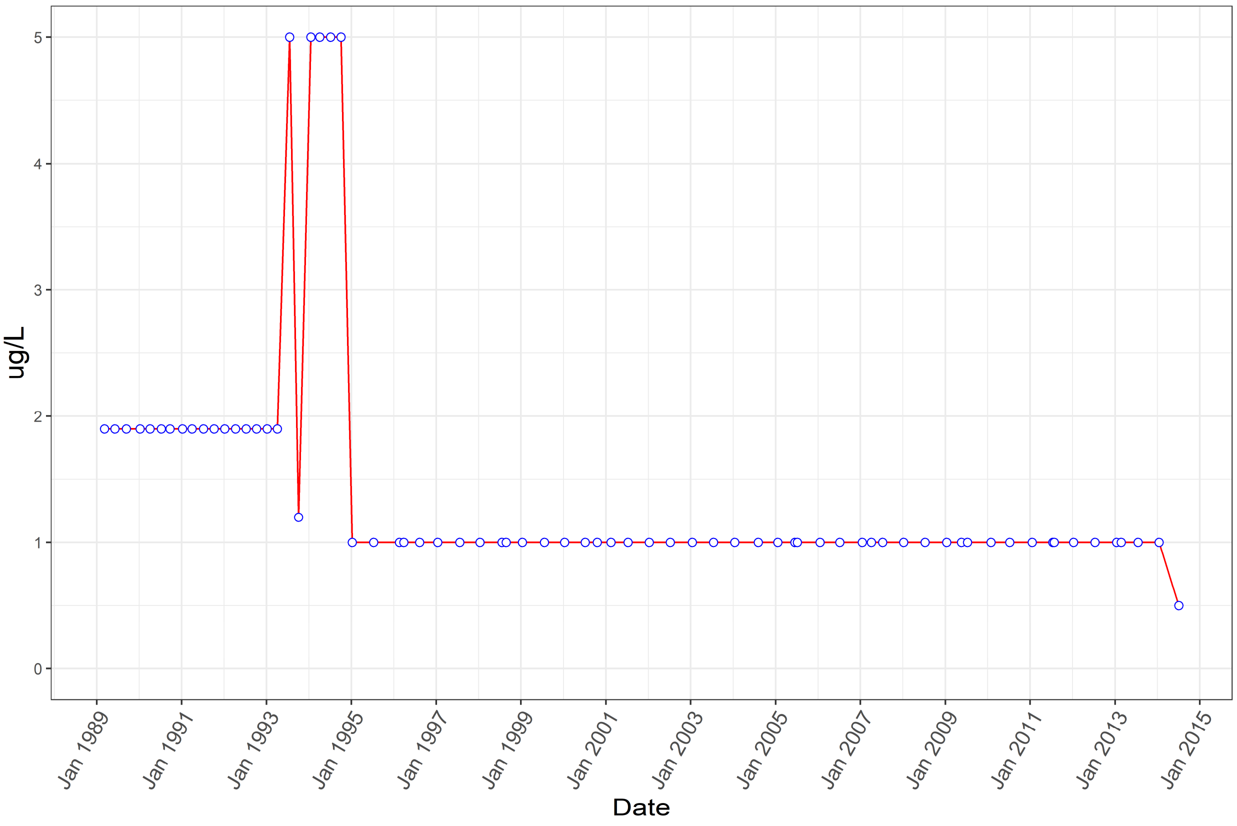

Methyl Chloride
ug/L
0
2
4
6
8
10
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Date

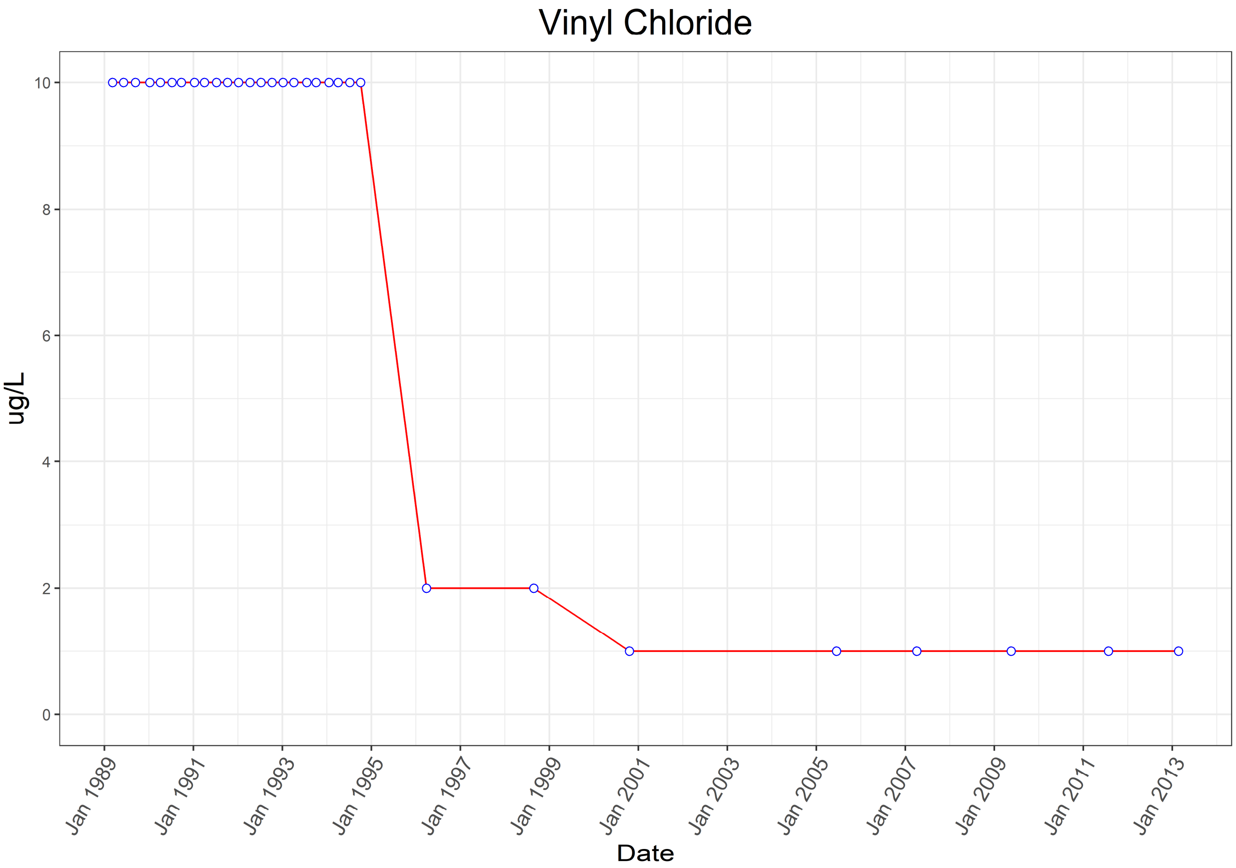

Methylene Chloride
ug/L
0
5
10
15
20
25
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Date

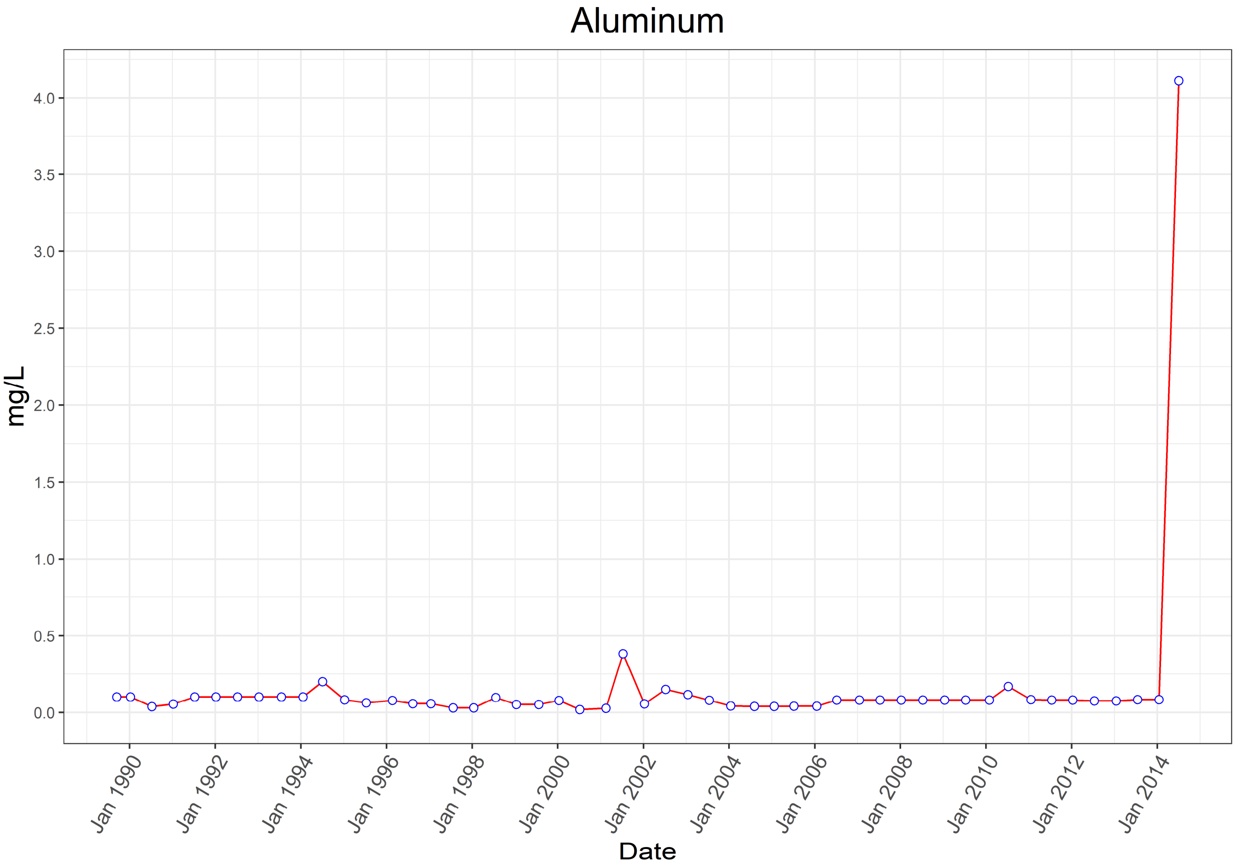
N-Nitrosodimethylamine

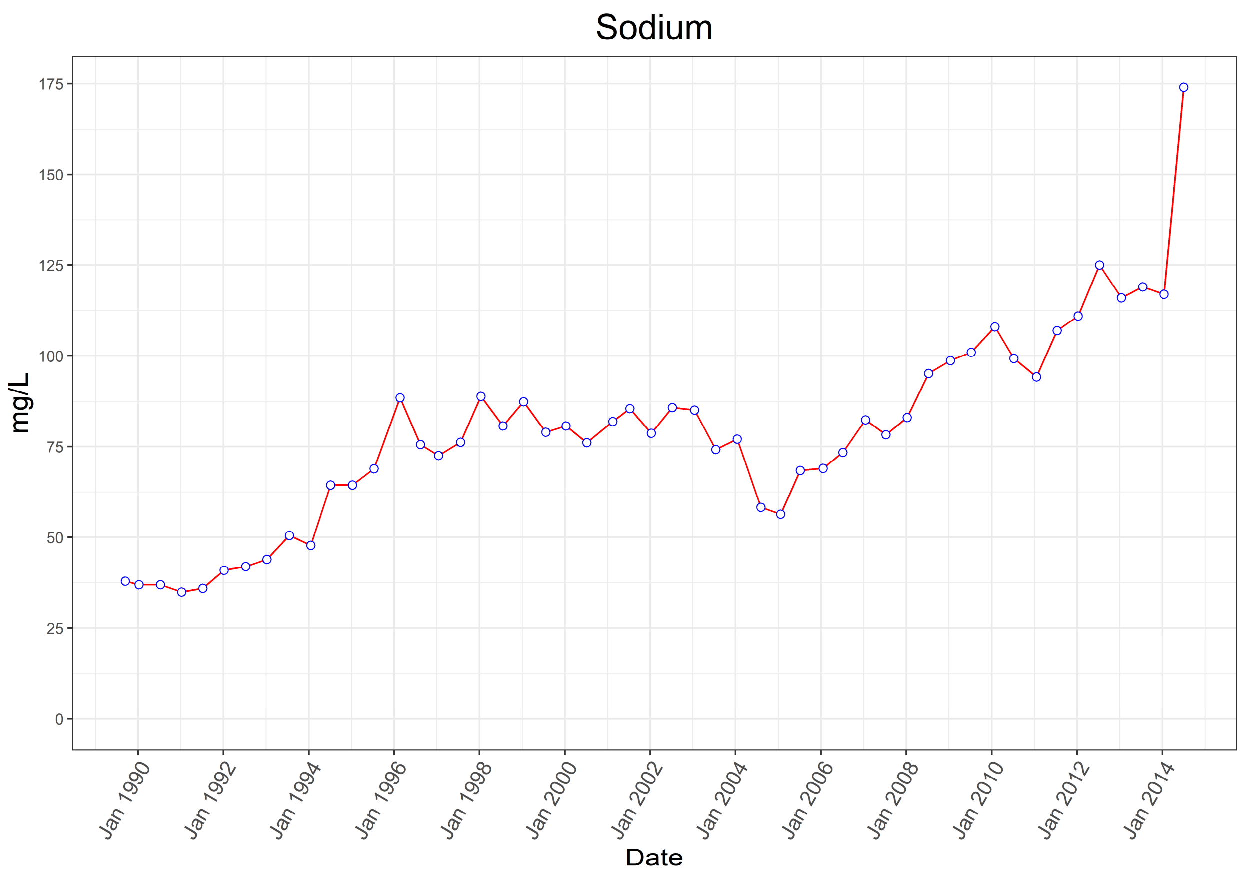


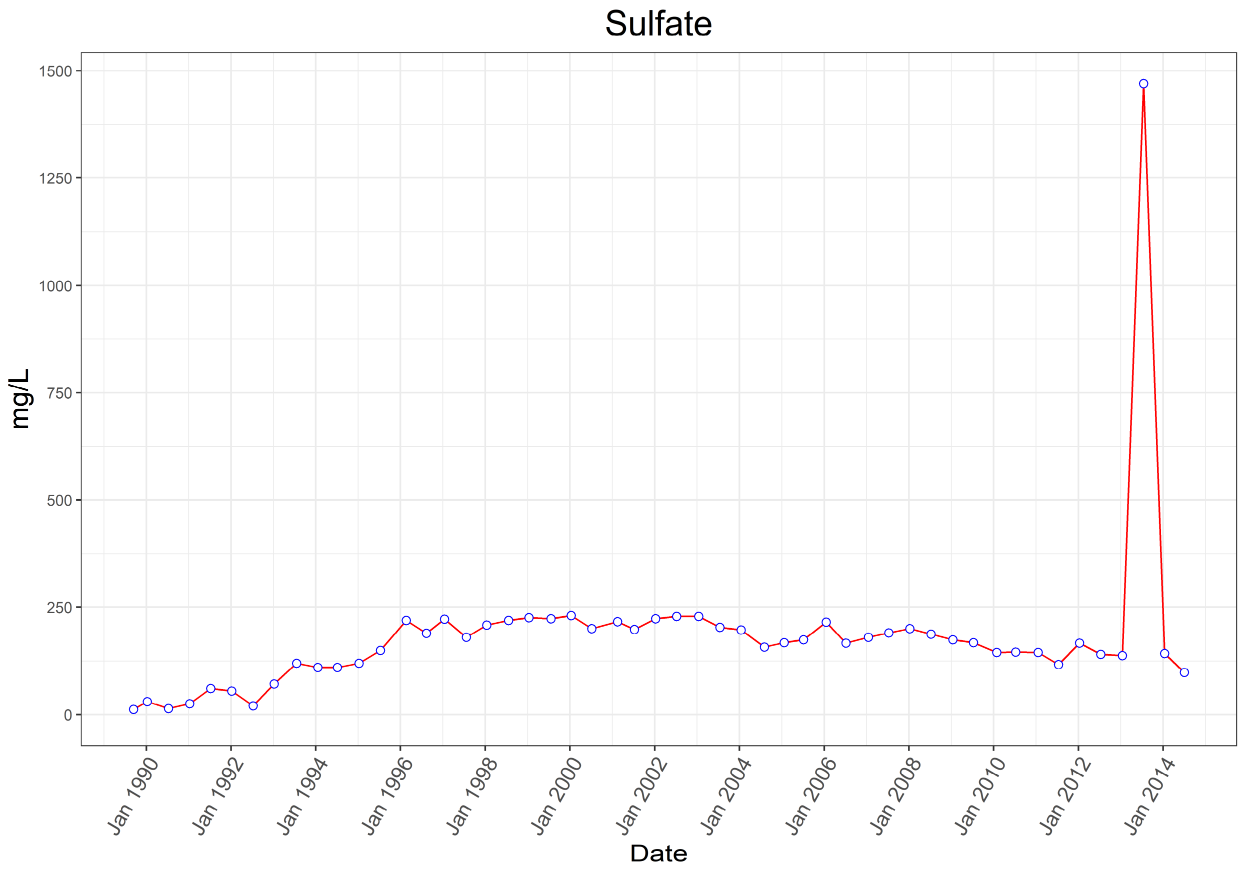
Trichloroethene

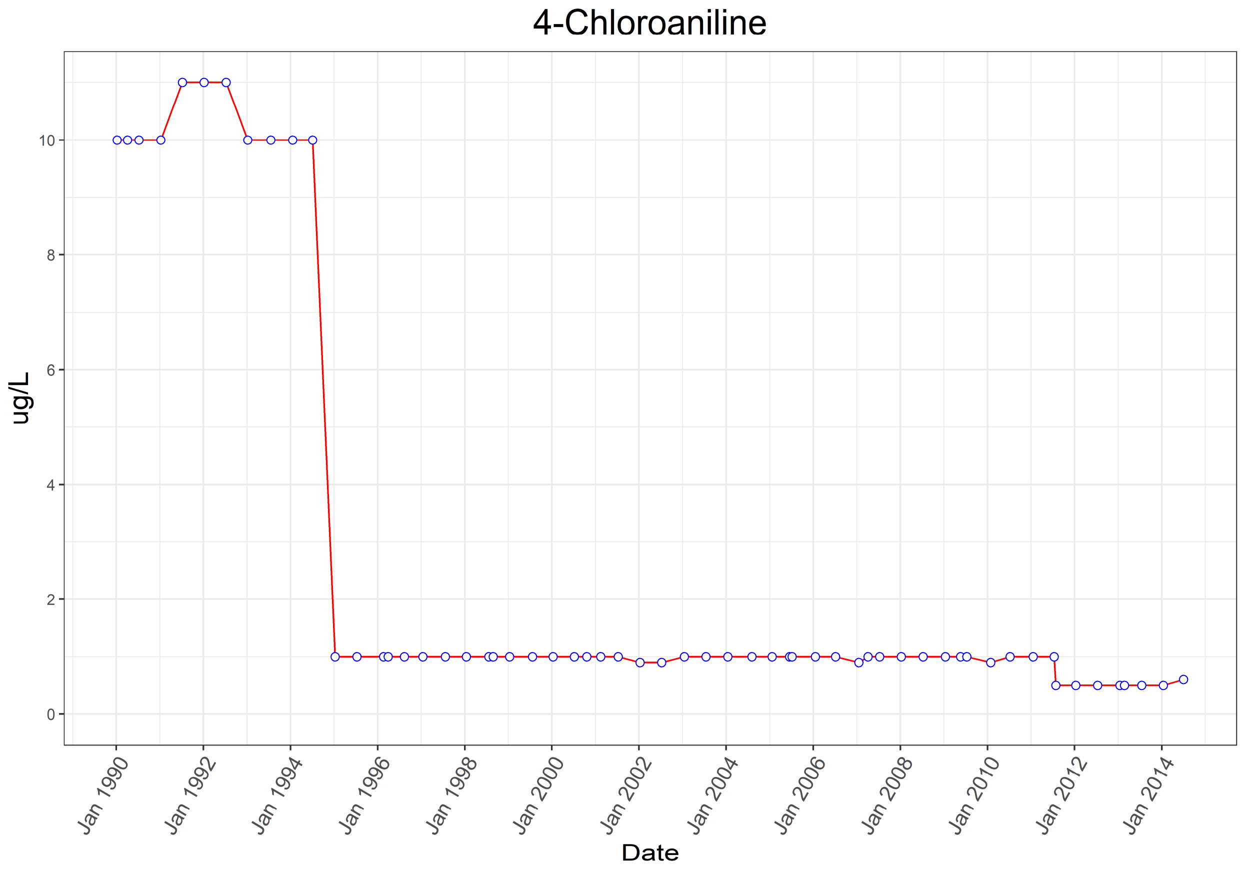


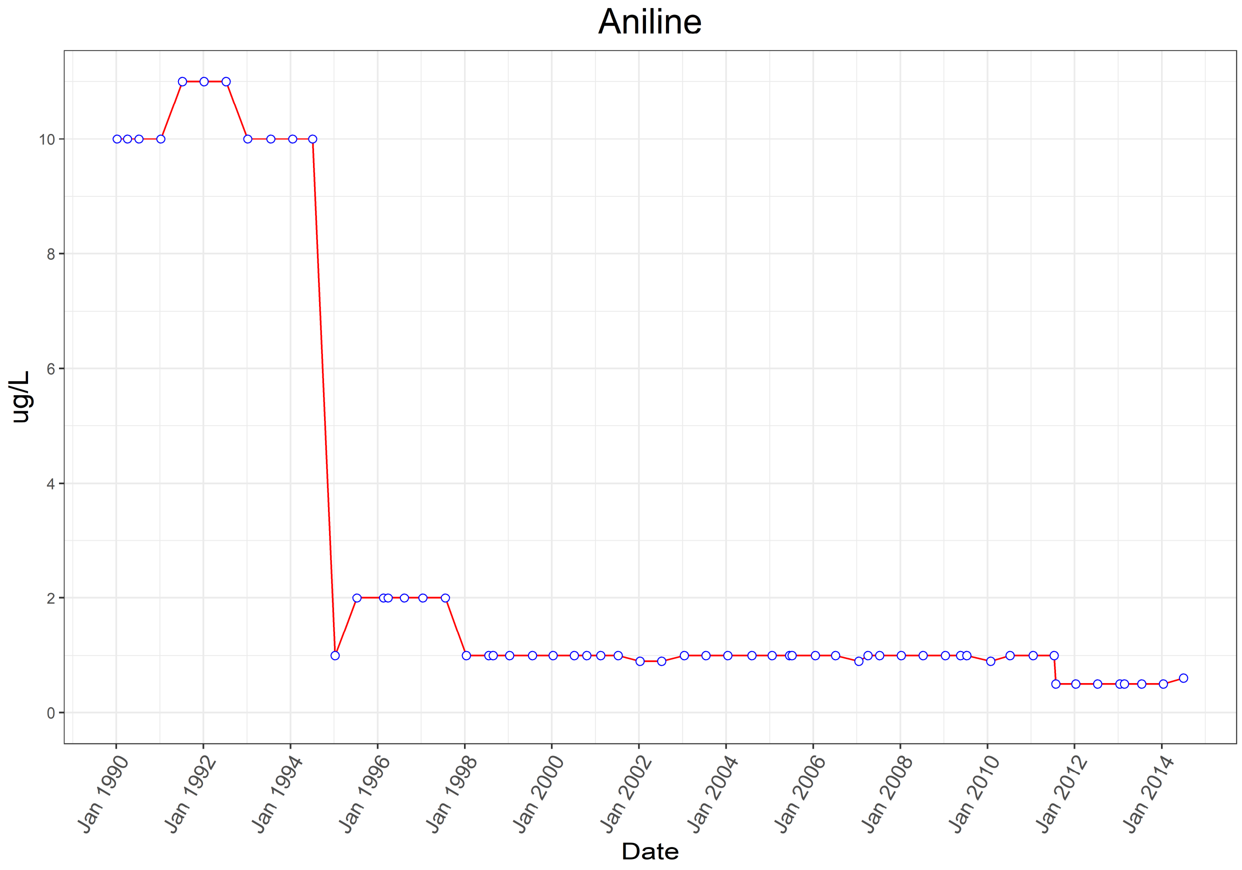

Vinyl Chloride
ug/L
10
8
6
4
2
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Date

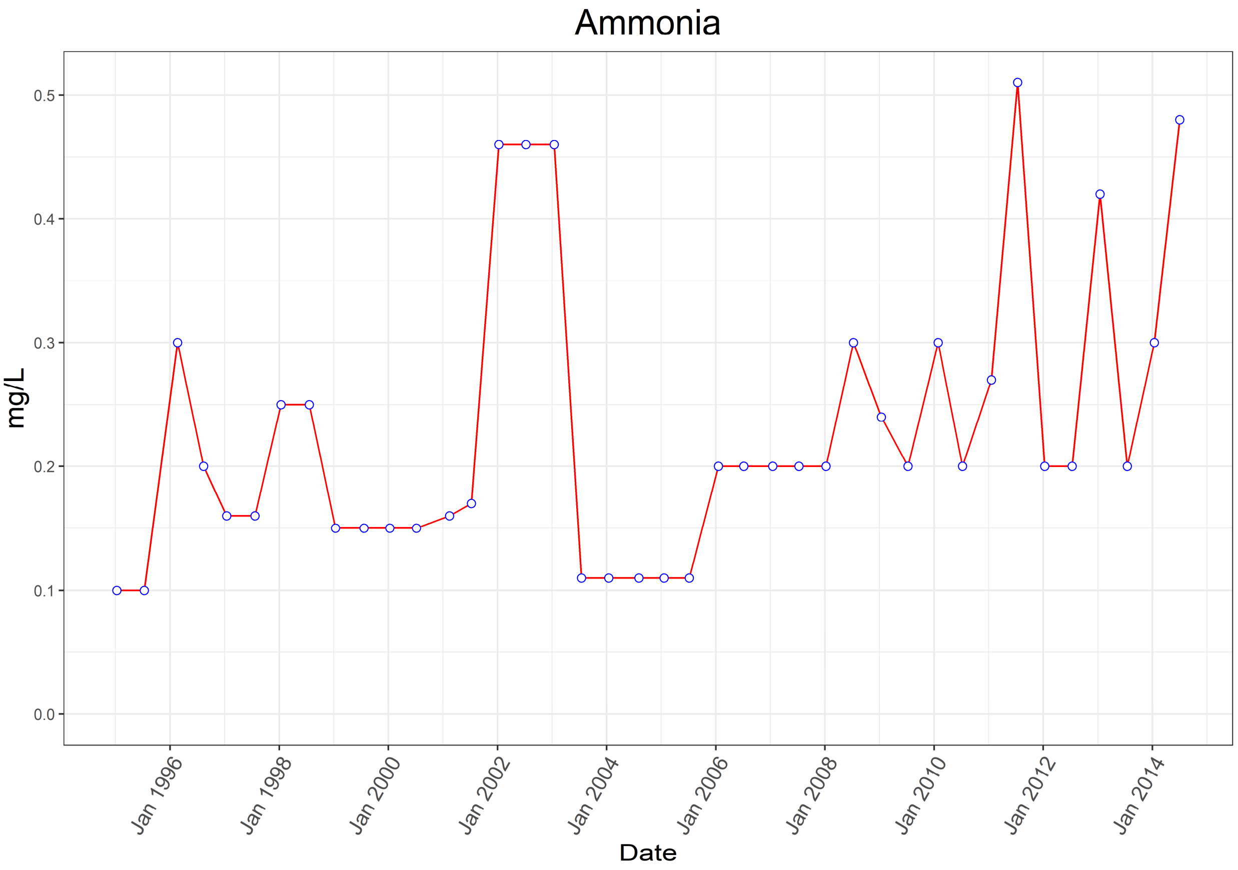

Aluminum
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Date


Sodium
mg/L
175
150
125
100
75
50
25
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Date


Sulfate
mg/L
1500
1250
1000
750
500
250
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Date

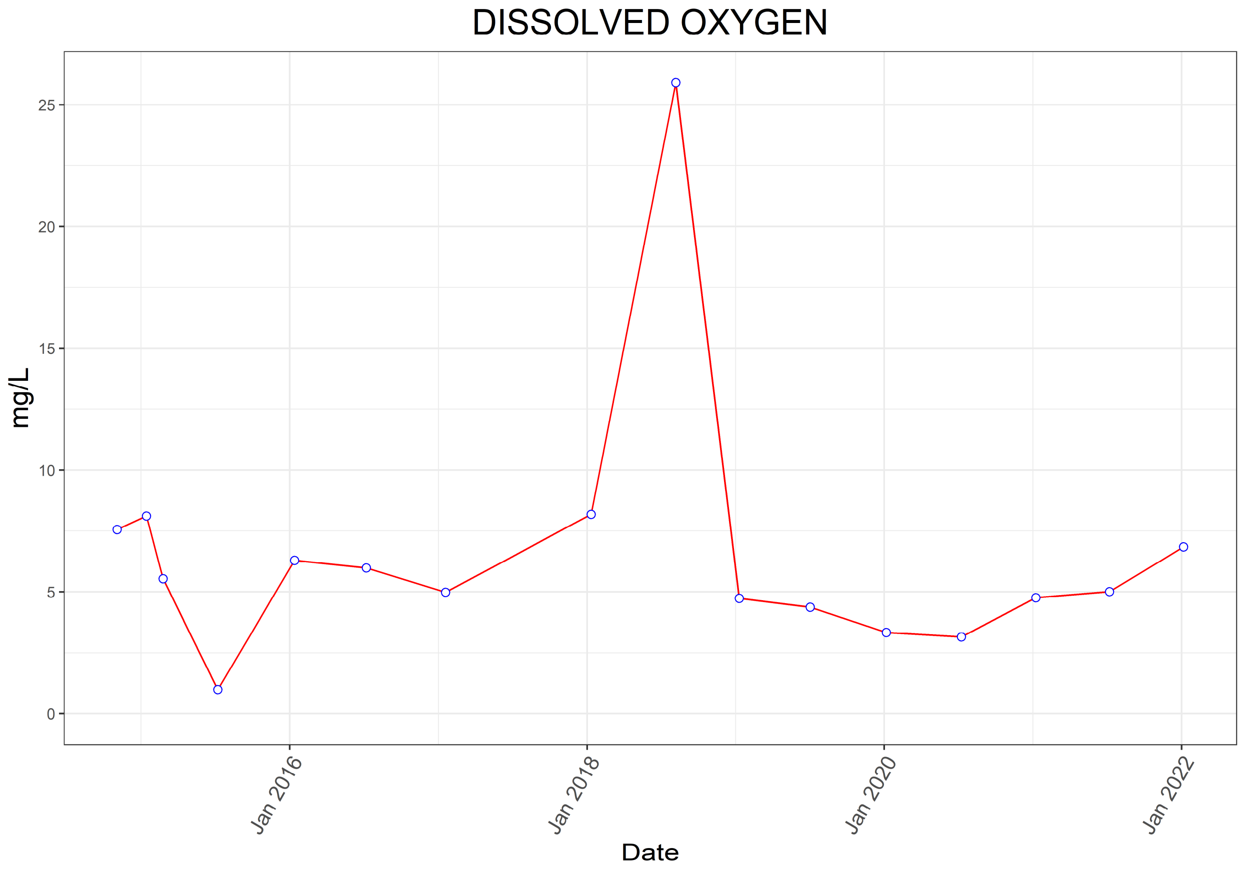

4-Chloroaniline
ug/L
0
2
4
6
8
10
Date
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014

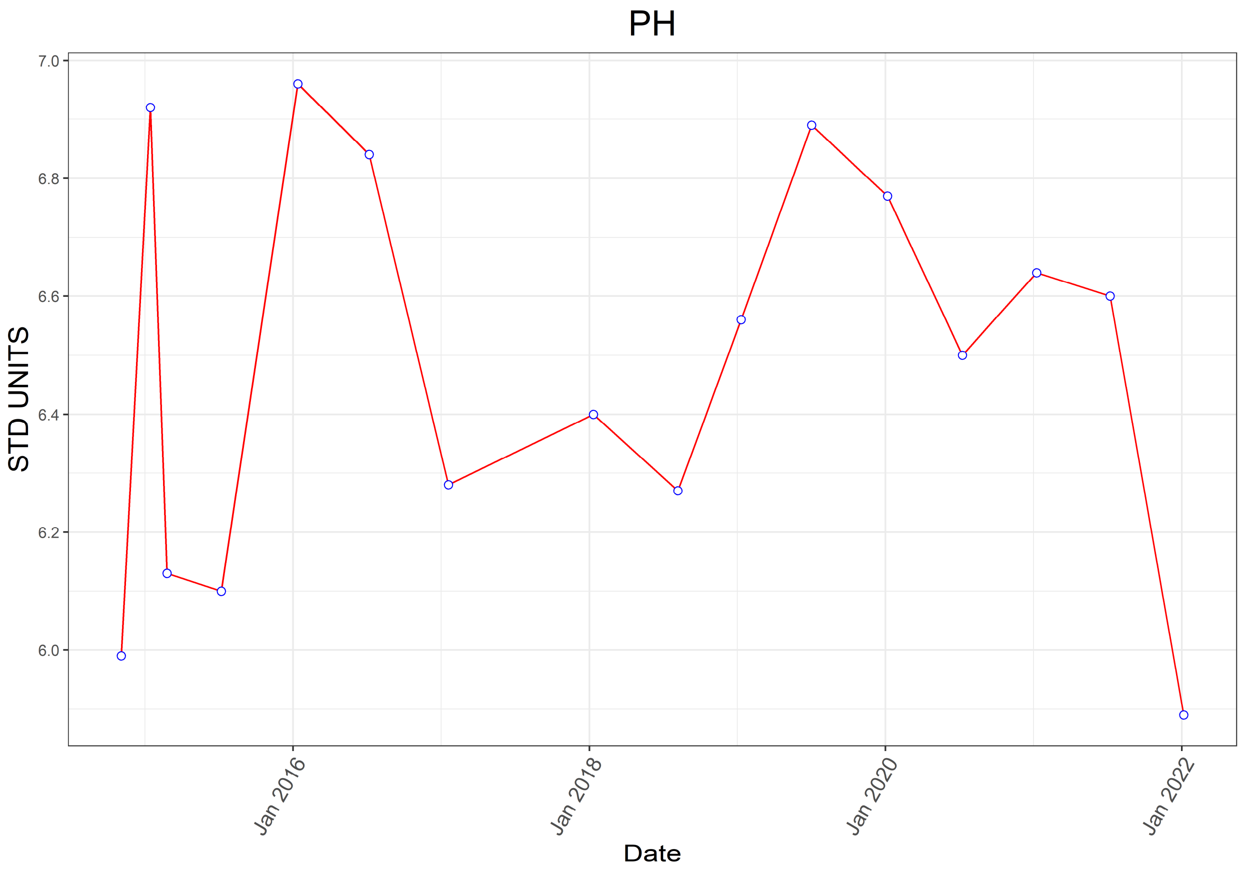

Aniline
ug/L
0
2
4
6
8
10
Date
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014

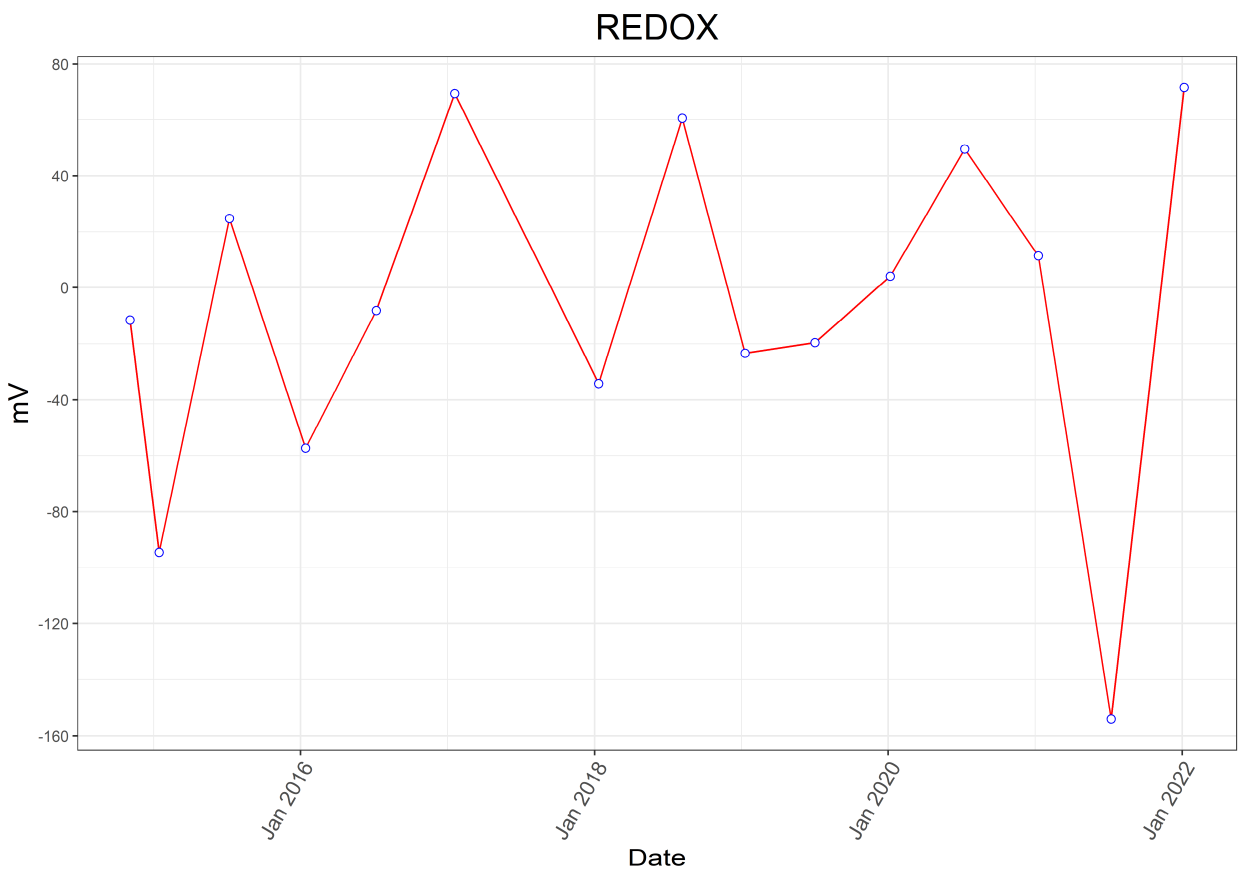

Ammonia
mg/L
0.0
0.1
0.2
0.3
0.4
0.5
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Date

Well Name: Q20-M02B

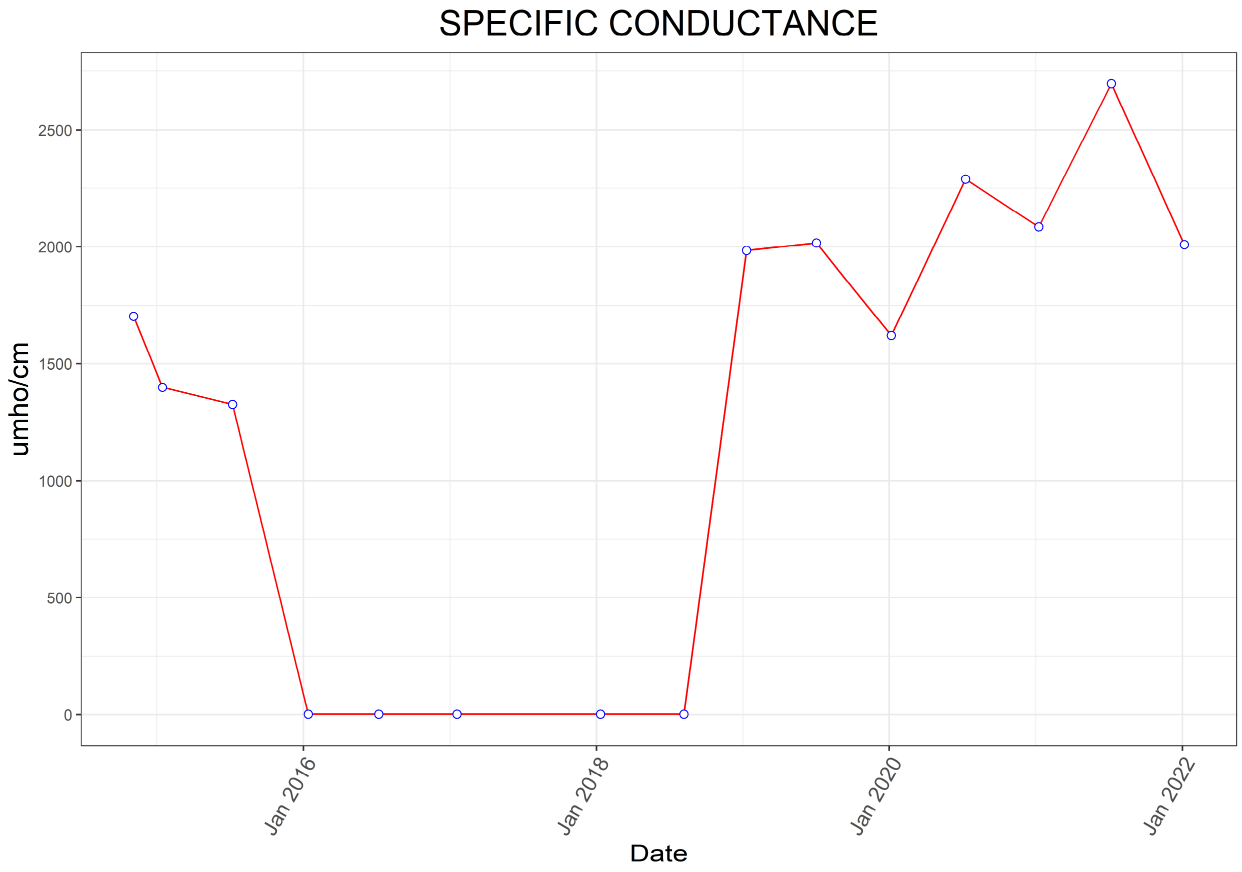
Field Parameters



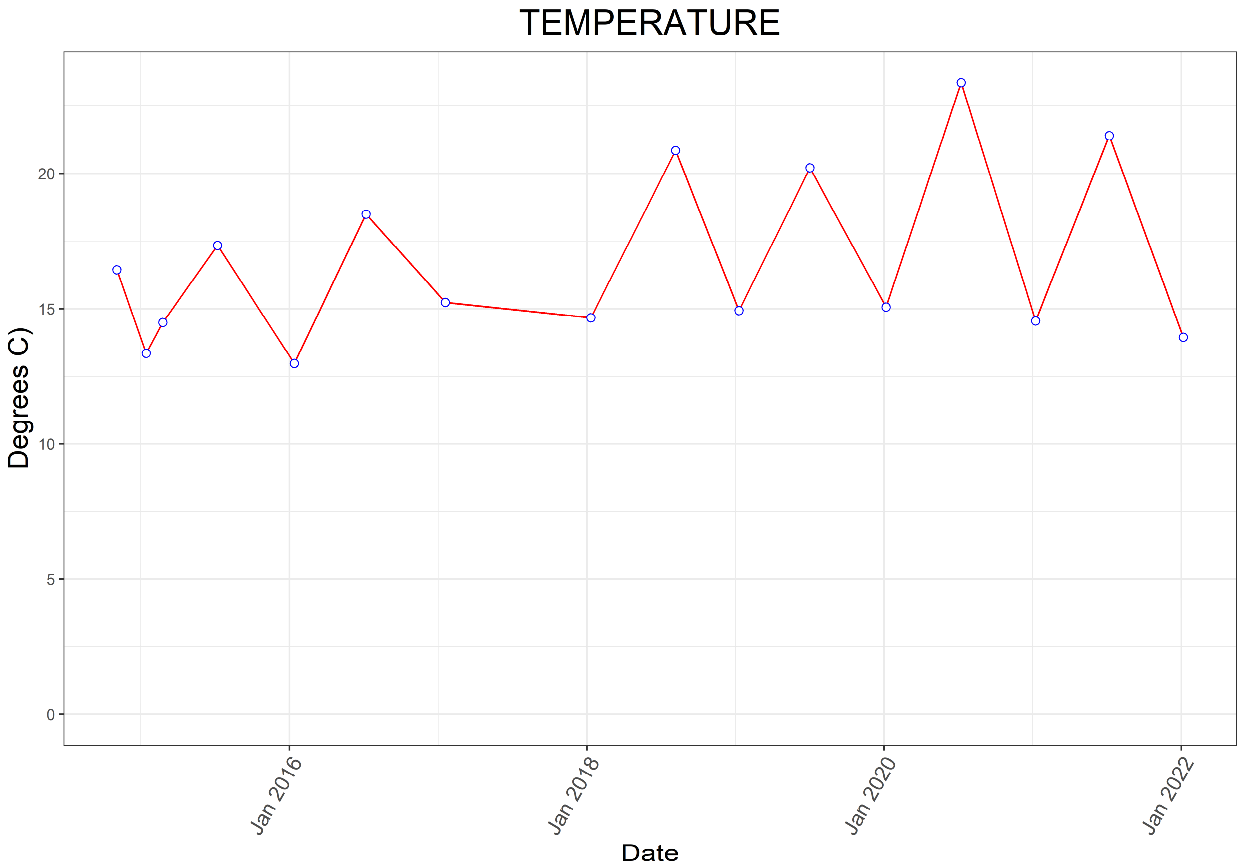




REDOX



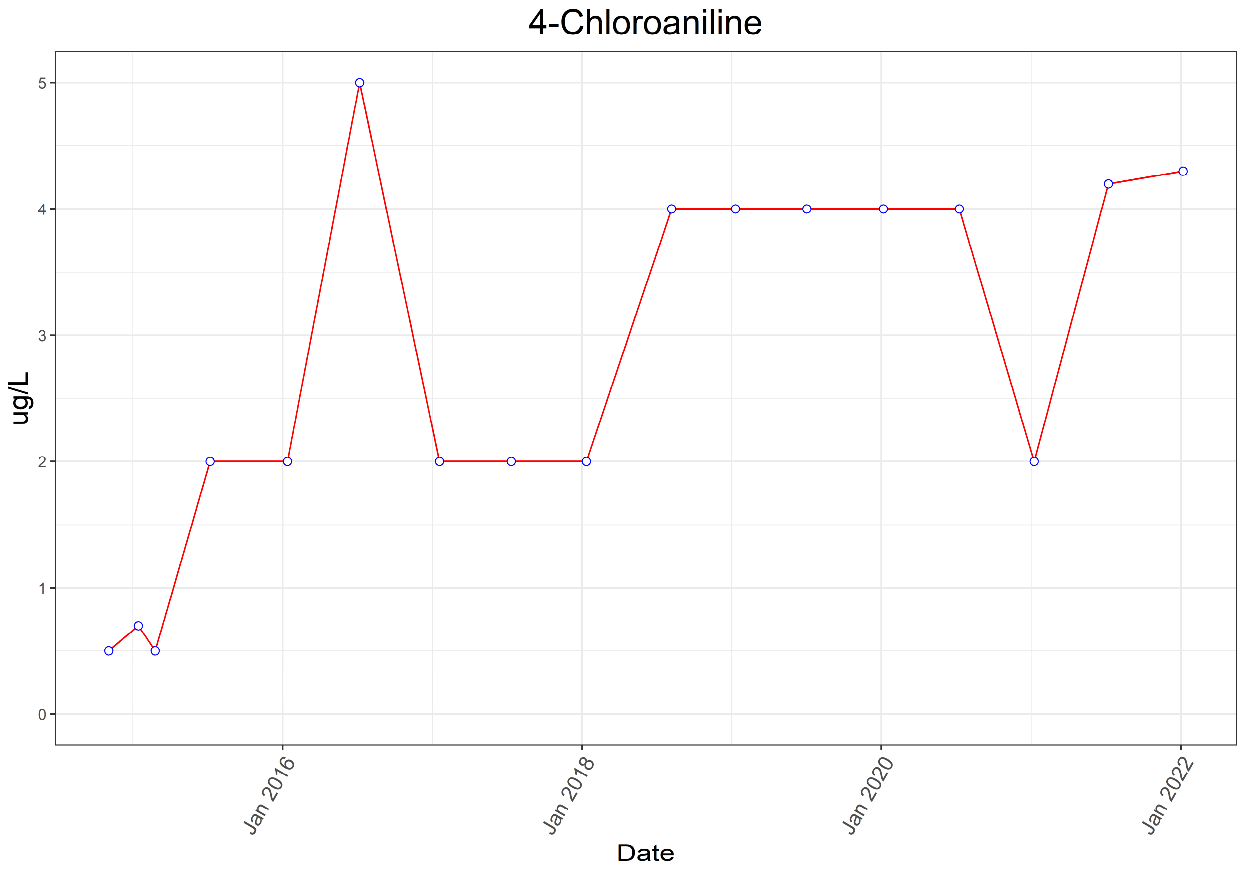
SPECIFIC CONDUCTANCE

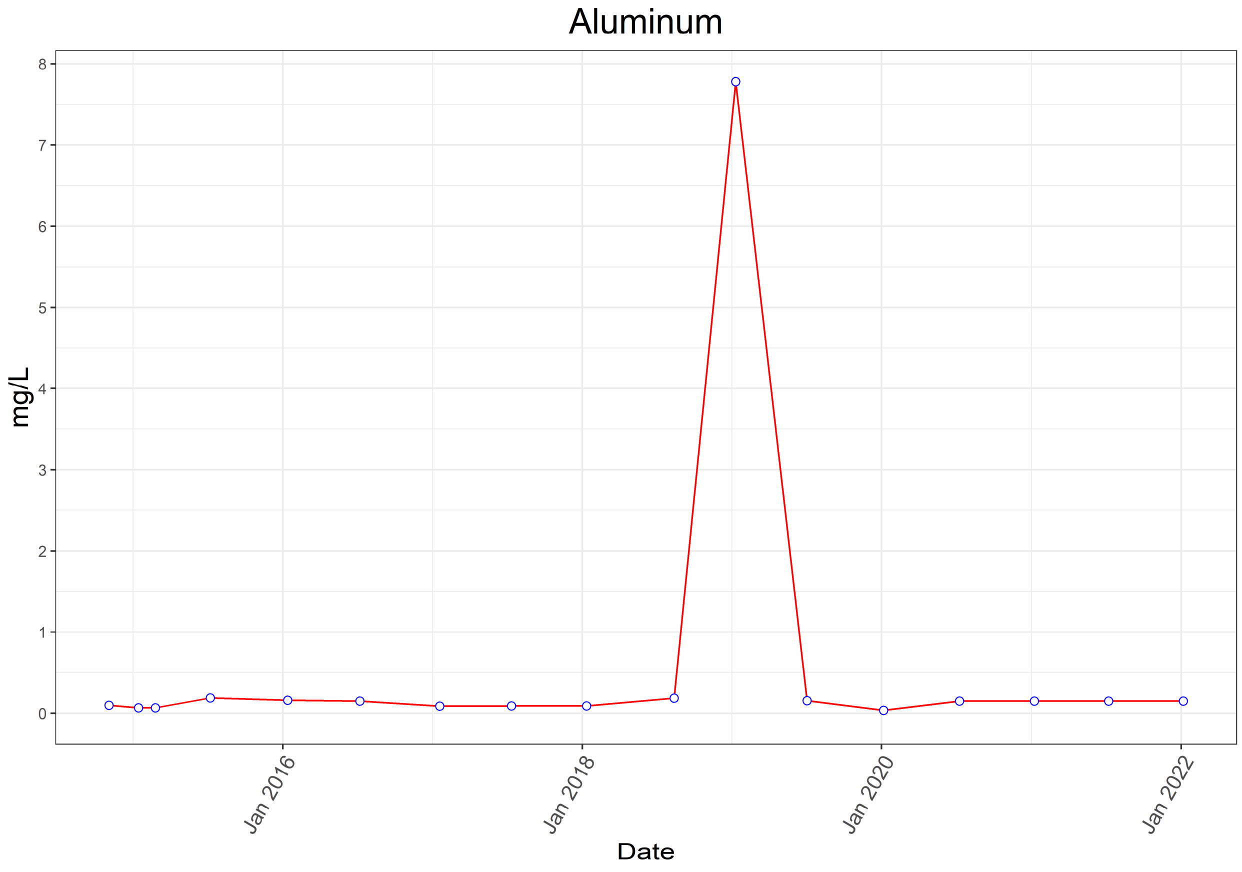


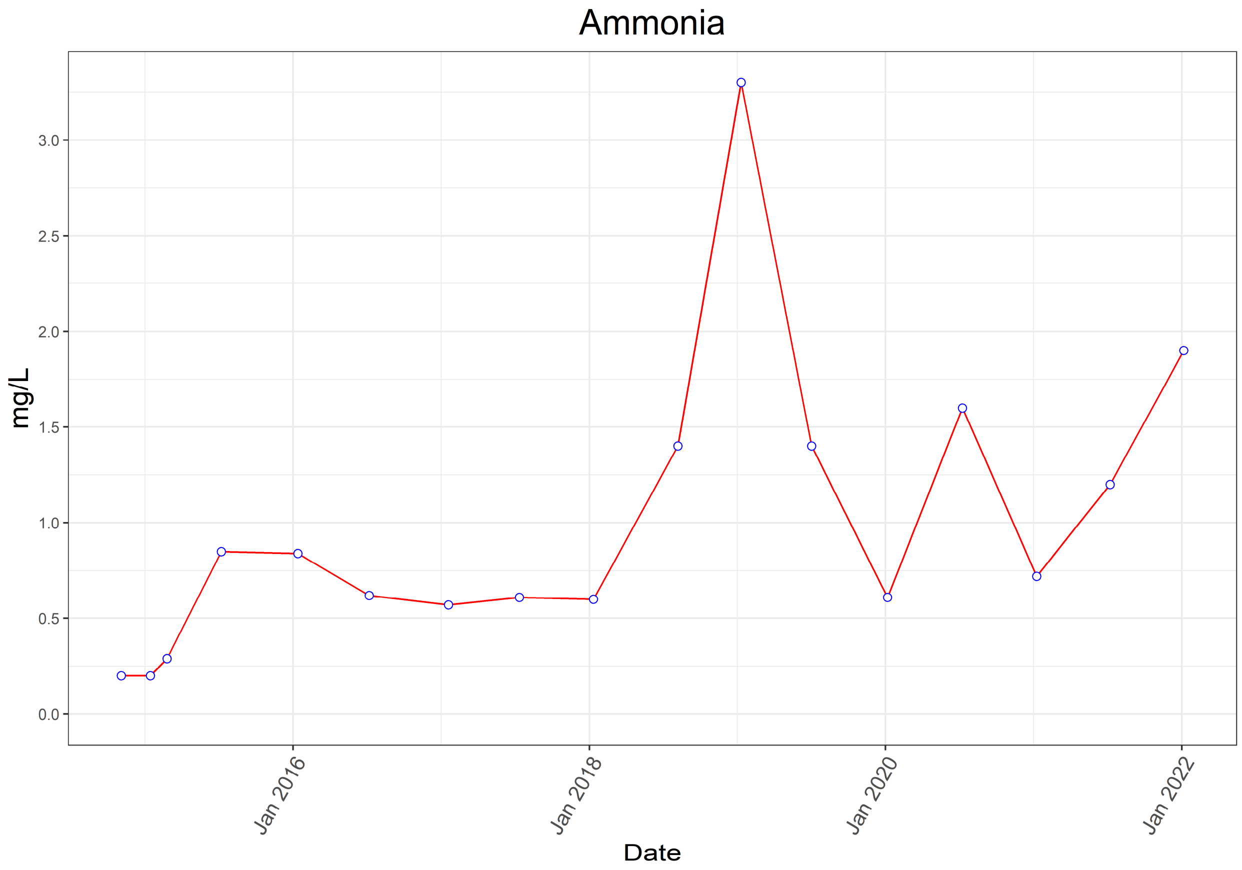
TEMPERATURE
Degrees C)
0
5
10
15
20
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

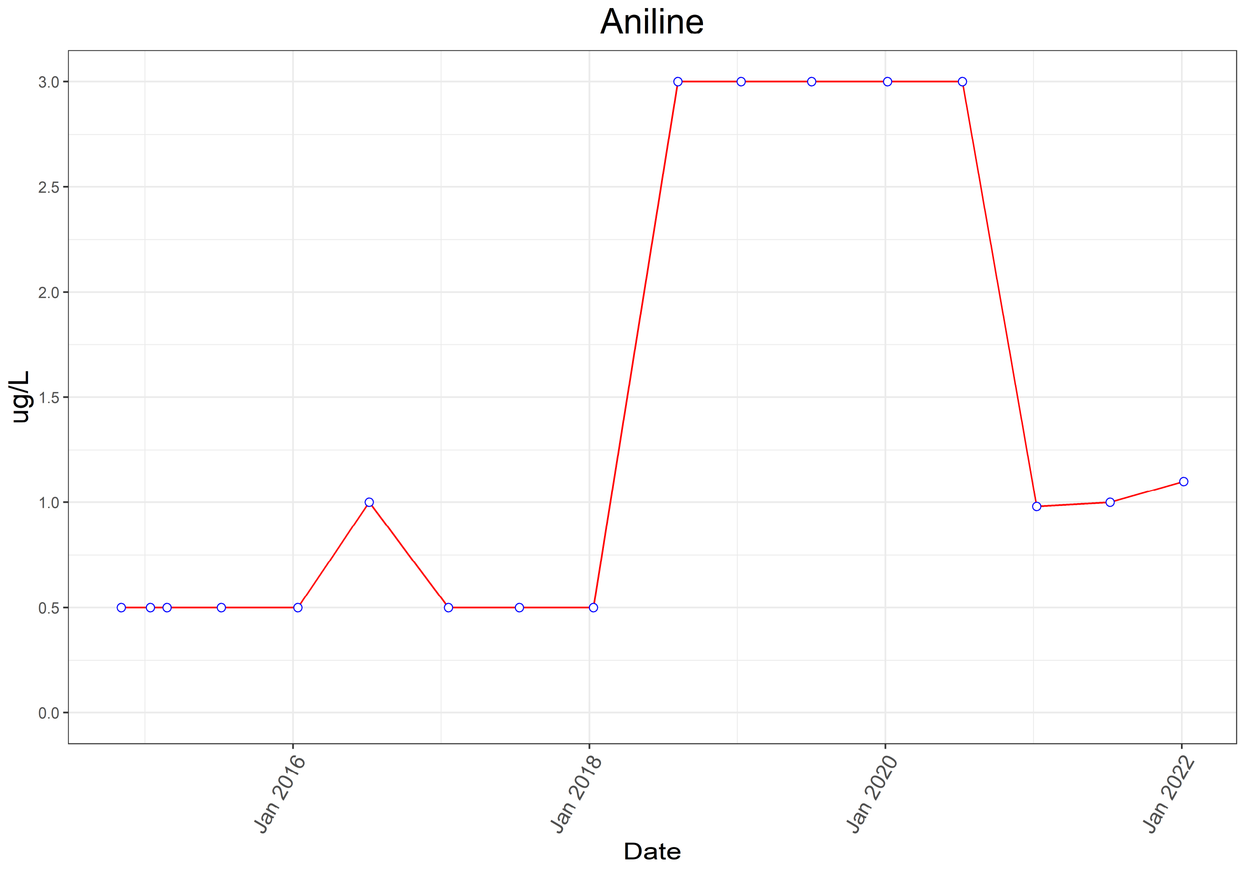
Secure C Landfill Corrective Action Monitoring Program (Program 6)

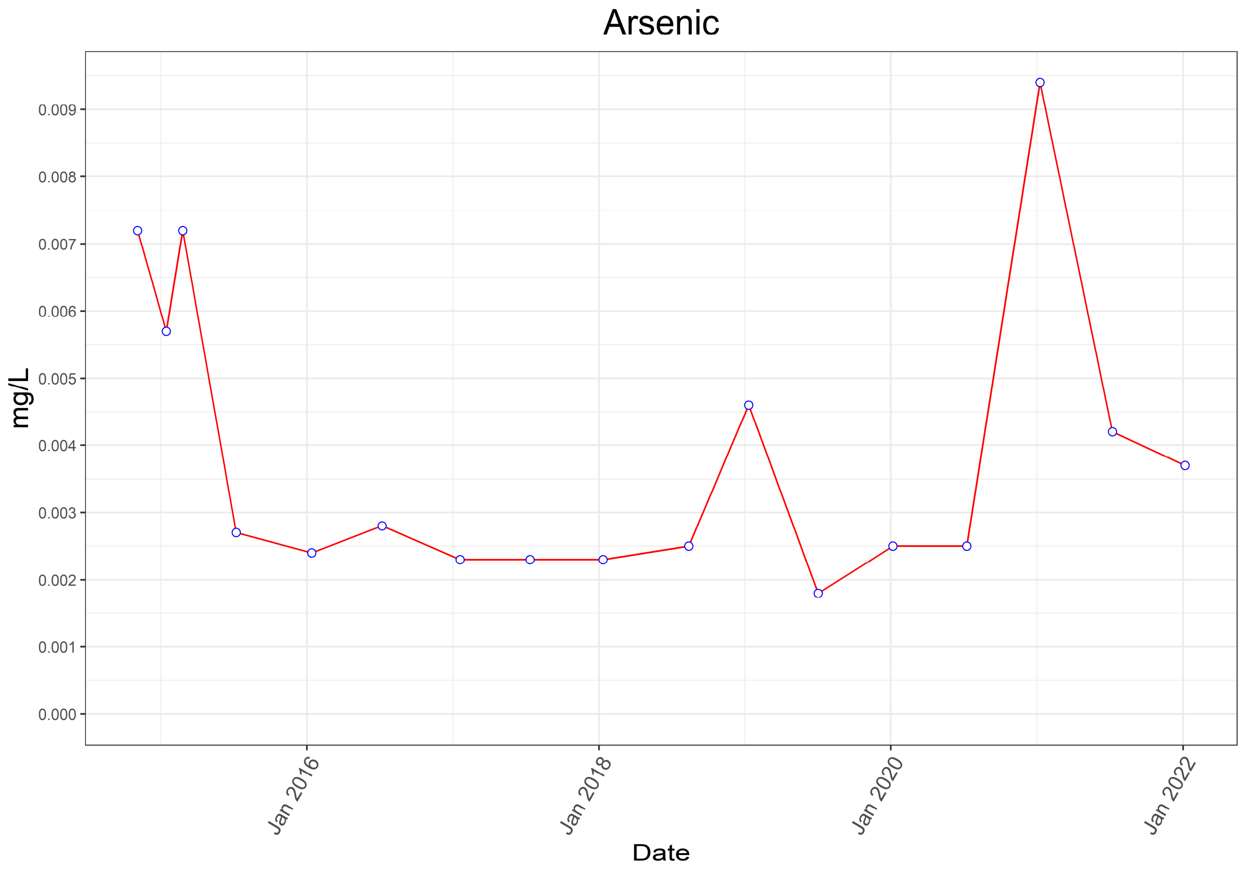
Well Name: Q20-R01B

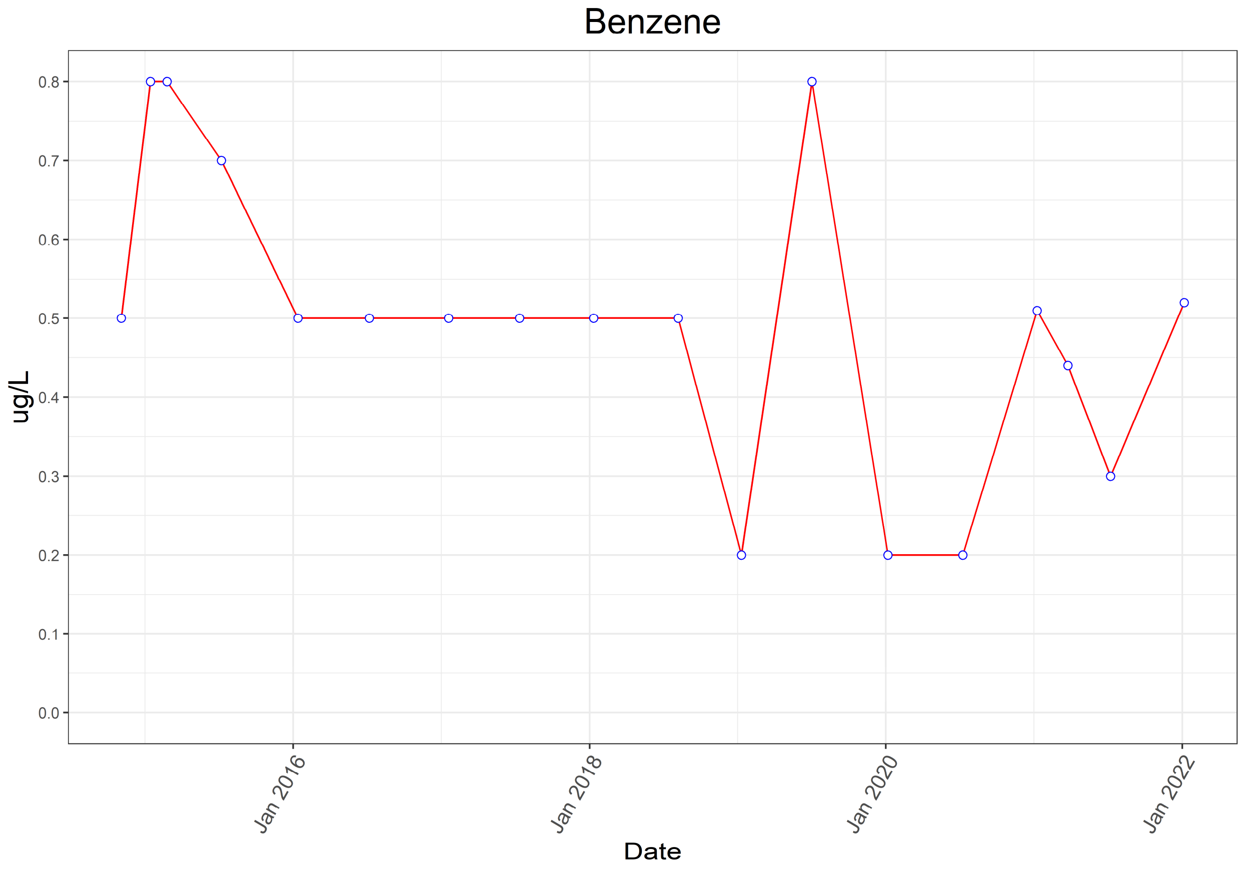


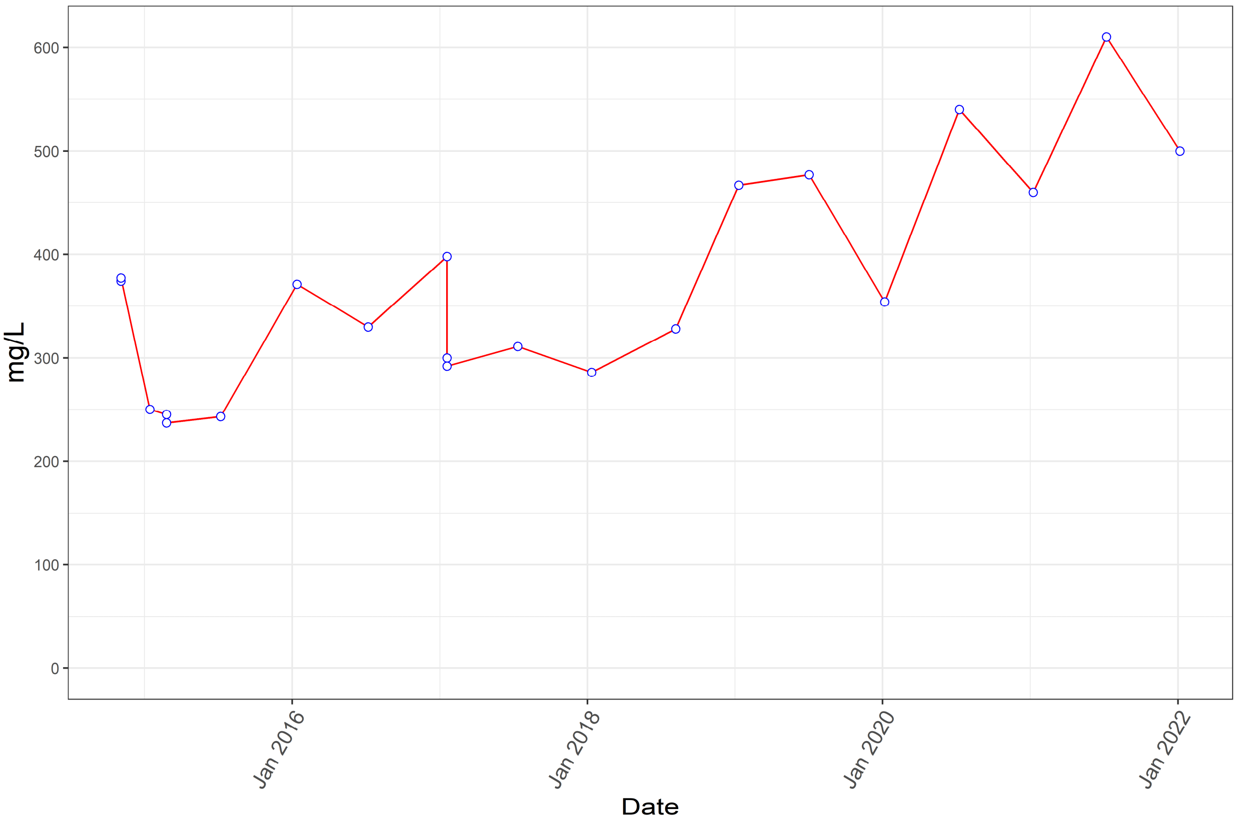



Ammonia
mg/L
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

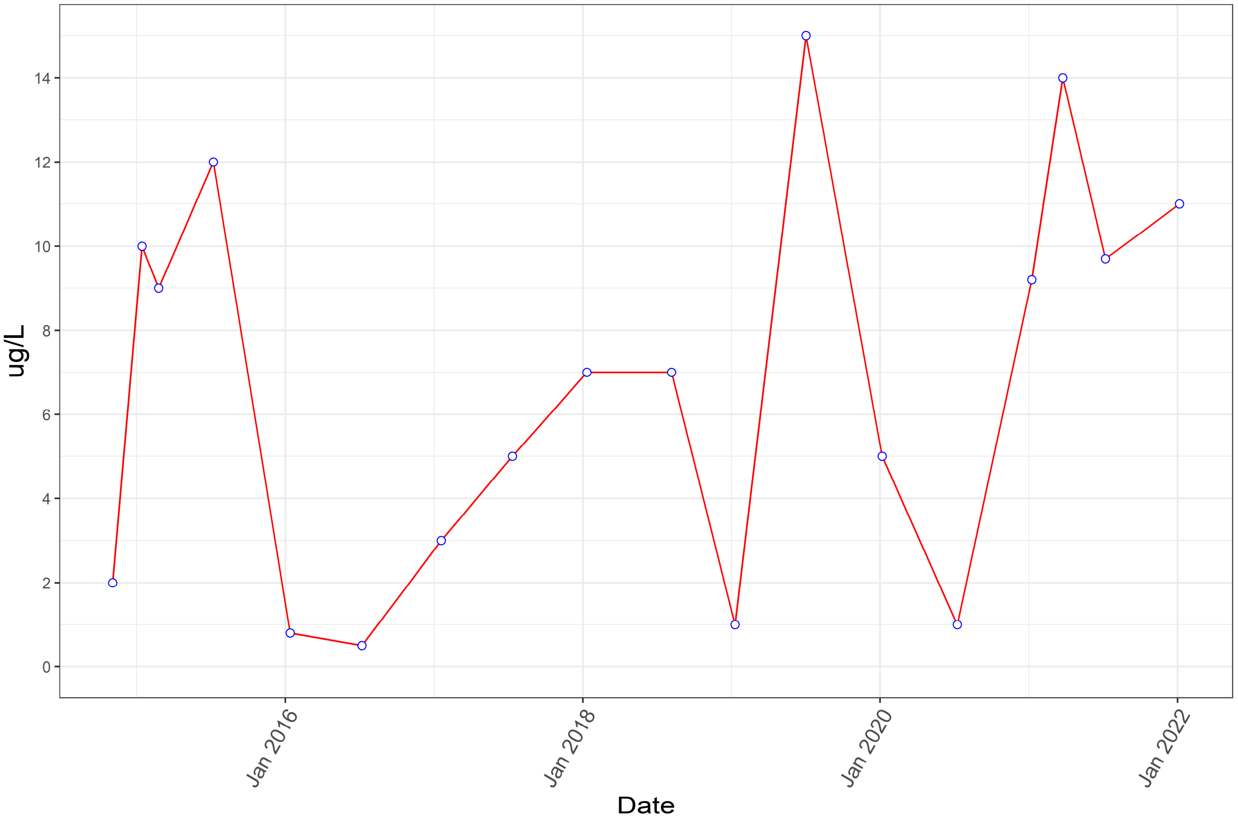

Aniline
ug/L
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Arsenic
mg/L
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

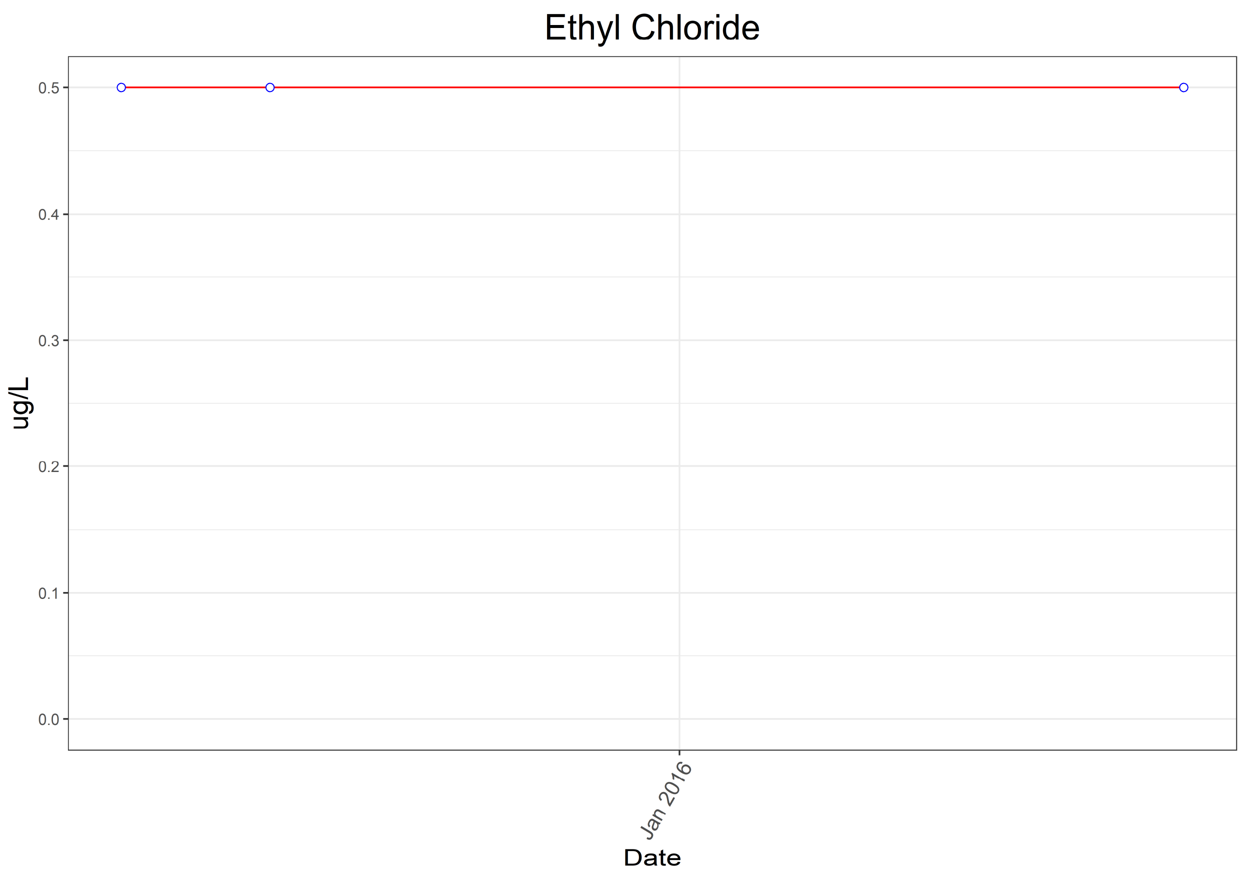

Benzene
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

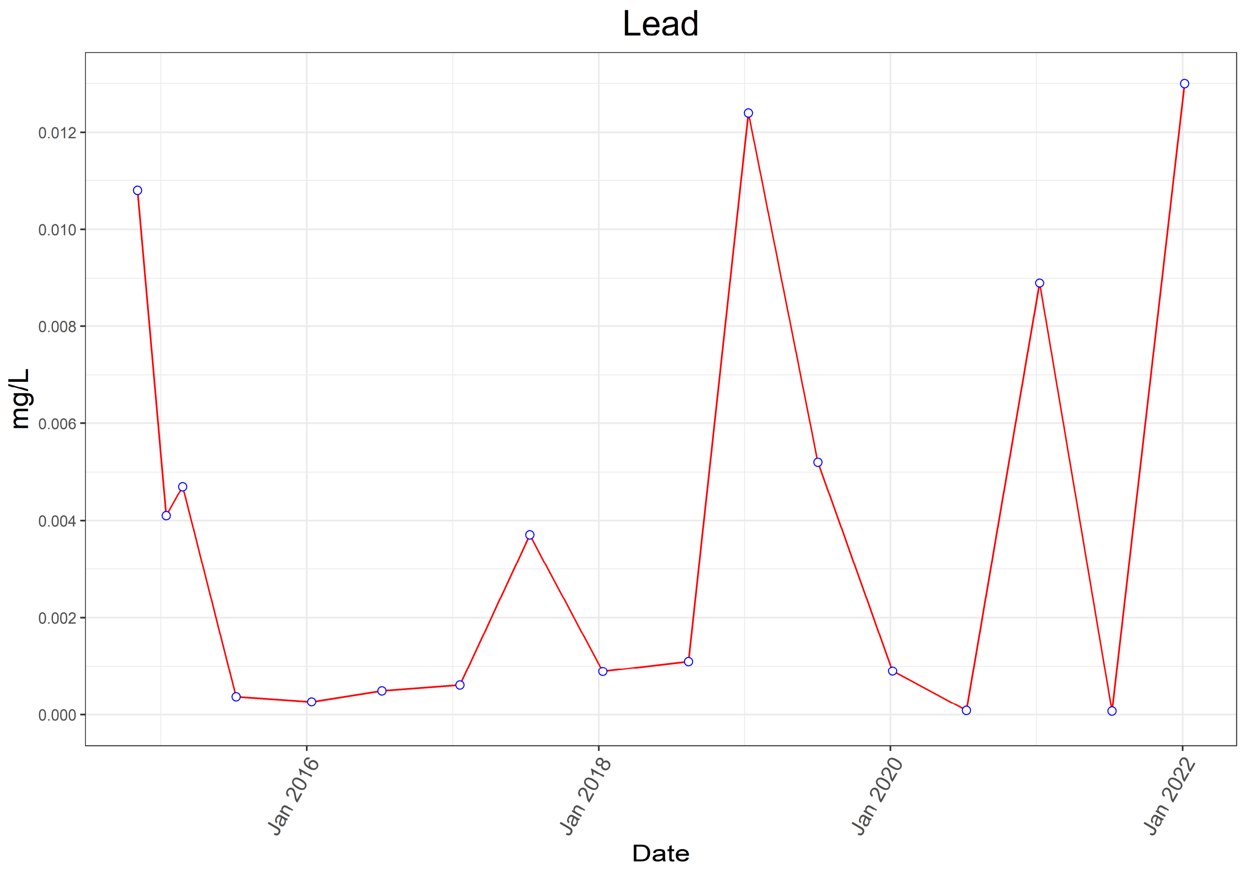


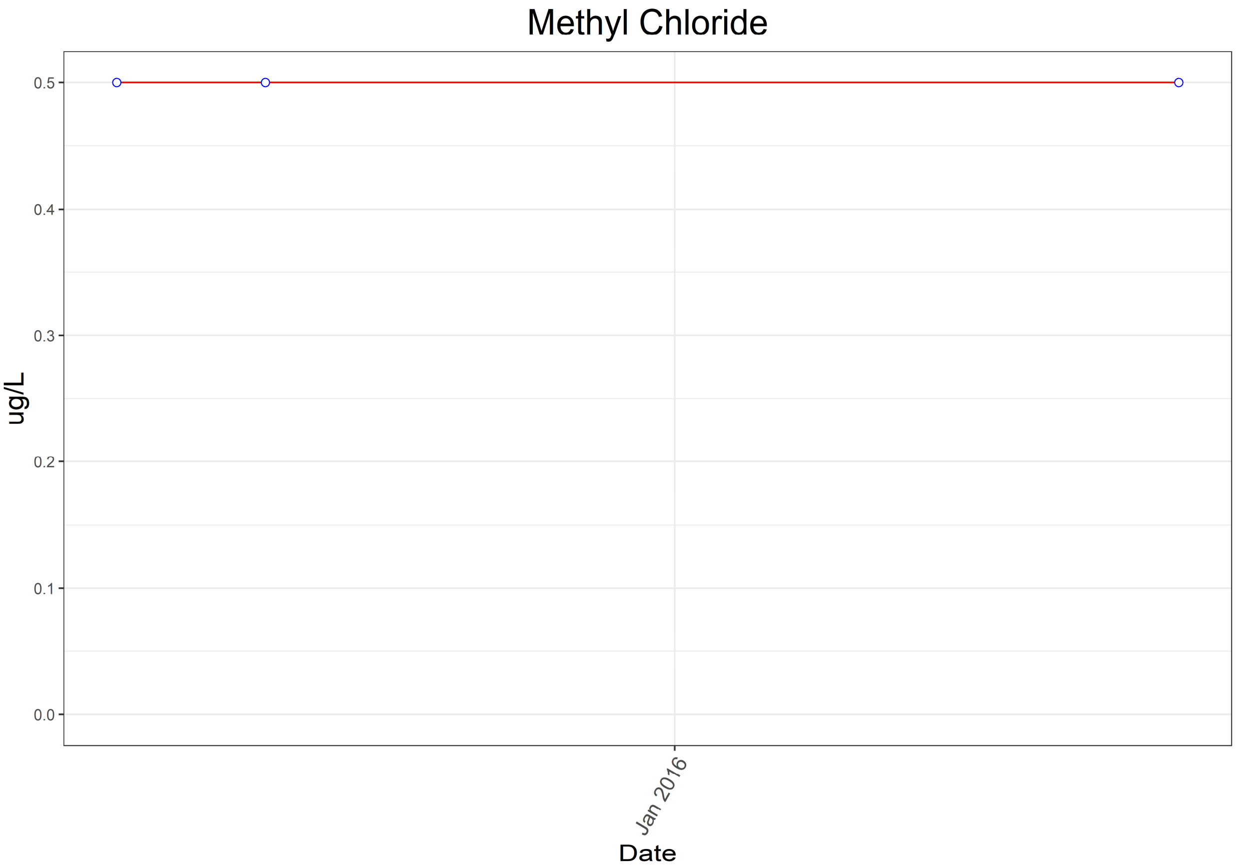
Chloride

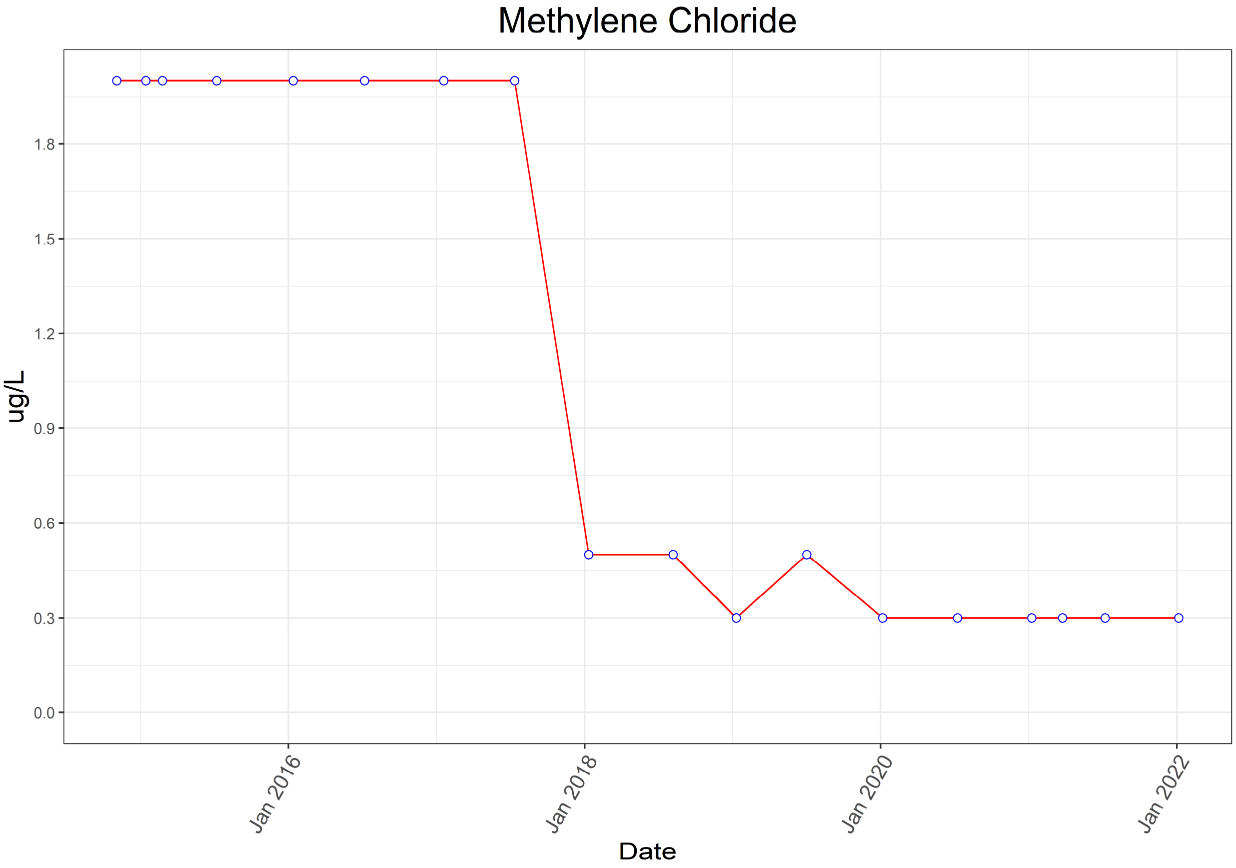


Chlorobenzene

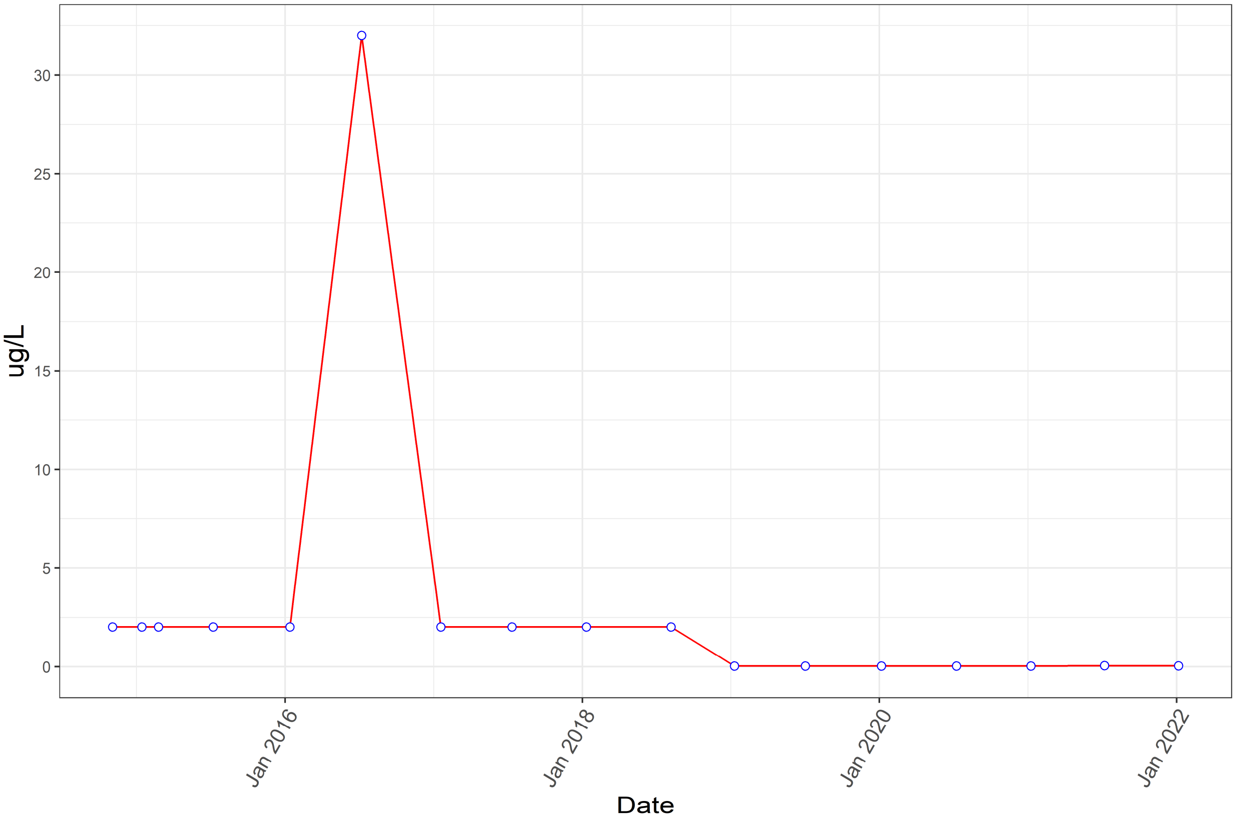

Ethyl Chloride
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2016
Date


Lead
mg/L
0.012
0.010
0.008
0.006
0.004
0.002
0.000
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

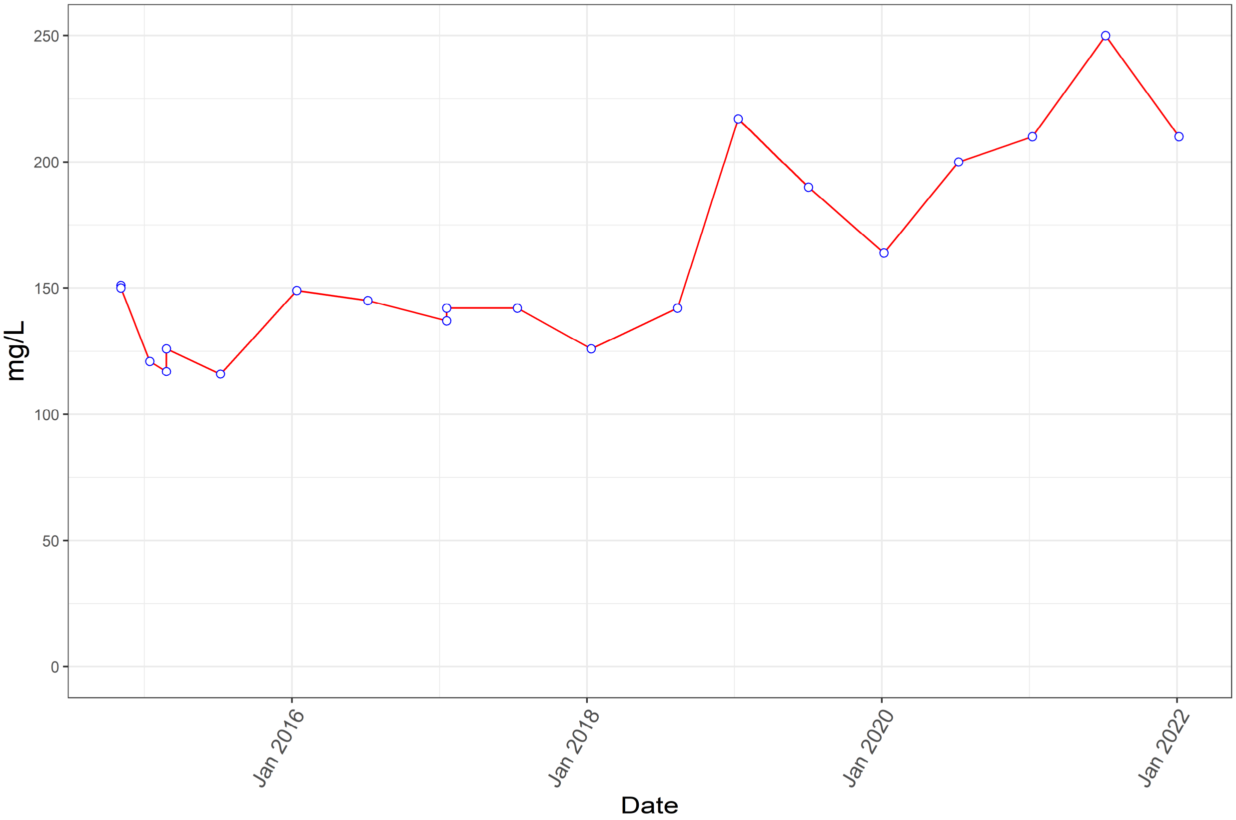

Methyl Chloride
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2016
Date

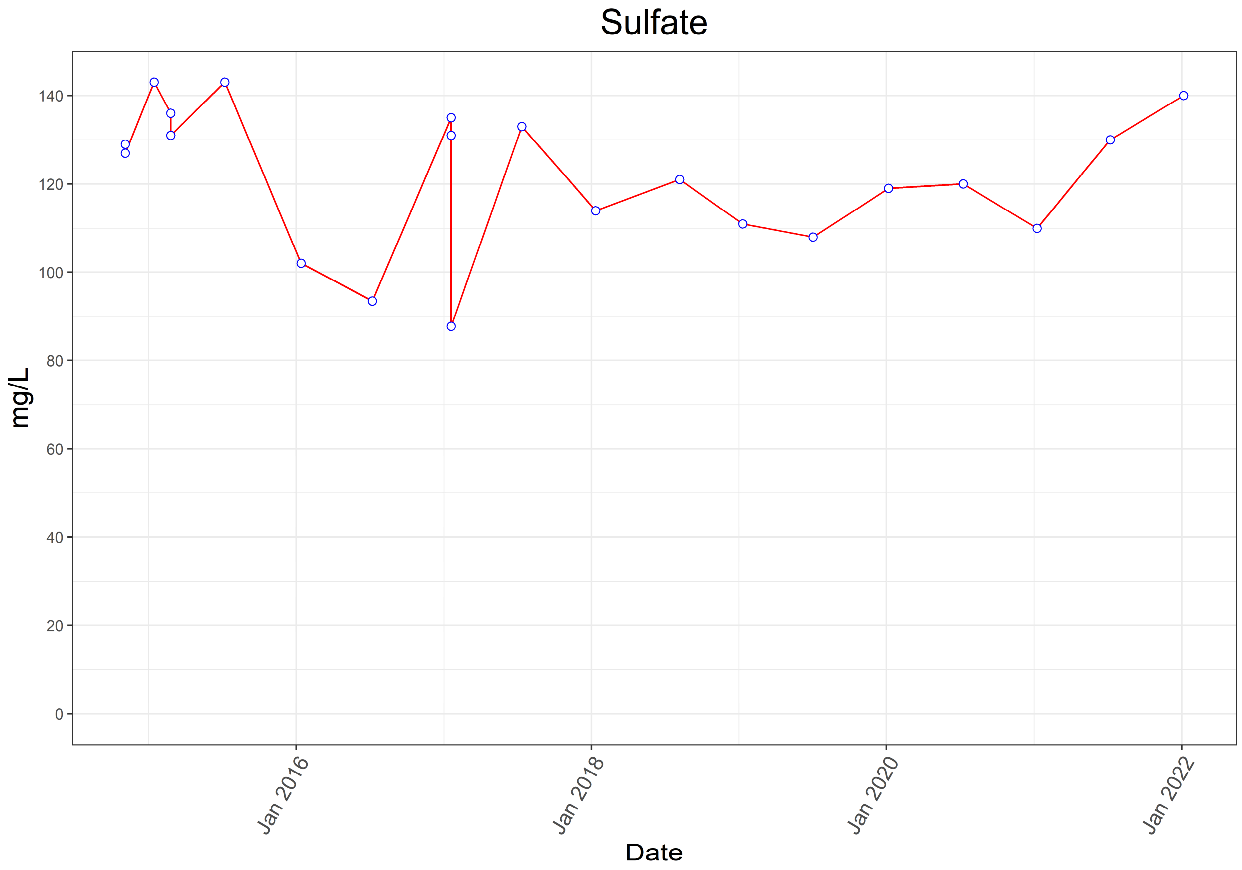

Methylene Chloride
ug/L
1.8
1.5
1.2
0.9
0.6
0.3
0.0
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

N-Nitrosodimethylamine

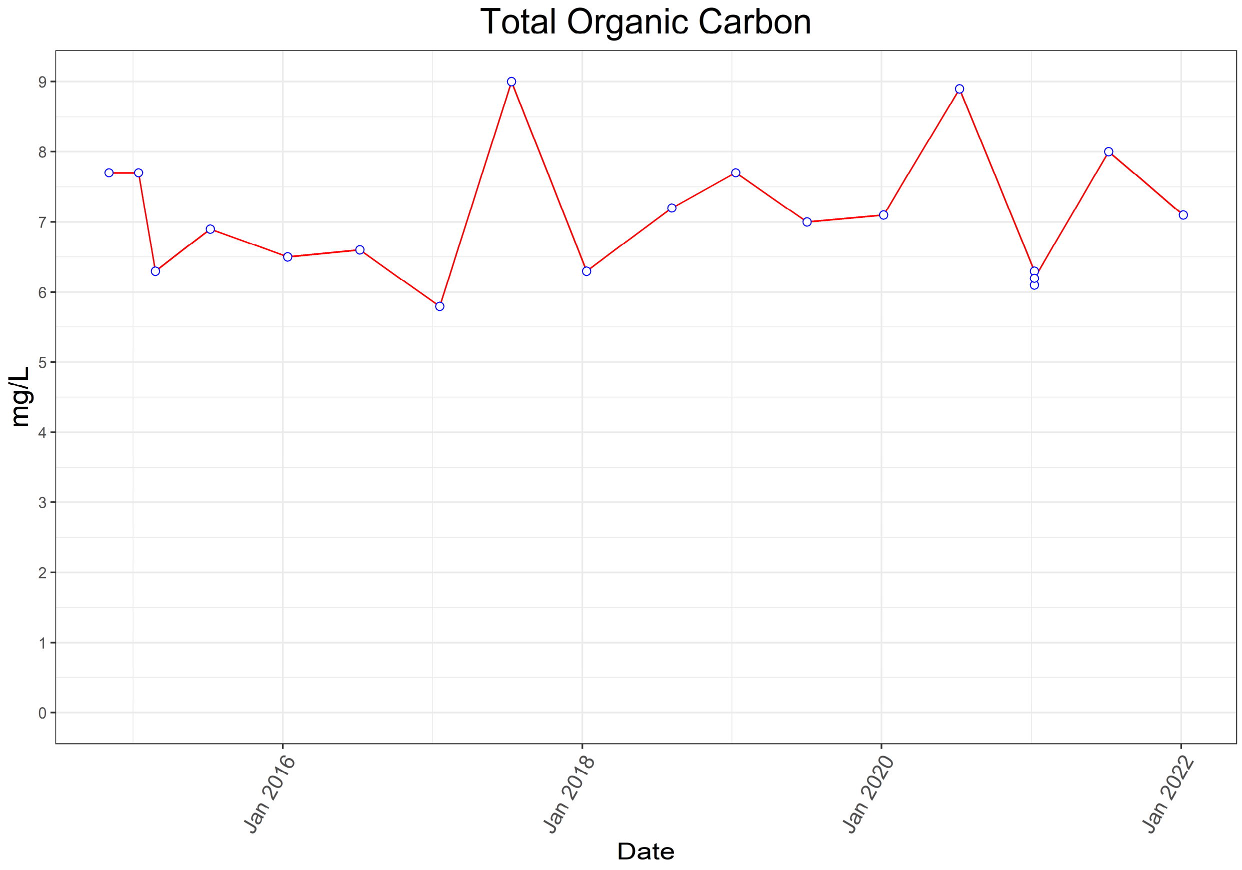


Sodium

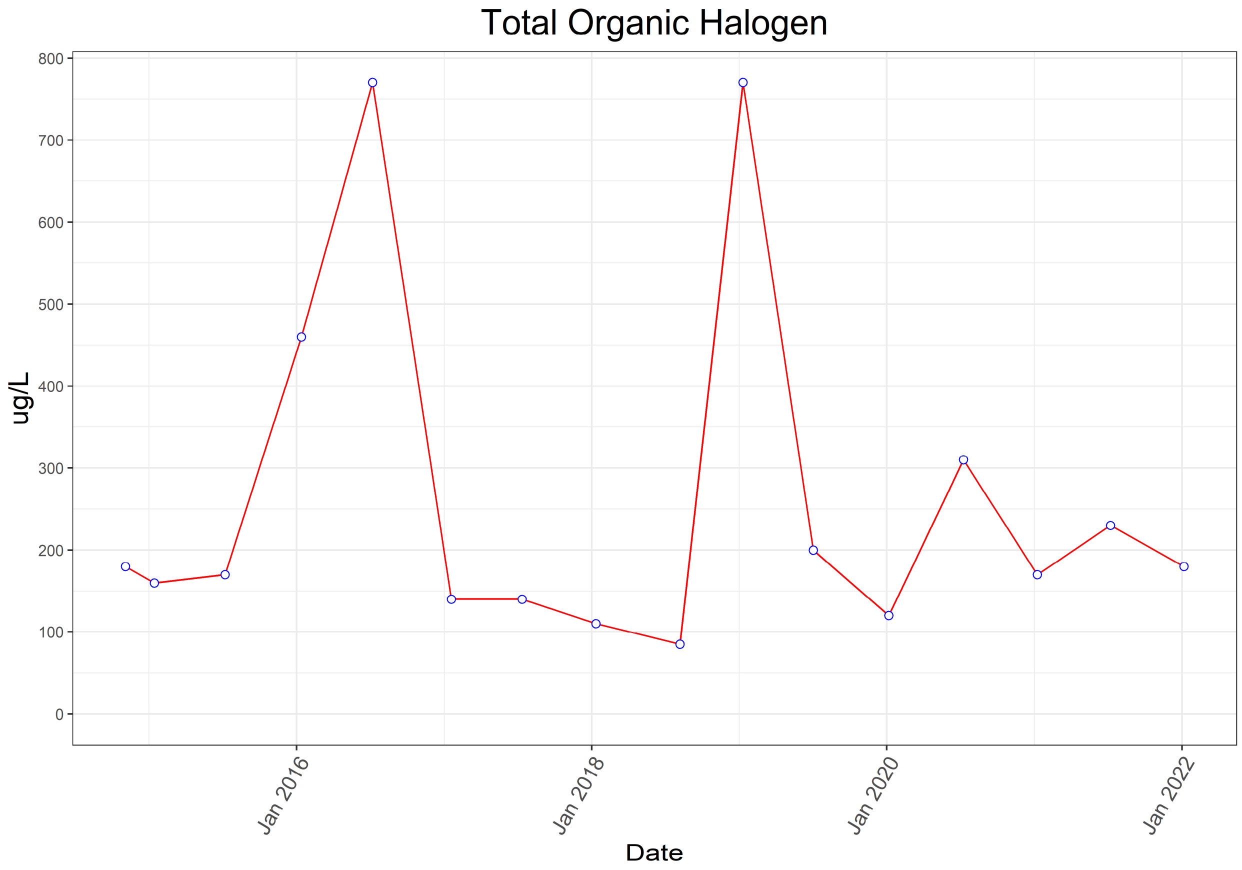


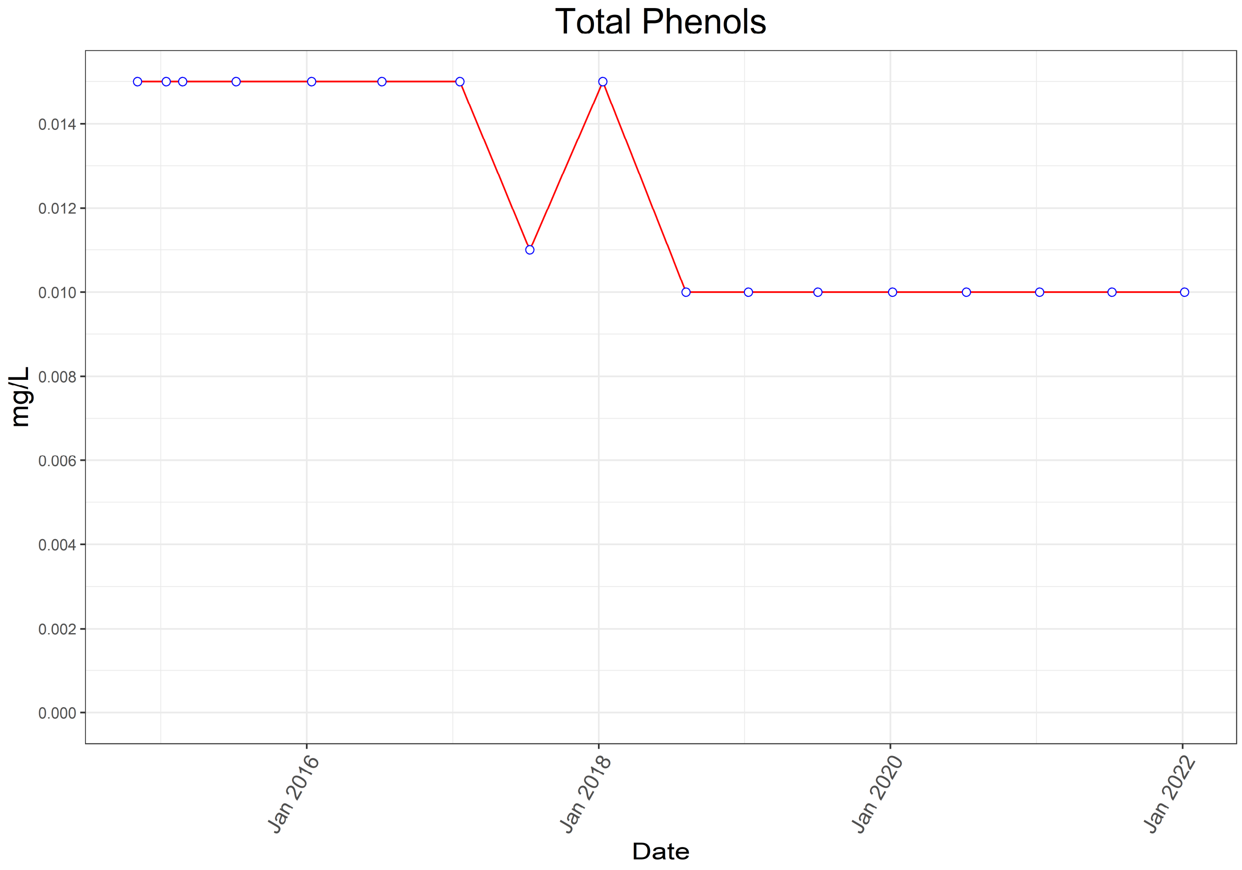


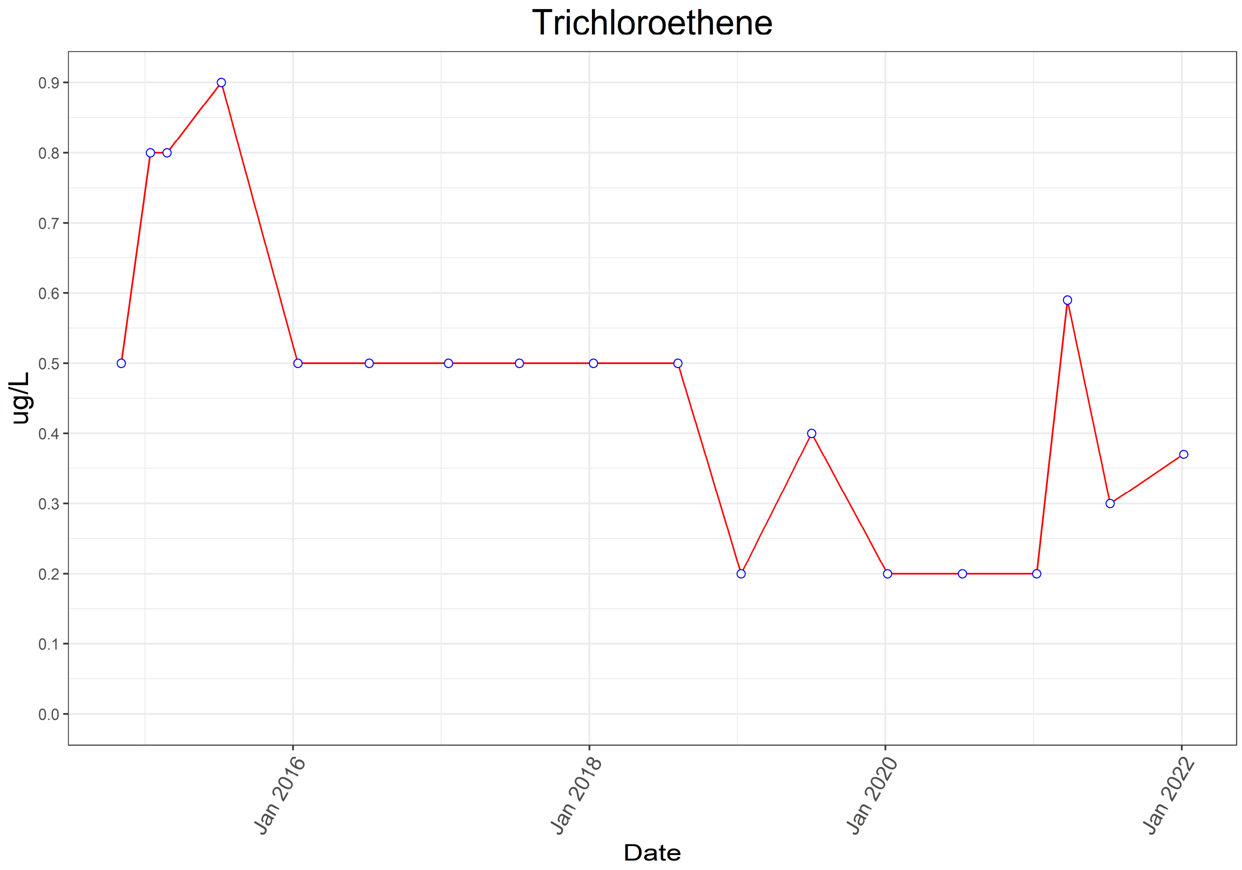
Sulfate

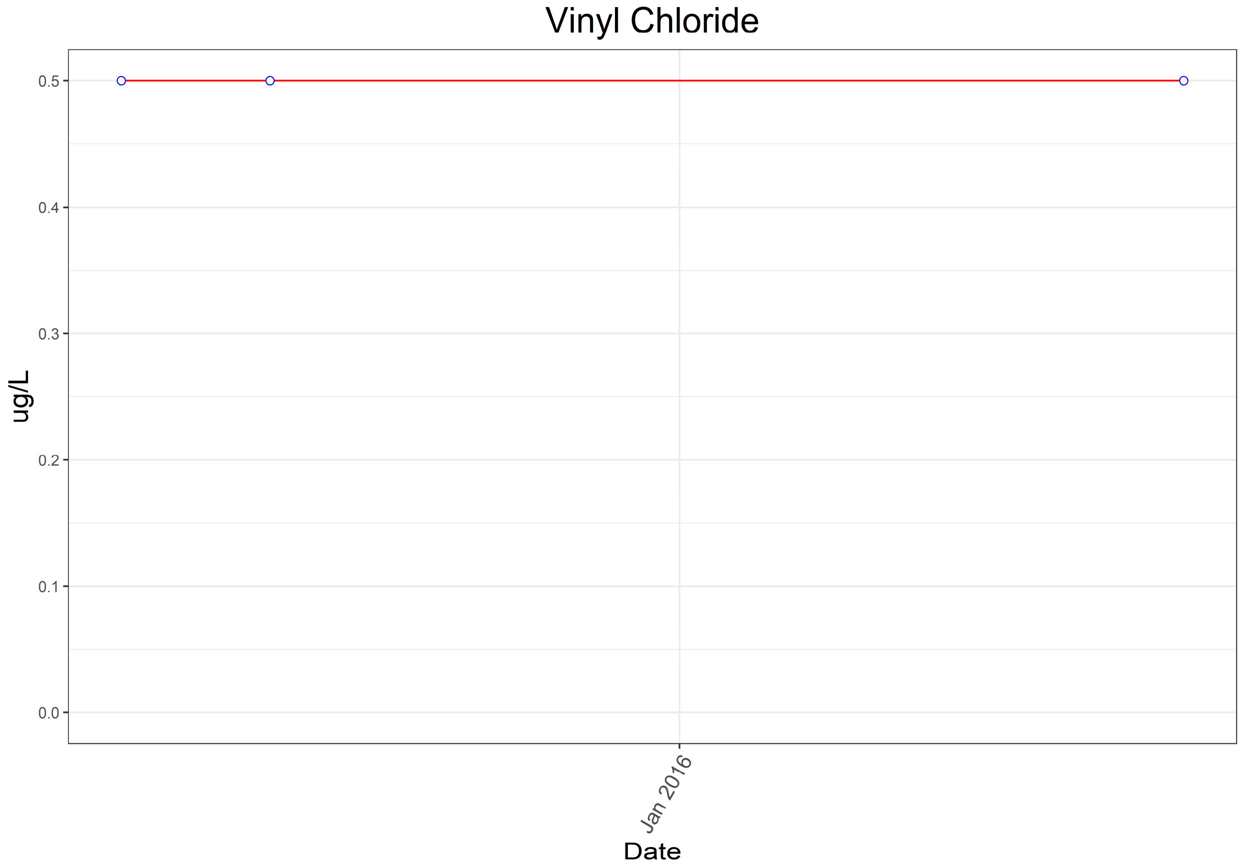


Total Organic Carbon

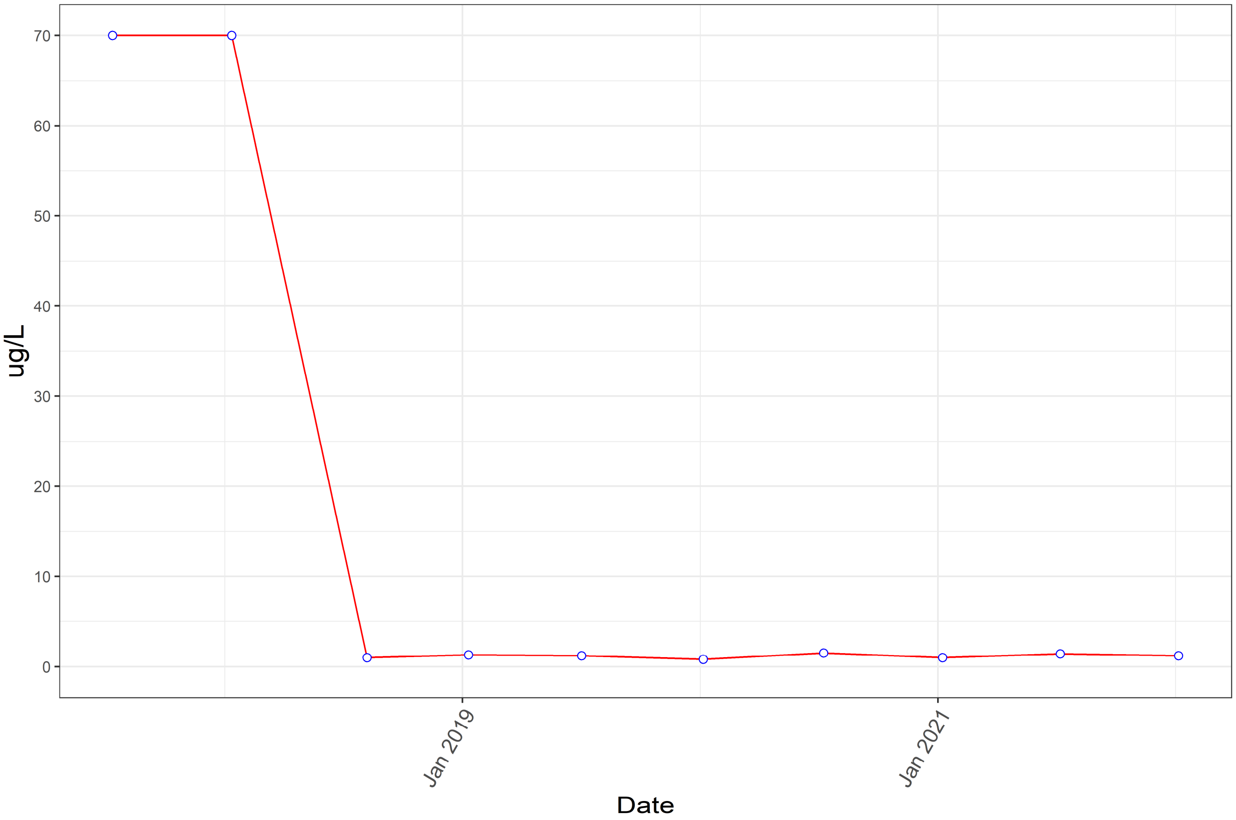

Total Organic Halogen
ug/L
800
700
600
500
400
300
200
100
0
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Total Phenols
mg/L
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Trichloroethene
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

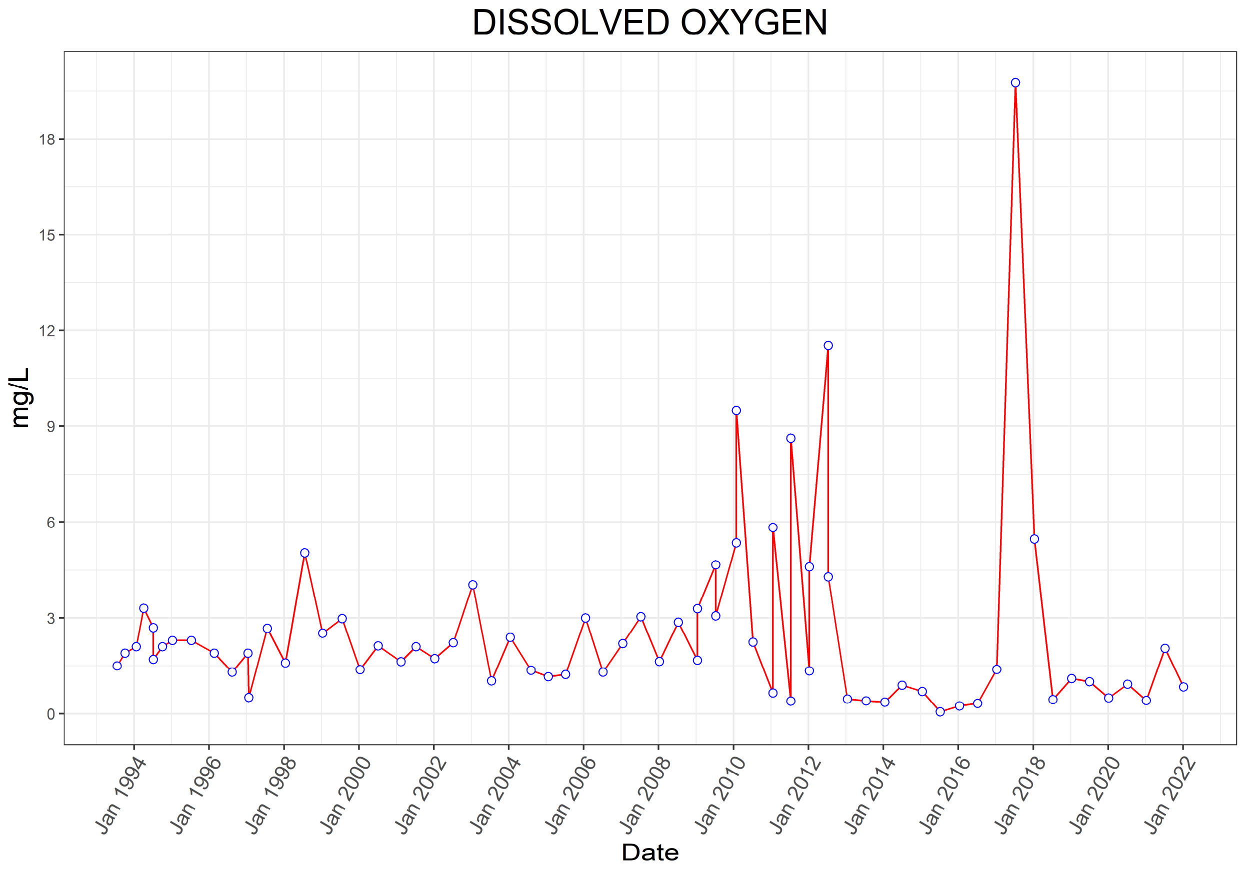

Vinyl Chloride
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2016
Date

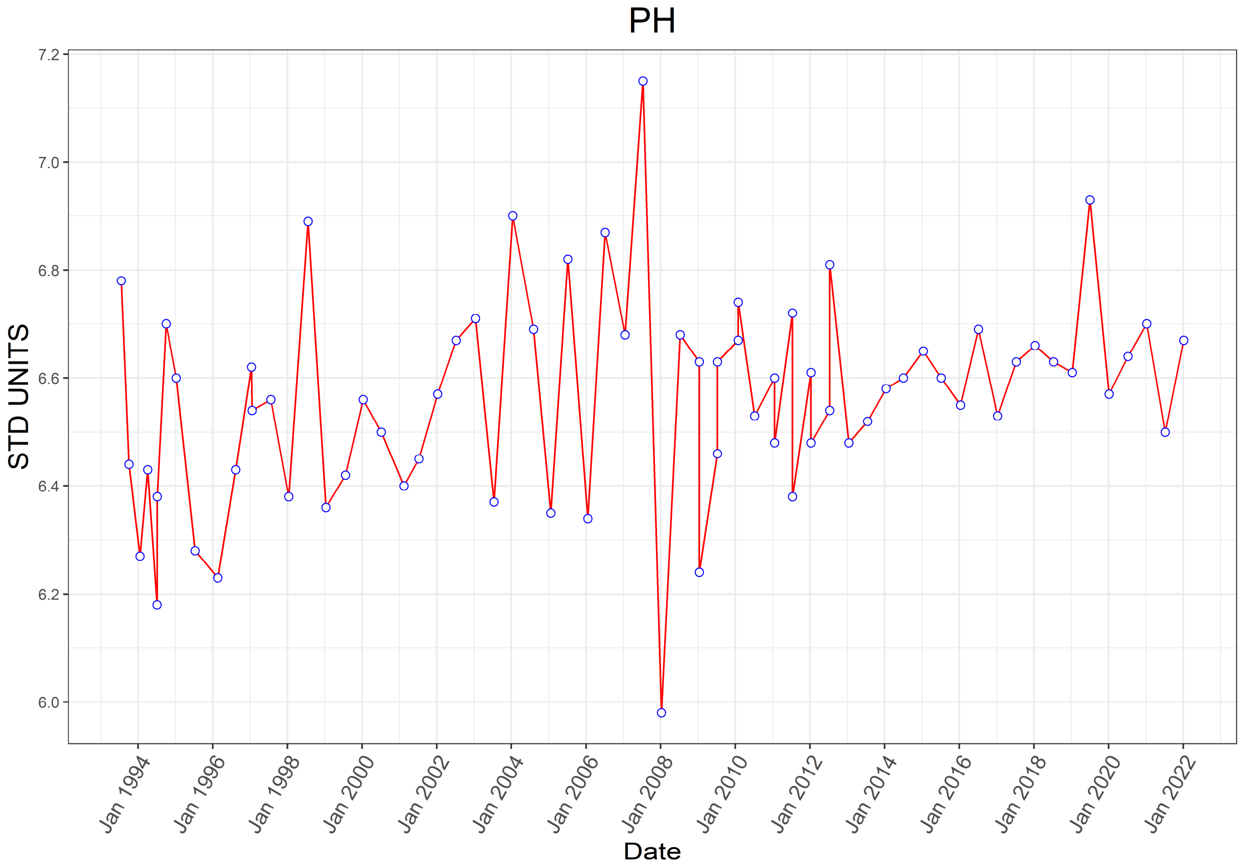
1,4-Dioxane

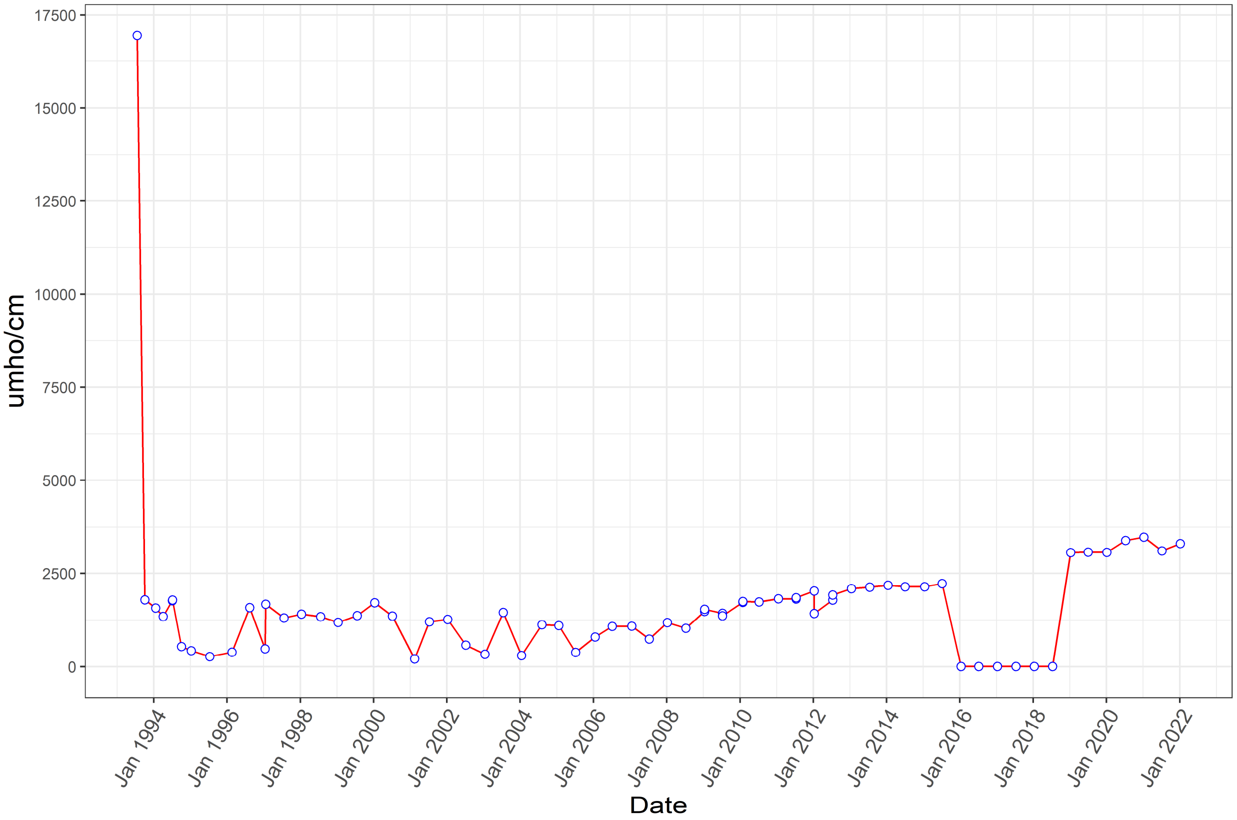


Well Name: Q20-R01B

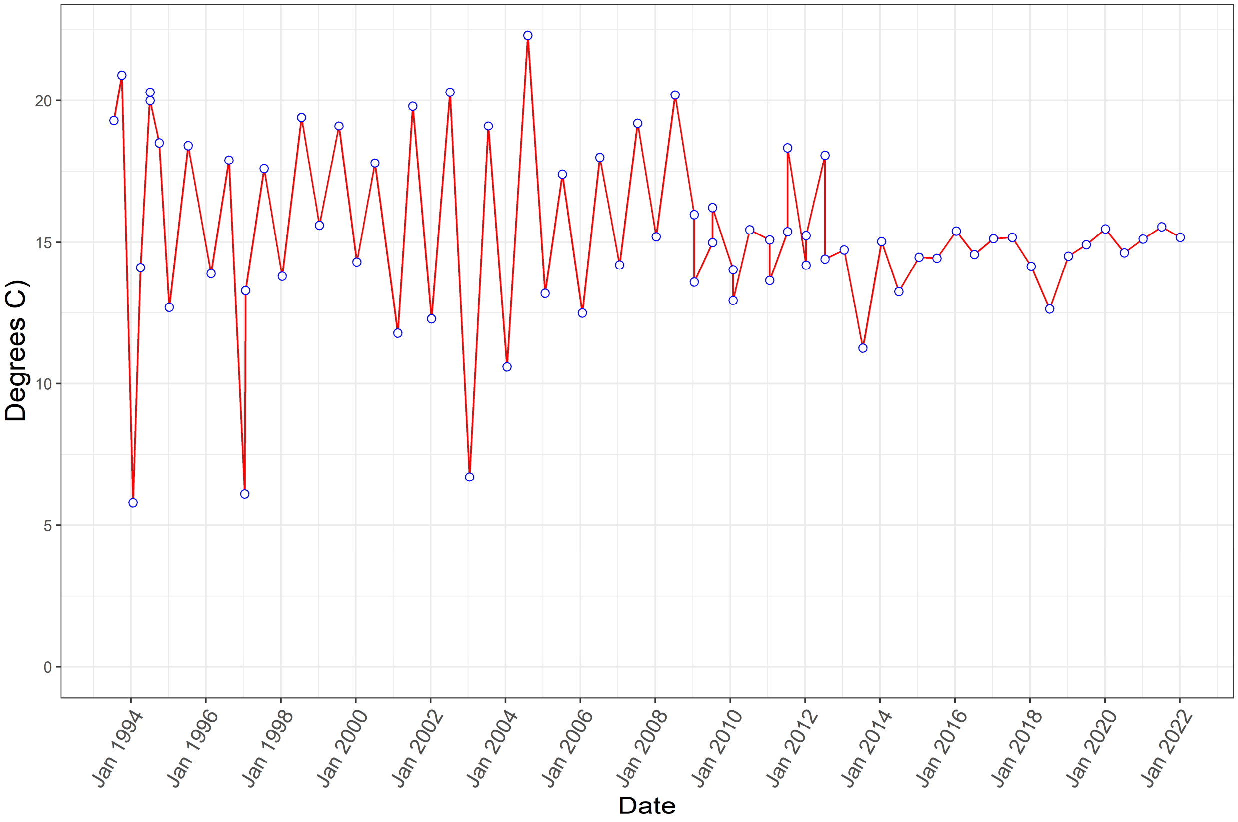
Field Parameters



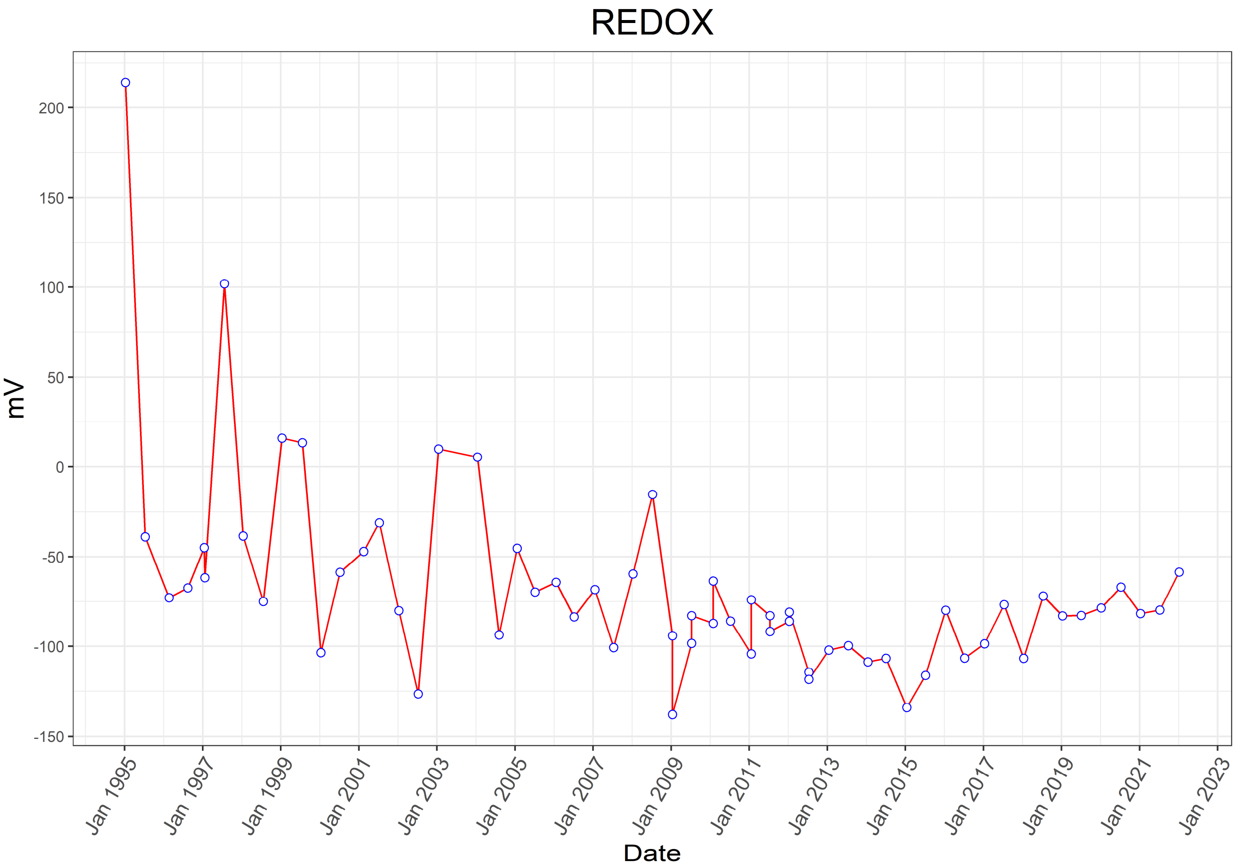




SPECIFIC CONDUCTANCE

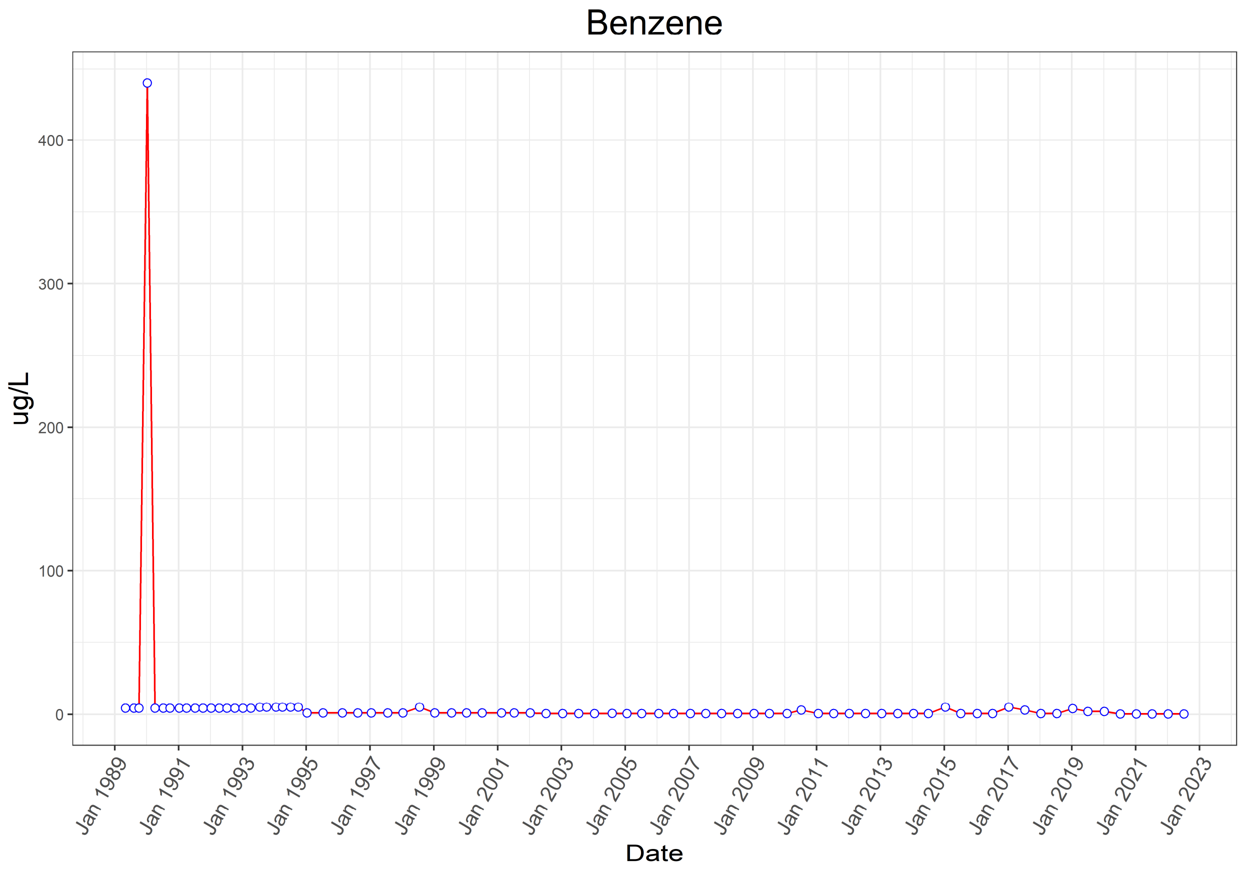


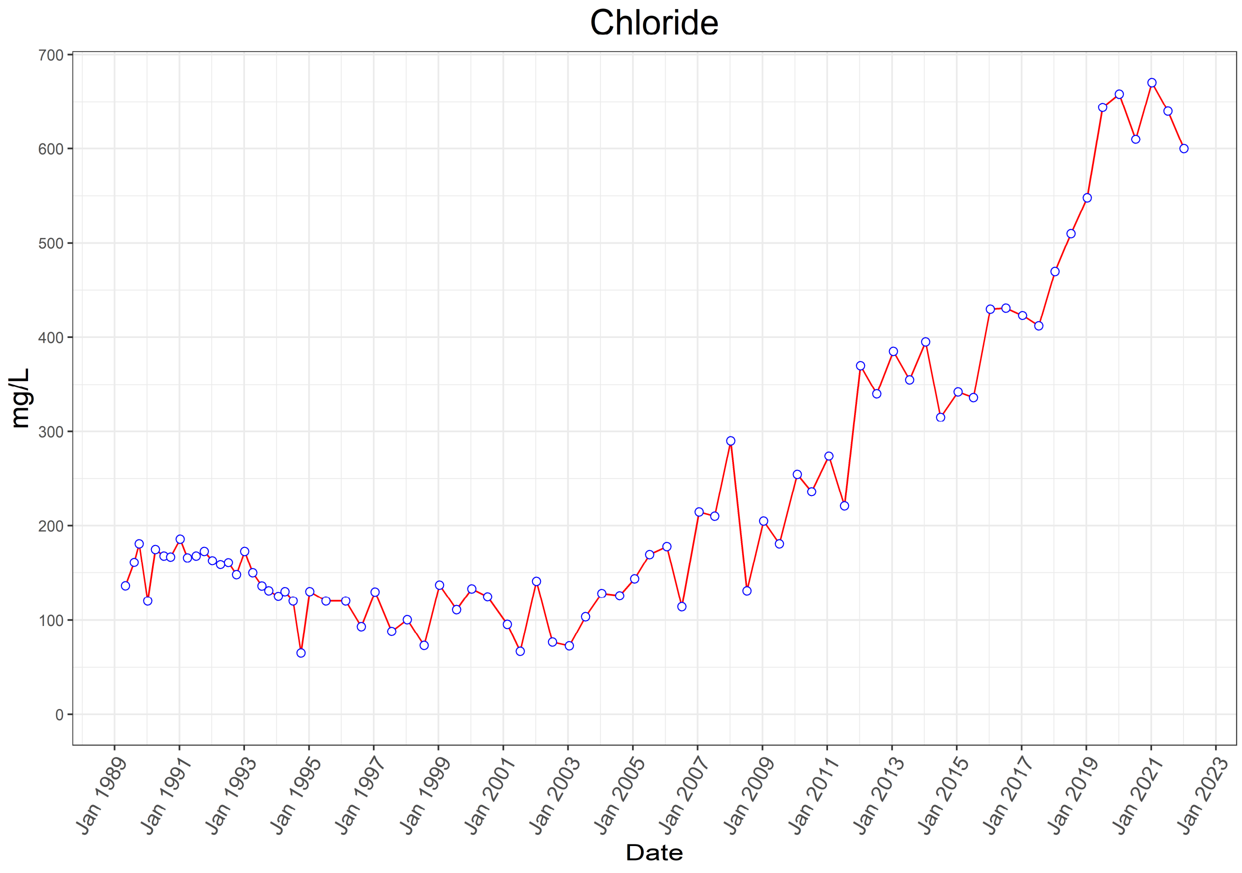
TEMPERATURE


REDOX
mV
200
150
100
50
0
-50
-100
-150
Date
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

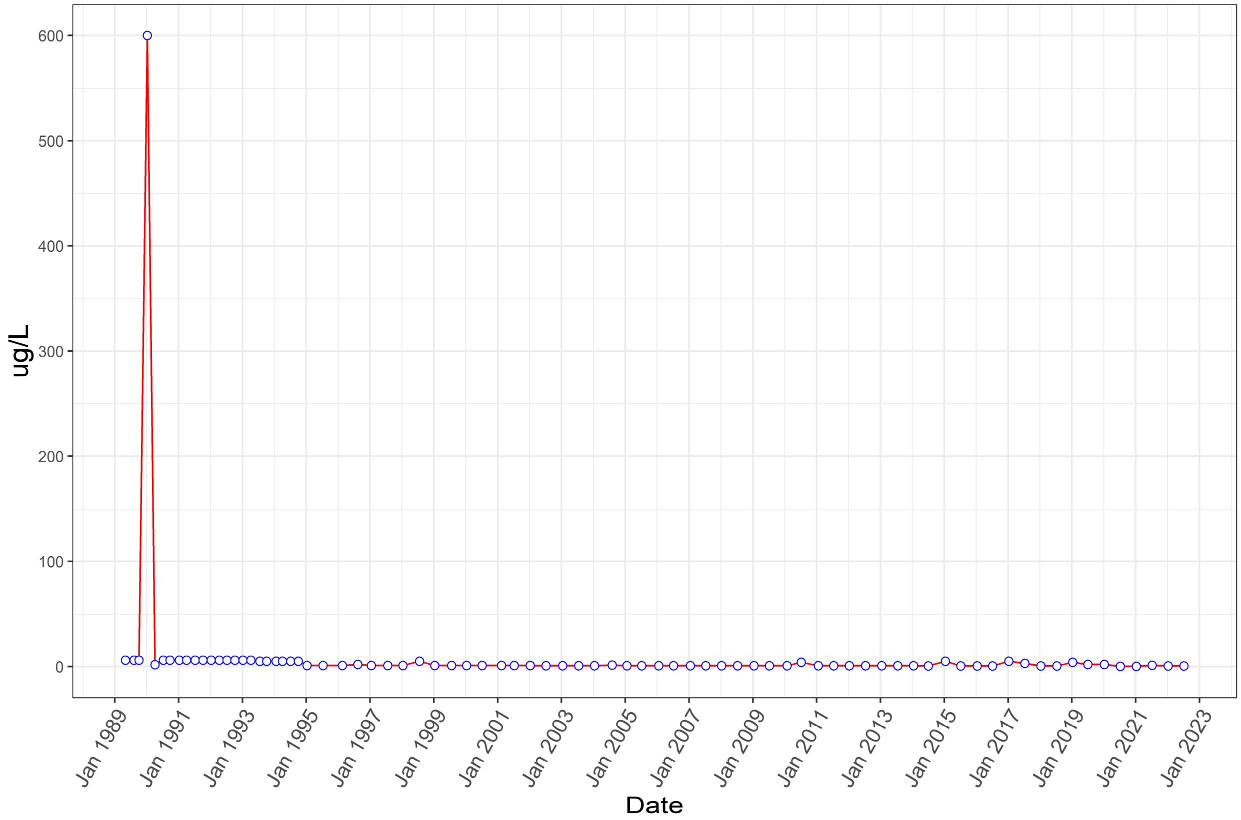
Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: Q21-M01B

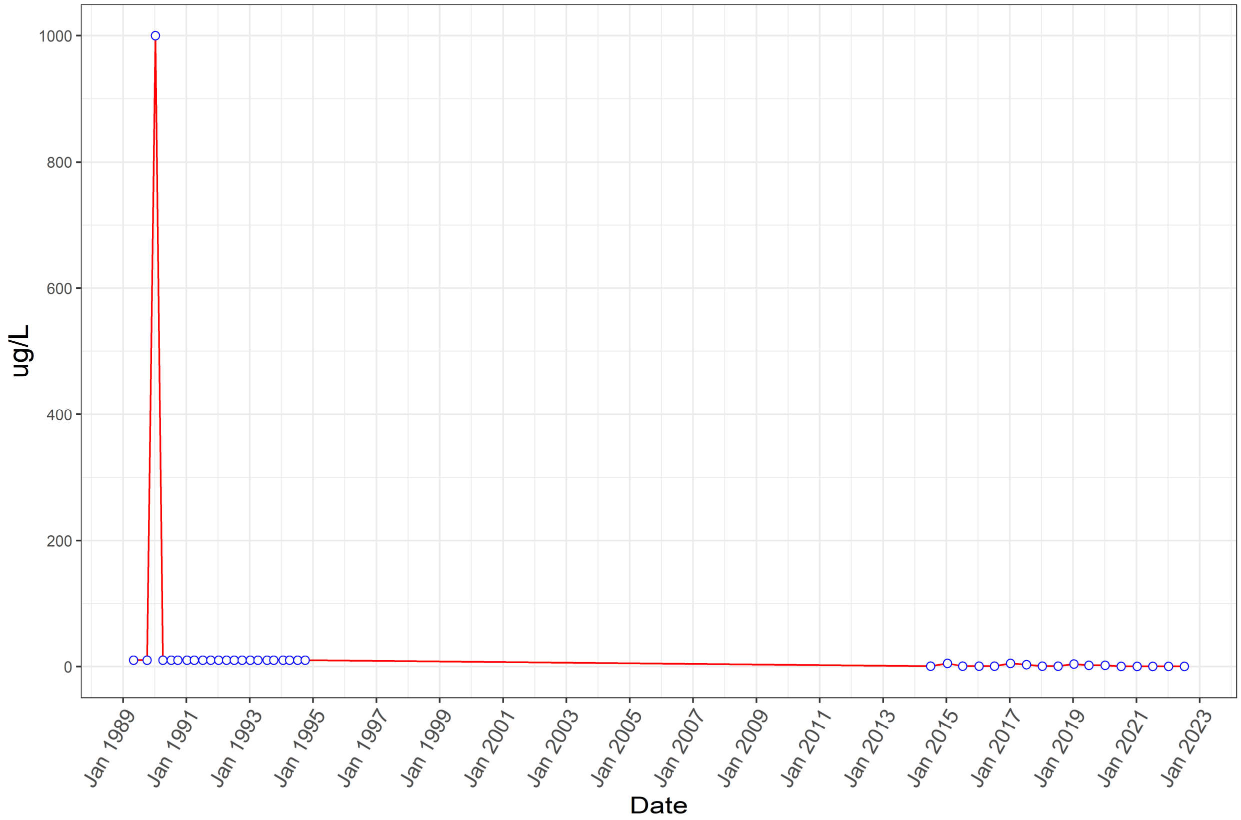


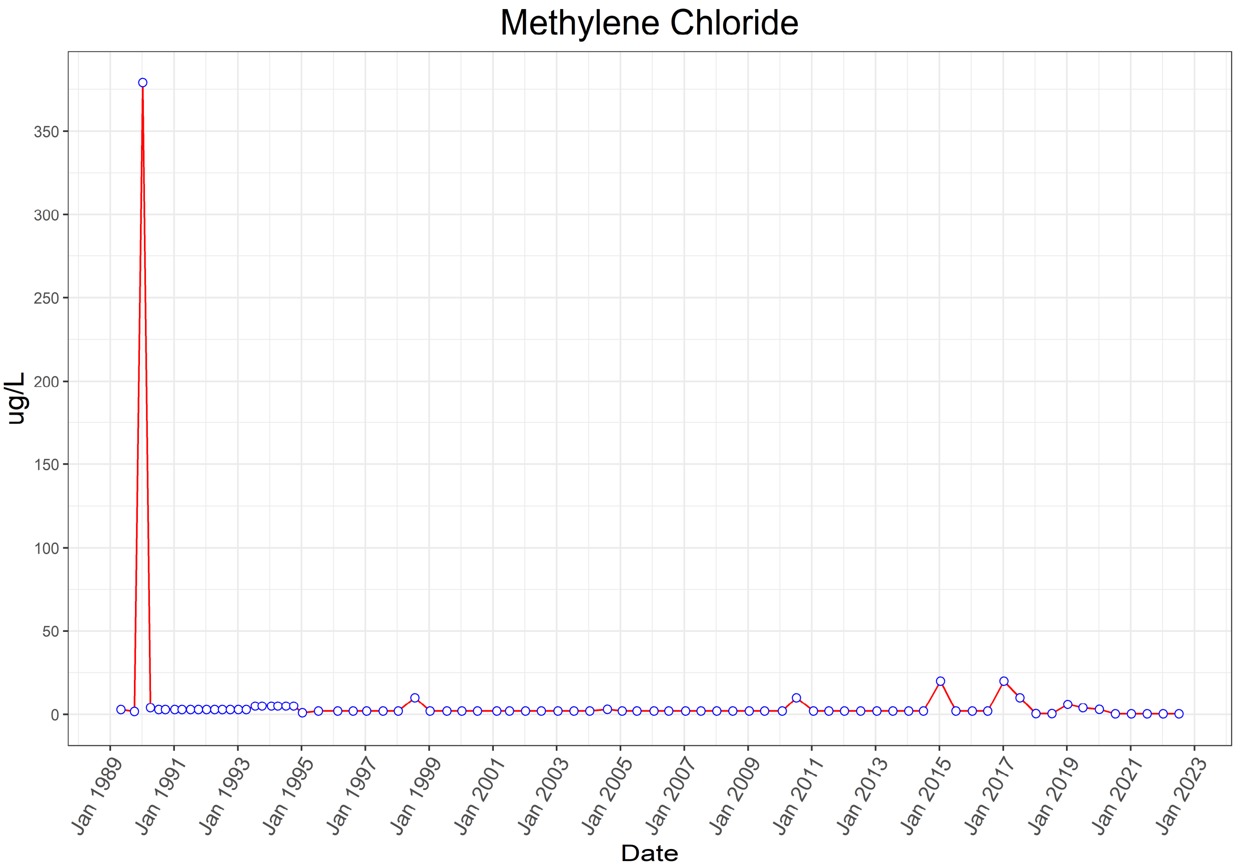


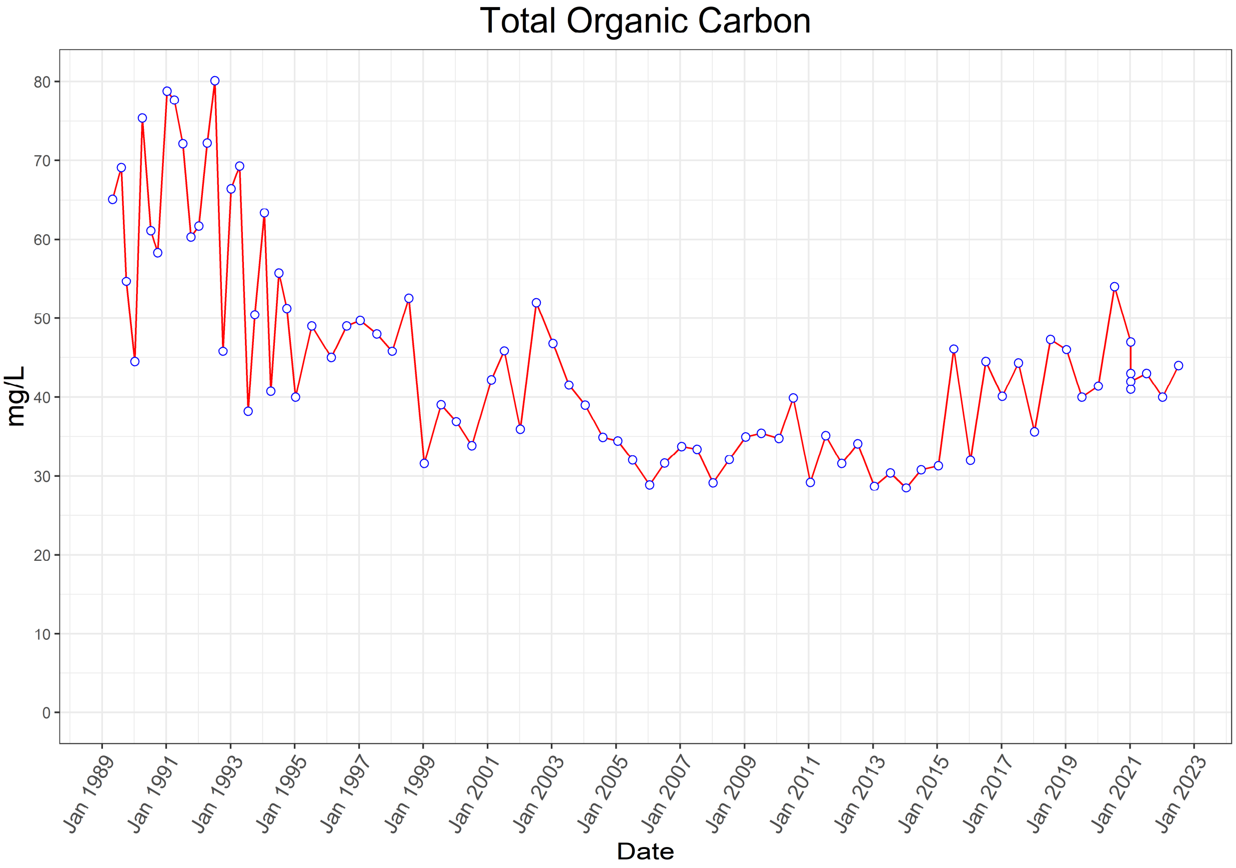
Chlorobenzene

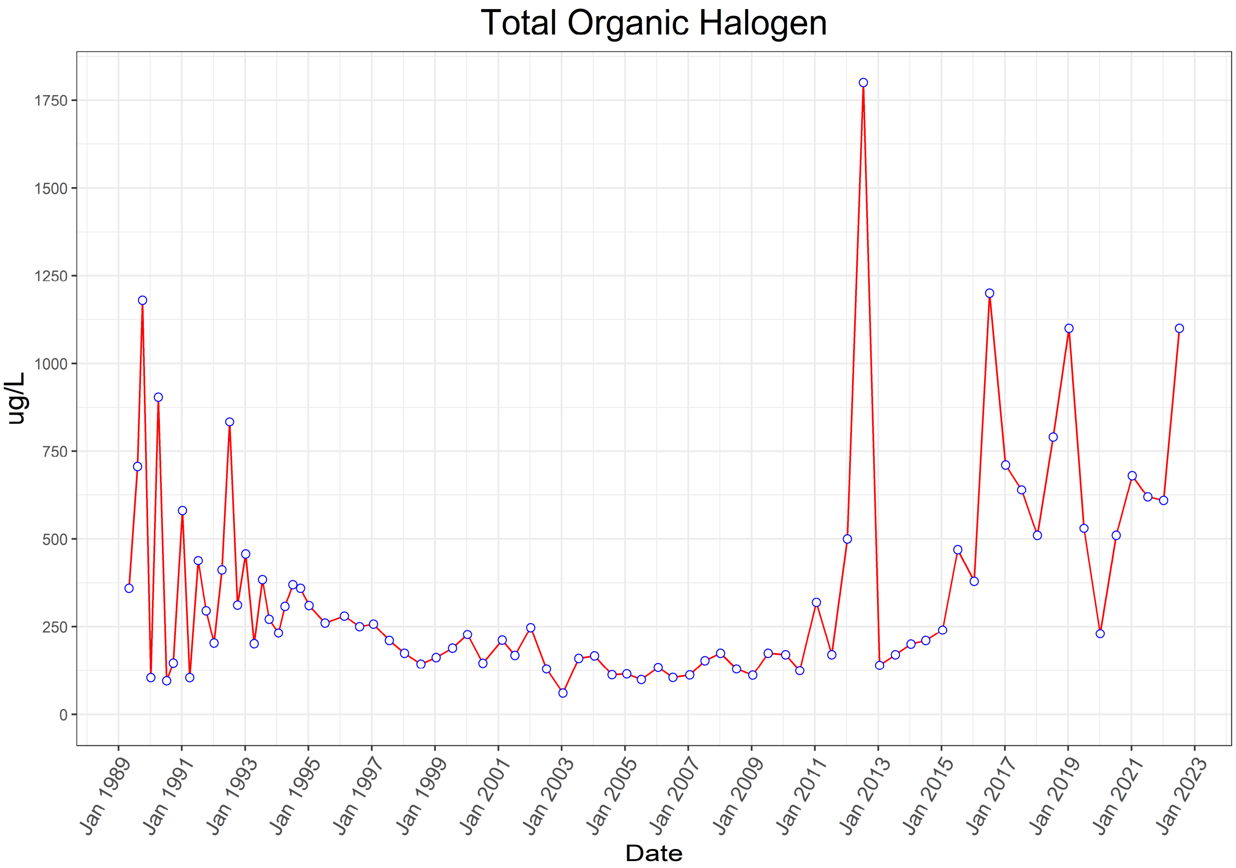


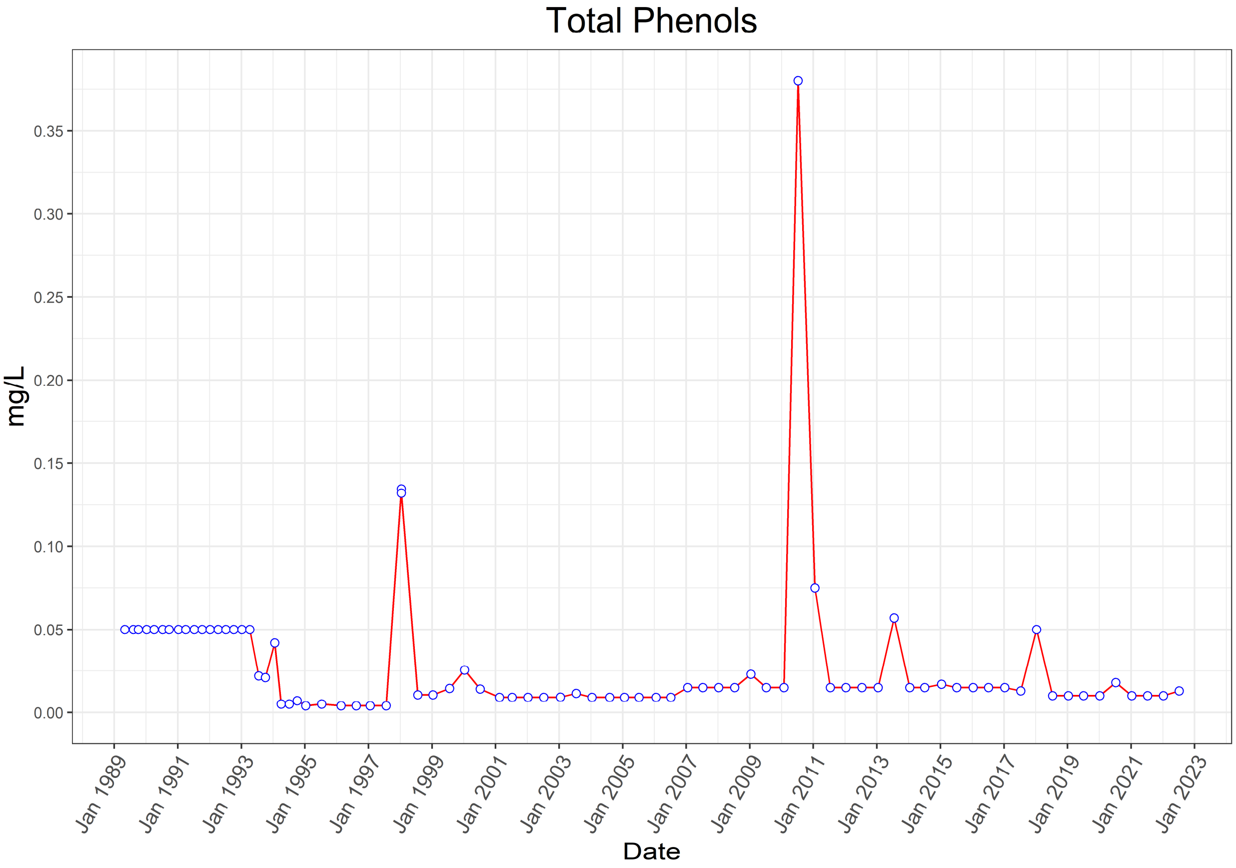
Ethyl Chloride

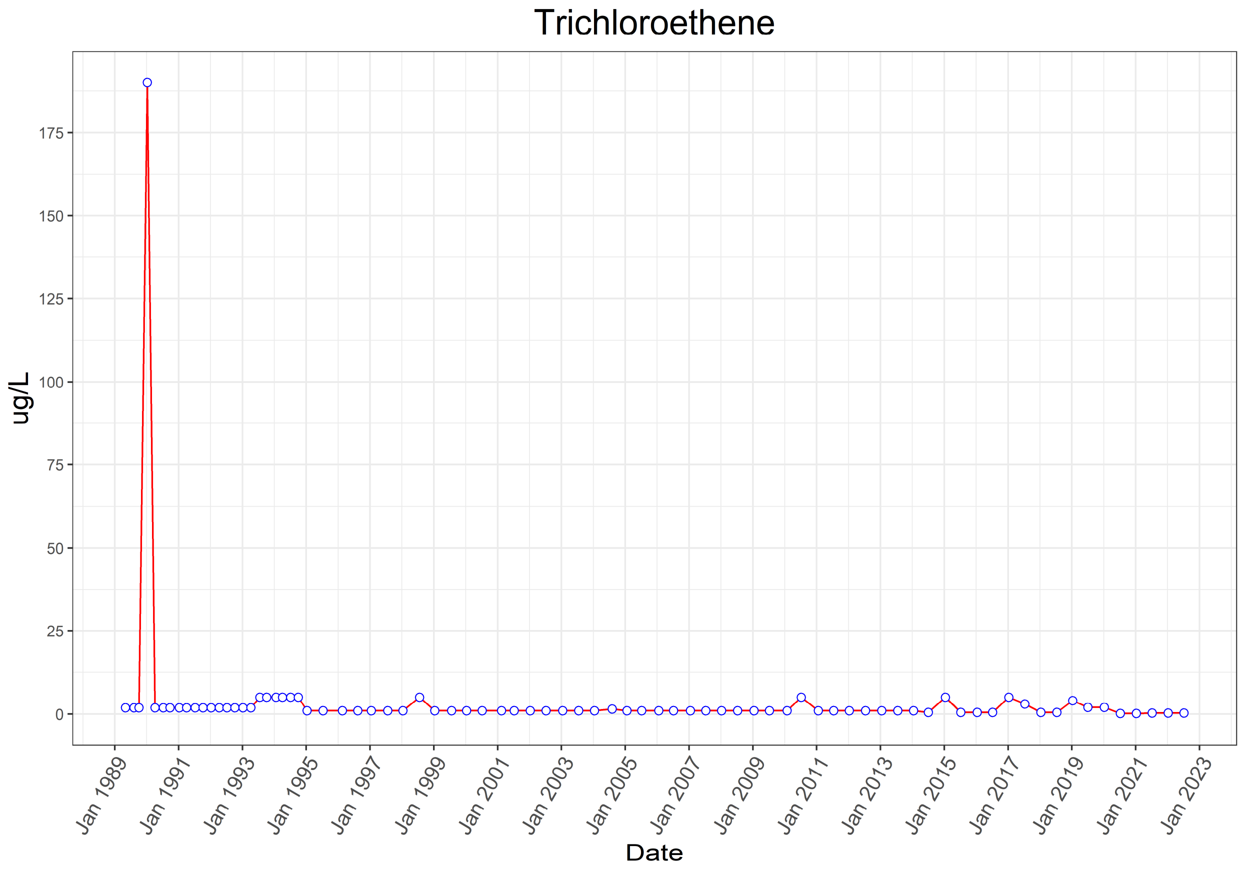


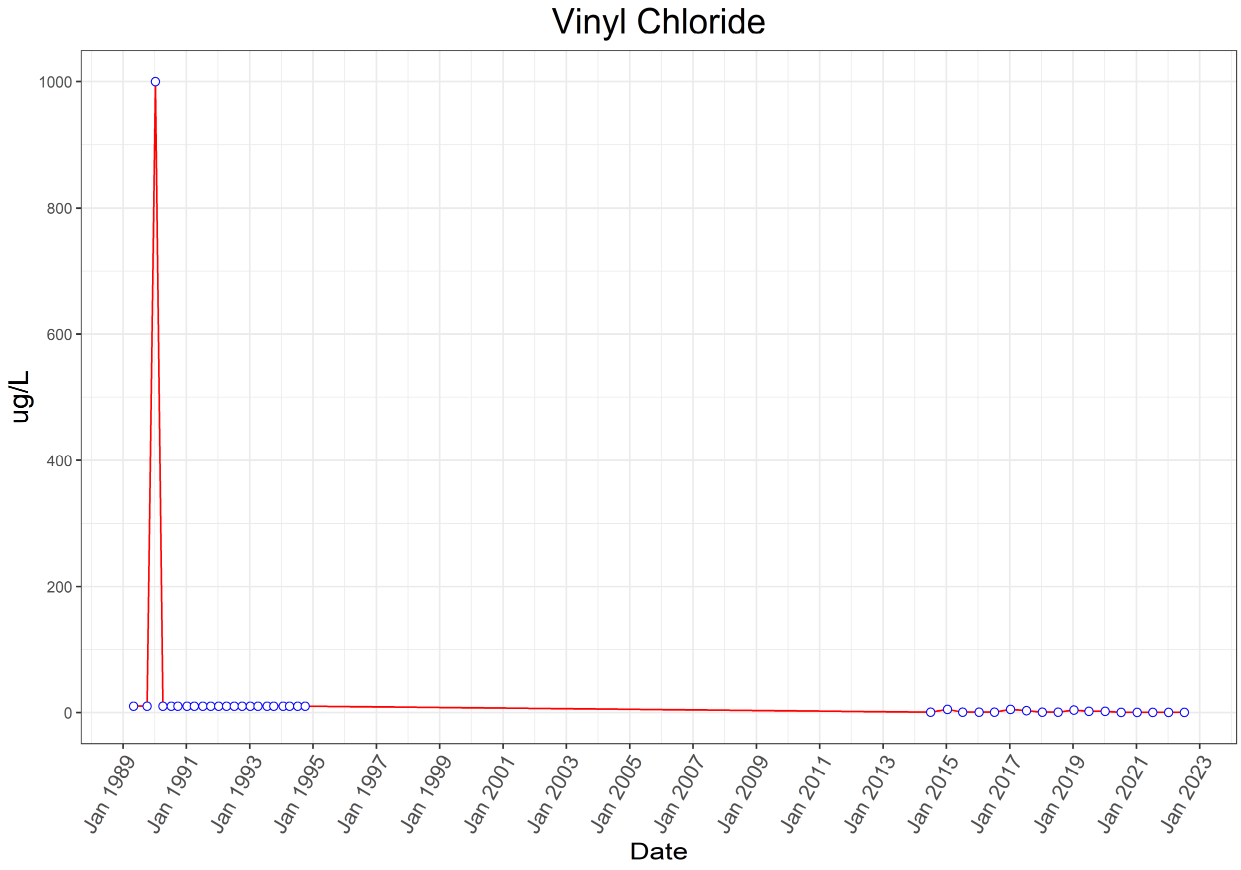

Methylene Chloride
ug/L
350
300
250
200
150
100
50
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

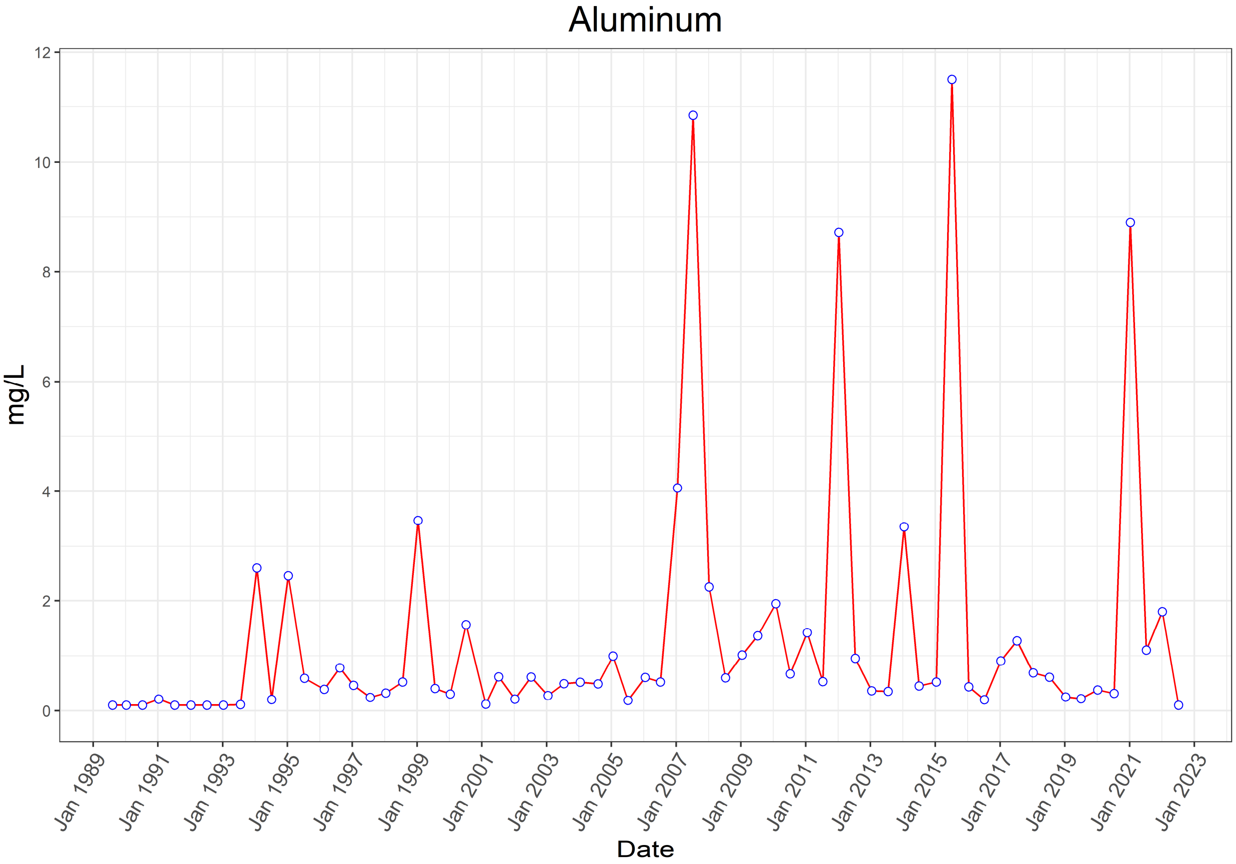

Total Organic Carbon
mg/L
80
70
60
50
40
30
20
10
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date


Total Organic Halogen
ug/L
0
250
500
750
1000
1250
1500
1750
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

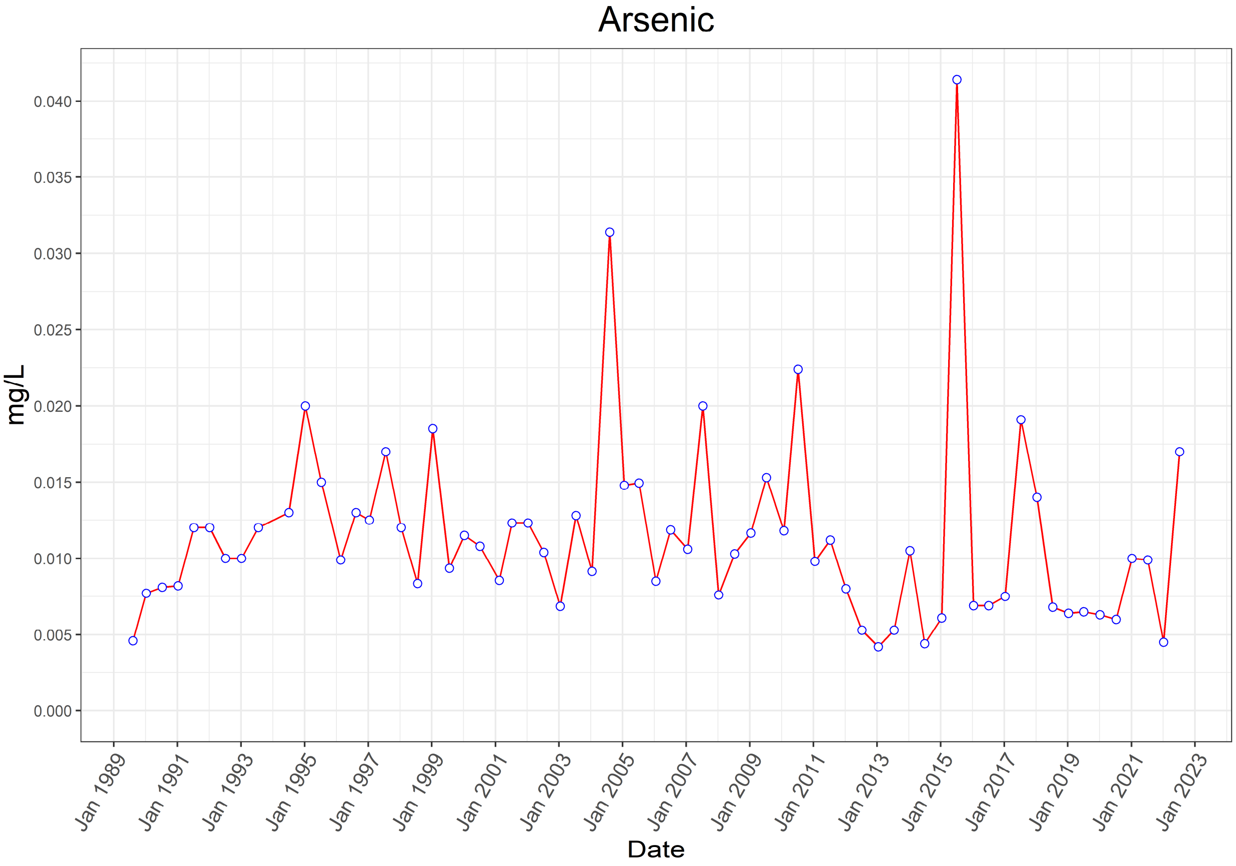

Total Phenols
mg/L
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date


Trichloroethene
ug/L
175
150
125
100
75
50
25
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

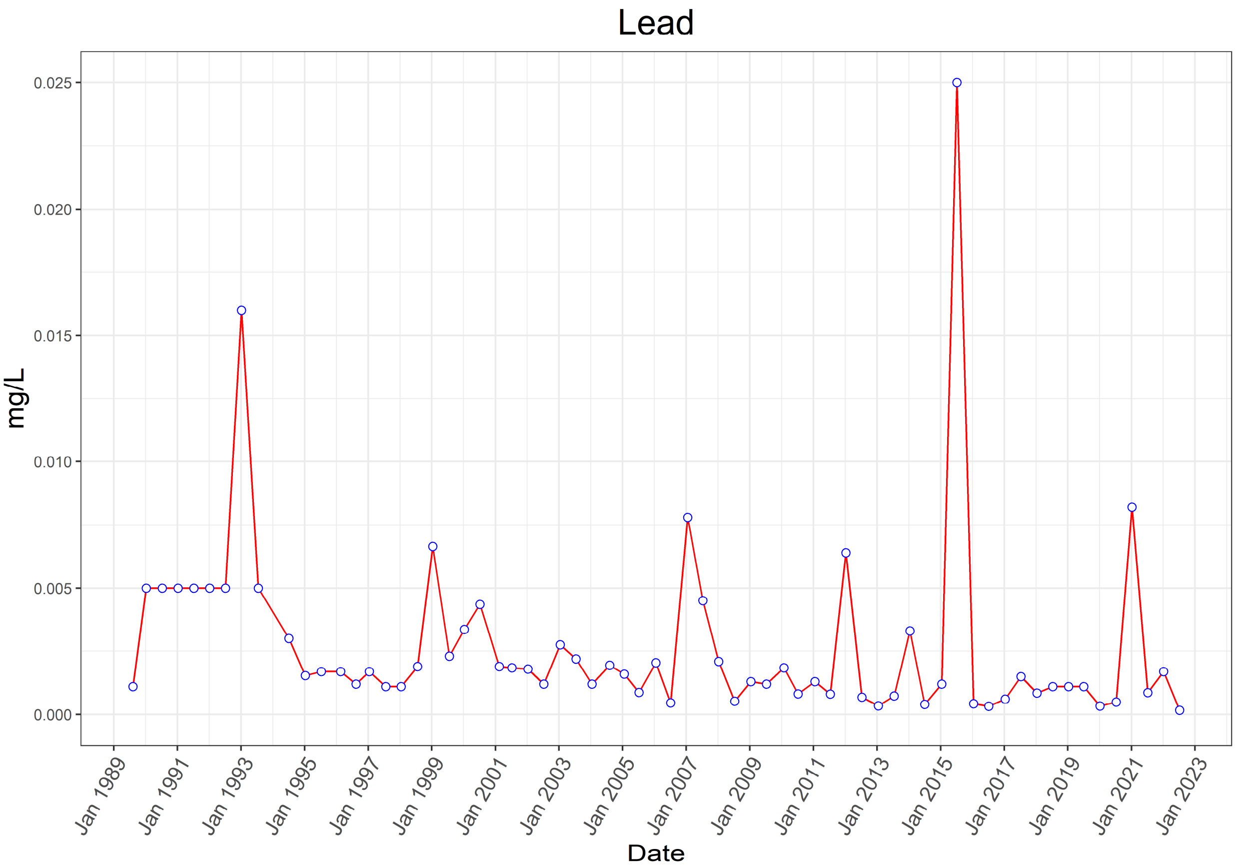

Vinyl Chloride
ug/L
1000
800
600
400
200
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date



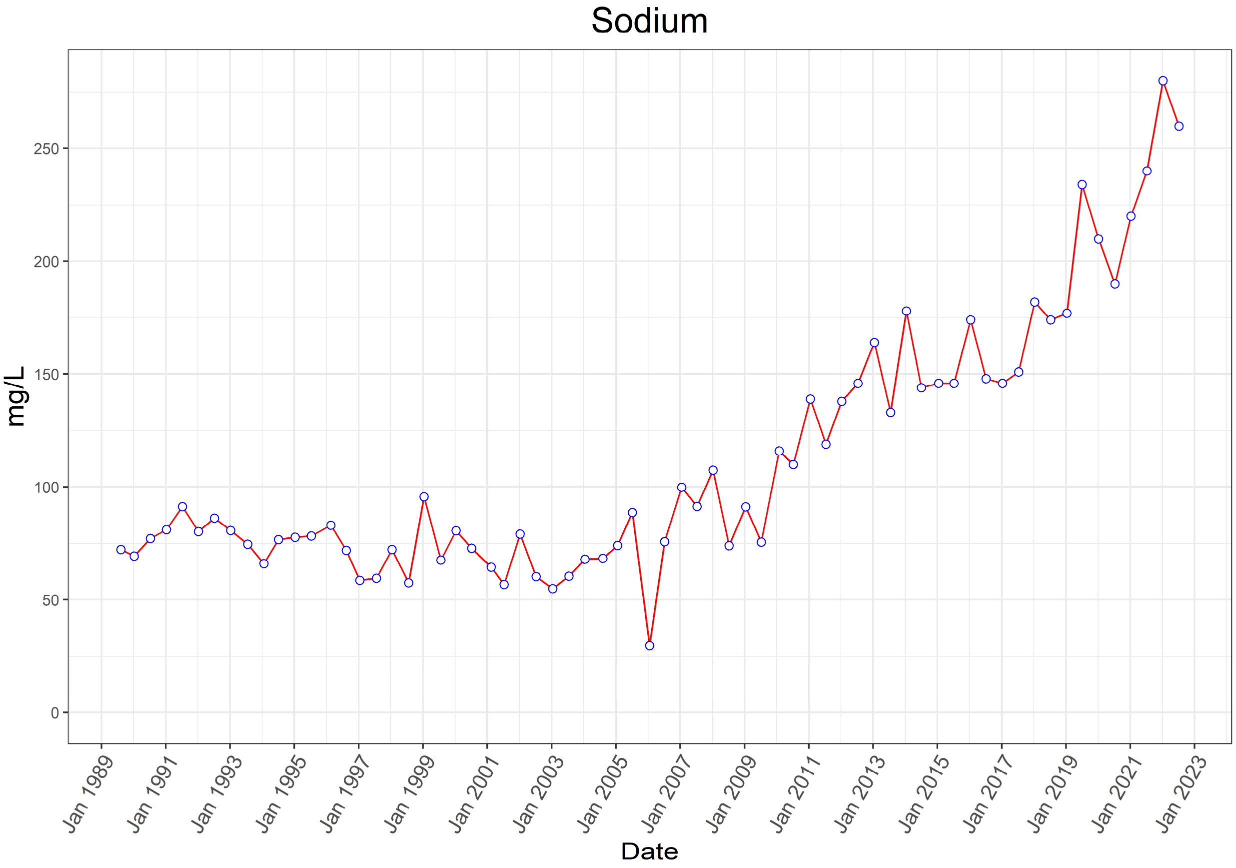
Aluminum



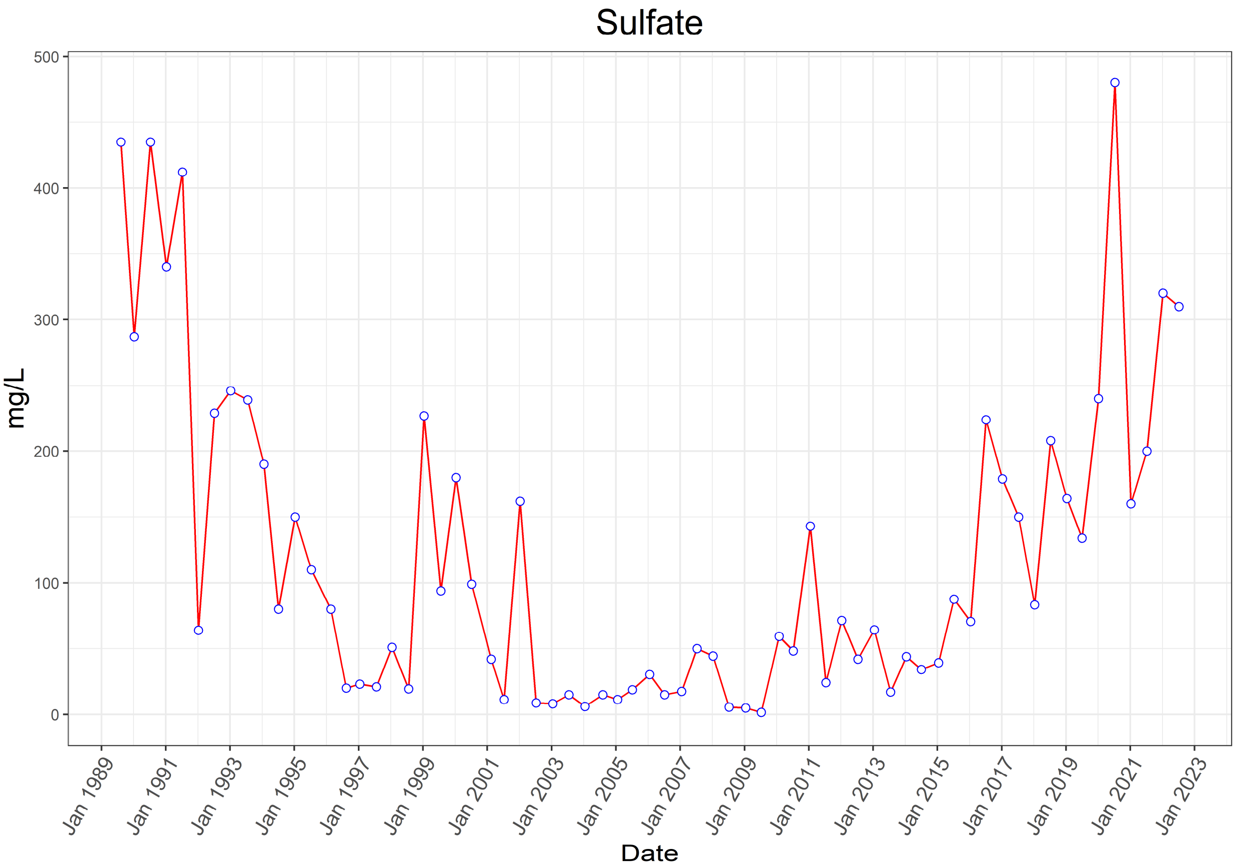
Arsenic

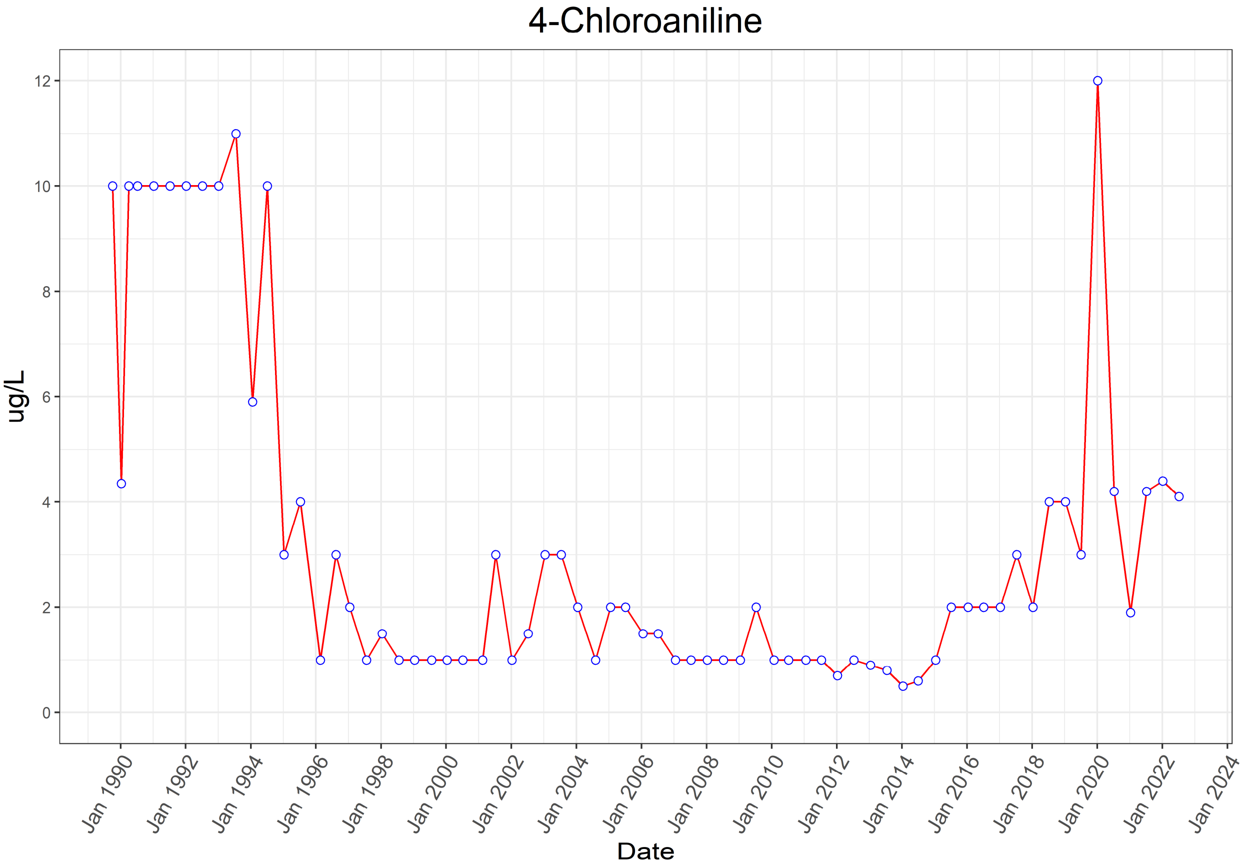


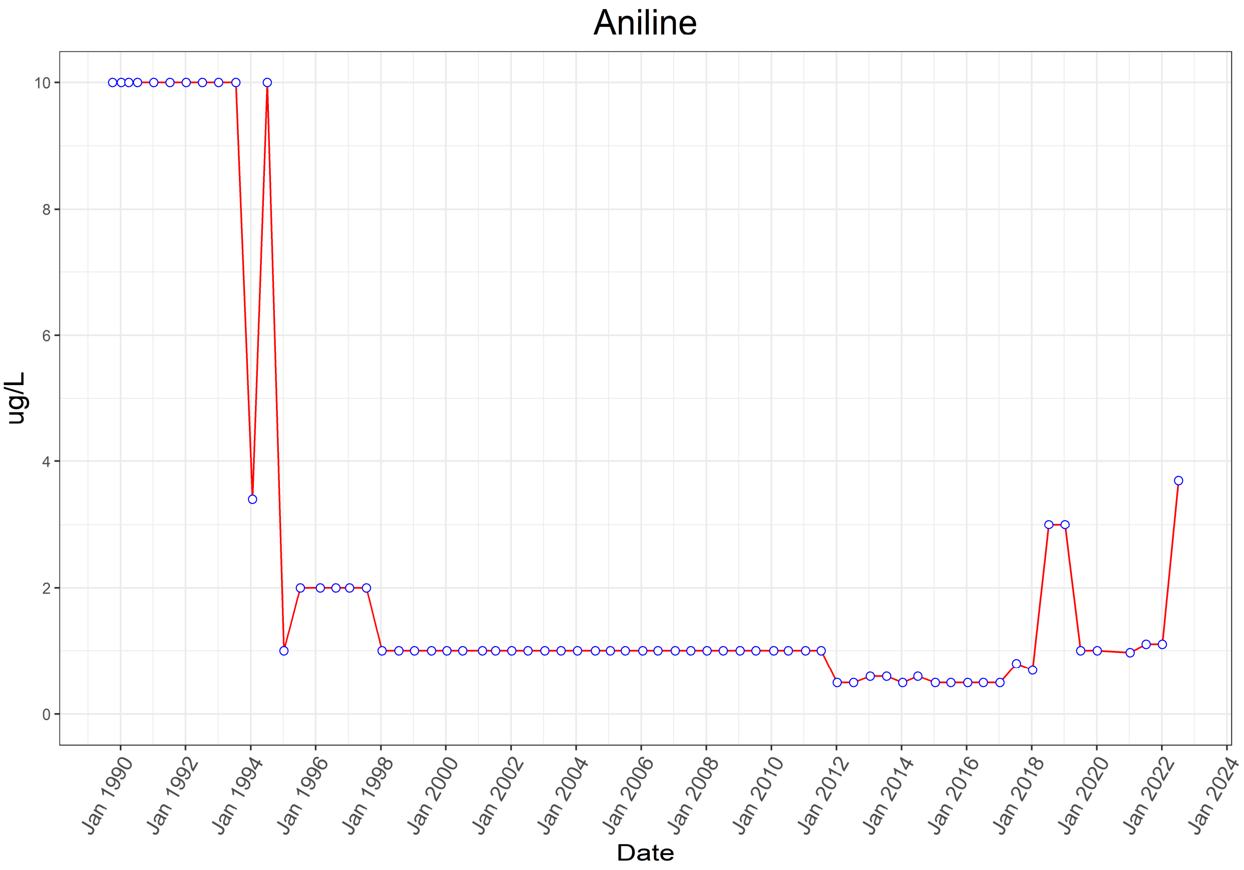
Lead
mg/L
0.025
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

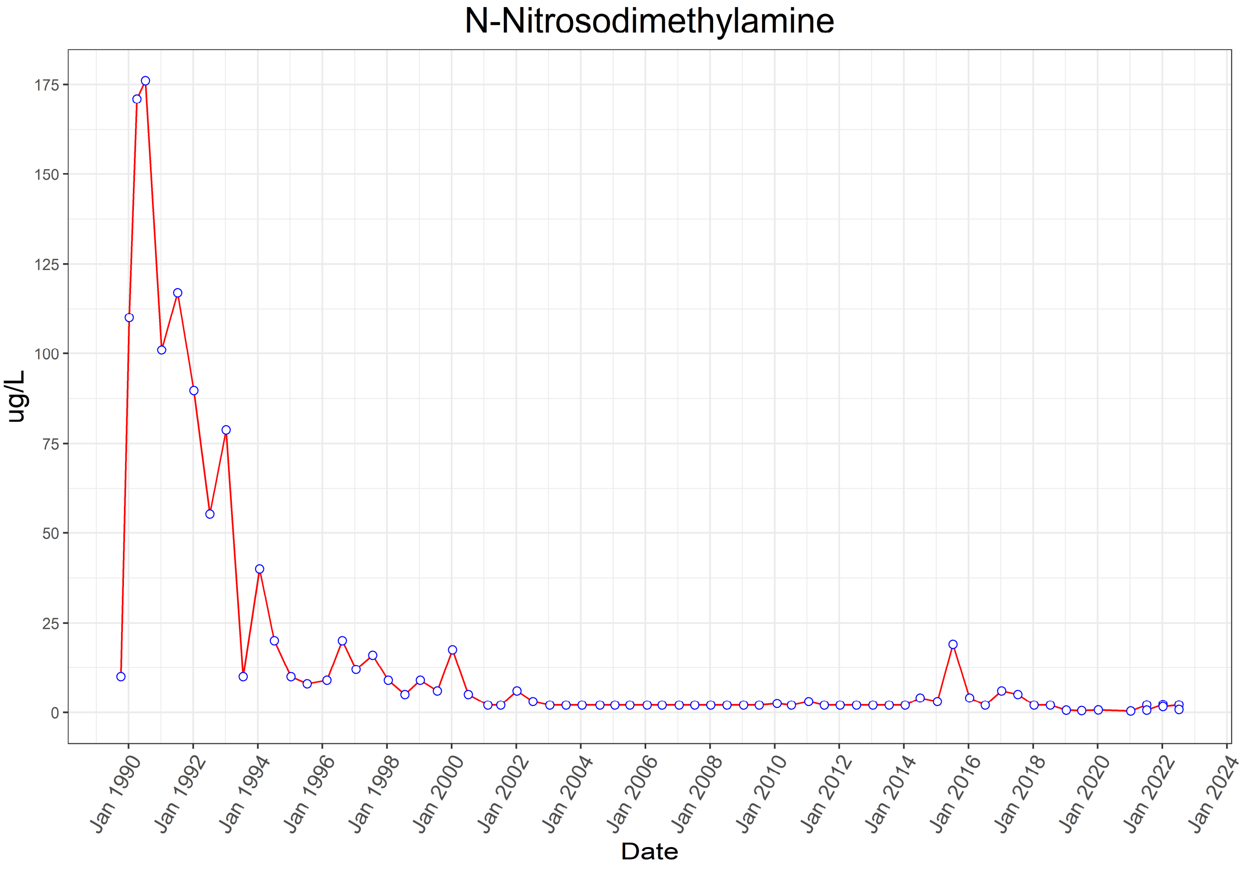


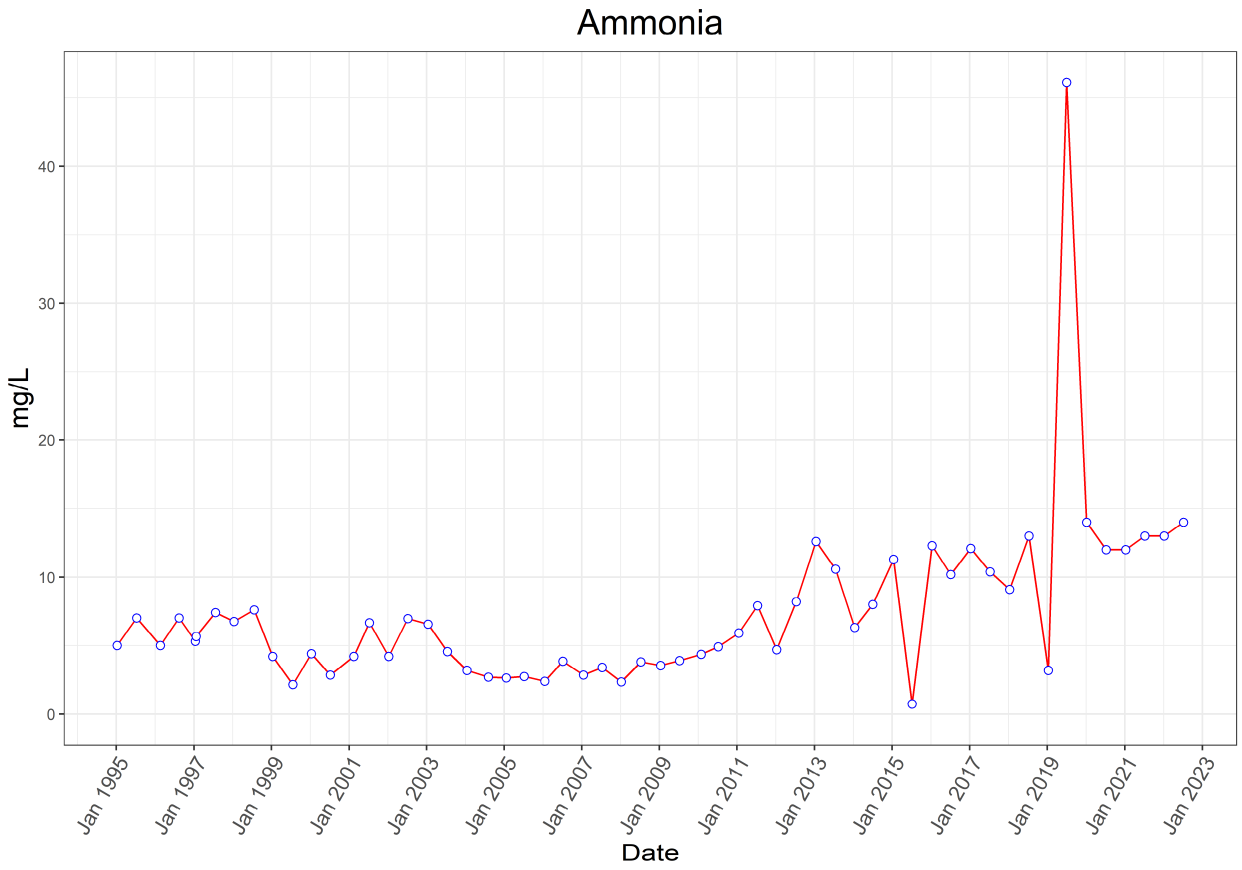
Sodium
mg/L
250
200
150
100
50
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

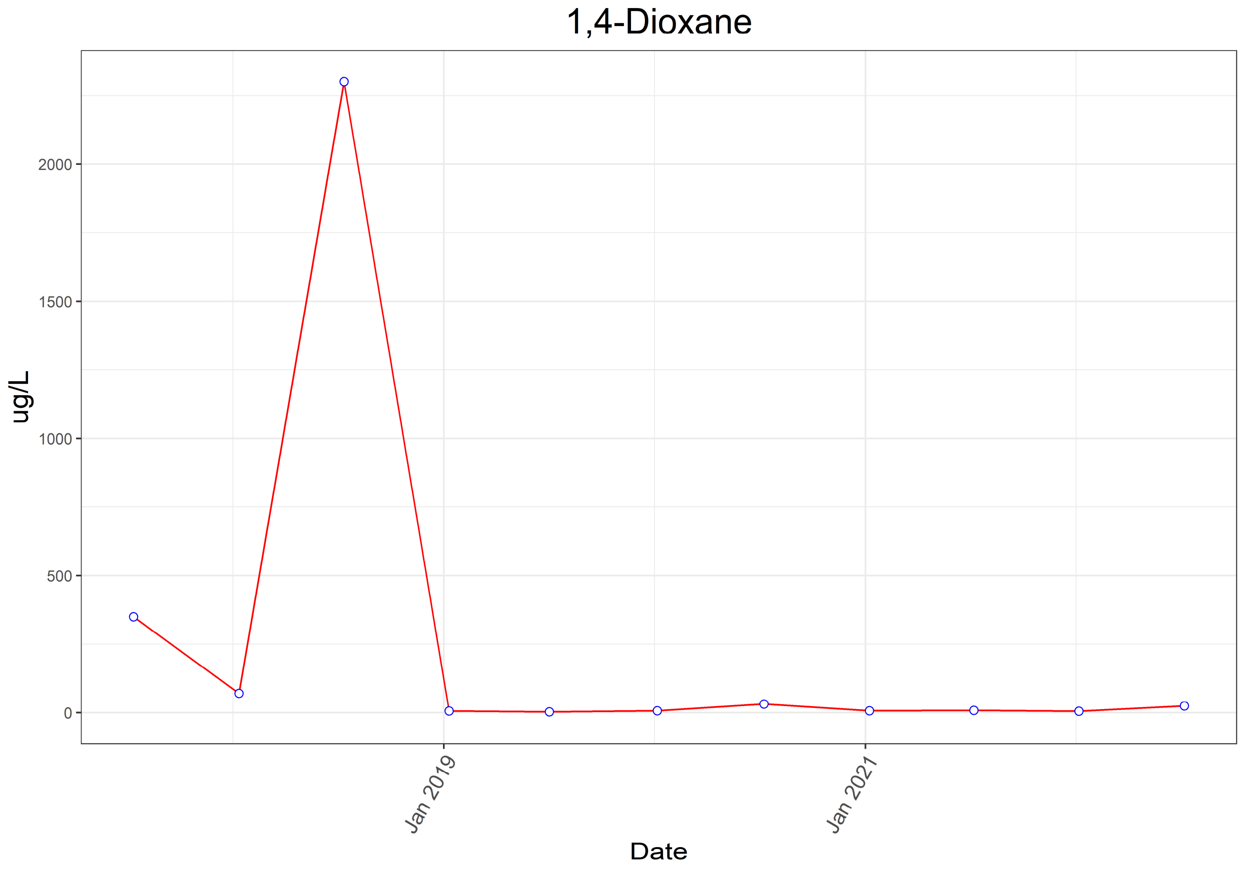

Sulfate
mg/L
500
400
300
200
100
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date


4-Chloroaniline
ug/L
12
10
8
6
4
2
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Jan 2024
Date


Aniline
ug/L
10
8
6
4
2
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Jan 2024
Date

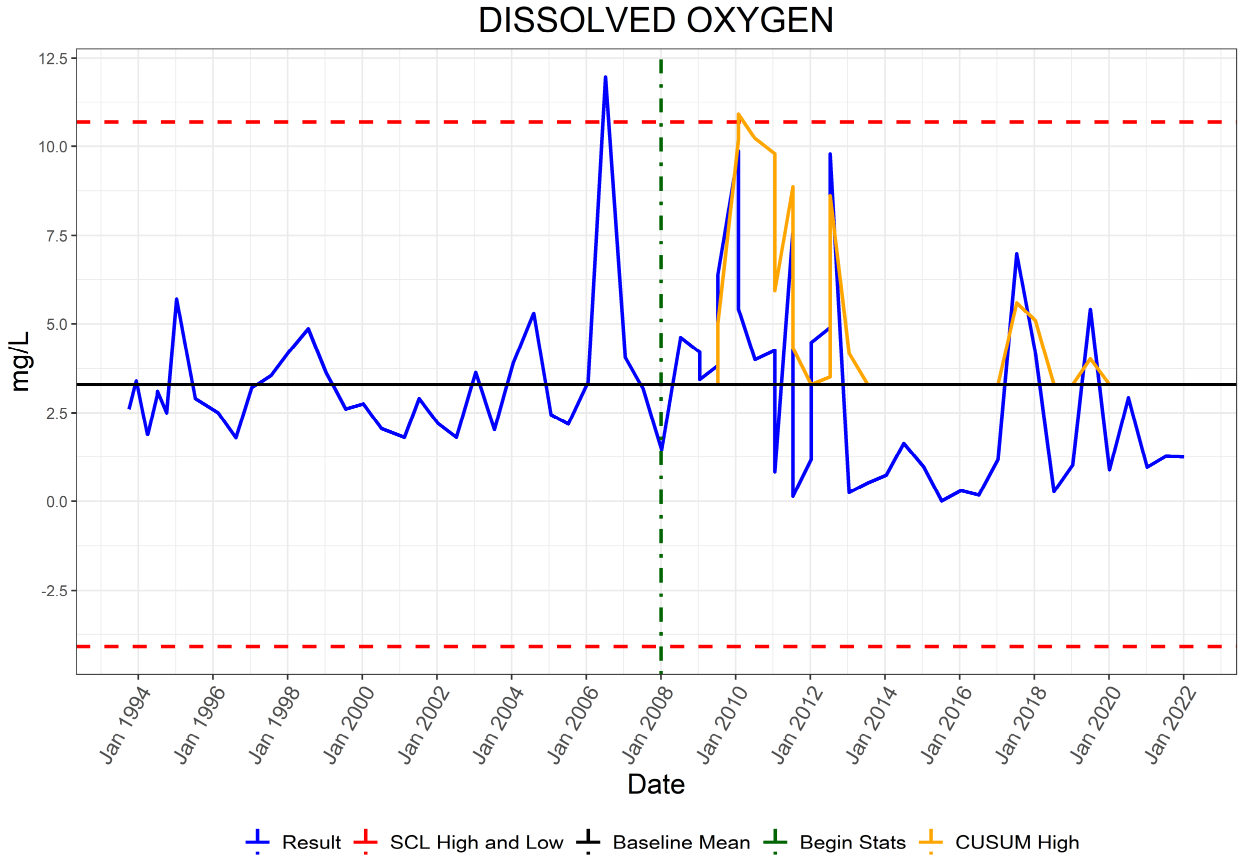

N-Nitrosodimethylamine
ug/L
175
150
125
100
75
50
25
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Jan 2024
Date

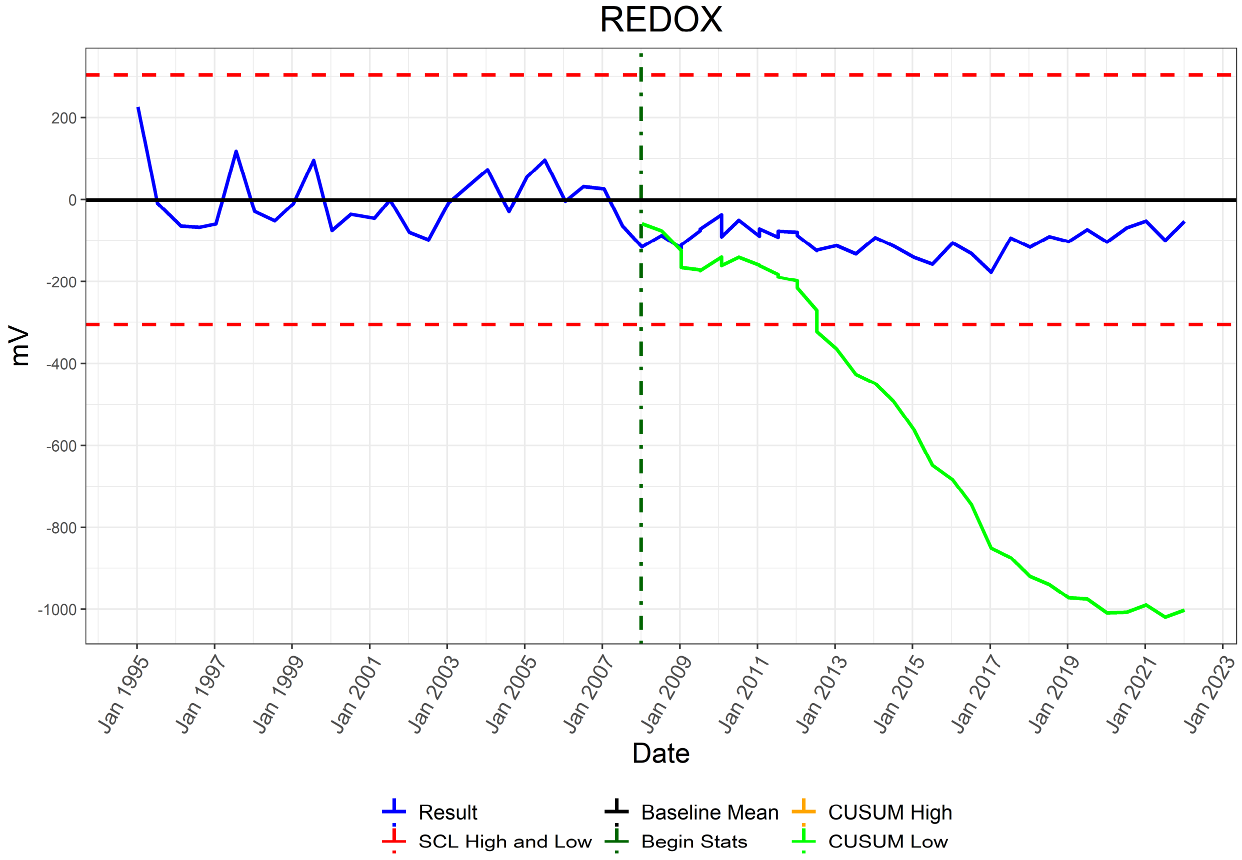

Ammonia
mg/L
0
10
20
30
40
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

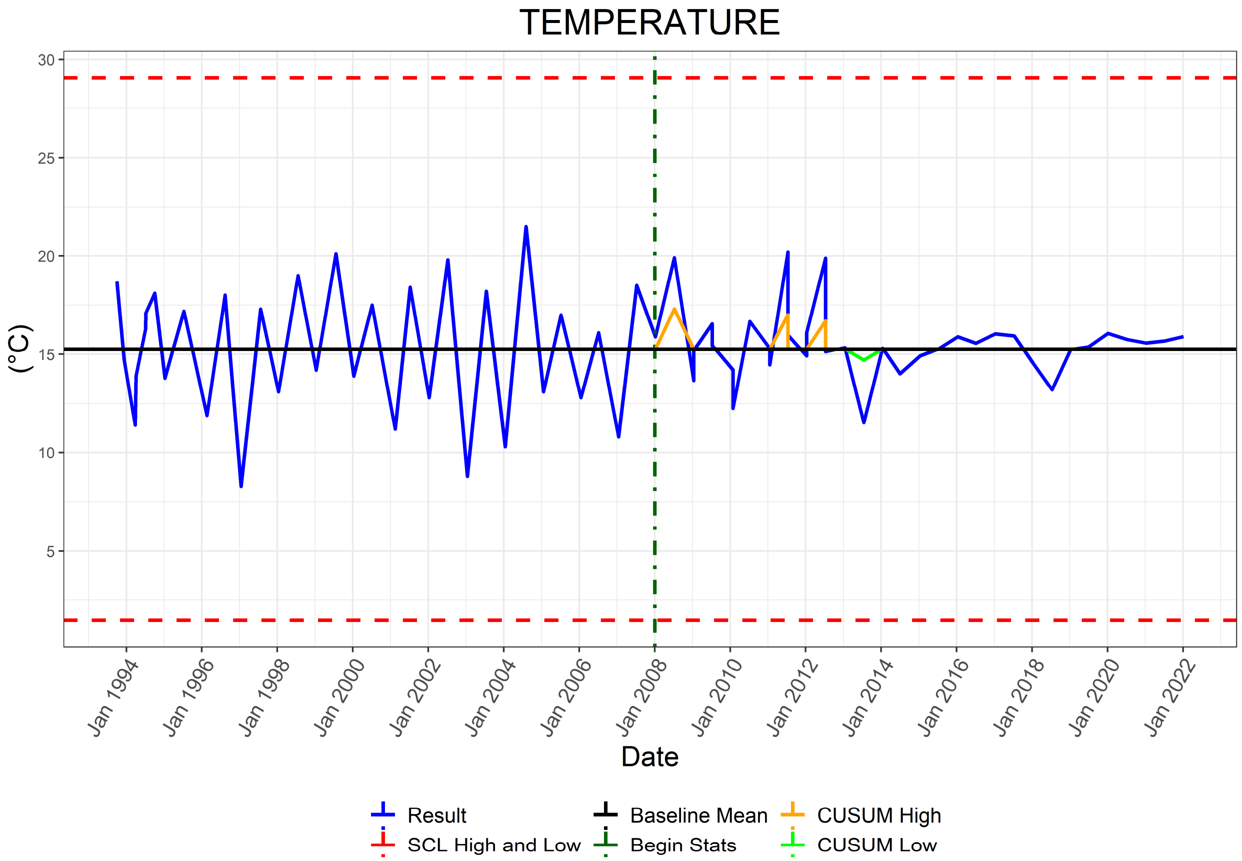

1,4-Dioxane
ug/L
0
500
1000
1500
2000
Jan 2019
Jan 2021
Date

Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: P21-M01B

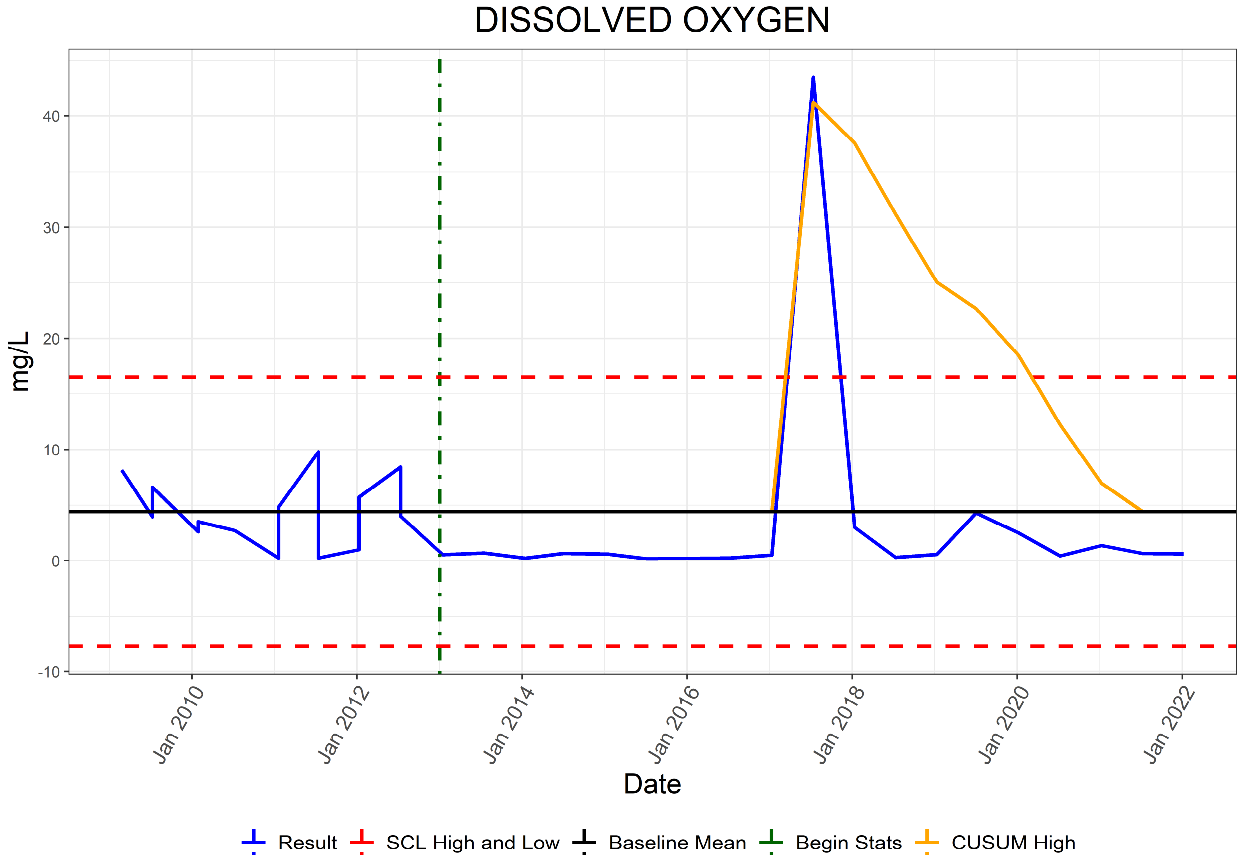


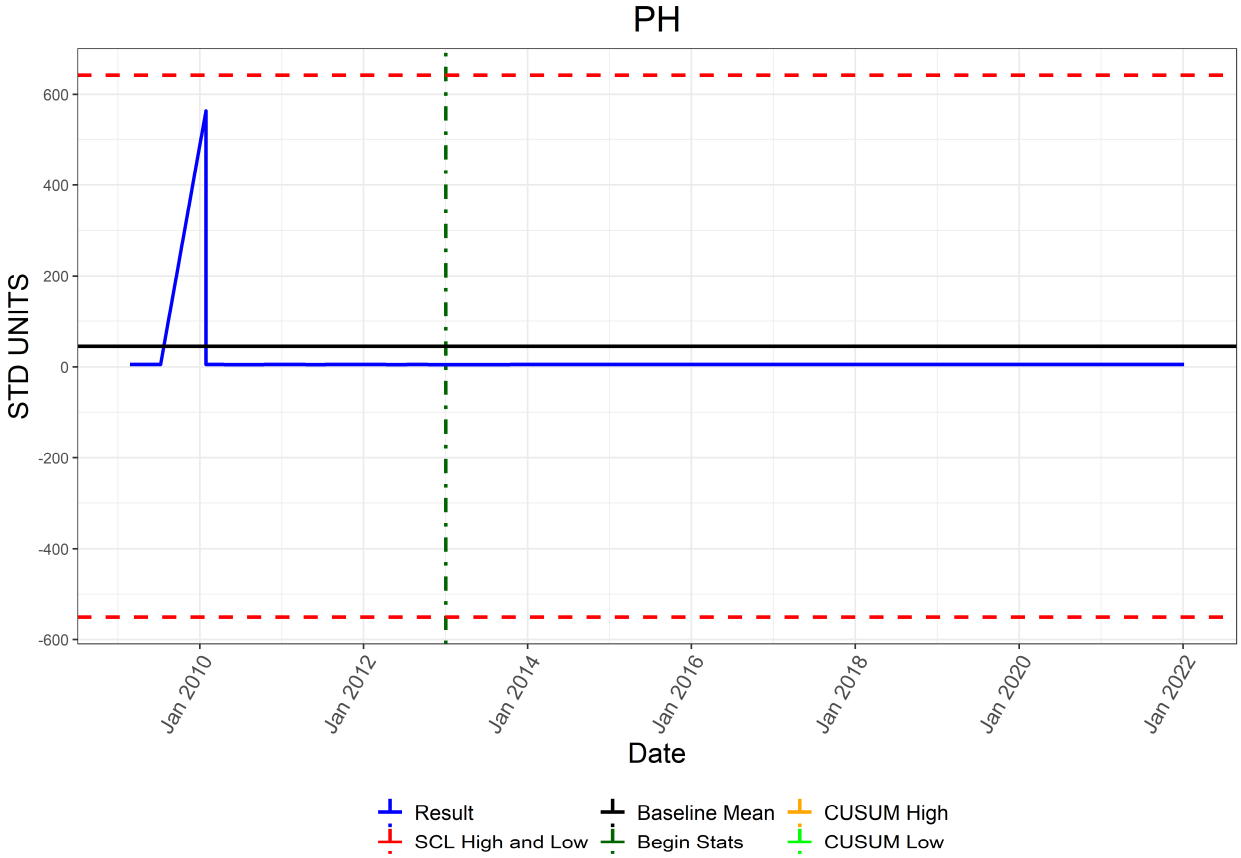


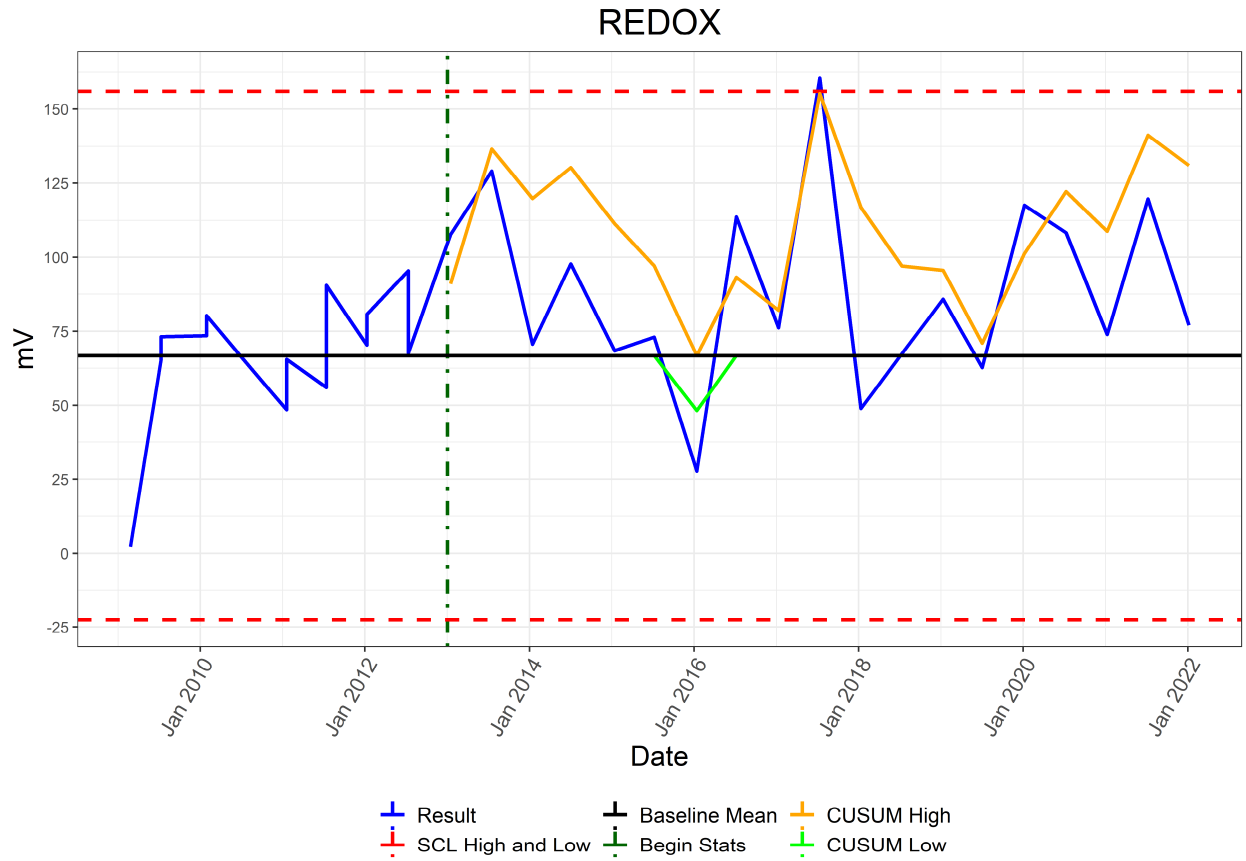

TEMPERATURE
(°C)
30
25
20
15
10
5
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

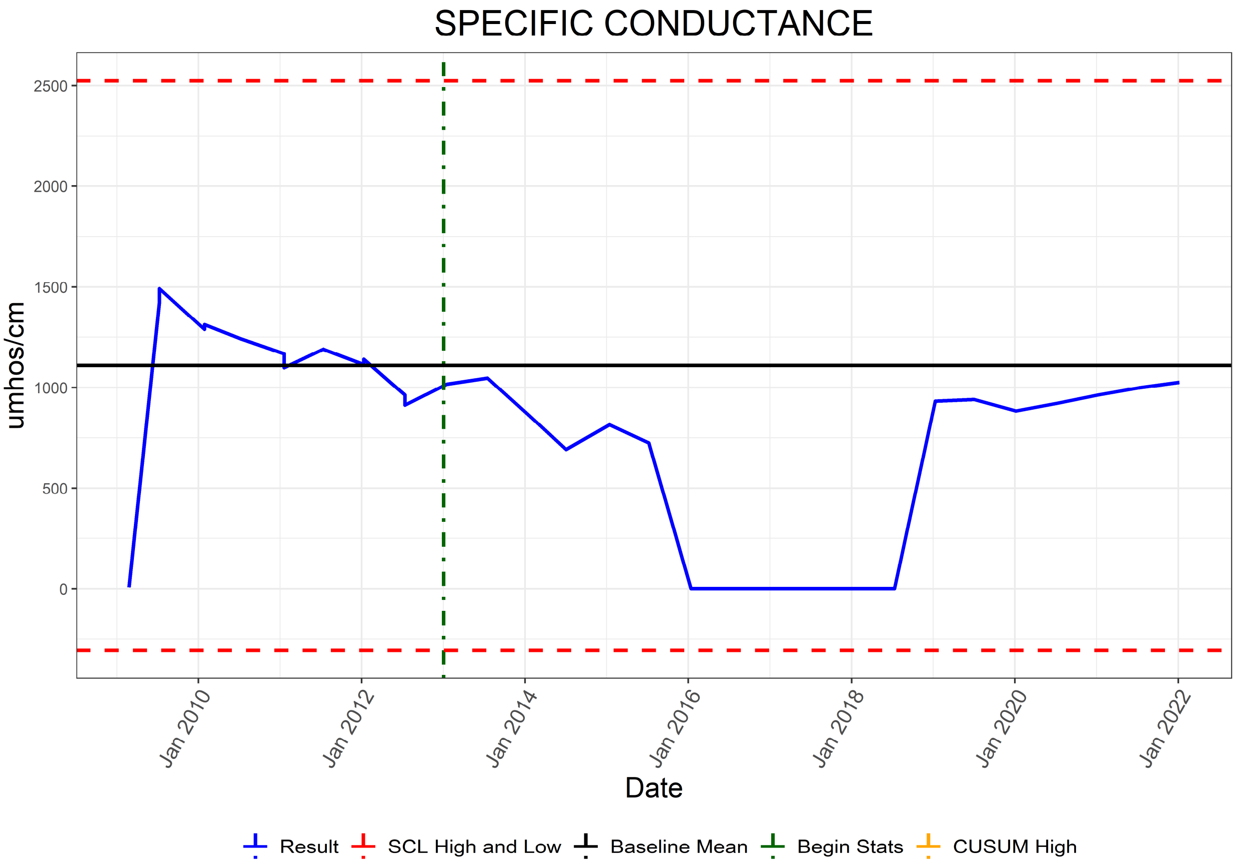
Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: P21-M04B

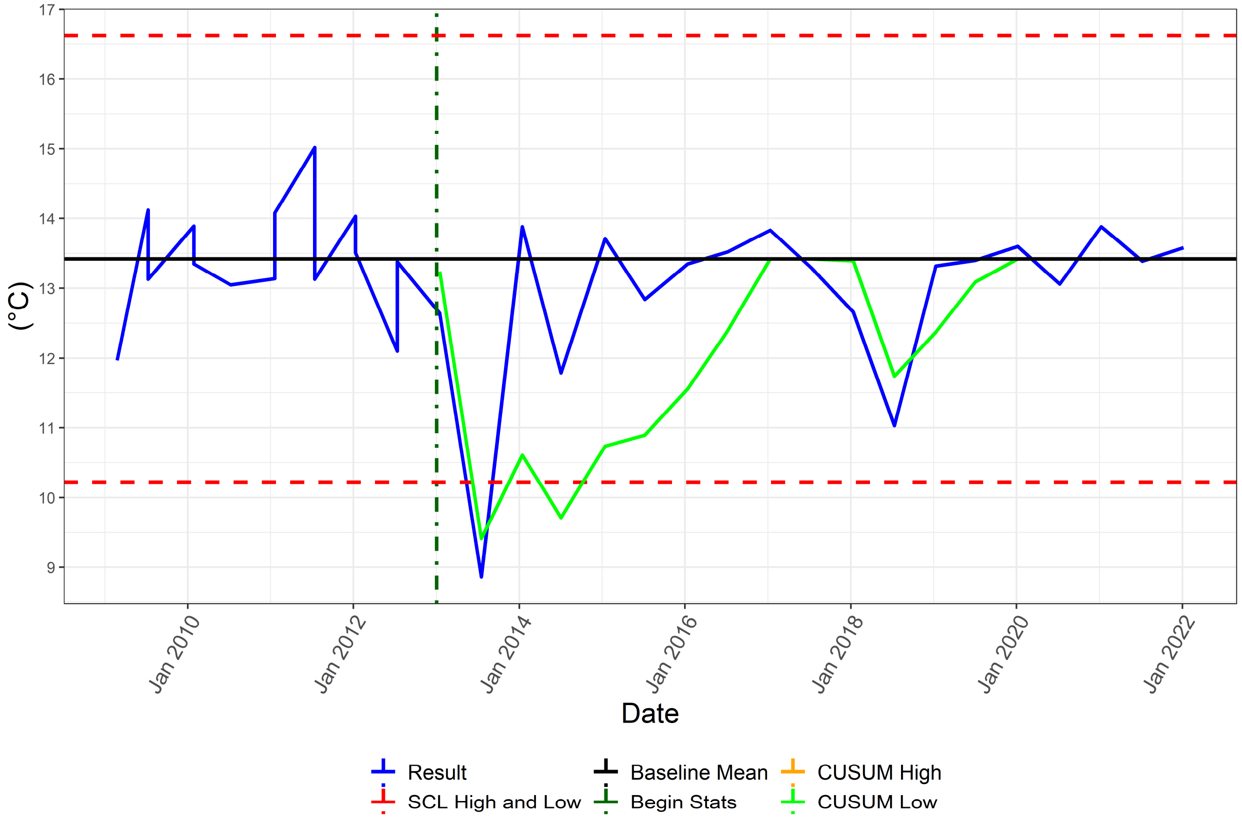





REDOX
mV
150
125
100
75
50
25
0
-25
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

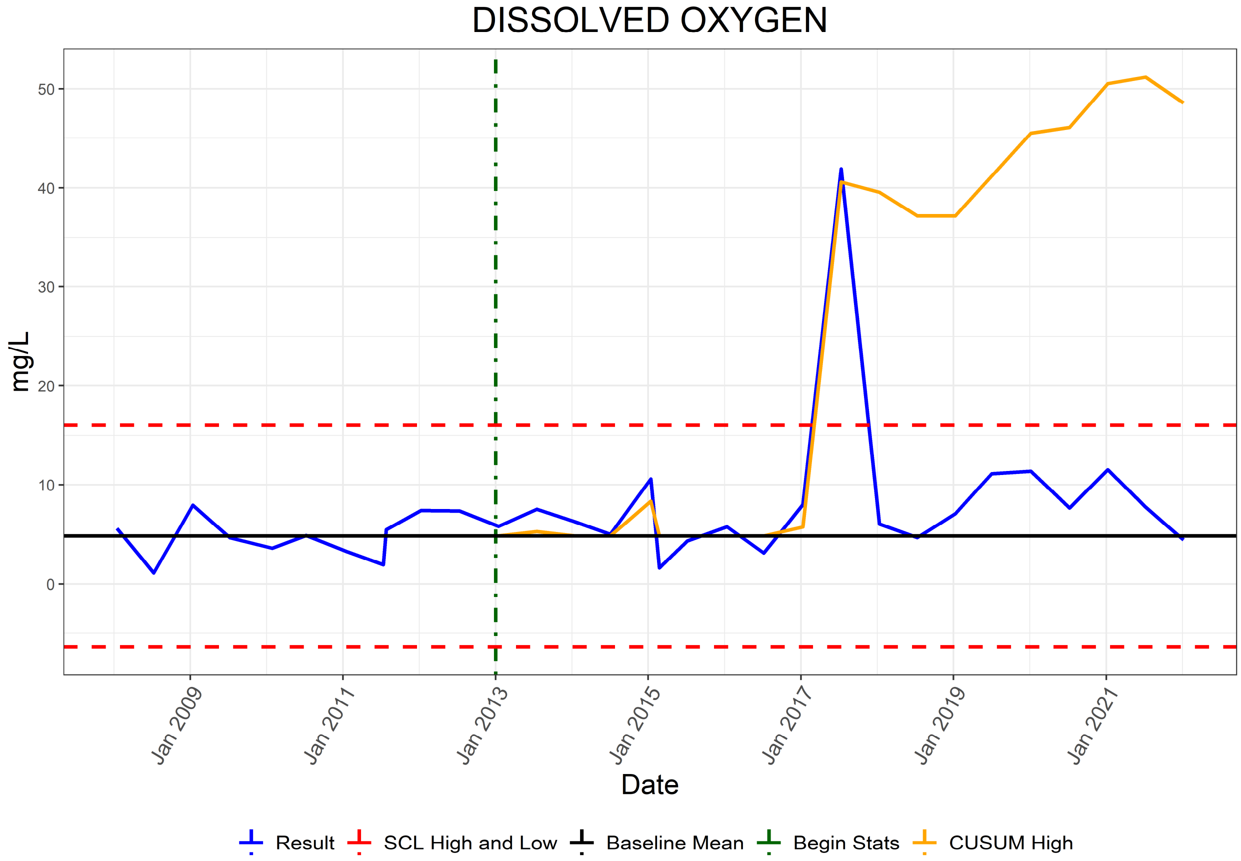

SPECIFIC CONDUCTANCE
umhos/cm
2500
2000
1500
1000
500
0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

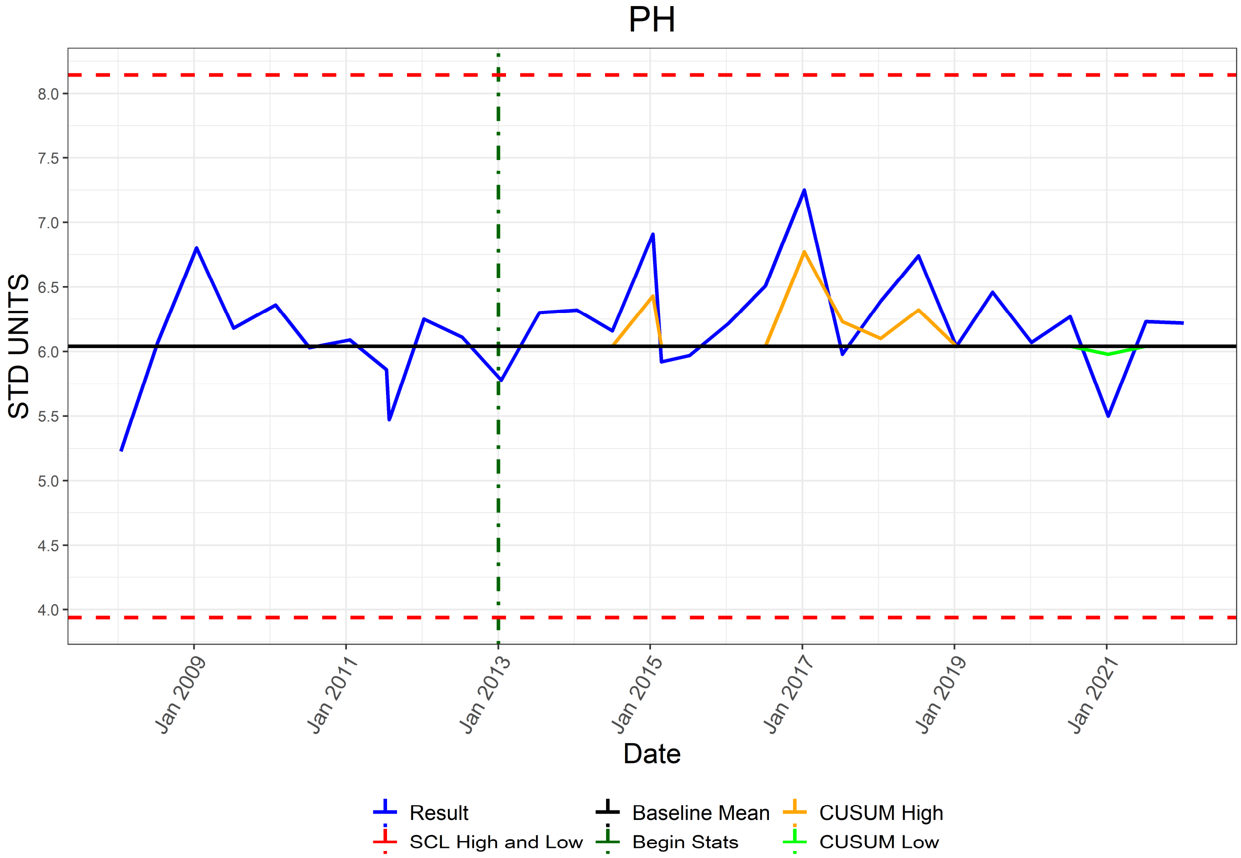
TEMPERATURE

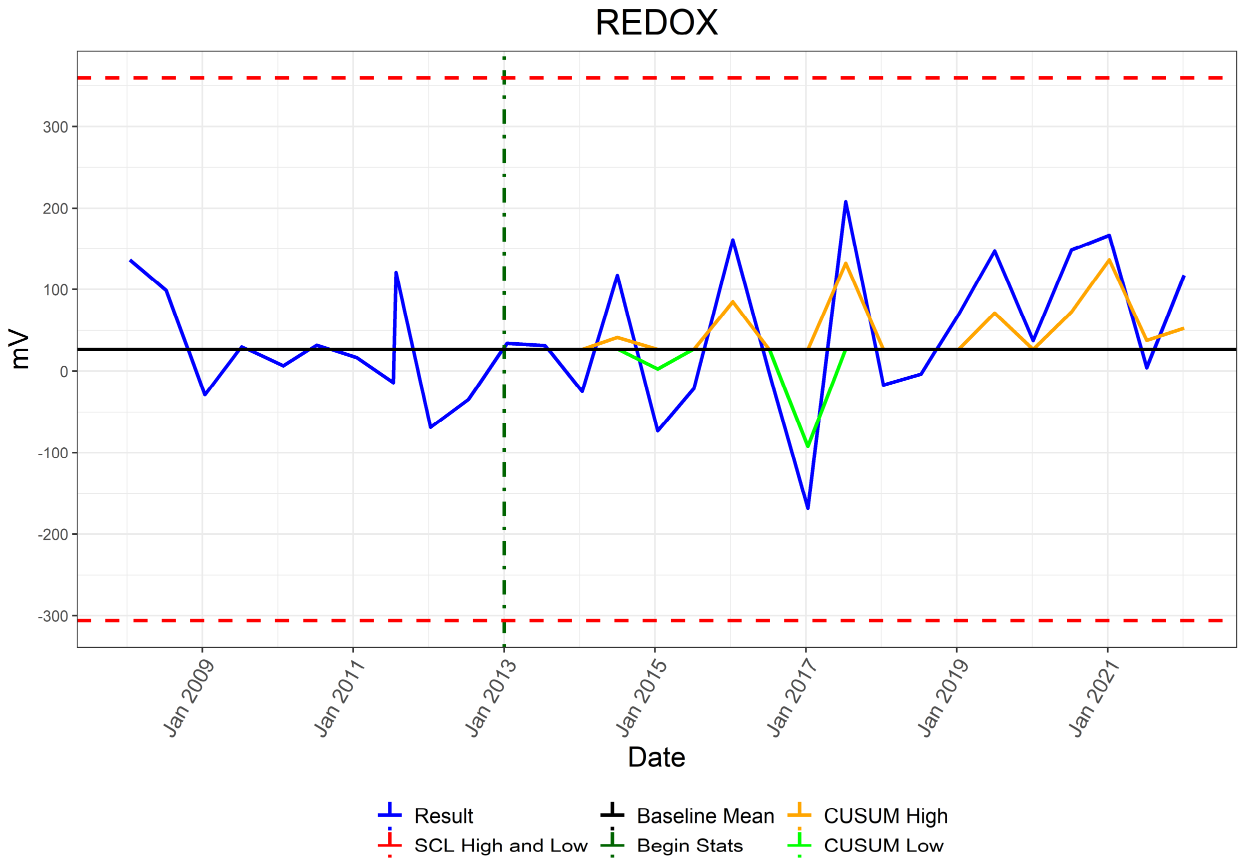


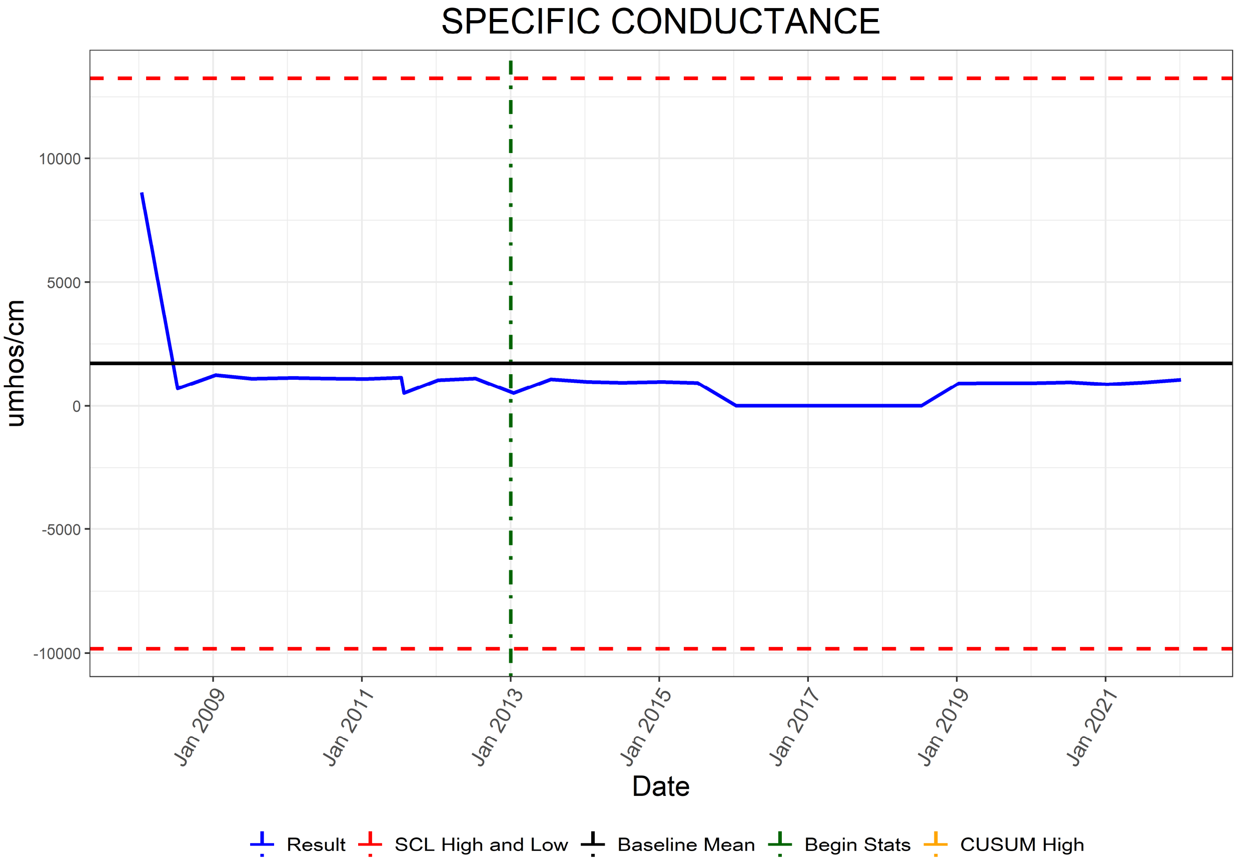
Secure C Landfill Corrective Action Monitoring Program (Program 6)

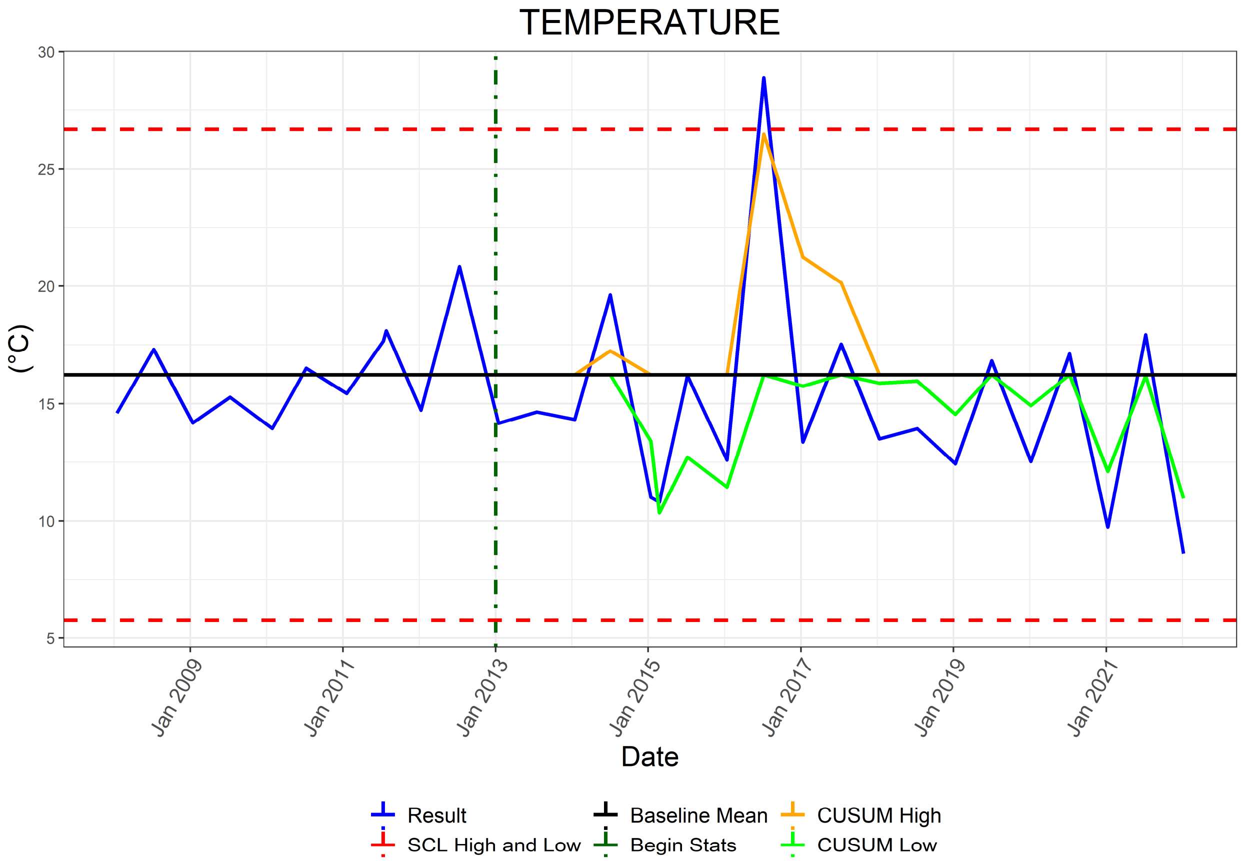
Well Name: P21-R01B






REDOX
mV
300
200
100
0
-100
-200
-300
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

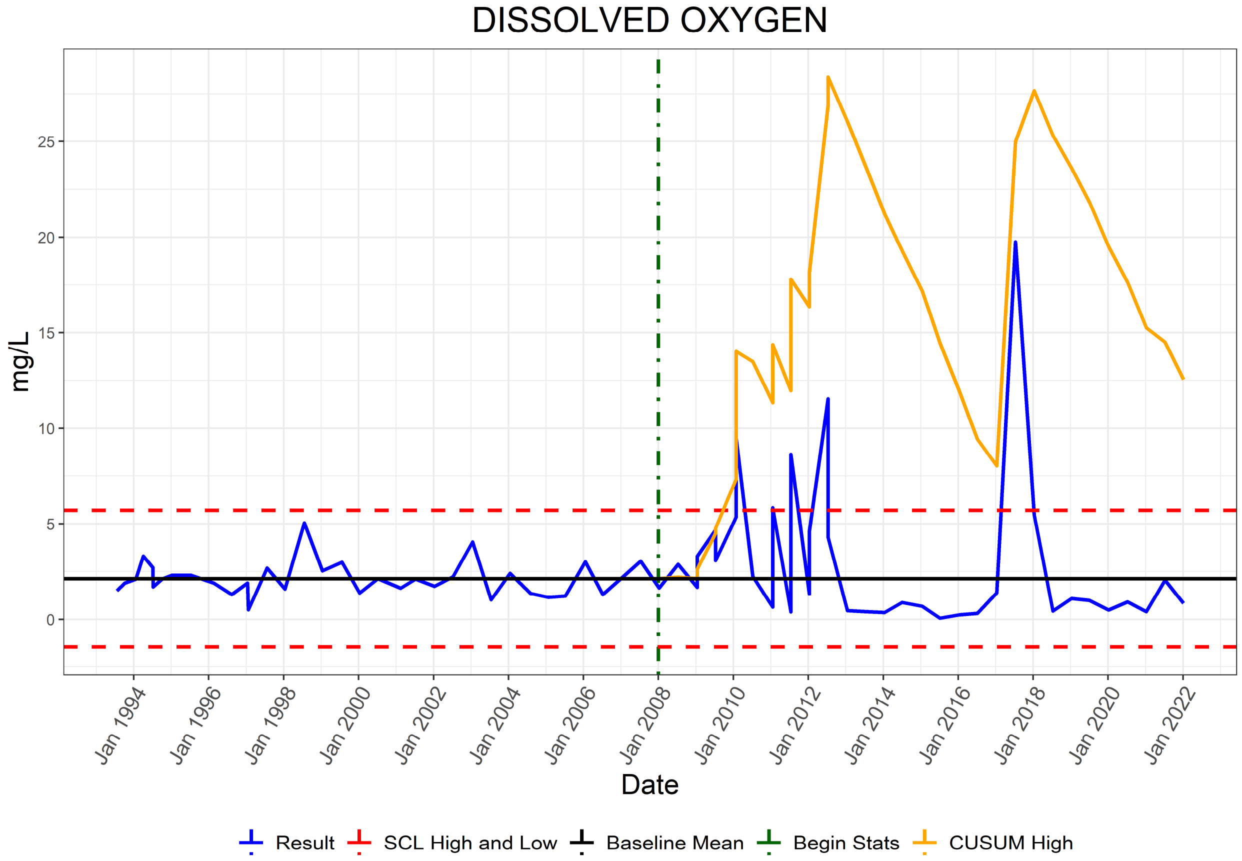

SPECIFIC CONDUCTANCE
umhos/cm
10000
5000
0
-5000
-10000
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

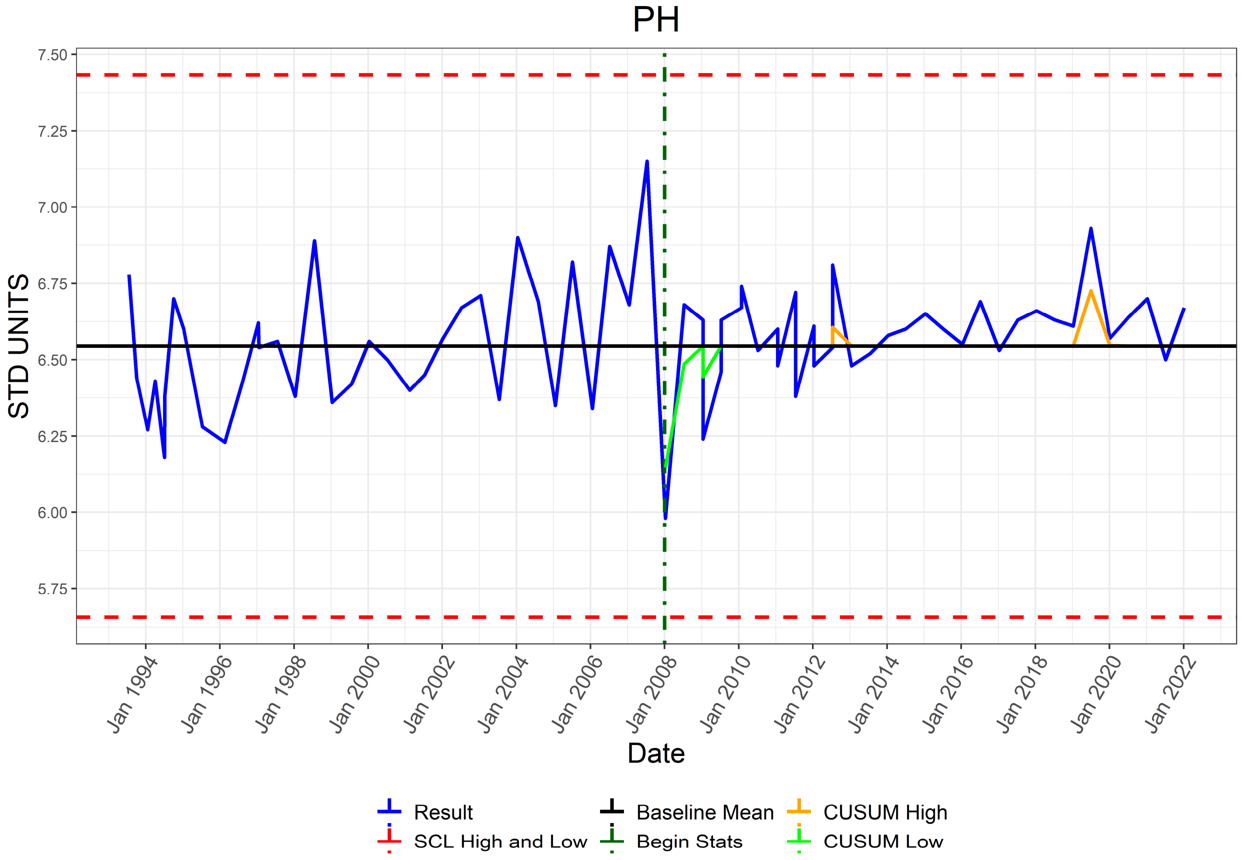


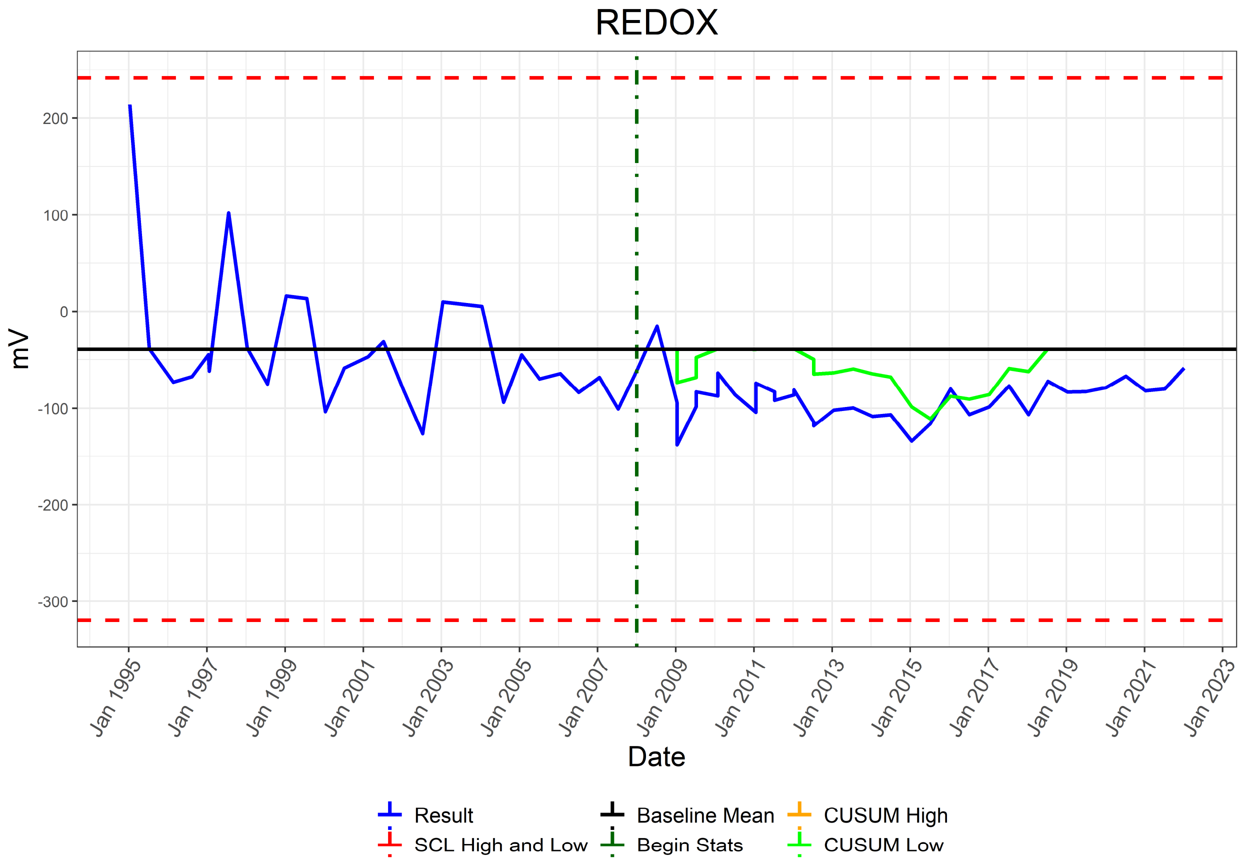
TEMPERATURE
(°C)
30
25
20
15
10
5
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

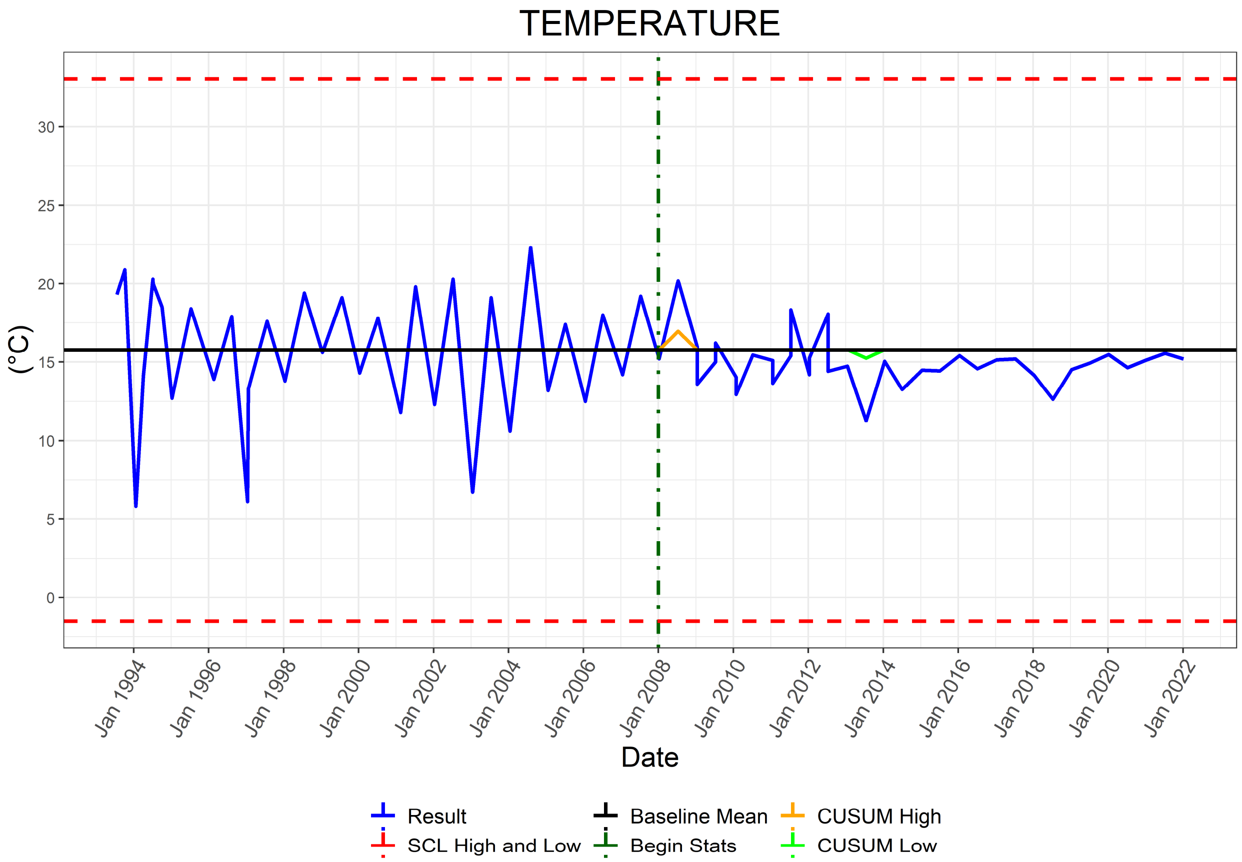
Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: Q21-M01B



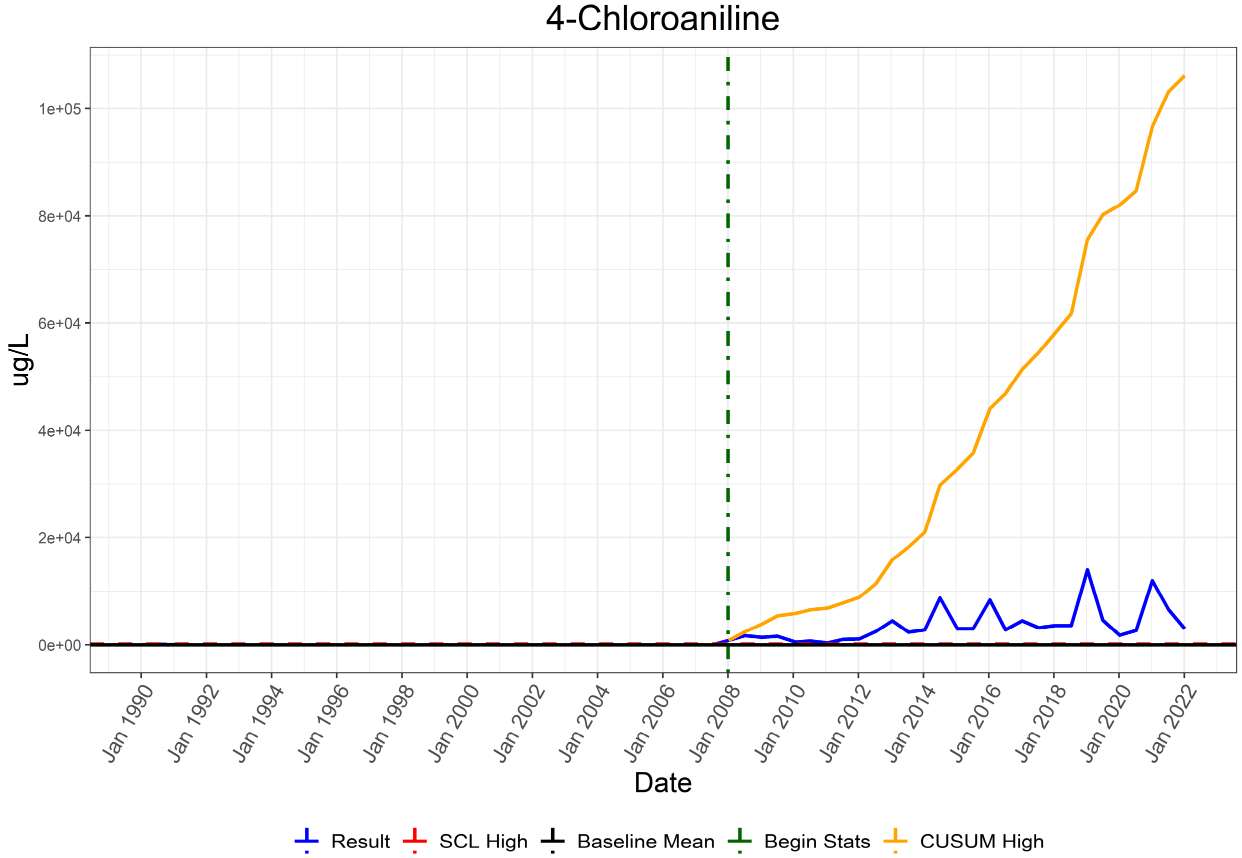


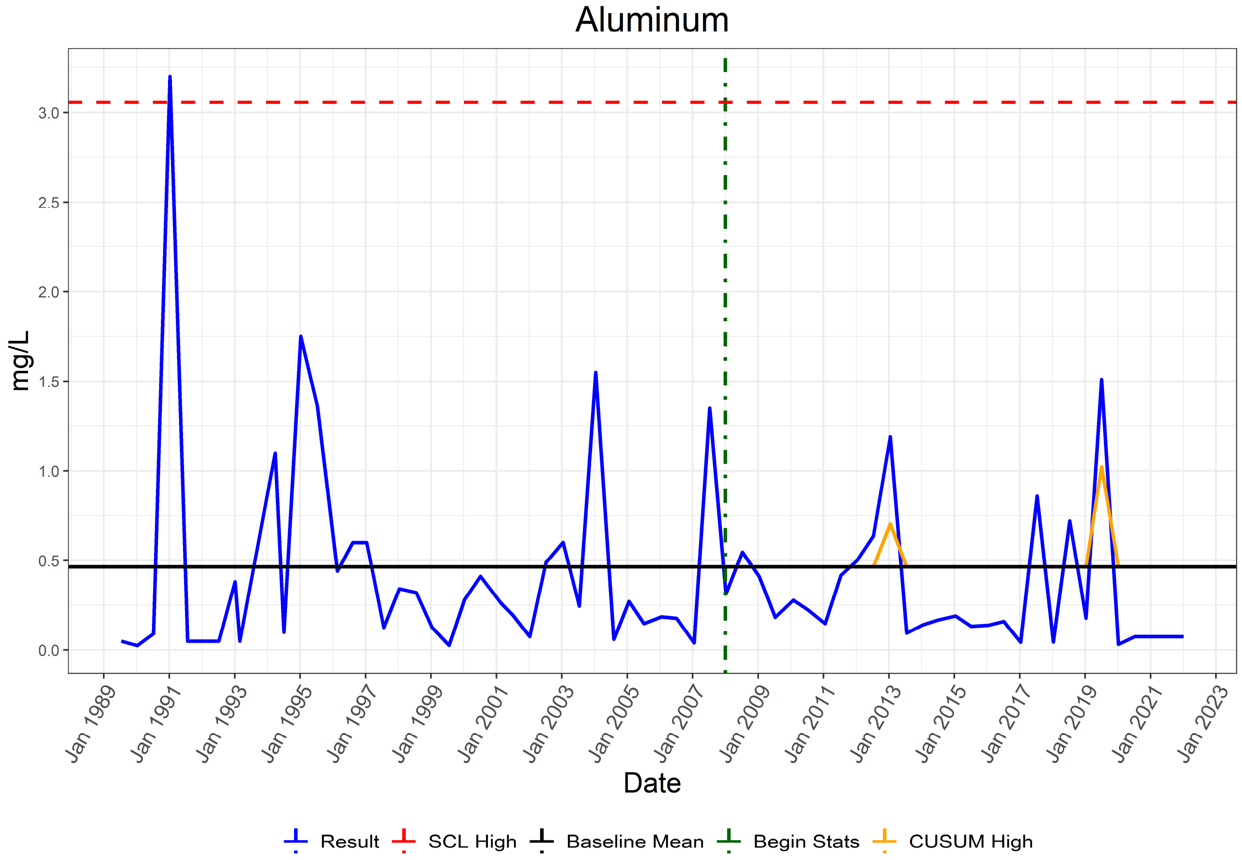

REDOX
mV
200
100
0
-100
-200
-300
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

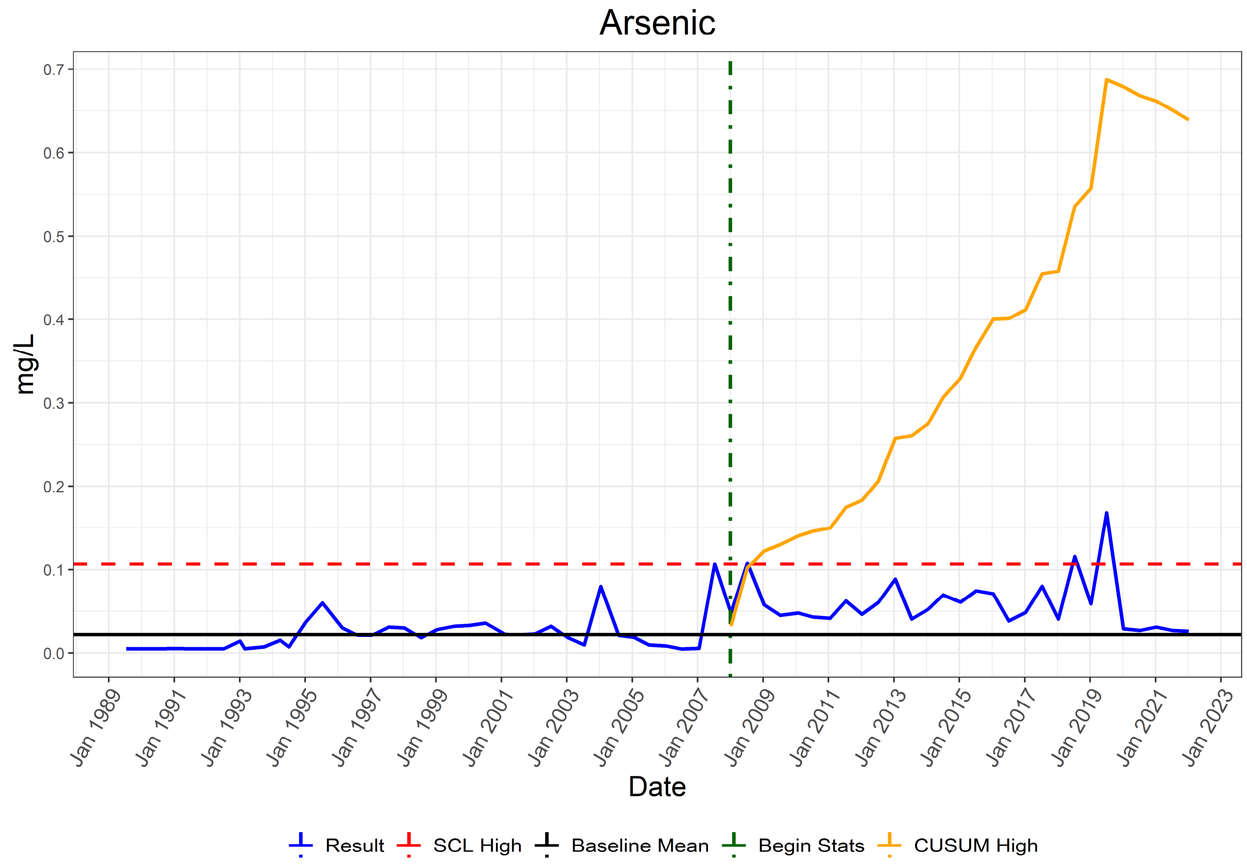

TEMPERATURE
(°C)
30
25
20
15
10
5
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

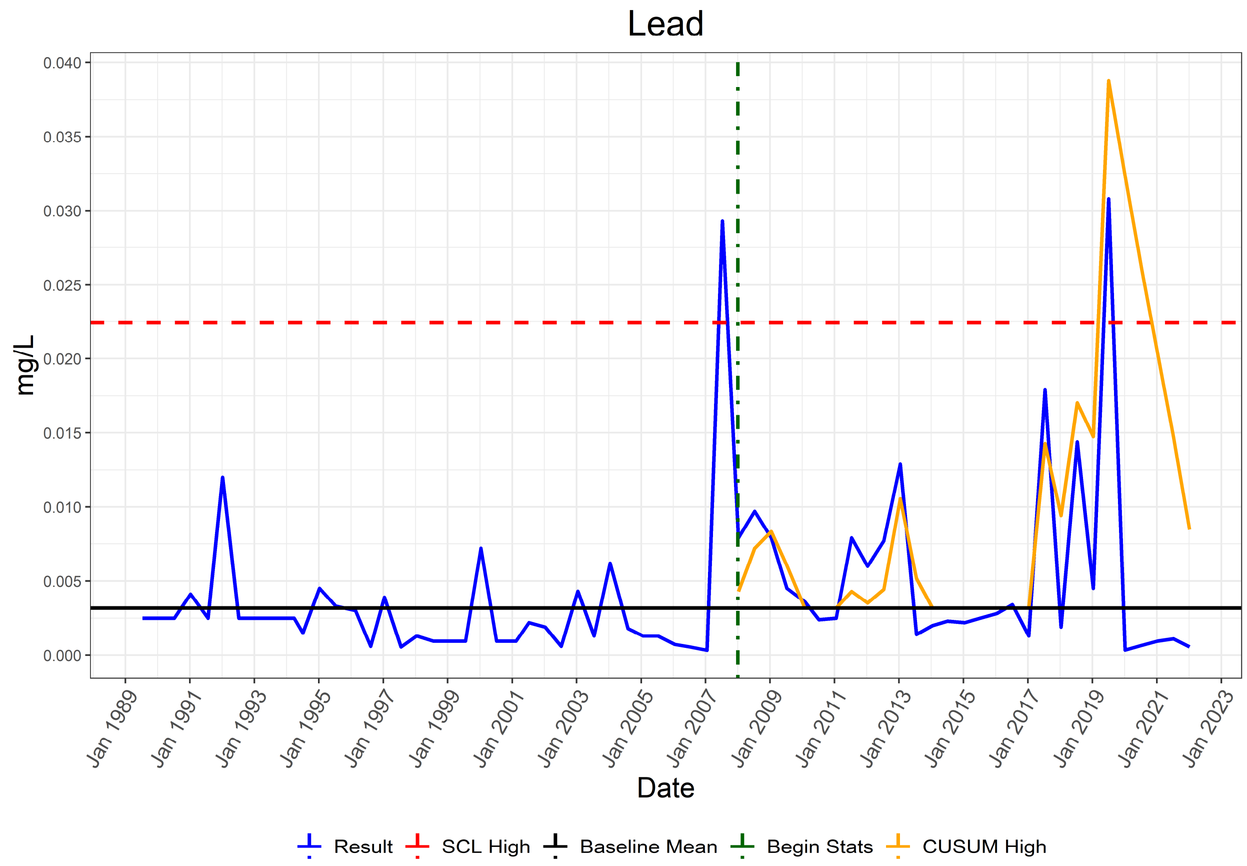
Secure C Landfill Corrective Action Monitoring Program (Program 6)

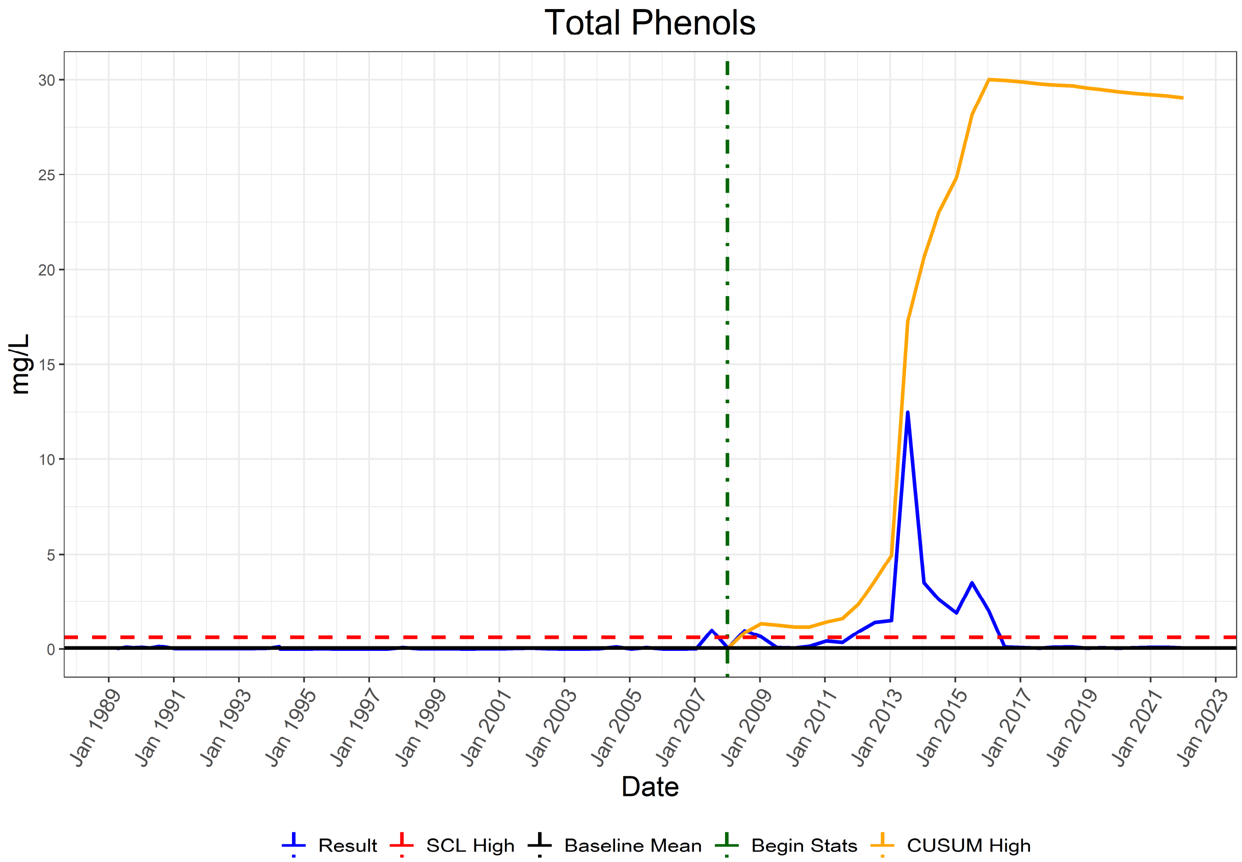
Well Name: P21-M01B





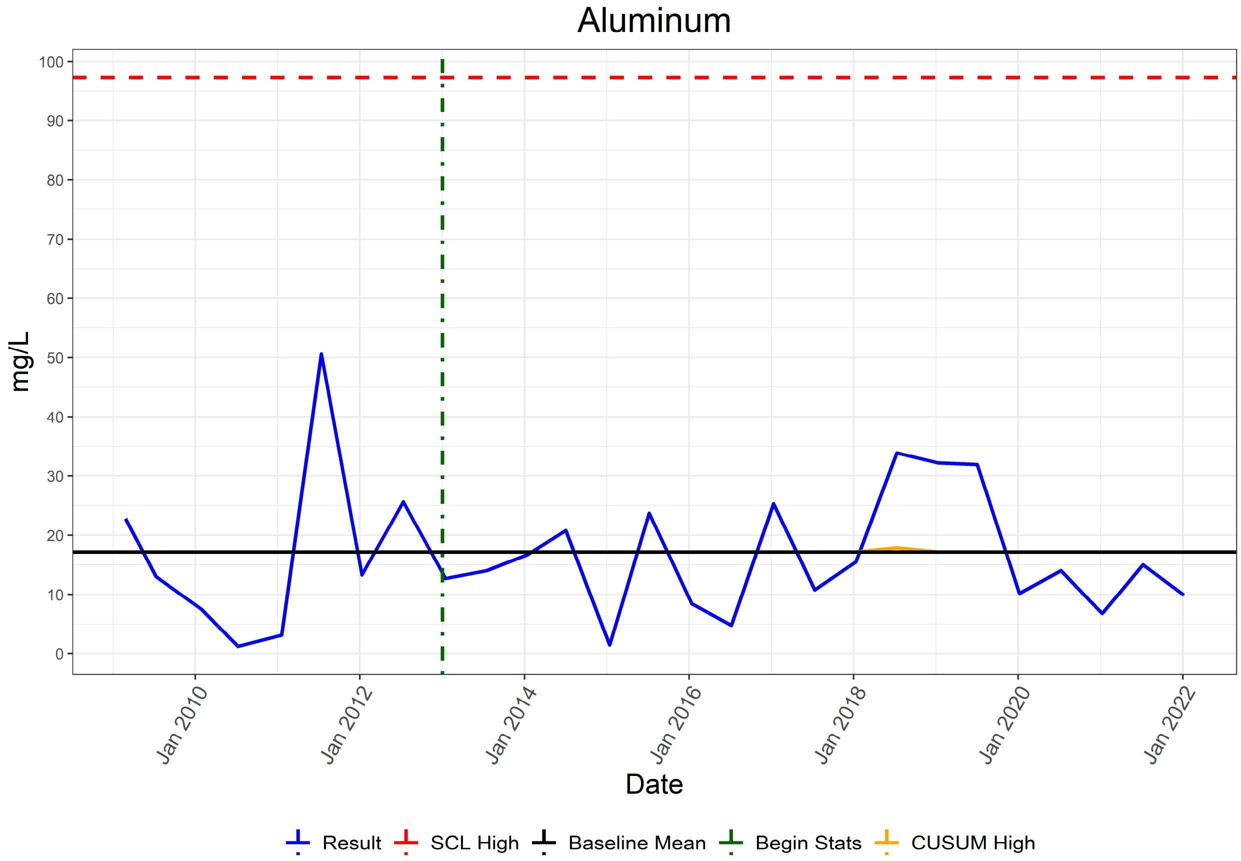

Arsenic
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

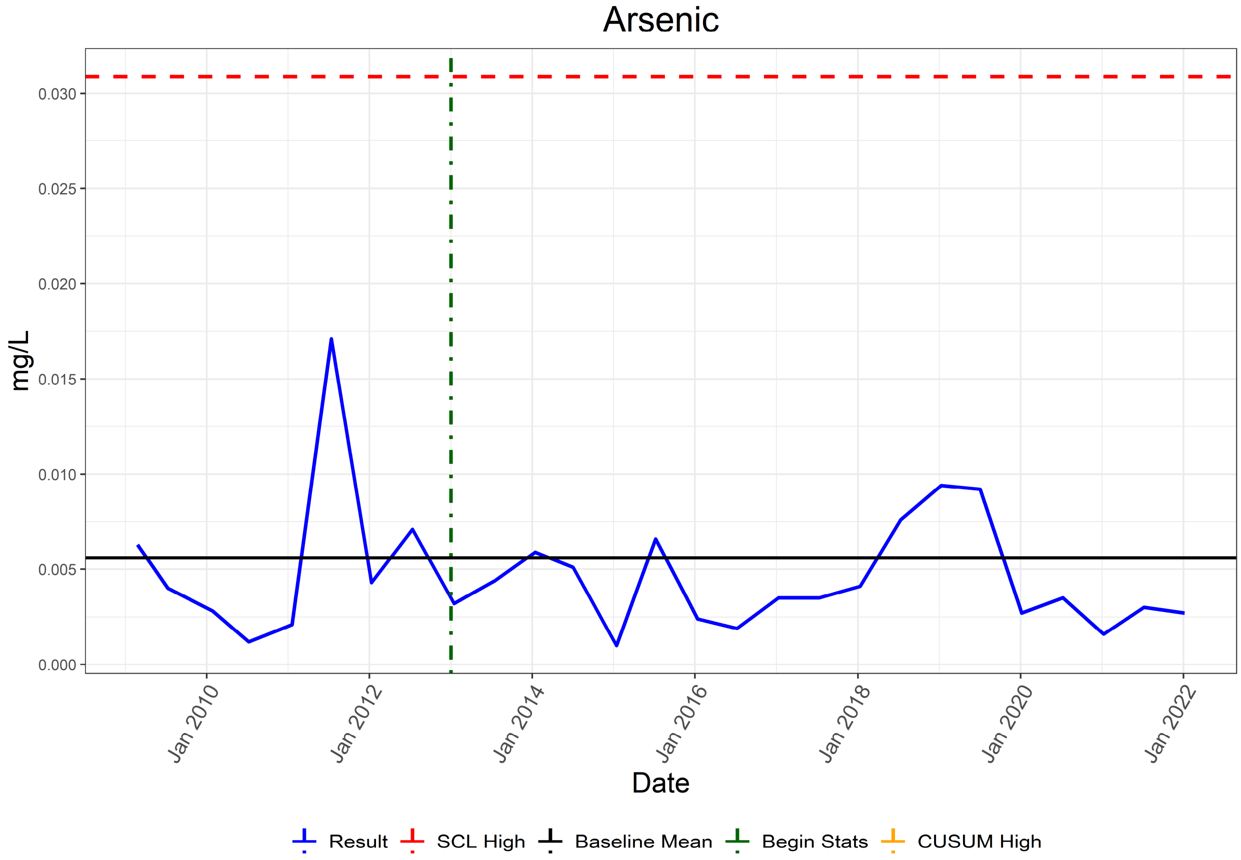

Lead
mg/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

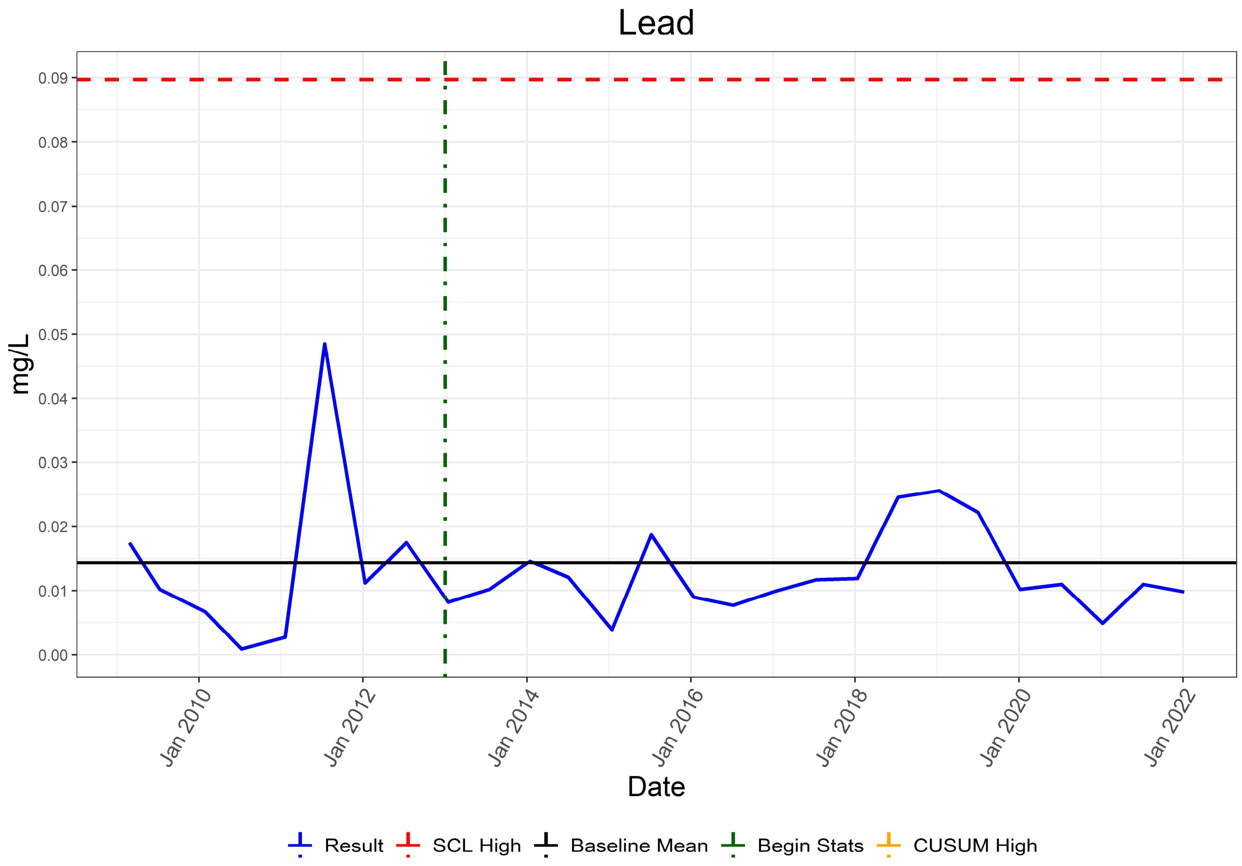

Total Phenols
mg/L
30
25
20
15
10
5
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

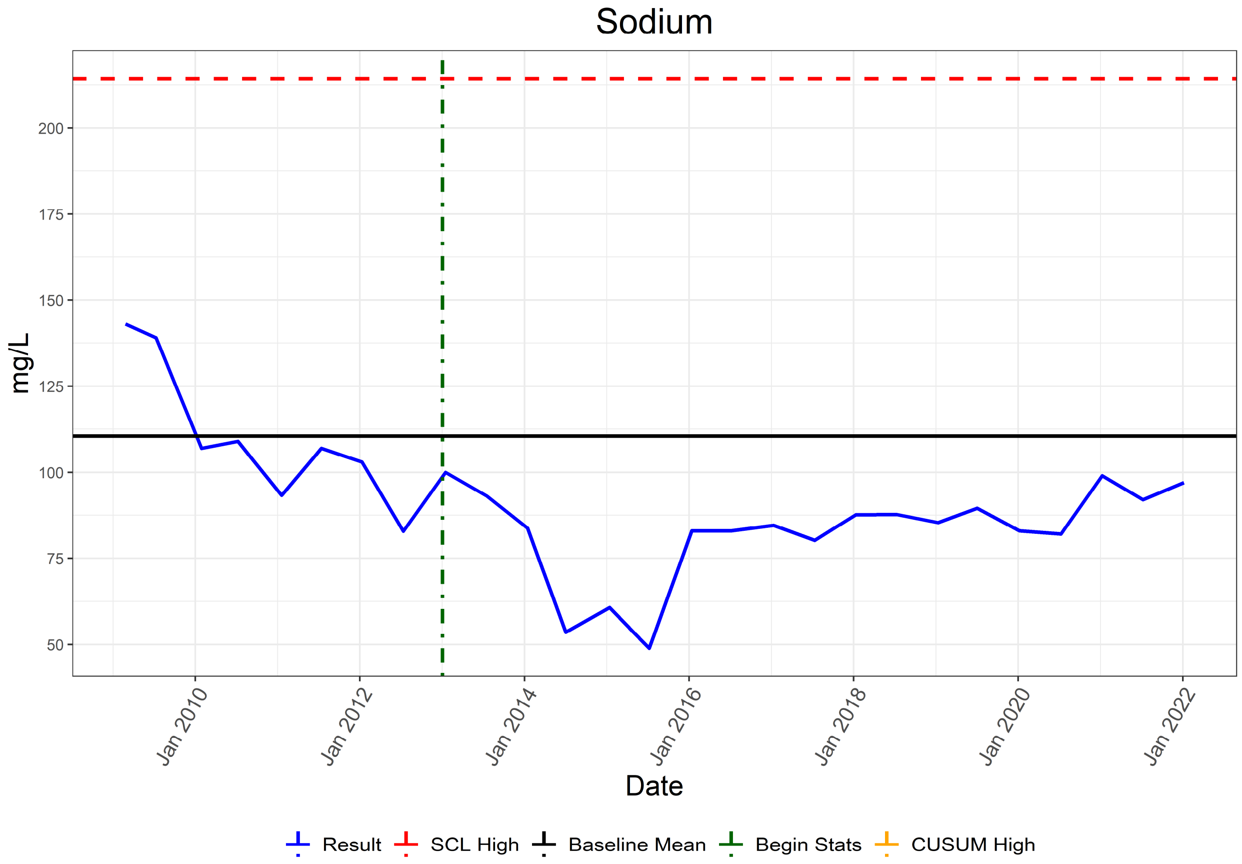
Secure C Landfill Corrective Action Monitoring Program (Program 6)

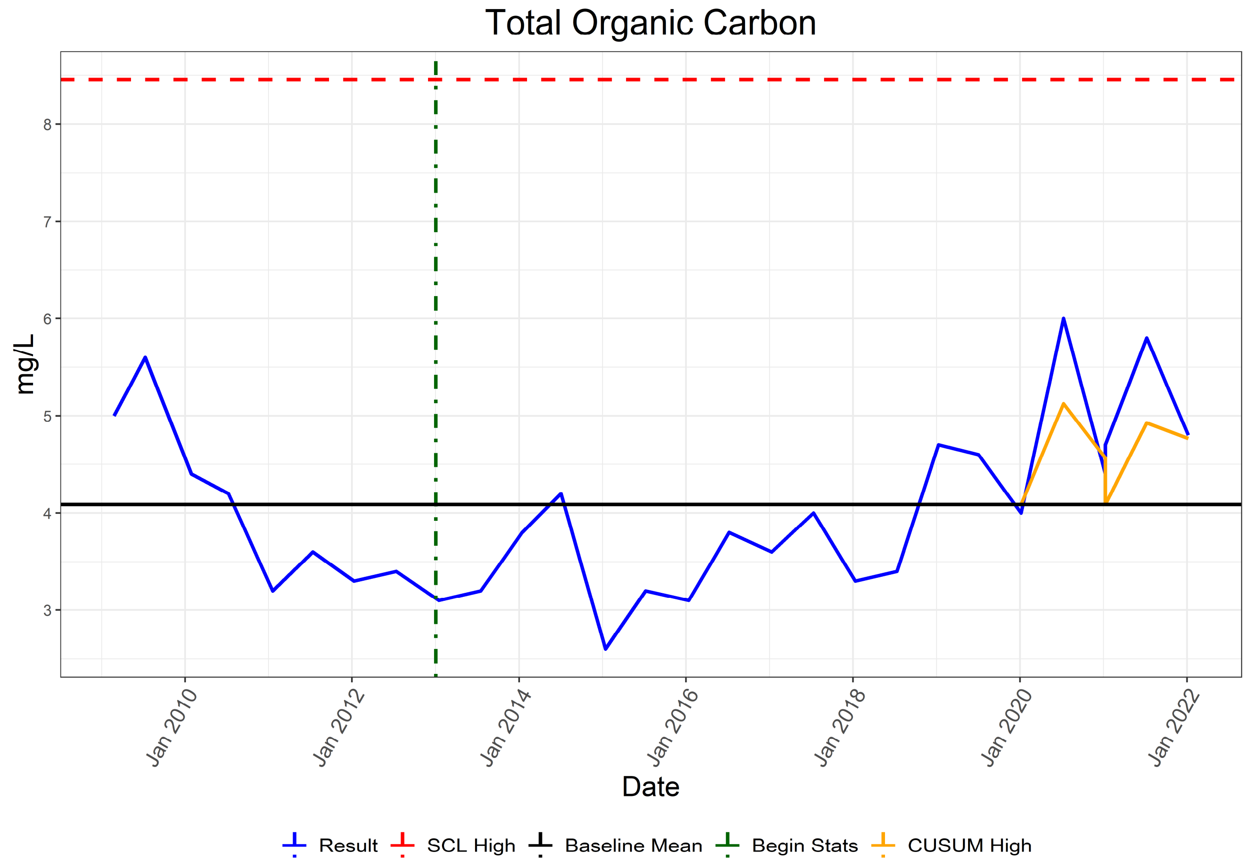
Well Name: P21-M04B

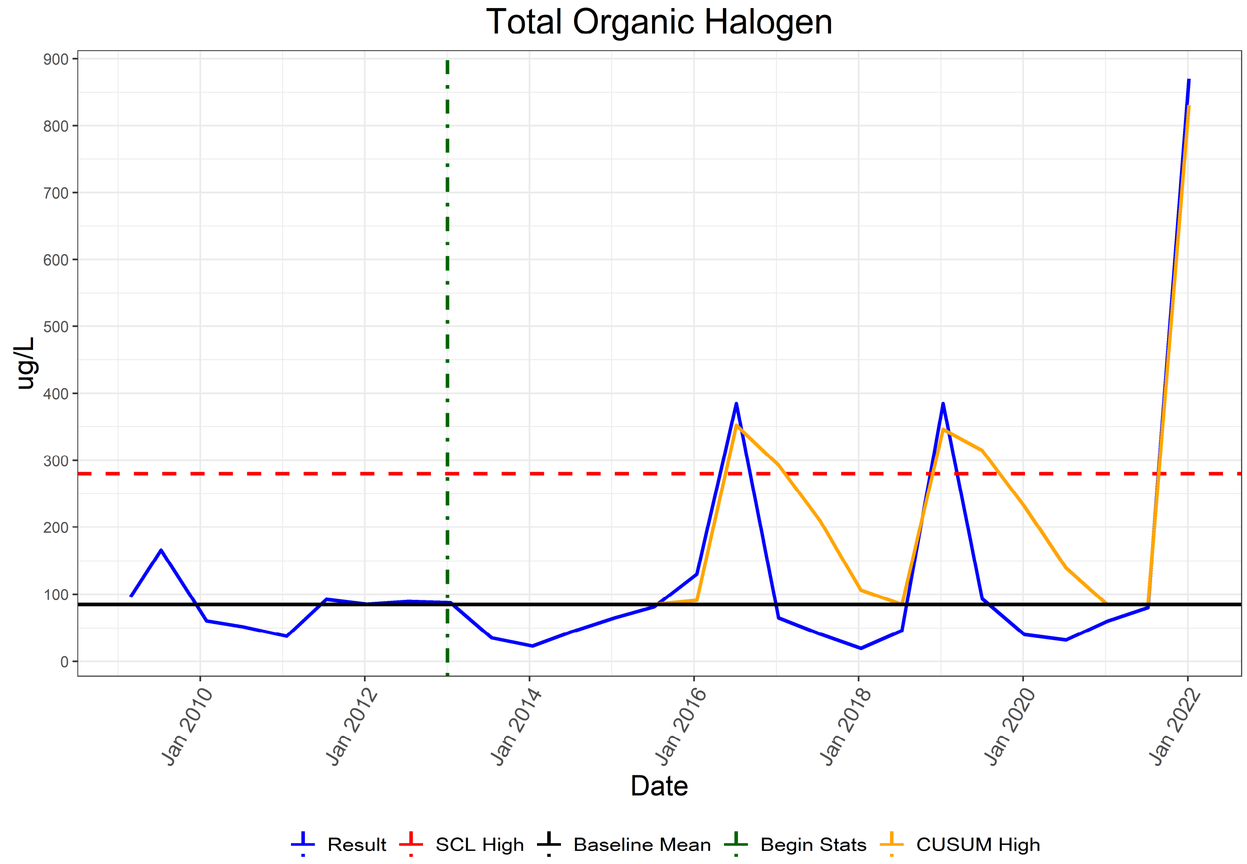





Lead
mg/L
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

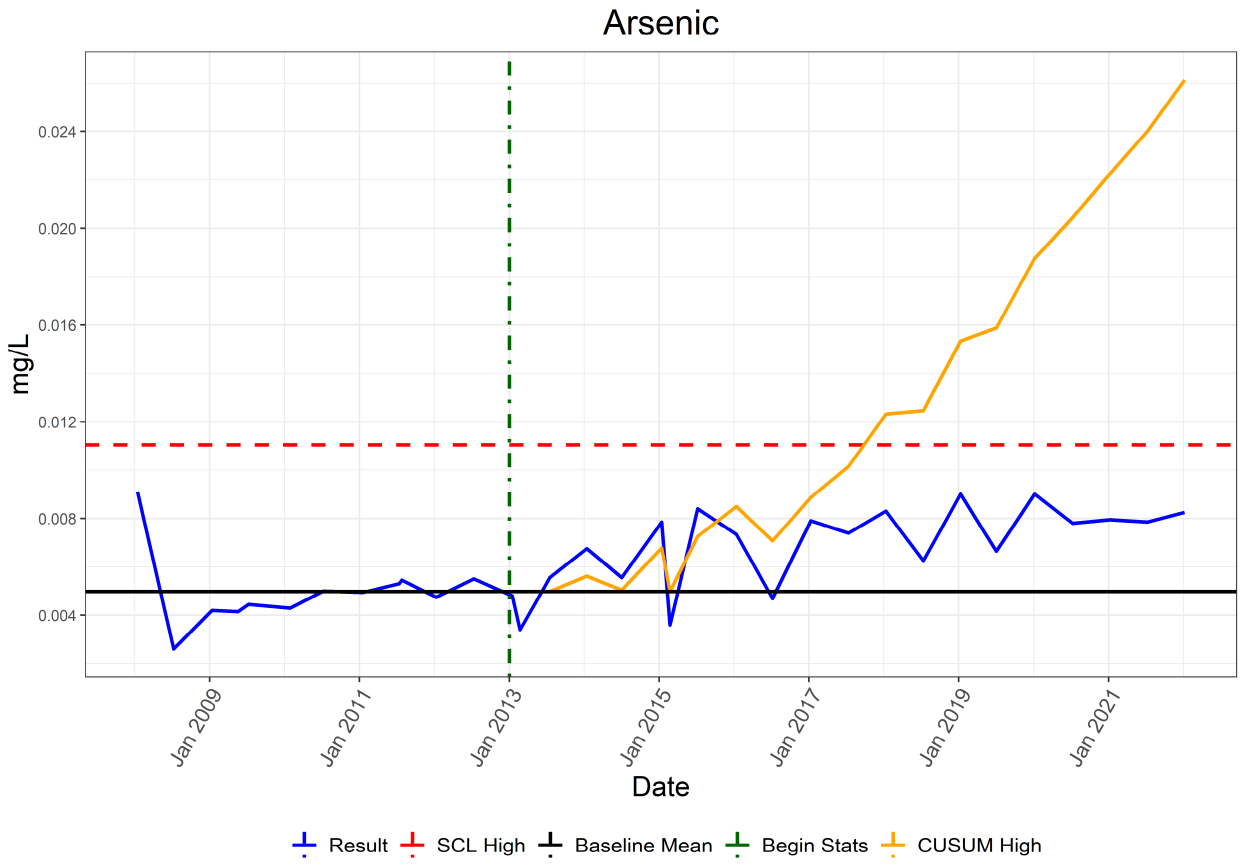

Sodium
mg/L
200
175
150
125
100
75
50
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

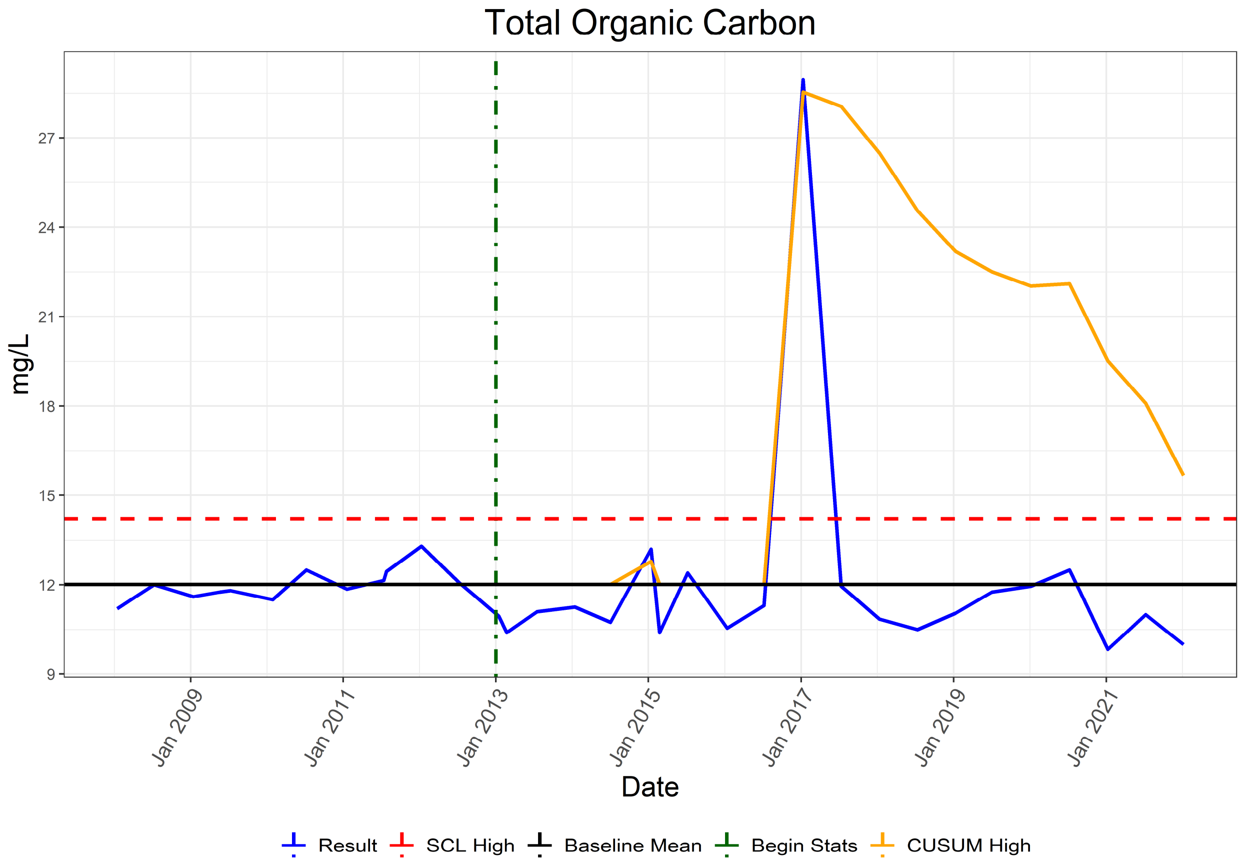

Total Organic Carbon
mg/L
8
7
6
5
4
3
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

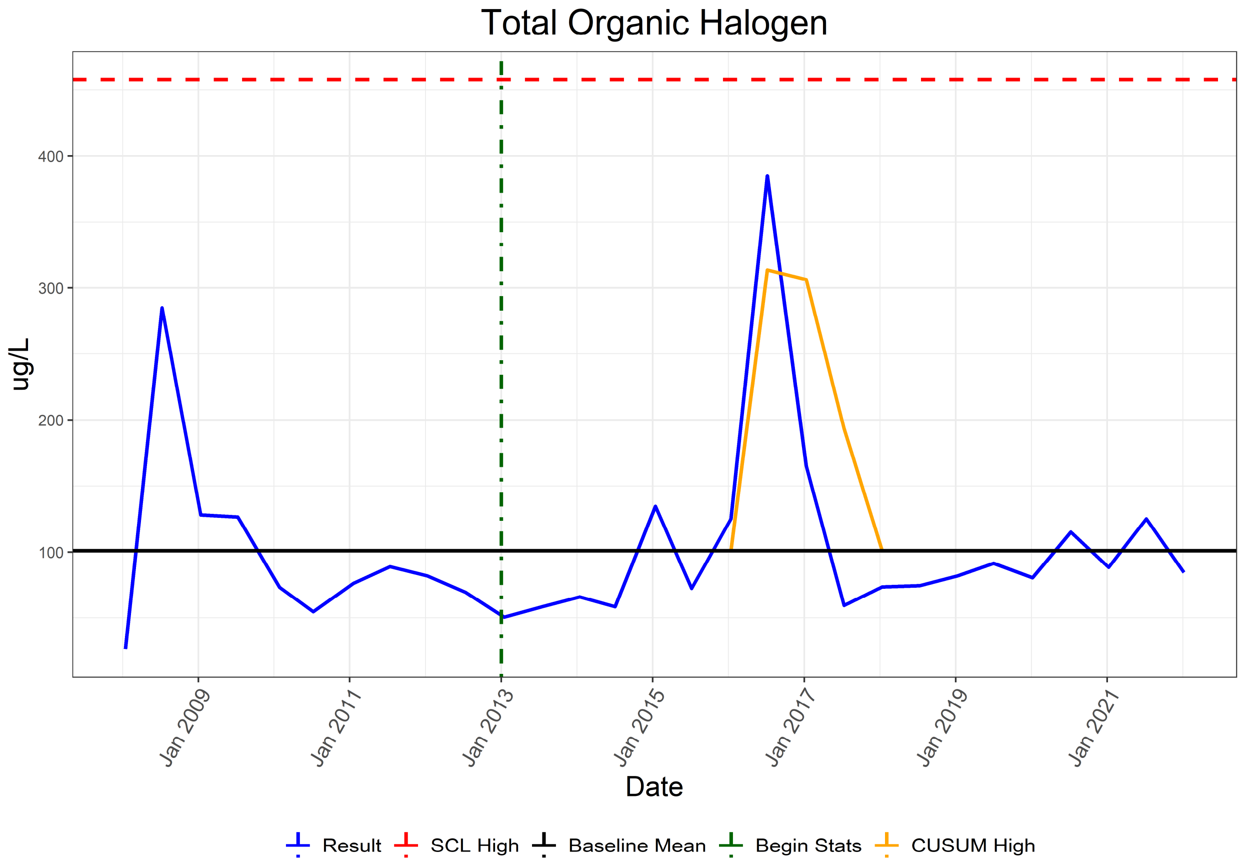

Total Organic Halogen
ug/L
900
800
700
600
500
400
300
200
100
0
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: P21-R01B

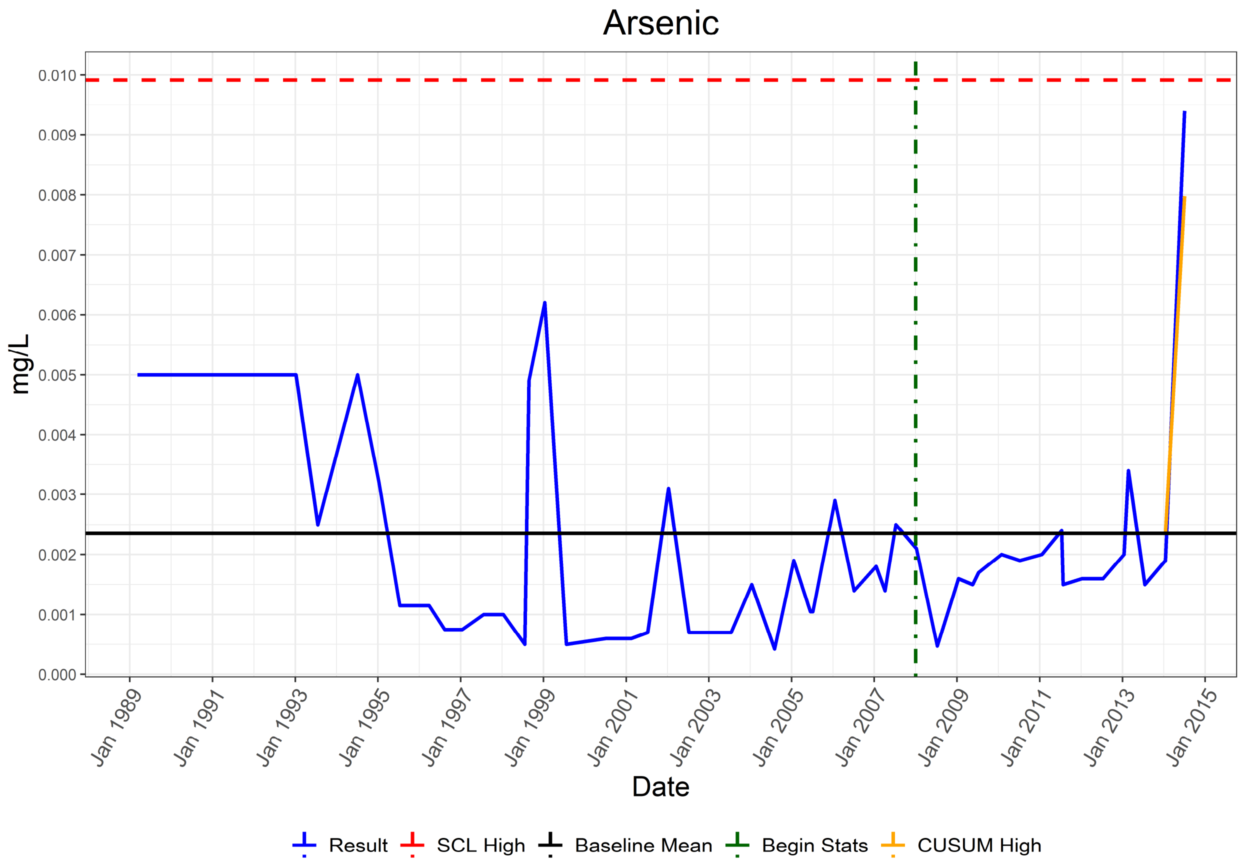


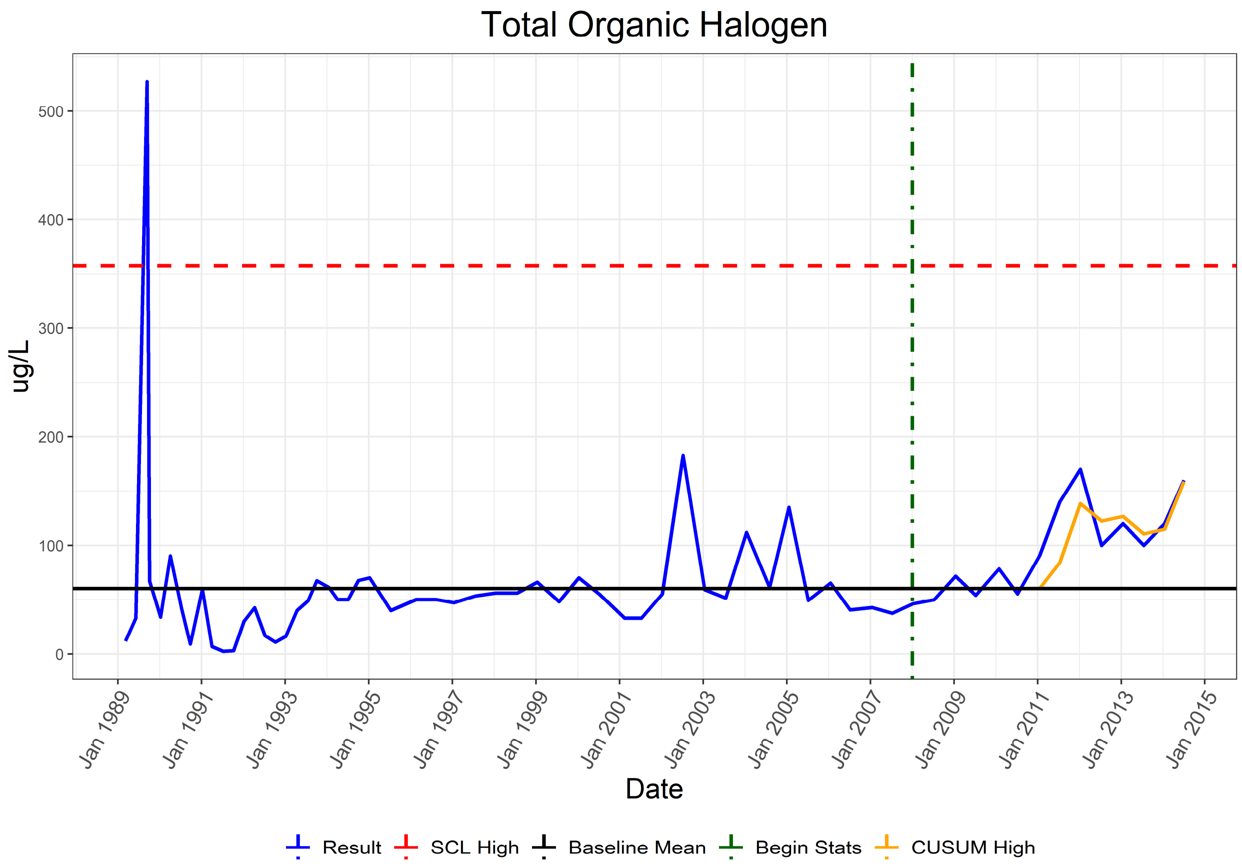



Total Organic Halogen
ug/L
400
300
200
100
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Secure C Landfill Corrective Action Monitoring Program (Program 6)

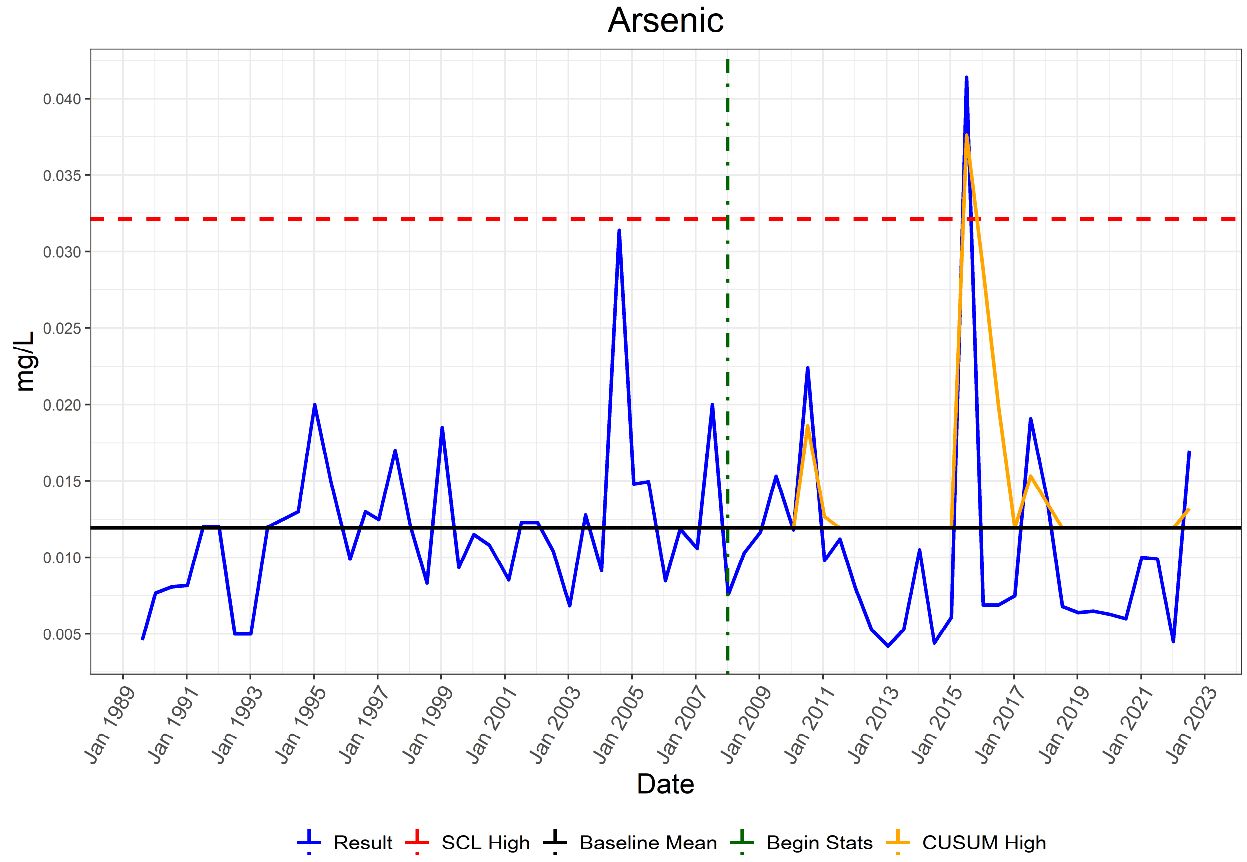
Well Name: Q20-M02B

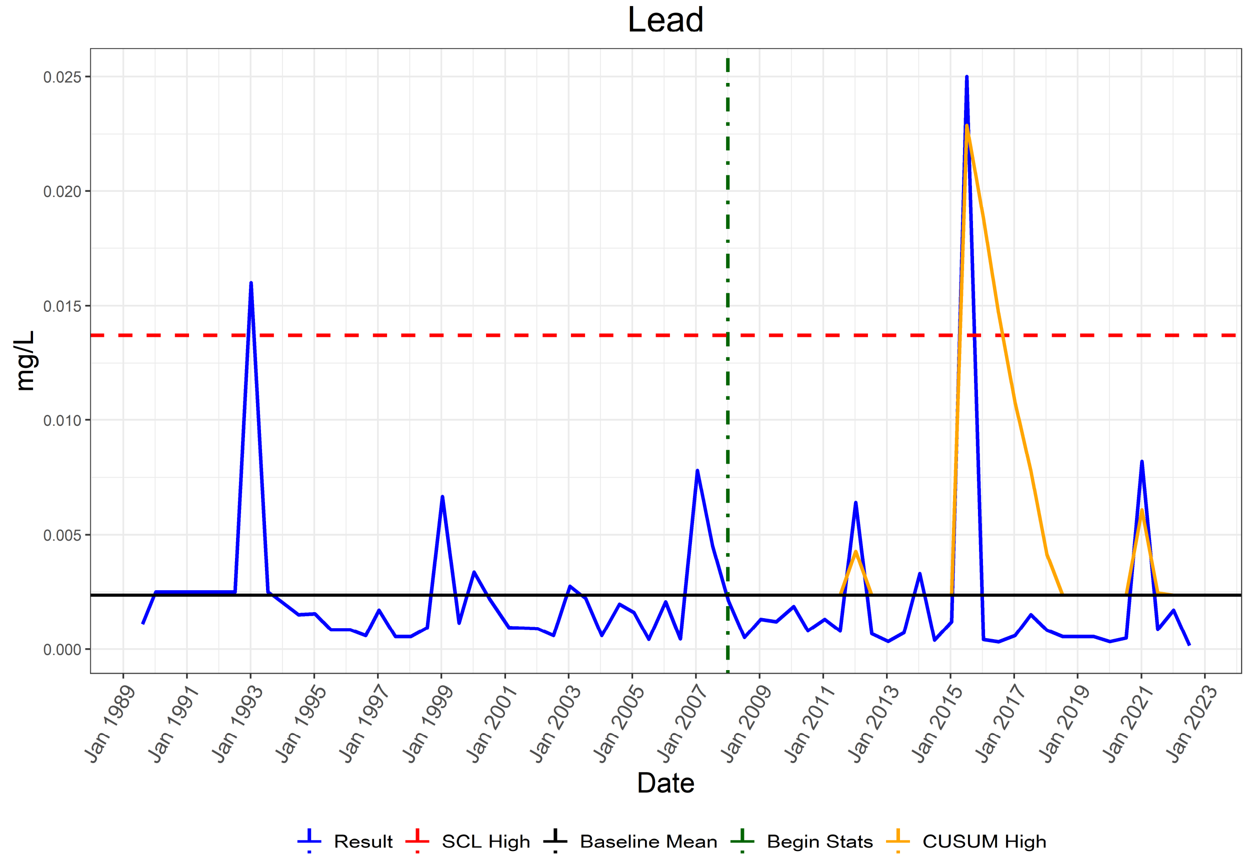


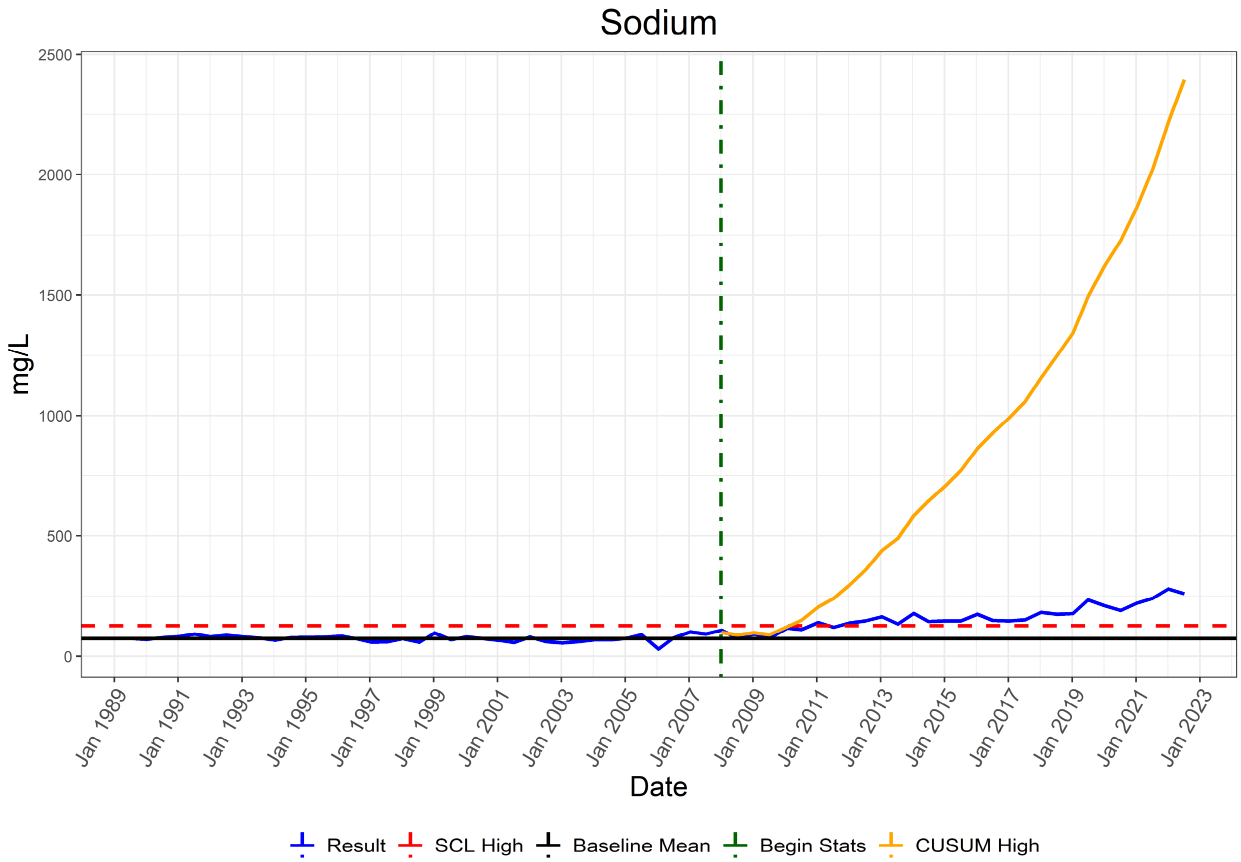


Secure C Landfill Corrective Action Monitoring Program (Program 6)

Well Name: Q21-M01B







Sodium
2500
2000
1500
1000
500
0
mg/L
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Appendix E

Well Summary, Statistical Evaluation Results, Time-Series Plots, and Control Chart Analysis for the Secure C Landfill Detection Monitoring Program

Narrative Well Summary:
Secure C Landfill Detection Monitoring Program

The following sections present a summary of the Mann-Kendall trend test and the control chart results. Only those tests that indicated a significant trend at a 1% level of confidence or an out-of-control result in the current event are mentioned below.

R19-M01B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that ammonia and sodium exhibit a statistically significant upward trend. The control chart analysis indicates that arsenic (CUSUM), chloride (CUSUM), total organic carbon (CUSUM), and total organic halogen (CUSUM) are out-of-control.

R19-M02B

No significant trends were identified by the Mann-Kendall trend test. The control chart analysis indicates that aluminum (CUSUM), arsenic (CUSUM), lead (CUSUM), and specific conductance (CUSUM) are out-of-control.

S19-M01B

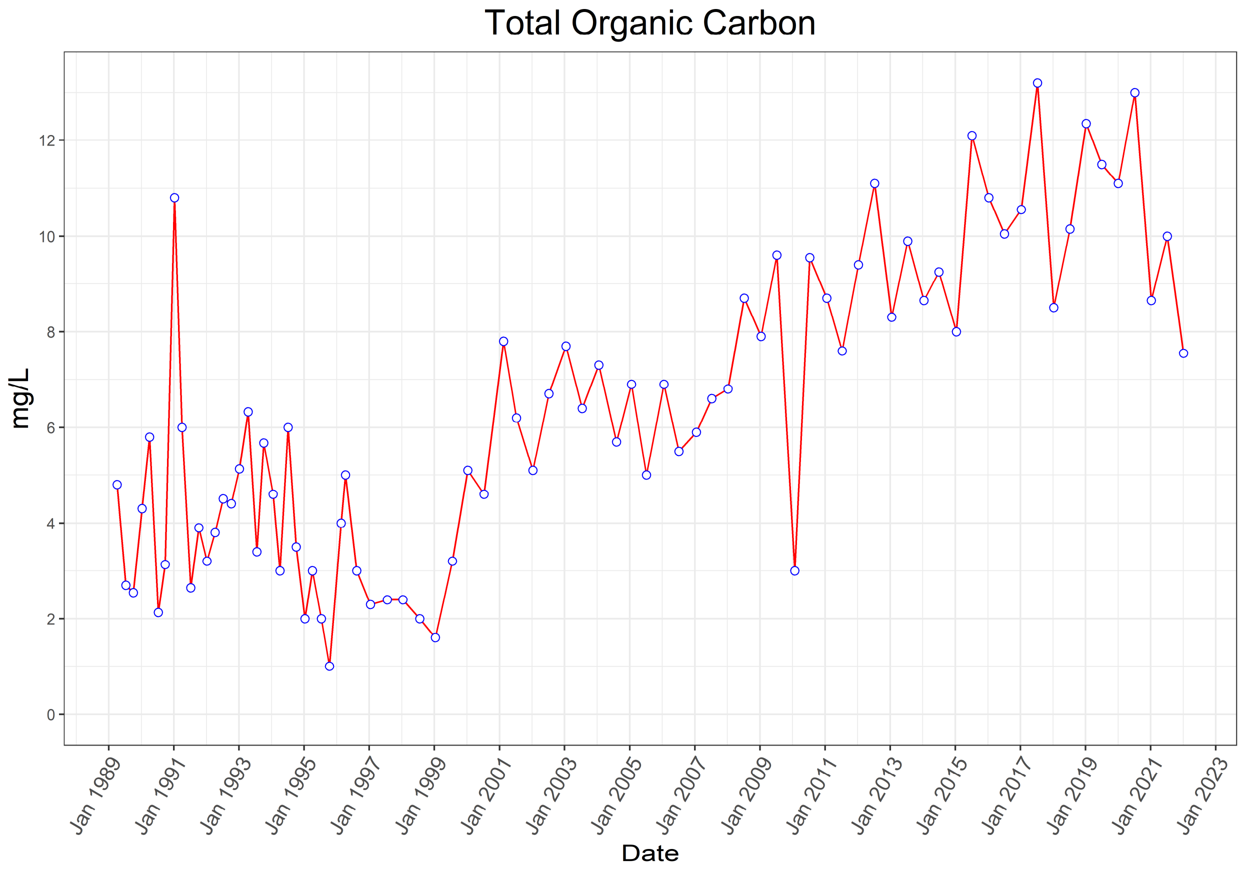
The Mann-Kendall evaluation of the combined baseline/current data sets indicates that dissolved oxygen exhibits a downward trend. The control chart analysis indicates that total organic halogen (CUSUM), pH (CUSUM), and specific conductance (CUSUM) are out-of-control.

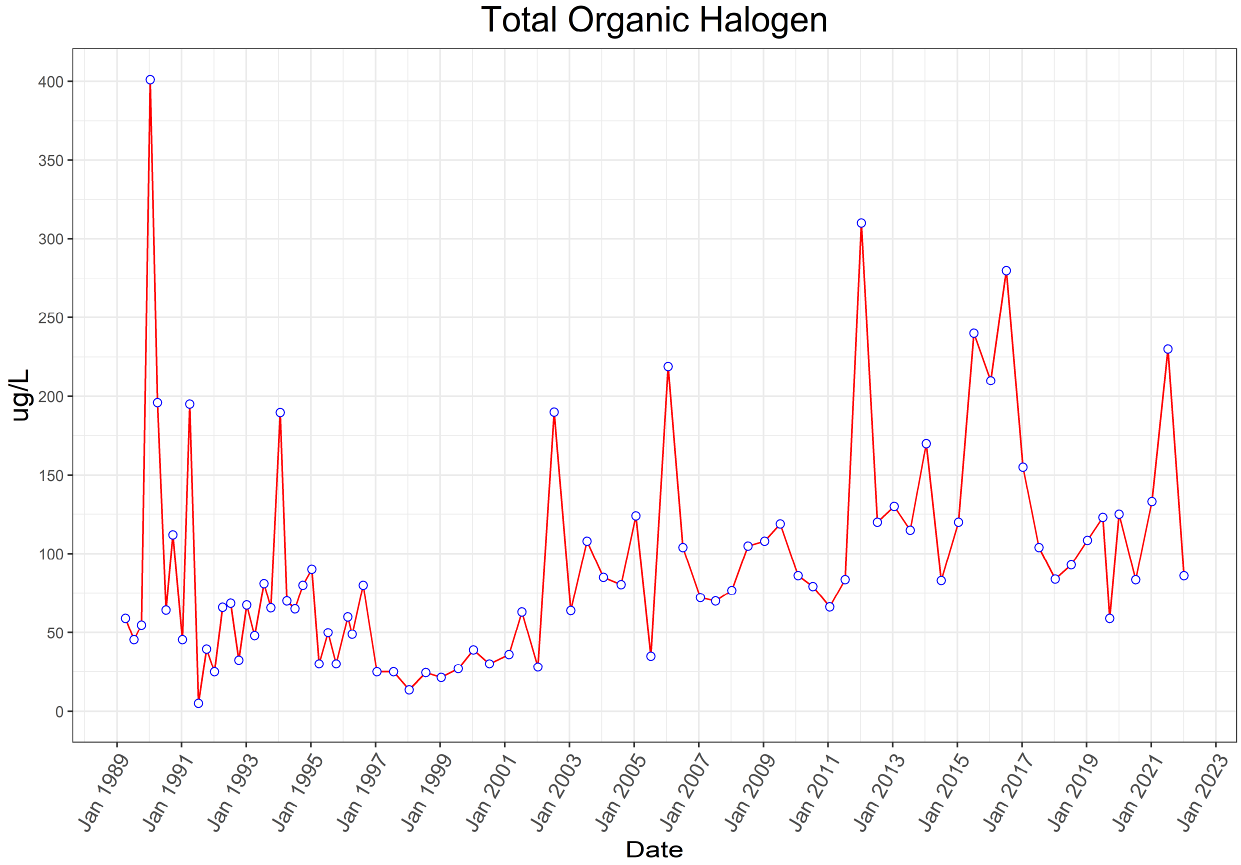
S19-M02B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that chloride and sodium exhibit an upward trend for all data. The control chart analysis indicates that specific conductance (CUSUM) and total organic halogen (CUSUM) are out-of-control.

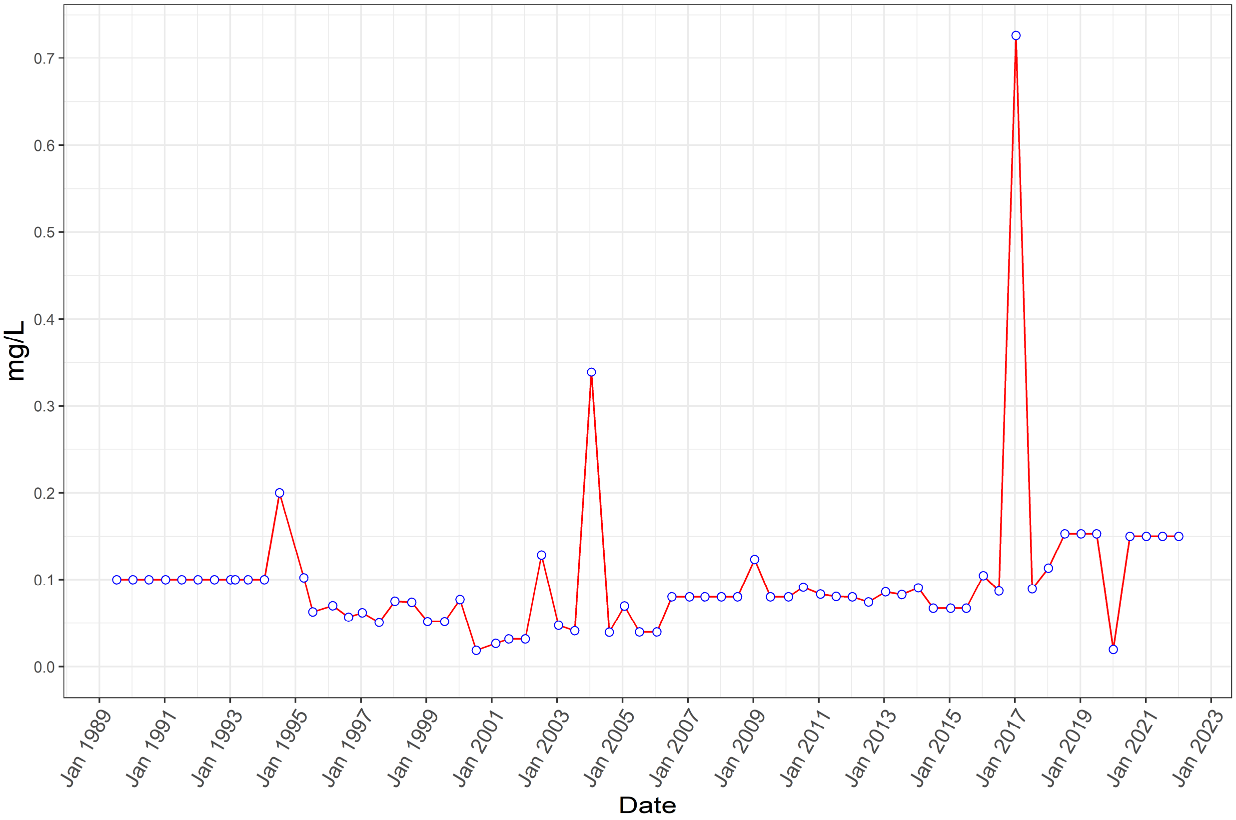
Secure C Landfill Detection Monitoring Program (Program 7)

Well Name: R19-M01B

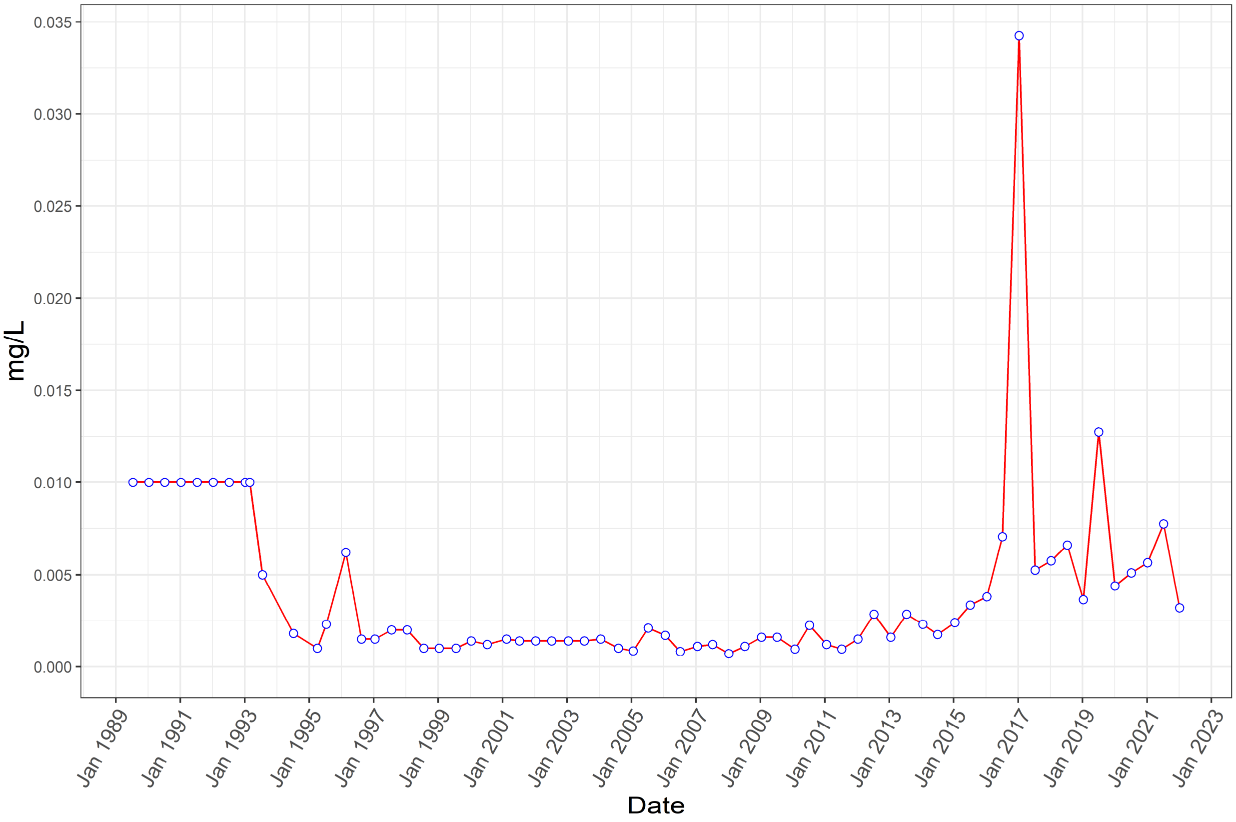


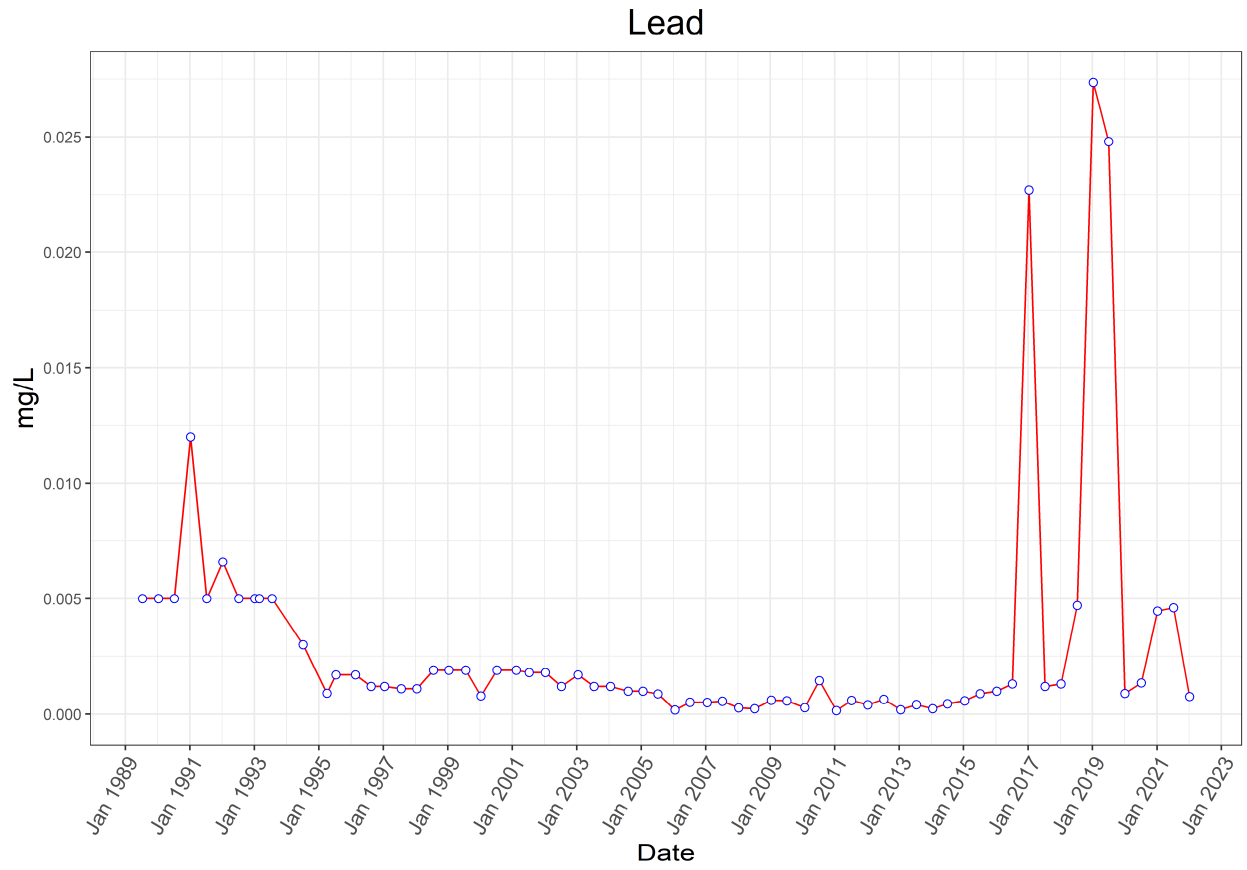


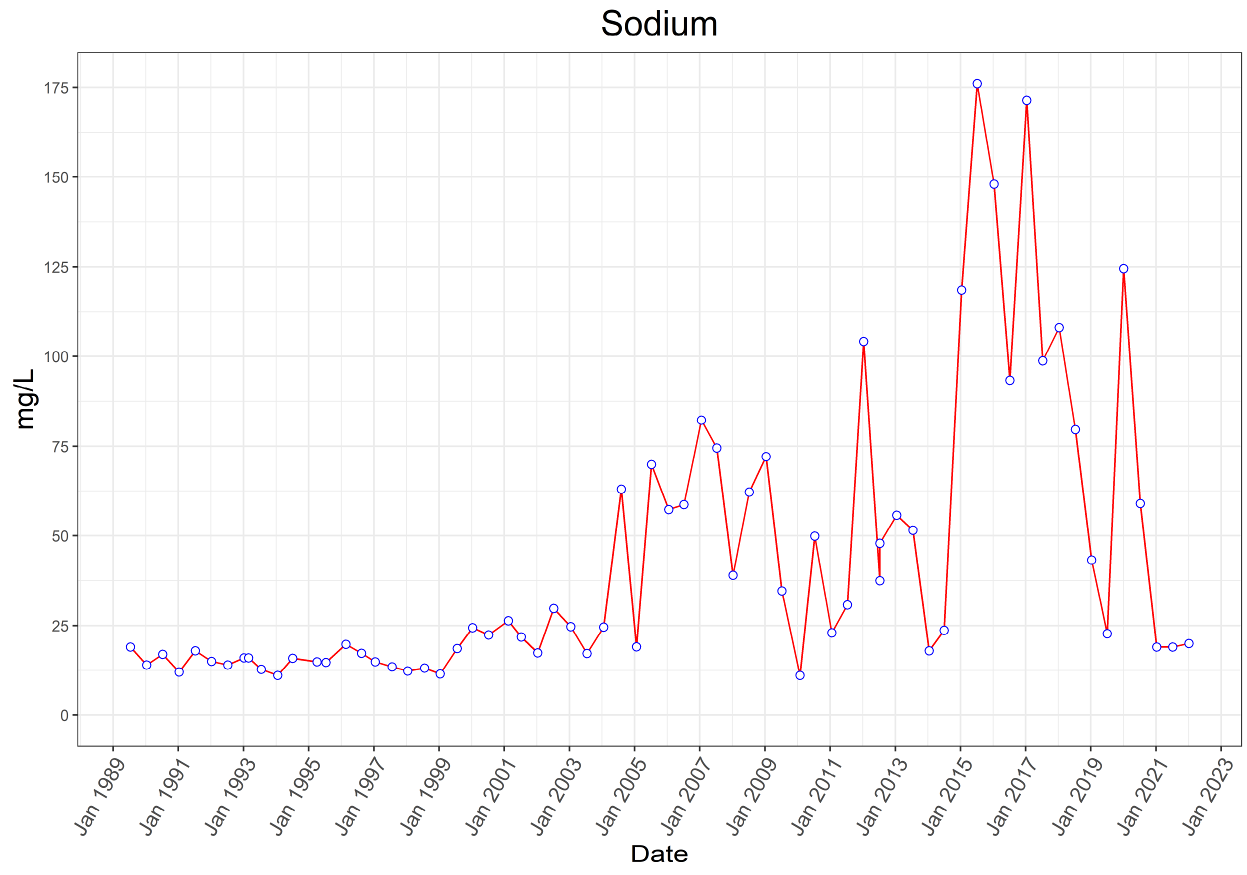
Aluminum

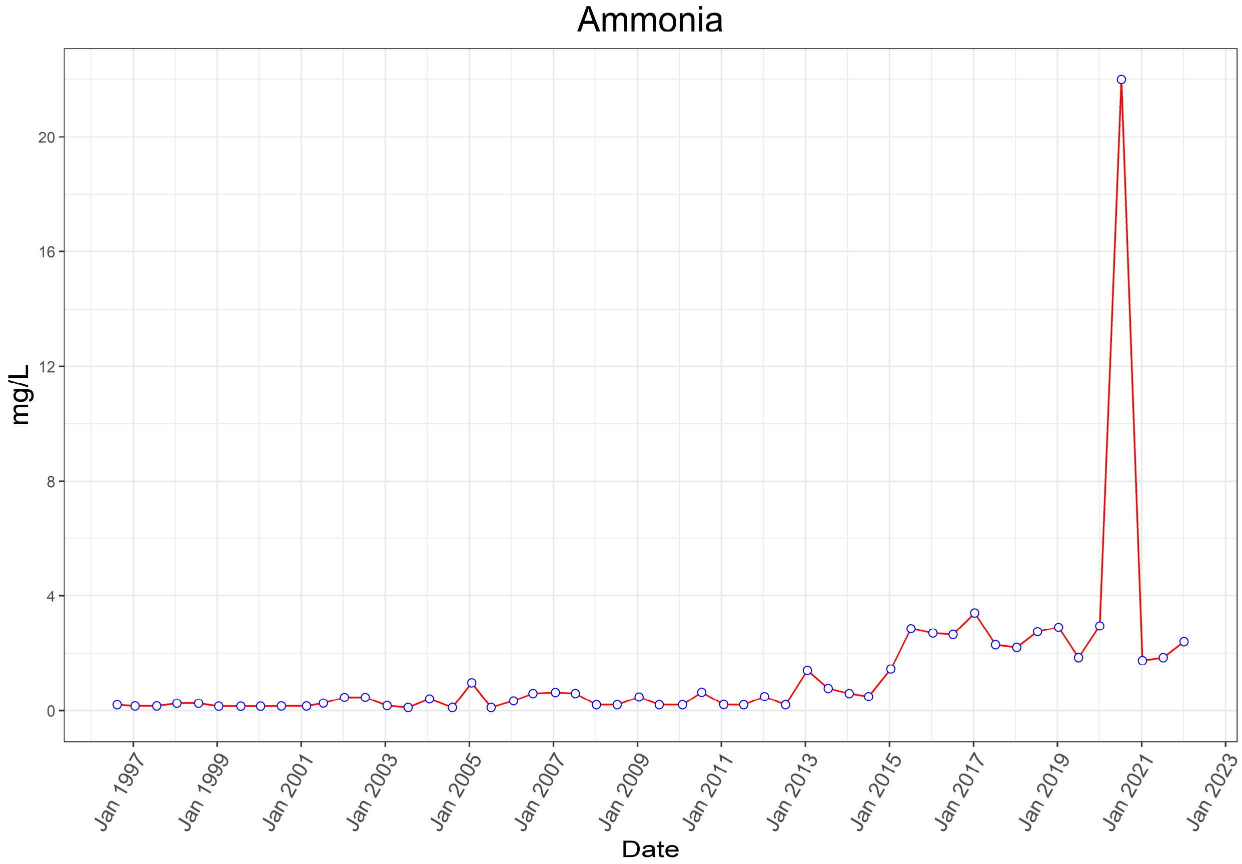


Arsenic



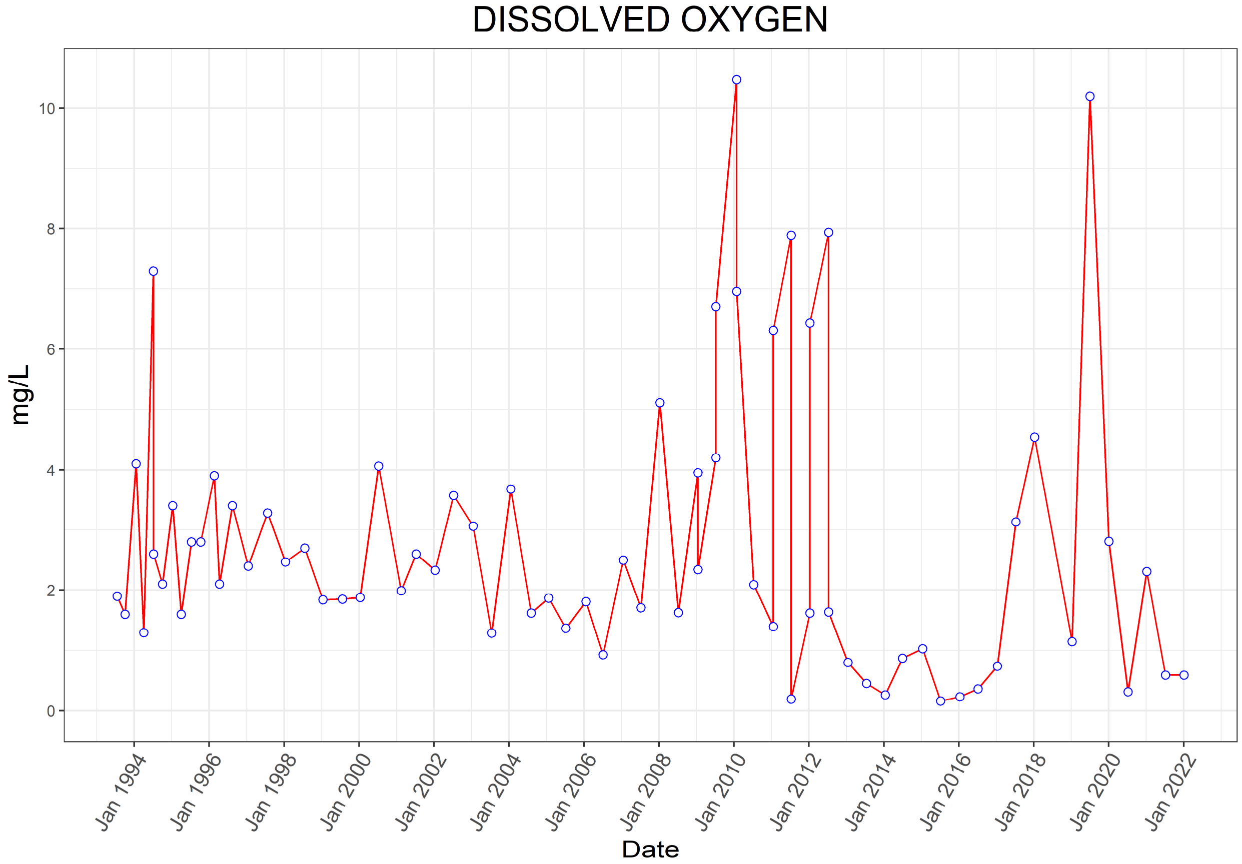

Lead
mg/L
0.025
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

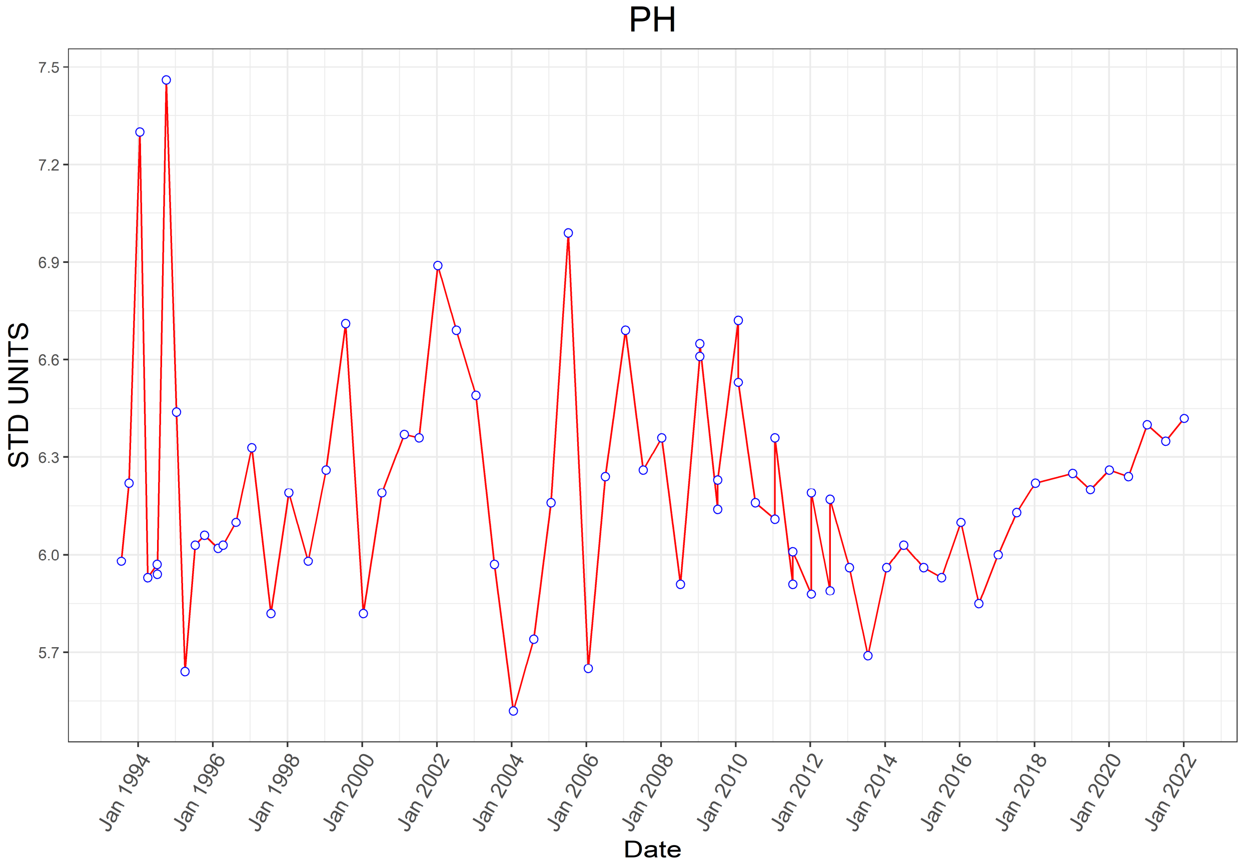

Sodium
mg/L
175
150
125
100
75
50
25
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date


Ammonia
mg/L
20
16
12
8
4
0
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

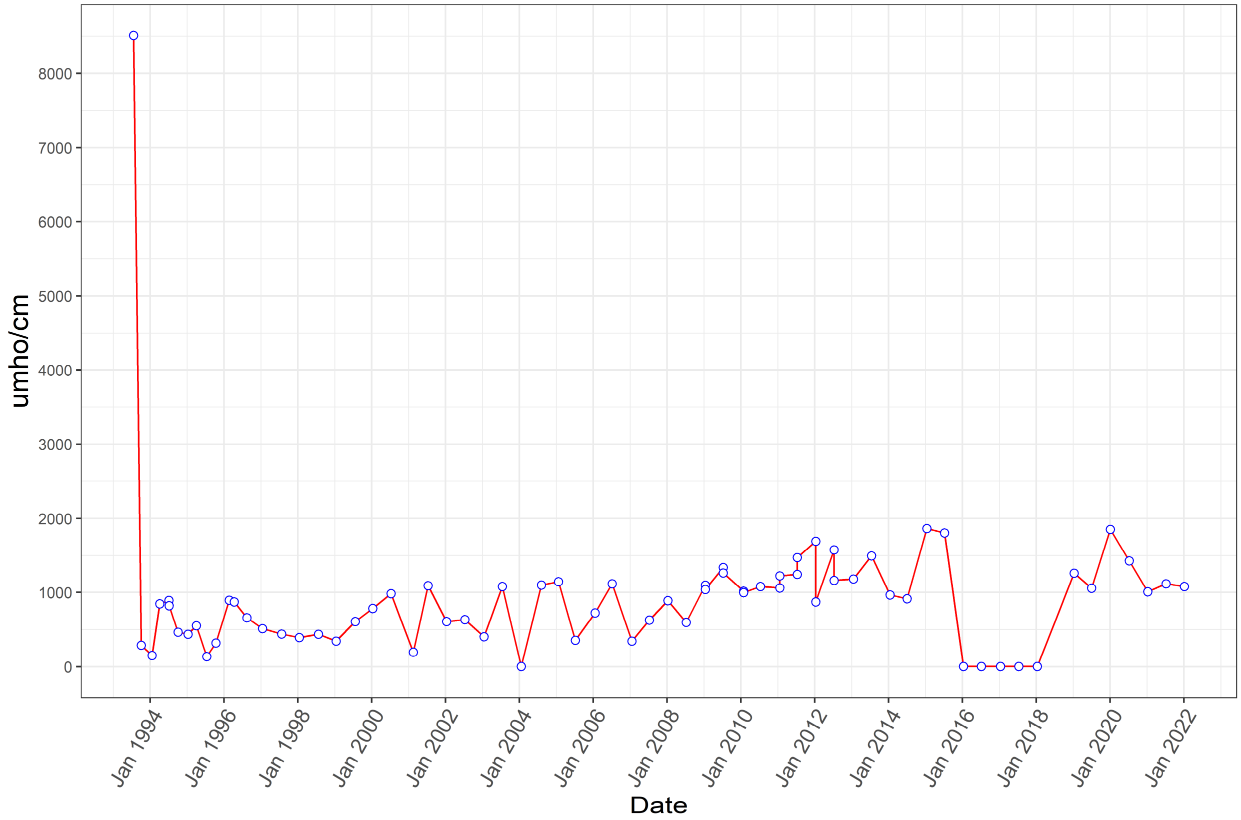
Well Name: R19-M01B

Field Parameters

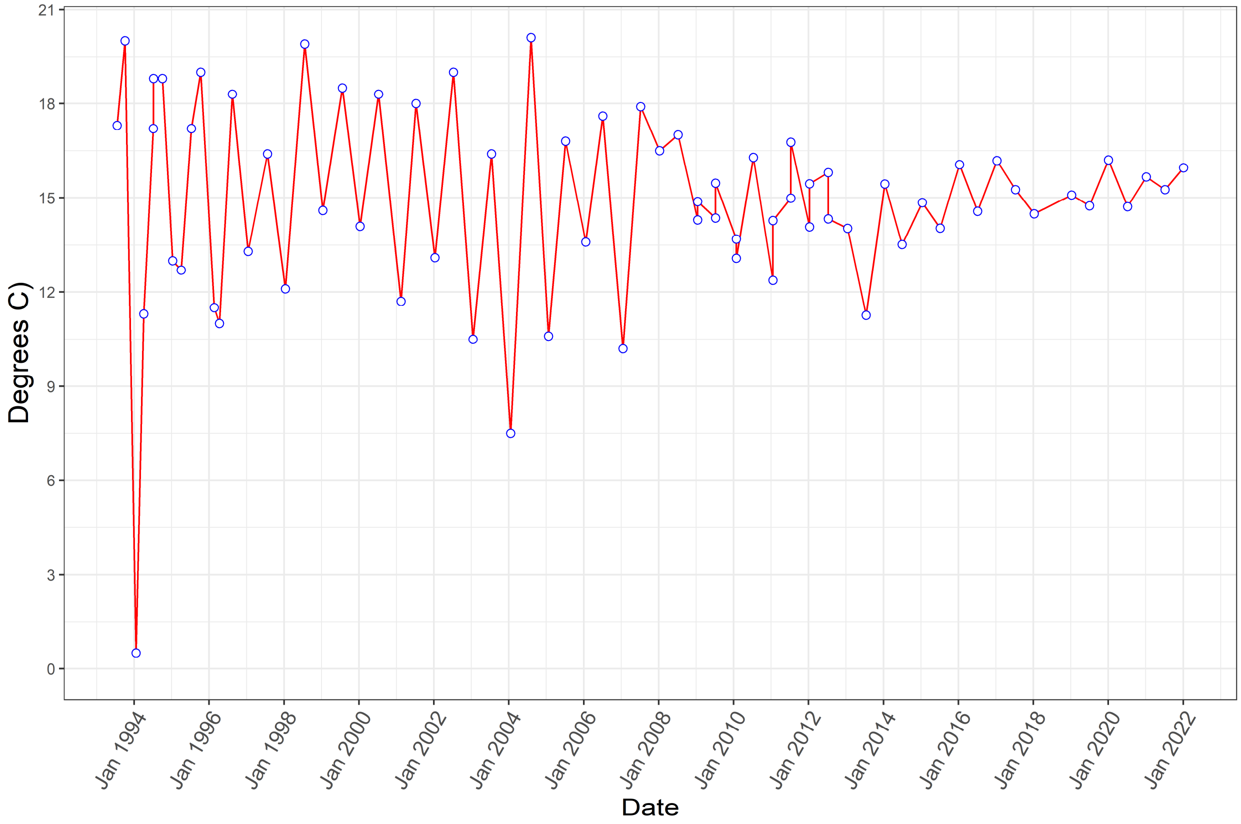


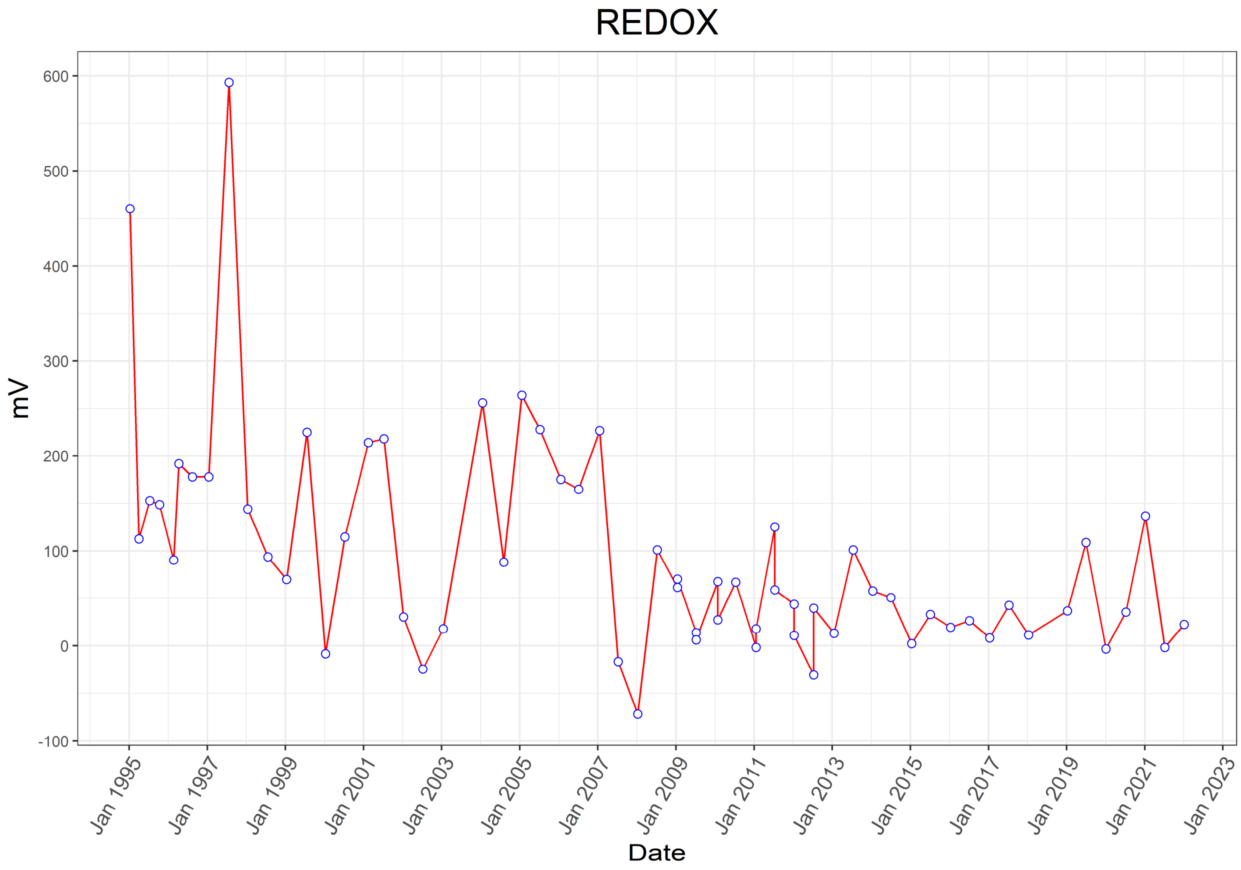


SPECIFIC CONDUCTANCE



TEMPERATURE

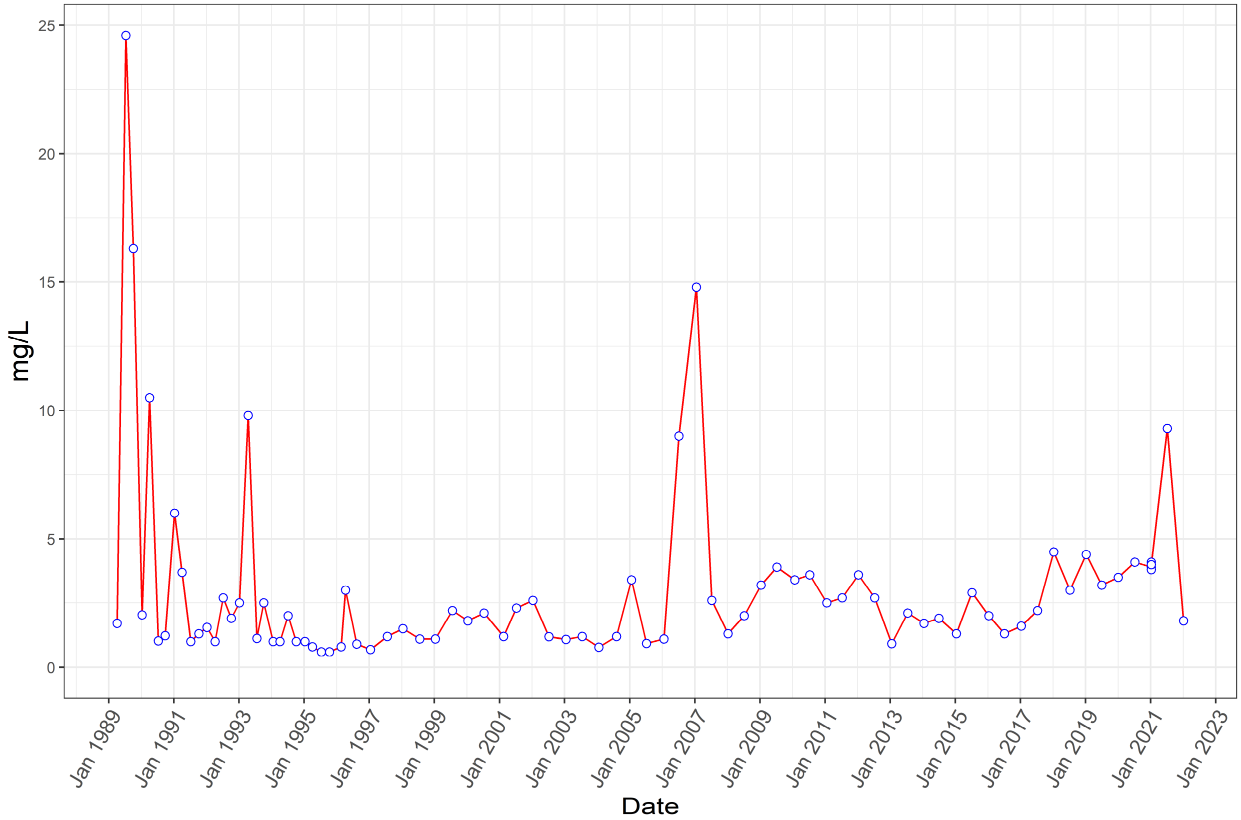



REDOX
mV
600
500
400
300
200
100
0
-100
Date
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

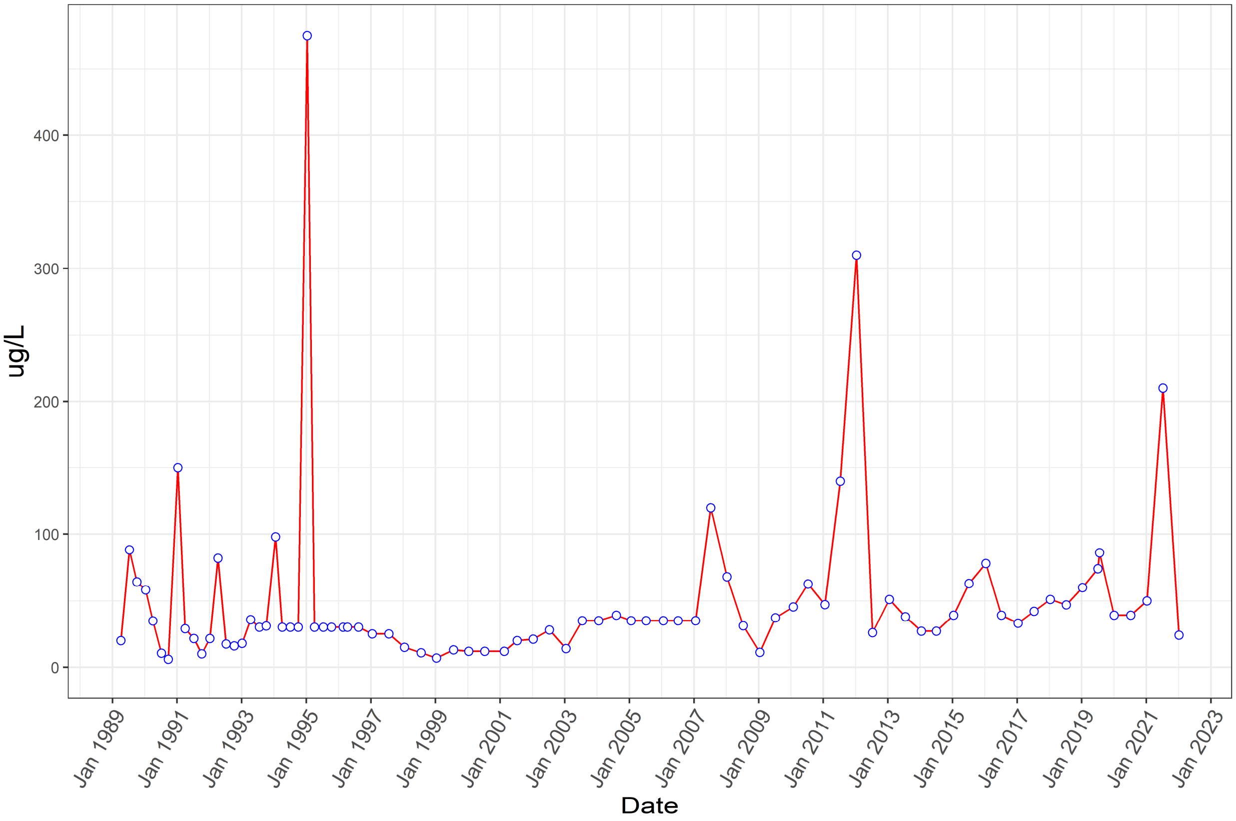
Secure C Landfill Detection Monitoring Program (Program 7)

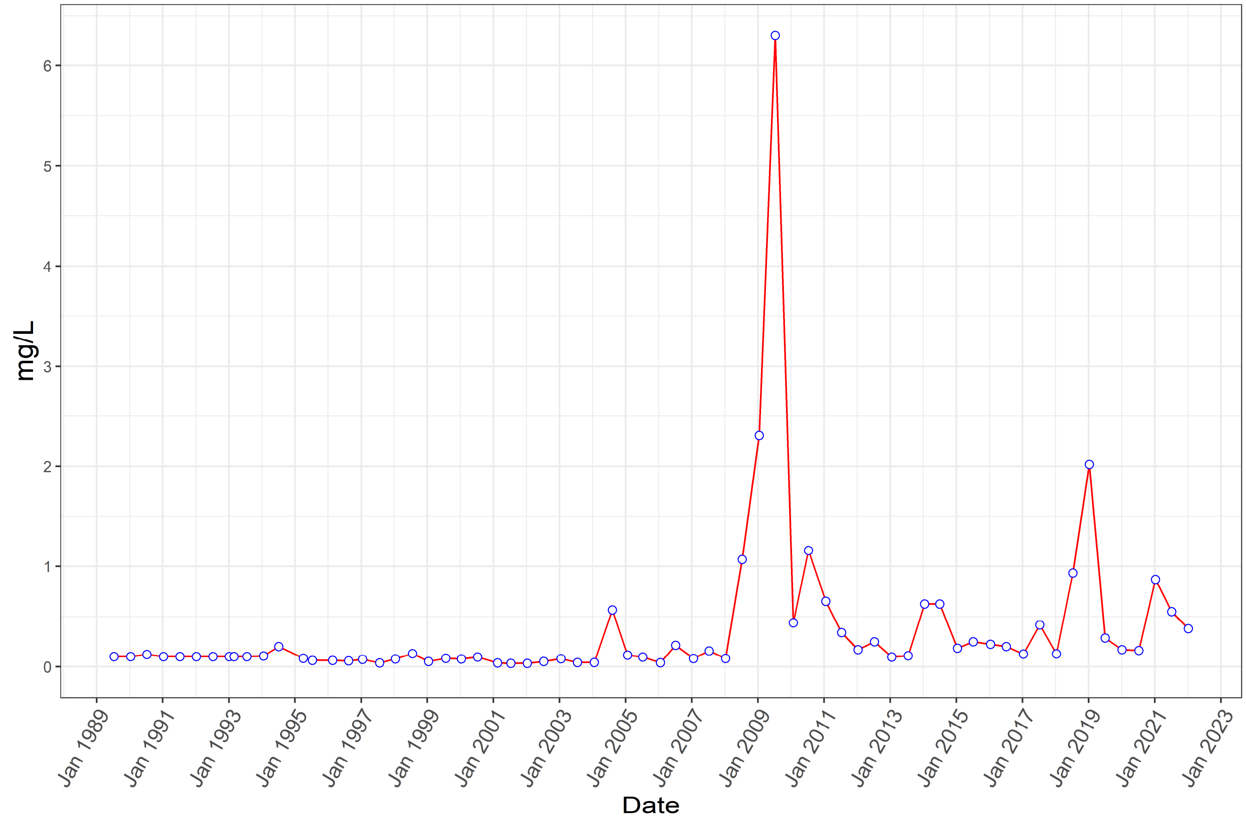
Well Name: R19-M02B

Total Organic Carbon

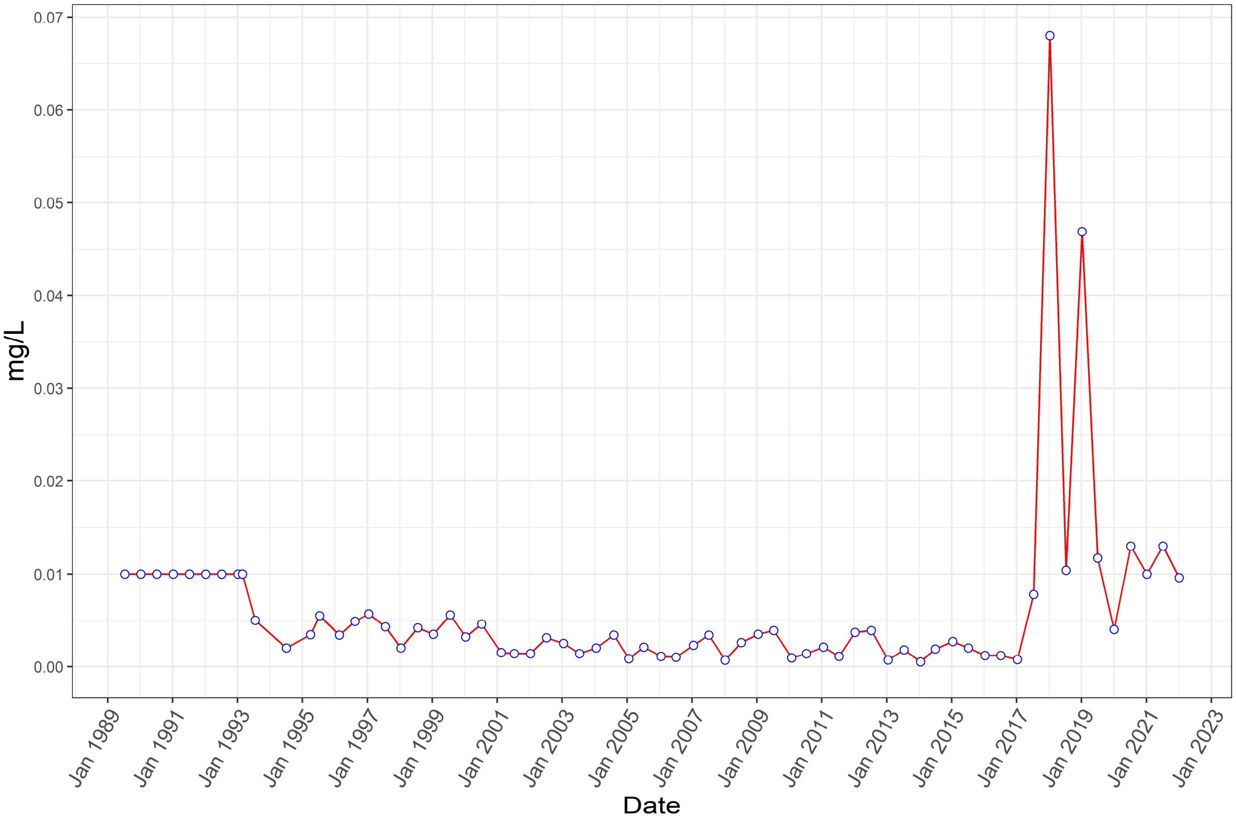


Total Organic Halogen

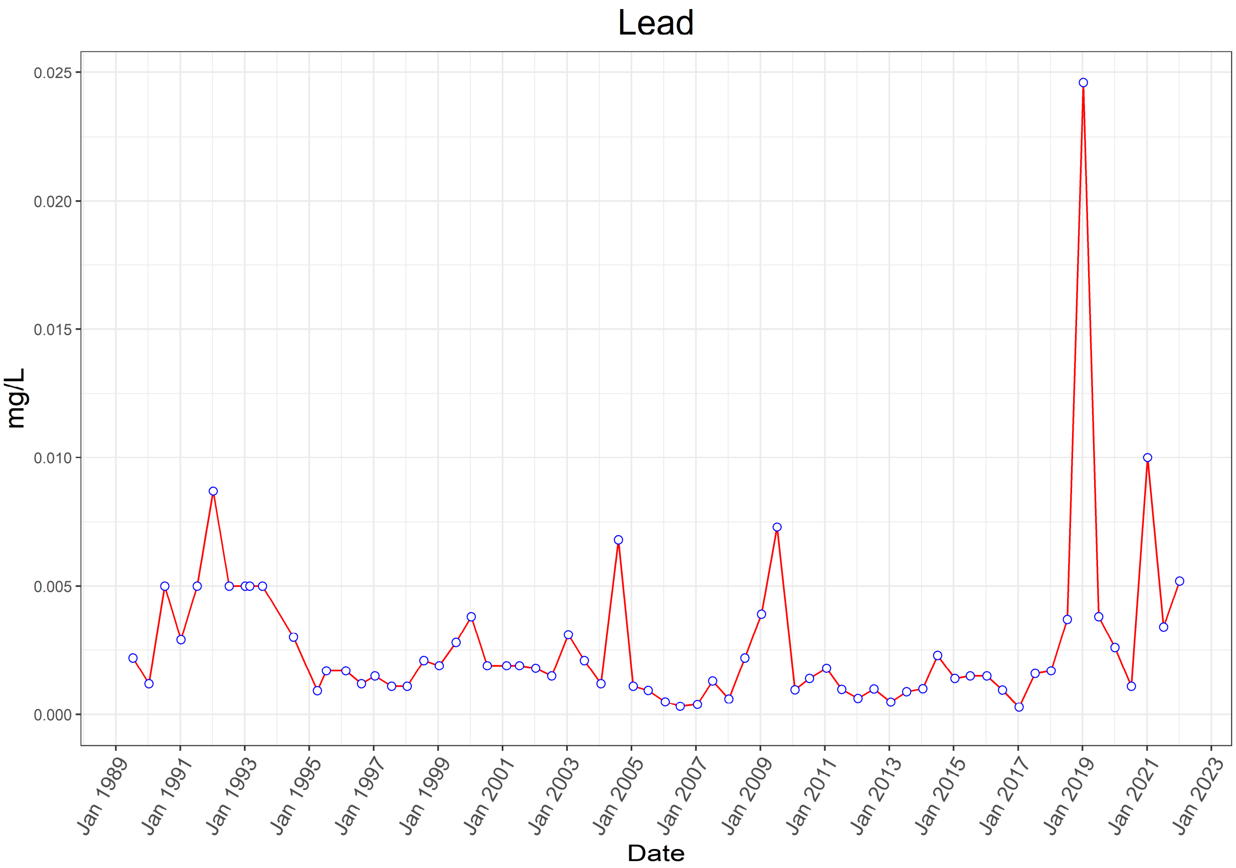


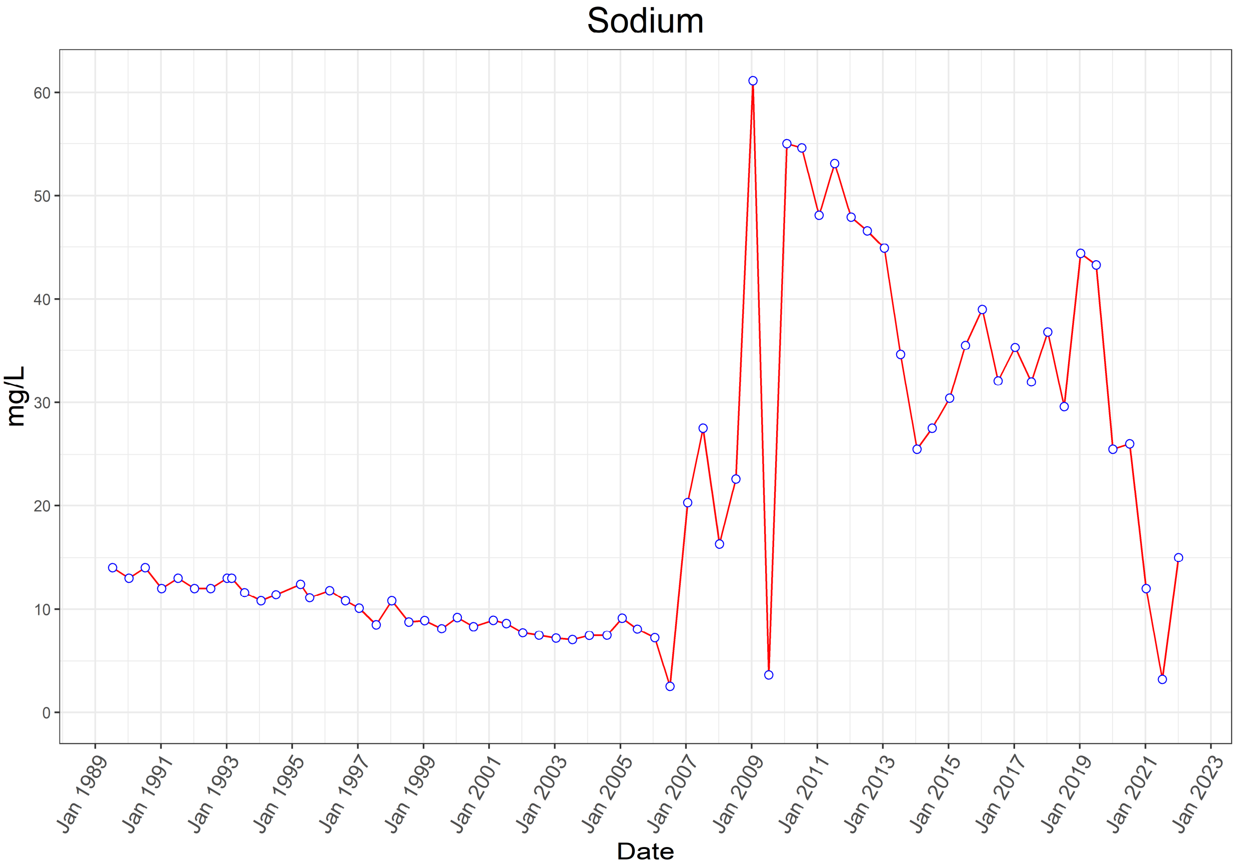


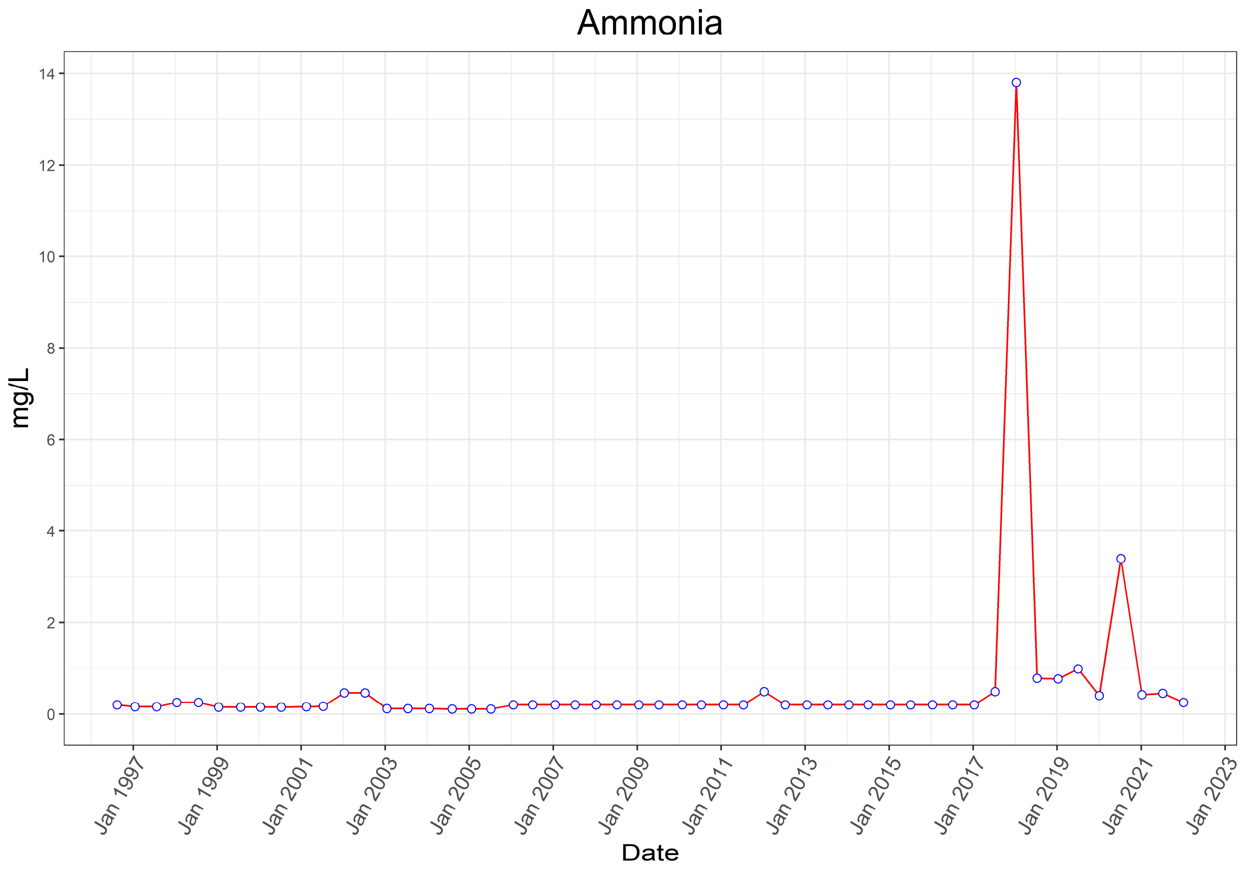
Aluminum



Arsenic

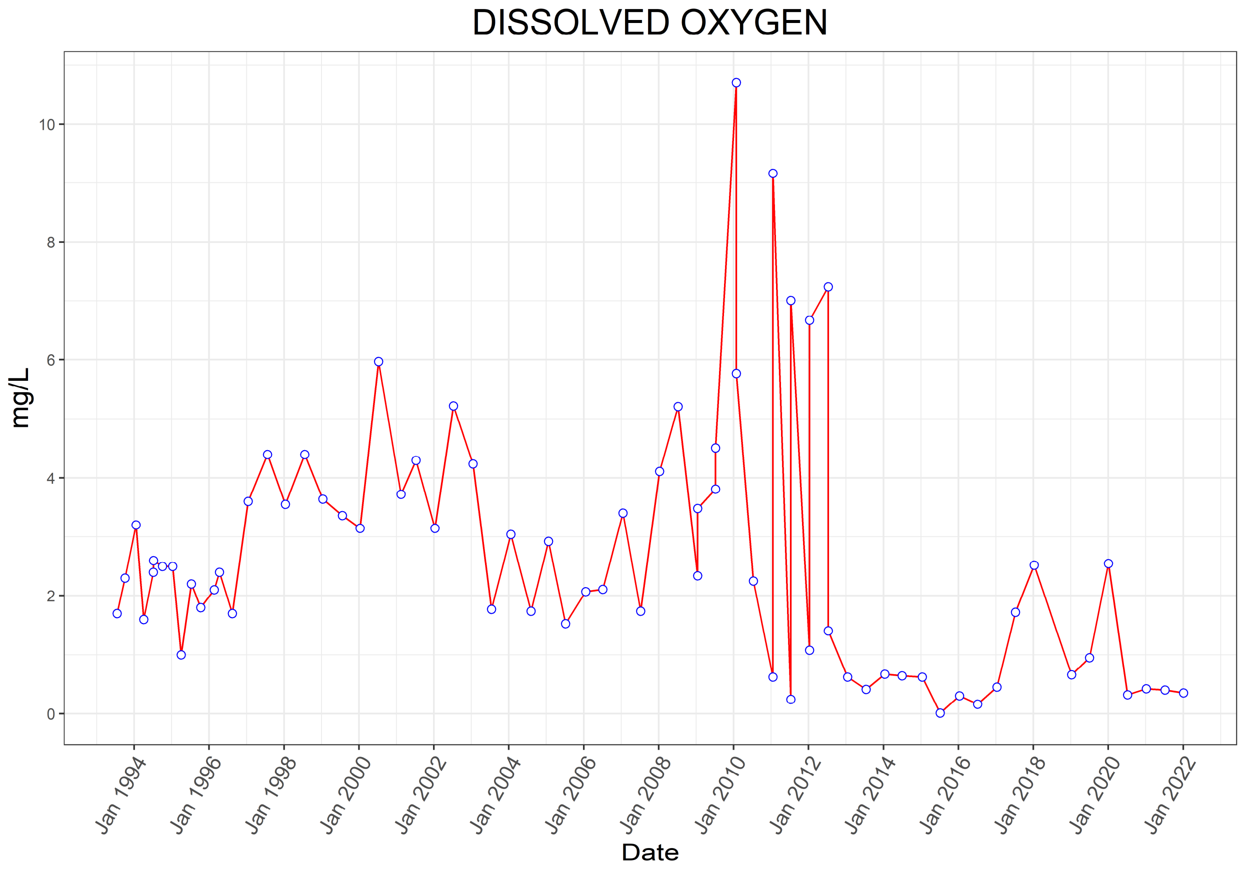

Lead
mg/L
0.025
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

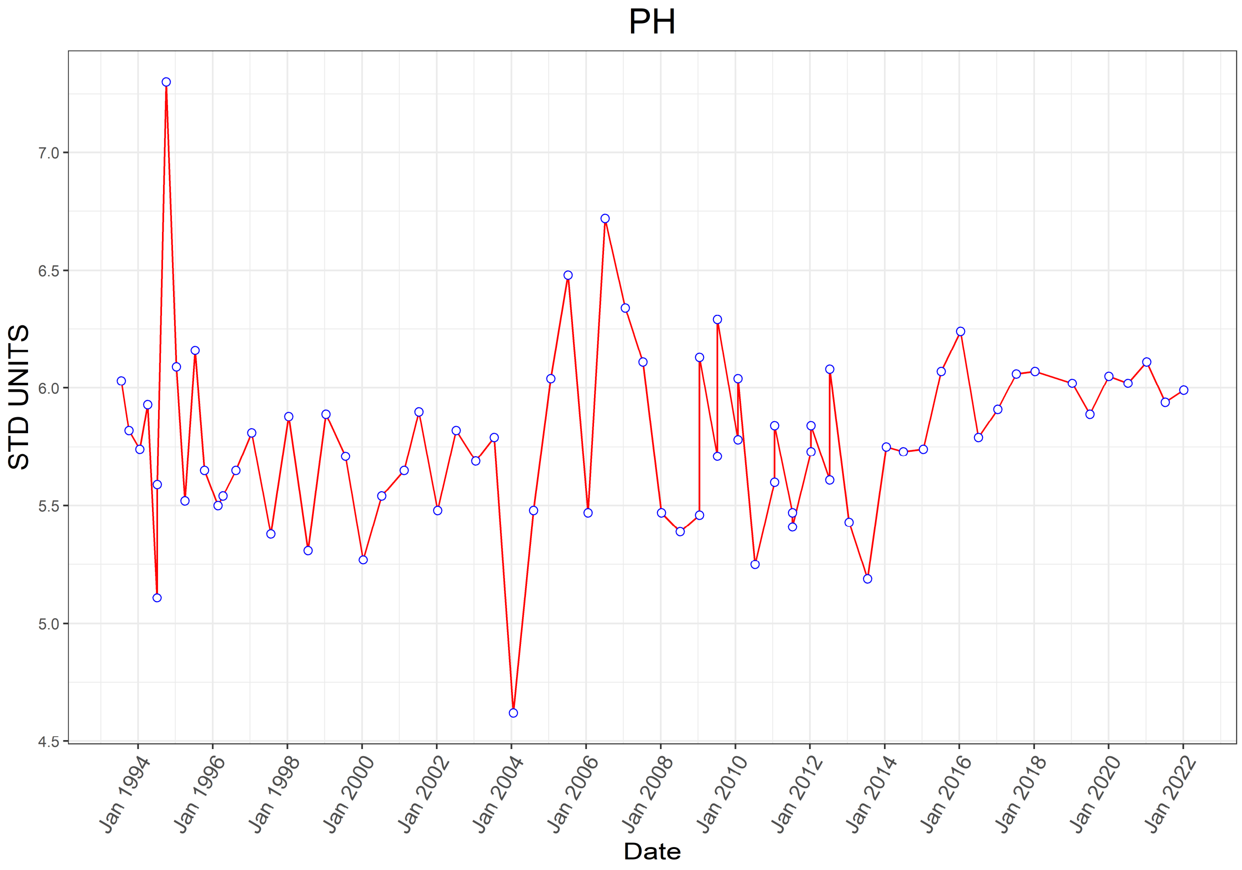

Sodium
mg/L
60
50
40
30
20
10
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

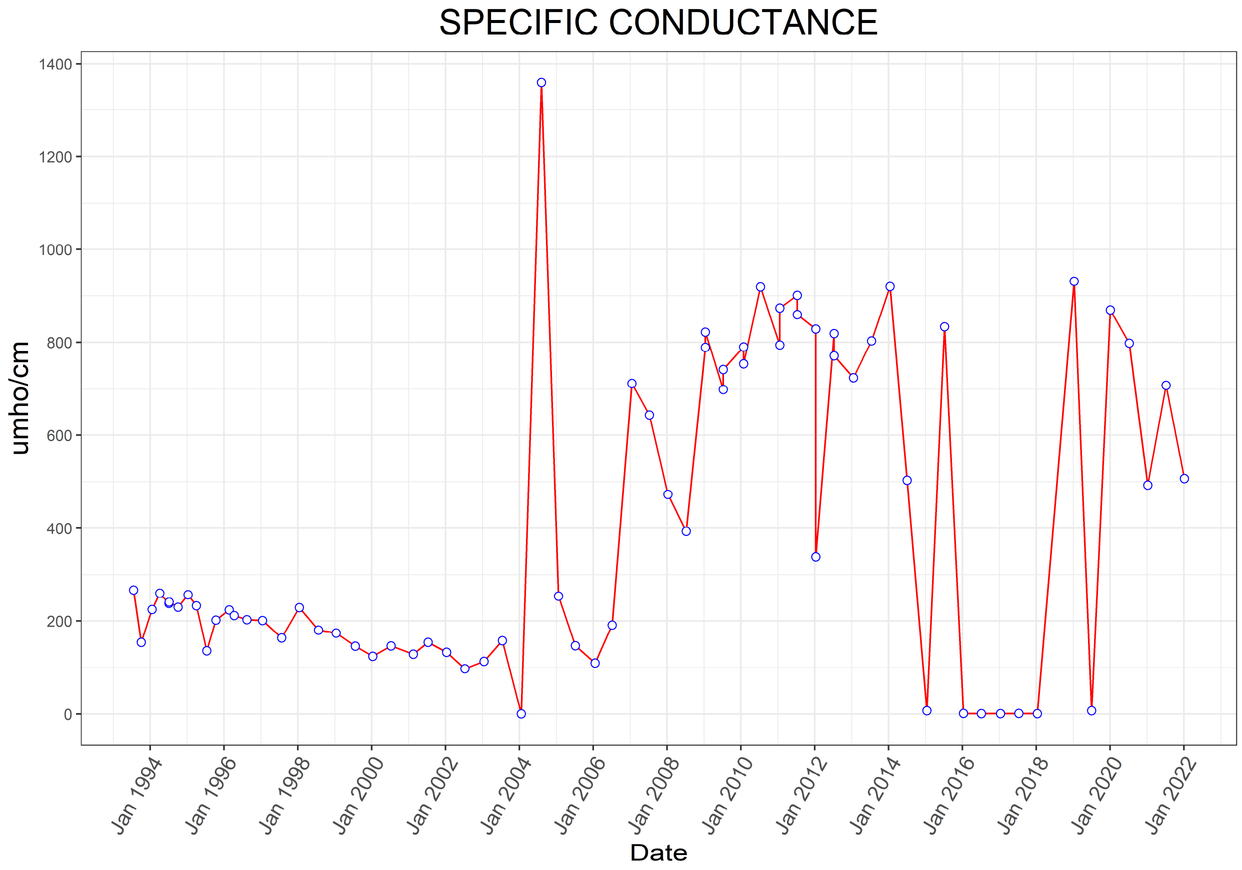

Ammonia
mg/L
0
2
4
6
8
10
12
14
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

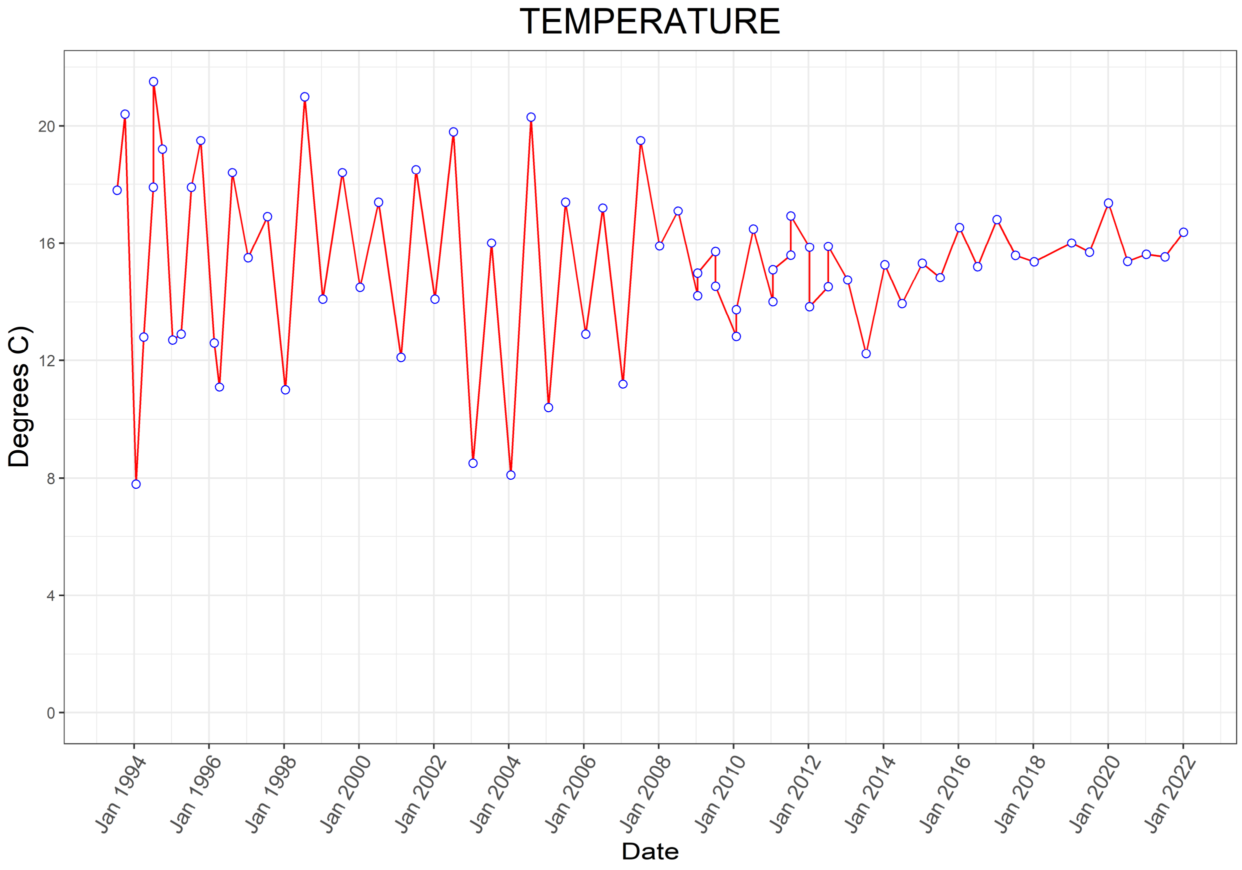
Well Name: R19-M02B

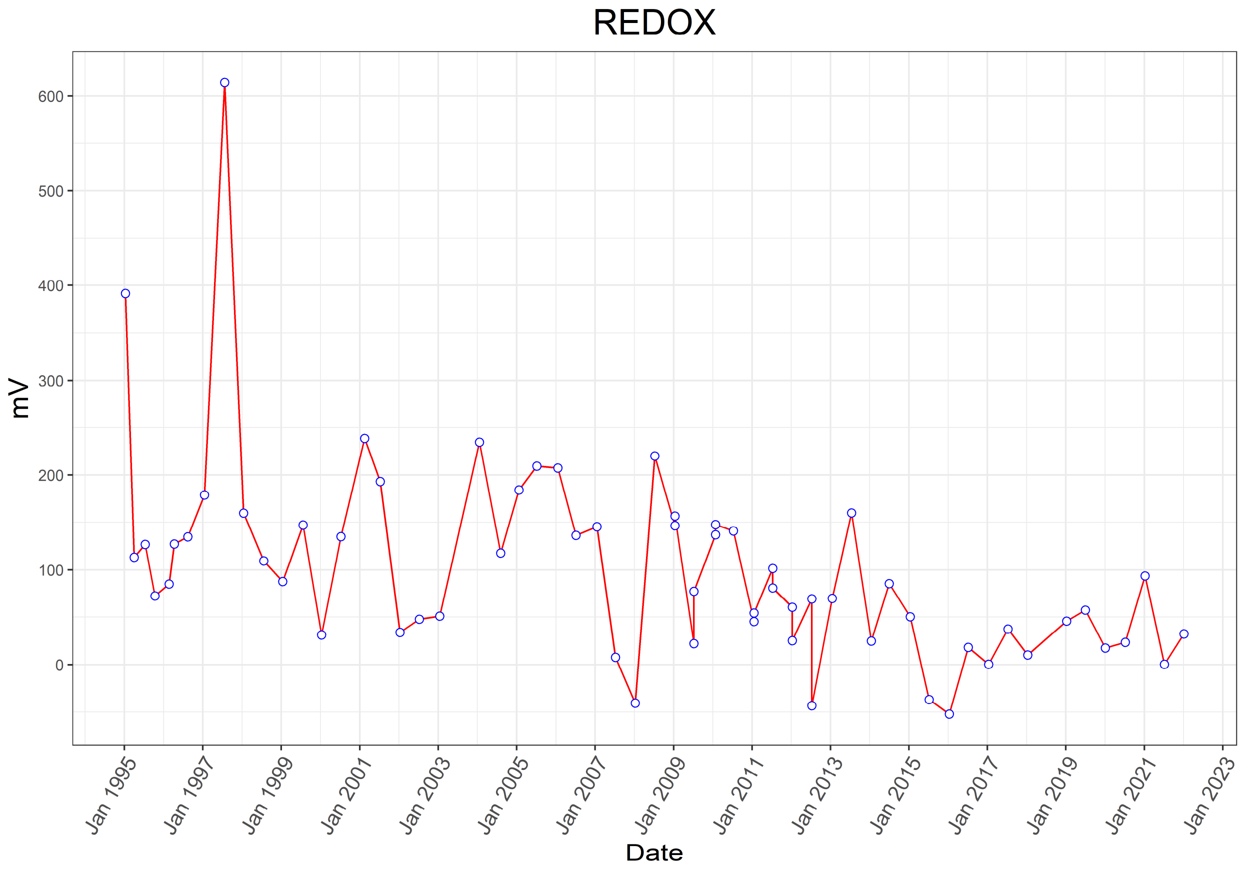
Field Parameters






SPECIFIC CONDUCTANCE
umho/cm
1400
1200
1000
800
600
400
200
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


TEMPERATURE
Degrees C)
20
16
12
8
4
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


REDOX
mV
600
500
400
300
200
100
0
Date
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

Secure C Landfill Detection Monitoring Program (Program 7)

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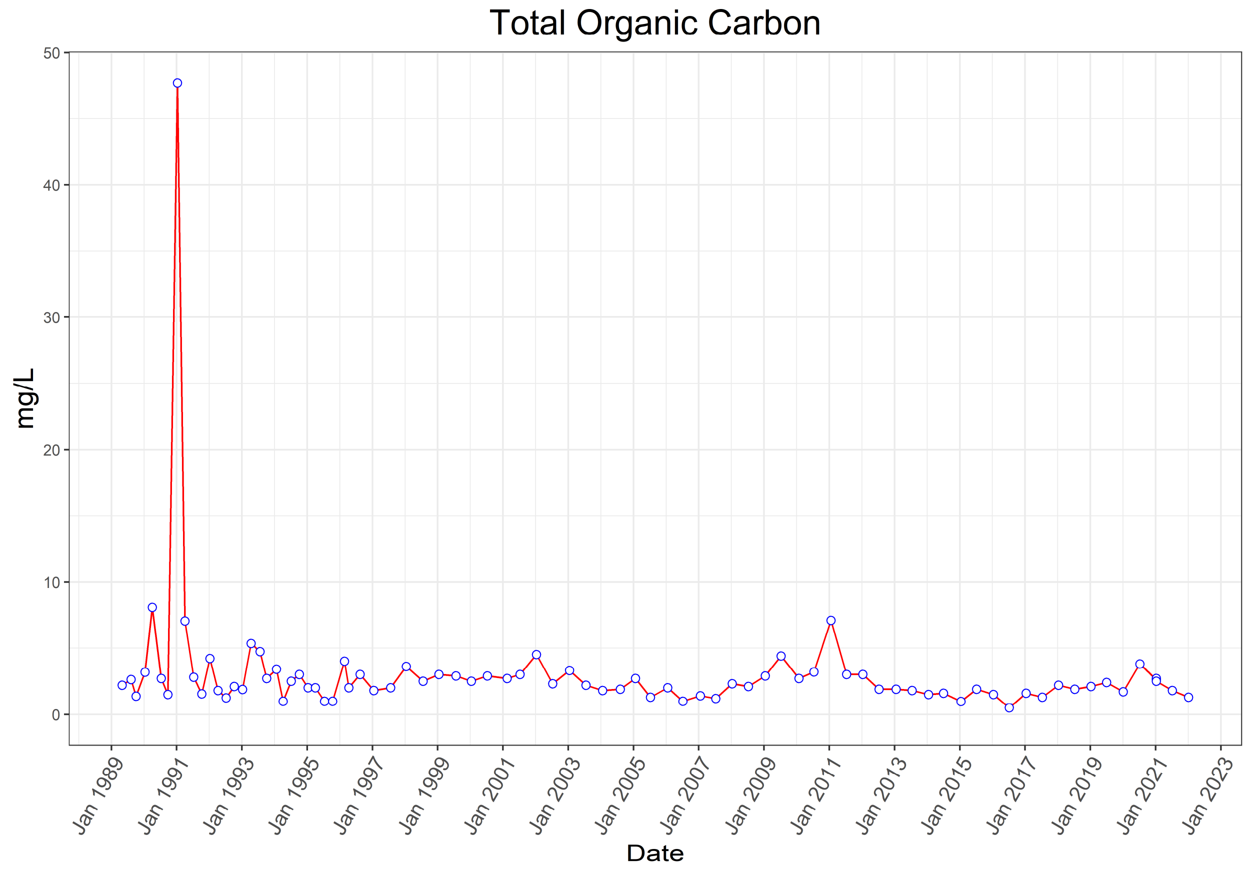
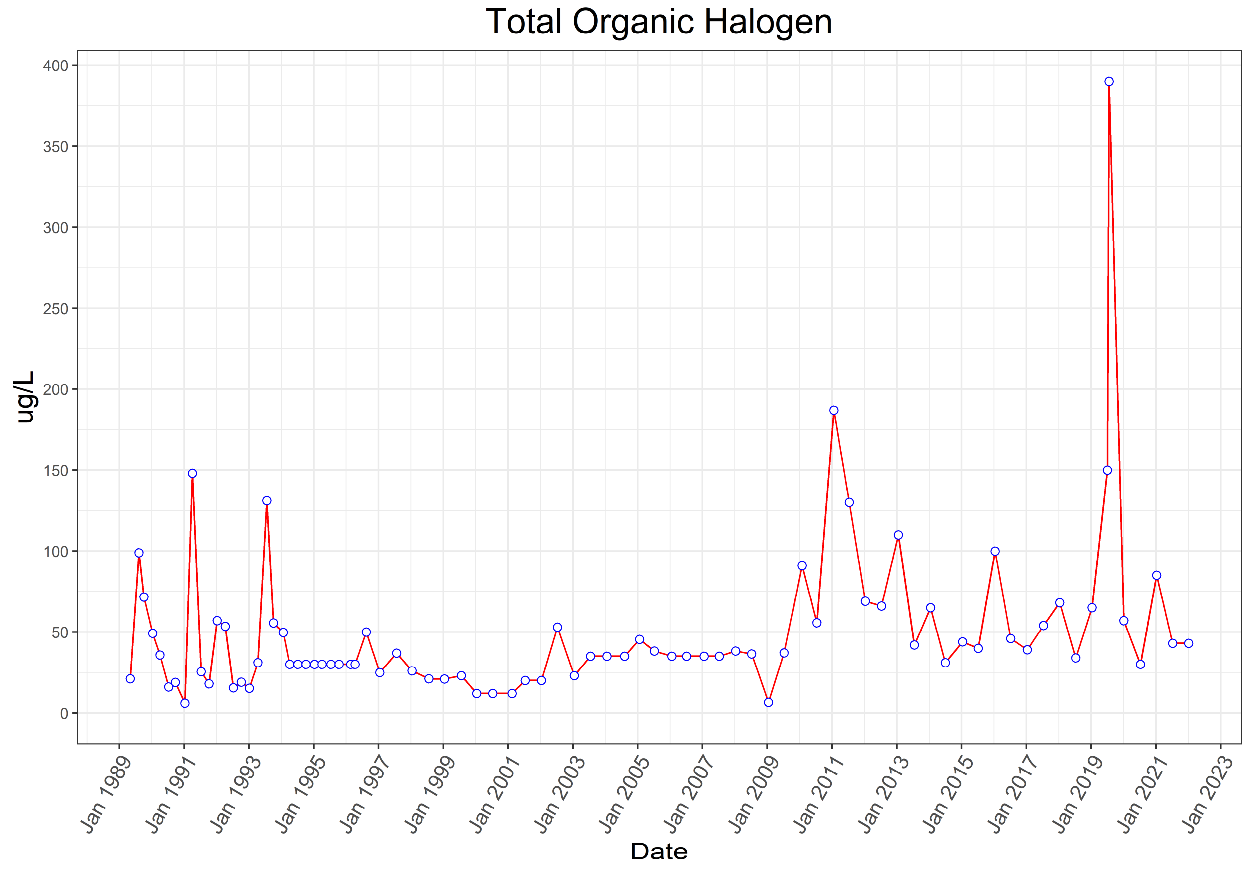
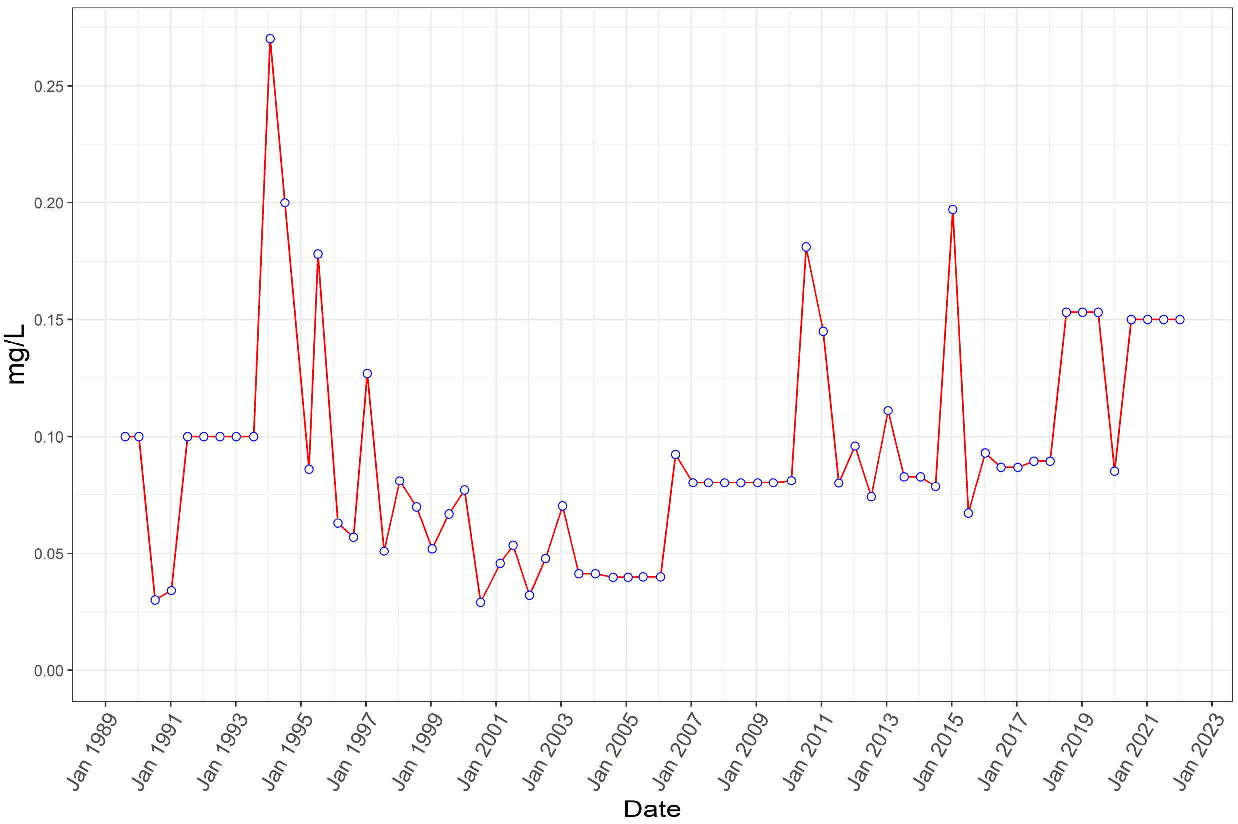
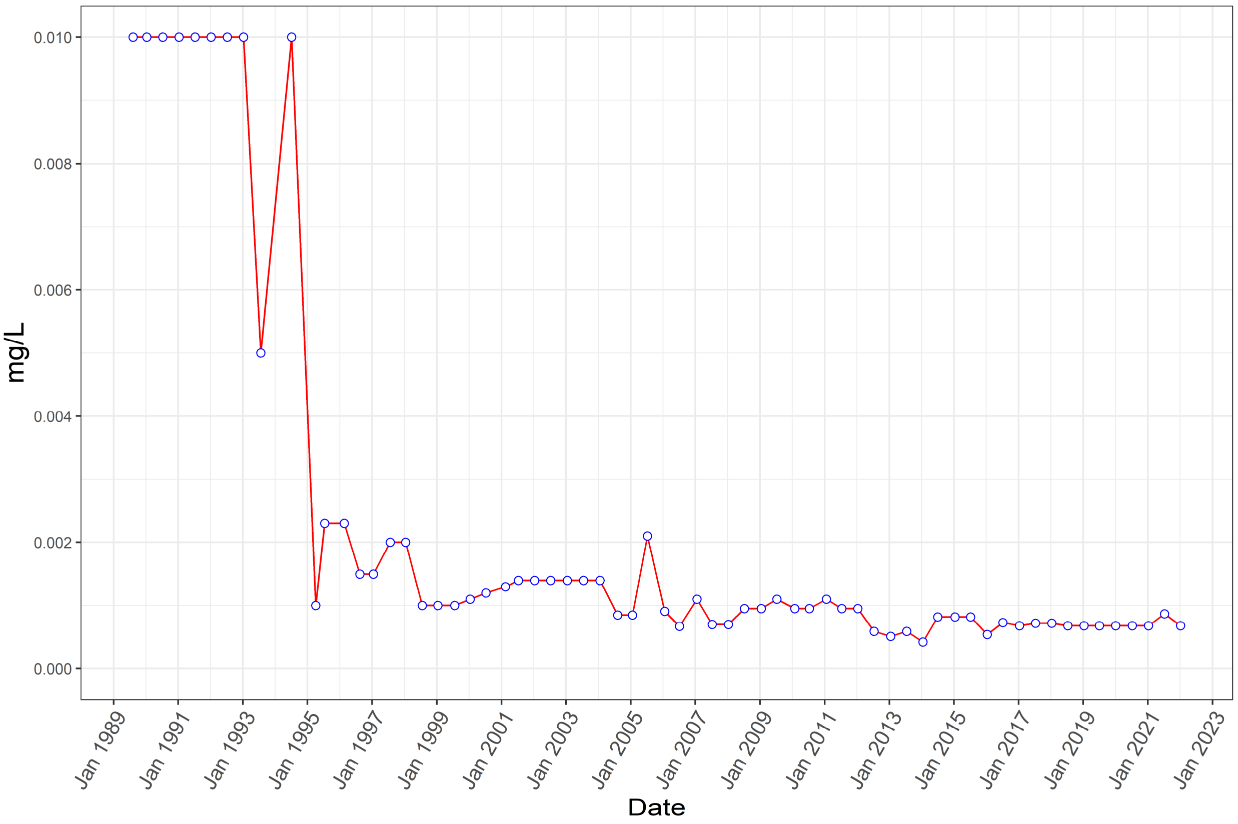


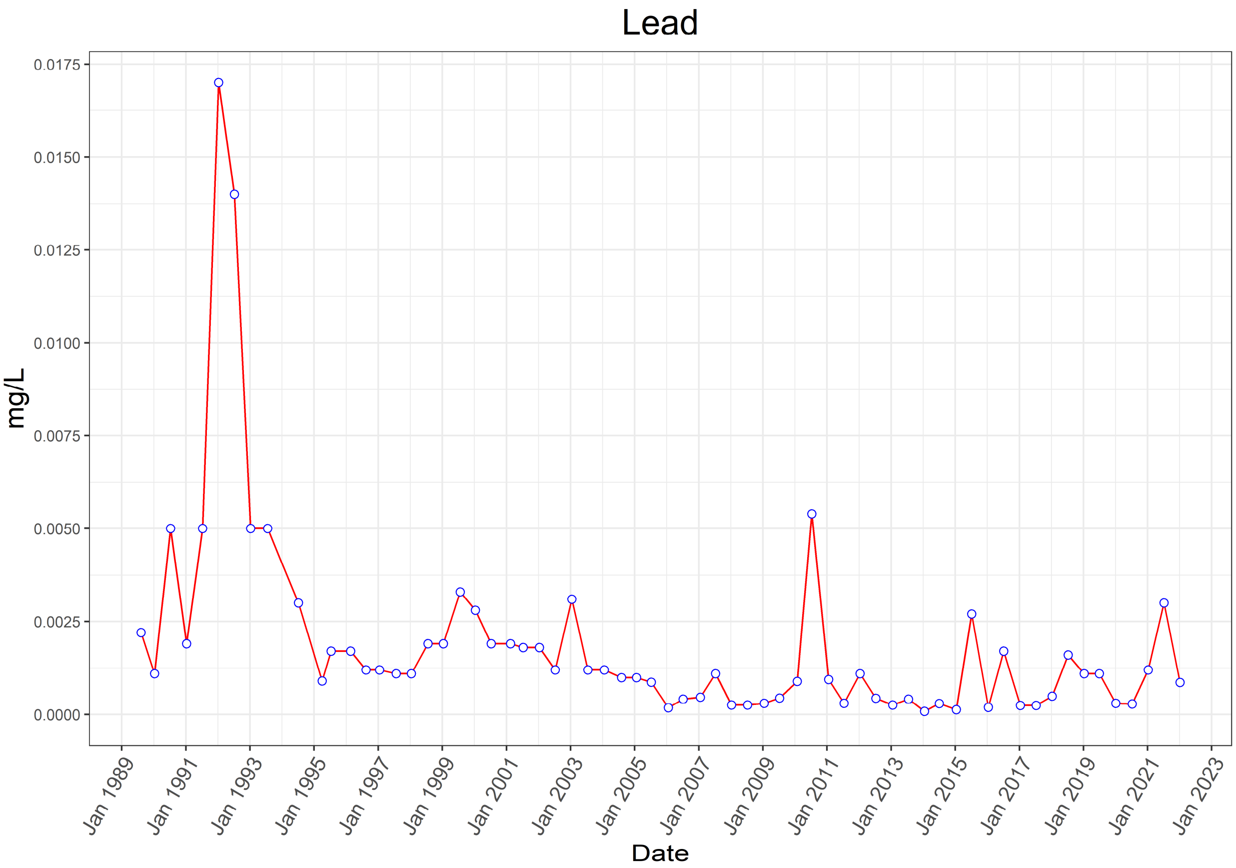


Aluminum



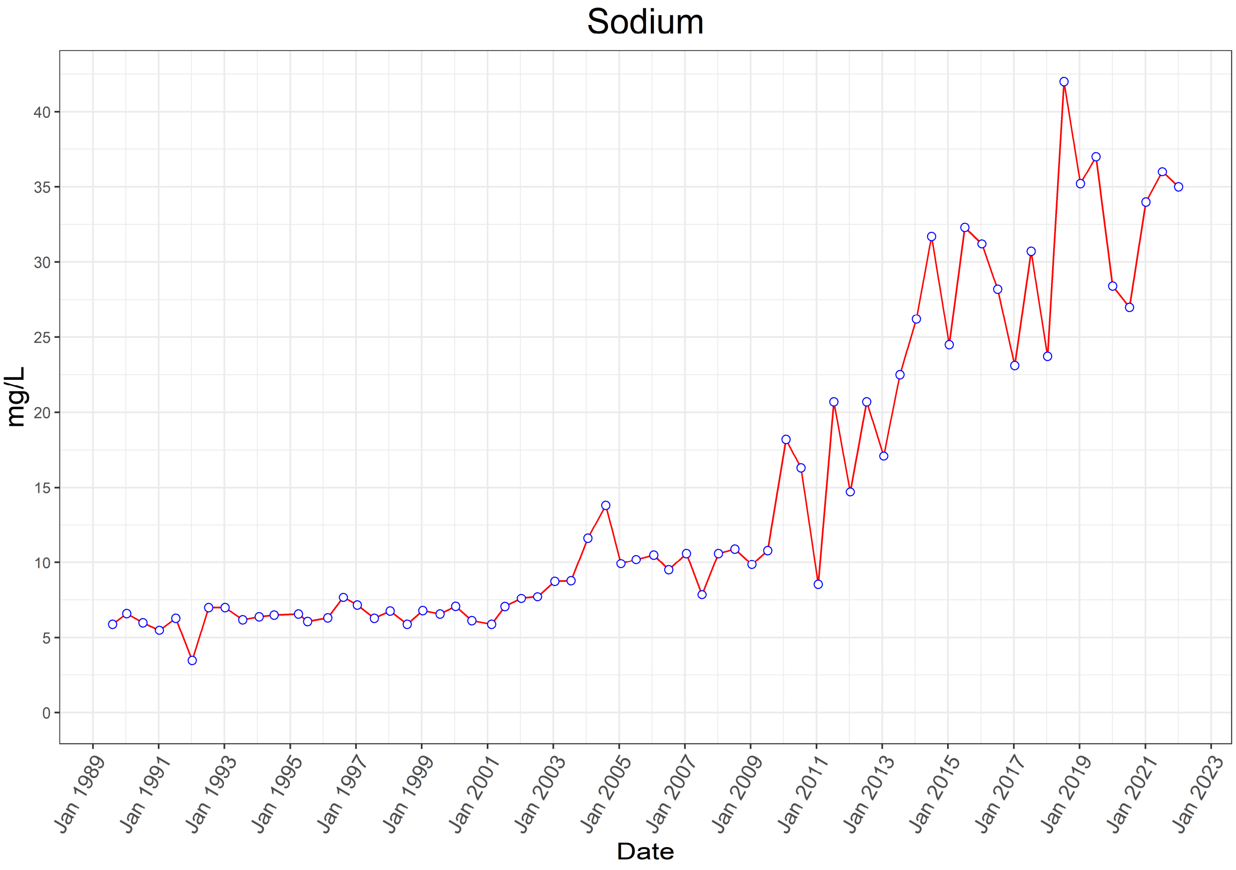
Arsenic





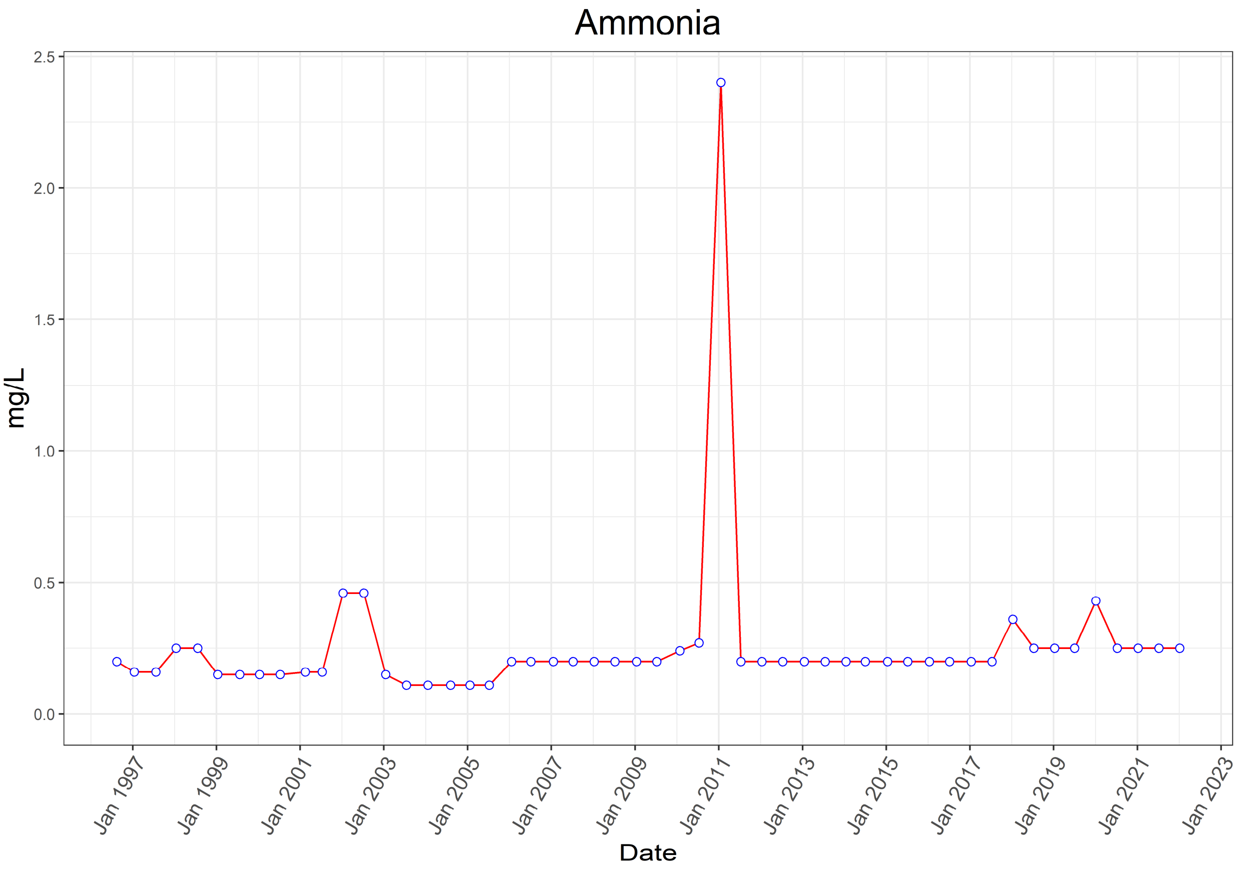
Lead

mg/L
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date



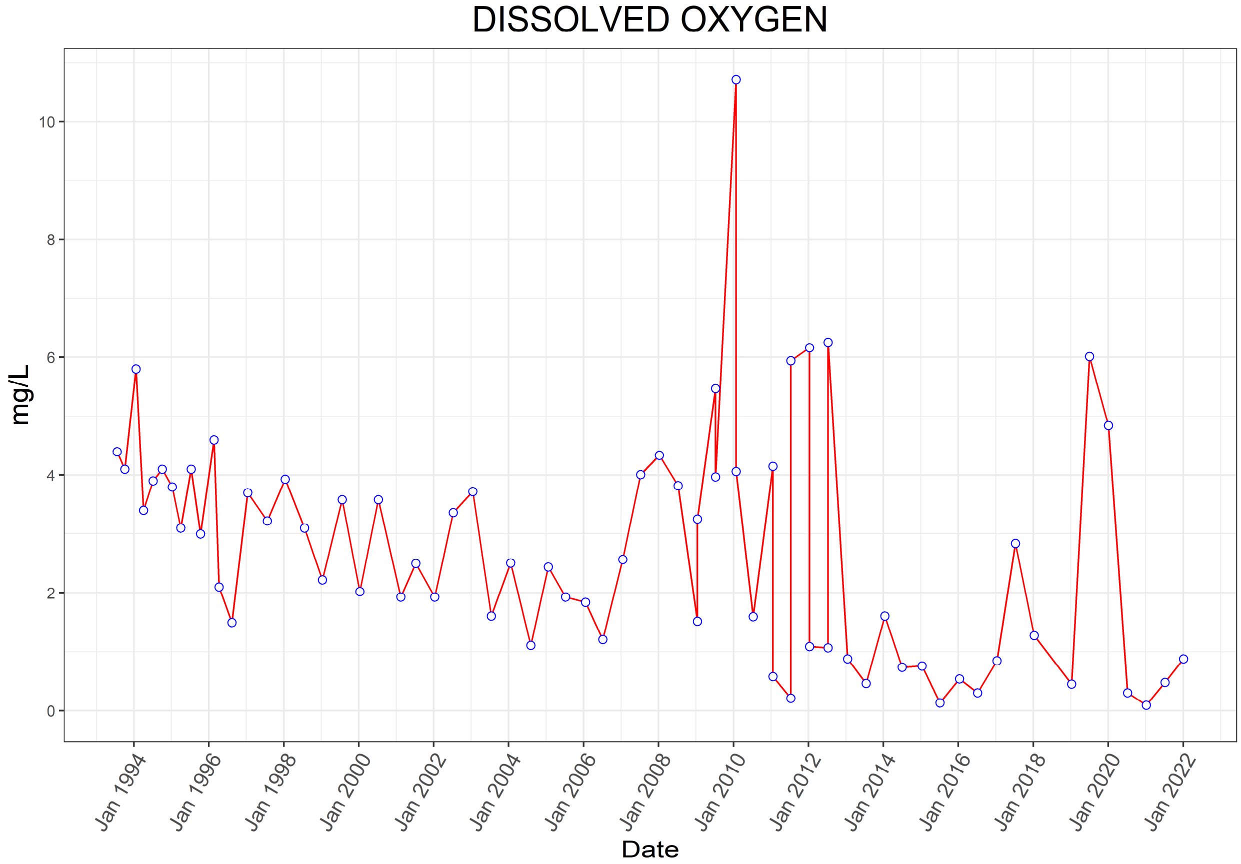
Sodium

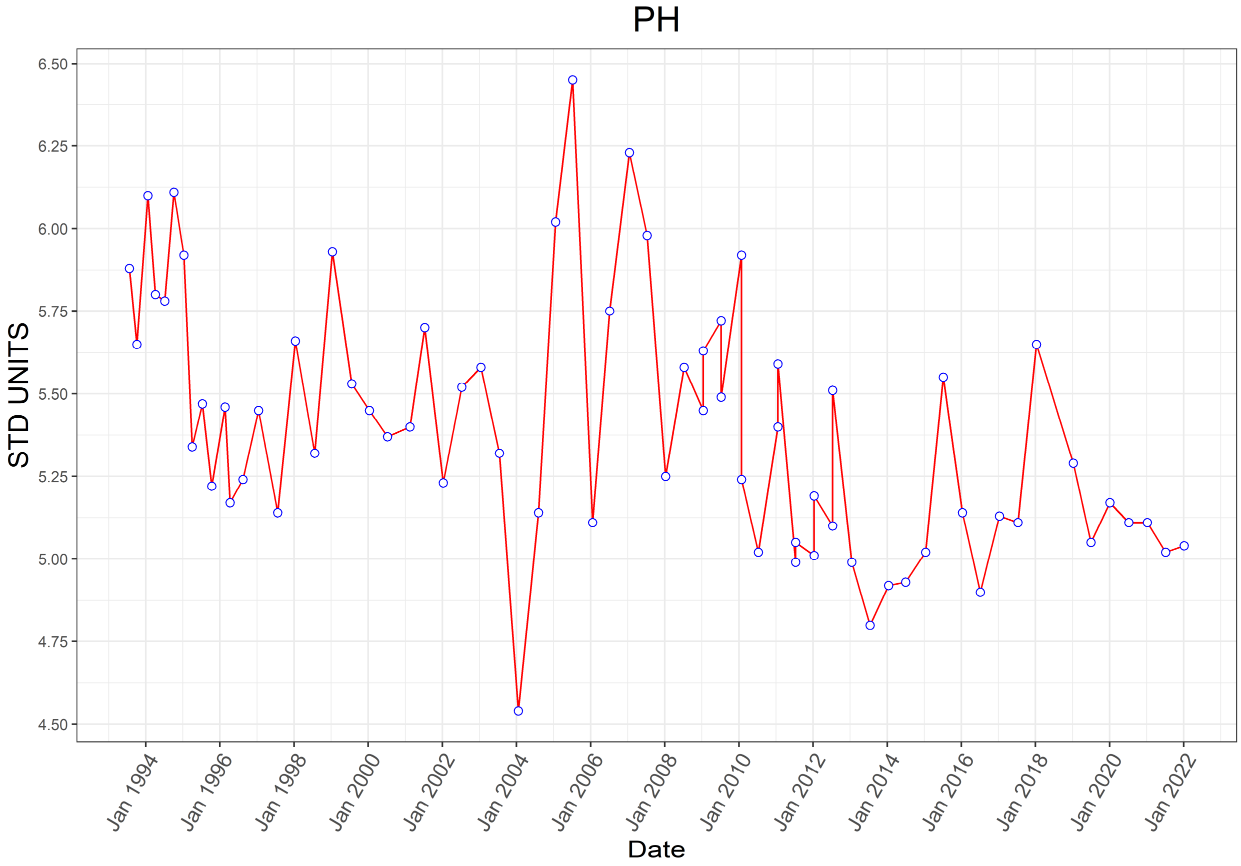
mg/L
40
35
30
25
20
15
10
5
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

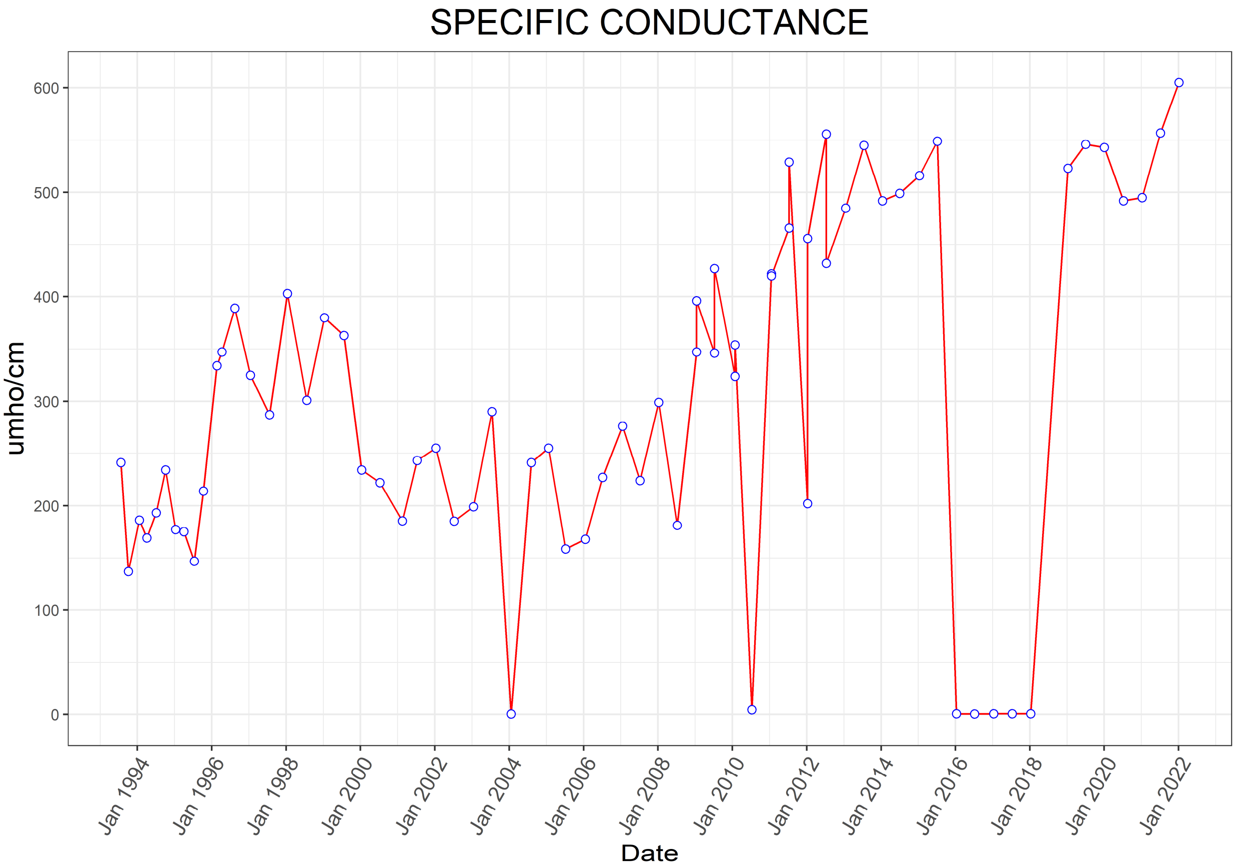

Ammonia
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

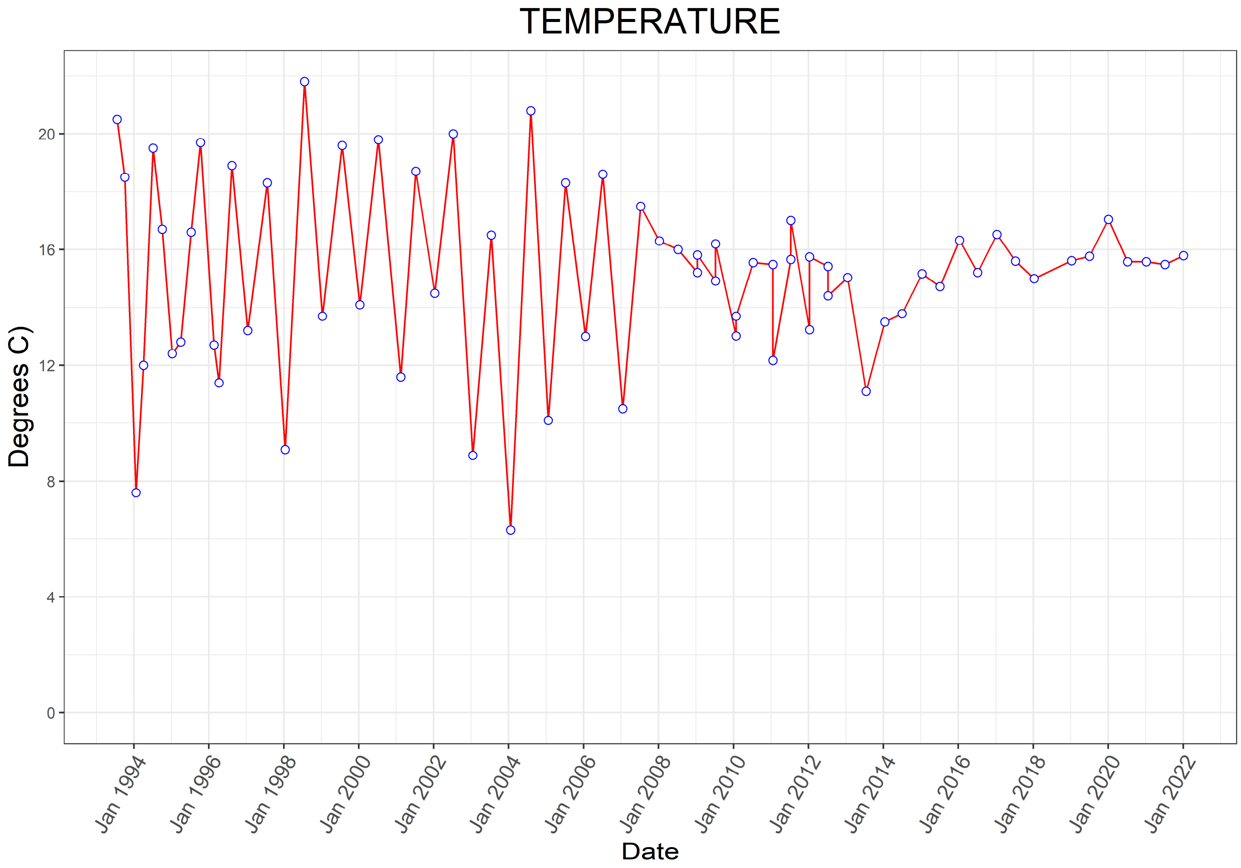
Well Name: S19-M01B

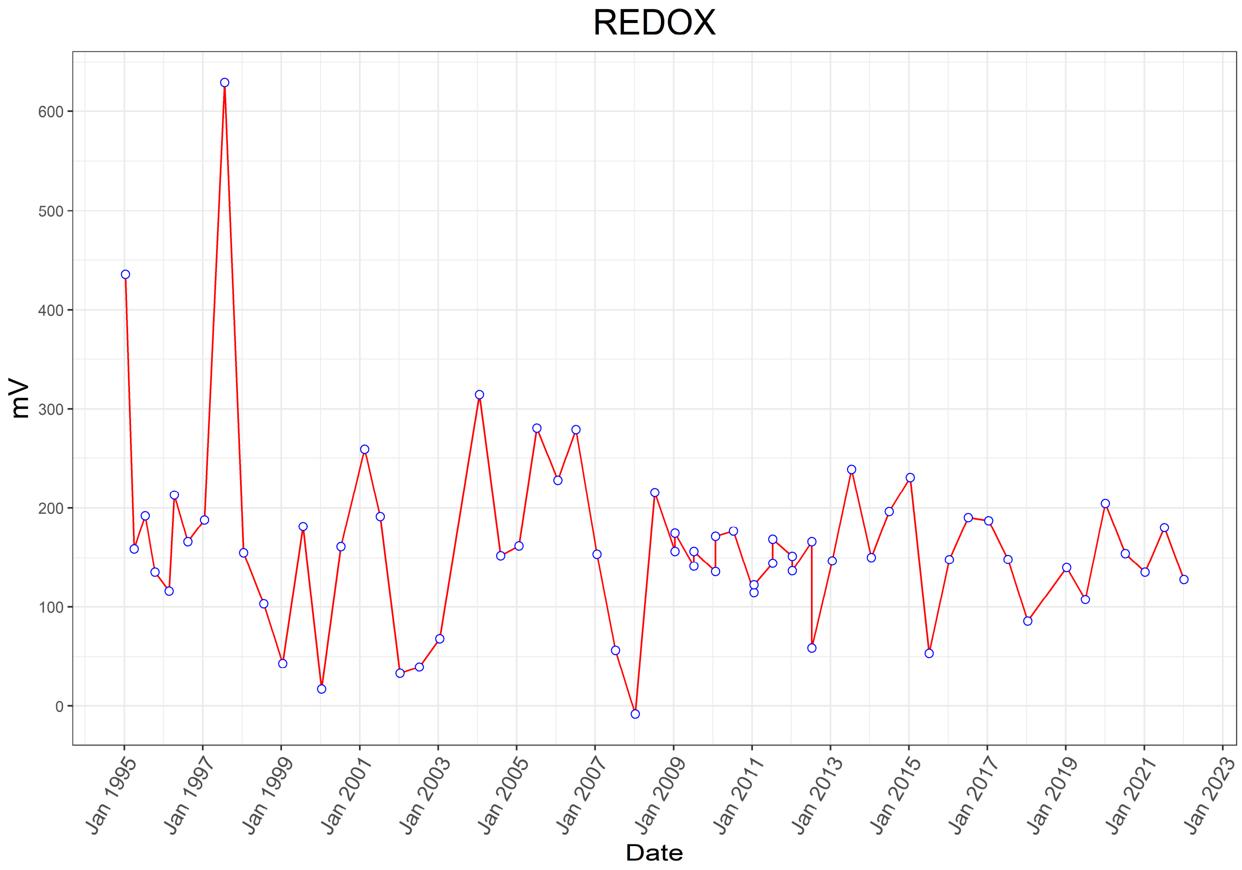
Field Parameters





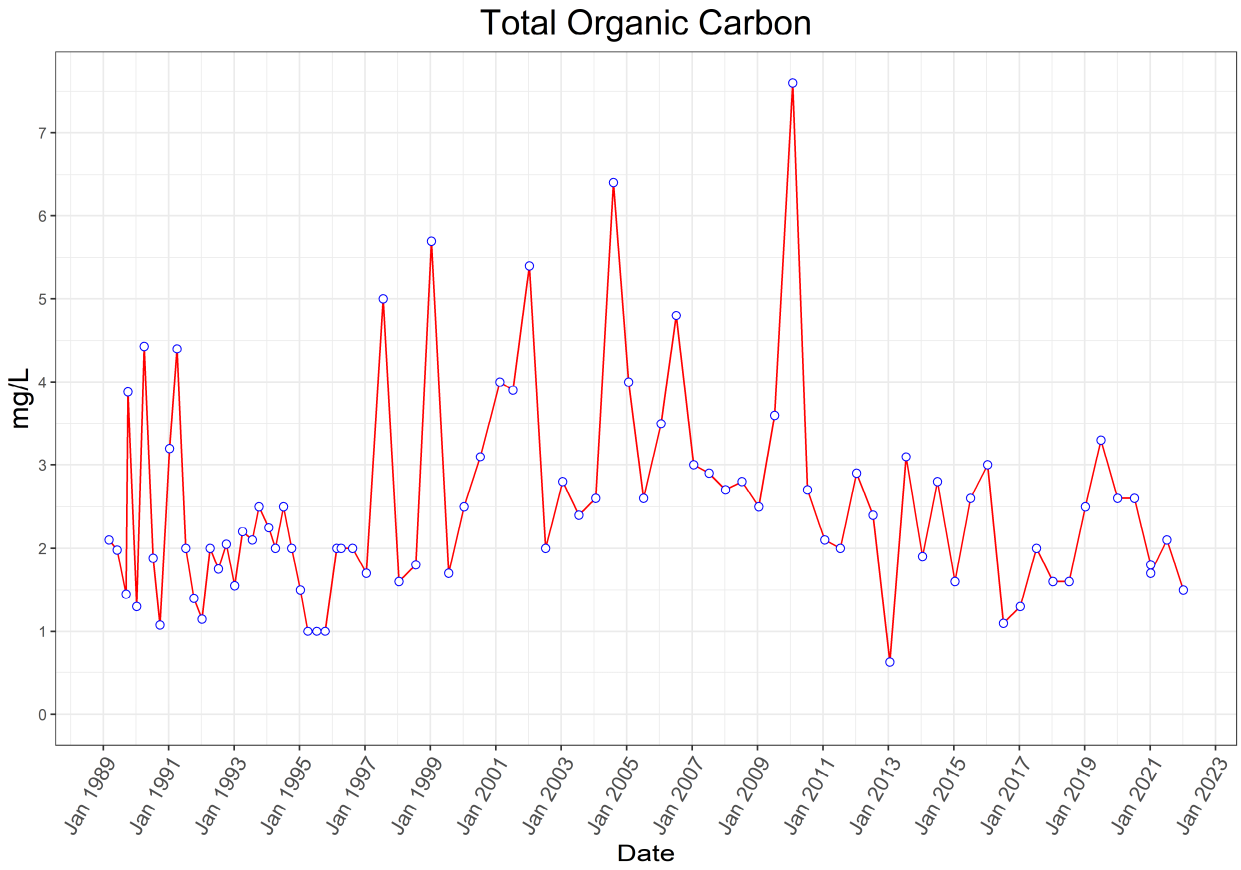

SPECIFIC CONDUCTANCE
umho/cm
0
100
200
300
400
500
600
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

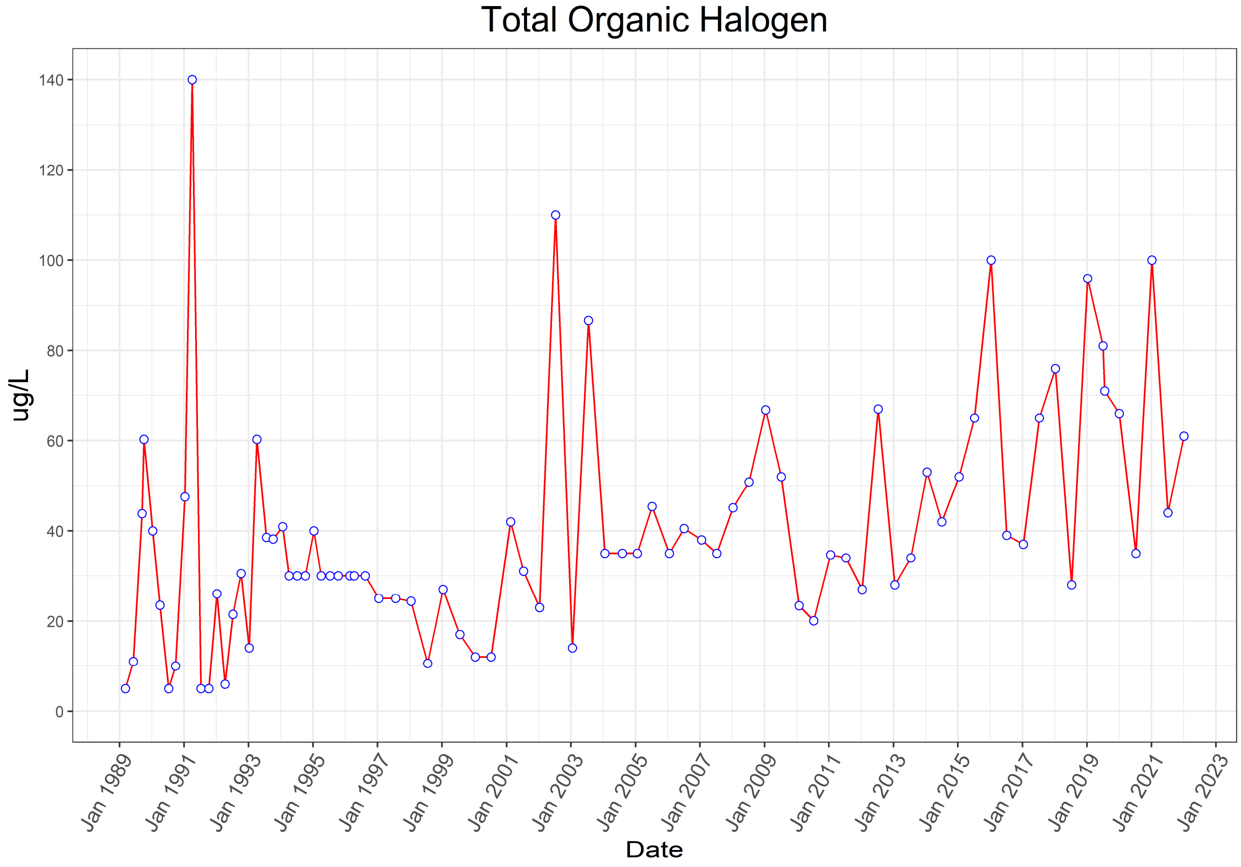

TEMPERATURE
Degrees C)
0
4
8
12
16
20
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

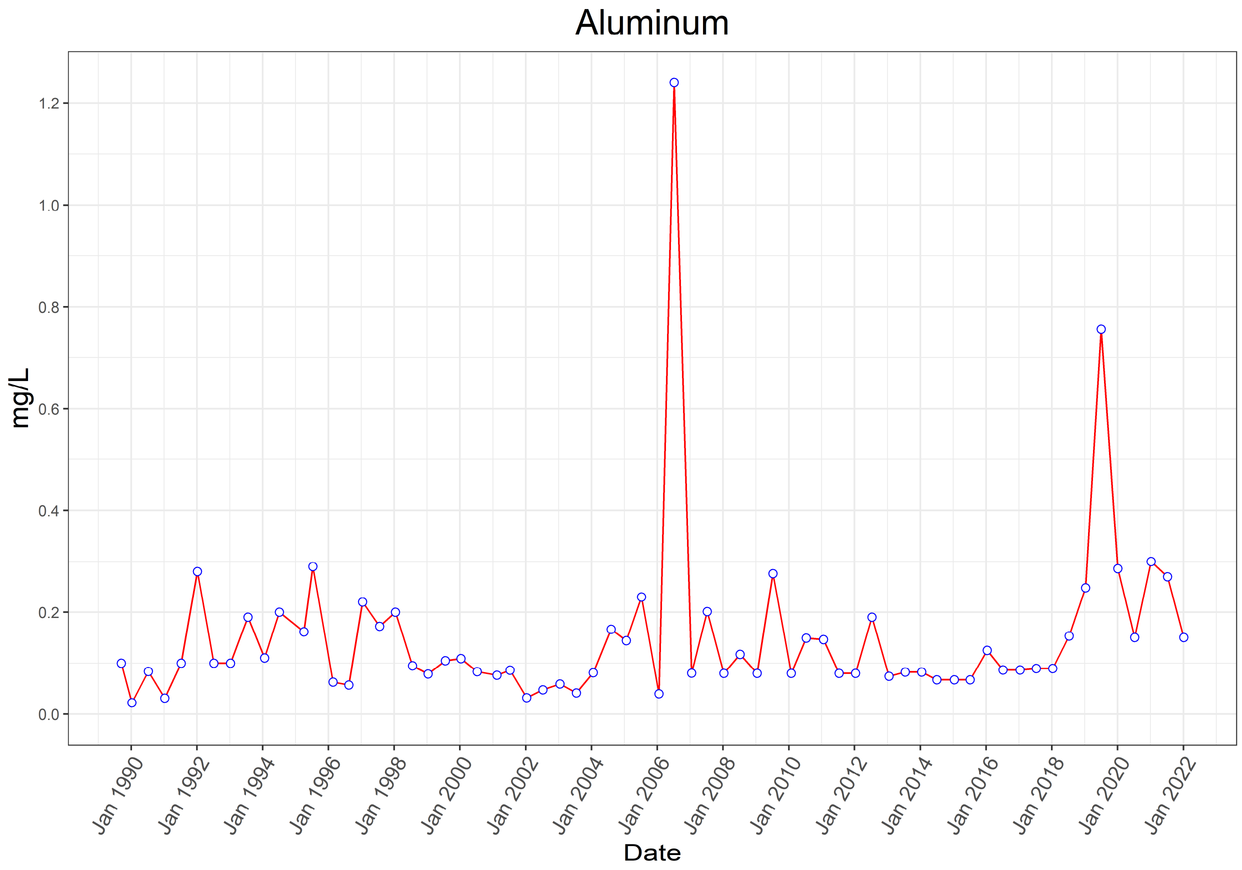

REDOX
mV
600
500
400
300
200
100
0
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date

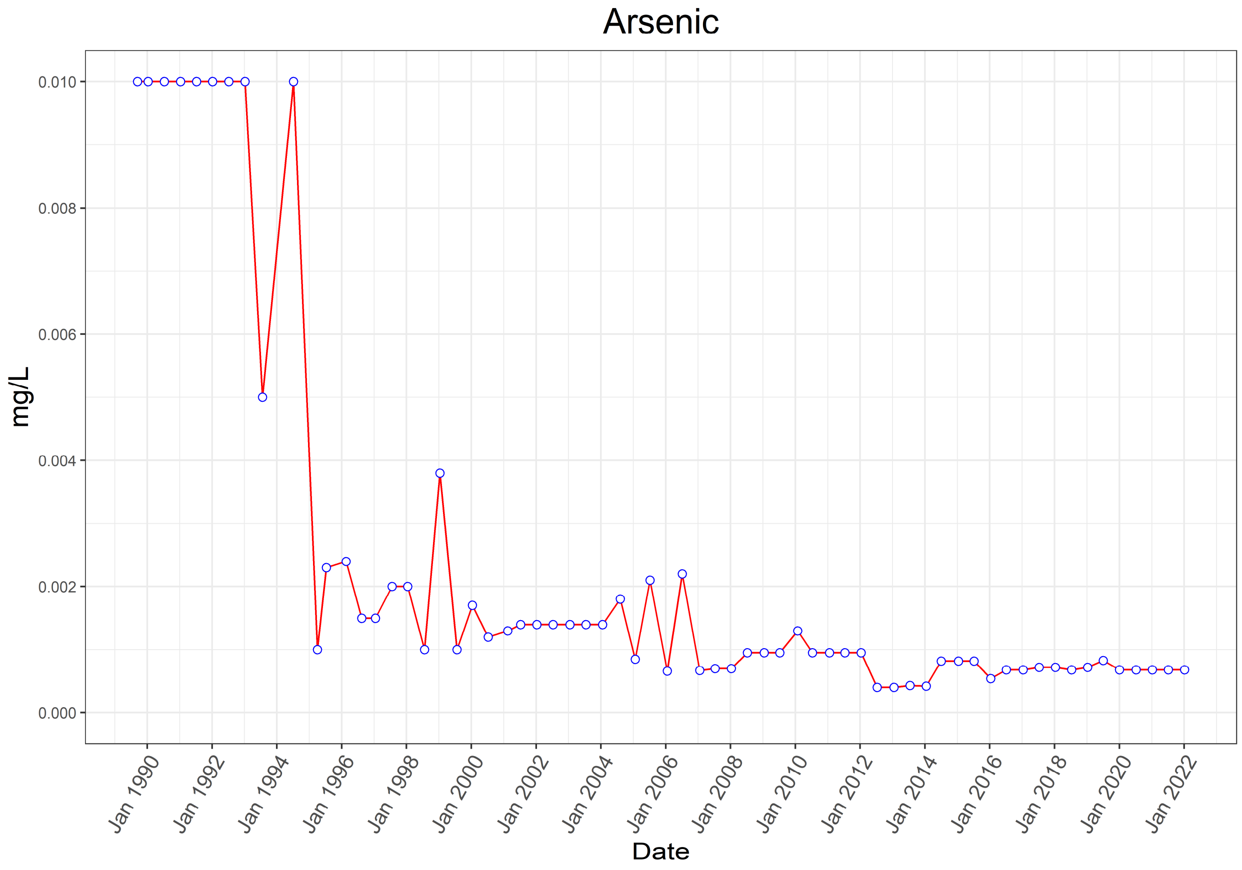
Secure C Landfill Detection Monitoring Program (Program 7)

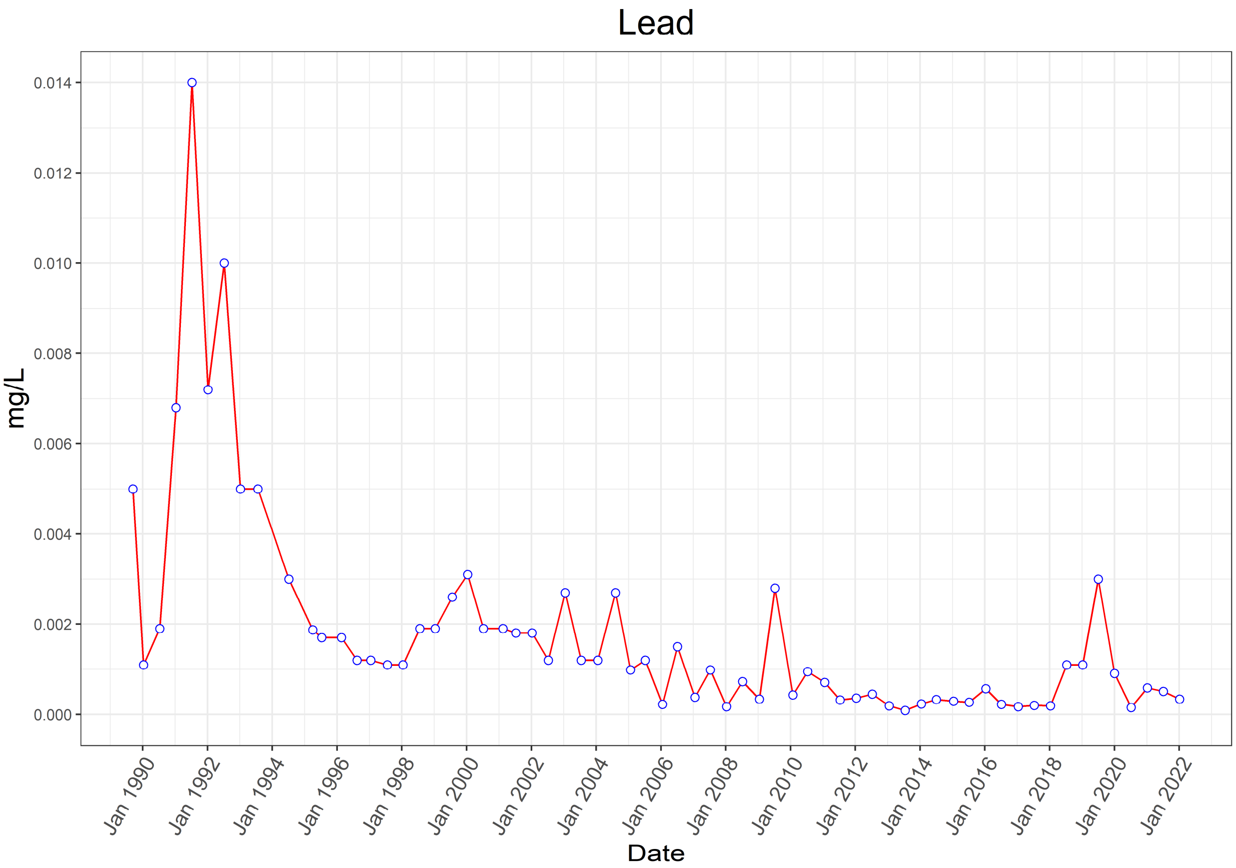
Well Name: S19-M02B

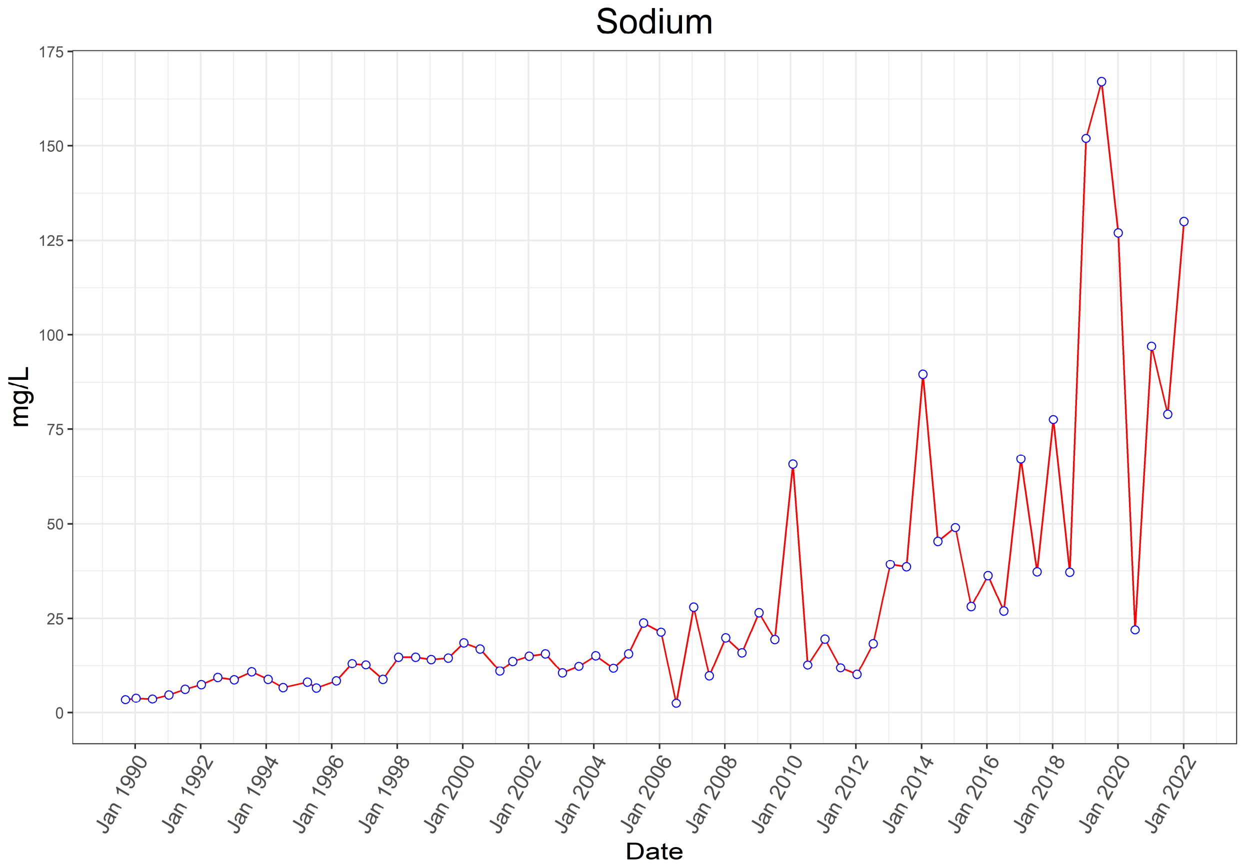


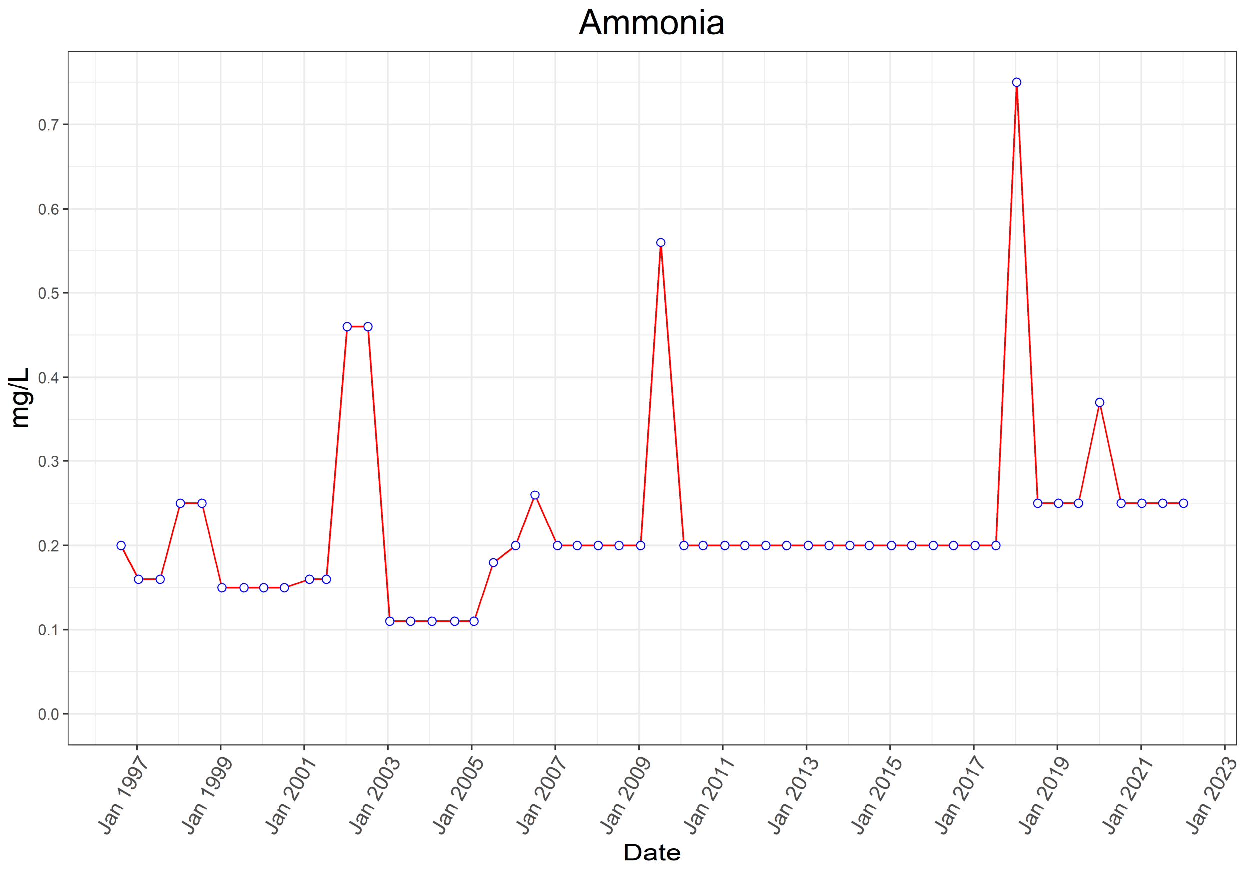



Aluminum
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Arsenic
mg/L
0.010
0.008
0.006
0.004
0.002
0.000
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

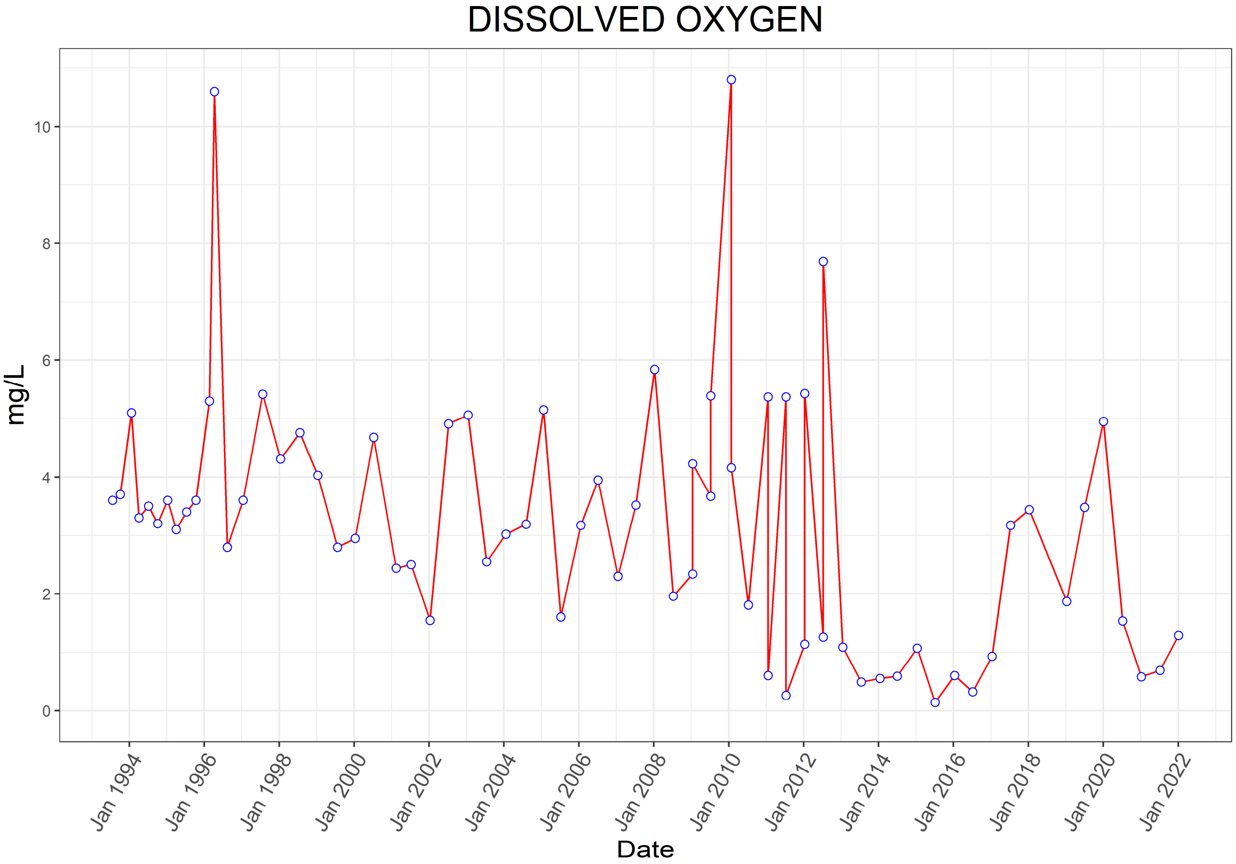

Lead
mg/L
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

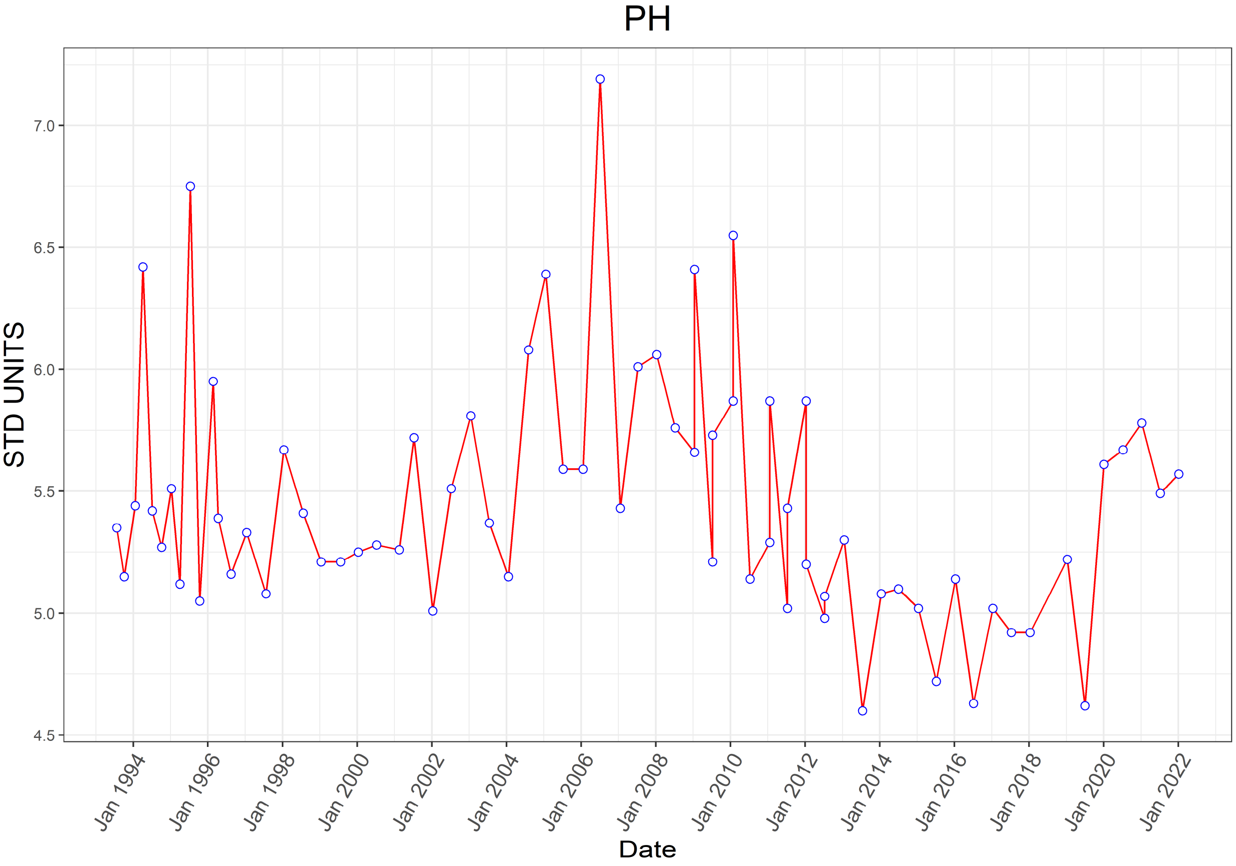

Sodium
mg/L
175
150
125
100
75
50
25
0
Jan 1990
Jan 1992
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

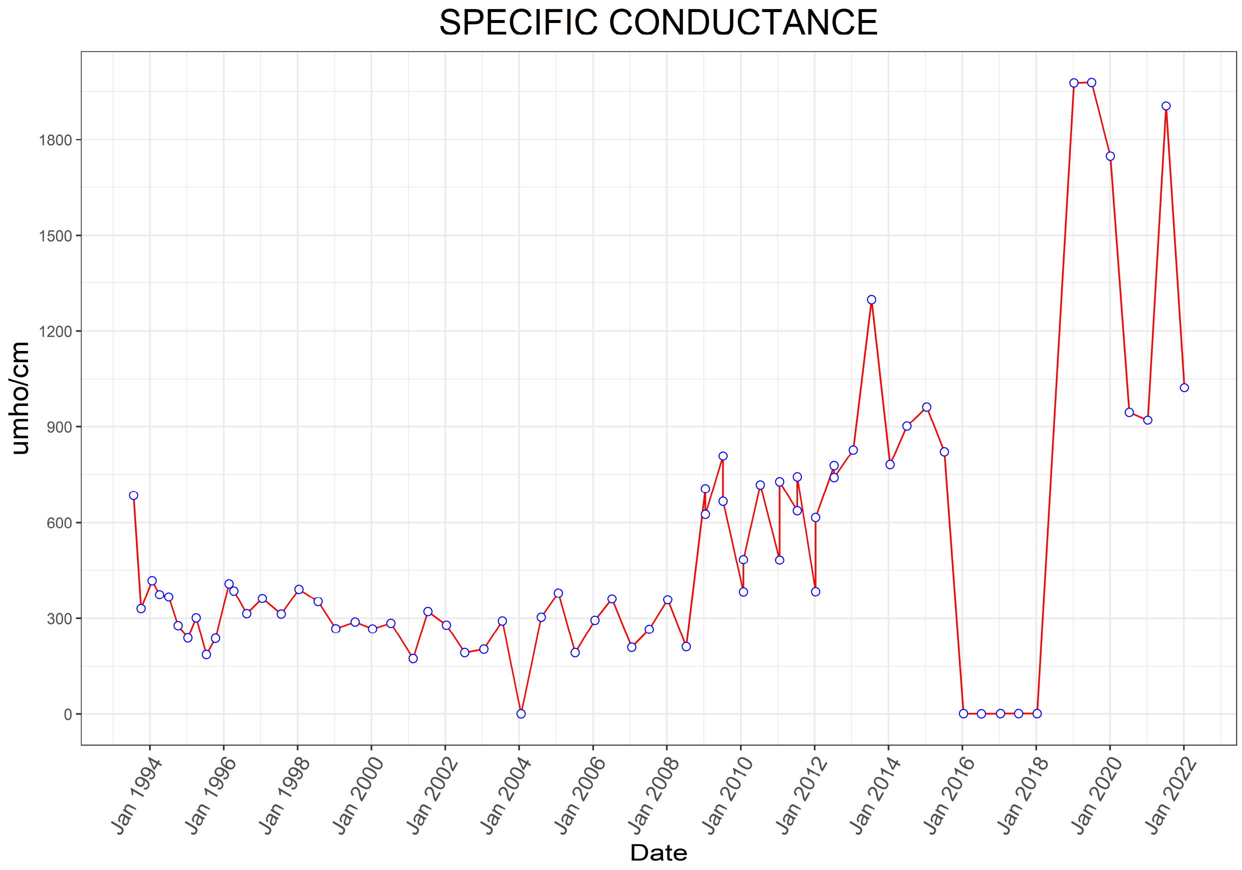

Ammonia
mg/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Date
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

Well Name: S19-M02B

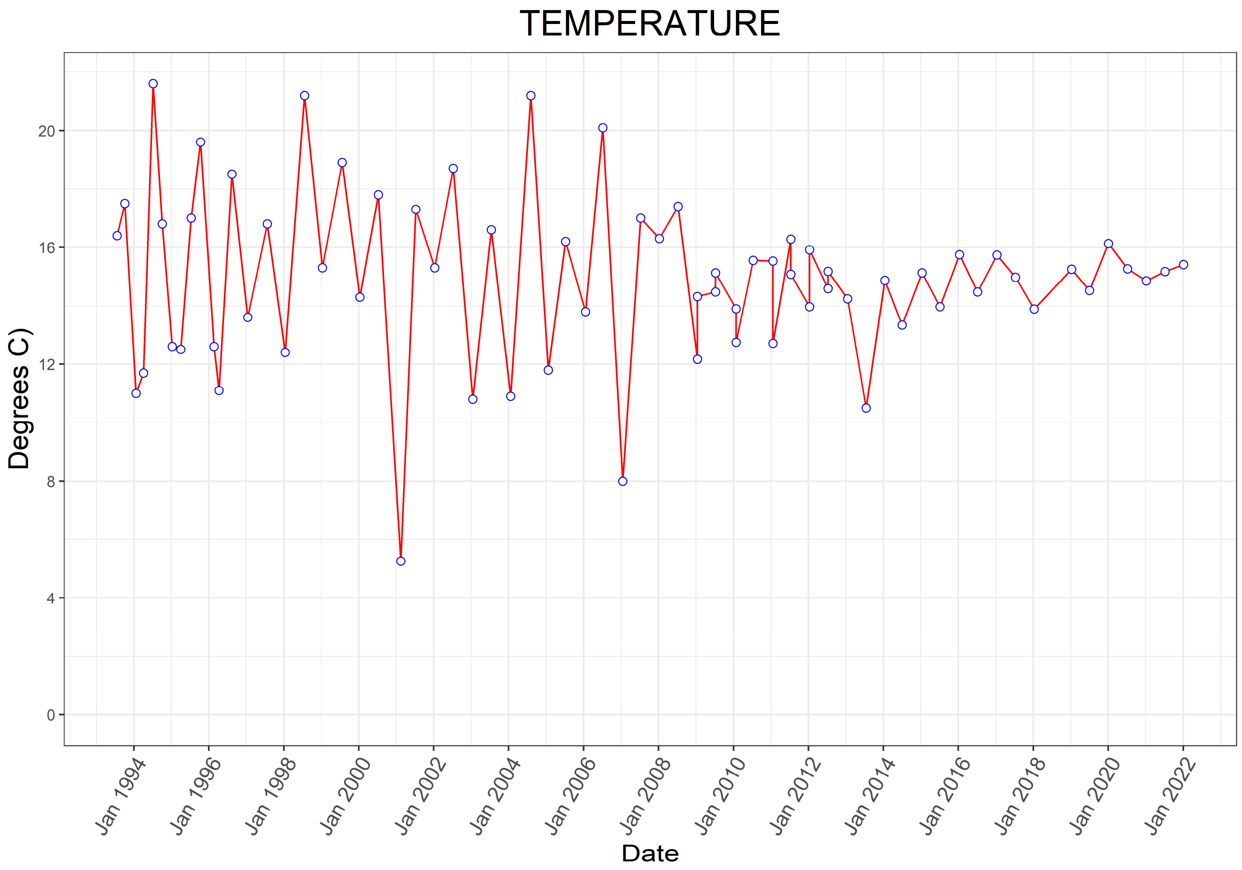
Field Parameters



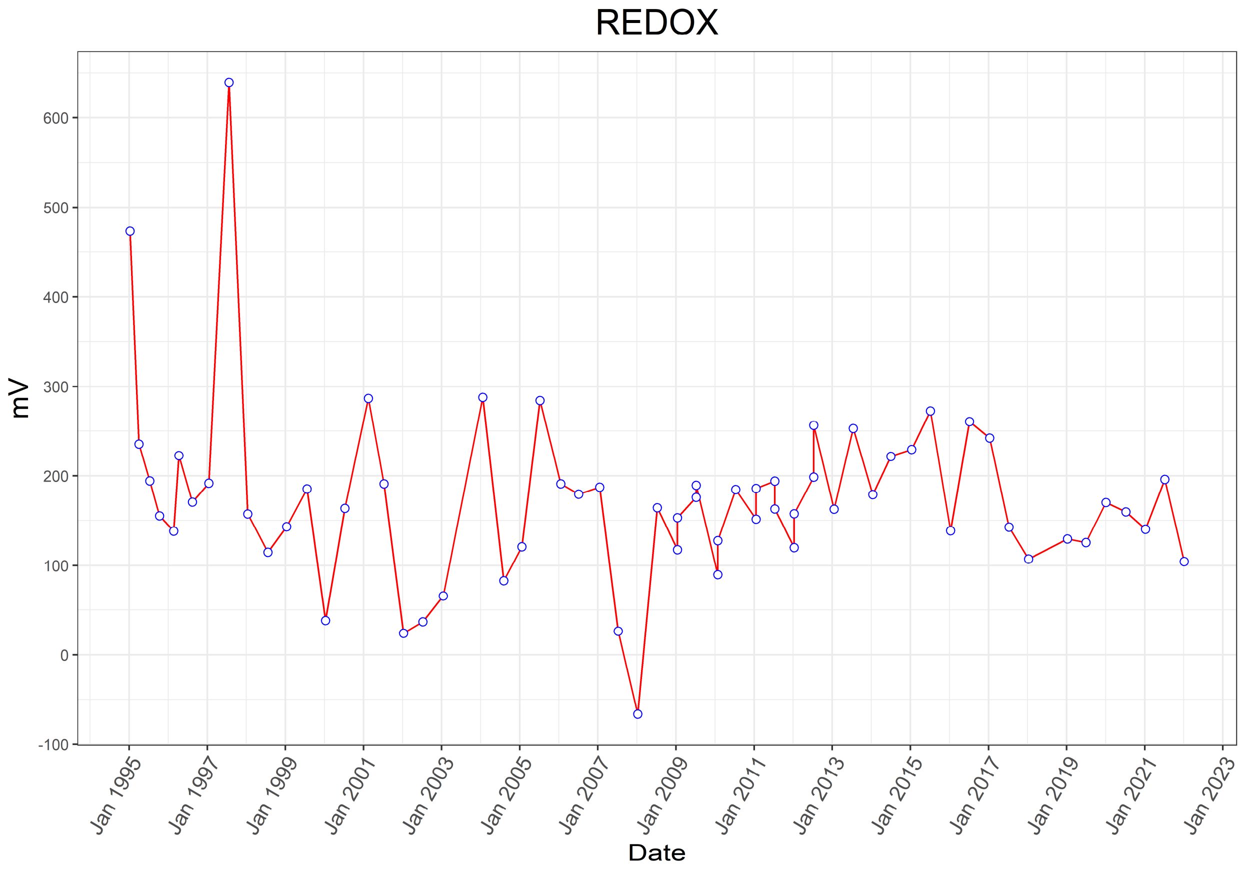




SPECIFIC CONDUCTANCE

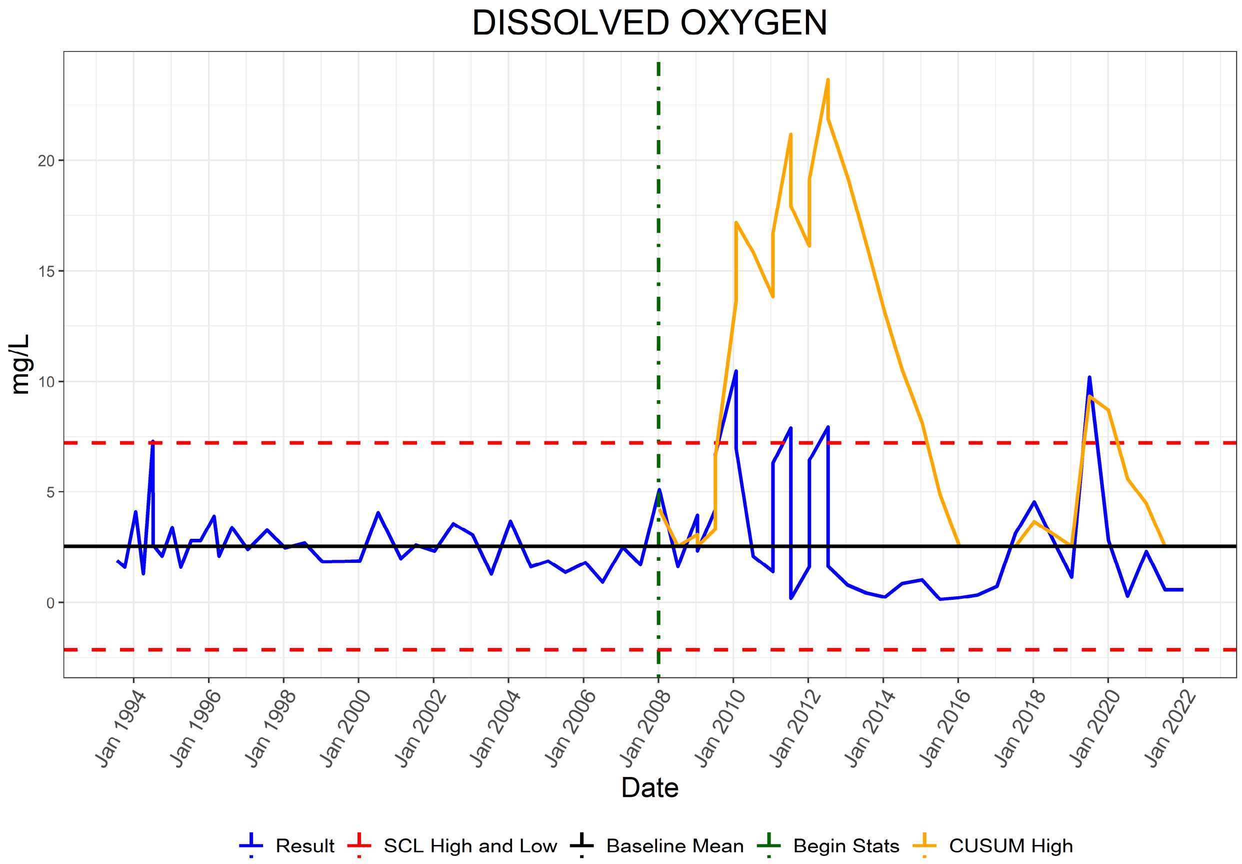


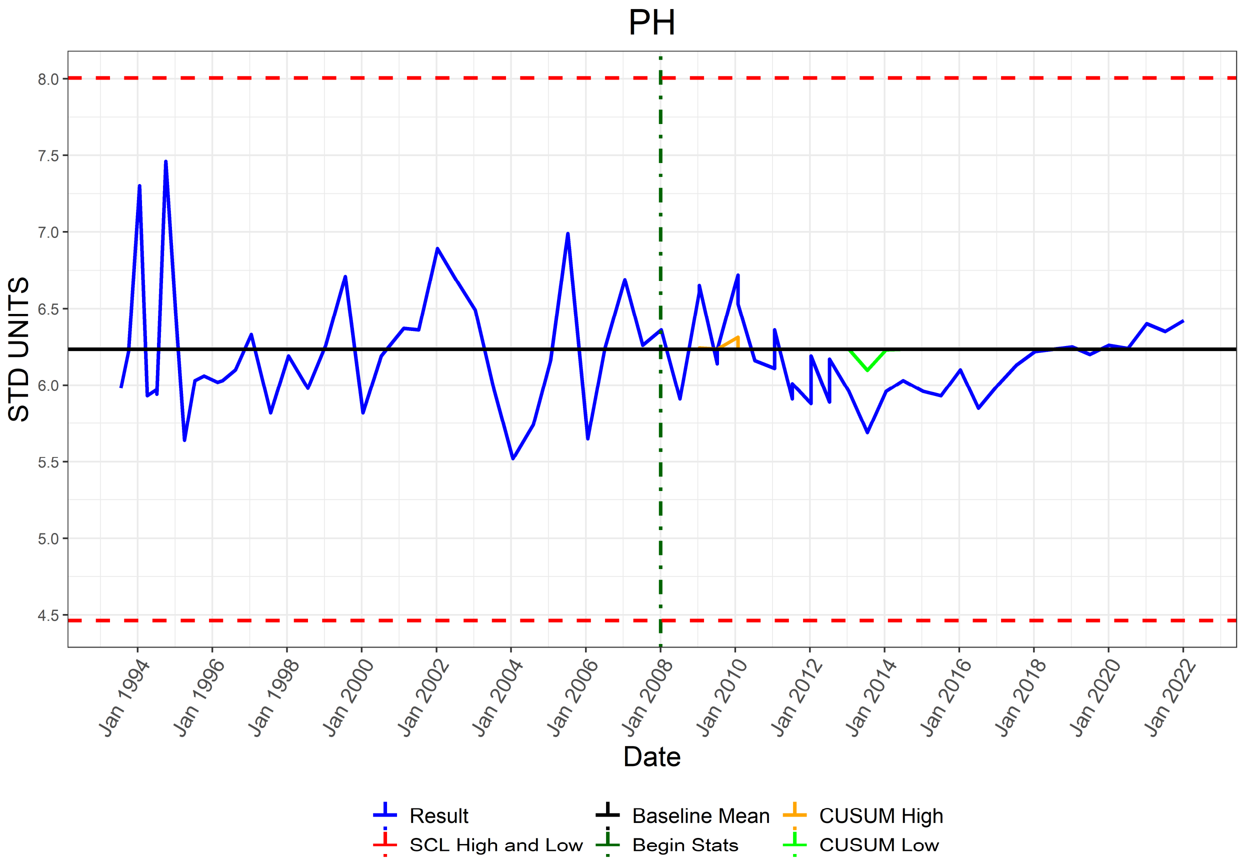
TEMPERATURE

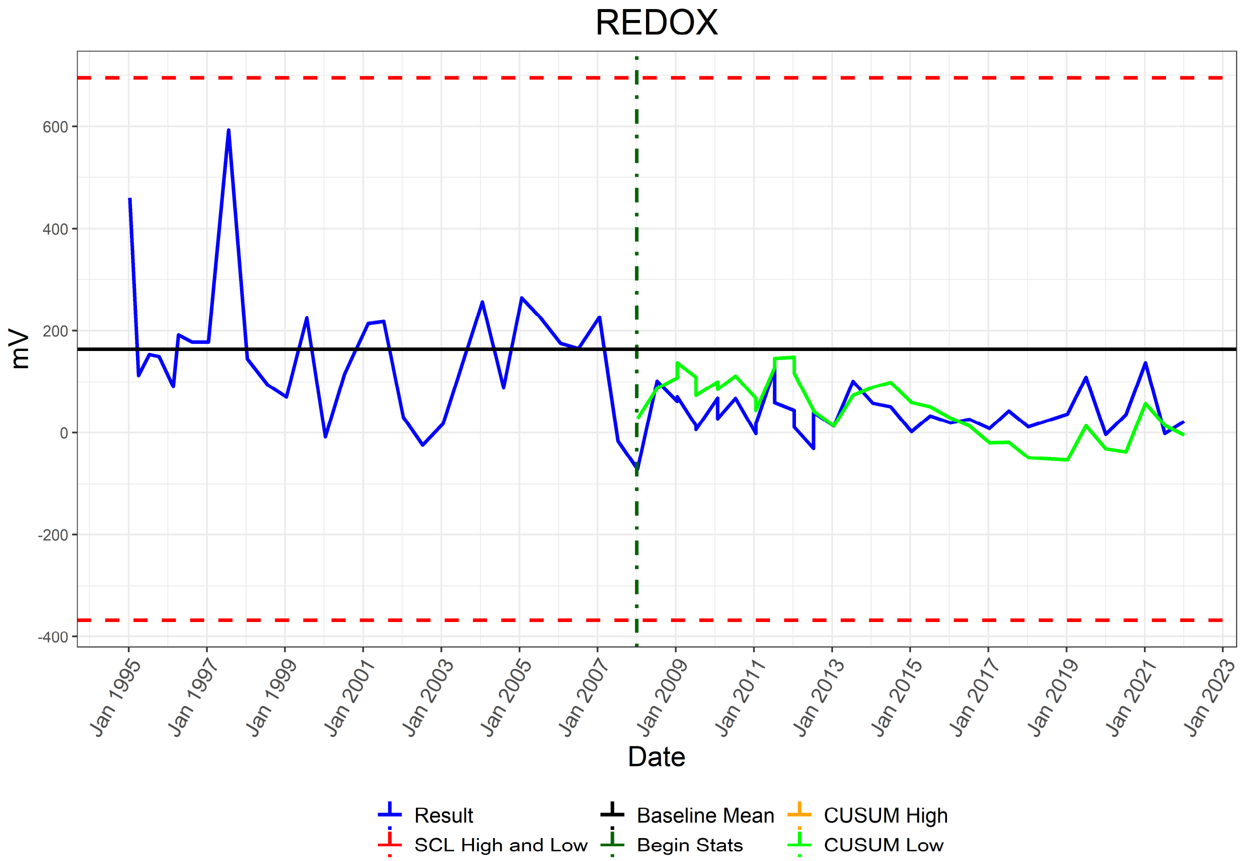

REDOX
mV
600
500
400
300
200
100
0
-100
Date
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023

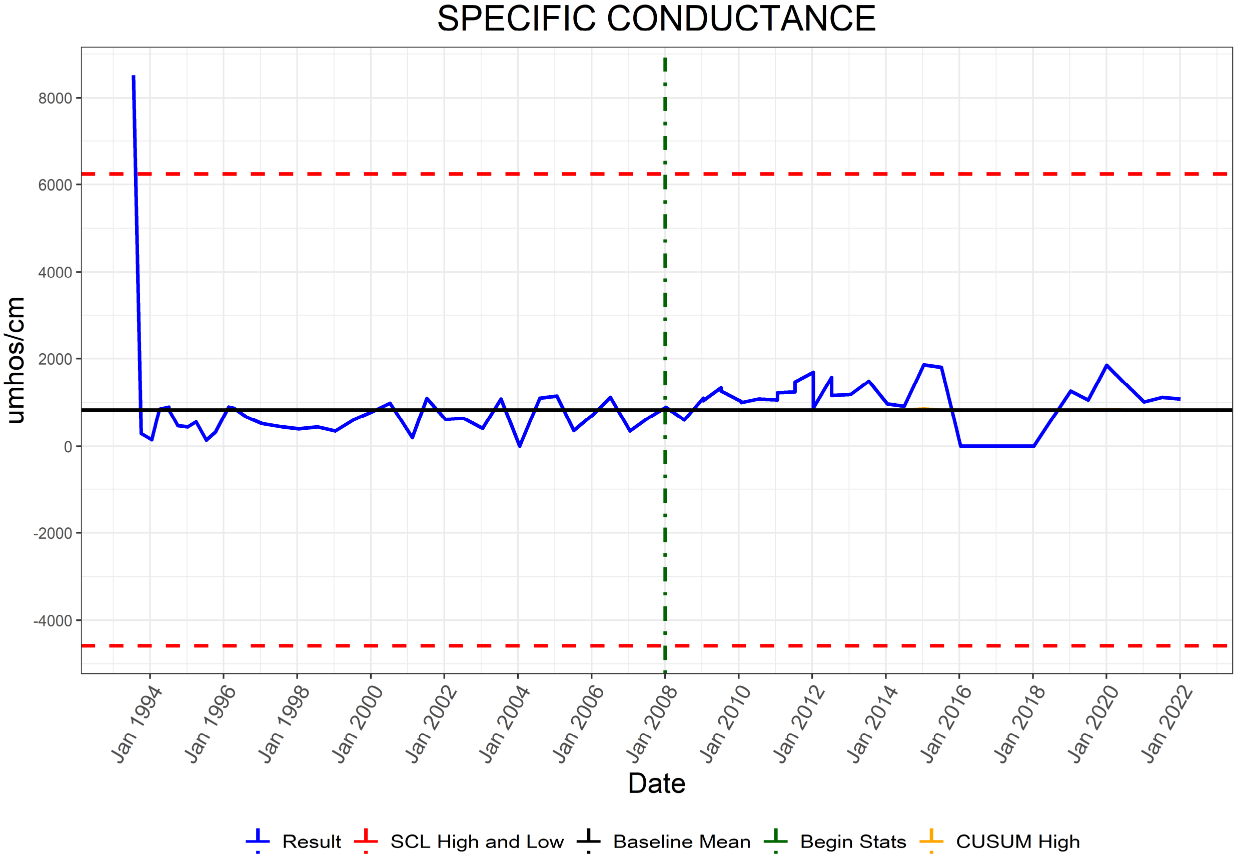
Secure C Landfill Detection Monitoring Program (Program 7)

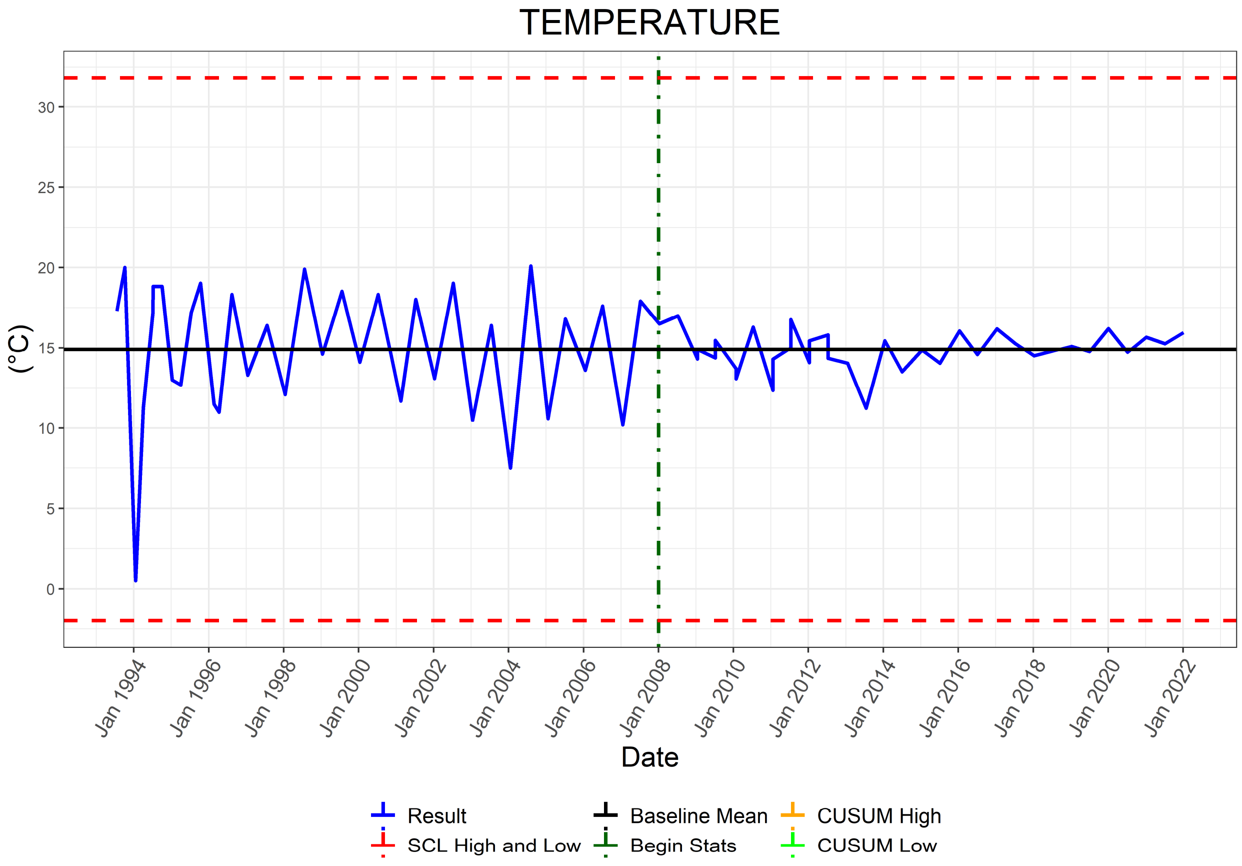
Well Name: R19-M01B





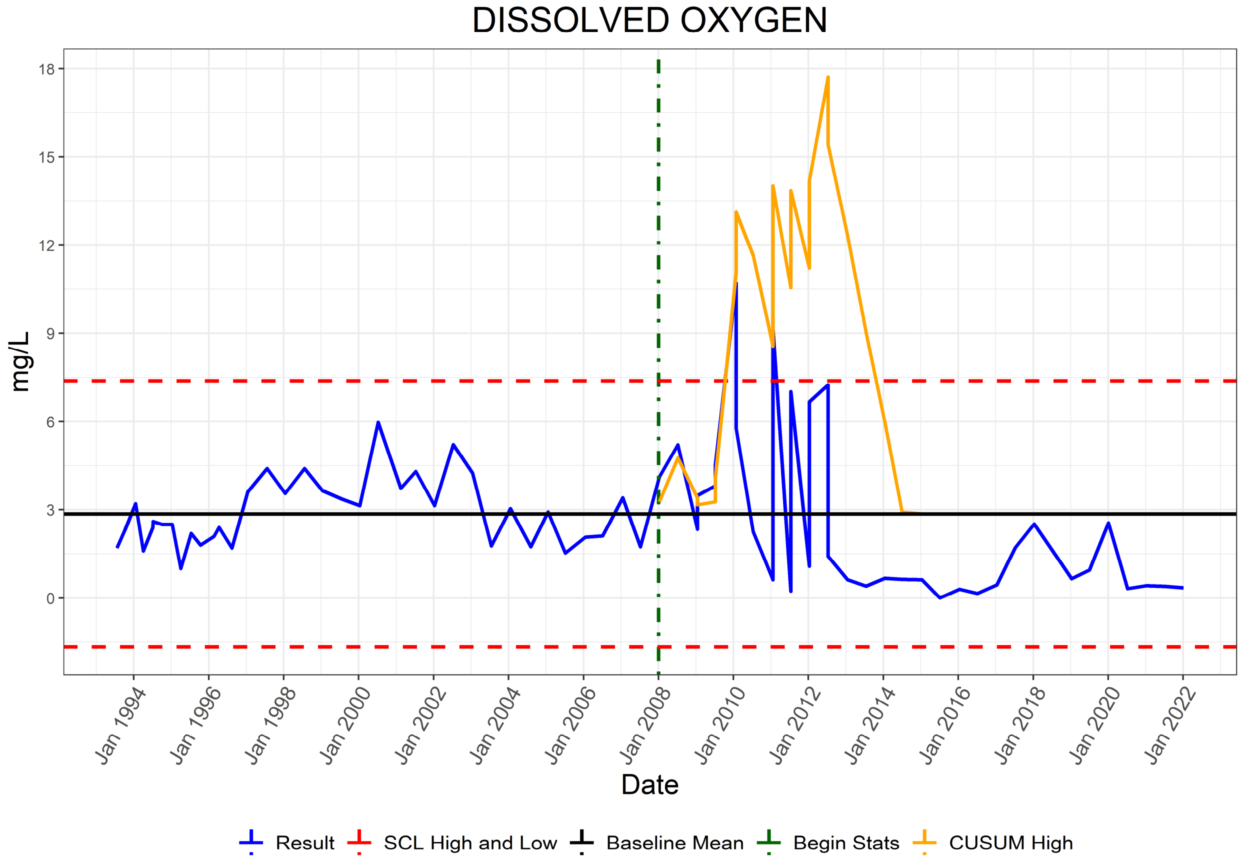

REDOX
mV
600
400
200
0
-200
-400
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

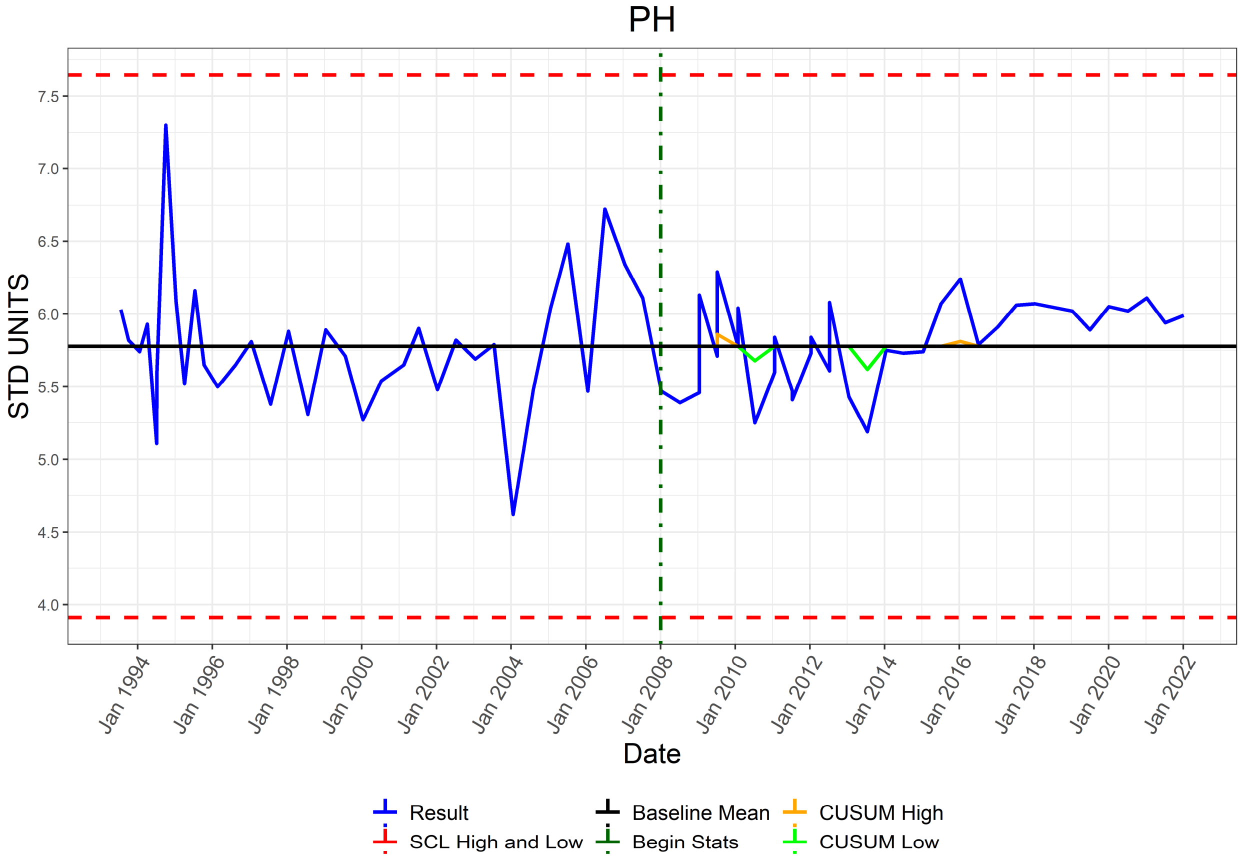

SPECIFIC CONDUCTANCE
umhos/cm
8000
6000
4000
2000
0
-2000
-4000
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

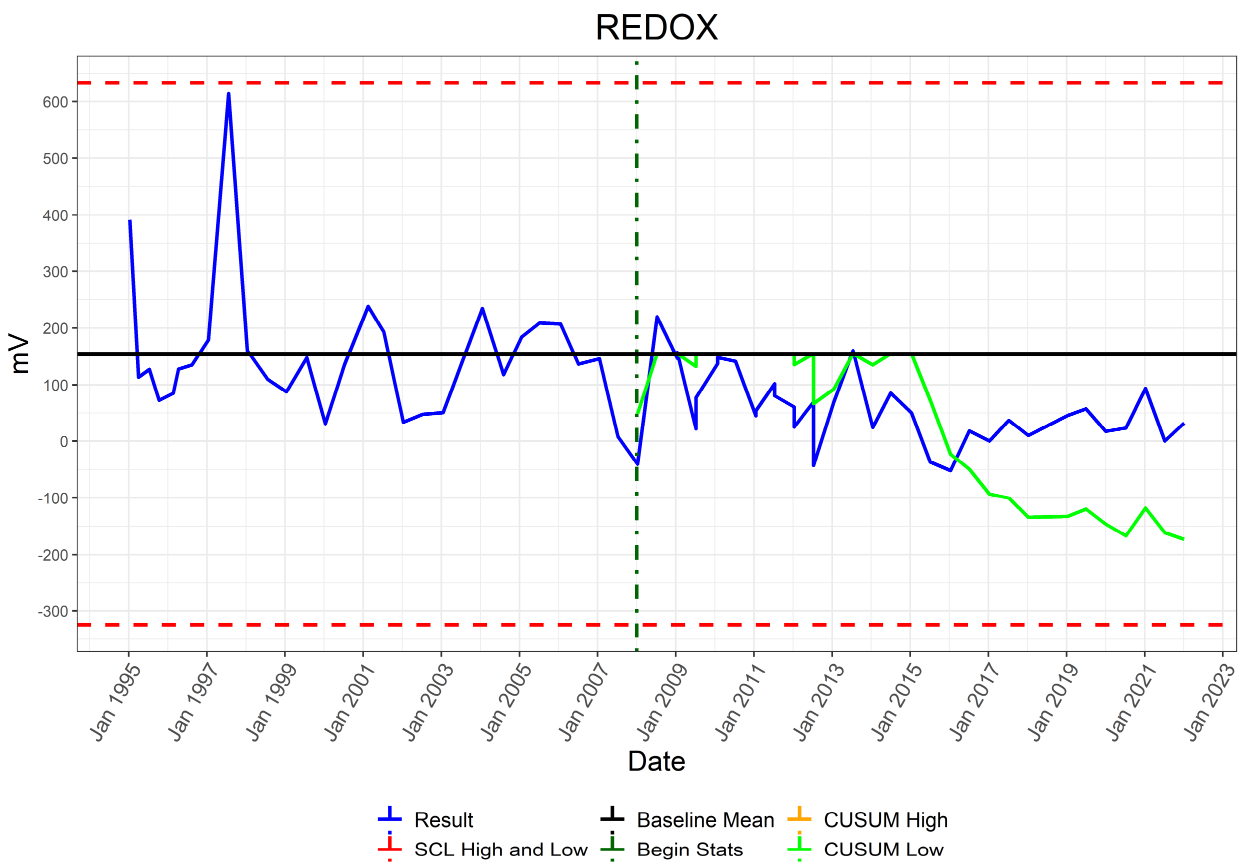

TEMPERATURE
(°C)
30
25
20
15
10
5
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

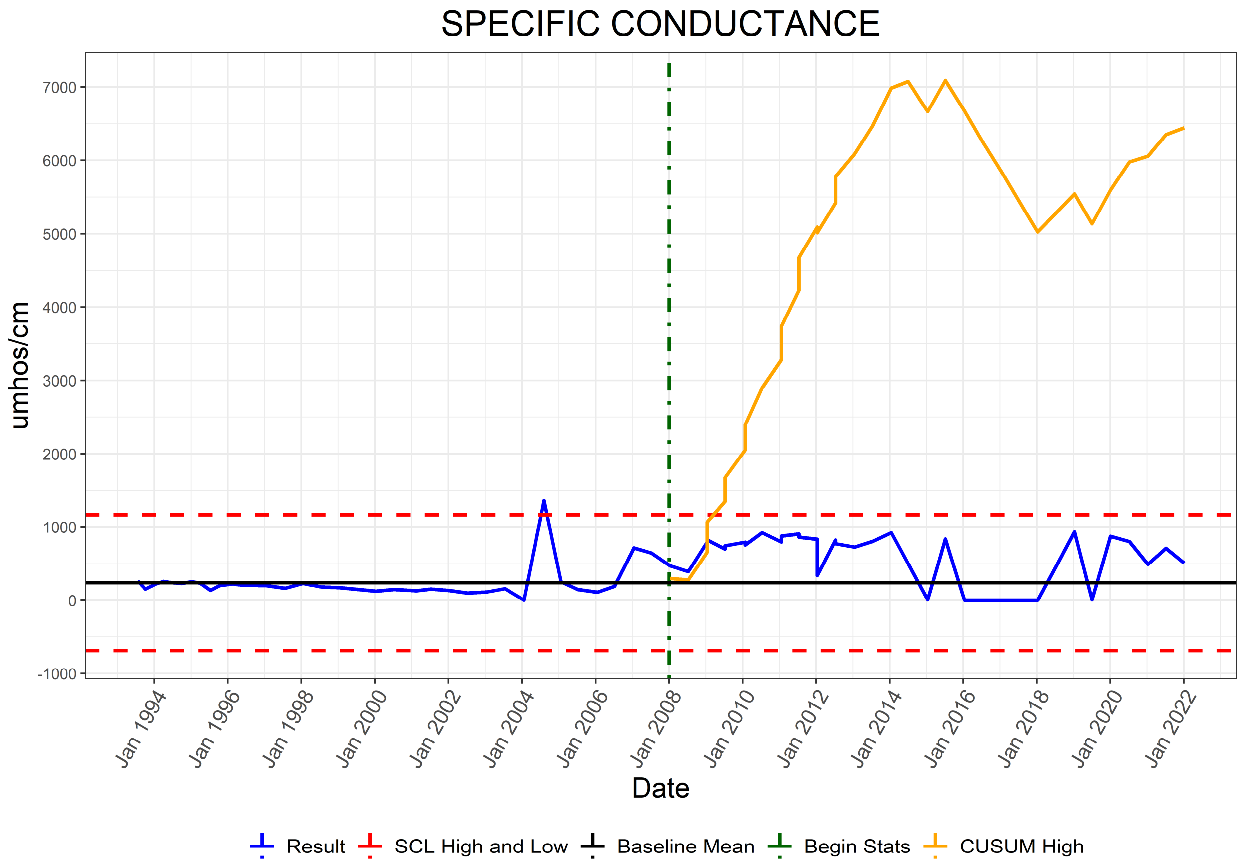
Secure C Landfill Detection Monitoring Program (Program 7)

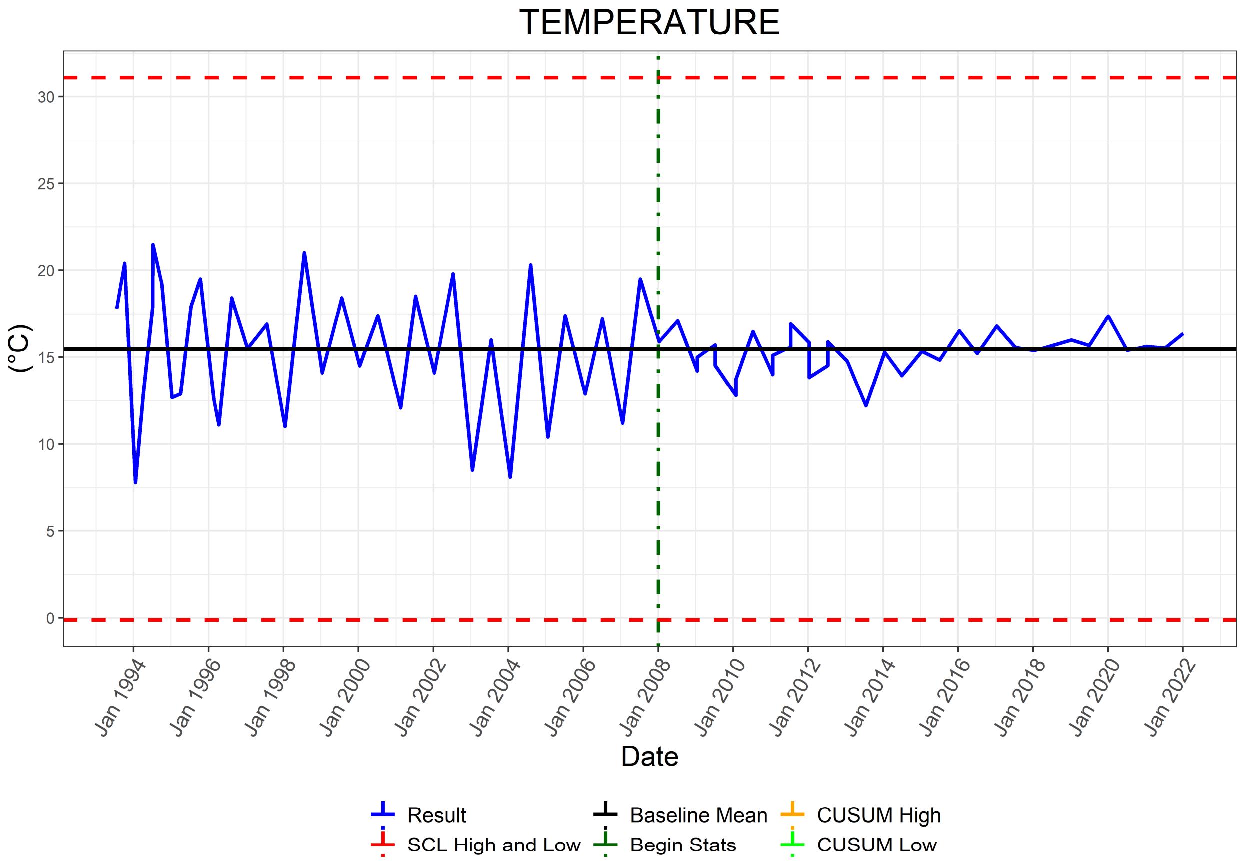
Well Name: R19-M02B





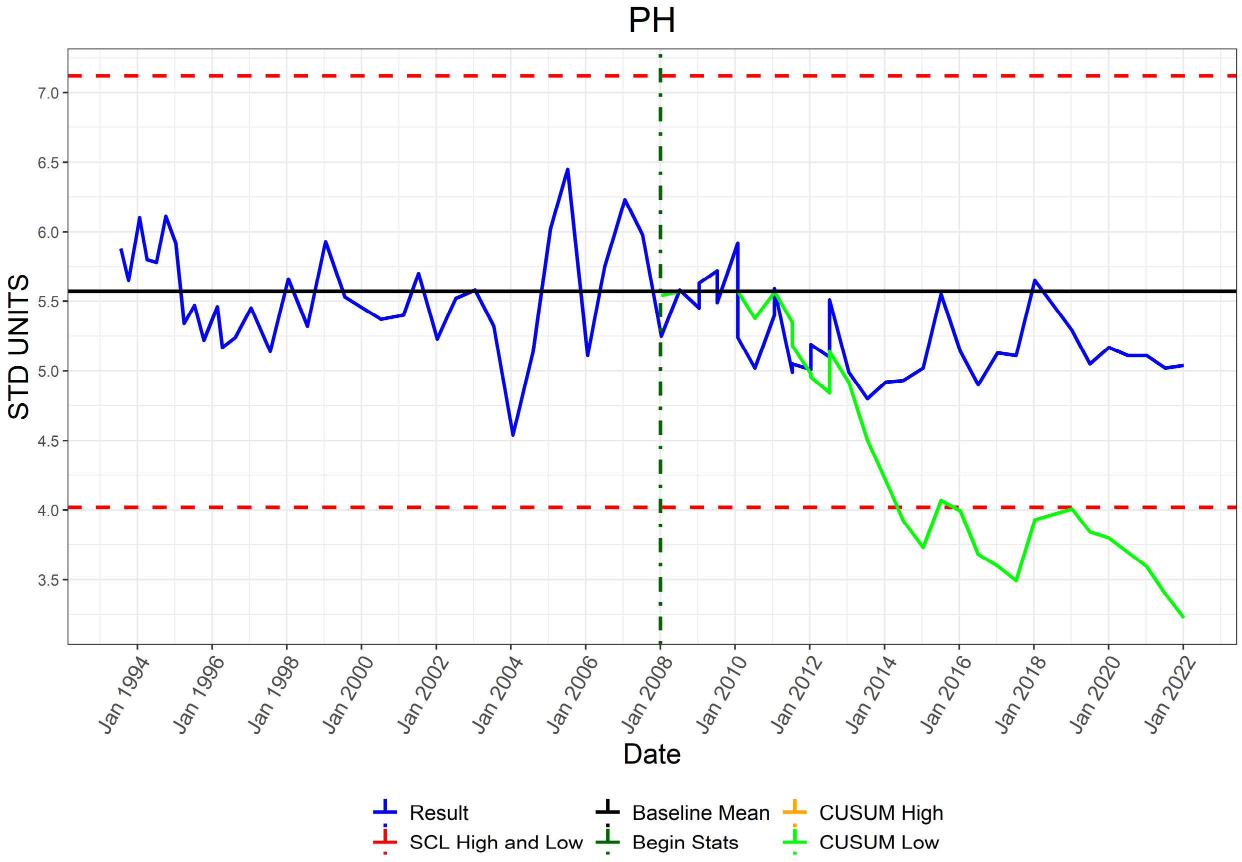

REDOX
mV
600
500
400
300
200
100
0
-100
-200
-300
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

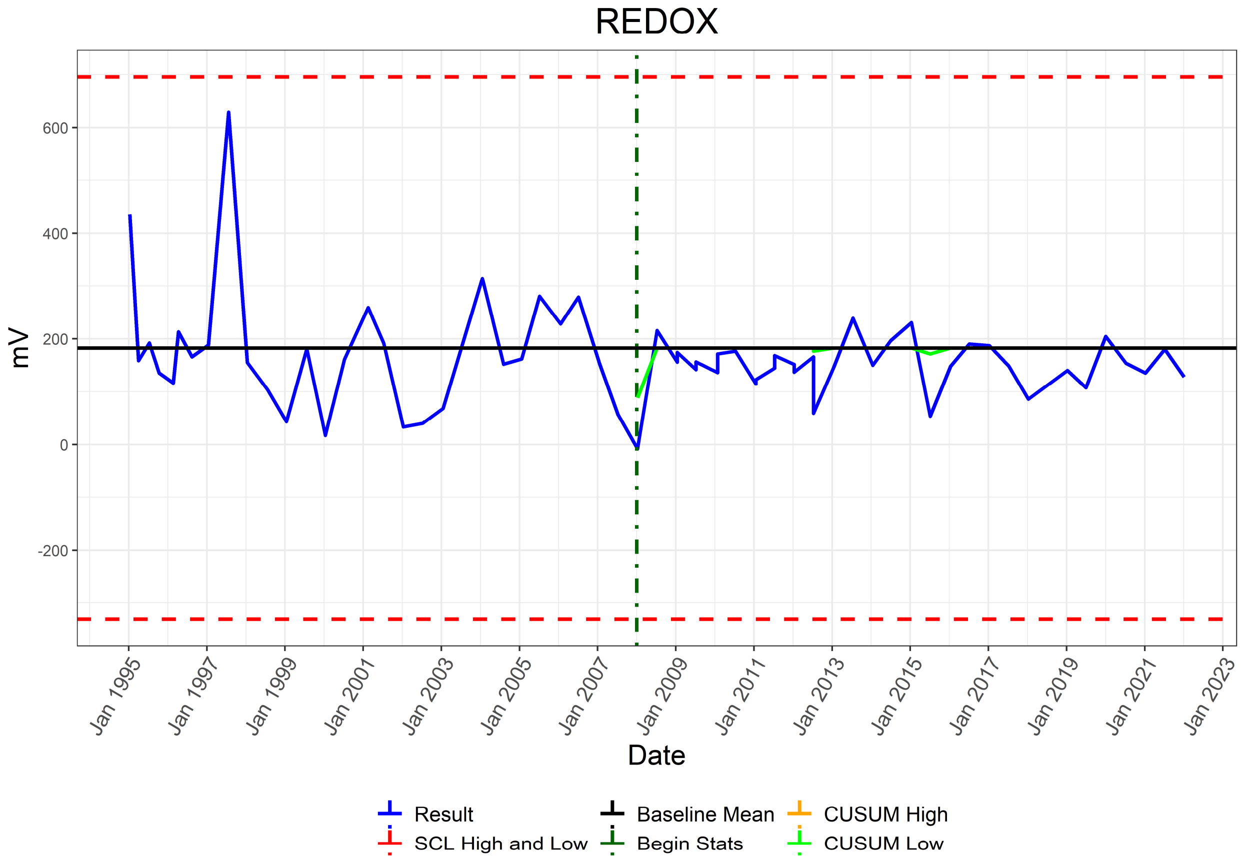

SPECIFIC CONDUCTANCE
umhos/cm
7000
6000
5000
4000
3000
2000
1000
0
-1000
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

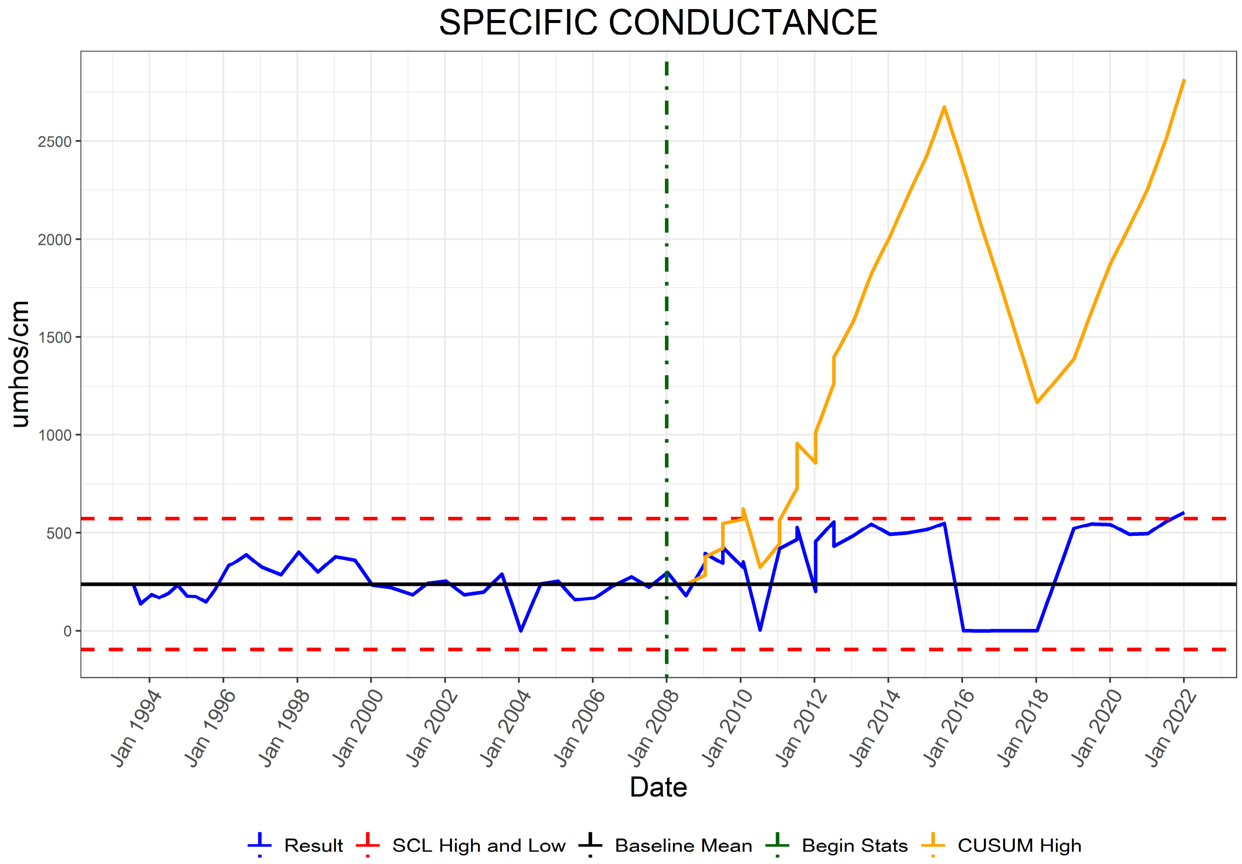

TEMPERATURE
(°C)
0
5
10
15
20
25
30
Date
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

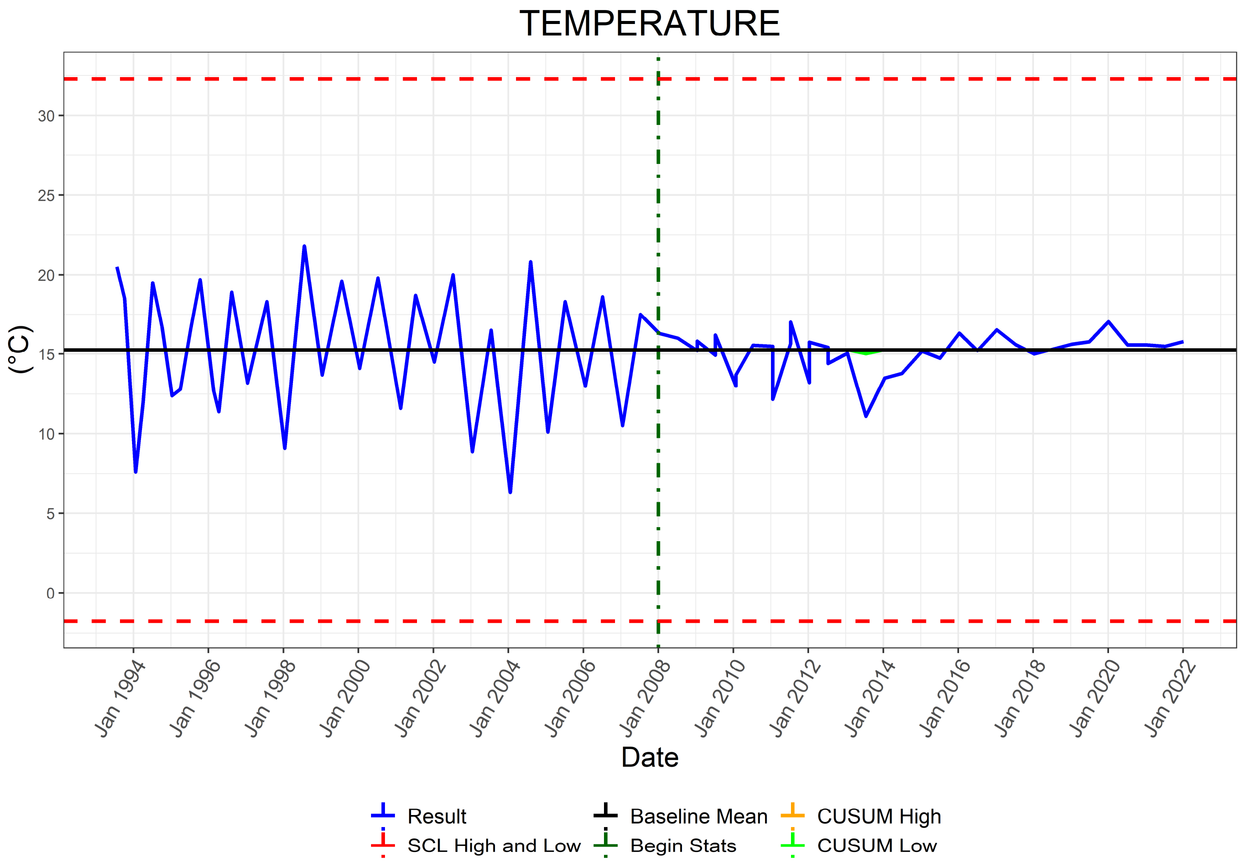
Secure C Landfill Detection Monitoring Program (Program 7)

Well Name: S19-M01B





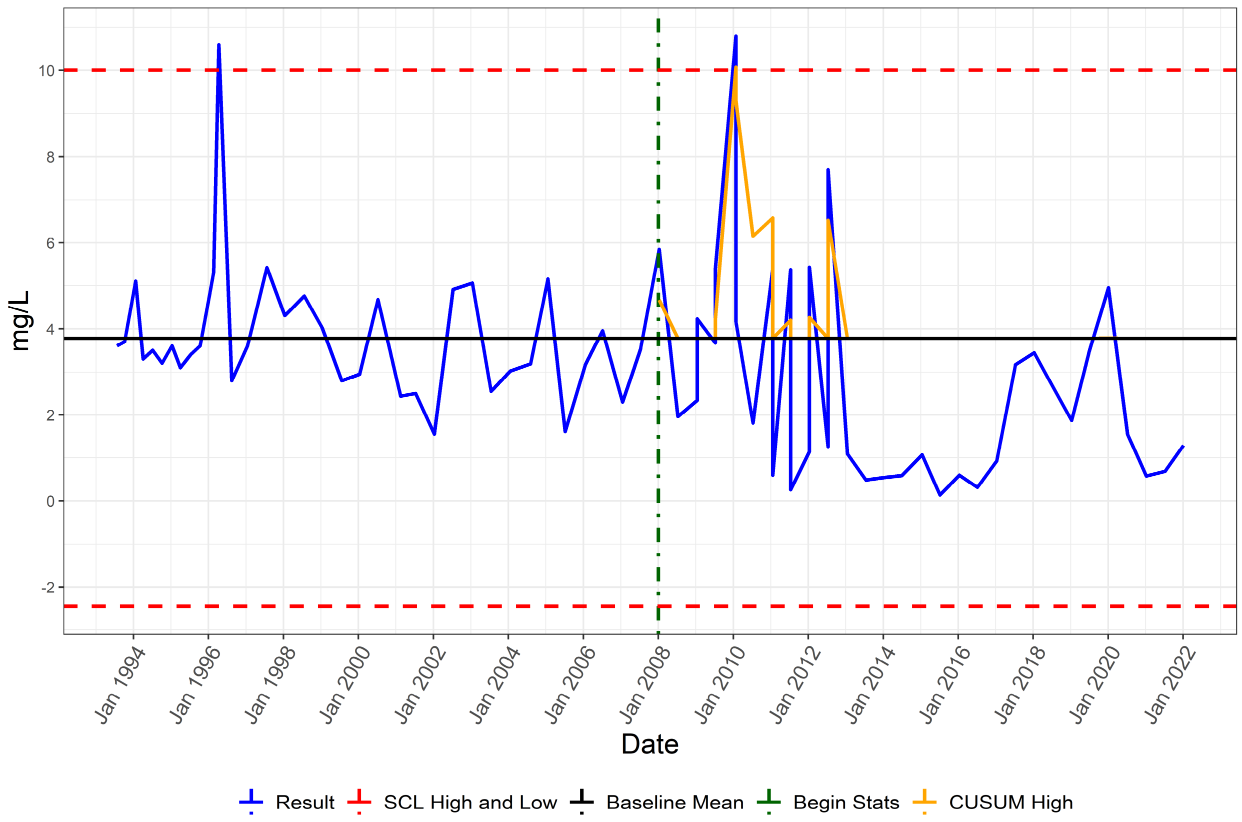

SPECIFIC CONDUCTANCE
umhos/cm
2500
2000
1500
1000
500
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High


TEMPERATURE
(°C)
30
25
20
15
10
5
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

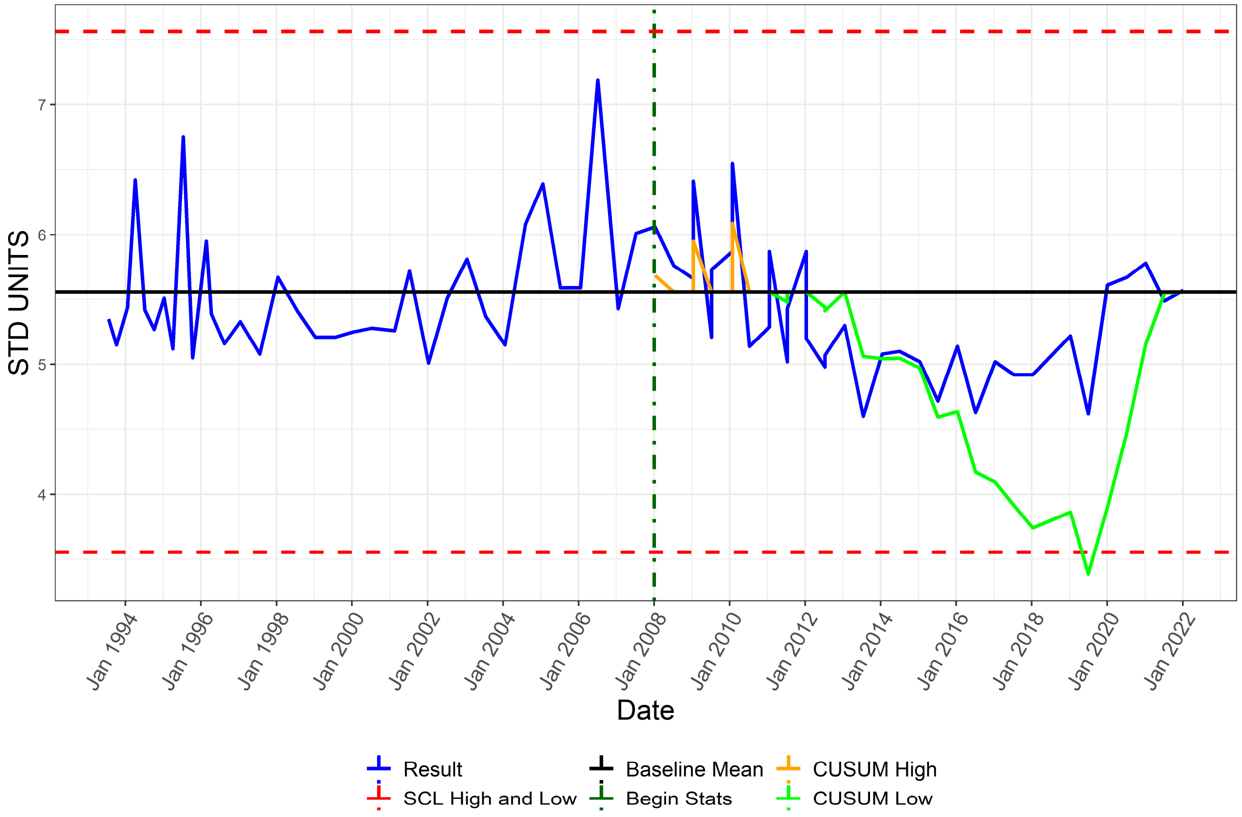
Secure C Landfill Detection Monitoring Program (Program 7)

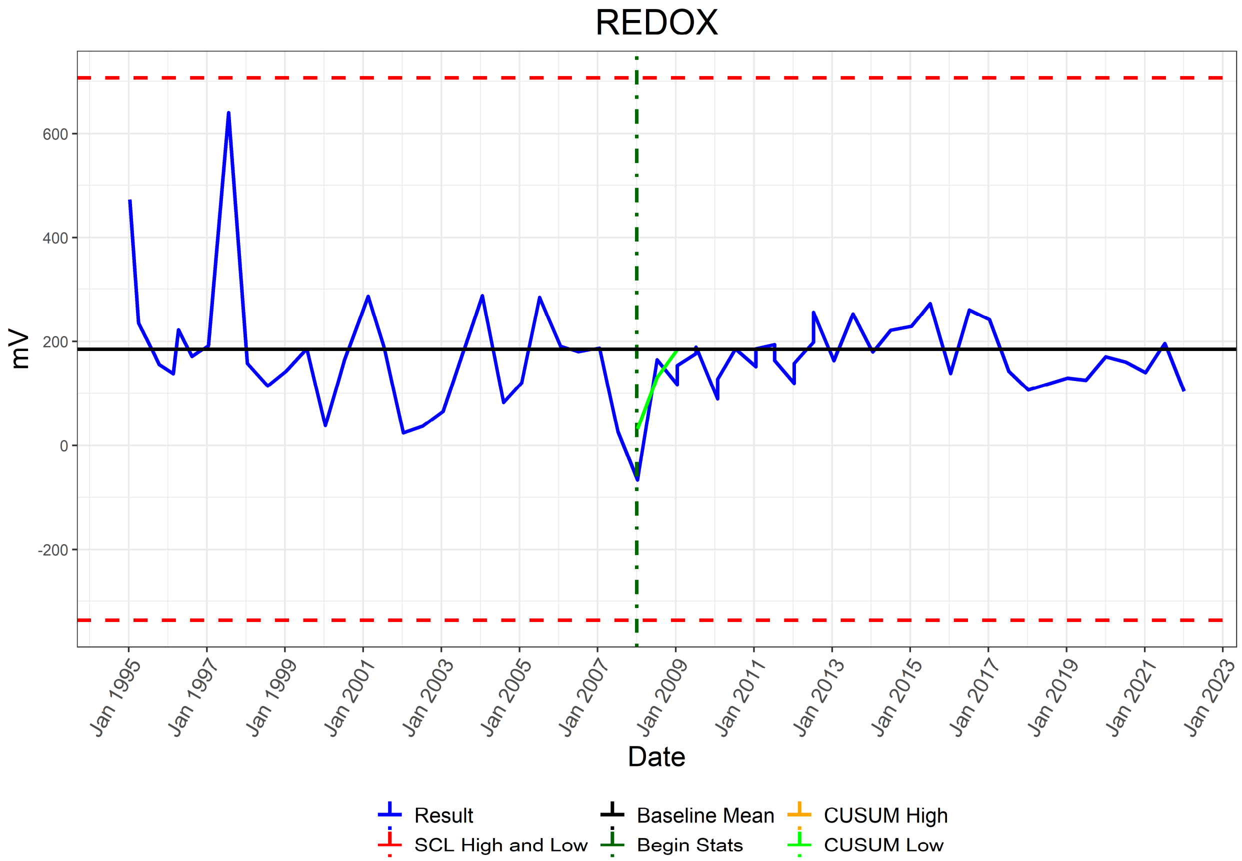
Well Name: S19-M02B

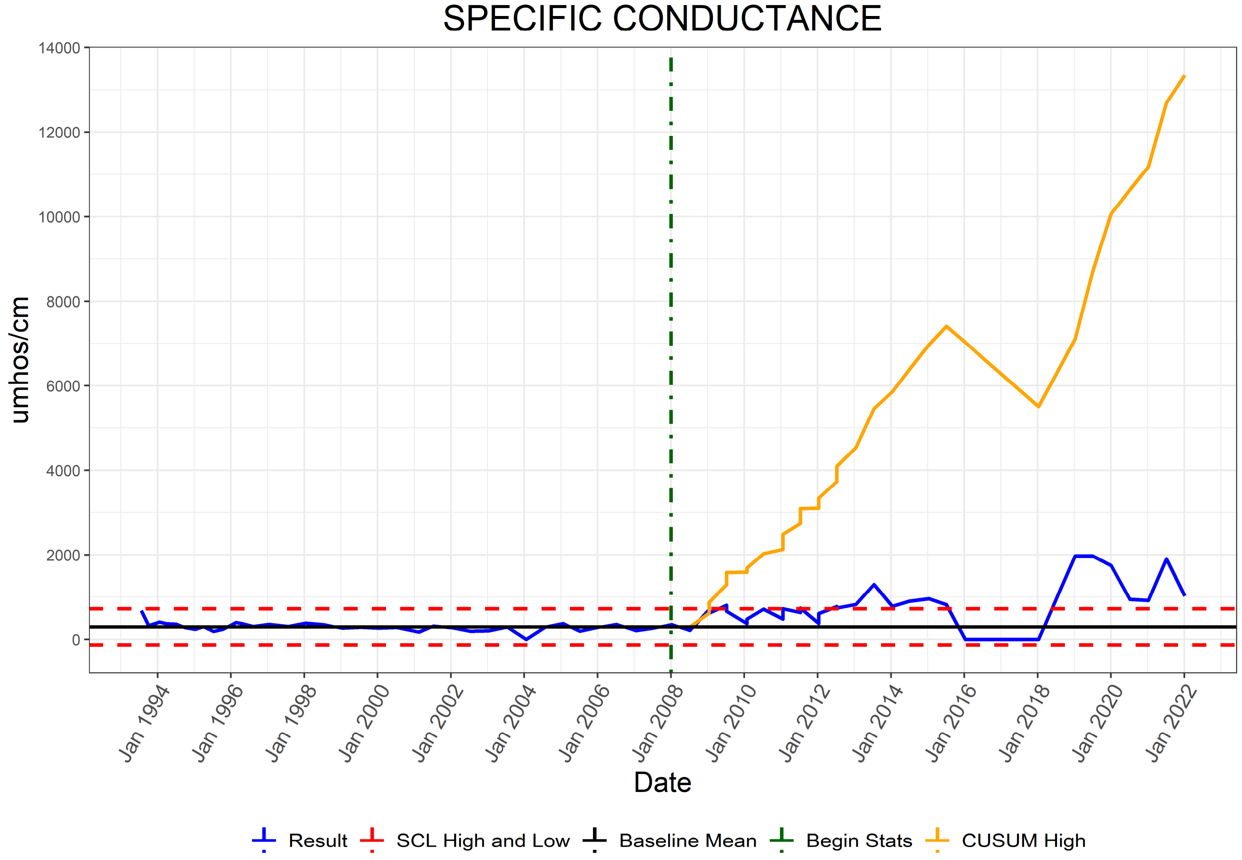
DISSOLVED OXYGEN

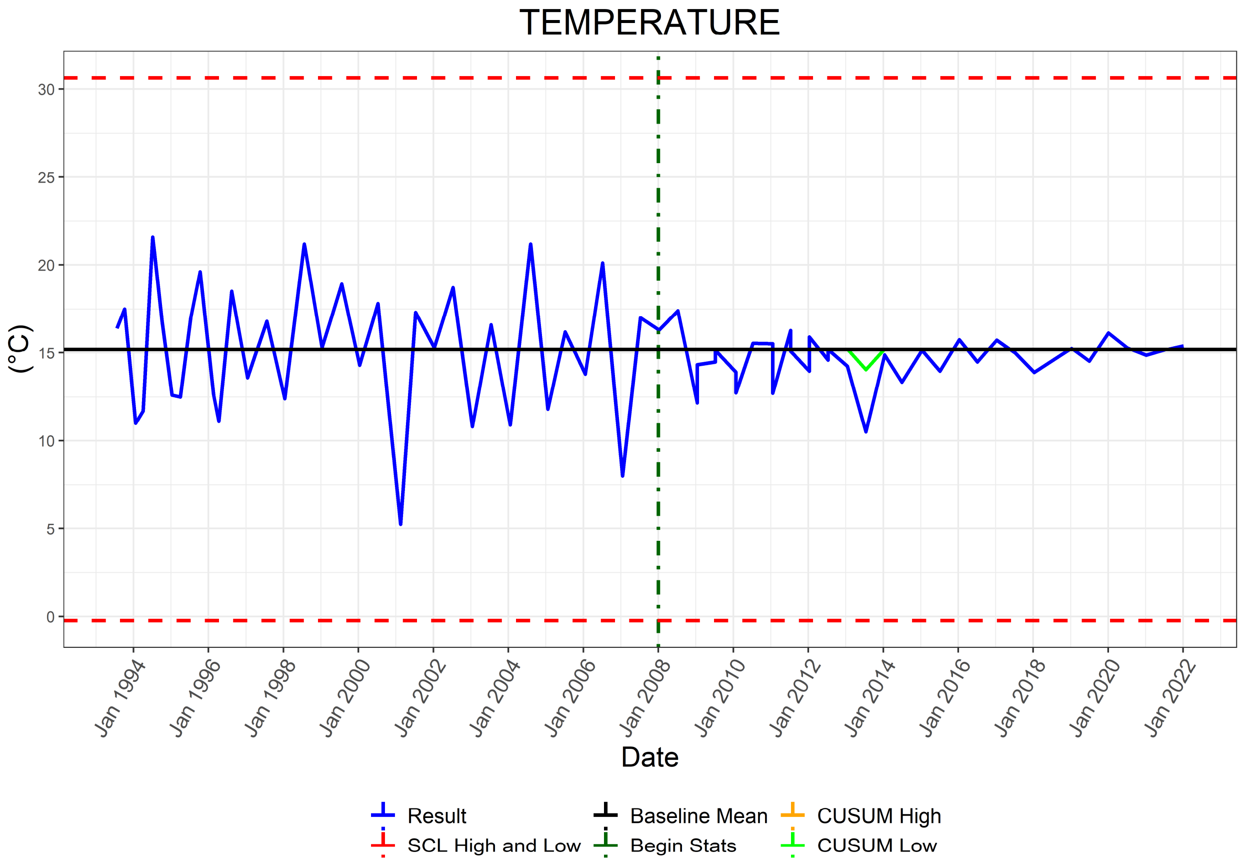


PH



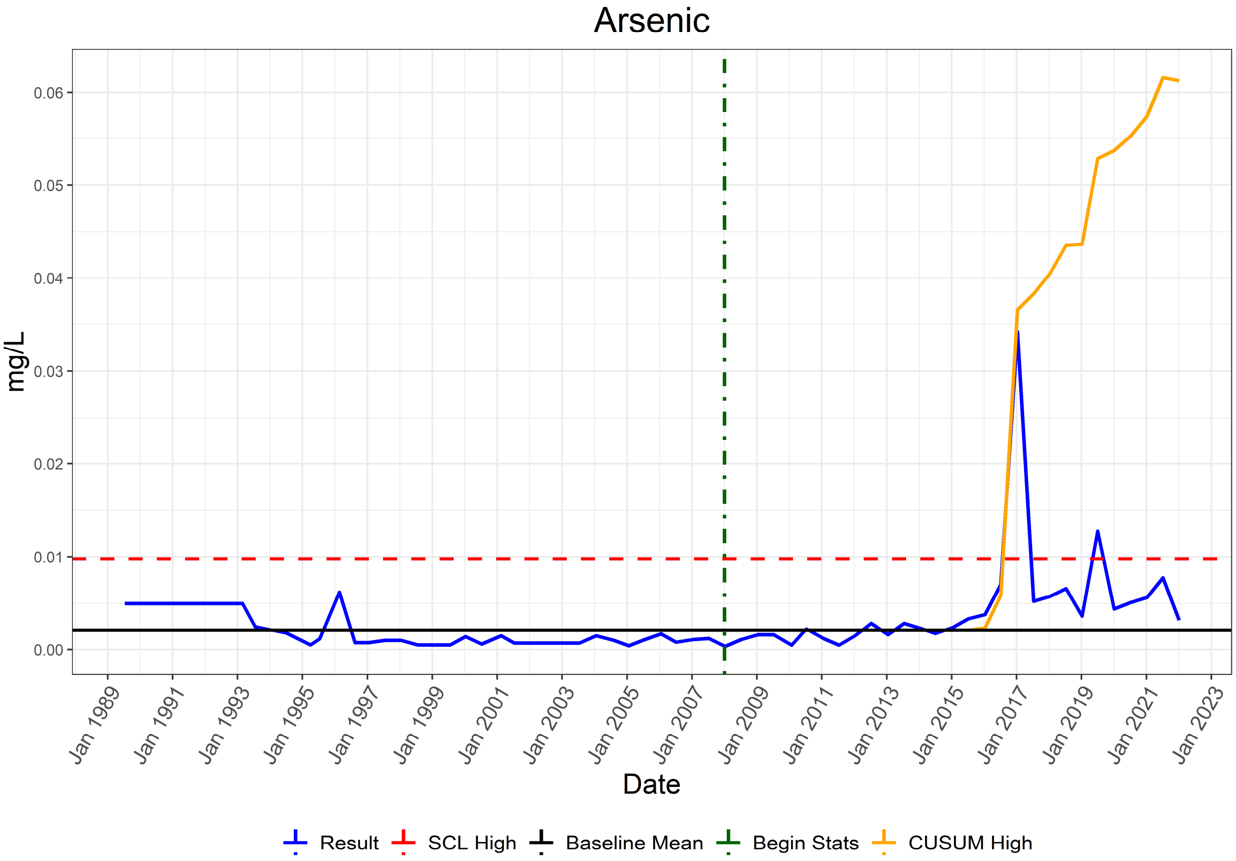

REDOX
mV
600
400
200
0
-200
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

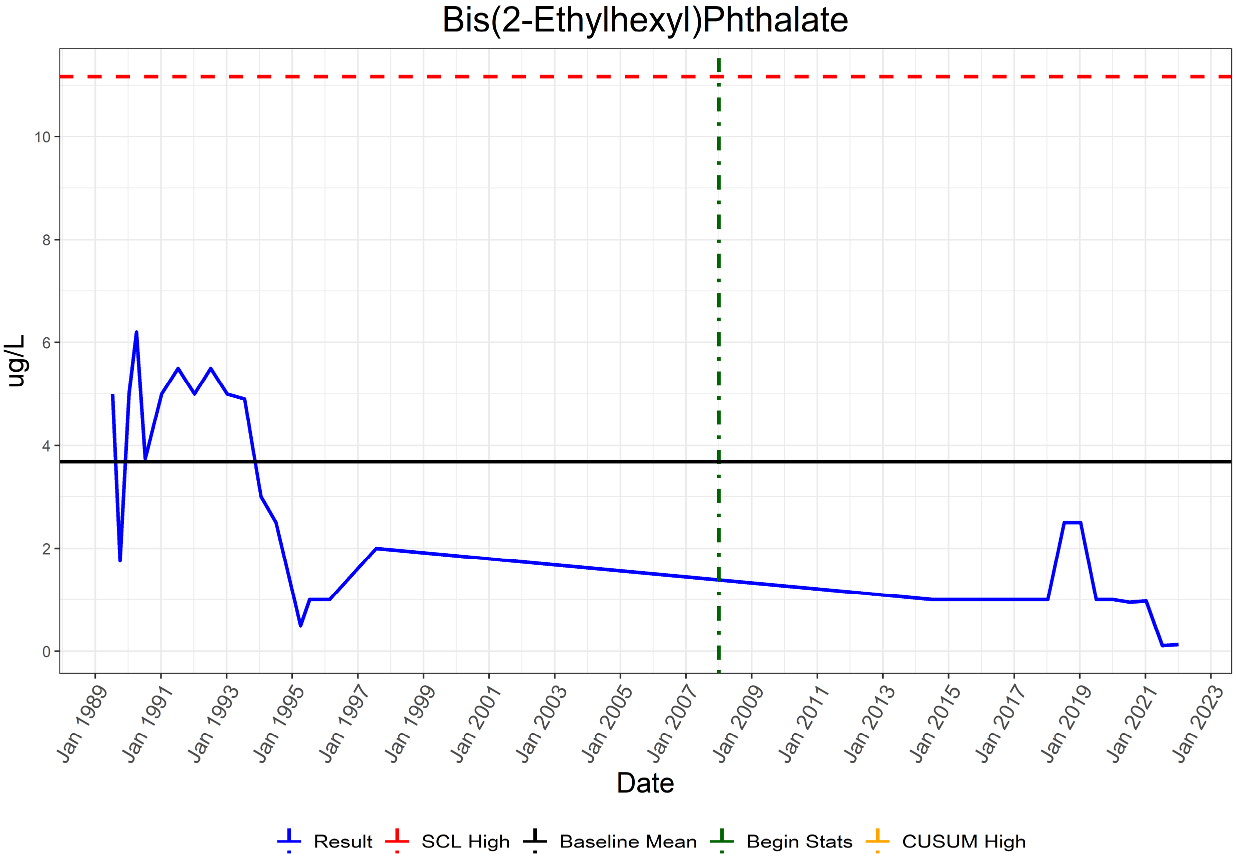

SPECIFIC CONDUCTANCE
umhos/cm
14000
12000
10000
8000
6000
4000
2000
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High

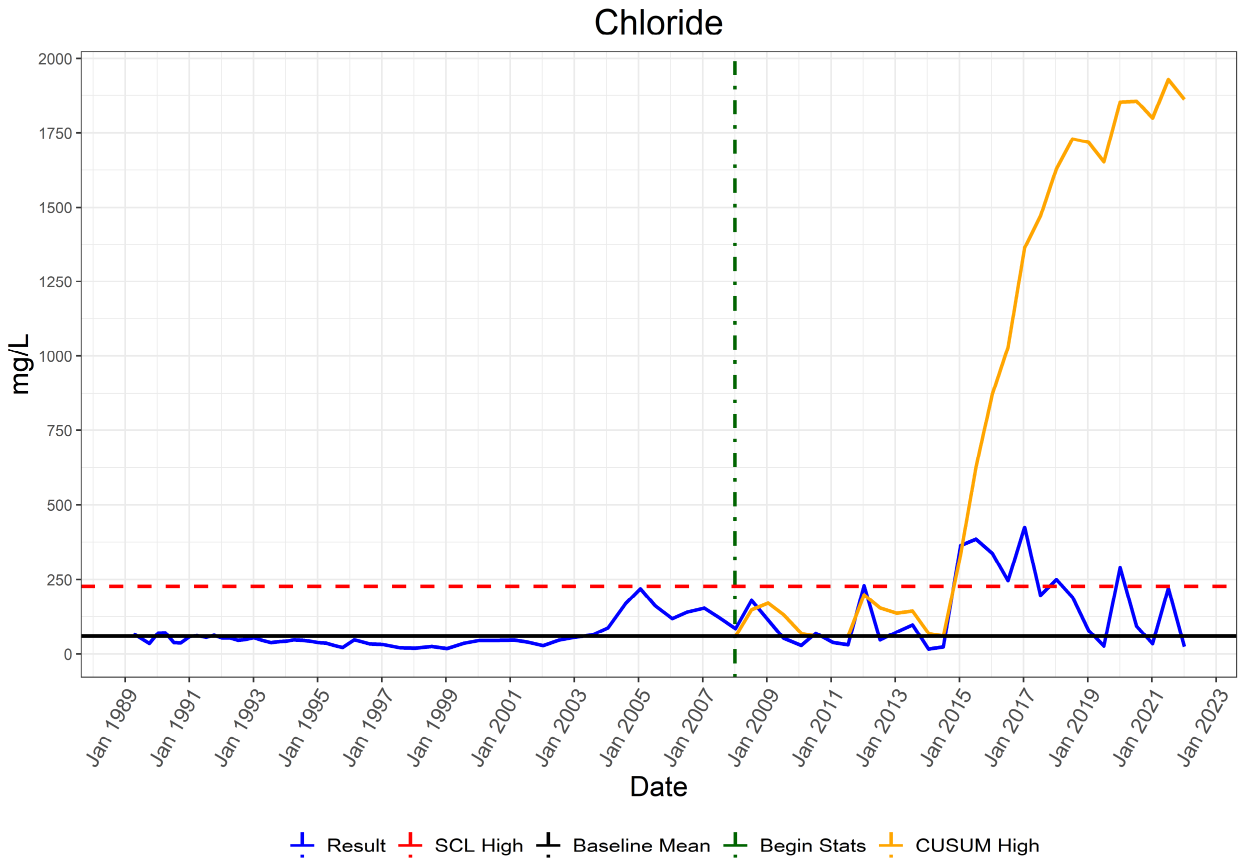

TEMPERATURE
(°C)
30
25
20
15
10
5
0
Jan 1994
Jan 1996
Jan 1998
Jan 2000
Jan 2002
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High and Low
Baseline Mean
Begin Stats
CUSUM High
CUSUM Low

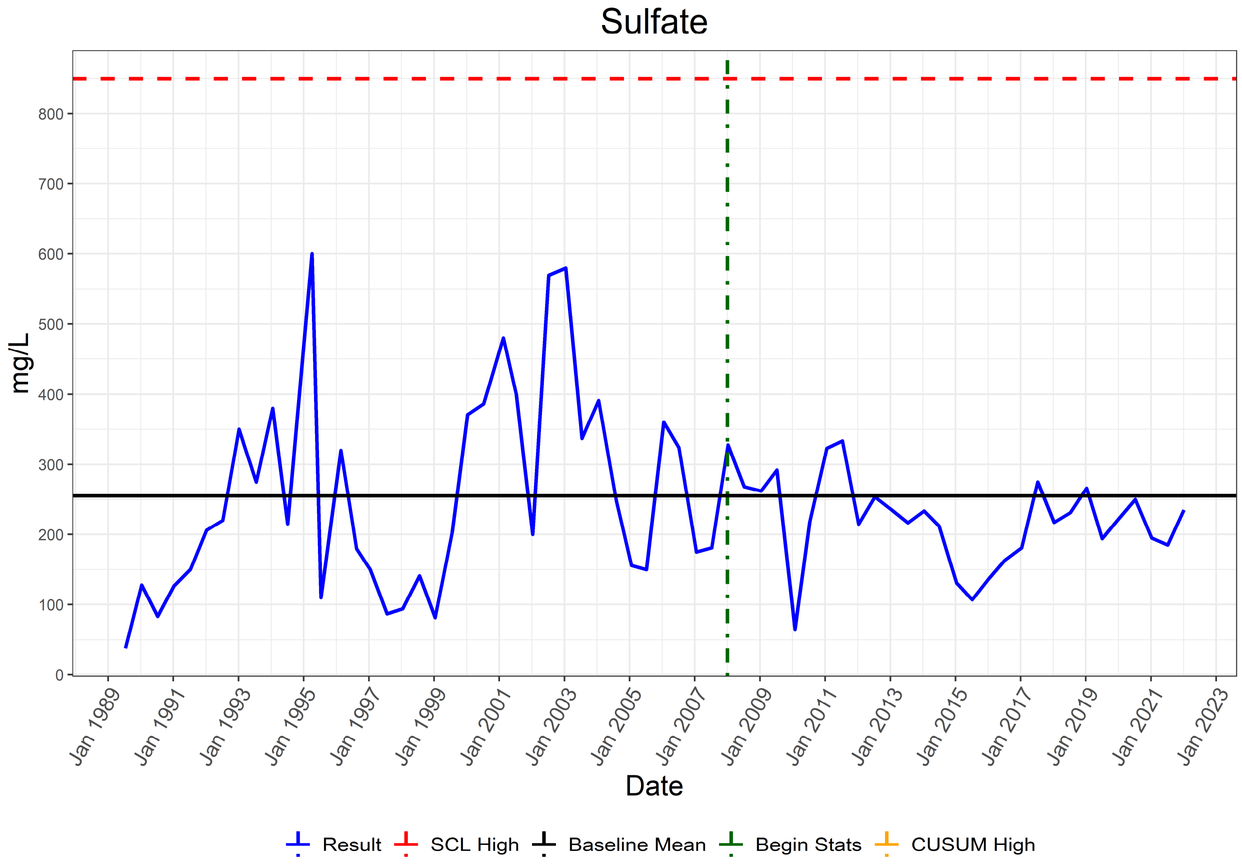
Secure C Landfill Detection Monitoring Program (Program 7)

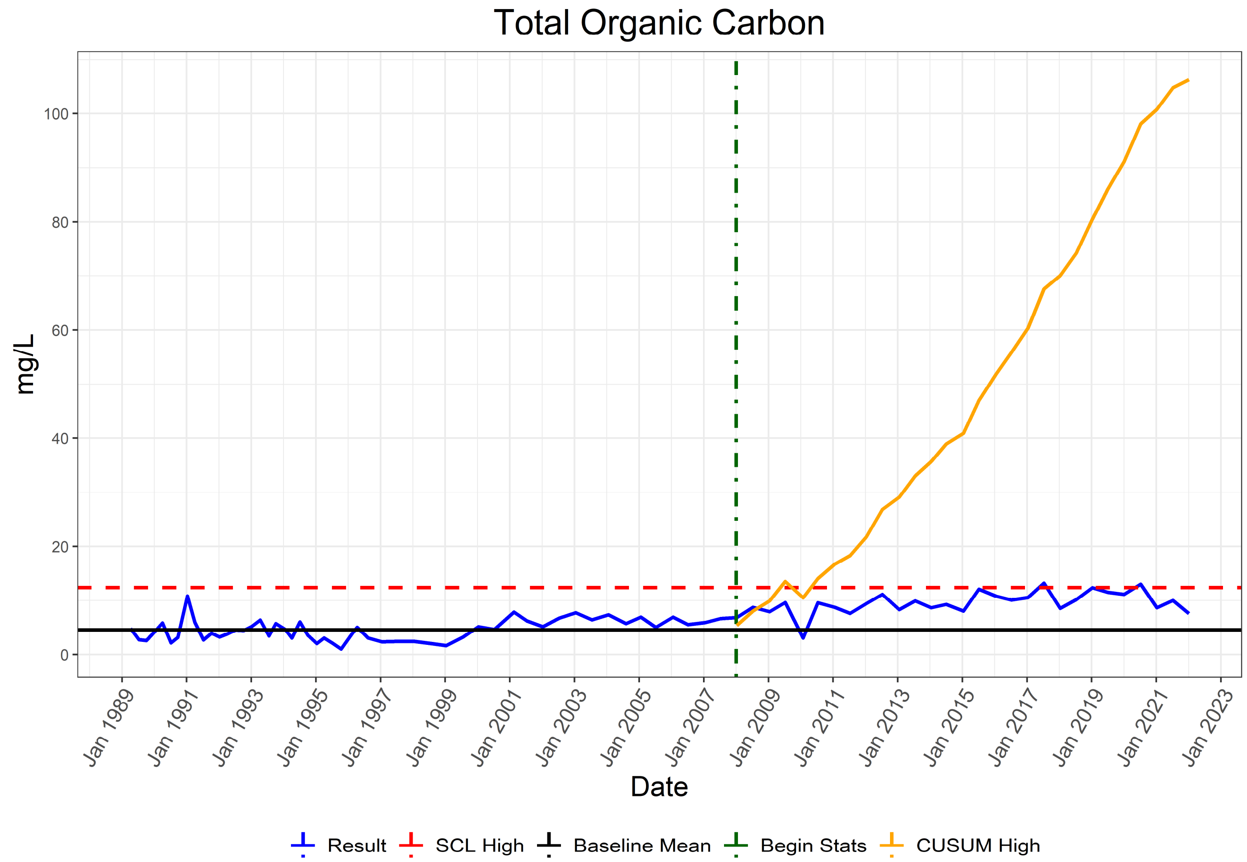
Well Name: R19-M01B

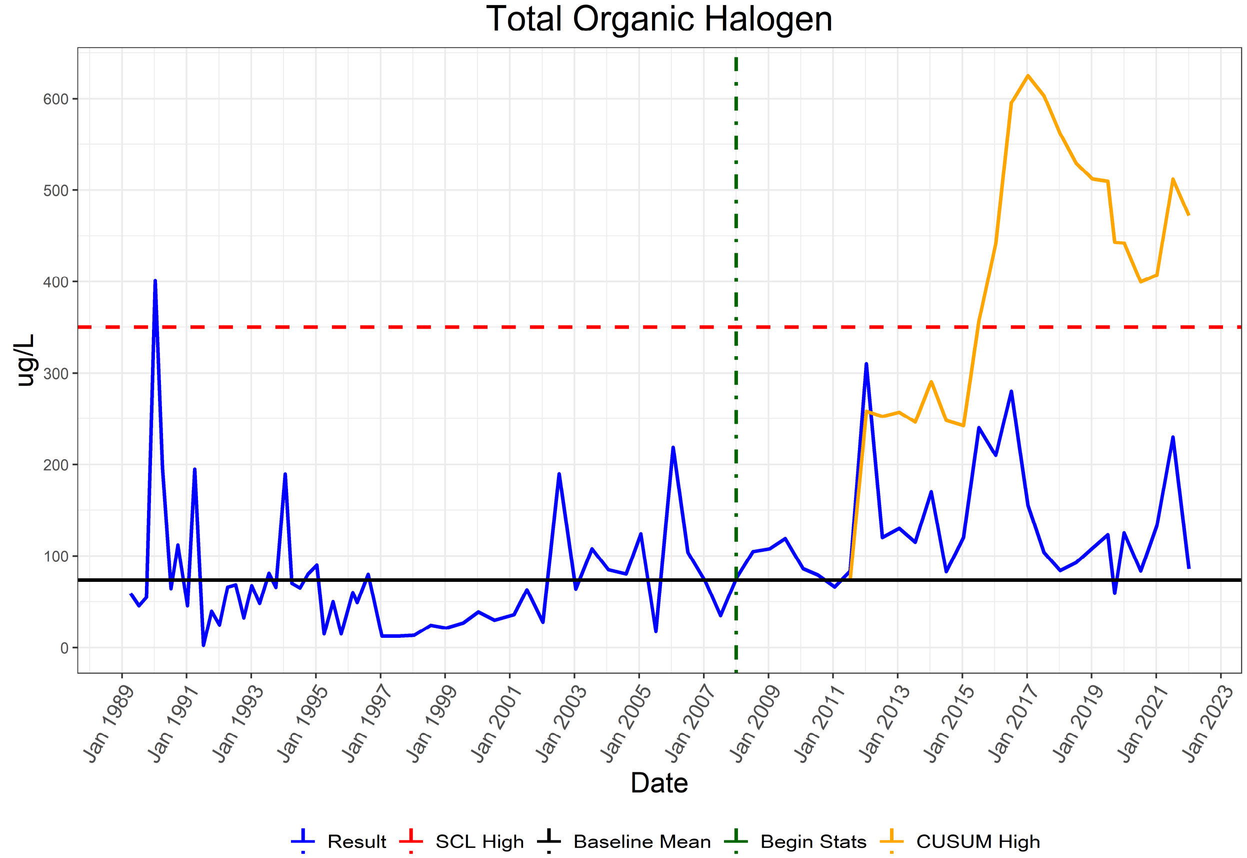





Chloride
mg/L
2000
1750
1500
1250
1000
750
500
250
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

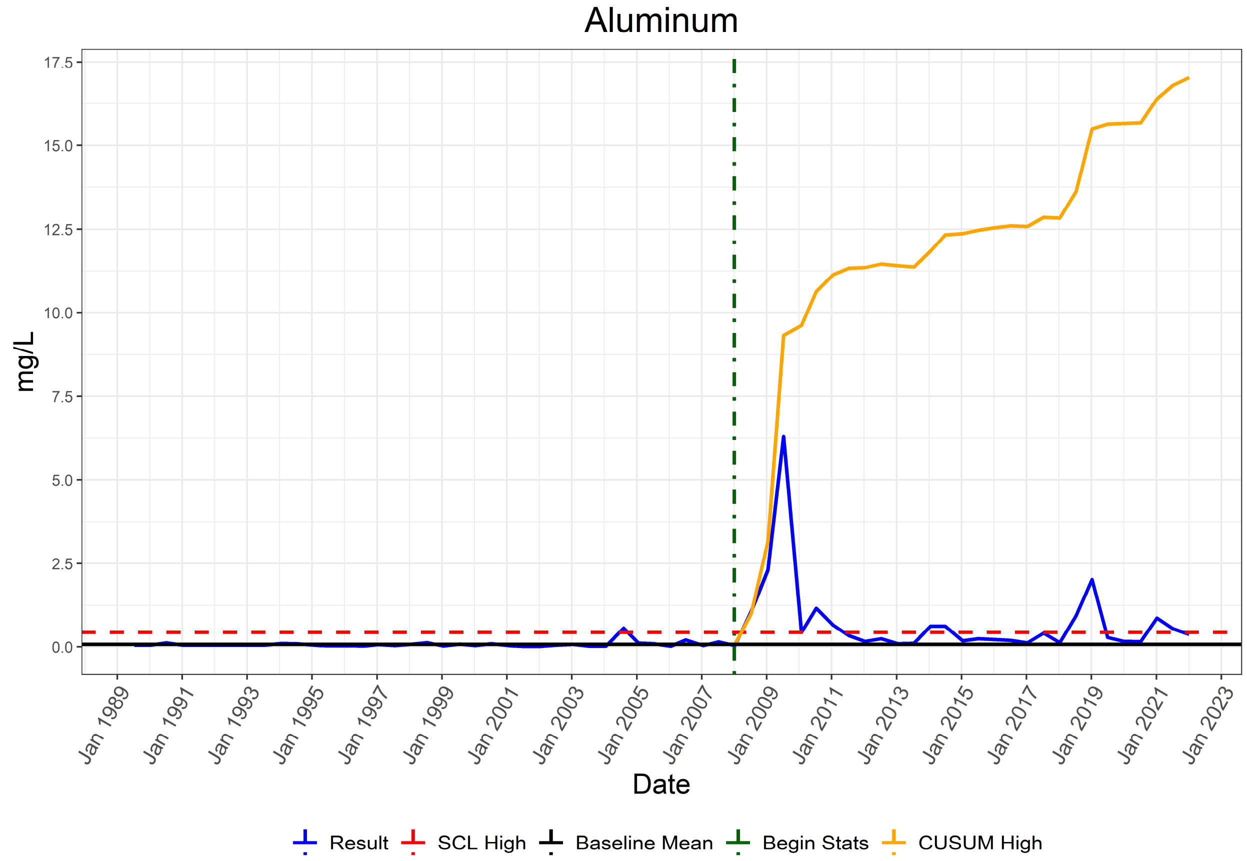

Sulfate
mg/L
800
700
600
500
400
300
200
100
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

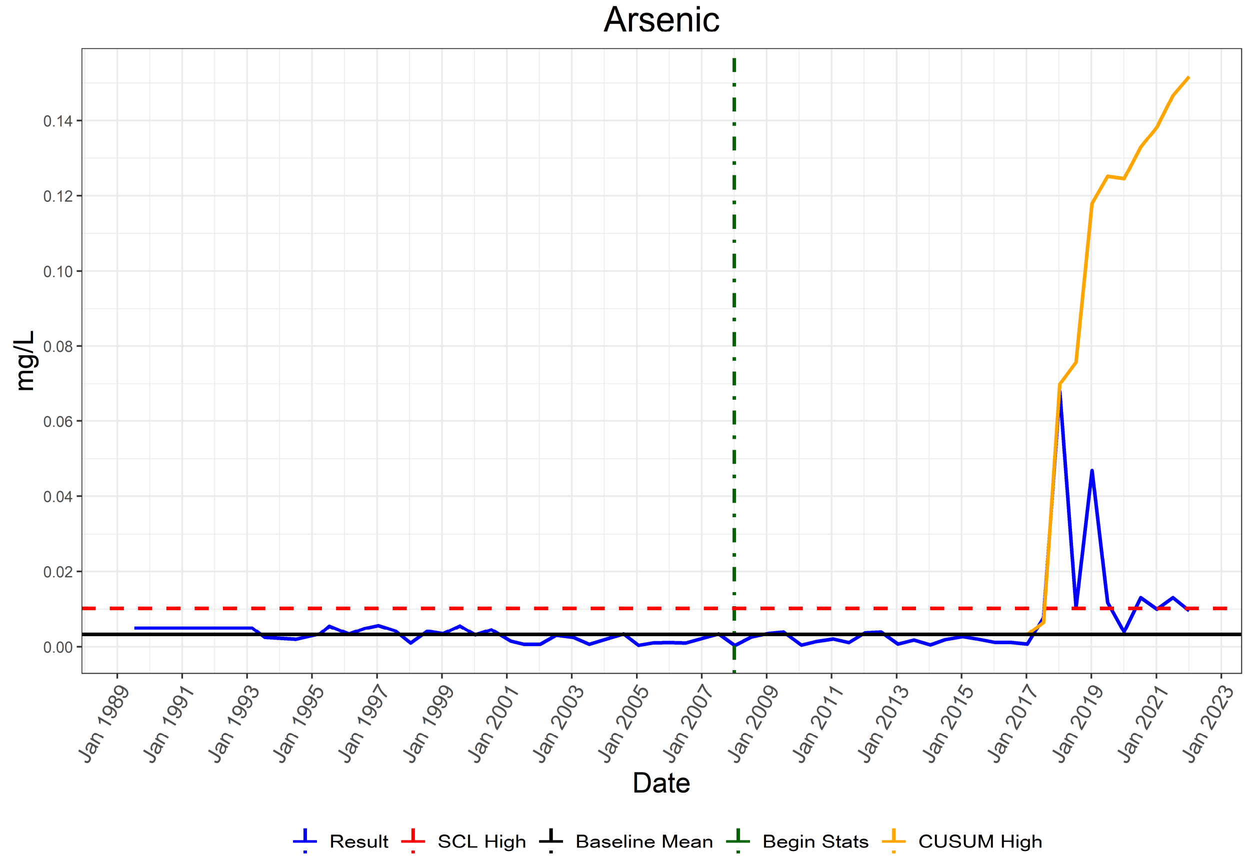

Total Organic Carbon
mg/L
0
20
40
60
80
100
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

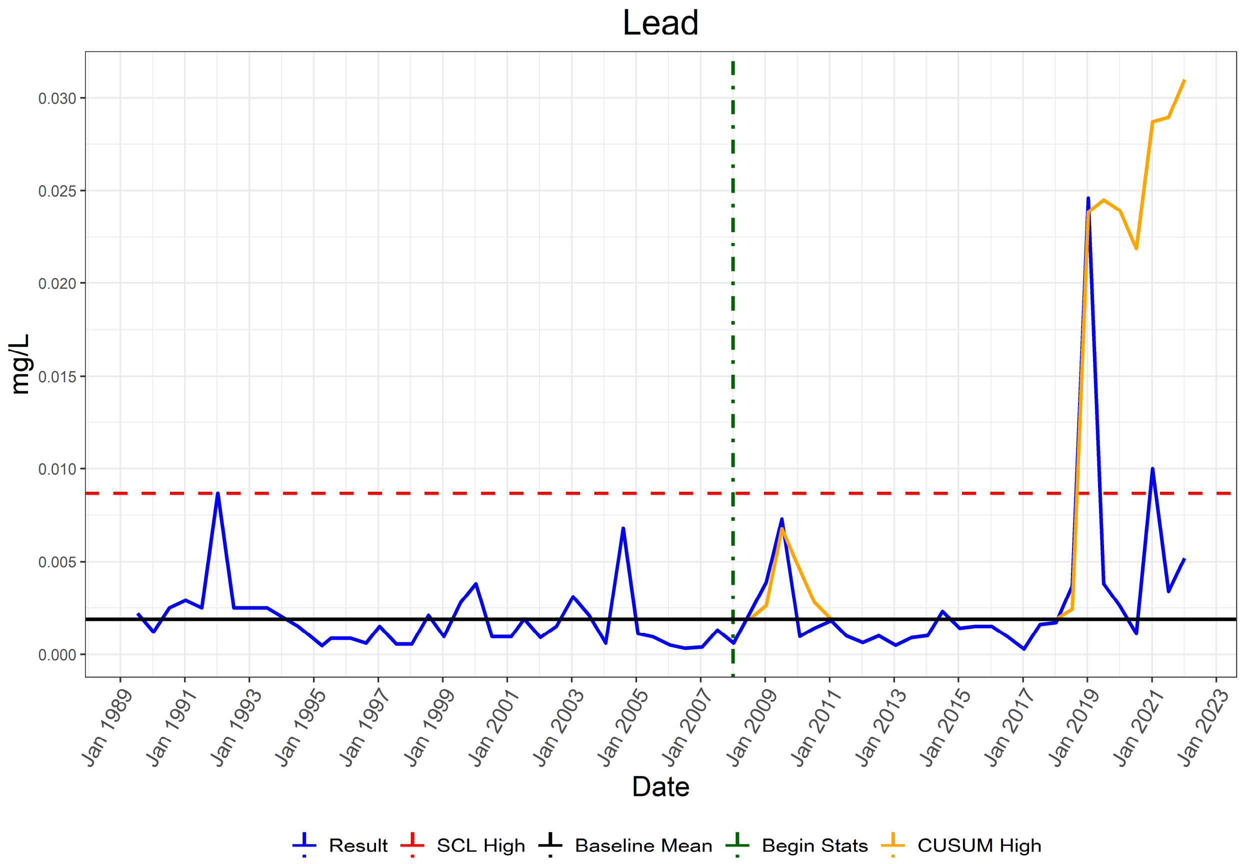

Total Organic Halogen
ug/L
0
100
200
300
400
500
600
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

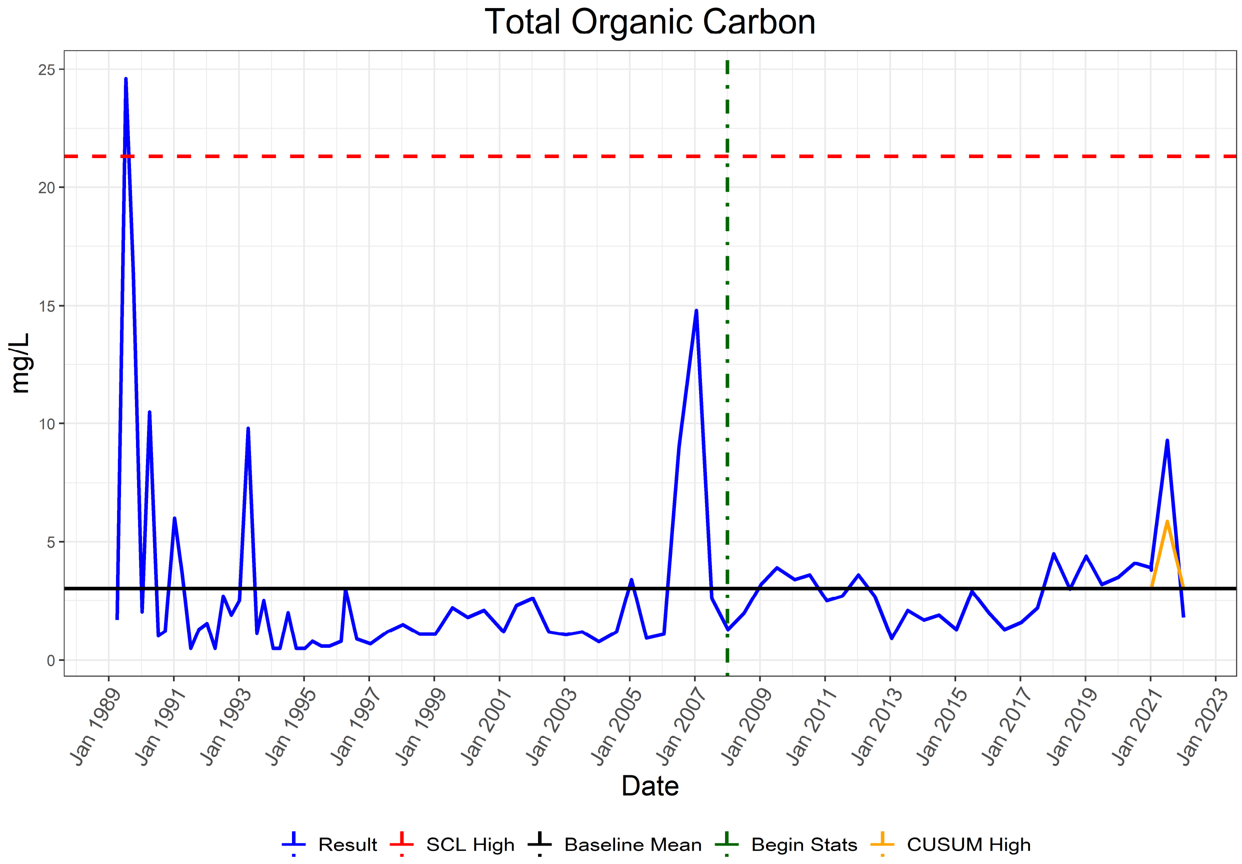
Secure C Landfill Detection Monitoring Program (Program 7)

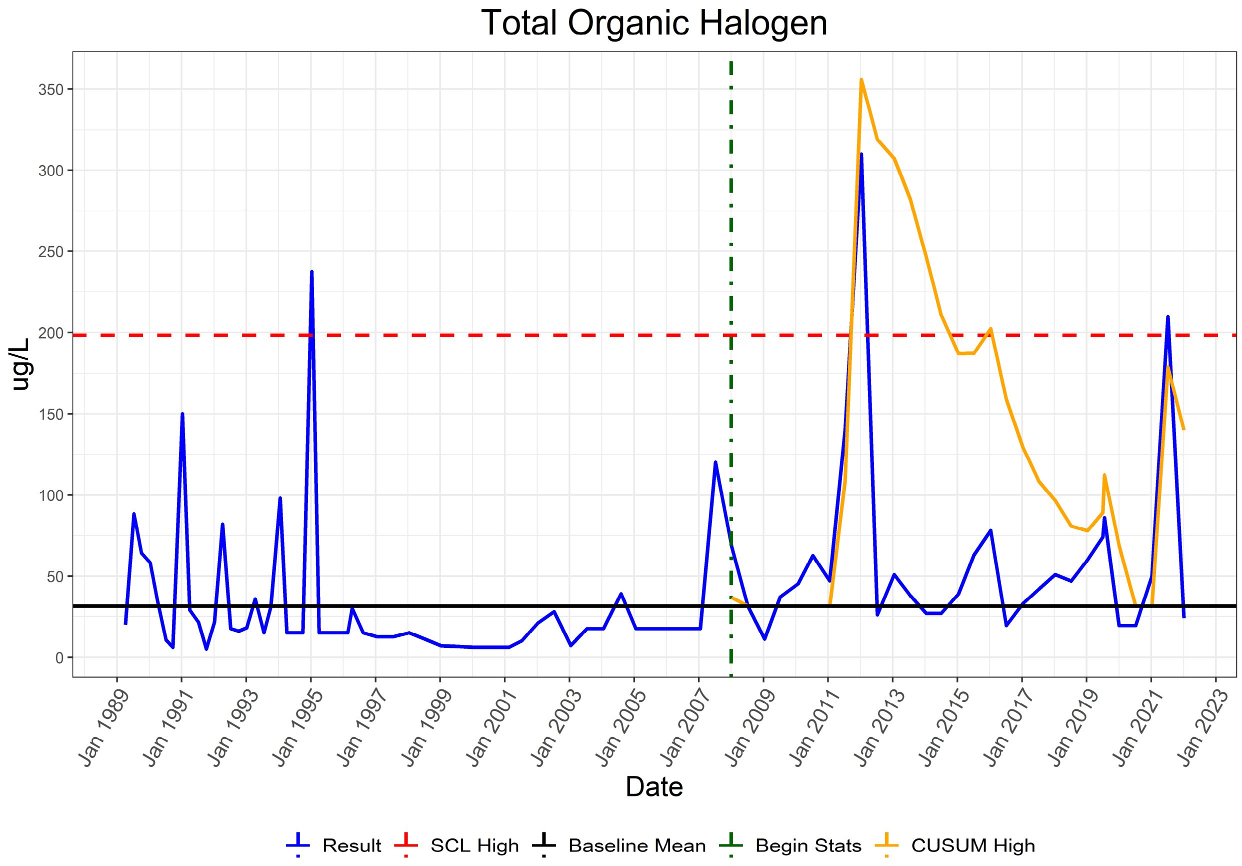
Well Name: R19-M02B





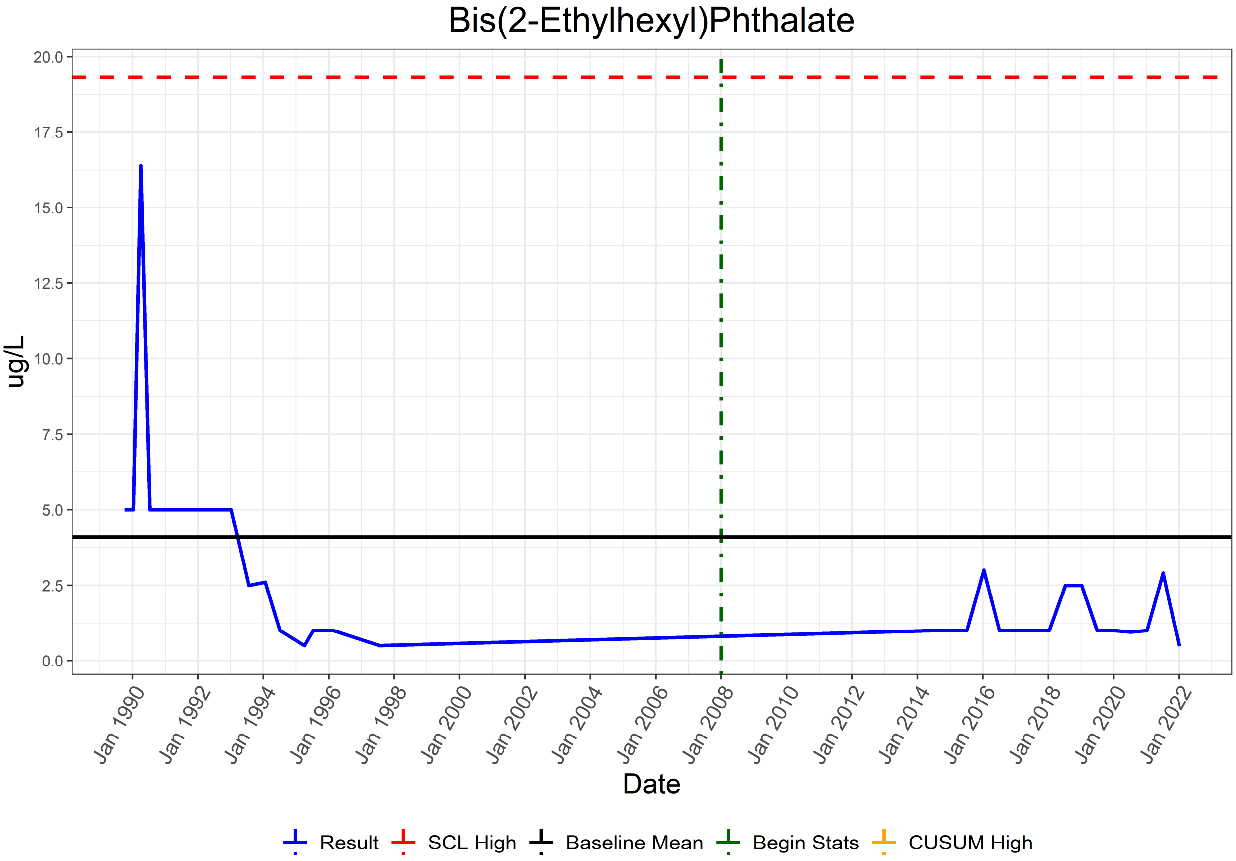

Lead
mg/L
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

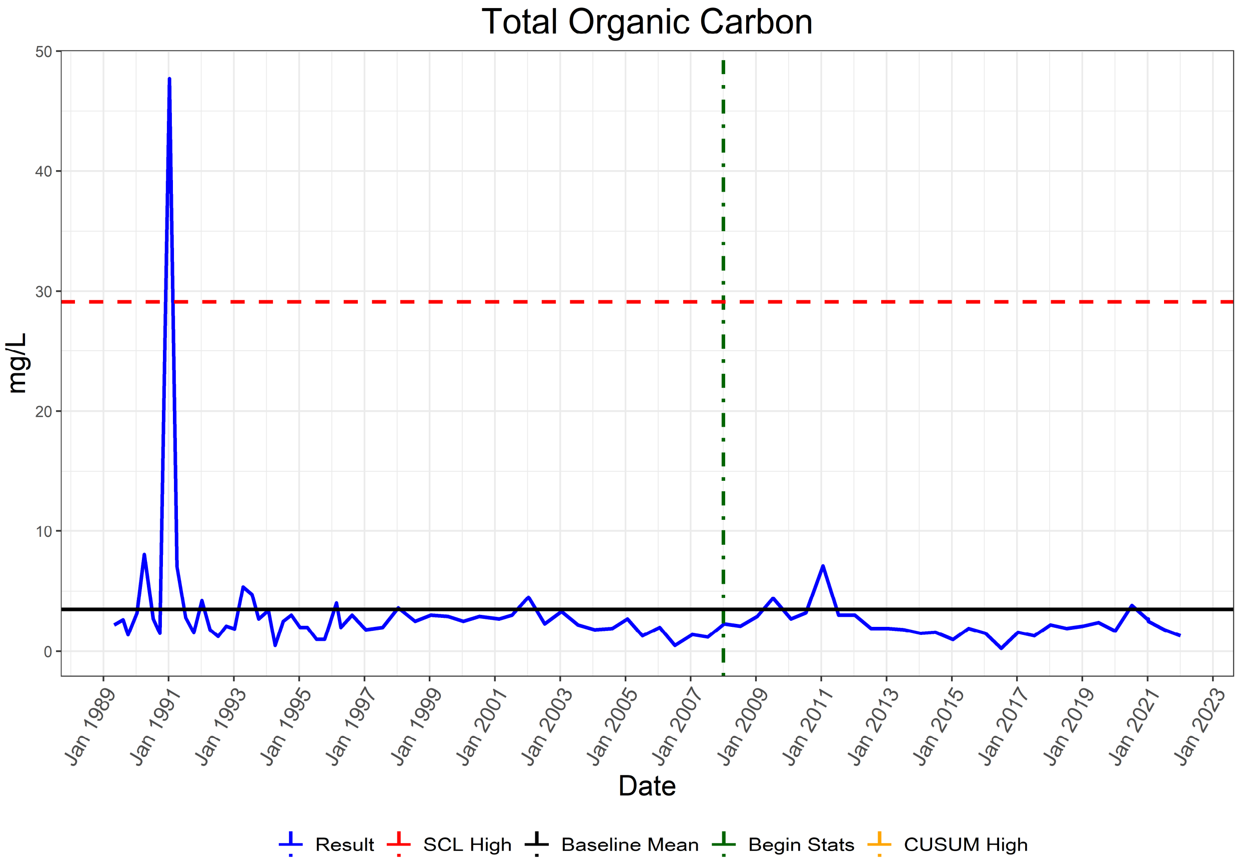

Total Organic Carbon
mg/L
25
20
15
10
5
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

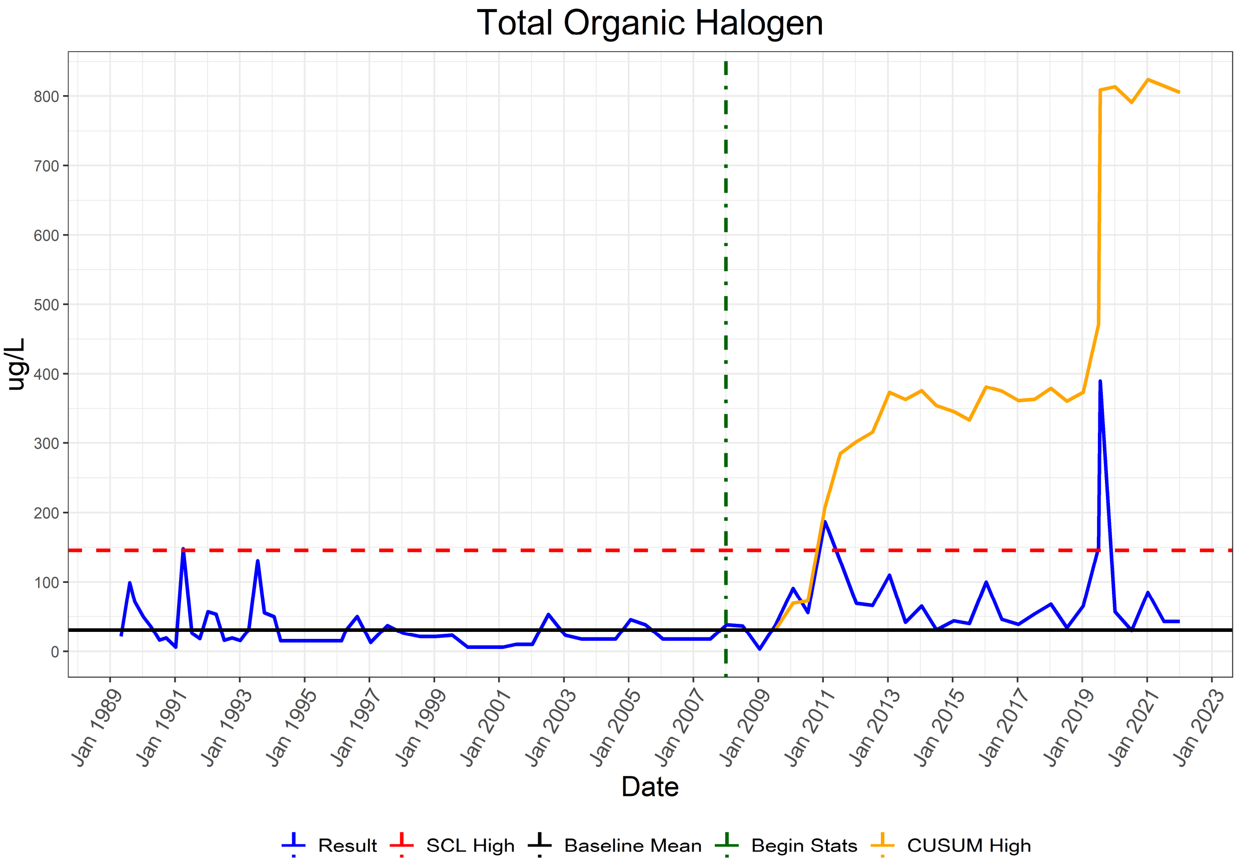

Total Organic Halogen
ug/L
0
50
100
150
200
250
300
350
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Secure C Landfill Detection Monitoring Program (Program 7)

Well Name: S19-M01B

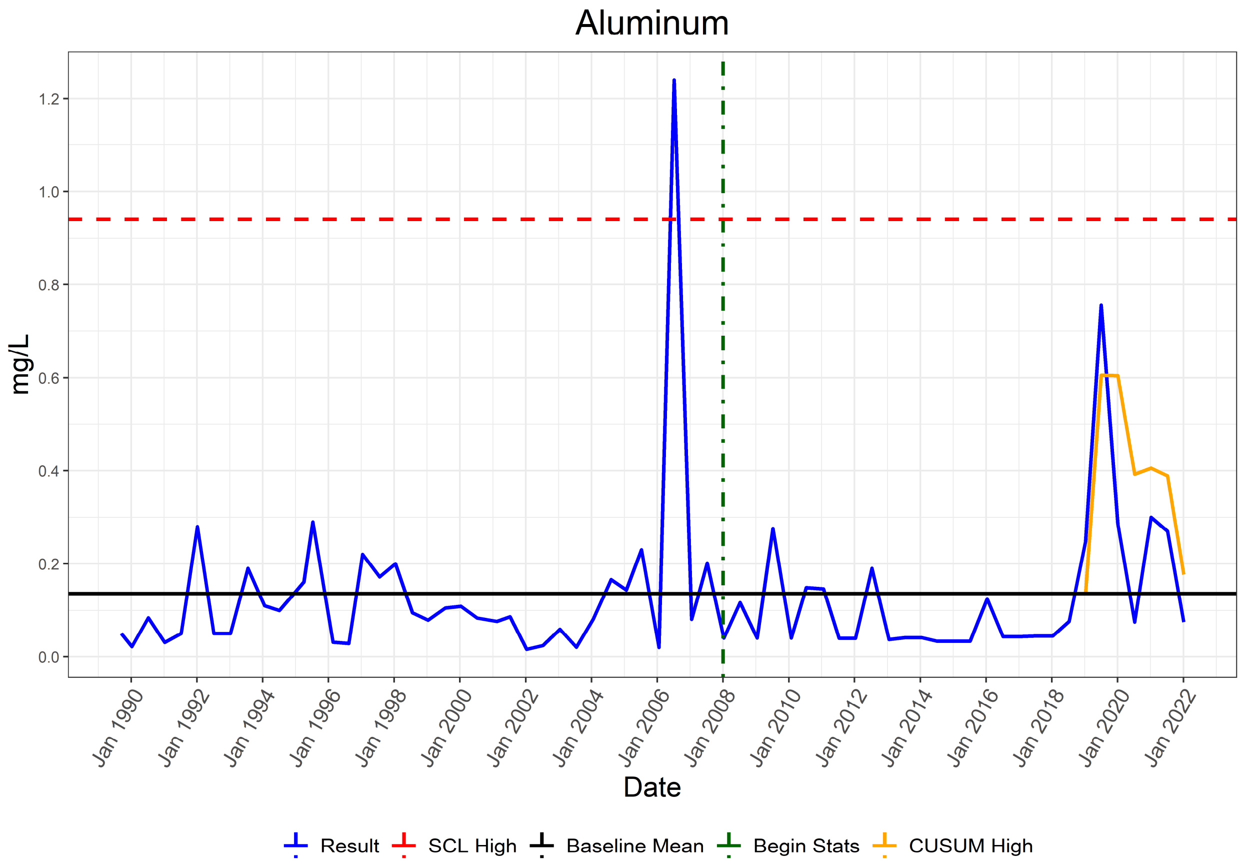


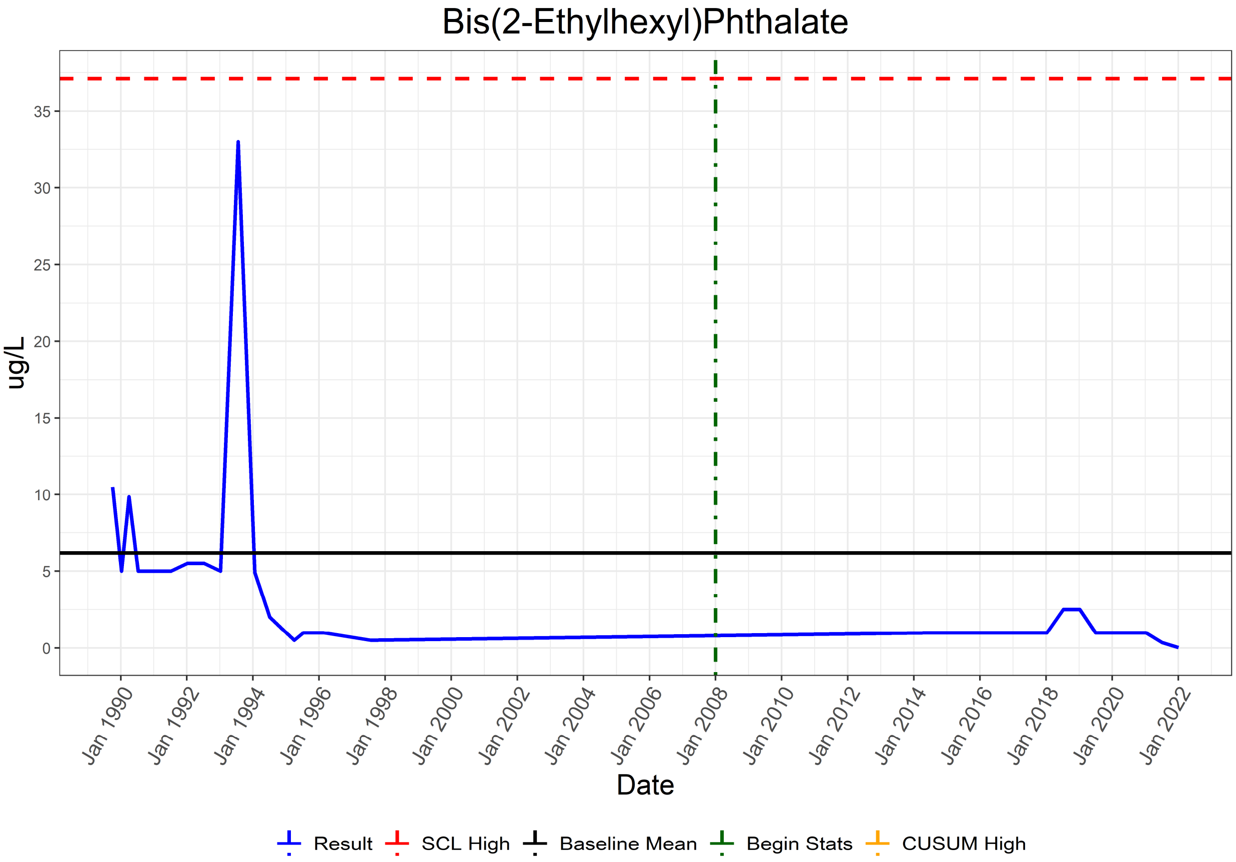


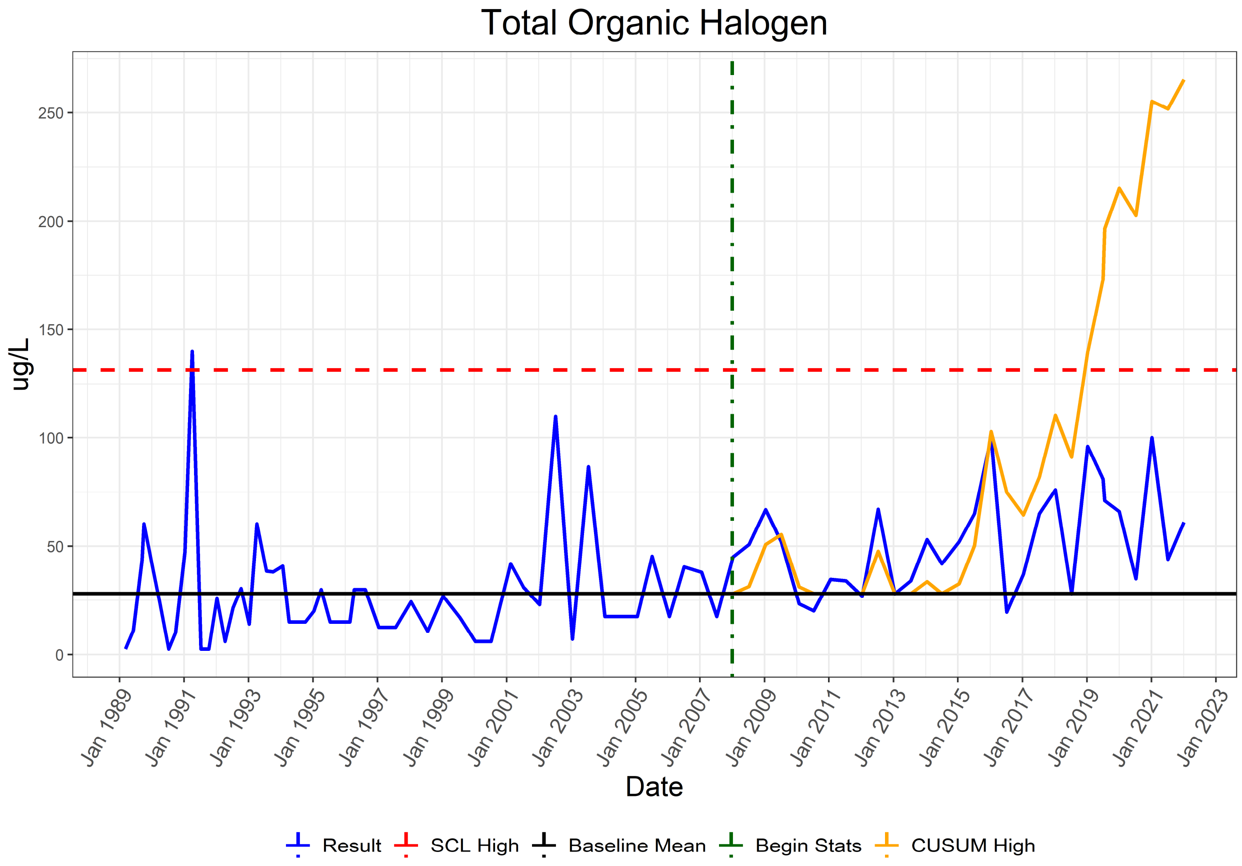

Total Organic Halogen
ug/L
800
700
600
500
400
300
200
100
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Secure C Landfill Detection Monitoring Program (Program 7)

Well Name: S19-M02B






Total Organic Halogen
ug/L
250
200
150
100
50
0
Jan 1989
Jan 1991
Jan 1993
Jan 1995
Jan 1997
Jan 1999
Jan 2001
Jan 2003
Jan 2005
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Appendix F

Well Summary, Statistical Evaluation Results, Time-Series Plots, and Control Chart Analysis for the PFAS Monitoring Program

Narrative Well Summary:
PFAS Monitoring Program

The following sections present a summary of the Mann-Kendall trend test and the control chart results. Only those tests that indicated a significant trend at the 1% level of significance or an out-of-control result in the current event are mentioned below.

AA22-M01B

The control chart analysis indicates that perfluorobutanoic acid (CUSUM) is out-of-control.

AA25-M01B

The control chart analysis indicates that perfluorobutanoic acid (CUSUM), perfluorodecanoic acid (CUSUM), perfluoroheptanoic acid (CUSUM), perfluorohexanoic acid (CUSUM), perfluorononanoic acid (CUSUM), and perfluoropentanoic acid (CUSUM) are out-of-control.

AA25-M01C

The control chart analysis indicates that perfluorodecanoic acid (CUSUM/current value), perfluorohexanoic acid (CUSUM/current value), and PFOA (CUSUM) are out-of-control.

C08-M01B

The Mann-Kendall trend test indicated that perfluoroheptanoic acid and perfluoropentanoic acid exhibit downward trends for all data. The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM), perfluorobutanoic acid (CUSUM), perfluorodecanoic acid (CUSUM), perfluorohexanoic acid (CUSUM), and PFOS (CUSUM/current value) are out-of-control.

C11-M01C

The control chart analysis indicates that perfluorododecanoic acid (CUSUM) is out-of-control.

C11-M01E

The control chart analysis indicates that perfluorodecanoic acid (CUSUM), perfluorohexanoic acid (CUSUM), and perfluorononanoic acid (CUSUM) are out-of-control.

C11-M02D

The control chart analysis indicates that perfluorodecanoic acid (CUSUM), perfluoropentanoic acid (CUSUM/current value), and perfluoroundecanoic acid (CUSUM) are out-of-control.

C11-M03B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that perfluorobutane sulfonic acid exhibits a downward trend for all data. The control chart analysis indicates that perfluorododecanoic acid (CUSUM/current value), perfluoroundecanoic (CUSUM), and PFOS (CUSUM/current value) are out-of-control.

D06-M01B

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that perfluorododecanoic acid exhibits an upward trend. The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM), perfluorobutanoic acid (CUSUM/current value), perfluorodecanoic acid (CUSUM/current value), perfluorohexanoic acid (CUSUM/current value), perfluorononanoic acid (CUSUM/current value), perfluoropentanoic acid (CUSUM/current value), perfluoroundecanoic acid (CUSUM), PFOA (CUSUM), and PFOS (CUSUM/current value) are out-of-control.

D15-M01B

The control chart analysis indicates that perfluoropentanoic acid (CUSUM) is out-of-control.

F07-M01B

The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM/current value) is out-of-control.

F08-M01A

The control chart analysis indicates that perfluorodecanoic acid (CUSUM) is out-of-control.

F08-M01B

The control chart analysis indicates that perfluorobutanoic acid (CUSUM/current value), perfluorododecanoic acid (CUSUM/current value), perfluoroheptanoic acid (CUSUM/current value), perfluoropentanoic acid (CUSUM), and perfluoroundecanoic acid (CUSUM) are out-of-control.

G04-M01B

All tested parameters are statistically consistent with baseline levels.

G04-M01E

The control chart analysis indicates that perfluorobutanoic acid (CUSUM), perfluoropentanoic acid (CUSUM), and perfluoroundecanoic acid (CUSUM) are out-of-control.

G05-M02B

The control chart analysis indicates that perfluorononanoic acid (CUSUM), perfluorodecanoic acid (CUSUM/current value), and perfluoroundecanoic acid (CUSUM/current value) are out-of-control.

G09-M01A

The control chart analysis indicates that perfluorobutanoic acid (CUSUM/current value), perfluorodecanoic acid (CUSUM/current value), perfluoroheptanoic acid (CUSUM/current value), perfluorohexanoic acid (CUSUM/current value), perfluorononanoic acid (CUSUM), perfluoropentanoic acid (CUSUM), and PFOA (CUSUM) are out-of-control.

J05-M01C

The control chart analysis indicates that perfluorobutanoic acid (CUSUM/current value), perfluorodecanoic acid (CUSUM/current value), perfluoroheptanoic acid (CUSUM/current value), perfluorohexanoic acid (CUSUM/current value), perfluorononanoic acid (CUSUM/current value), perfluoropentanoic acid (CUSUM/current value), perfluoroundecanoic acid (CUSUM/current value), and PFOA (CUSUM/current value) are out-of-control.

J10-M02B

The control chart analysis indicates that perfluorohexanoic acid (CUSUM/current value) and perfluoropentaoic acid (CUSUM) are out-of-control.

K12-M01A

The control chart analysis indicates that no parameters are out-of-control.

K13-M02B

The control chart analysis indicates that perfluorononanoic acid (CUSUM) is out-of-control.

L09-M01B

The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM), perfluorobutanoic acid (CUSUM), perfluorodecanoic acid (CUSUM), and perfluorohexanoic acid (CUSUM) are out-of-control.

L09-M01C

The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM), perfluorobutanoic acid (CUSUM), perfluoroheptanoic acid (CUSUM), perfluorohexanoic acid (CUSUM), and perfluoroundecanoic acid (CUSUM) are out-of-control.

L09-M01D

The control chart analysis indicates that perfluorobutanoic acid (CUSUM), perfluorodecanoic acid (CUSUM/current value), perfluoroheptanoic acid (CUSUM), perfluorohexanoic acid (CUSUM), perfluorononanoic acid (CUSUM/current value), and PFOA (CUSUM) are out-of-control.

N08-M01B

The control chart analysis indicates that perfluorodecanoic acid (CUSUM) is out-of-control.

N08-M01C

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that perfluorohexanoic acid exhibits an upward trend. The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM/current value), perfluorodecanoic acid (CUSUM), perfluoroundecanoic acid (CUSUM), and PFOA (CUSUM) are out-of-control.

N08-M01D

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that perfluorohexanoic acid exhibits an upward trend. The control chart analysis indicates that perfluorodecanoic acid (CUSUM), perfluoroheptanoic acid (CUSUM), perfluoropentanoic acid (CUSUM), perfluoroundecanoic acid (CUSUM), and PFOA (CUSUM) are out-of-control.

P06-M01B

The control chart analysis indicates that perfluorodecanoic acid (CUSUM/current value) and perfluorononanoic acid (CUSUM) are out-of-control.

P06-M01D

The control chart analysis indicates that perfluorobutanoic acid (CUSUM), perfluorodecanoic acid (CUSUM/current value), perfluoroheptanoic acid (CUSUM/current value), perfluorohexanoic acid (CUSUM/current value), perfluorononanoic acid (CUSUM), perfluoropentanoic acid (CUSUM/), and PFOA (CUSUM/current value) are out-of-control.

P06-M01E

The Mann-Kendall evaluation of the combined baseline/current data sets indicates that perfluorobutanoic acid exhibits an upward trend. The control chart analysis indicates that perfluoroheptanoic acid (CUSUM), perfluorohexanoic acid (CUSUM), perfluorononanoic acid (CUSUM), and perfluoropentanoic acid (CUSUM) are out-of-control.

P06-M02C

The control chart analysis indicates that perfluorodecanoic acid (CUSUM/current value), perfluorononanoic acid (CUSUM/current value), and PFOA (CUSUM) are out-of-control.

P21-M01B

The control chart analysis indicates that perfluoroheptanoic acid (CUSUM), perfluorononanoic acid (CUSUM), perfluoropentanoic acid (CUSUM), and PFOA (CUSUM) are out-of-control.

R09-M02B

The control chart analysis indicates that perfluorodecanoic acid (CUSUM) is out-of-control.

R10-M01C

The control chart analysis indicates that perfluorobutanoic acid (CUSUM), perfluorododecanoic acid (CUSUM), perfluoroheptanoic acid (CUSUM/current value), perfluorohexanoic acid (CUSUM/current value), perfluorononanoic (CUSUM/current value), perfluoropentanoic (CUSUM), perfluoroundecanoic acid (CUSUM), and PFOA (CUSUM) are out-of-control.

R10-M01E

The control chart analysis indicates that perfluorobutanoic acid (CUSUM), perfluorododecanoic acid (CUSUM), and perfluorohexanoic acid (CUSUM) are out-of-control.

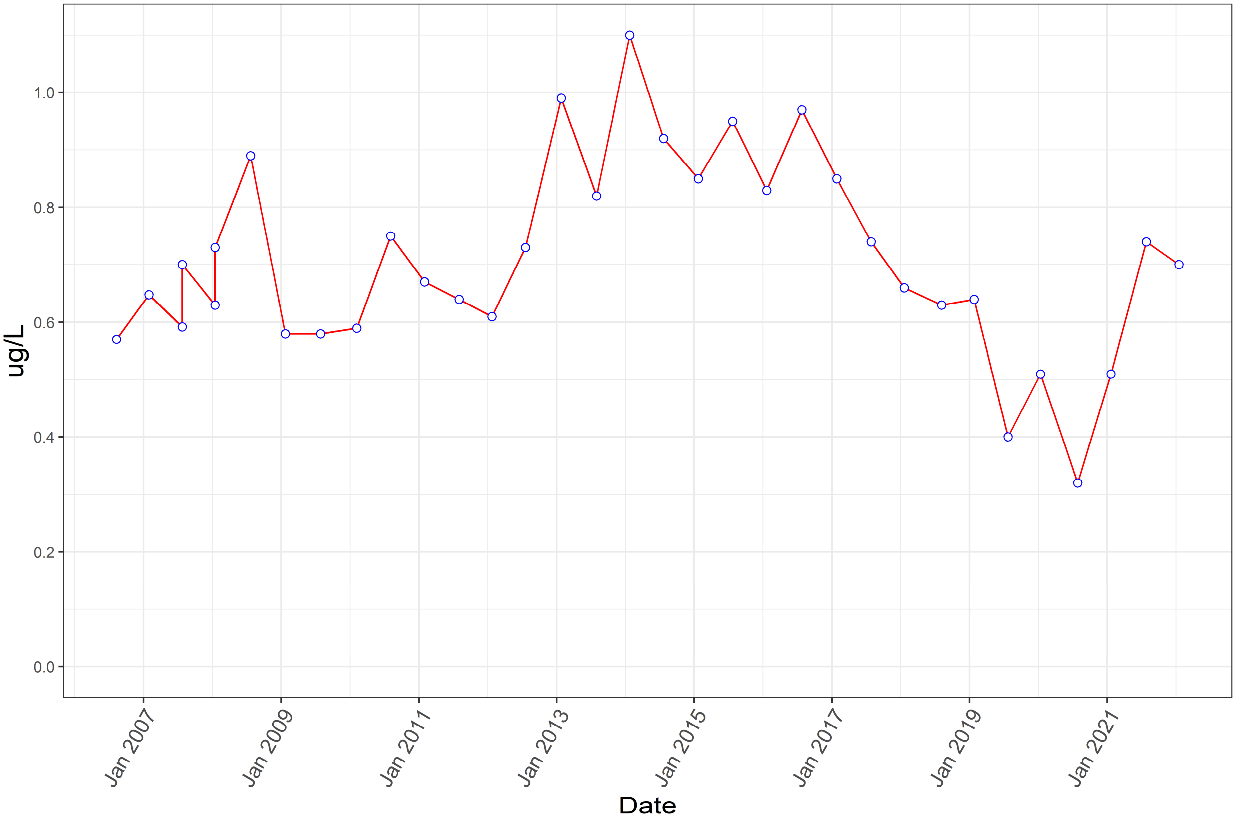
Z28-M01B

The control chart analysis indicates that perfluorobutane sulfonic acid (CUSUM/current value), perfluorobutanoic acid (CUSUM), perfluorodecanoic acid (CUSUM/current value), perfluoroheptanoic acid (CUSUM), perfluorohexane sulfonic acid (CUSUM), perfluorohexanoic acid (CUSUM), perfluorononanoic acid (CUSUM), perfluoropentanoic acid (CUSUM), PFOA (CUSUM), and PFOS (CUSUM) are out-of-control.

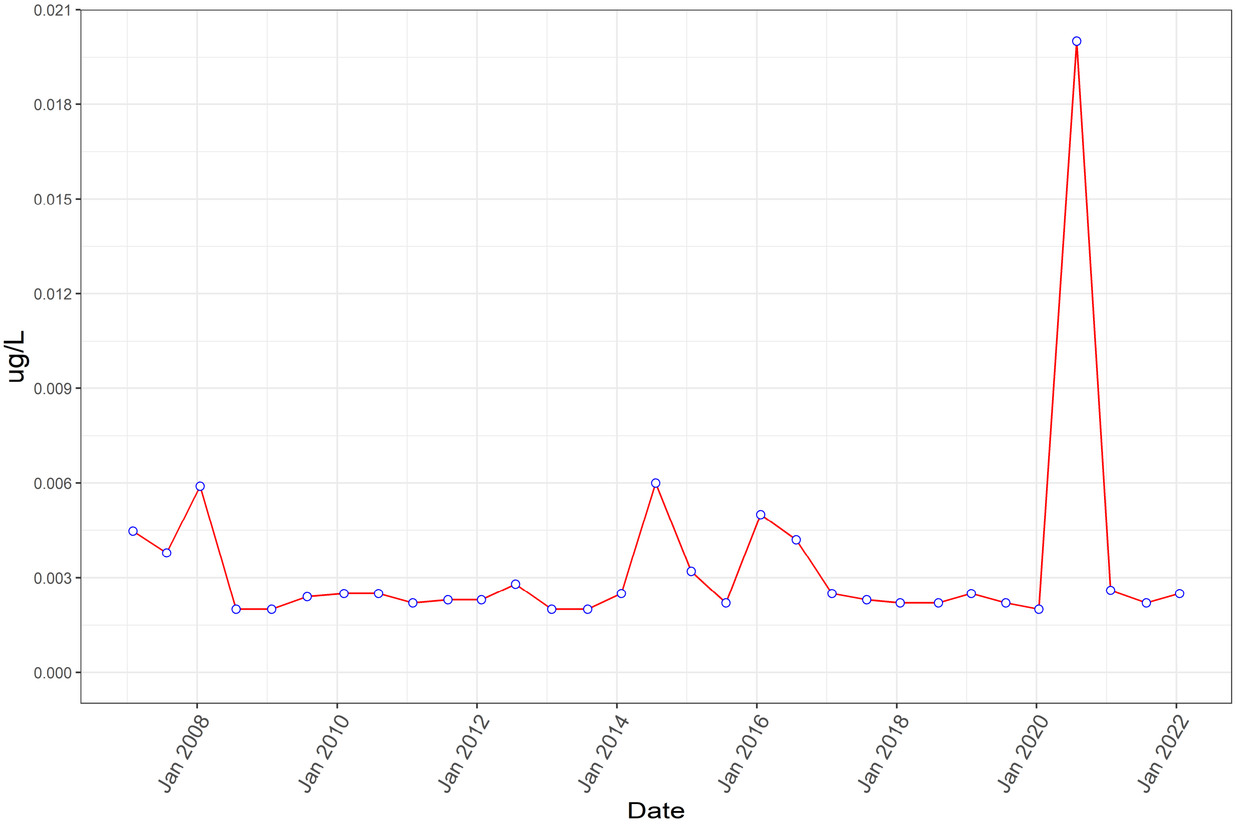
PFAS Monitoring Program (Program 9)

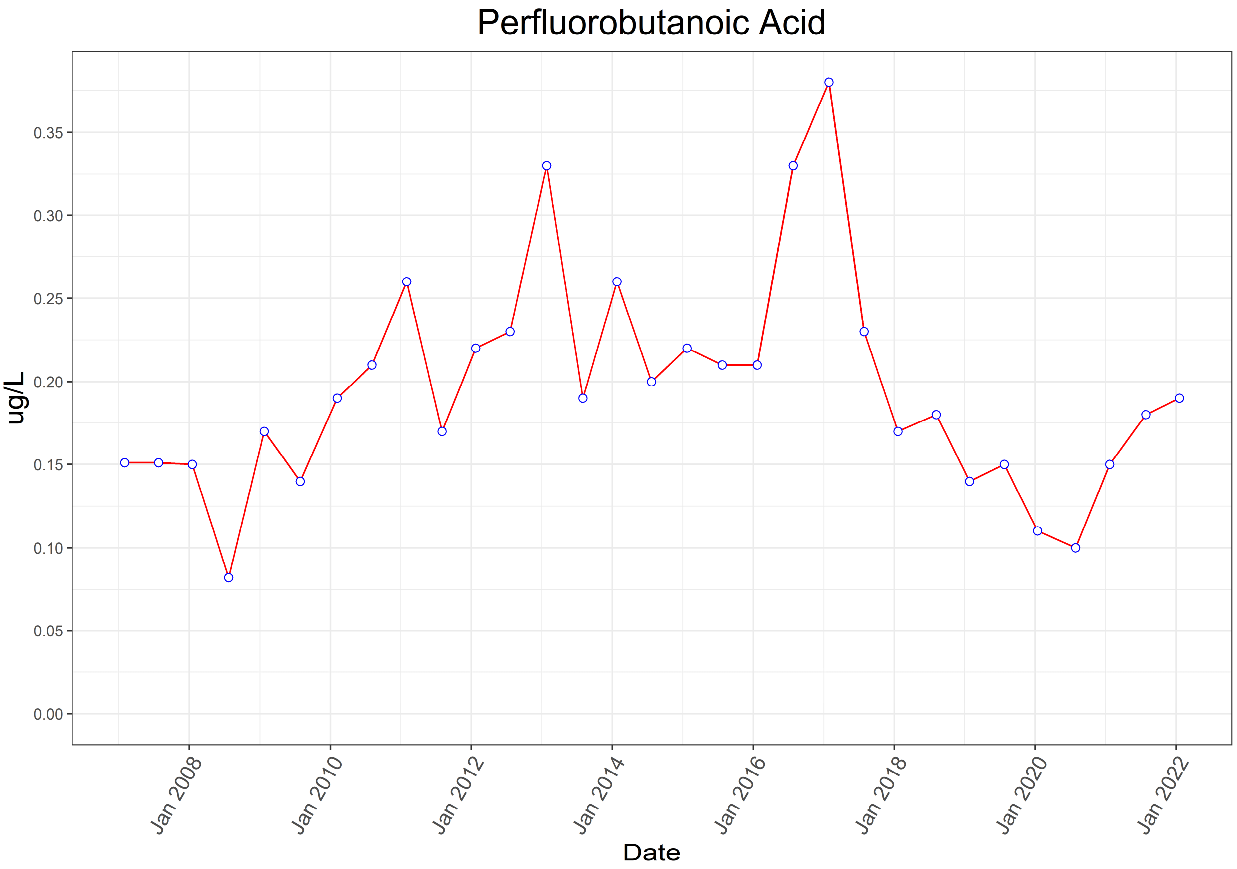
Well Name: AA22-M01B

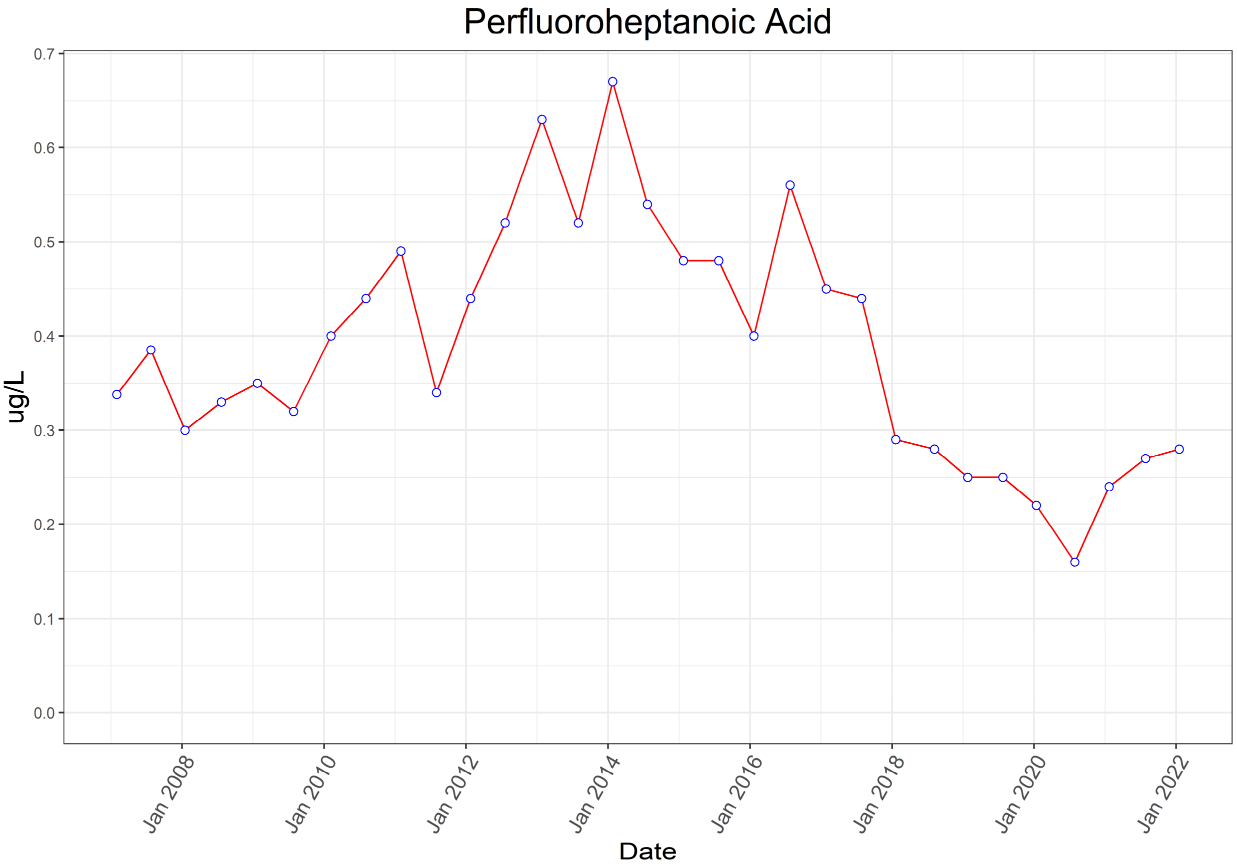
PFOA

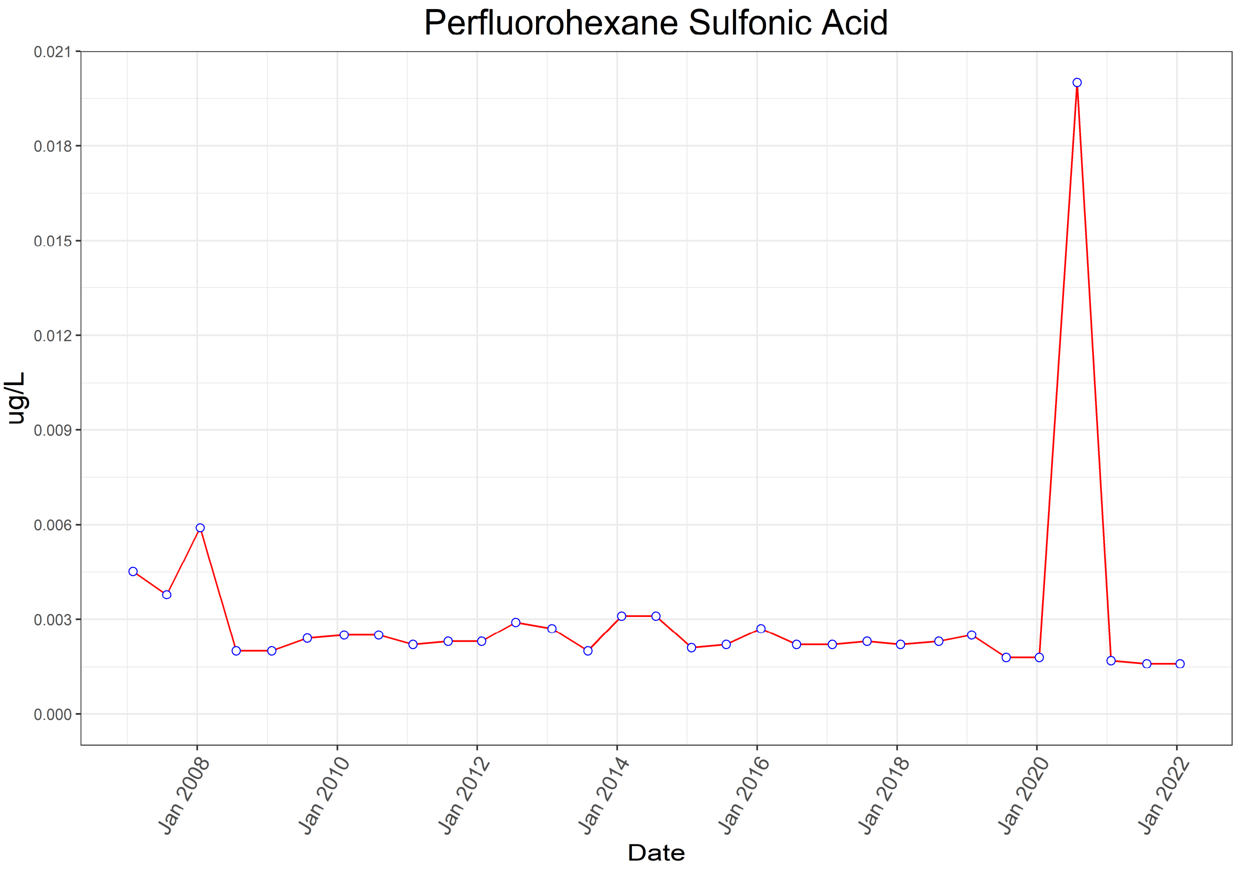


Perfluorobutane Sulfonic Acid

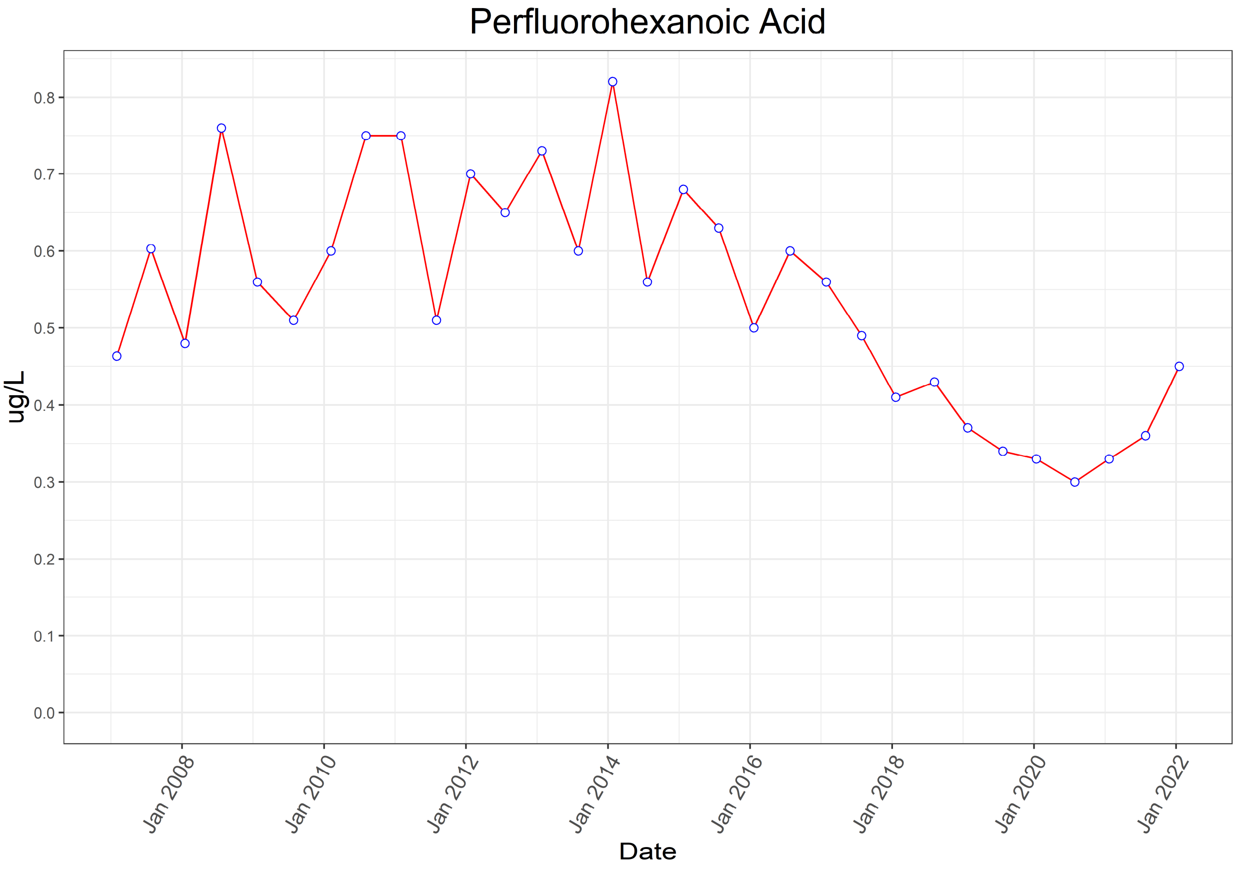



Perfluorobutanoic Acid
ug/L
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

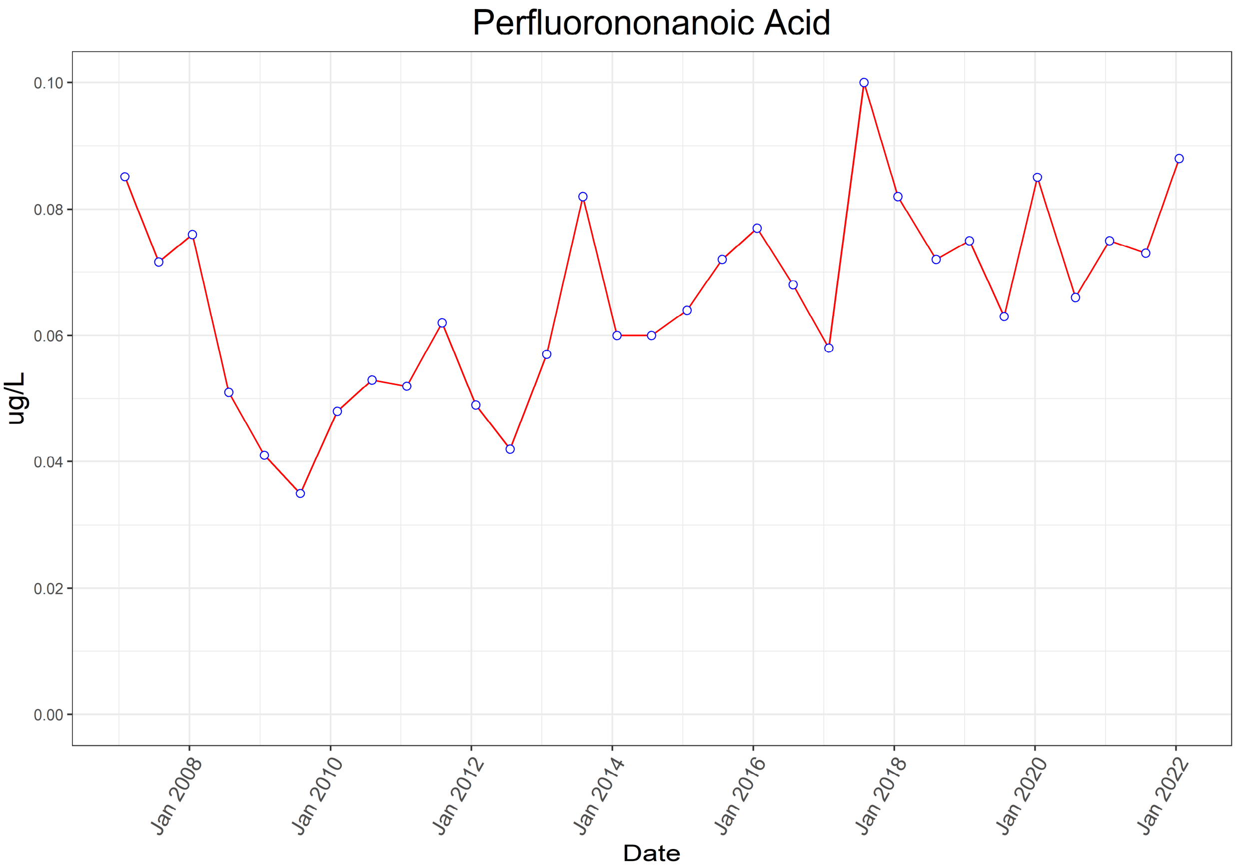

Perfluoroheptanoic Acid
ug/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

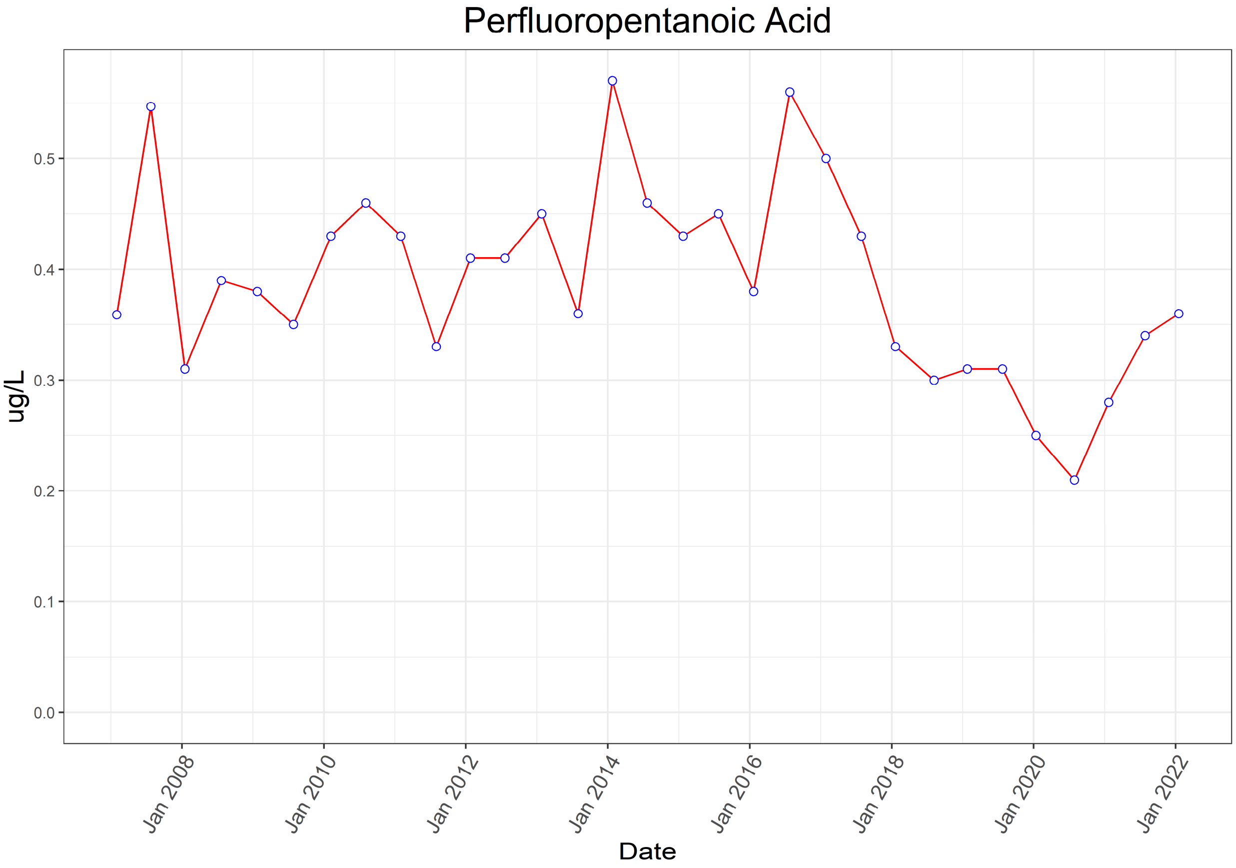


Perfluorohexane Sulfonic Acid

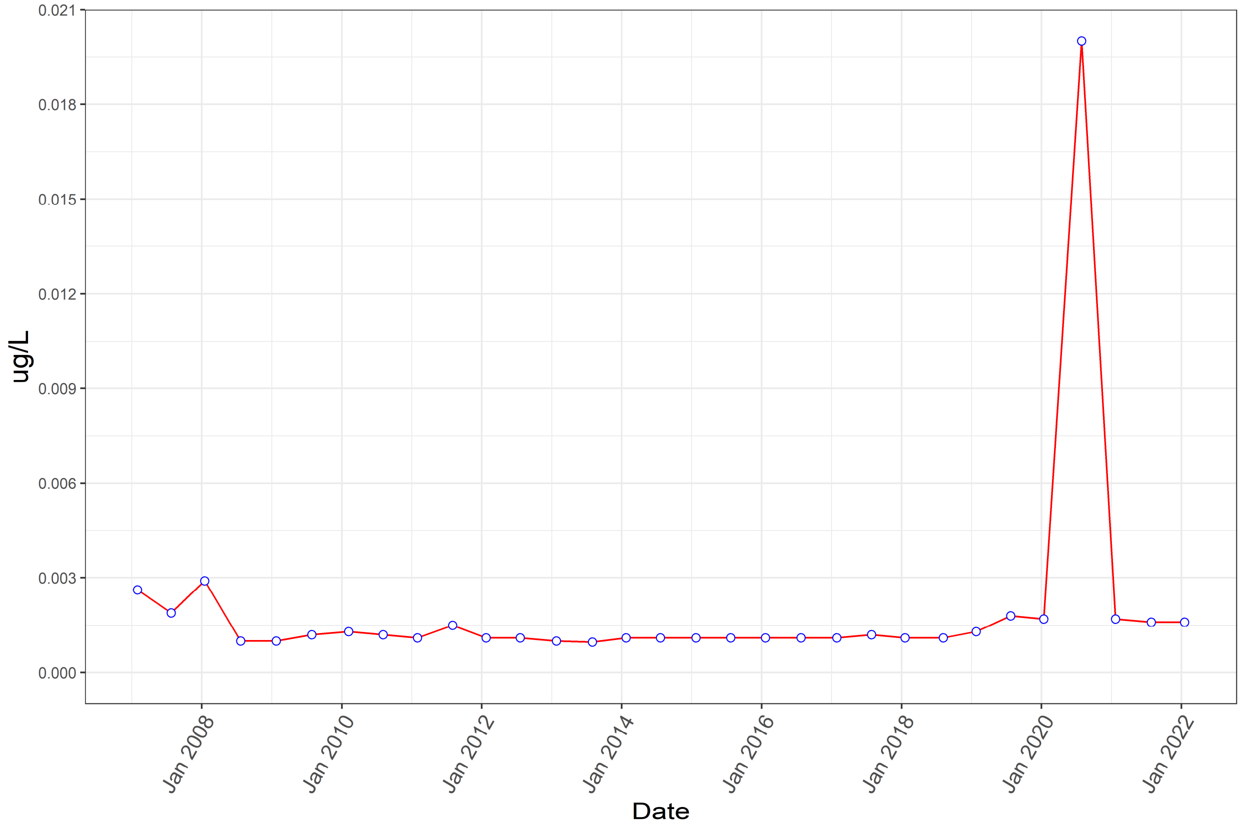


Perfluorohexanoic Acid

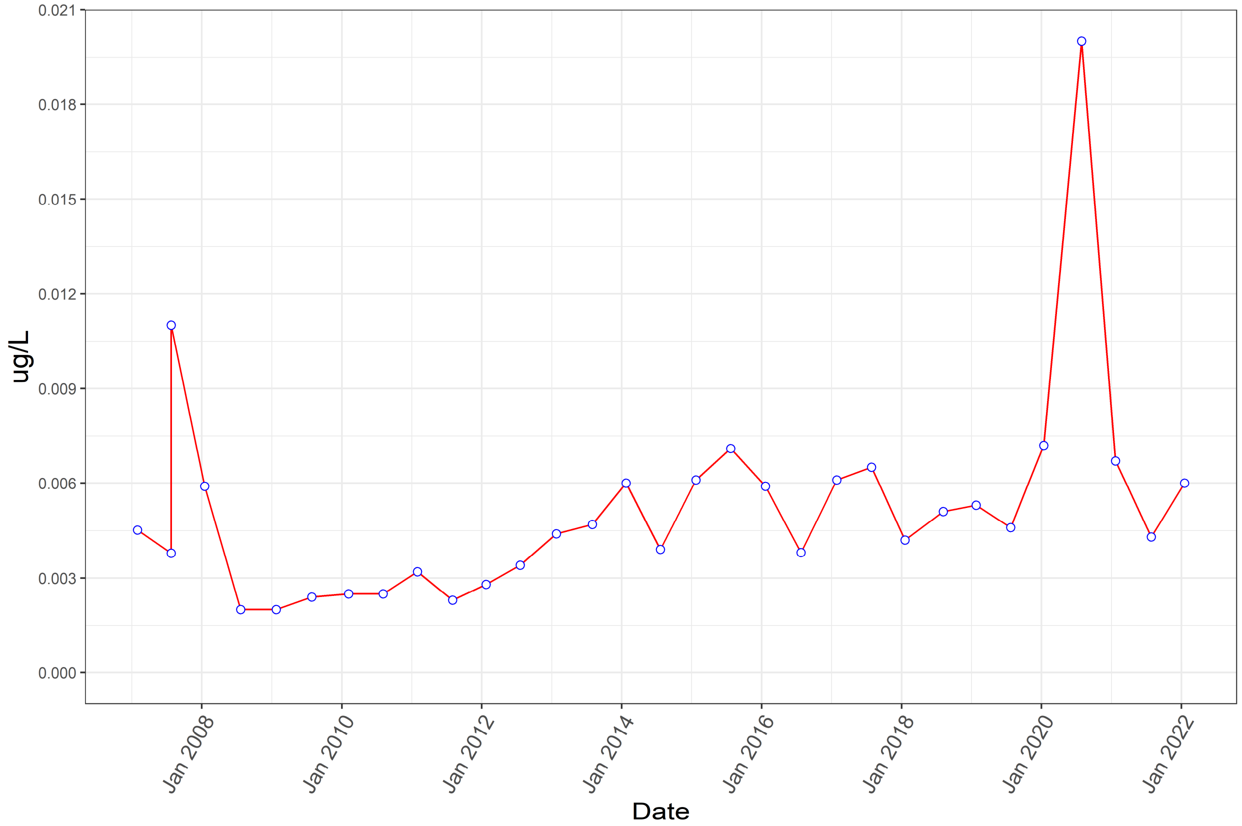

Perfluorononanoic Acid
ug/L
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

Perfluoroundecanoic Acid

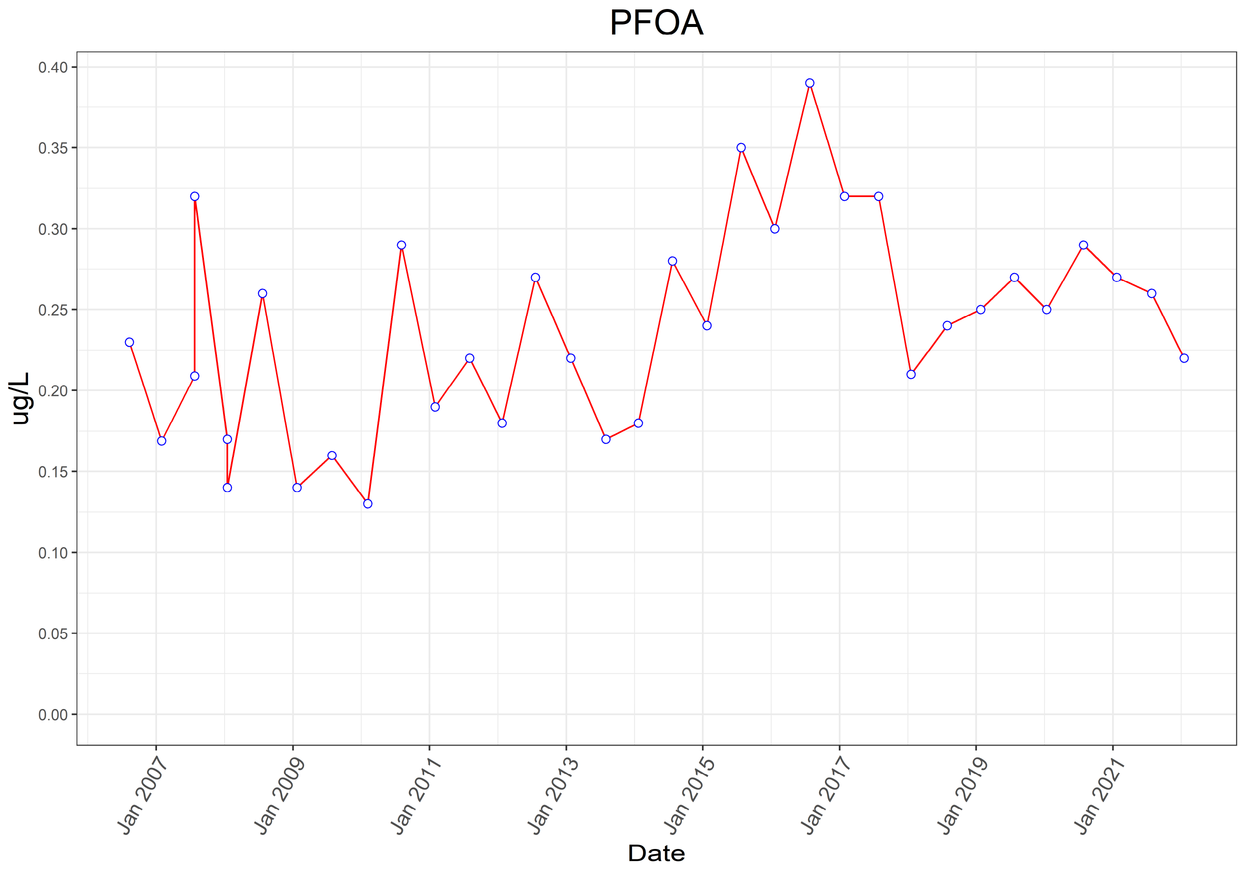


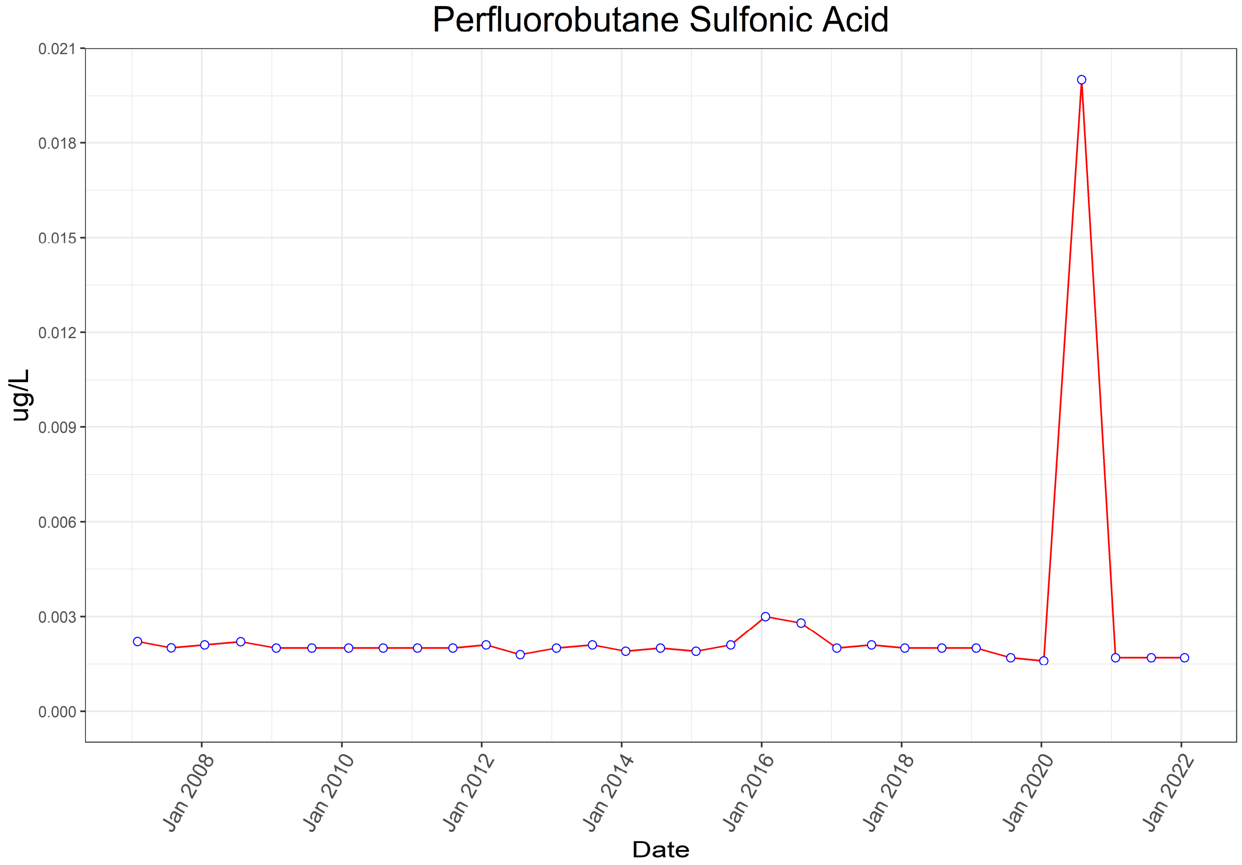
PFOS

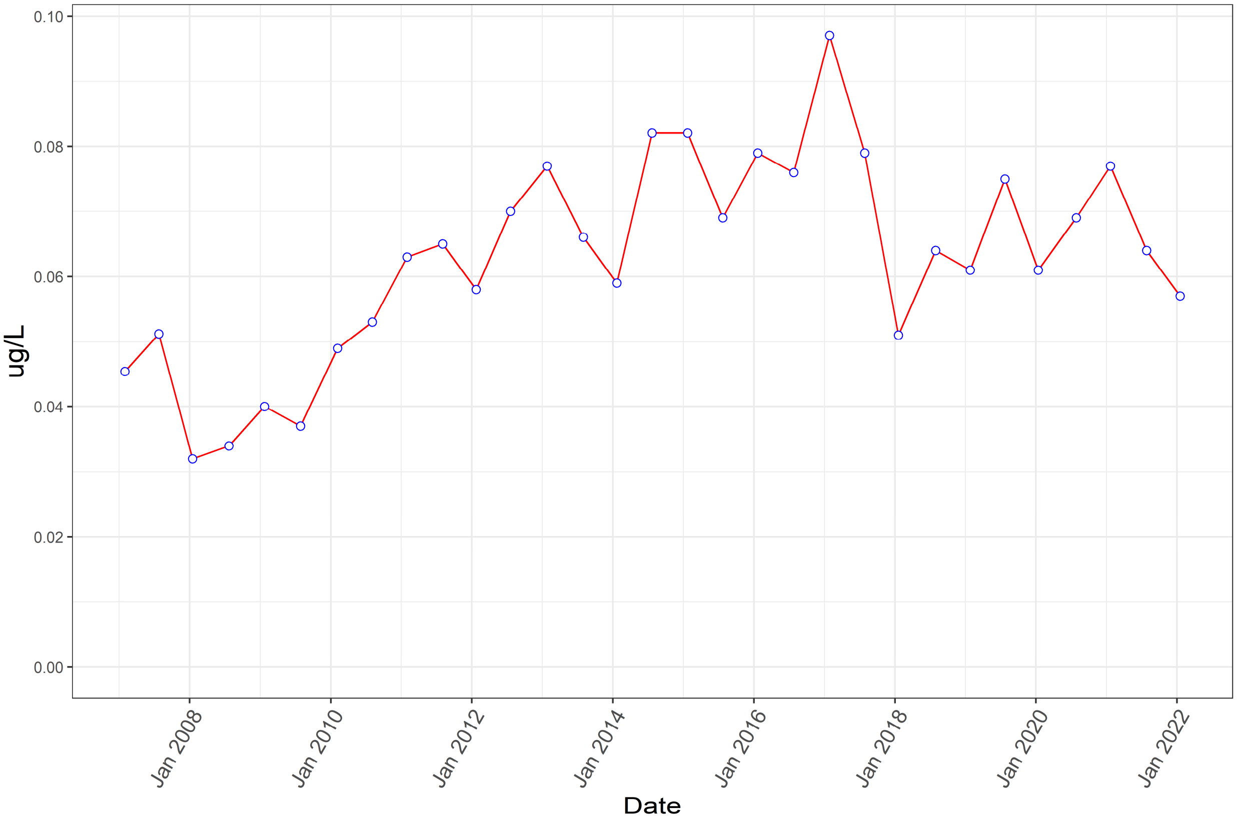


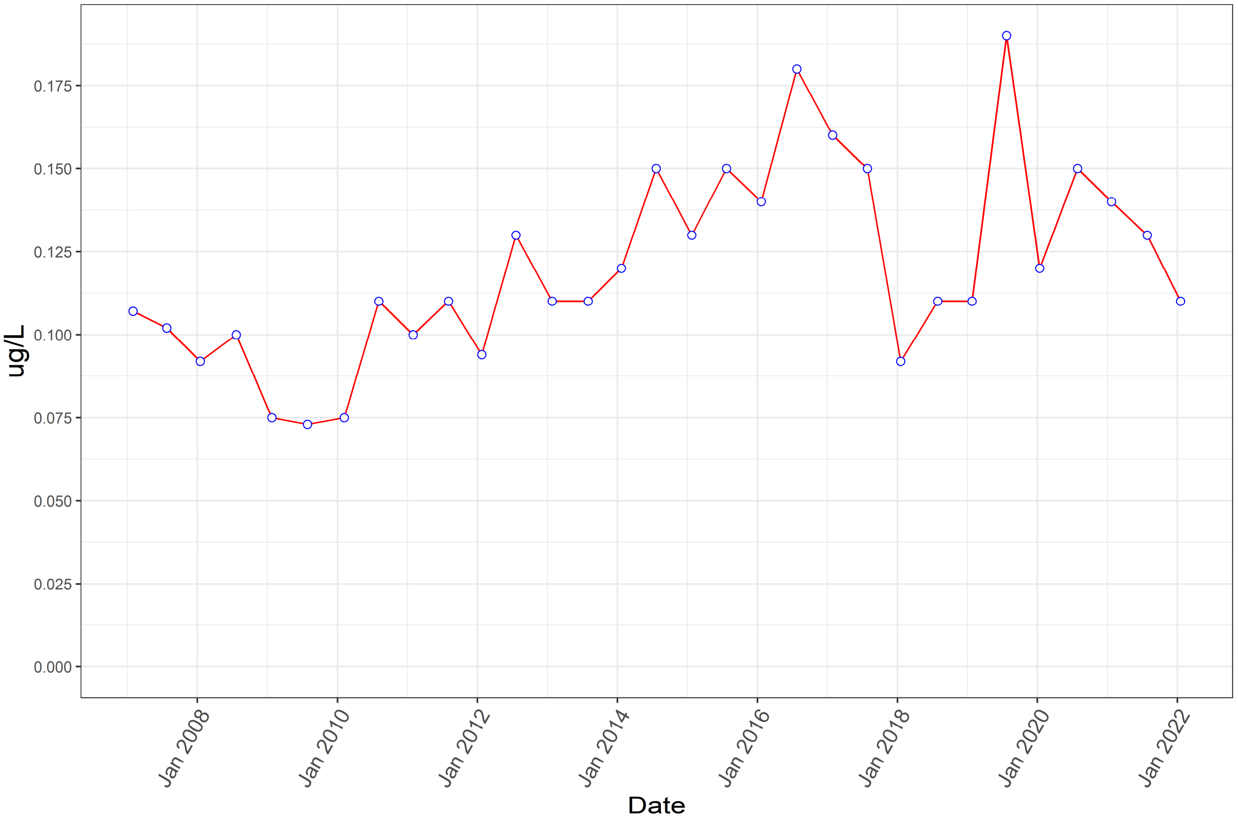
PFAS Monitoring Program (Program 9)

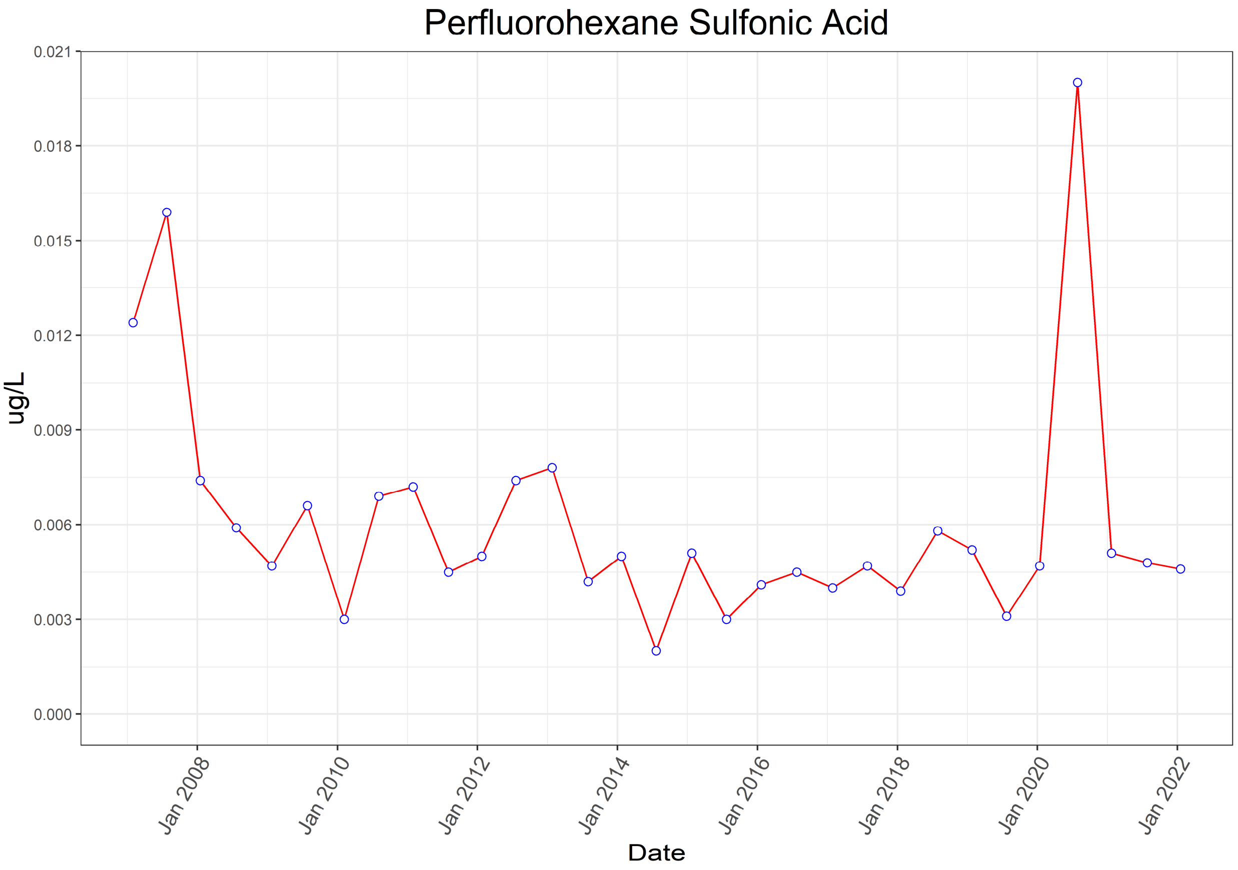
Well Name: AA25-M01B



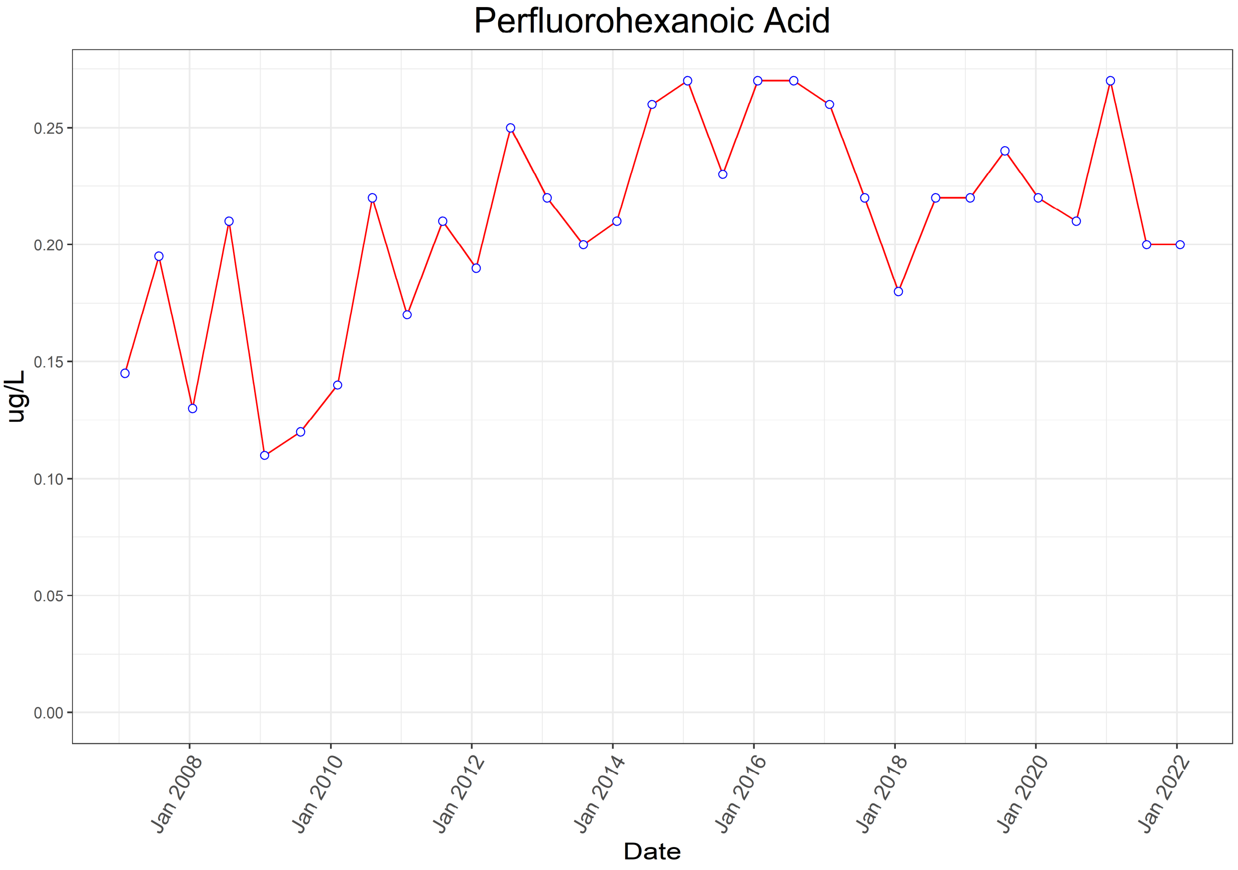



Perfluorobutanoic Acid


Perfluoroheptanoic Acid

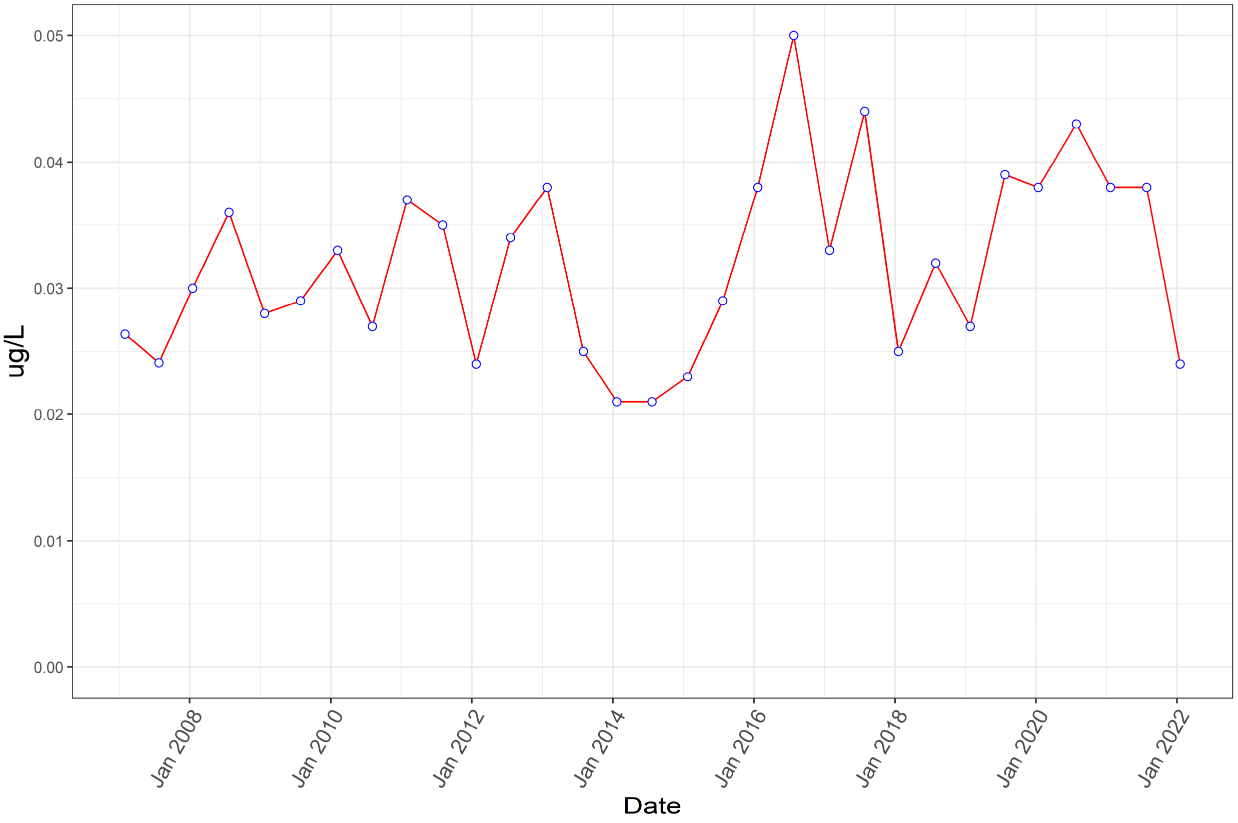


Perfluorohexane Sulfonic Acid

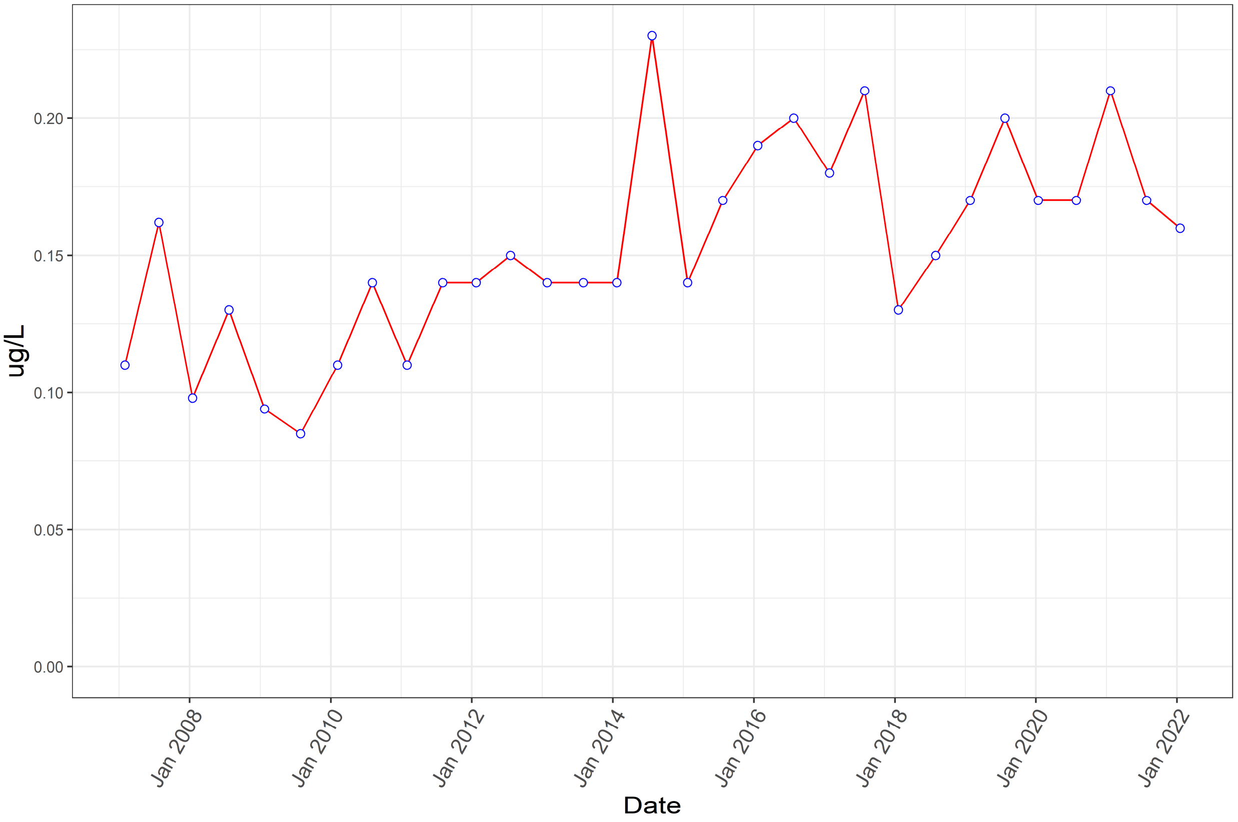


Perfluorohexanoic Acid

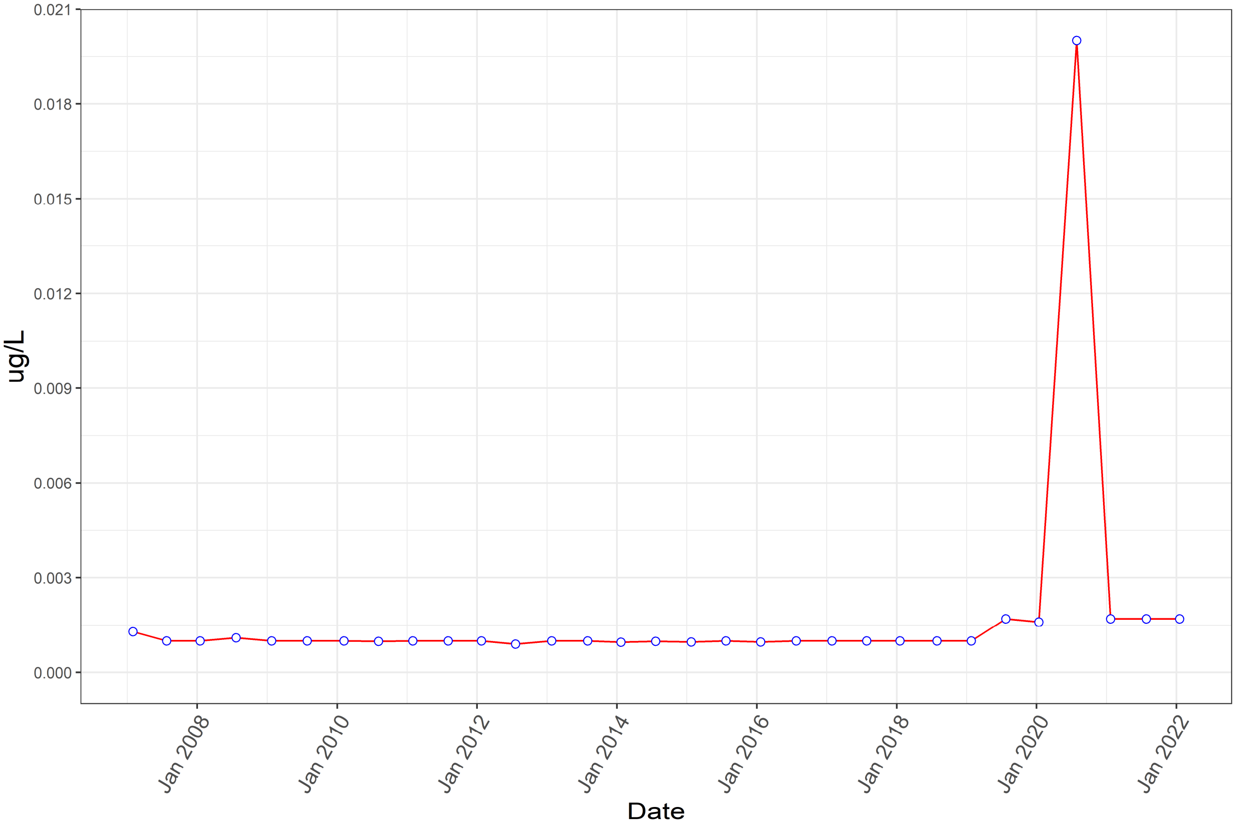
Perfluorononanoic Acid



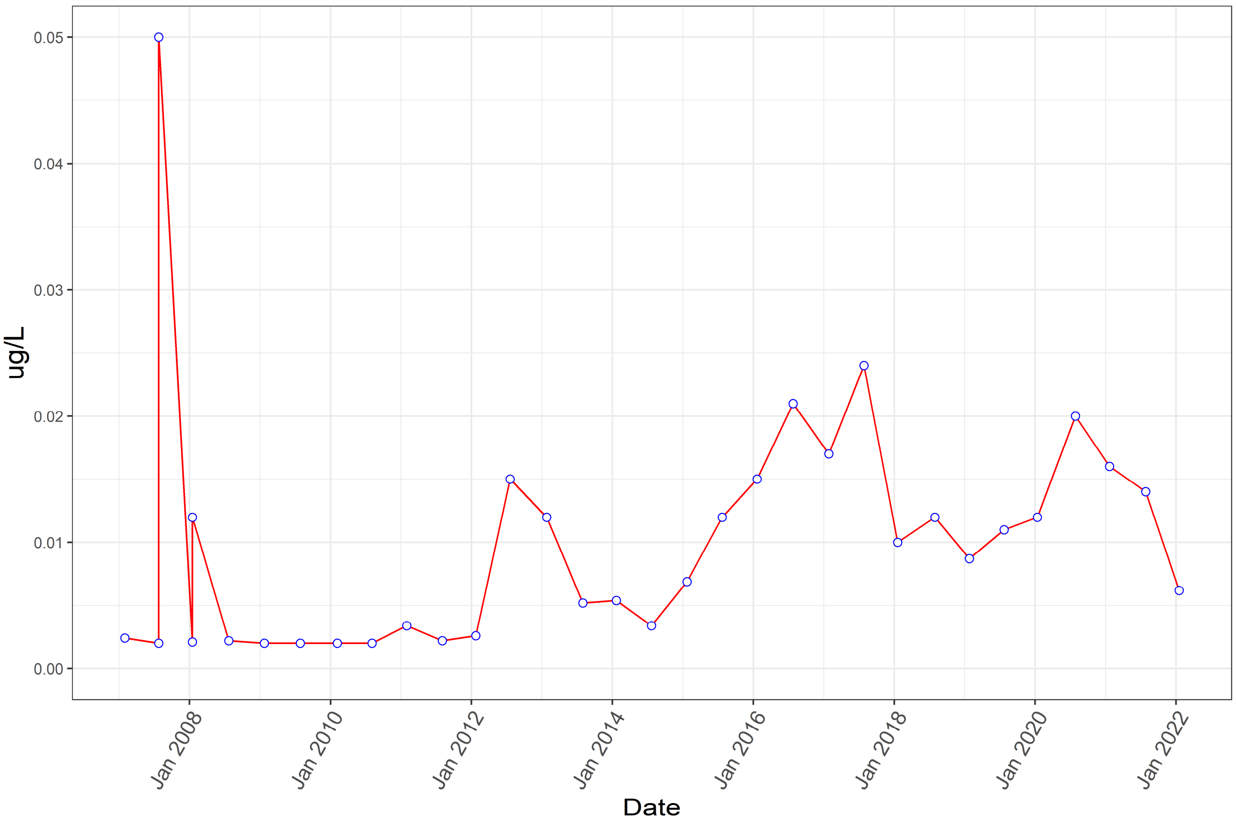
Perfluoropentanoic Acid



Perfluoroundecanoic Acid

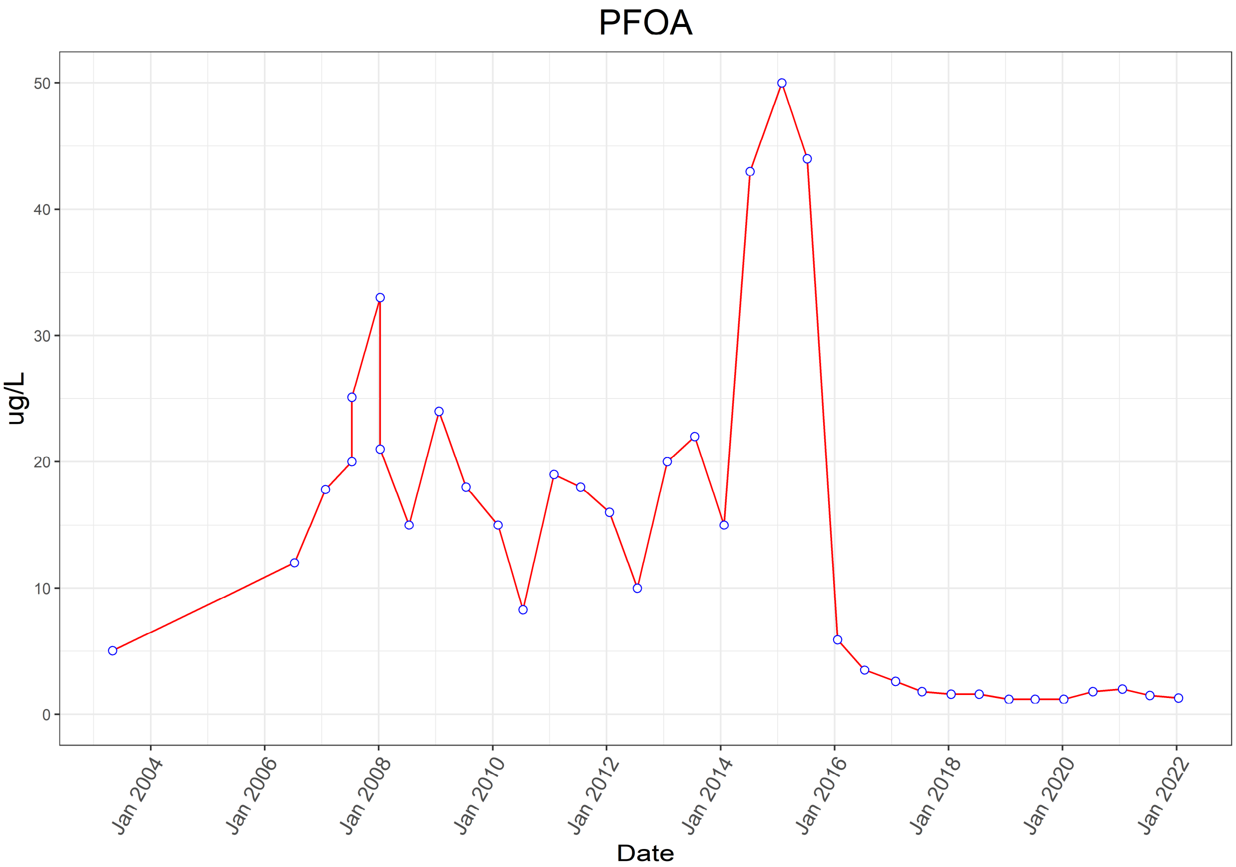


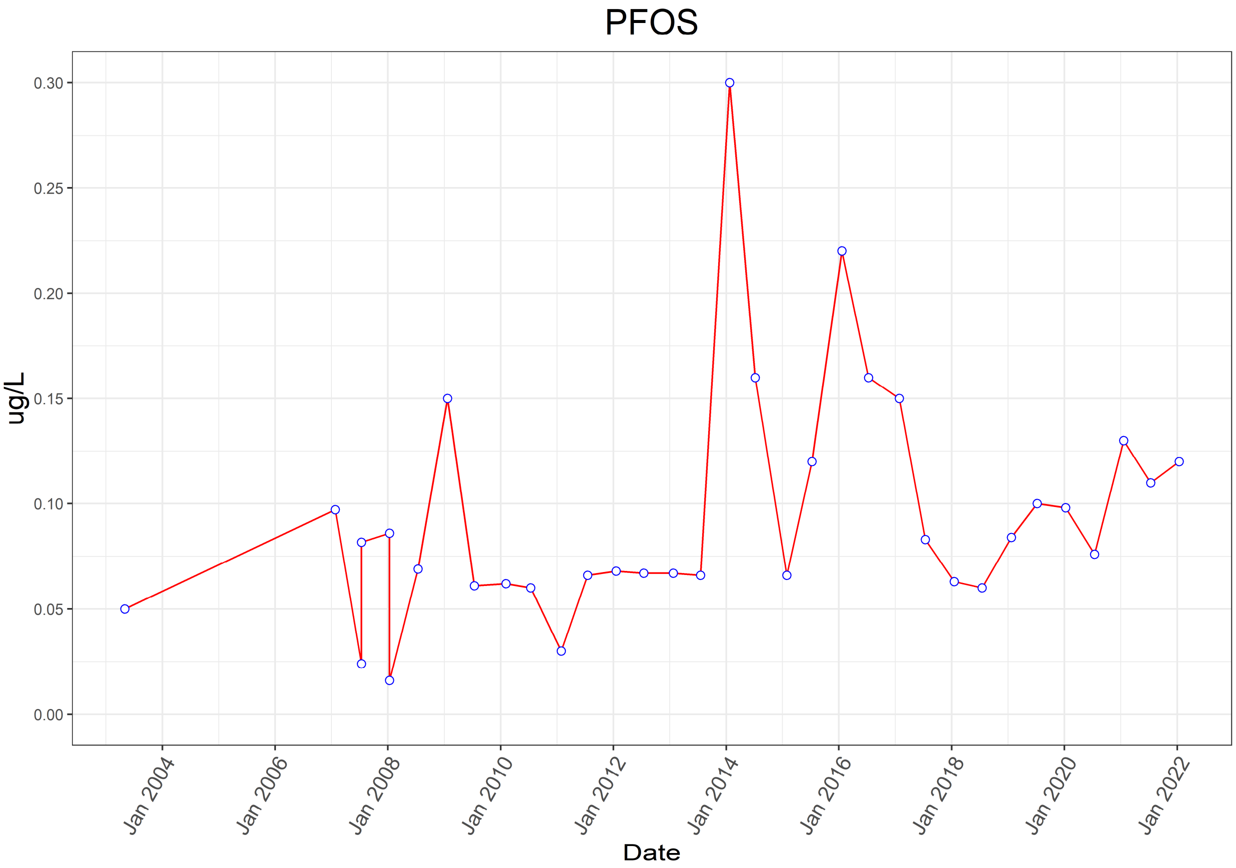
PFOS

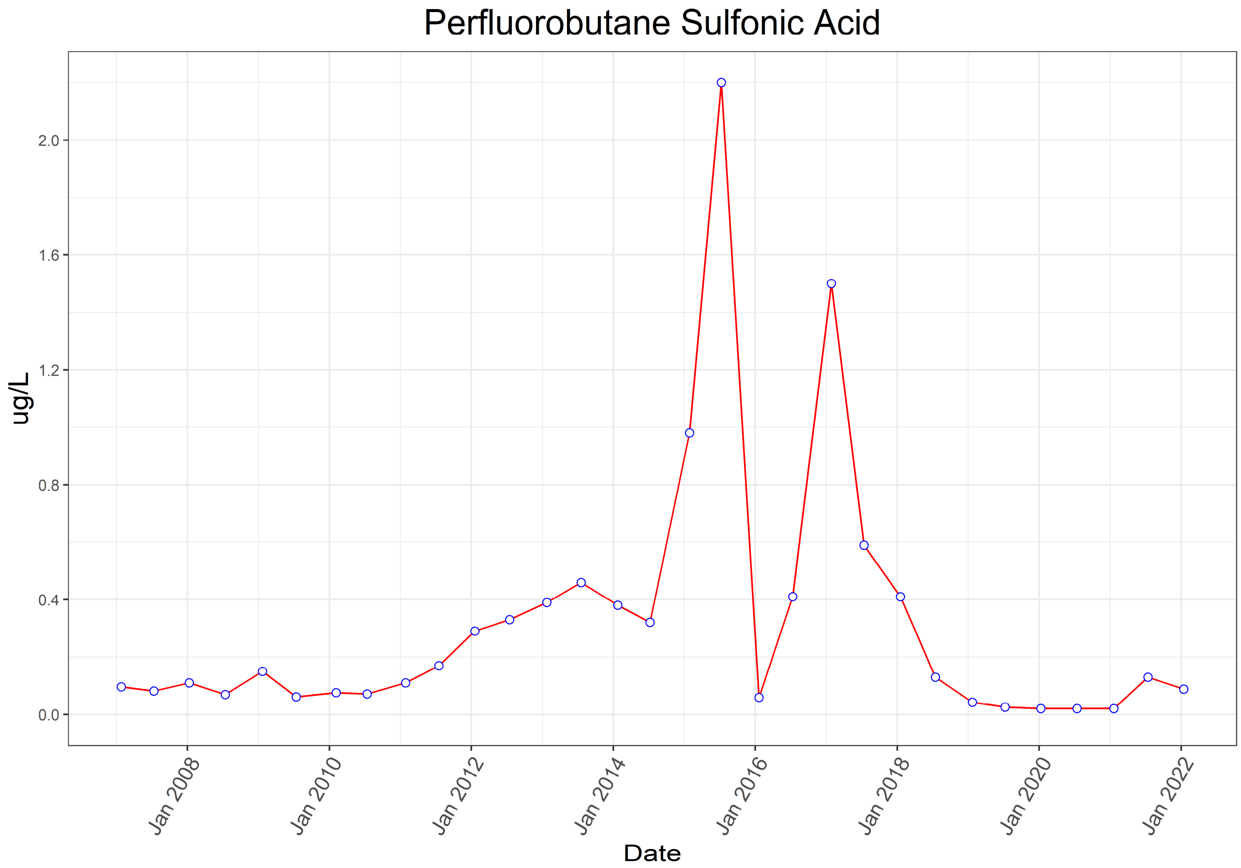


PFAS Monitoring Program (Program 9)

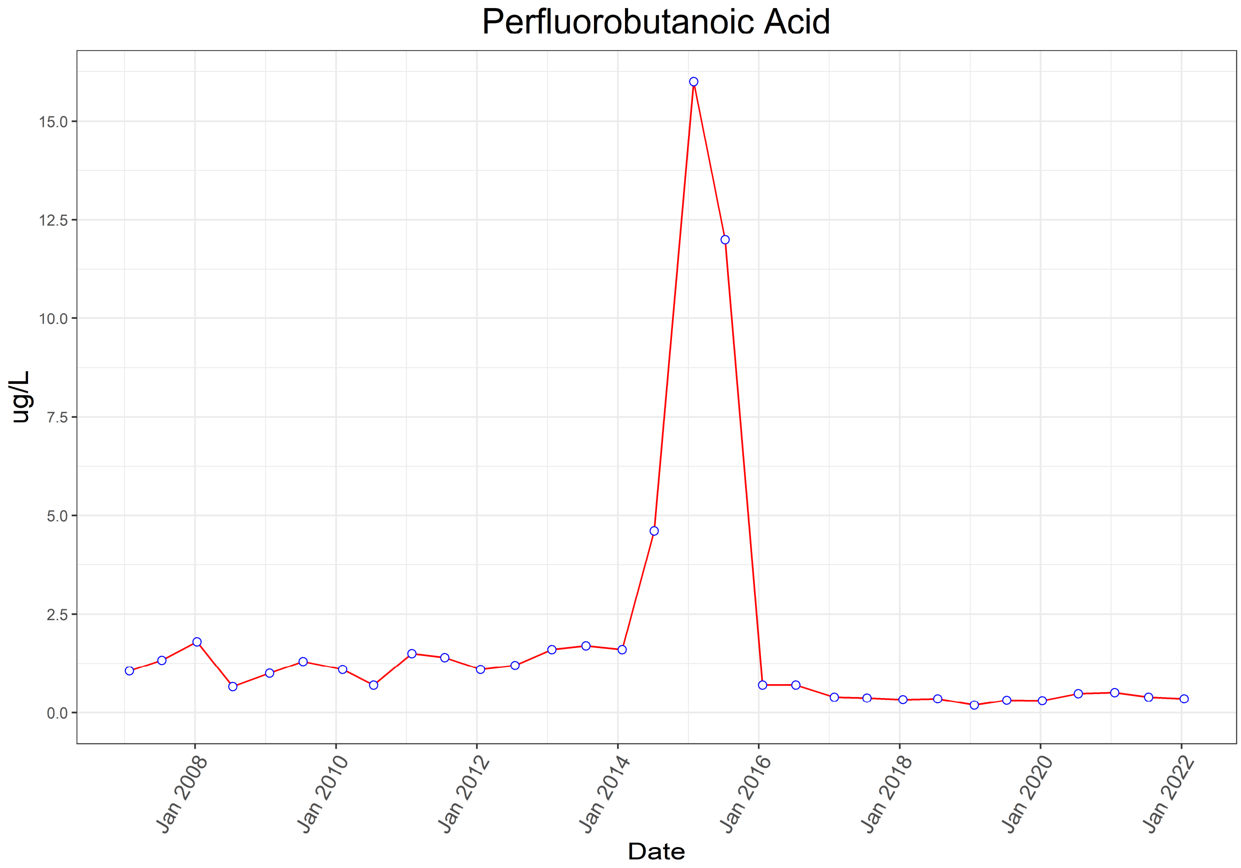
Well Name: C08-M01B



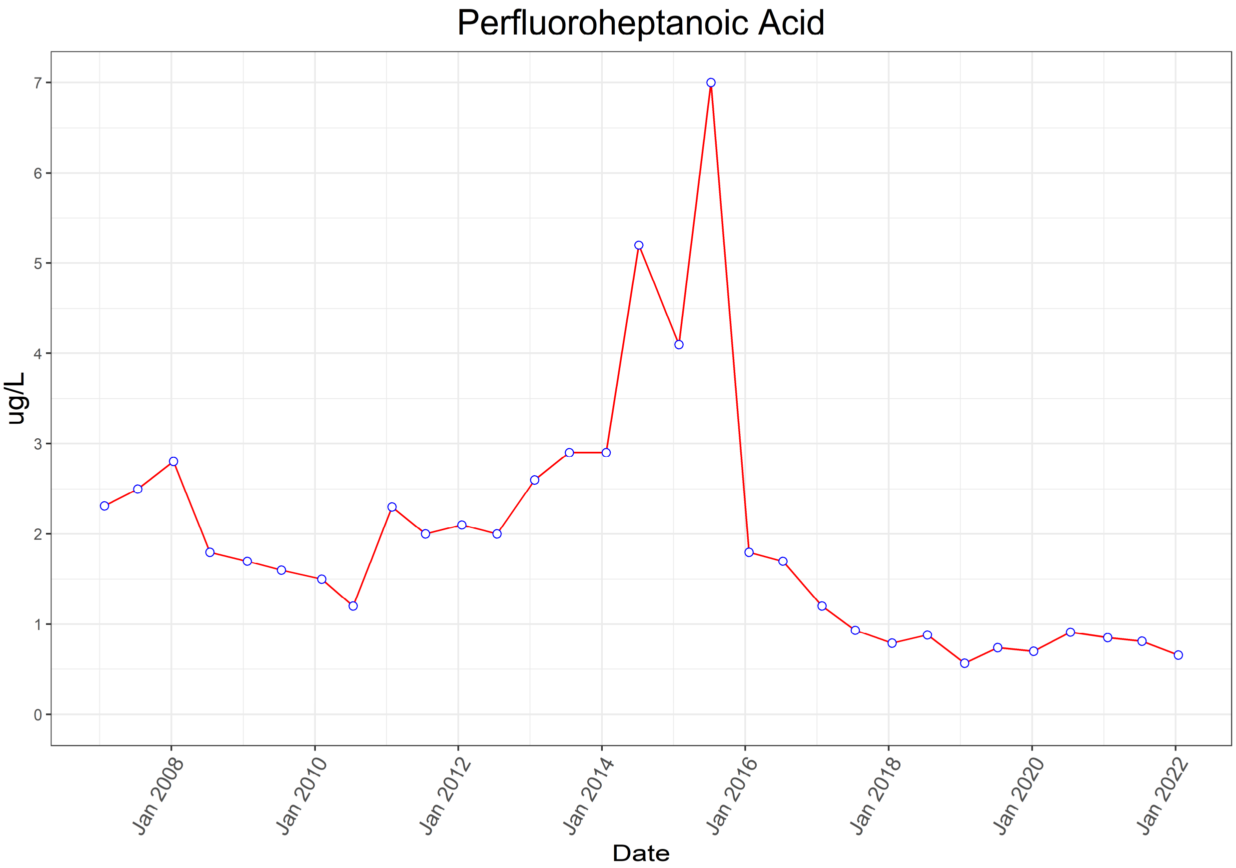


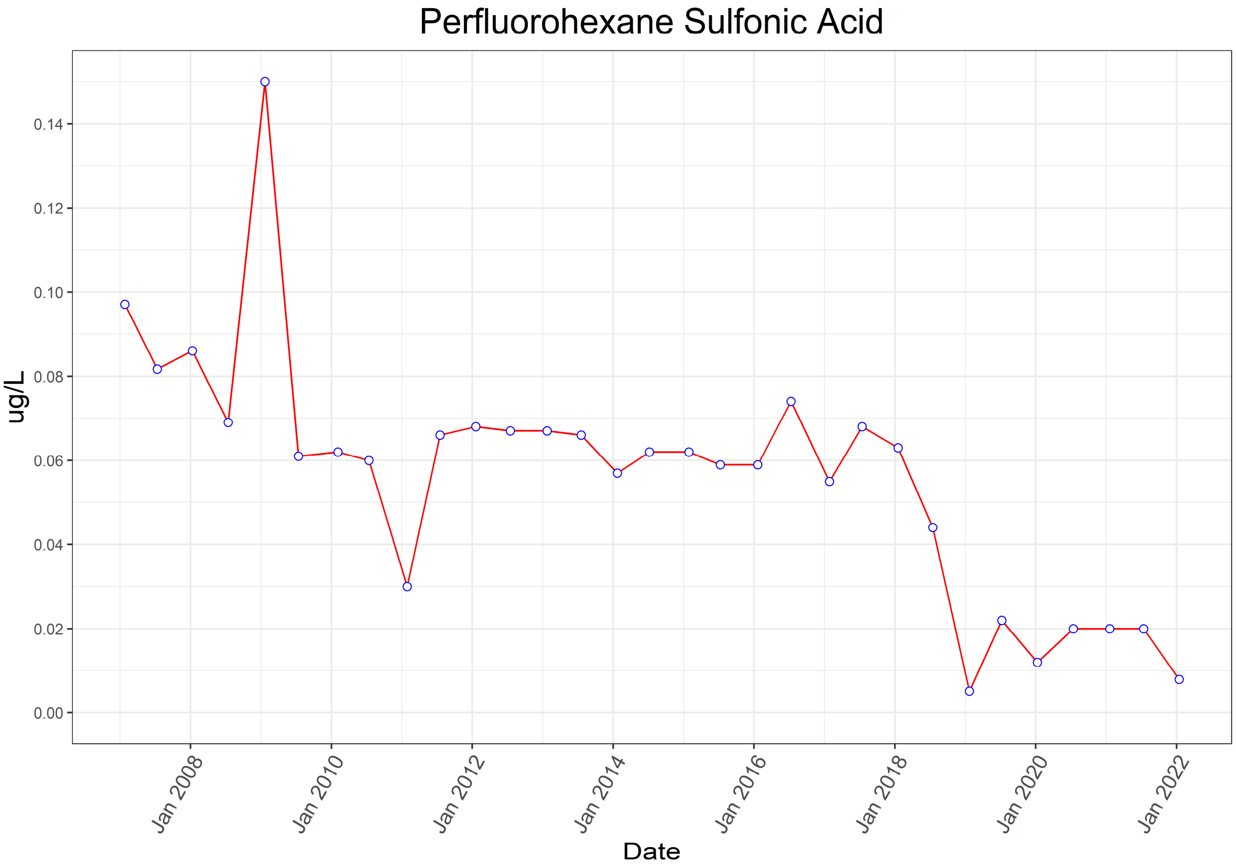


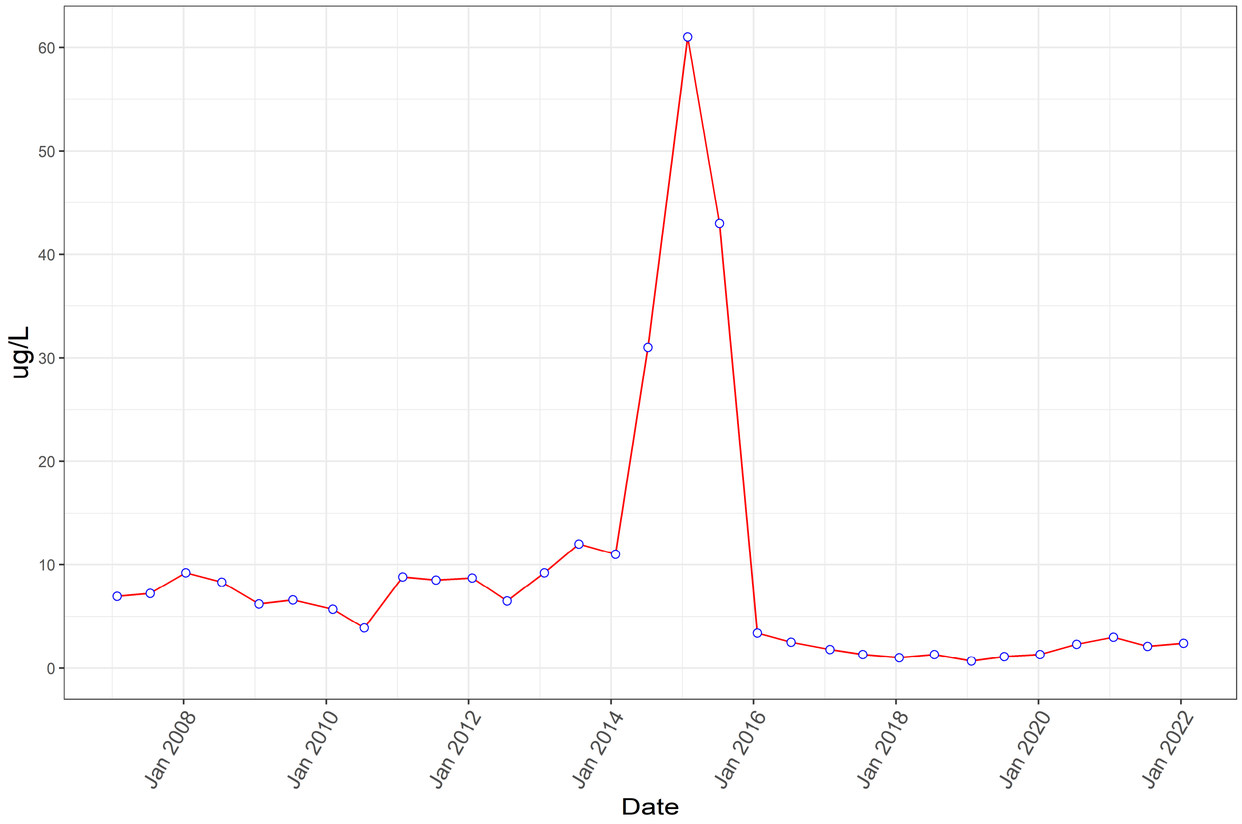
Perfluorobutane Sulfonic Acid



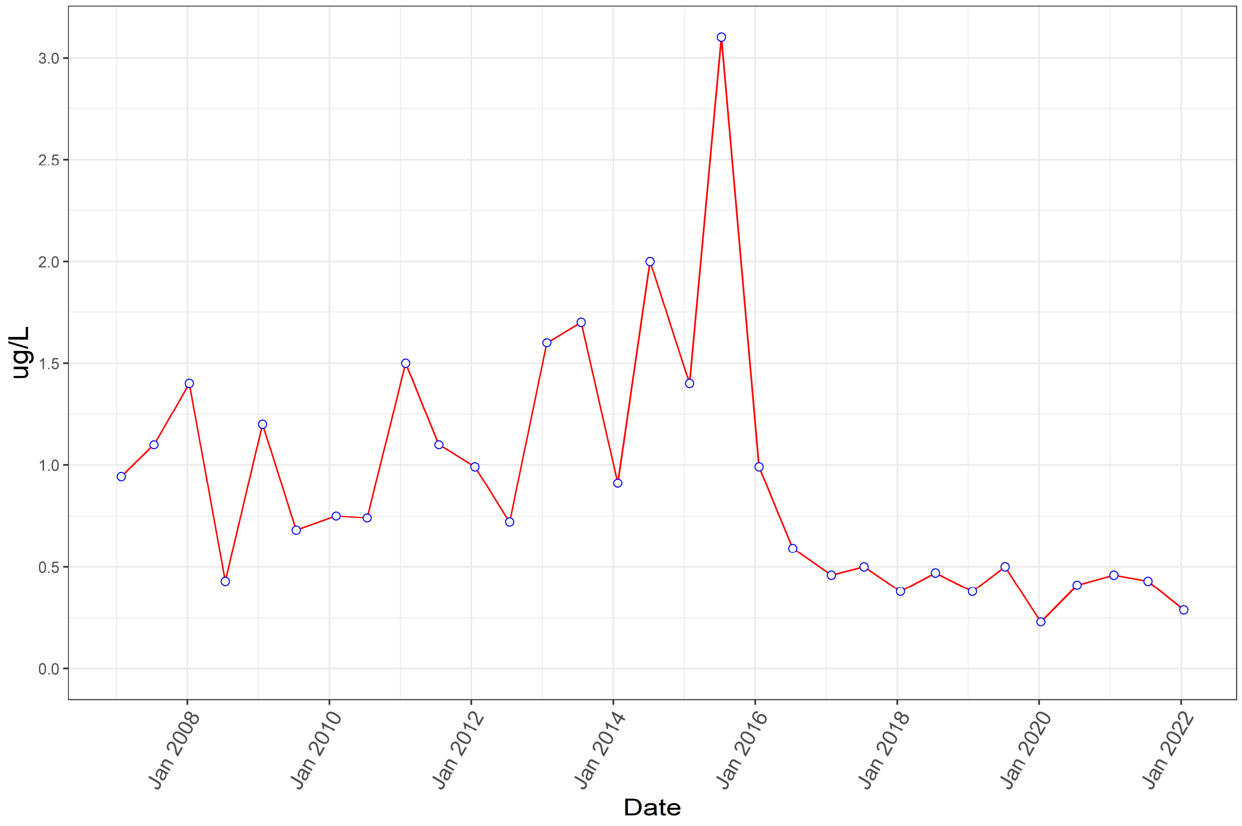
Perfluorobutanoic Acid


Perfluoroheptanoic Acid
ug/L
0
1
2
3
4
5
6
7
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

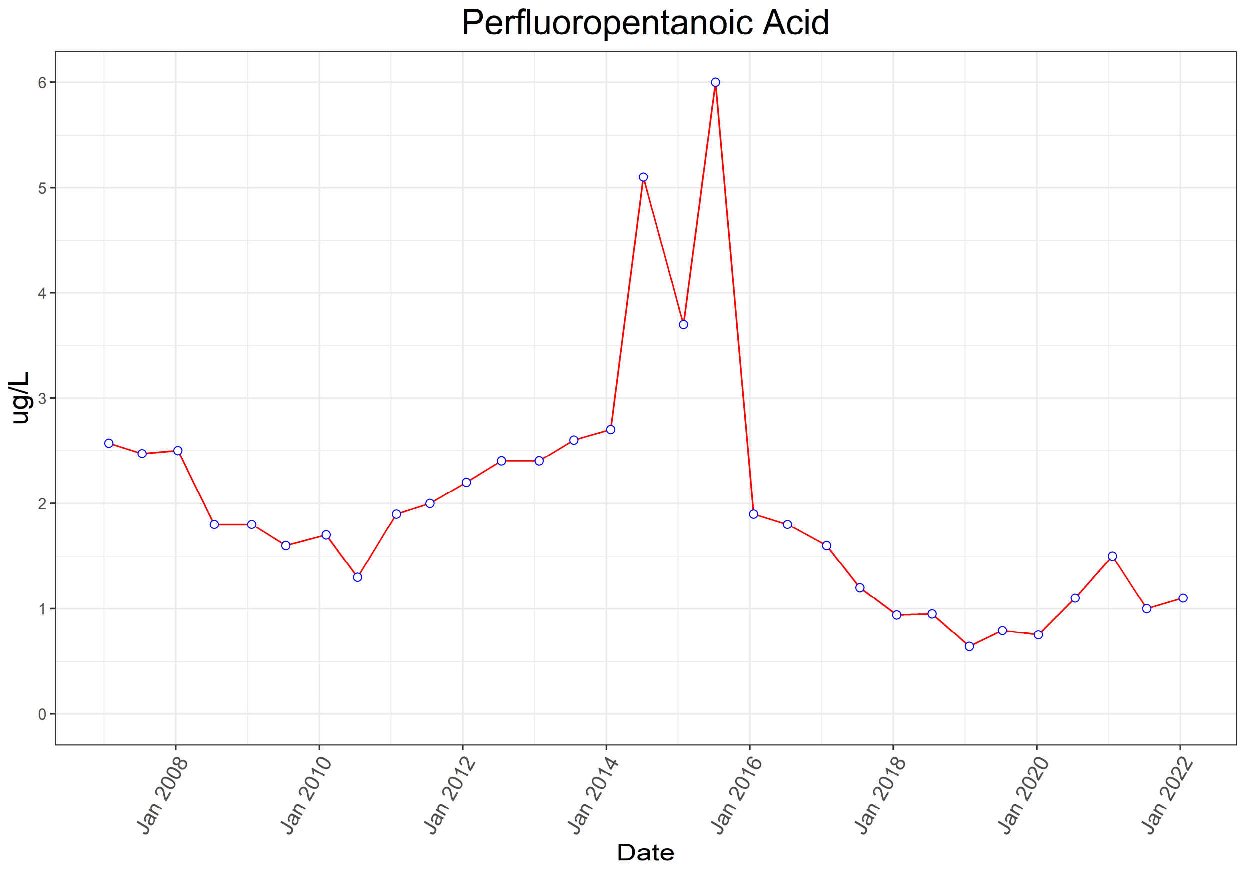

Perfluorohexane Sulfonic Acid
ug/L
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



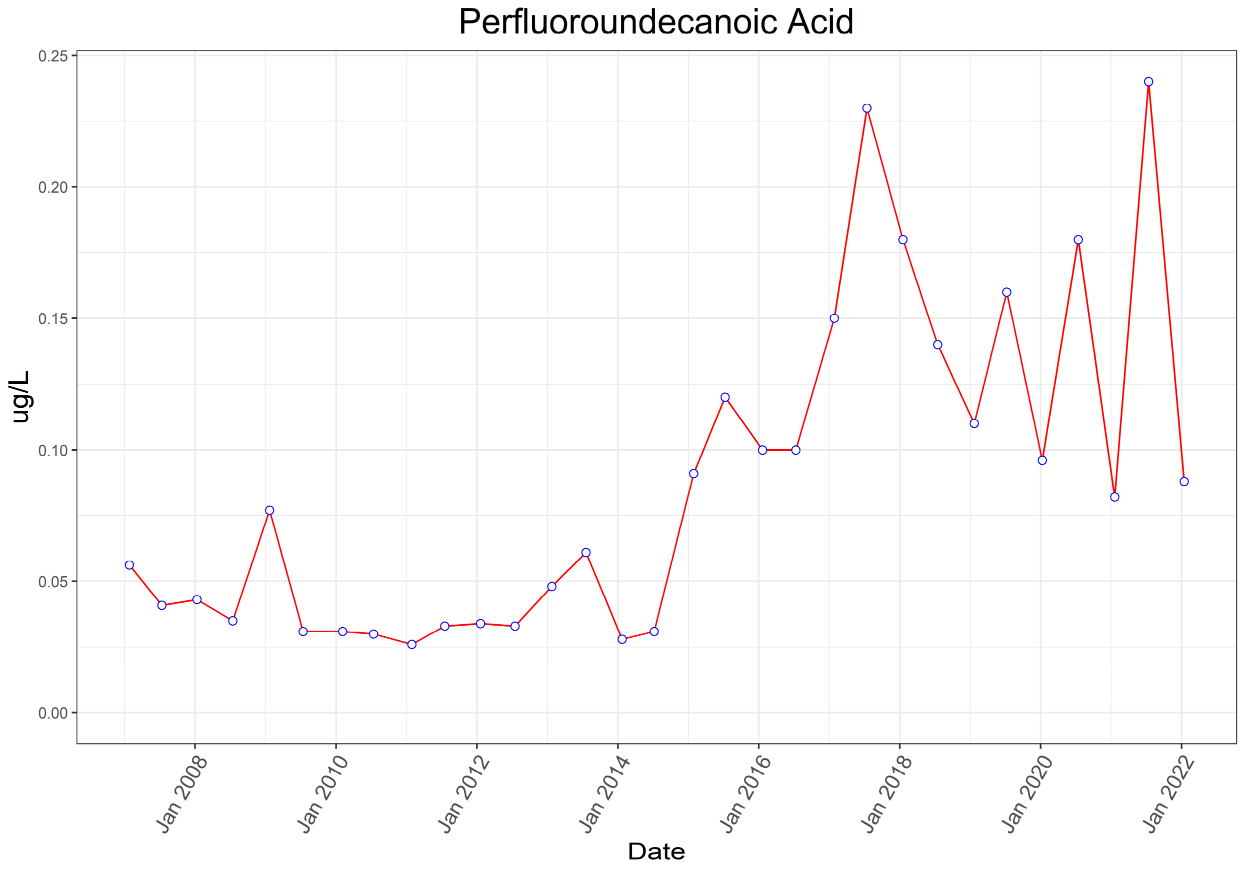
Perfluorohexanoic Acid



Perfluorononanoic Acid



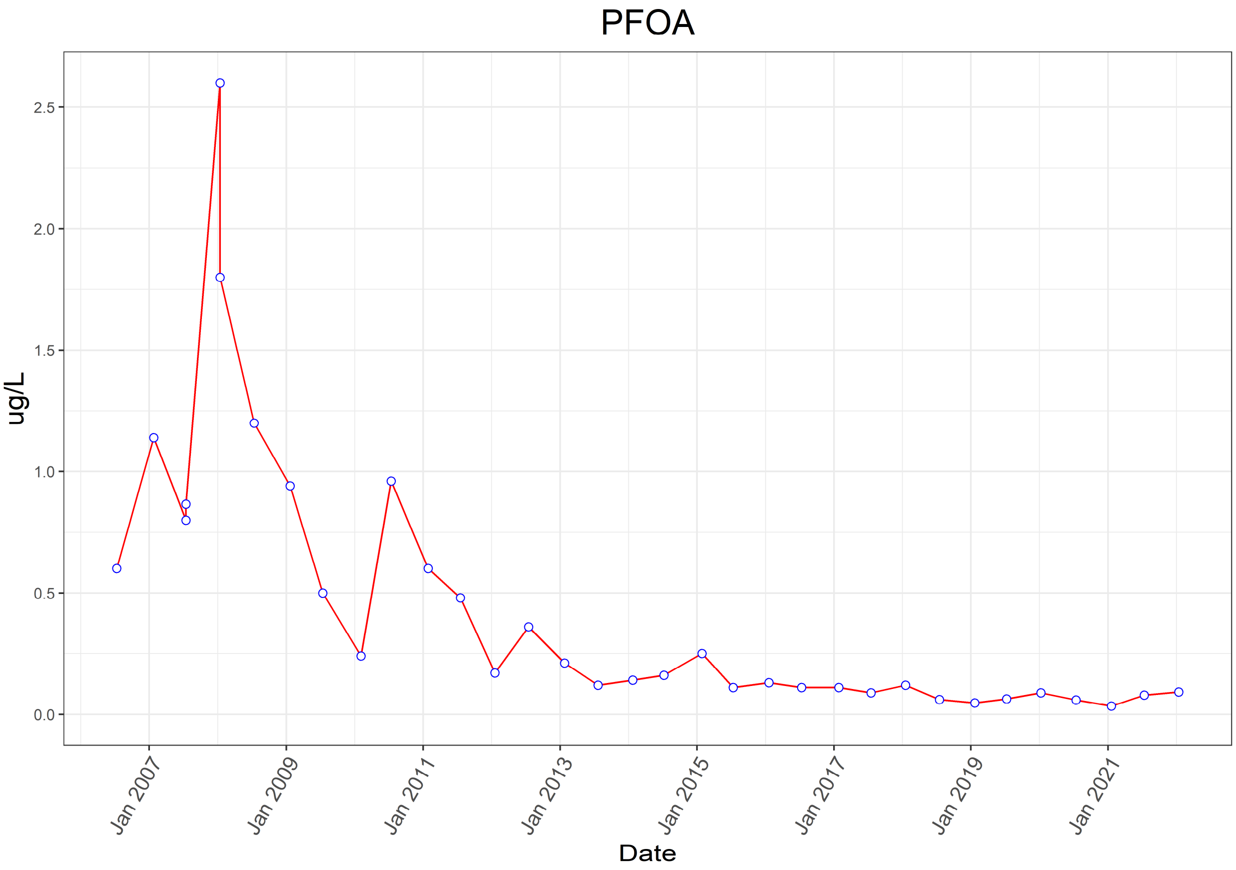
Perfluoropentanoic Acid

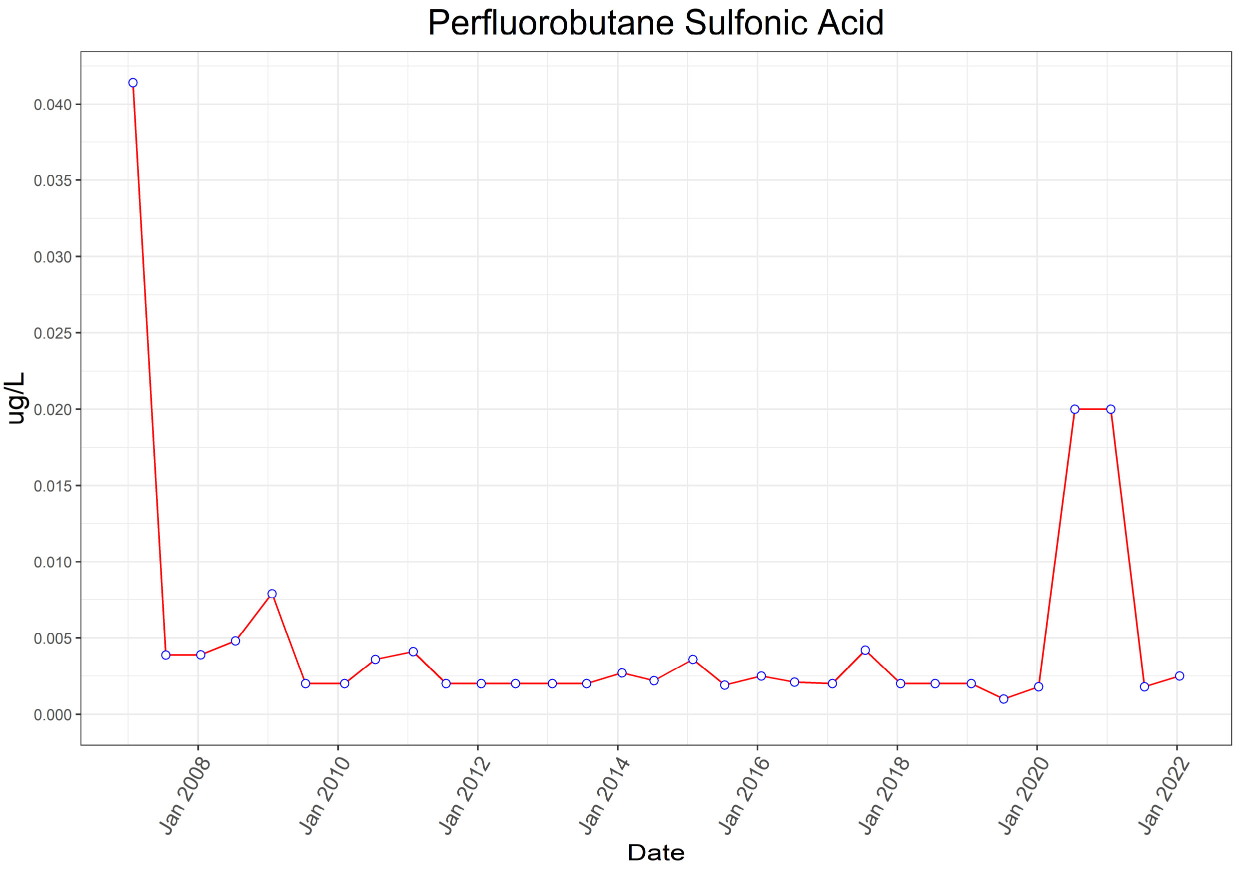


Perfluoroundecanoic Acid

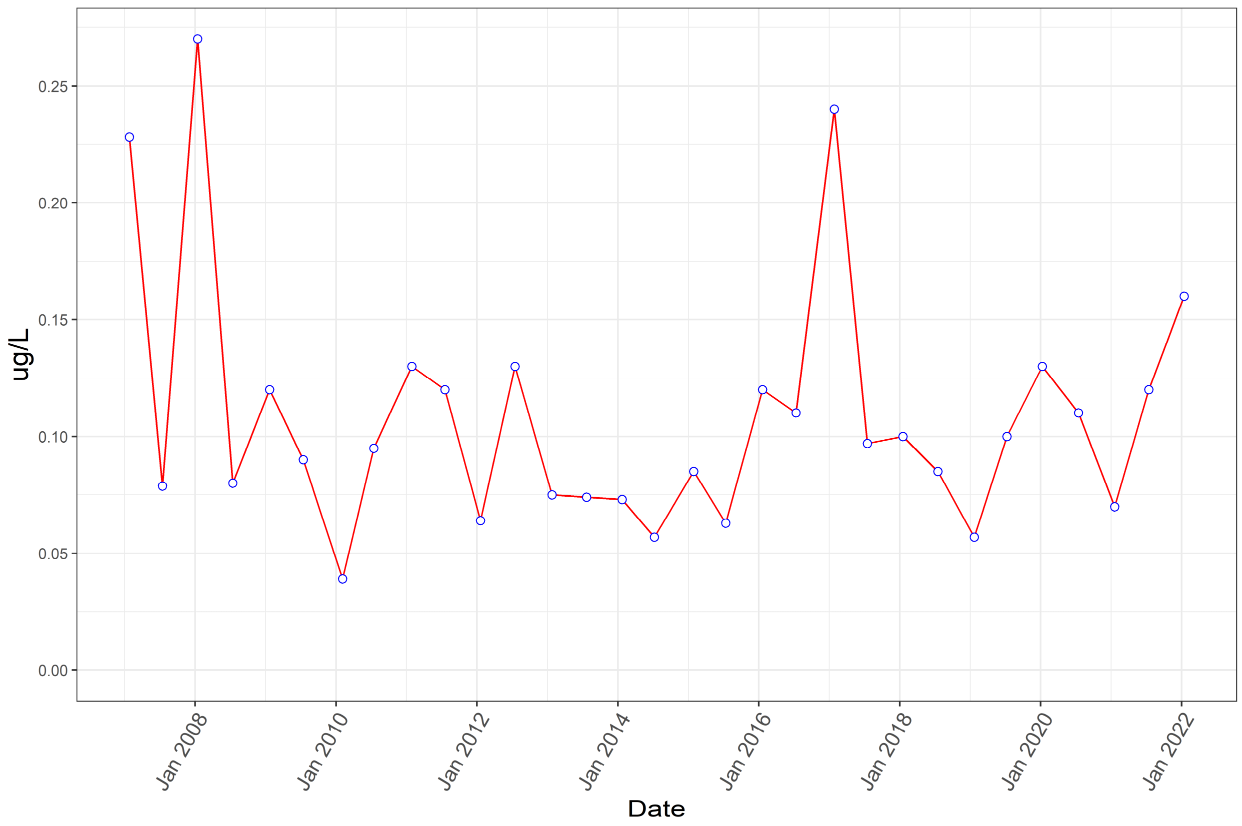
PFAS Monitoring Program (Program 9)

Well Name: C11-M01C

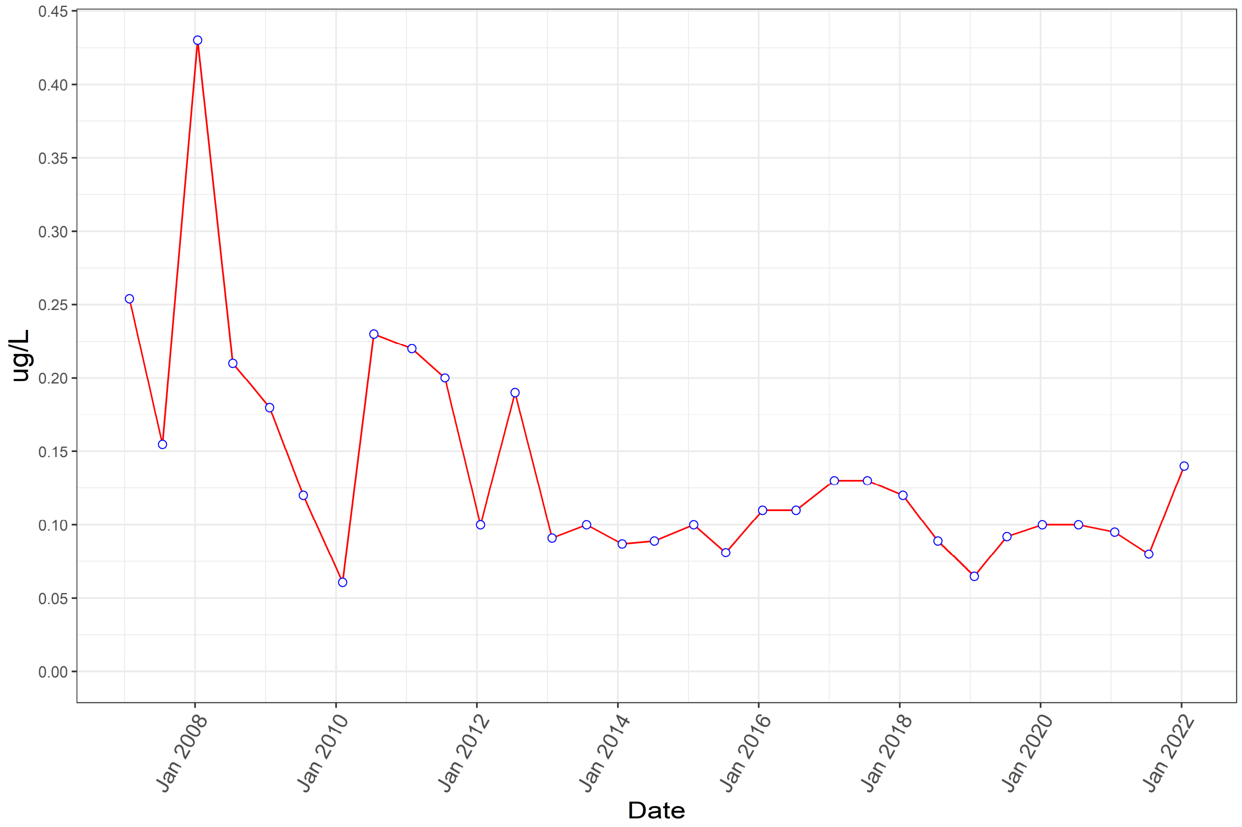




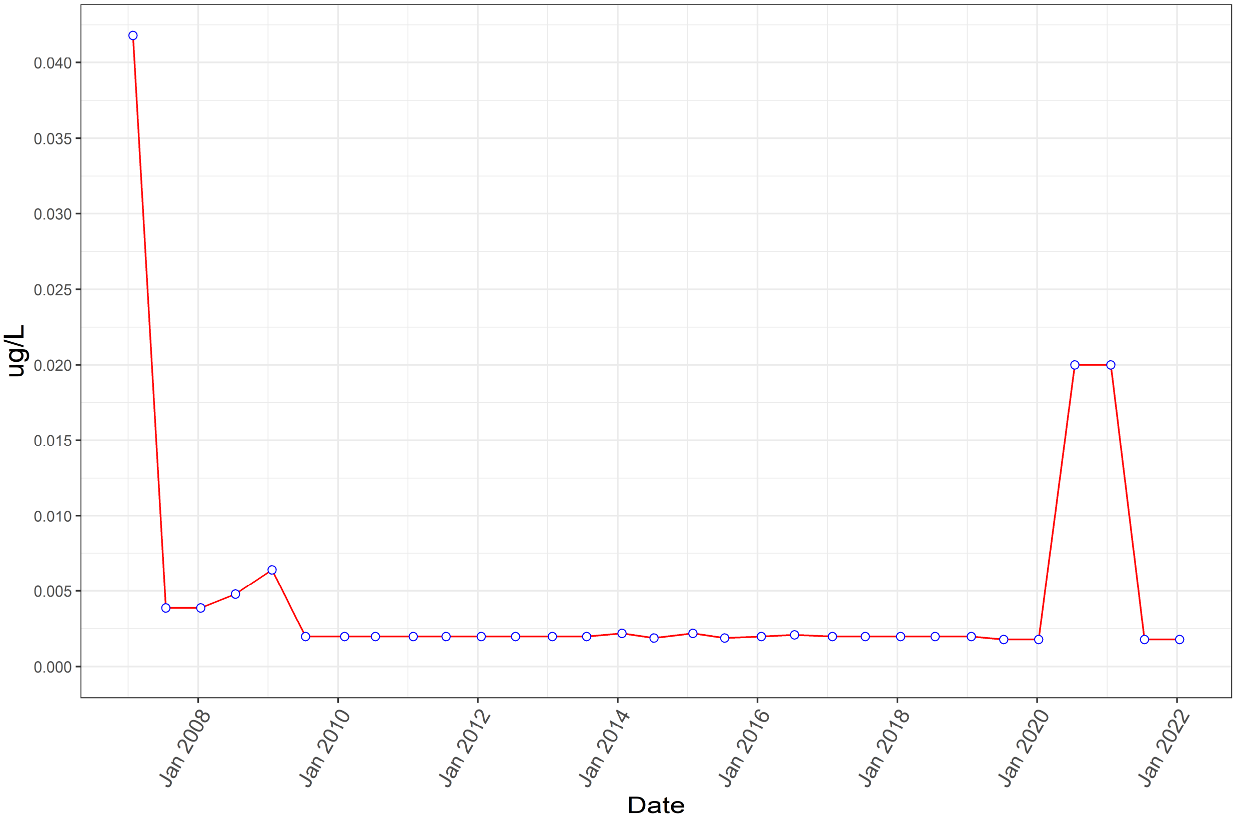
Perfluorobutanoic Acid



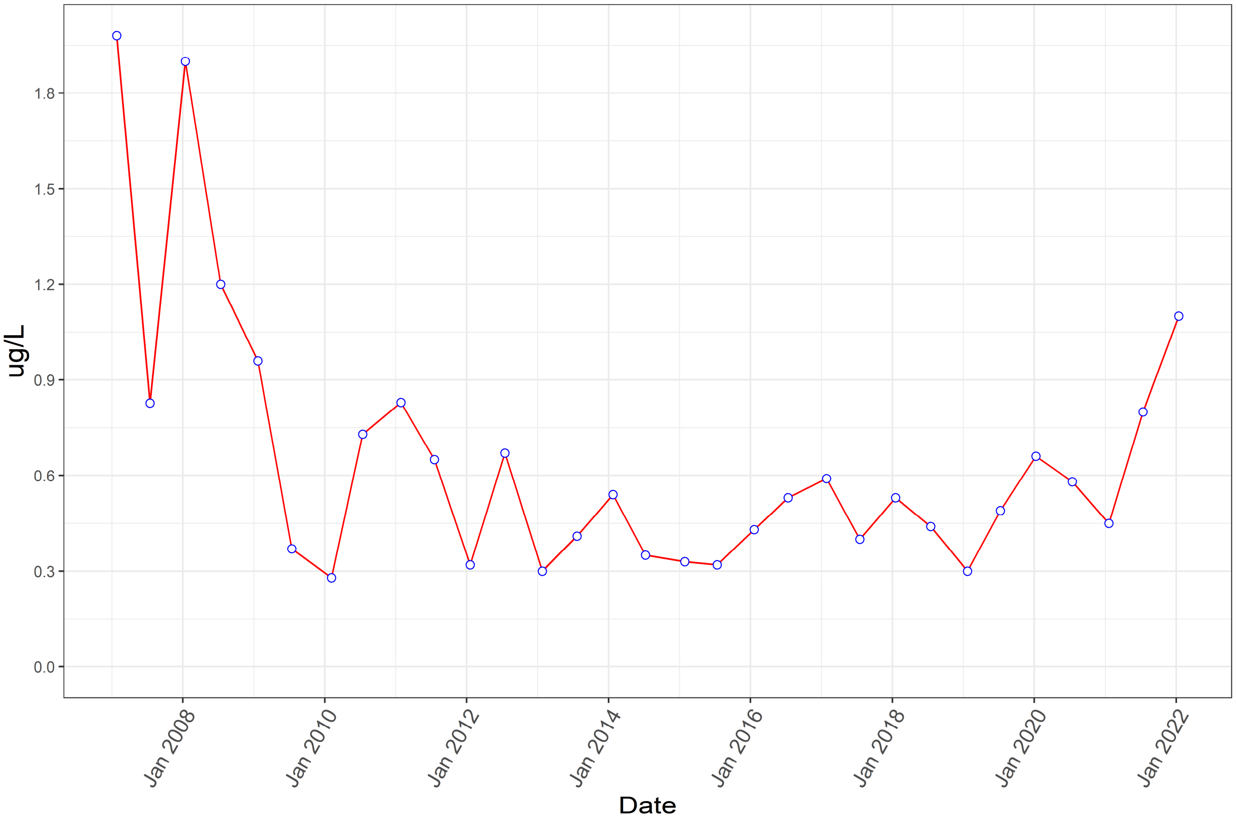
Perfluoroheptanoic Acid

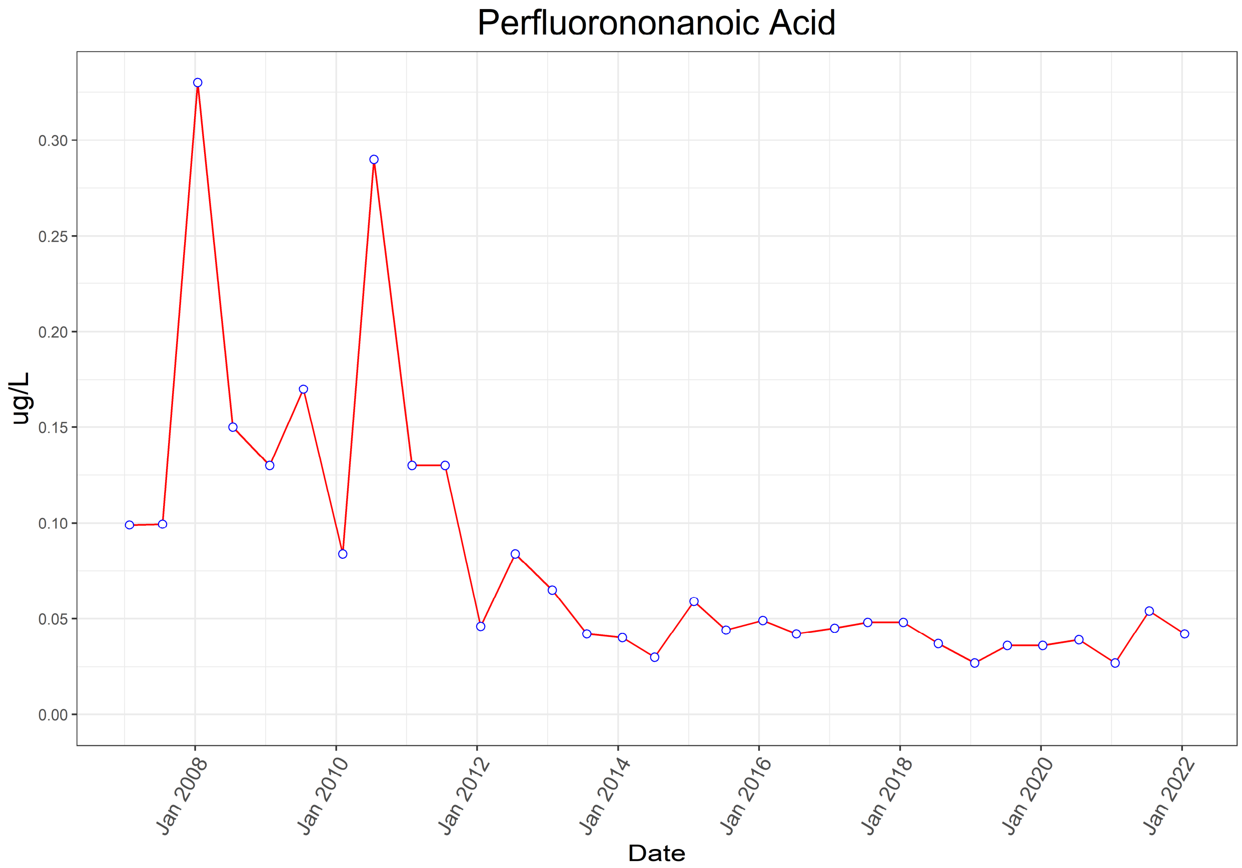


Perfluorohexane Sulfonic Acid

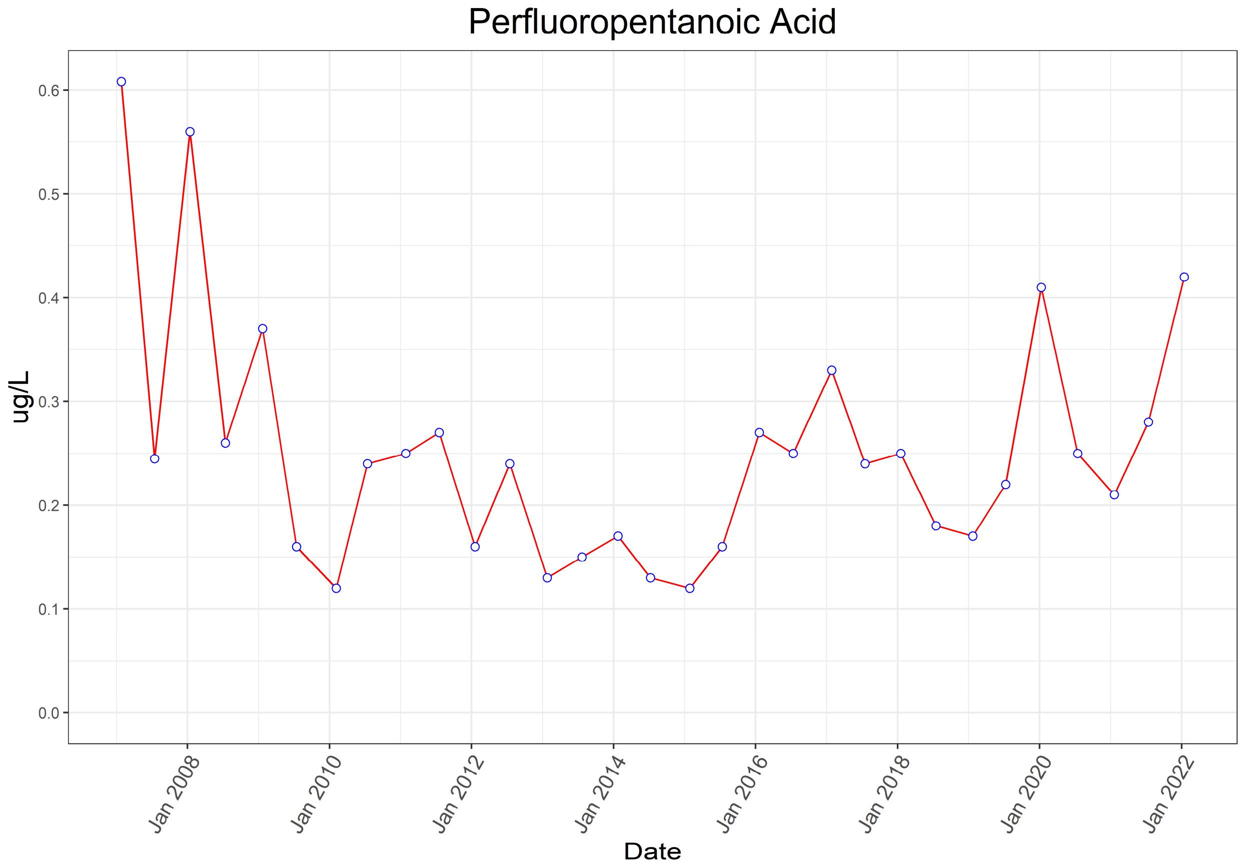


Perfluorohexanoic Acid

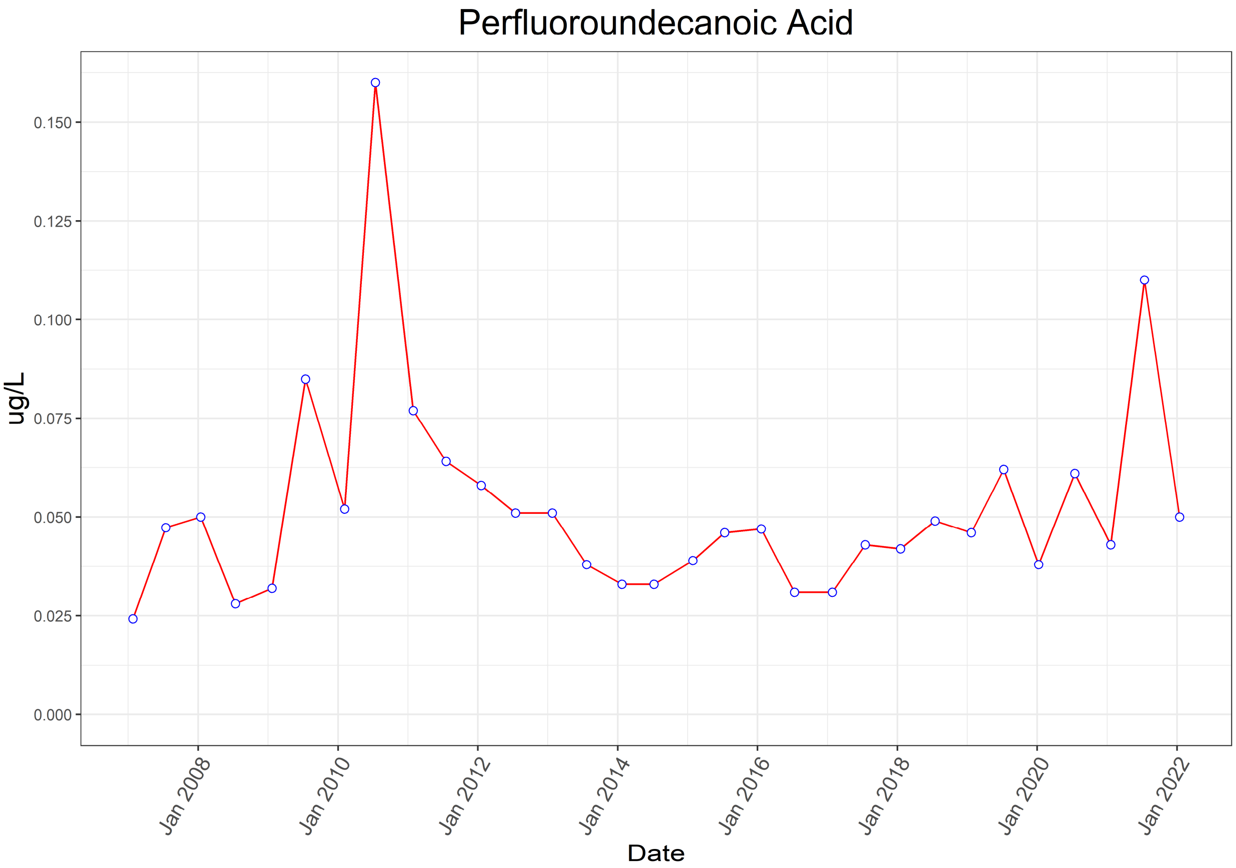


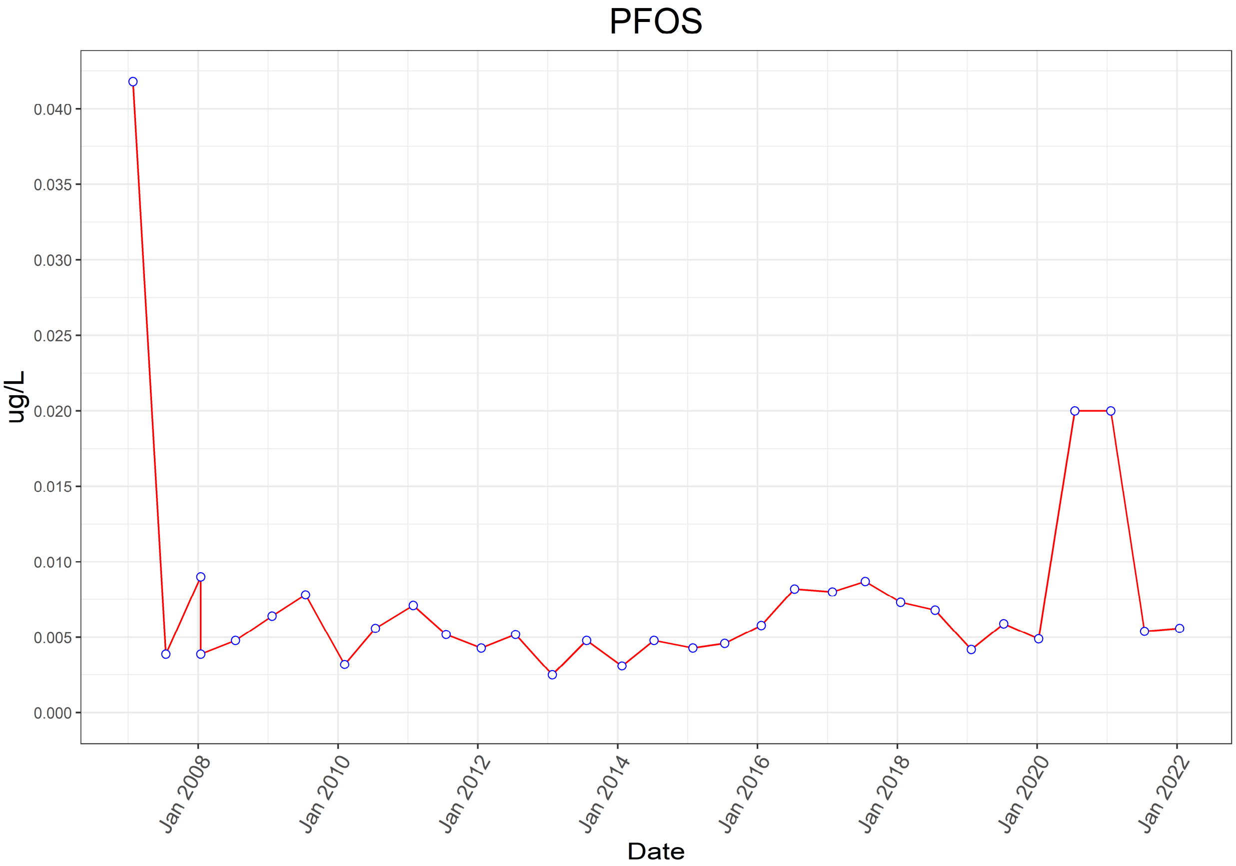


Perfluorononanoic Acid



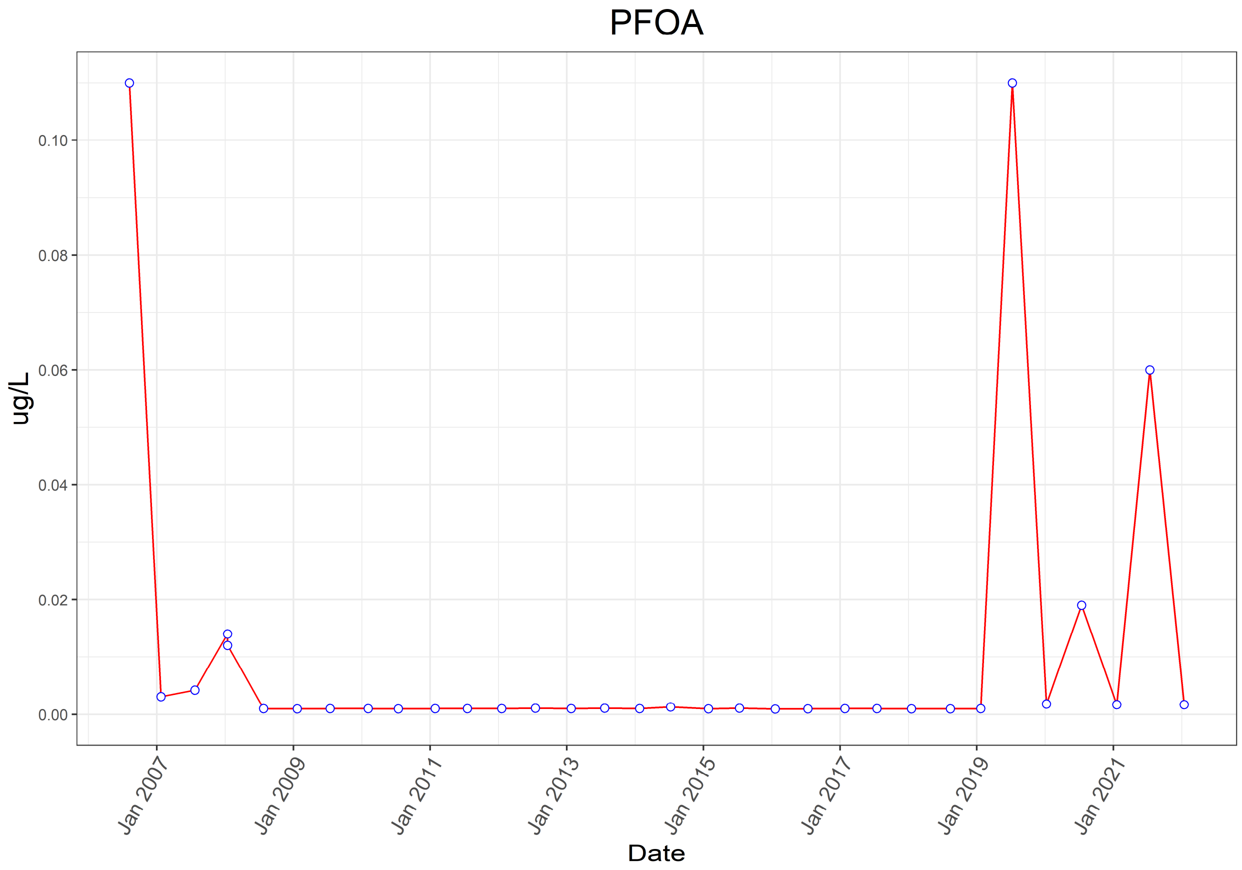
Perfluoropentanoic Acid

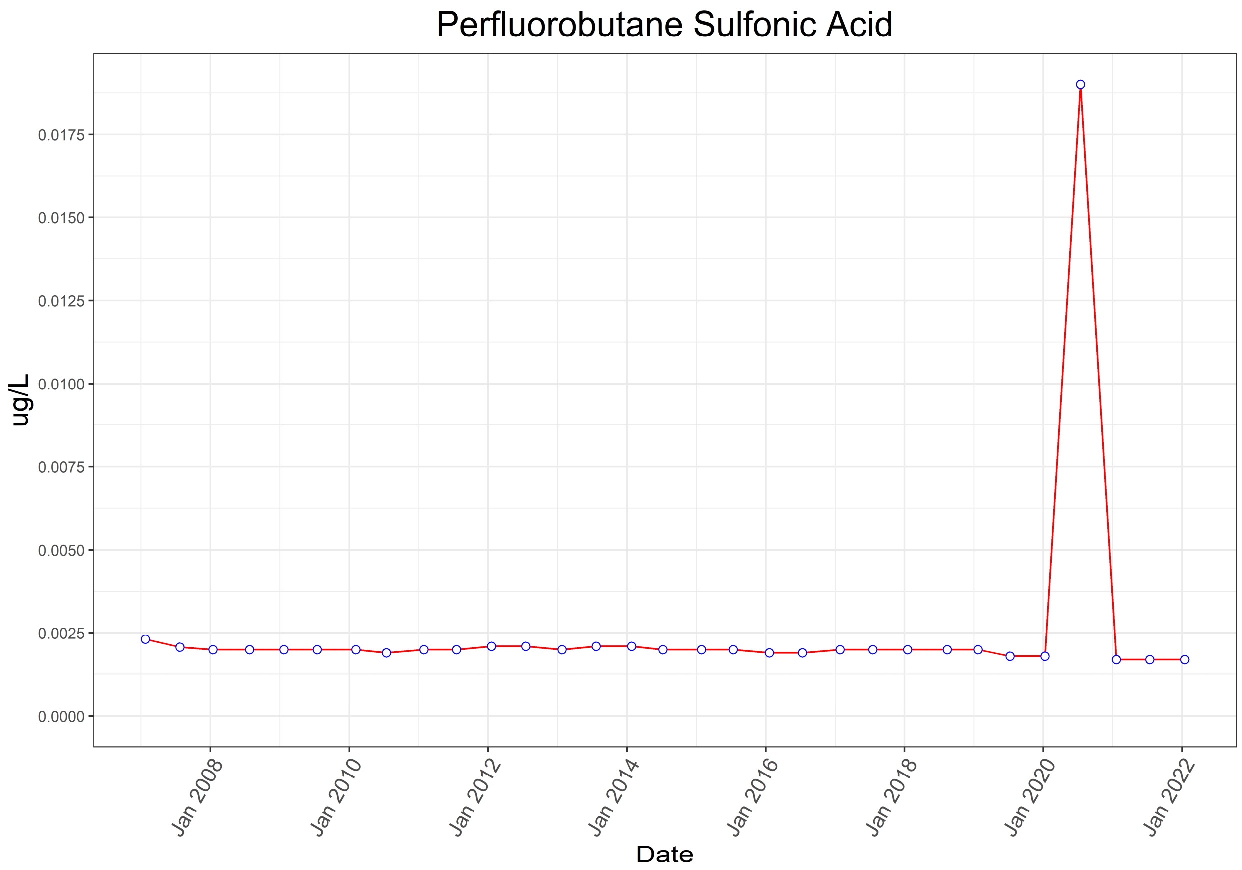

Perfluoroundecanoic Acid
ug/L
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

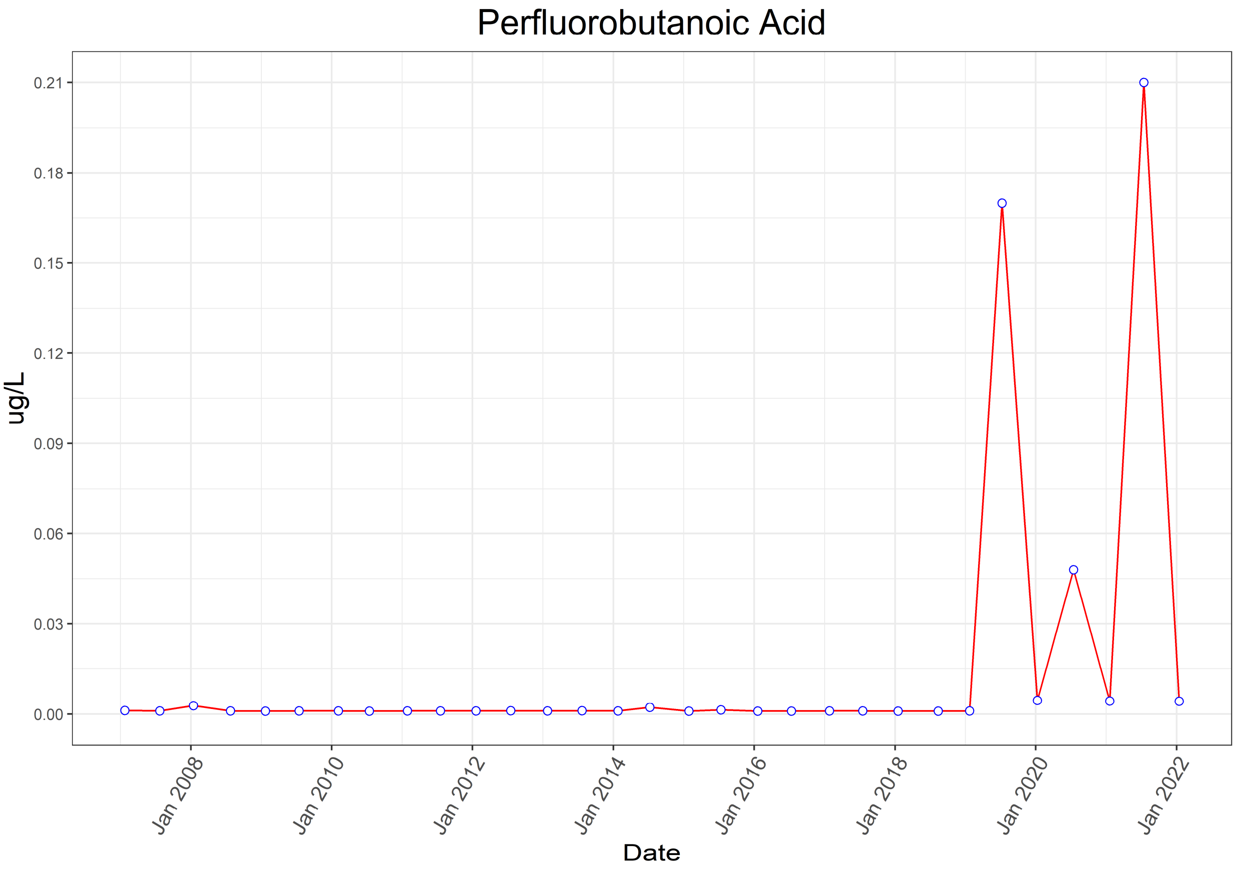

PFOS
ug/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

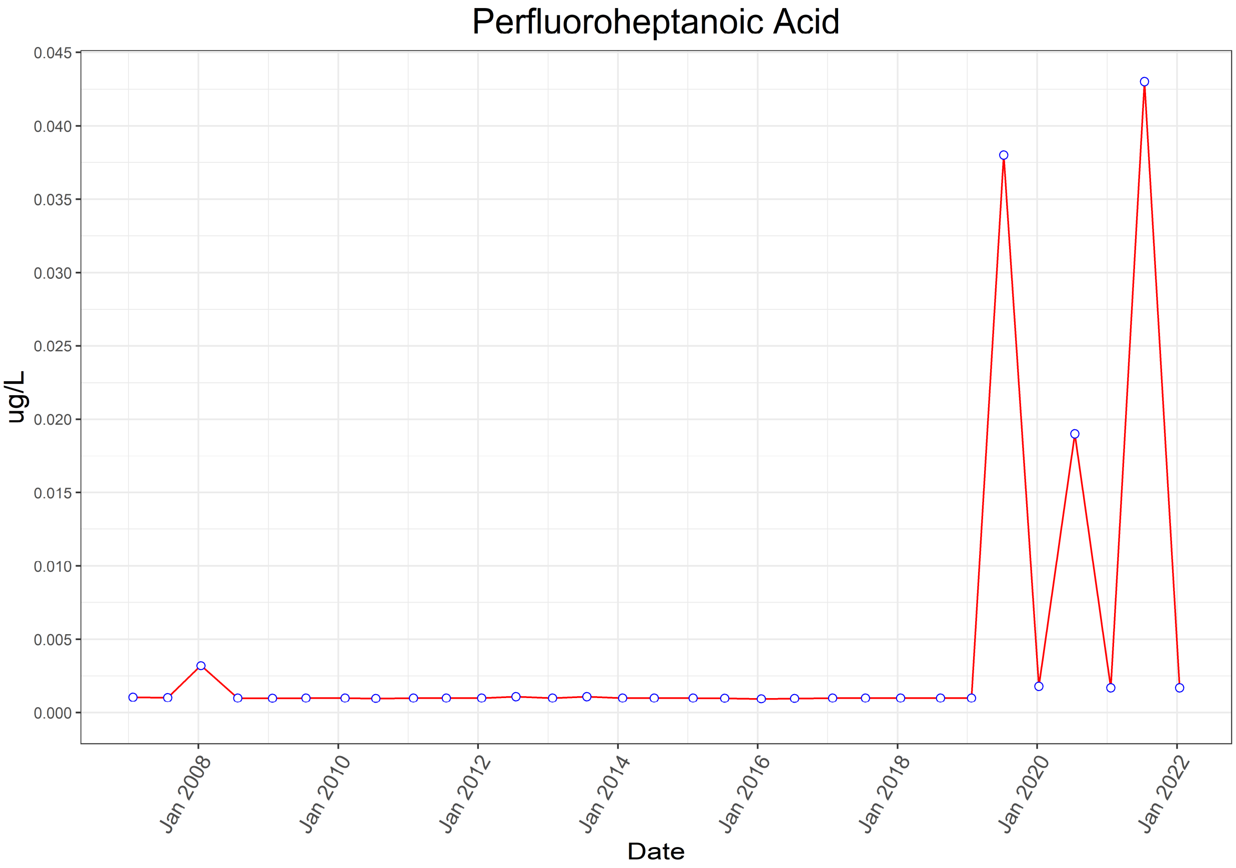
PFAS Monitoring Program (Program 9)

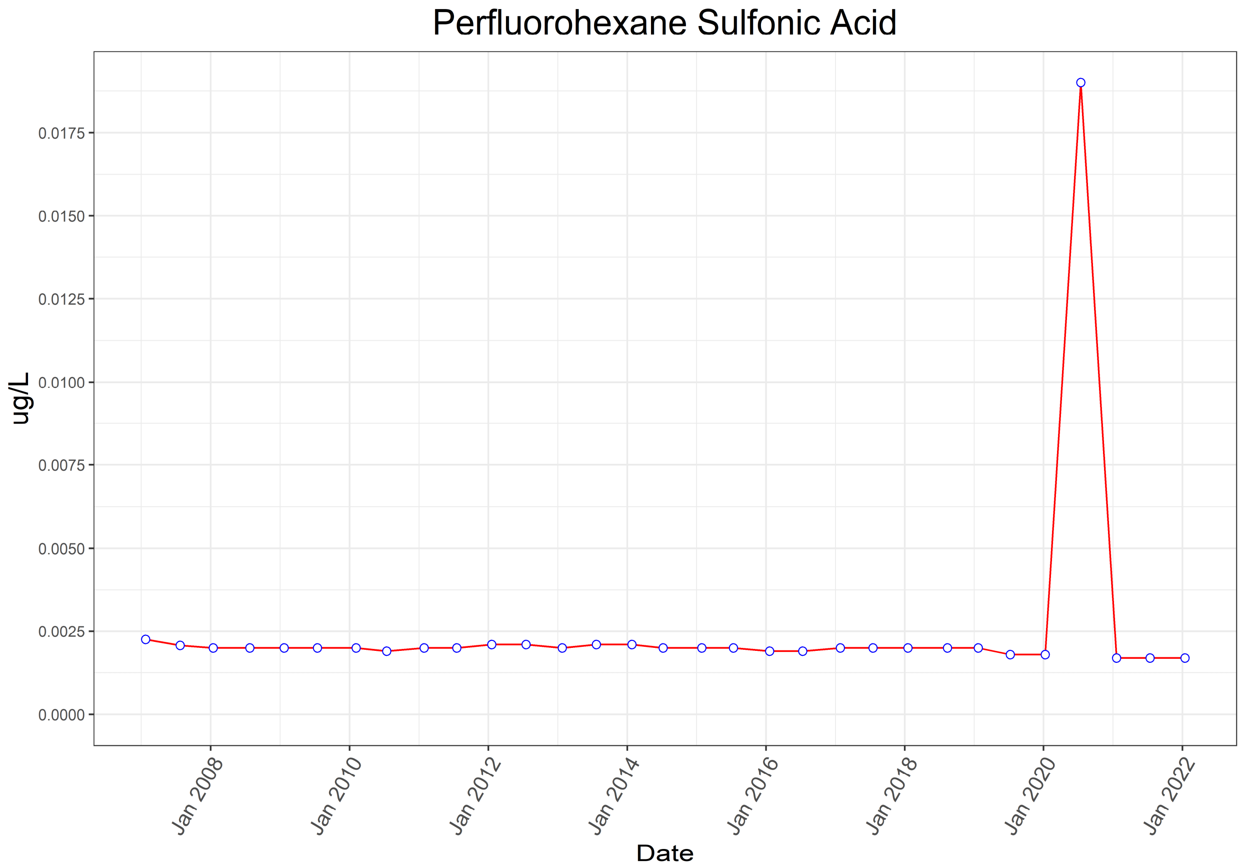
Well Name: C11-M01E

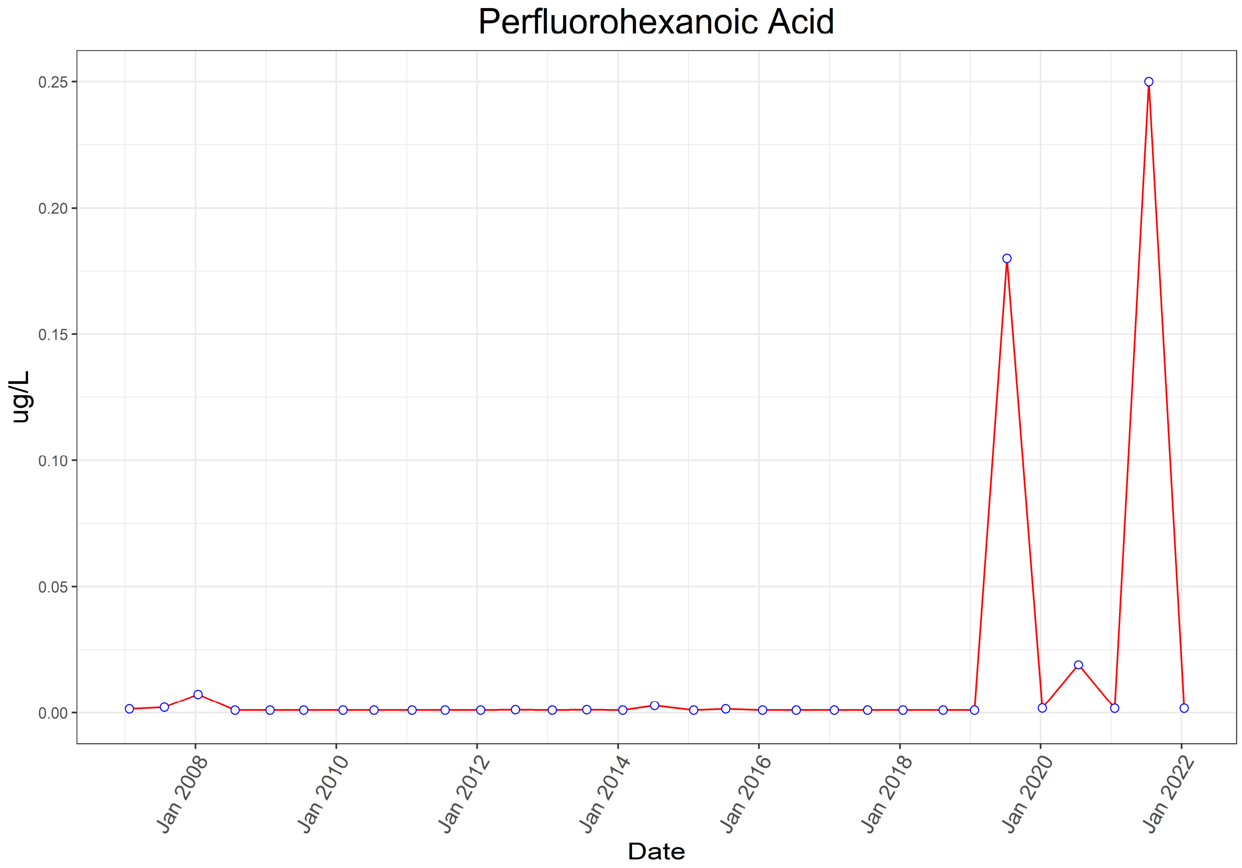




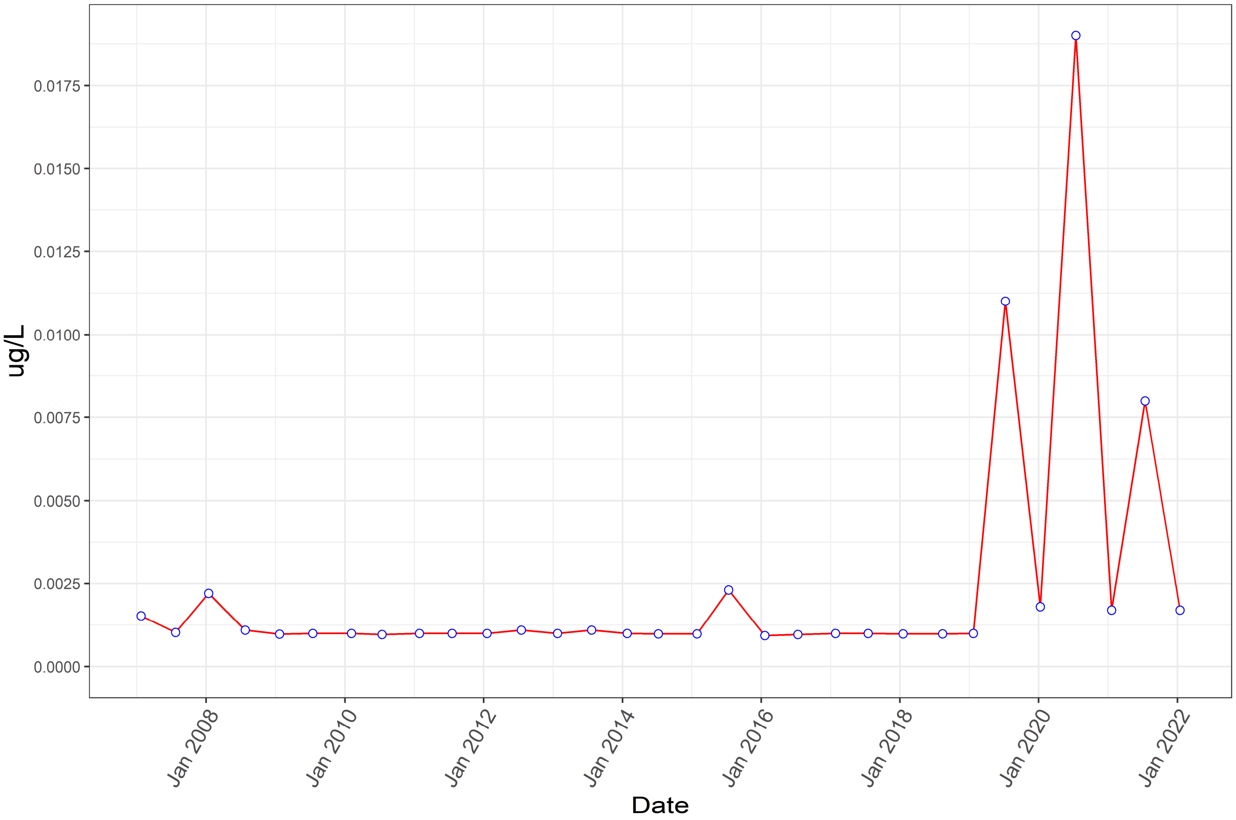

Perfluorobutanoic Acid
ug/L
0.21
0.18
0.15
0.12
0.09
0.06
0.03
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoroheptanoic Acid
ug/L
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

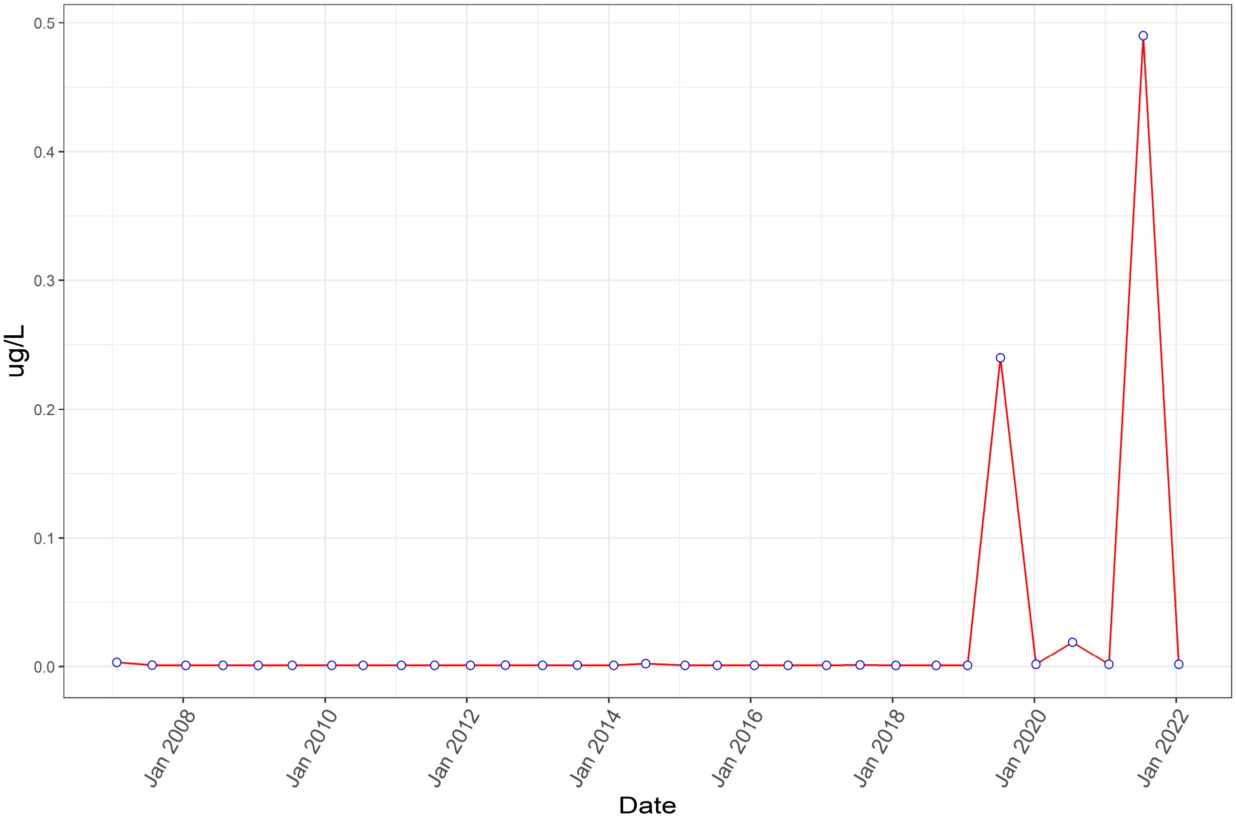

Perfluorohexane Sulfonic Acid
ug/L
0.0000
0.0025
0.0050
0.0075
0.0100
0.0125
0.0150
0.0175
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexanoic Acid
ug/L
0.00
0.05
0.10
0.15
0.20
0.25
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

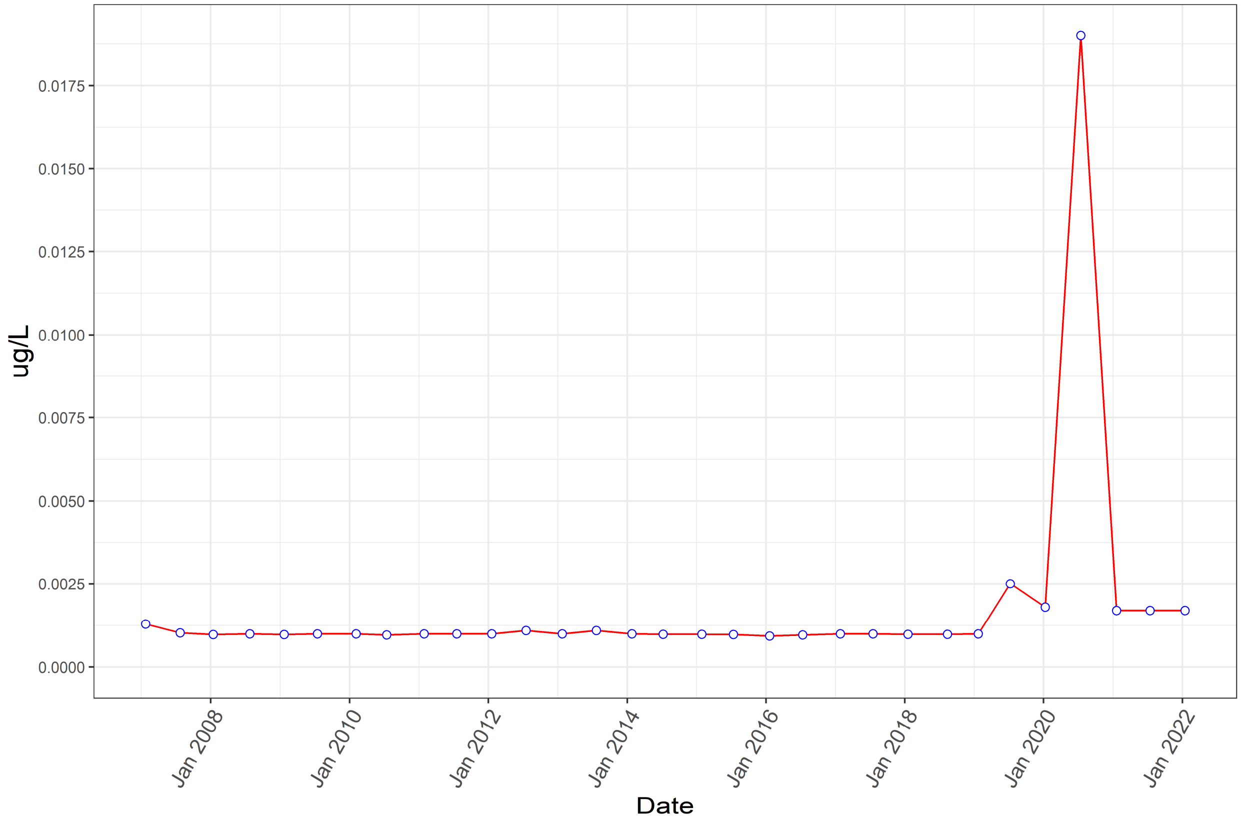
Perfluorononanoic Acid



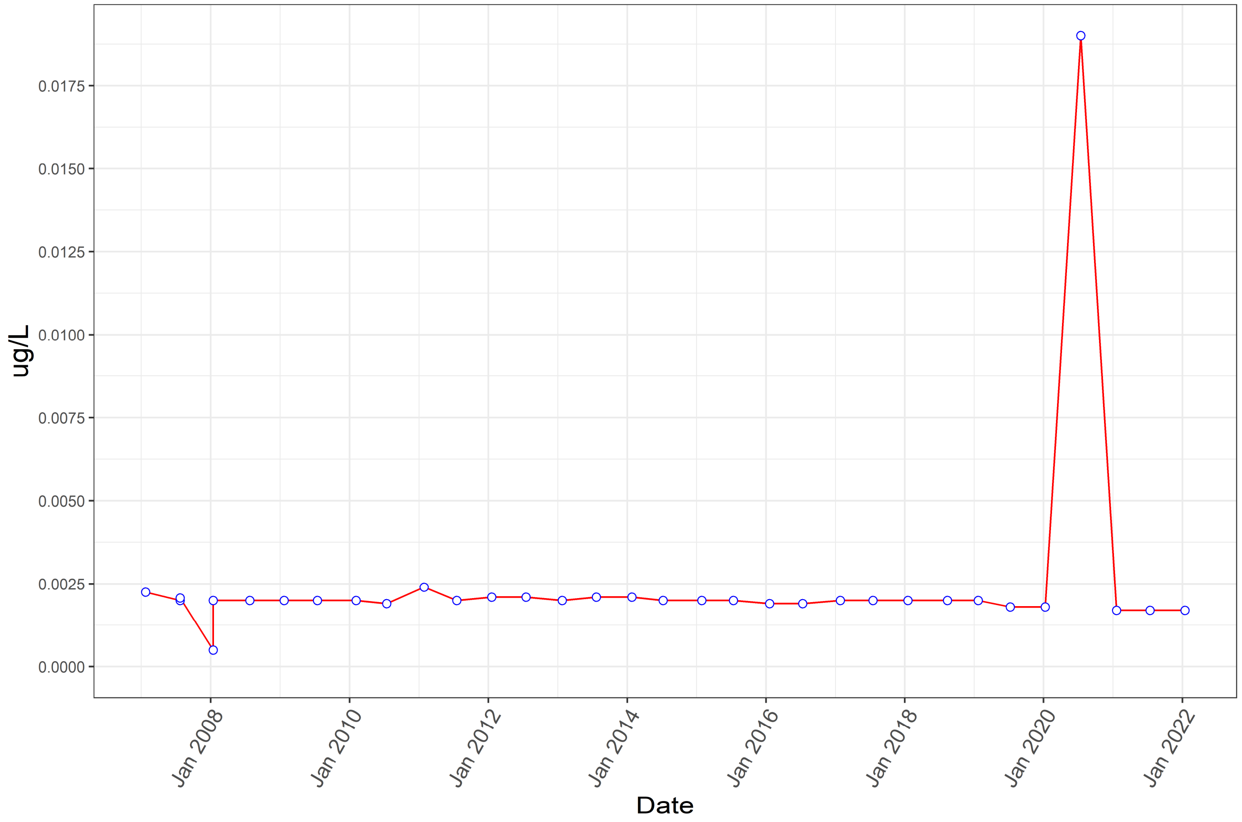
Perfluoropentanoic Acid



Perfluoroundecanoic Acid

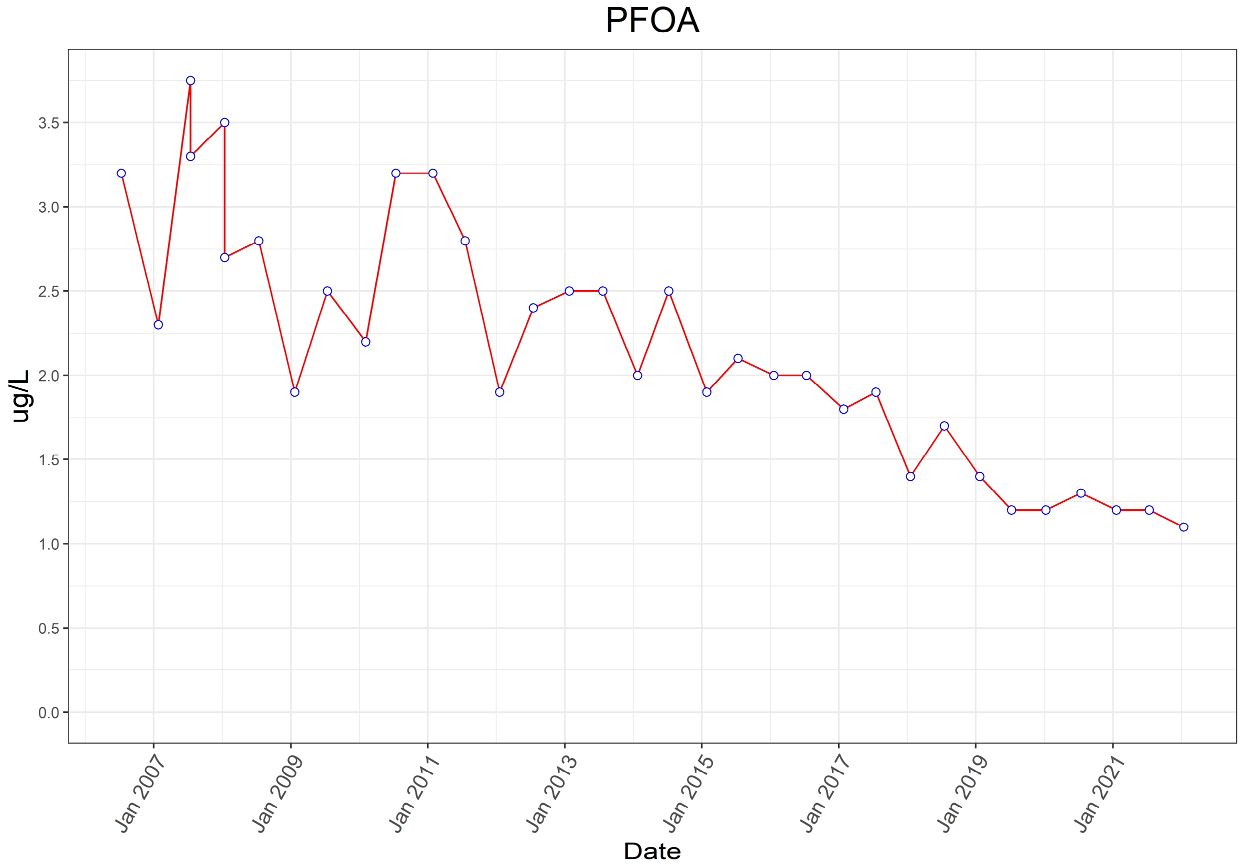


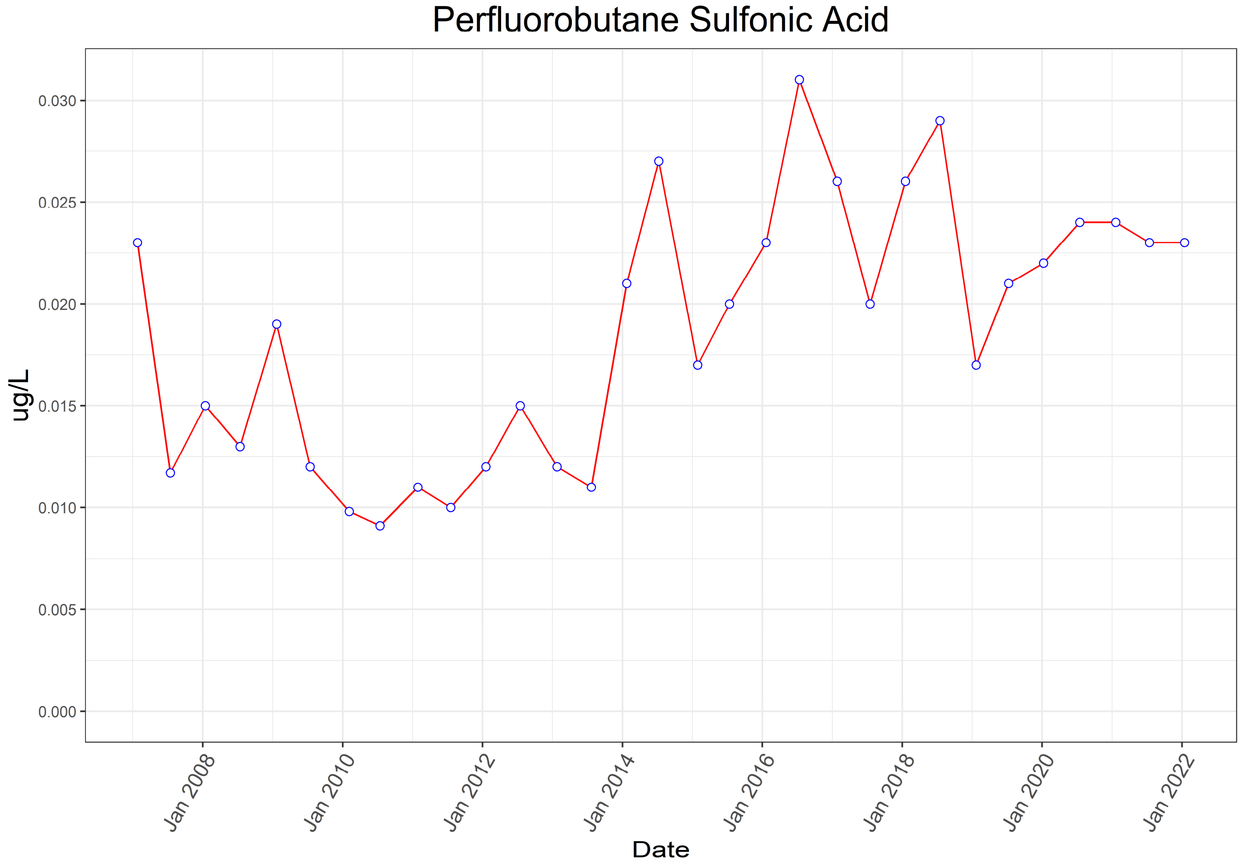
PFOS

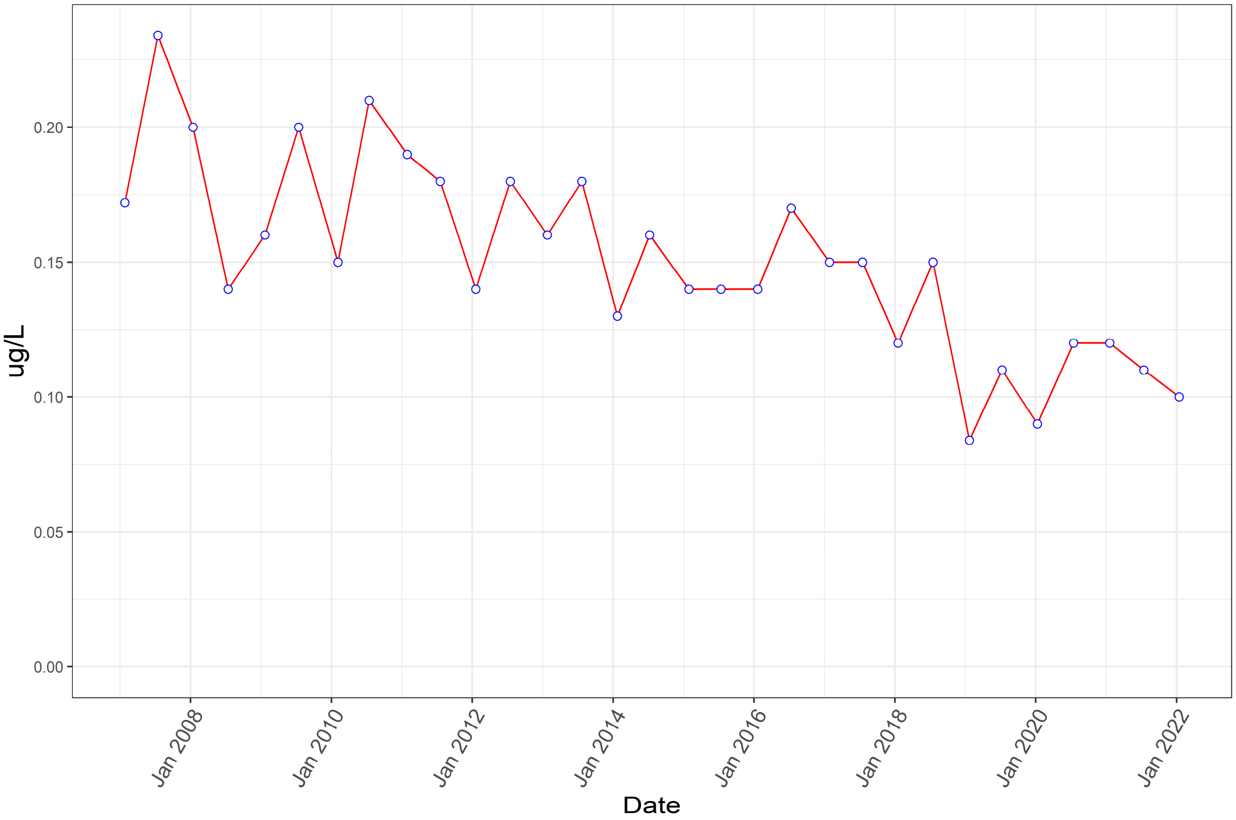


PFAS Monitoring Program (Program 9)

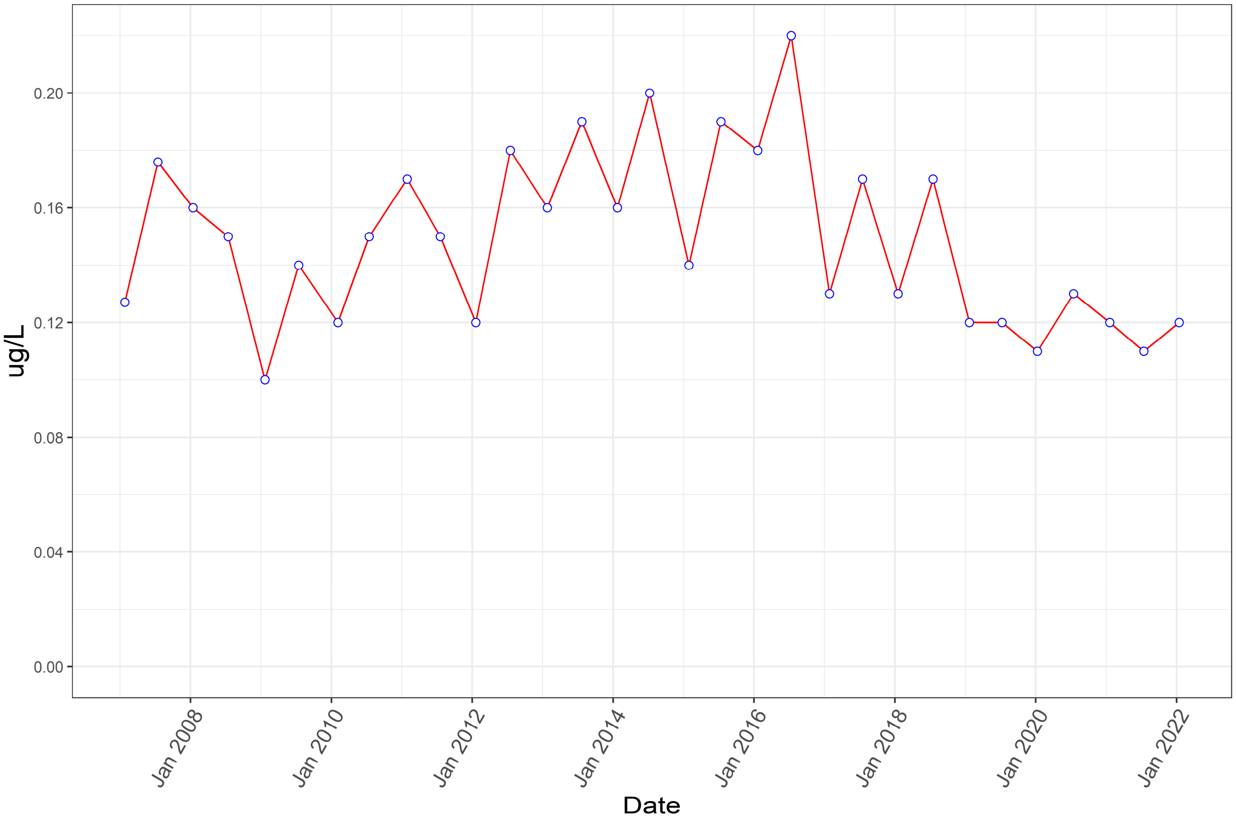
Well Name: C11-M02D





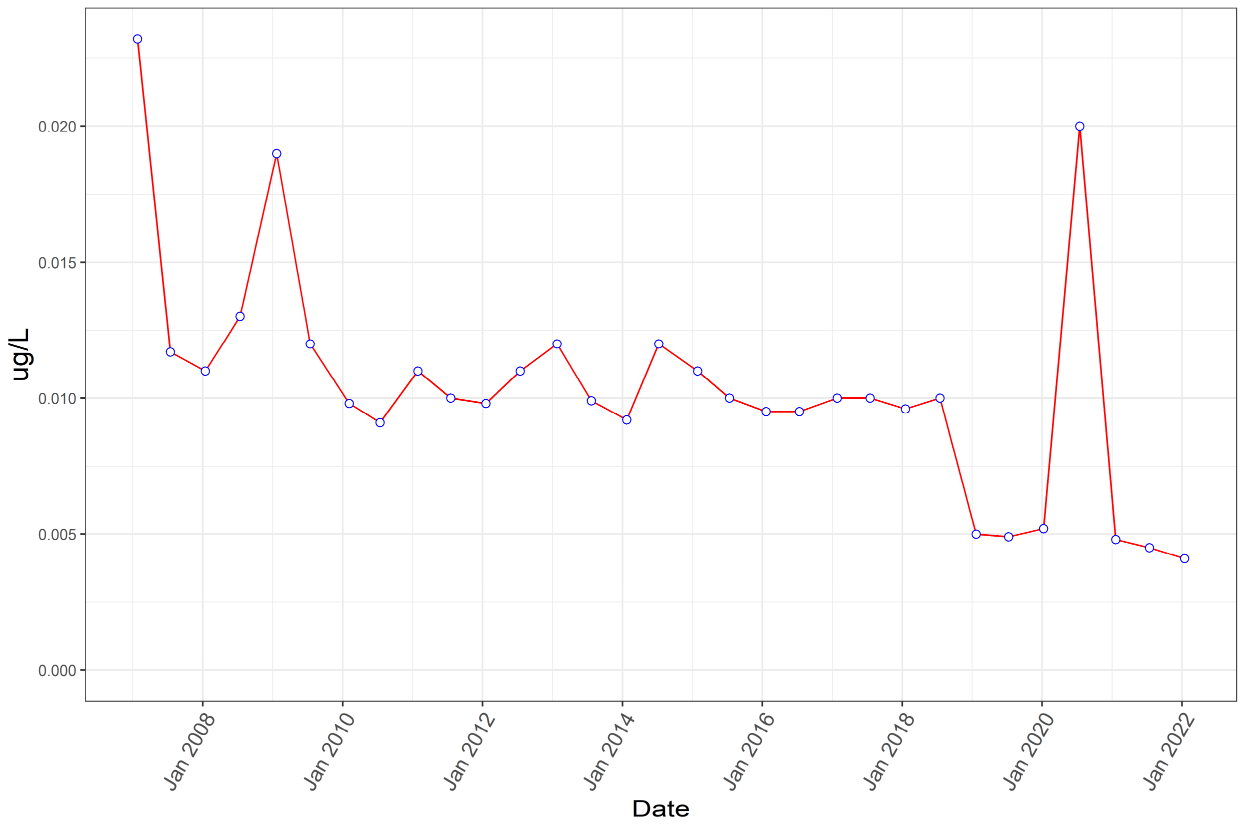


Perfluorobutanoic Acid

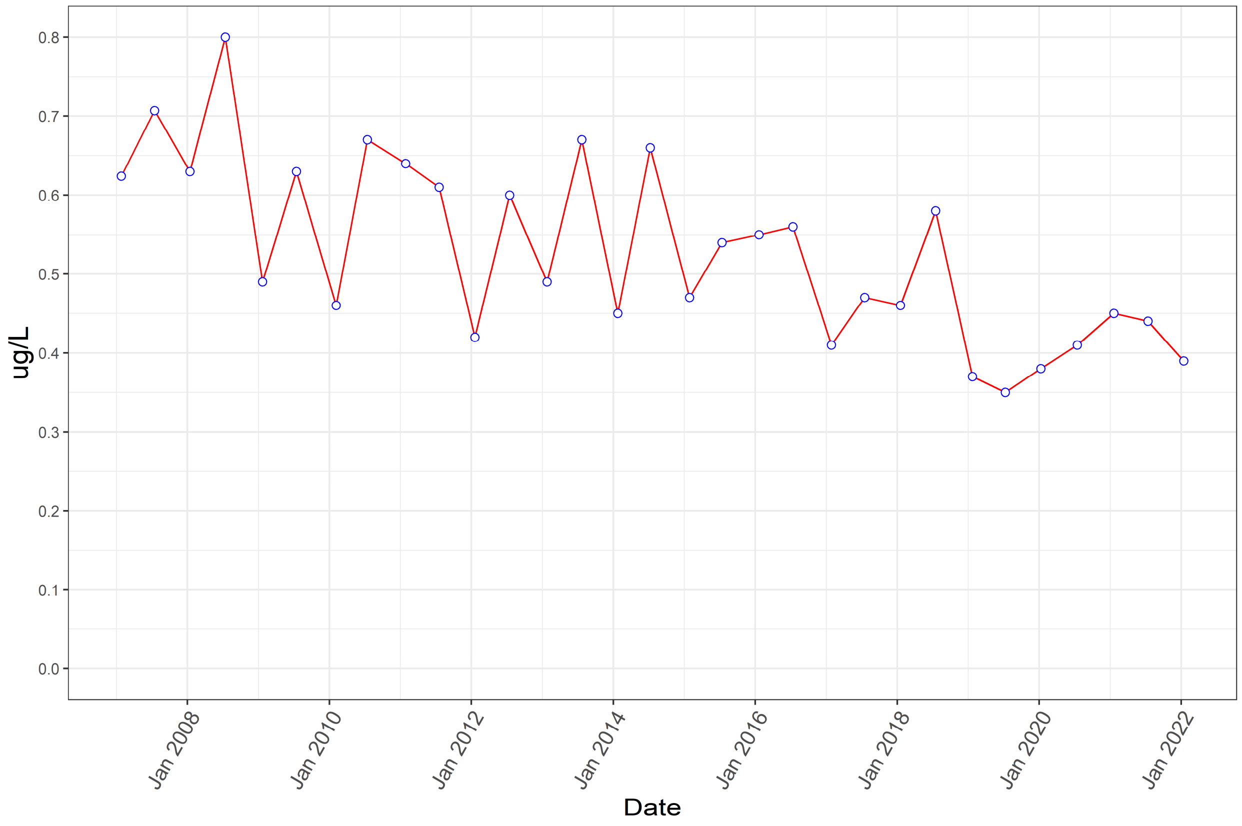


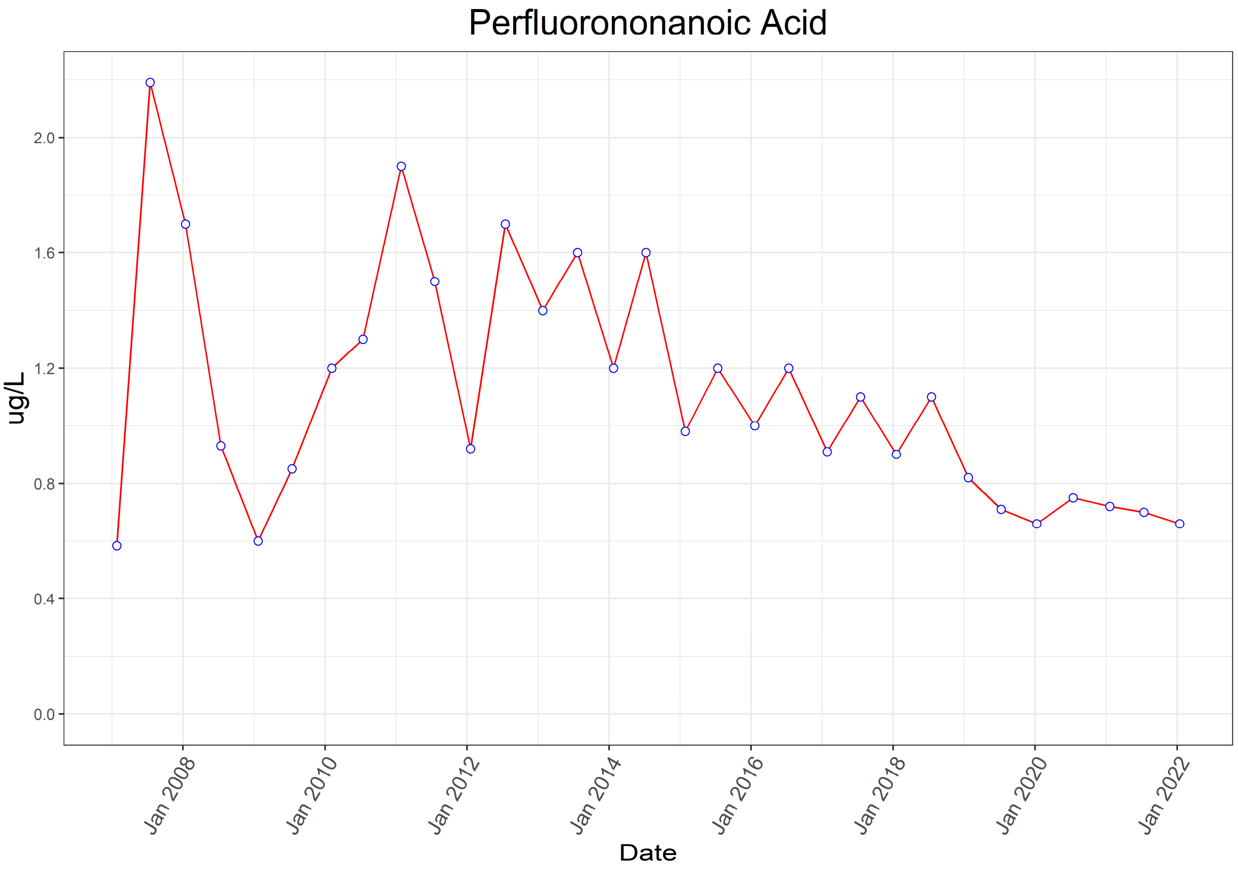
Perfluoroheptanoic Acid

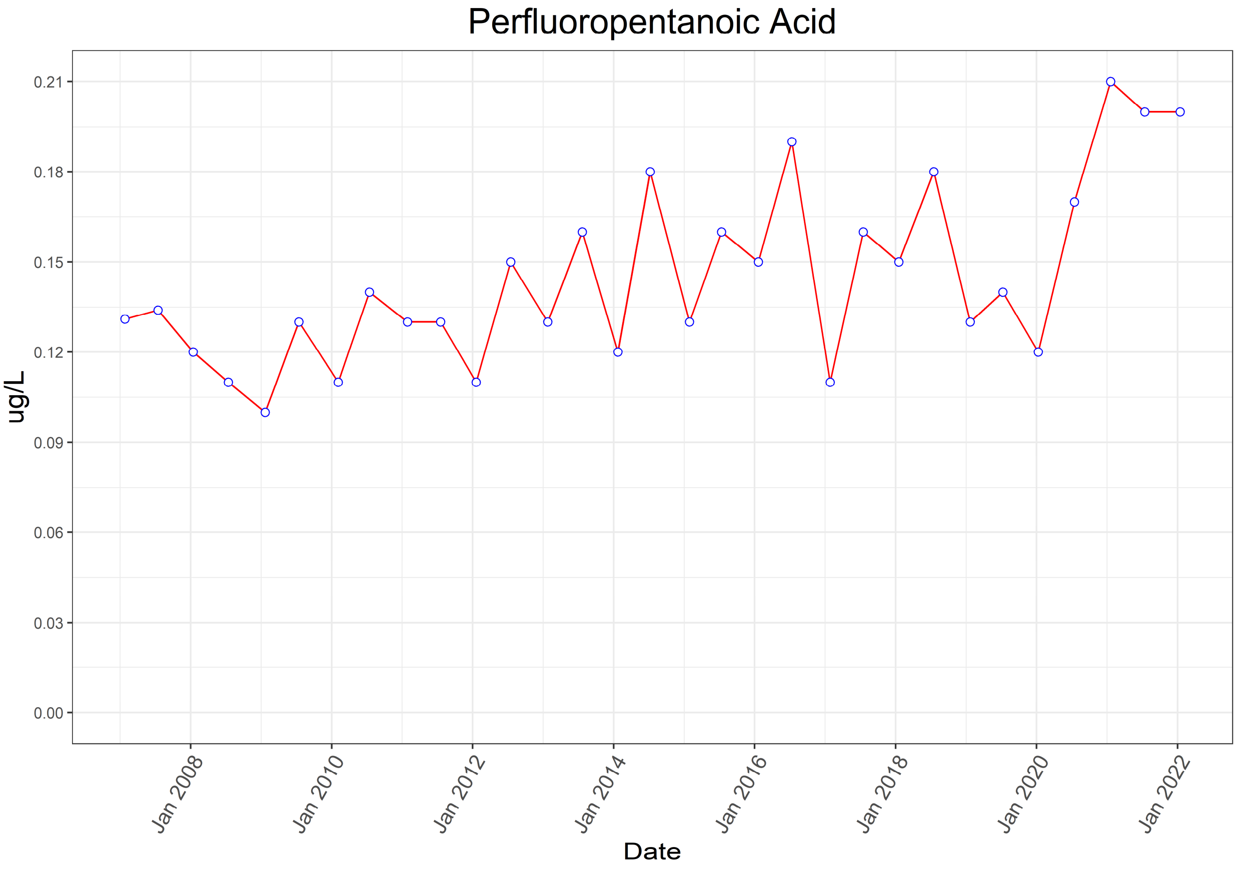
Perfluorohexane Sulfonic Acid

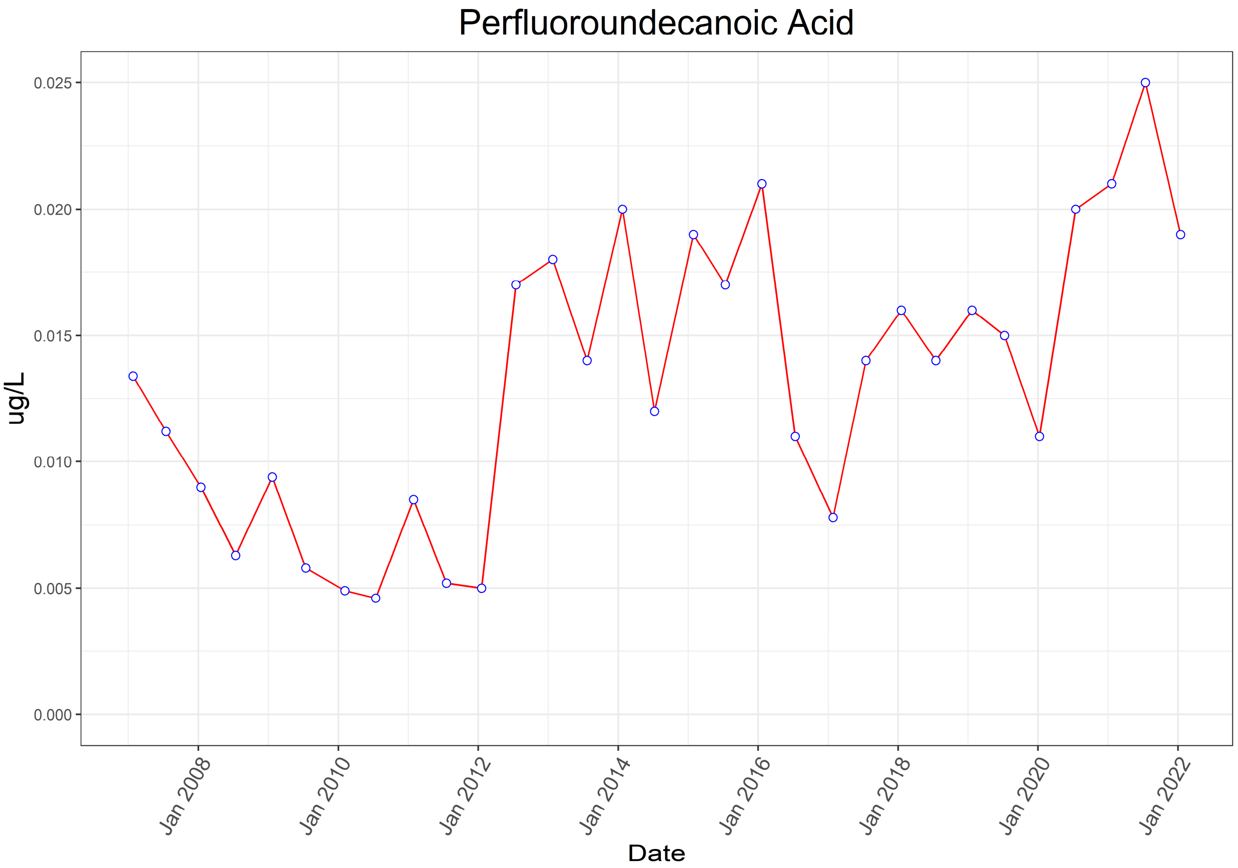


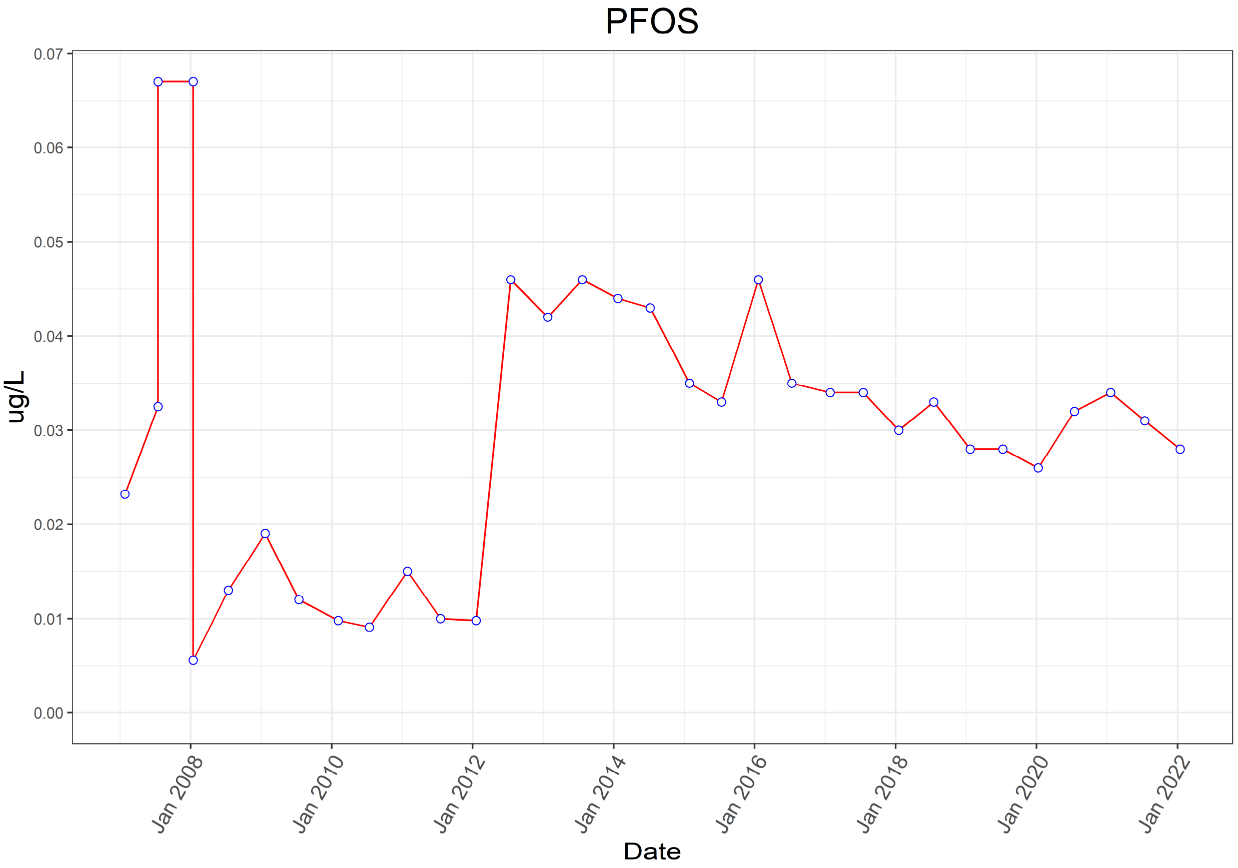
Perfluorohexanoic Acid




Perfluorononanoic Acid
ug/L
2.0
1.6
1.2
0.8
0.4
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

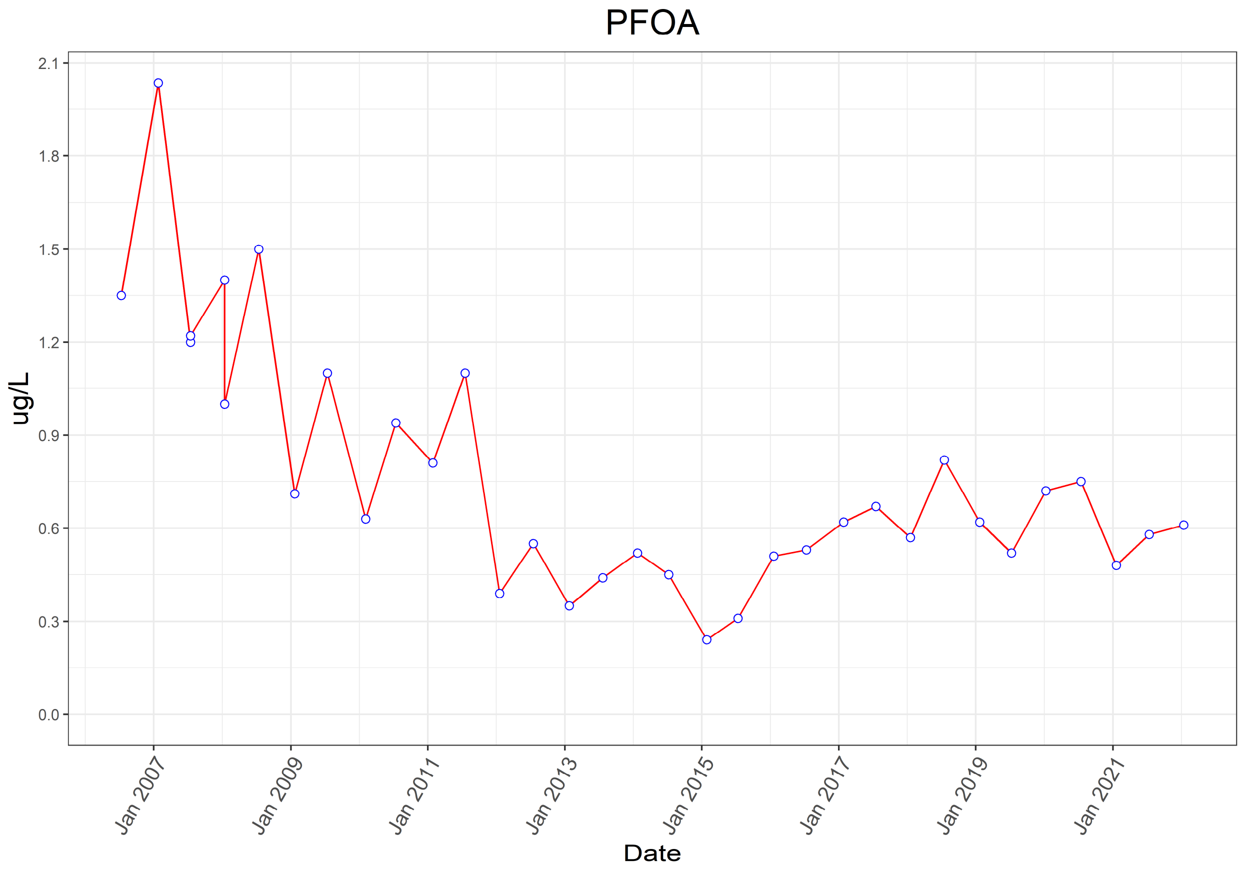

Perfluoropentanoic Acid
ug/L
0.21
0.18
0.15
0.12
0.09
0.06
0.03
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

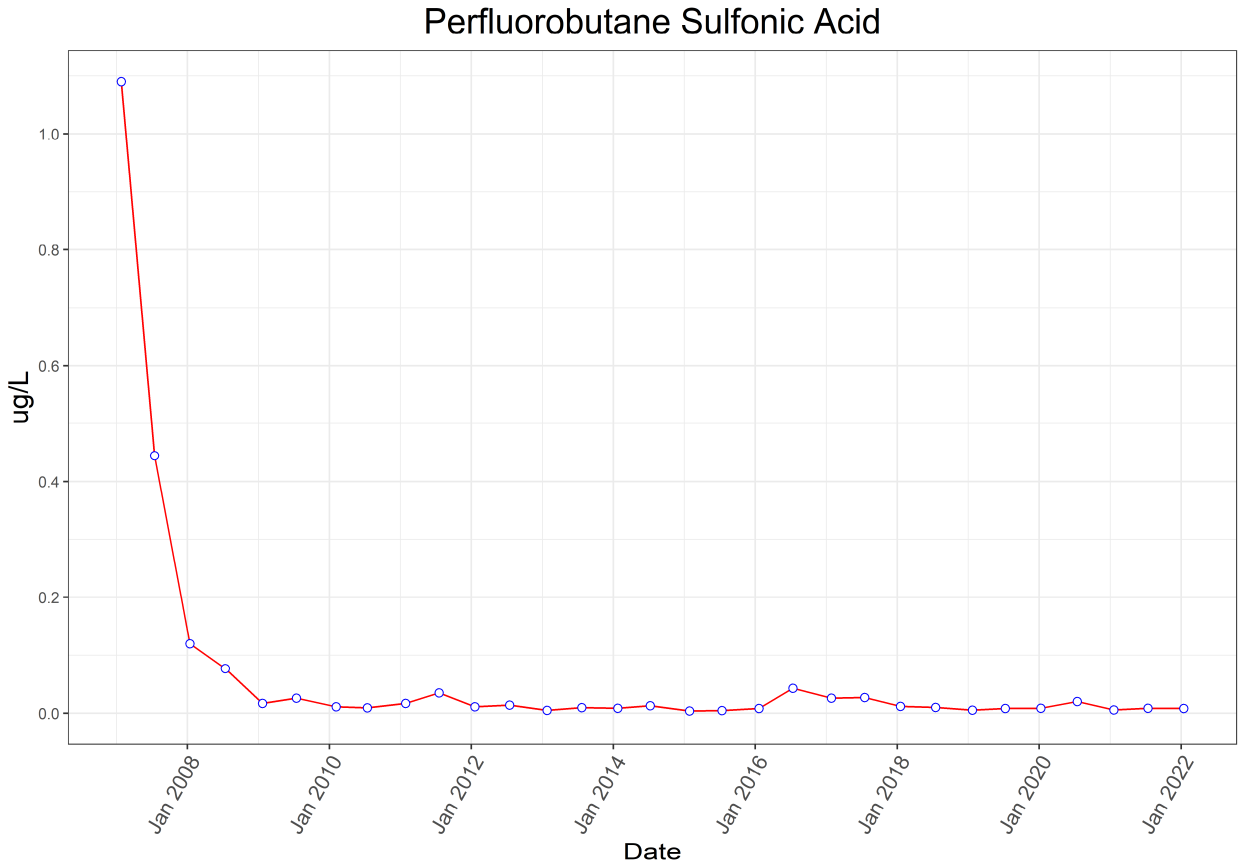

Perfluoroundecanoic Acid
ug/L
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

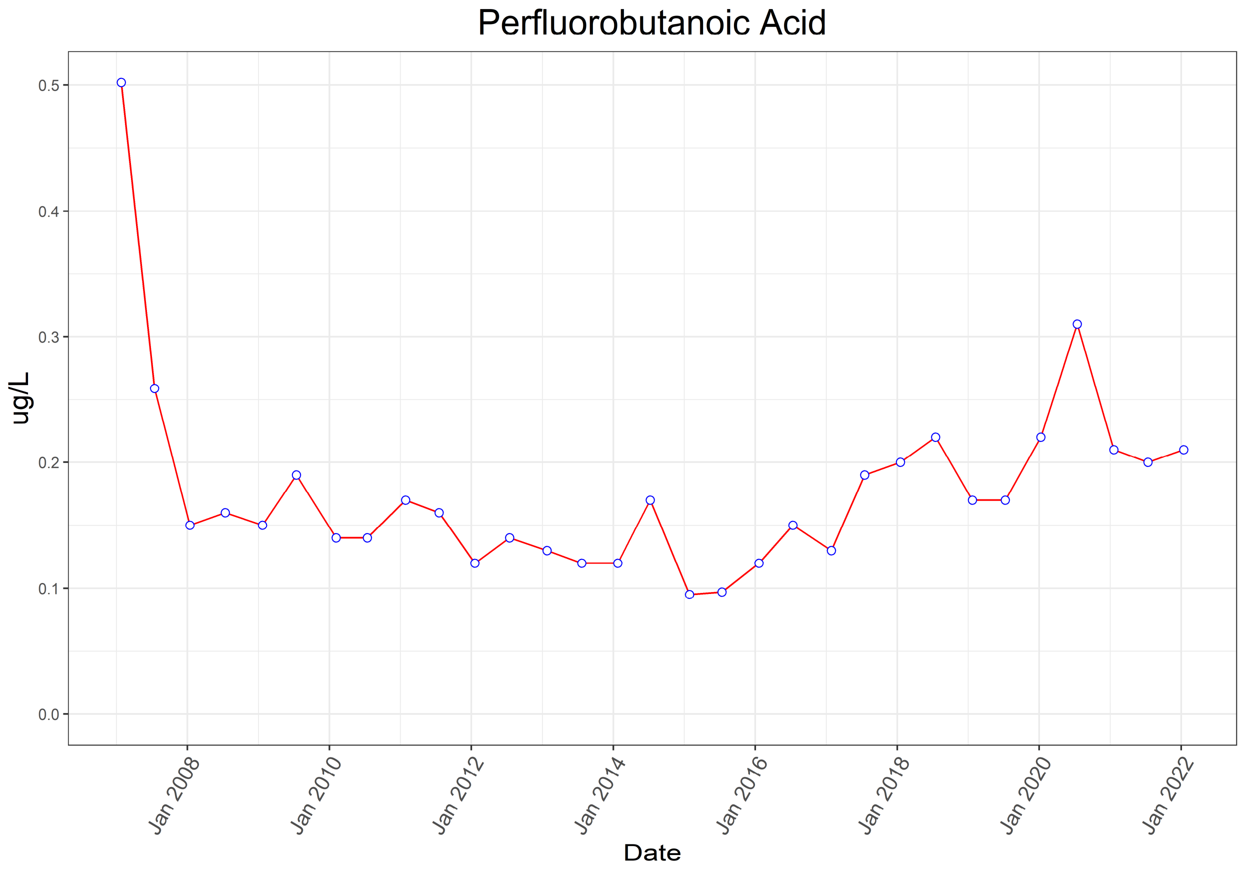

PFOS
ug/L
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

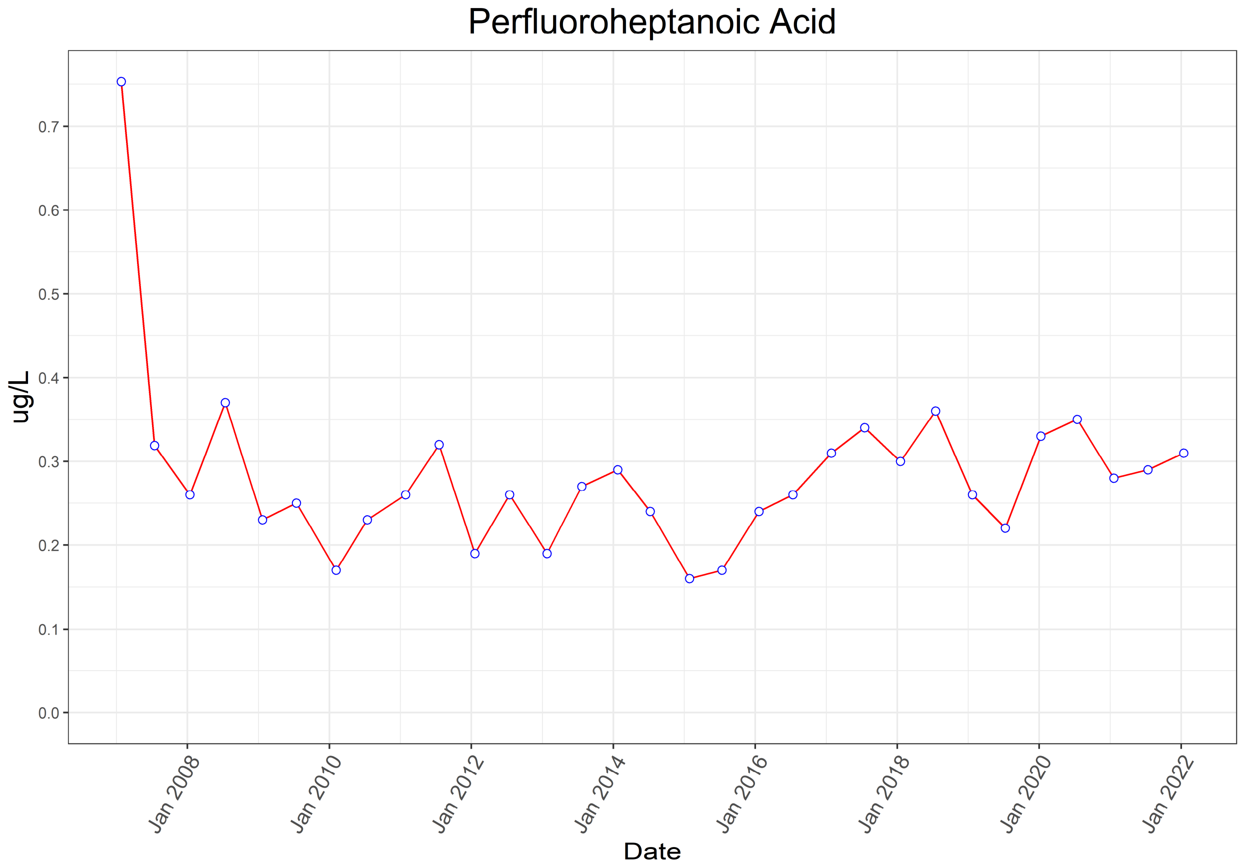
PFAS Monitoring Program (Program 9)

Well Name: C11-M03B

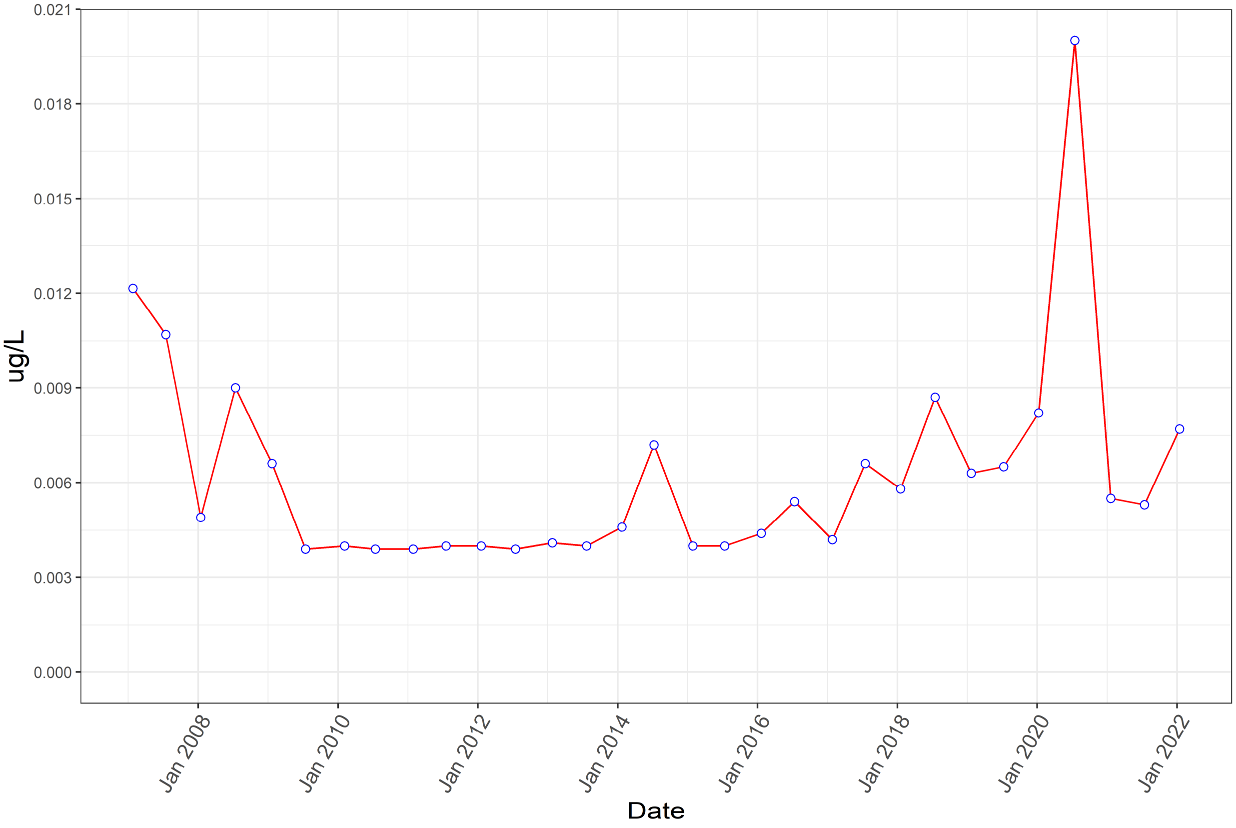




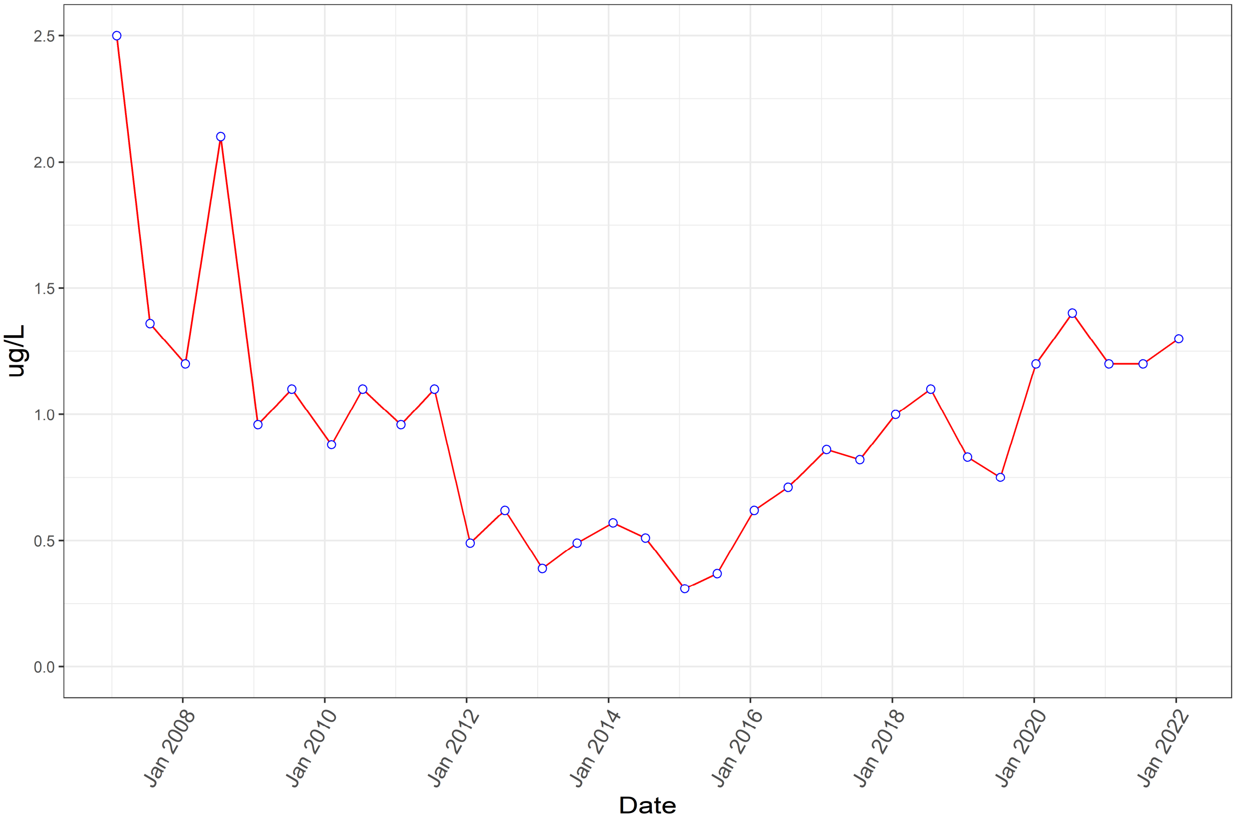

Perfluorobutanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

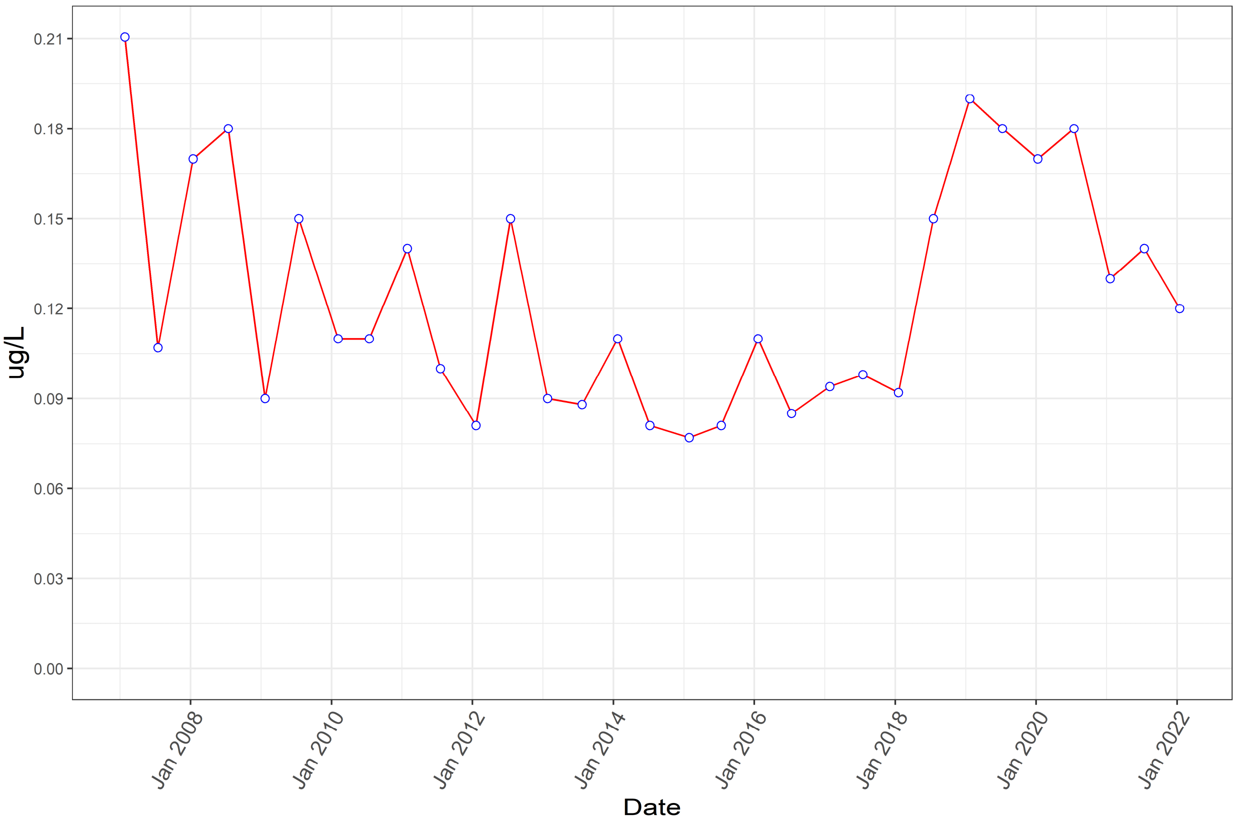

Perfluoroheptanoic Acid
ug/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

Perfluorohexane Sulfonic Acid

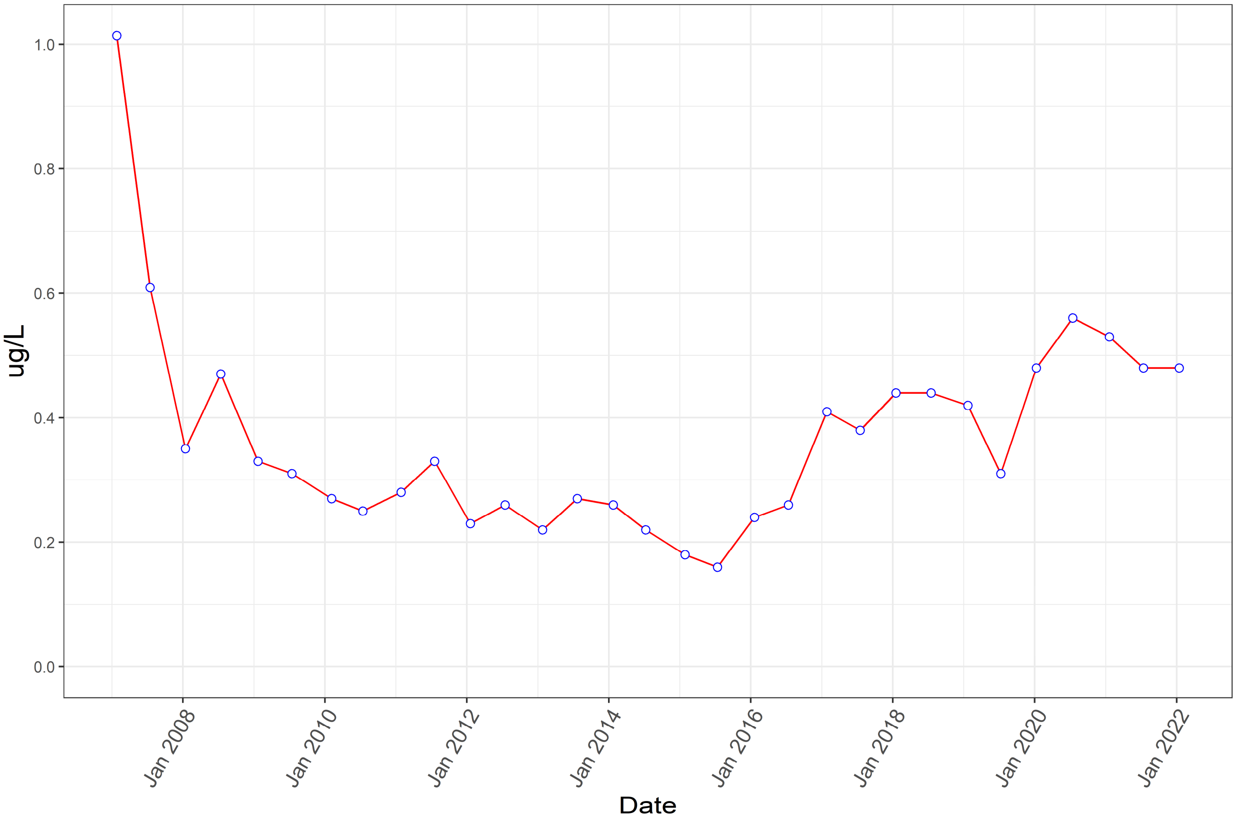


Perfluorohexanoic Acid

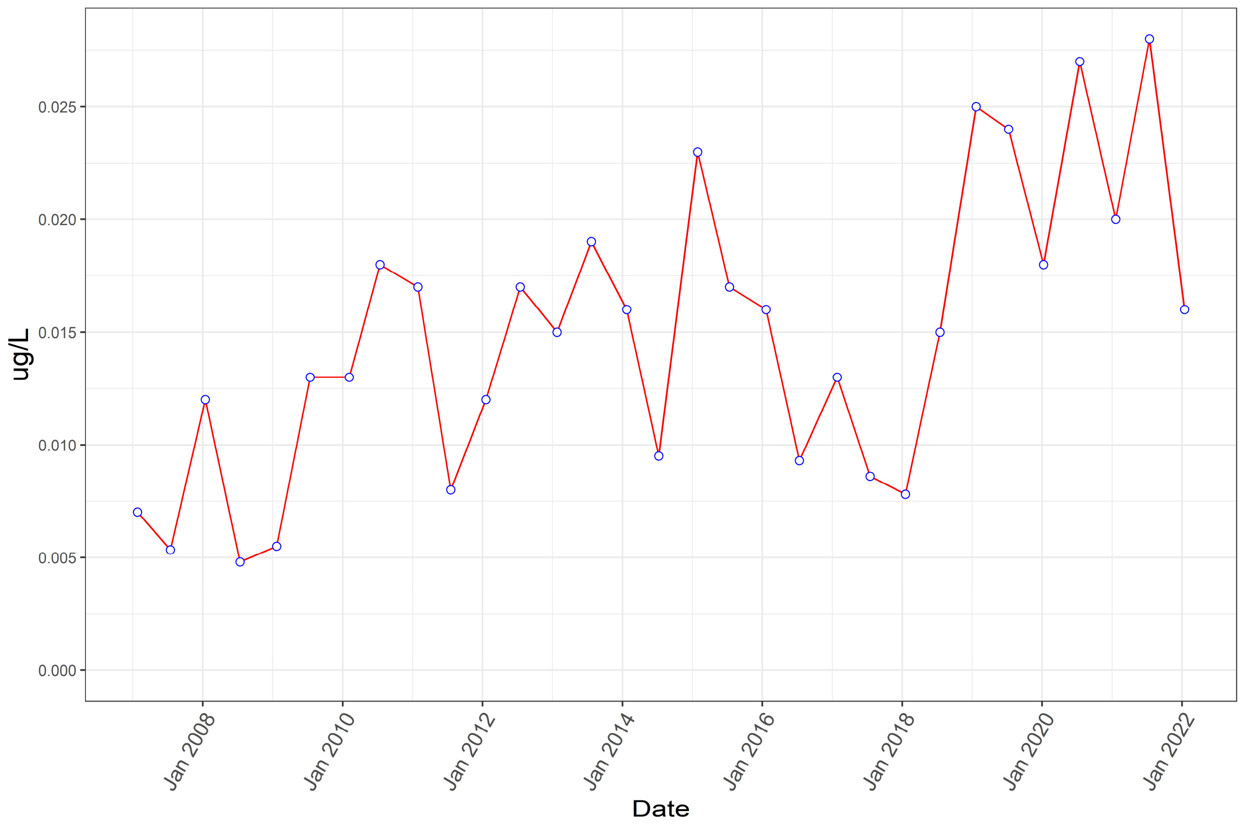




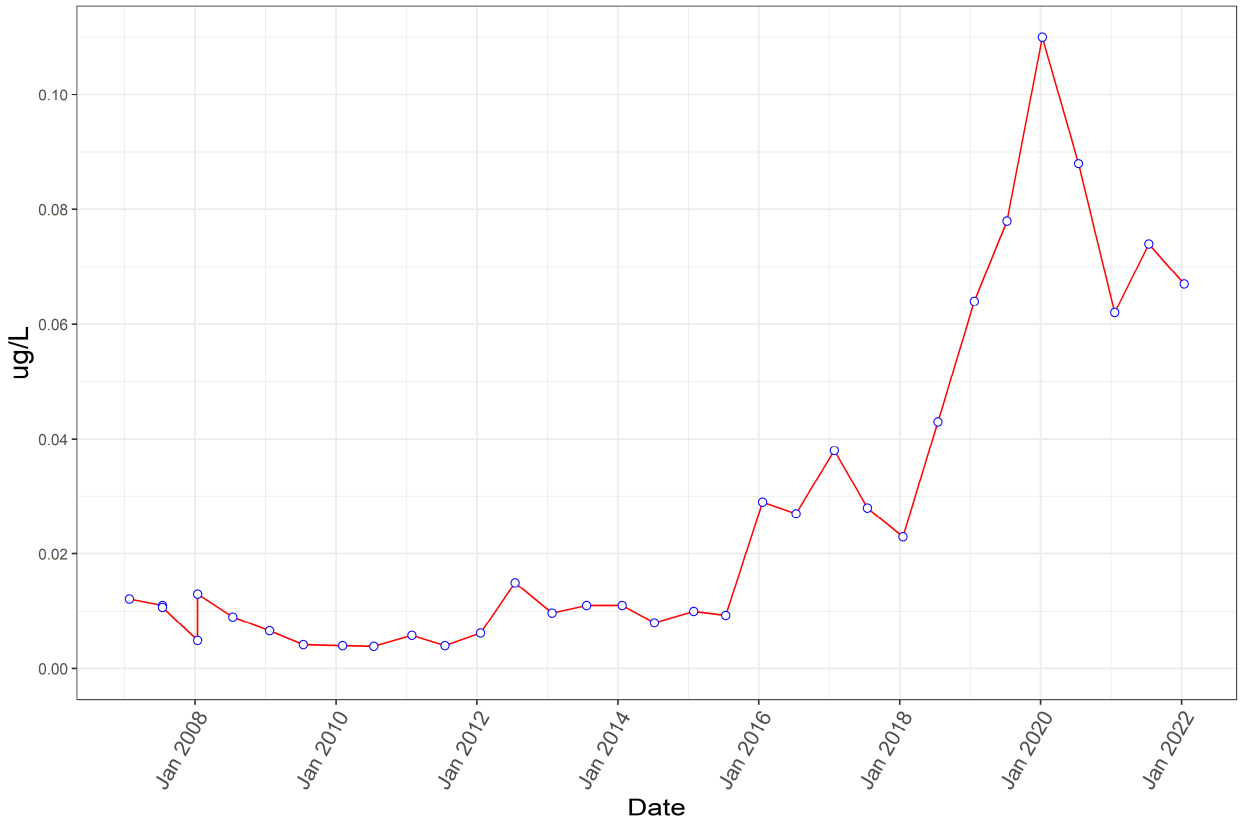
Perfluorononanoic Acid



Perfluoropentanoic Acid



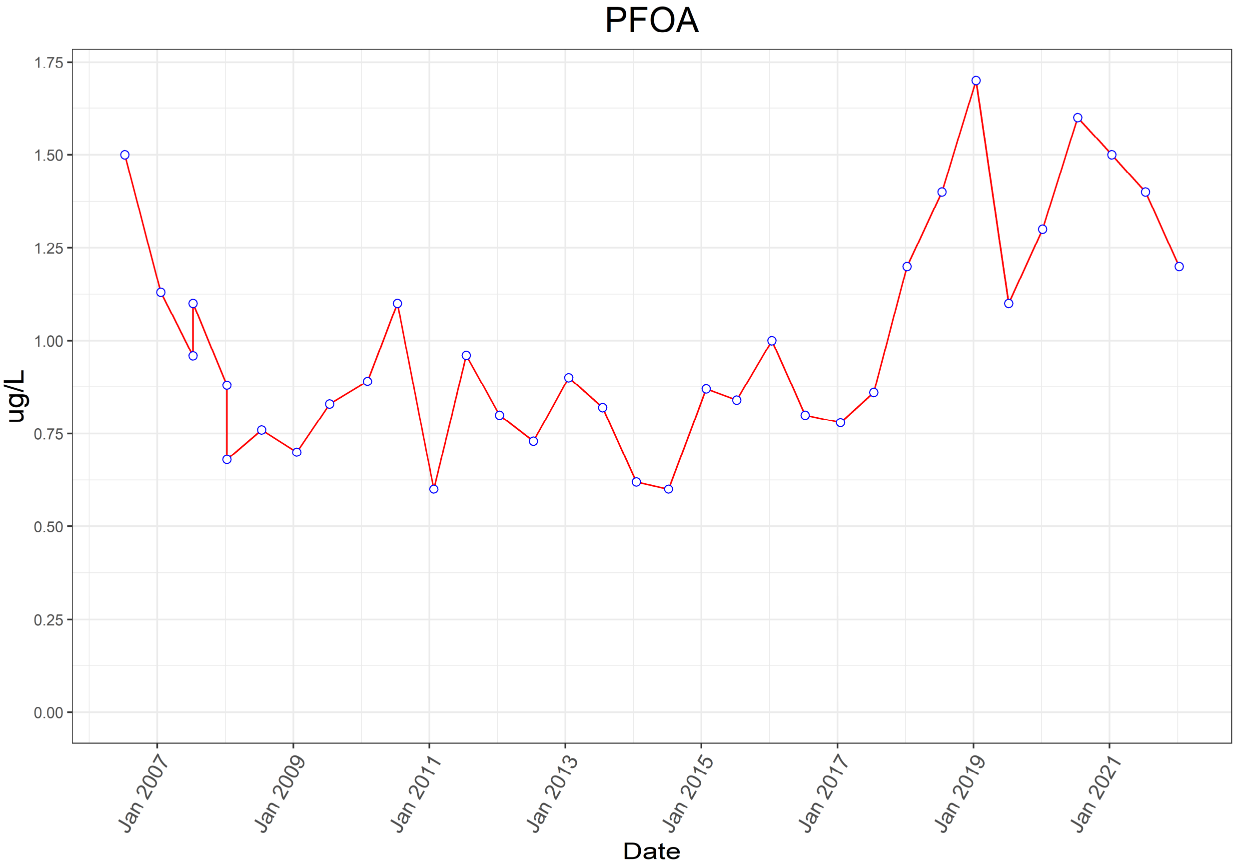
Perfluoroundecanoic Acid

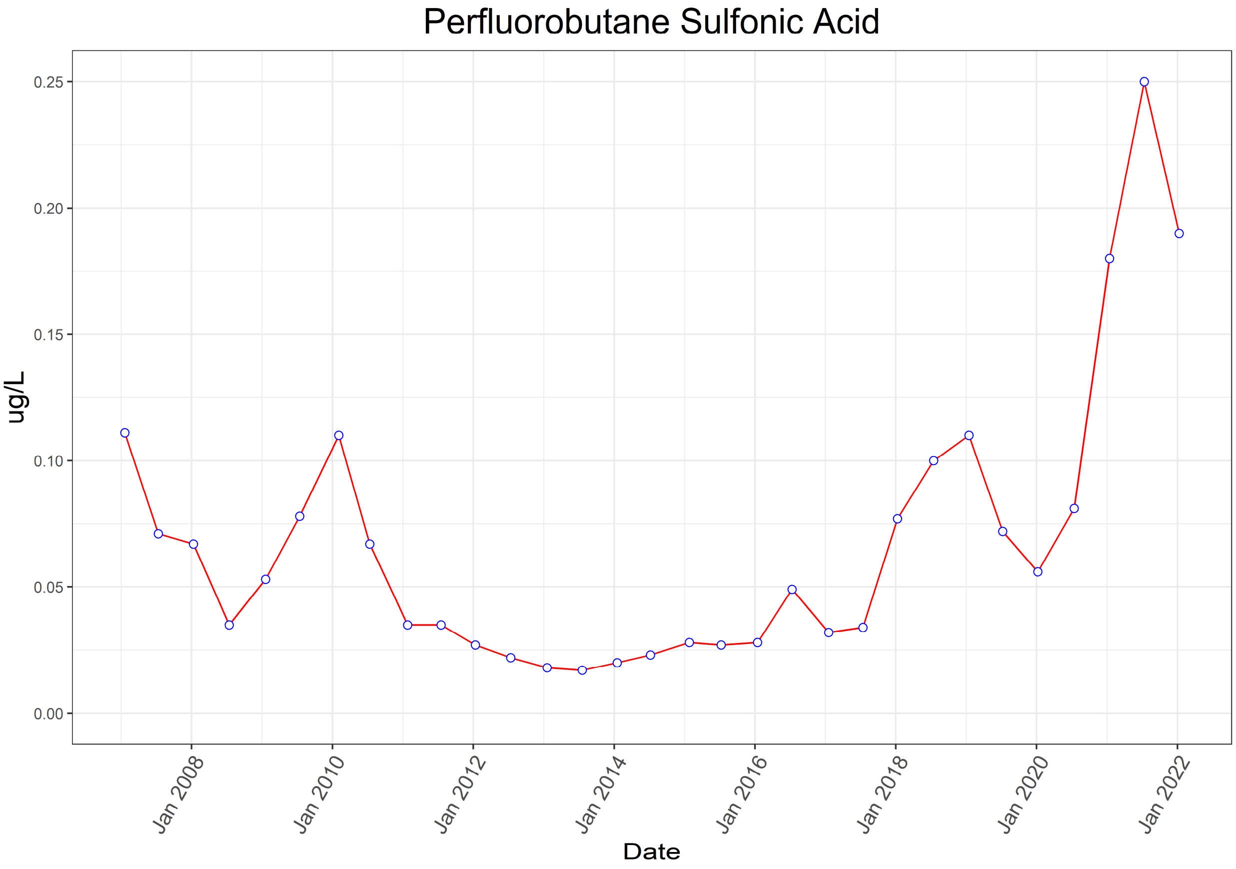


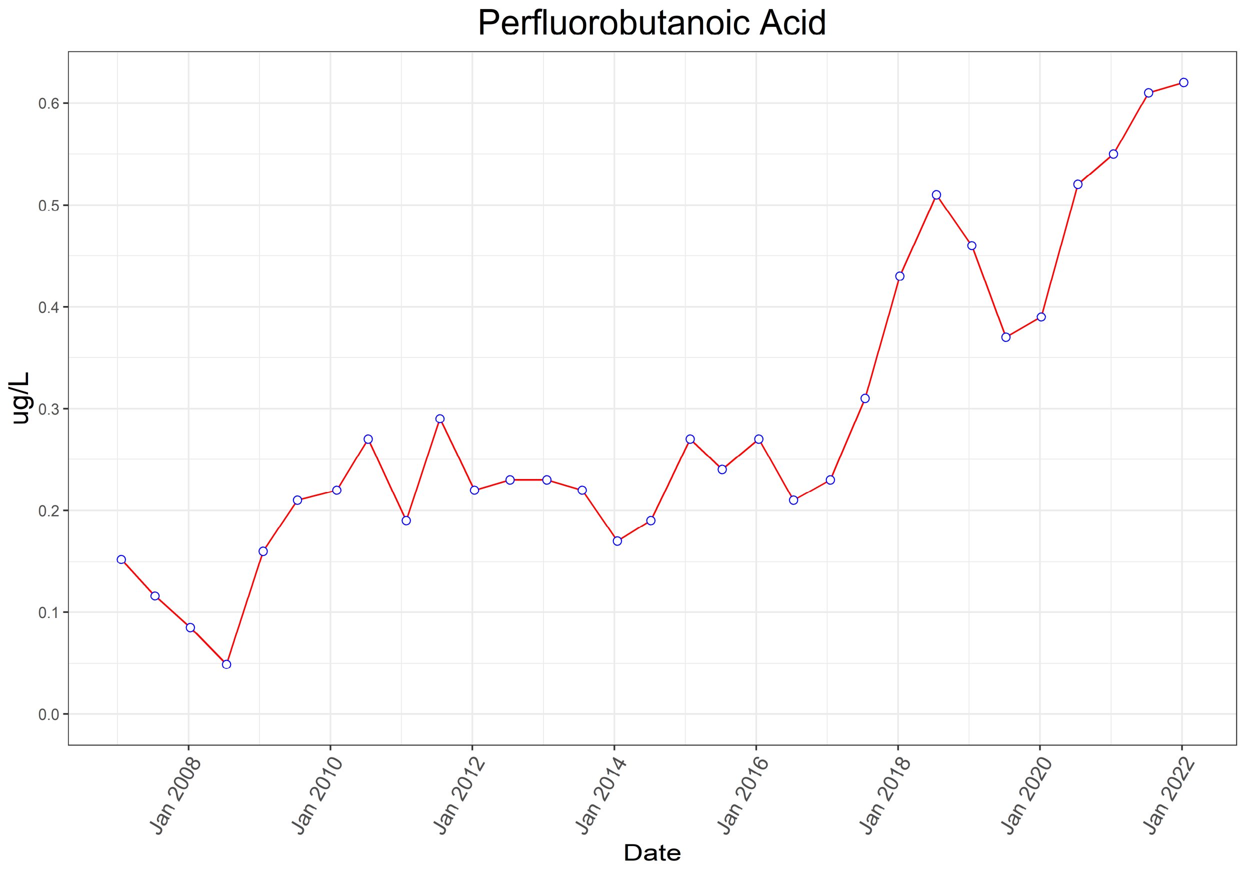
PFOS

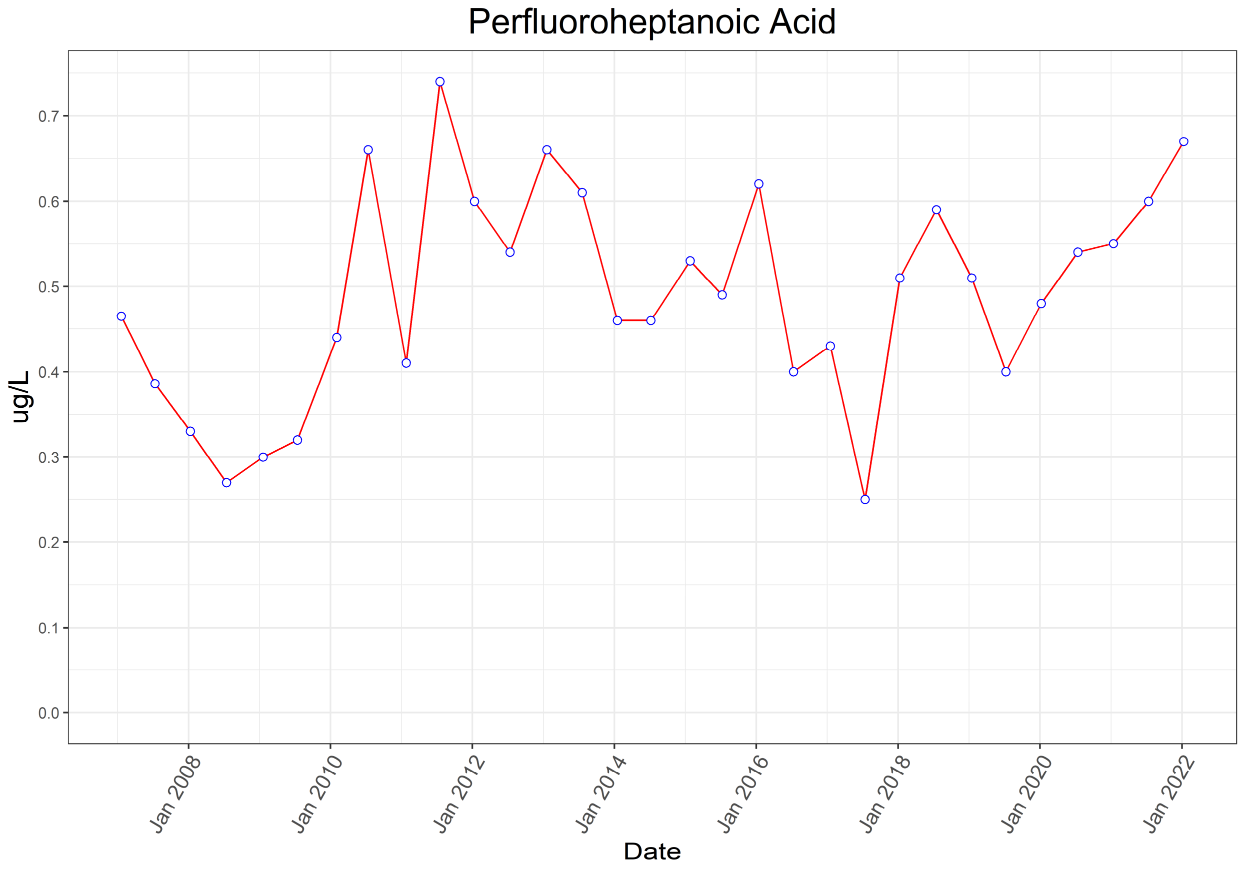
PFAS Monitoring Program (Program 9)

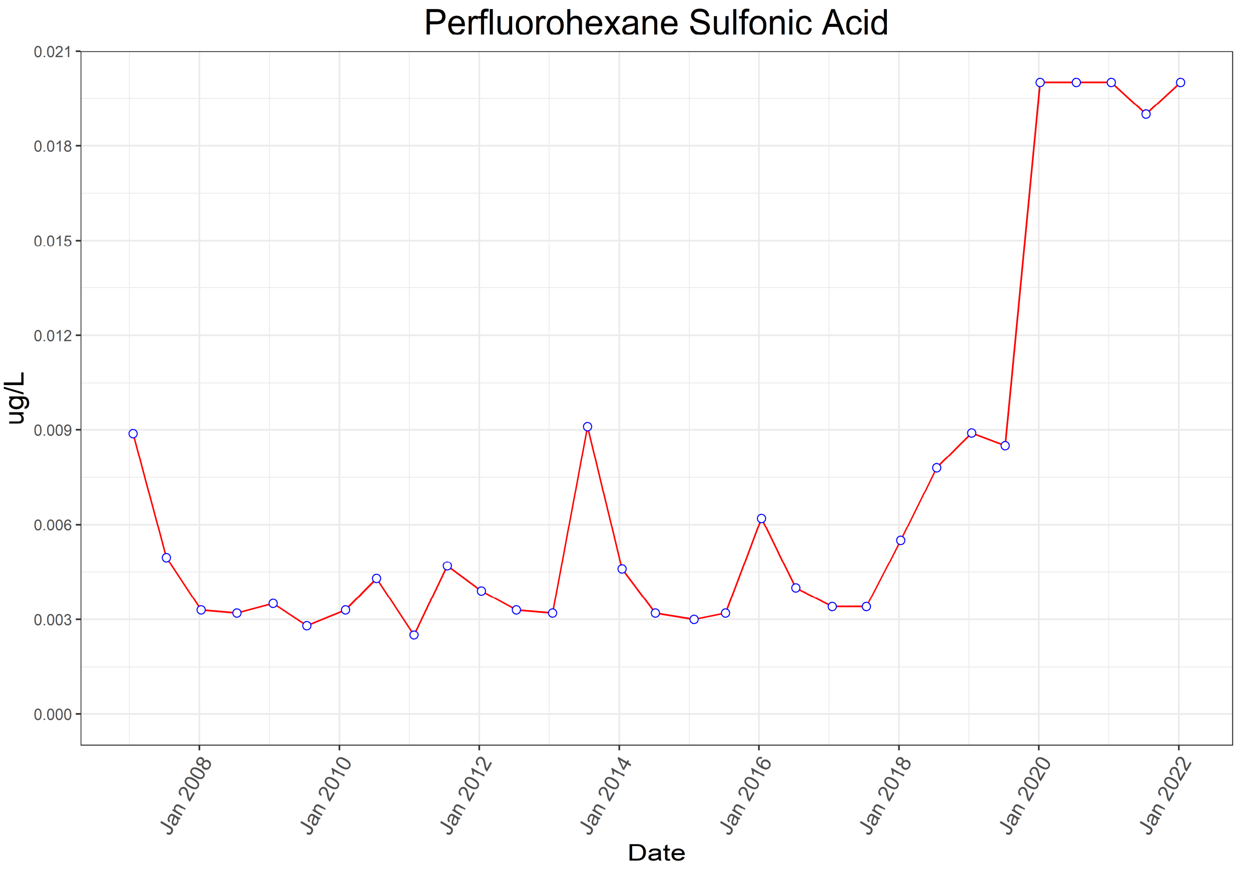
Well Name: D06-M01B



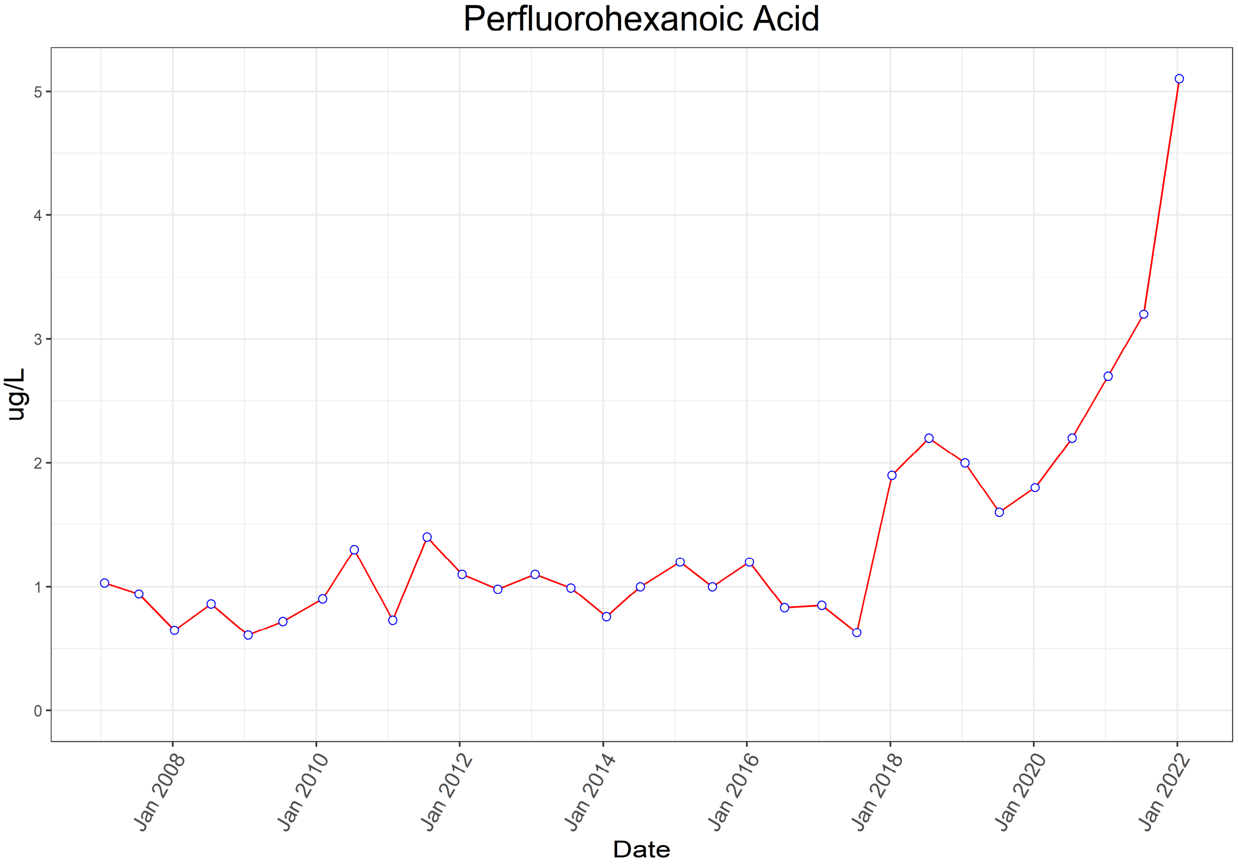



Perfluorobutanoic Acid
ug/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

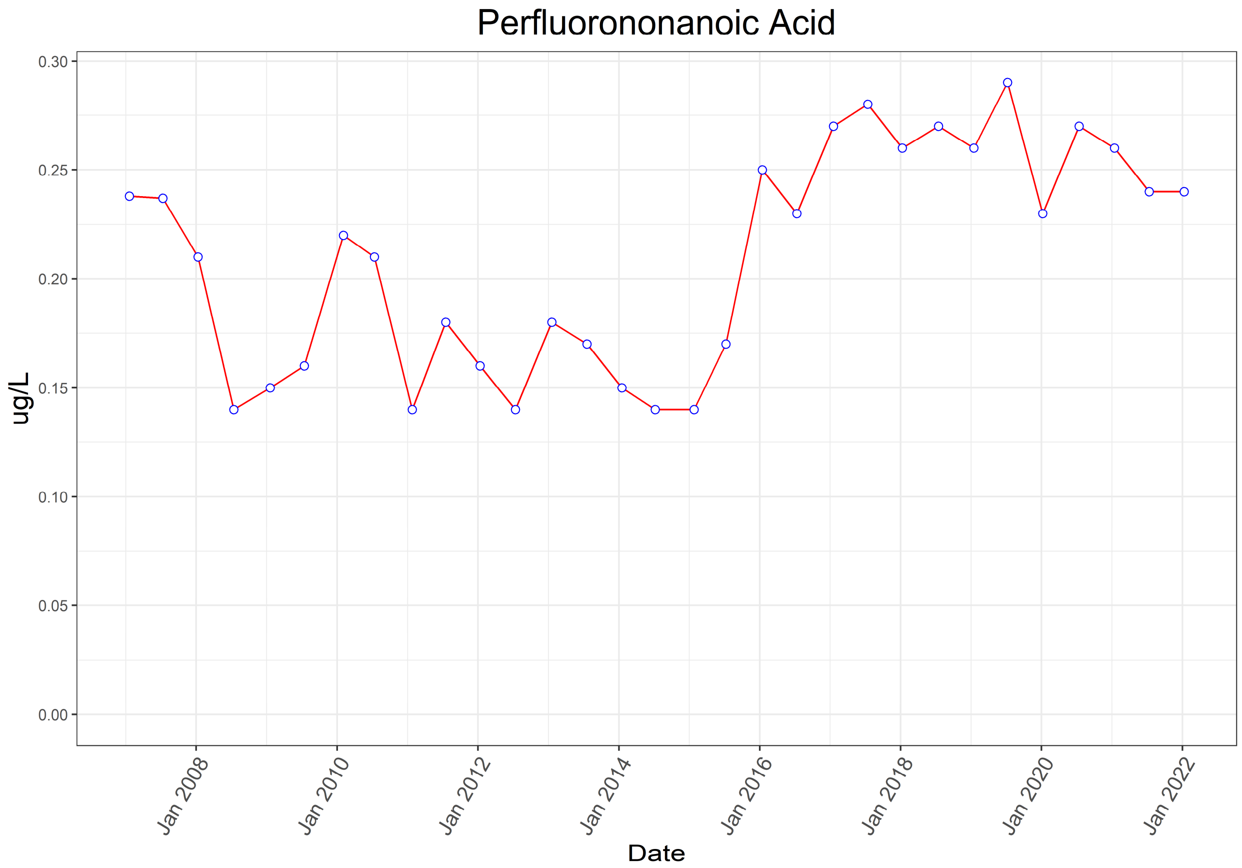

Perfluoroheptanoic Acid
ug/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

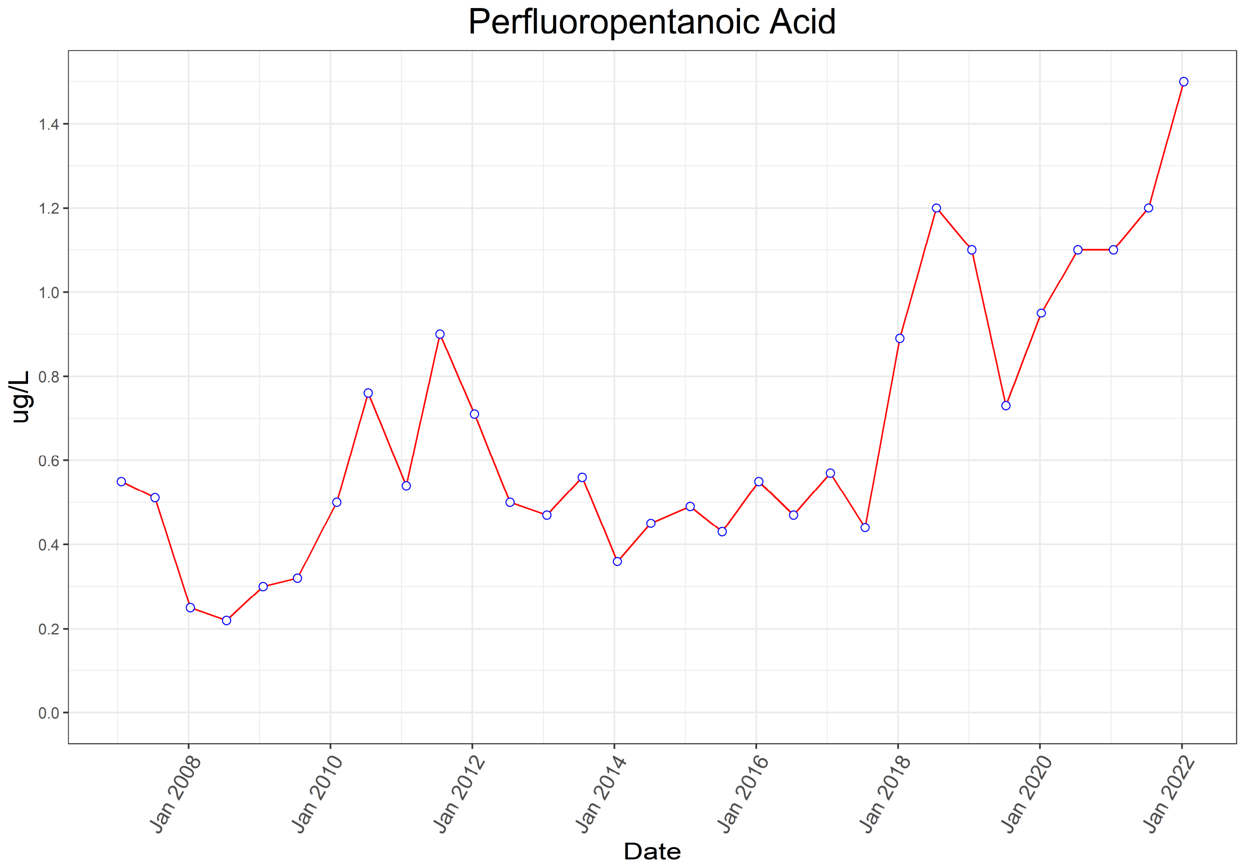


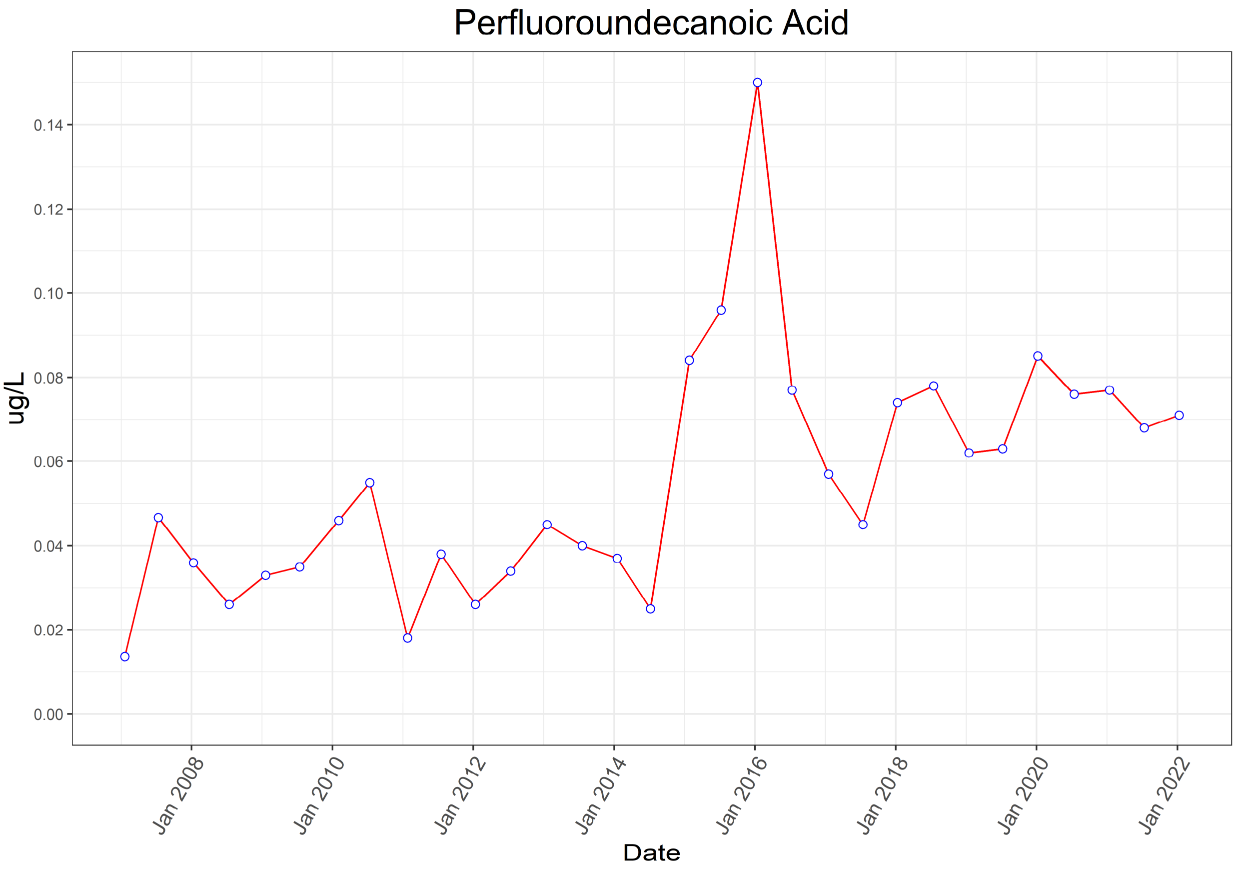
Perfluorohexane Sulfonic Acid



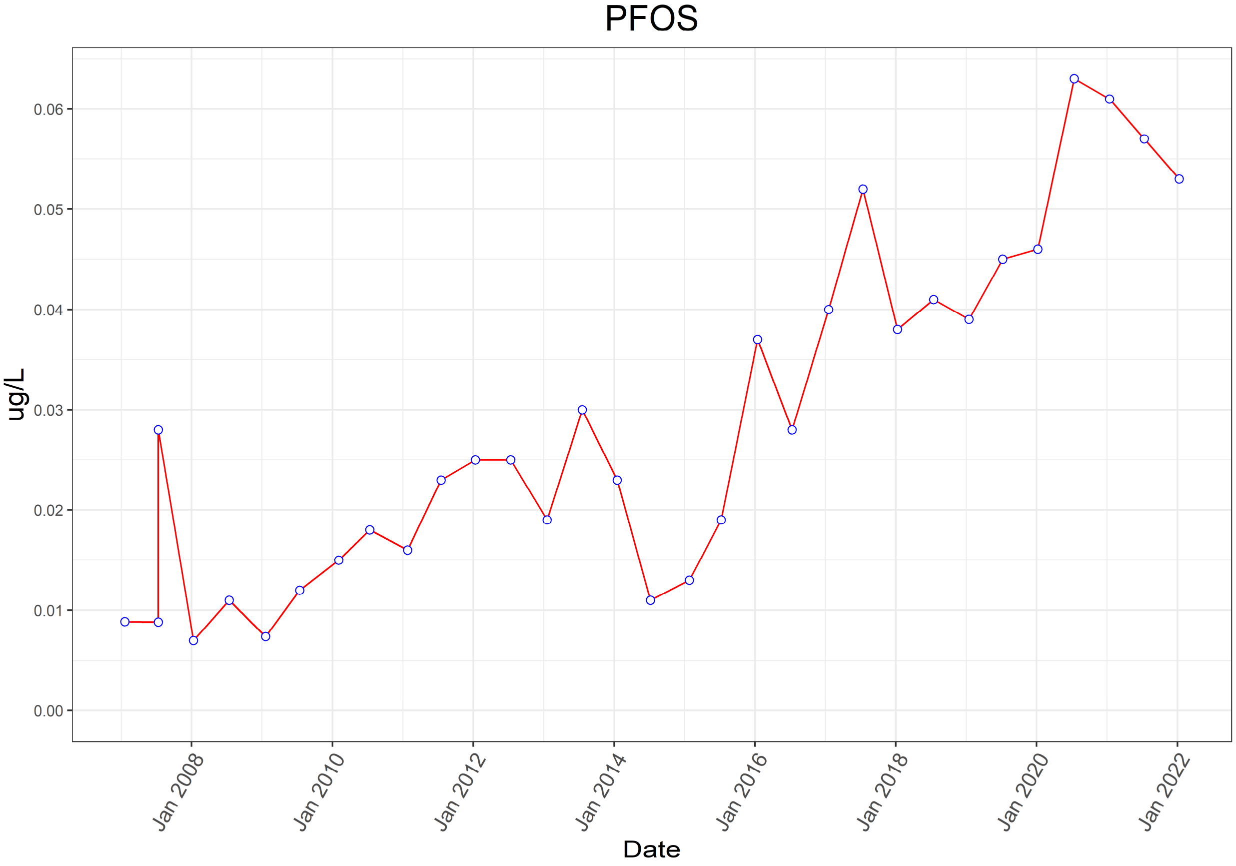
Perfluorohexanoic Acid


Perfluorononanoic Acid
ug/L
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



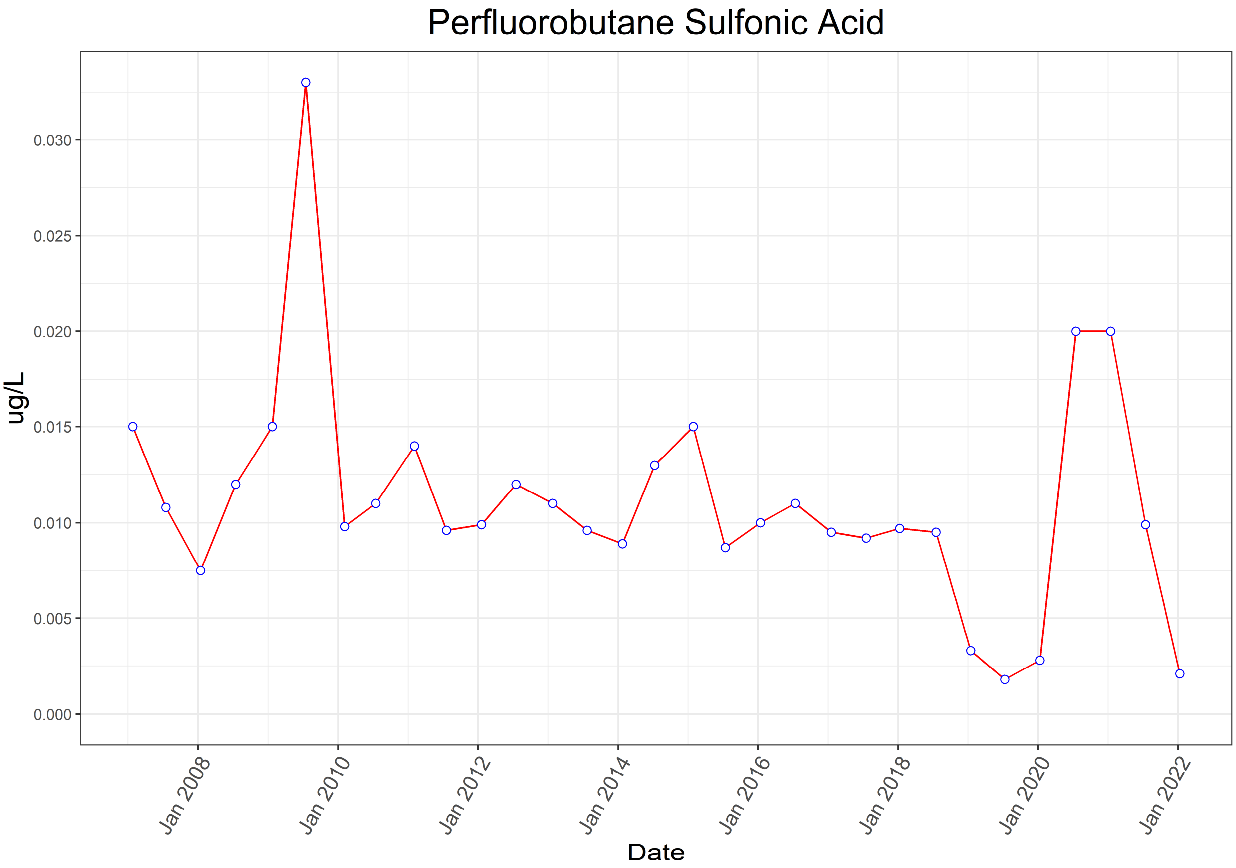
Perfluoroundecanoic Acid

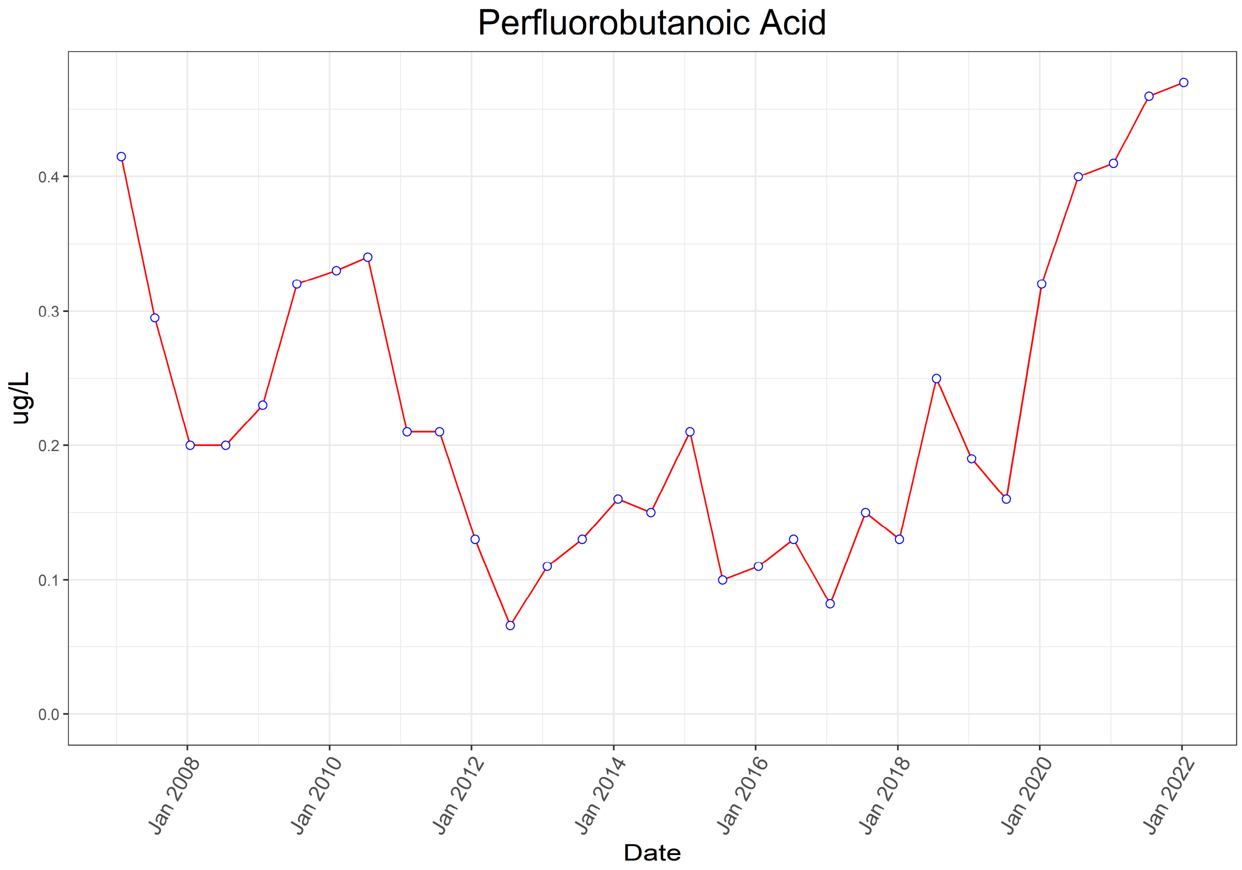


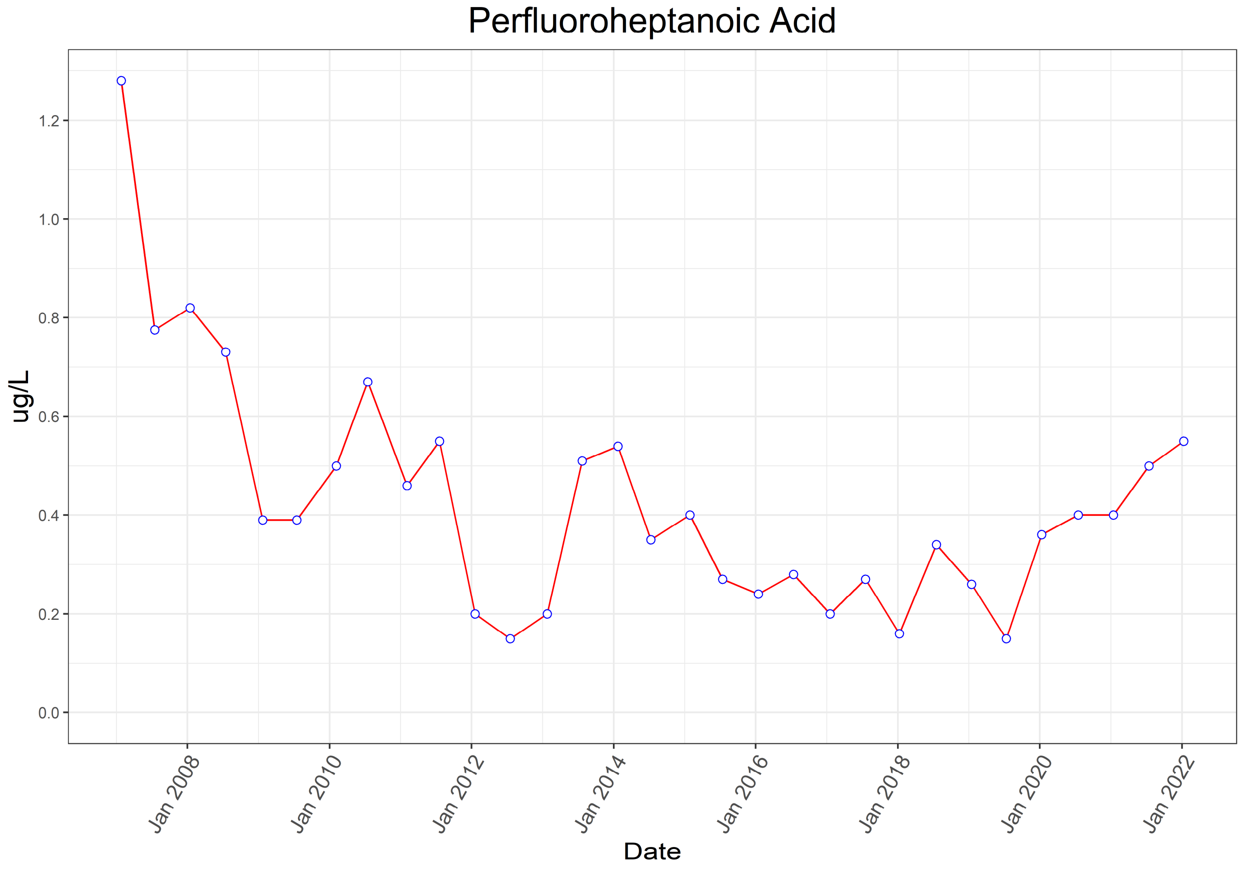
PFOS

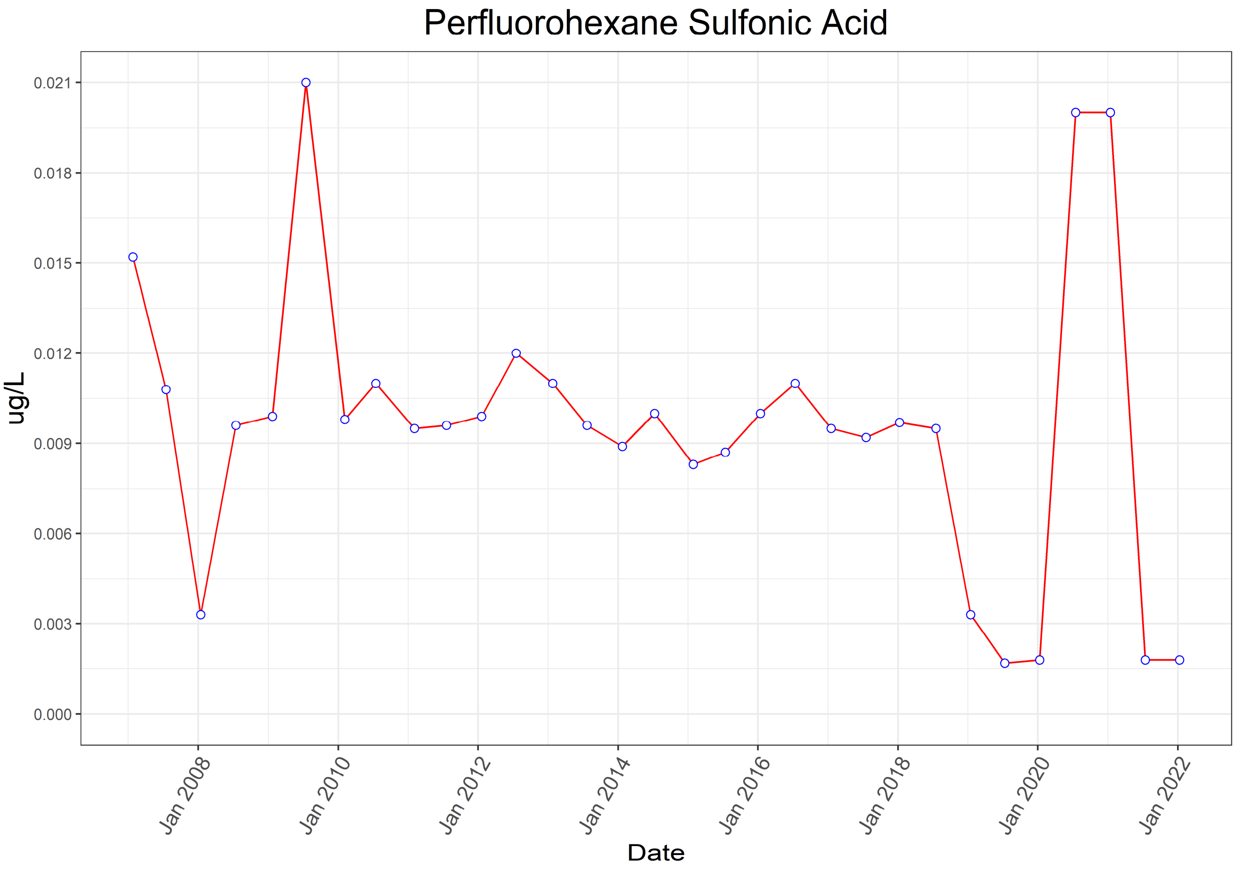
PFAS Monitoring Program (Program 9)

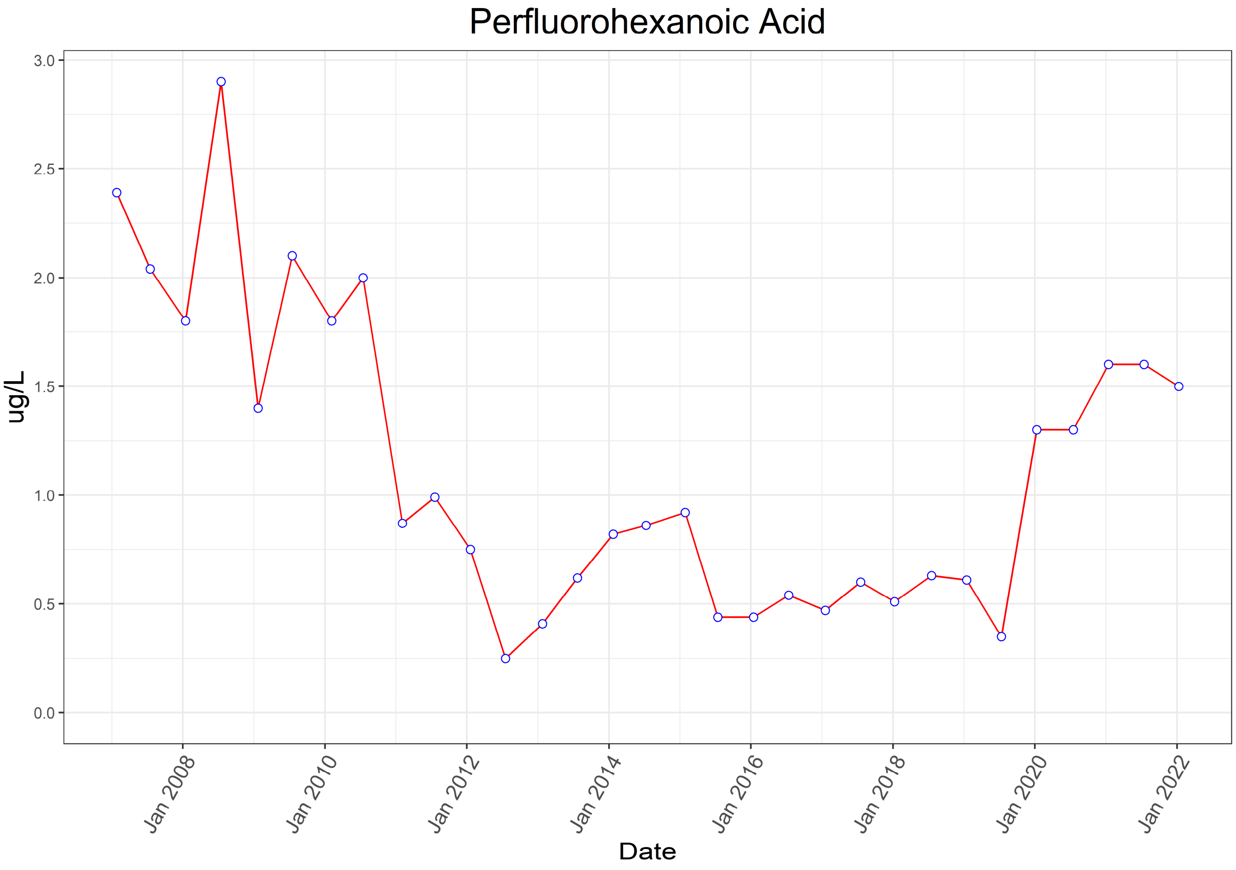
Well Name: D15-M01B

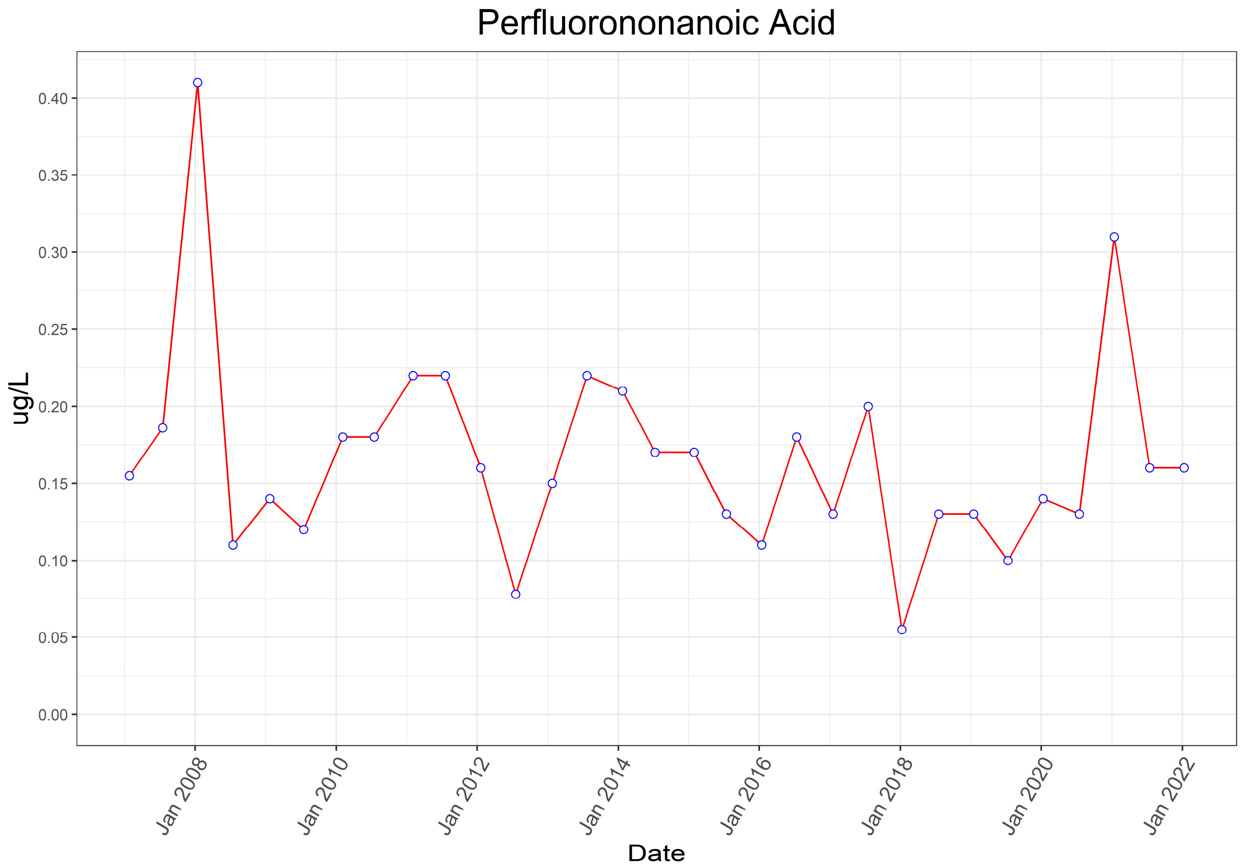



Perfluorobutanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

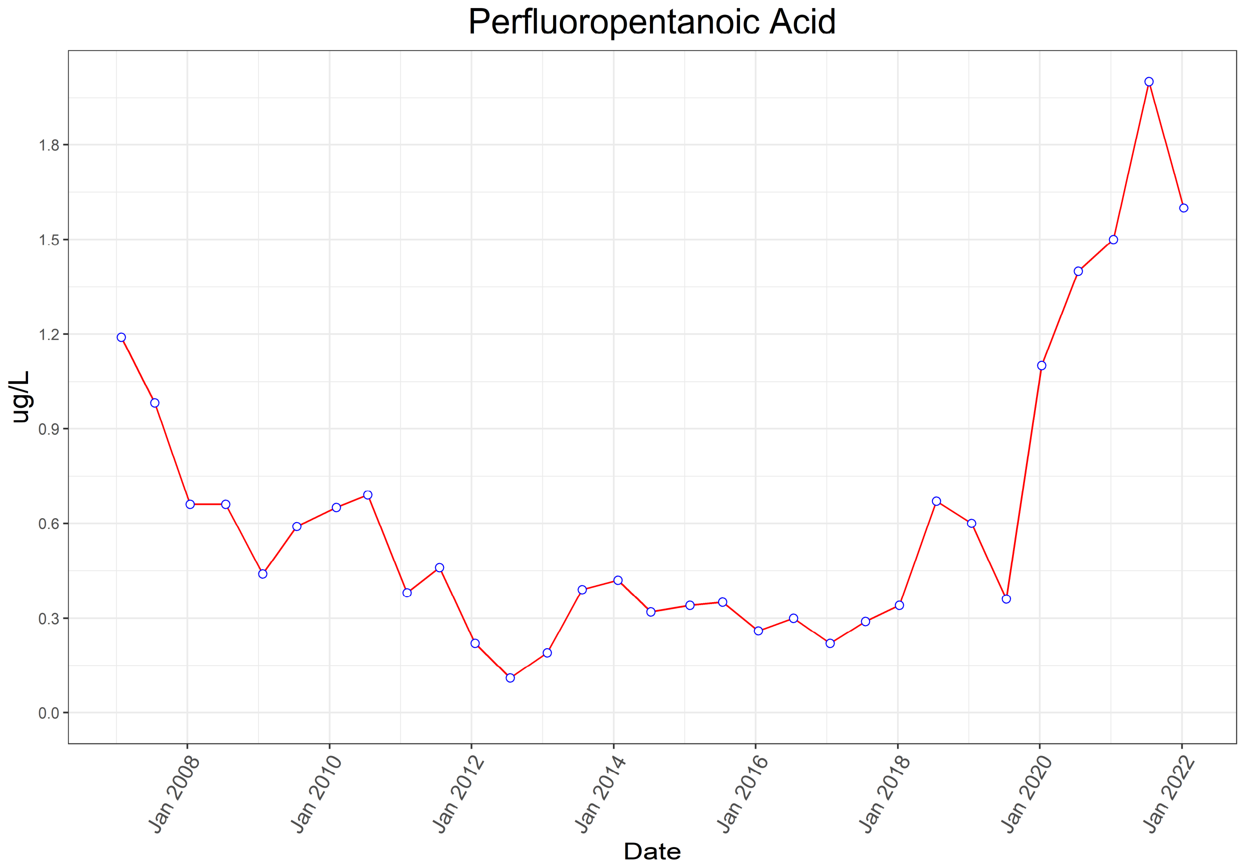

Perfluoroheptanoic Acid
ug/L
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexane Sulfonic Acid


Perfluorohexanoic Acid

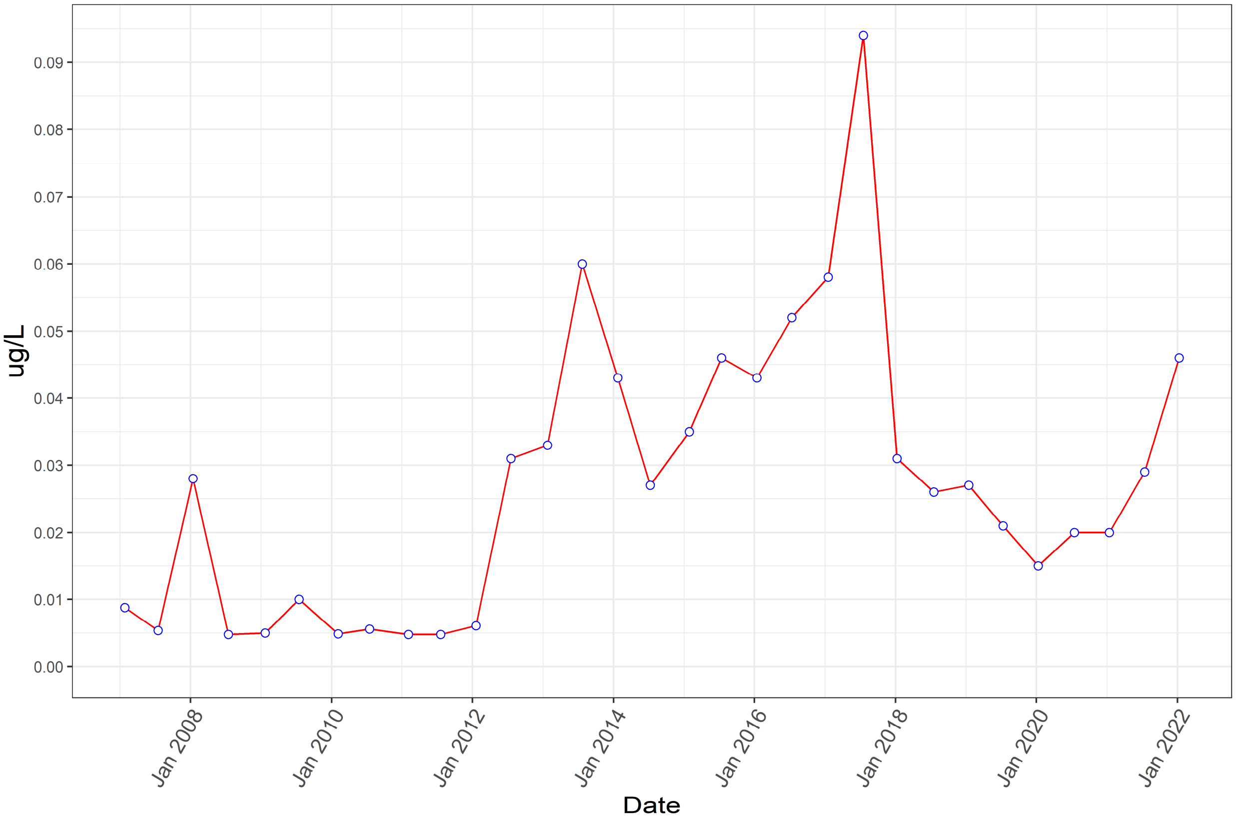


Perfluorononanoic Acid

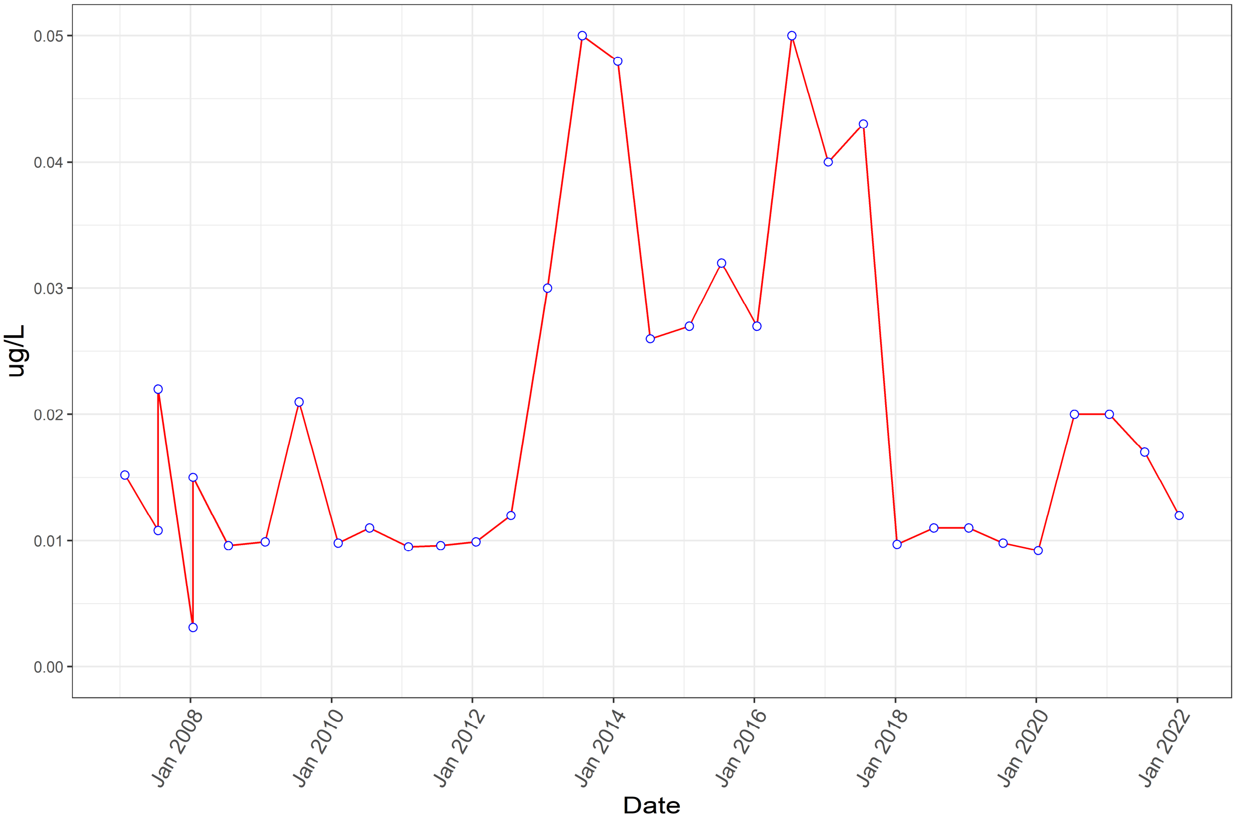


Perfluoropentanoic Acid

Perfluoroundecanoic Acid

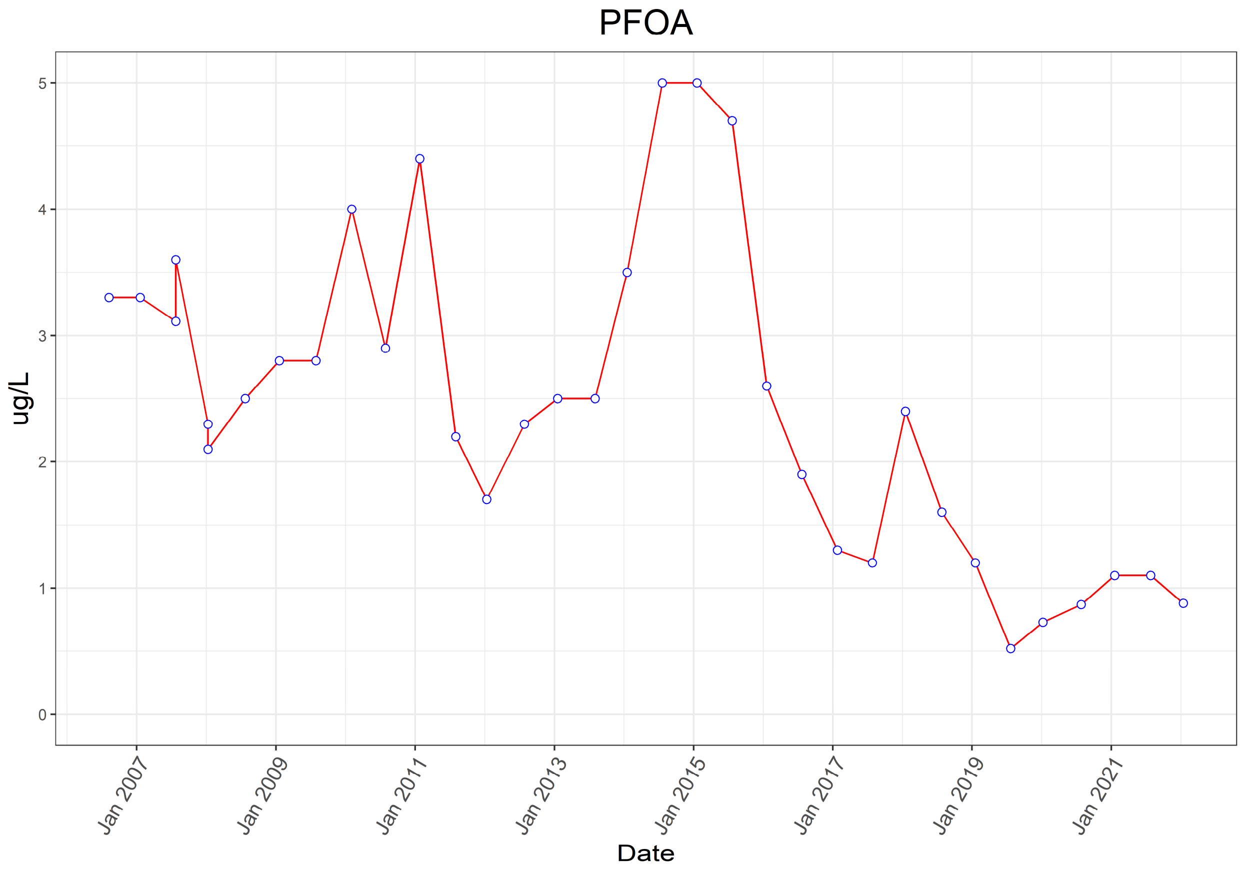


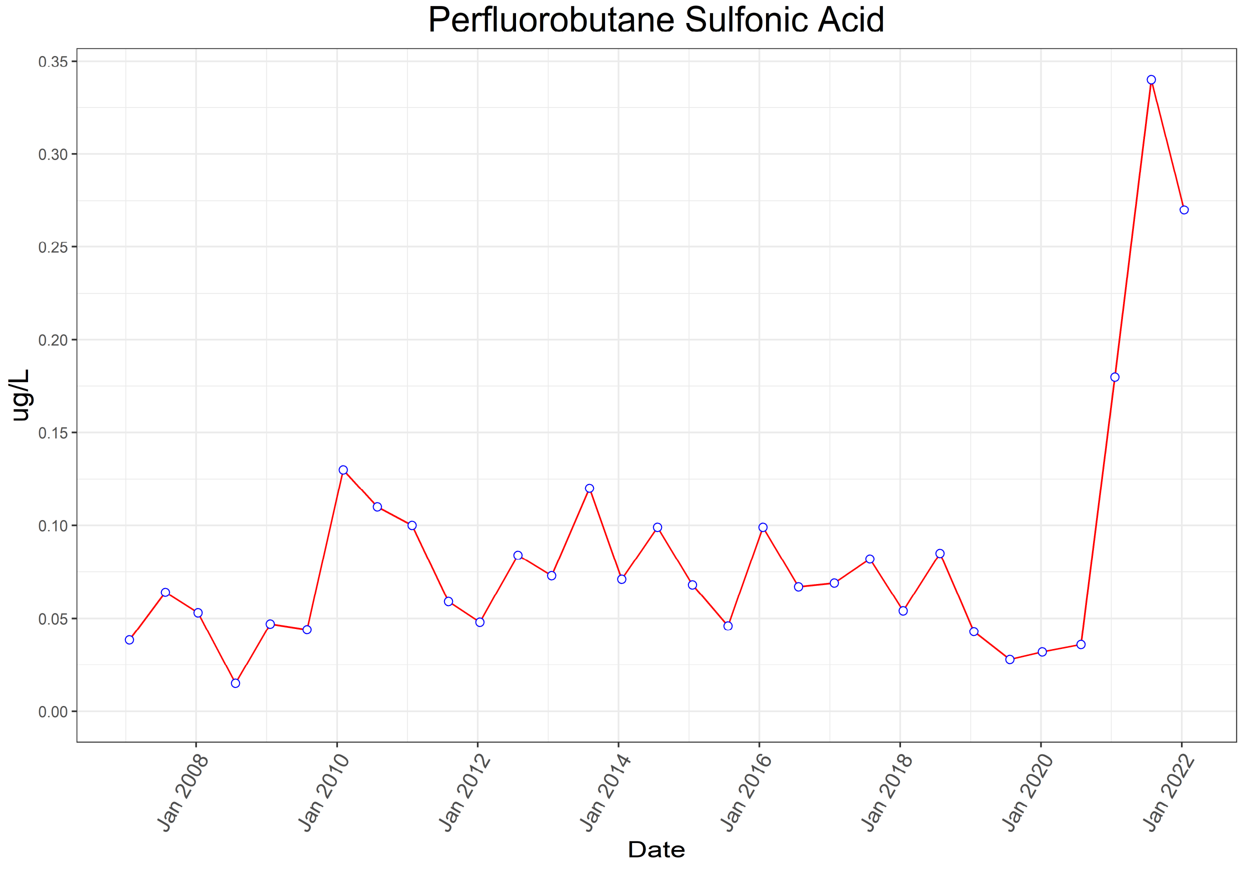
PFOS

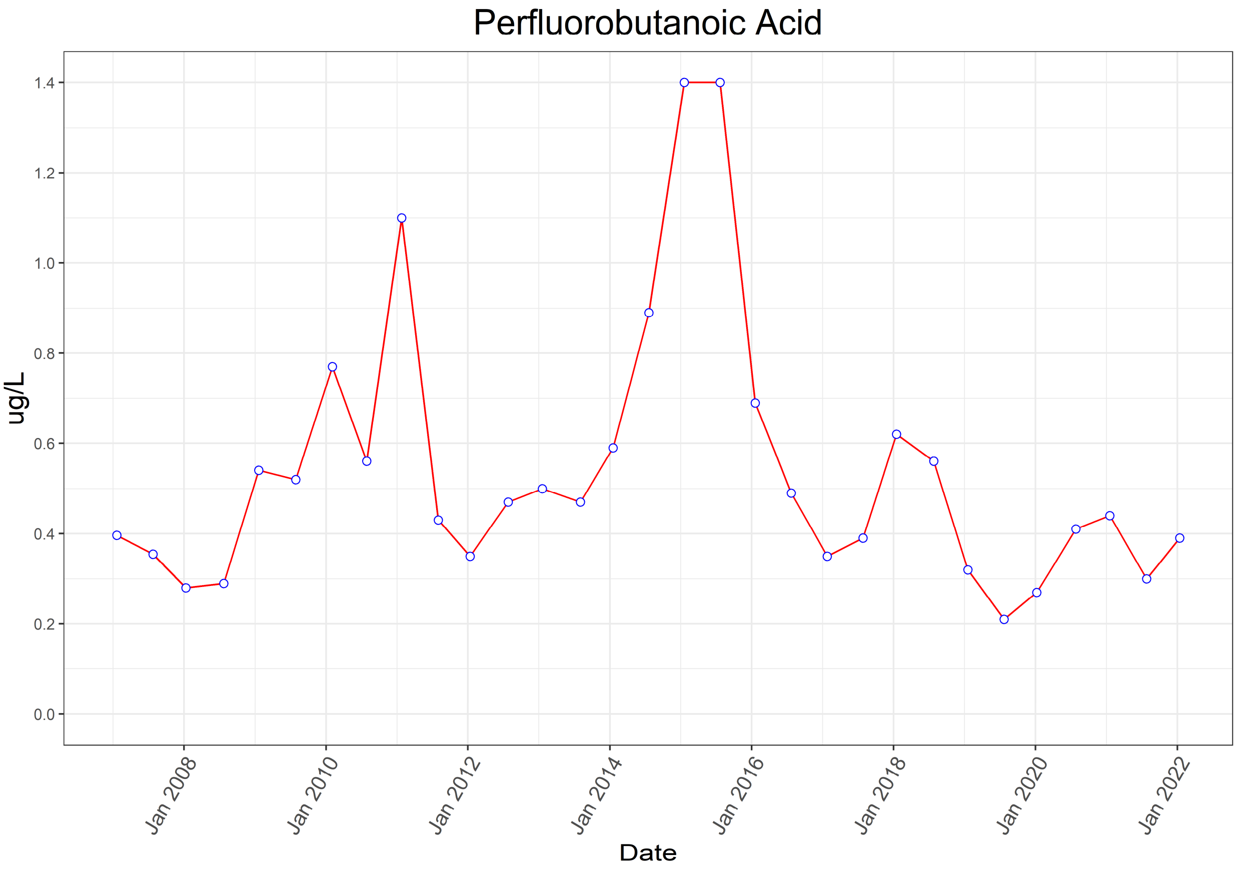


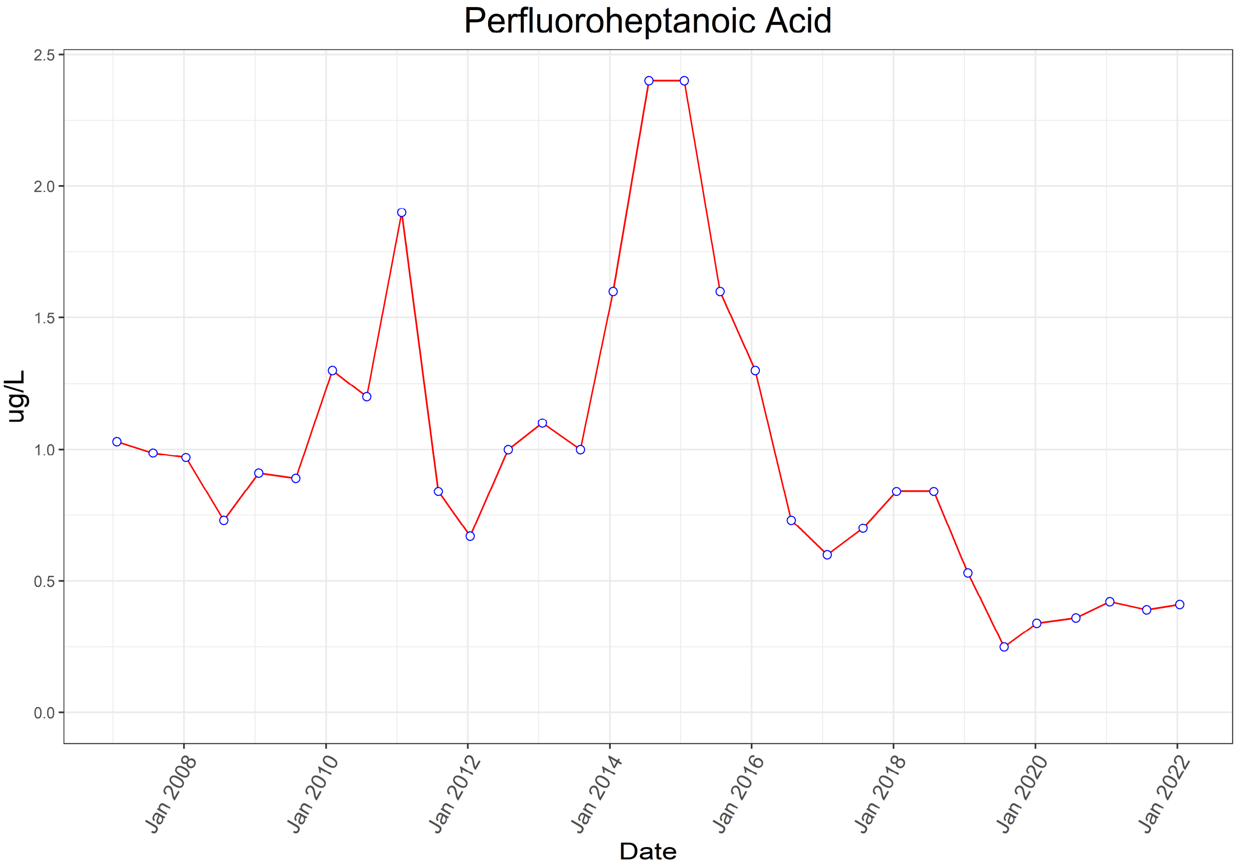
PFAS Monitoring Program (Program 9)

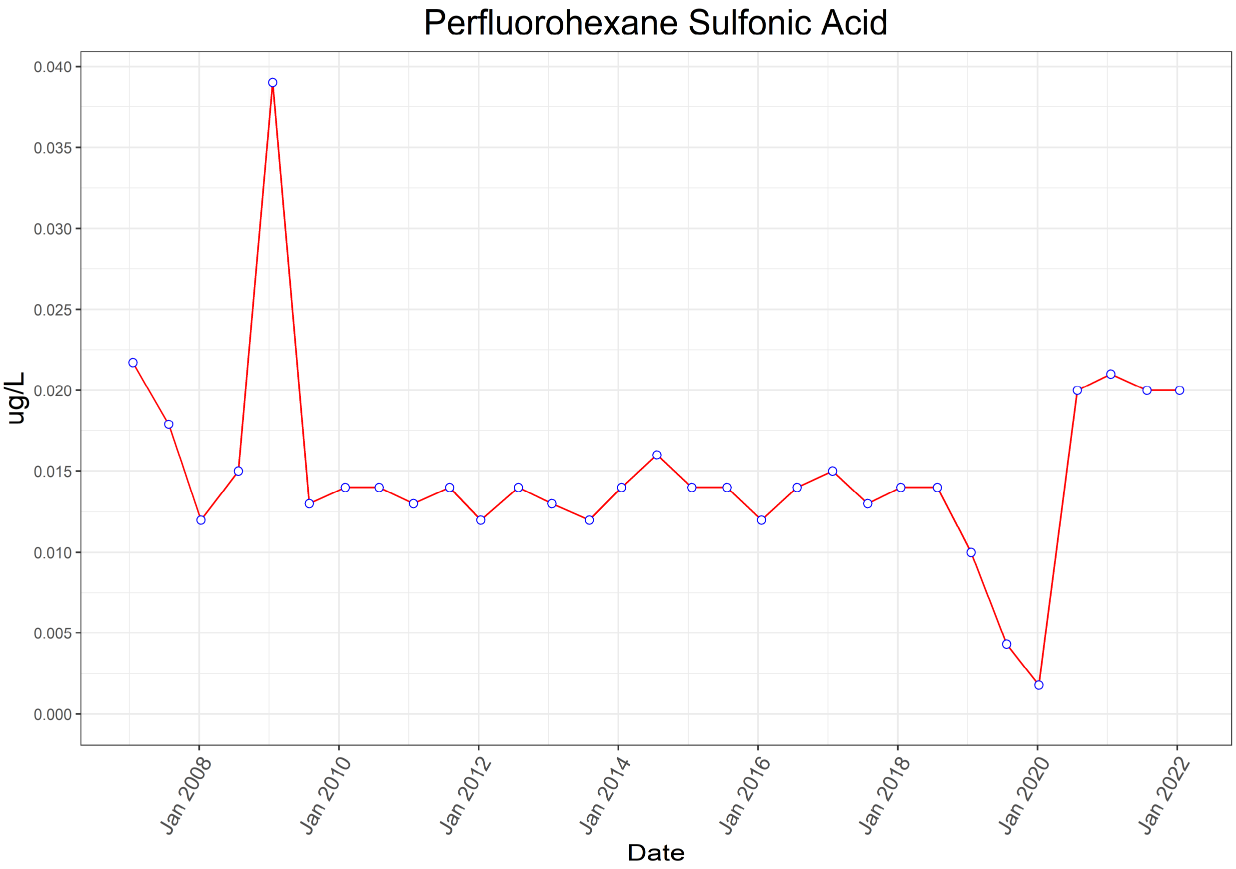
Well Name: F07-M01B

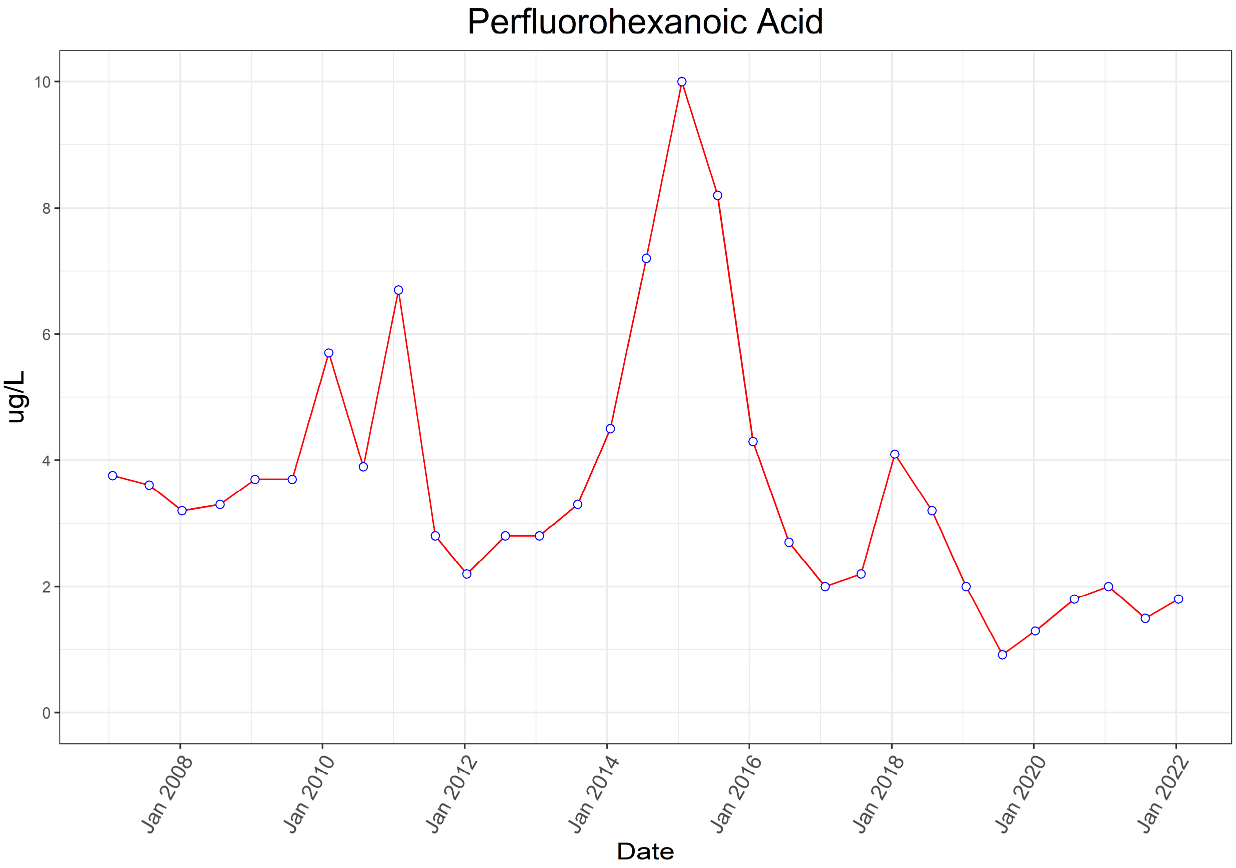




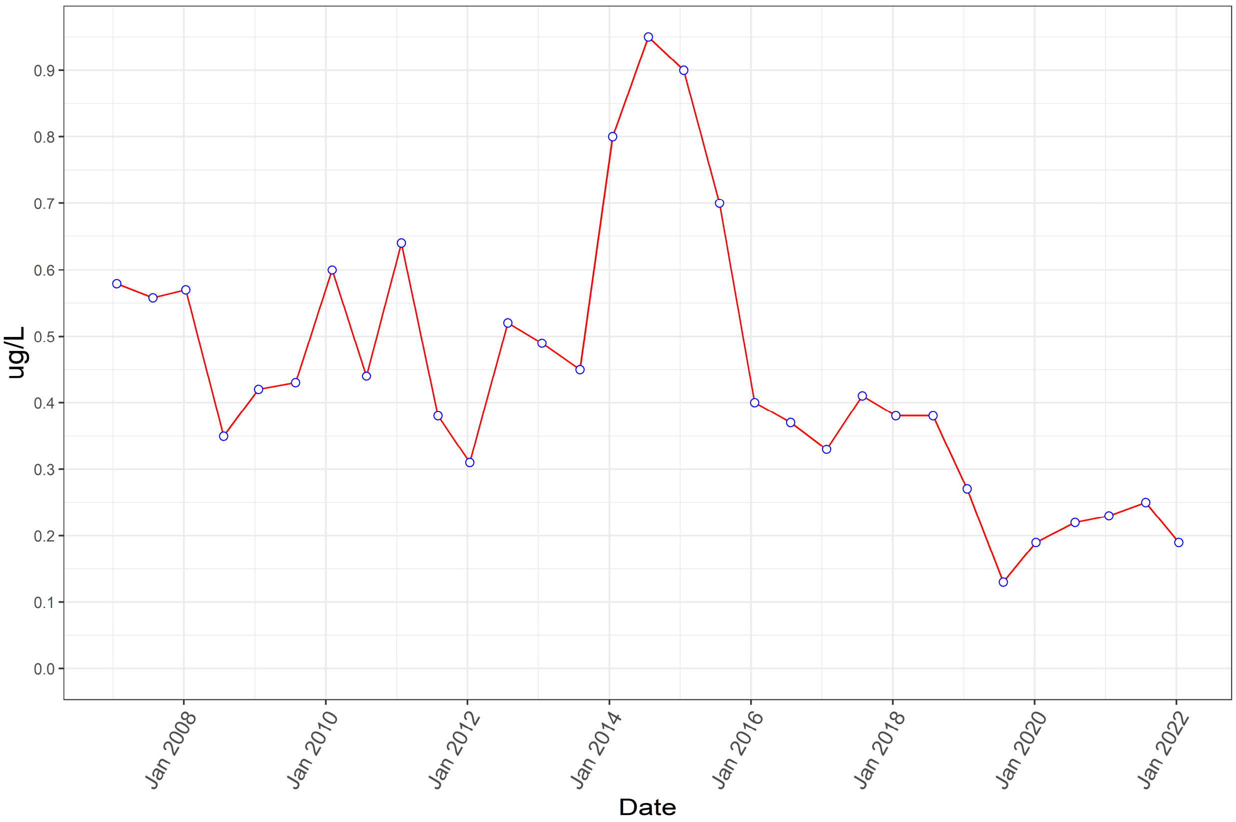

Perfluorobutanoic Acid
ug/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoroheptanoic Acid
ug/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

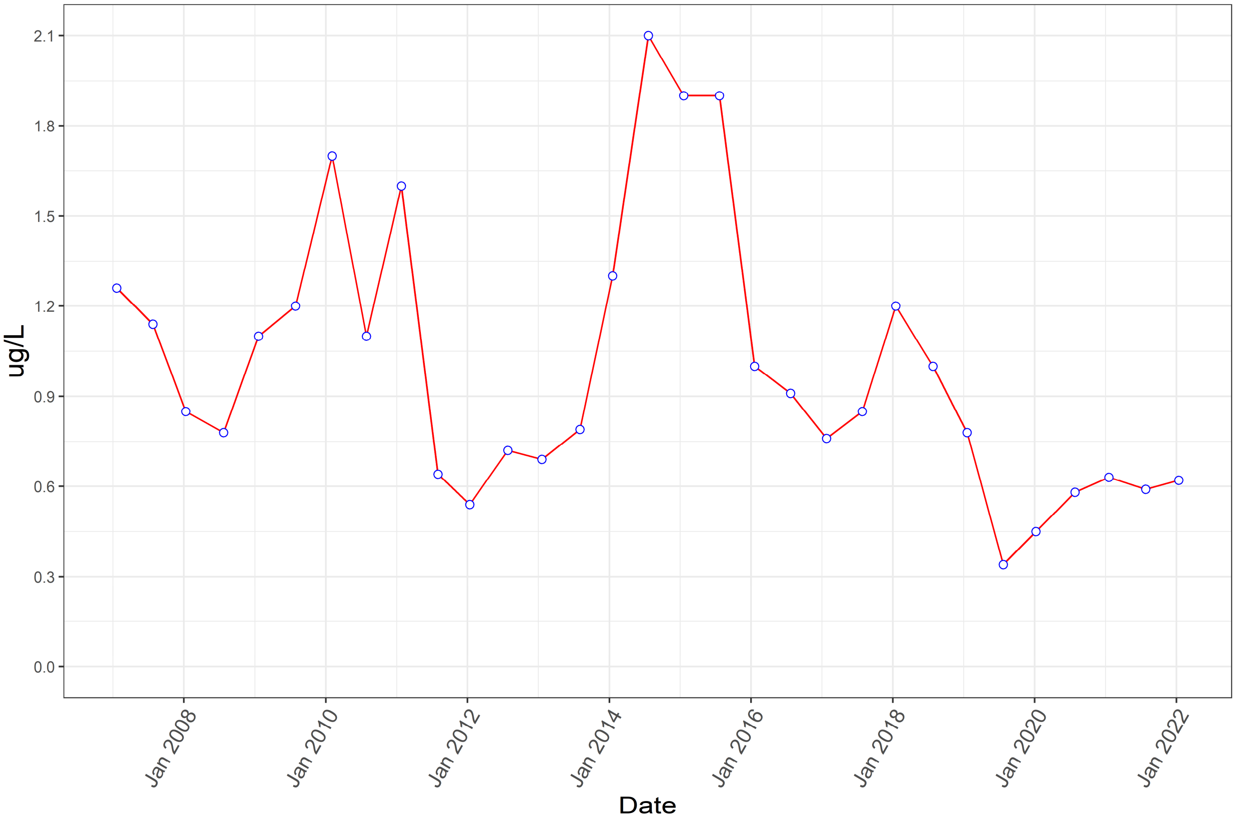

Perfluorohexane Sulfonic Acid
ug/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexanoic Acid
ug/L
10
8
6
4
2
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

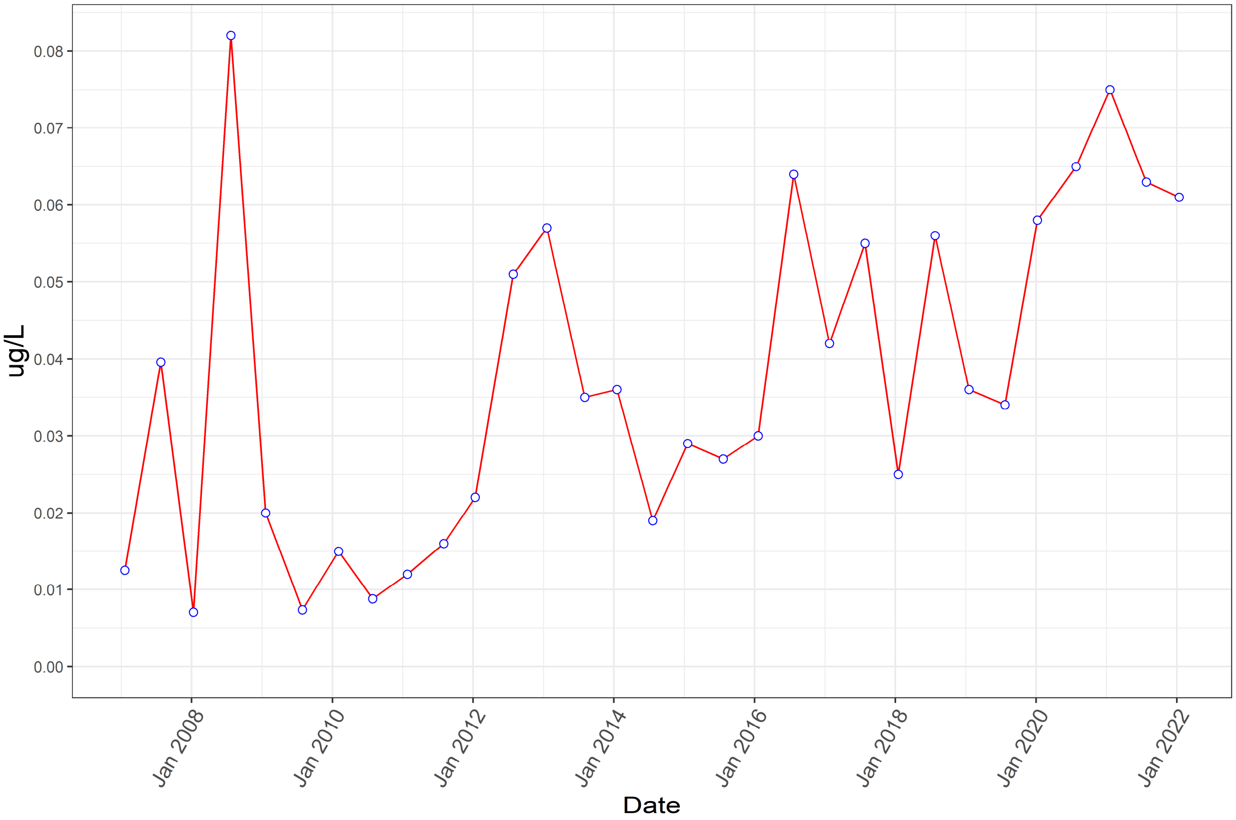
Perfluorononanoic Acid



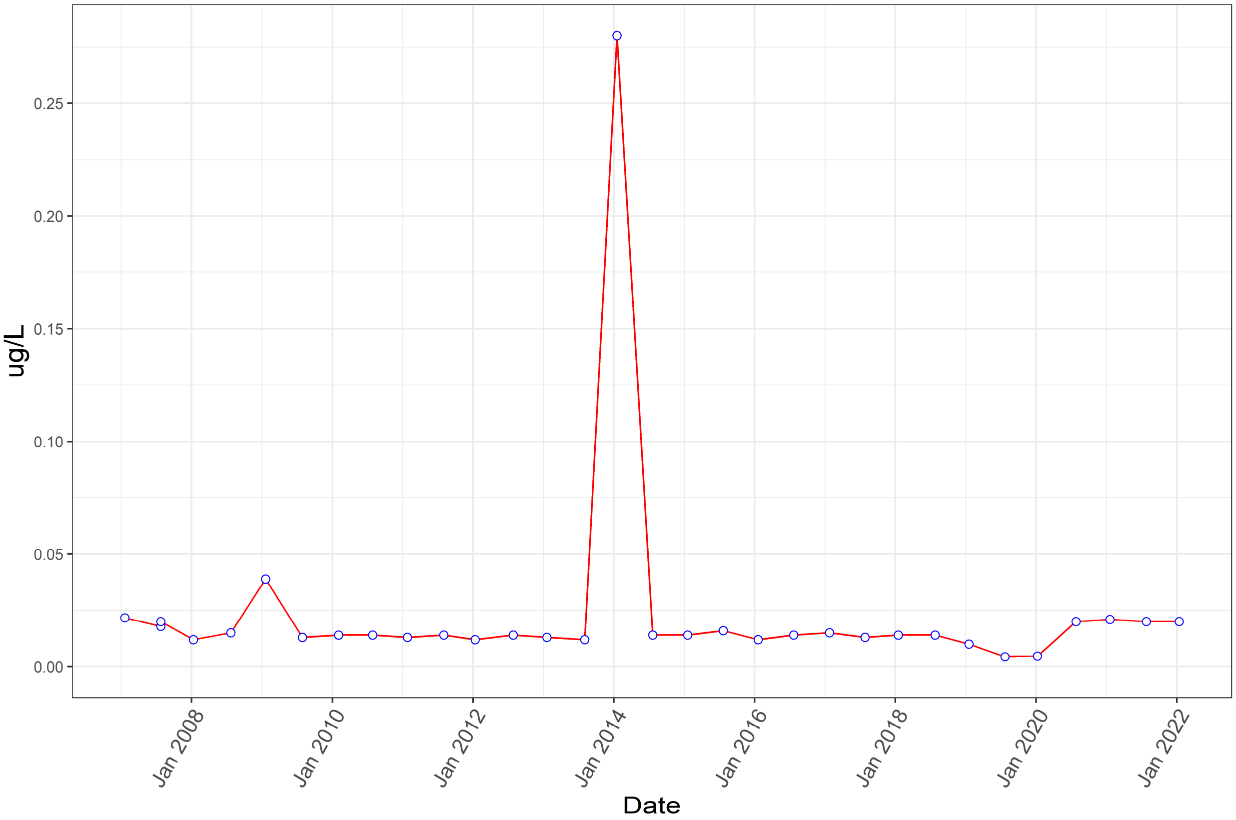
Perfluoropentanoic Acid



Perfluoroundecanoic Acid

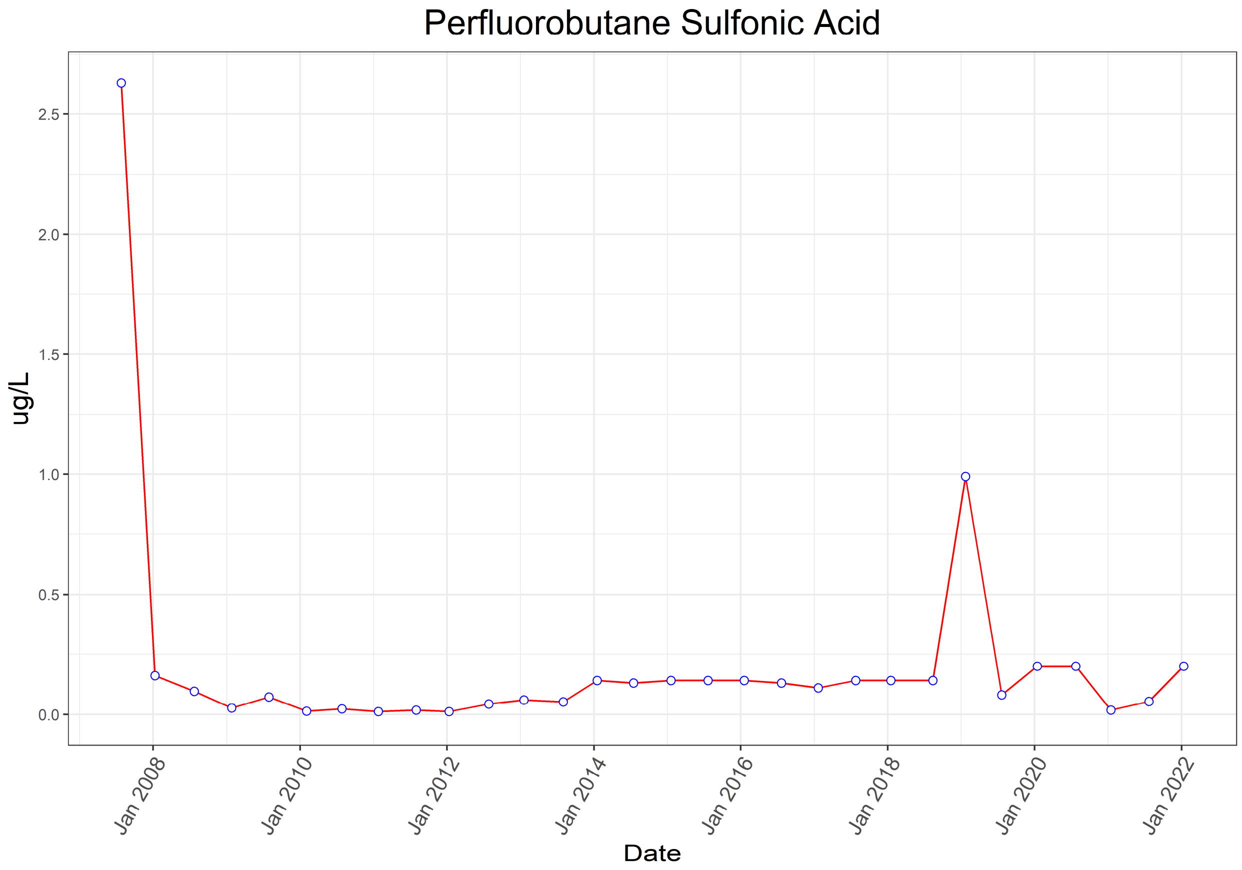


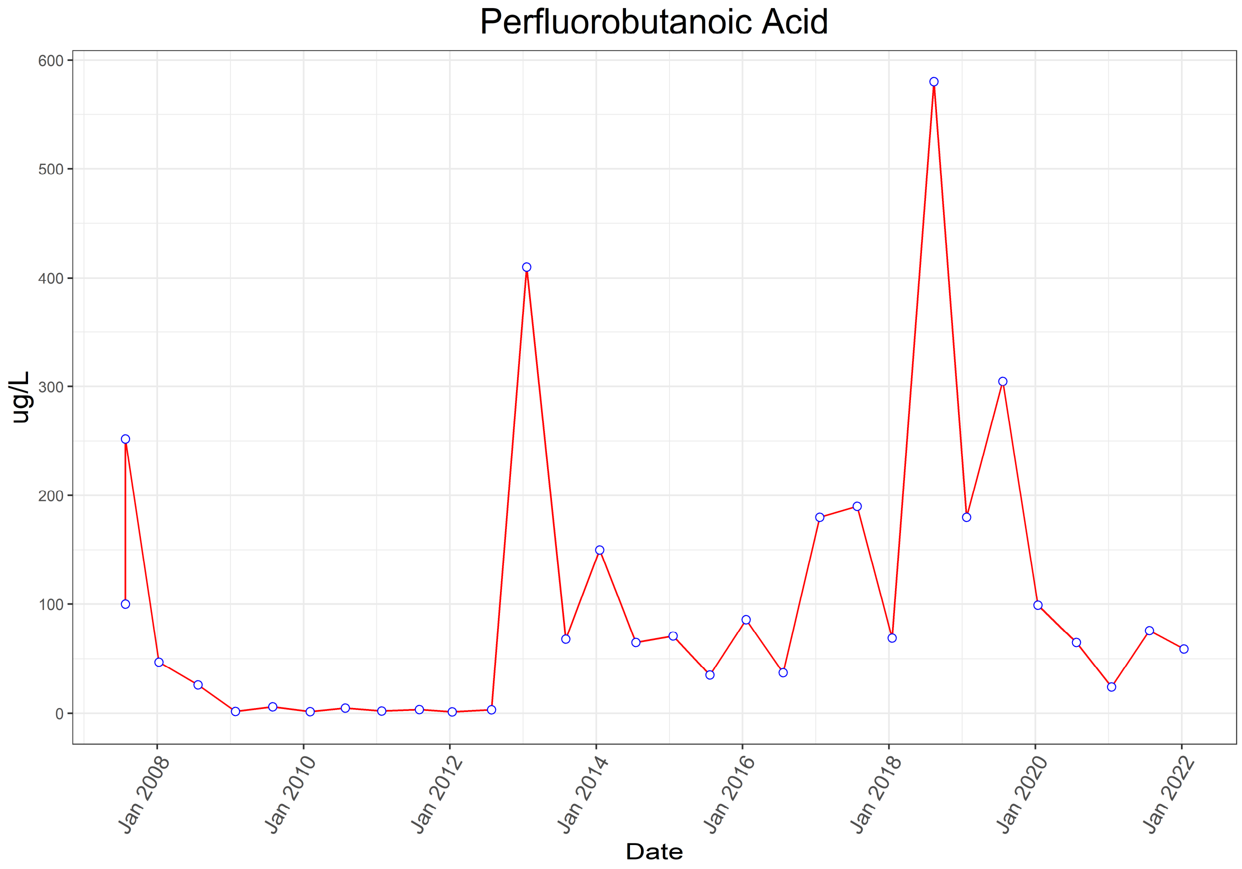
PFOS



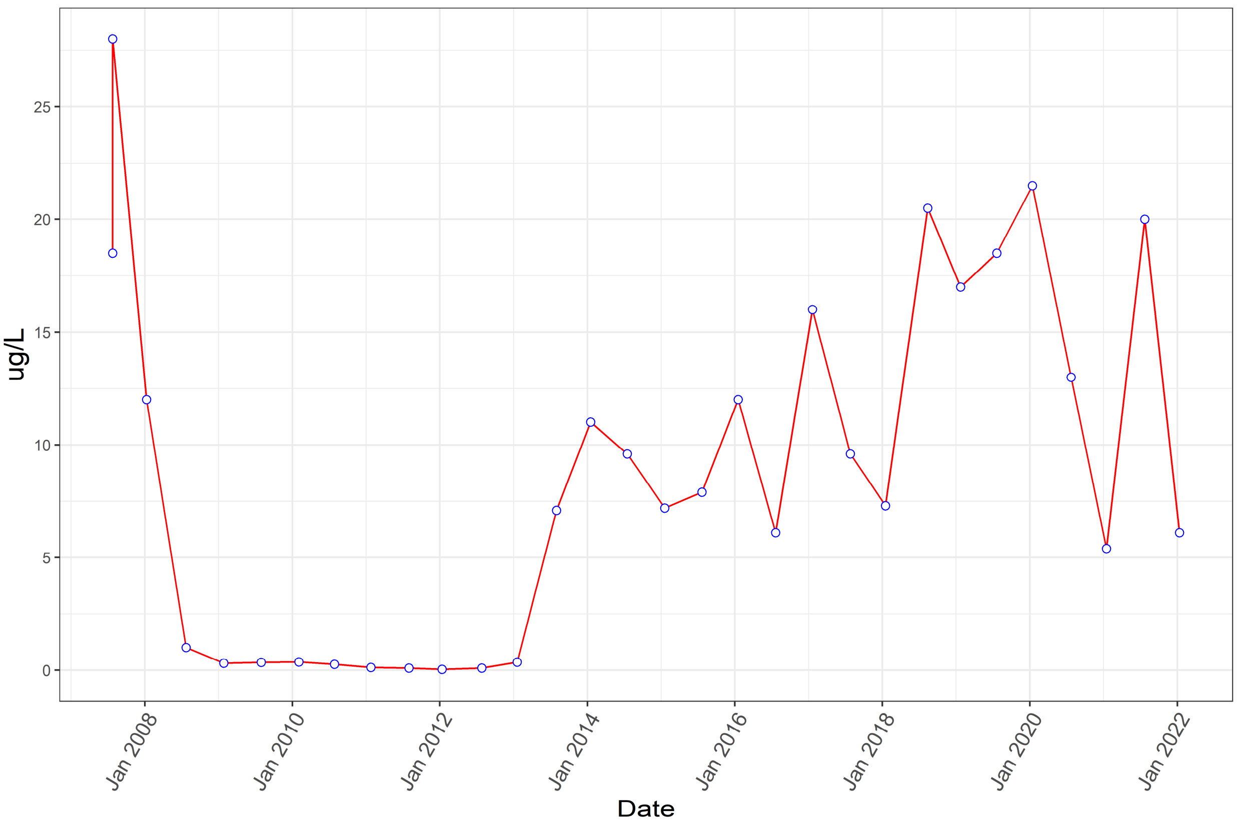
PFAS Monitoring Program (Program 9)

Well Name: F08-M01A

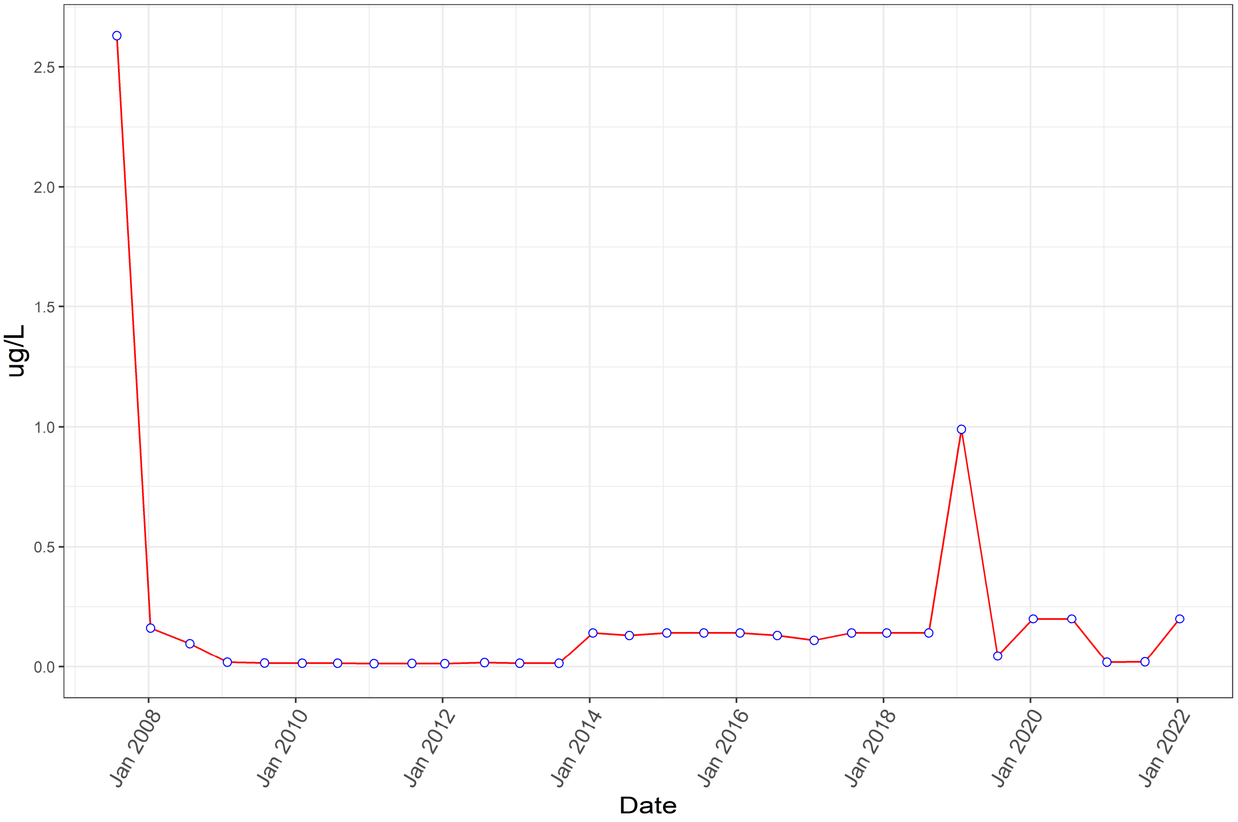


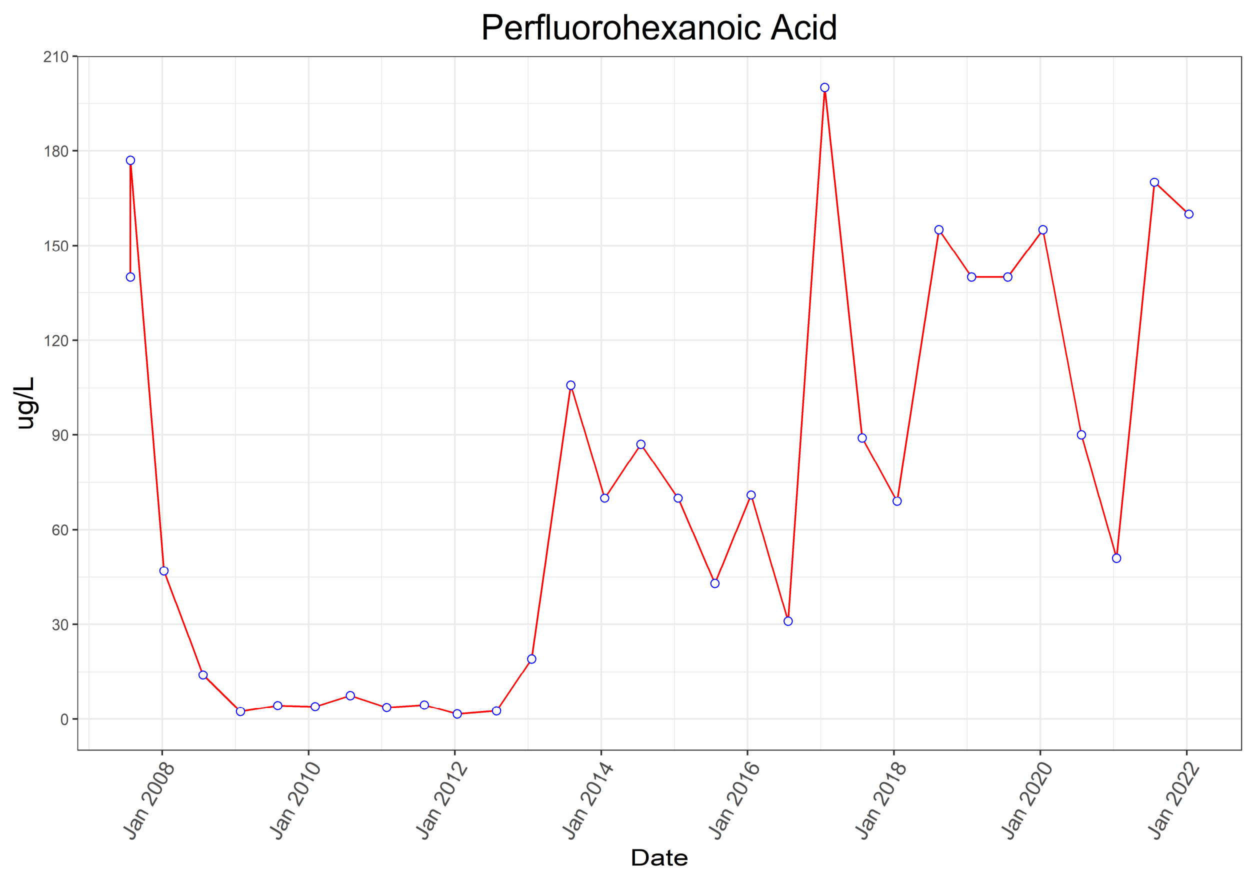


Perfluoroheptanoic Acid

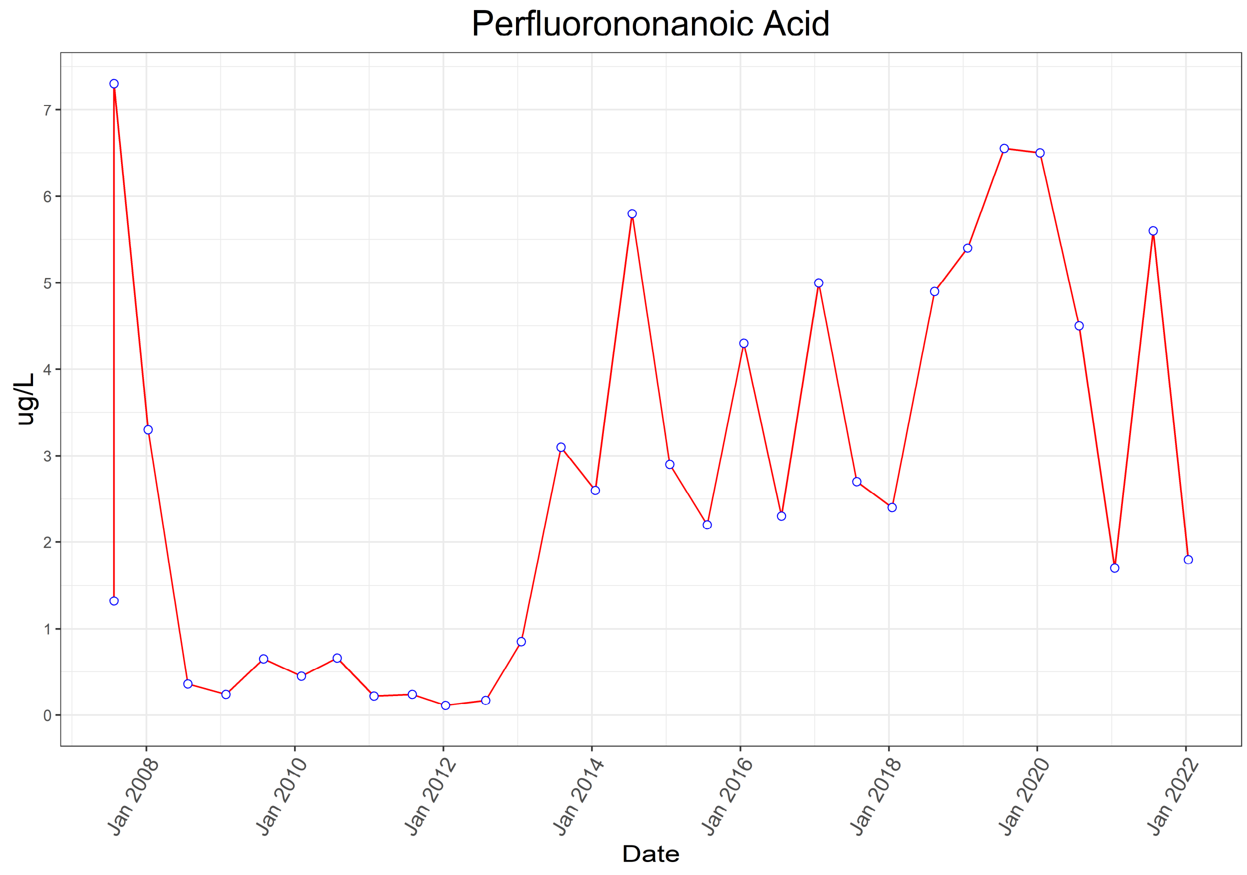


Perfluorohexane Sulfonic Acid



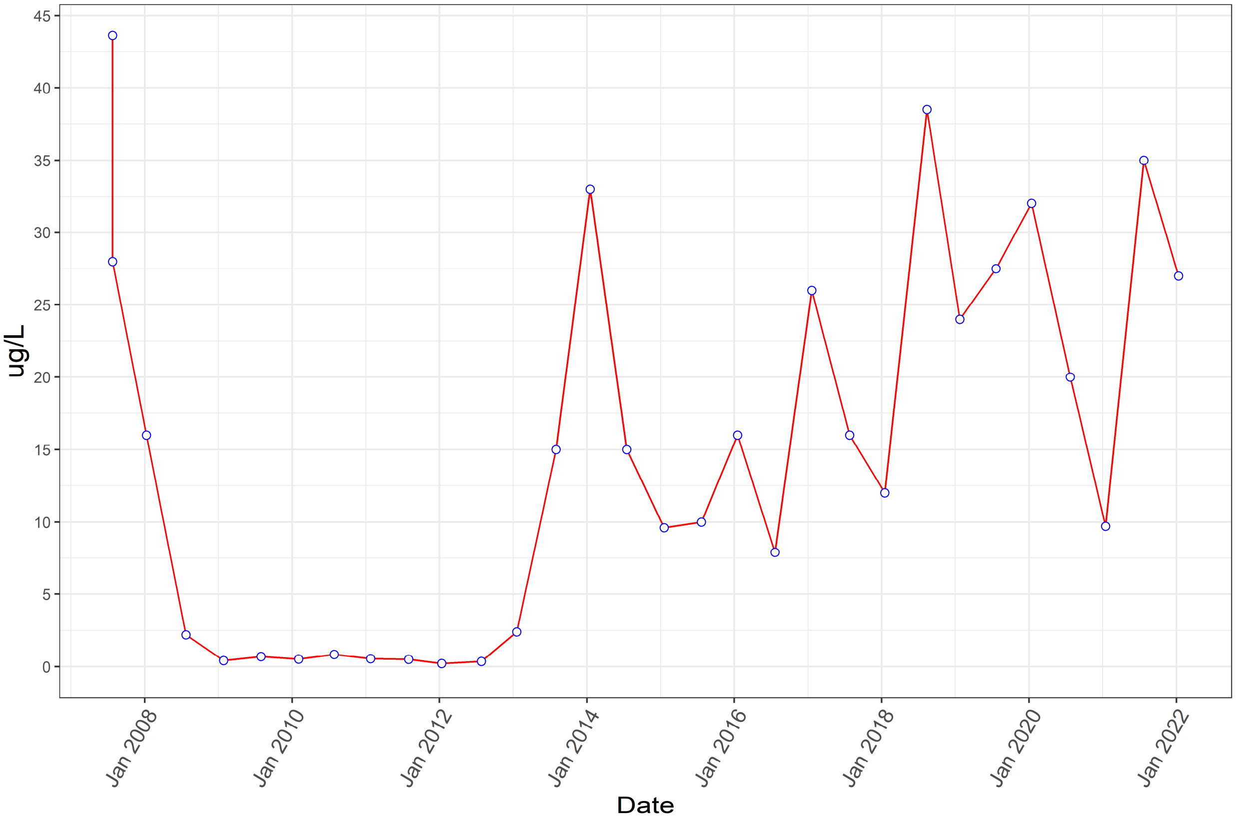


Perfluorohexanoic Acid

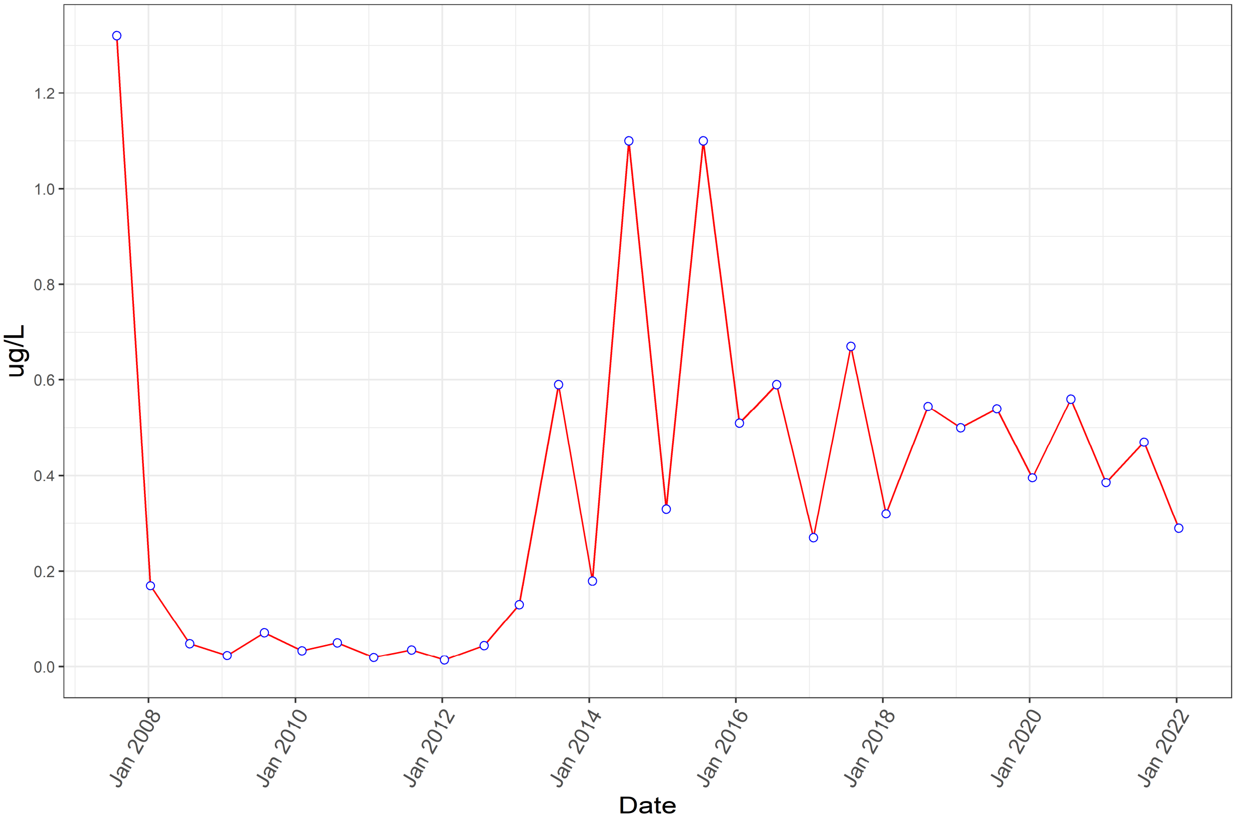


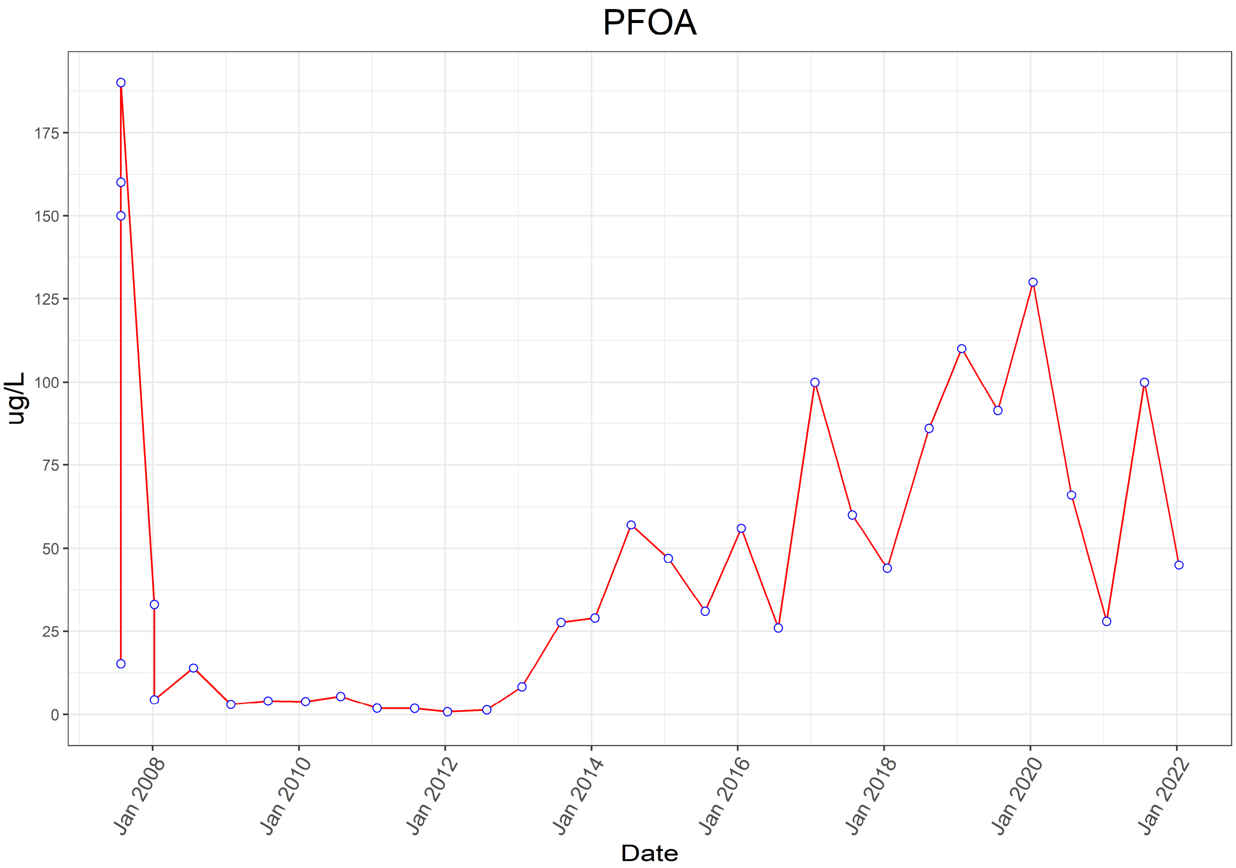
Perfluorononanoic Acid

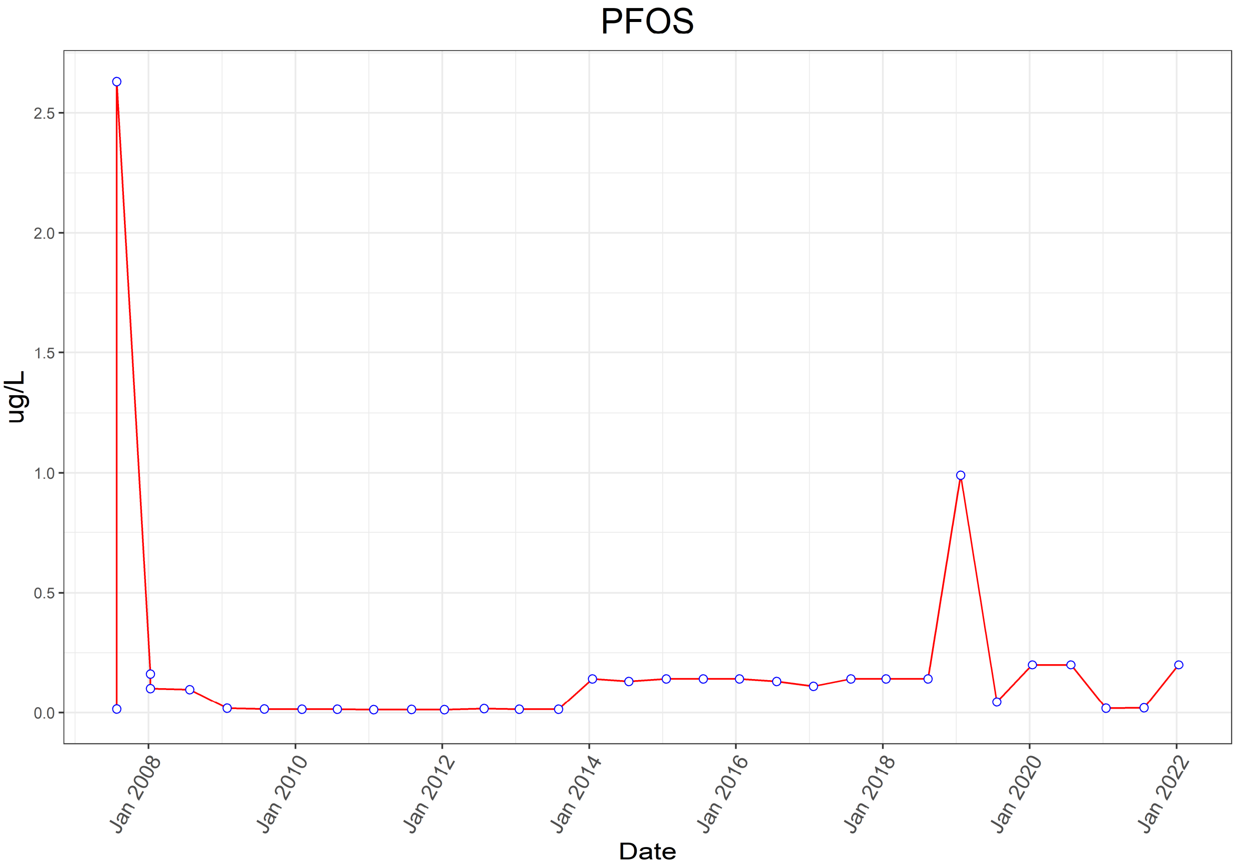
Perfluoropentanoic Acid

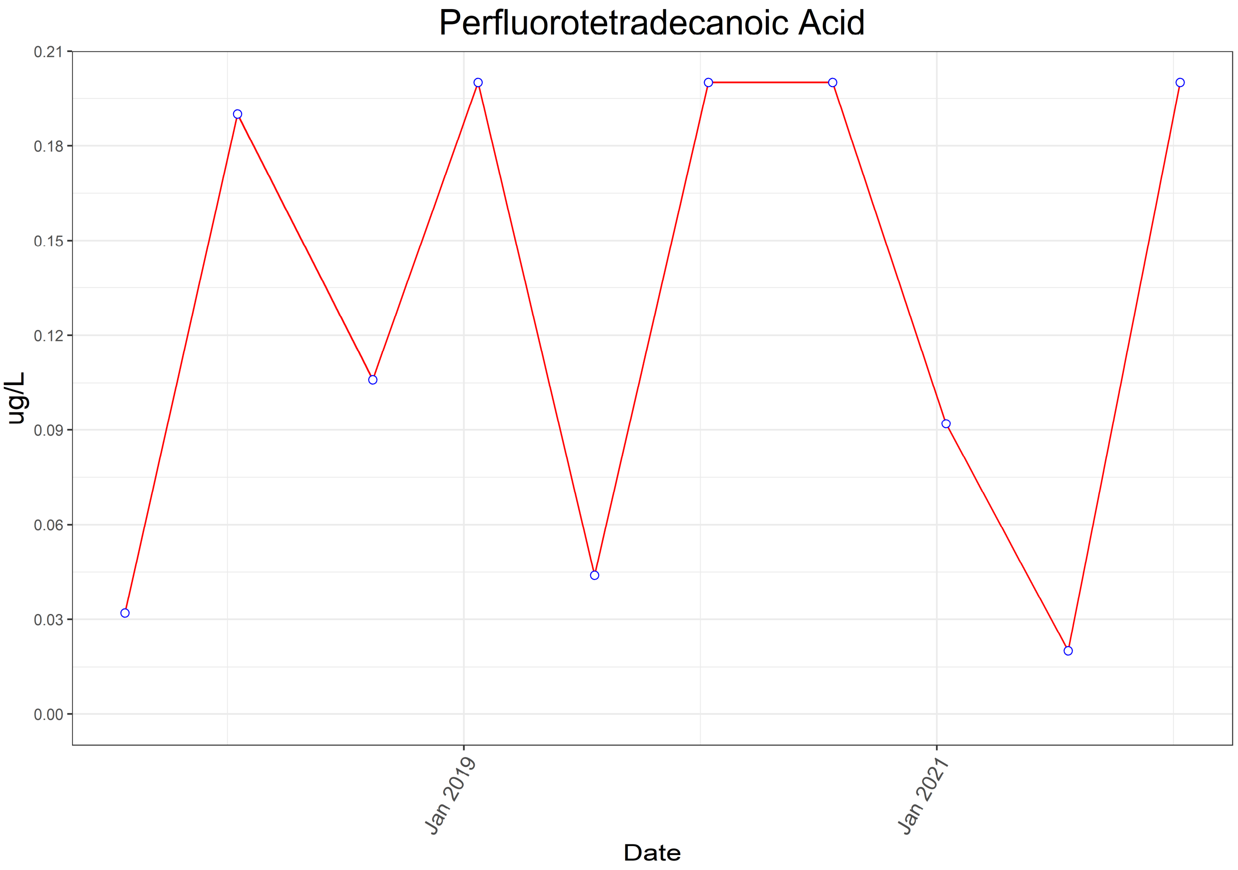


Perfluoroundecanoic Acid



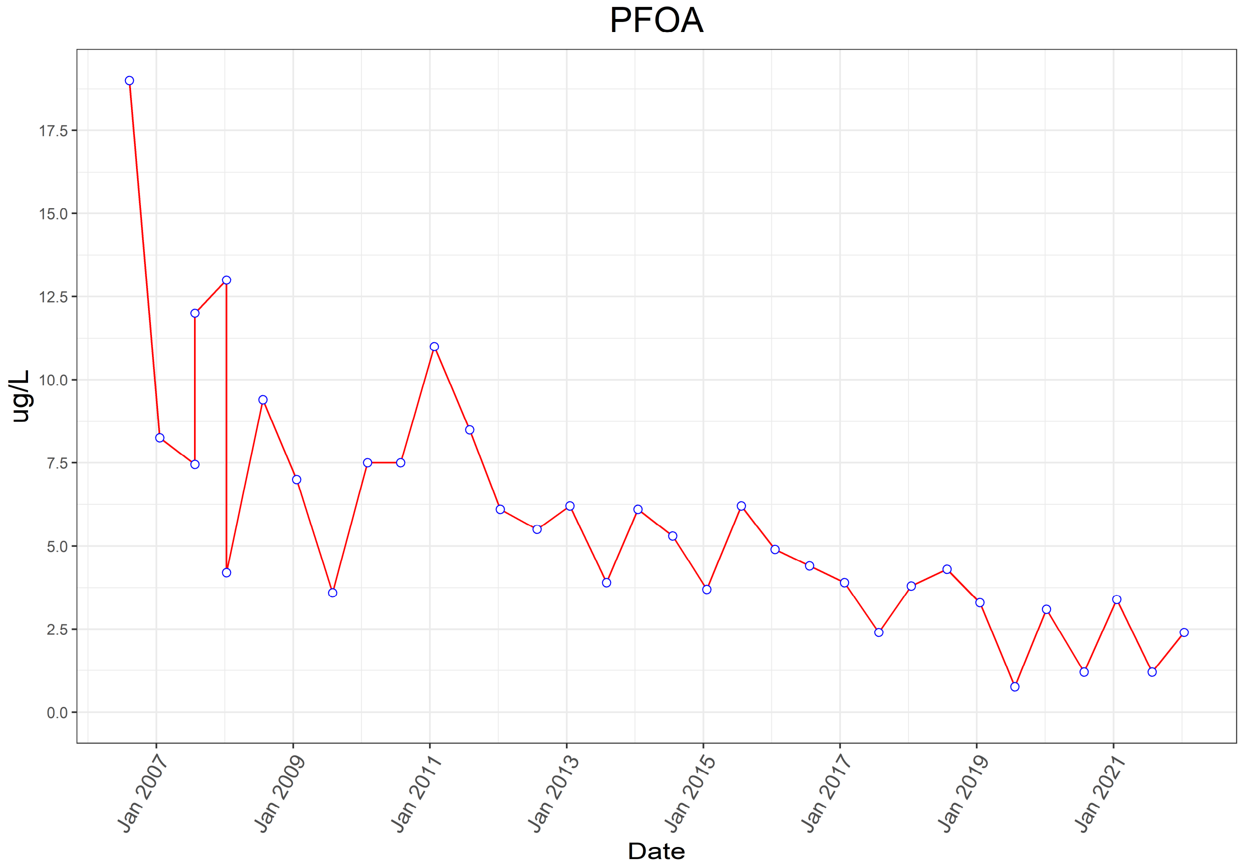

PFOA
ug/L
175
150
125
100
75
50
25
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

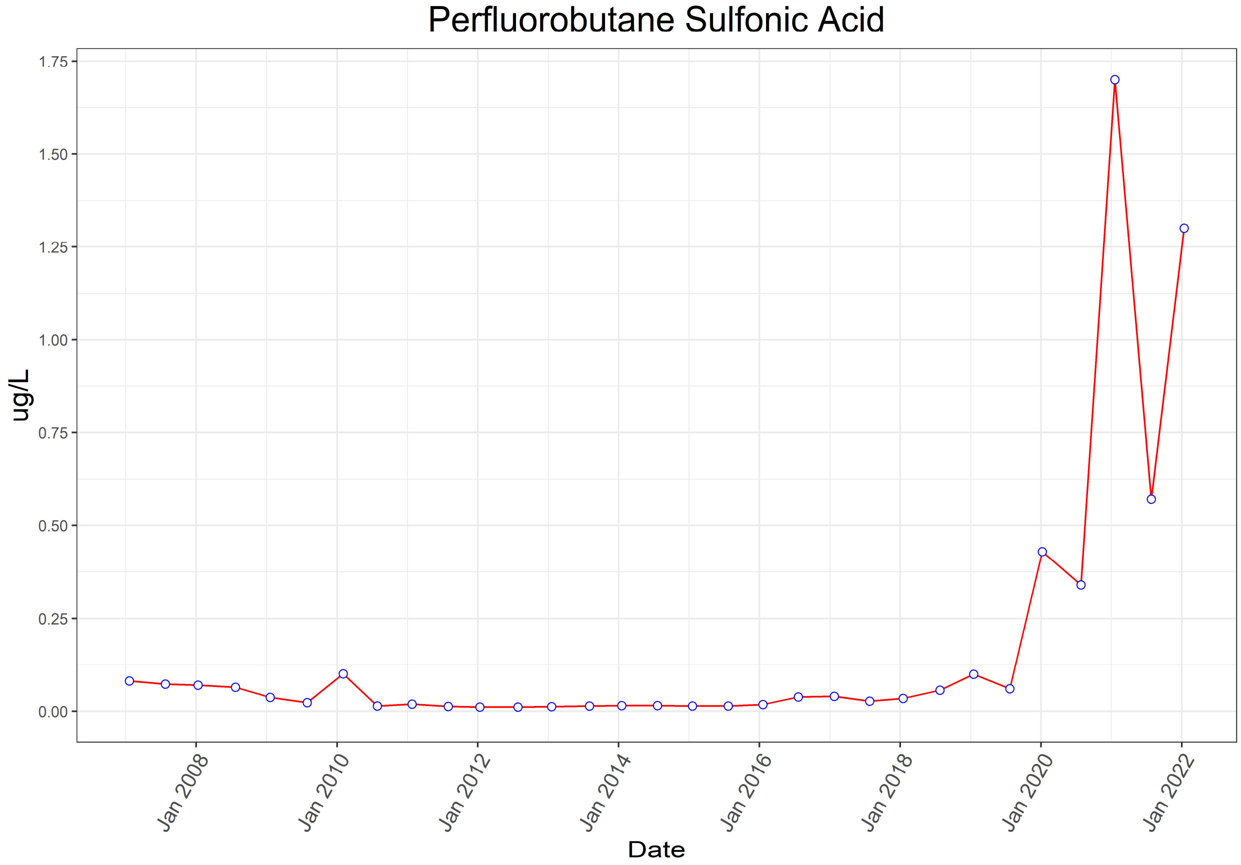

PFOS
ug/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

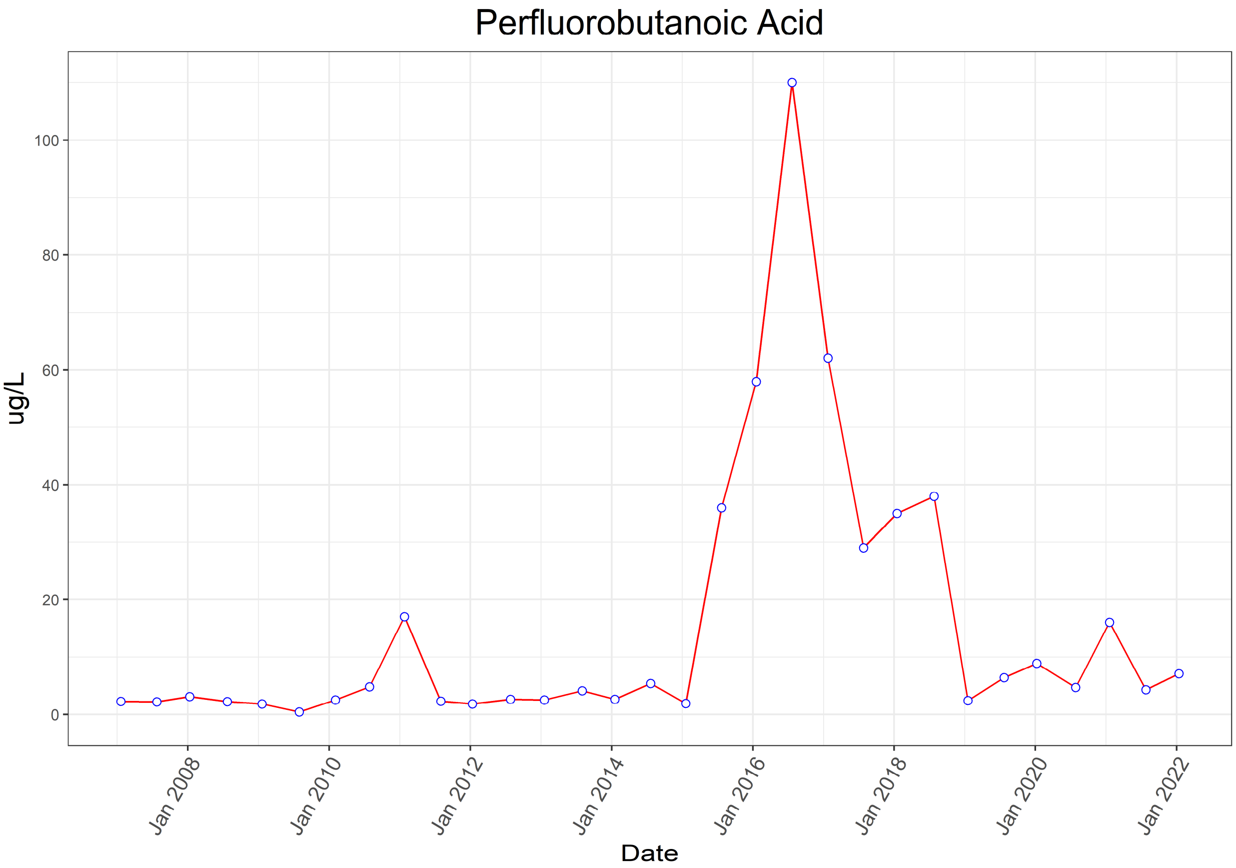

Perfluorotetradecanoic Acid
0.21
0.18
0.15
0.12
0.09
0.06
0.03
0.00
ug/L
Jan 2019
Jan 2021
Date

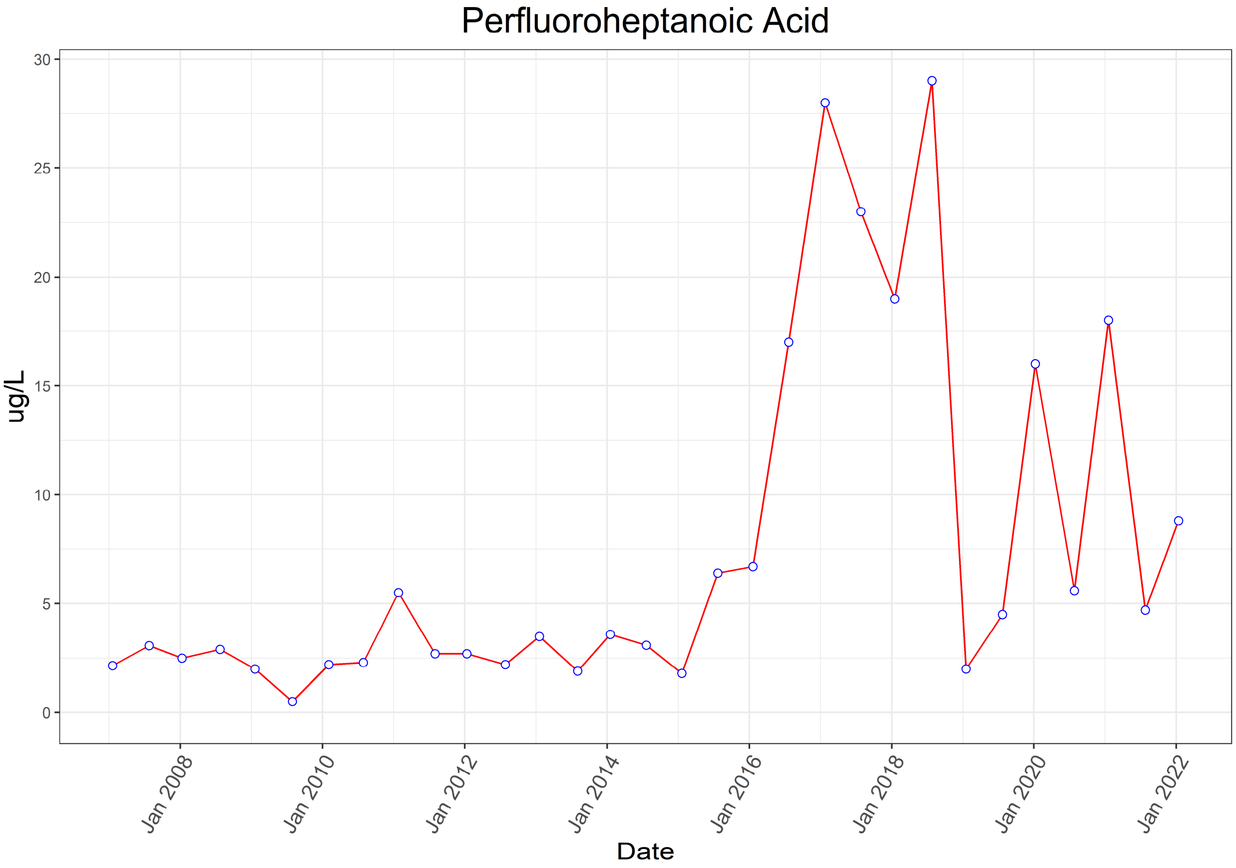
PFAS Monitoring Program (Program 9)

Well Name: F08-M01B

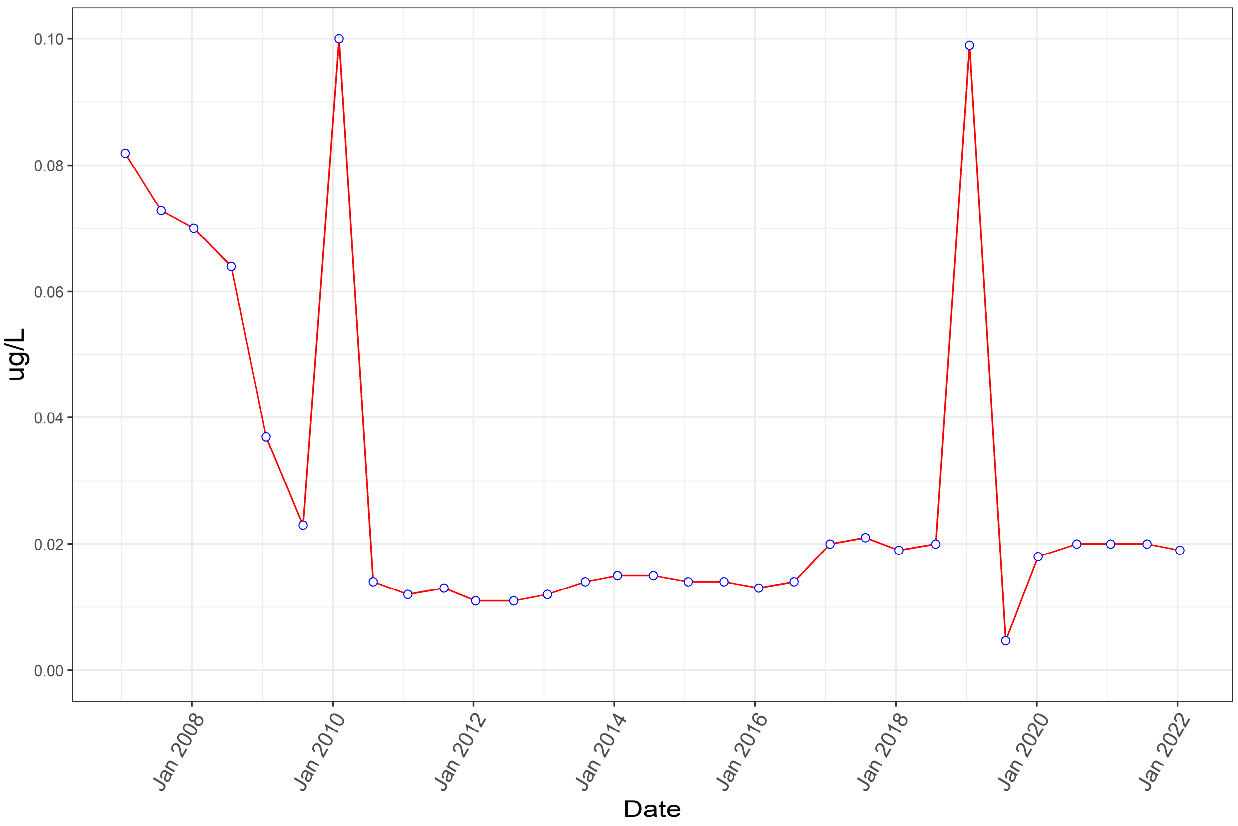




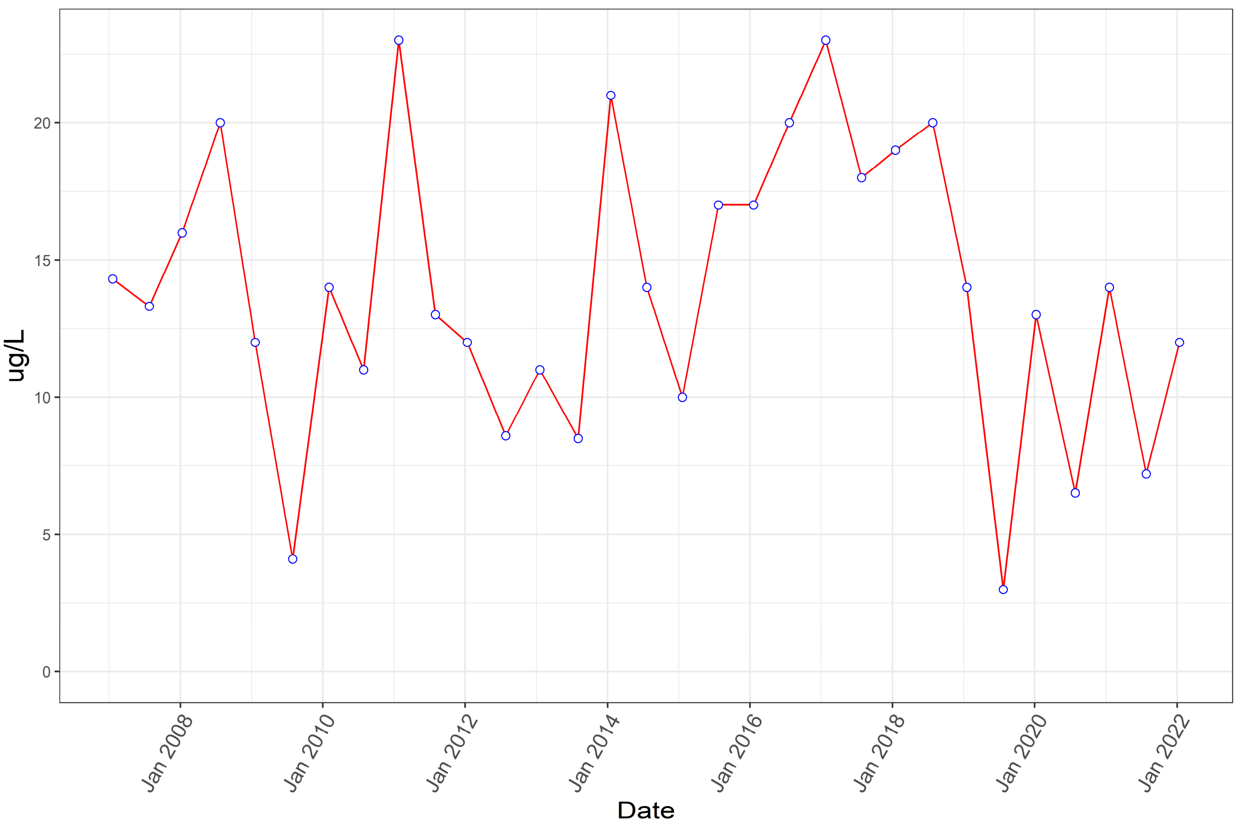

Perfluorobutanoic Acid
ug/L
0
20
40
60
80
100
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

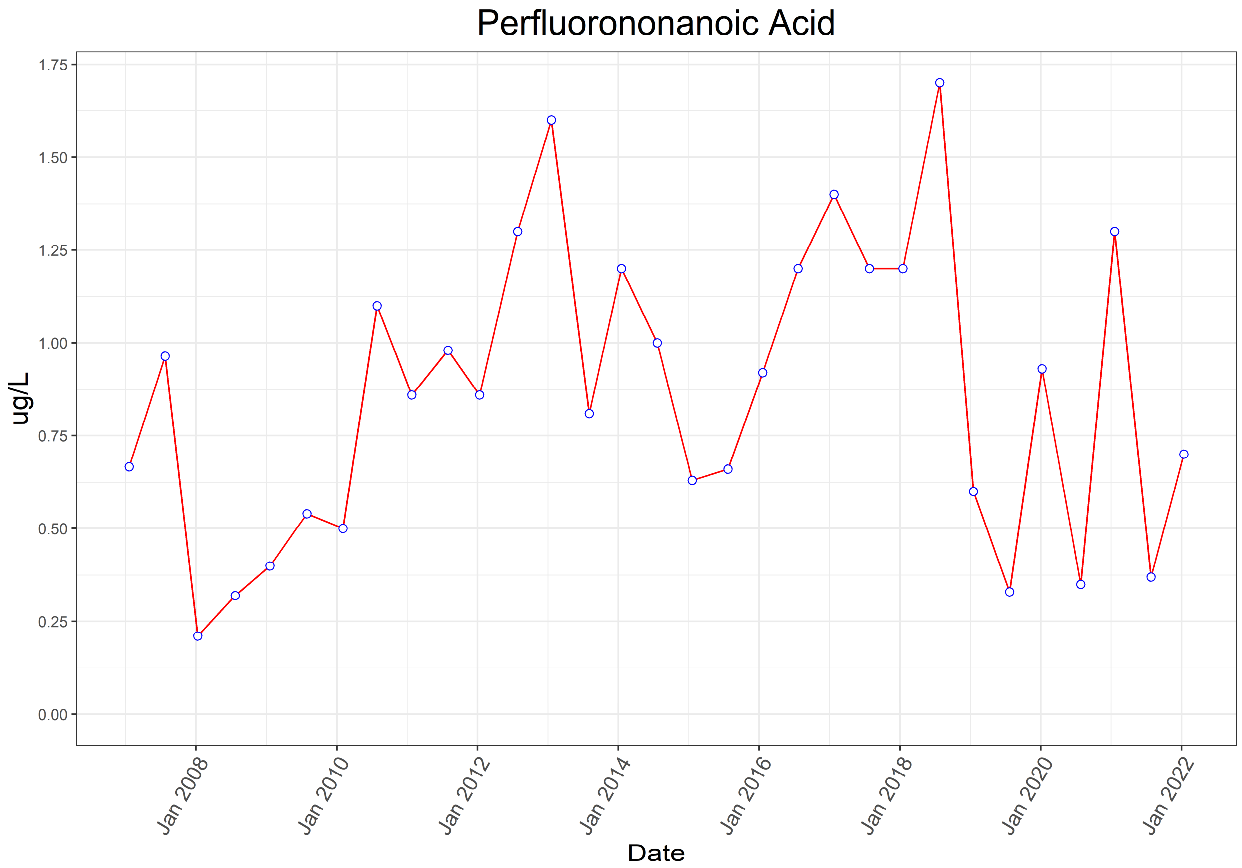

Perfluoroheptanoic Acid
ug/L
0
5
10
15
20
25
30
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

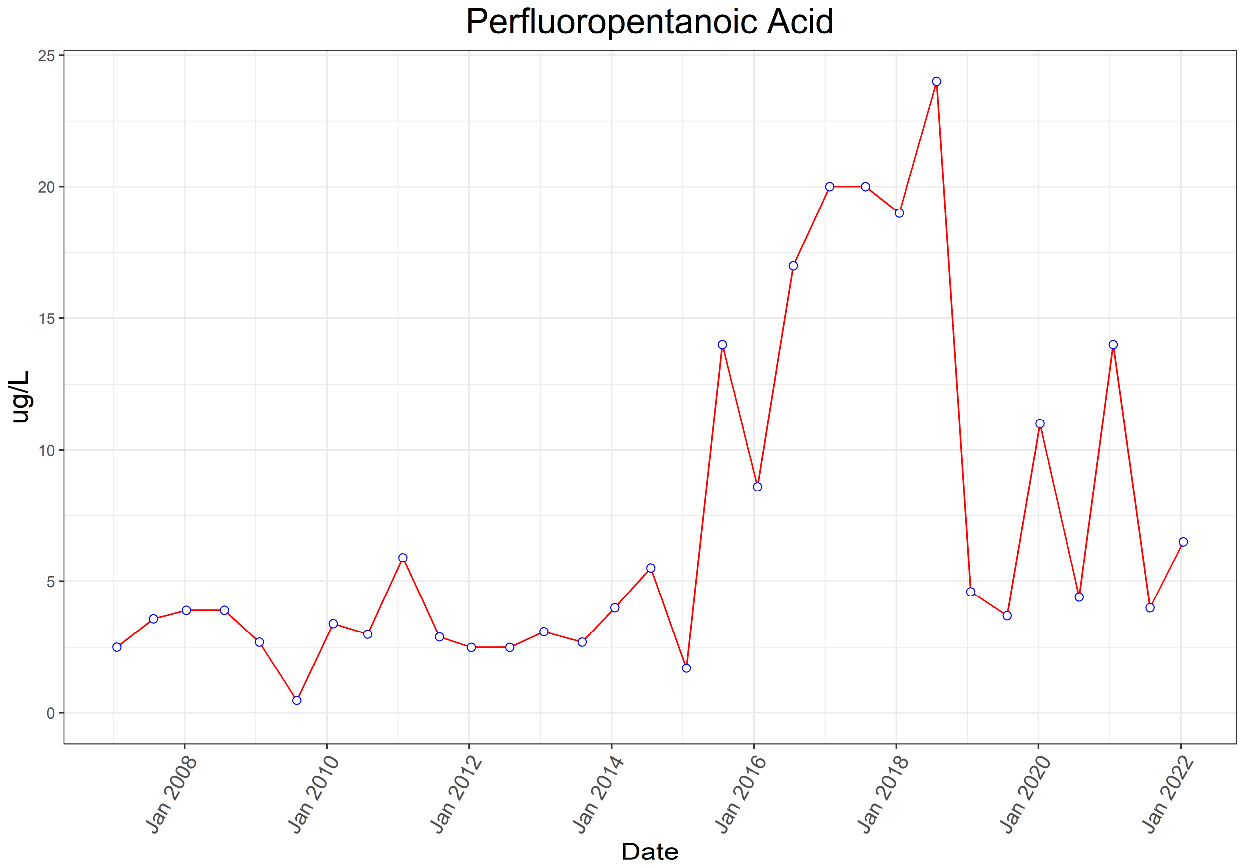
Perfluorohexane Sulfonic Acid

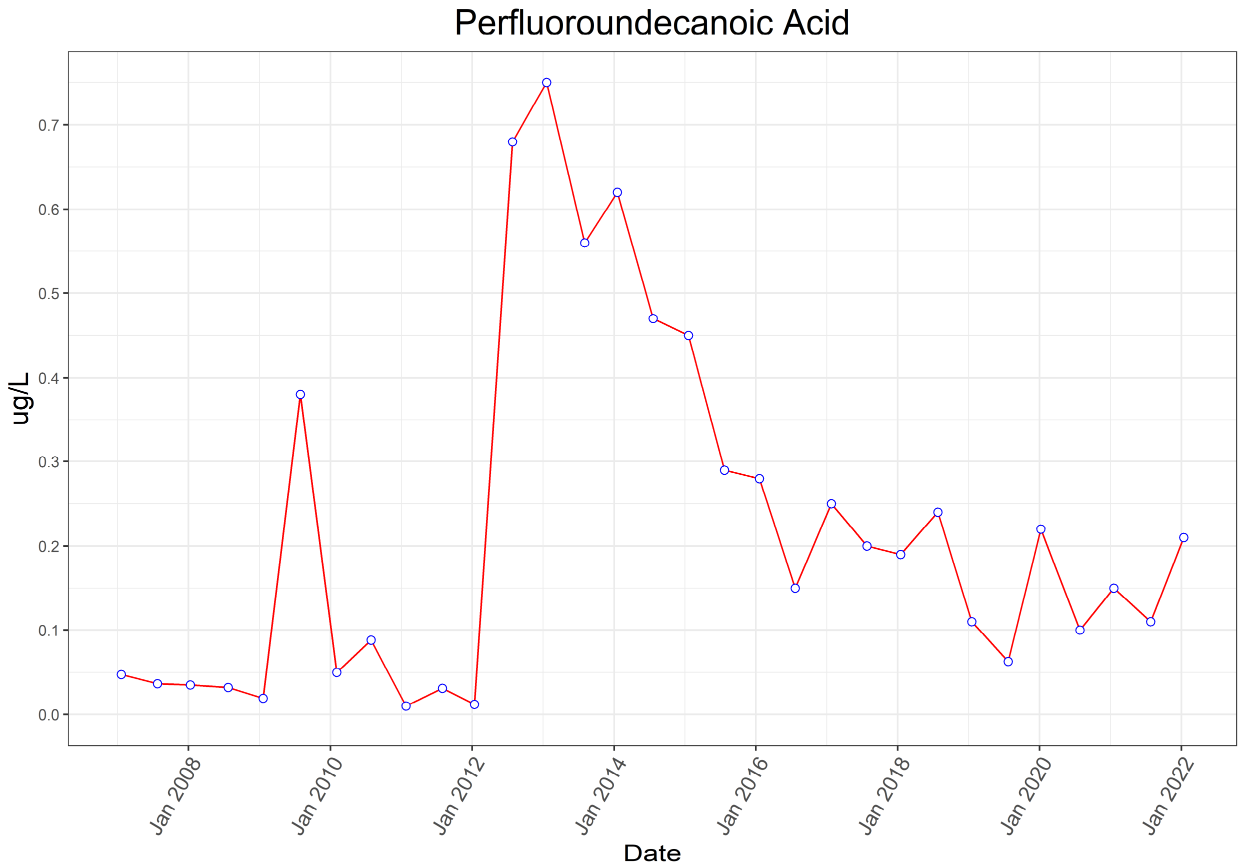


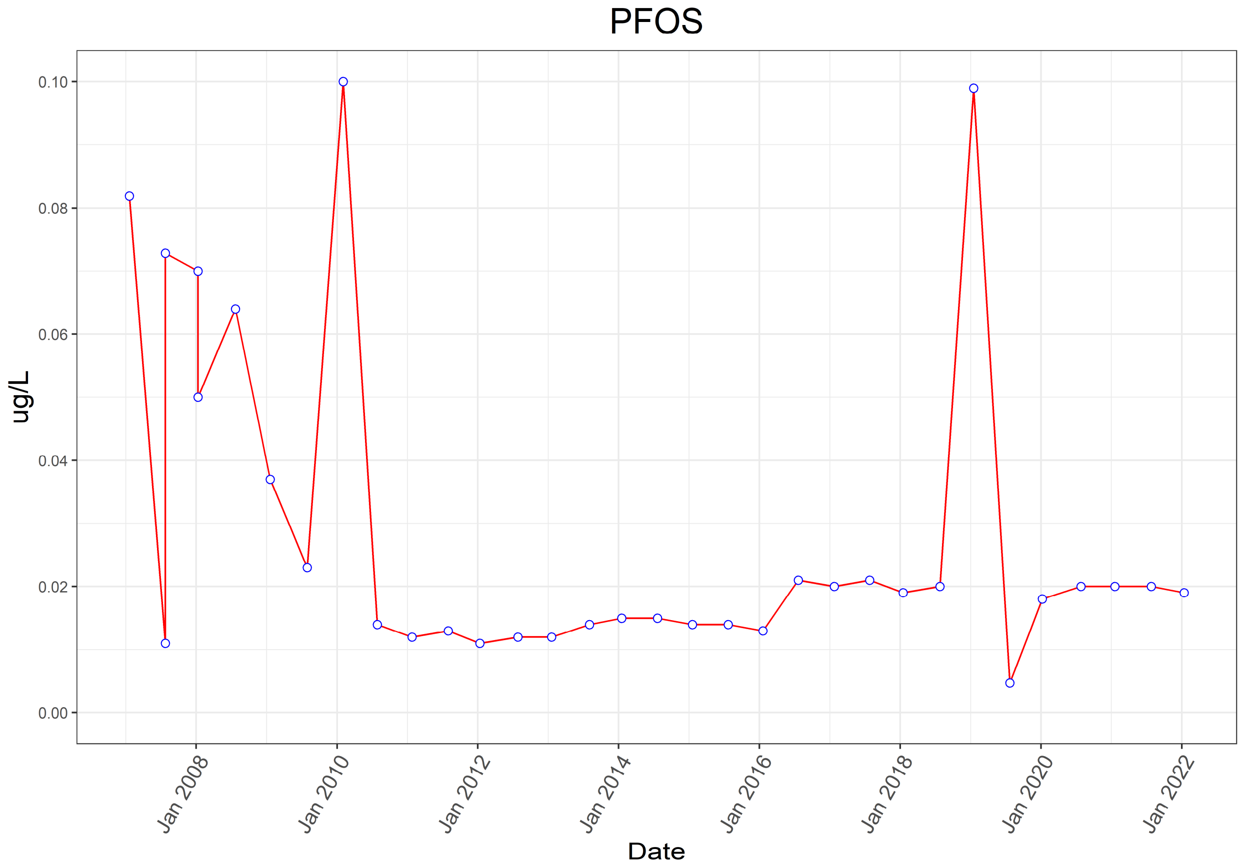
Perfluorohexanoic Acid




Perfluorononanoic Acid


Perfluoropentanoic Acid

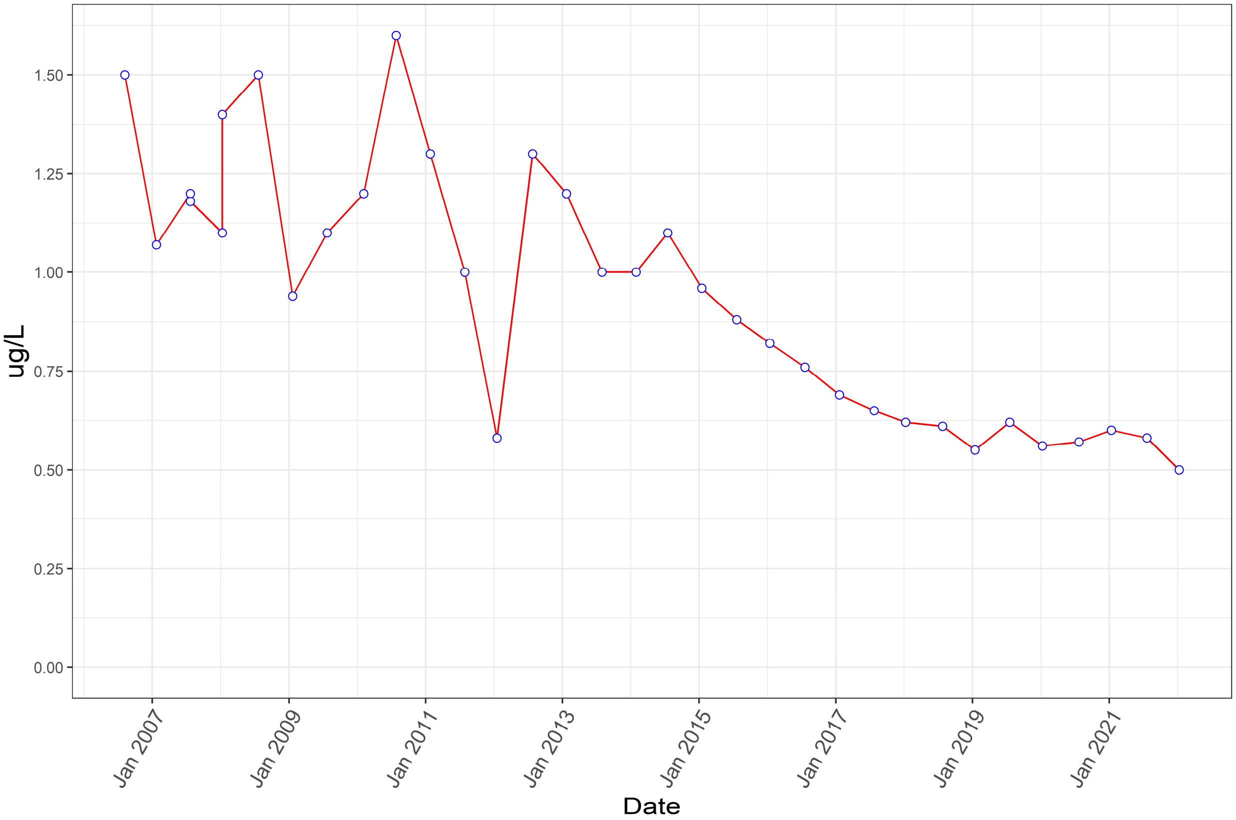

Perfluoroundecanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022


PFOS
ug/L
0.00
0.02
0.04
0.06
0.08
0.10
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

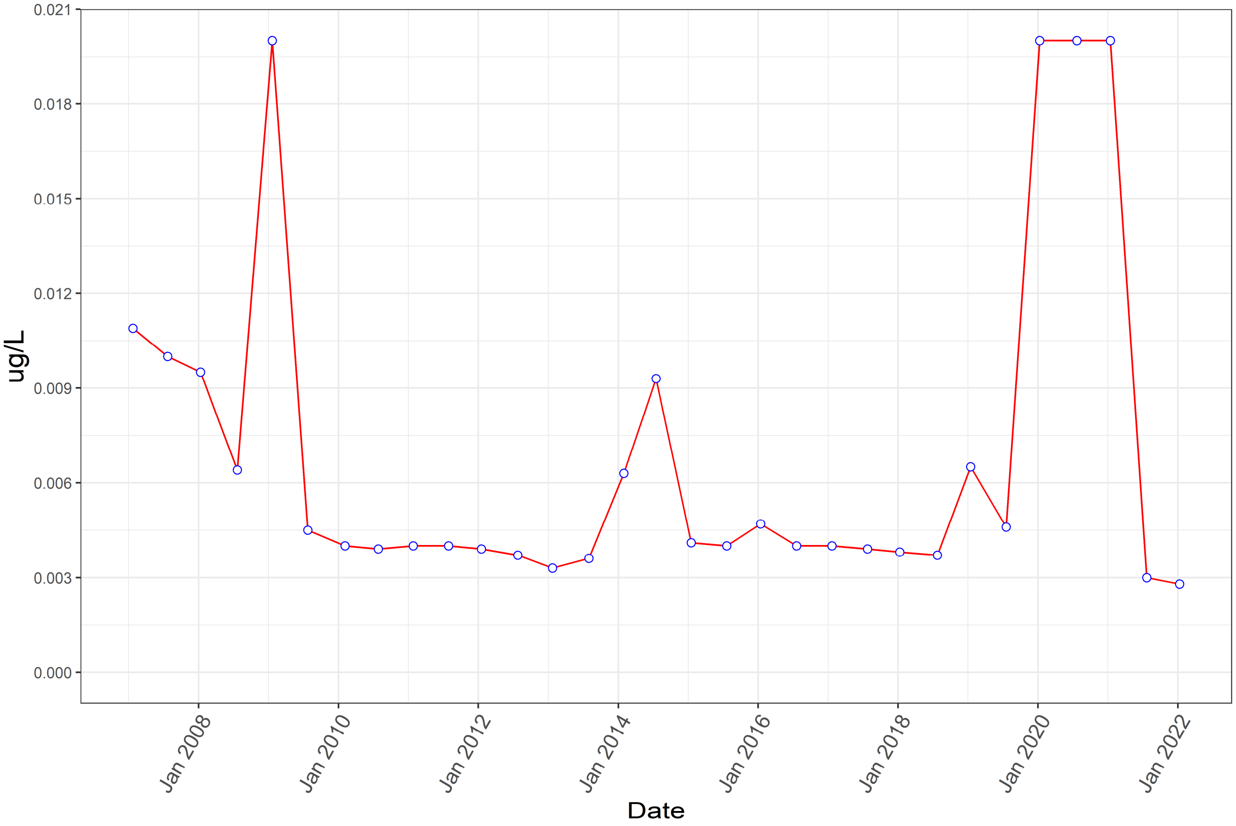
PFAS Monitoring Program (Program 9)

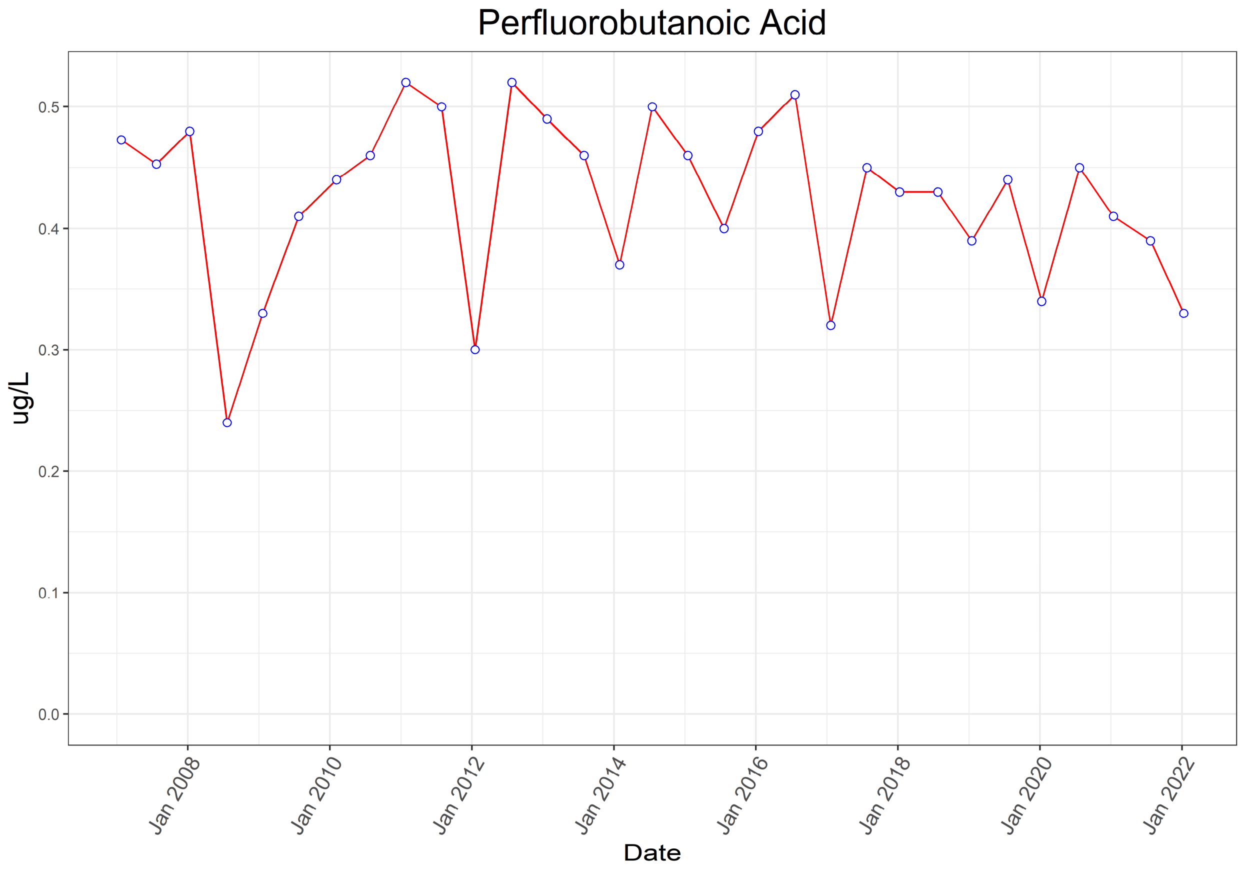
Well Name: G04-M01B

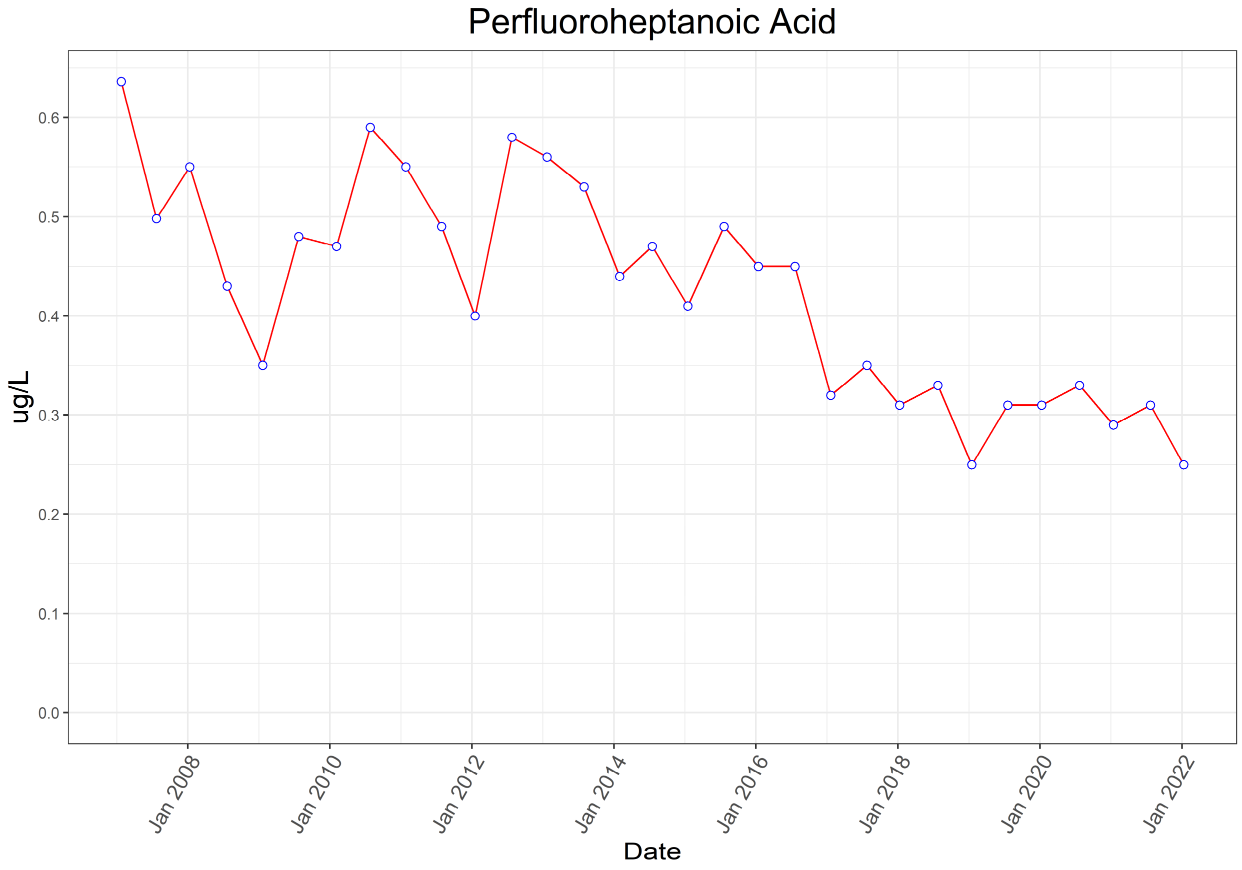
PFOA

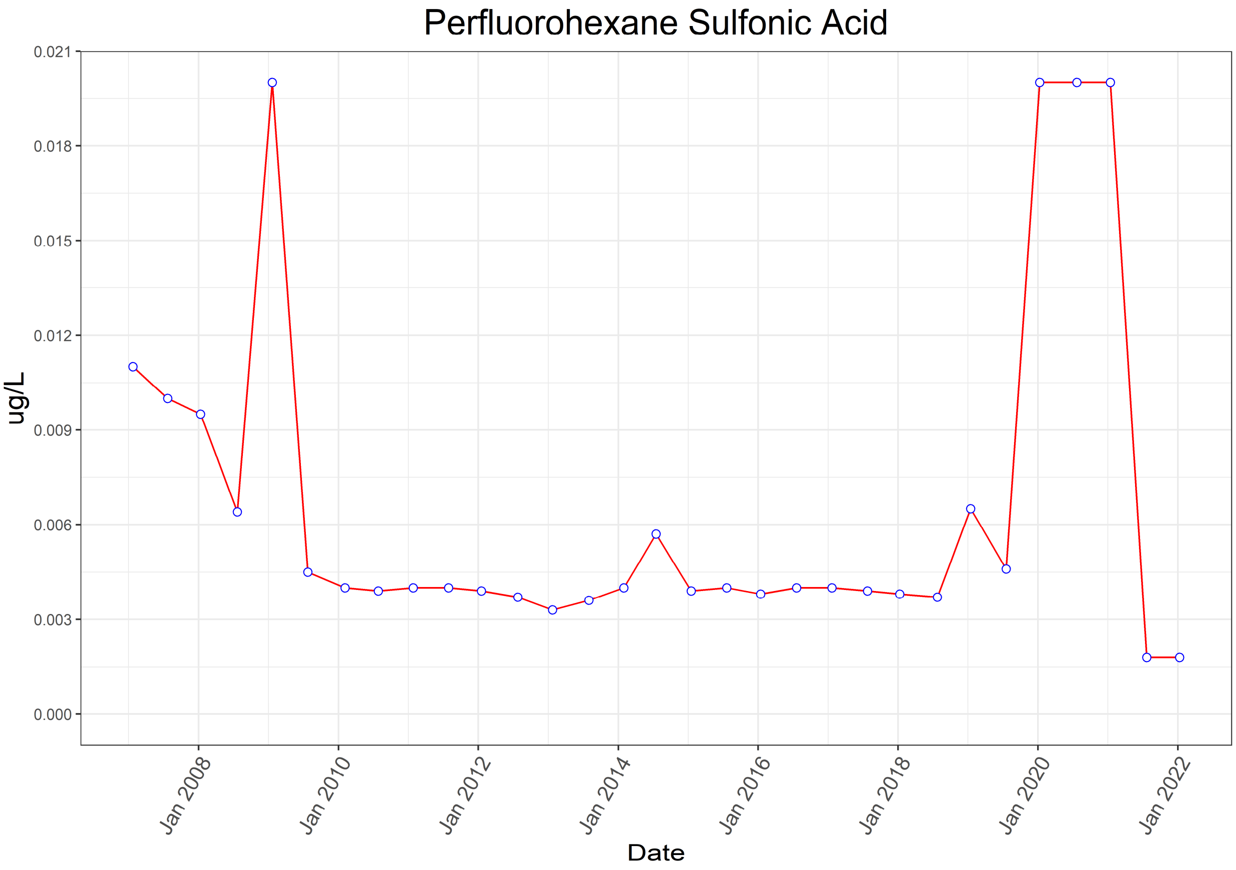


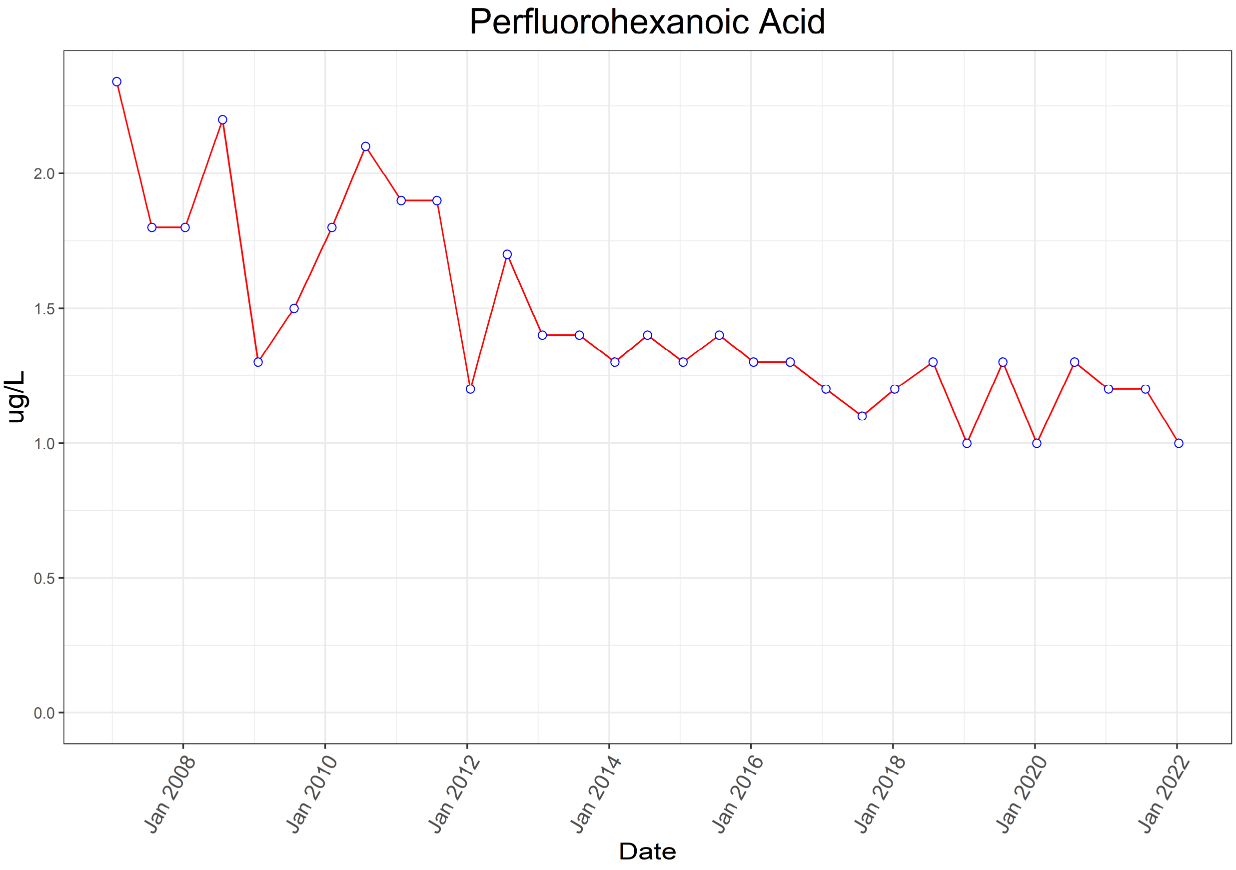
Perfluorobutane Sulfonic Acid

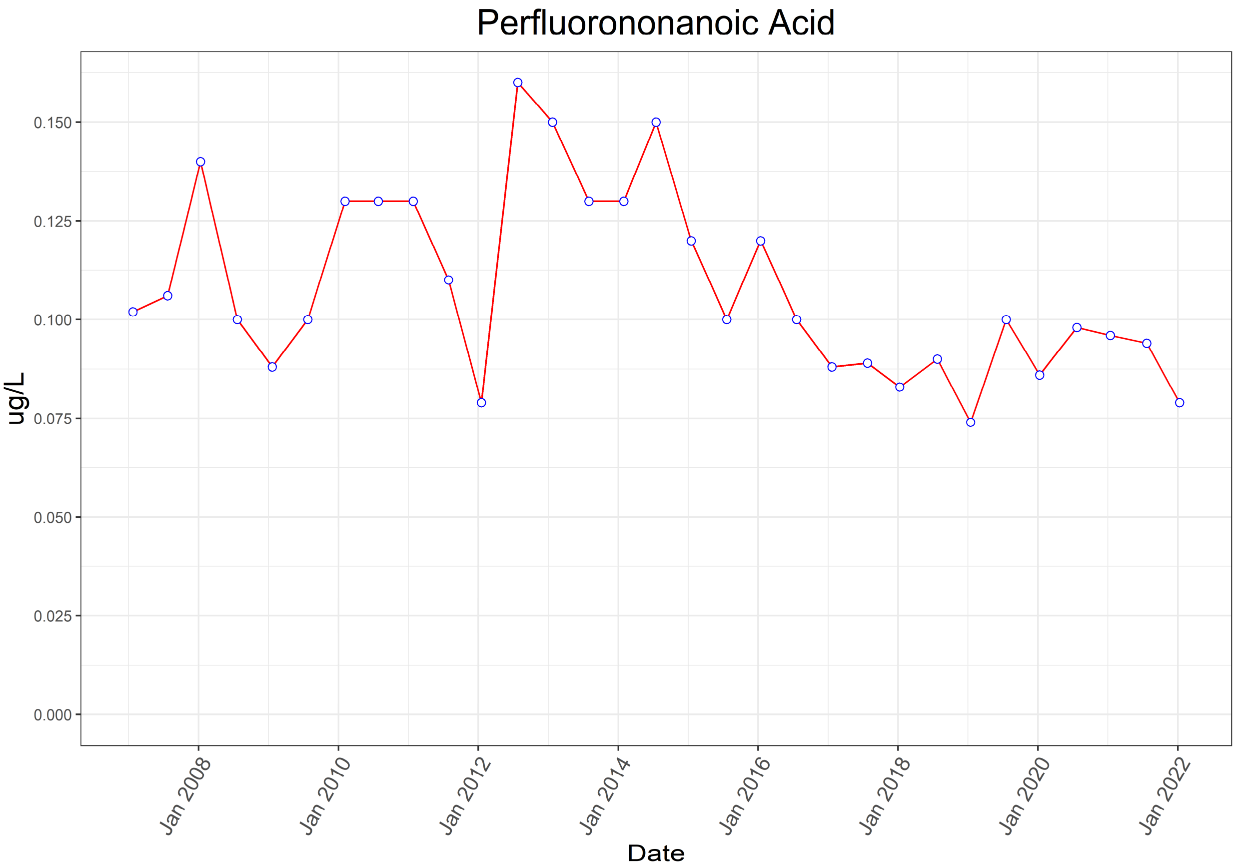


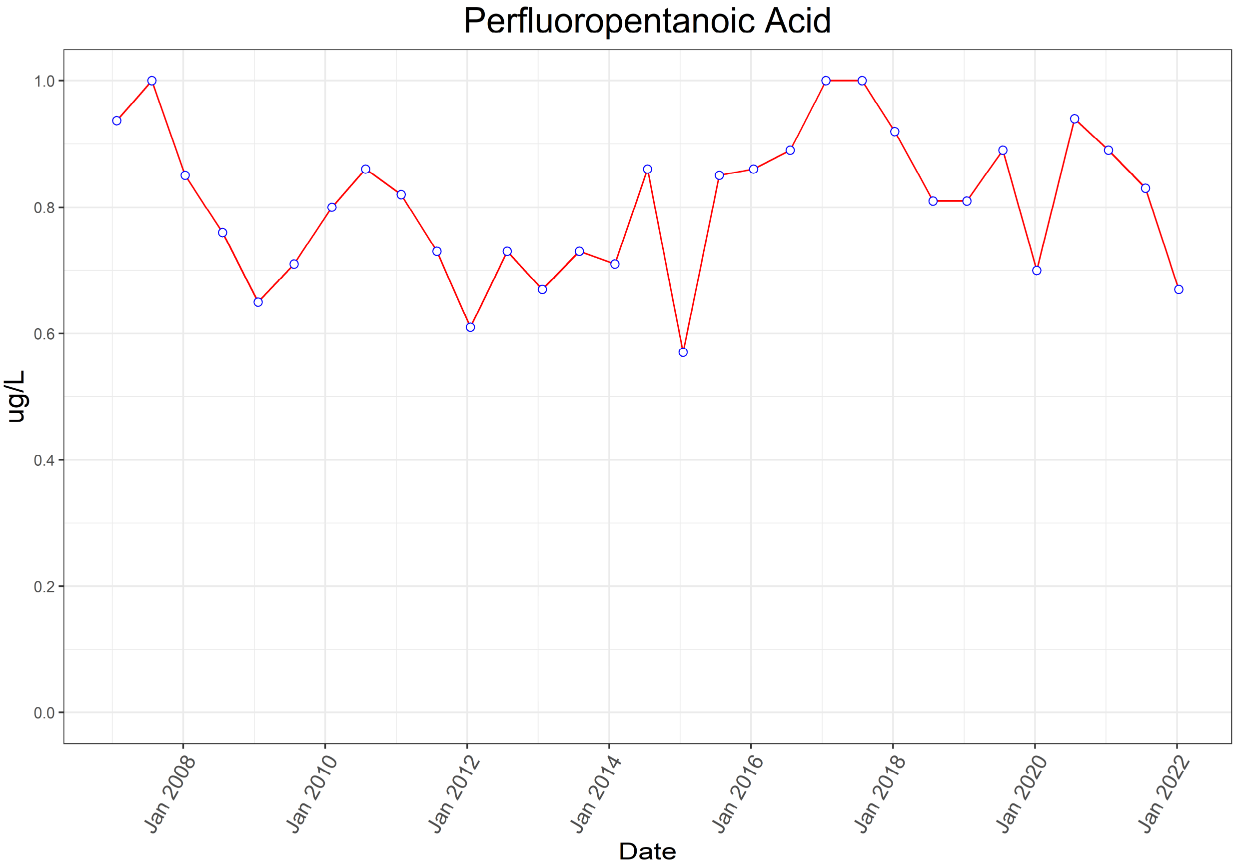

Perfluorobutanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022


Perfluoroheptanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

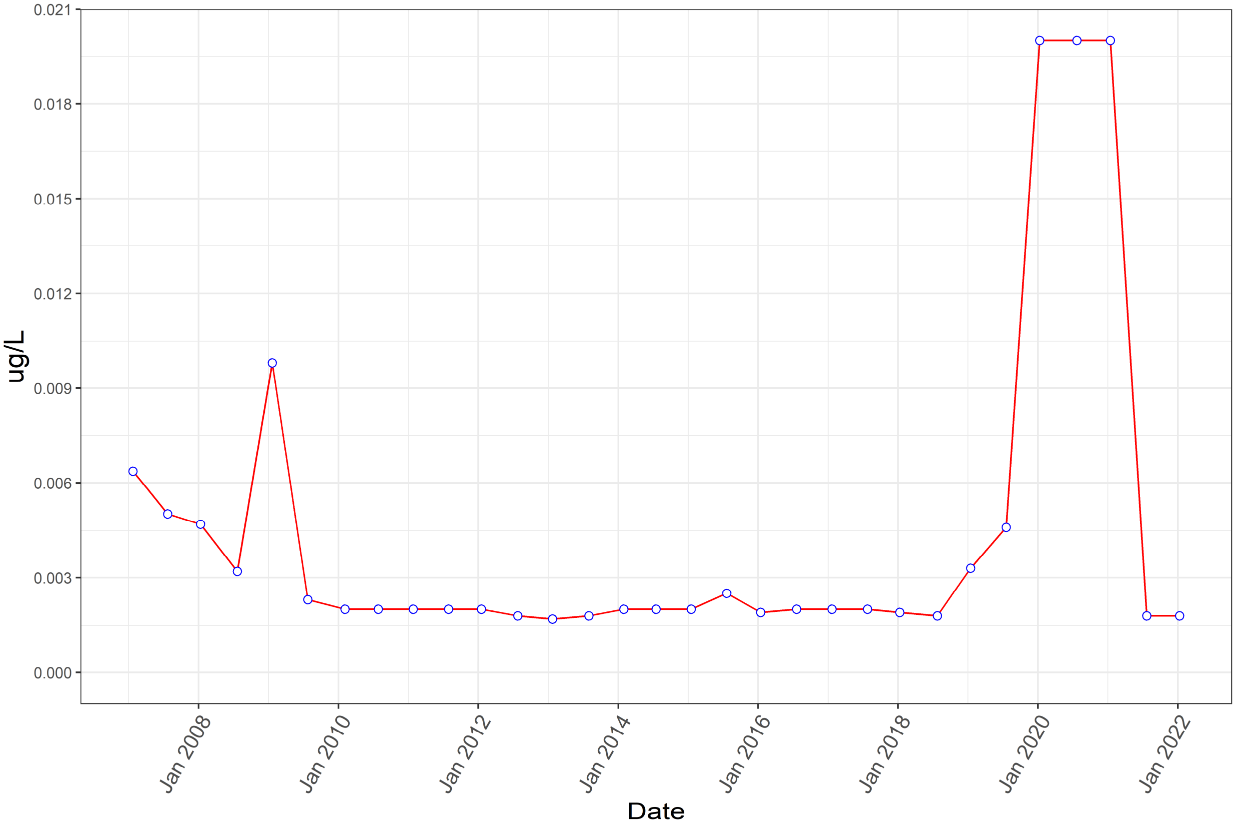

Perfluorohexane Sulfonic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexanoic Acid
ug/L
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

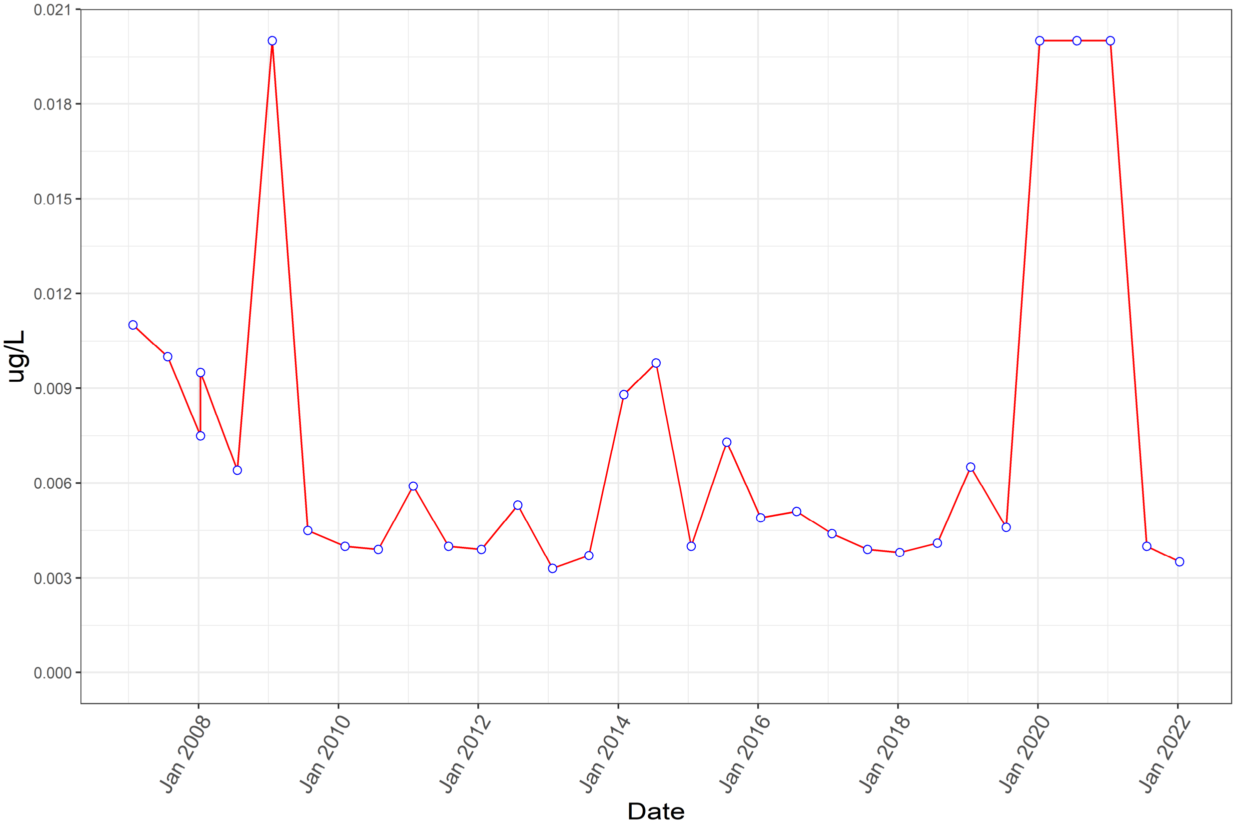

Perfluorononanoic Acid
ug/L
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

Perfluoroundecanoic Acid

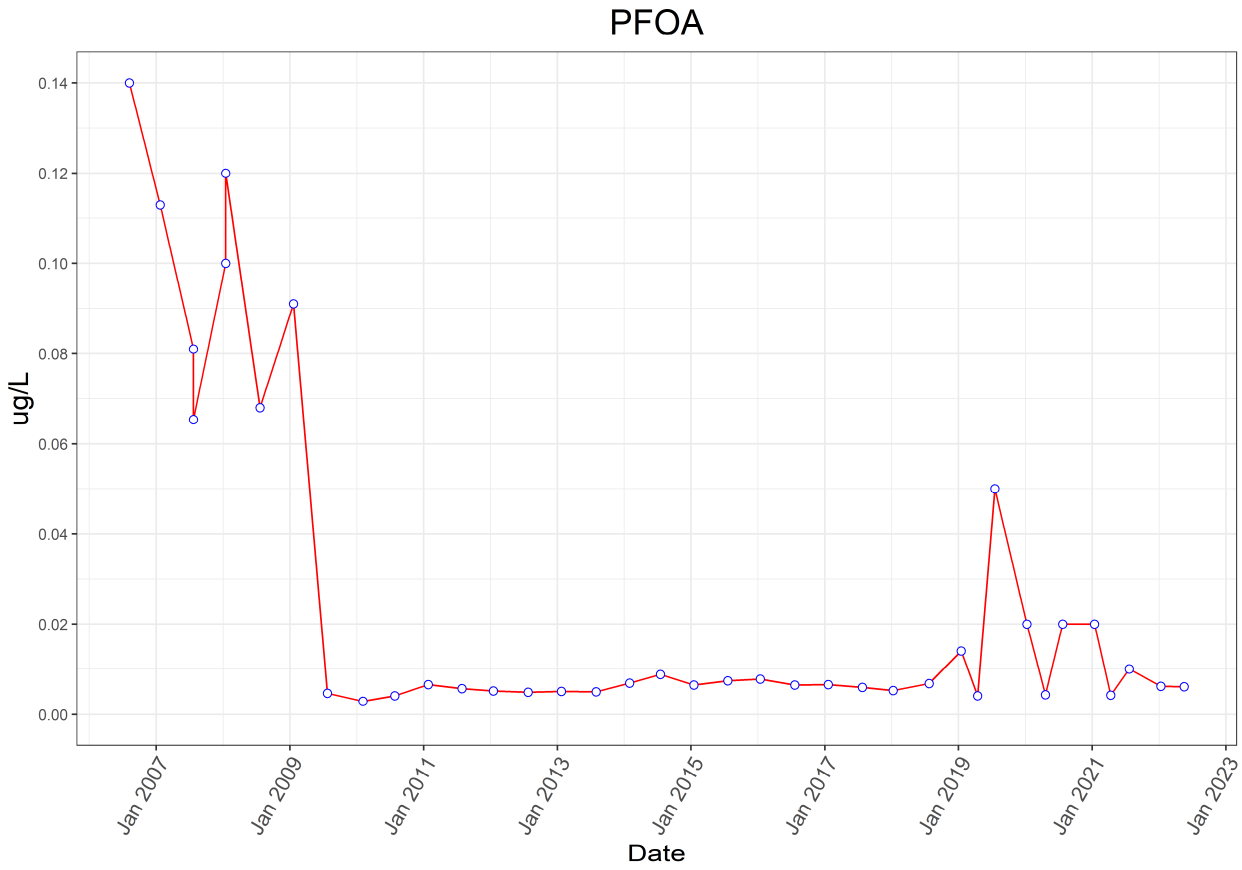


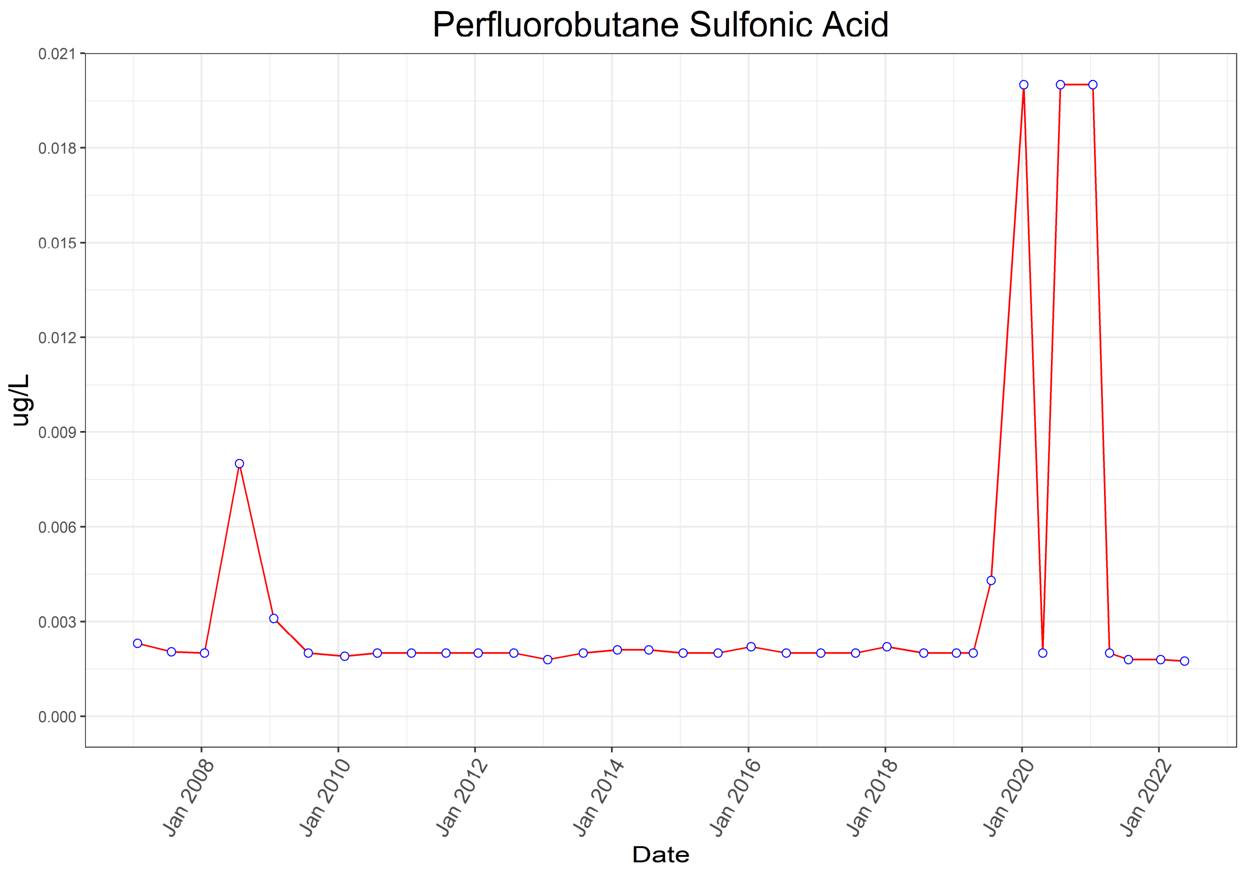
PFOS

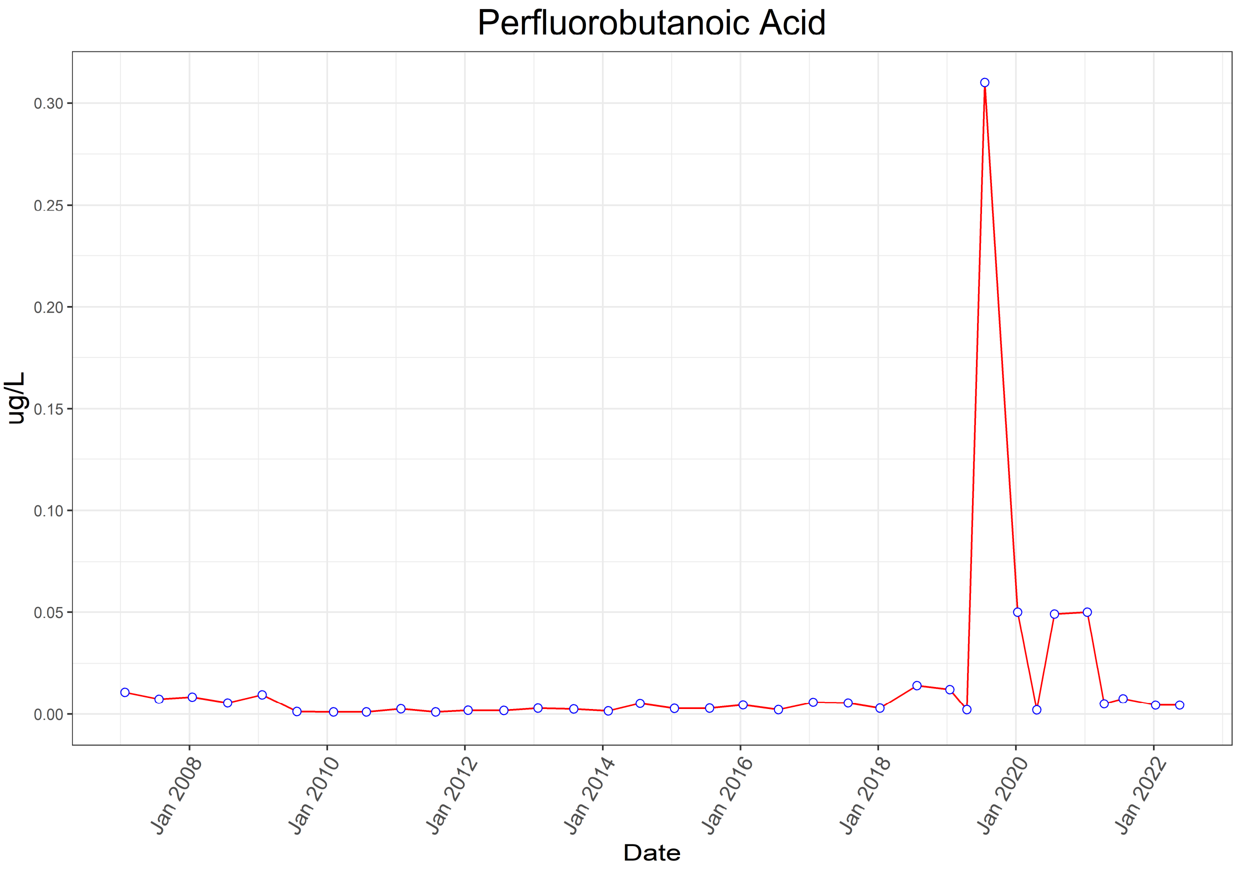


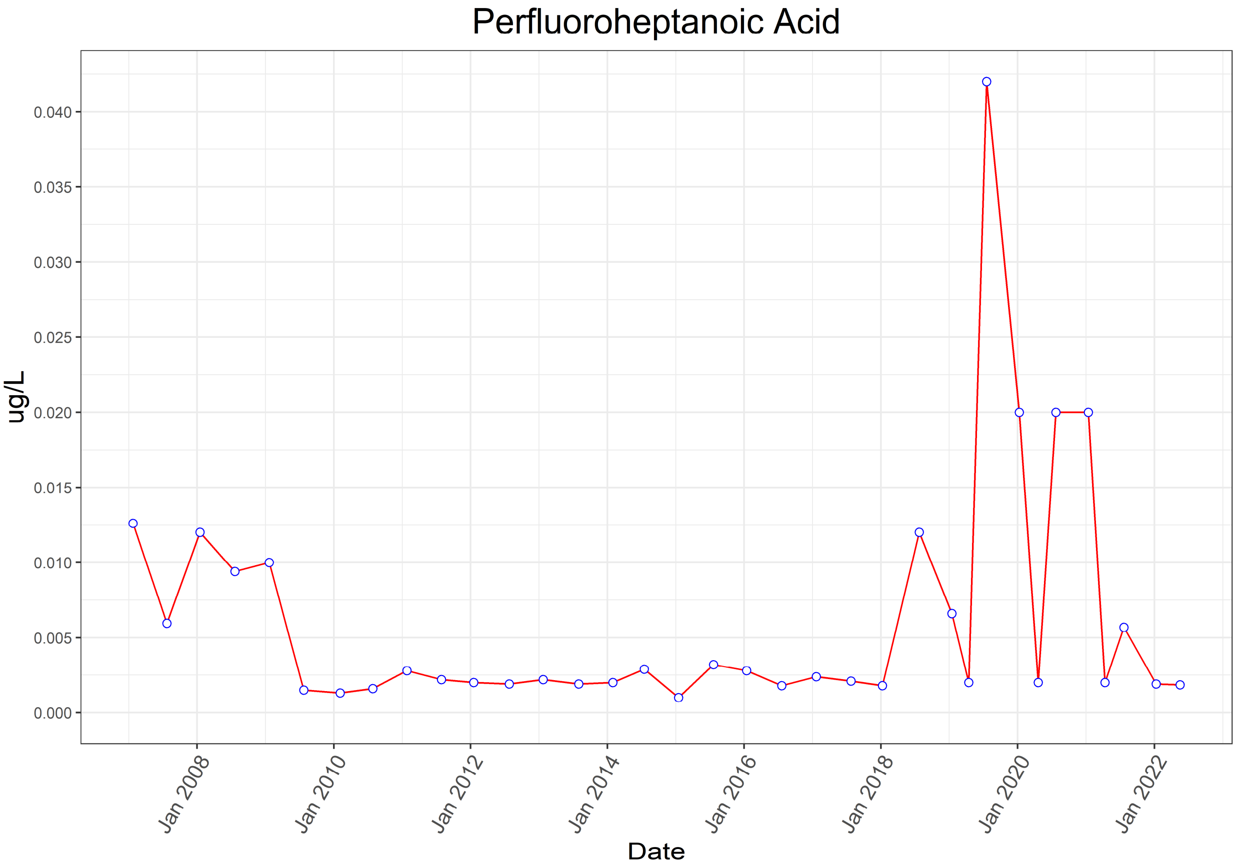
PFAS Monitoring Program (Program 9)

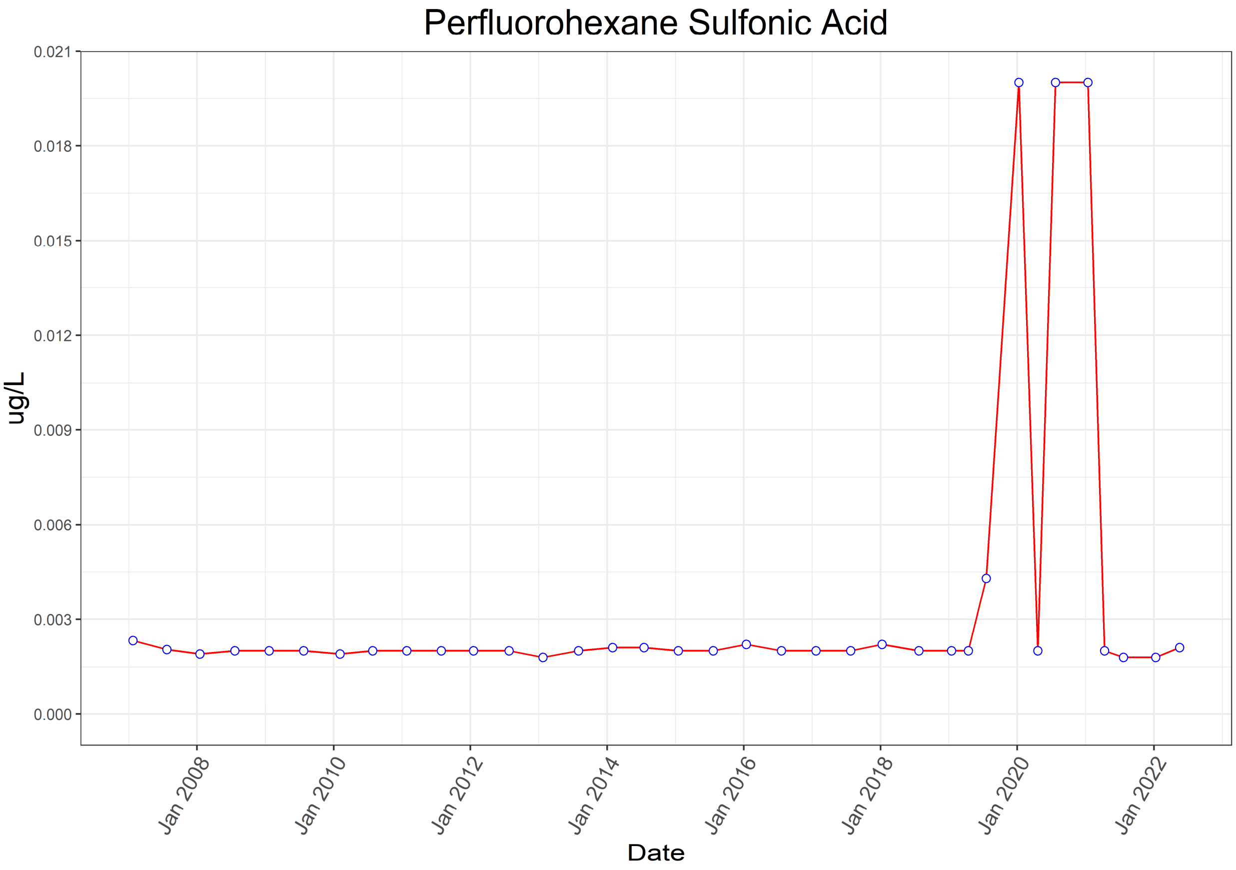
Well Name: G04-M01E

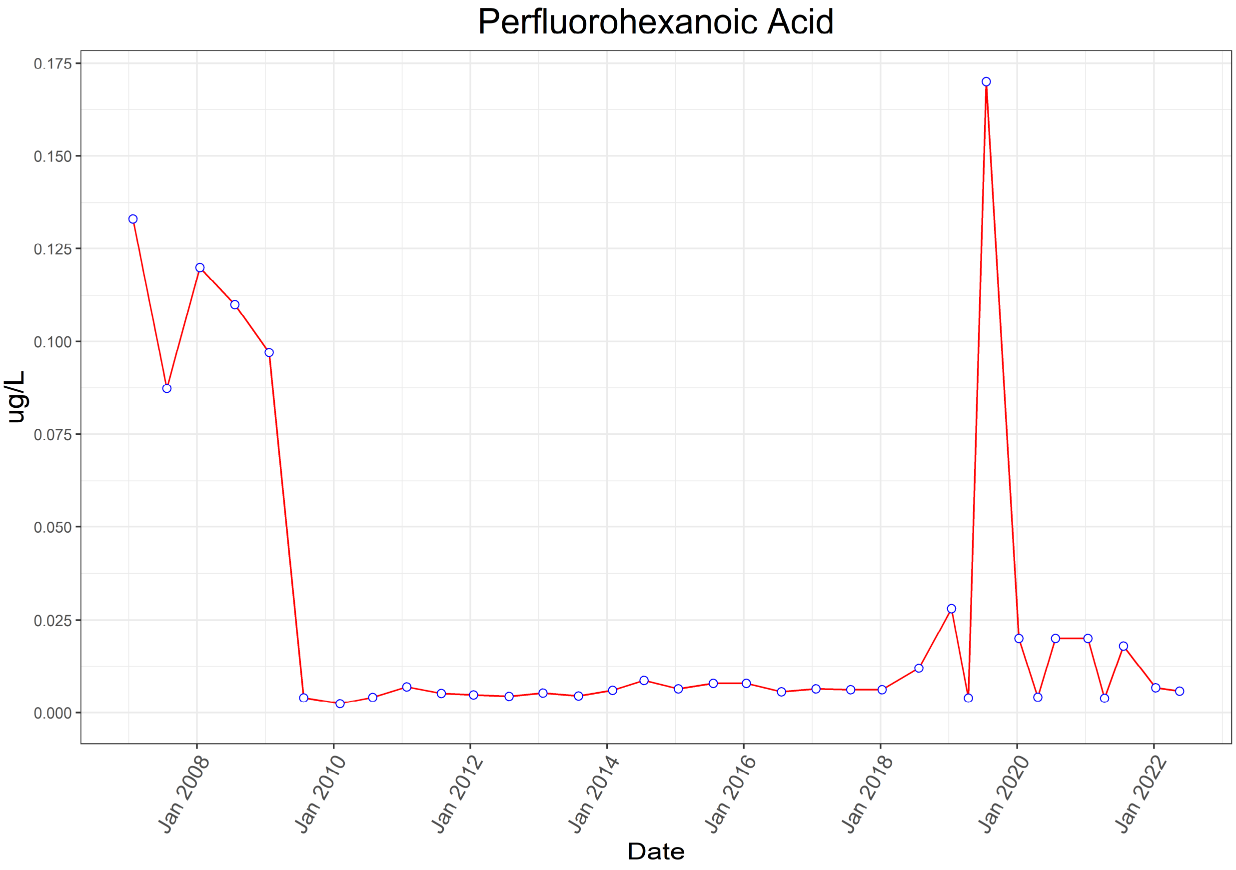


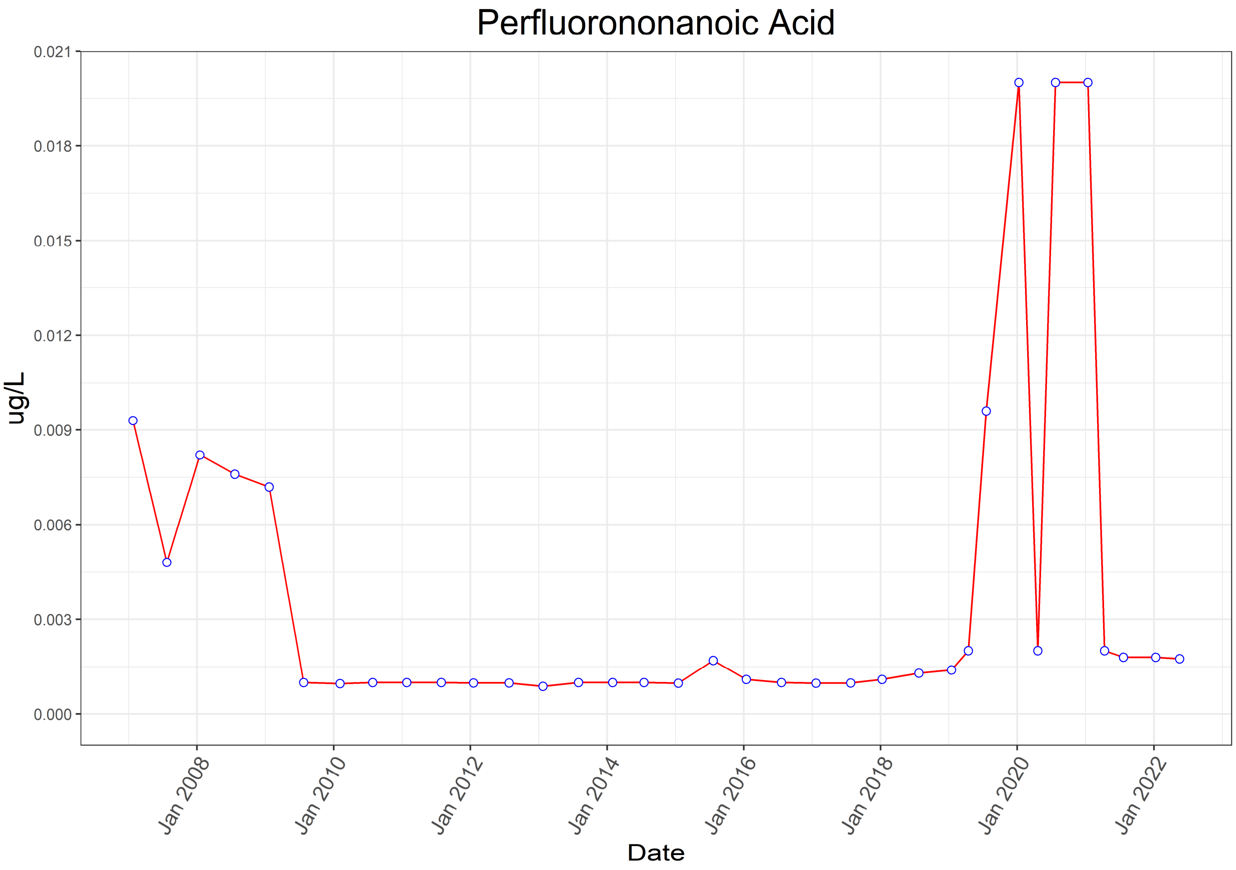


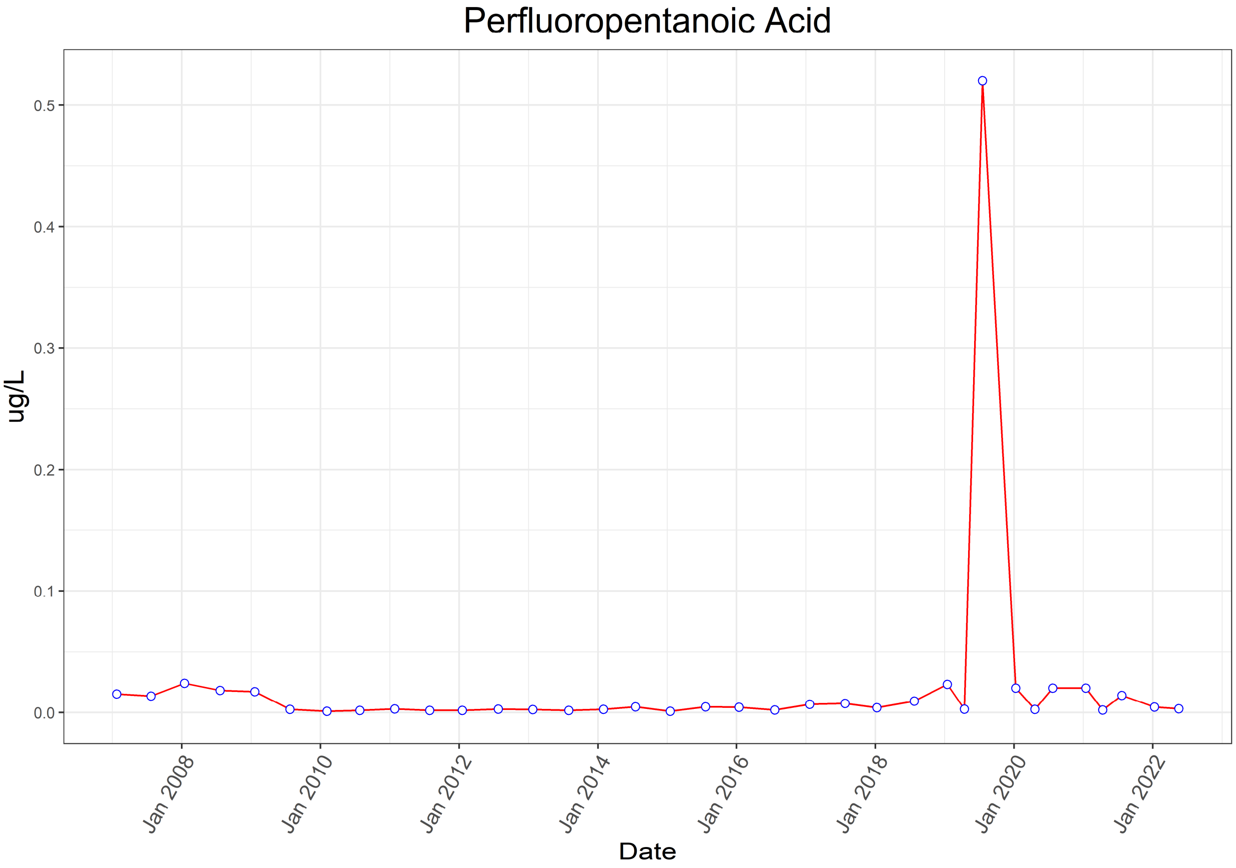

Perfluorobutanoic Acid
ug/L
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

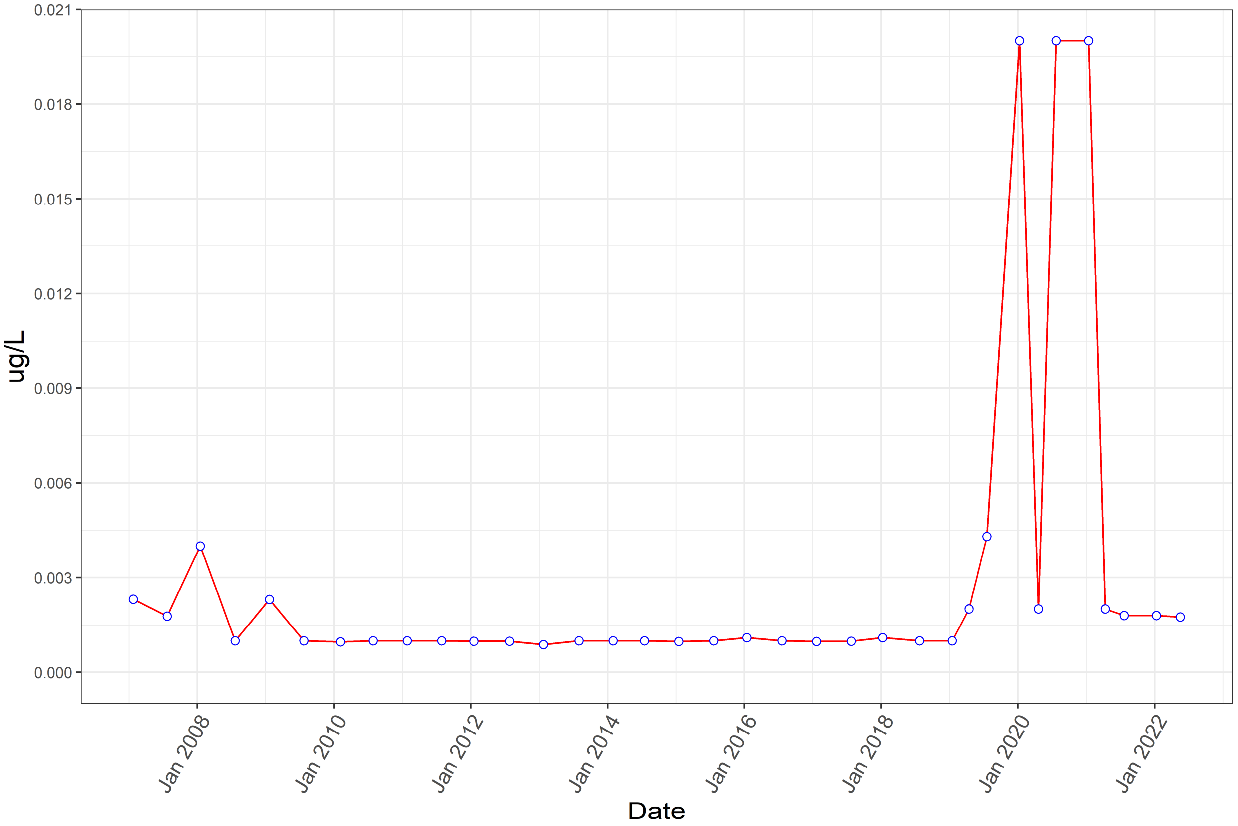

Perfluoroheptanoic Acid
ug/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

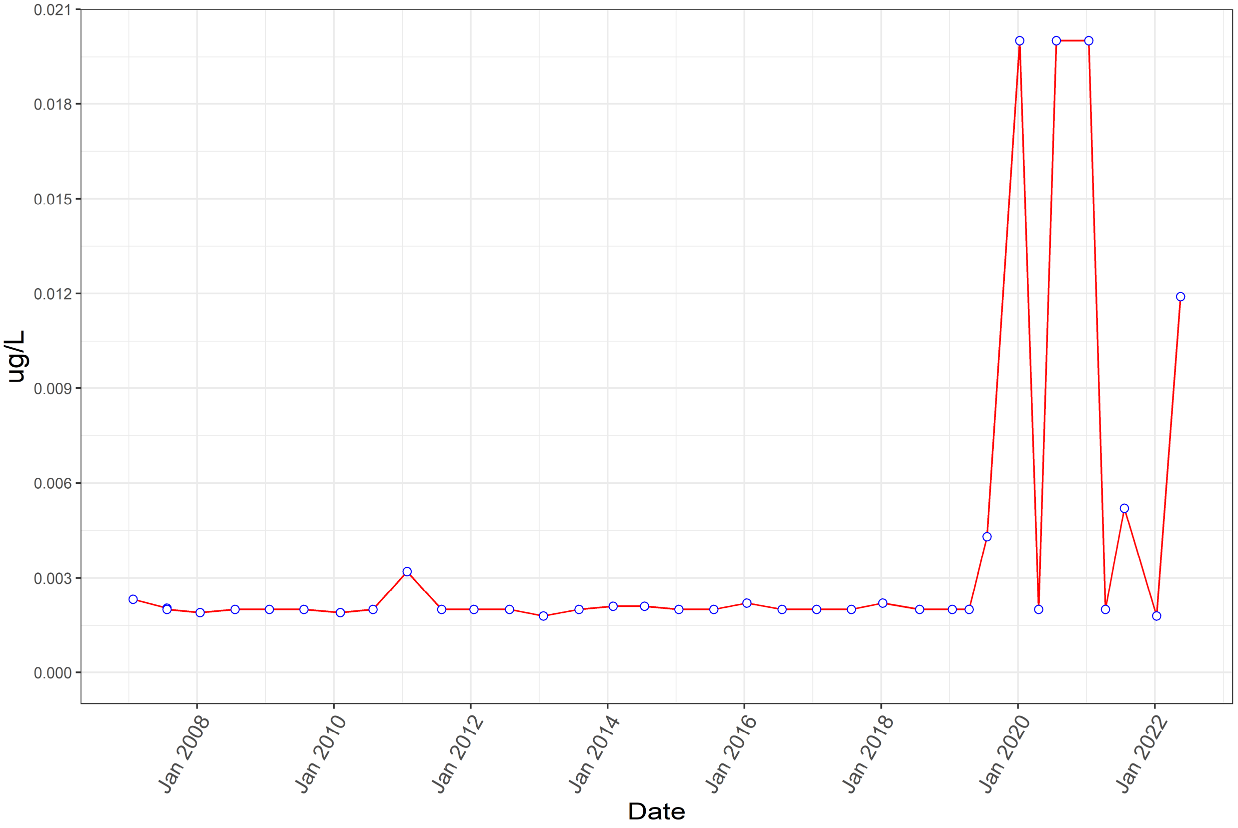

Perfluorohexane Sulfonic Acid
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
ug/L
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

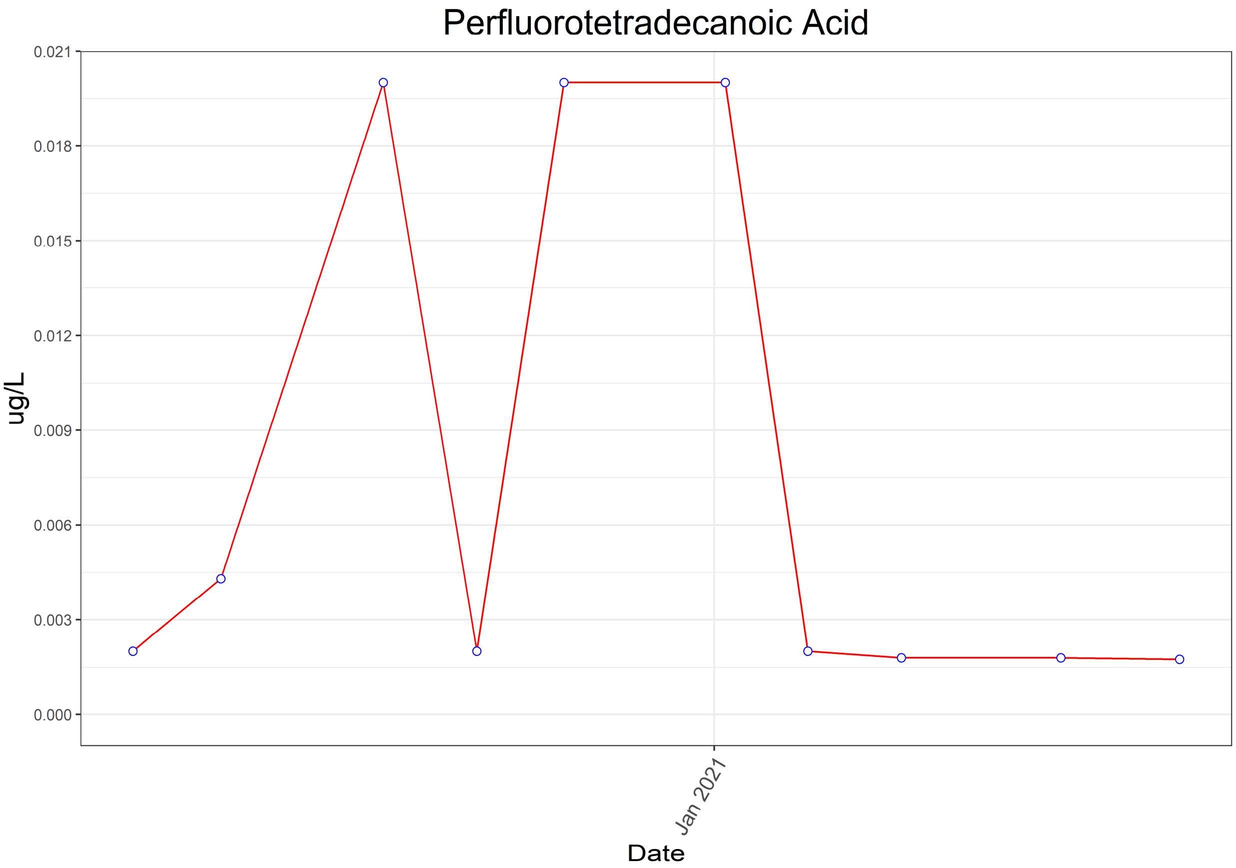

Perfluorohexanoic Acid
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
ug/L
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorononanoic Acid
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
ug/L
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
0.5
0.4
0.3
0.2
0.1
0.0
ug/L
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

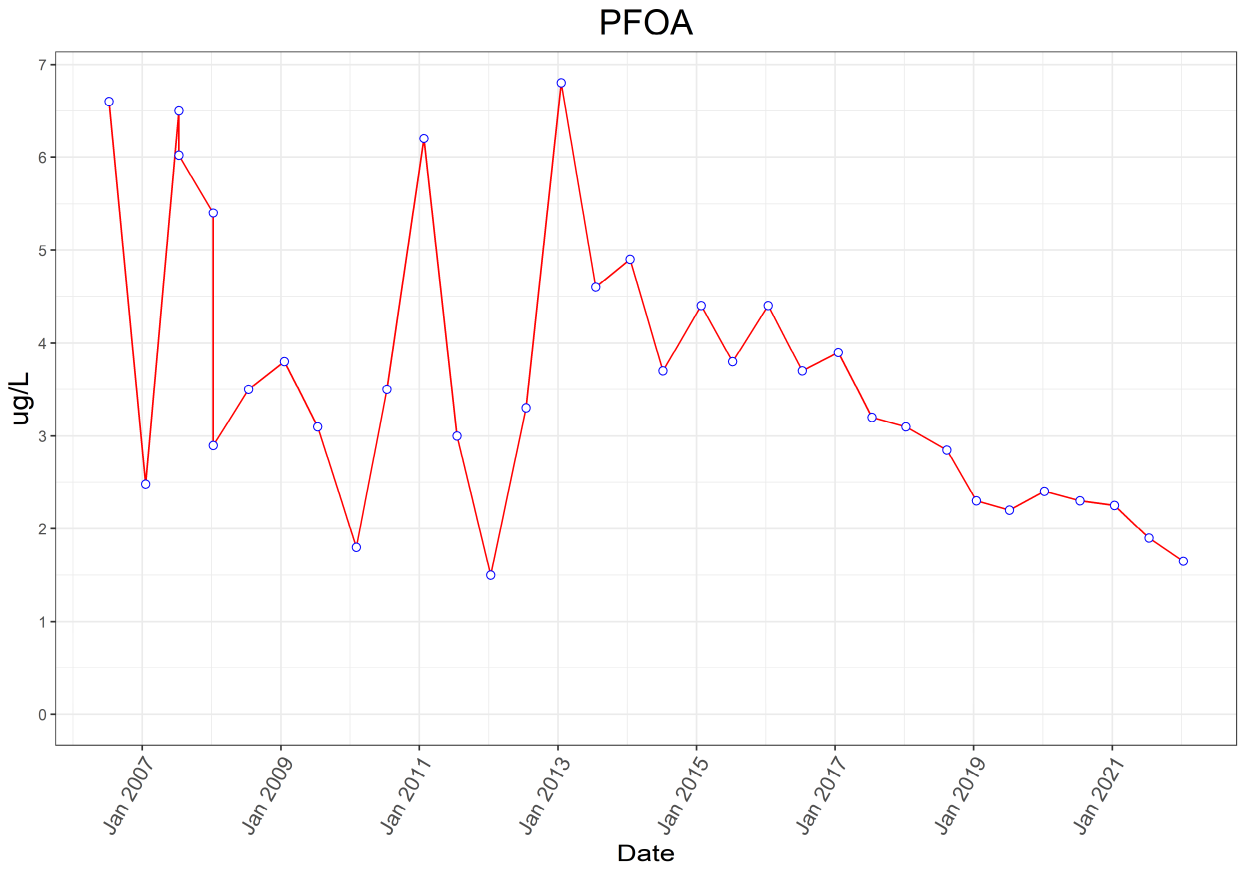

Perfluoroundecanoic Acid

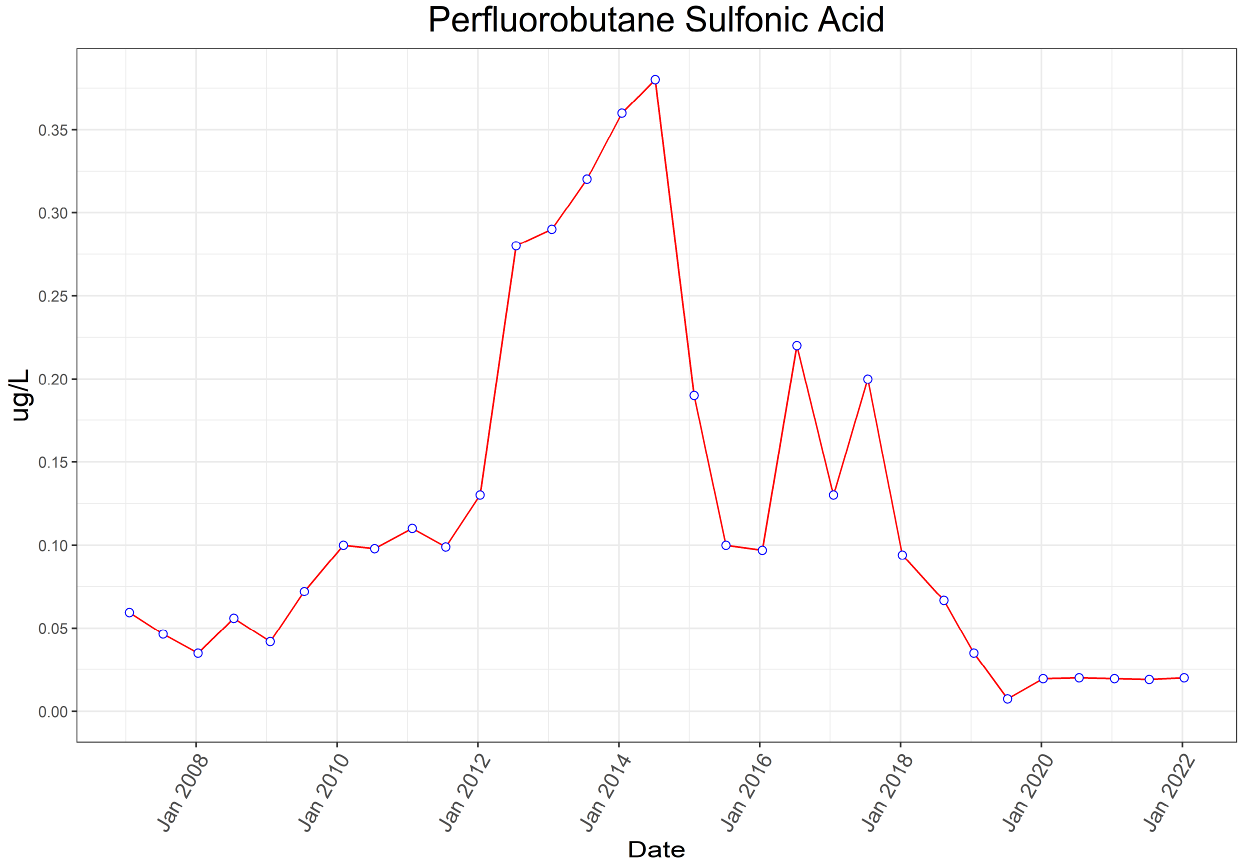

PFOS

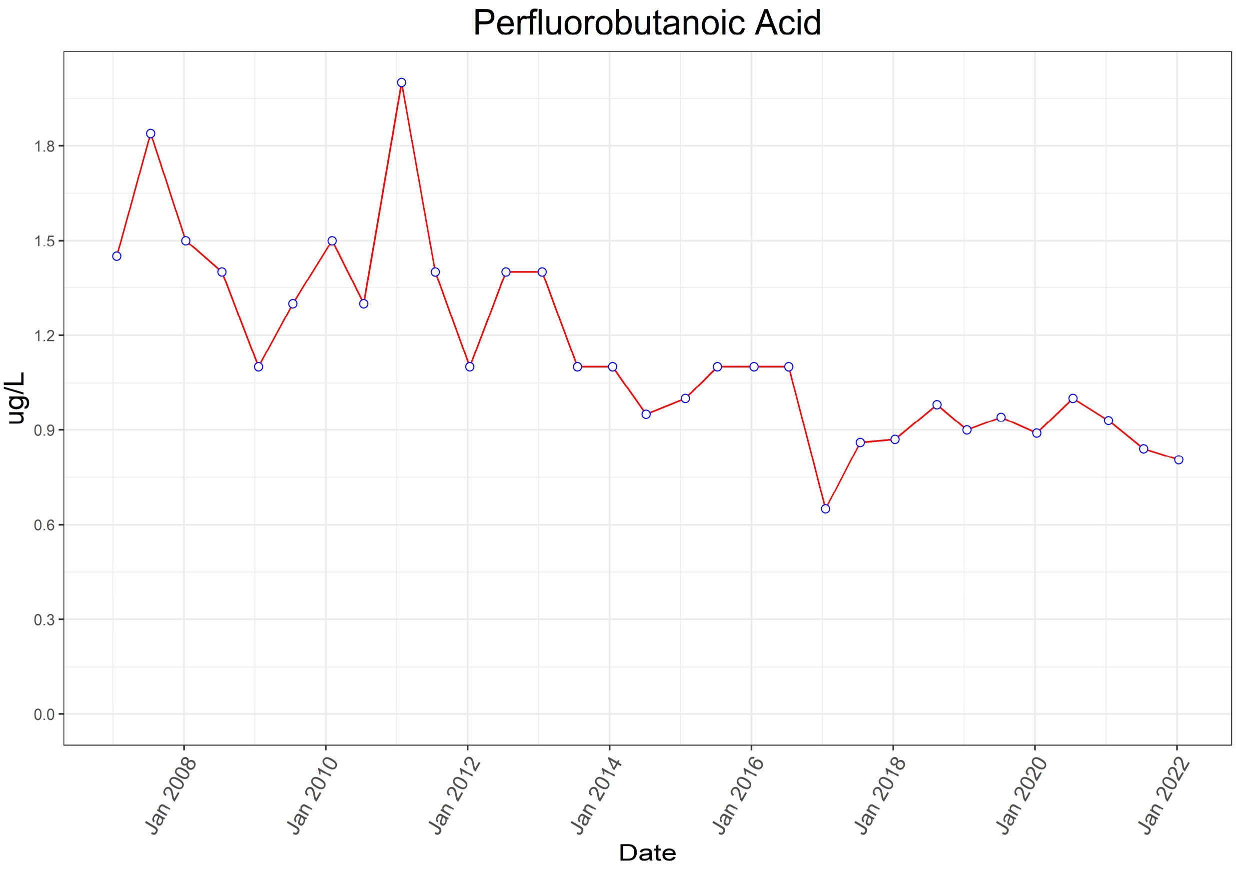

Perfluorotetradecanoic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2021
Date

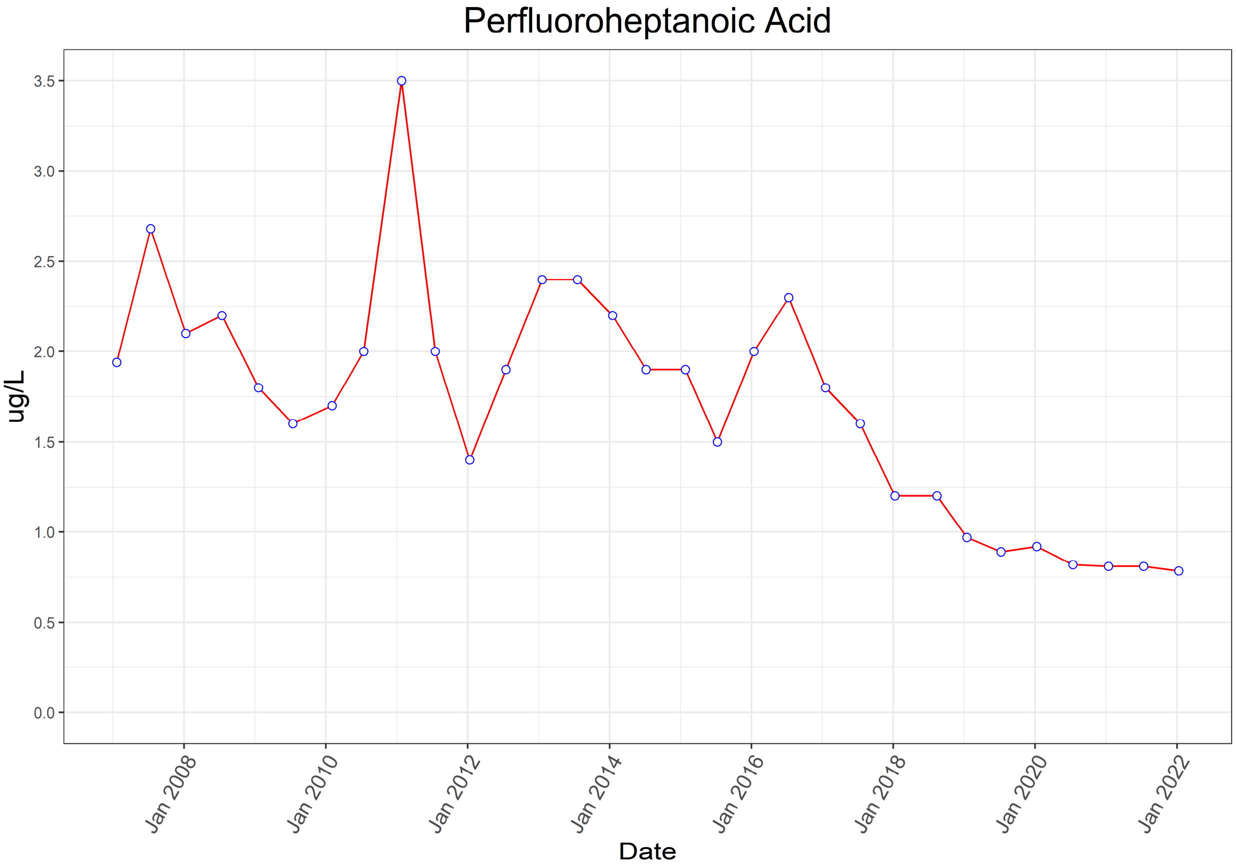
PFAS Monitoring Program (Program 9)

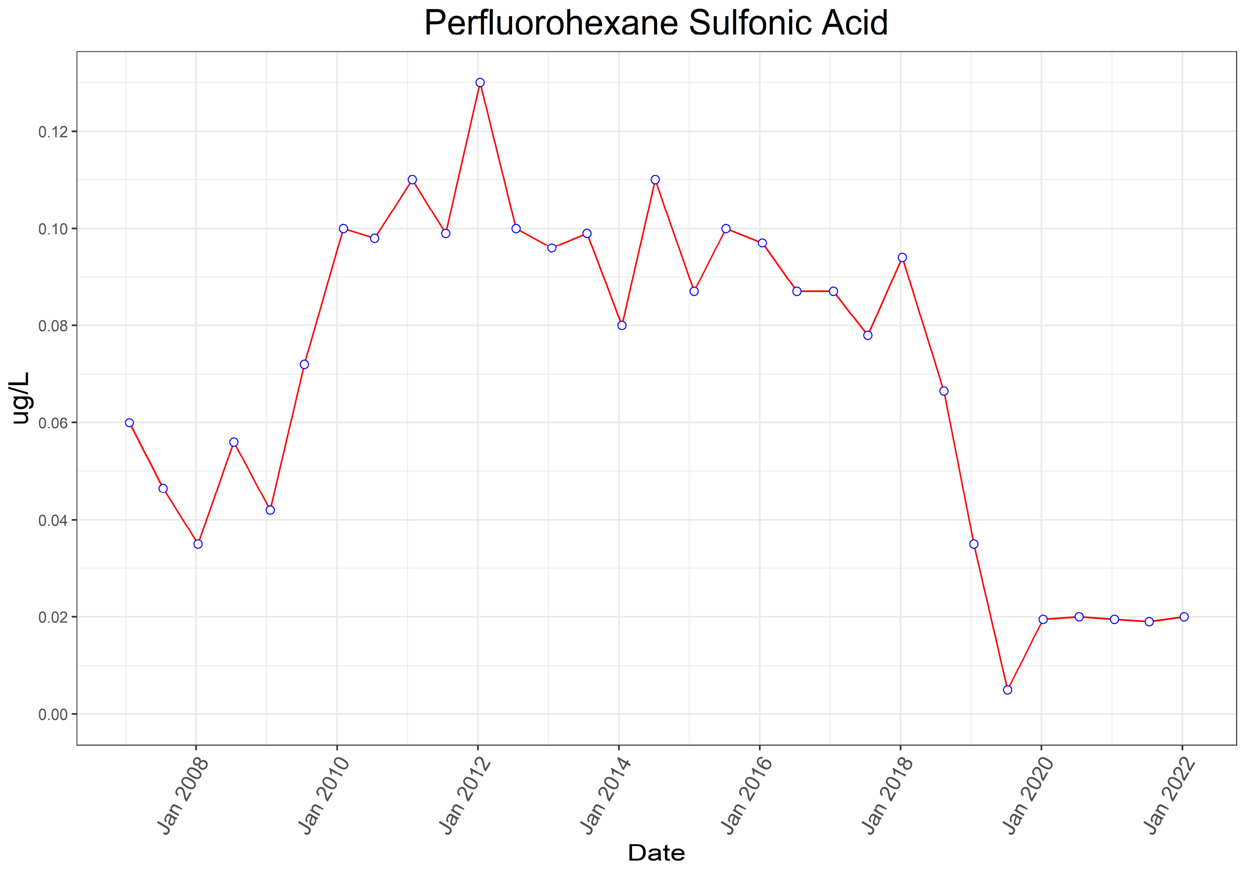
Well Name: G05-M02B

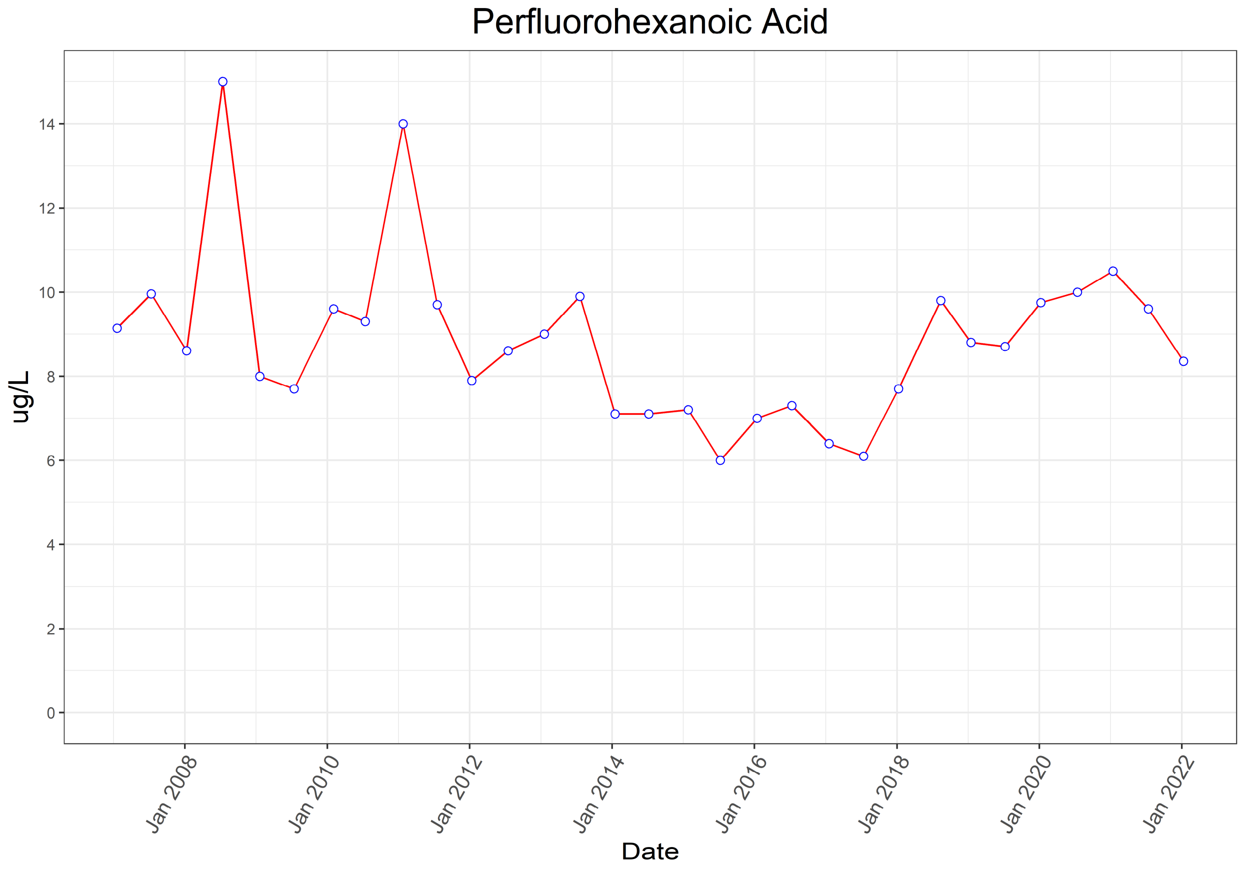


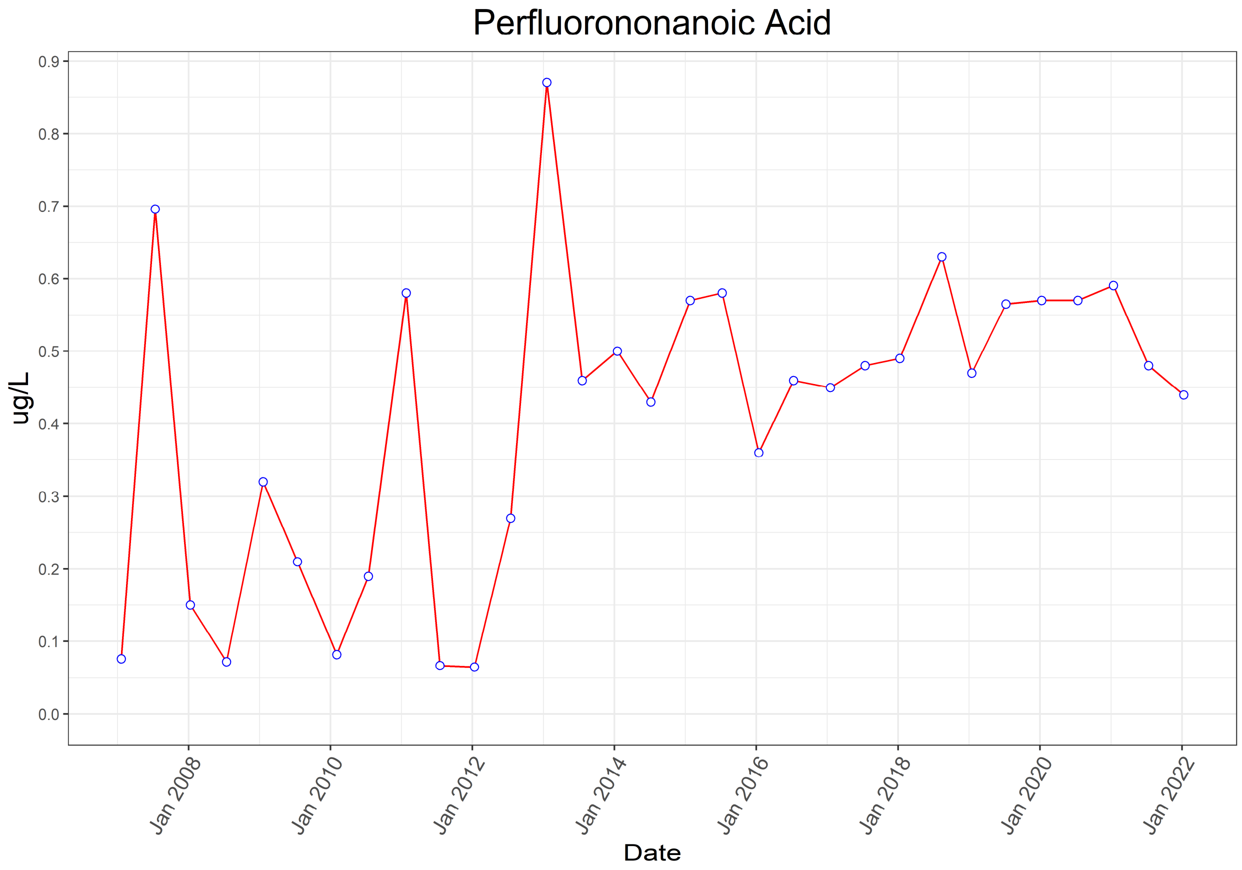


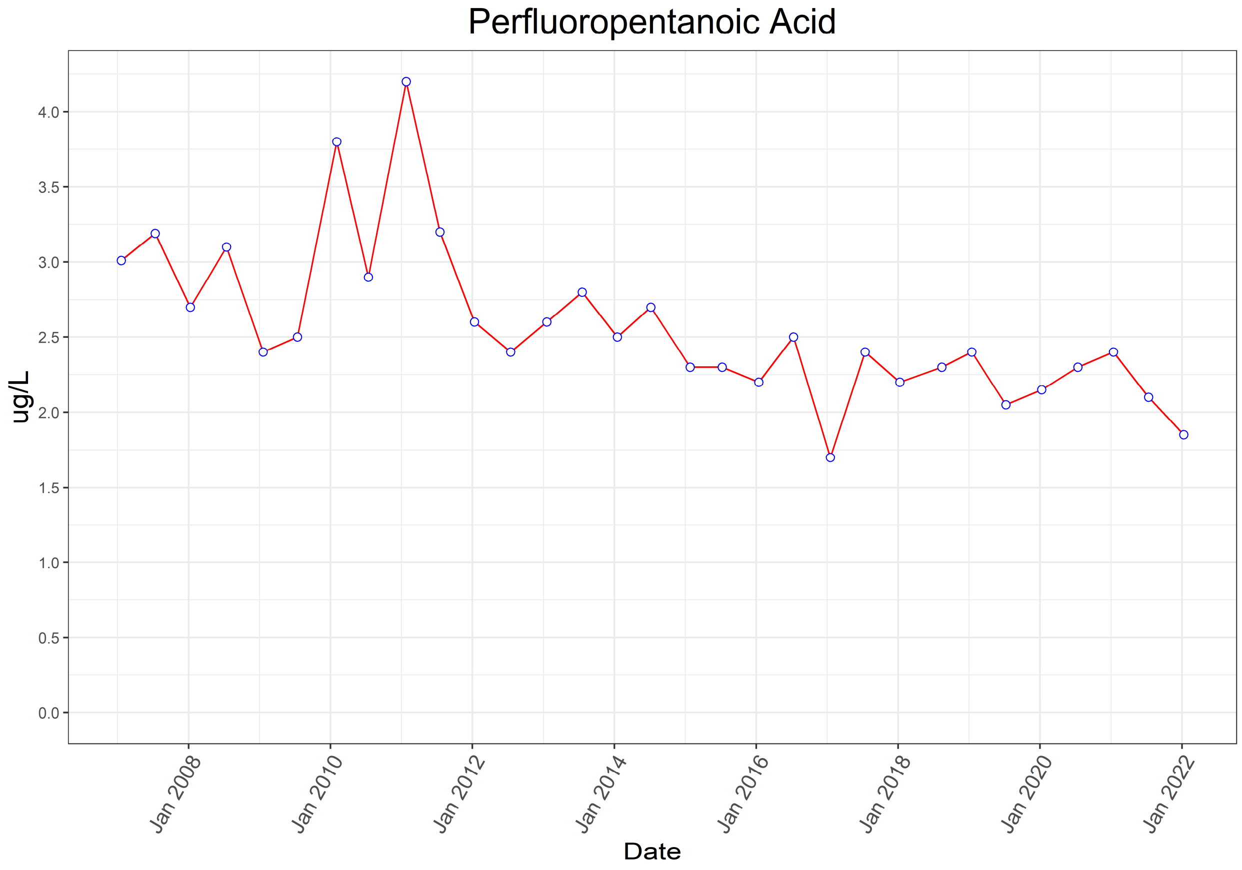

Perfluorobutanoic Acid
ug/L
1.8
1.5
1.2
0.9
0.6
0.3
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoroheptanoic Acid
ug/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

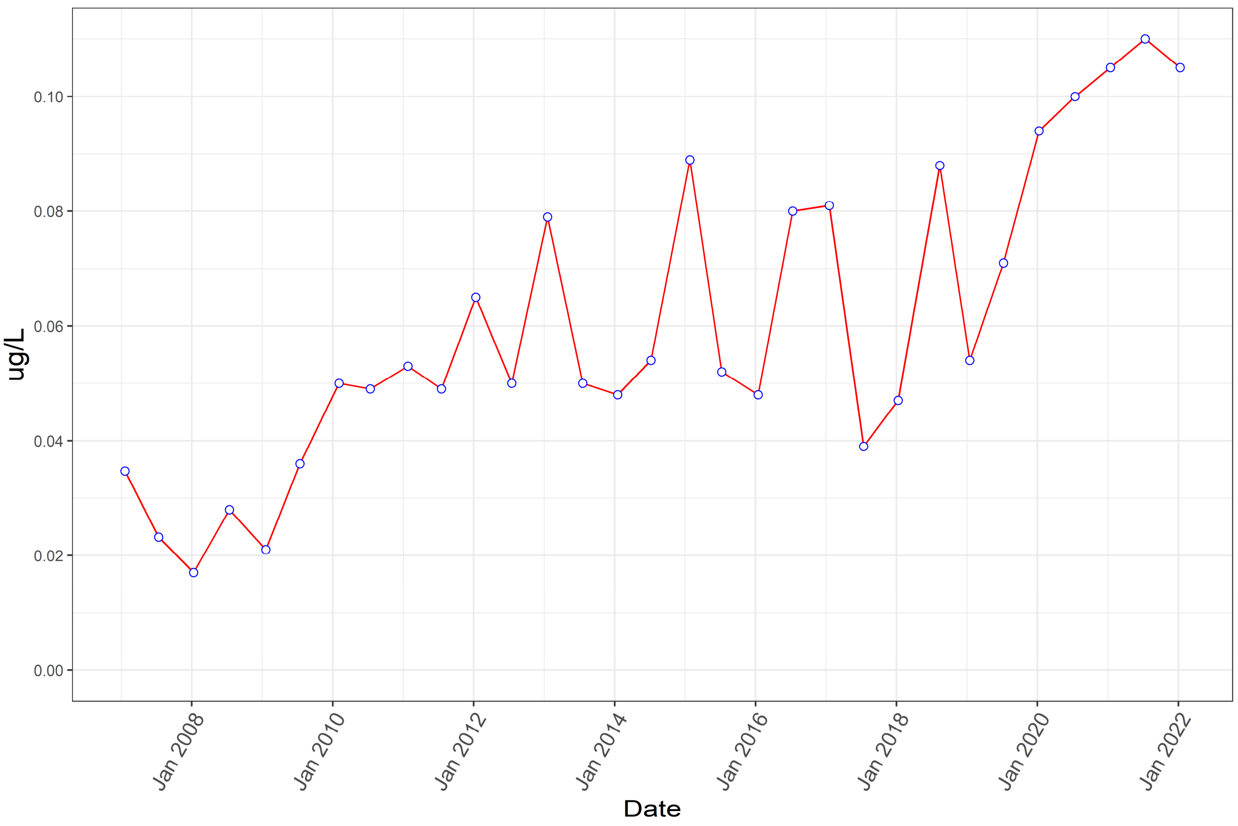

Perfluorohexane Sulfonic Acid
ug/L
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexanoic Acid
ug/L
14
12
10
8
6
4
2
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

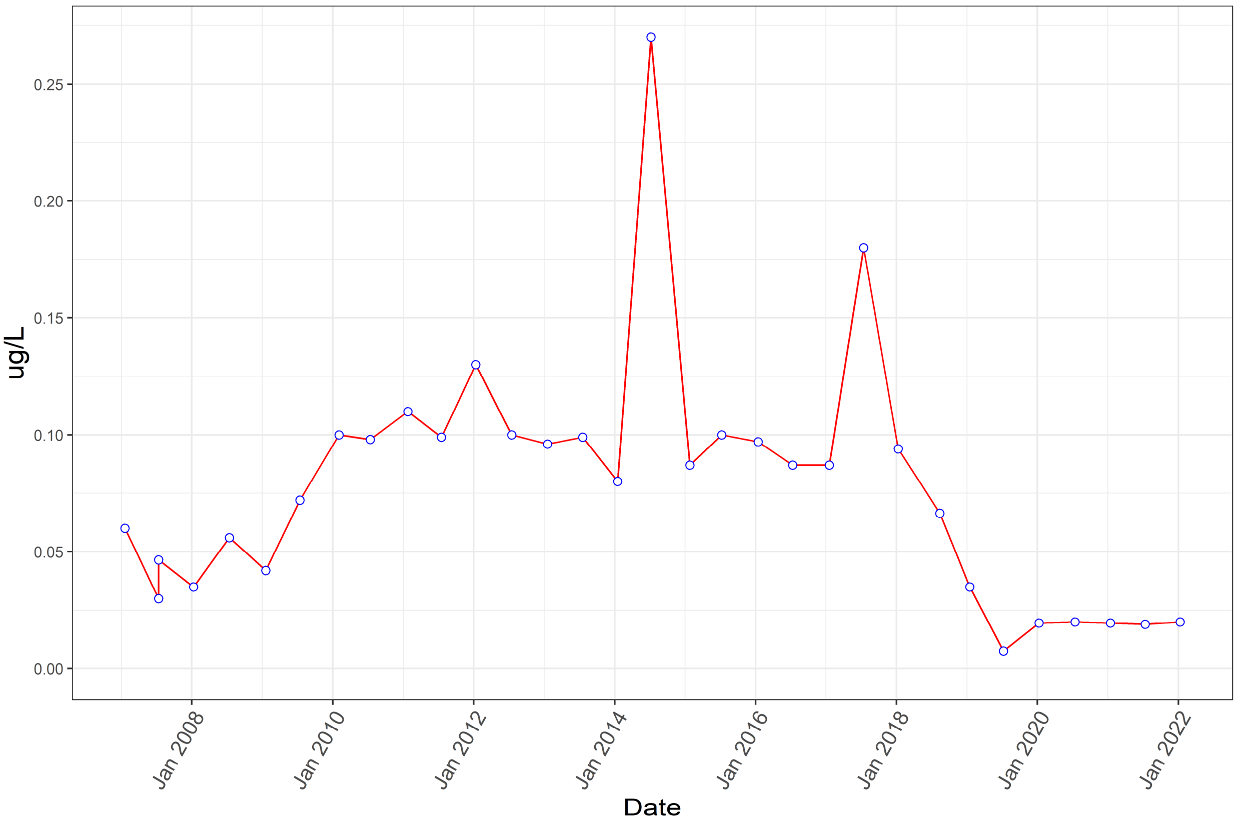

Perfluorononanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

Perfluoroundecanoic Acid



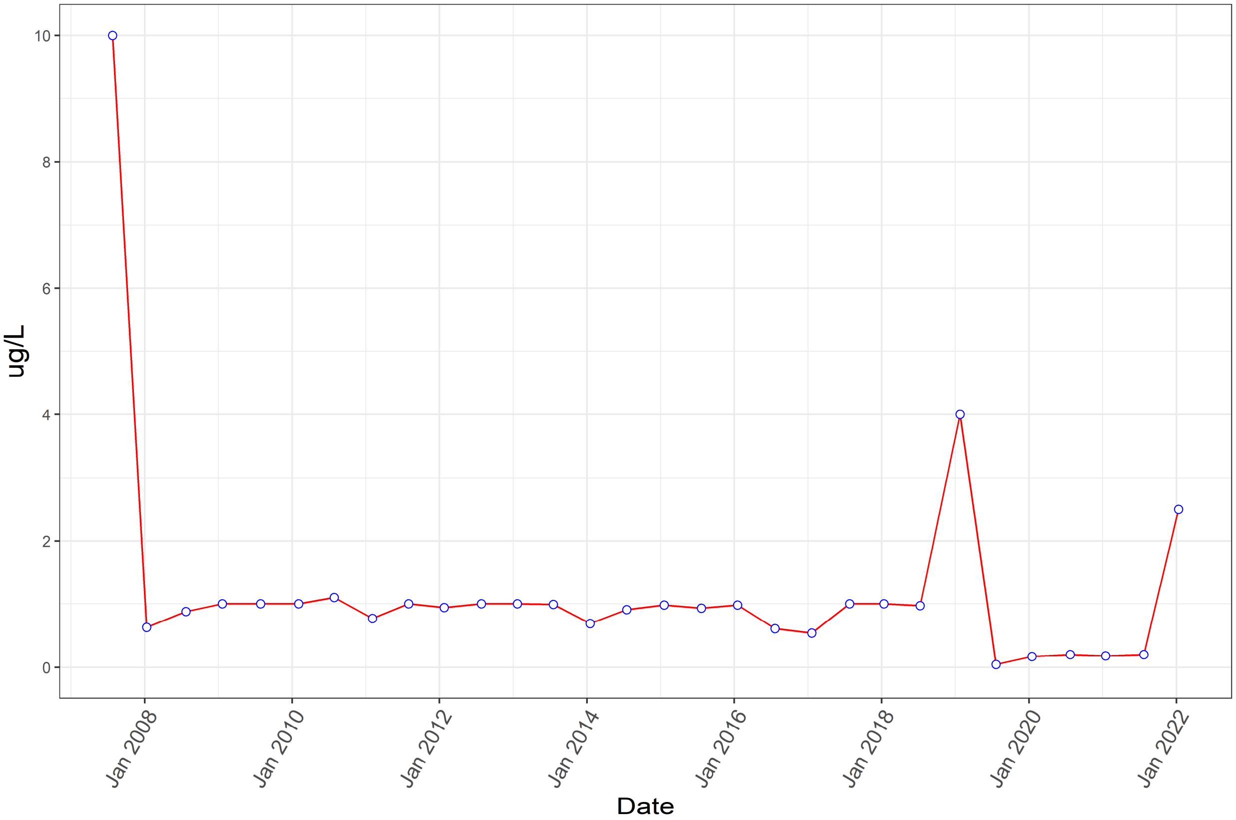
PFOS



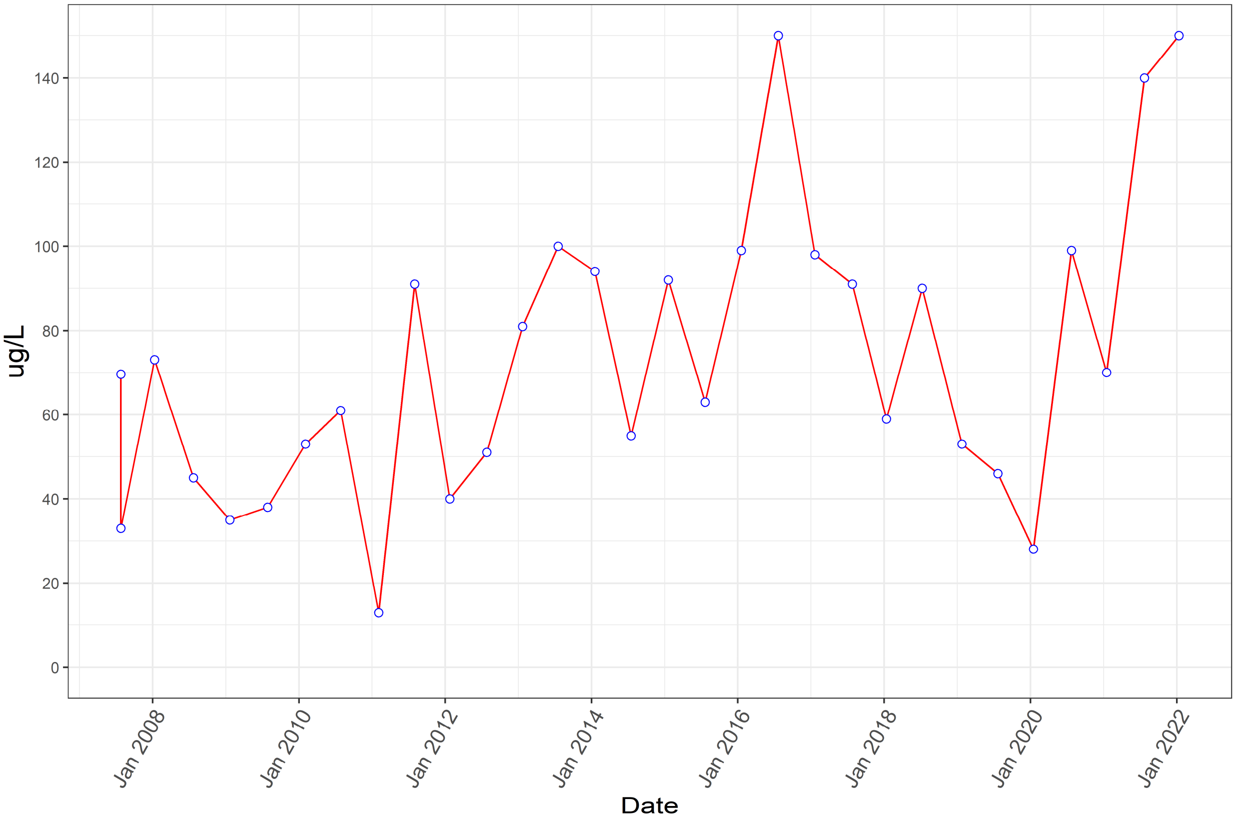
PFAS Monitoring Program (Program 9)

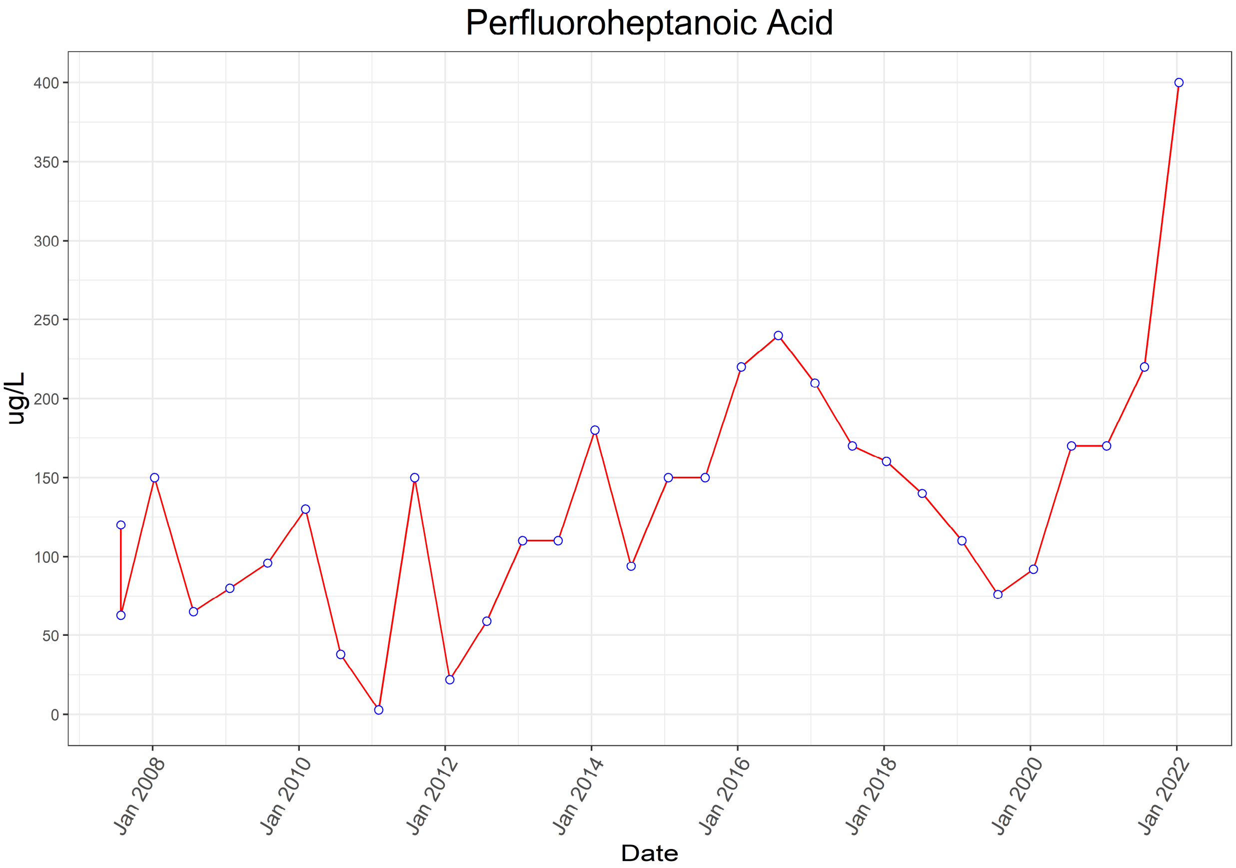
Well Name: G09-M01A

Perfluorobutane Sulfonic Acid

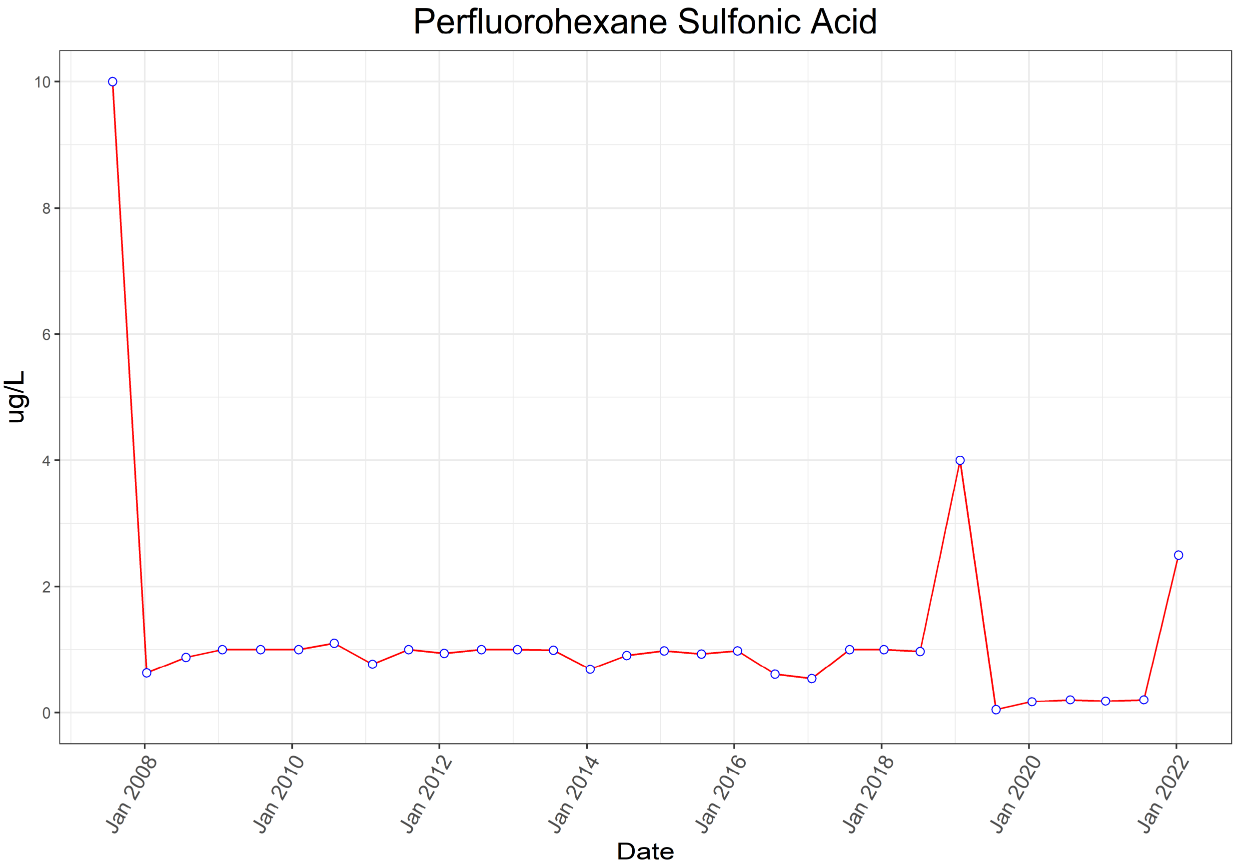


Perfluorobutanoic Acid



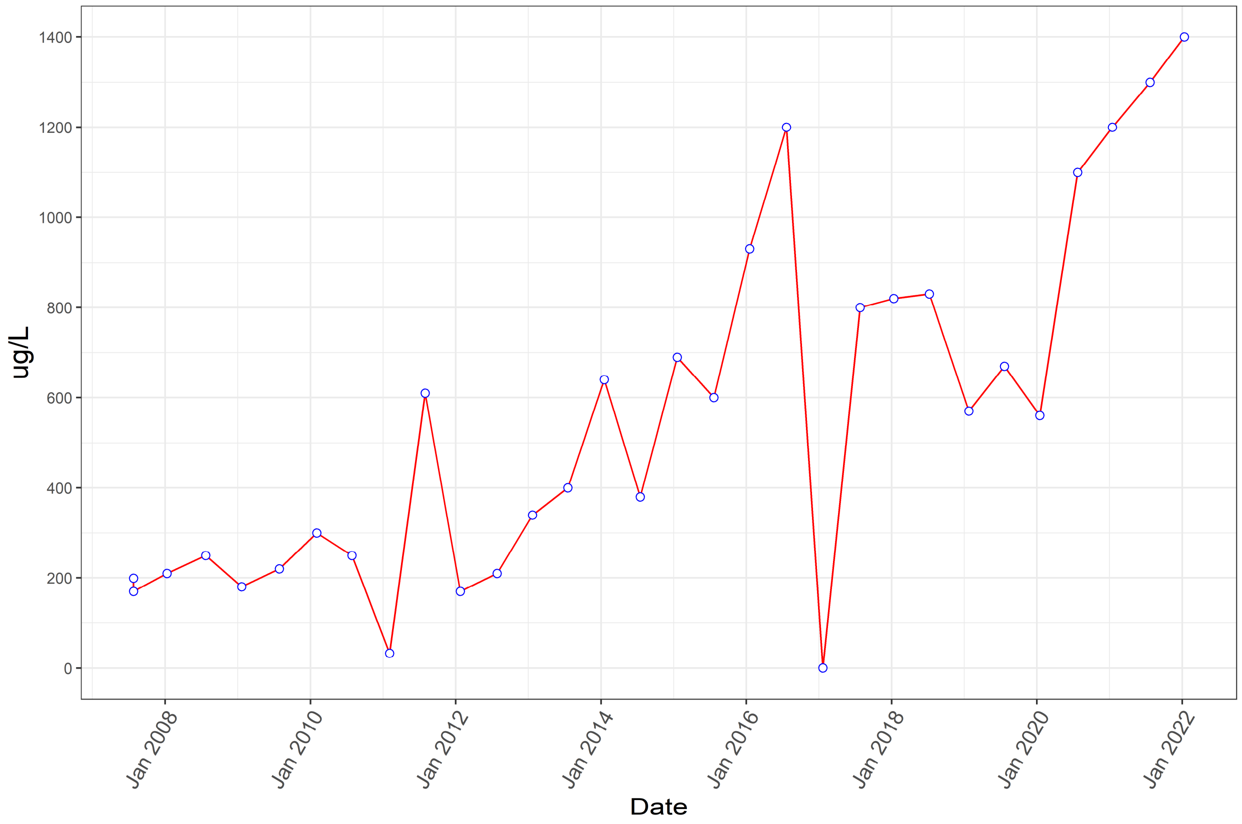


Perfluoroheptanoic Acid

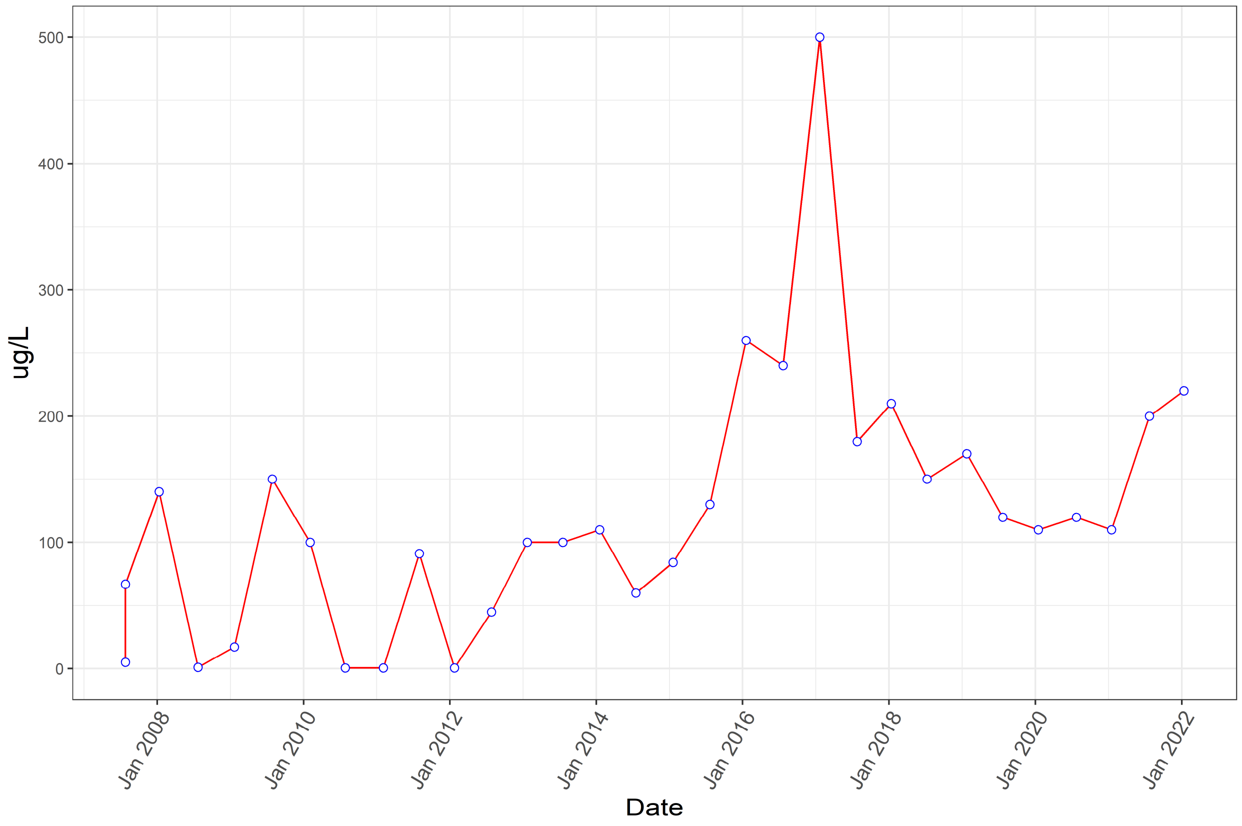


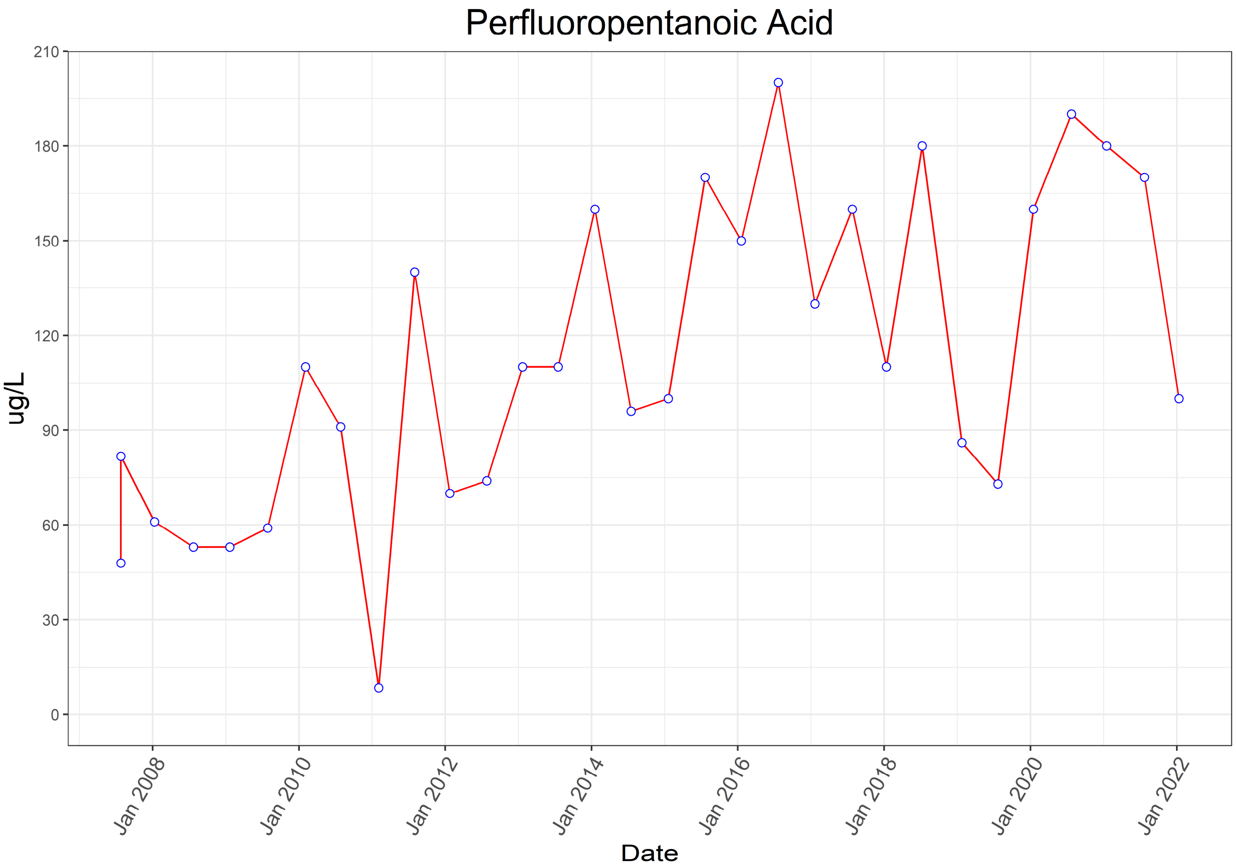
Perfluorohexane Sulfonic Acid

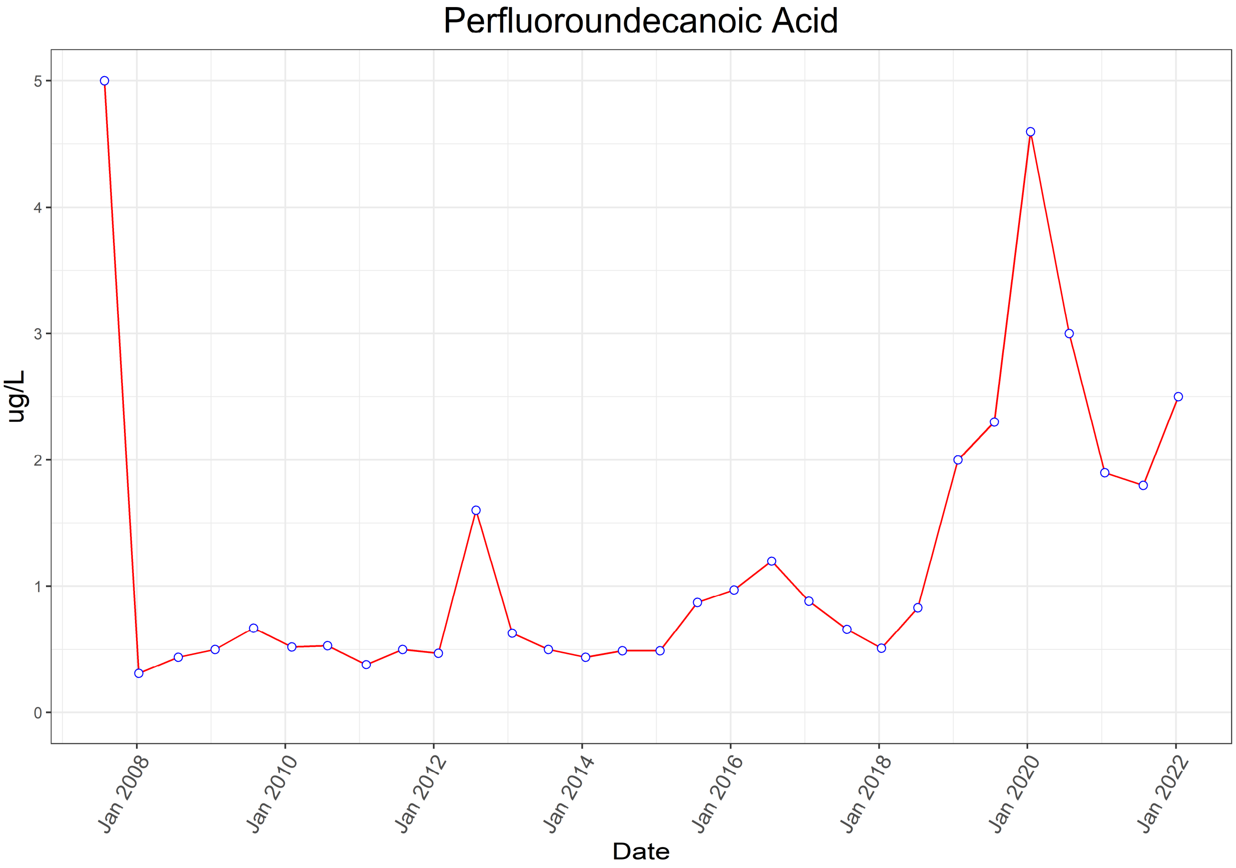
Perfluorohexanoic Acid

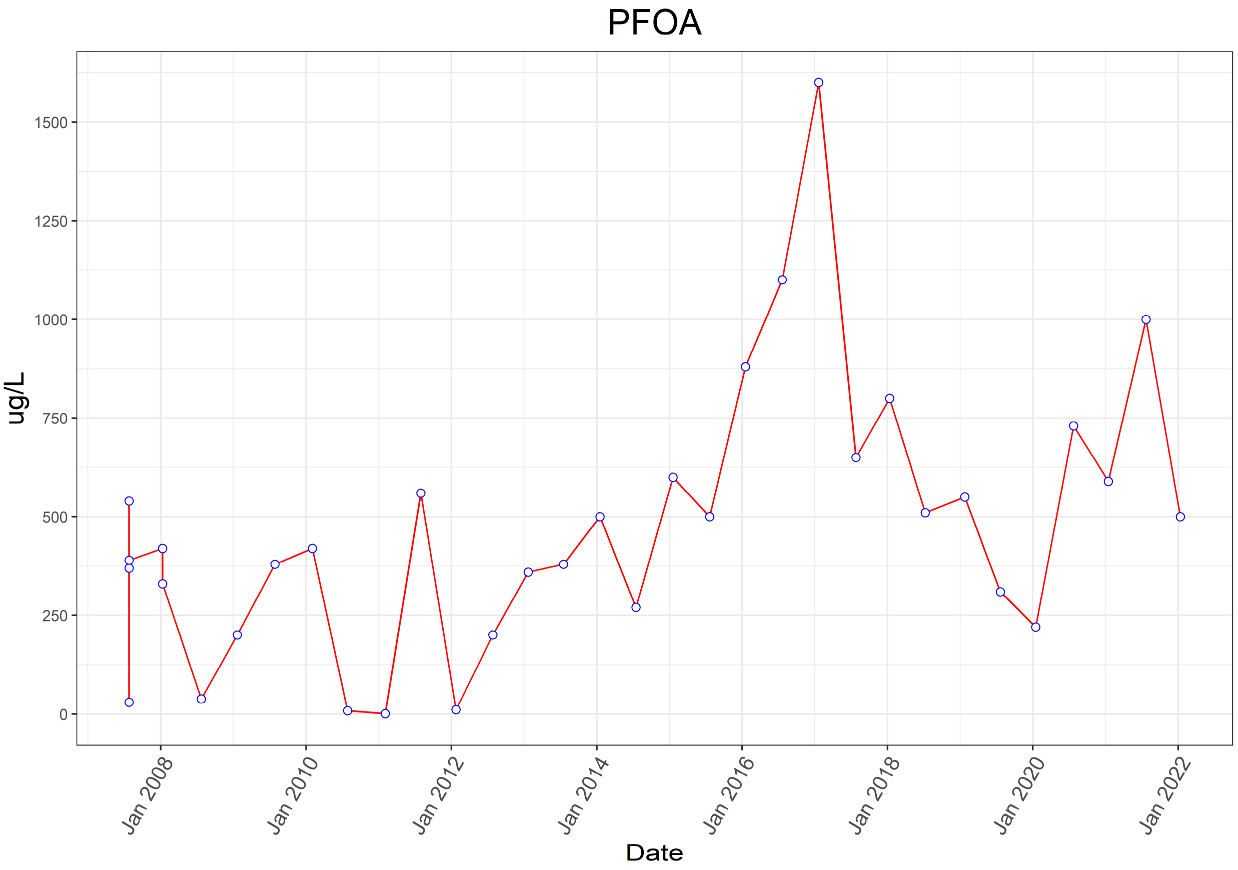


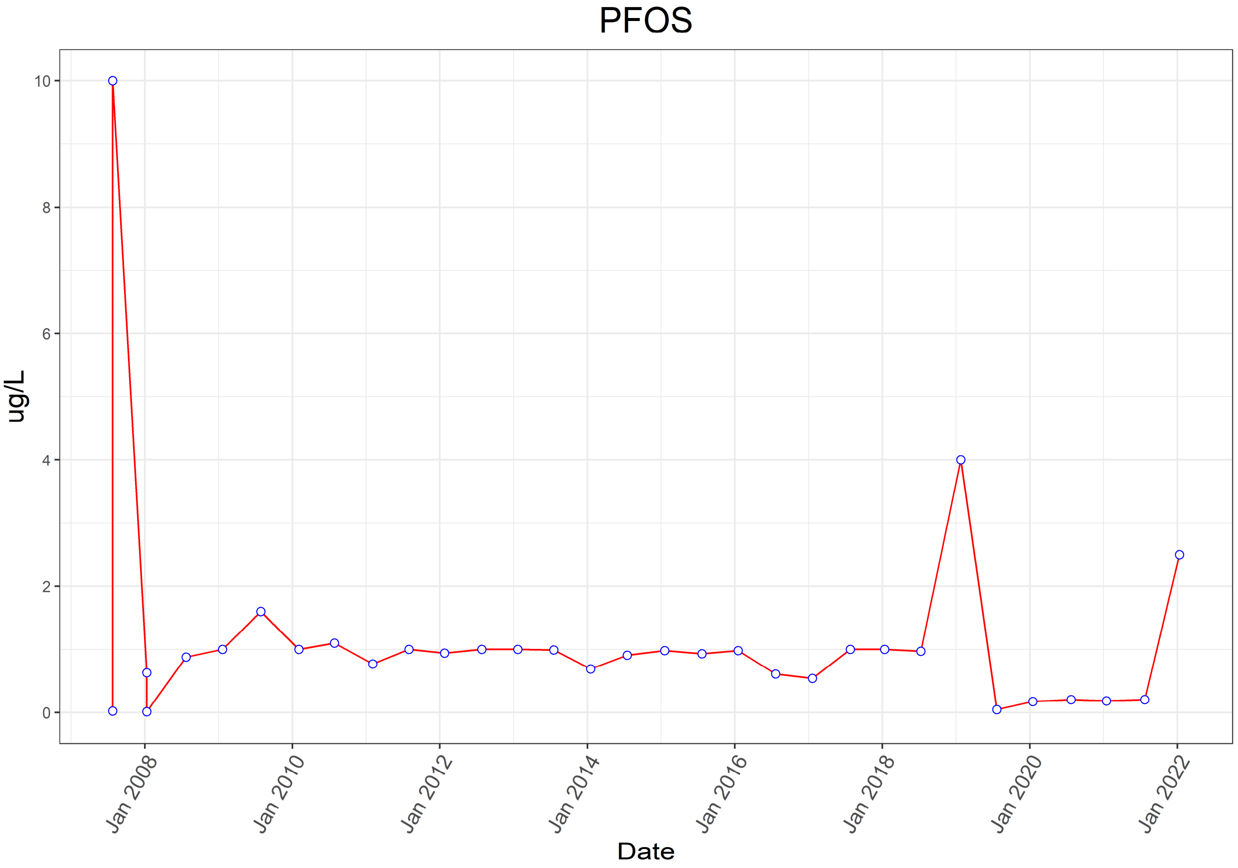
Perfluorononanoic Acid

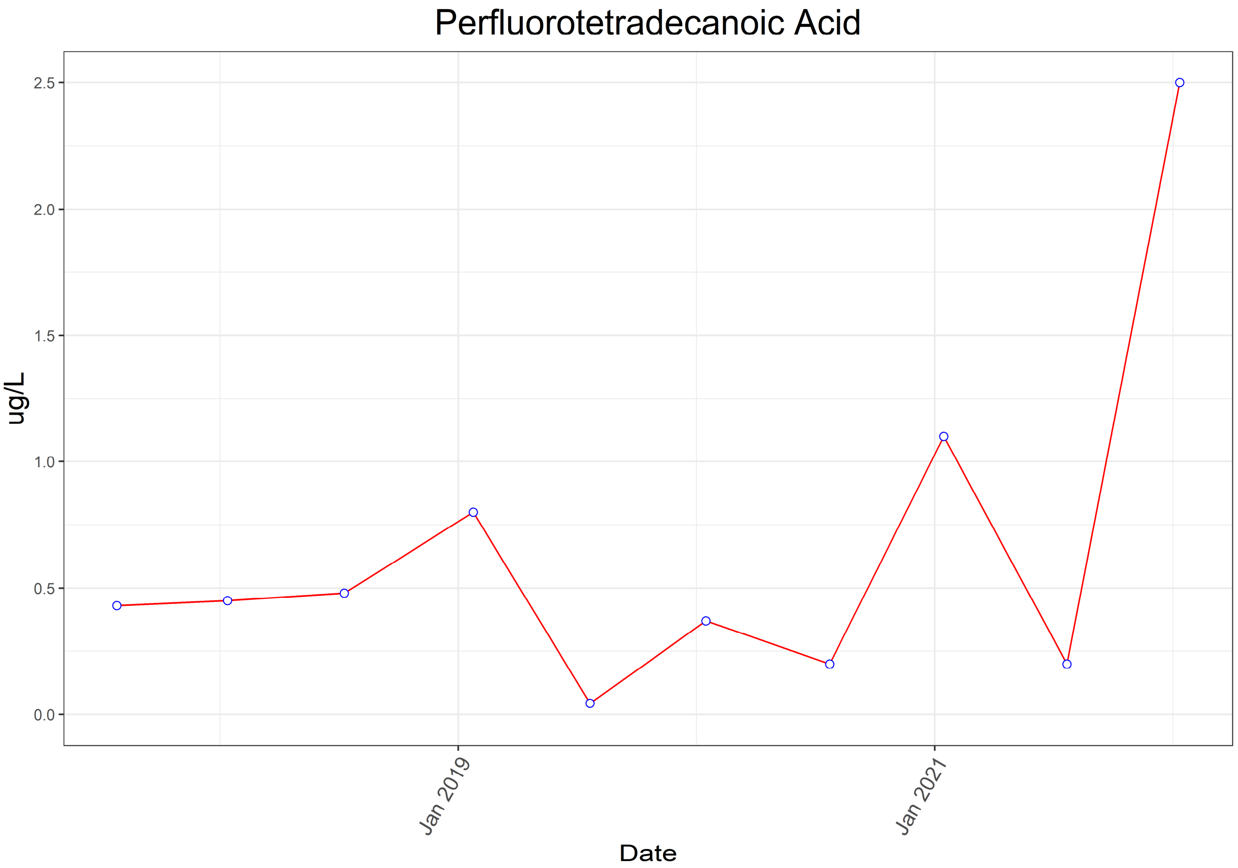



Perfluoropentanoic Acid
ug/L
0
30
60
90
120
150
180
210
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoroundecanoic Acid
ug/L
0
1
2
3
4
5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

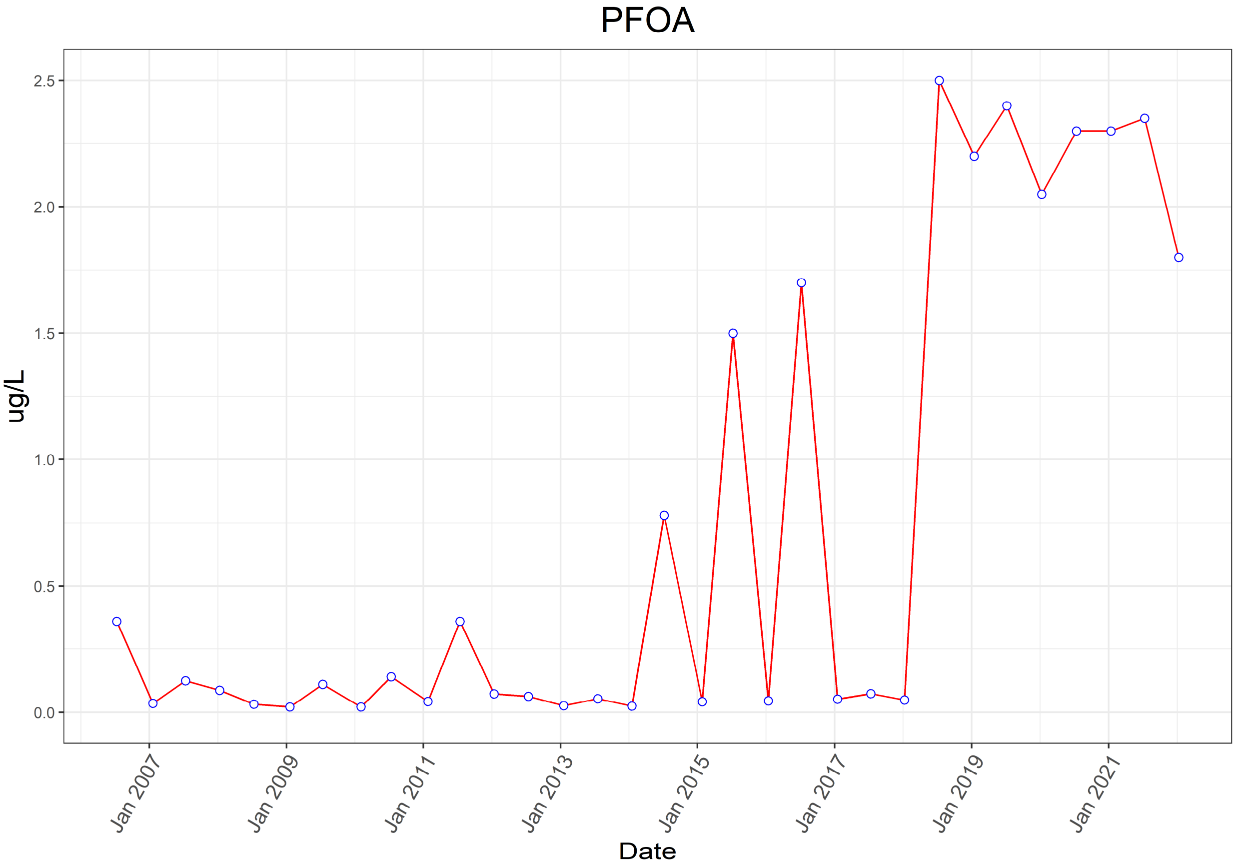

PFOA
ug/L
1500
1250
1000
750
500
250
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

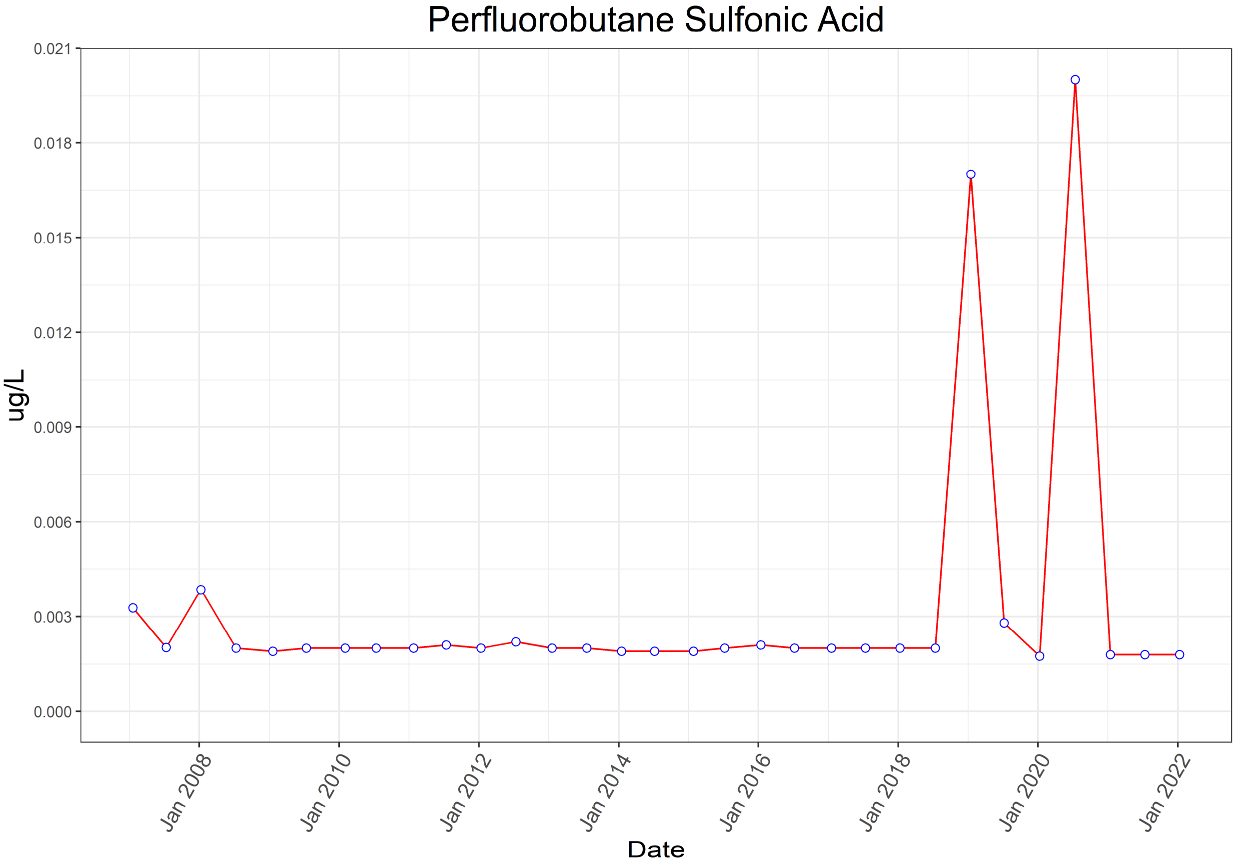

PFOS
ug/L
10
8
6
4
2
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

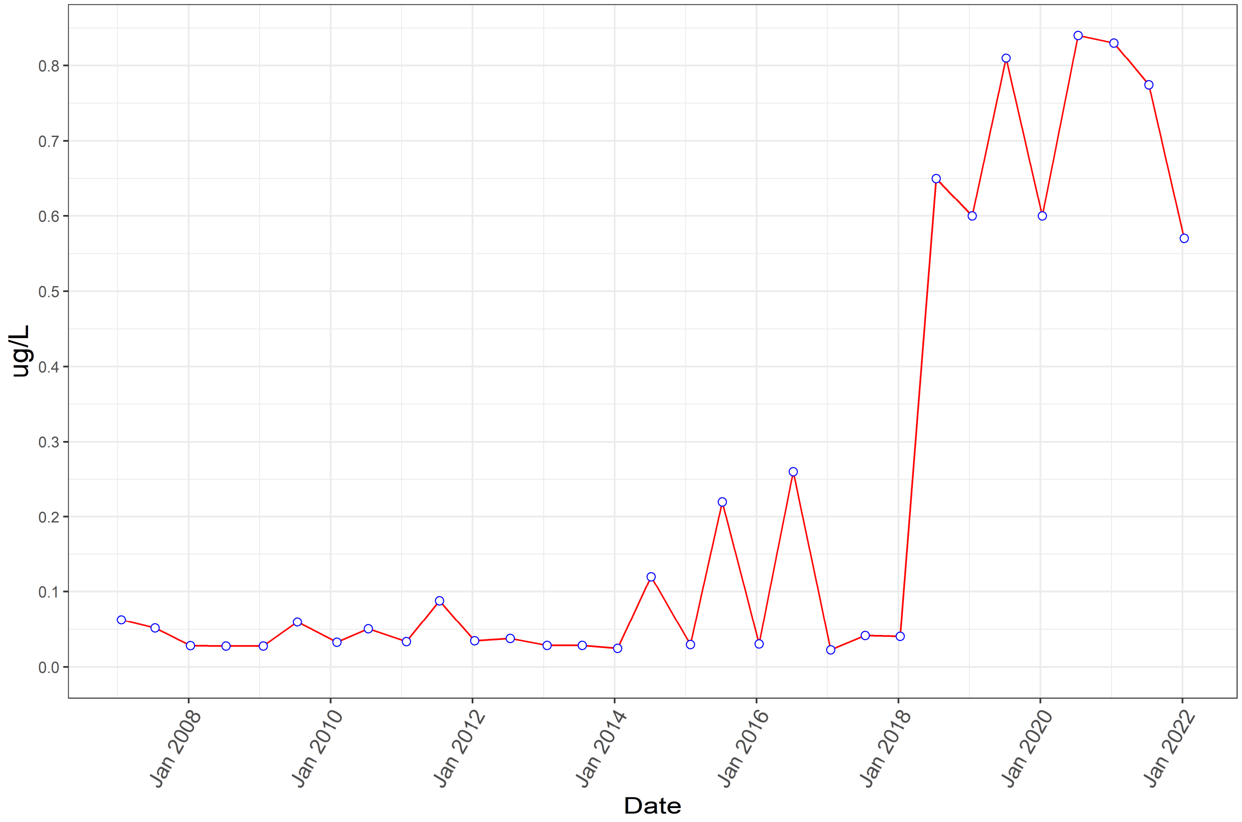

Perfluorotetradecanoic Acid
ug/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2019
Jan 2021
Date

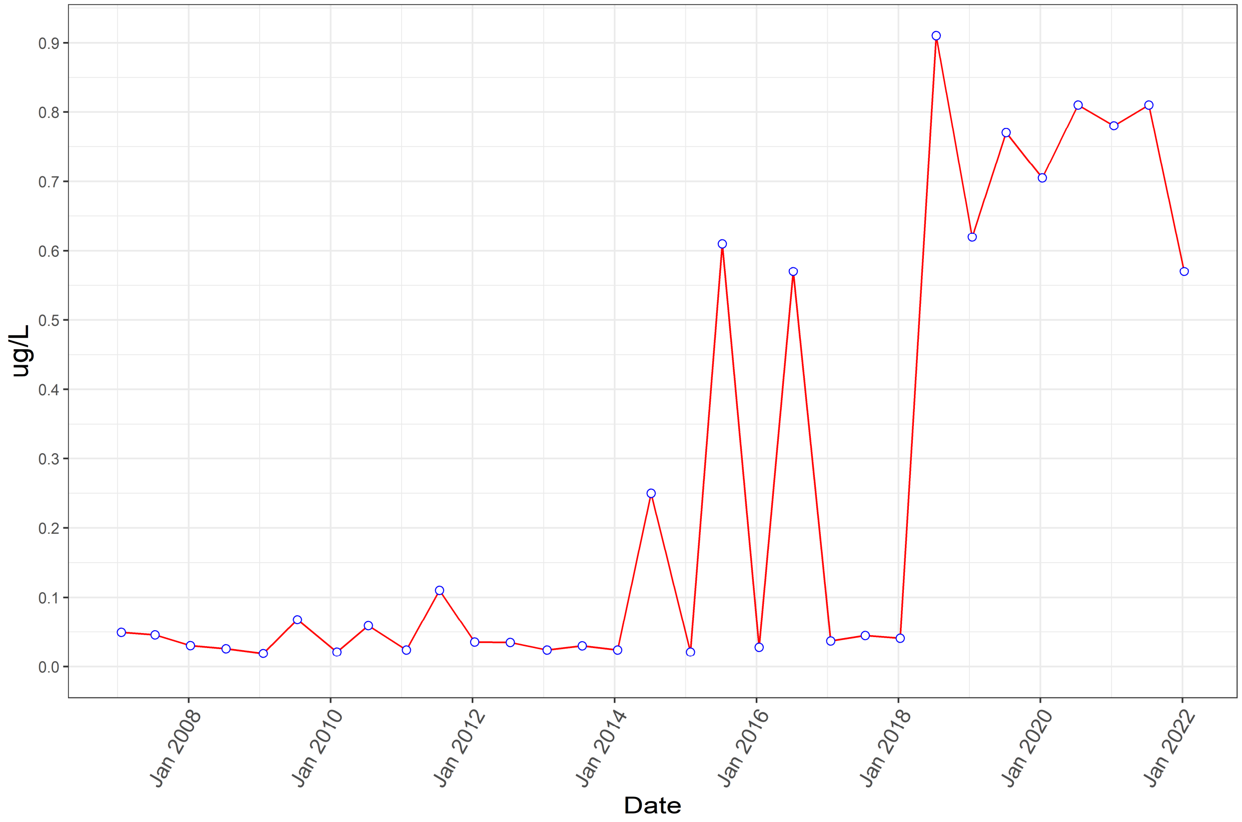
PFAS Monitoring Program (Program 9)

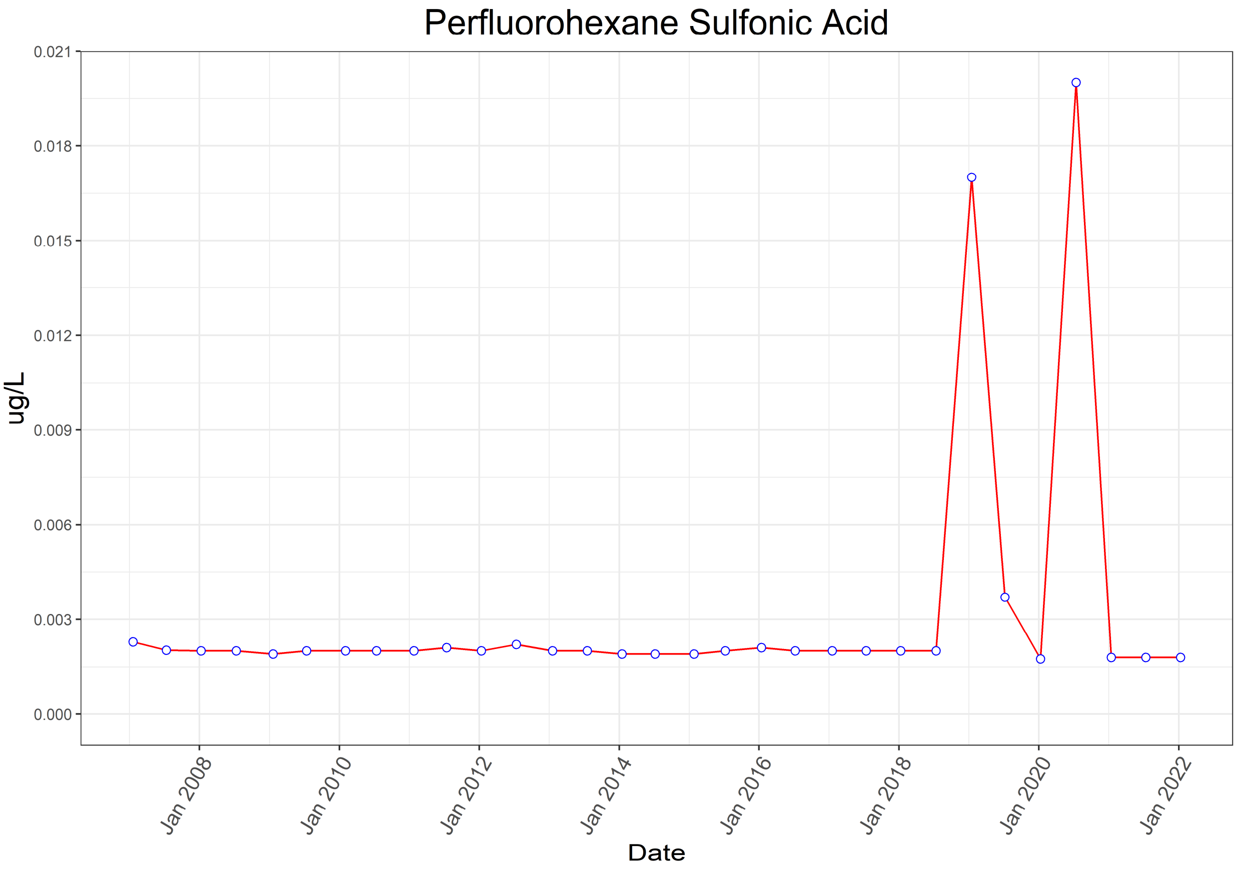
Well Name: J05-M01C

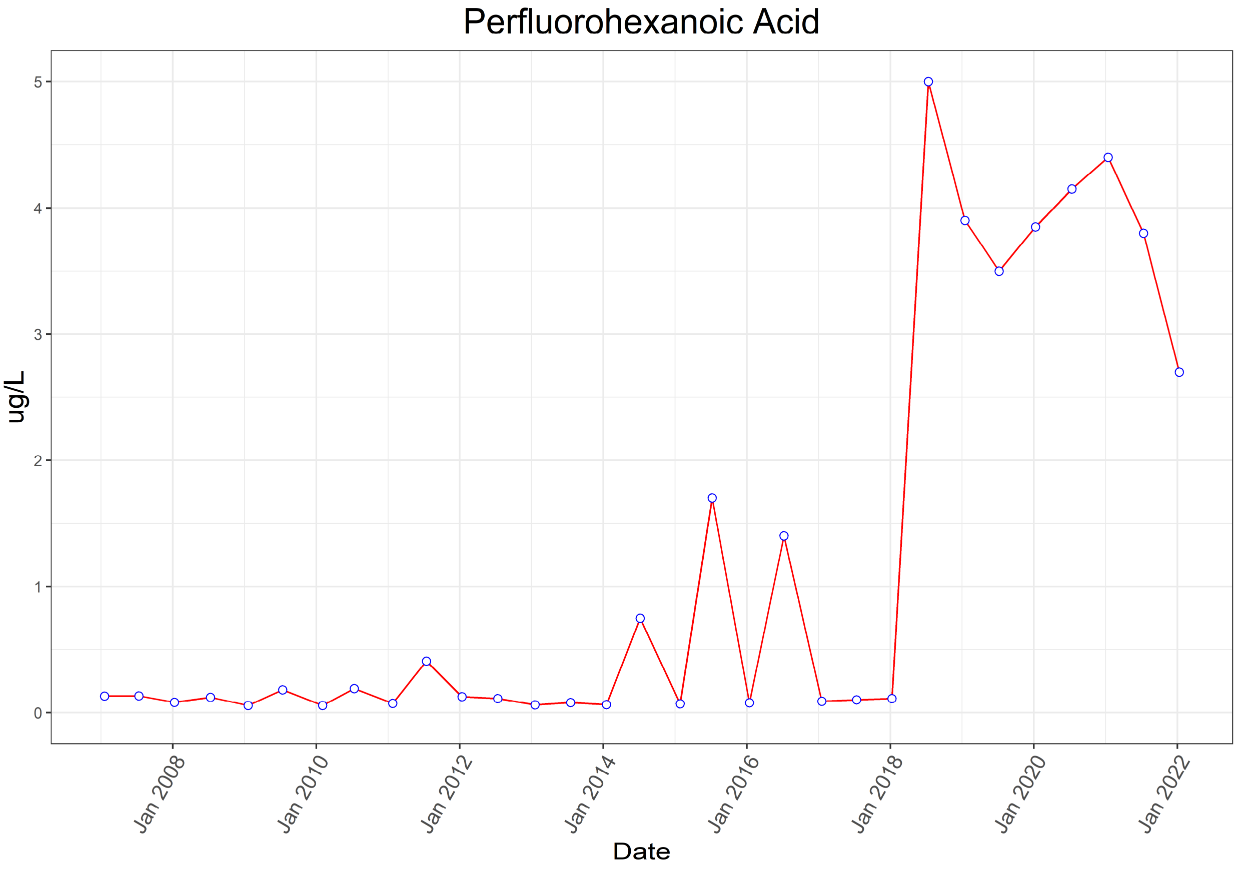


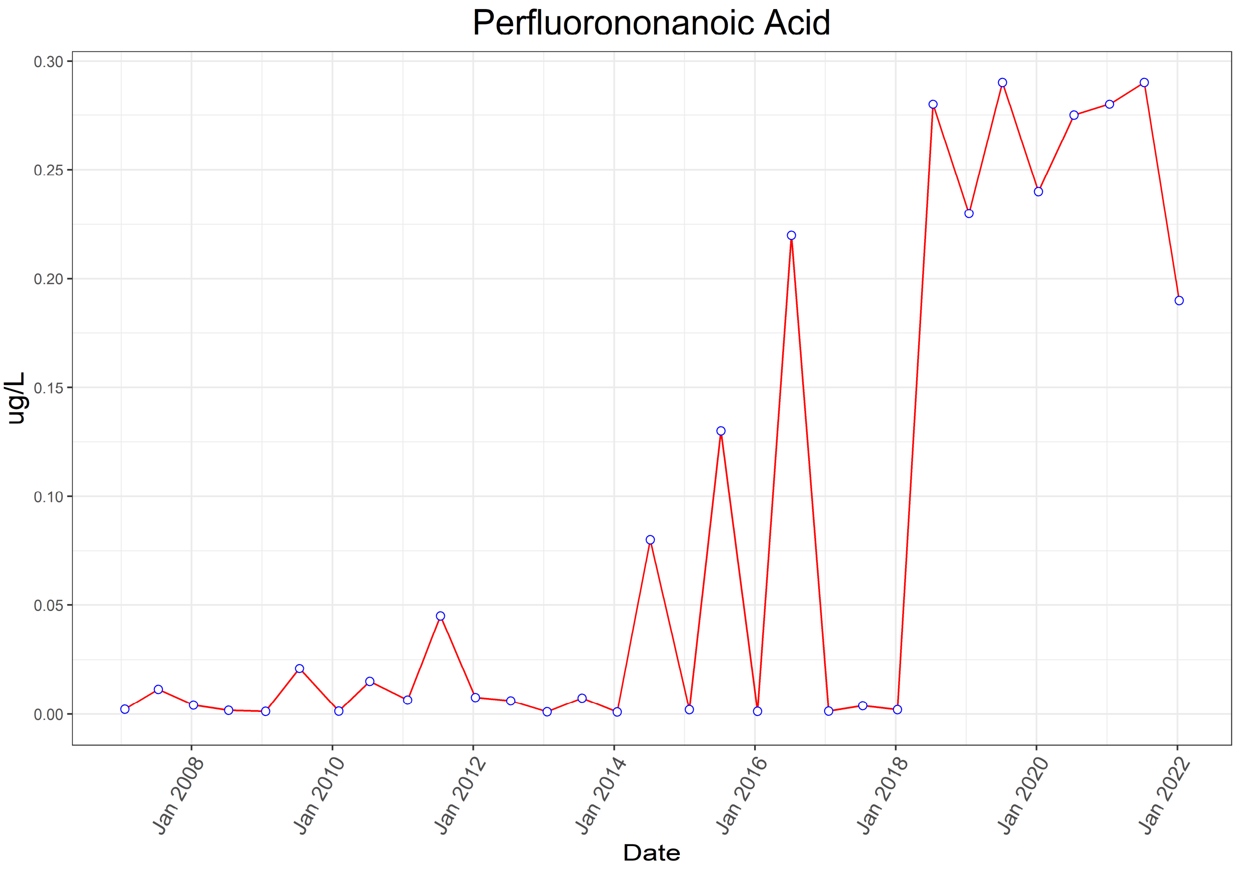


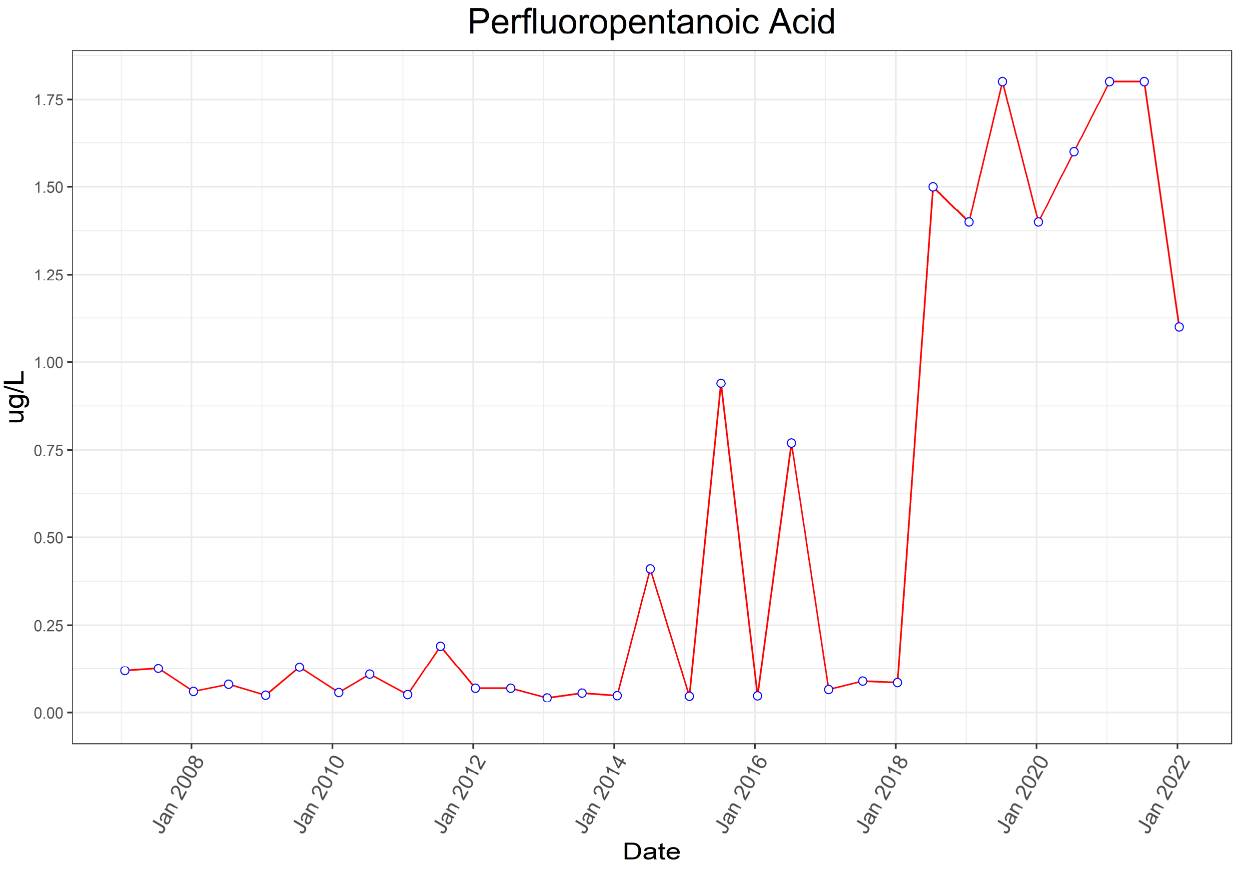

Perfluorobutanoic Acid

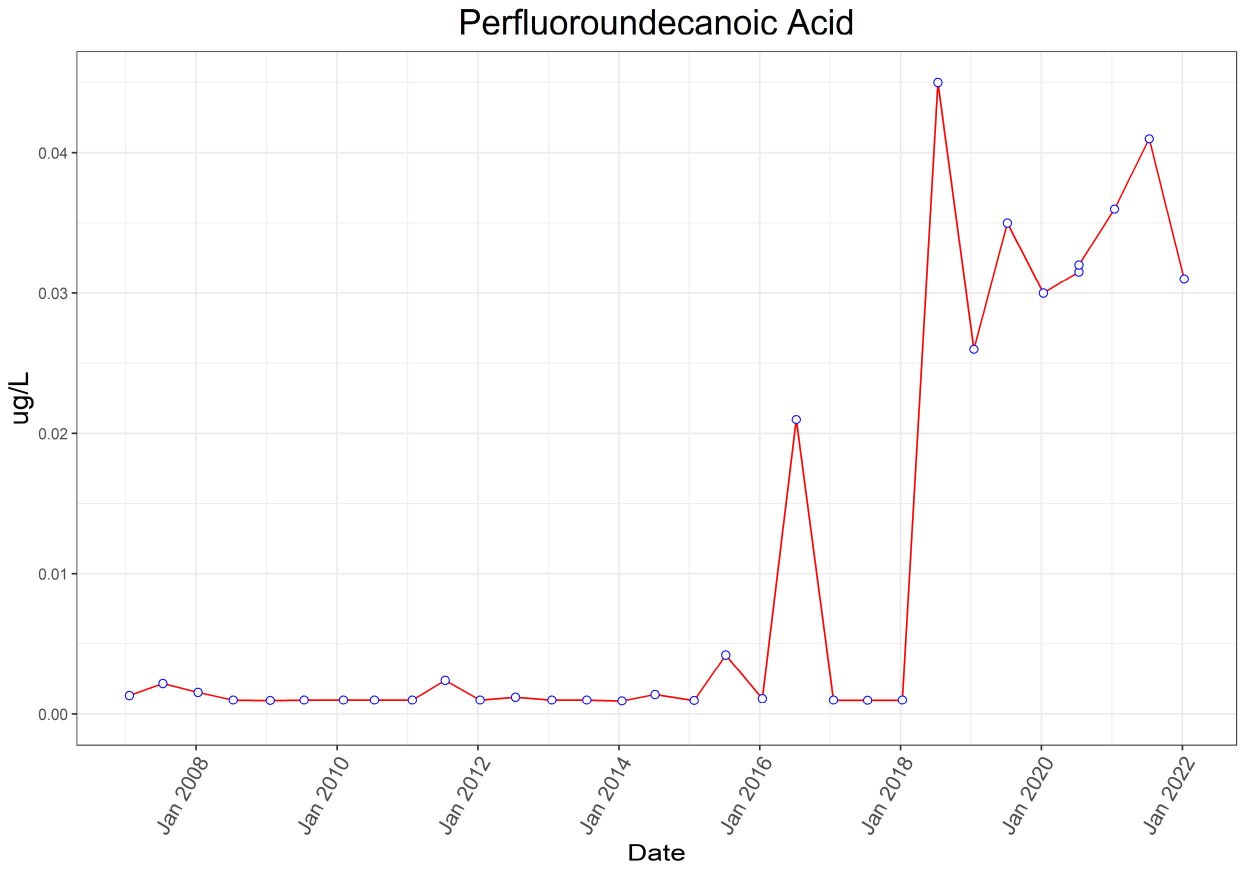

Perfluoroheptanoic Acid

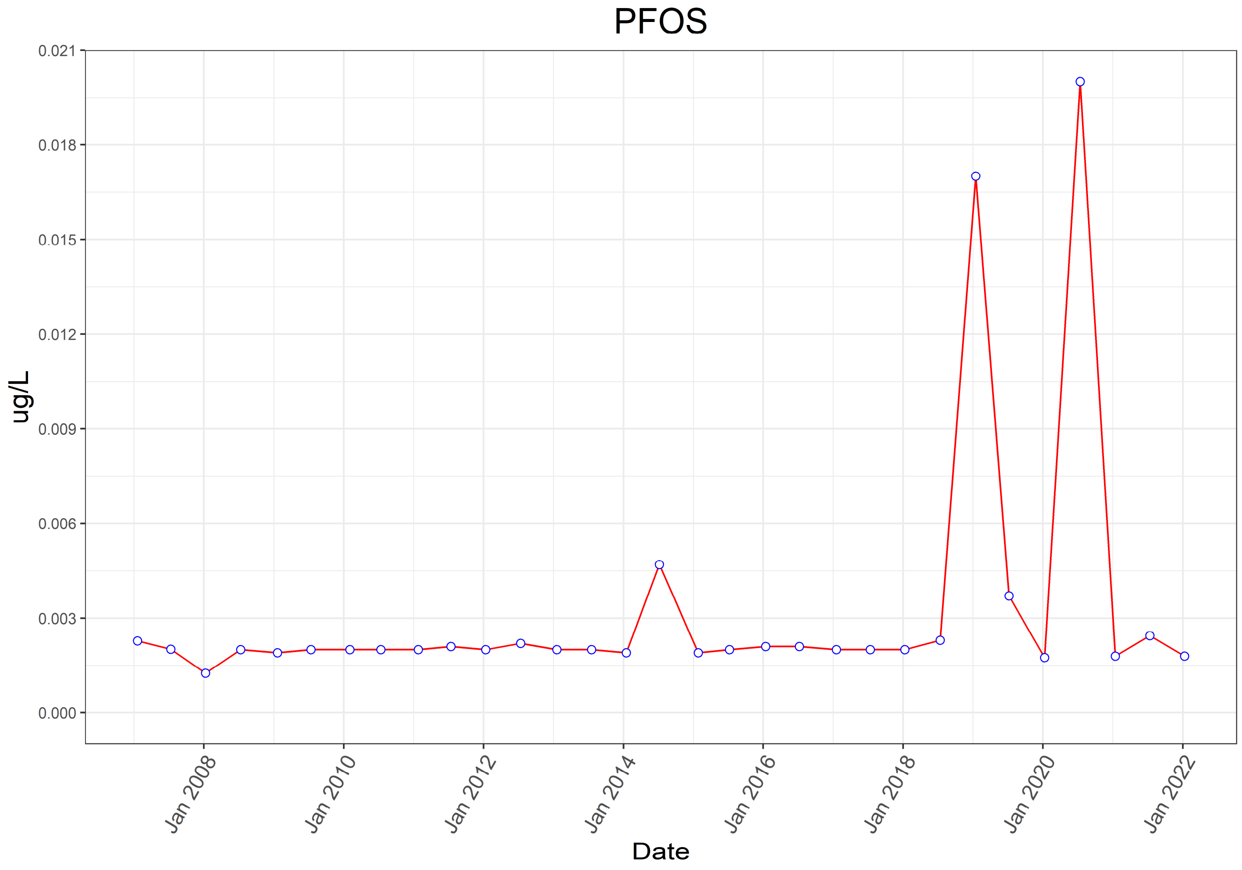

Perfluorohexane Sulfonic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexanoic Acid
ug/L
5
4
3
2
1
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorononanoic Acid
ug/L
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

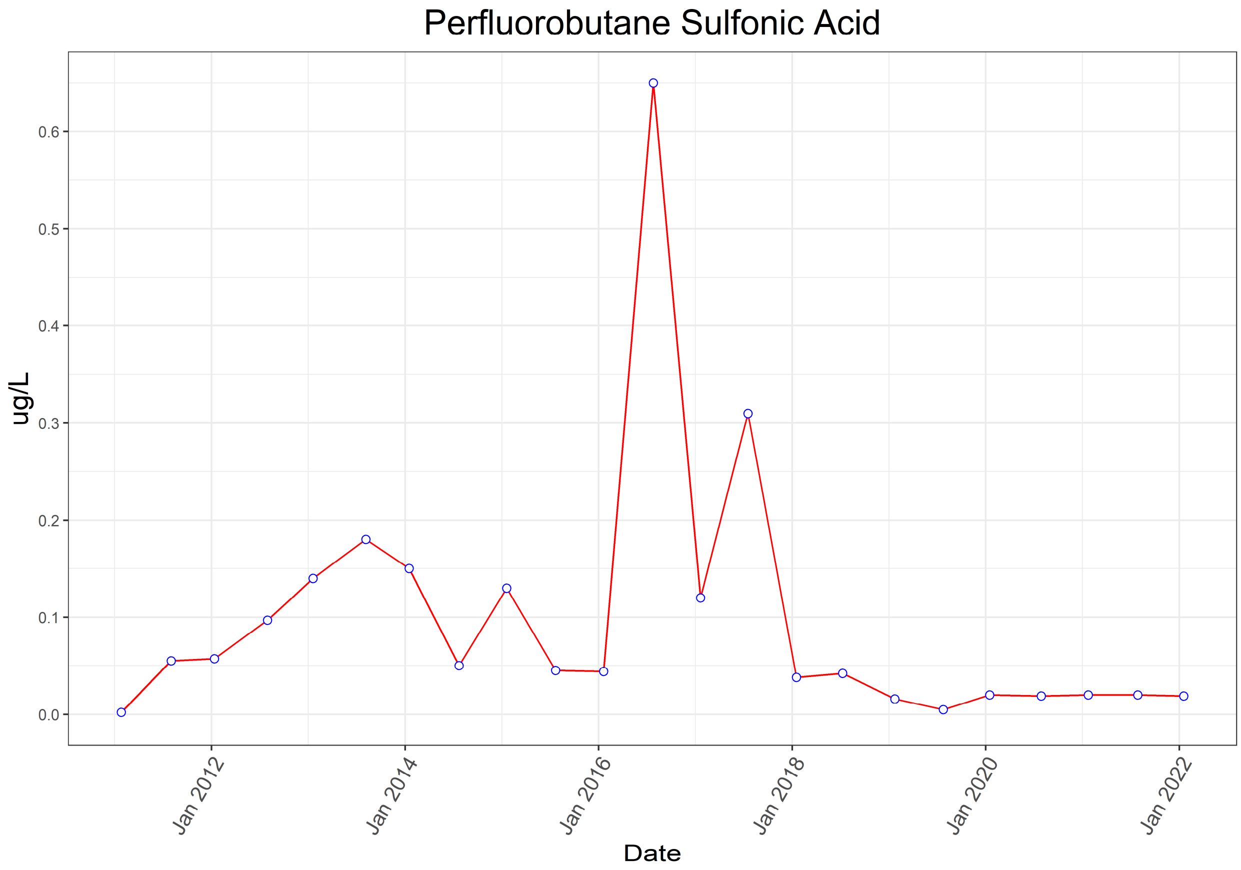

Perfluoropentanoic Acid
ug/L
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

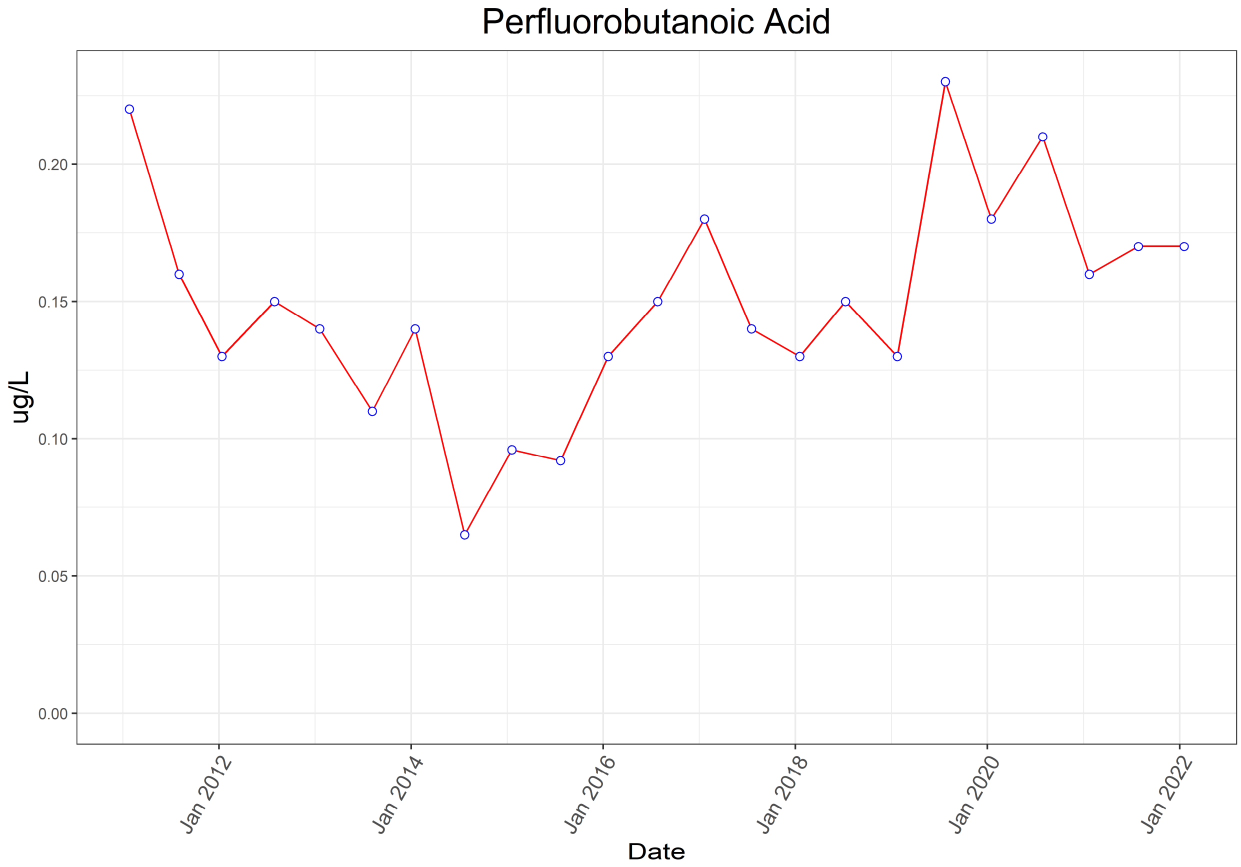

Perfluoroundecanoic Acid
ug/L
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

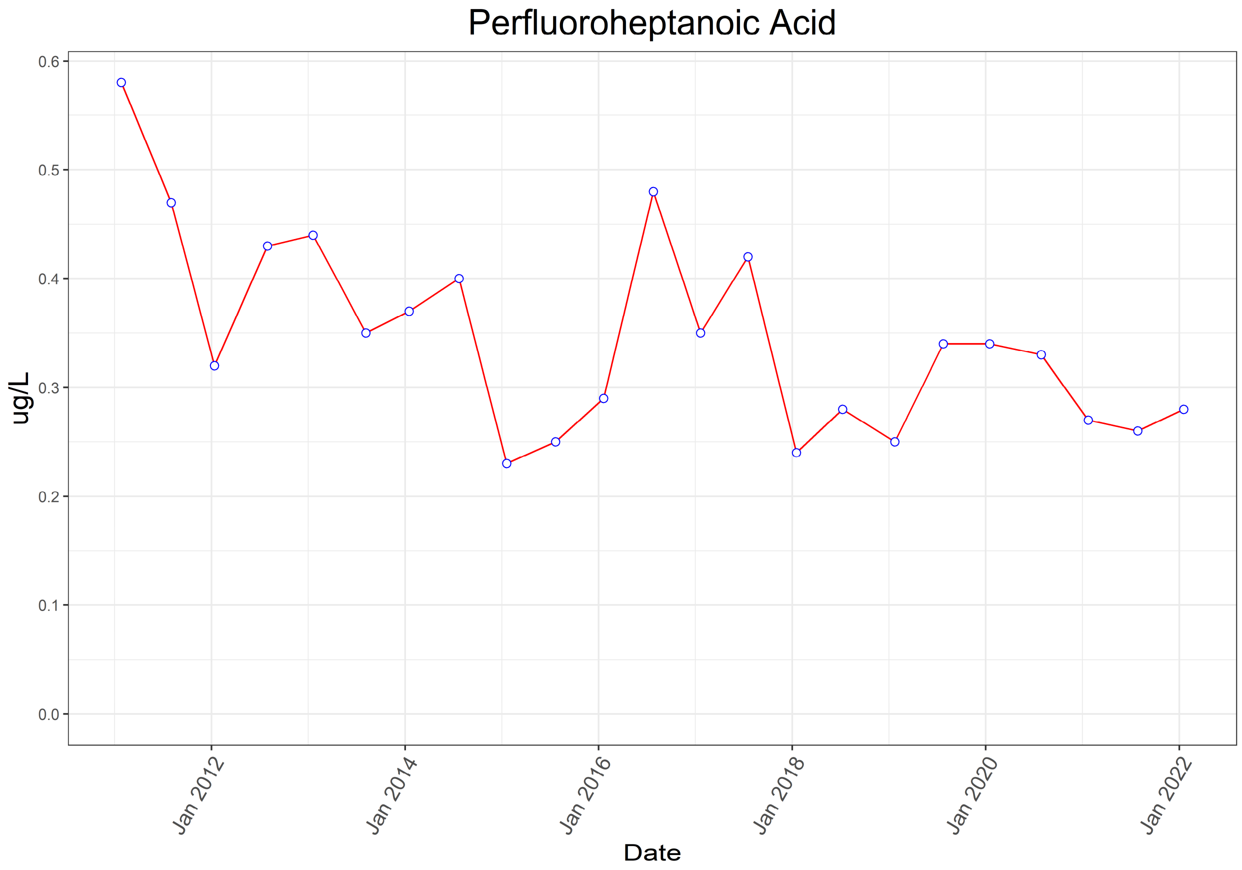

PFOS
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

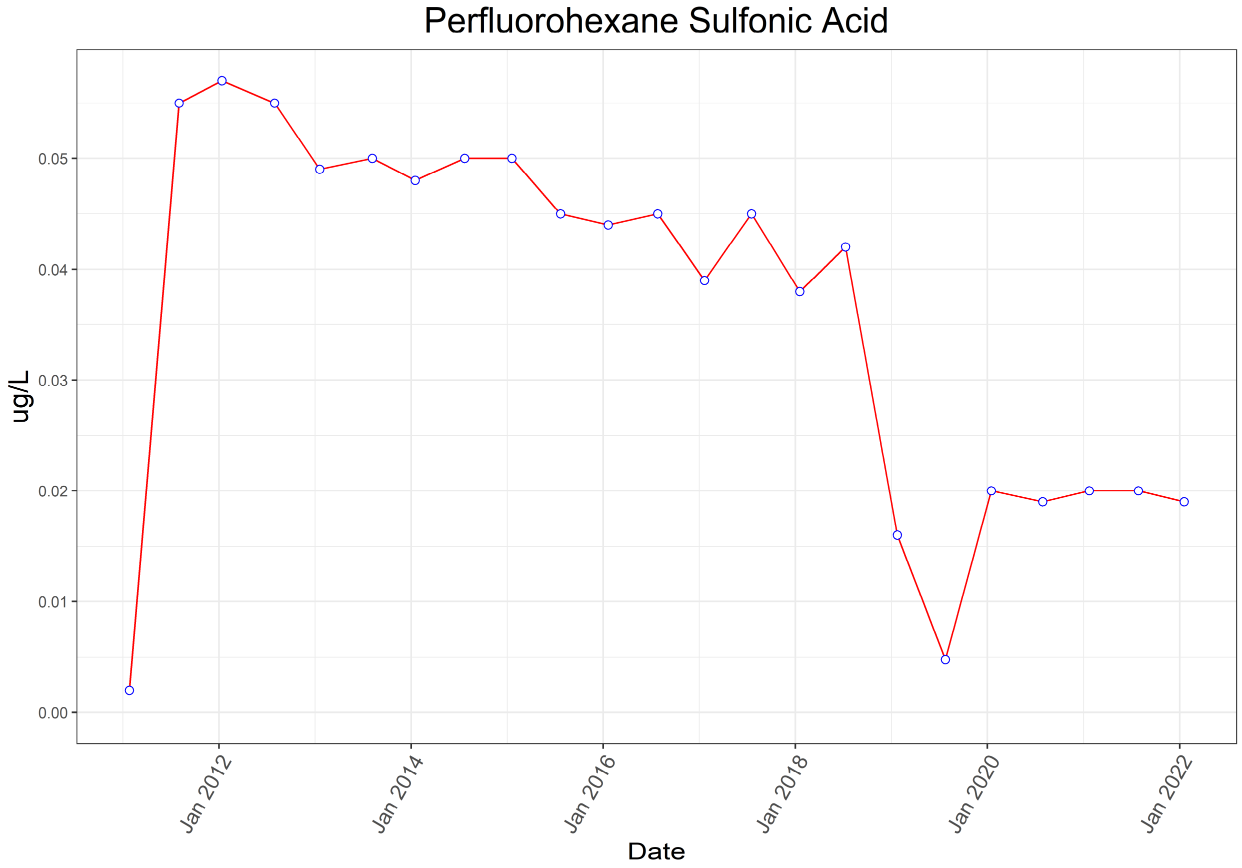
PFAS Monitoring Program (Program 9)

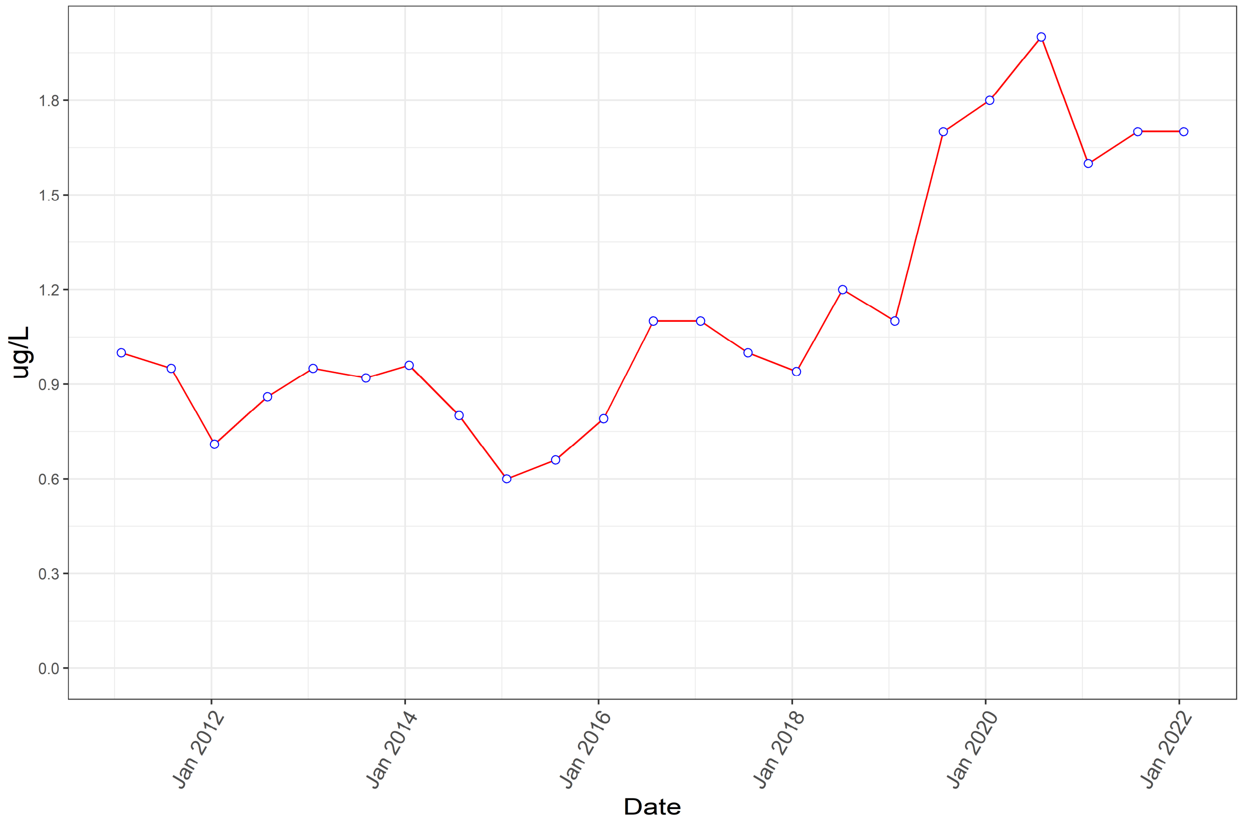
Well Name: J10-M02B



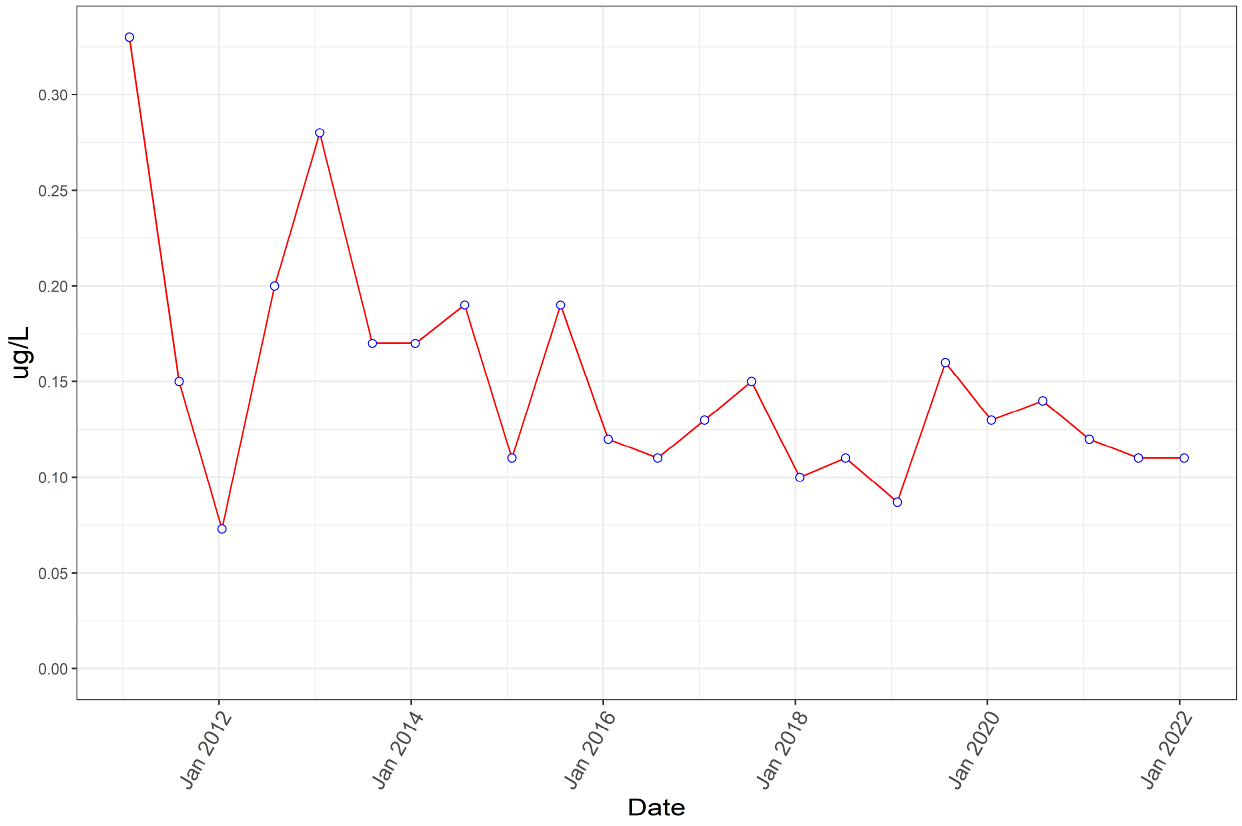



Perfluoroheptanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexane Sulfonic Acid
ug/L
0.00
0.01
0.02
0.03
0.04
0.05
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

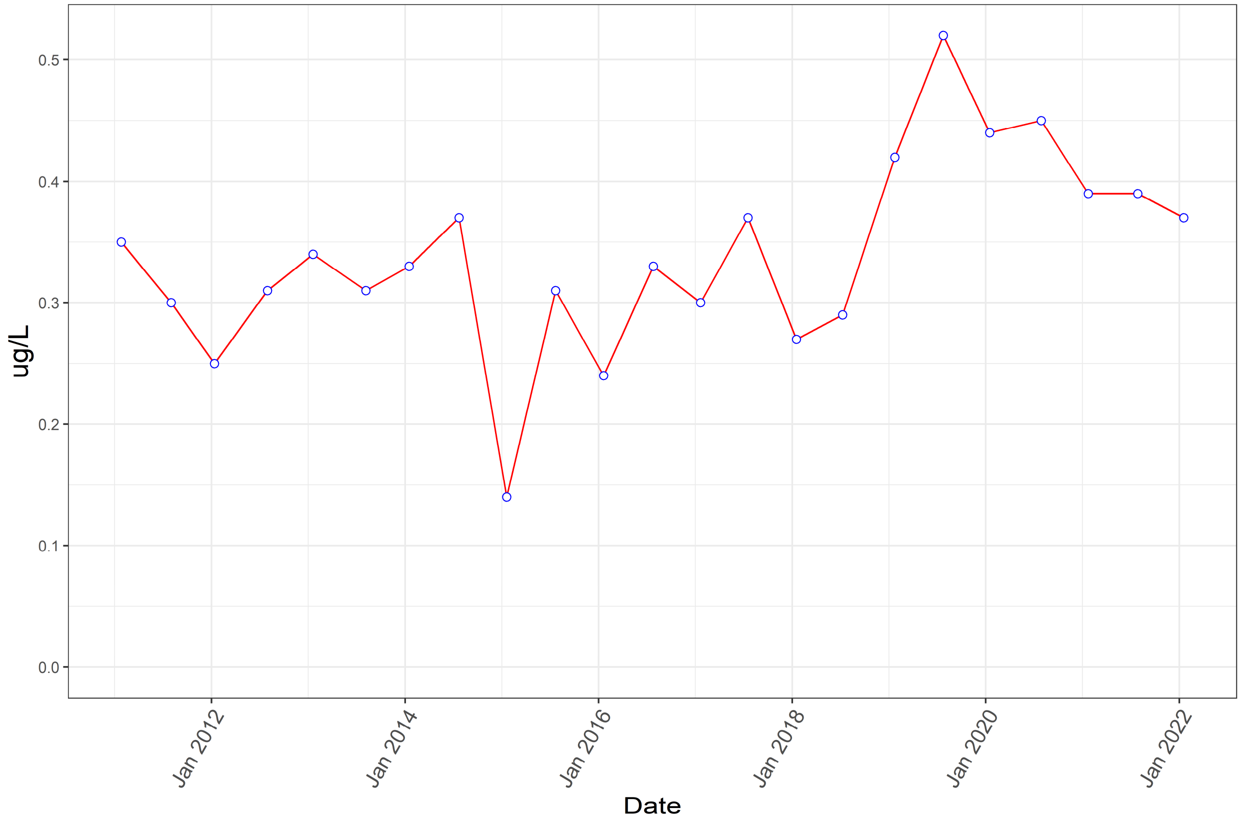


Perfluorohexanoic Acid

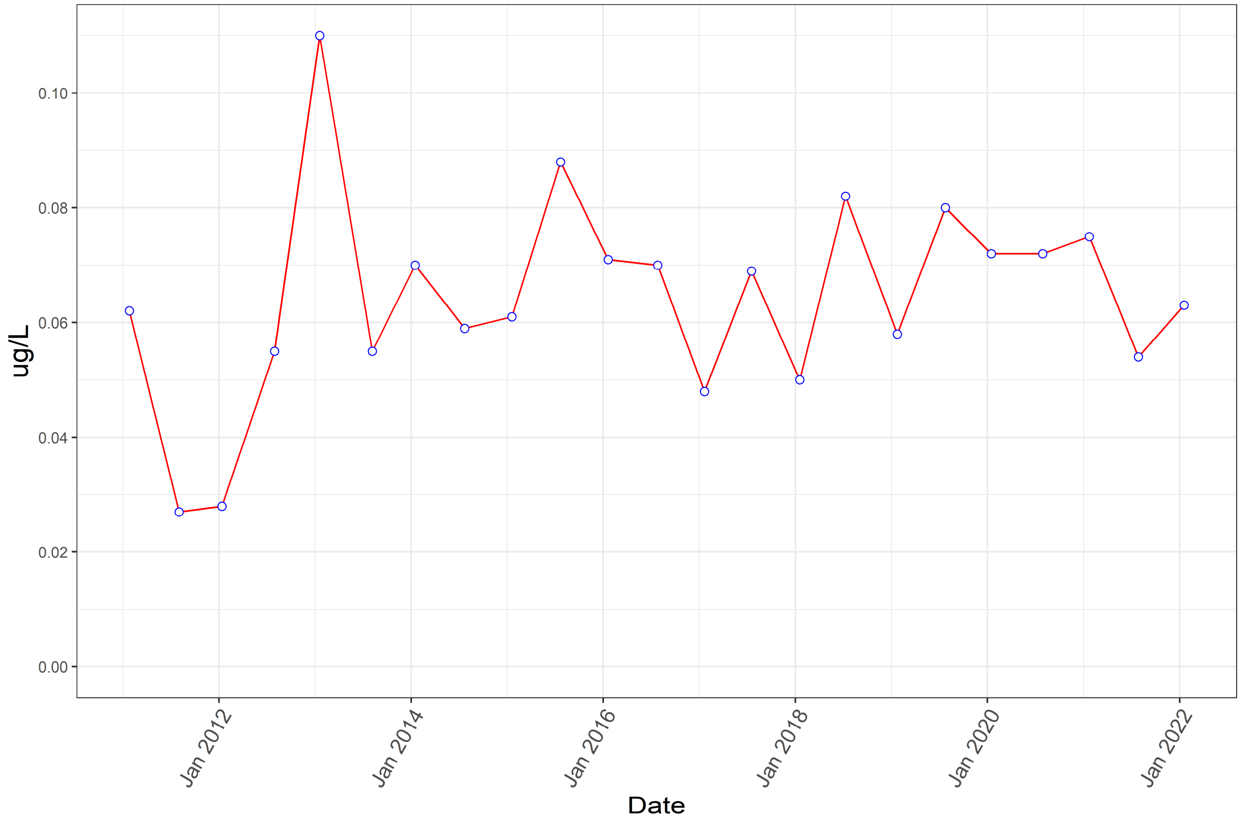


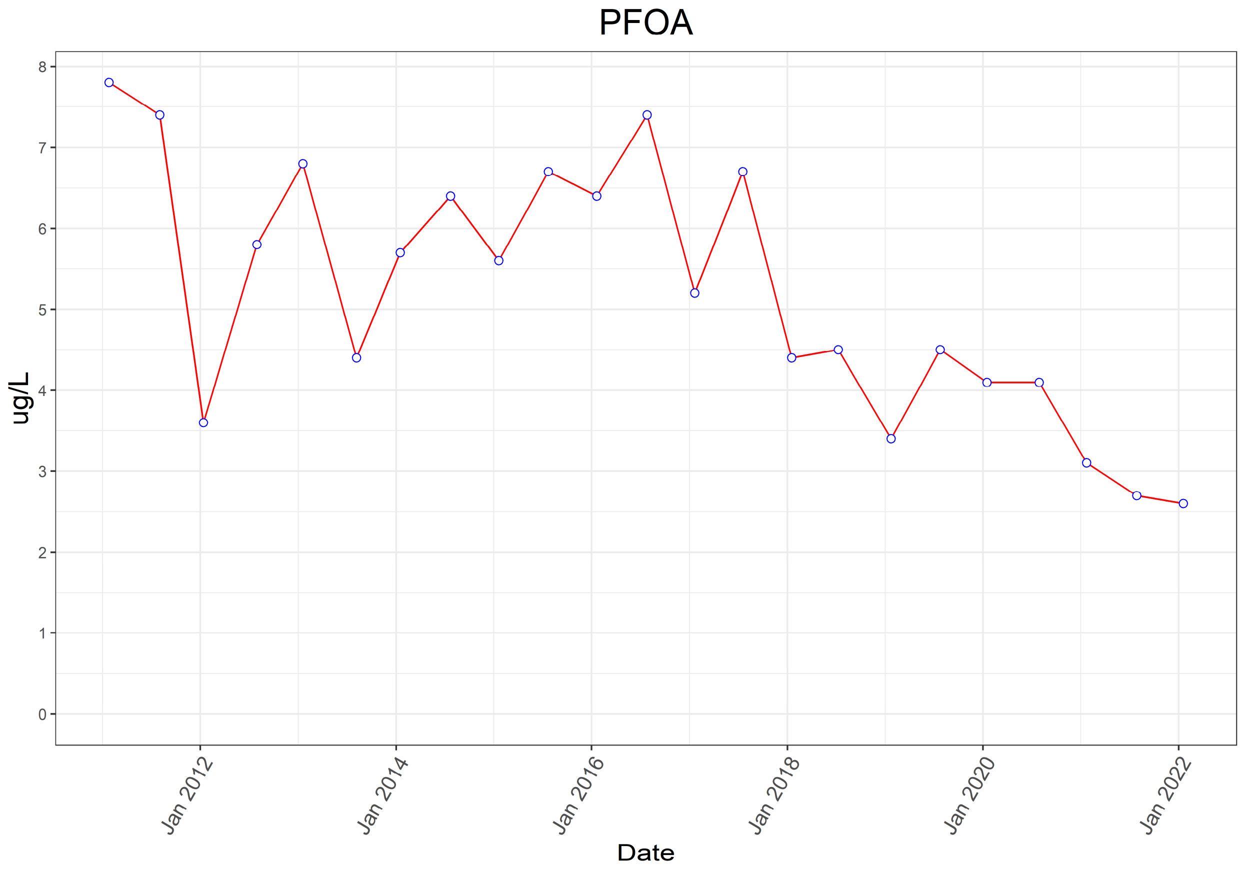
Perfluorononanoic Acid

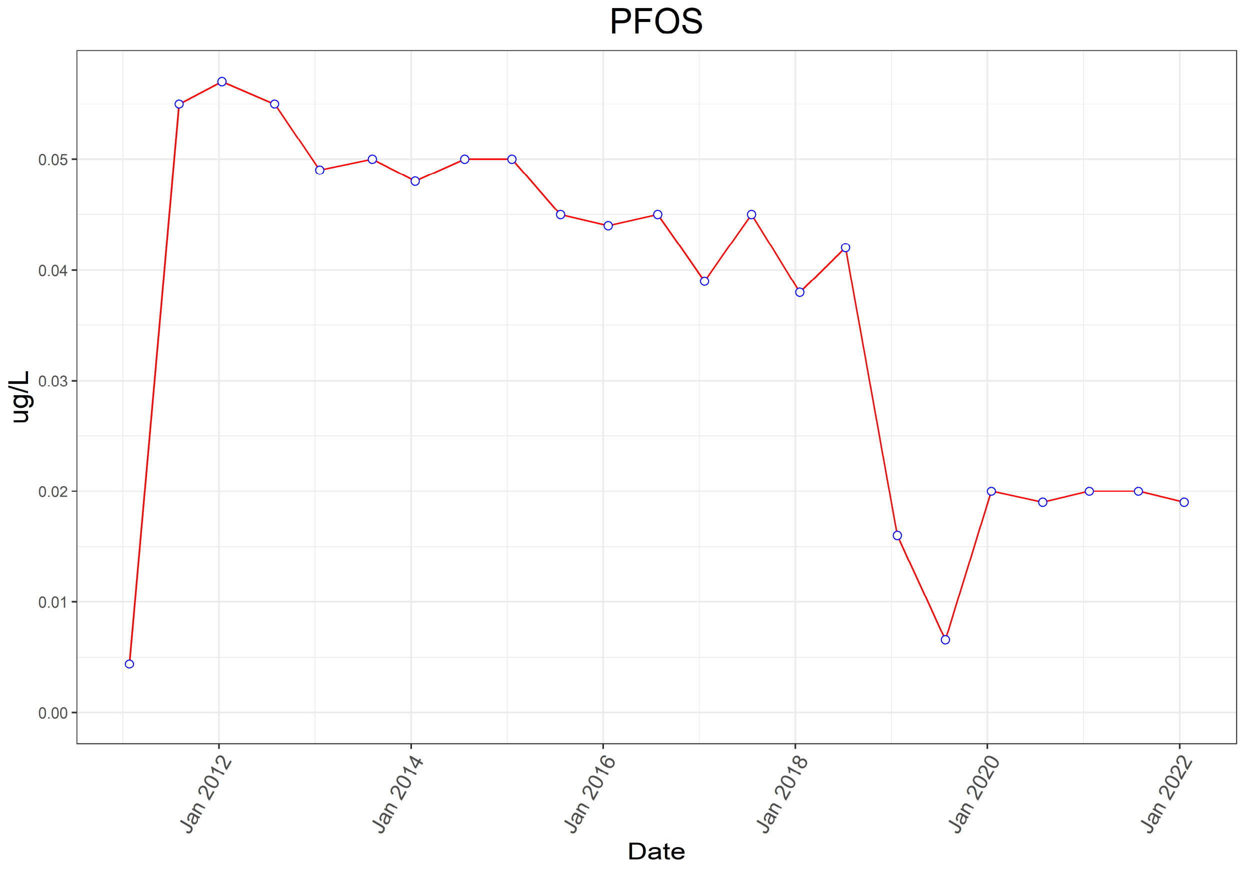
Perfluoropentanoic Acid



Perfluoroundecanoic Acid



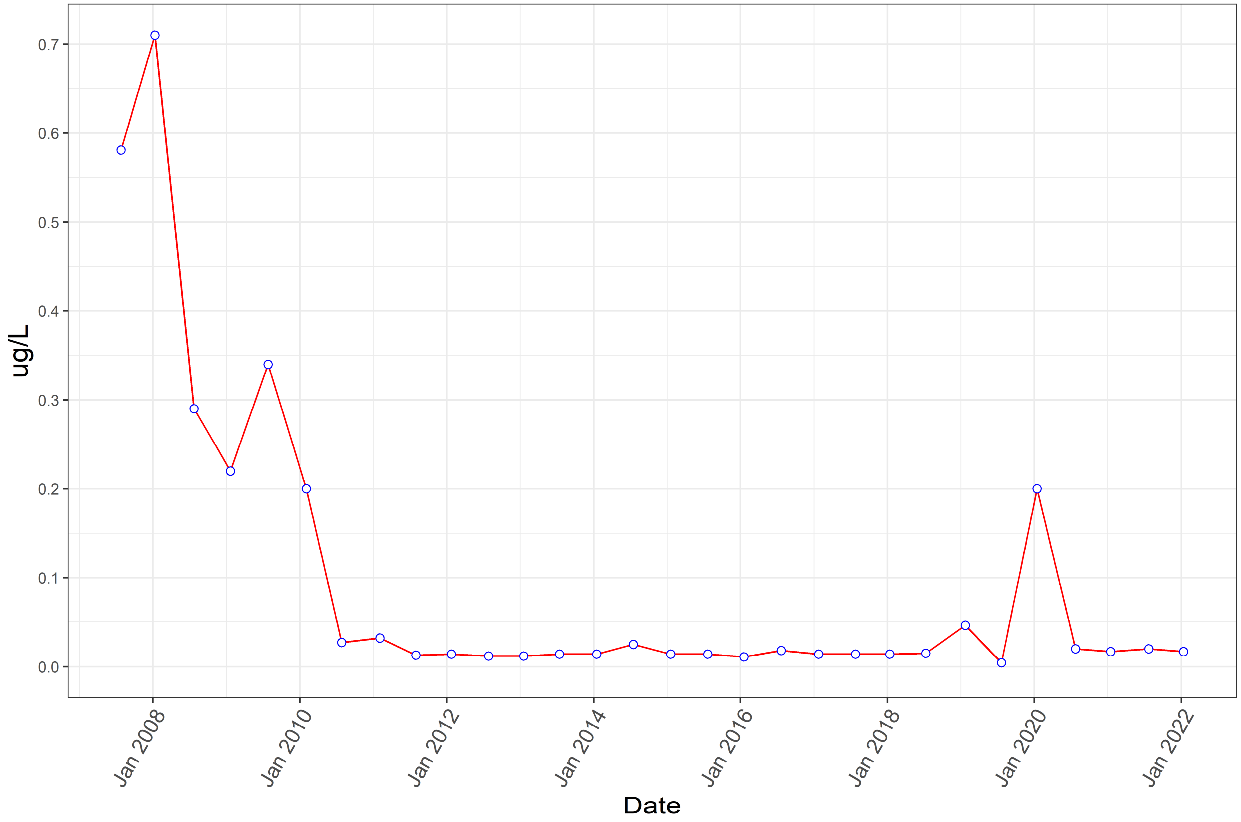

PFOA
ug/L
8
7
6
5
4
3
2
1
0
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


PFOS
ug/L
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

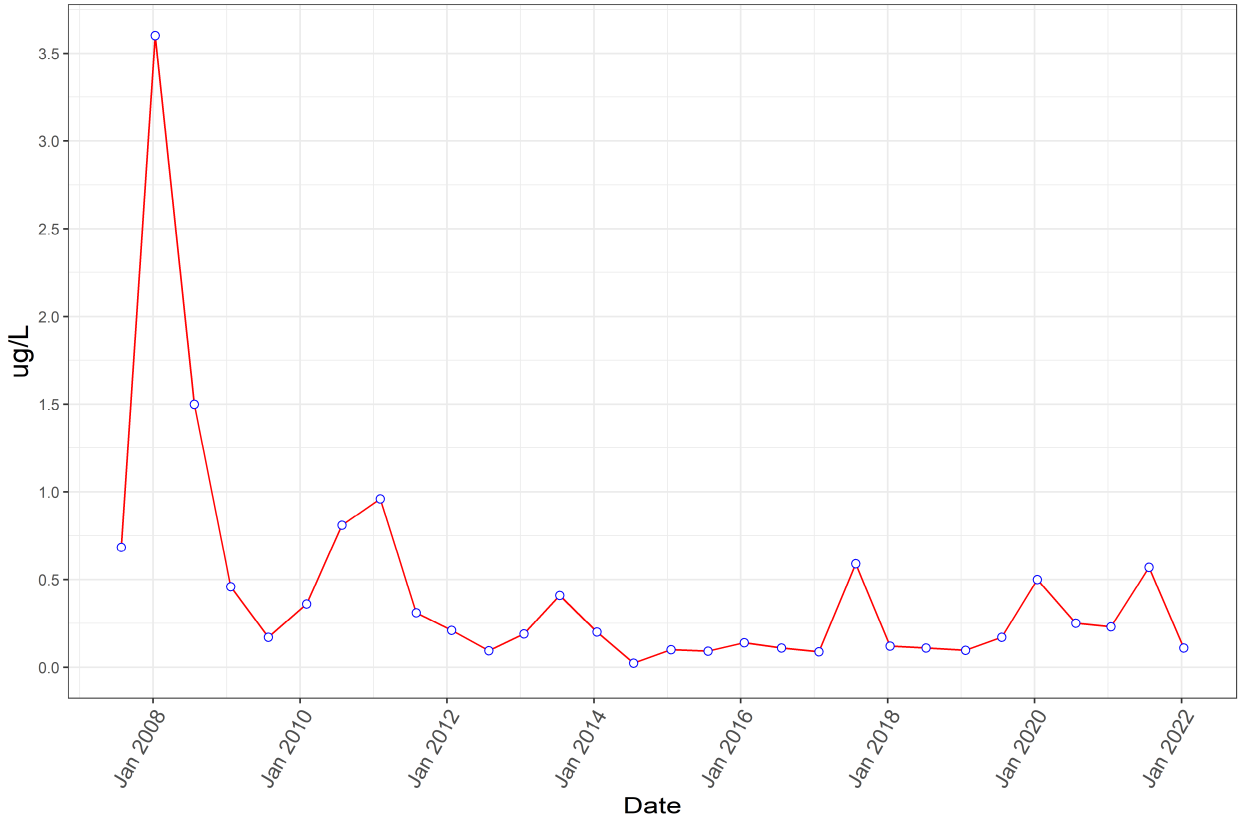
PFAS Monitoring Program (Program 9)

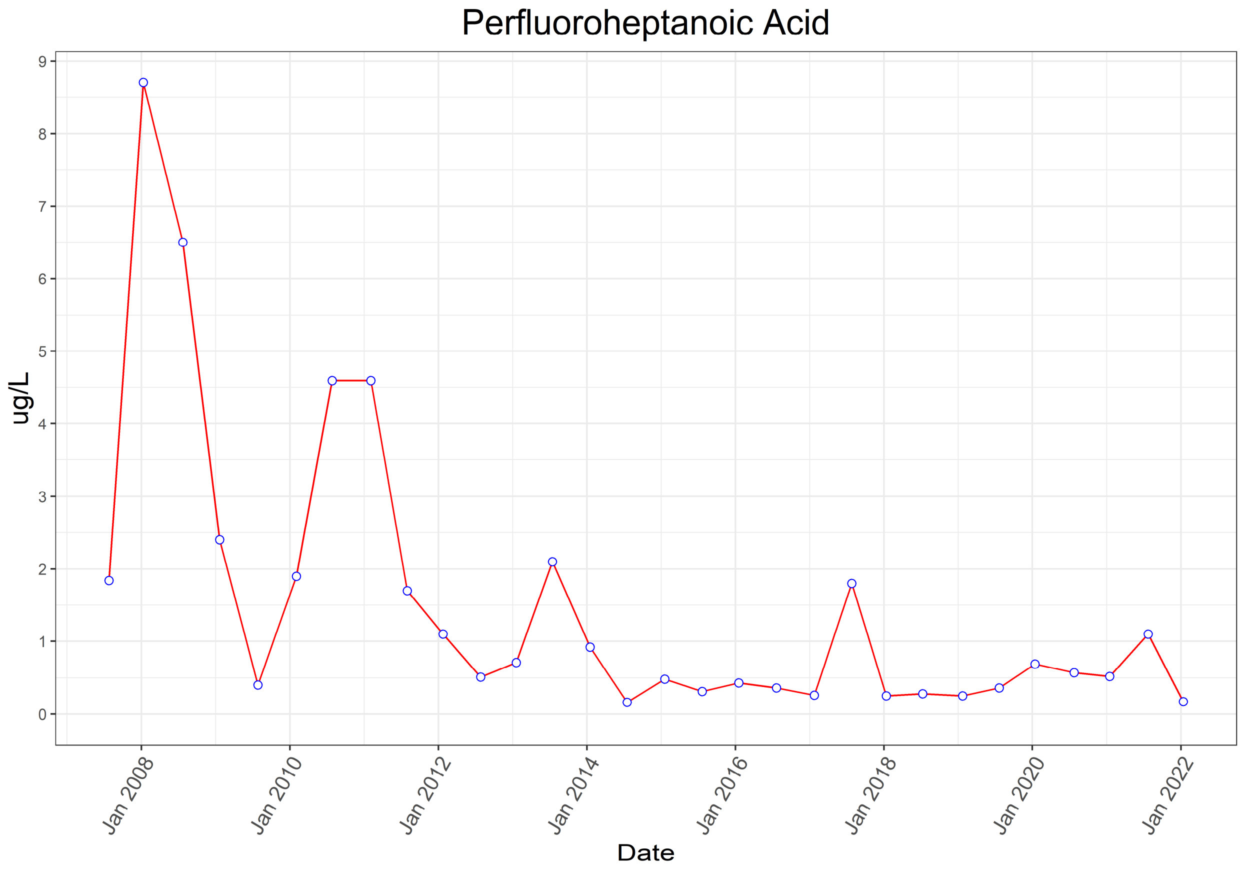
Well Name: K12-M01A

Perfluorobutane Sulfonic Acid

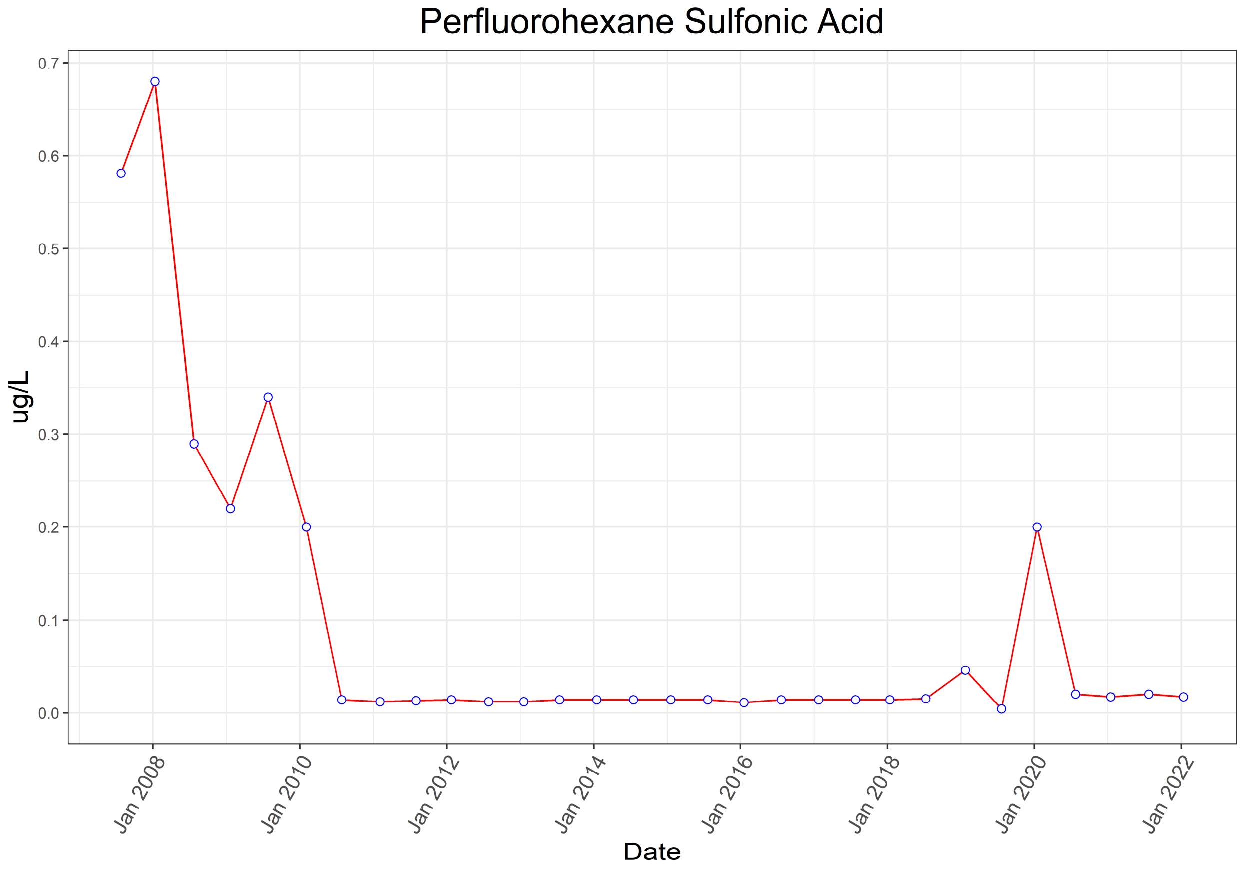


Perfluorobutanoic Acid

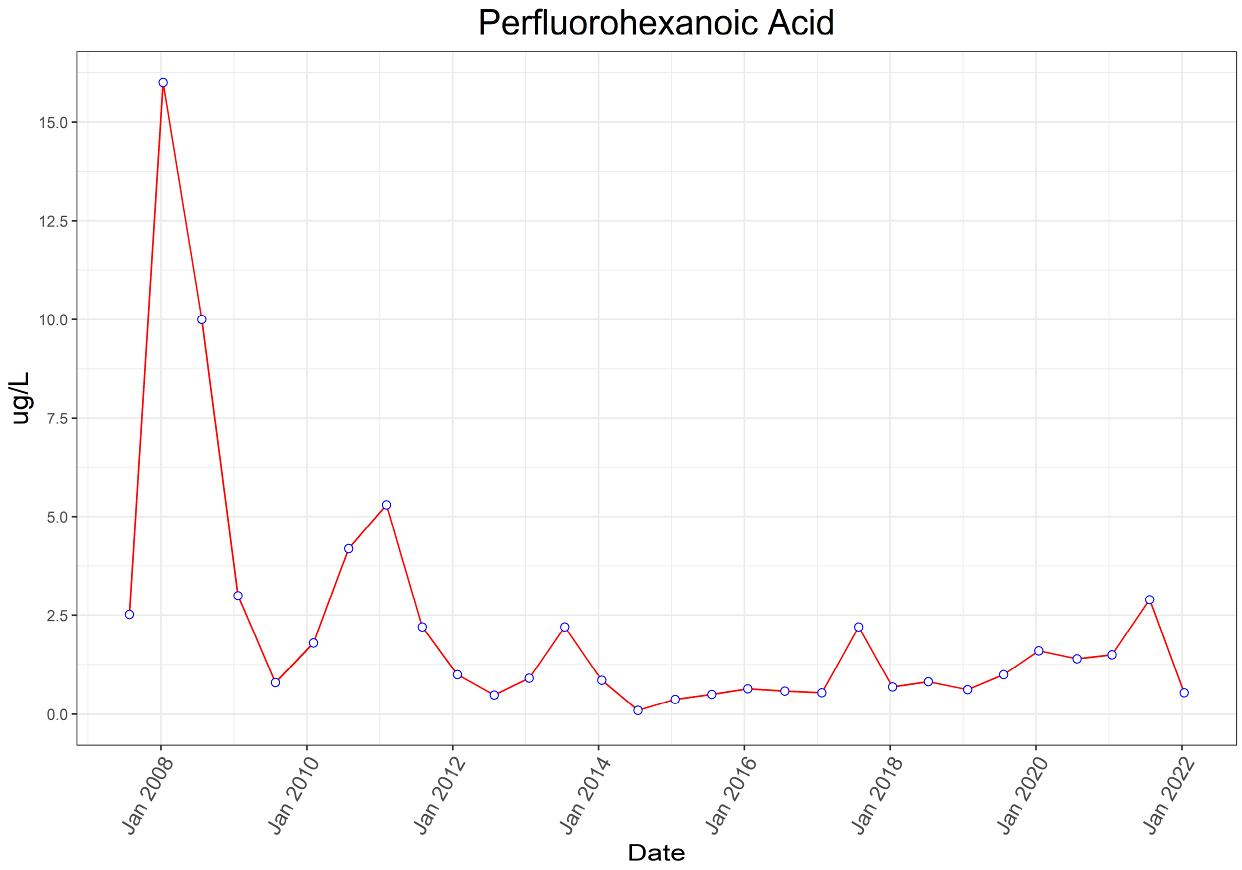


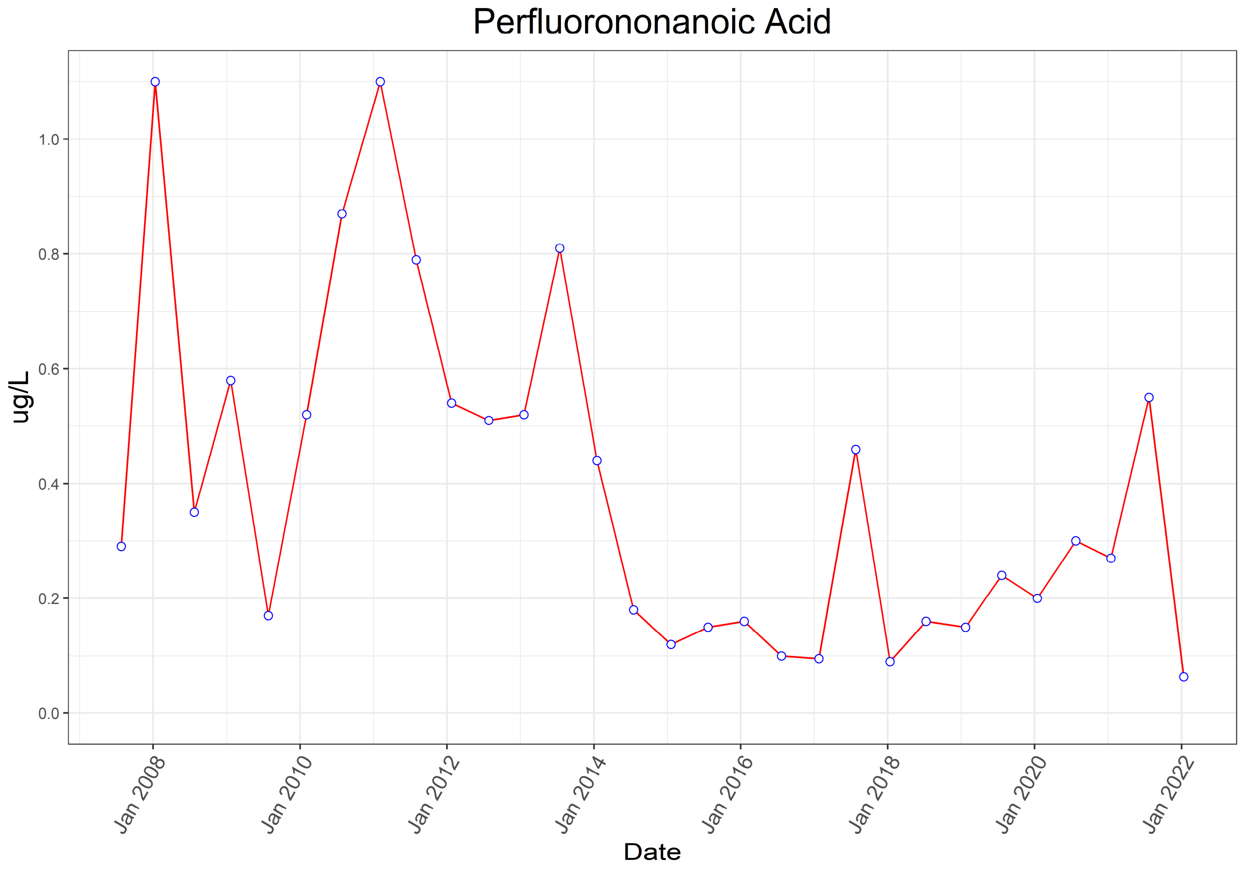


Perfluoroheptanoic Acid

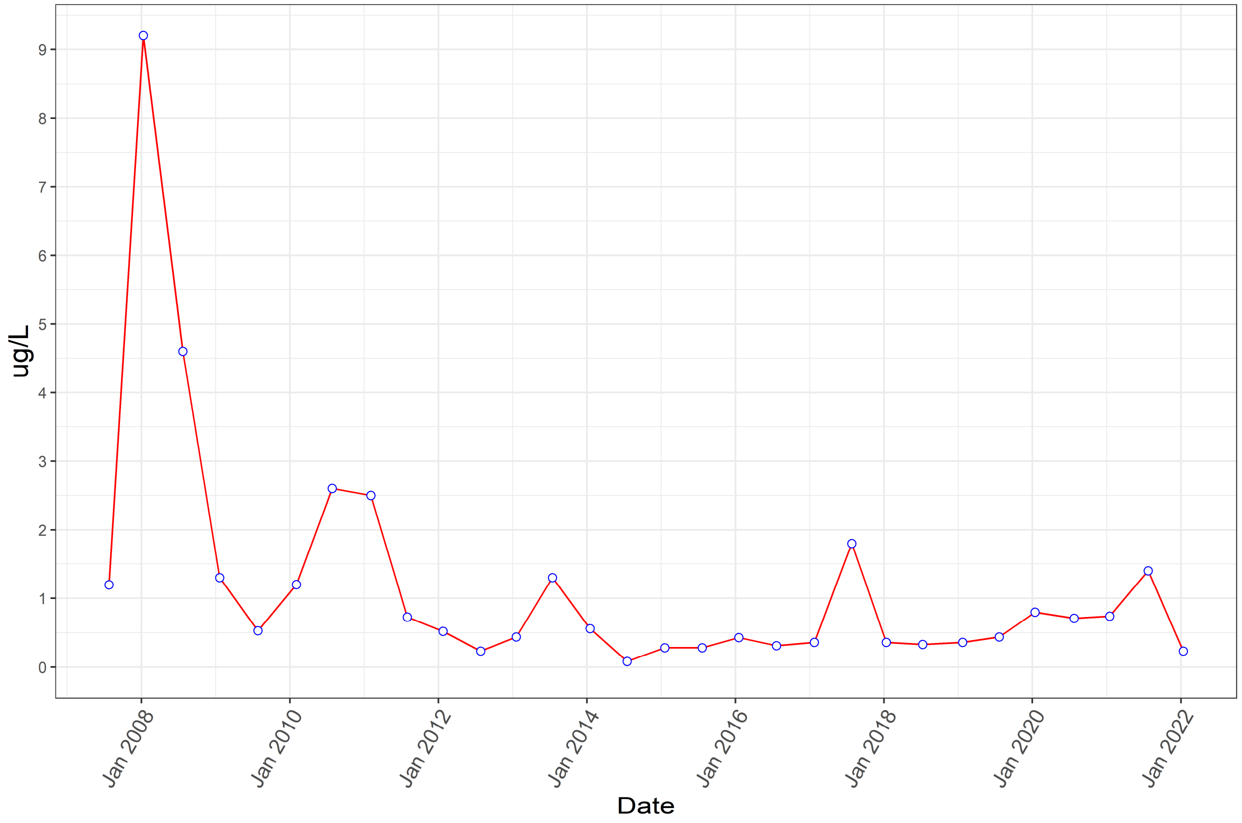


Perfluorohexane Sulfonic Acid

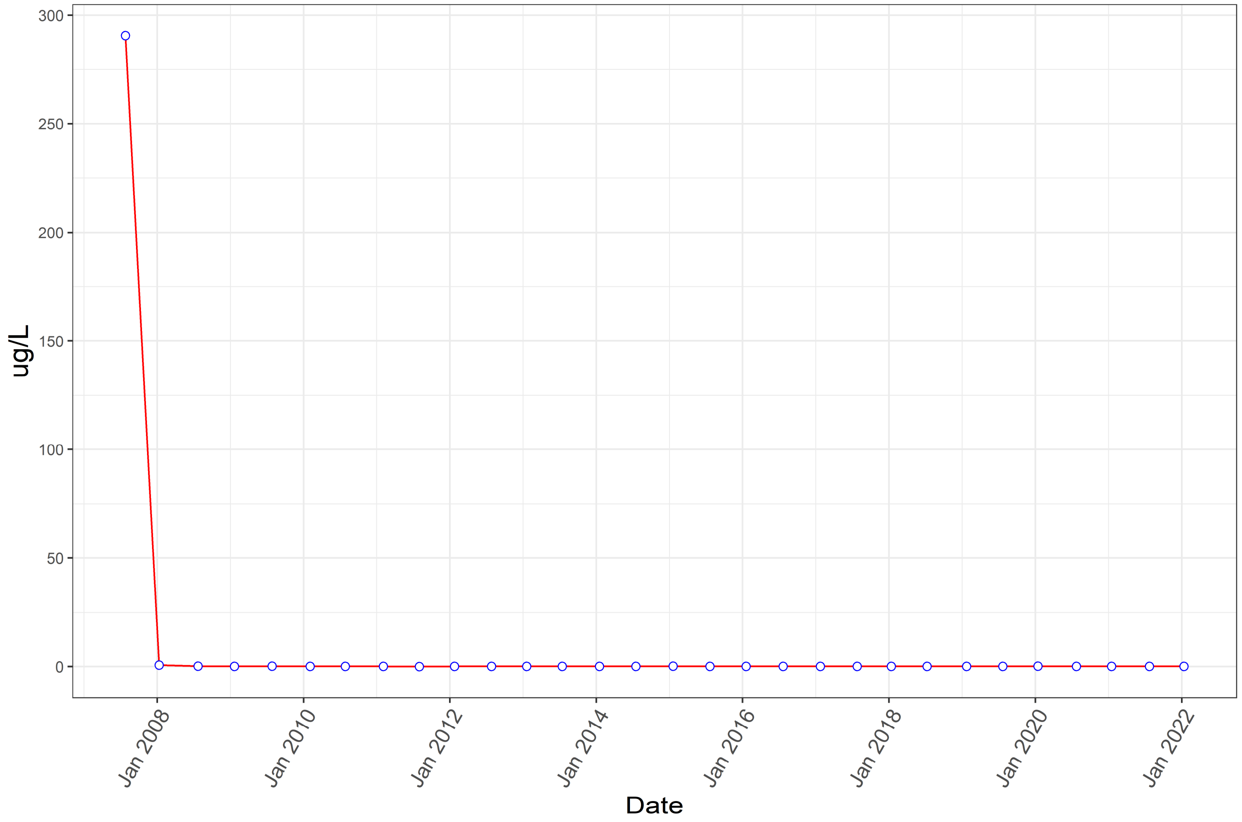

Perfluorohexanoic Acid

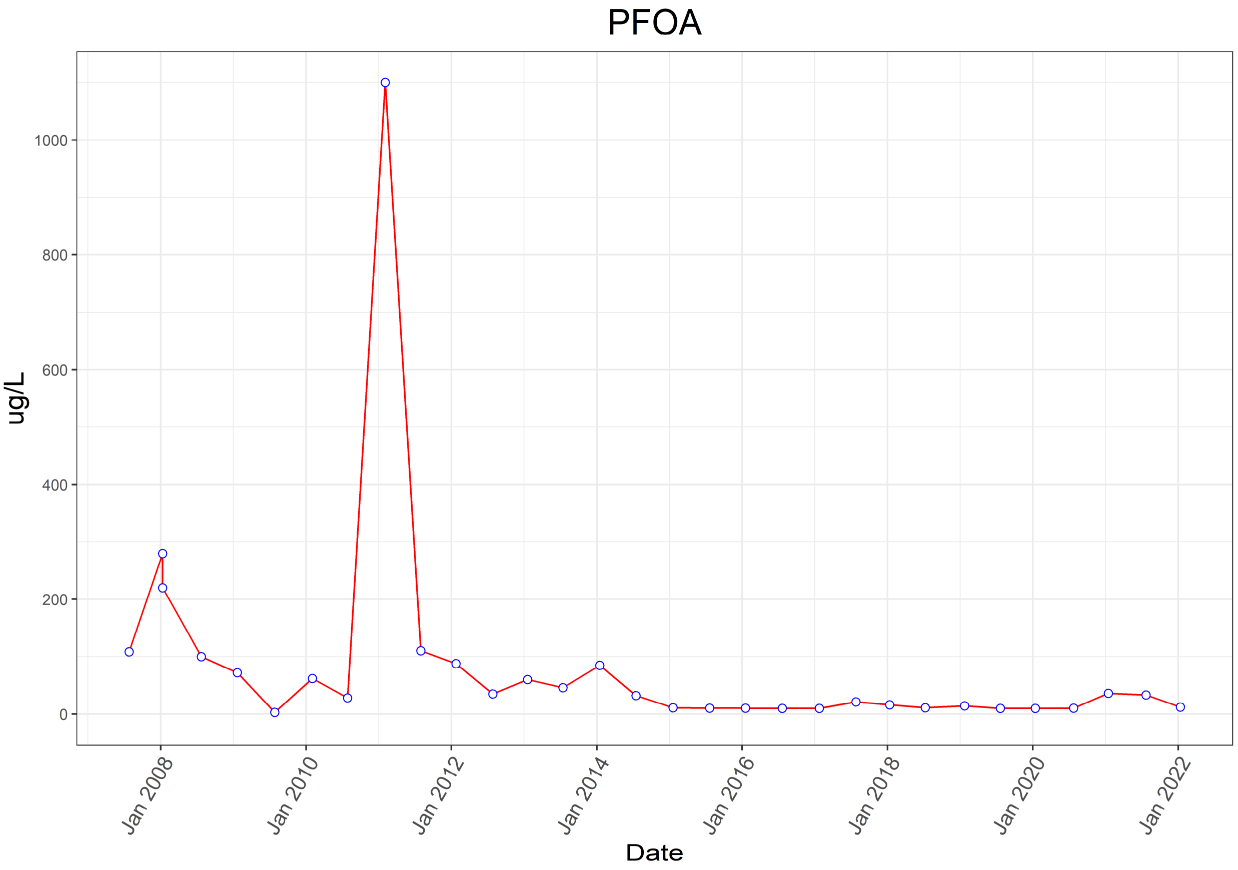

Perfluorononanoic Acid

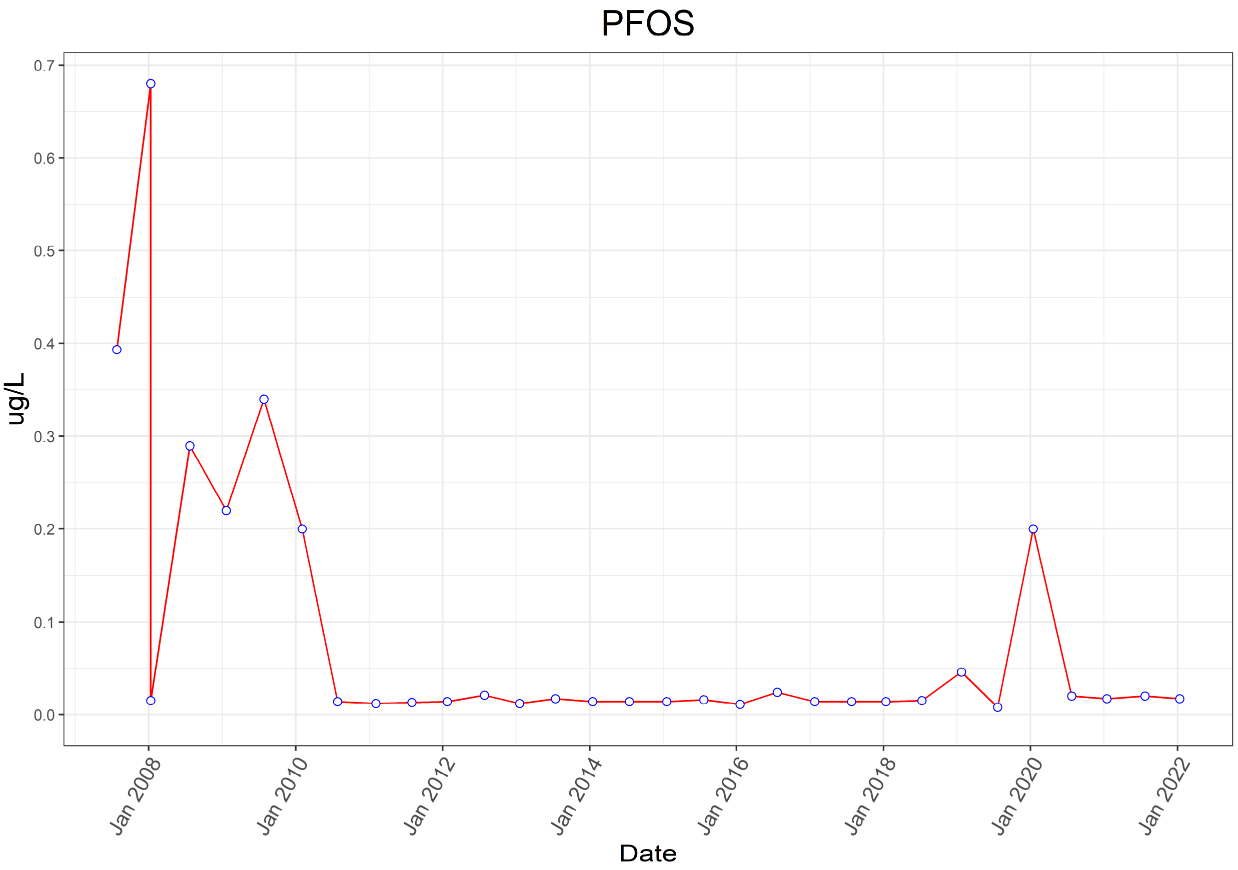
Perfluoropentanoic Acid



Perfluoroundecanoic Acid

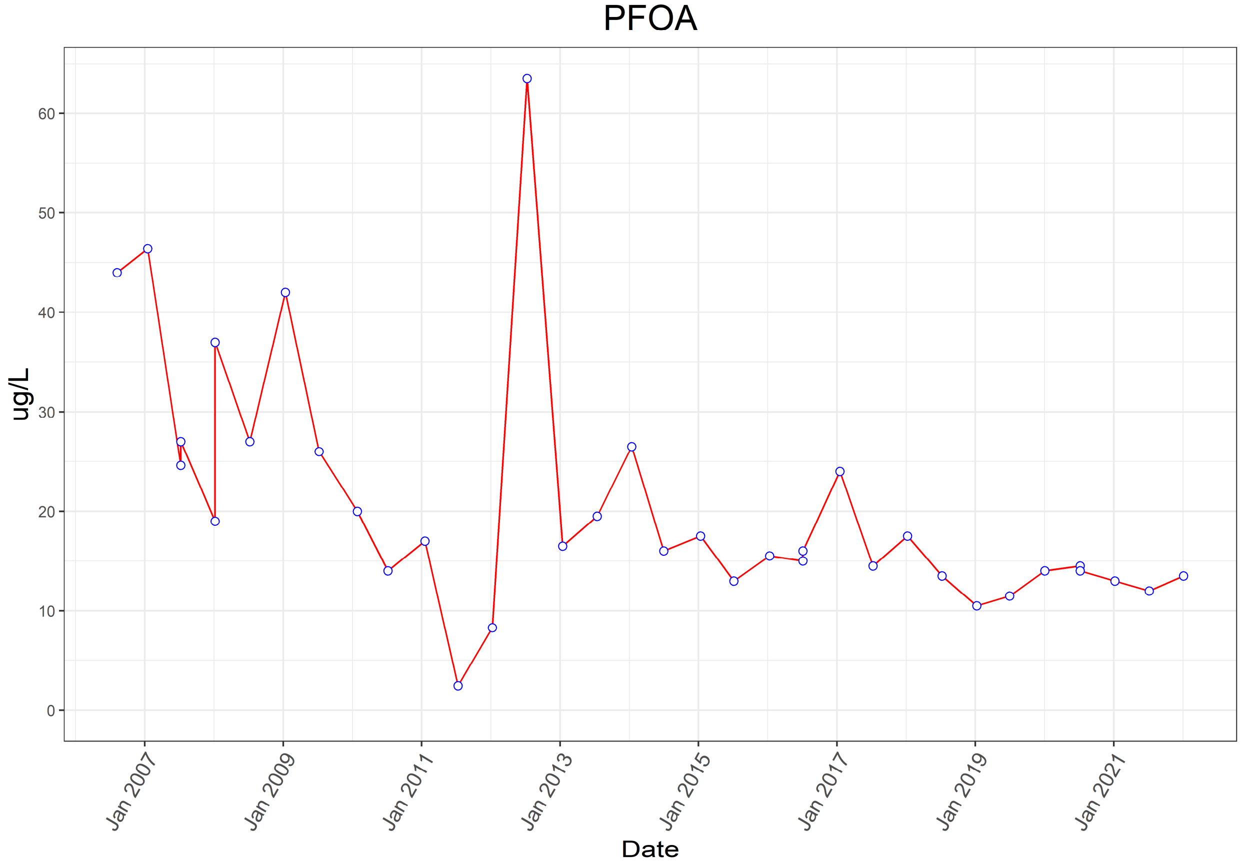


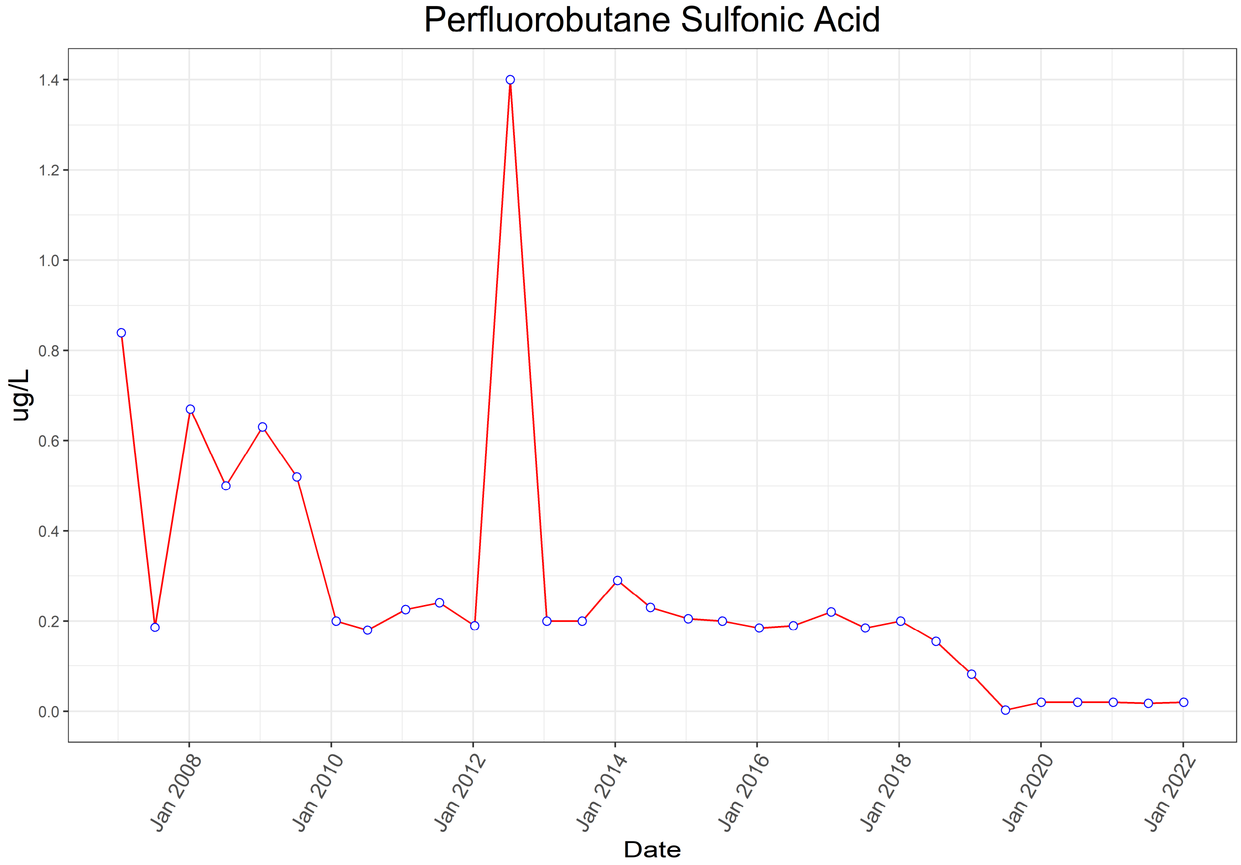

PFOA
ug/L
0
200
400
600
800
1000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

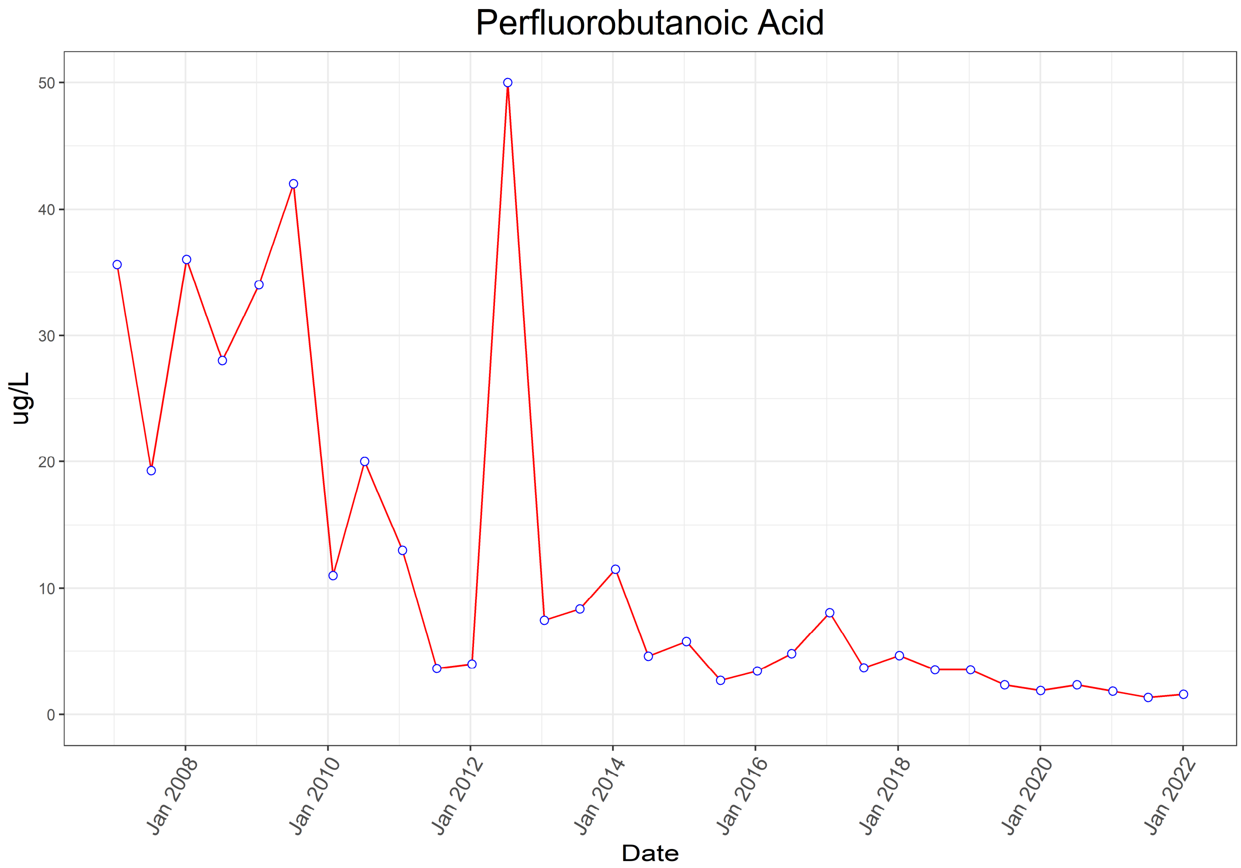

PFOS
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

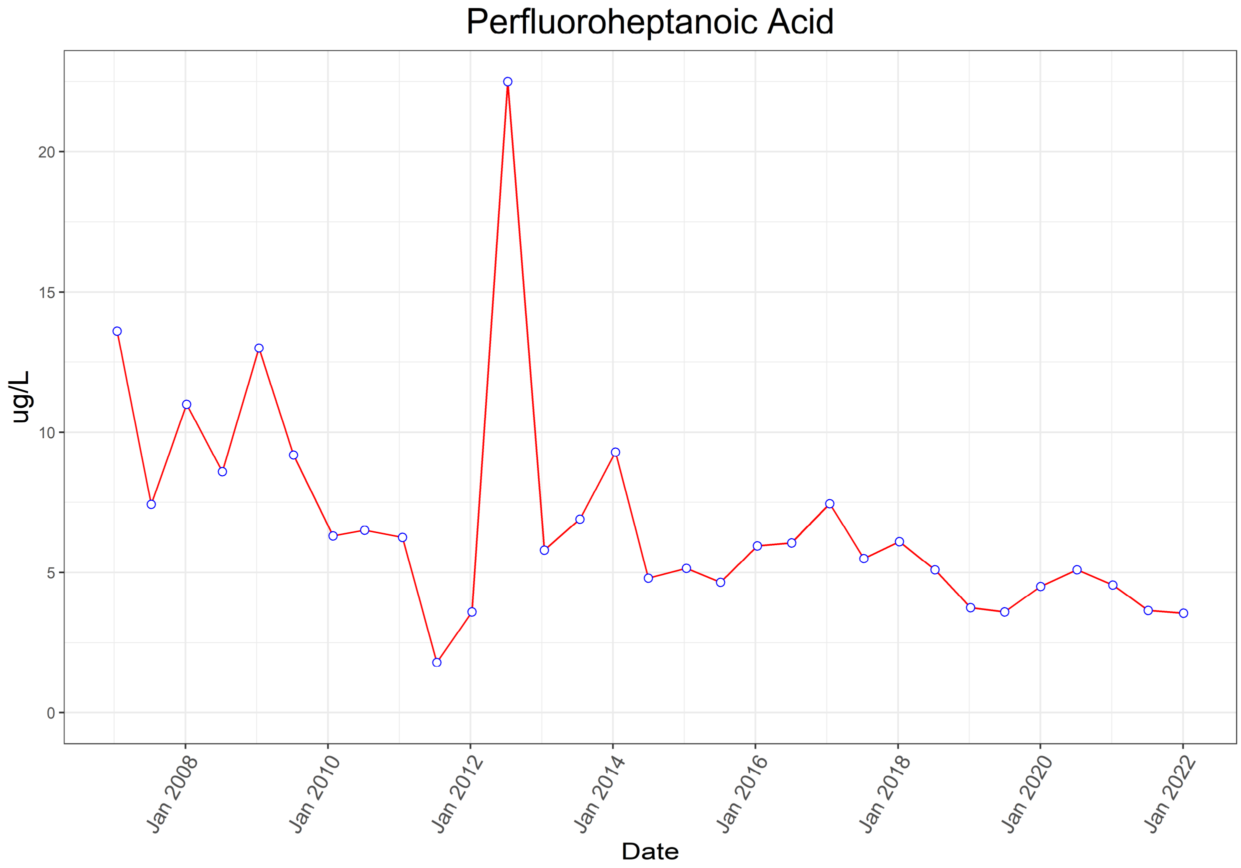
PFAS Monitoring Program (Program 9)

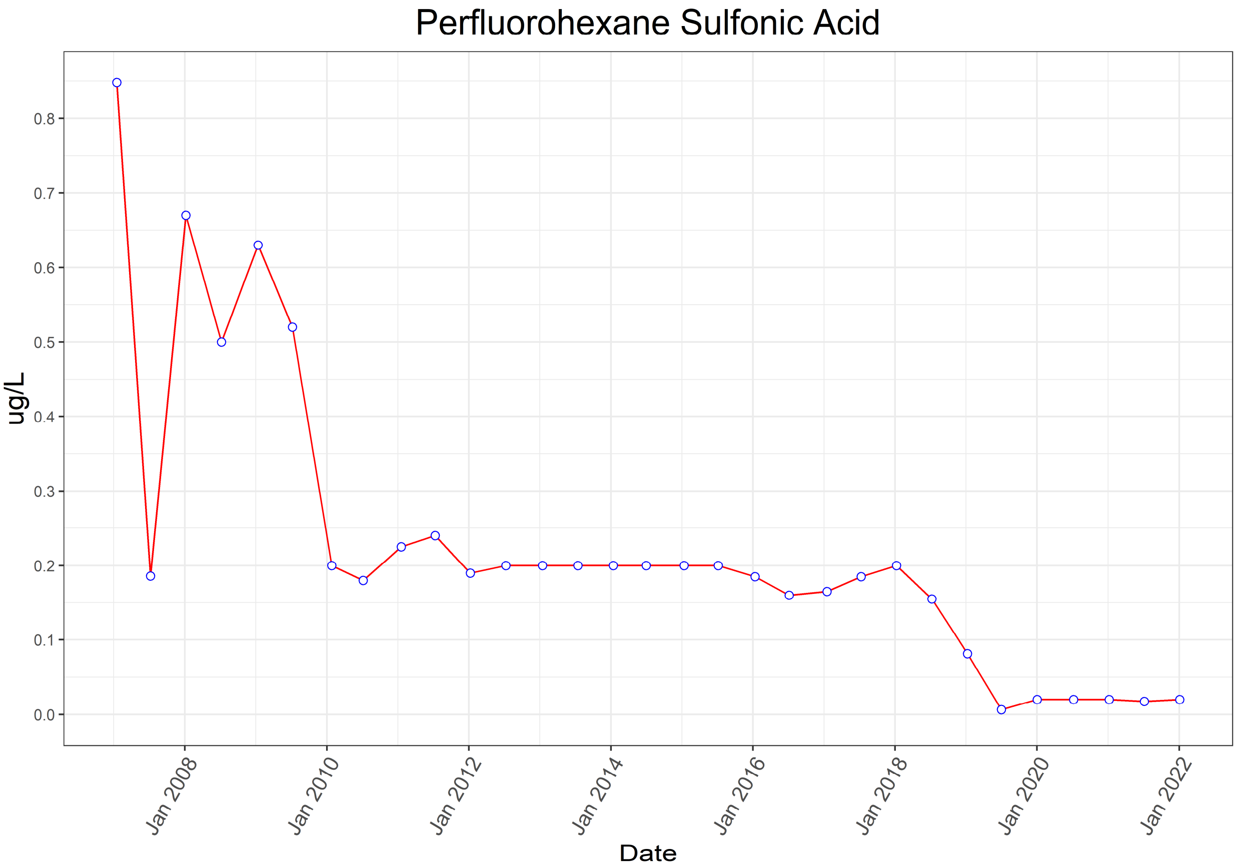
Well Name: K13-M02B

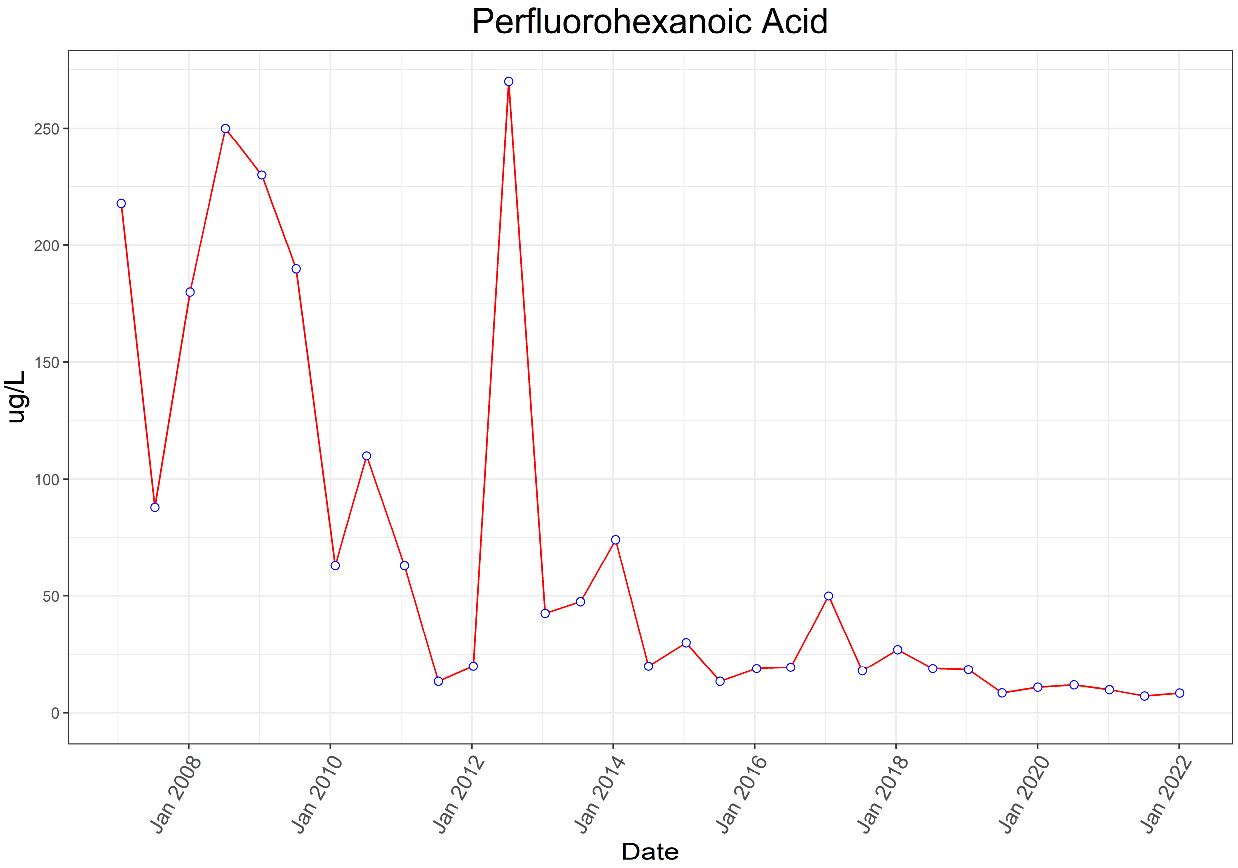




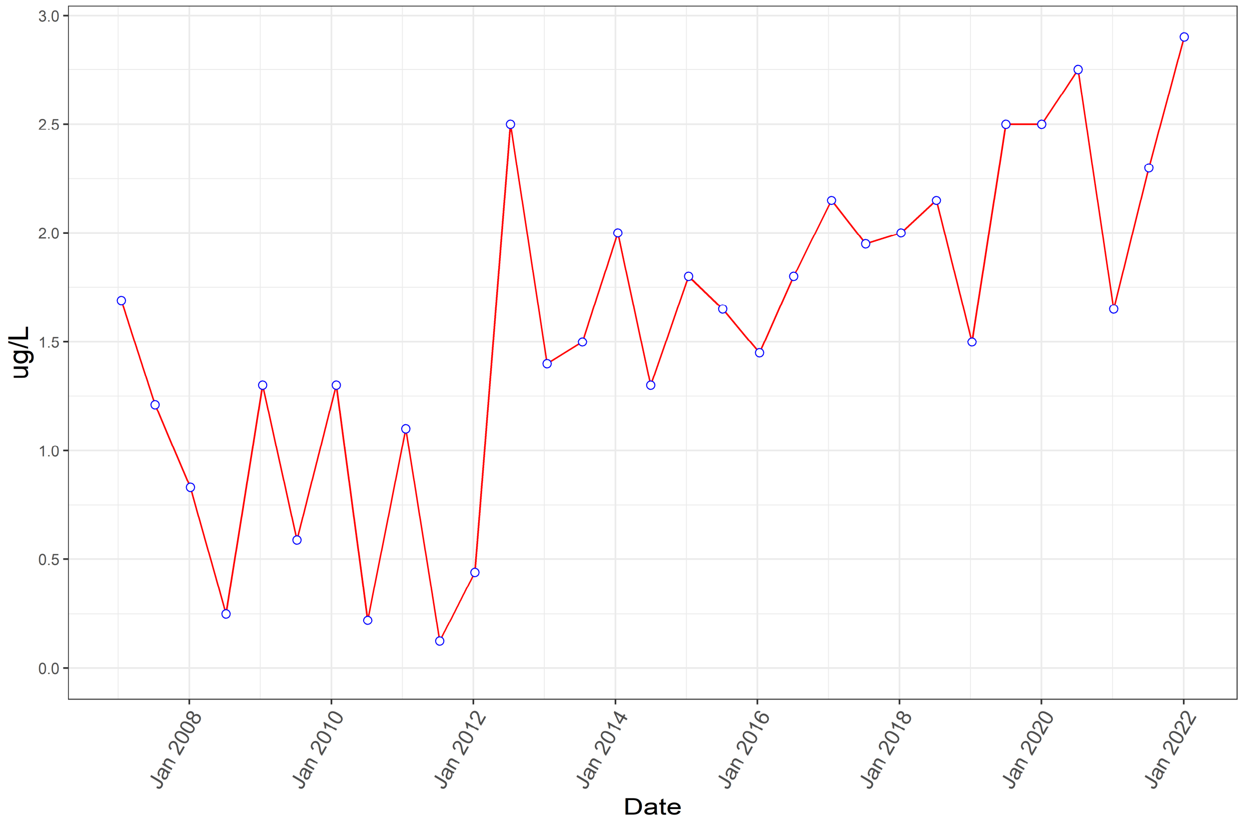

Perfluorobutanoic Acid
ug/L
0
10
20
30
40
50
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoroheptanoic Acid
ug/L
0
5
10
15
20
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

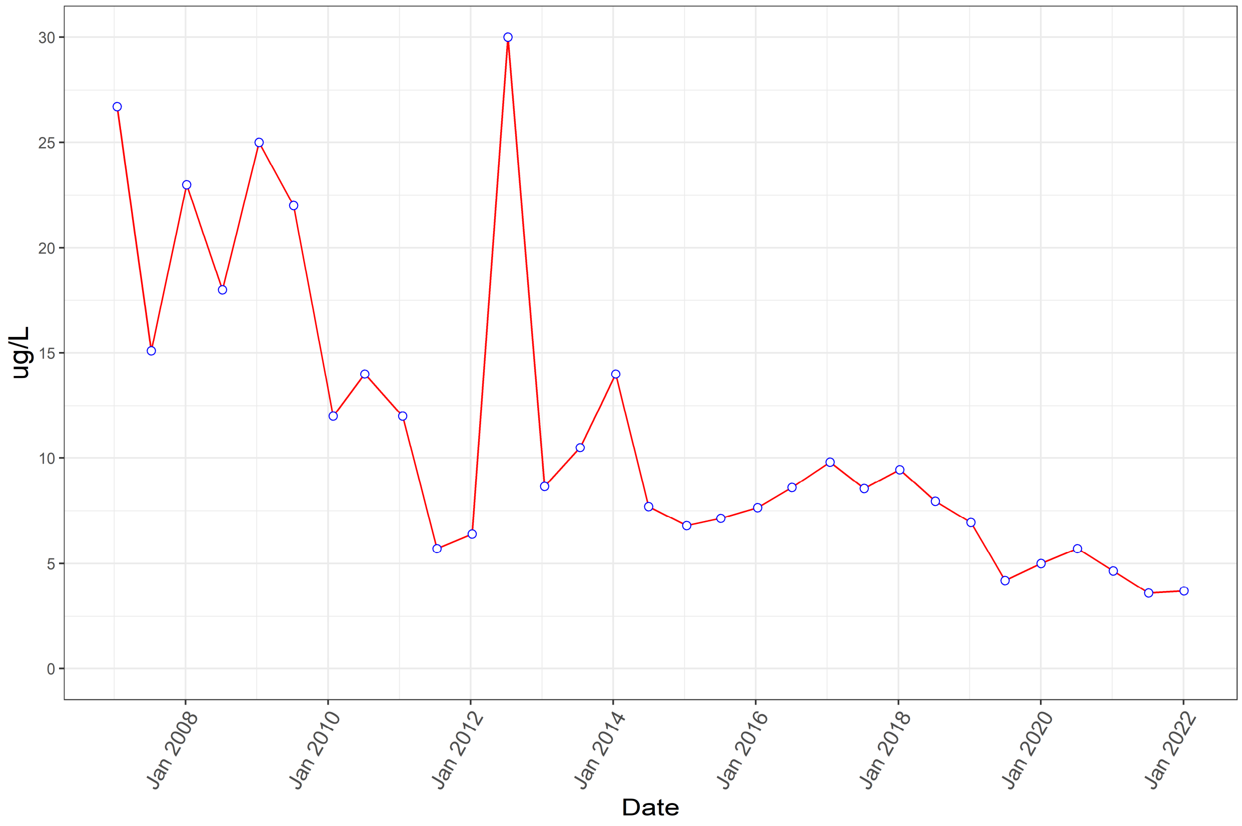

Perfluorohexane Sulfonic Acid
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

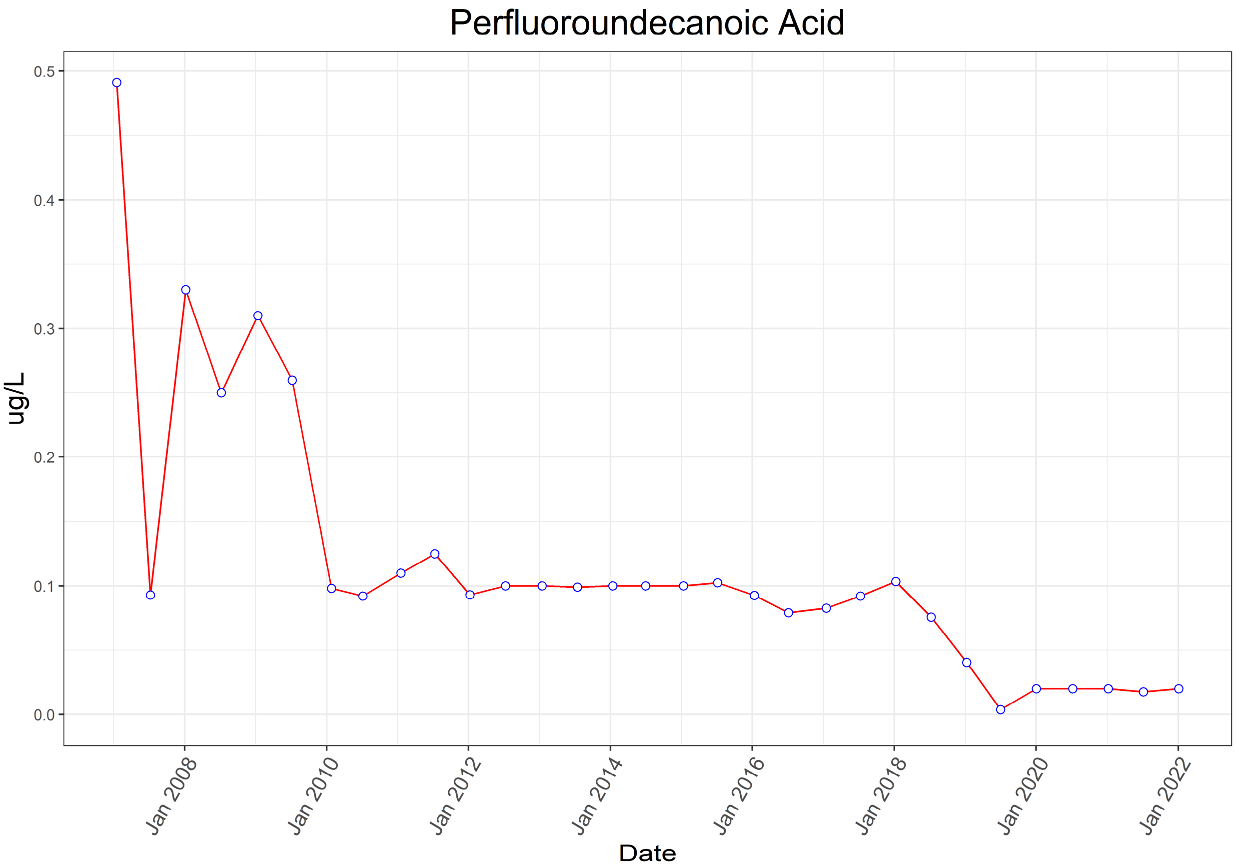

Perfluorohexanoic Acid
ug/L
250
200
150
100
50
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

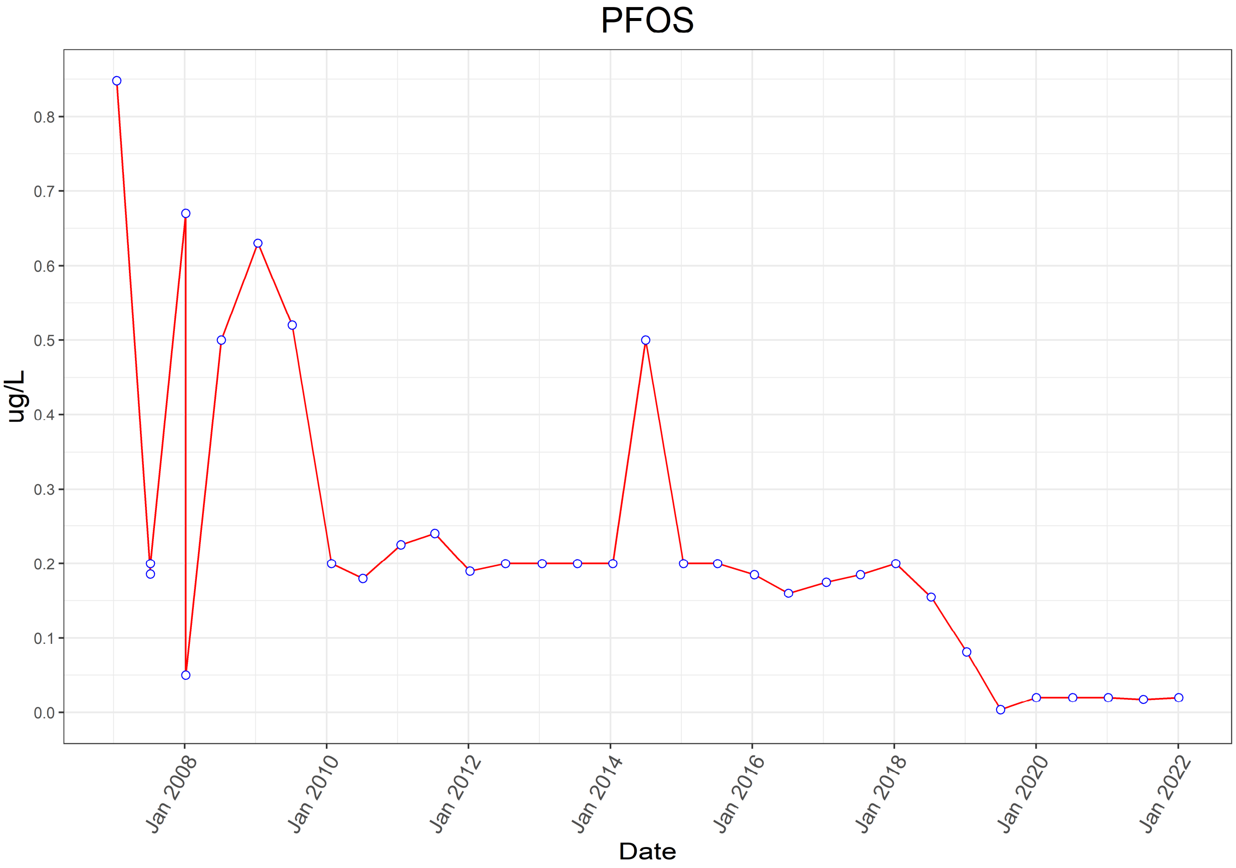
Perfluorononanoic Acid



Perfluoropentanoic Acid

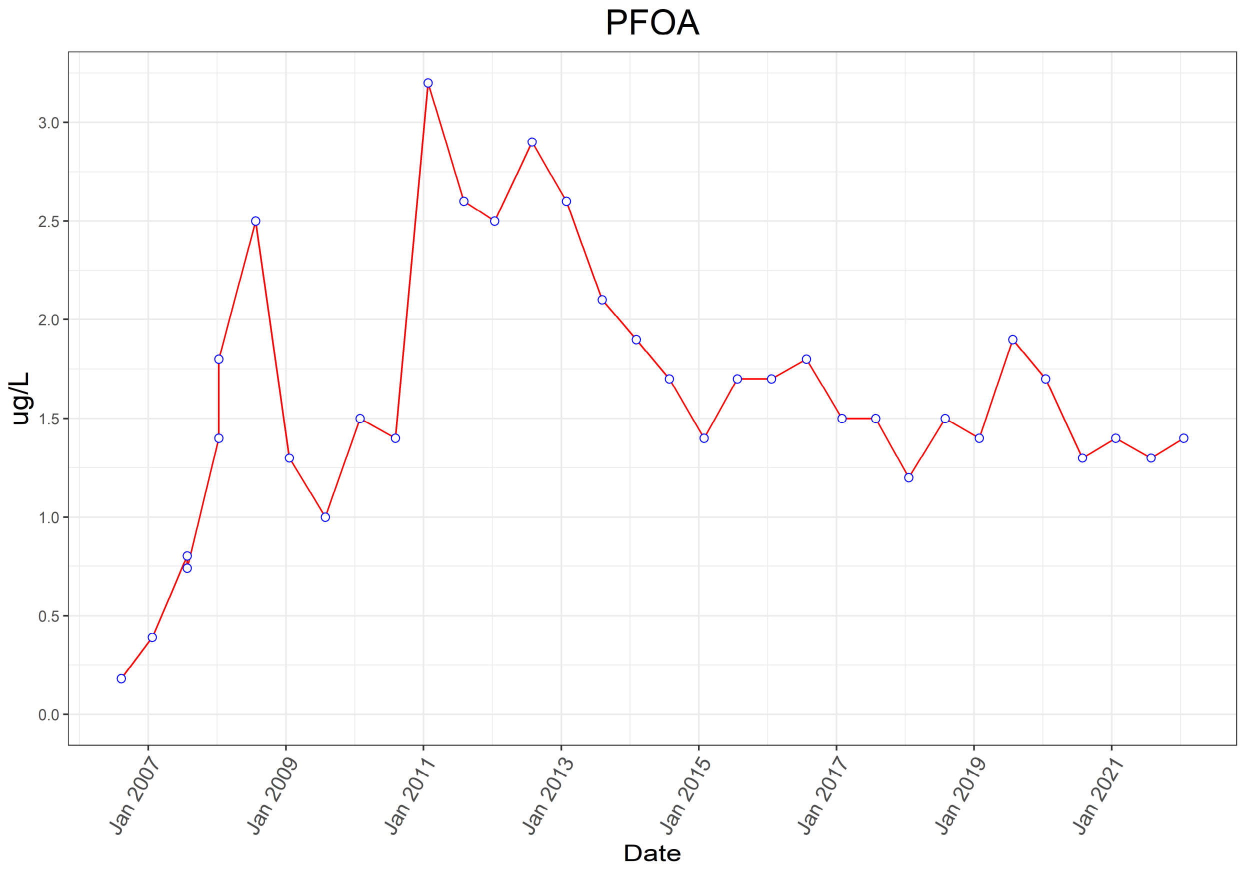


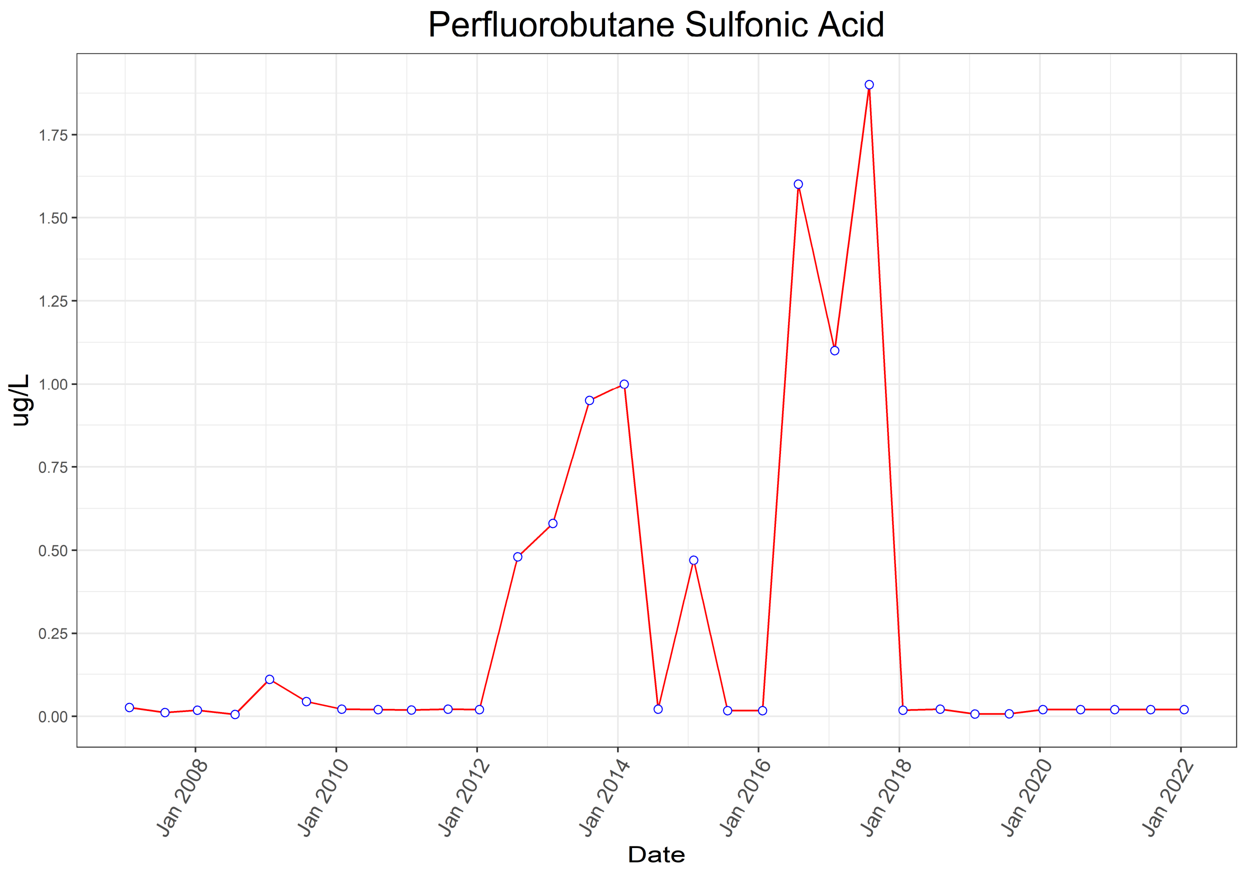

Perfluoroundecanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

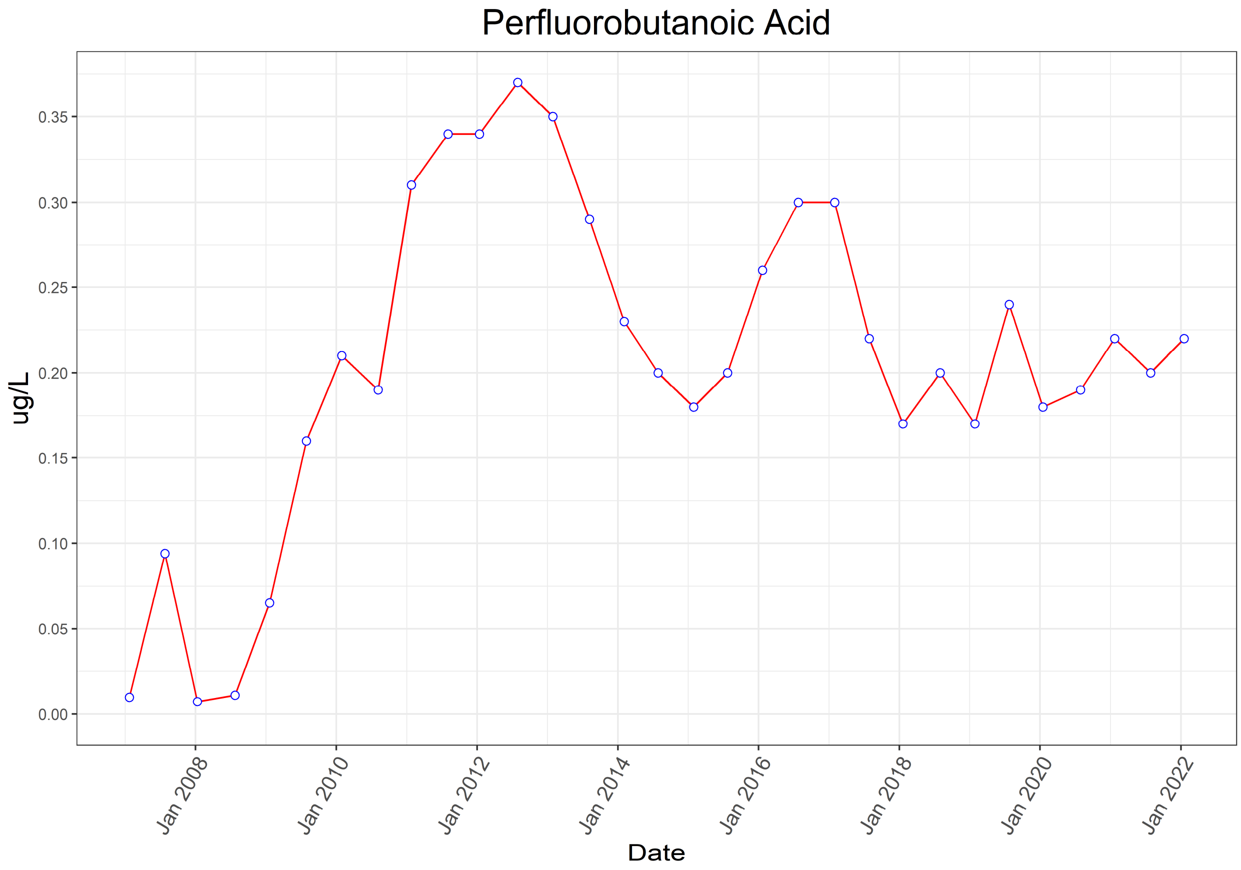

PFOS
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

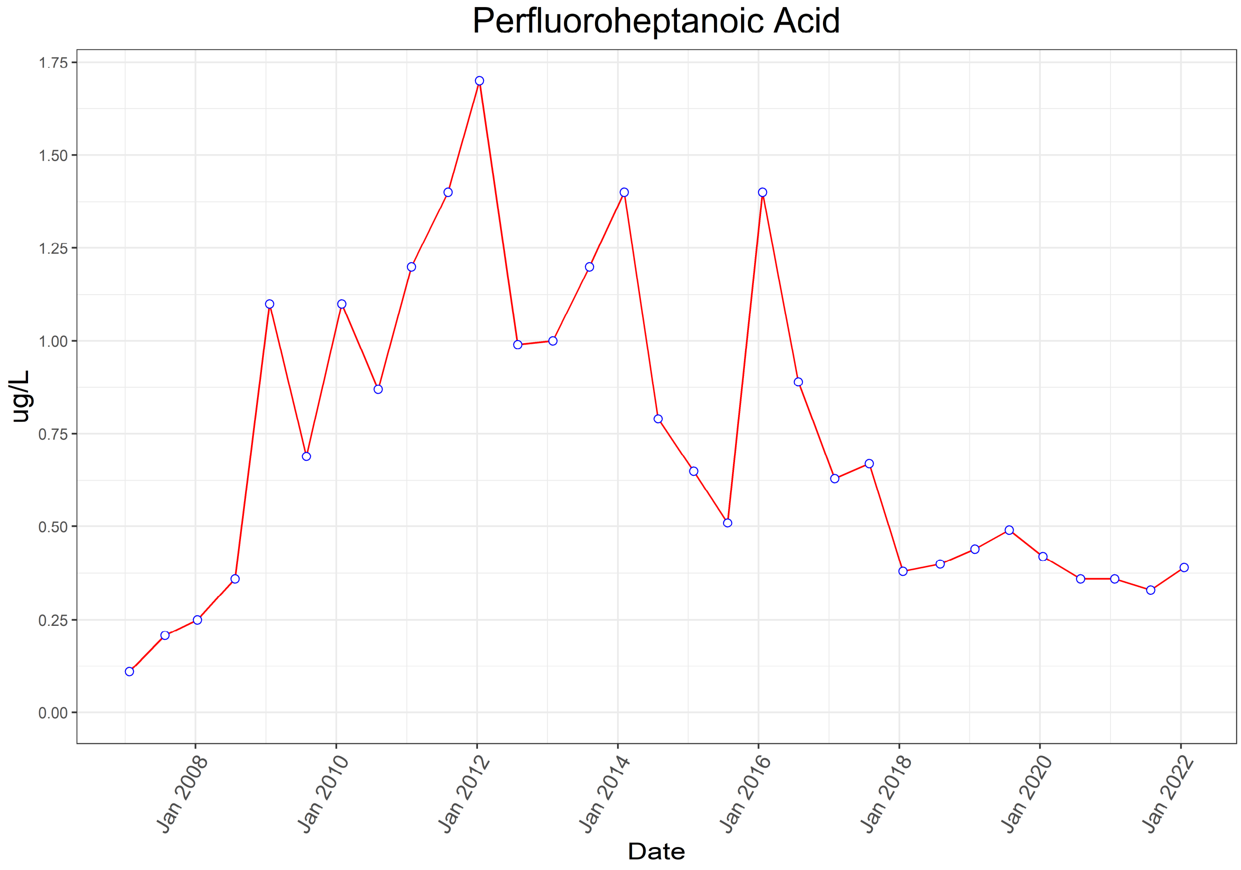
PFAS Monitoring Program (Program 9)

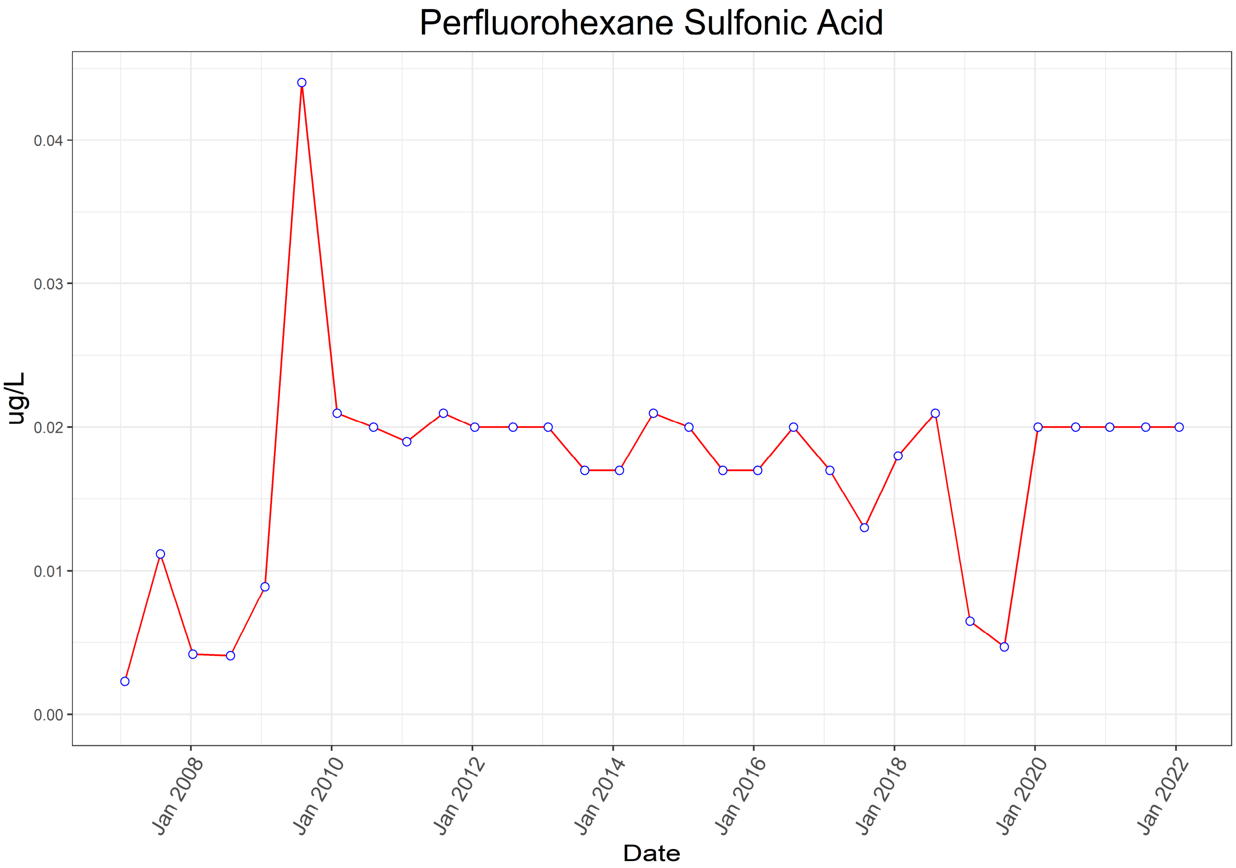
Well Name: L09-M01B



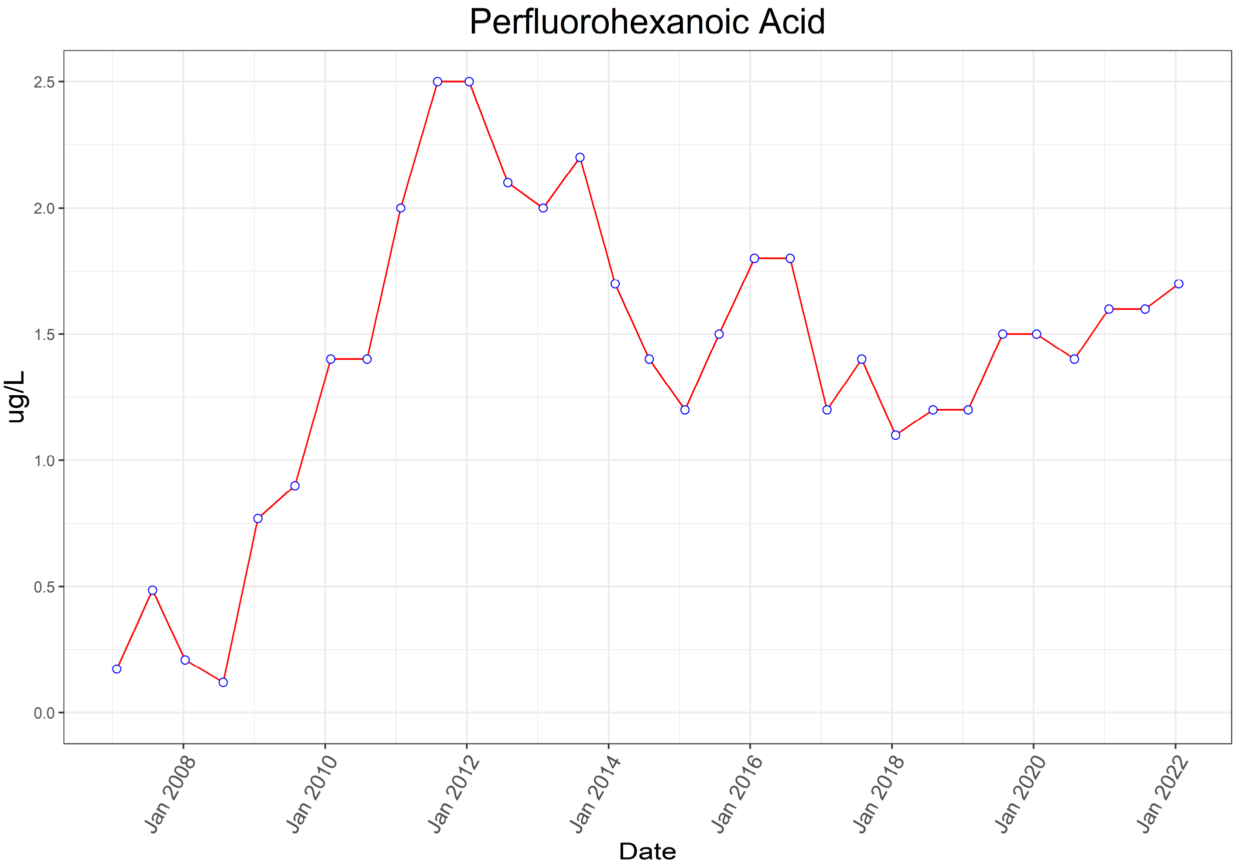



Perfluorobutanoic Acid
ug/L
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

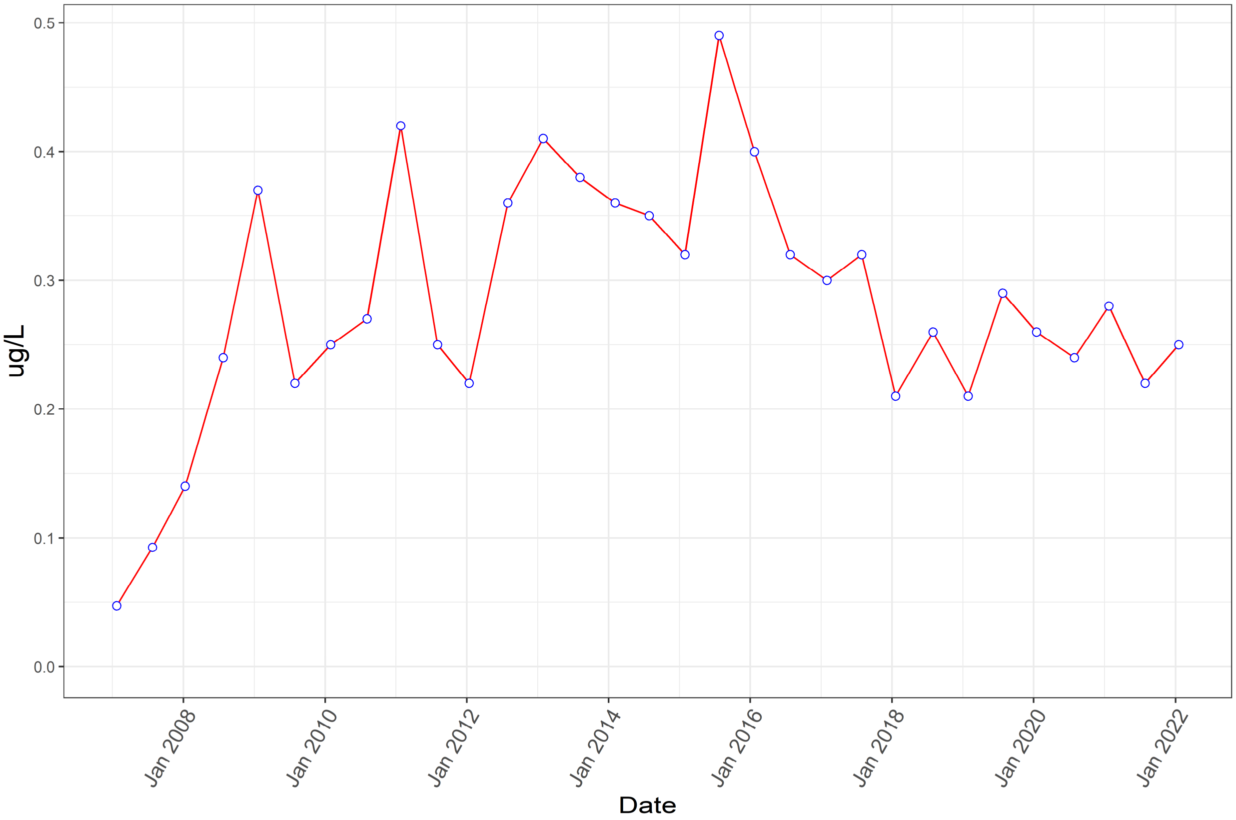

Perfluoroheptanoic Acid
ug/L
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



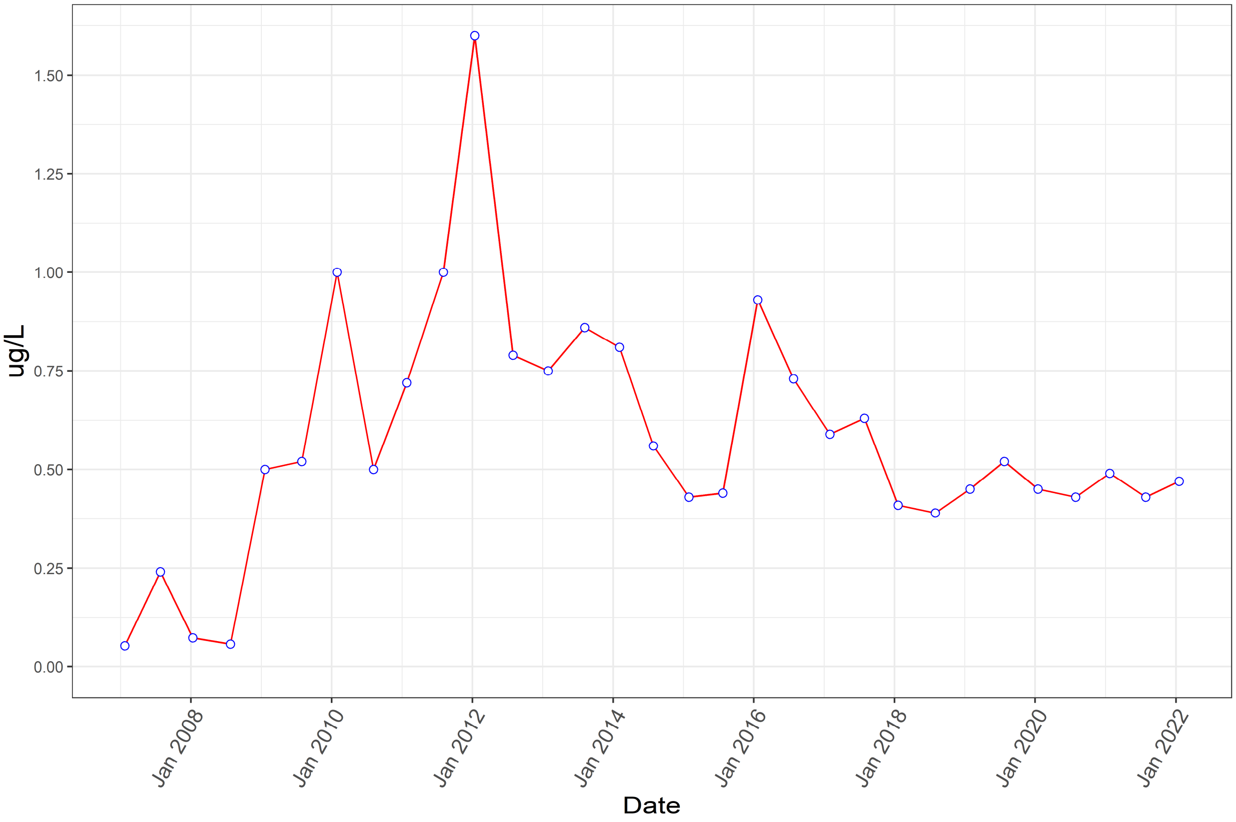
Perfluorohexane Sulfonic Acid
ug/L
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



Perfluorohexanoic Acid
ug/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

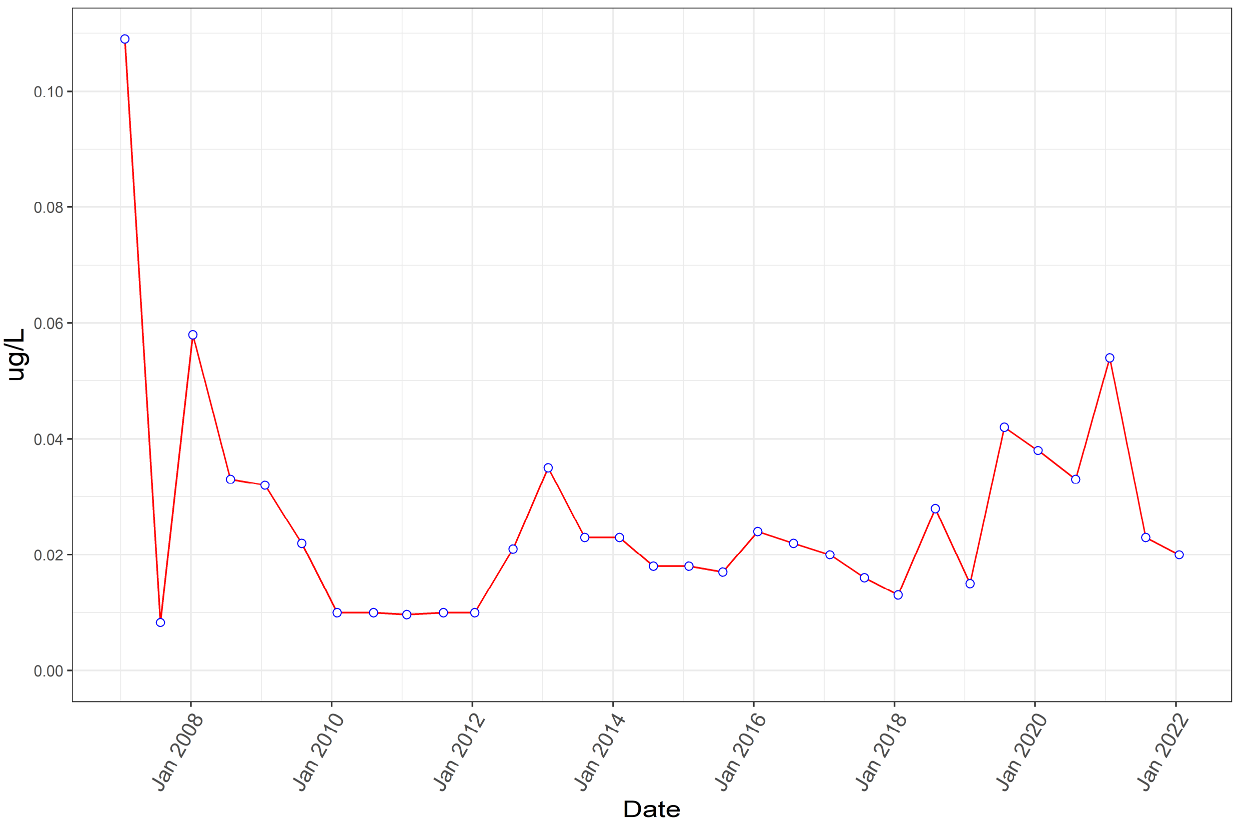


Perfluorononanoic Acid

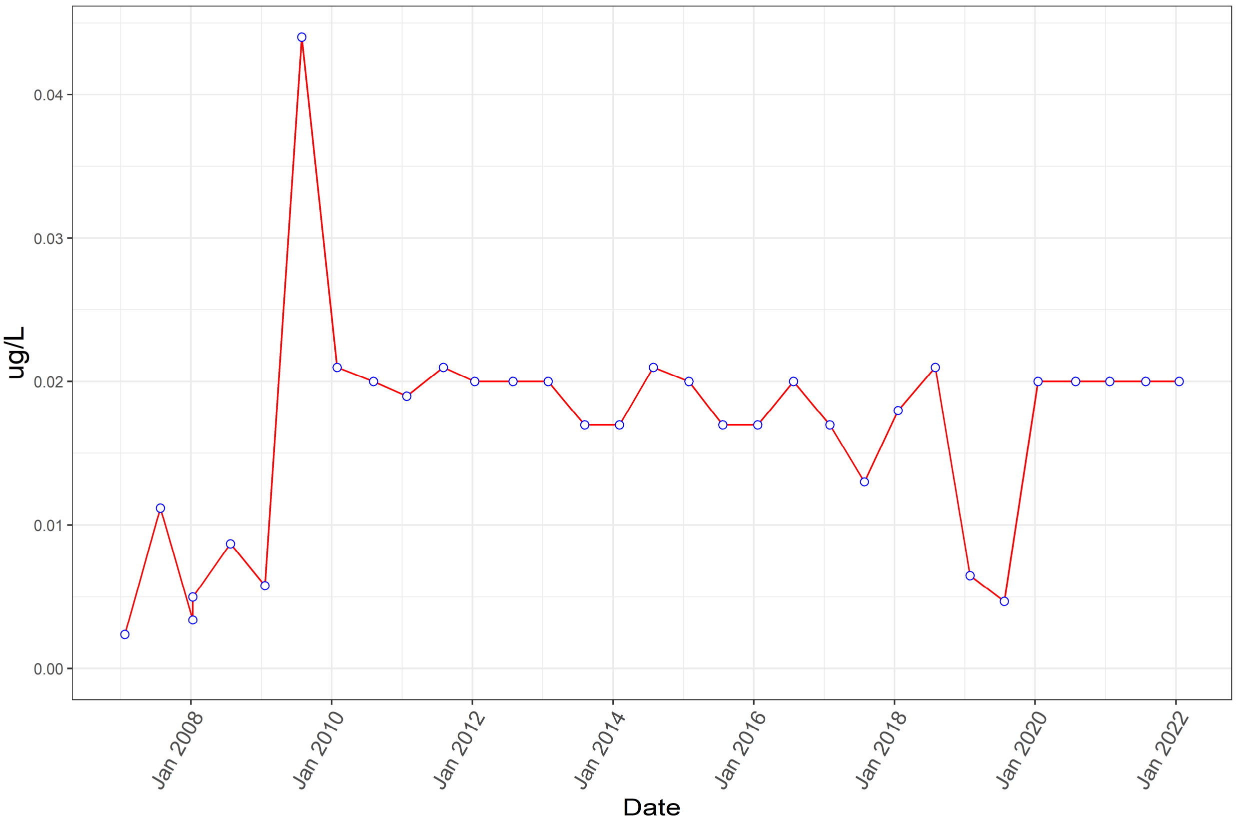


Perfluoropentanoic Acid

Perfluoroundecanoic Acid

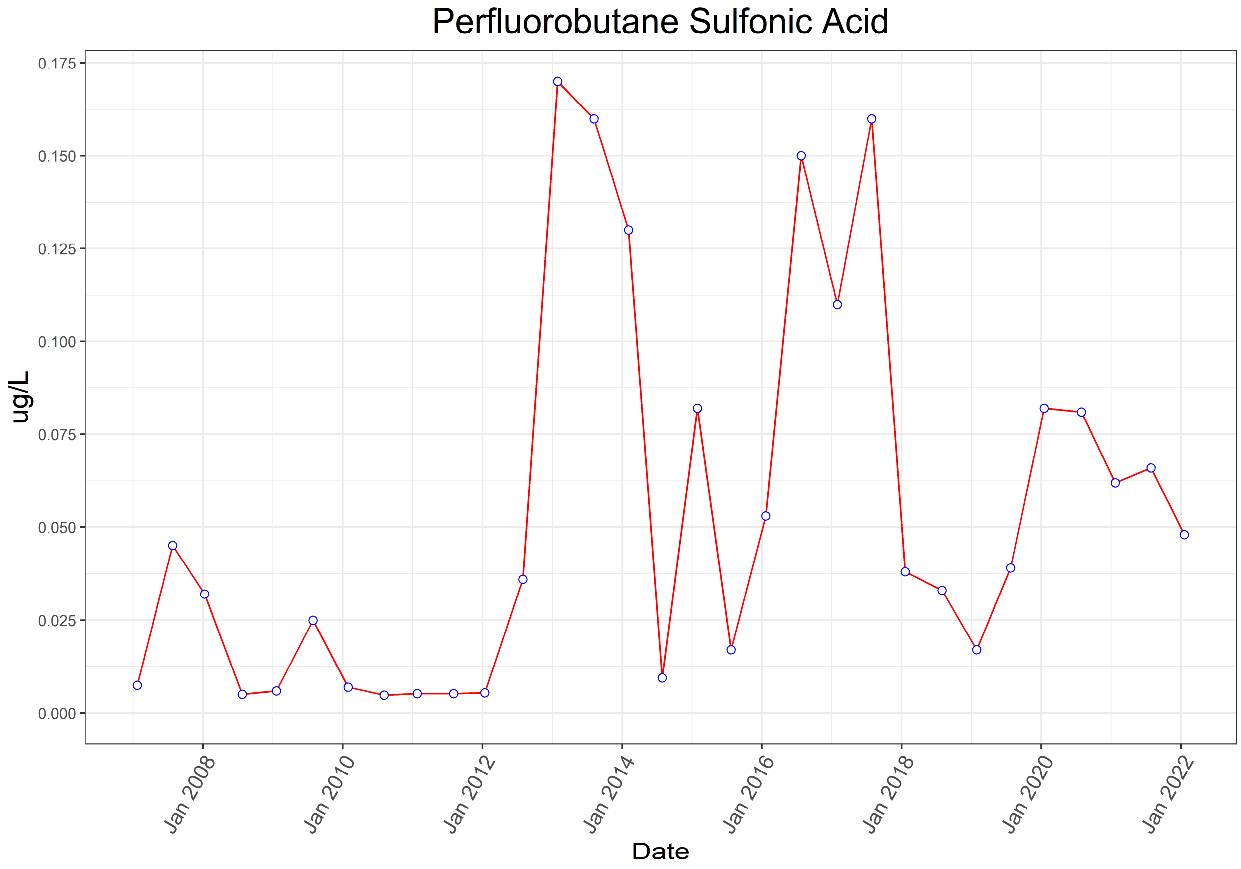


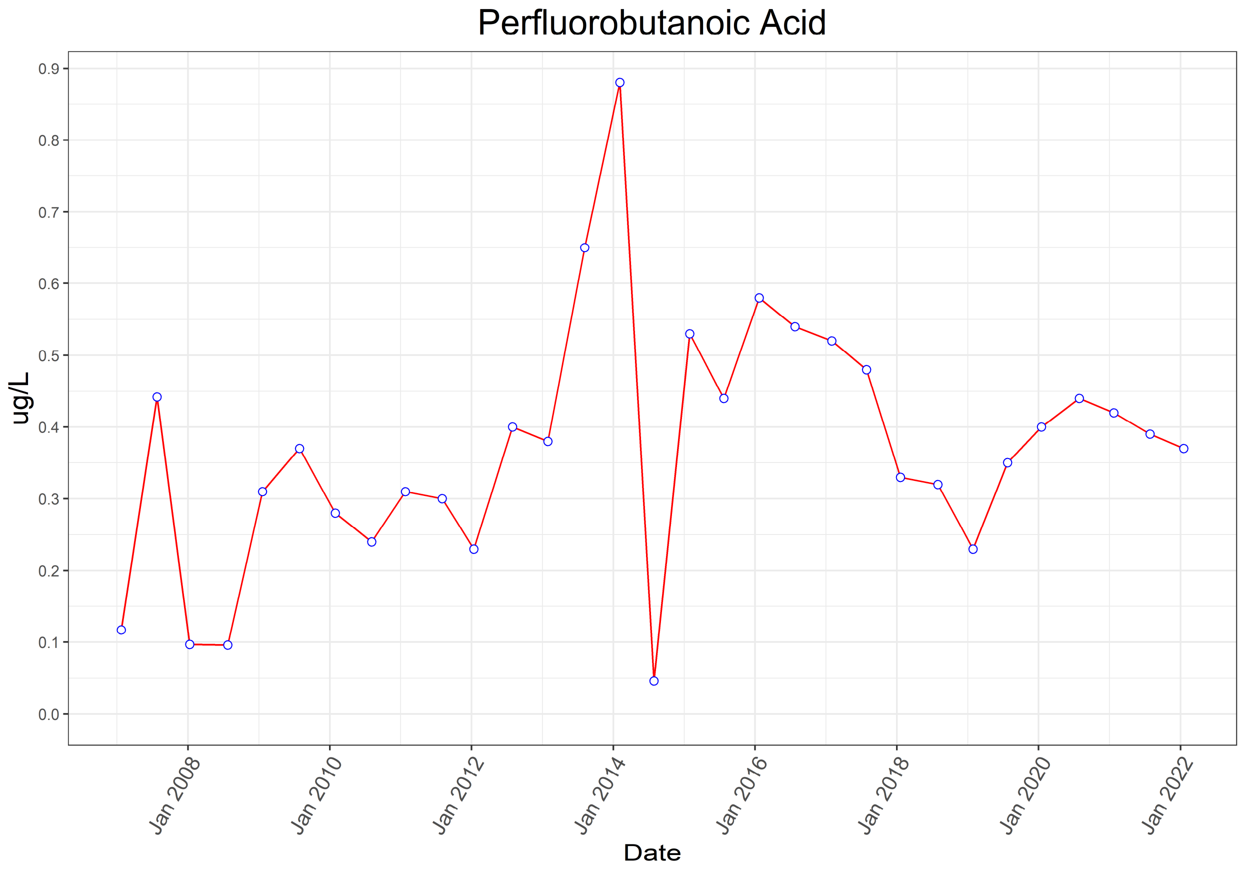
PFOS

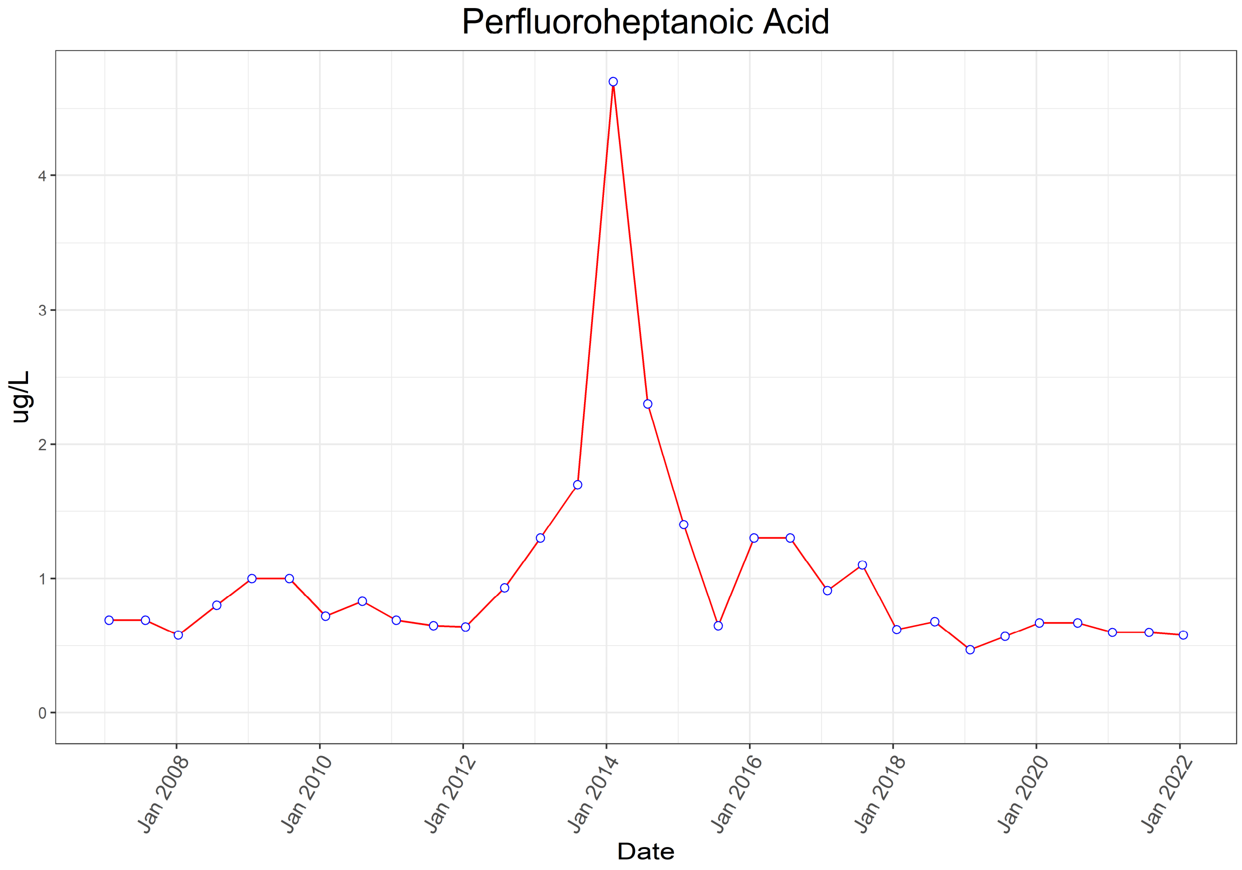


PFAS Monitoring Program (Program 9)

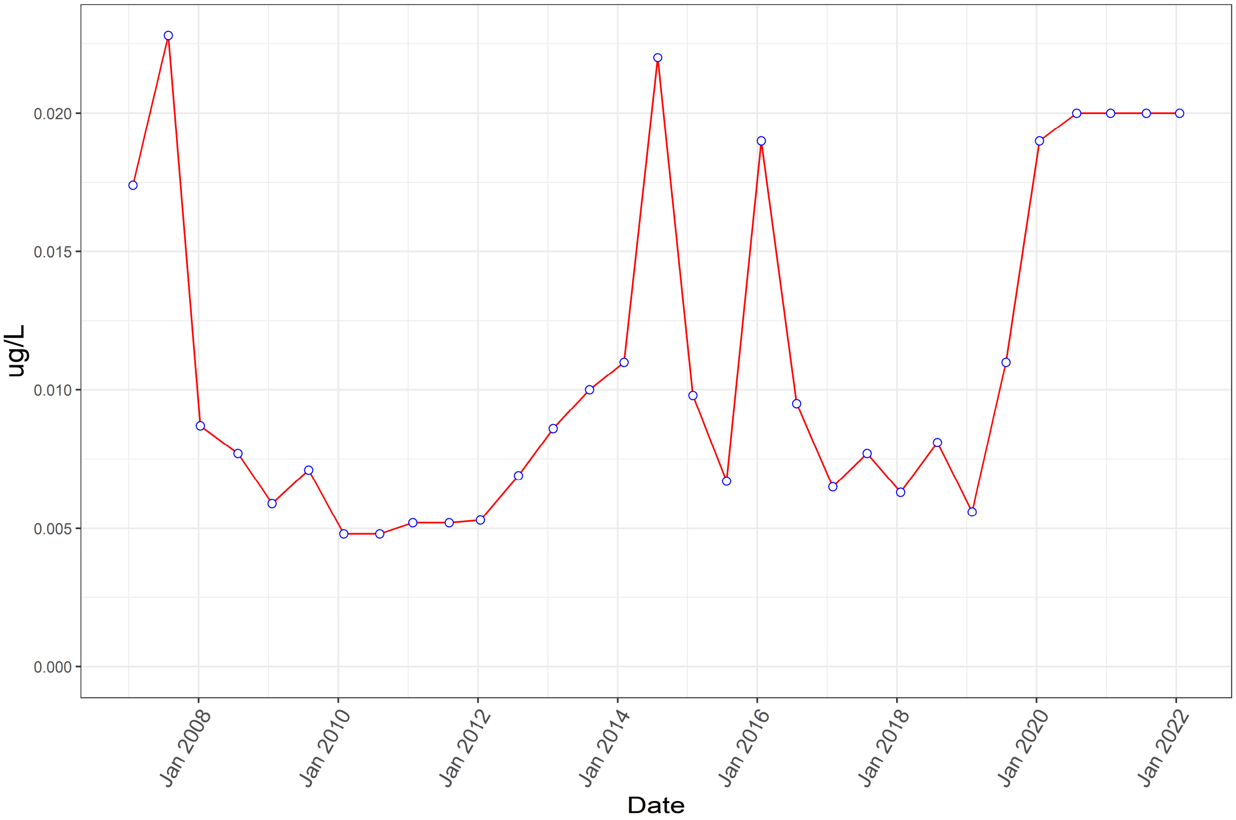
Well Name: L09-M01C



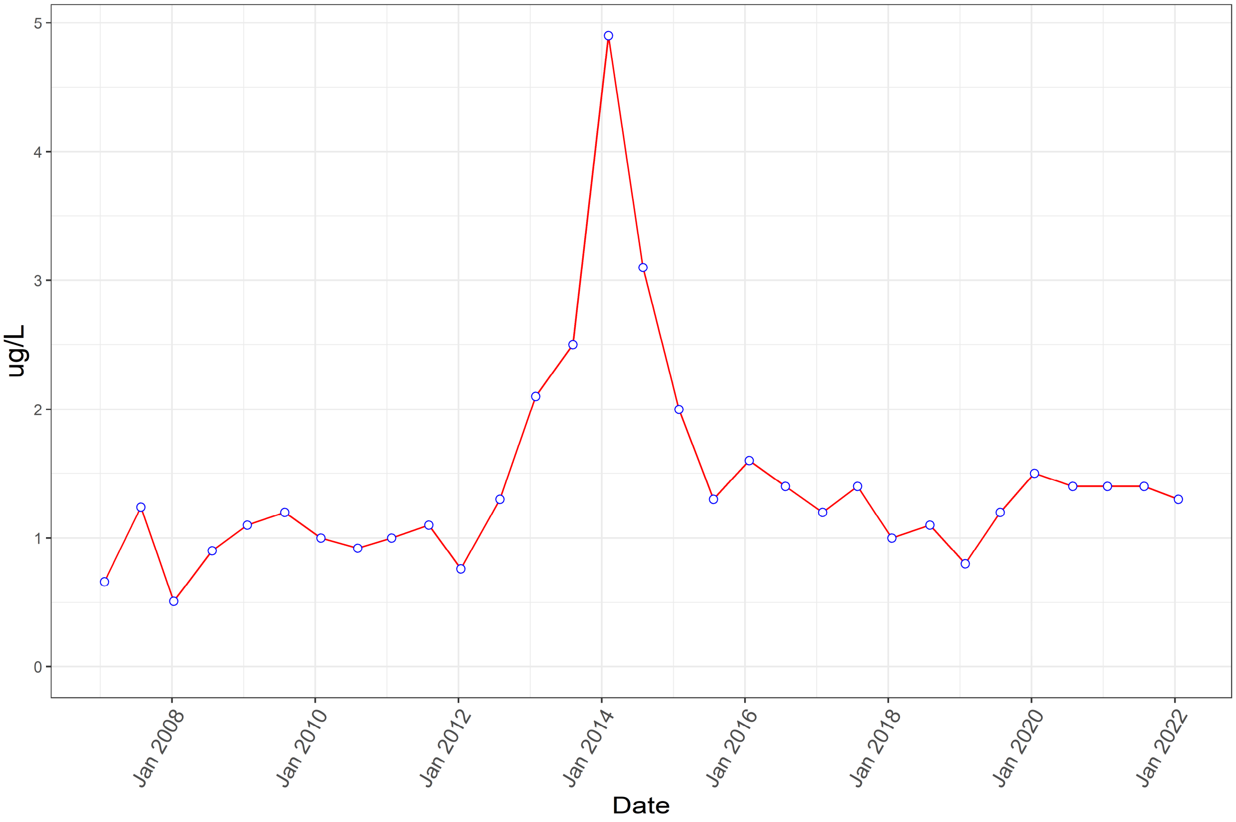

Perfluorobutanoic Acid

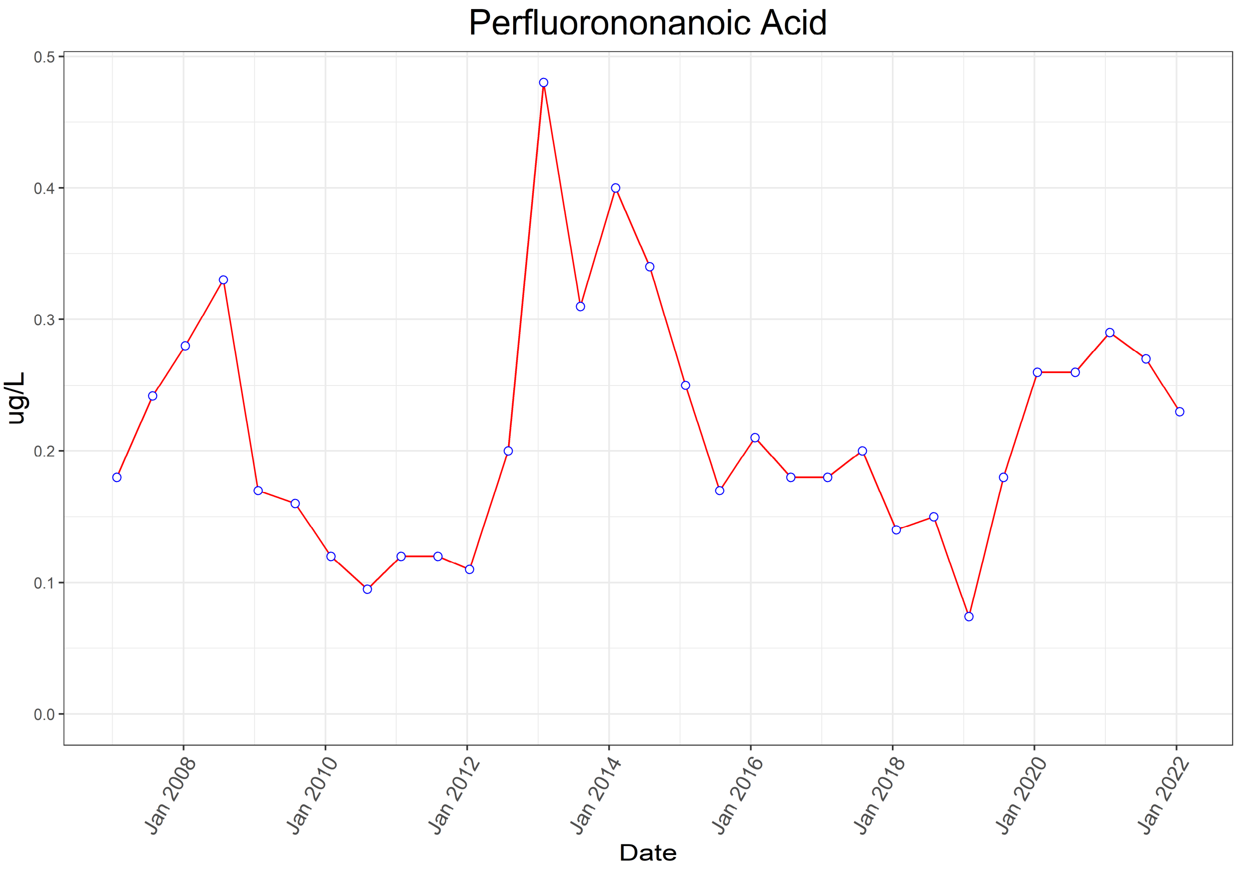

Perfluoroheptanoic Acid

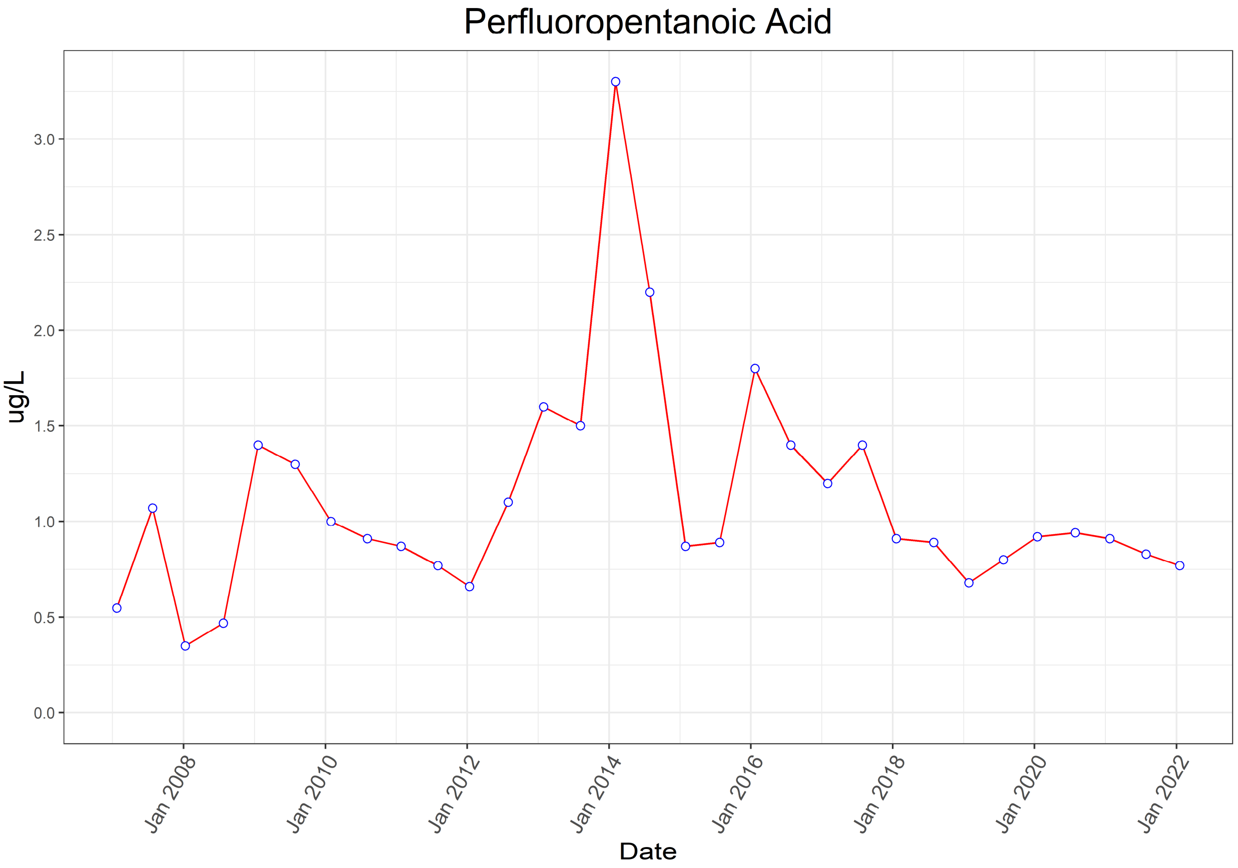
Perfluorohexane Sulfonic Acid

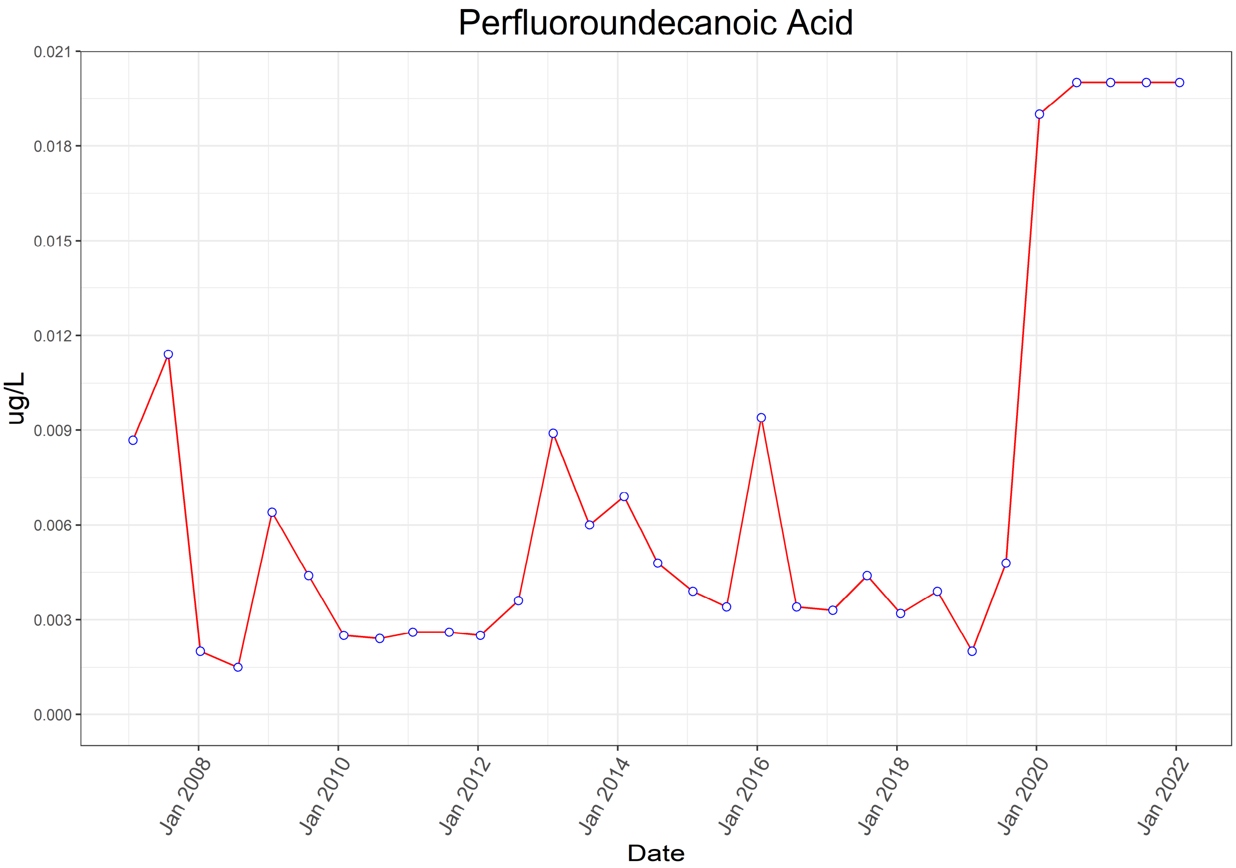


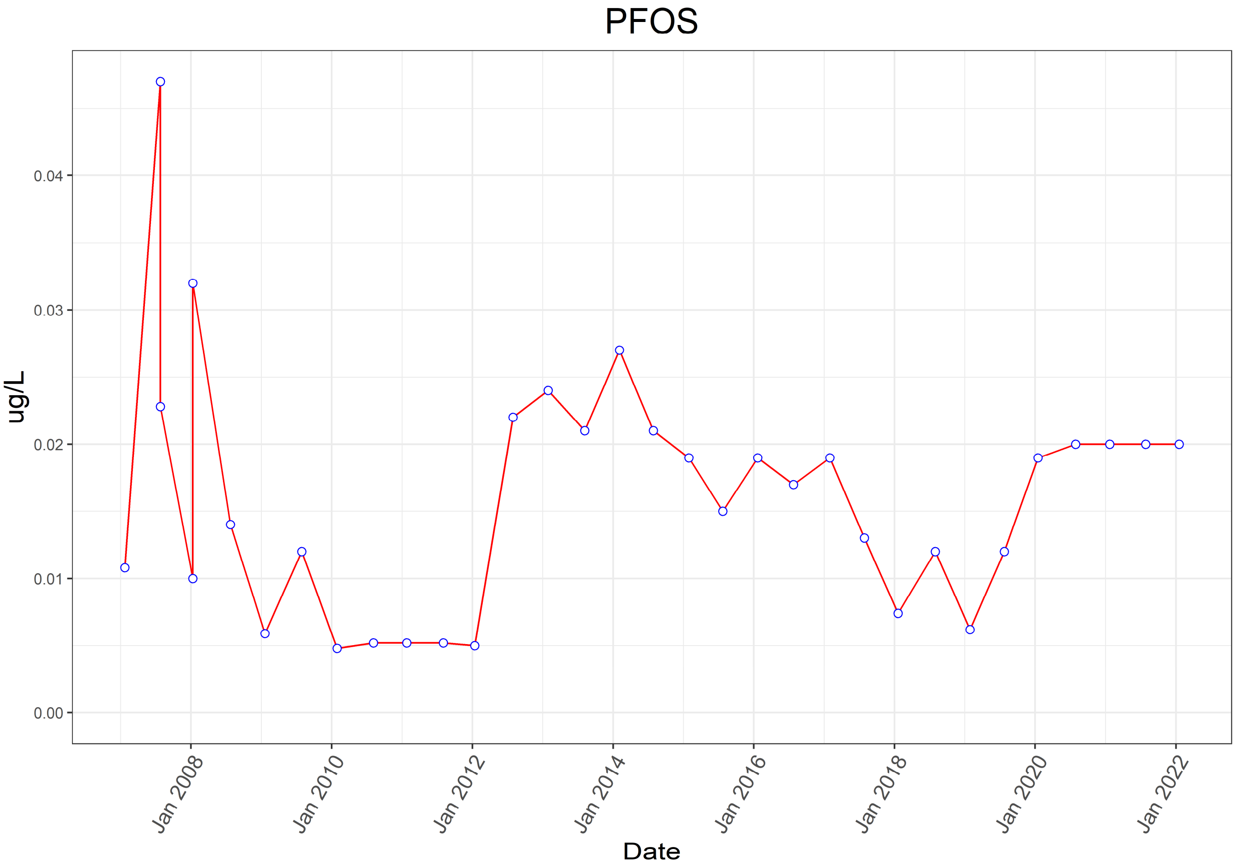
Perfluorohexanoic Acid




Perfluorononanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

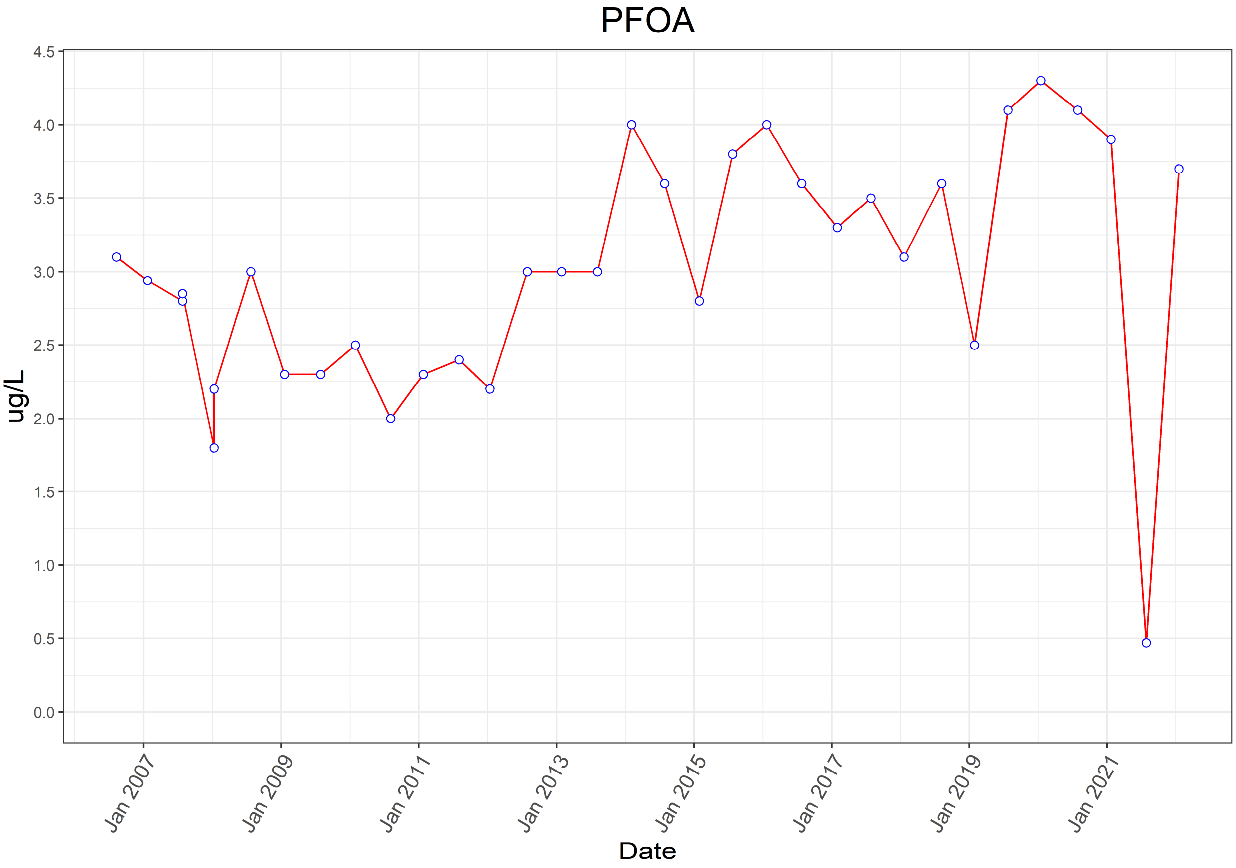

Perfluoropentanoic Acid
ug/L
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

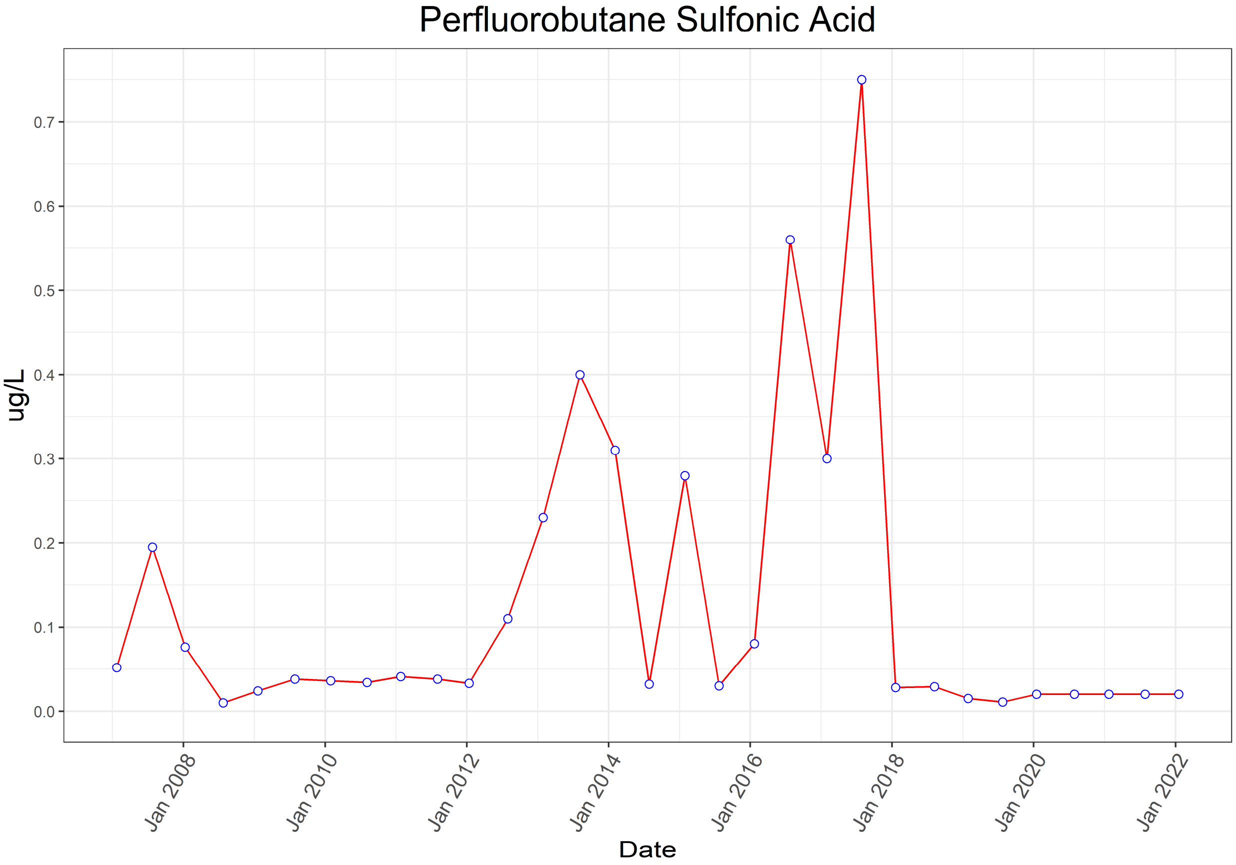

Perfluoroundecanoic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

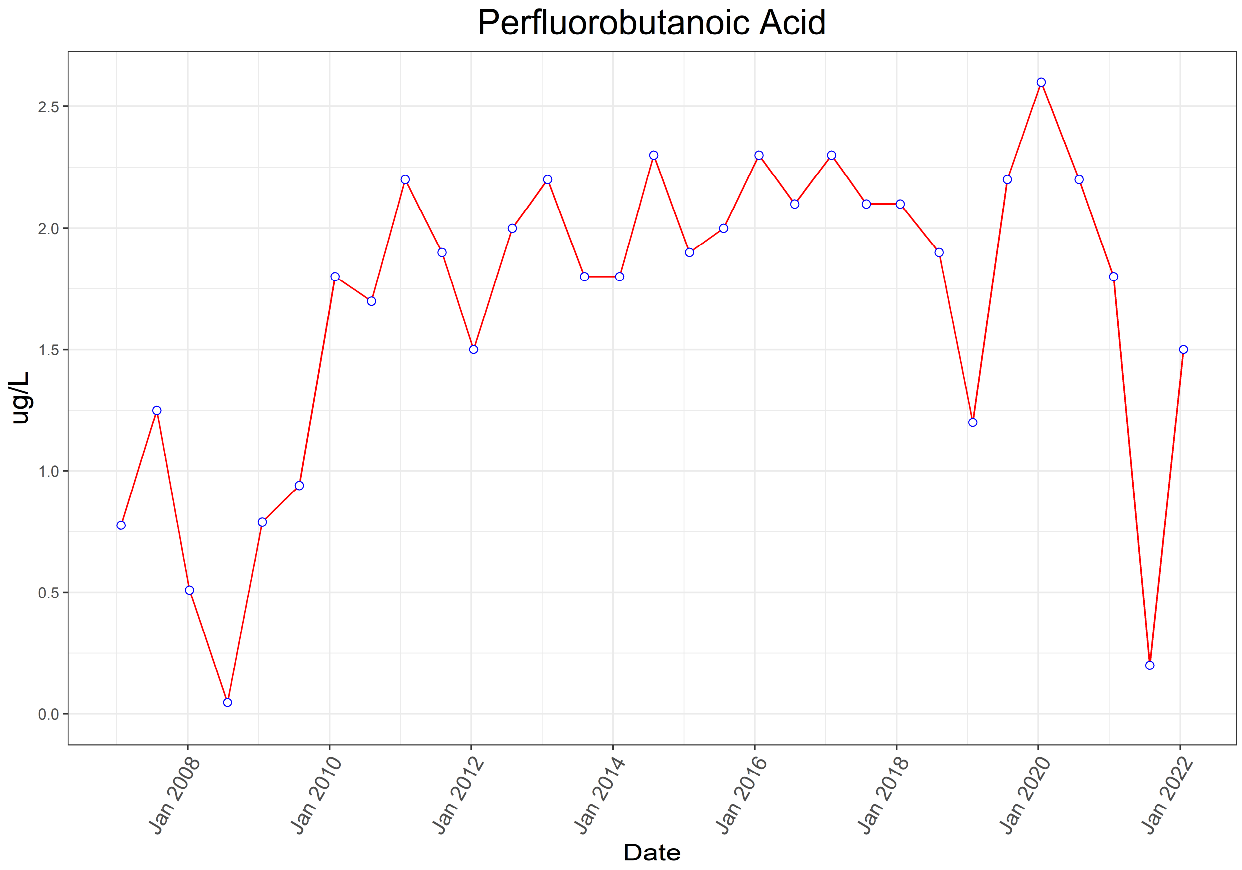

PFOS
ug/L
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

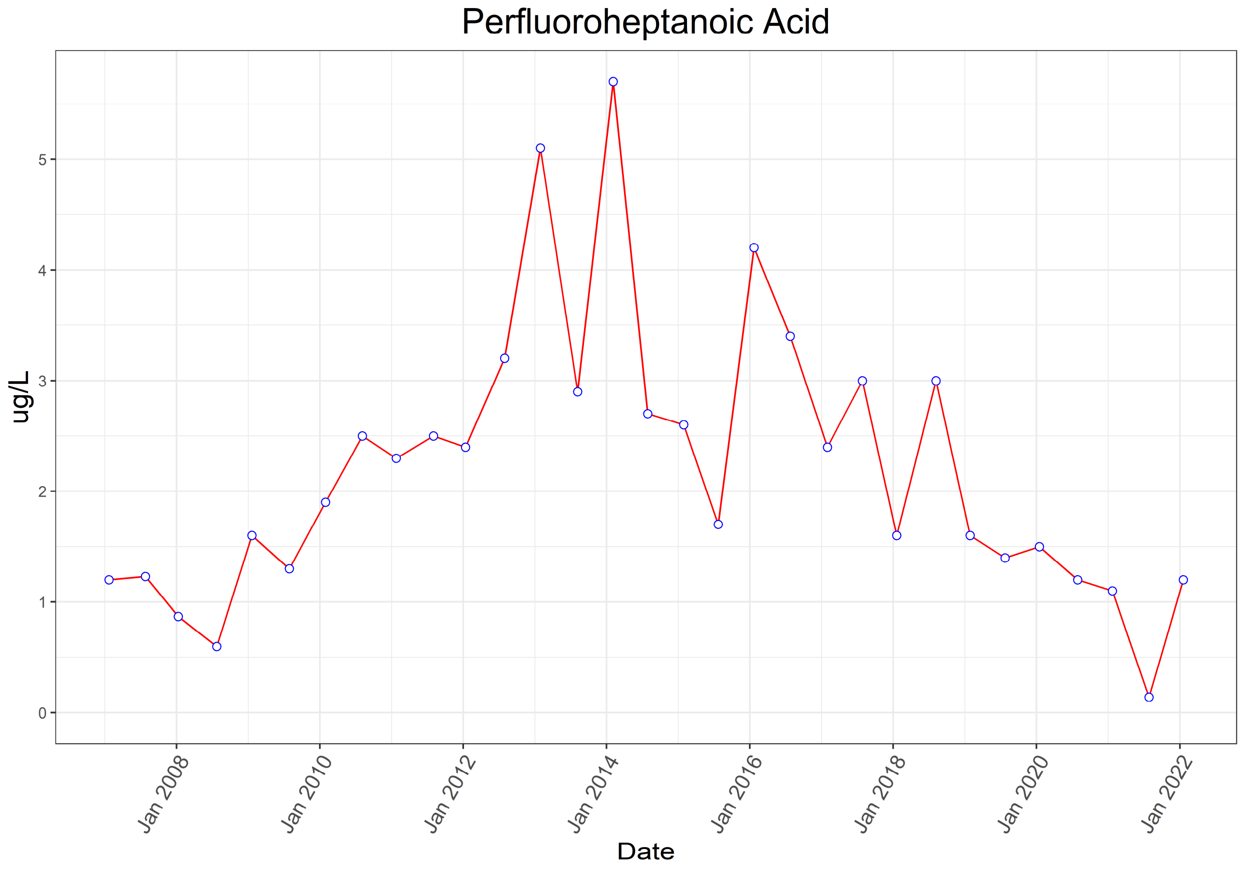
PFAS Monitoring Program (Program 9)

Well Name: L09-M01D

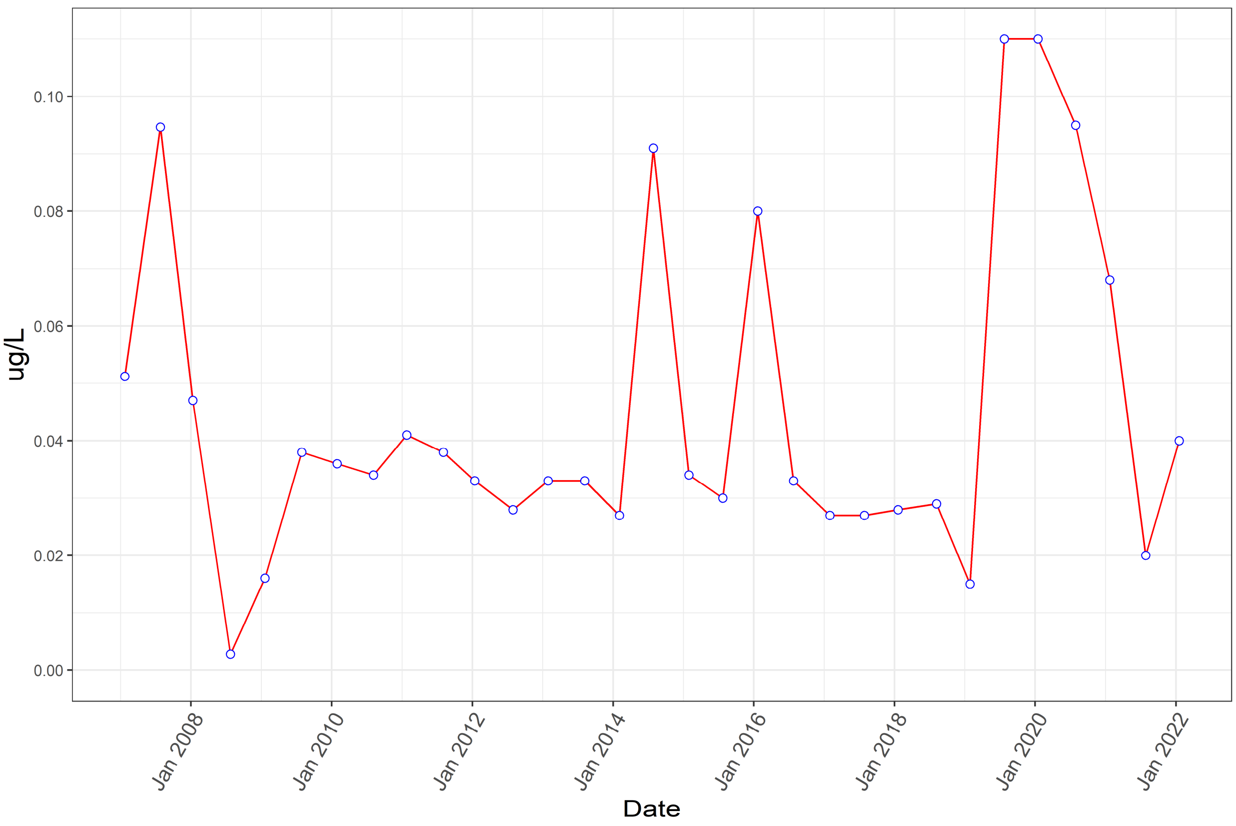




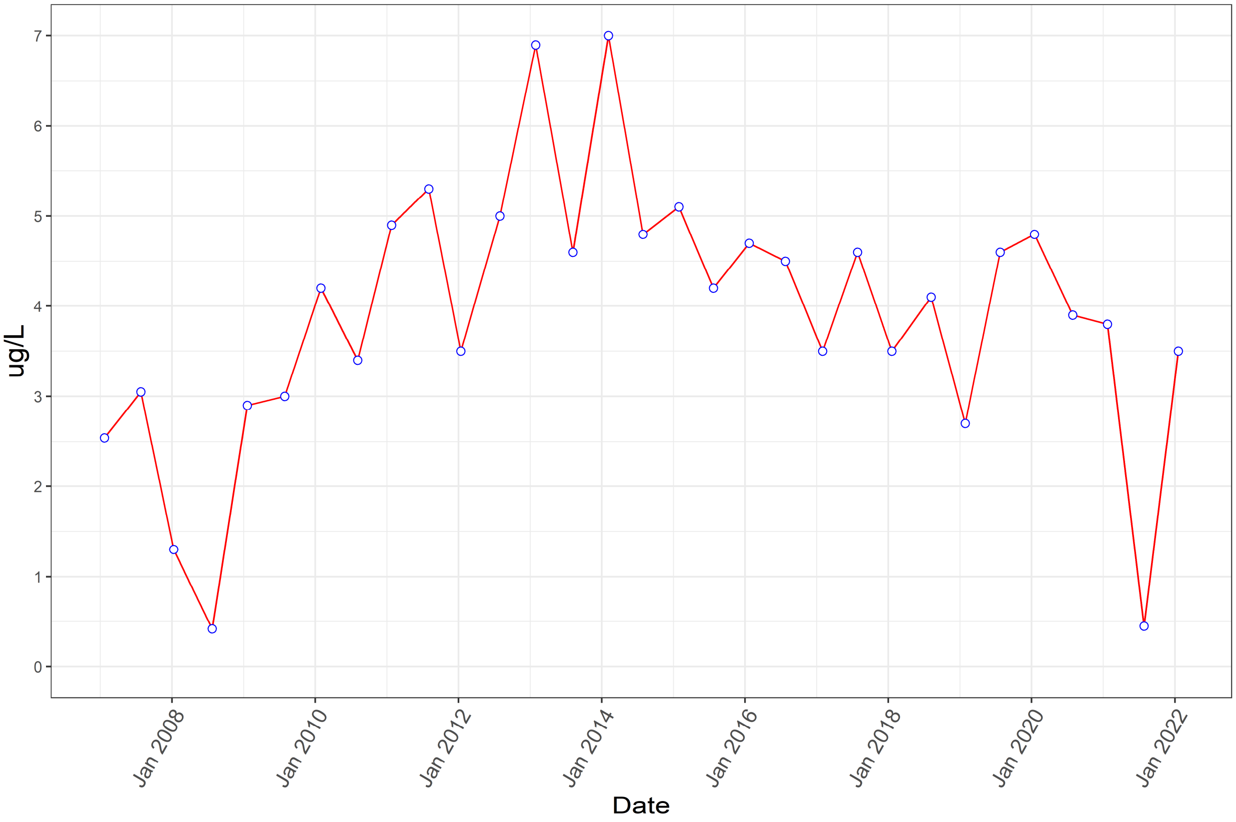

Perfluorobutanoic Acid

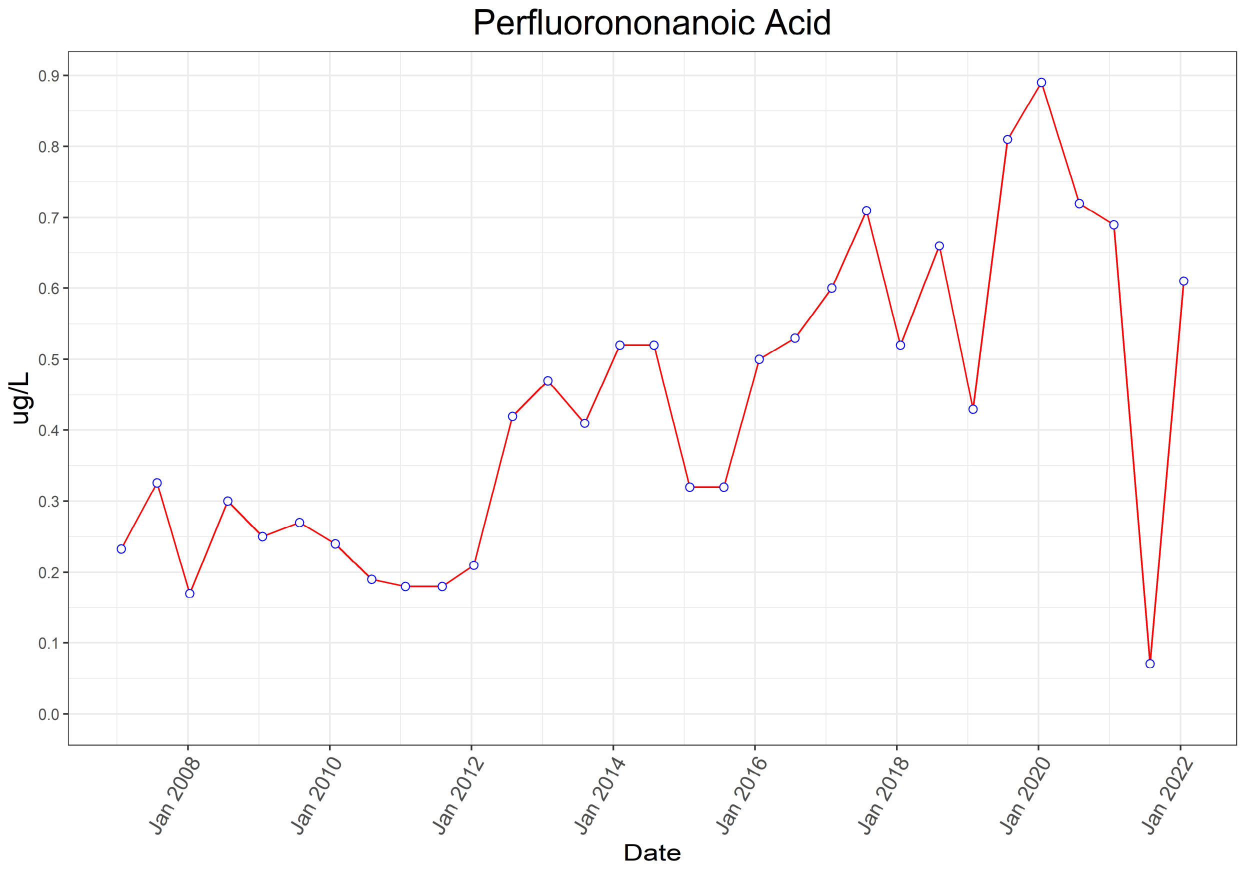

Perfluoroheptanoic Acid

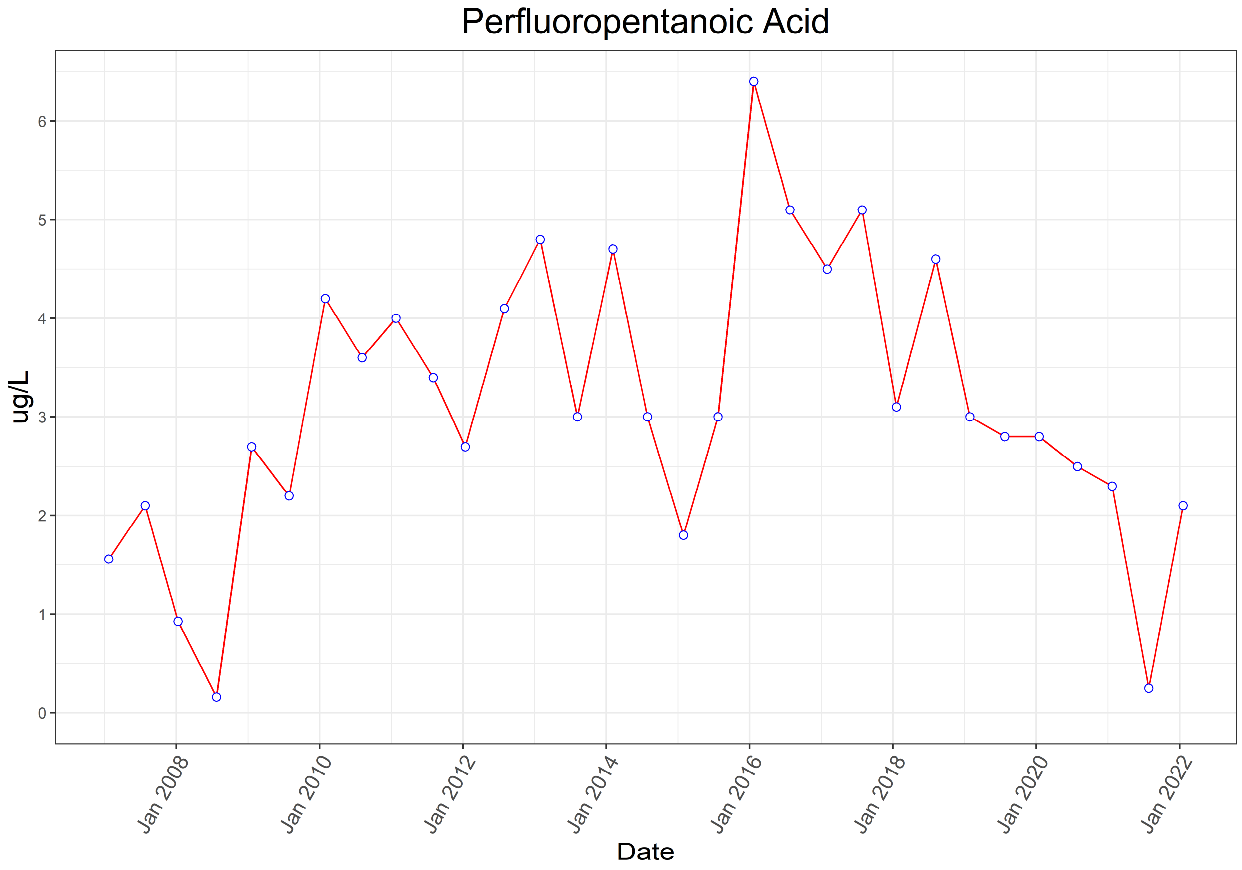
Perfluorohexane Sulfonic Acid

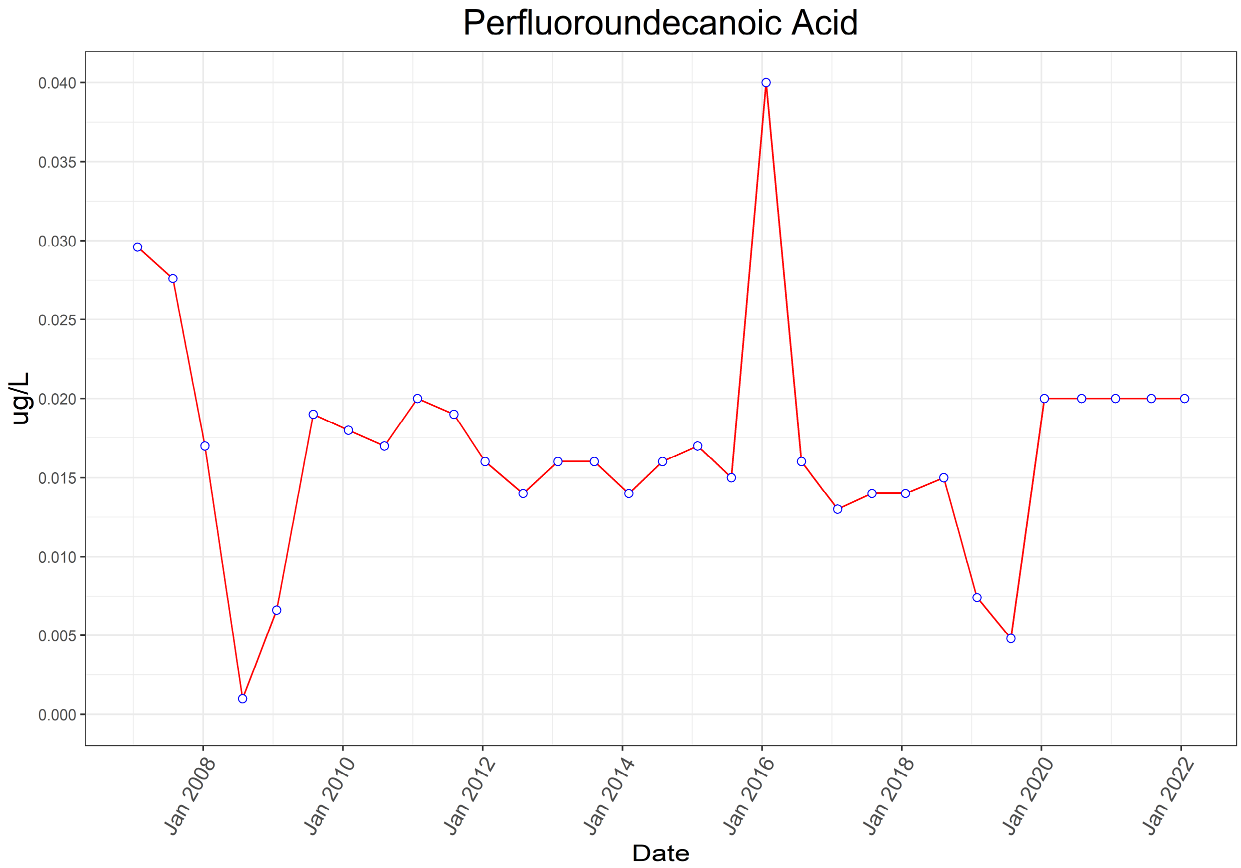


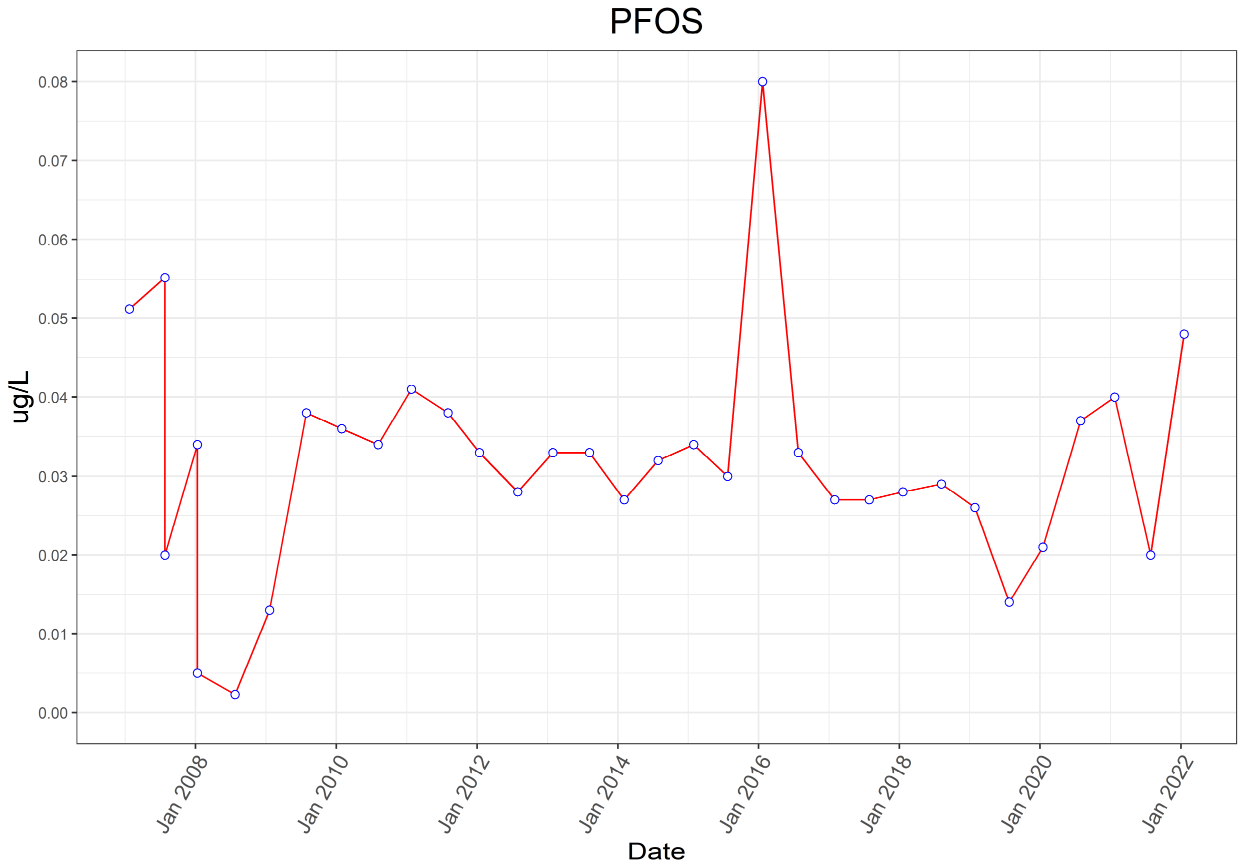
Perfluorohexanoic Acid




Perfluorononanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

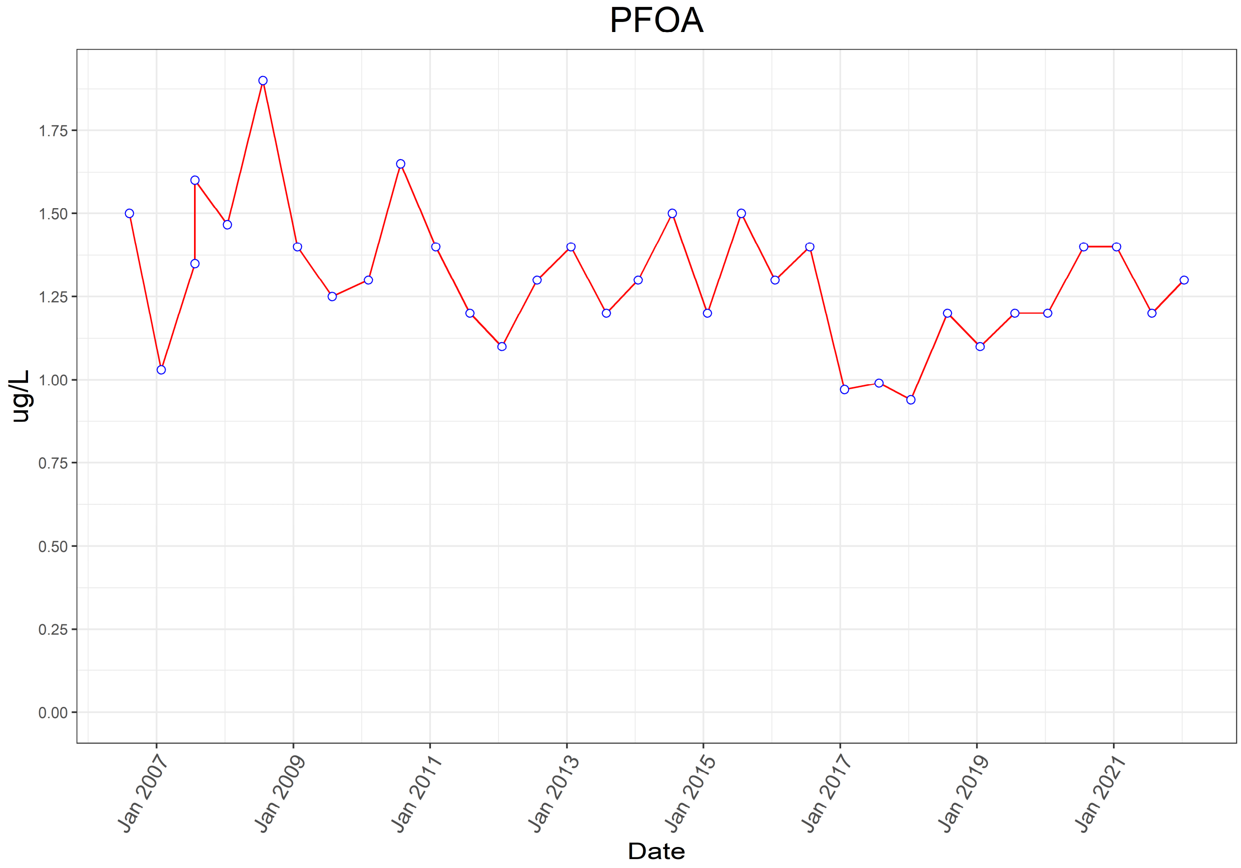

Perfluoropentanoic Acid
ug/L
0
1
2
3
4
5
6
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

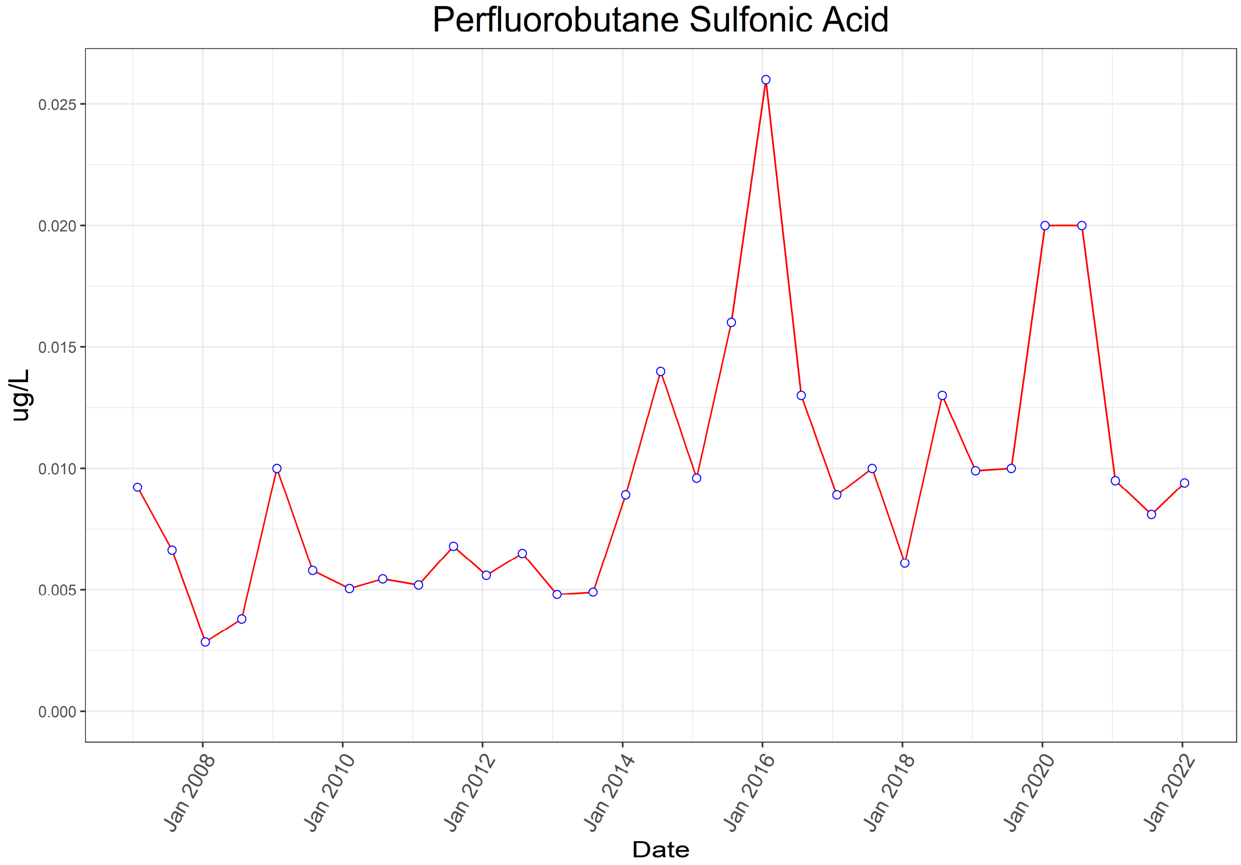

Perfluoroundecanoic Acid
ug/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


PFOS
ug/L
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

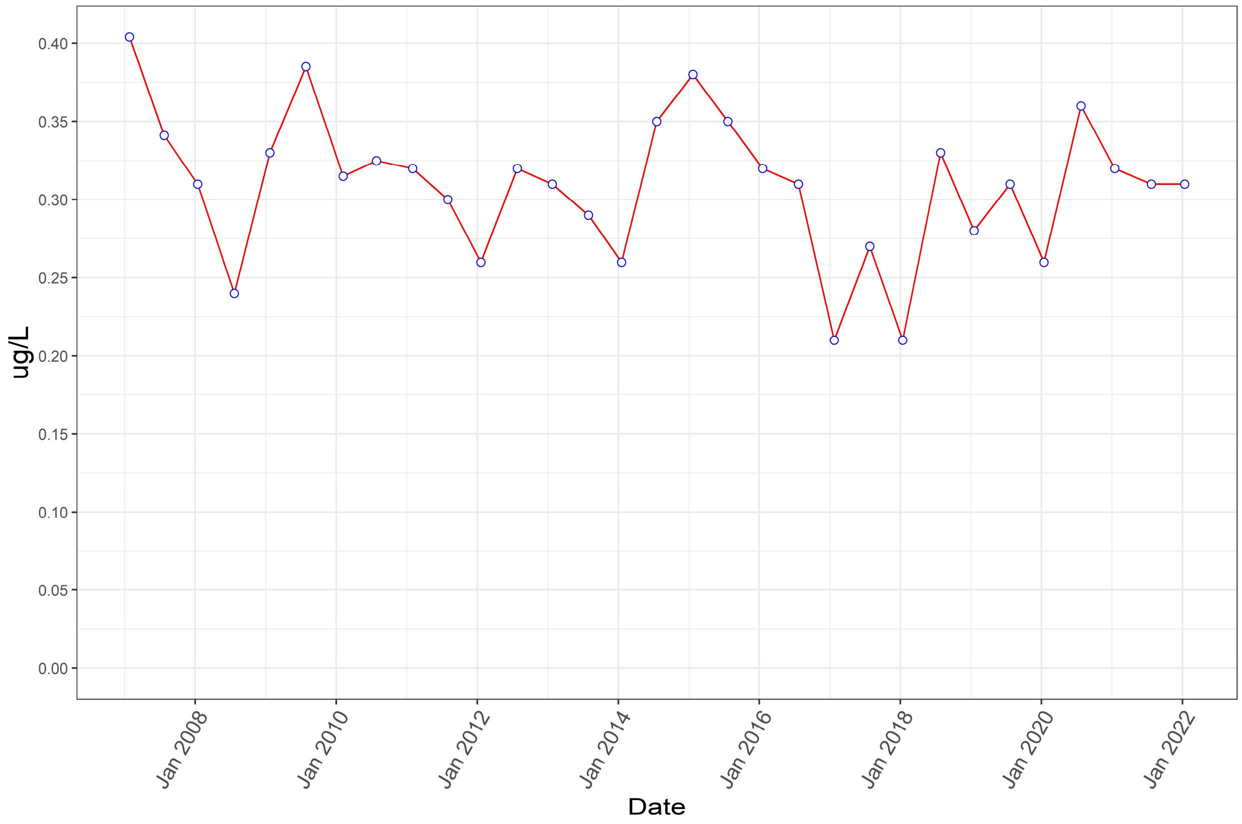
PFAS Monitoring Program (Program 9)

Well Name: N08-M01B

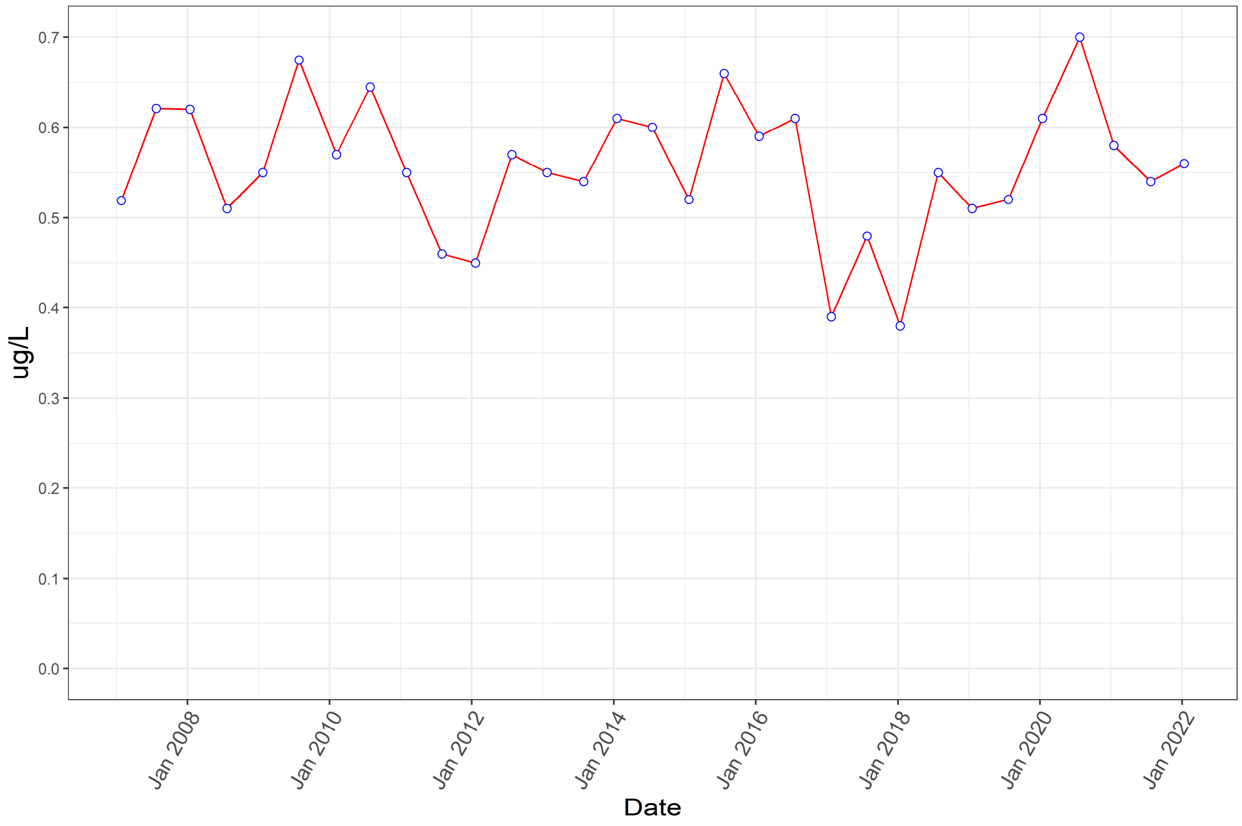


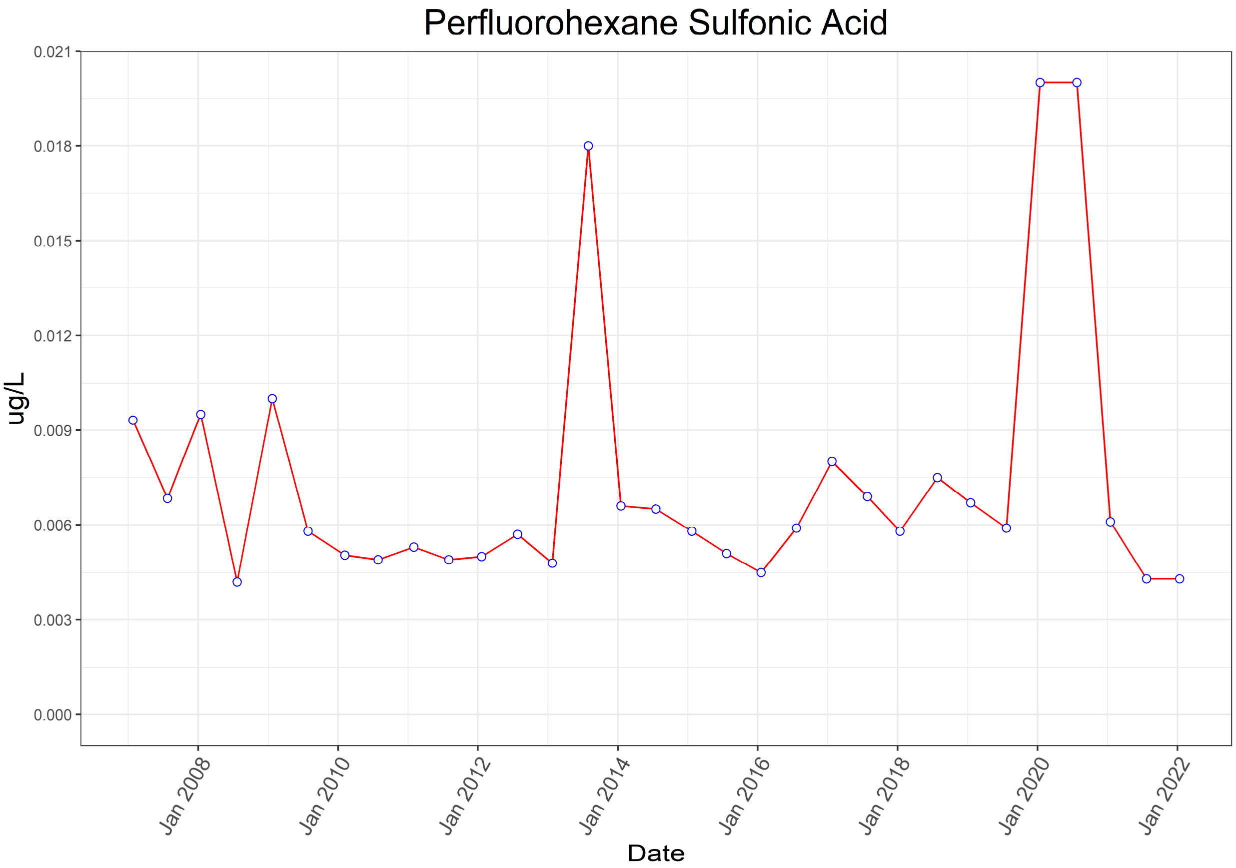


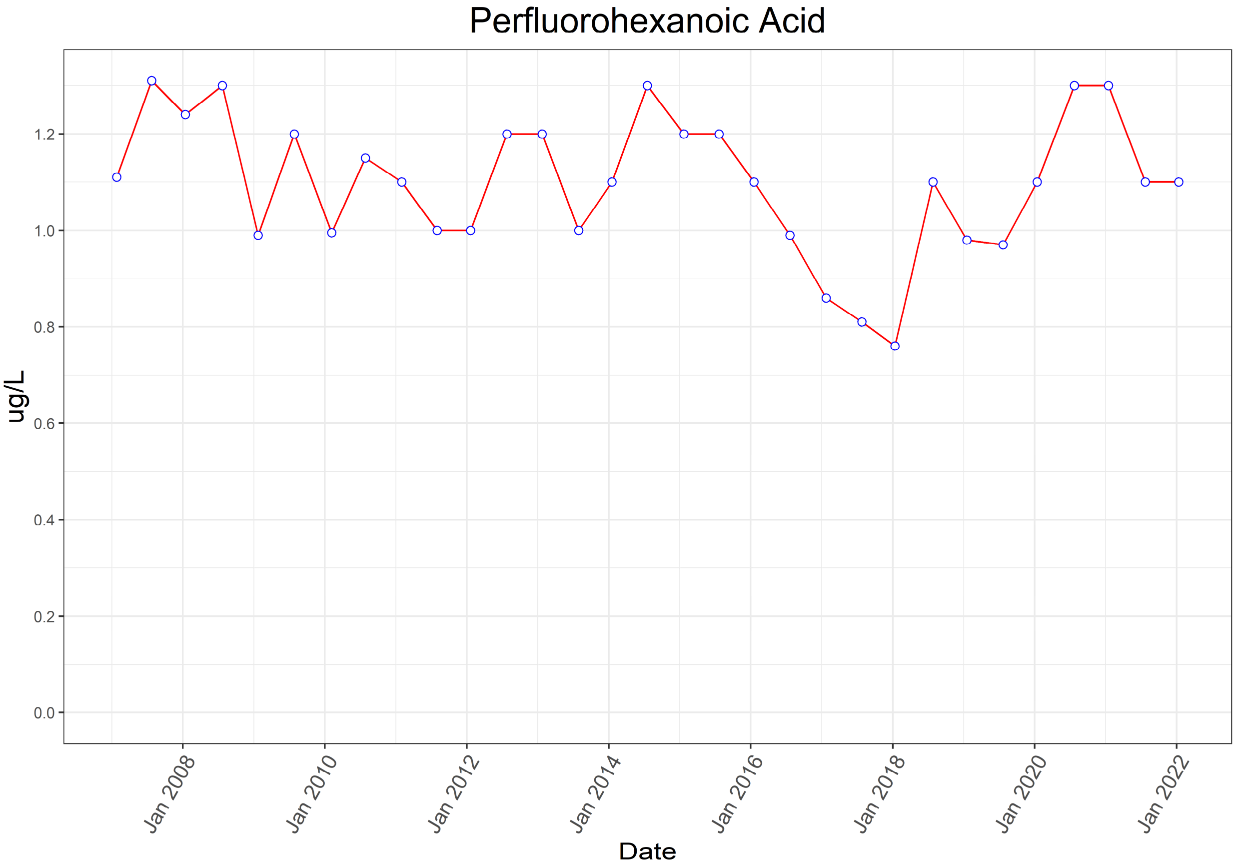
Perfluorobutanoic Acid

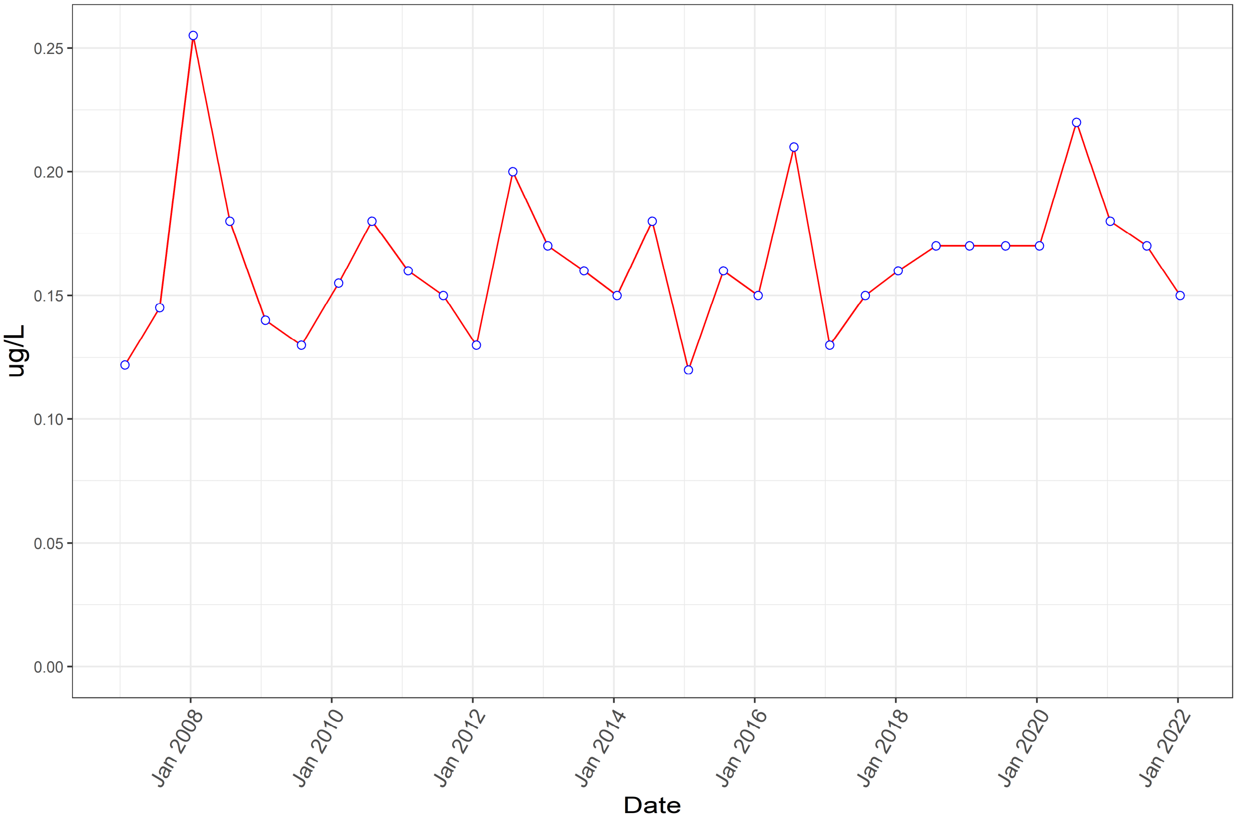


Perfluoroheptanoic Acid

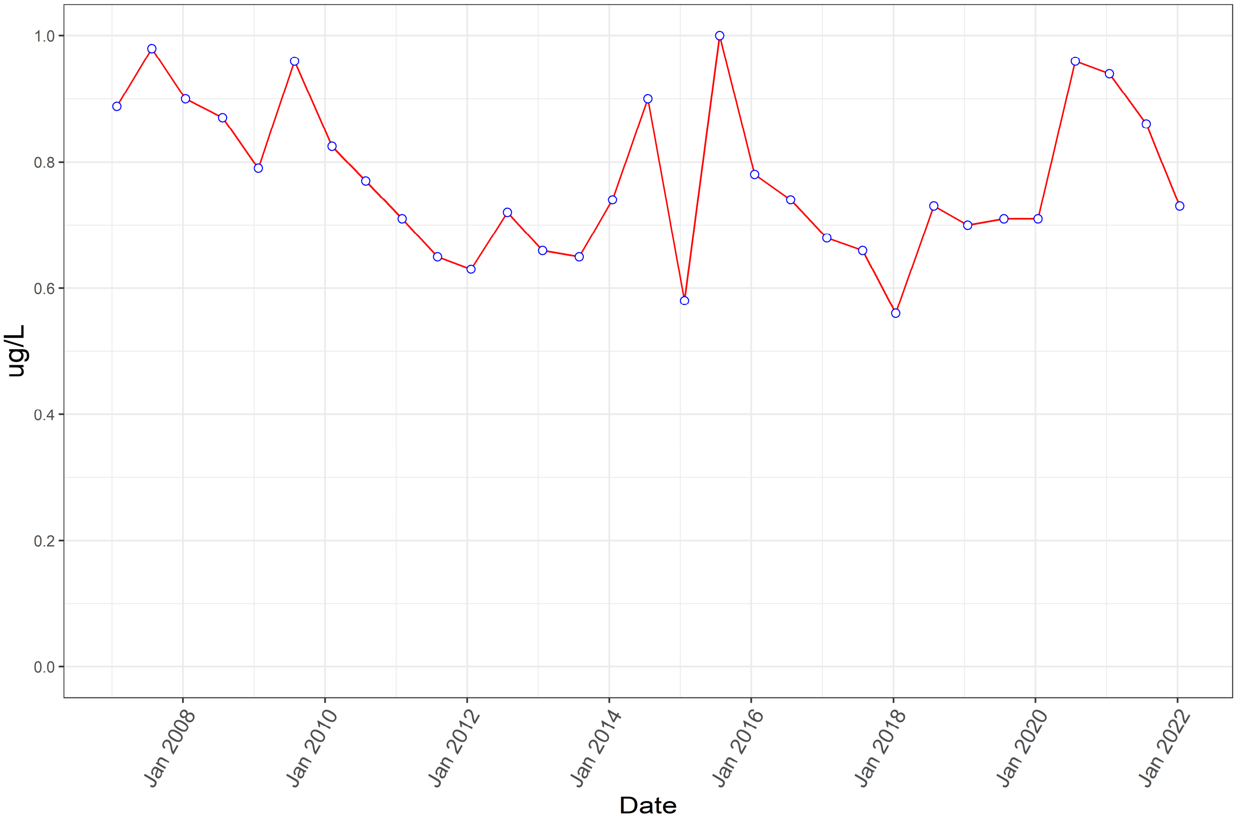



Perfluorohexane Sulfonic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

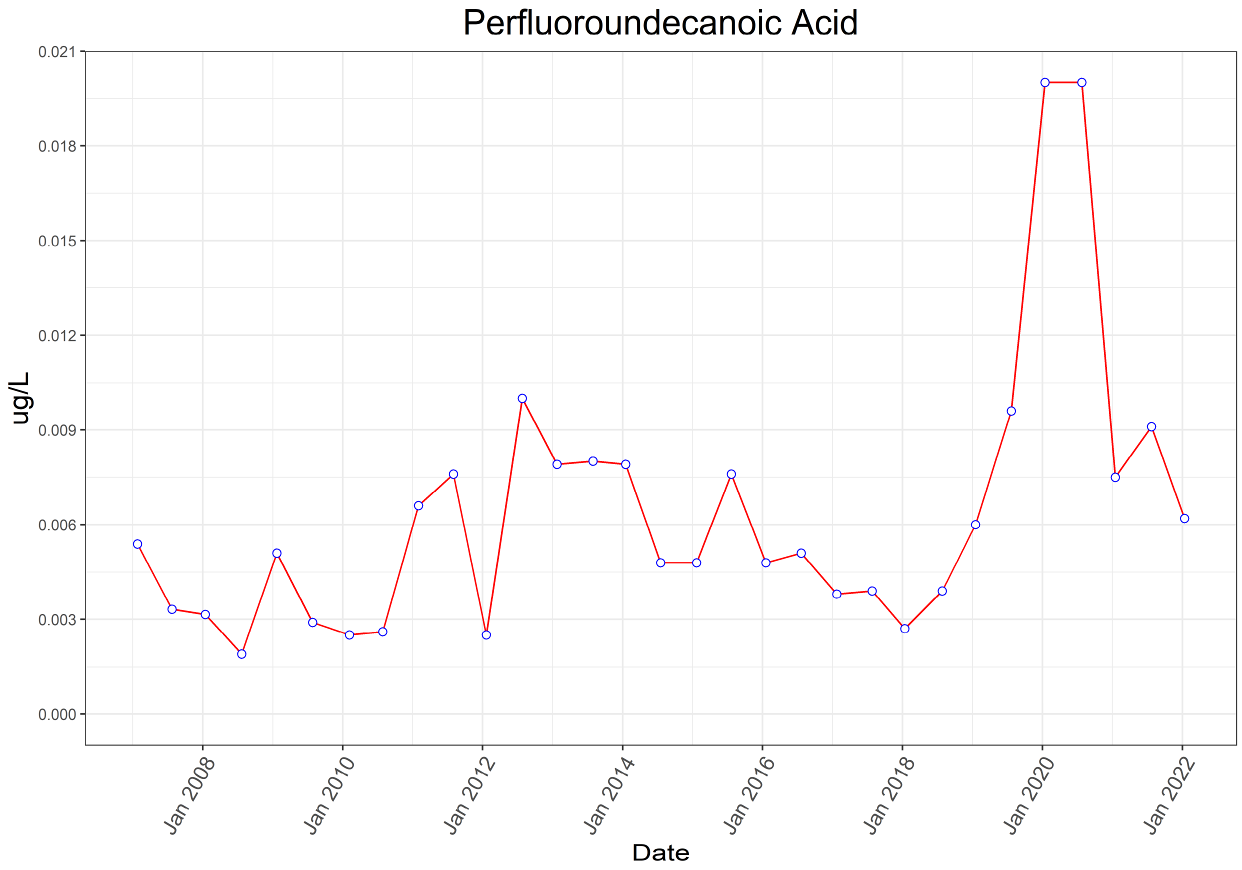

Perfluorohexanoic Acid
ug/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

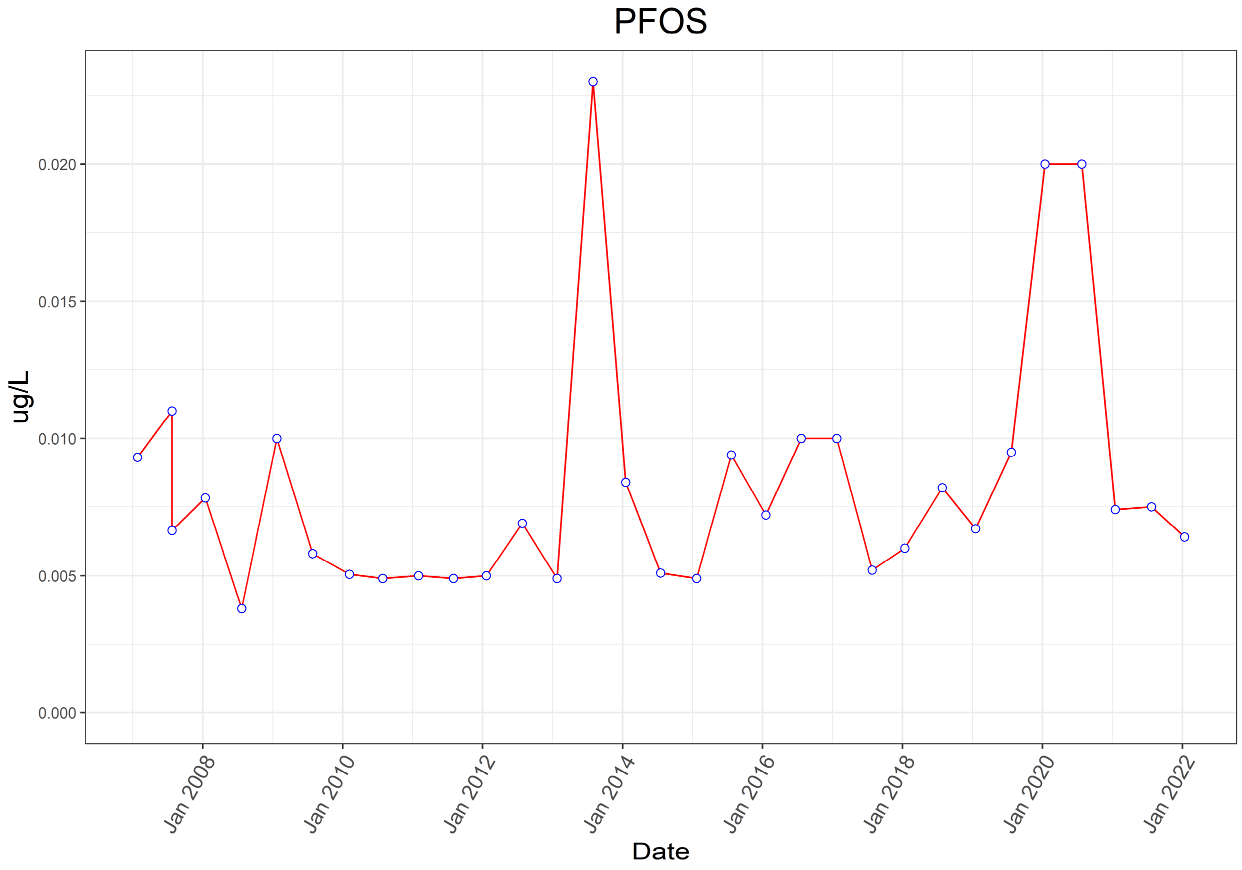


Perfluorononanoic Acid



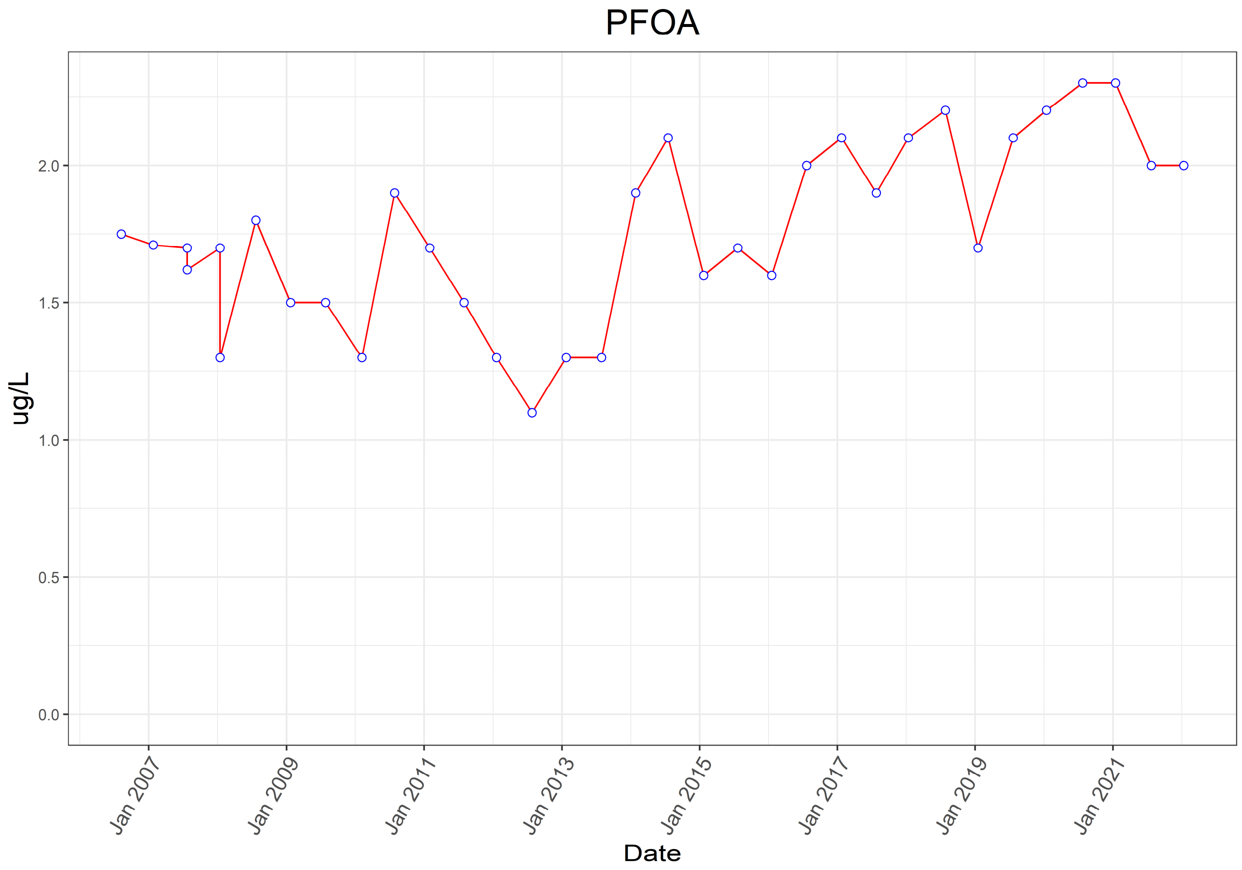
Perfluoropentanoic Acid

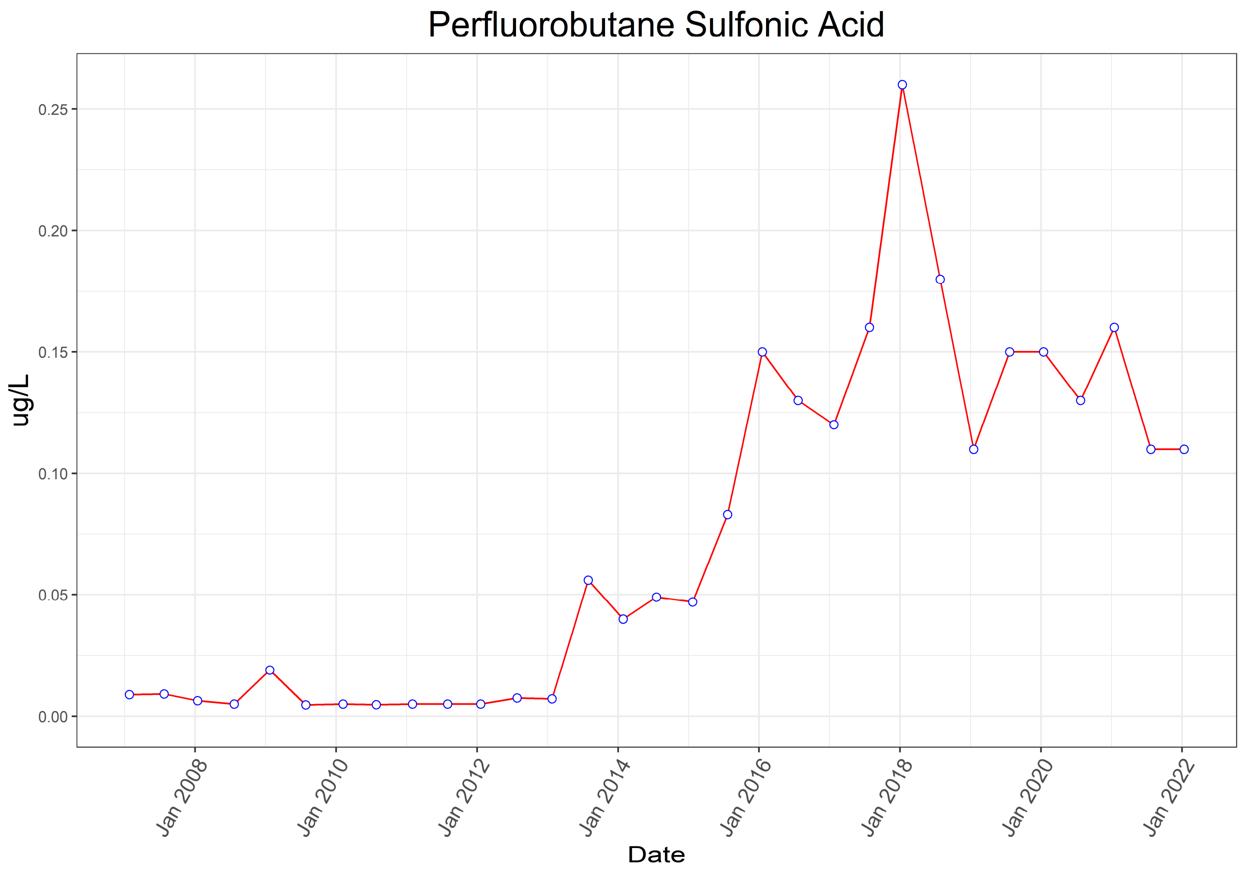

Perfluoroundecanoic Acid
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
ug/L
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

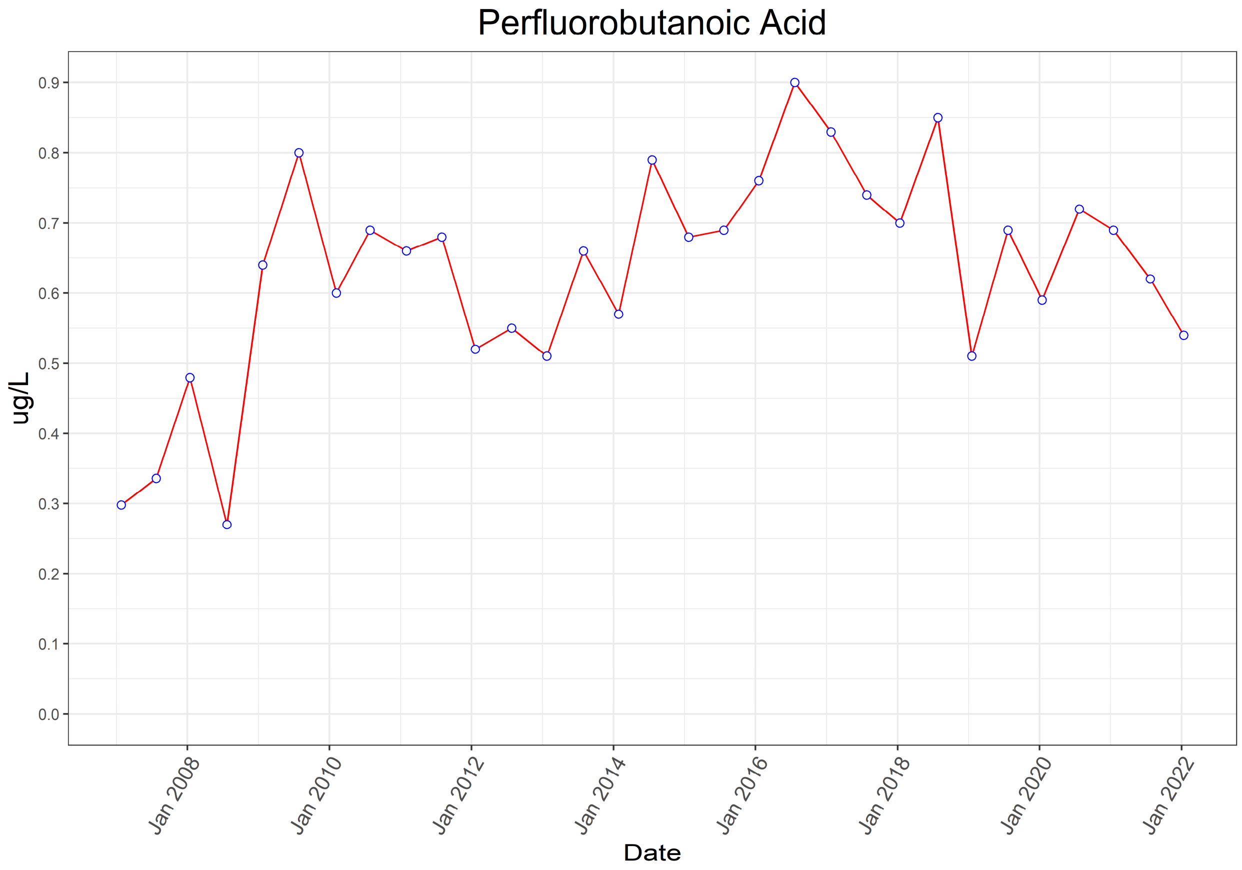

PFOS
0.020
0.015
0.010
0.005
0.000
ug/L
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

PFAS Monitoring Program (Program 9)

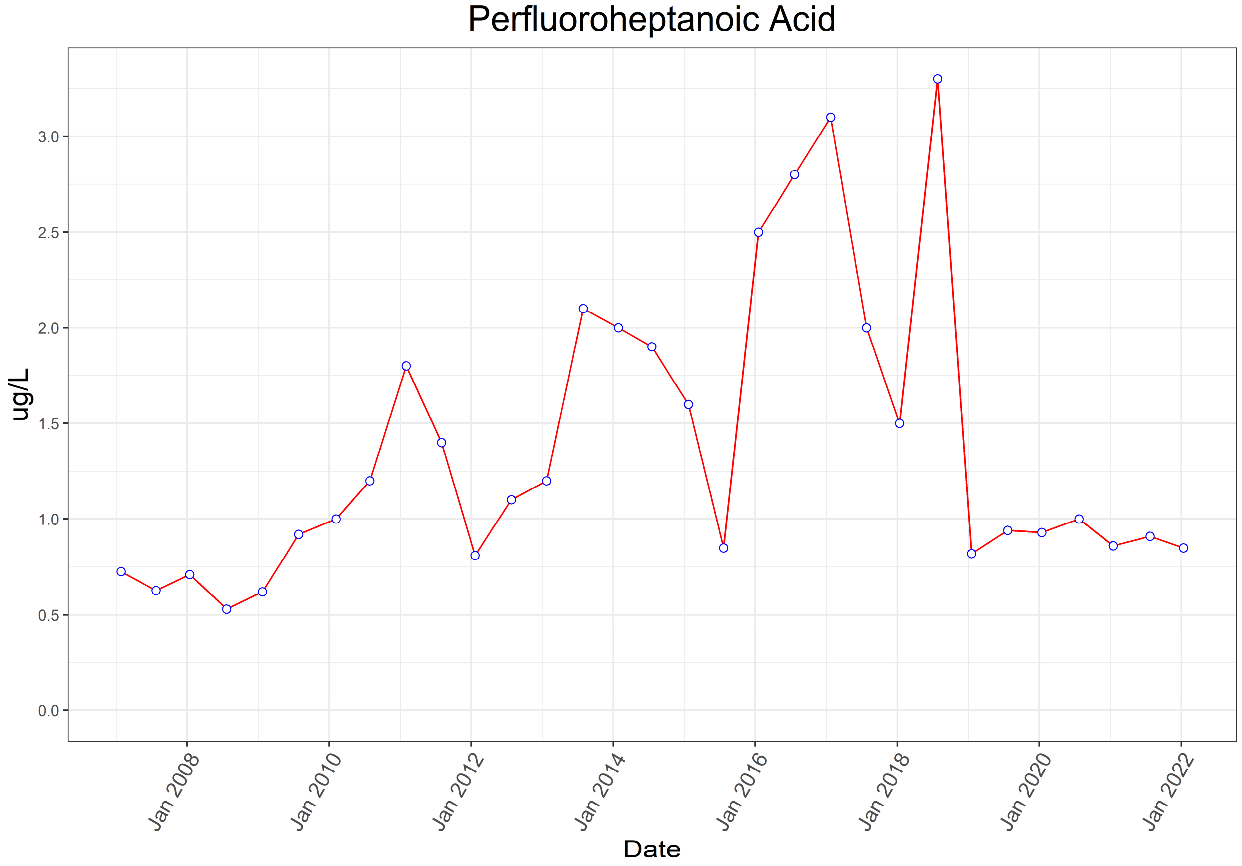
Well Name: N08-M01D



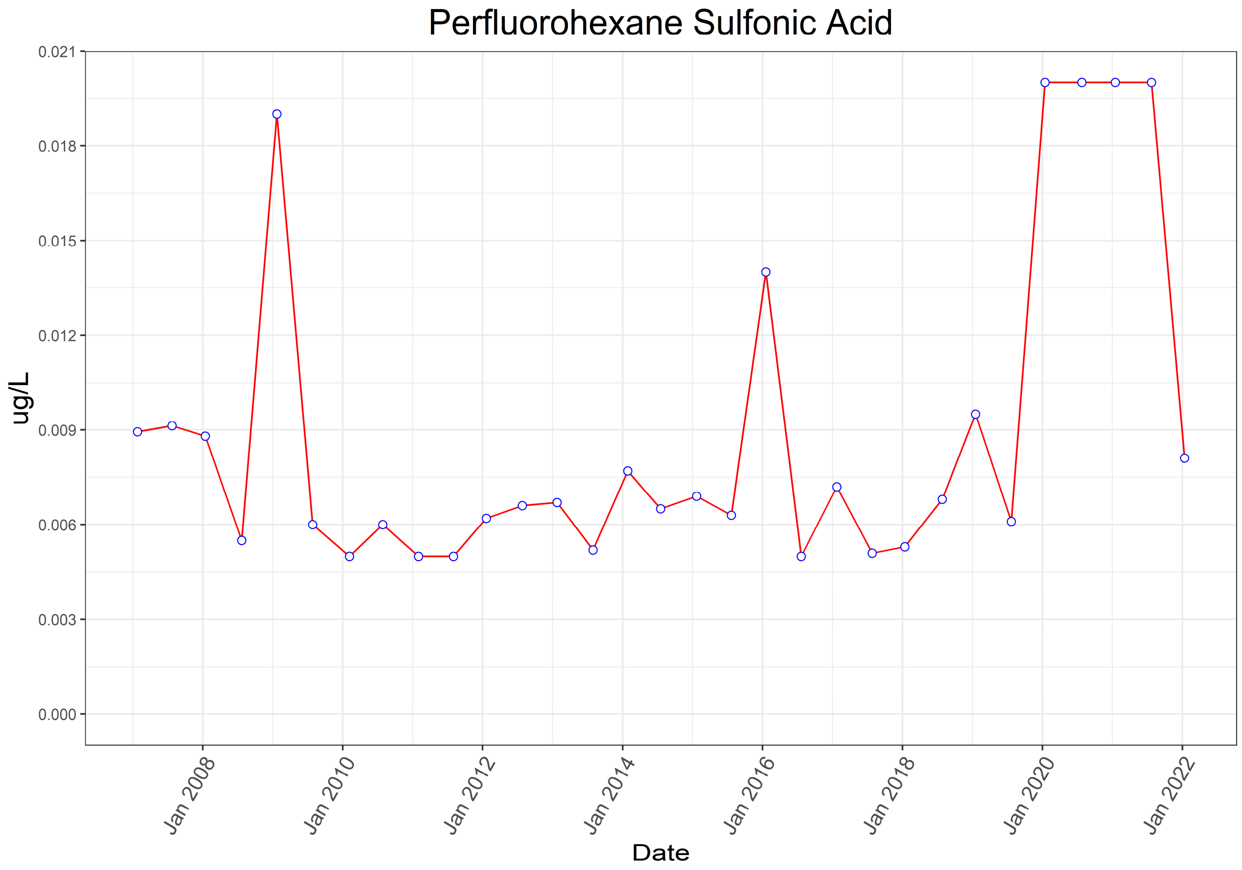


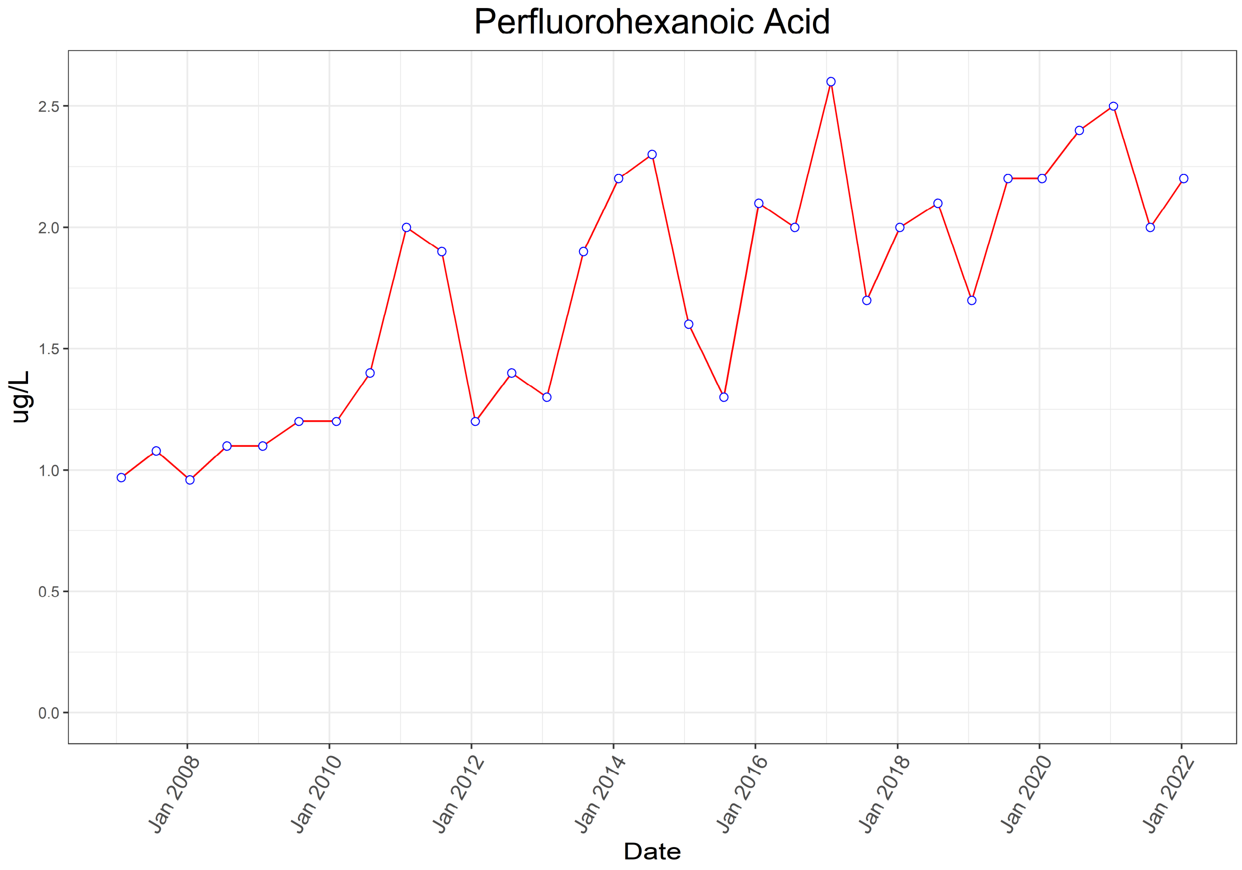


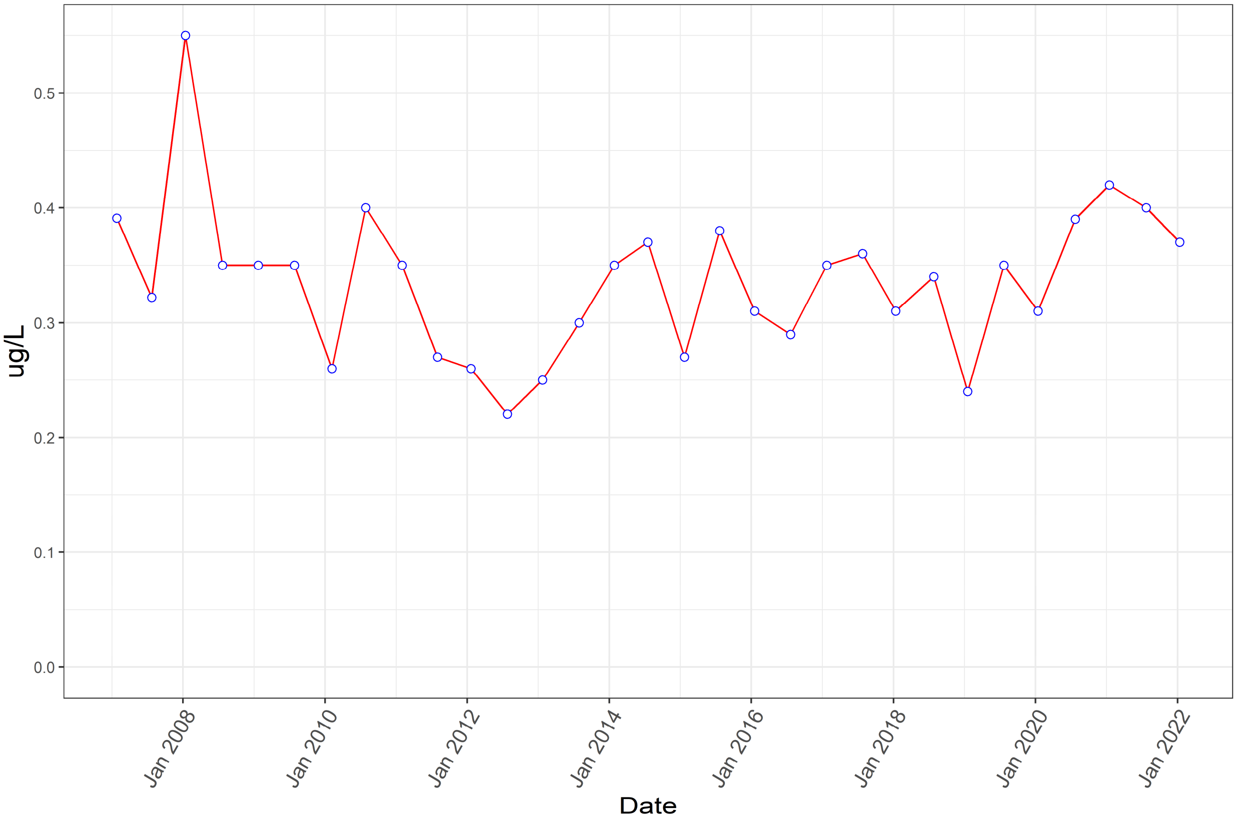
Perfluorobutanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



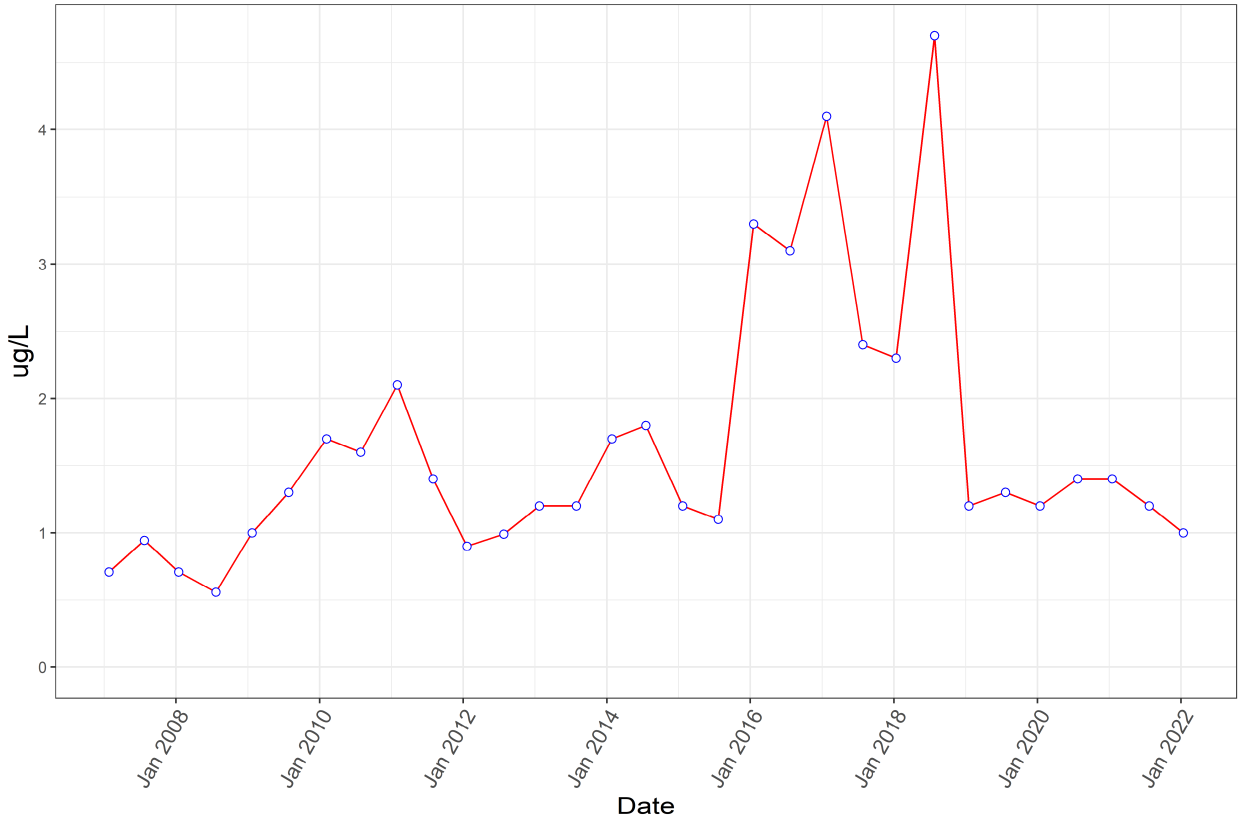
Perfluoroheptanoic Acid
ug/L
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluorohexane Sulfonic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

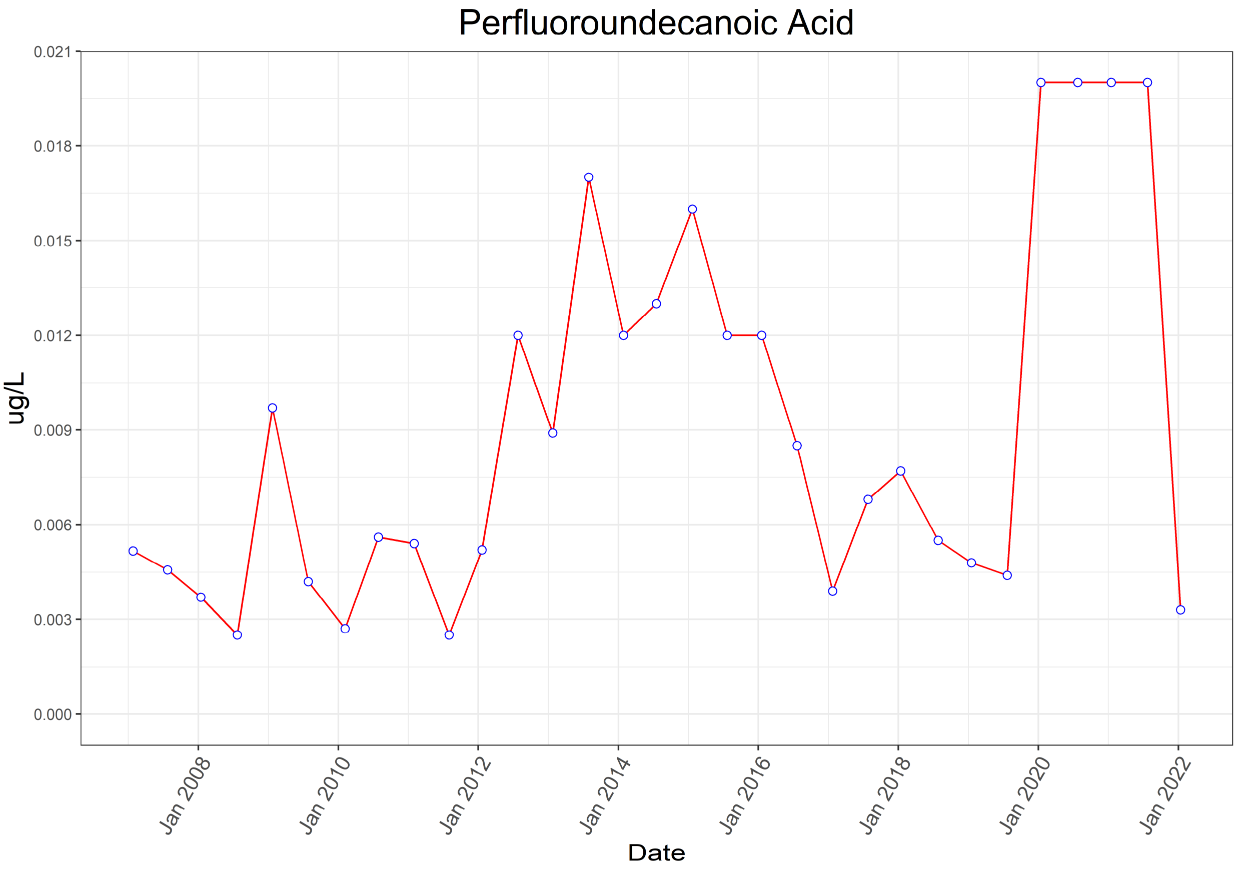

Perfluorohexanoic Acid
ug/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

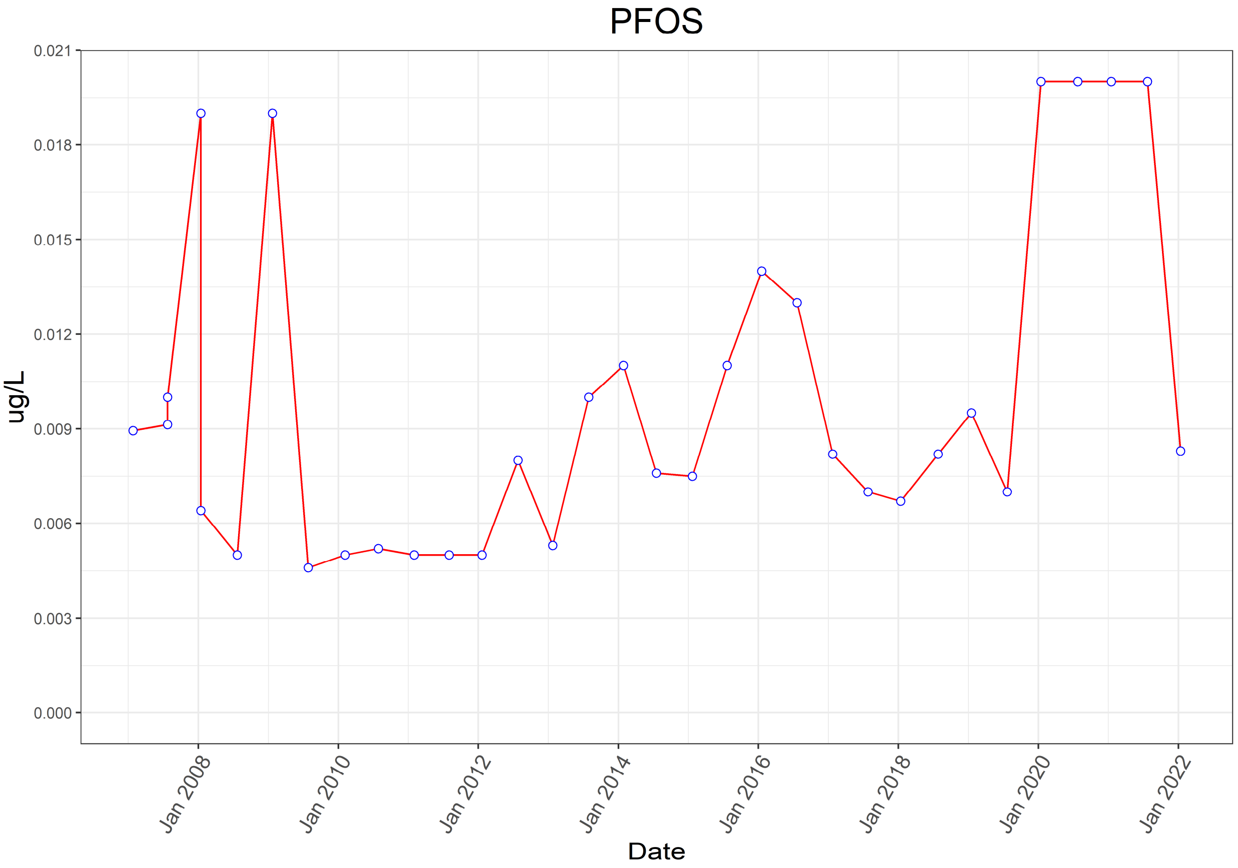


Perfluorononanoic Acid



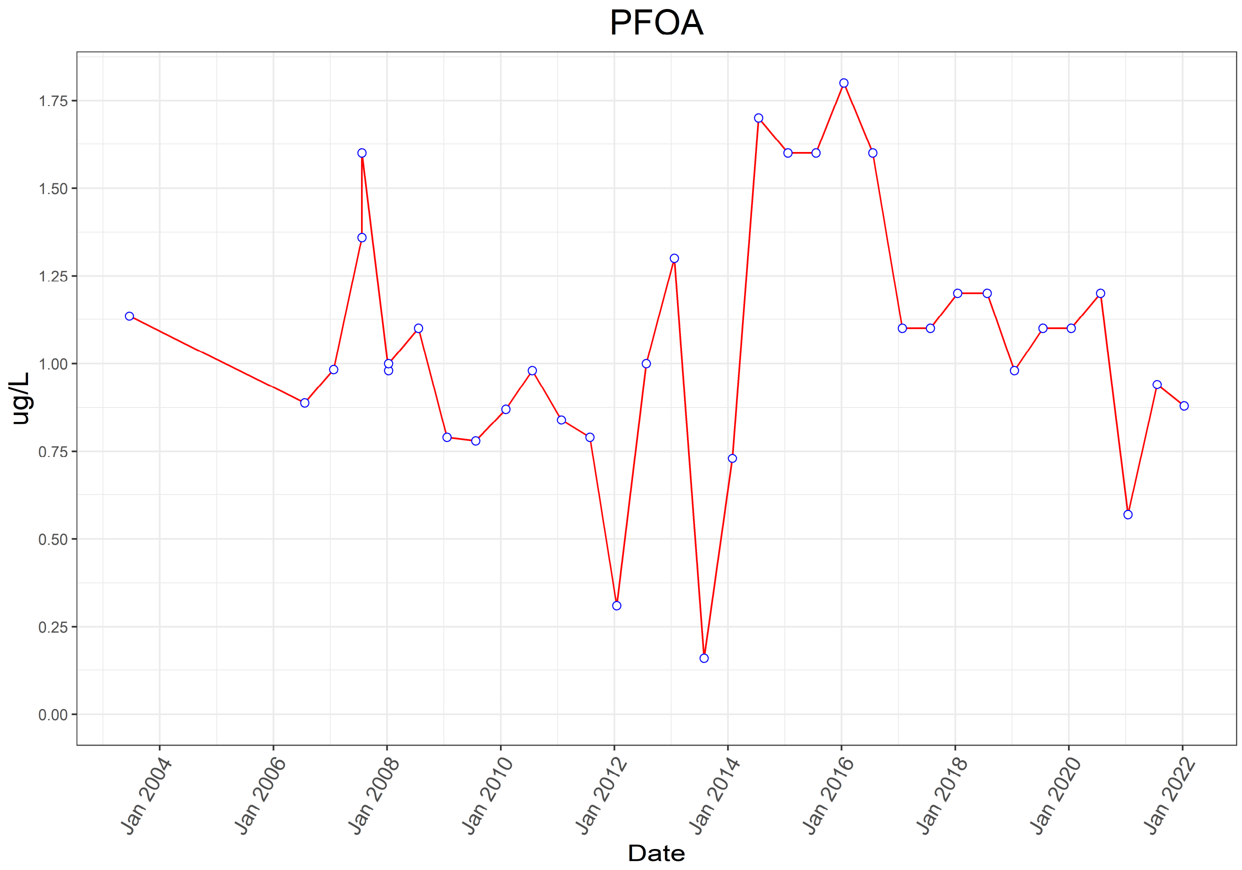
Perfluoropentanoic Acid


Perfluoroundecanoic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

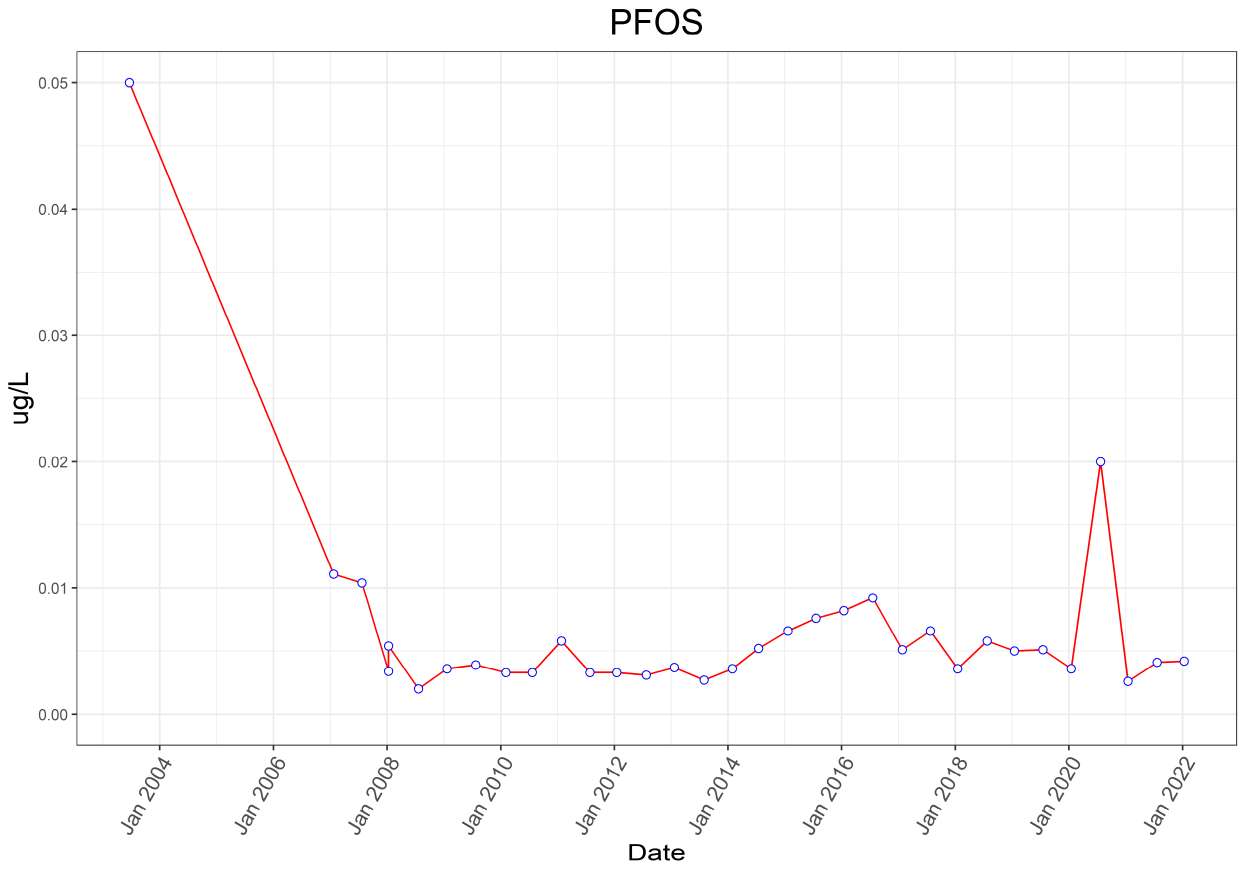

PFOS
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

PFAS Monitoring Program (Program 9)

Well Name: P06-M01B

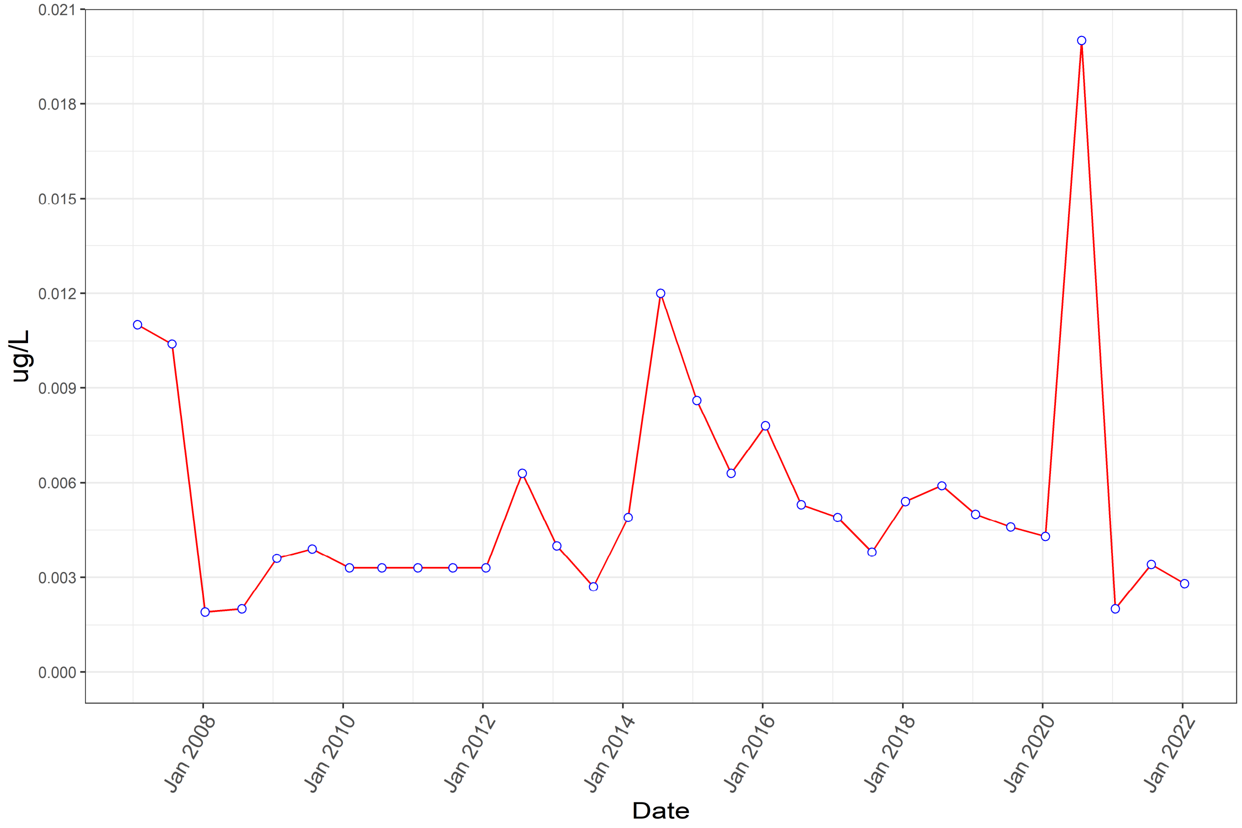


PFOA

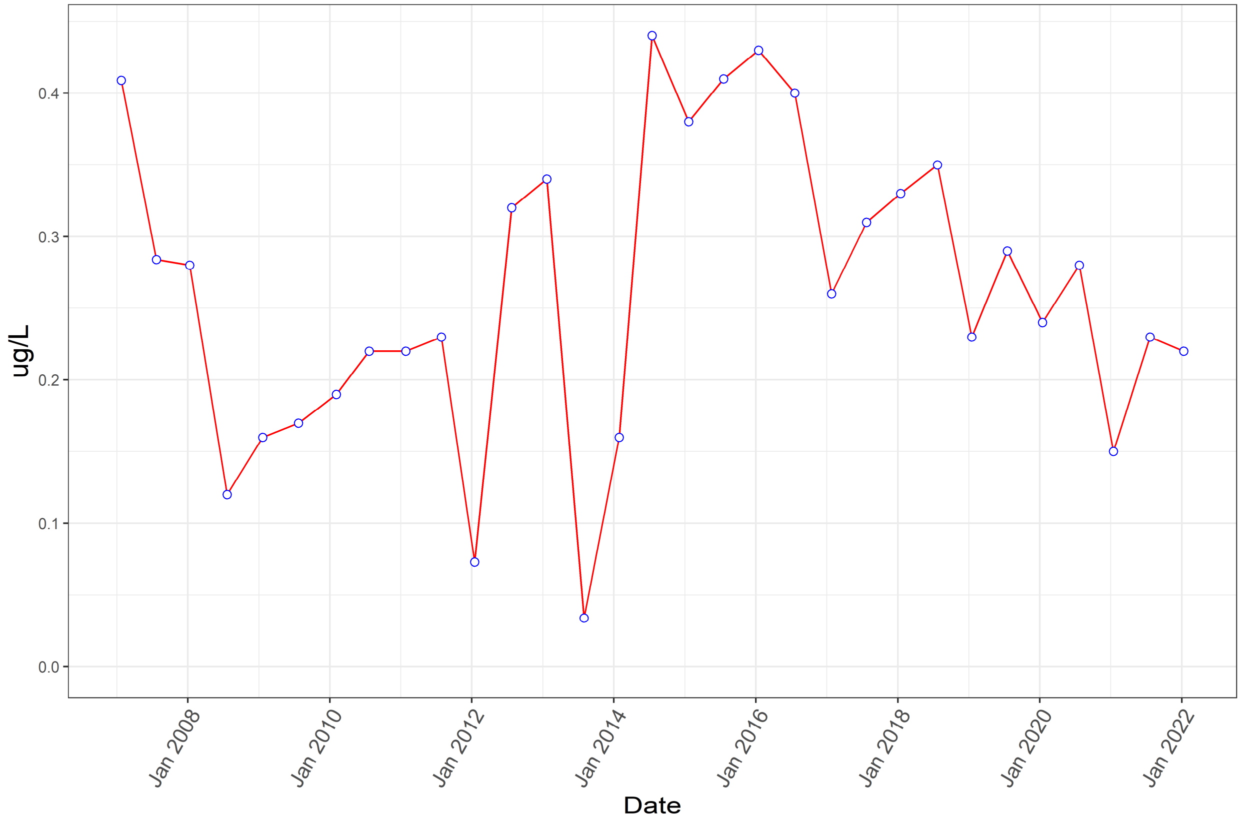


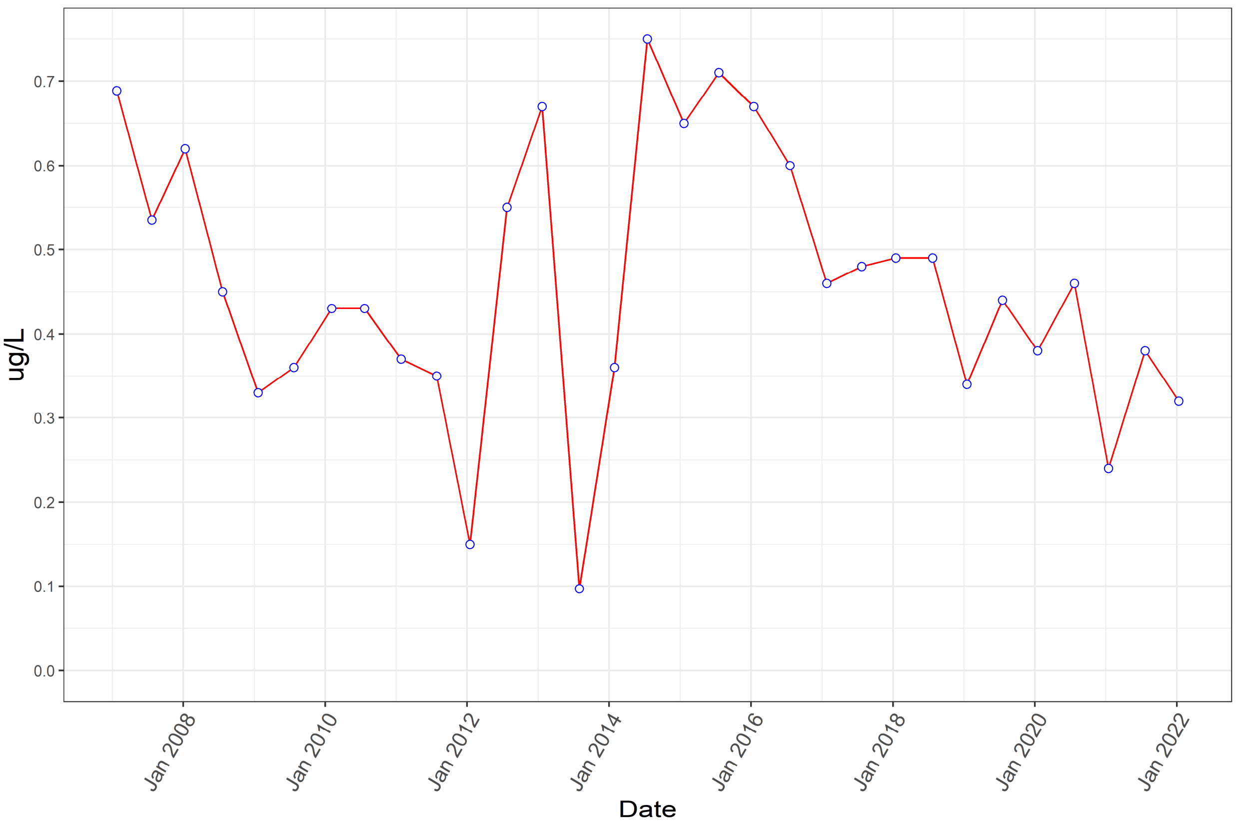
PFOS

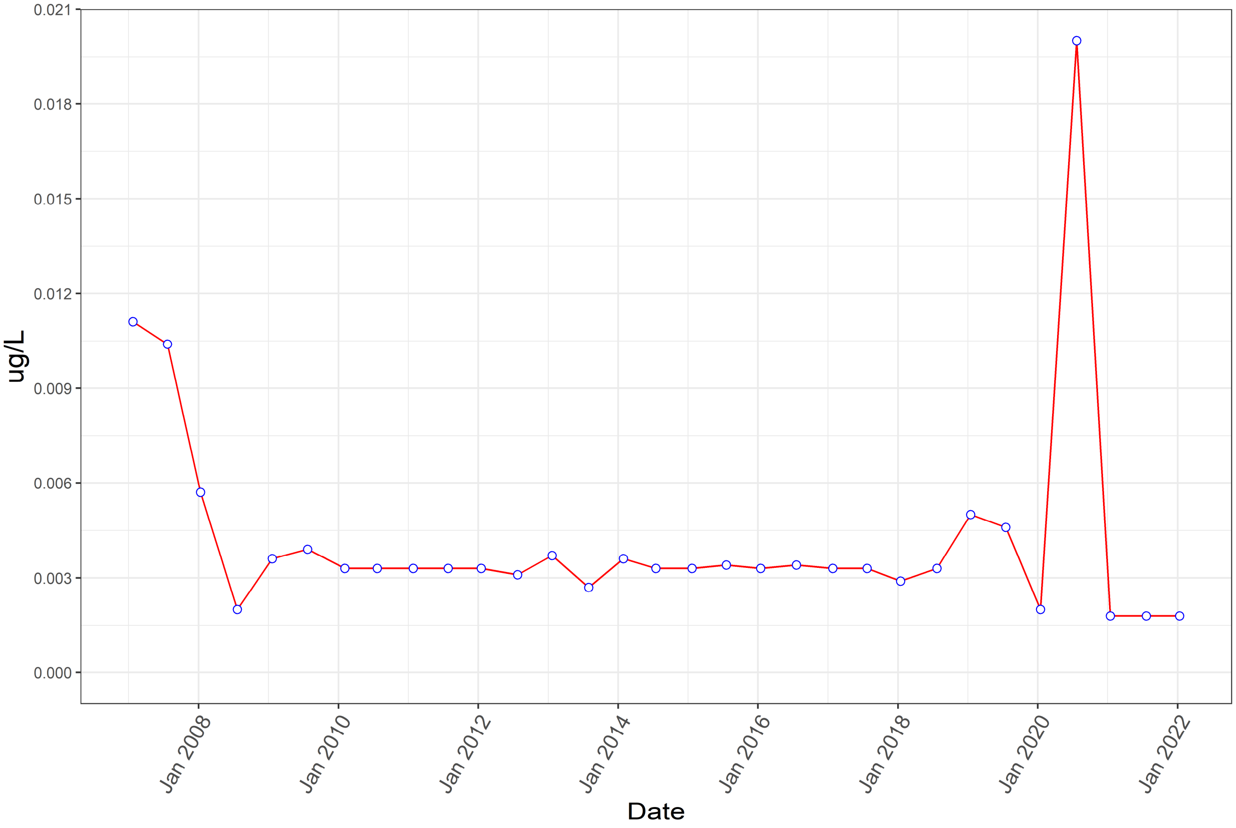
Perfluorobutane Sulfonic Acid

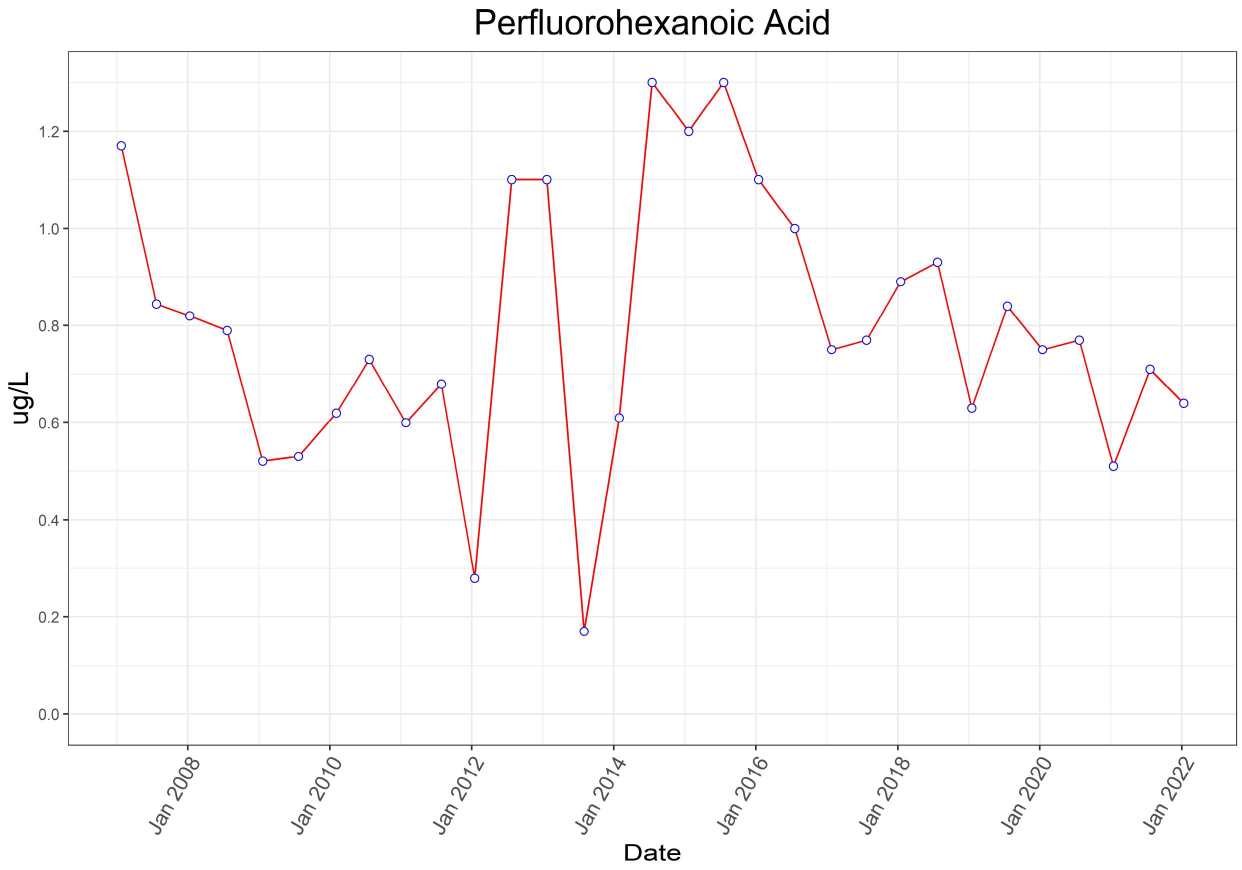


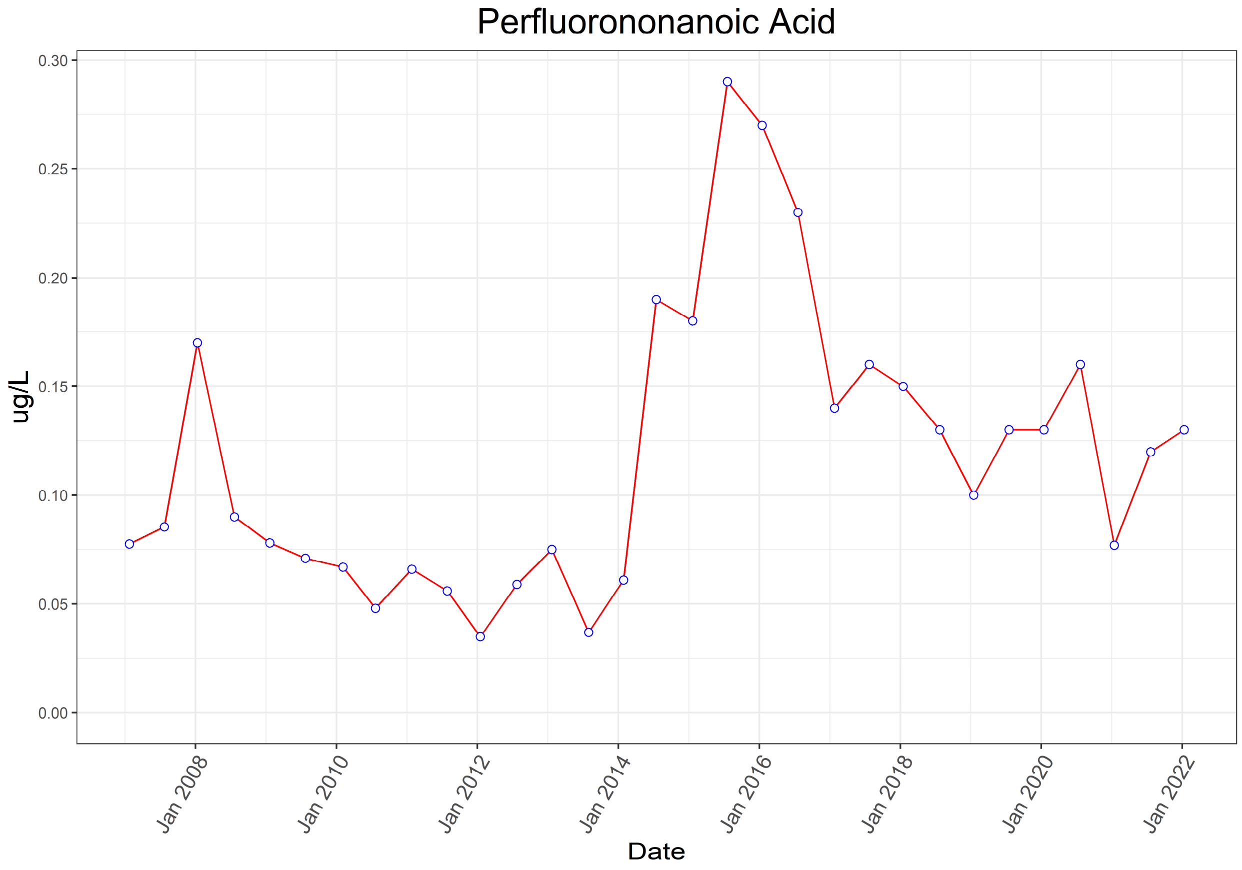
Perfluorobutanoic Acid

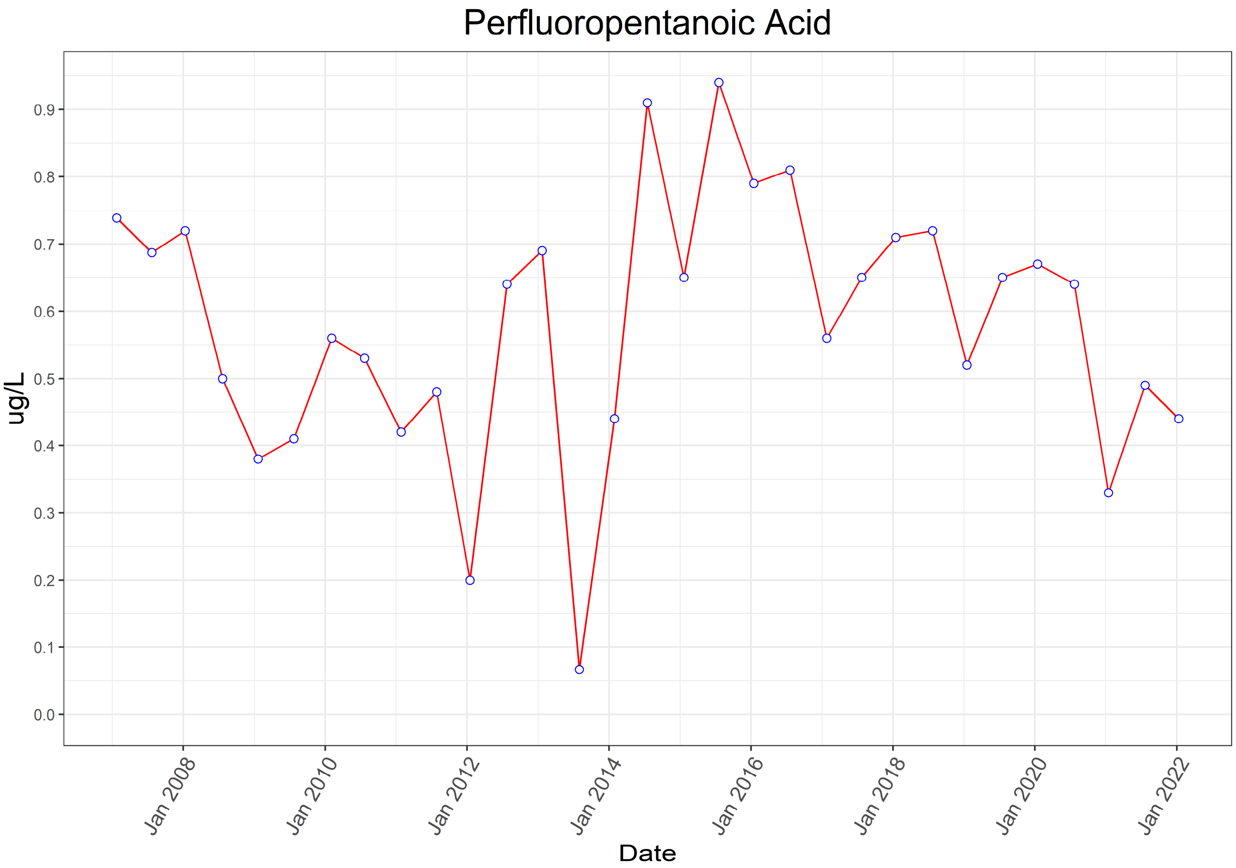


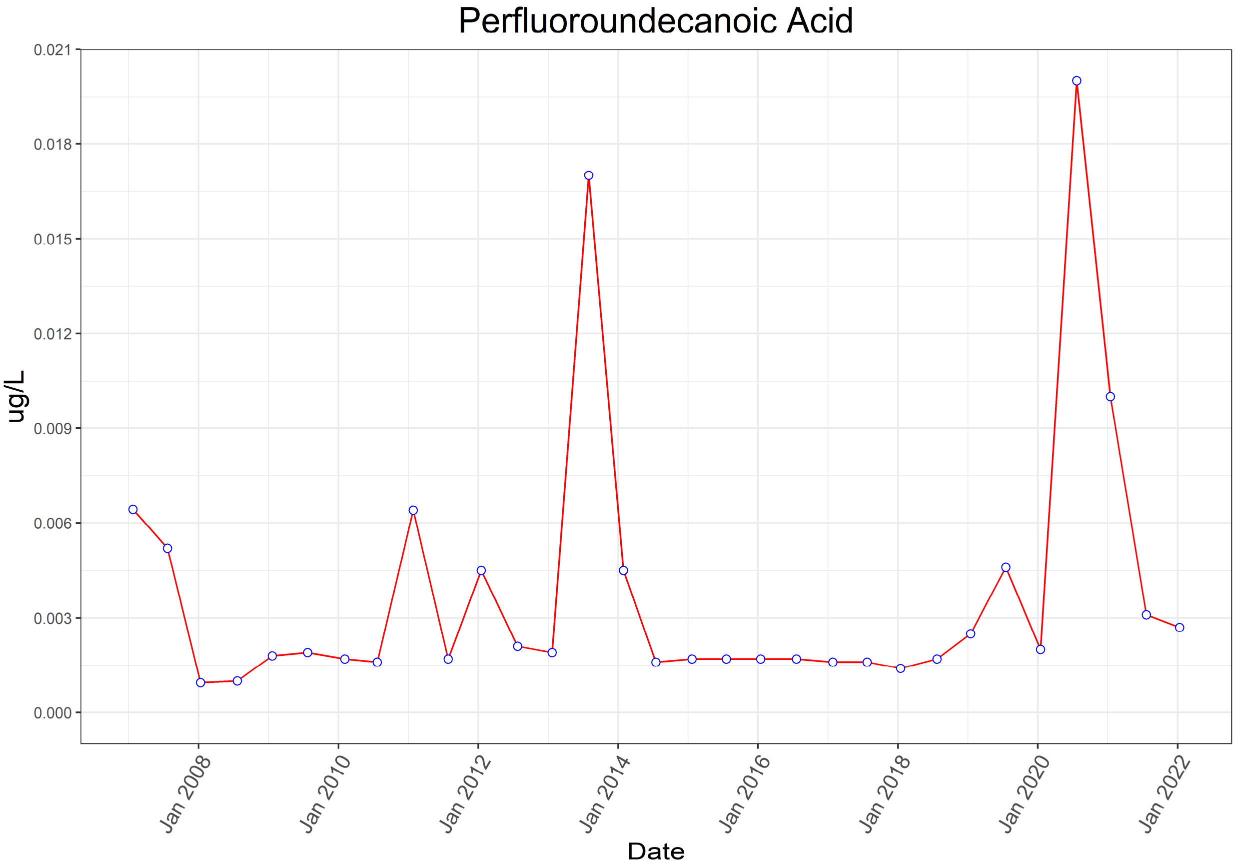

Perfluoroheptanoic Acid


Perfluorohexane Sulfonic Acid


Perfluorohexanoic Acid
ug/L
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

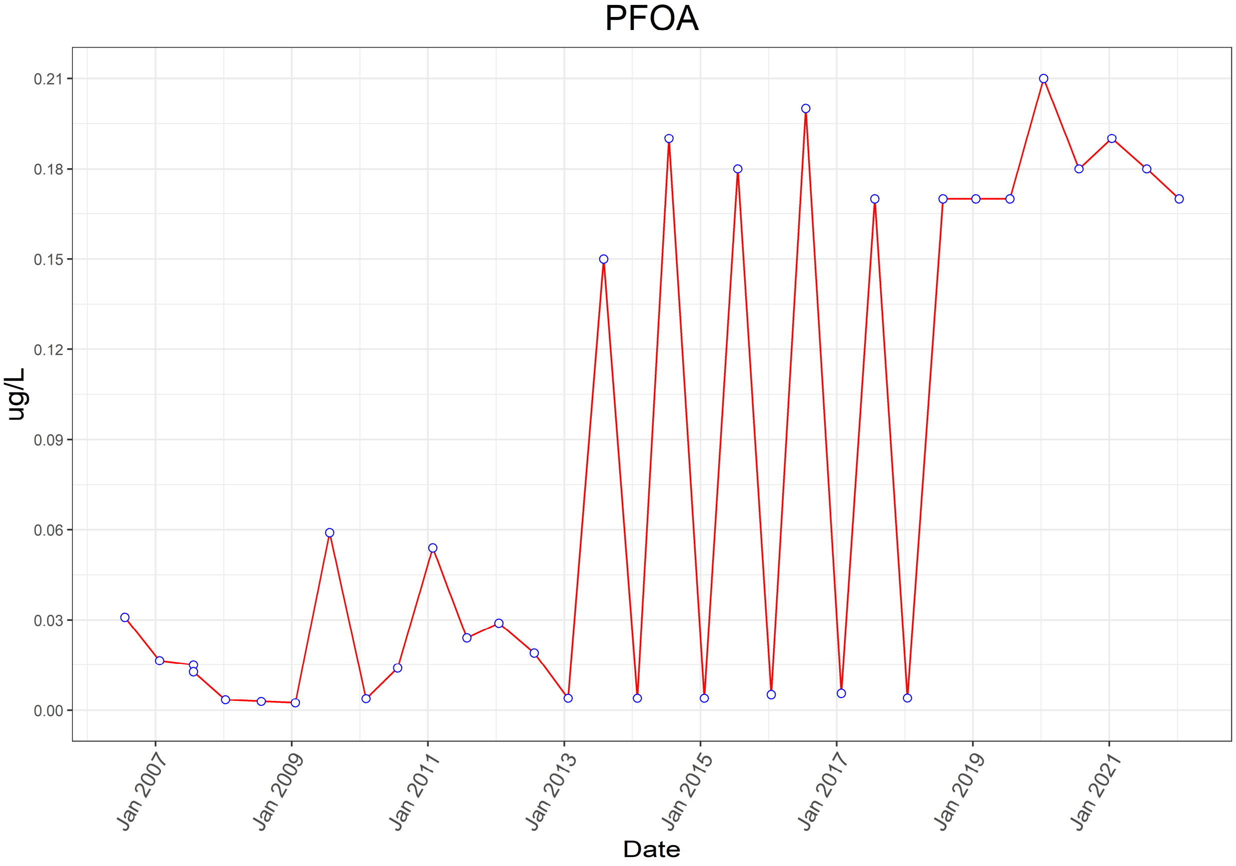

Perfluorononanoic Acid
ug/L
0.00
0.05
0.10
0.15
0.20
0.25
0.30
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022

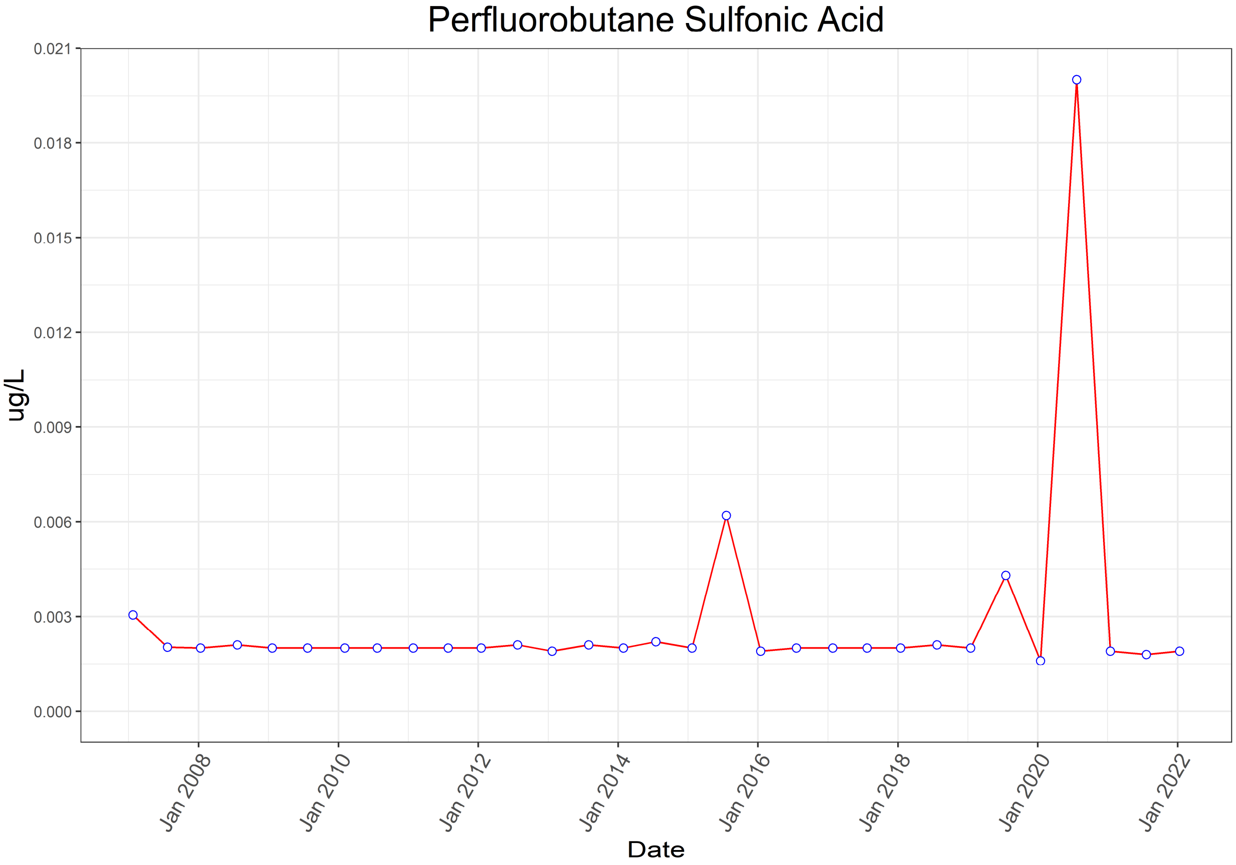

Perfluoropentanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

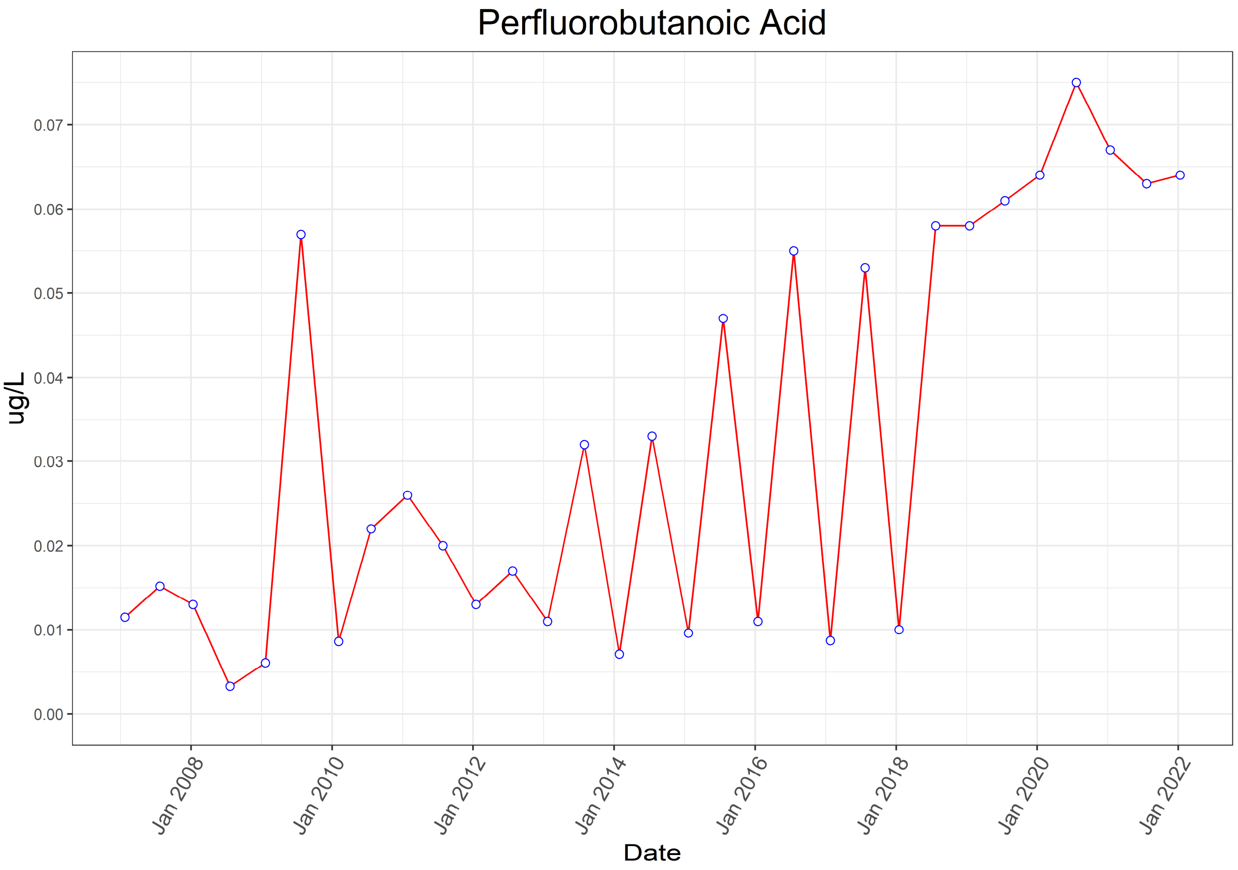

Perfluoroundecanoic Acid
ug/L
0.000
0.003
0.006
0.009
0.012
0.015
0.018
0.021
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

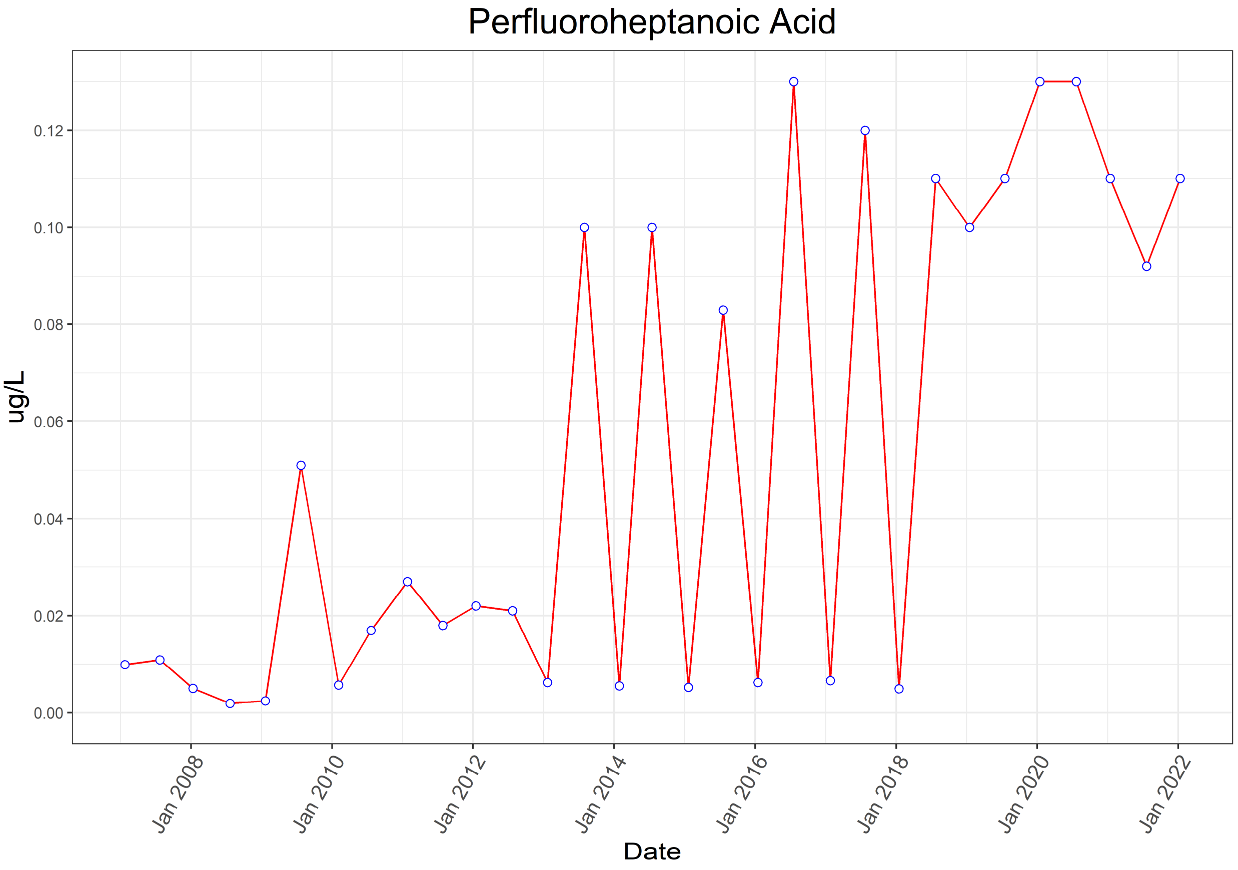
PFAS Monitoring Program (Program 9)

Well Name: P06-M01D

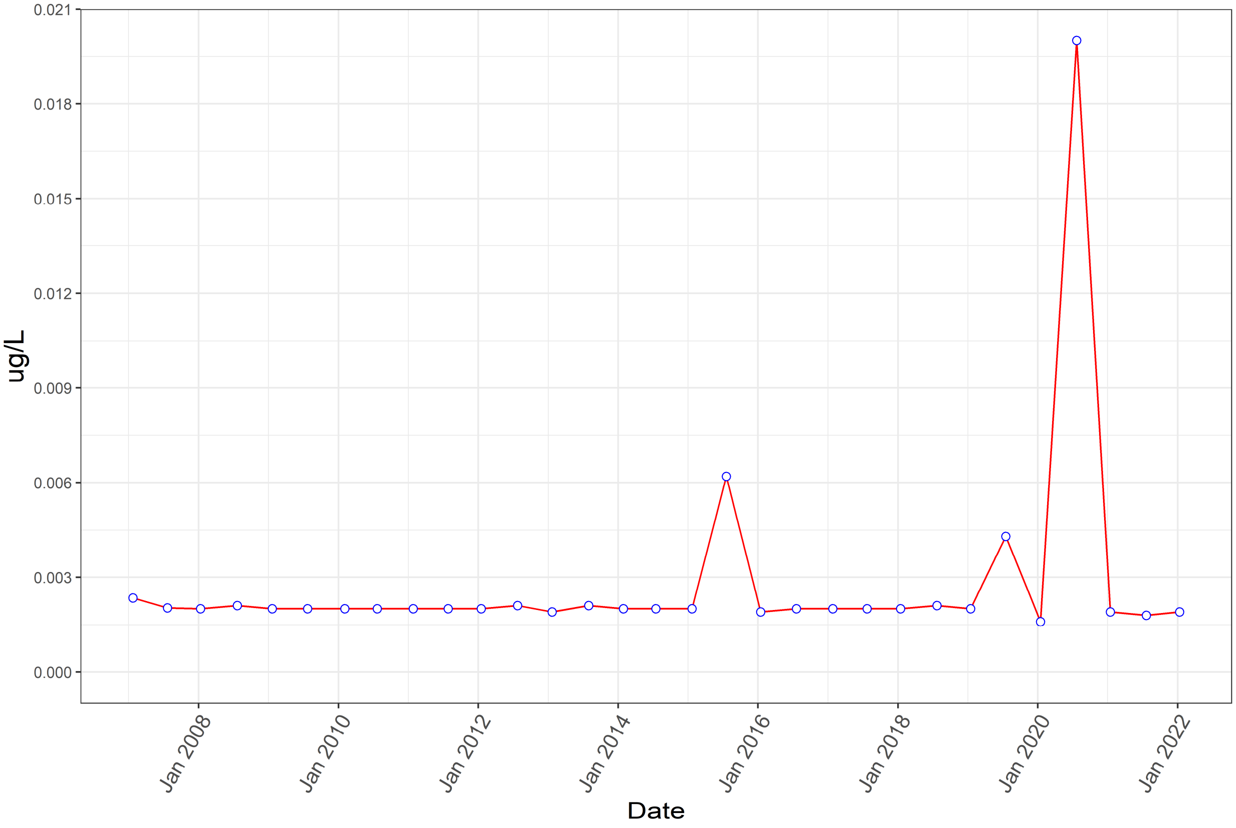




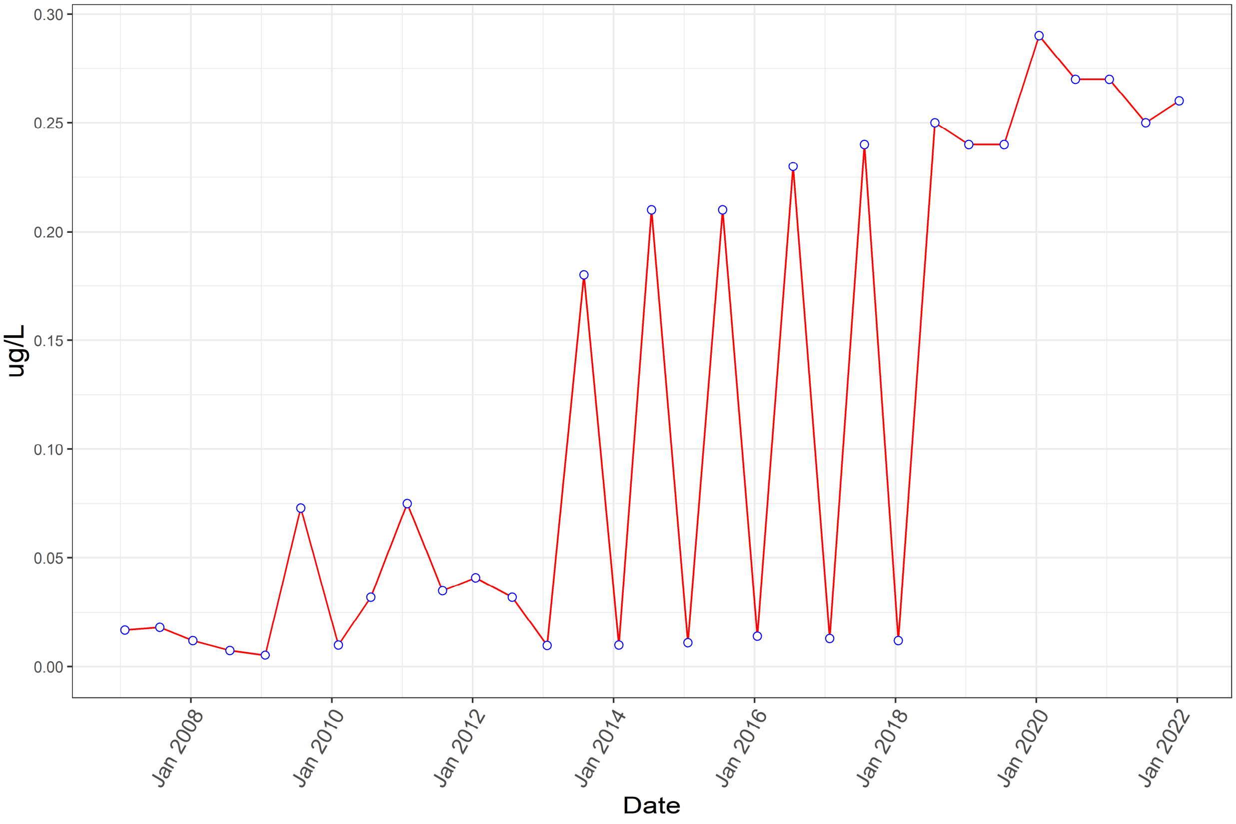

Perfluorobutanoic Acid
ug/L
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

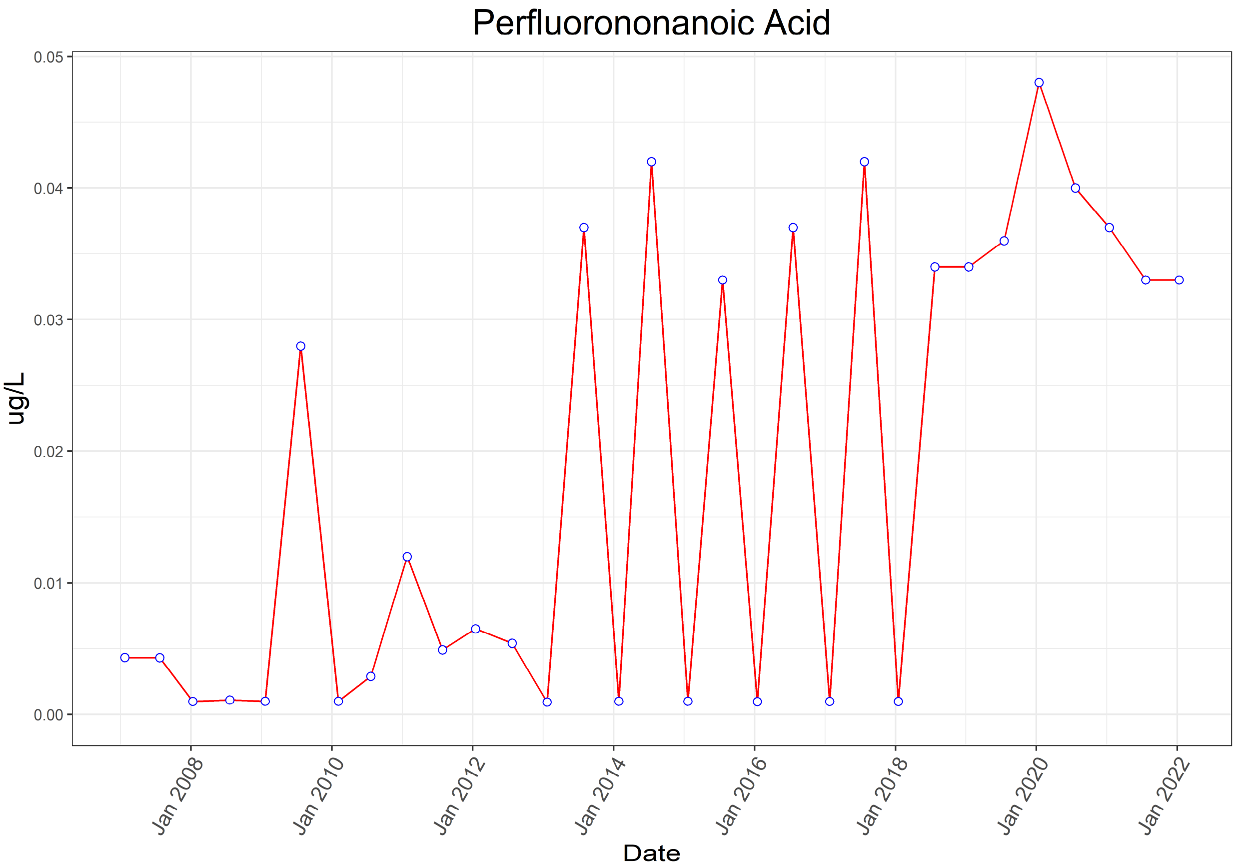

Perfluoroheptanoic Acid
ug/L
0.00
0.02
0.04
0.06
0.08
0.10
0.12
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

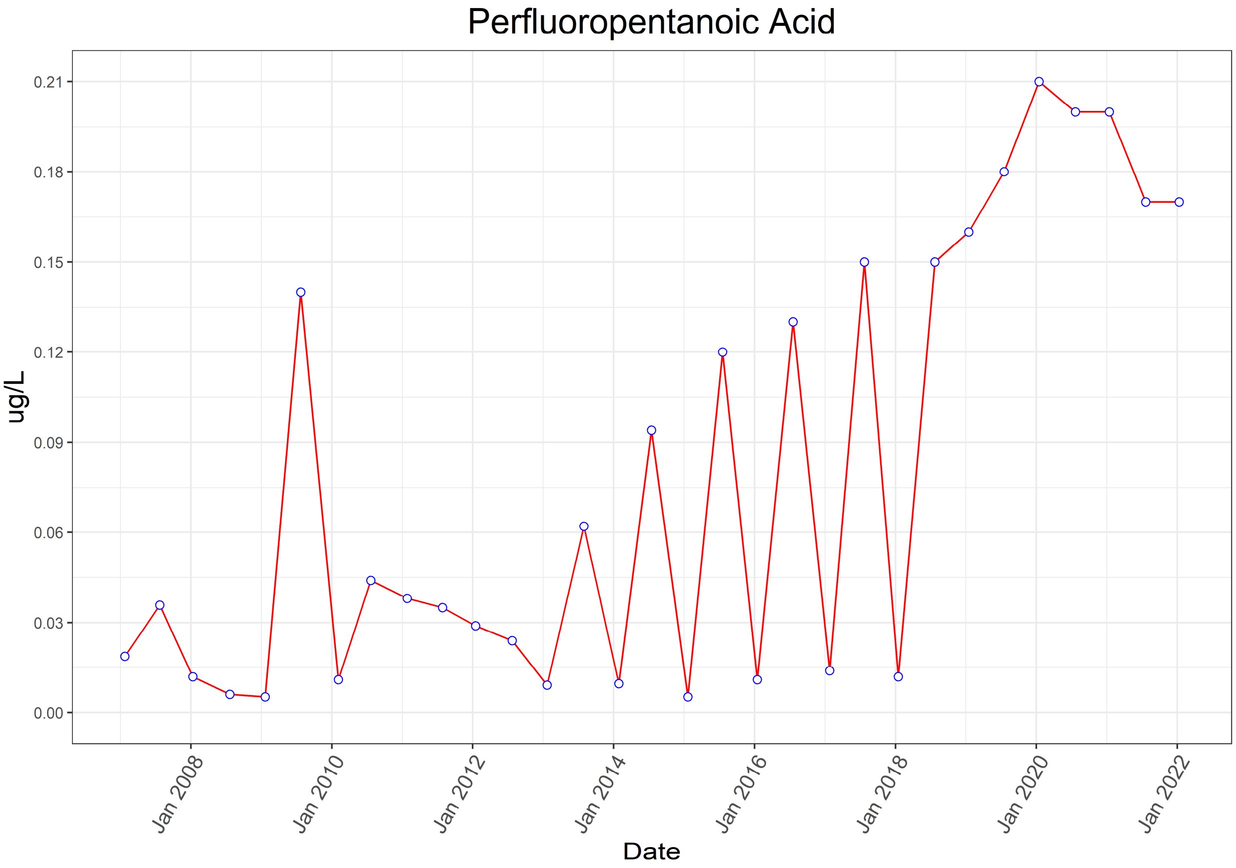
Perfluorohexane Sulfonic Acid

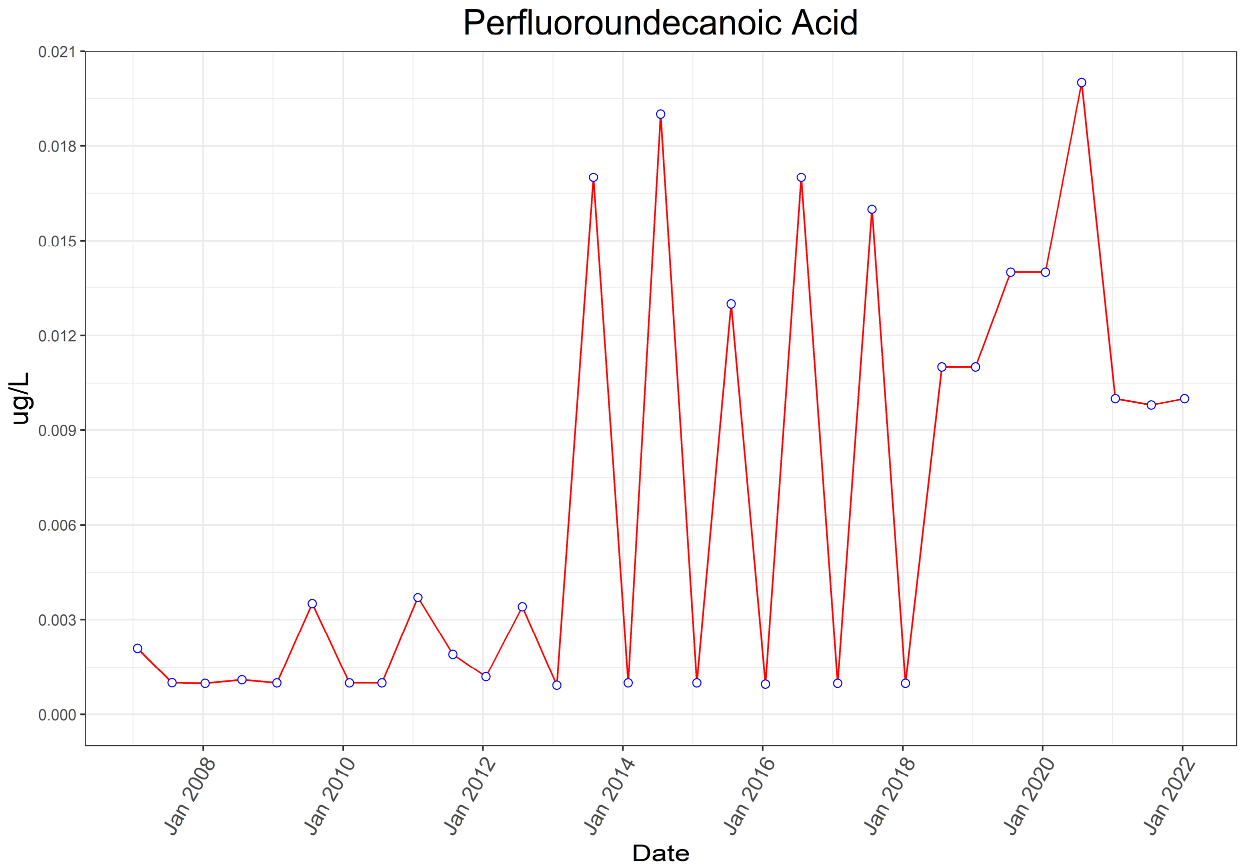


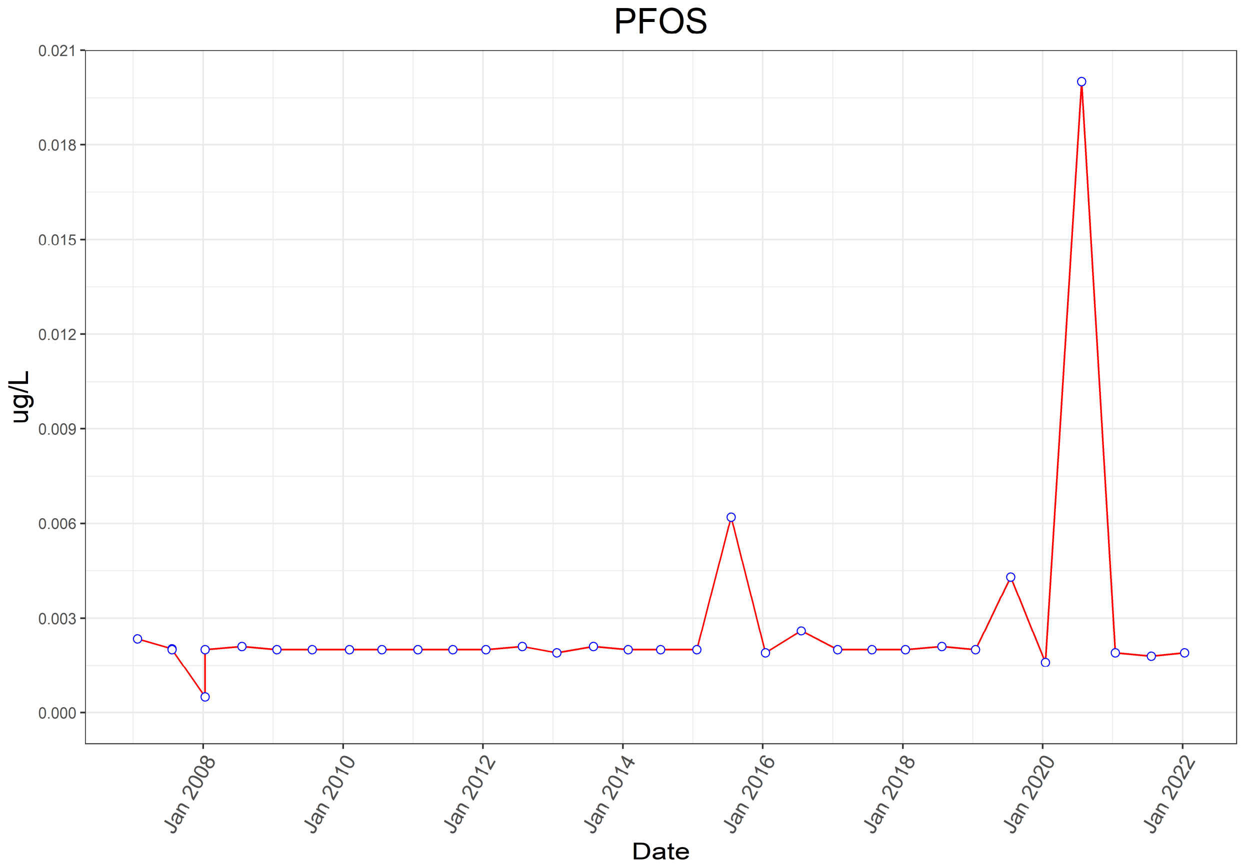
Perfluorohexanoic Acid




Perfluorononanoic Acid
ug/L
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

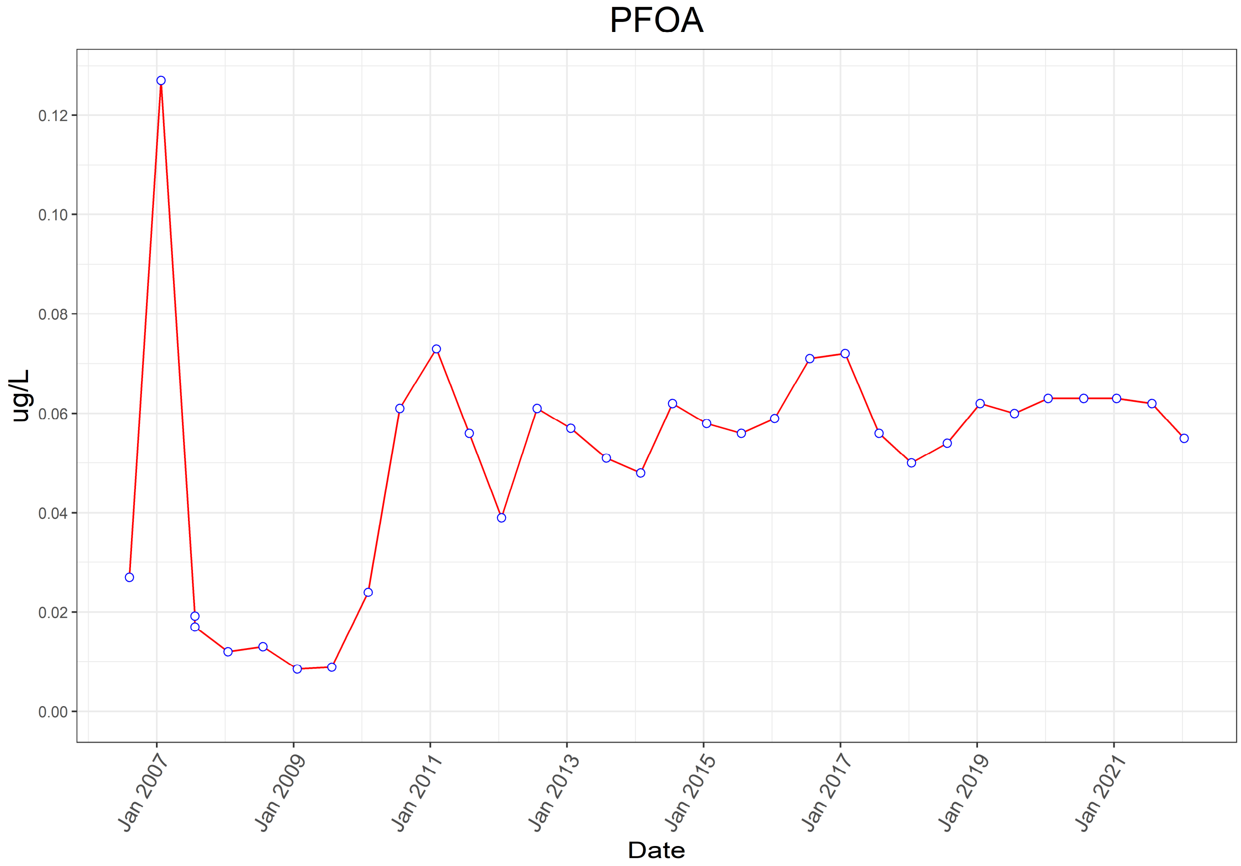

Perfluoropentanoic Acid
ug/L
0.21
0.18
0.15
0.12
0.09
0.06
0.03
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

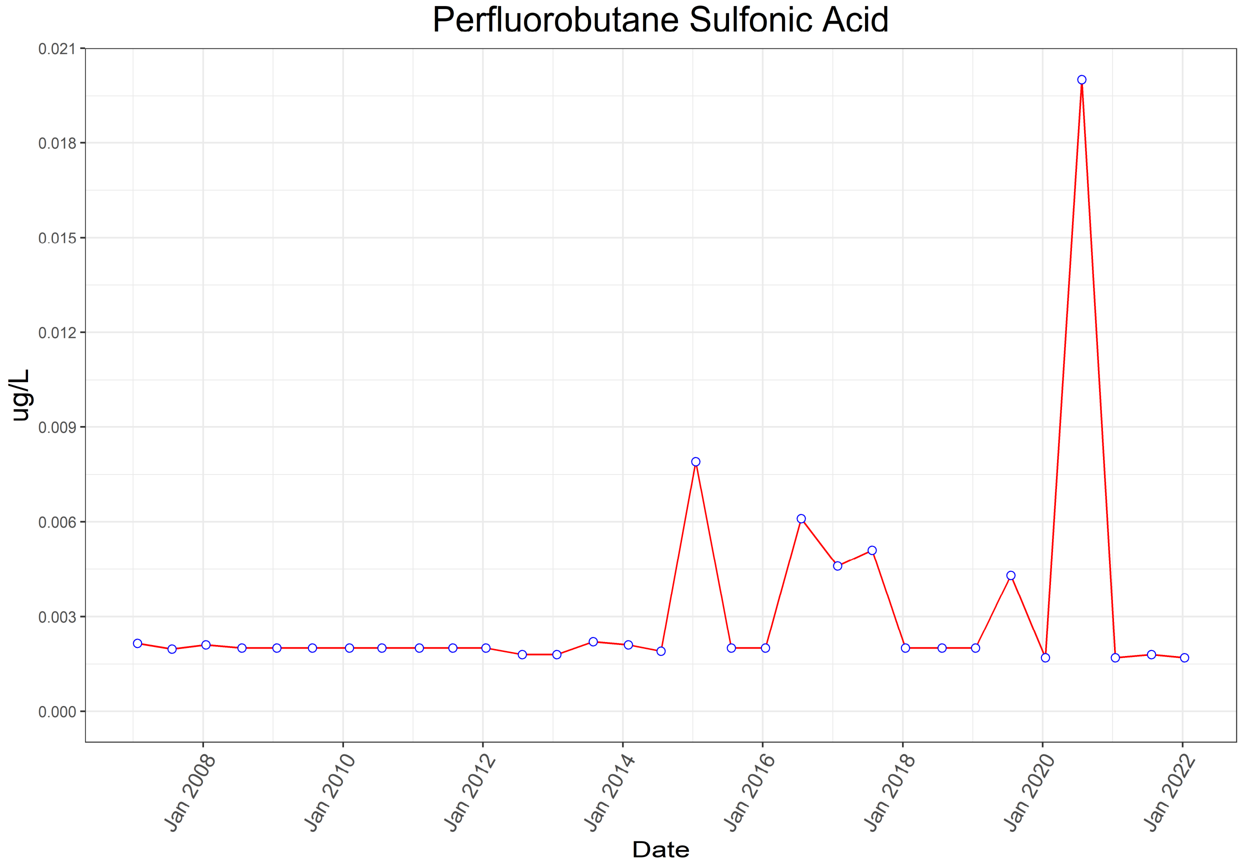

Perfluoroundecanoic Acid

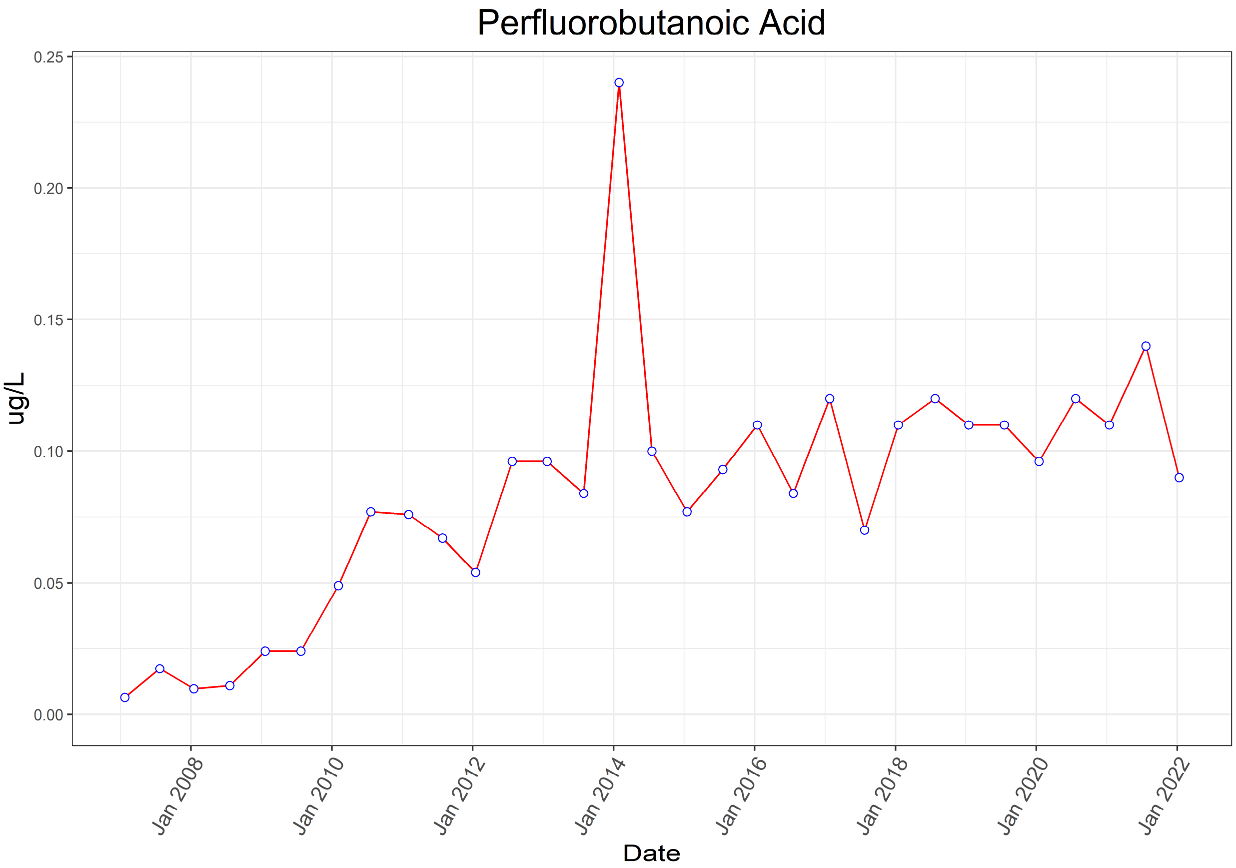

PFOS

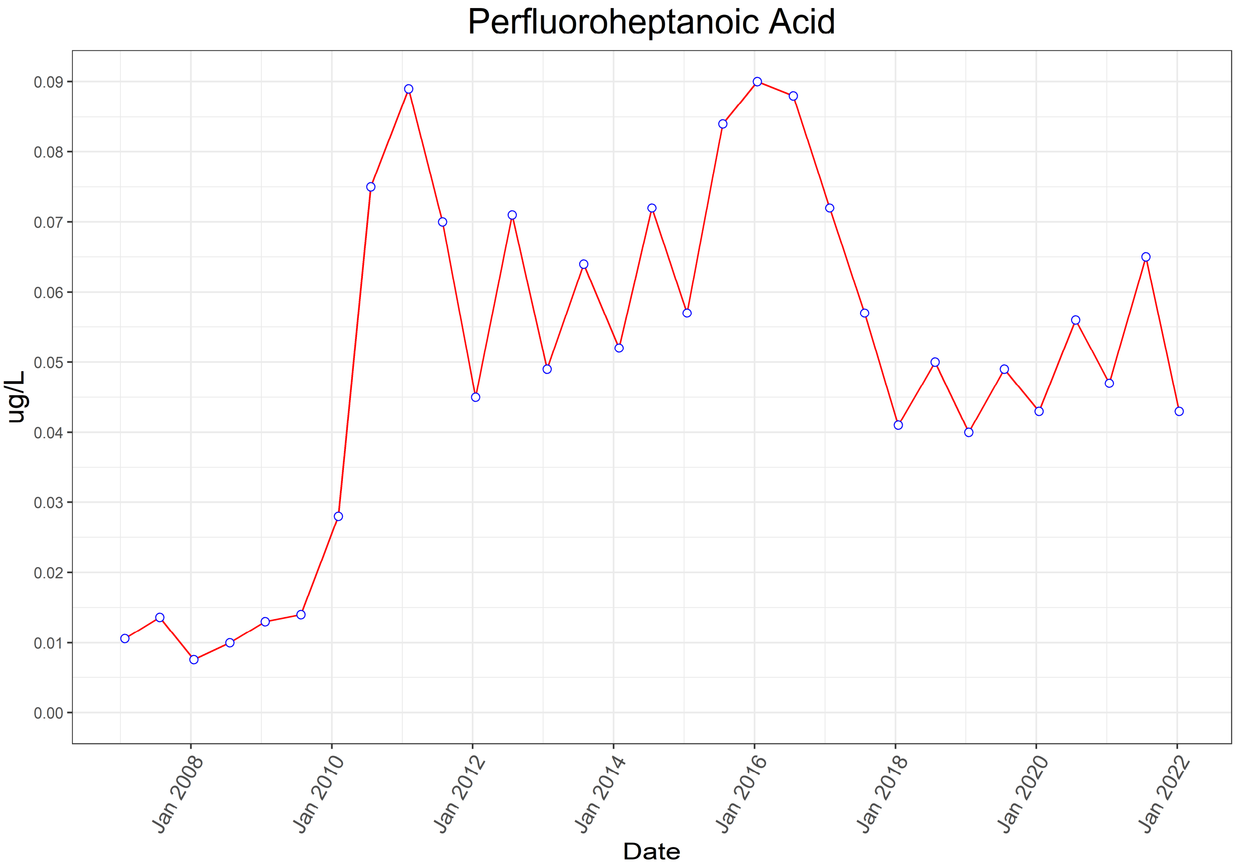
PFAS Monitoring Program (Program 9)

Well Name: P06-M01E

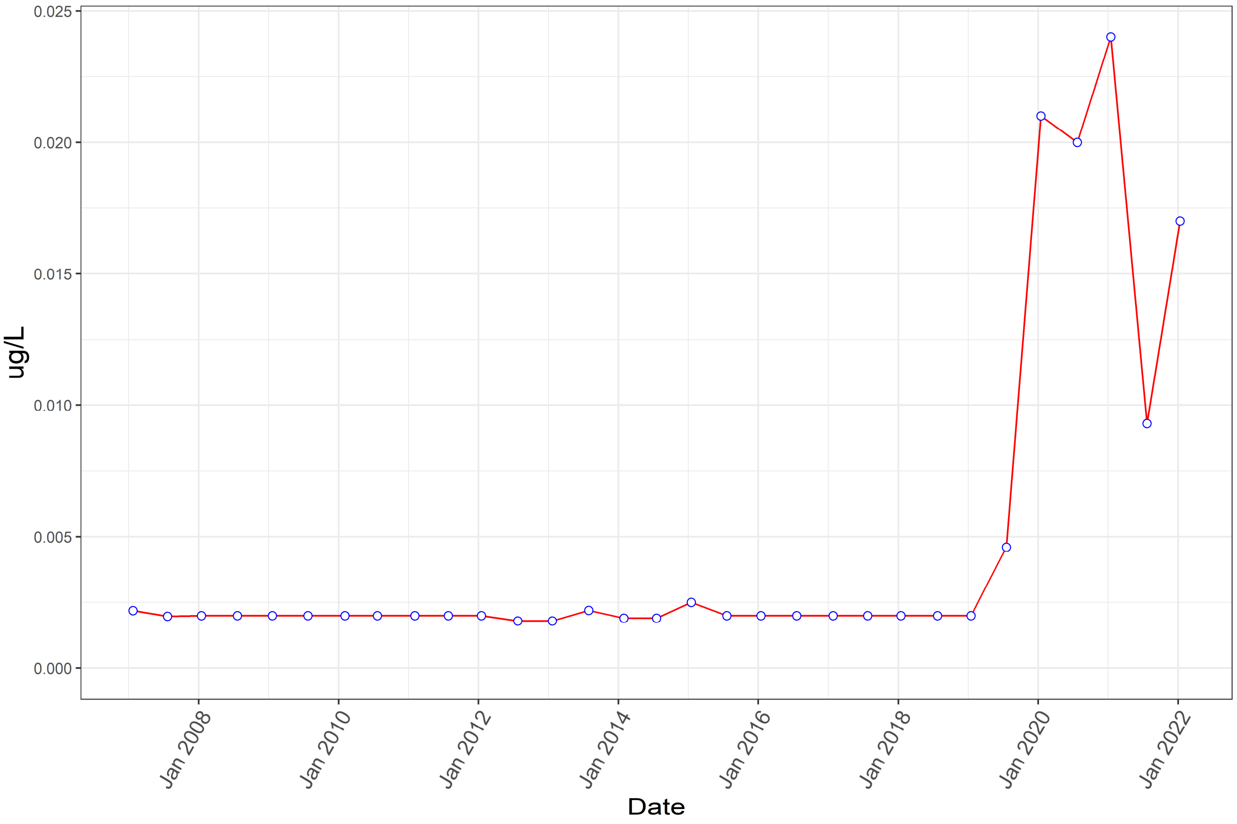




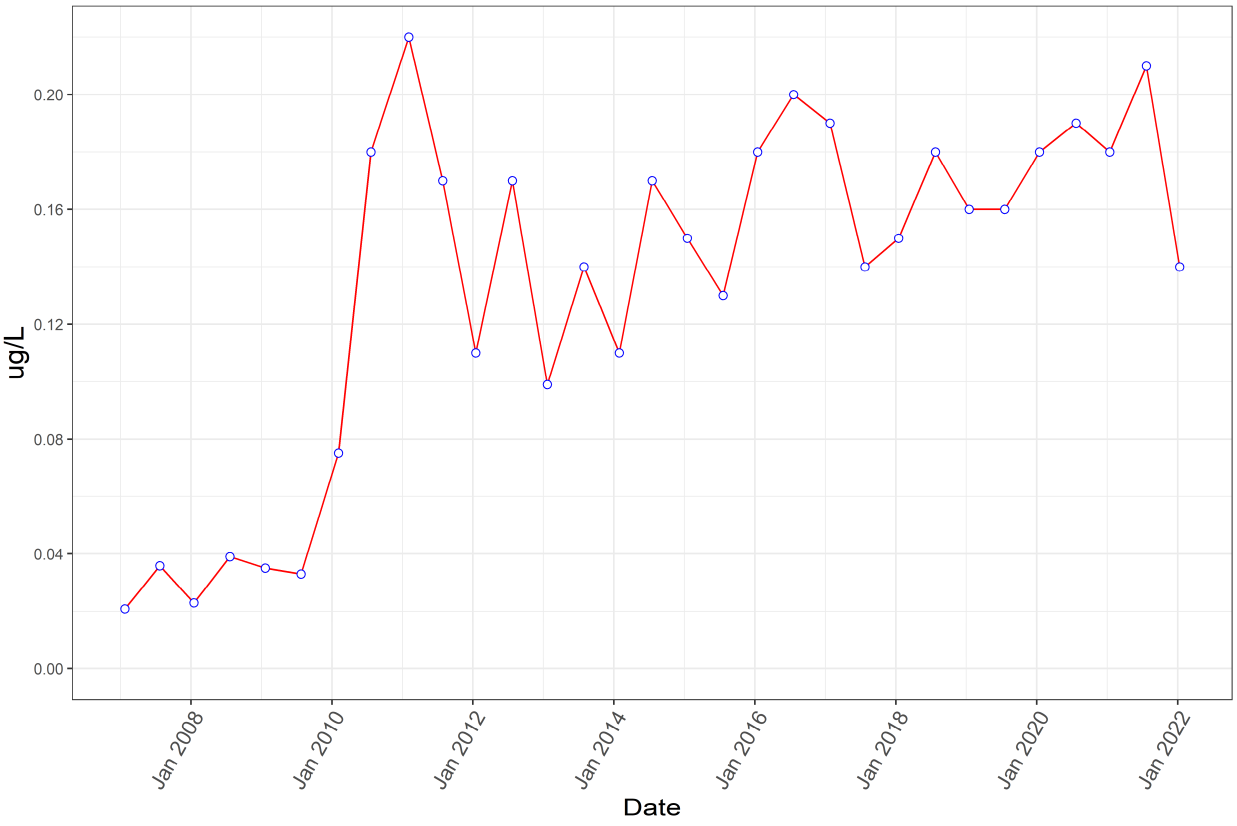

Perfluorobutanoic Acid
ug/L
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

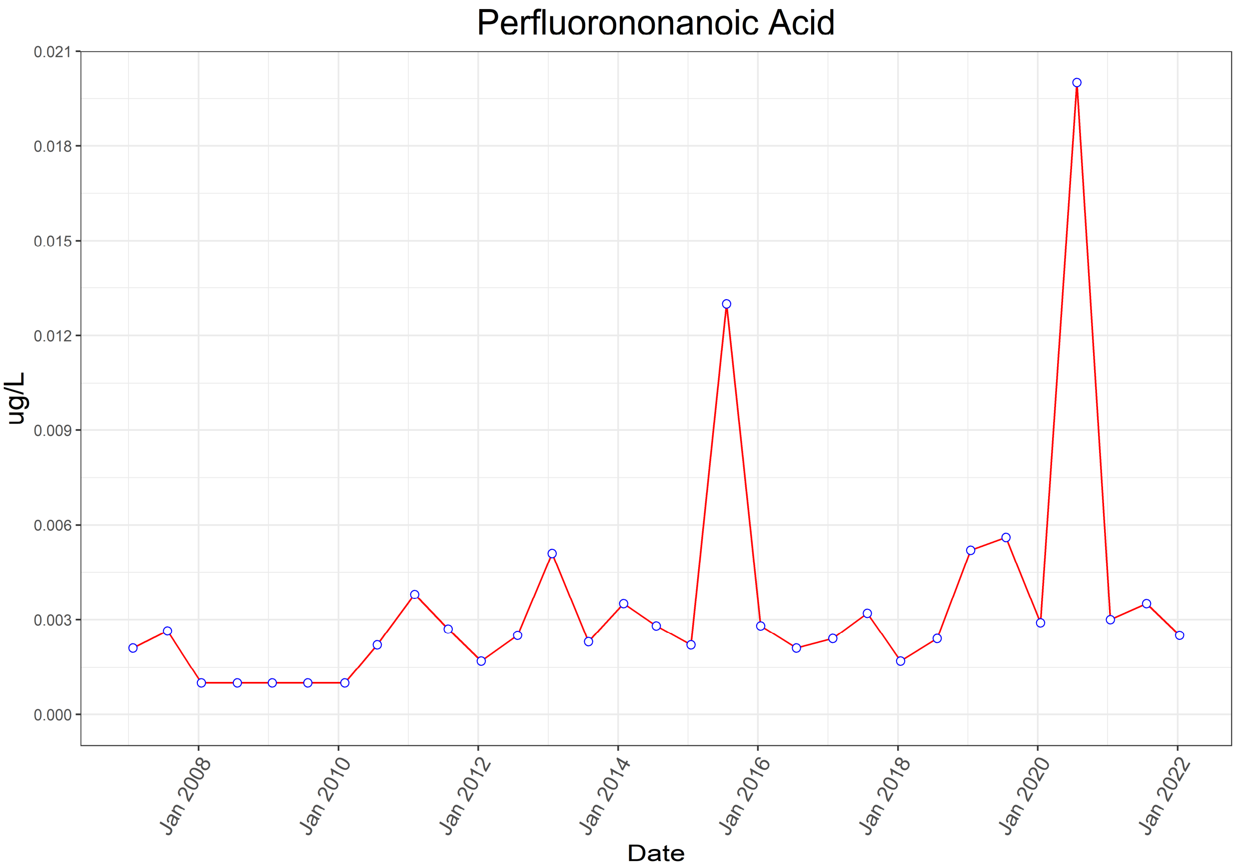

Perfluoroheptanoic Acid
ug/L
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

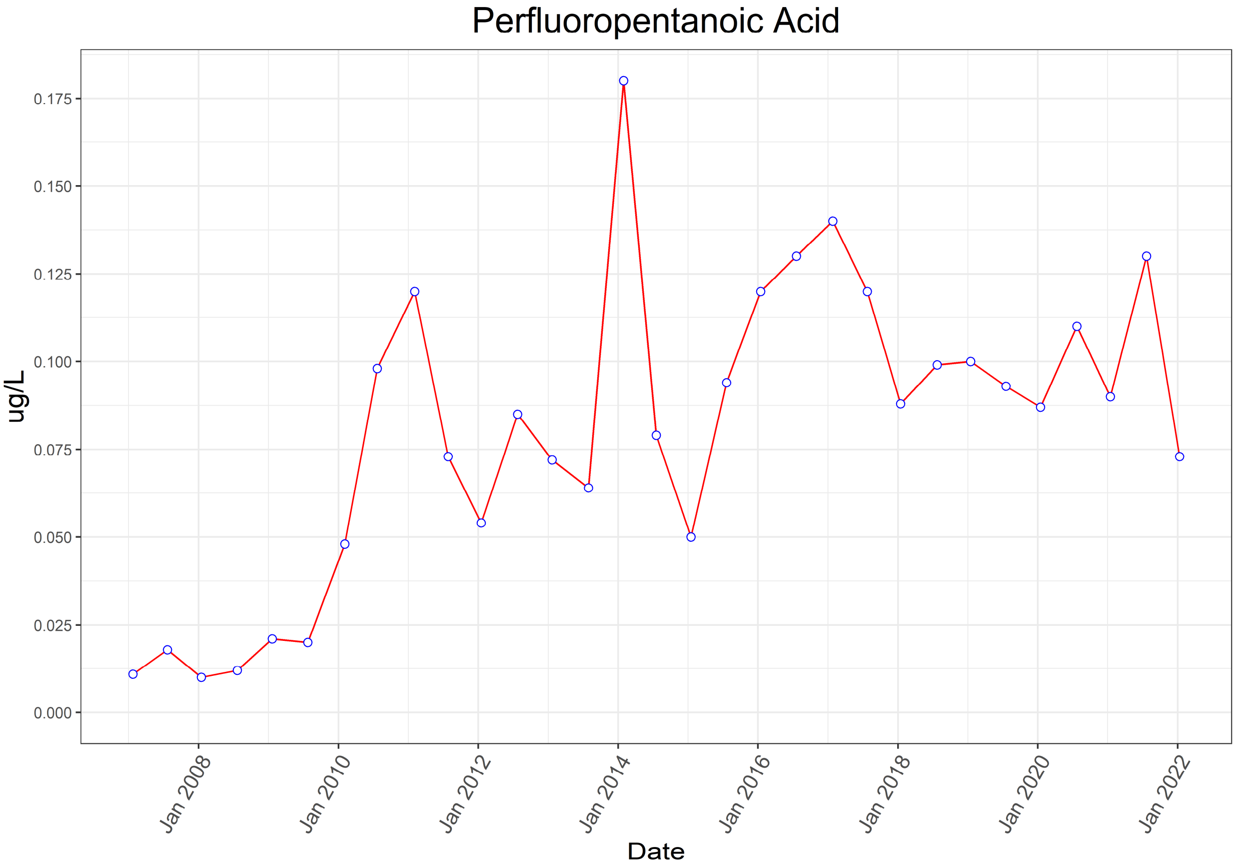
Perfluorohexane Sulfonic Acid



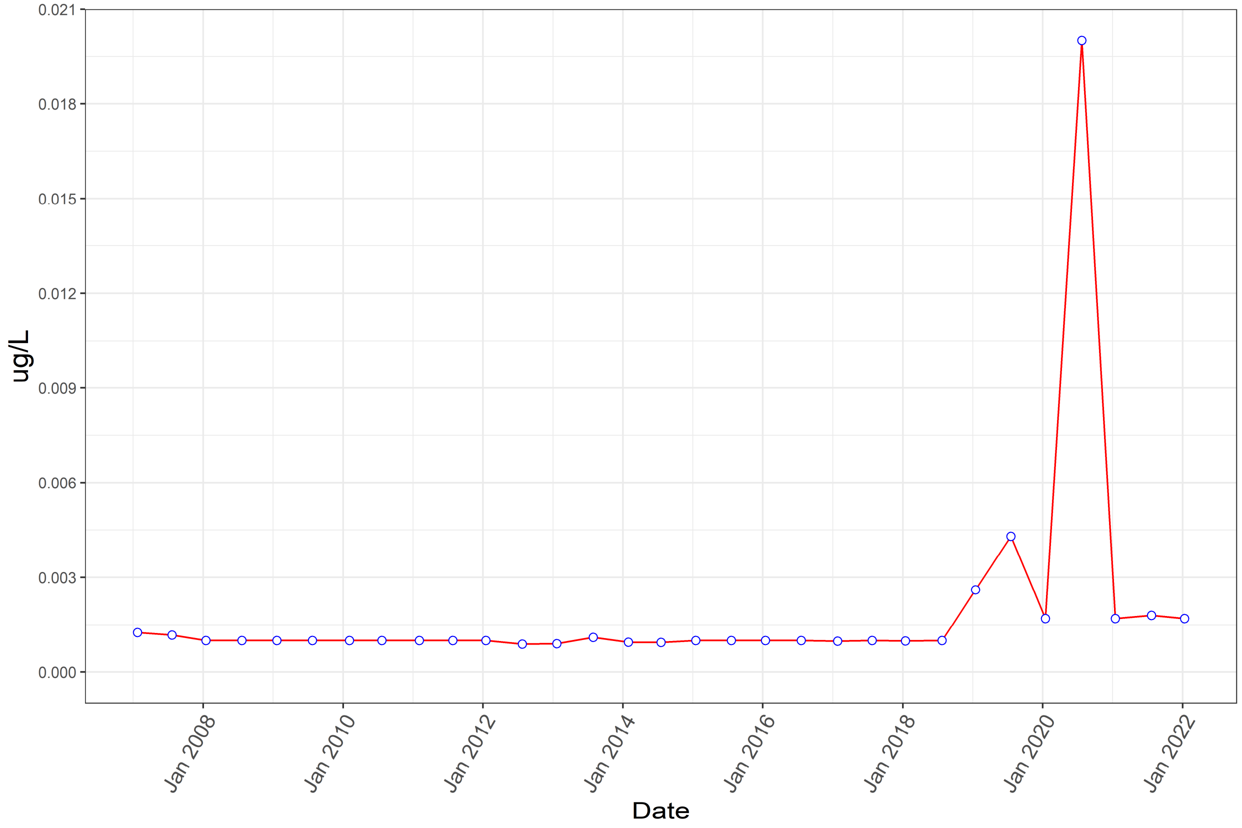
Perfluorohexanoic Acid



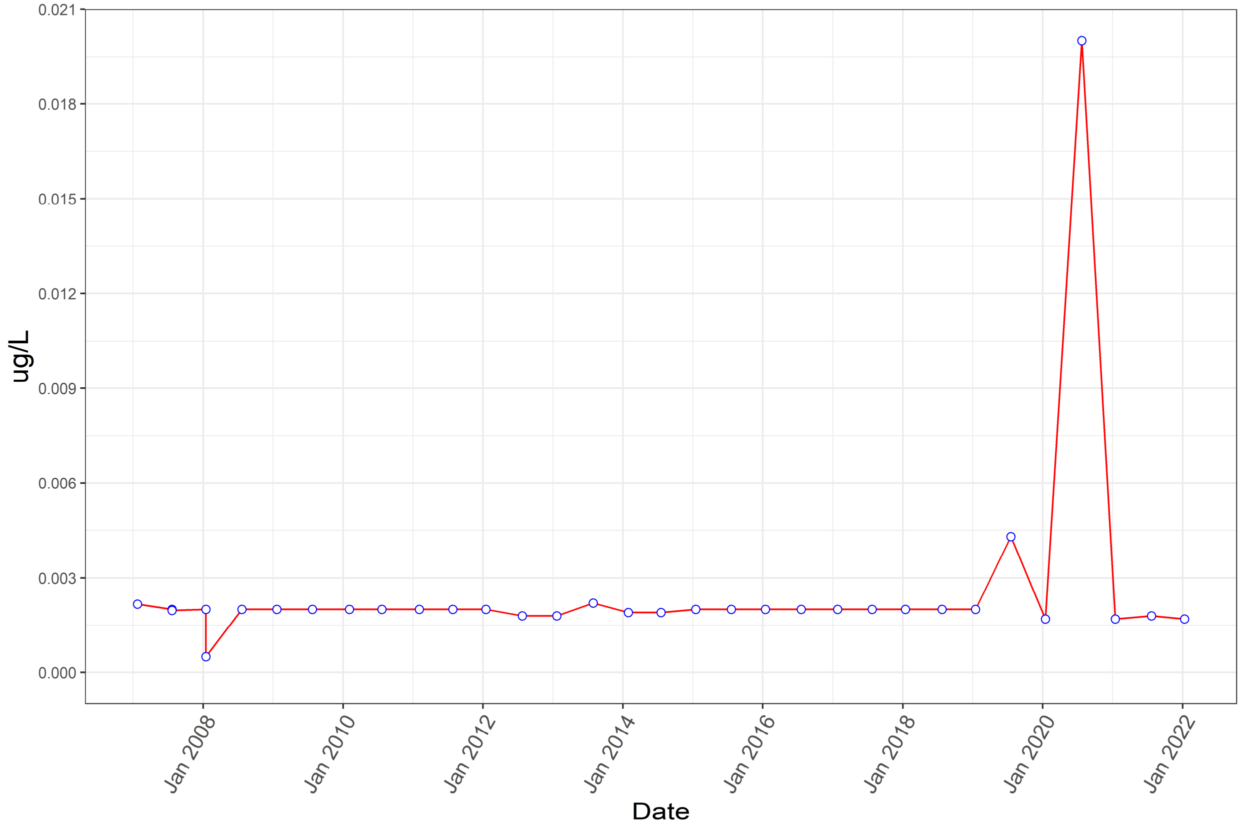

Perfluorononanoic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

Perfluoroundecanoic Acid

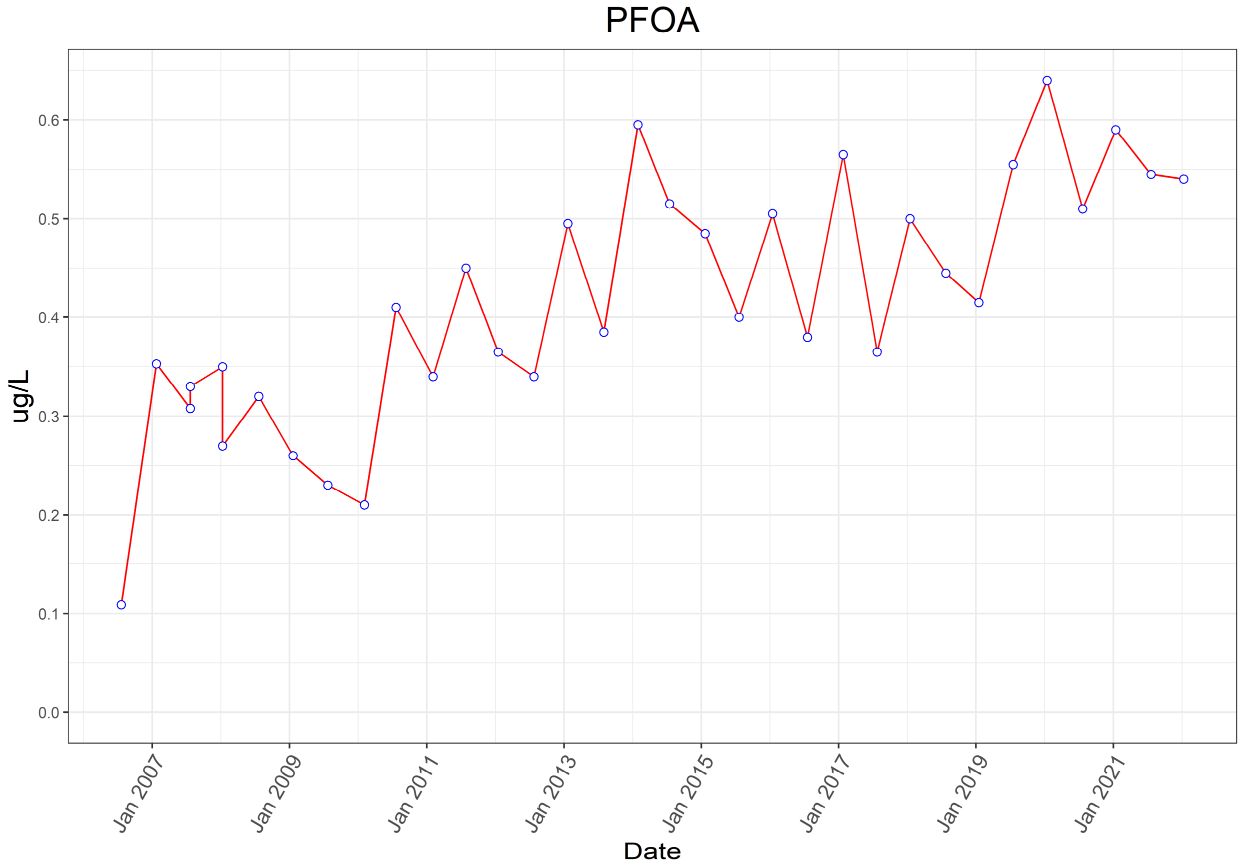


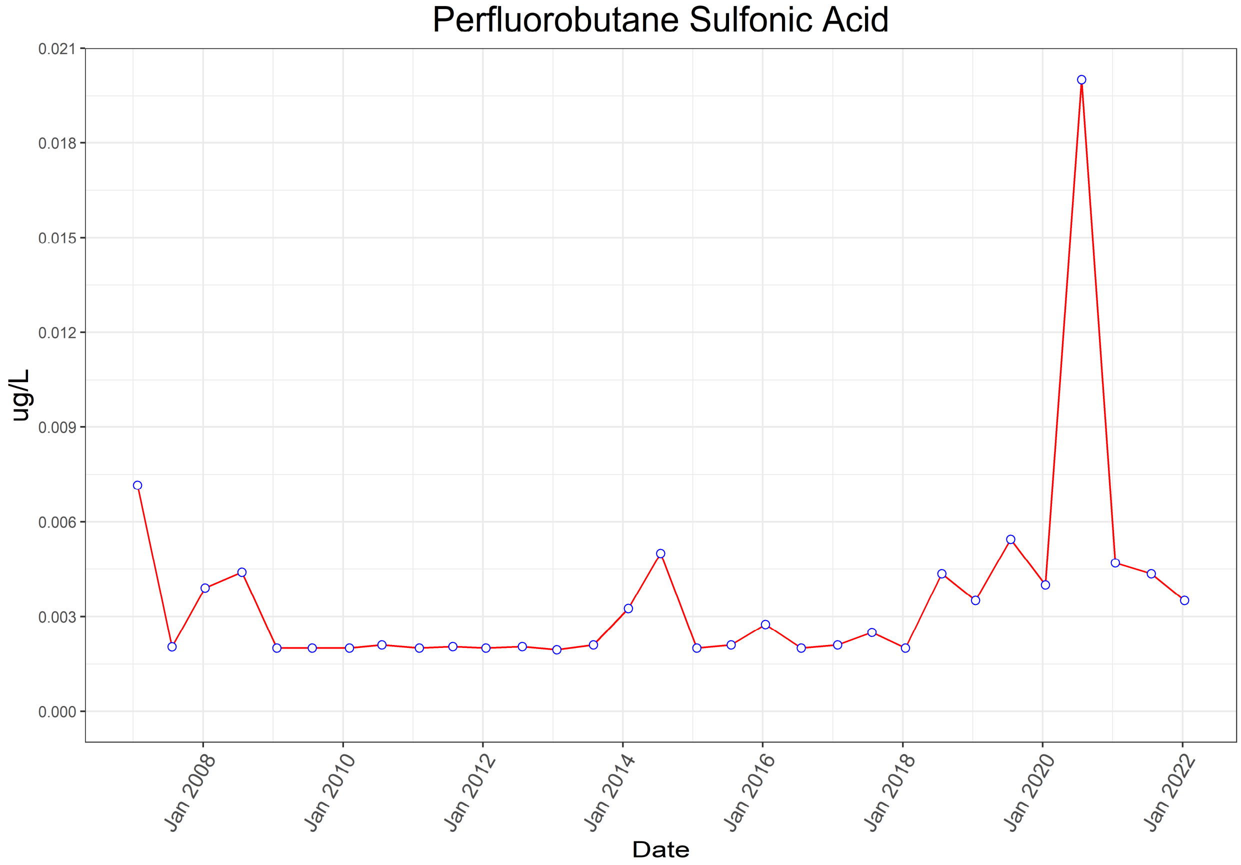
PFOS

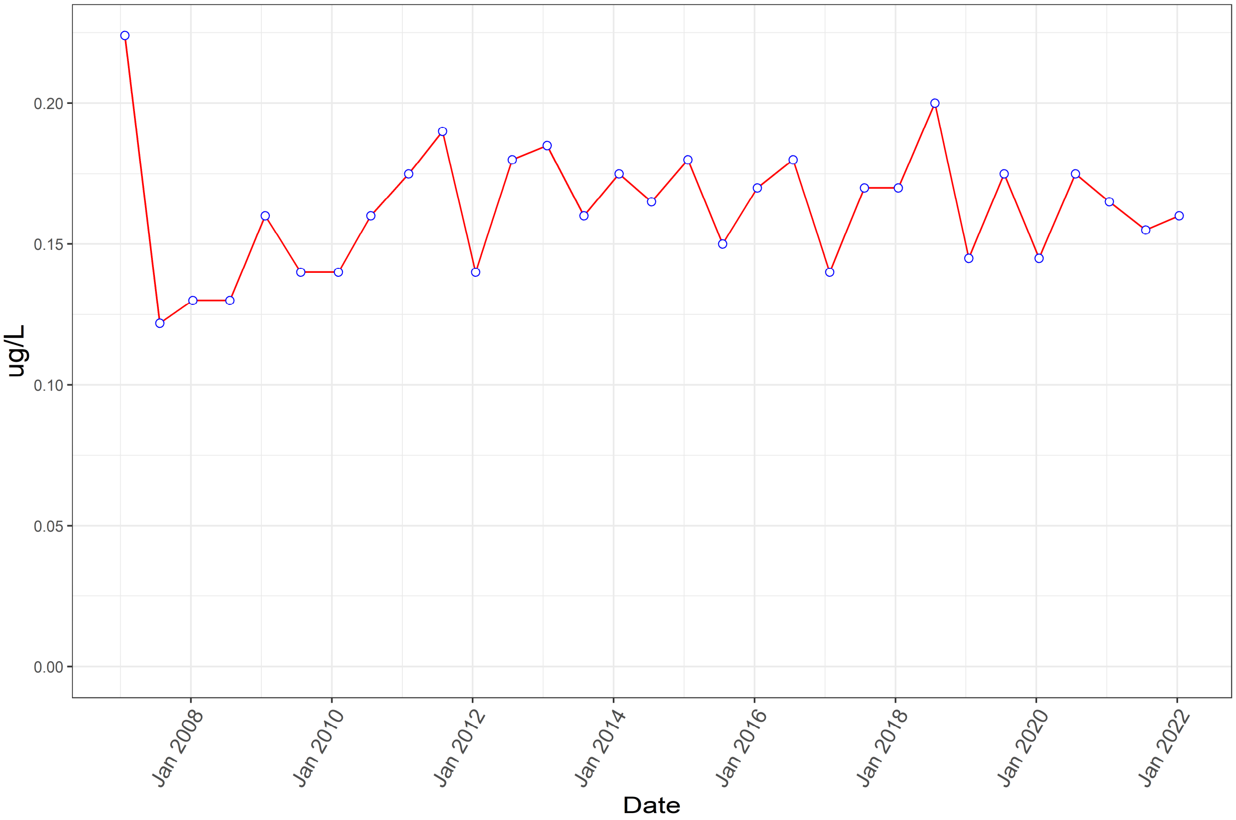


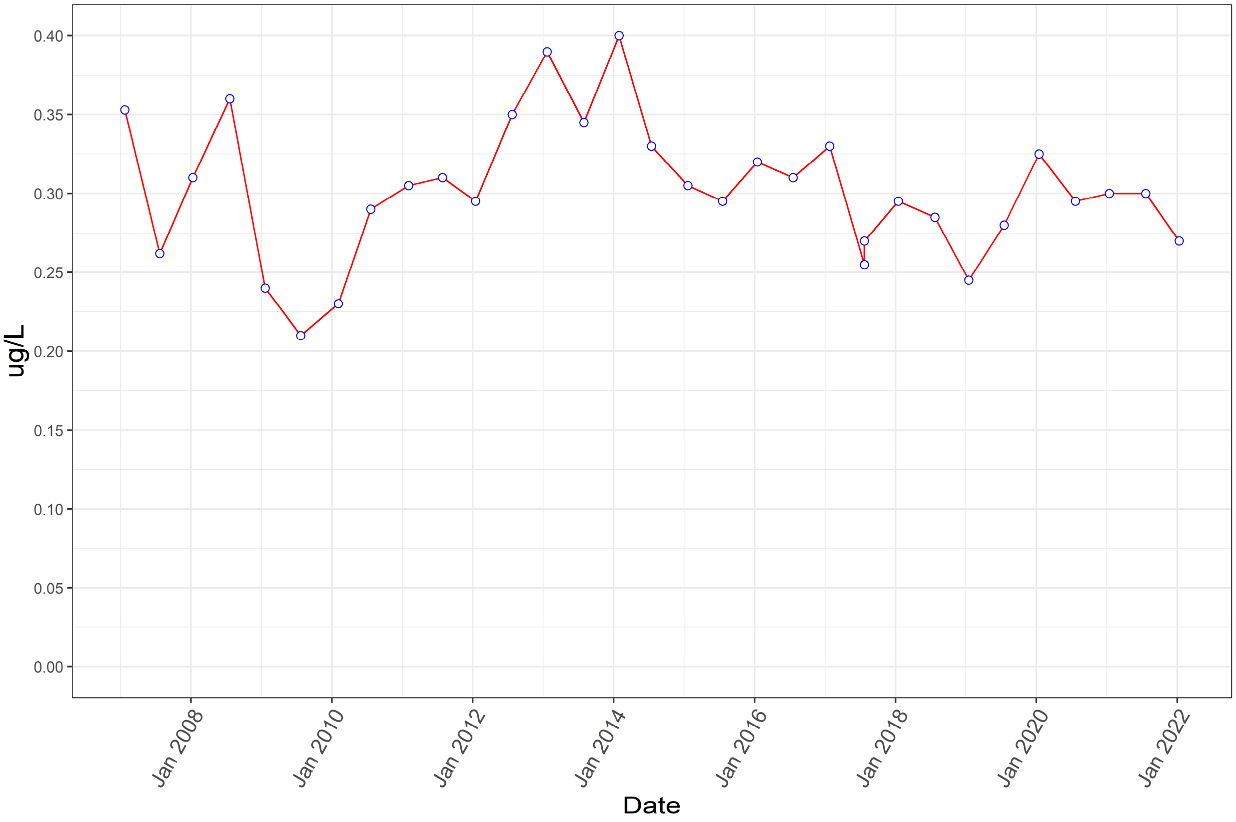
PFAS Monitoring Program (Program 9)

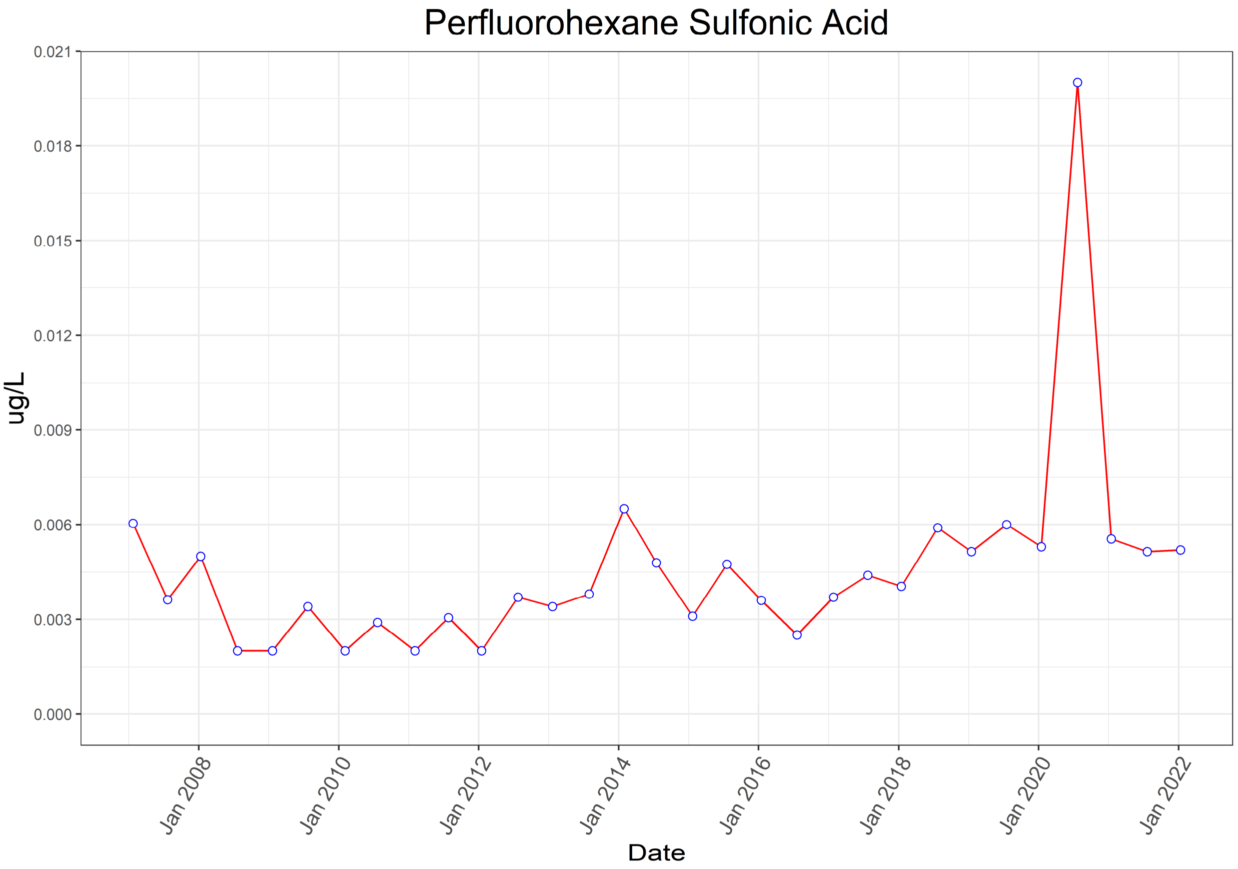
Well Name: P06-M02C



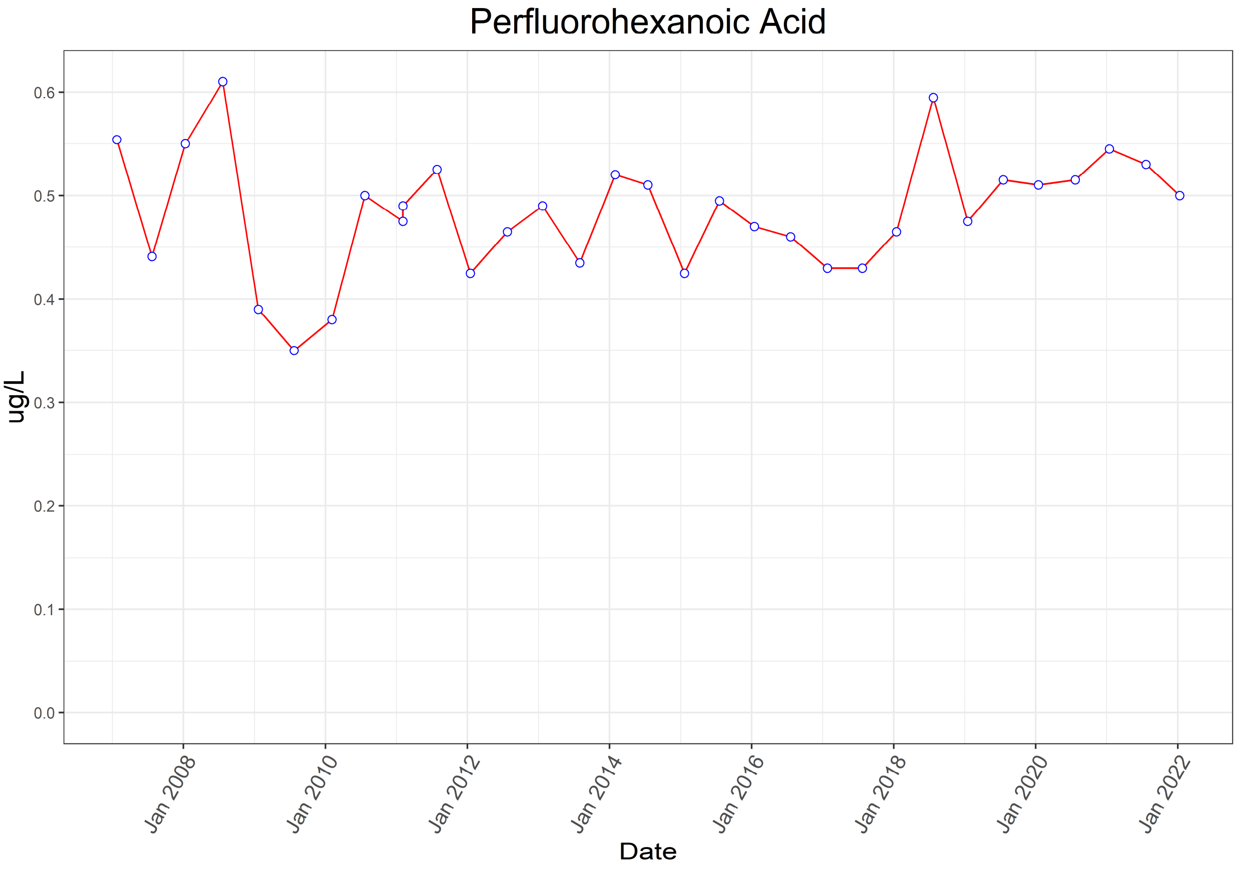



Perfluorobutanoic Acid

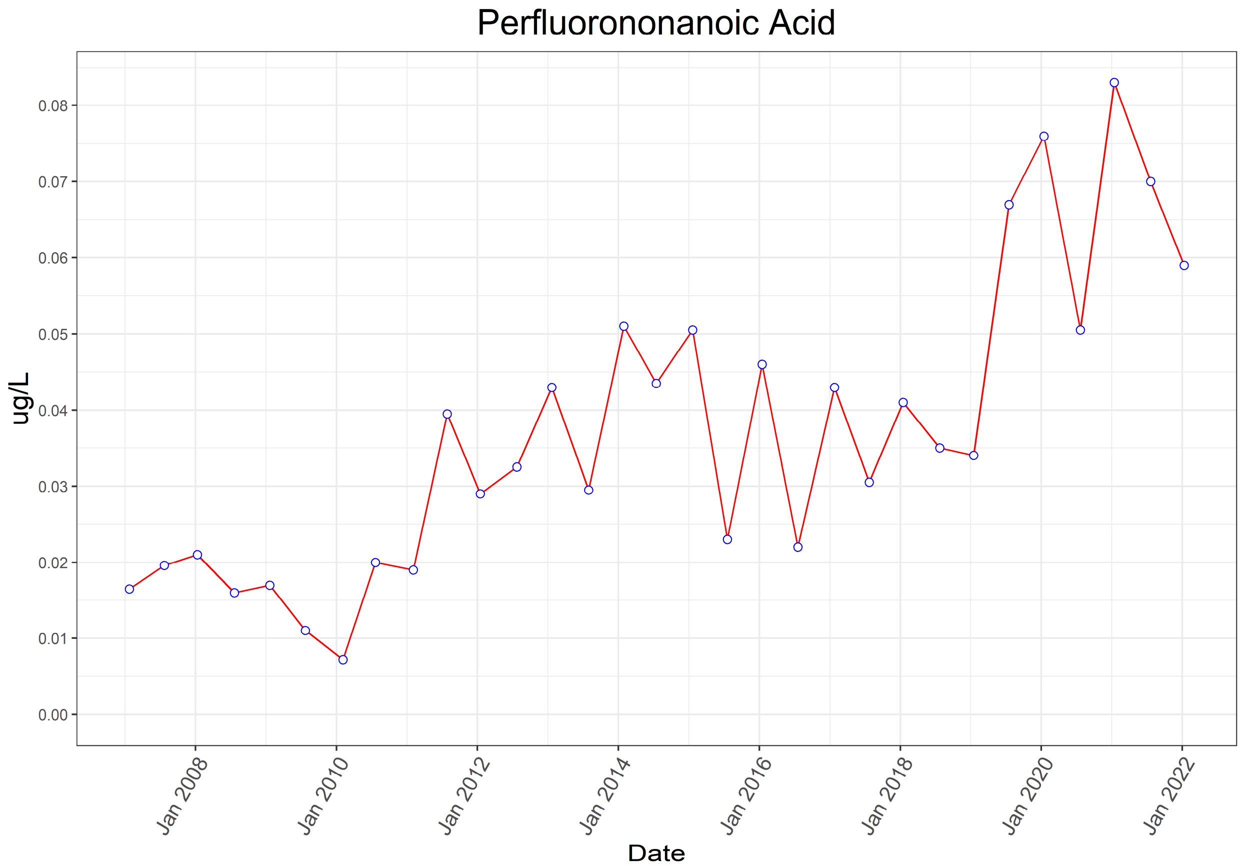

Perfluoroheptanoic Acid

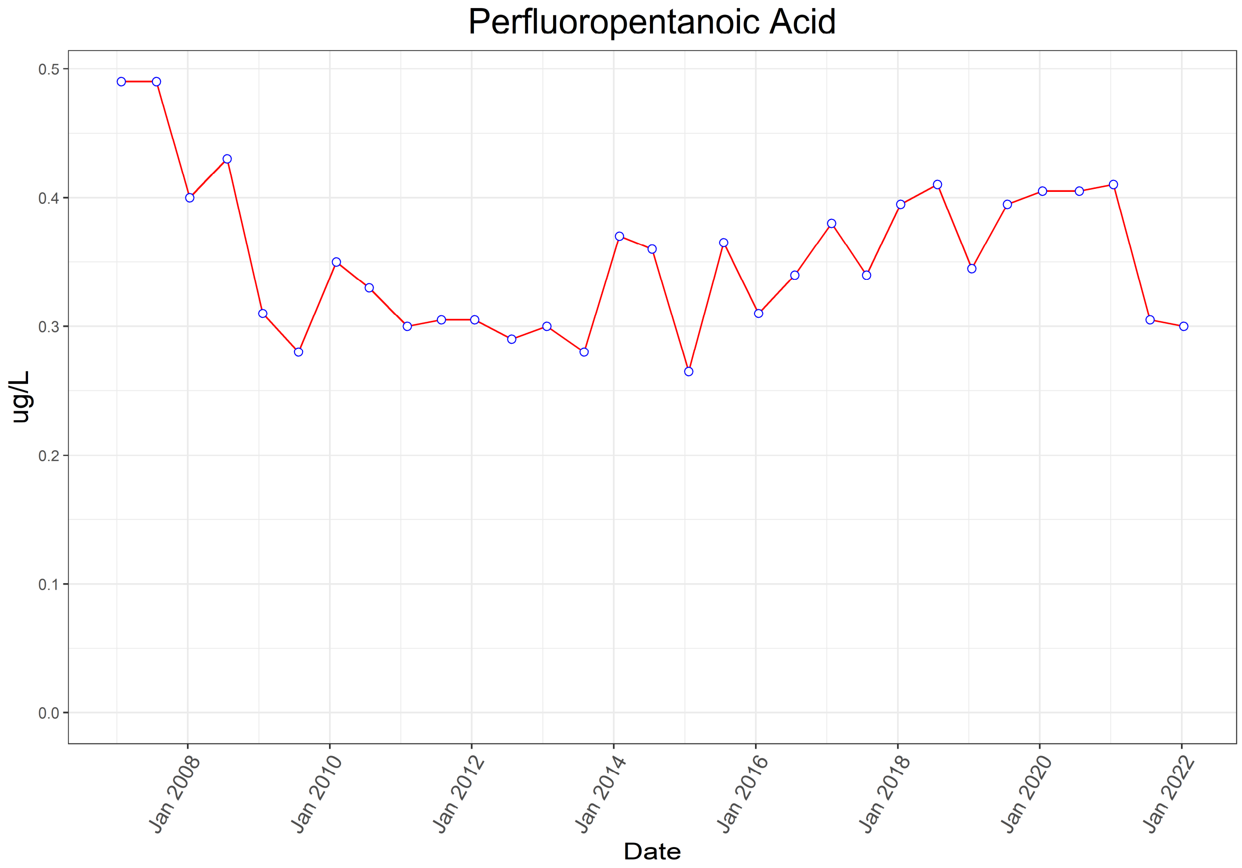


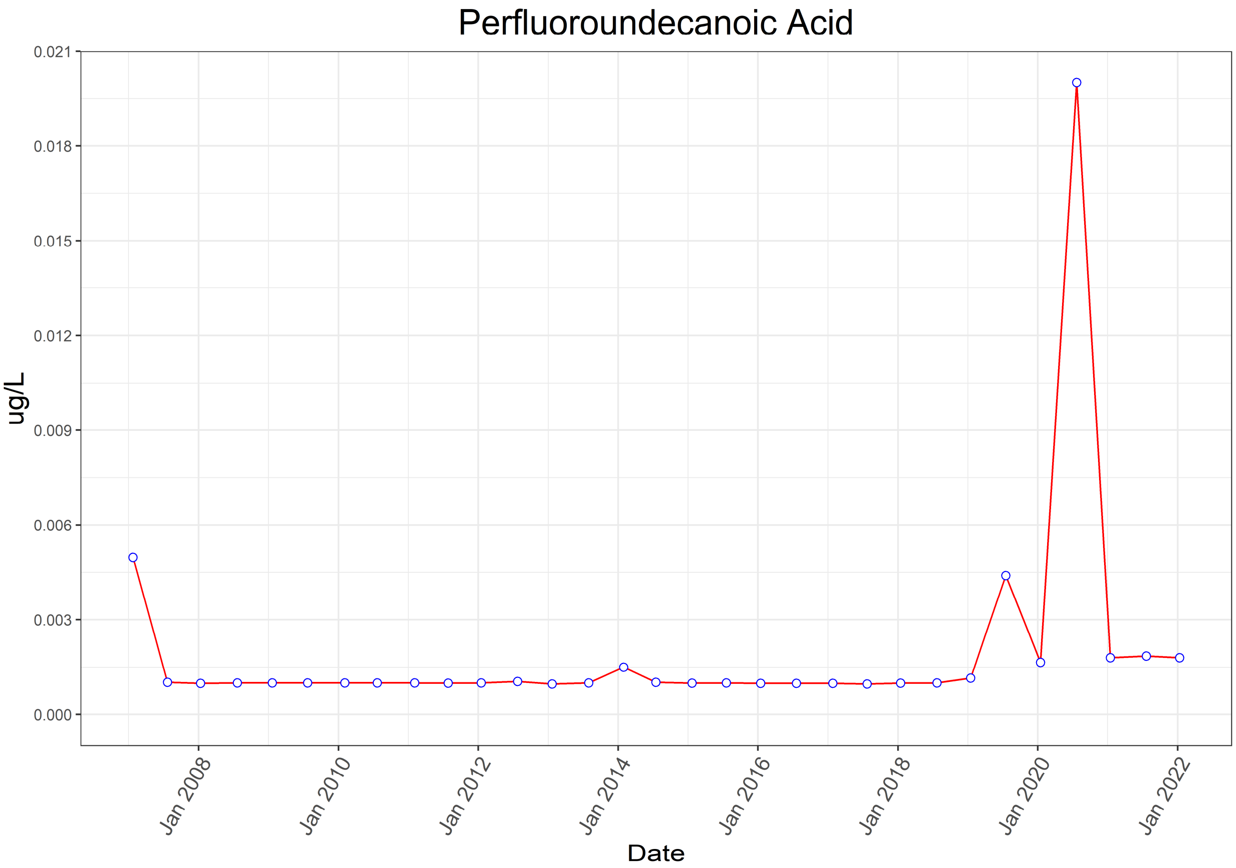
Perfluorohexane Sulfonic Acid

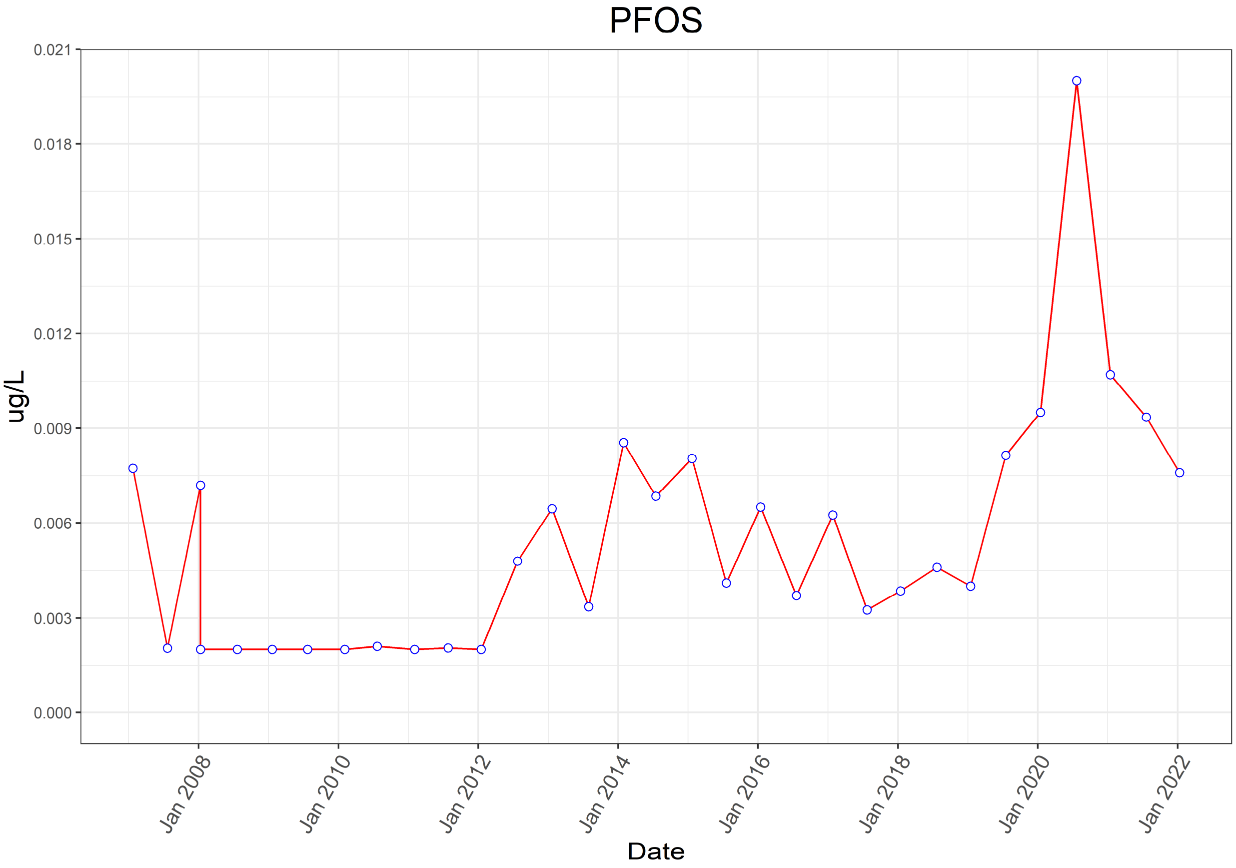


Perfluorohexanoic Acid


Perfluorononanoic Acid

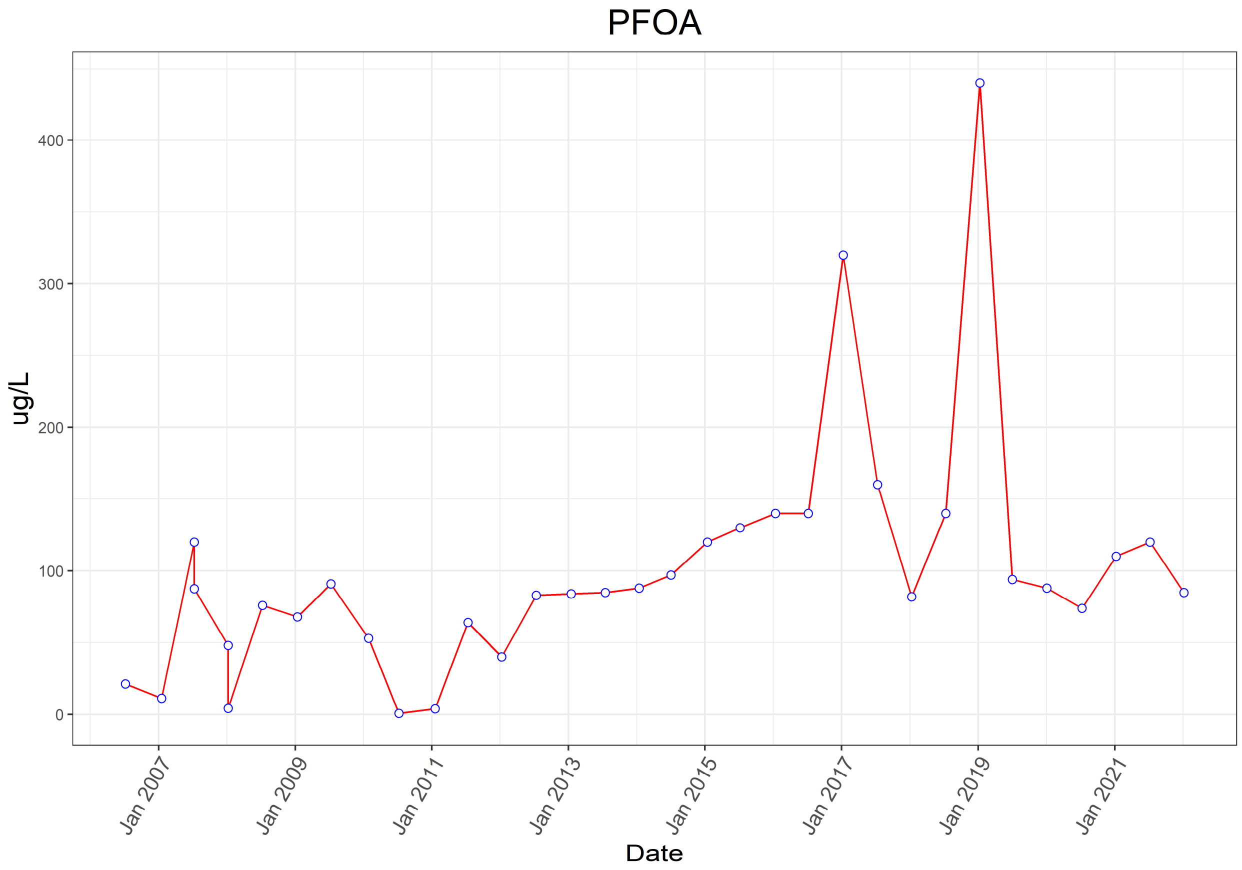

Perfluoropentanoic Acid

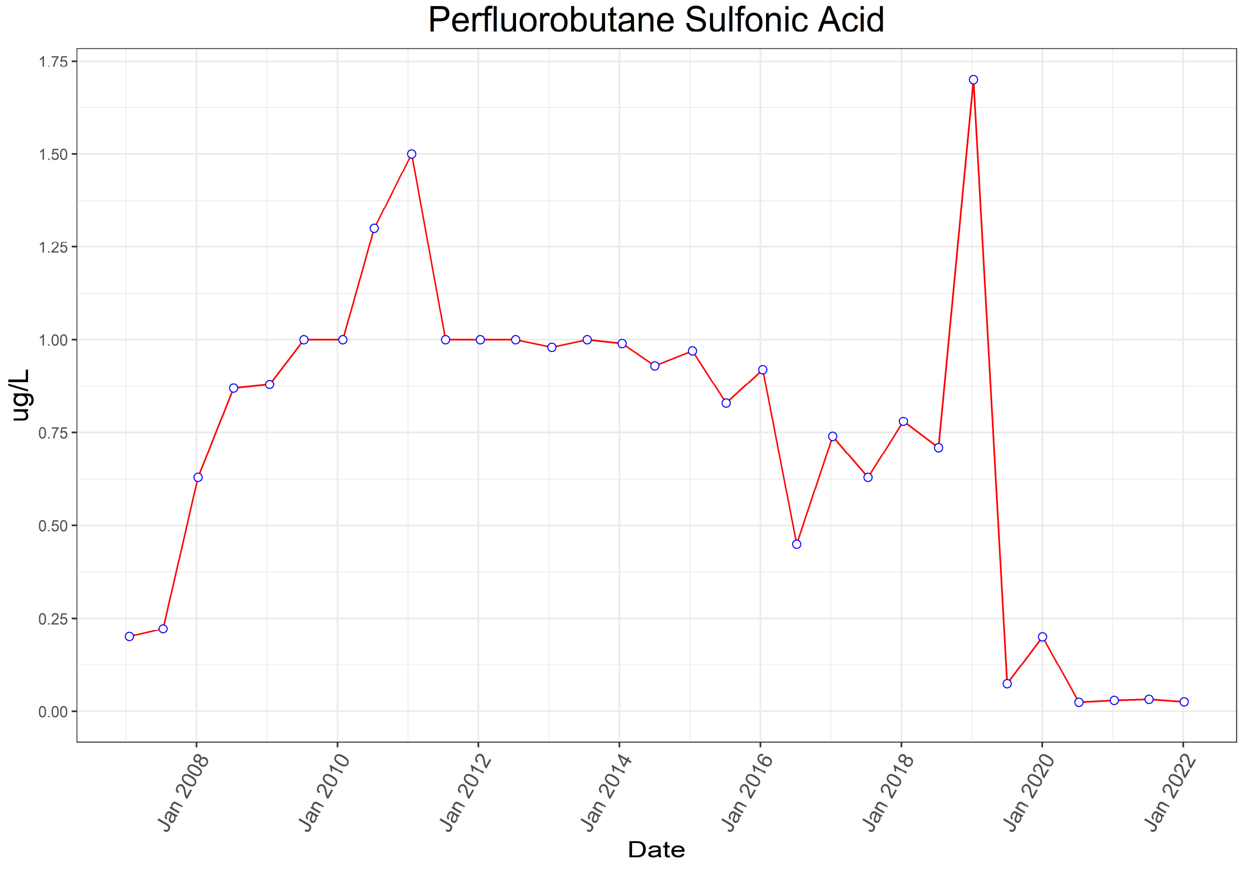

Perfluoroundecanoic Acid
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


PFOS
ug/L
0.021
0.018
0.015
0.012
0.009
0.006
0.003
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

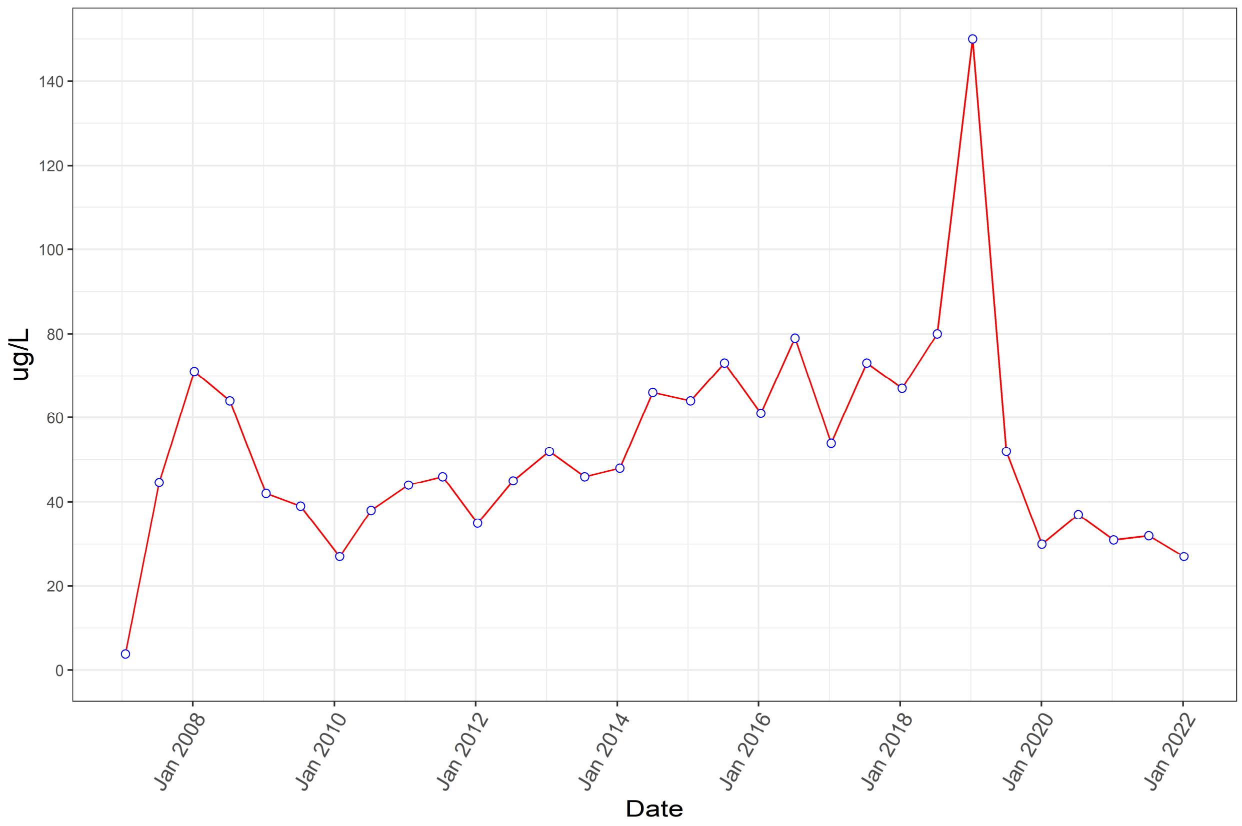
PFAS Monitoring Program (Program 9)

Well Name: P21-M01B

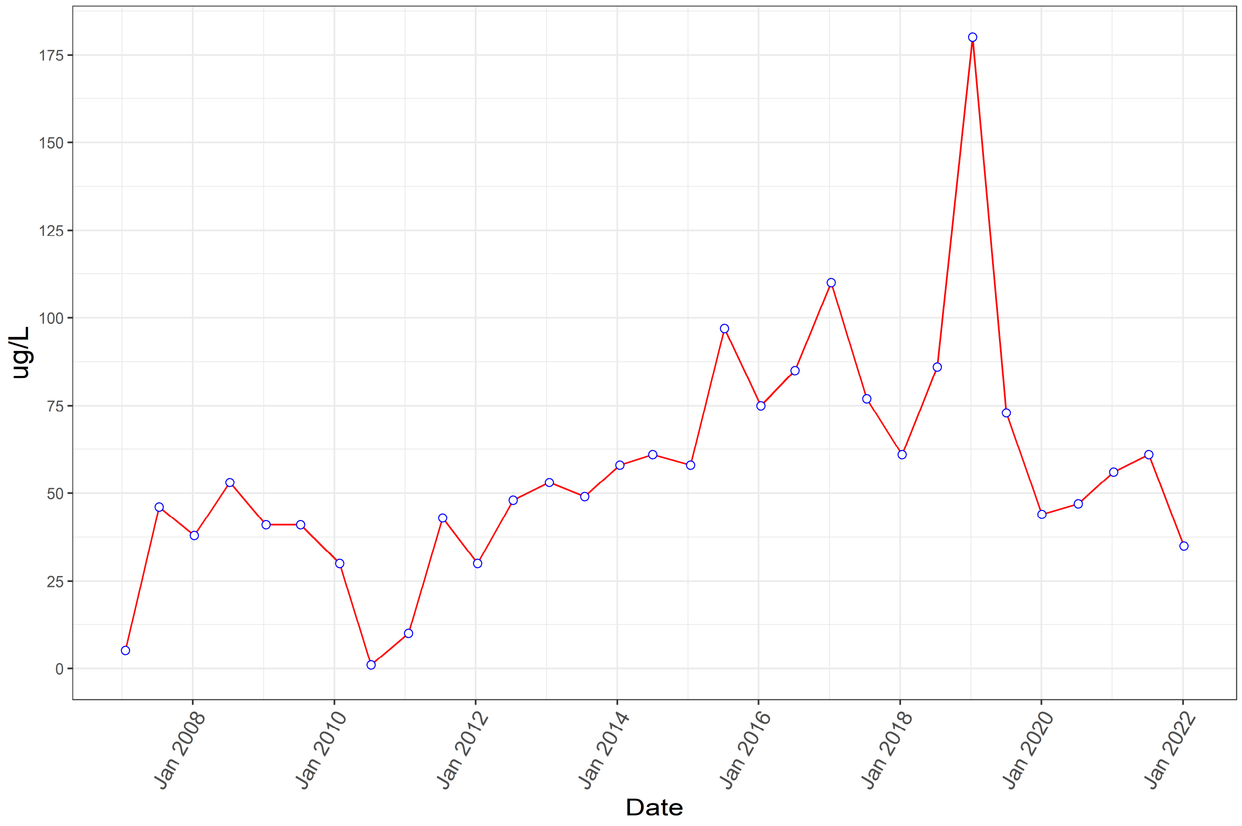


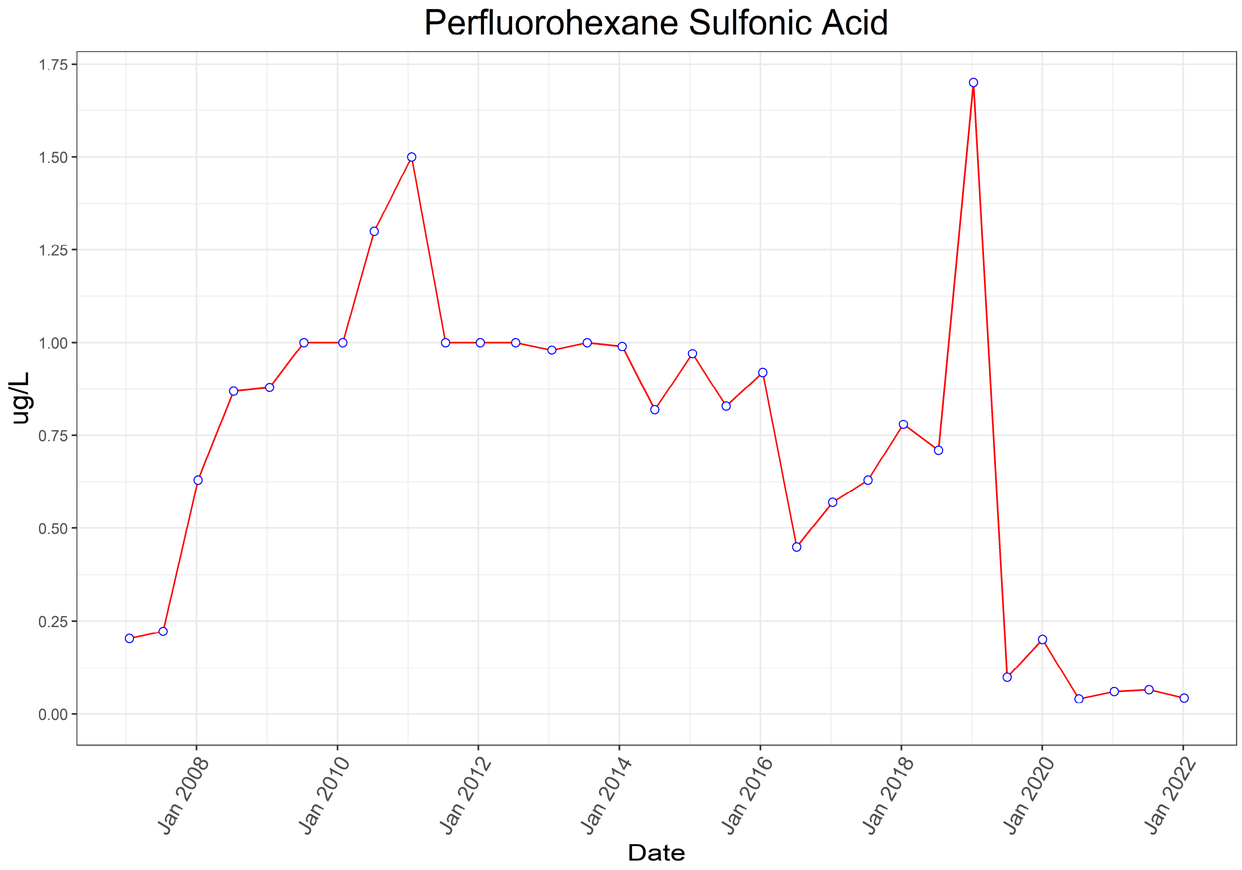


Perfluorobutanoic Acid

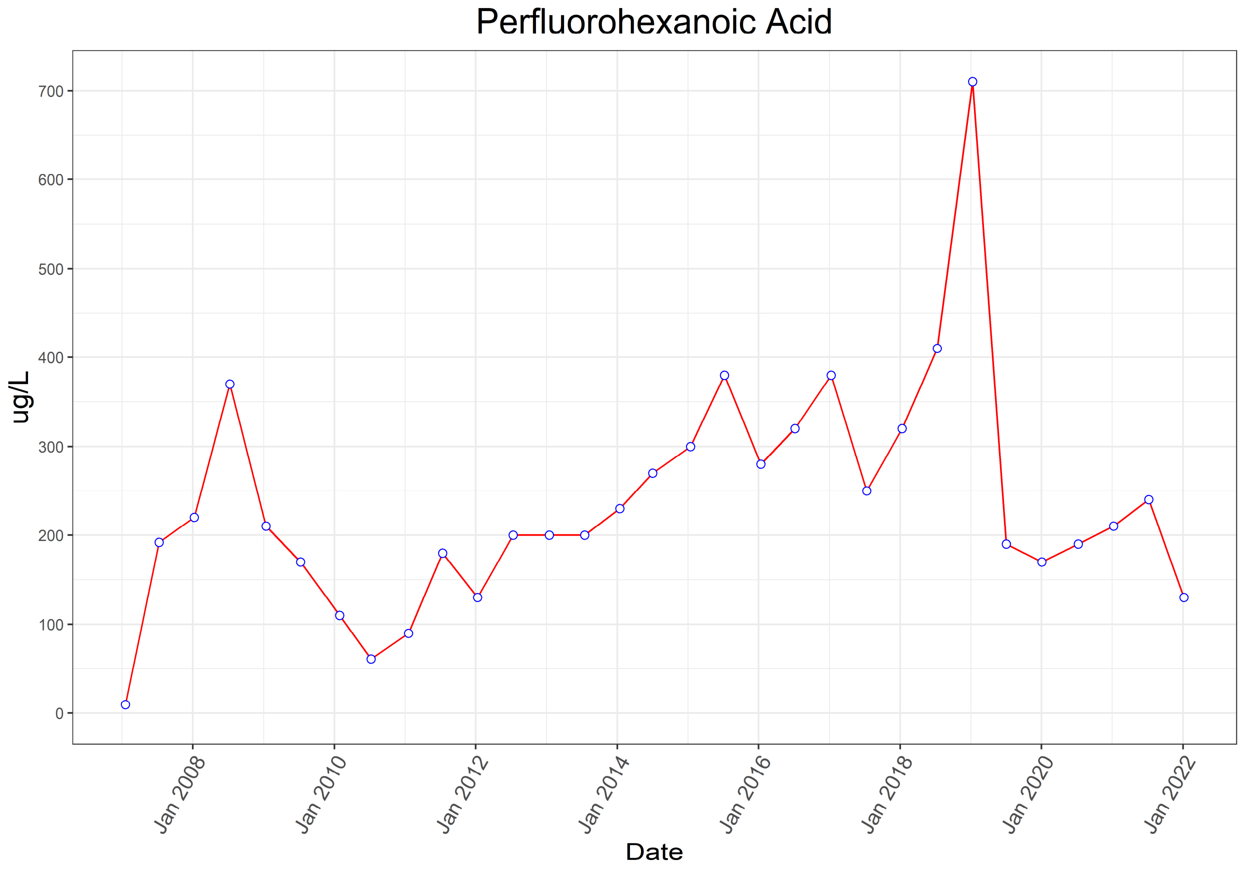


Perfluoroheptanoic Acid

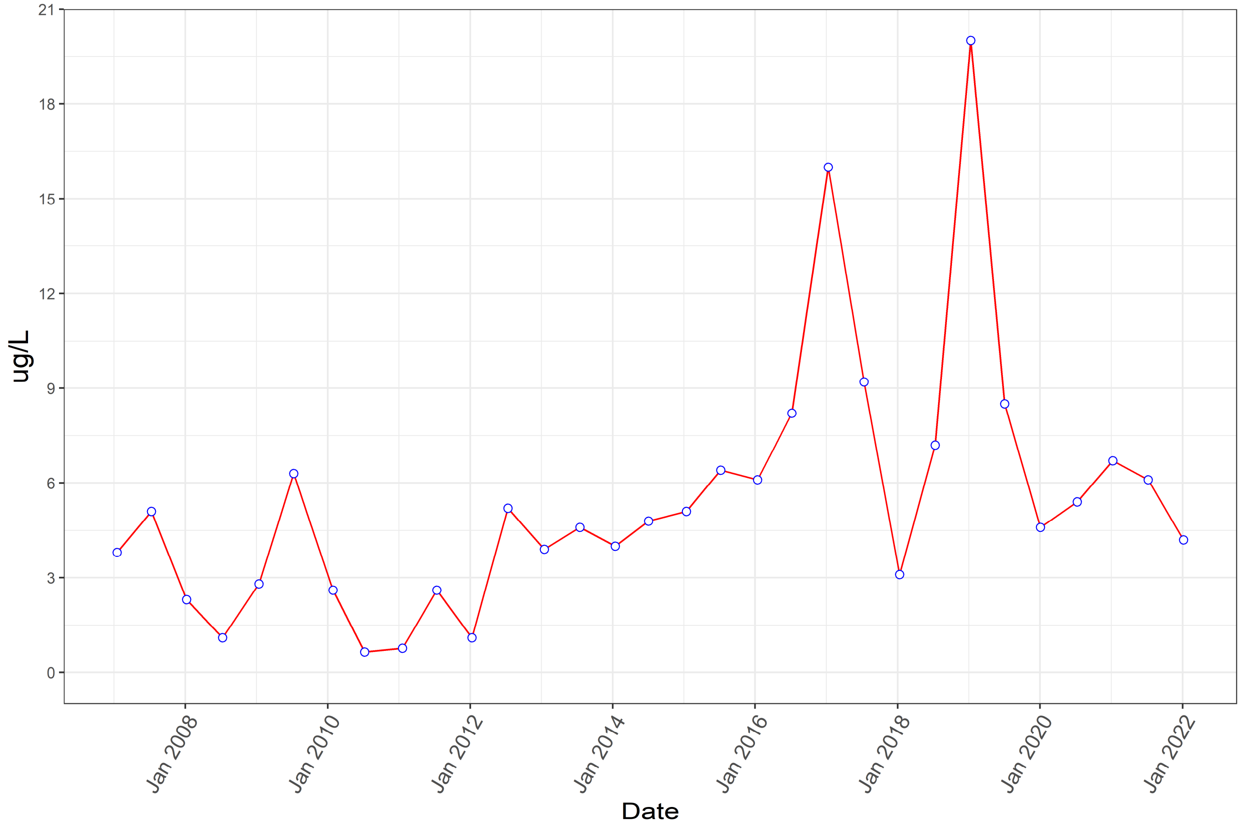




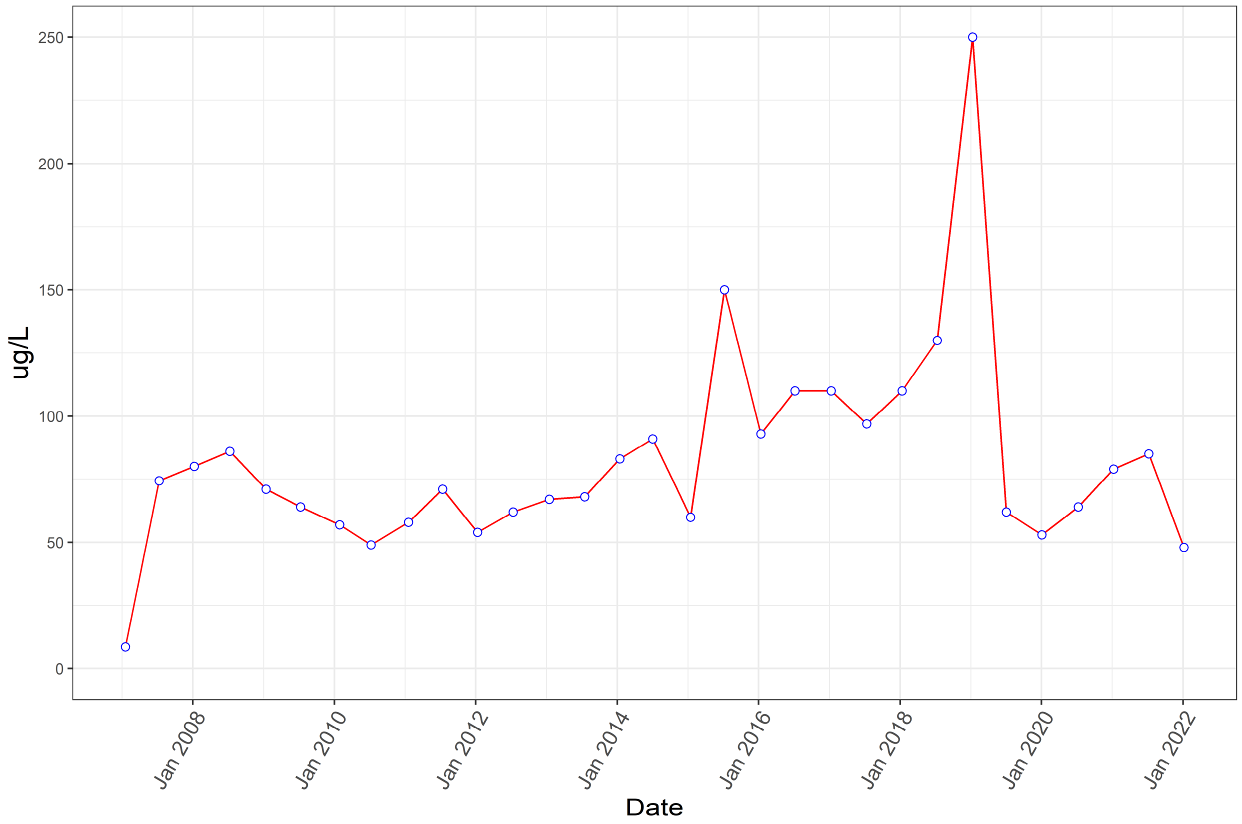
Perfluorohexane Sulfonic Acid



Perfluorohexanoic Acid

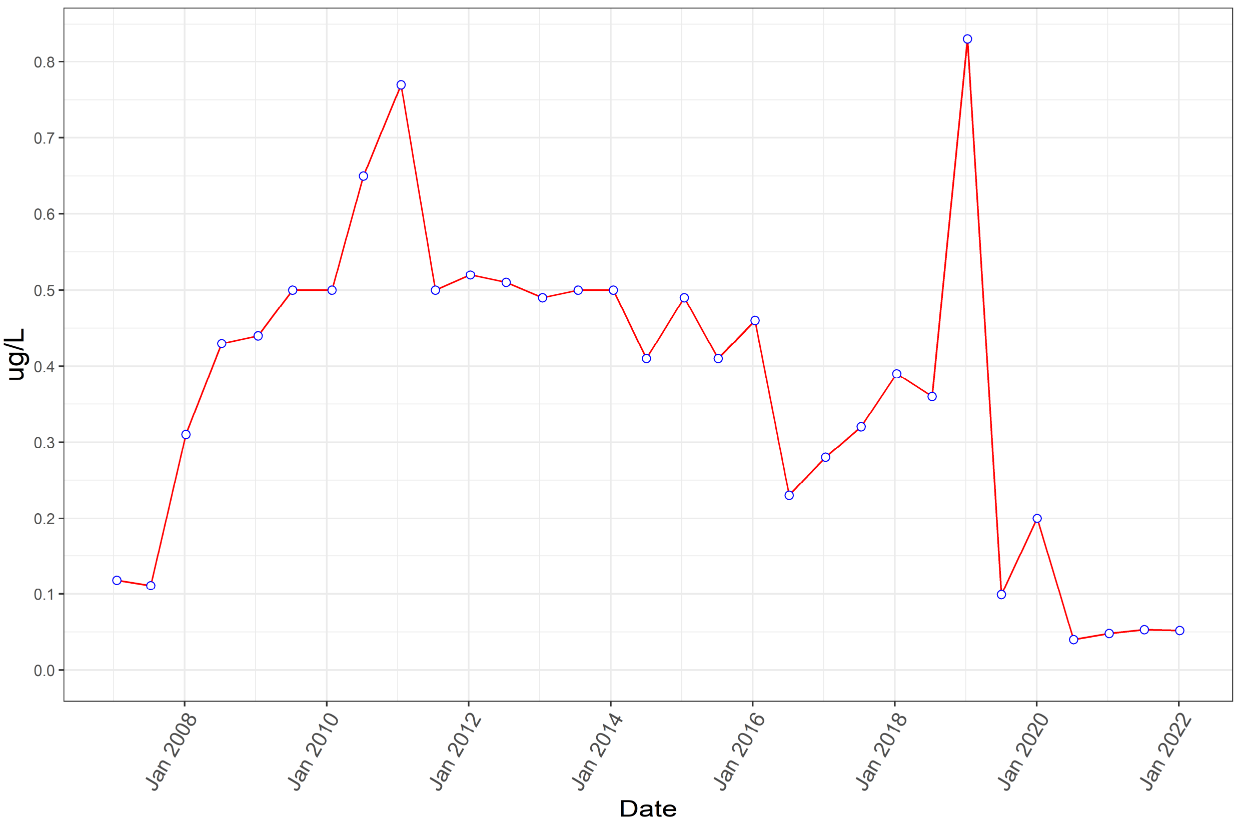


Perfluorononanoic Acid

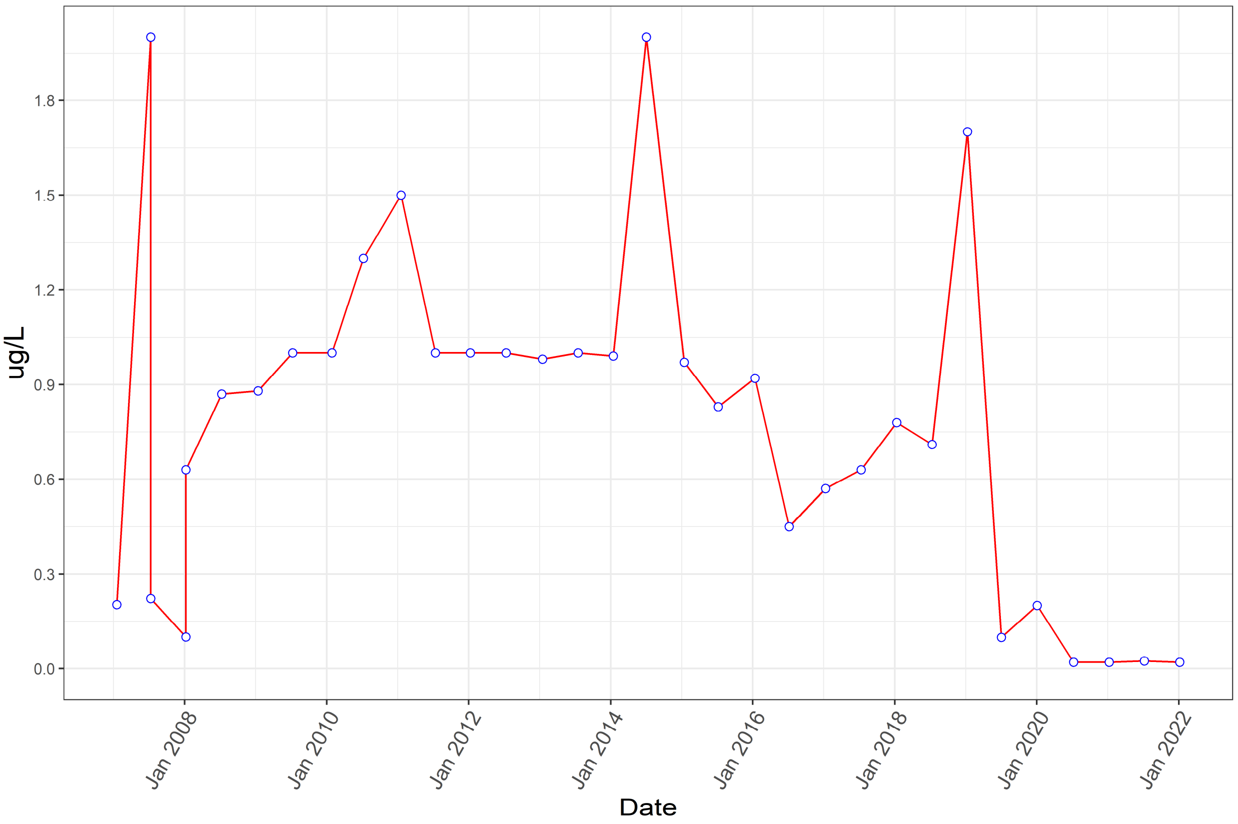


Perfluoropentanoic Acid

Perfluoroundecanoic Acid

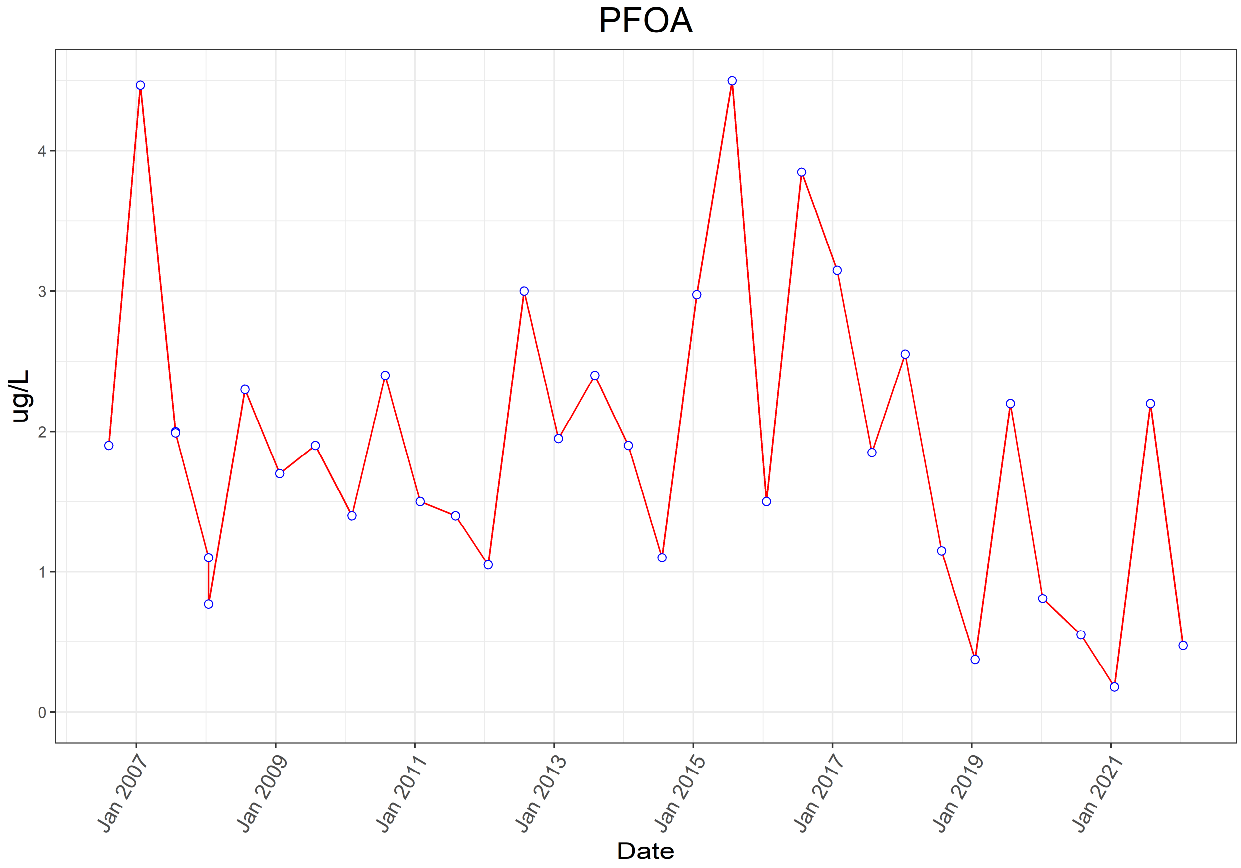


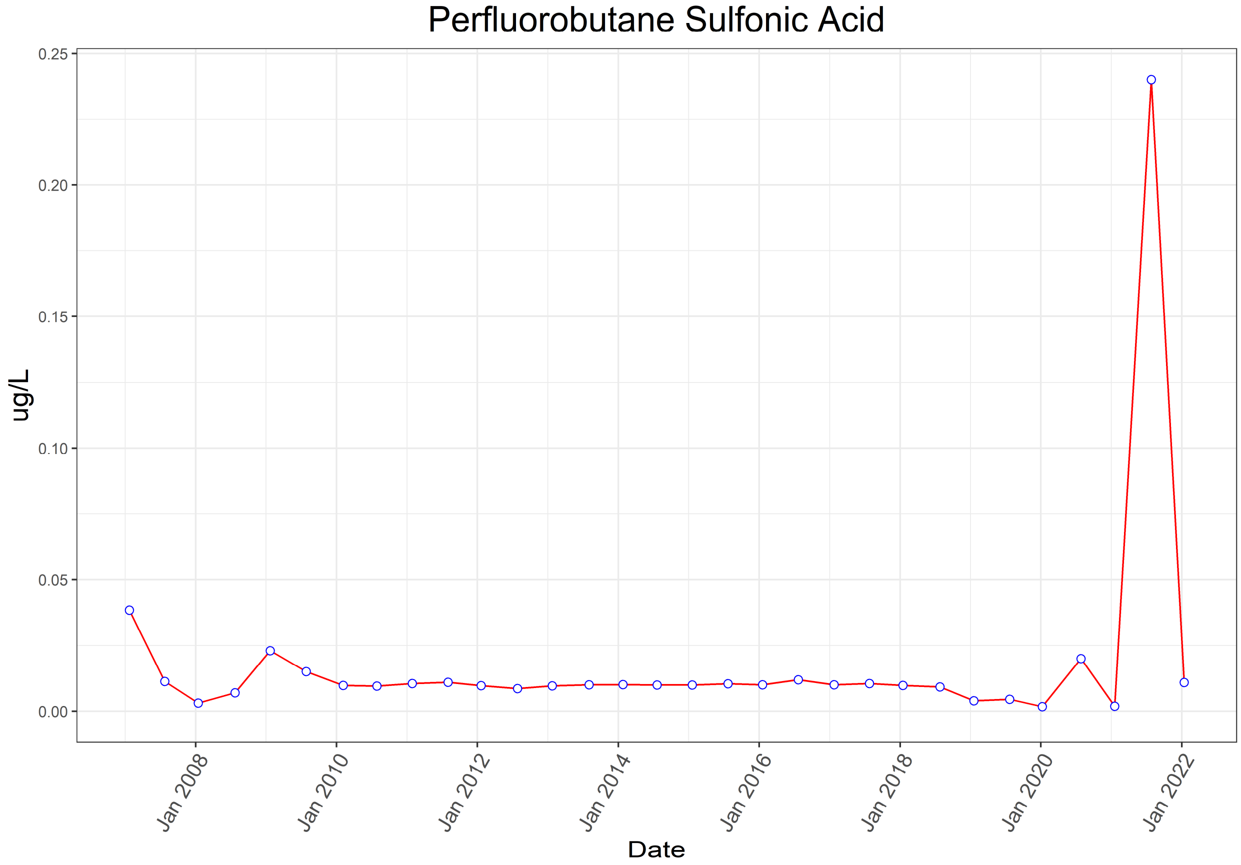
PFOS

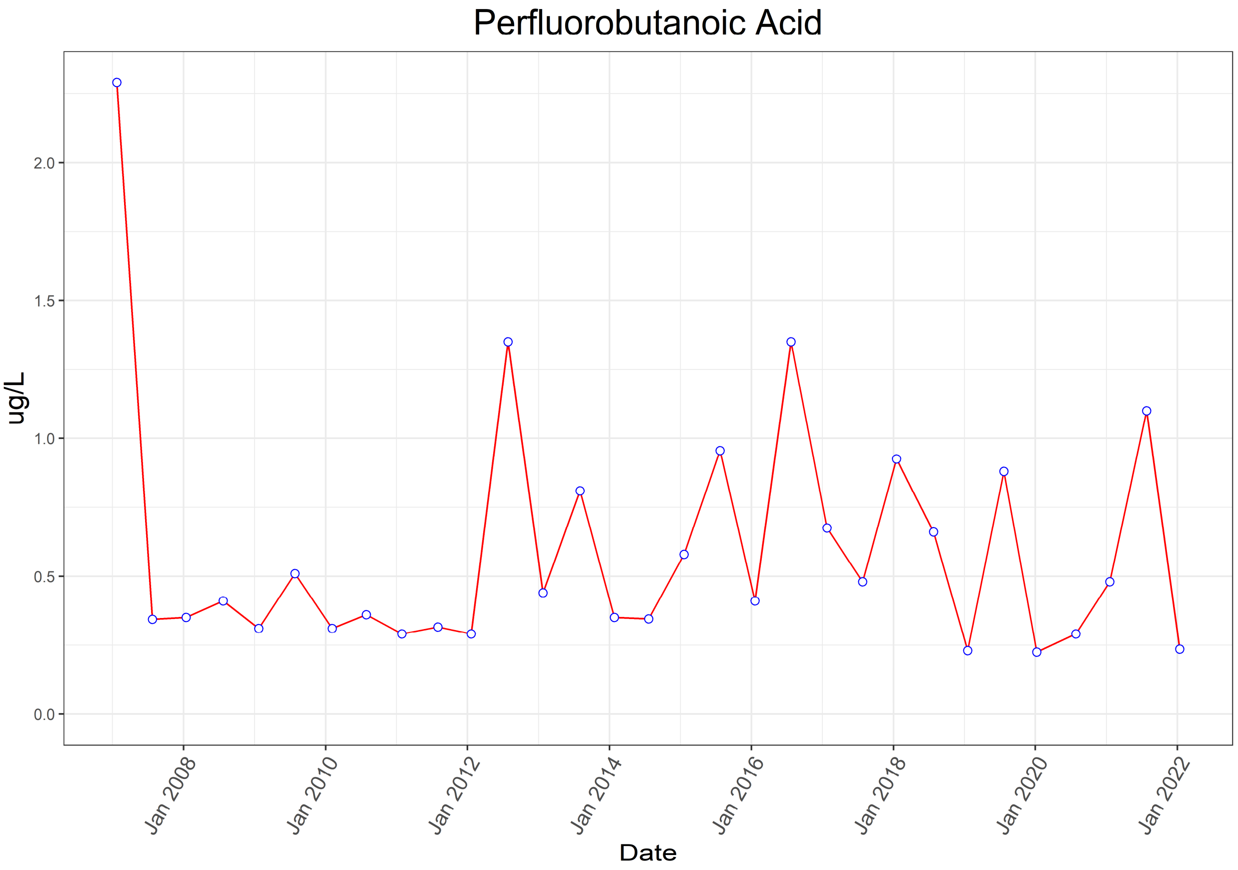


PFAS Monitoring Program (Program 9)

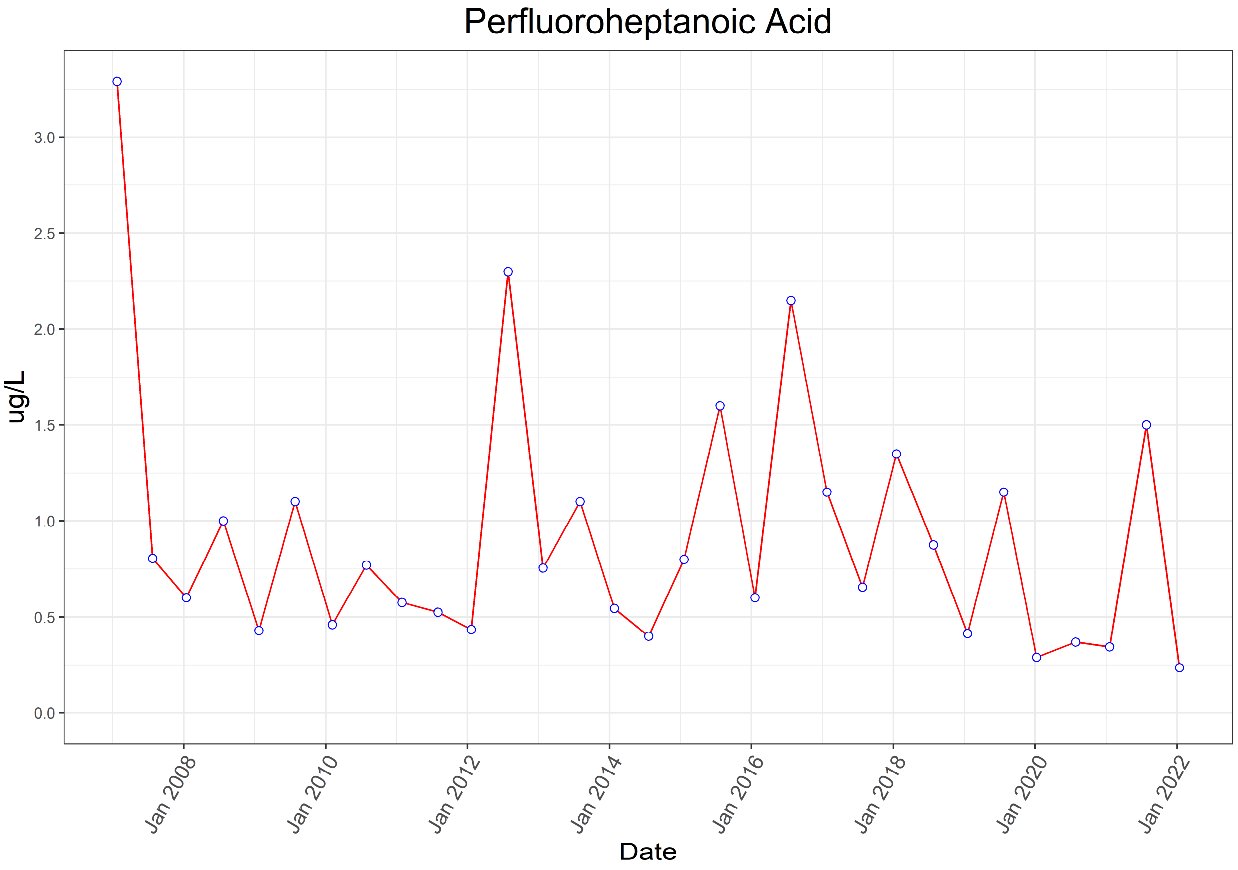
Well Name: R09-M02B



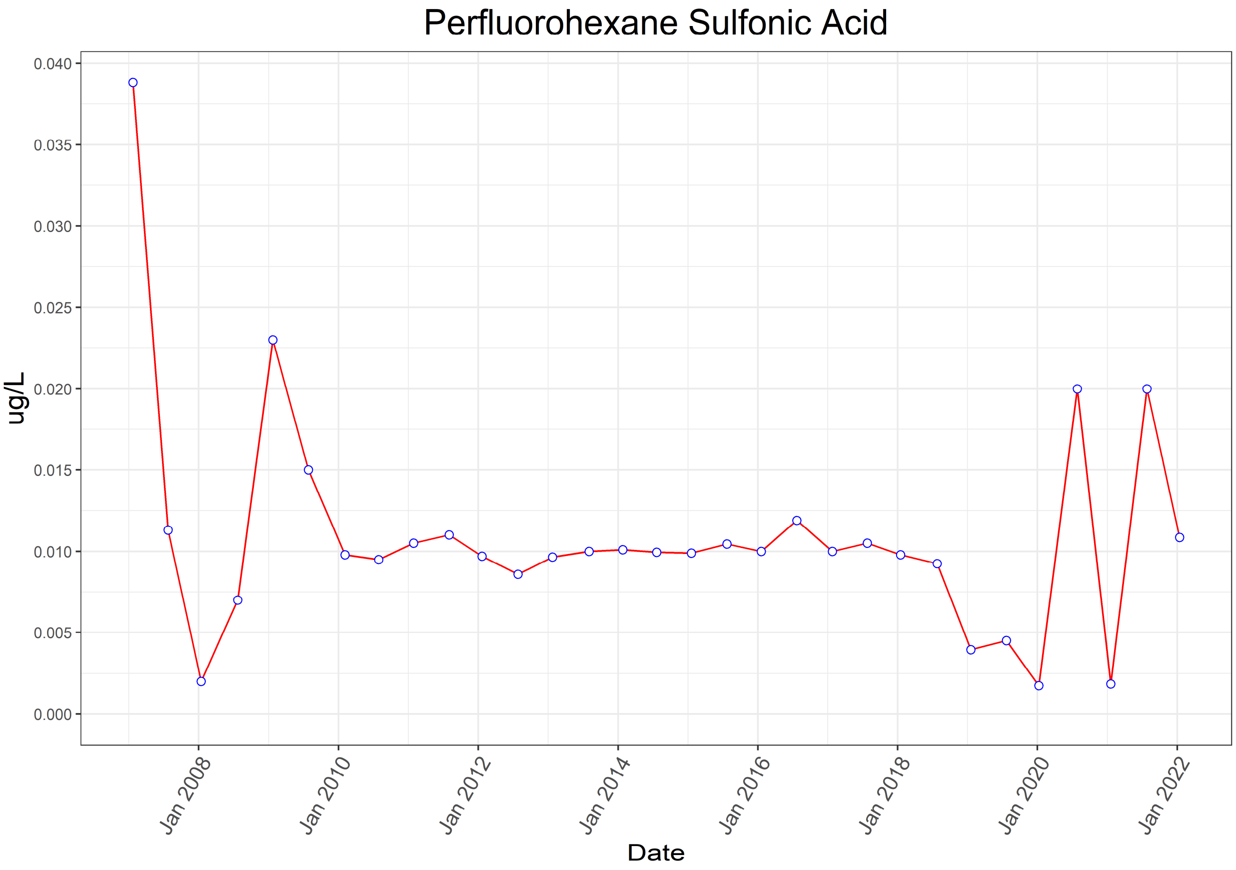


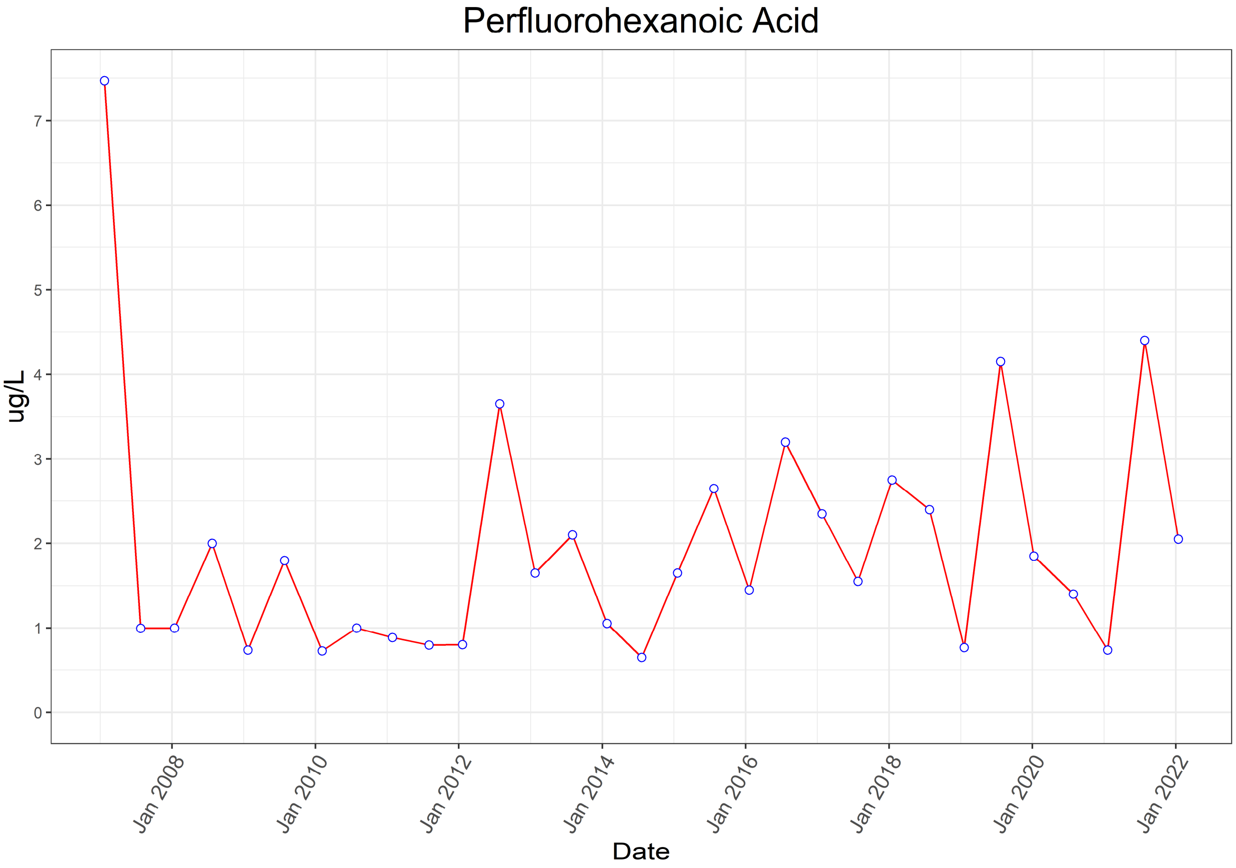


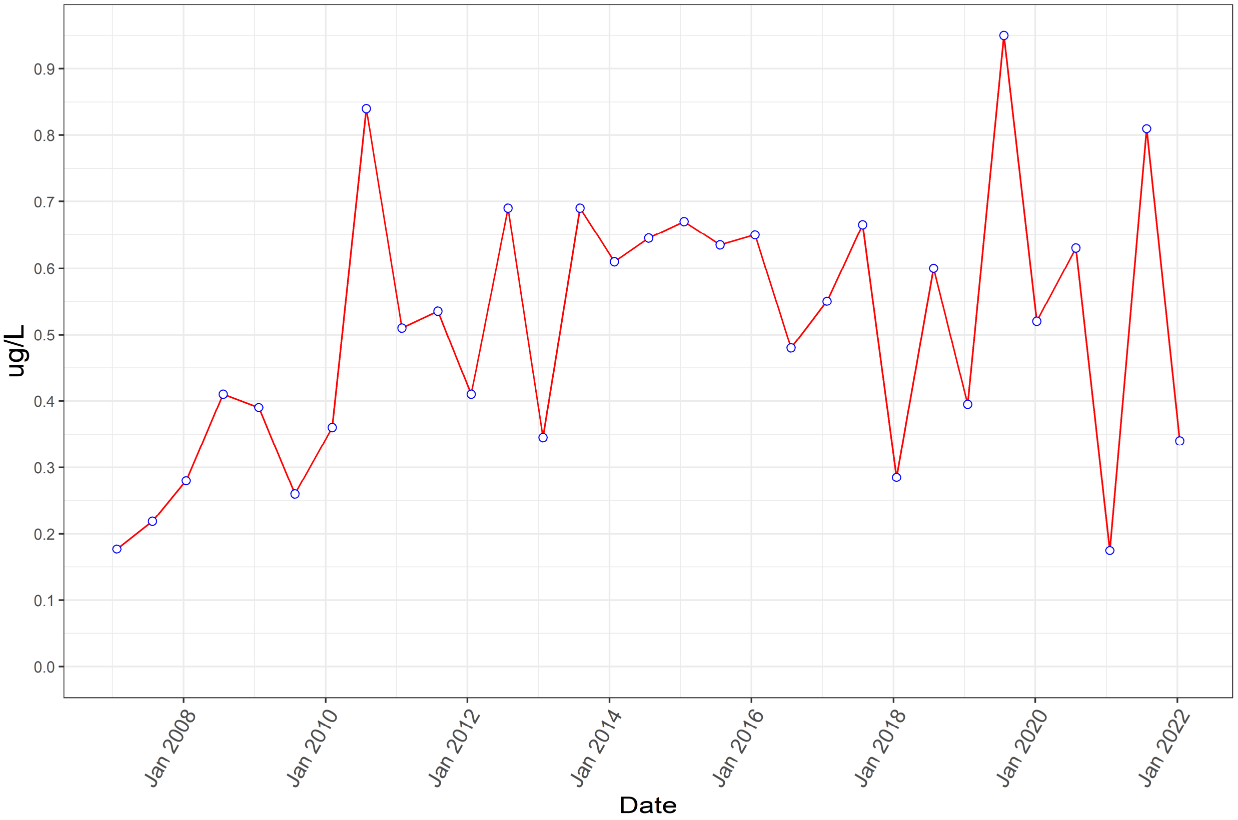
Perfluorobutanoic Acid



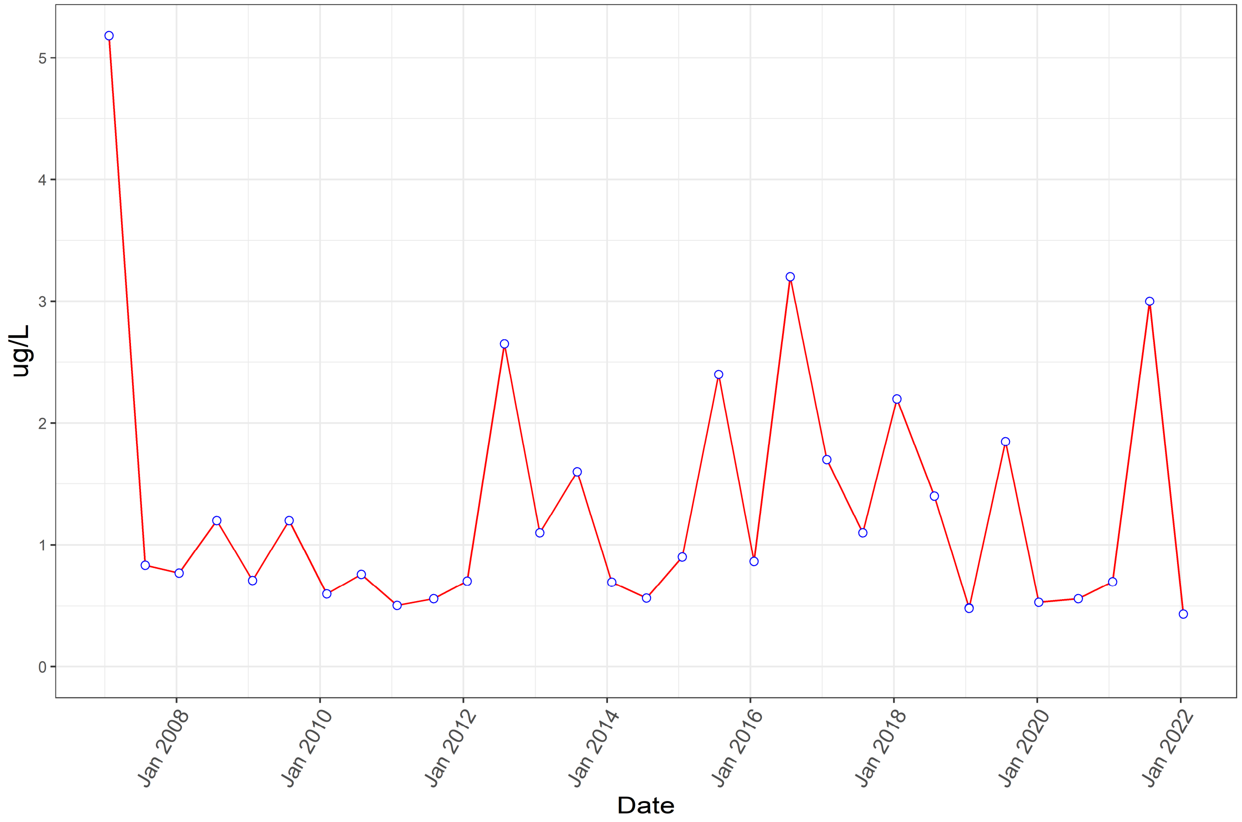
Perfluoroheptanoic Acid


Perfluorohexane Sulfonic Acid
ug/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

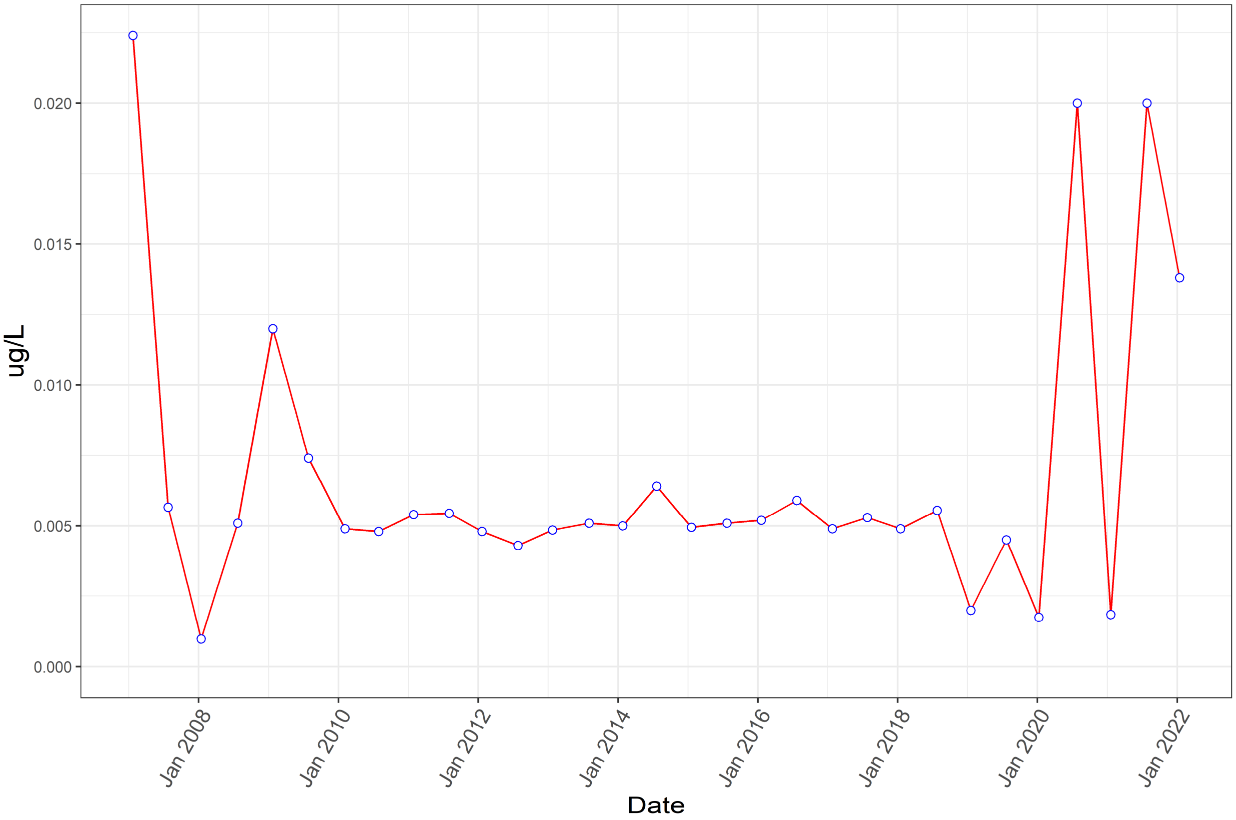

Perfluorohexanoic Acid
ug/L
7
6
5
4
3
2
1
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date



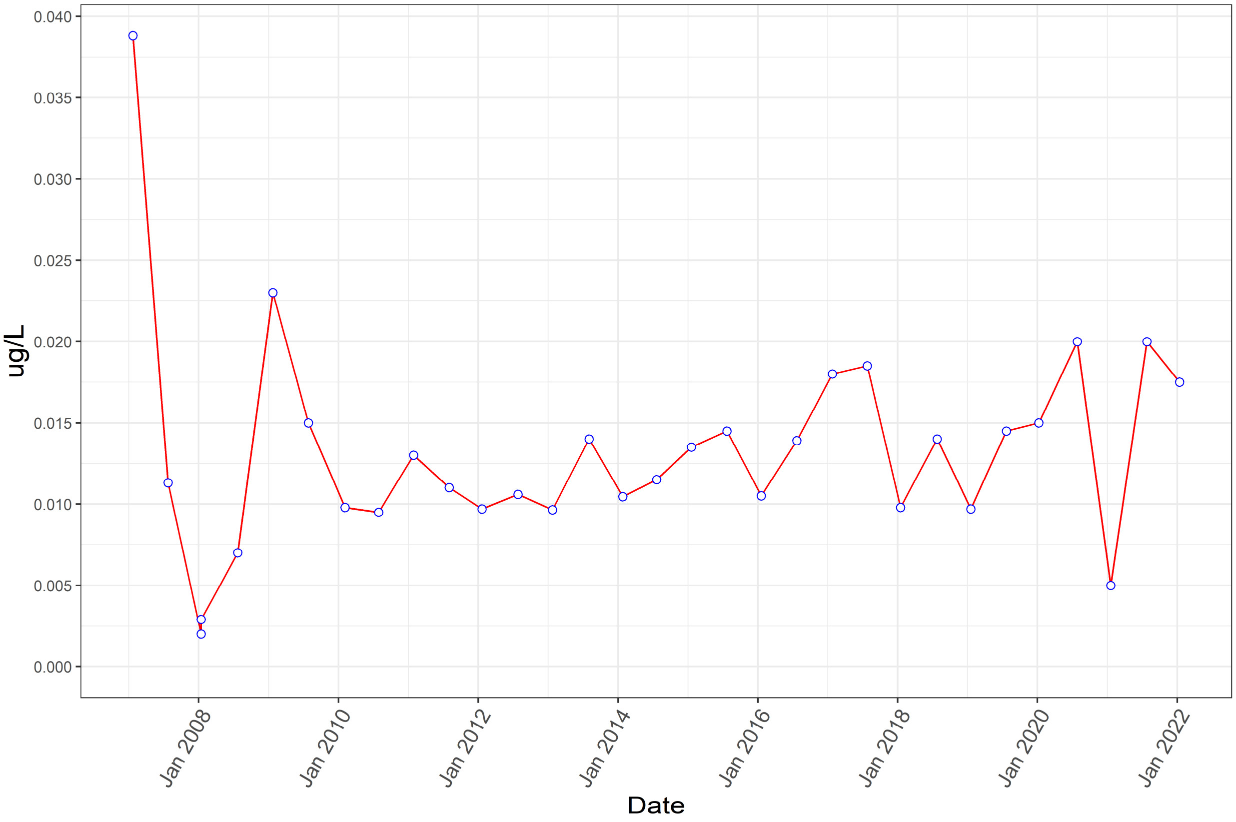
Perfluorononanoic Acid



Perfluoropentanoic Acid



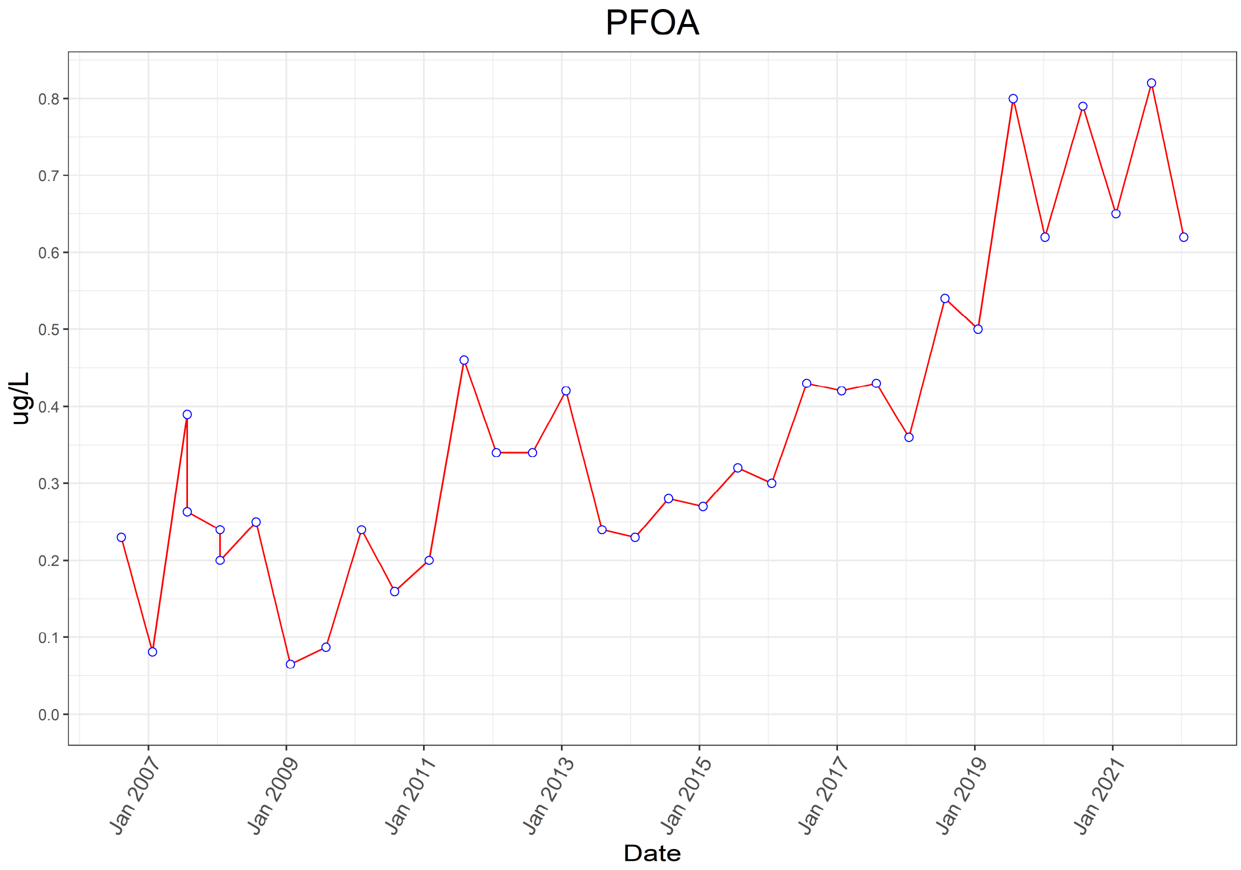
Perfluoroundecanoic Acid

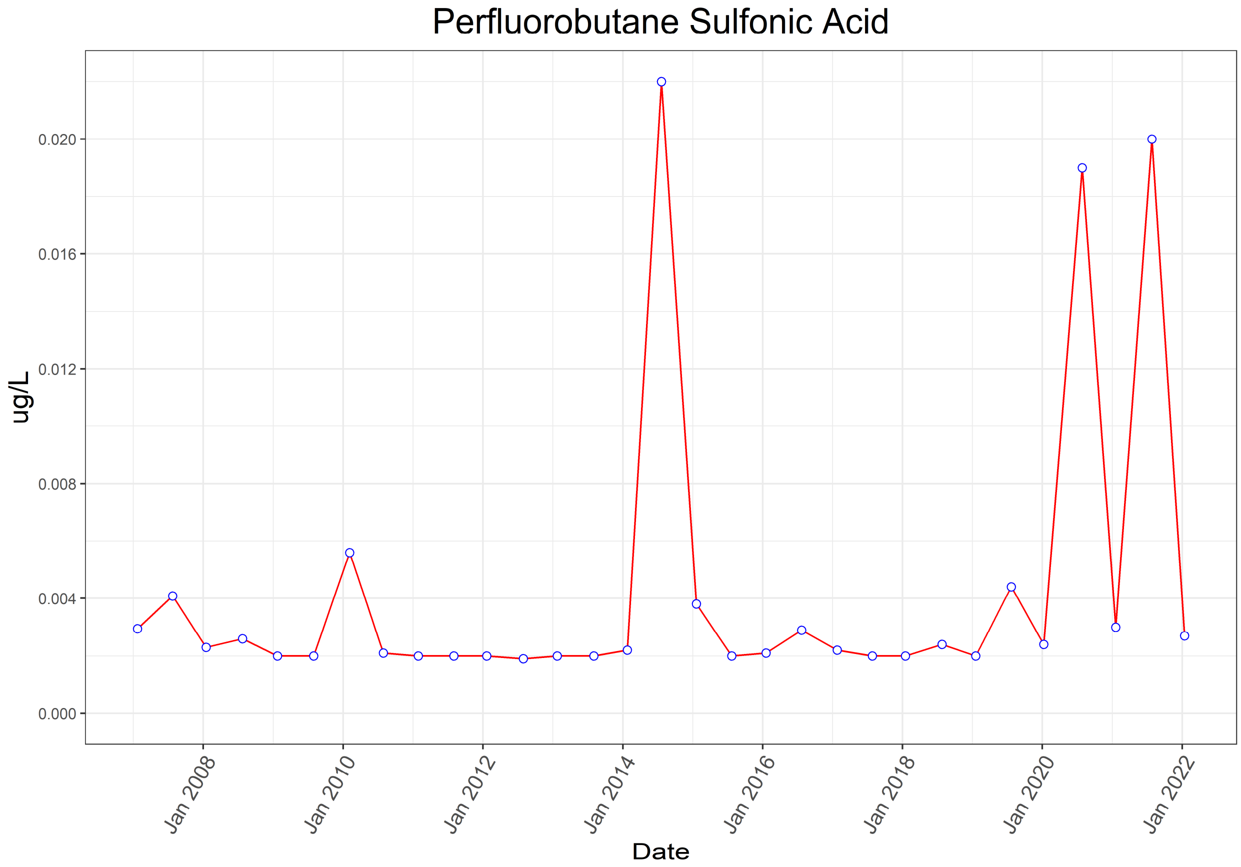


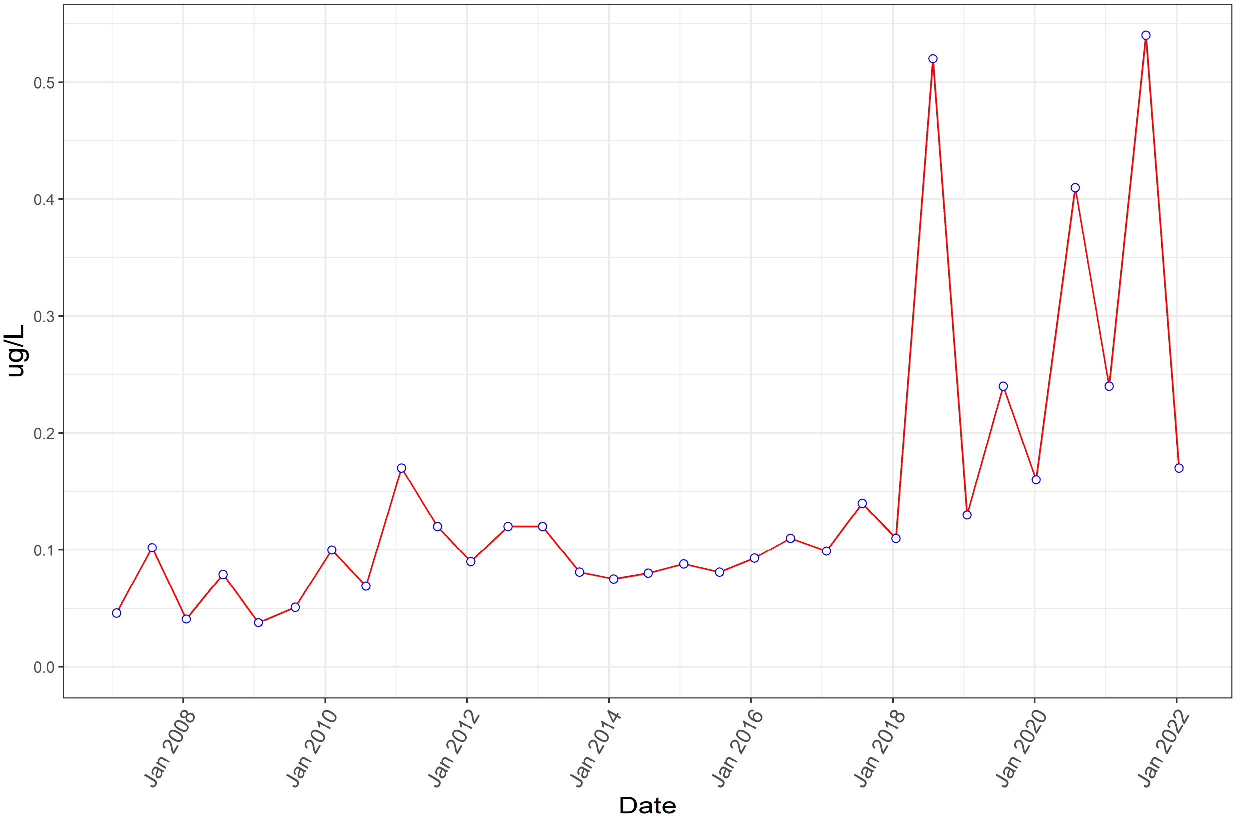
PFOS

PFAS Monitoring Program (Program 9)

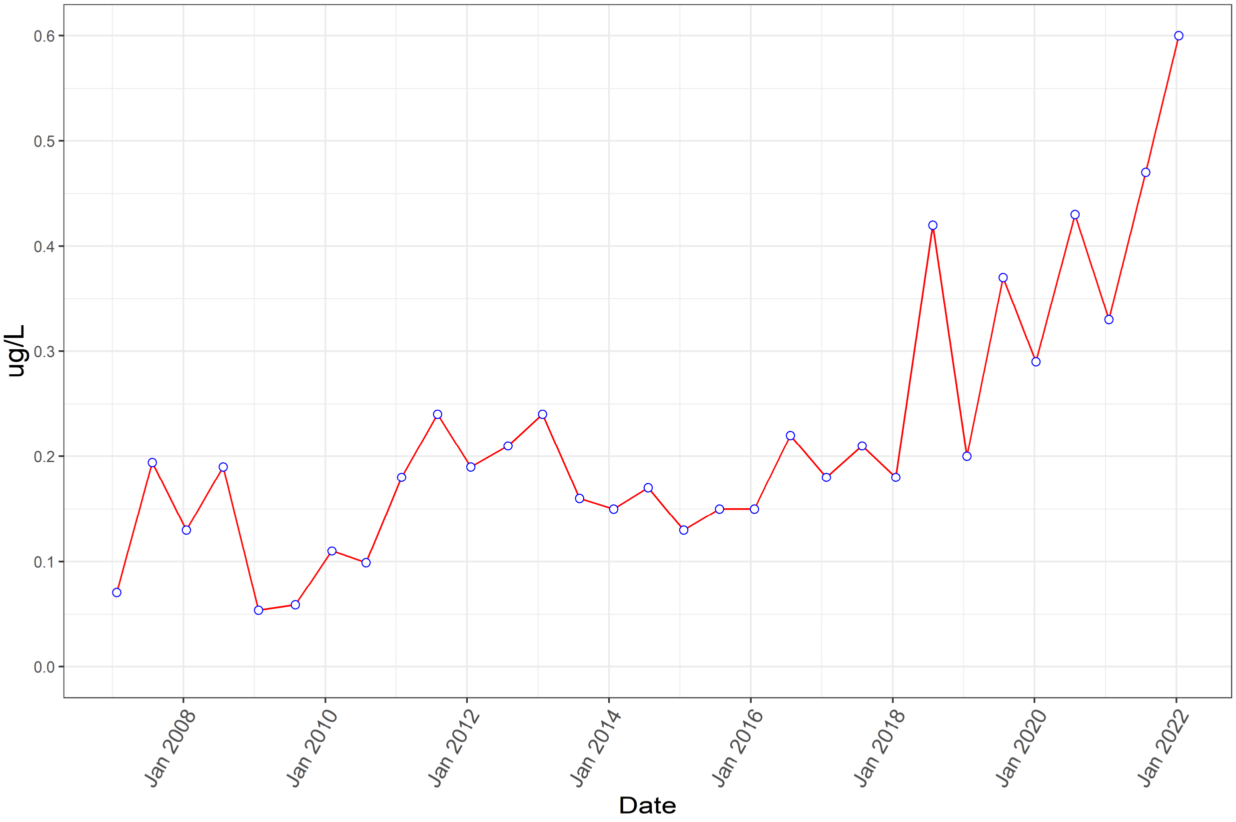
Well Name: R10-M01C





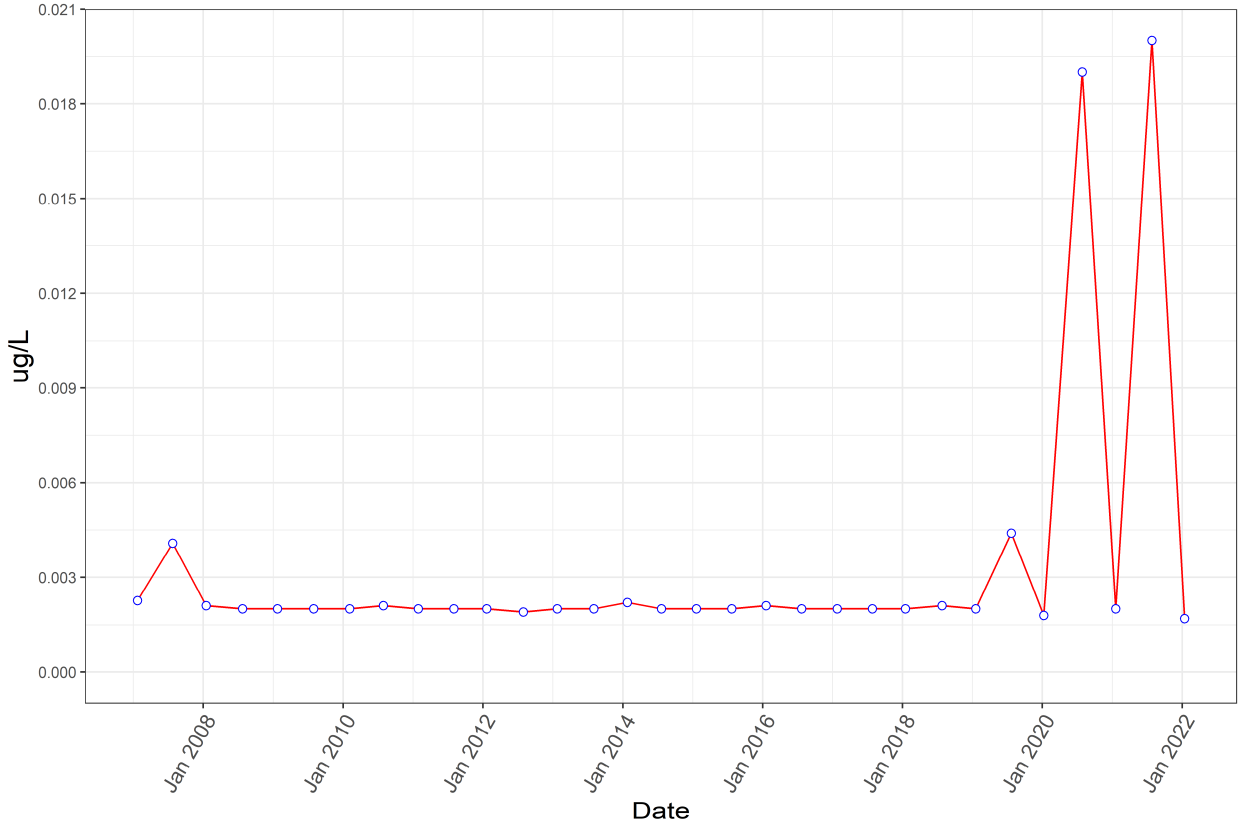


Perfluorobutanoic Acid

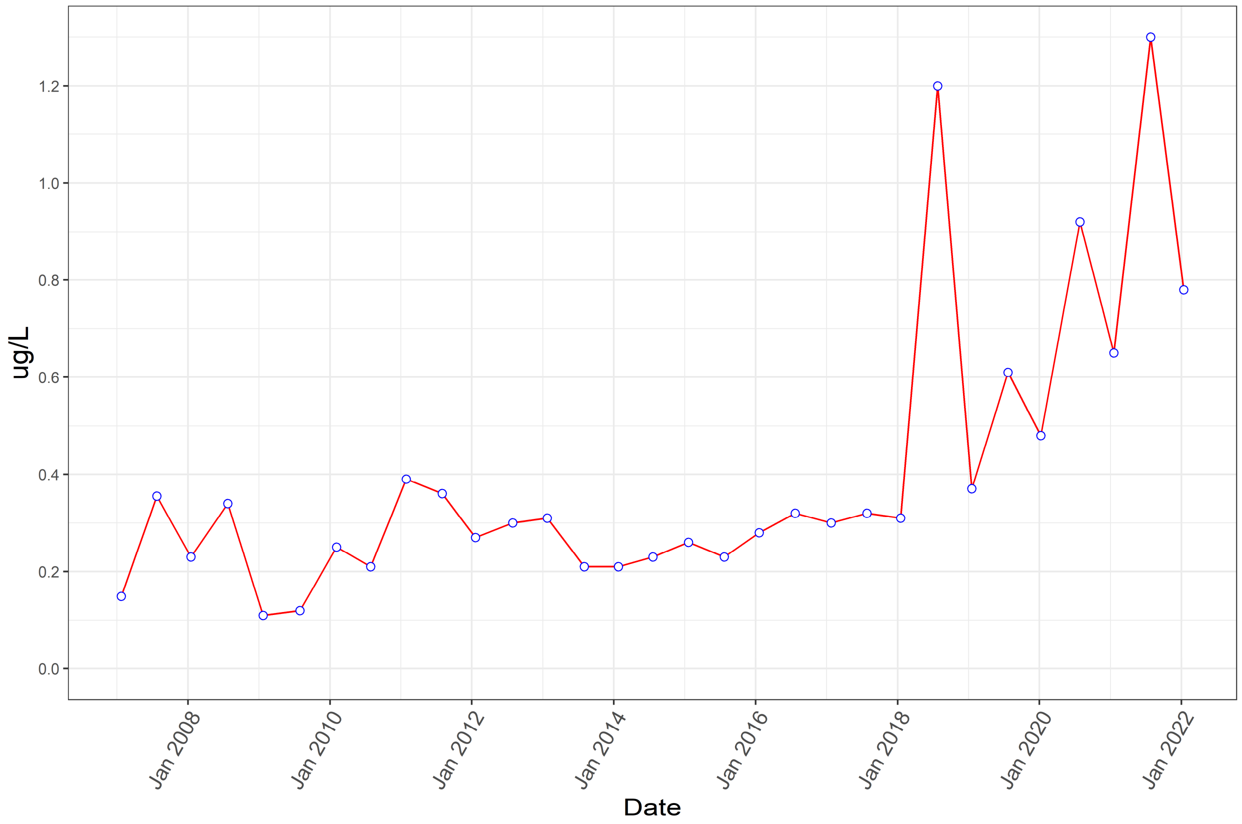


Perfluoroheptanoic Acid

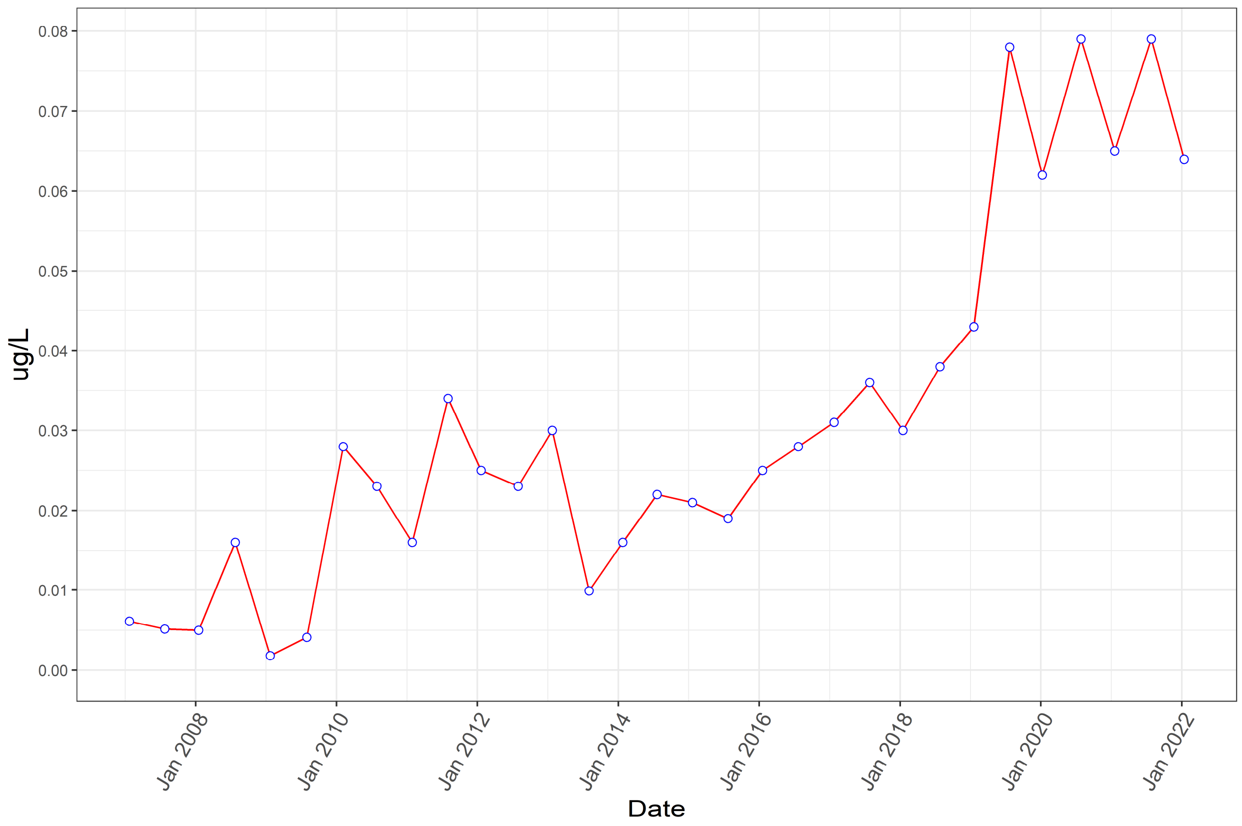
Perfluorohexane Sulfonic Acid



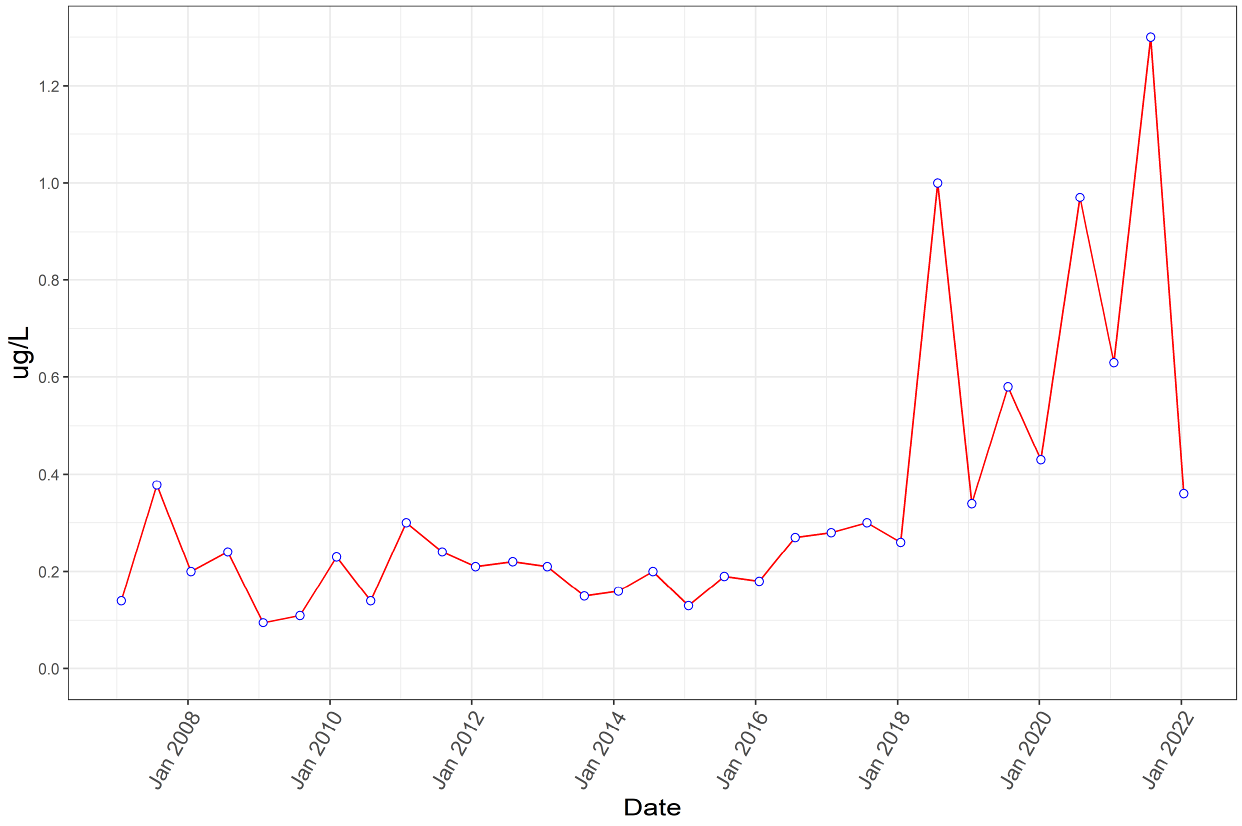
Perfluorohexanoic Acid

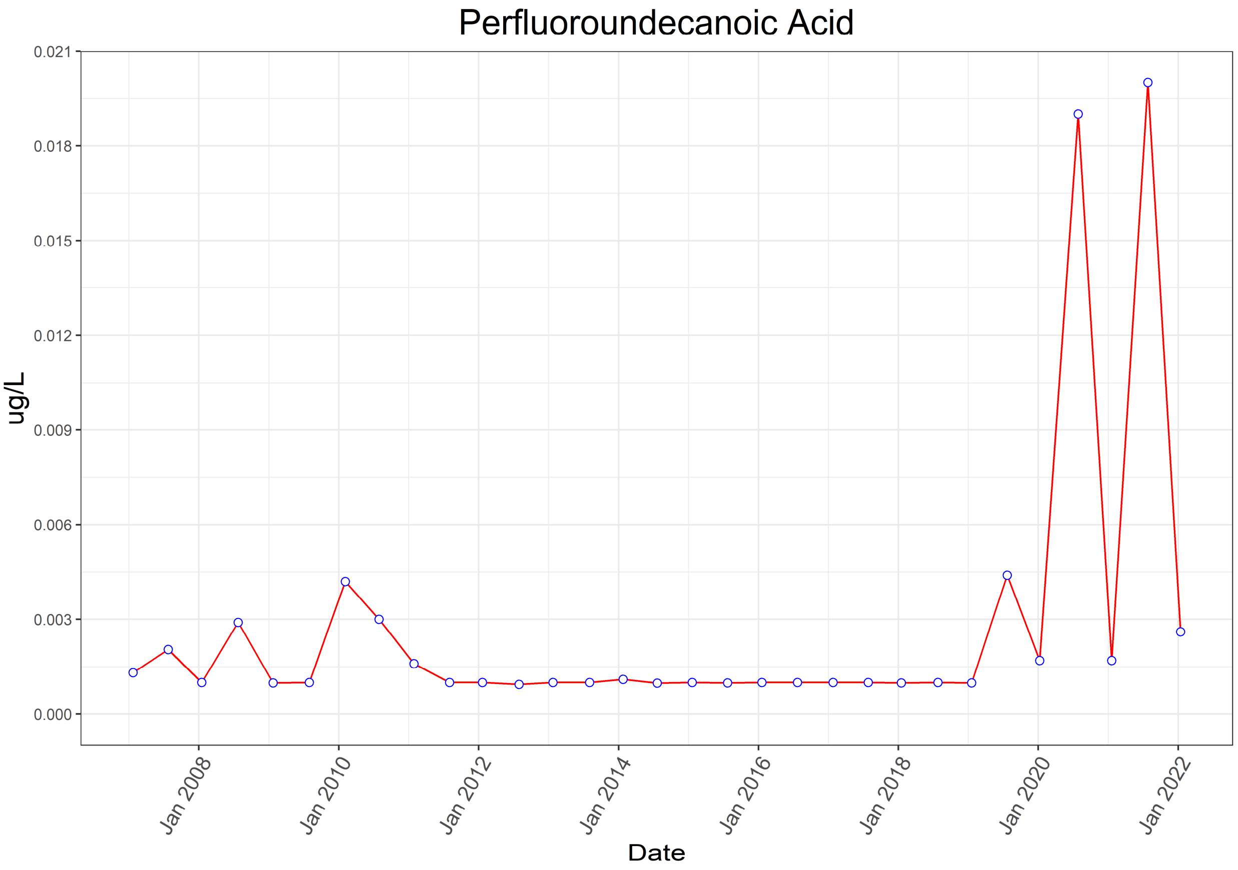


Perfluorononanoic Acid

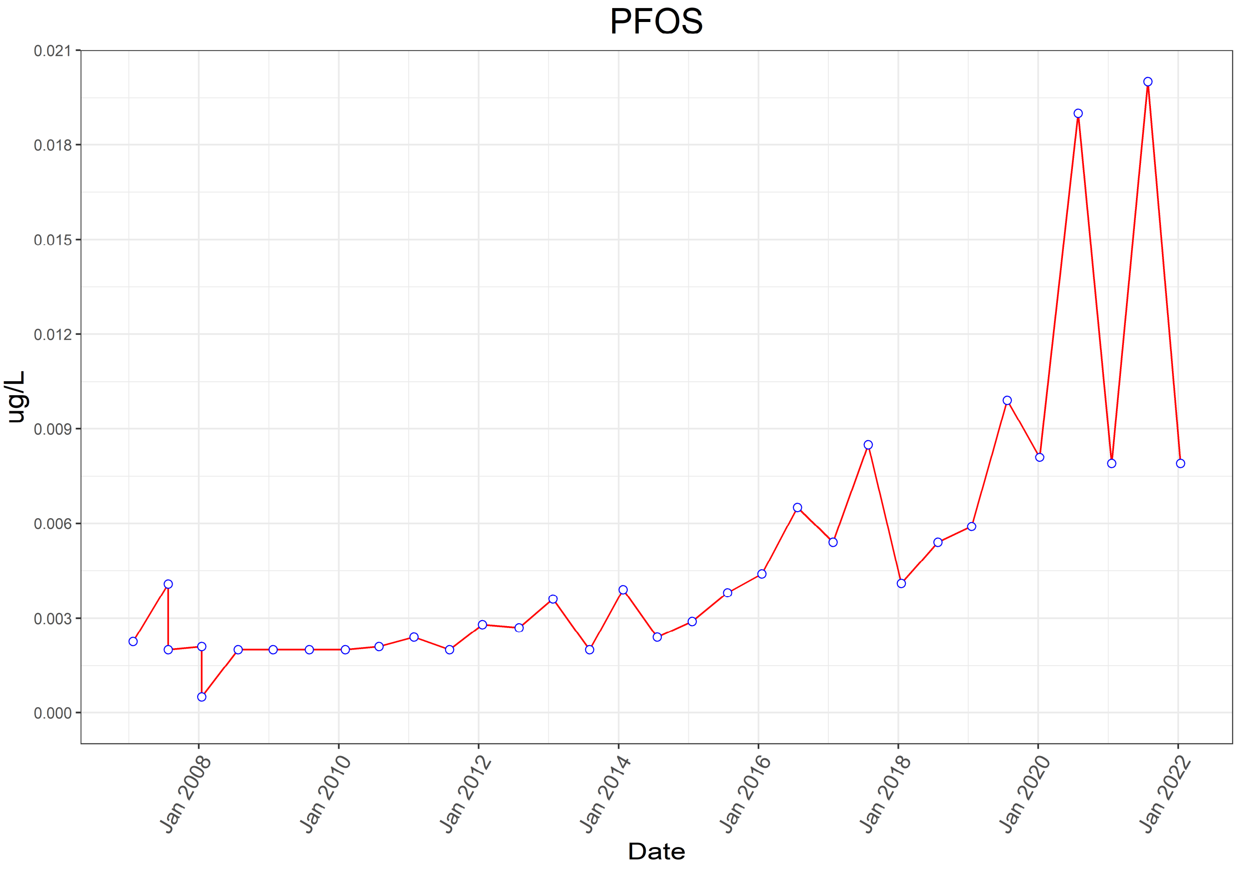


Perfluoropentanoic Acid





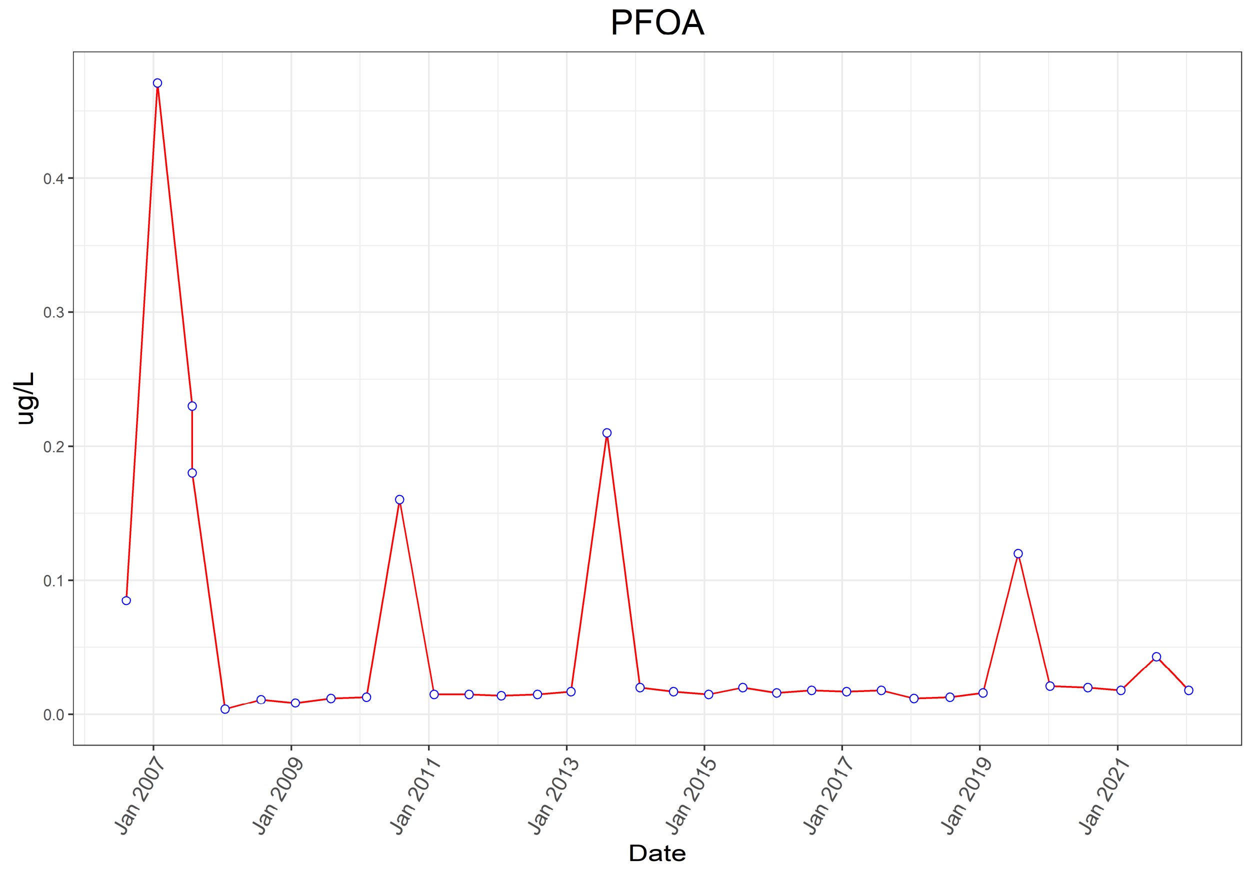
Perfluoroundecanoic Acid

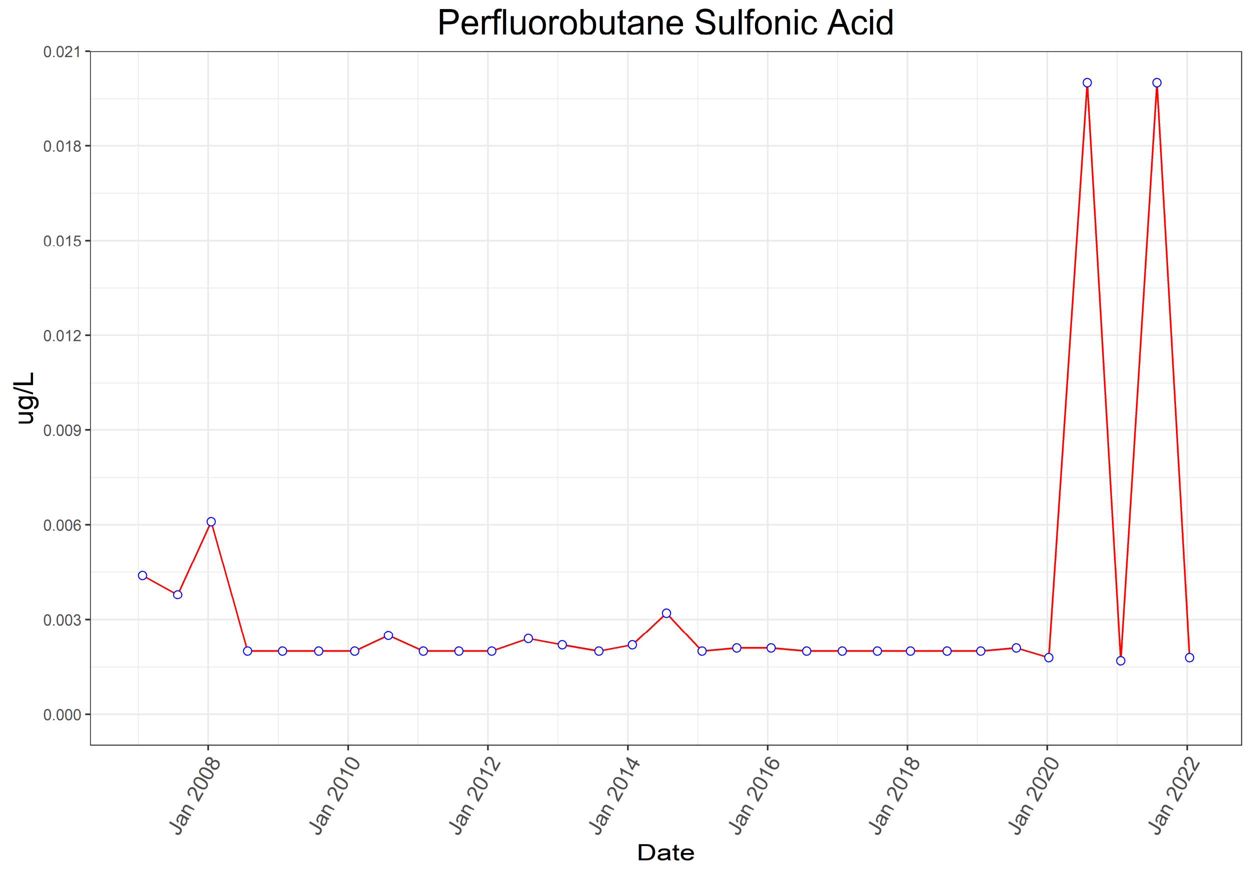


PFOS

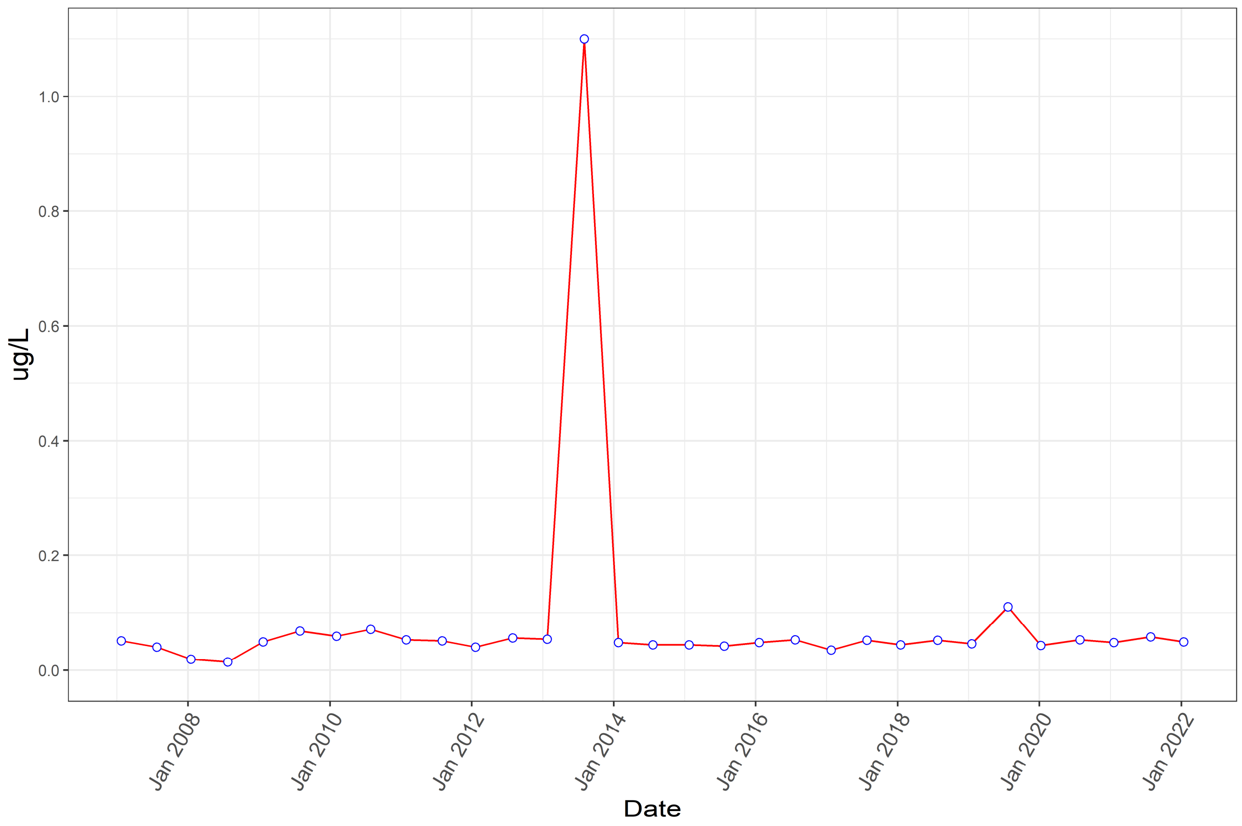
PFAS Monitoring Program (Program 9)

Well Name: R10-M01E

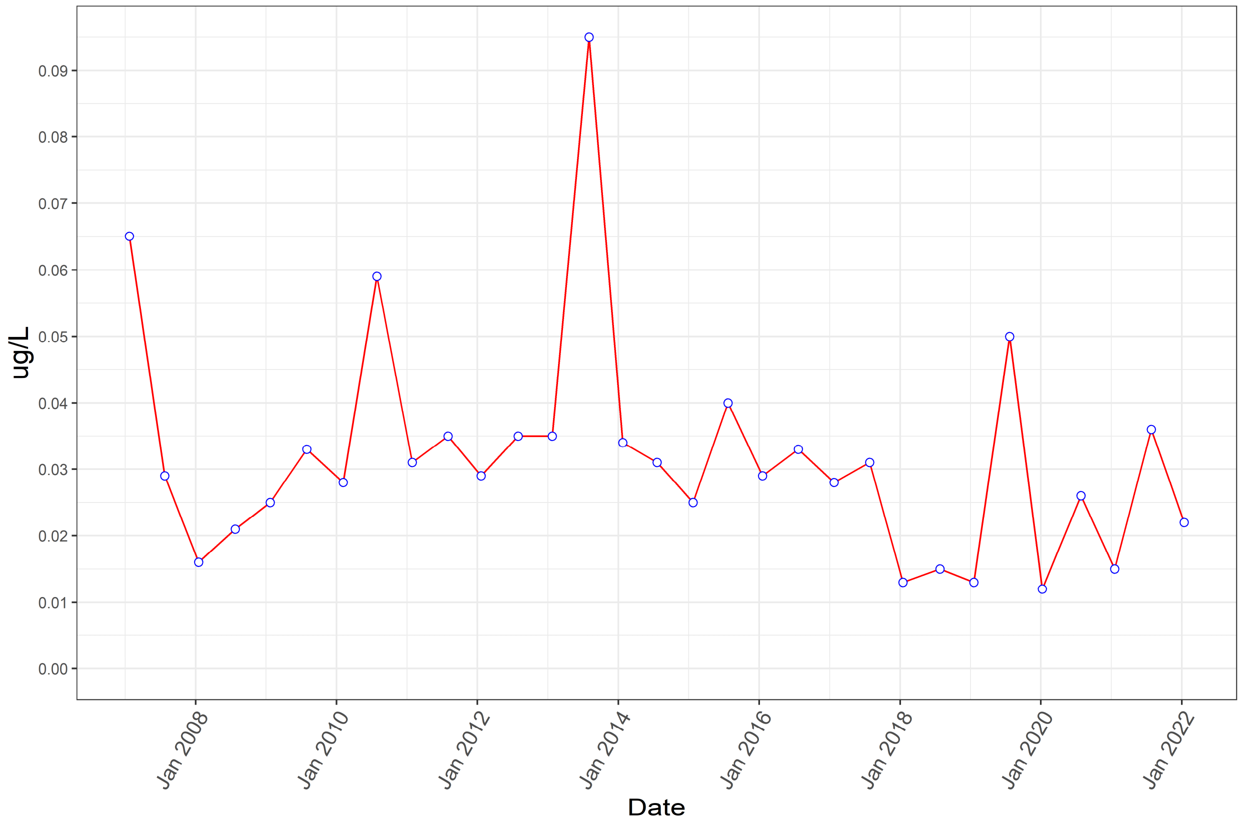


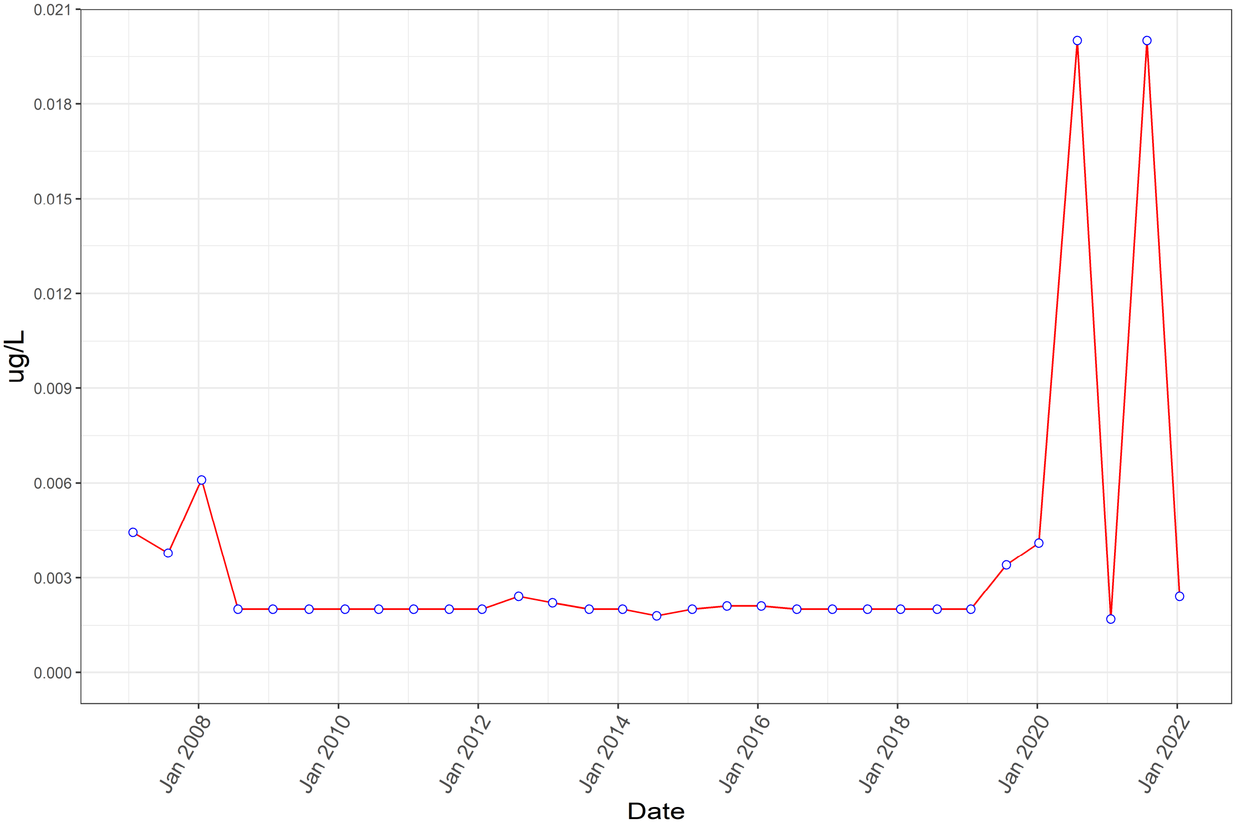


Perfluorobutanoic Acid

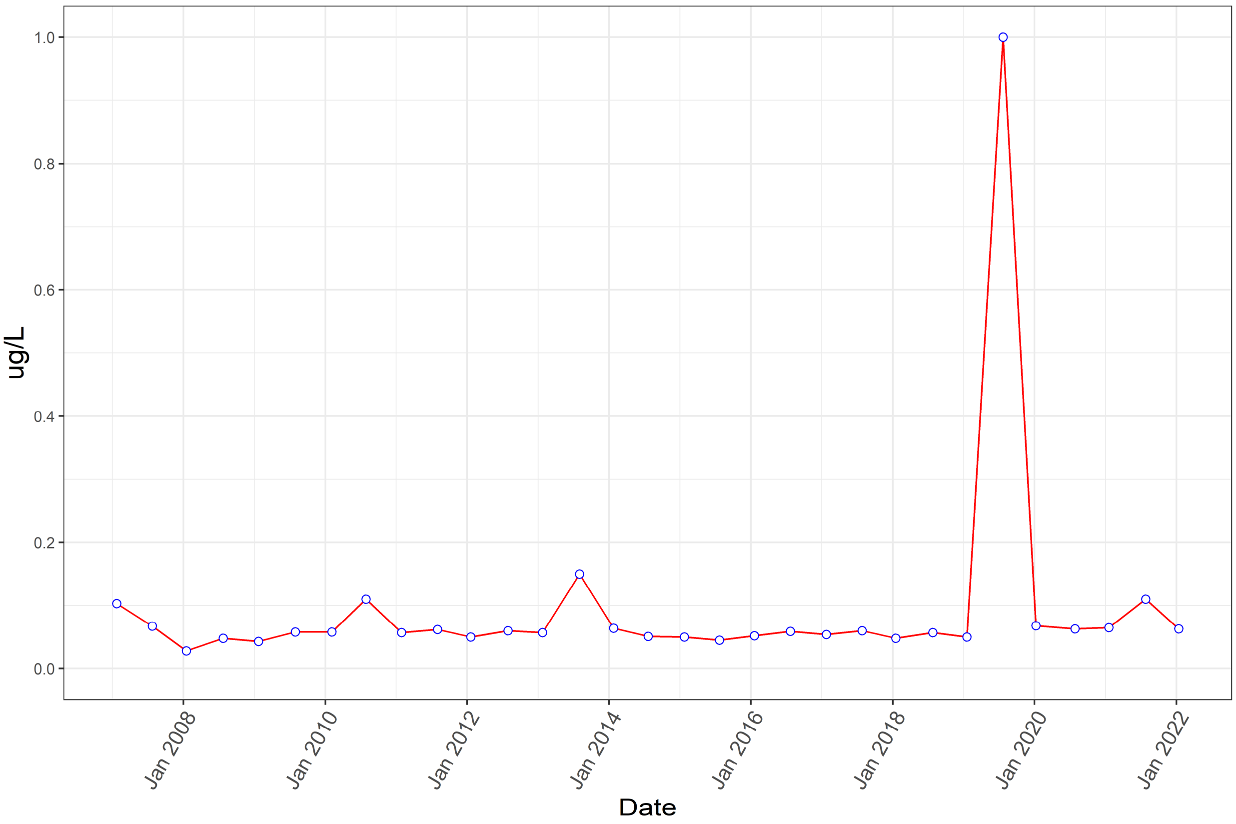


Perfluoroheptanoic Acid

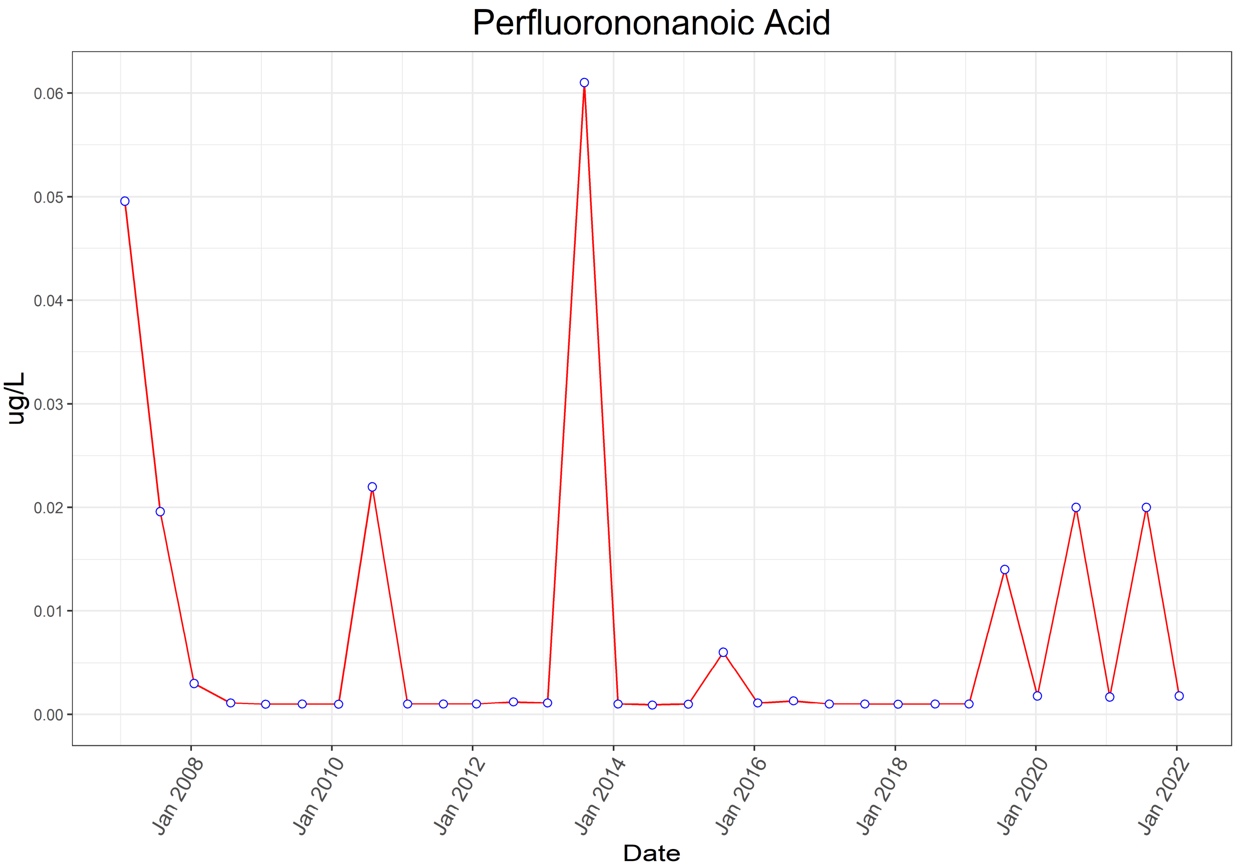


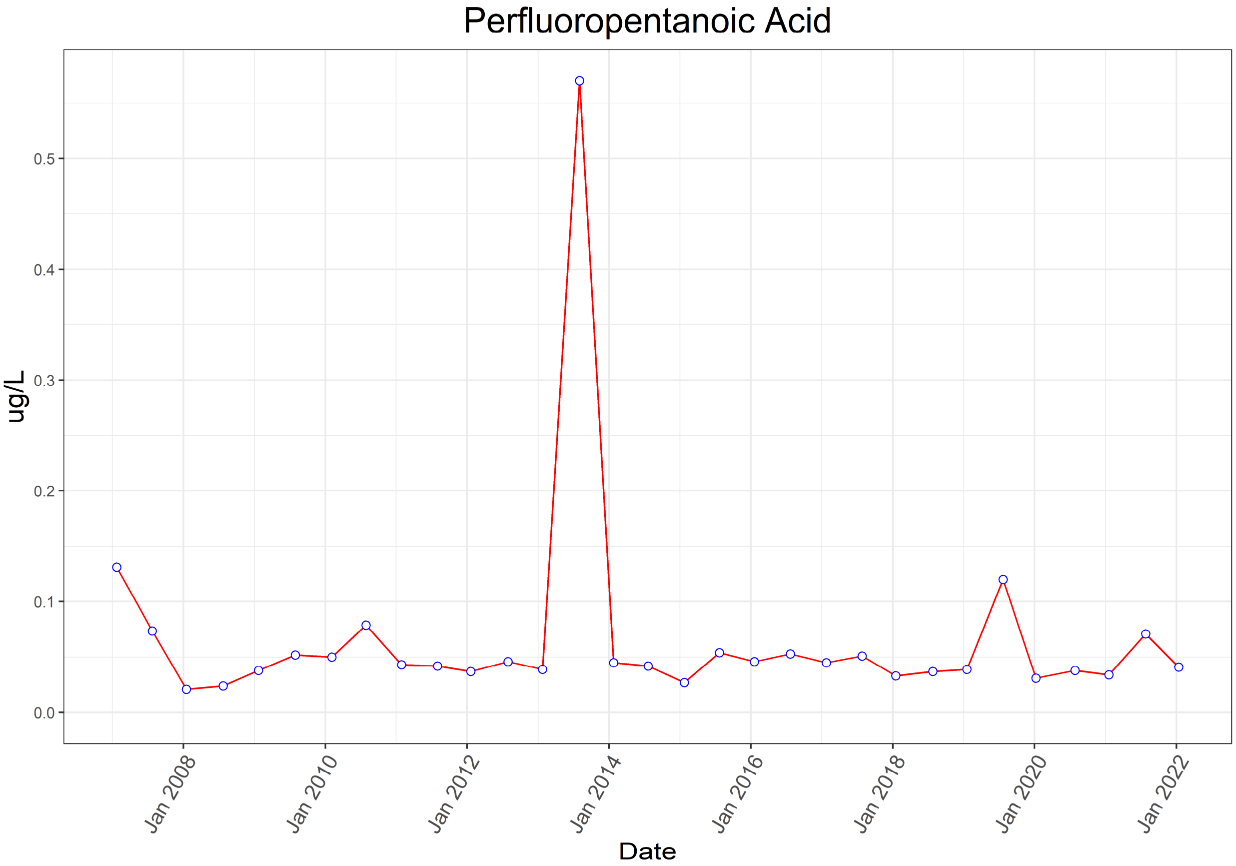


Perfluorohexane Sulfonic Acid

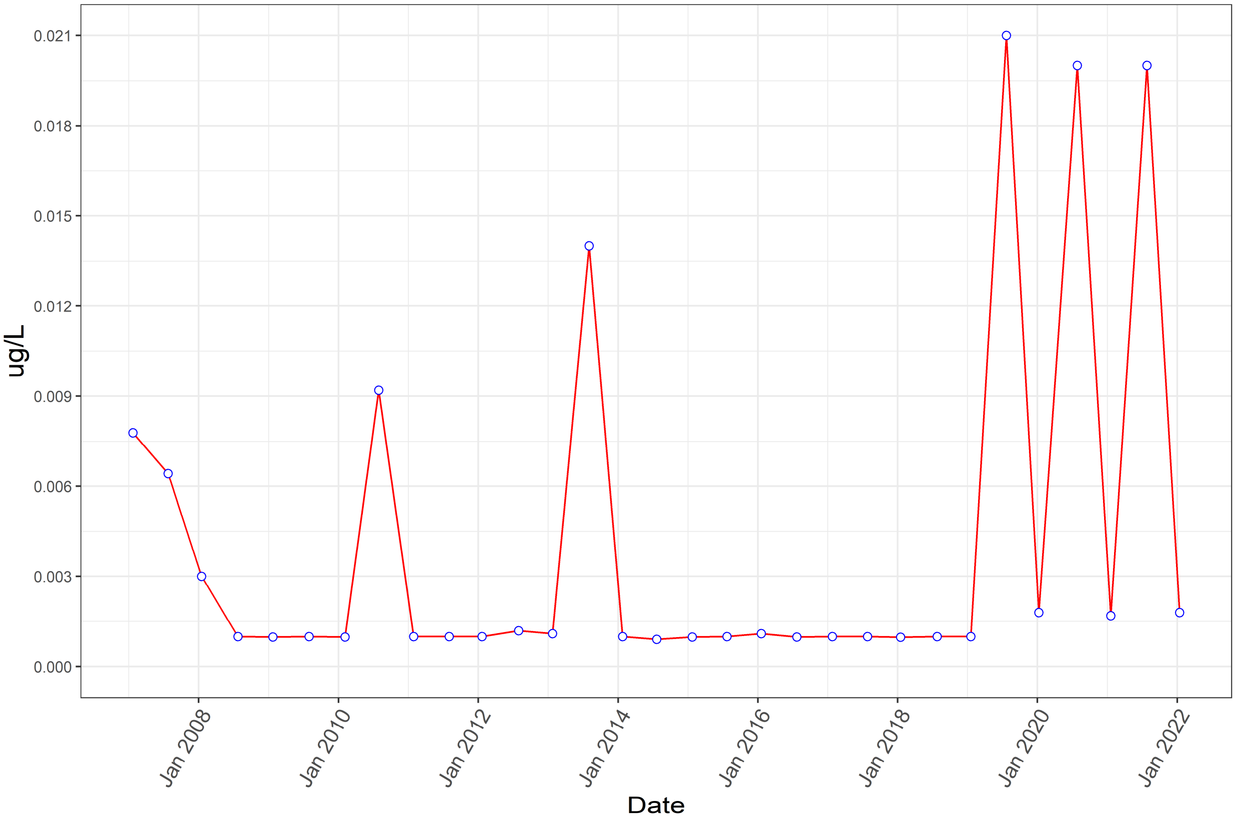


Perfluorohexanoic Acid

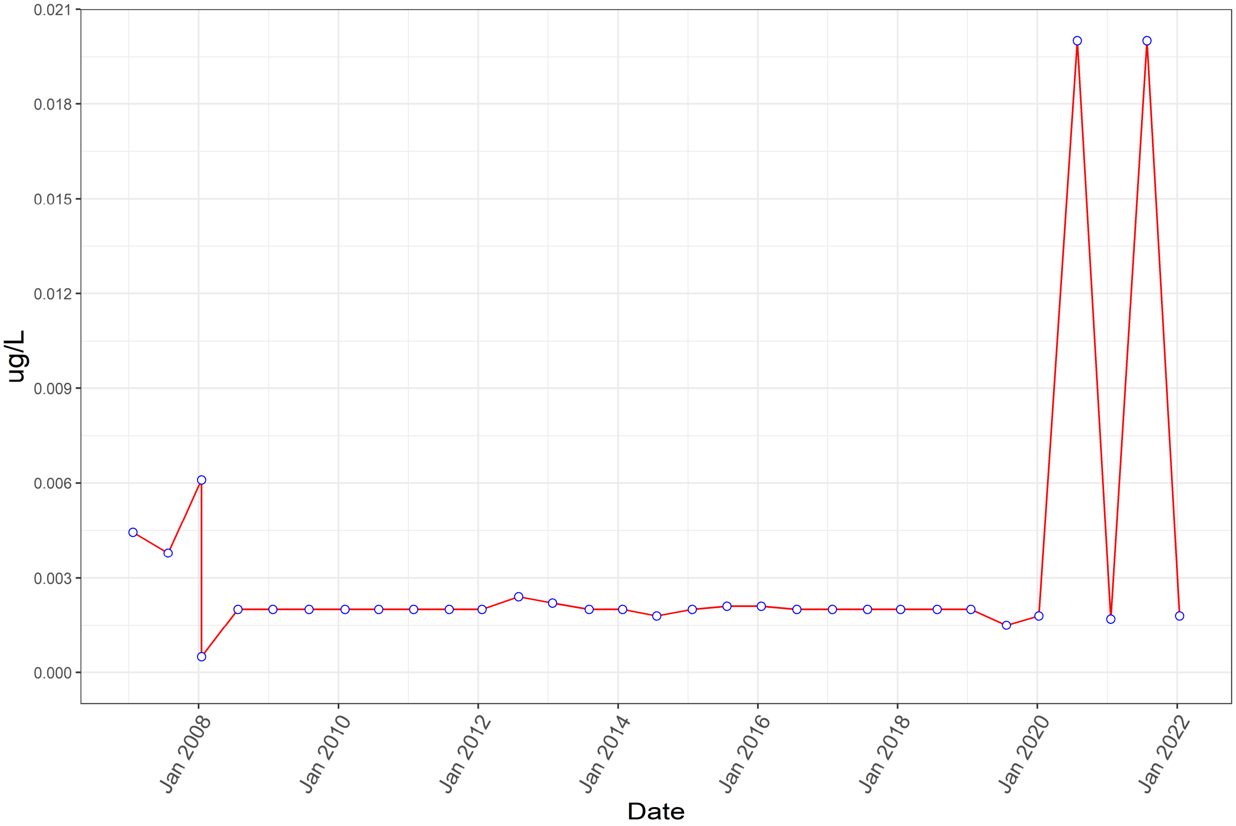

Perfluorononanoic Acid
ug/L
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

Perfluoroundecanoic Acid

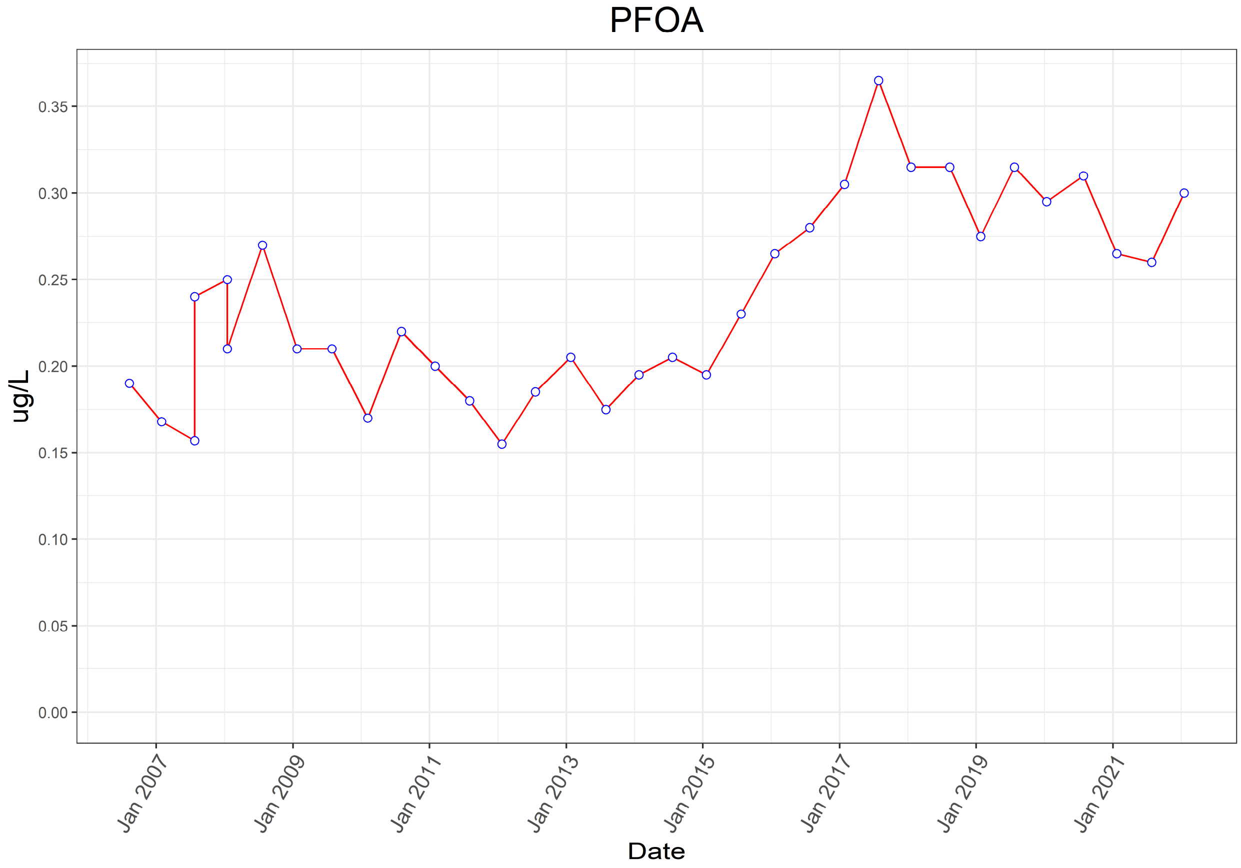


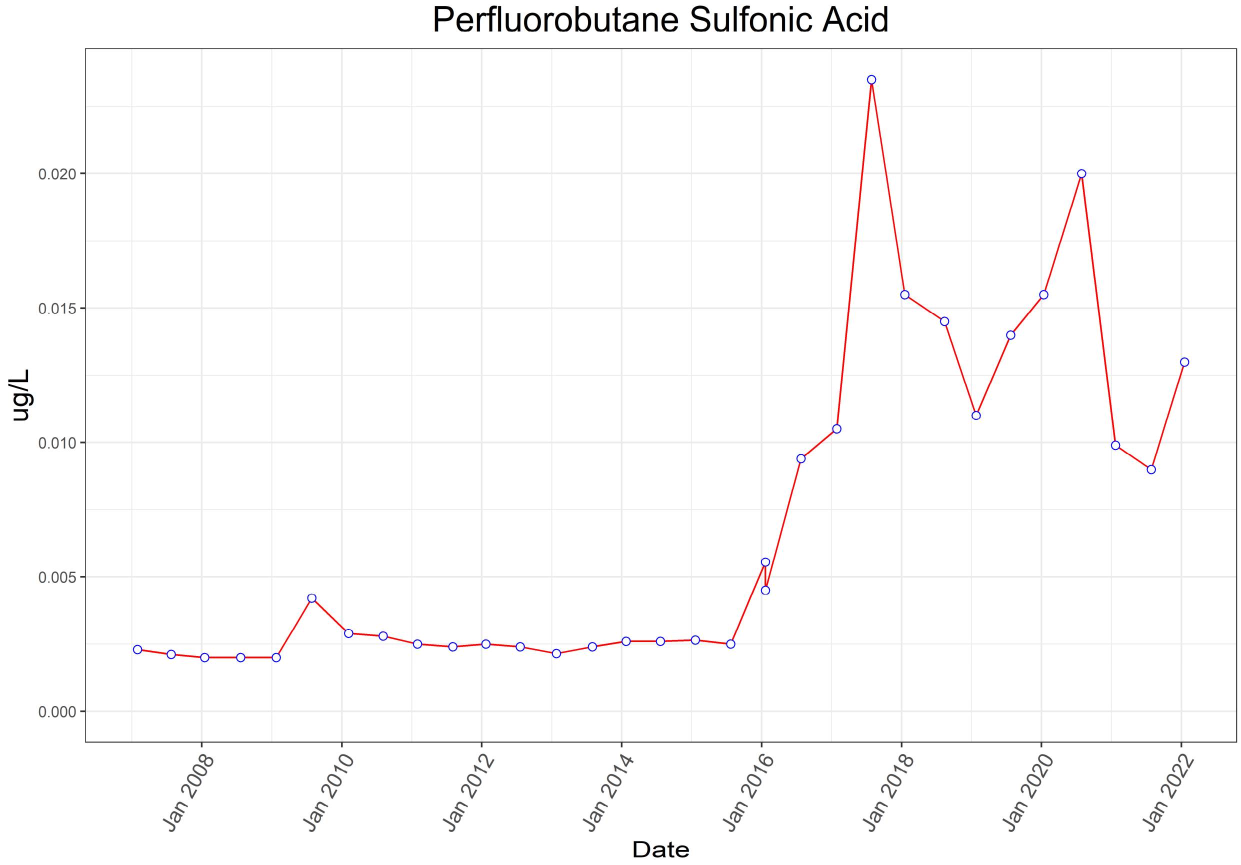
PFOS

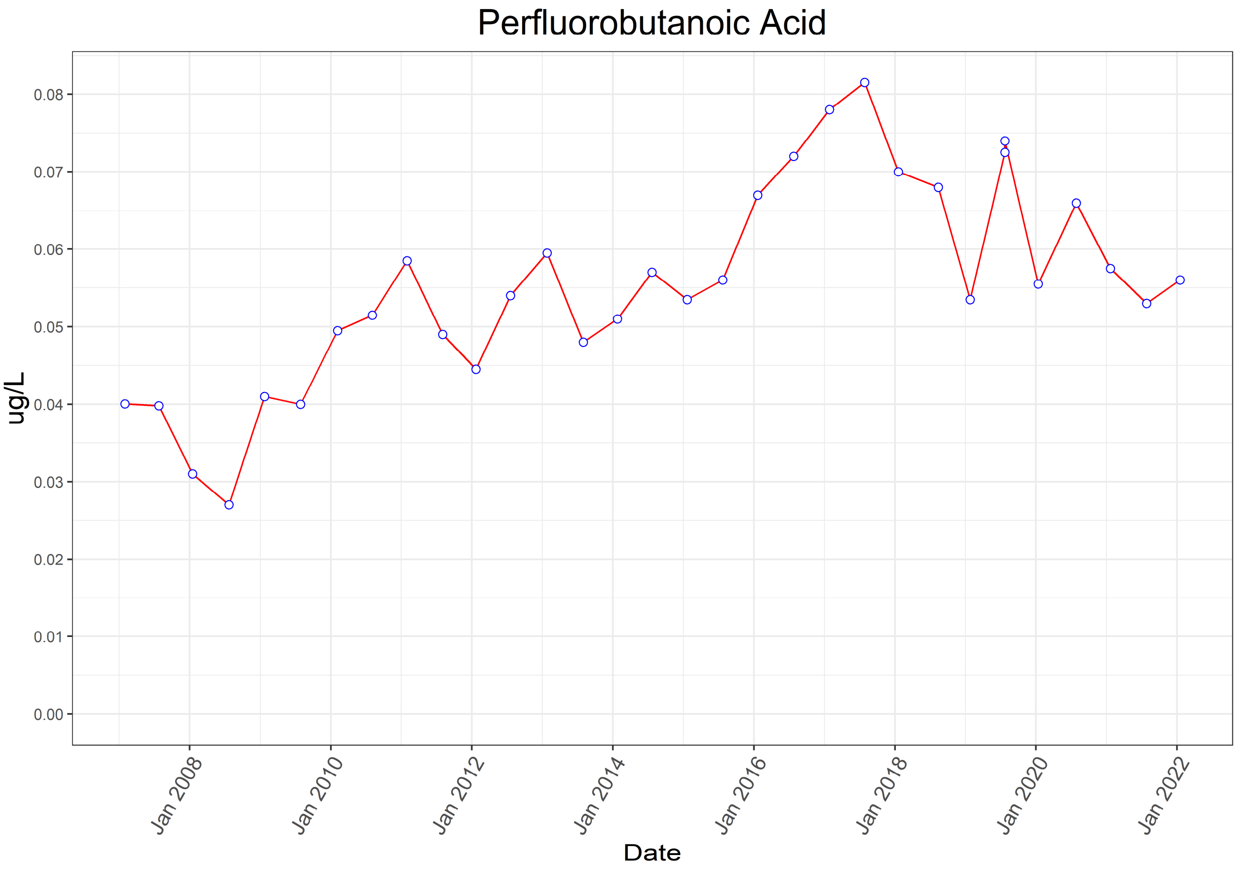


PFAS Monitoring Program (Program 9)

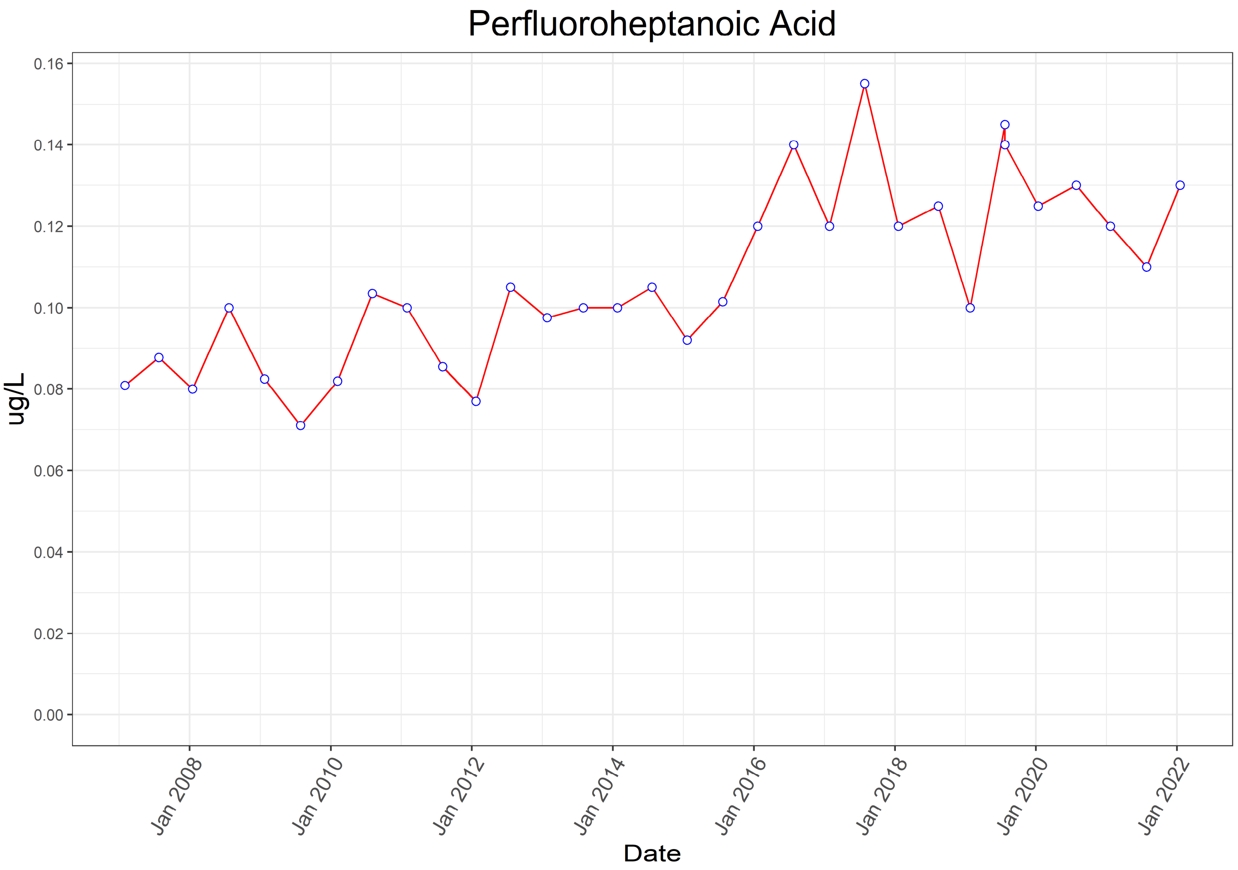
Well Name: Z28-M01B



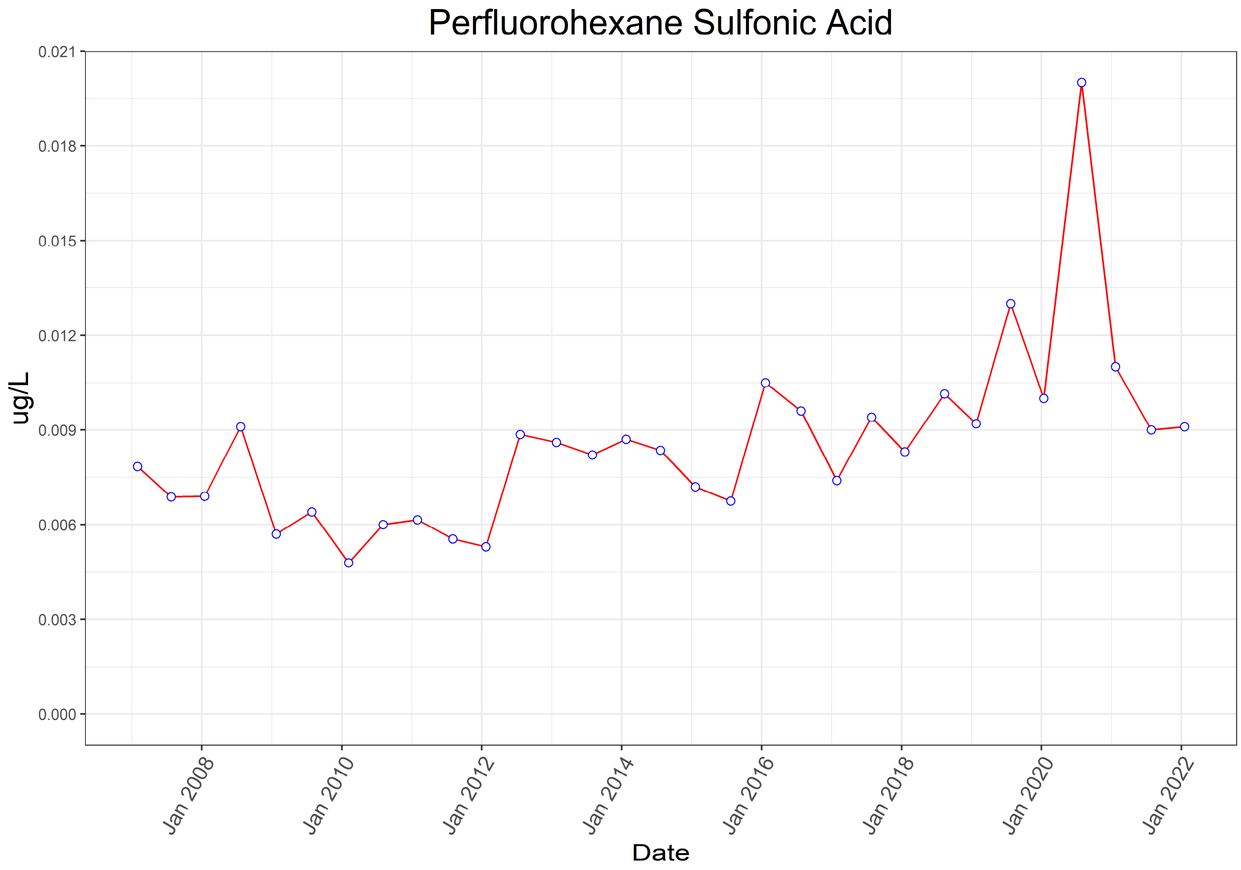




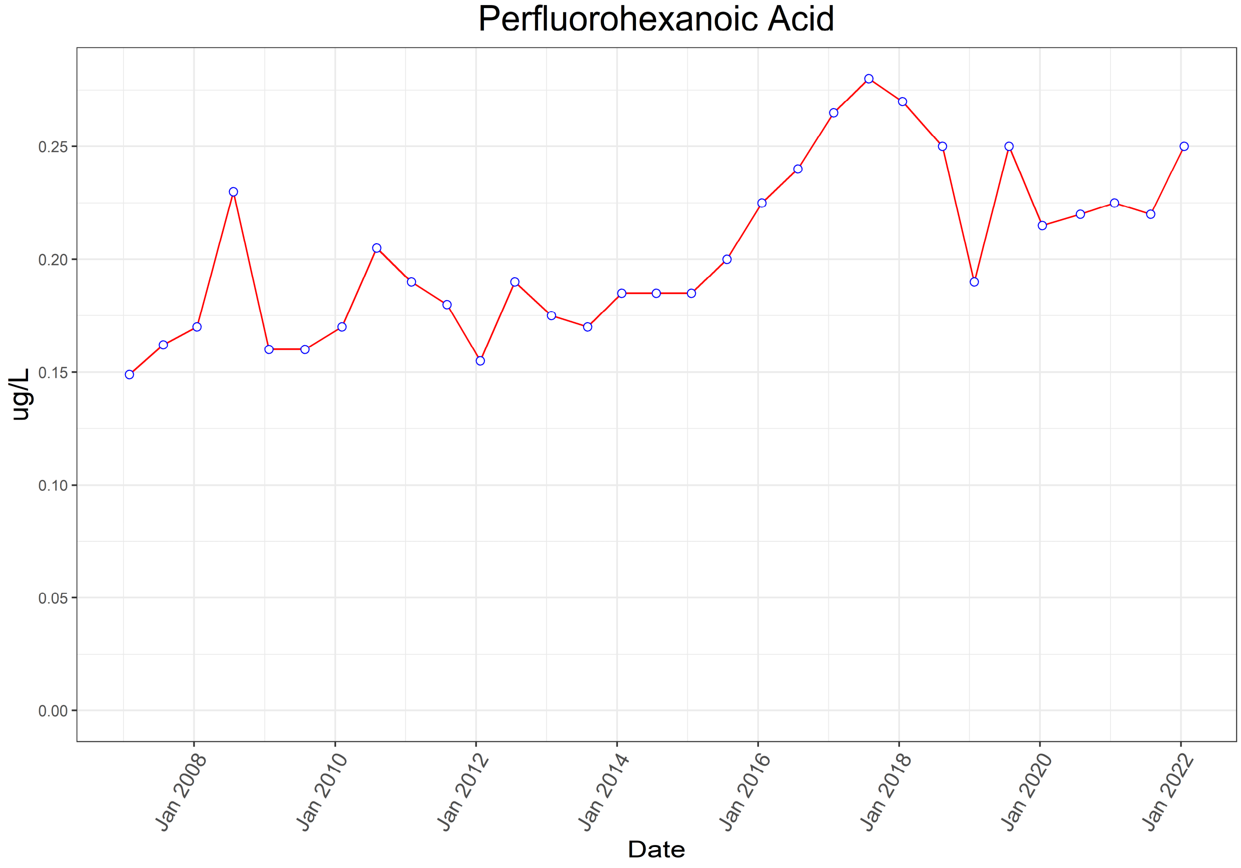
Perfluorobutanoic Acid



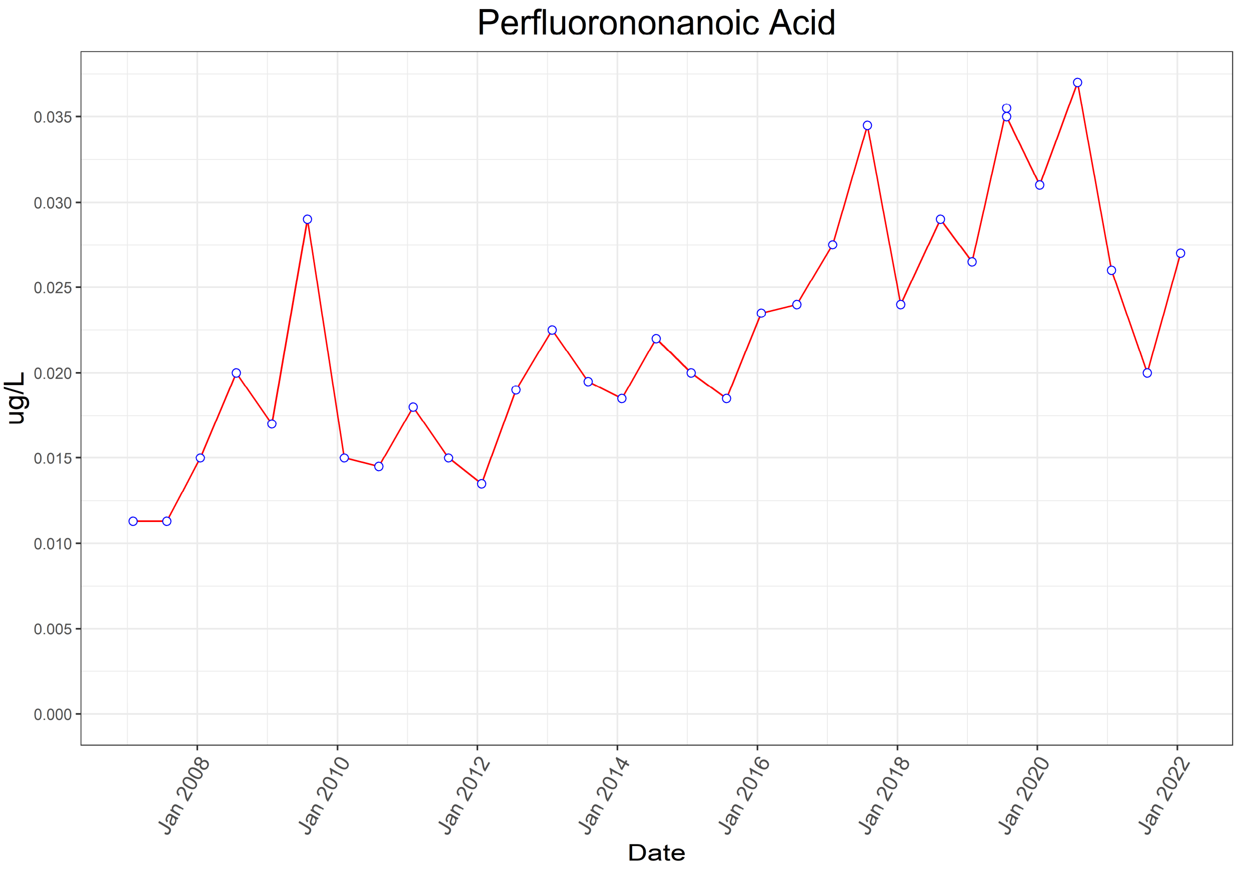
Perfluoroheptanoic Acid

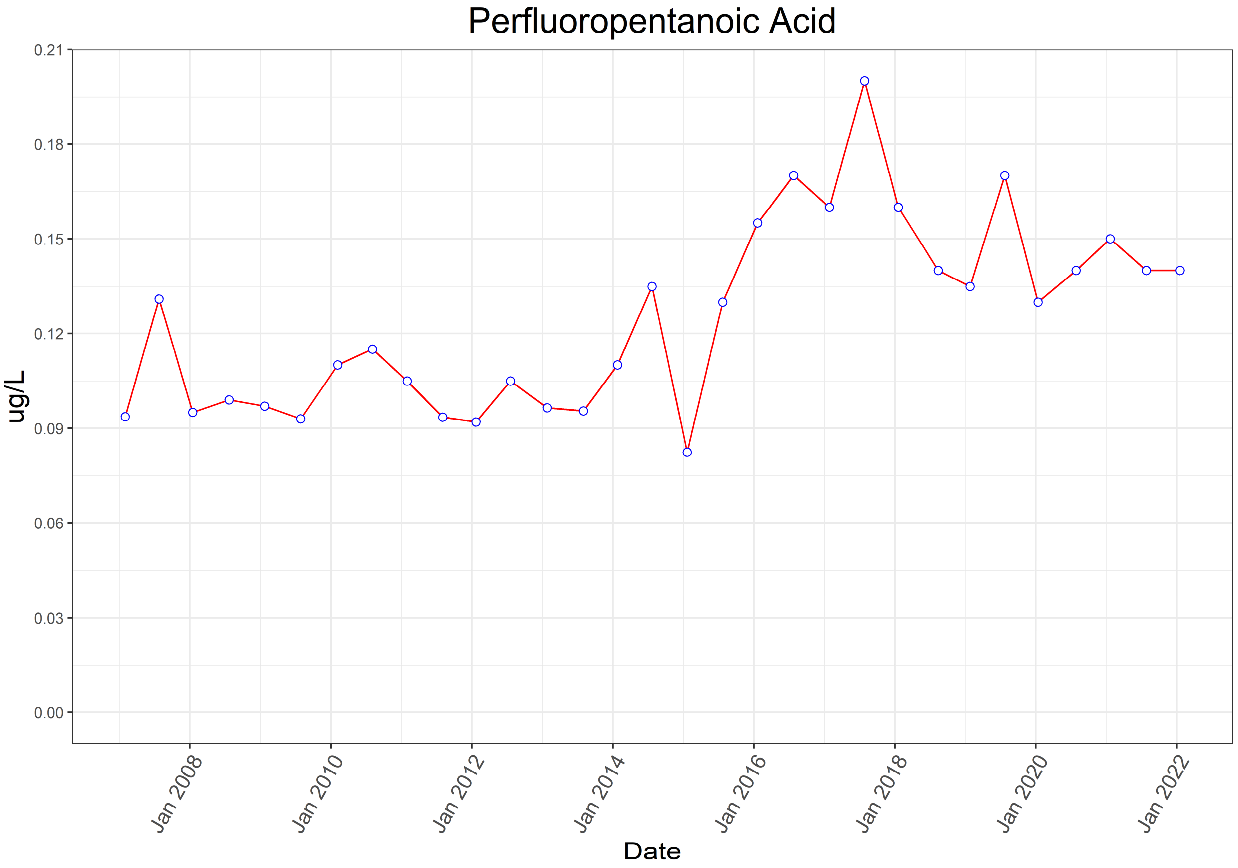


Perfluorohexane Sulfonic Acid

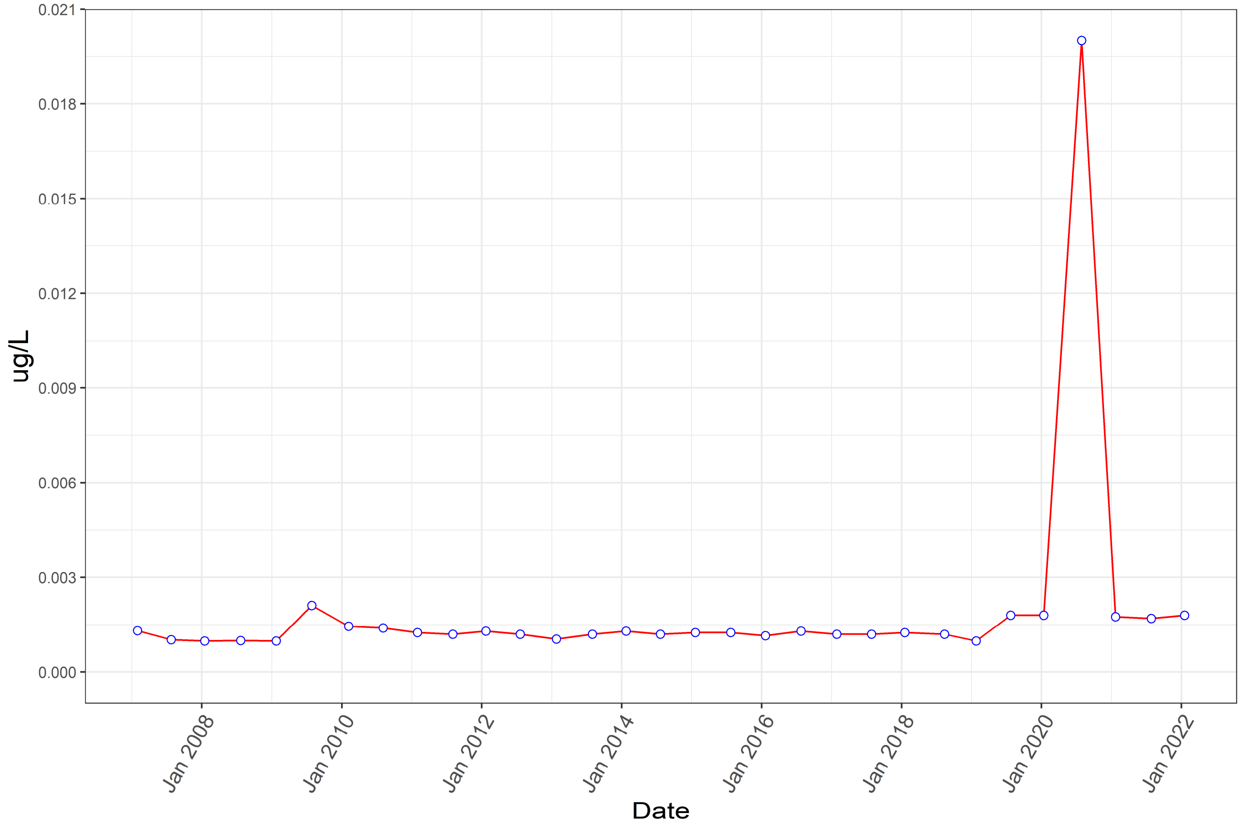


Perfluorohexanoic Acid

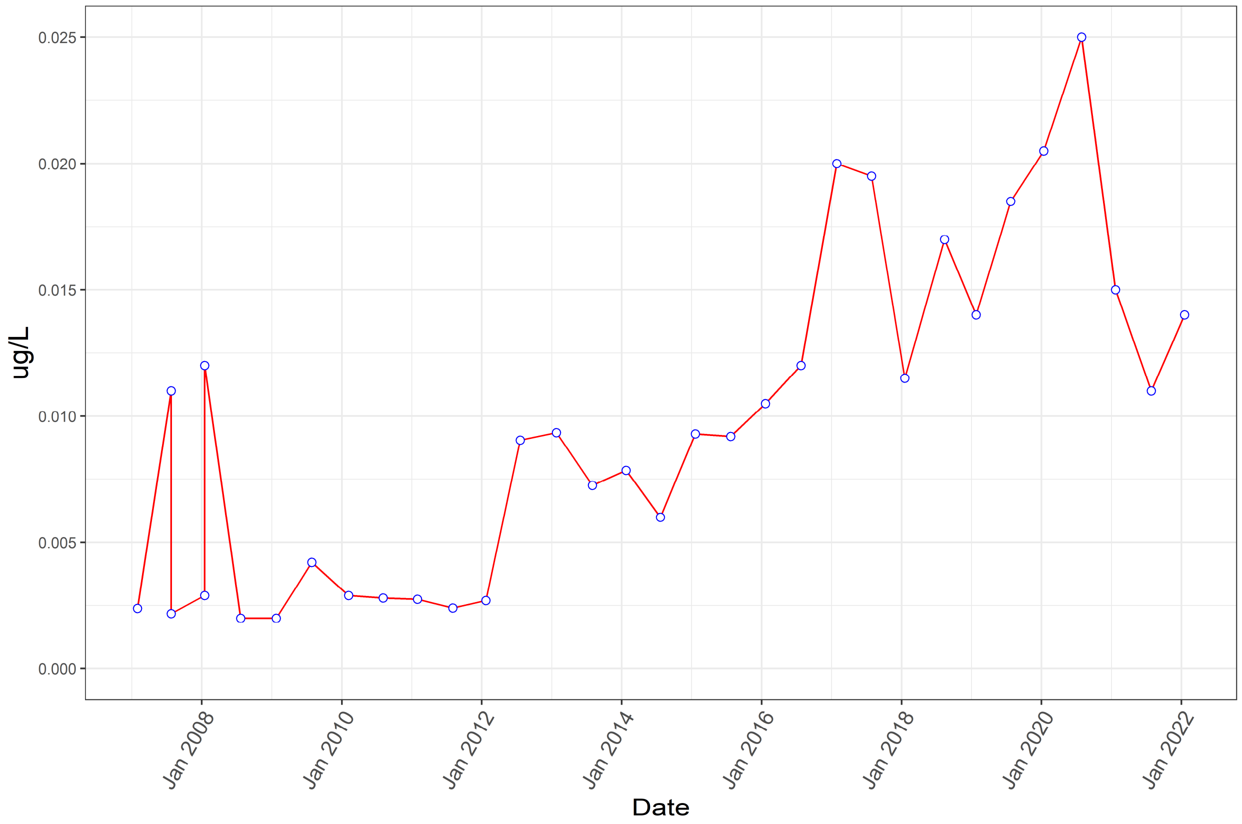

Perfluorononanoic Acid
ug/L
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date


Perfluoropentanoic Acid
ug/L
0.21
0.18
0.15
0.12
0.09
0.06
0.03
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date

Perfluoroundecanoic Acid

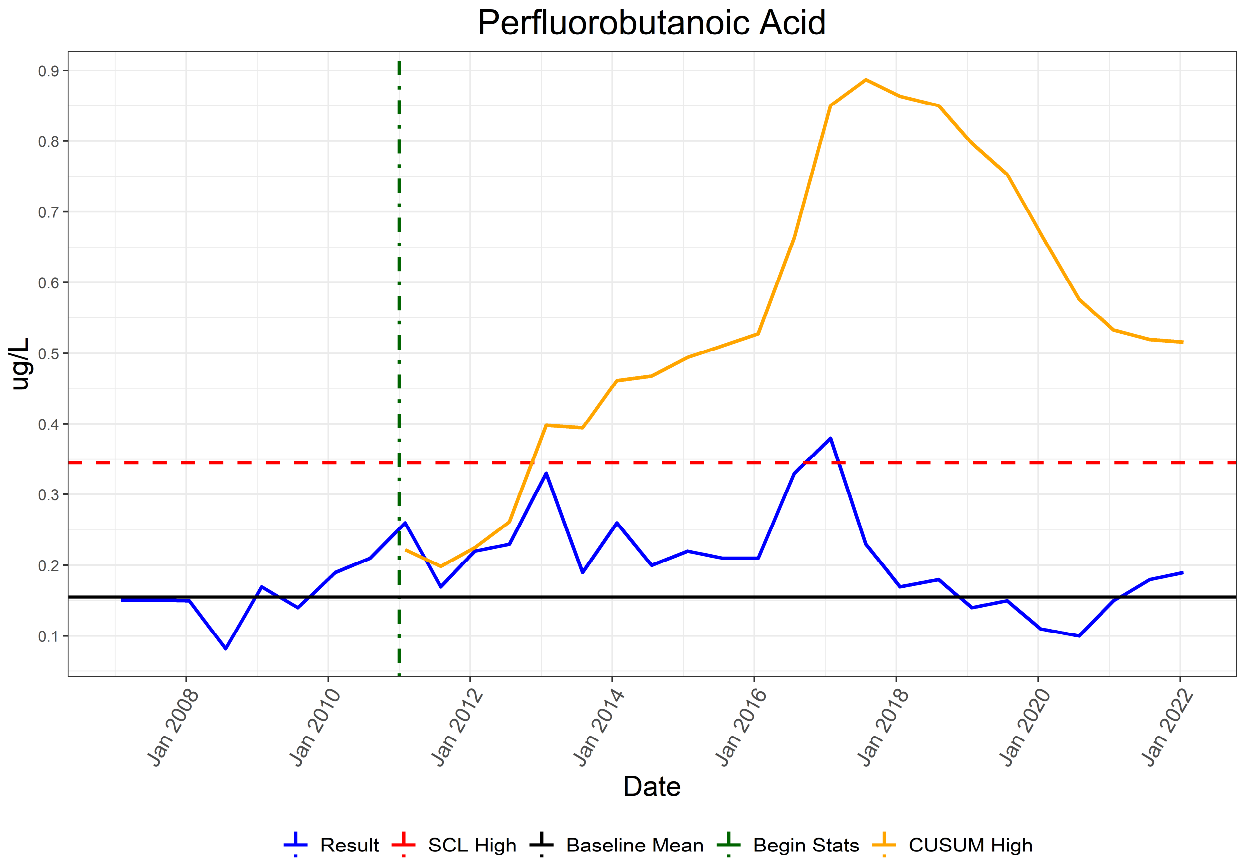


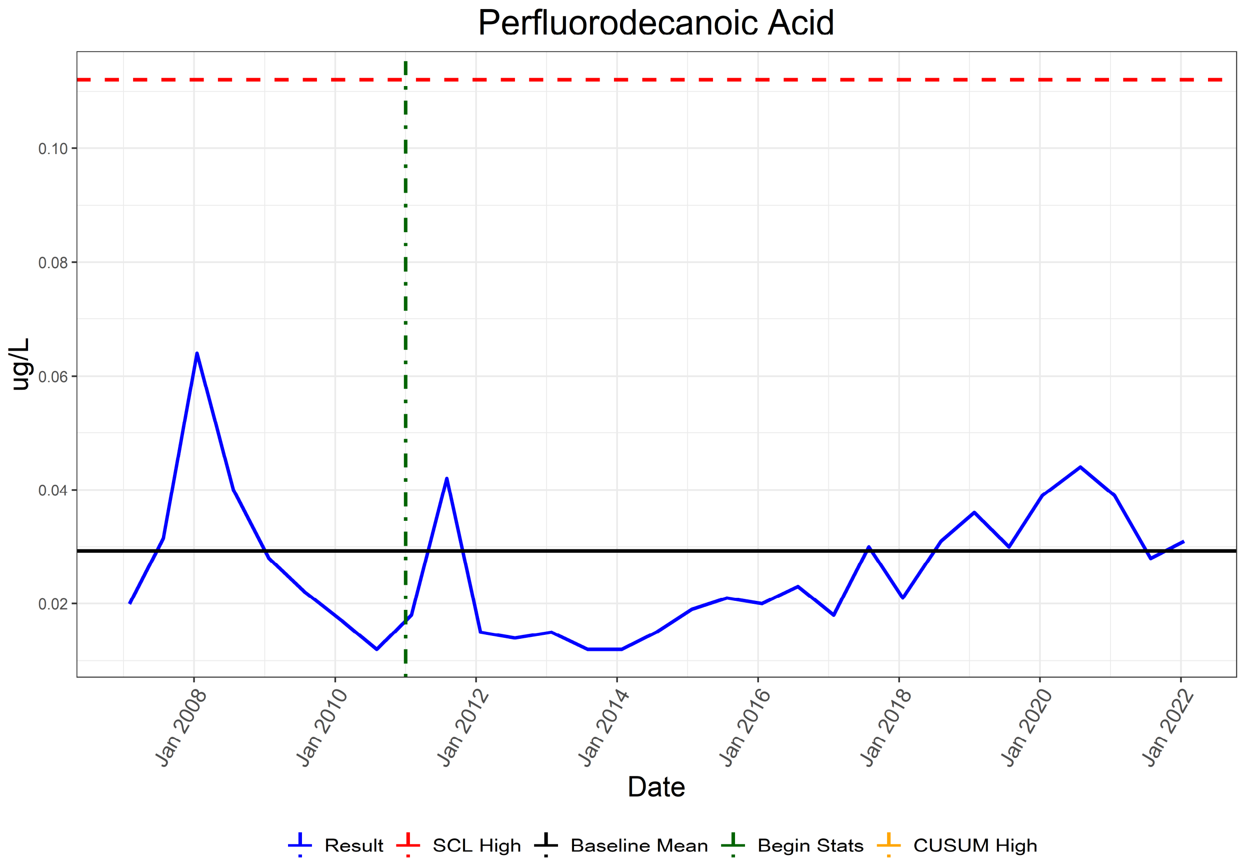
PFOS

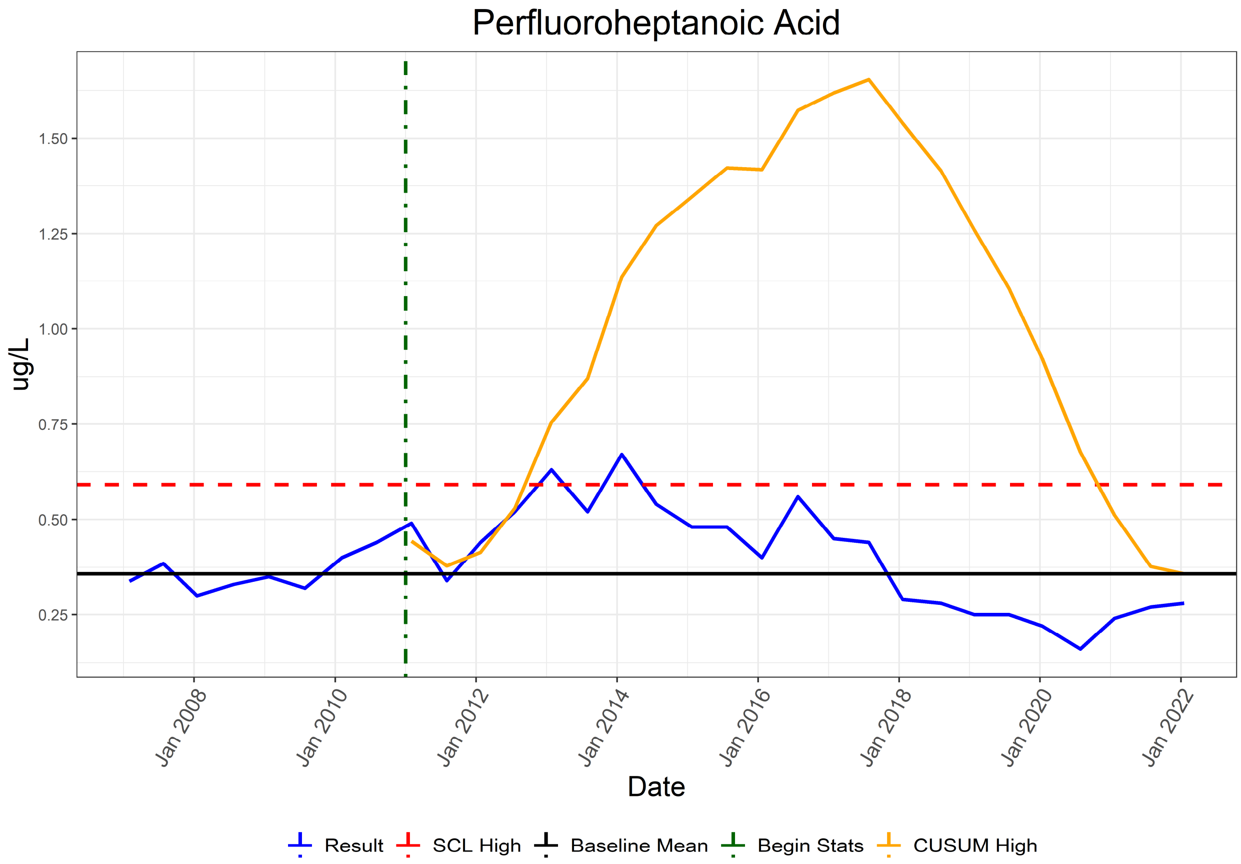


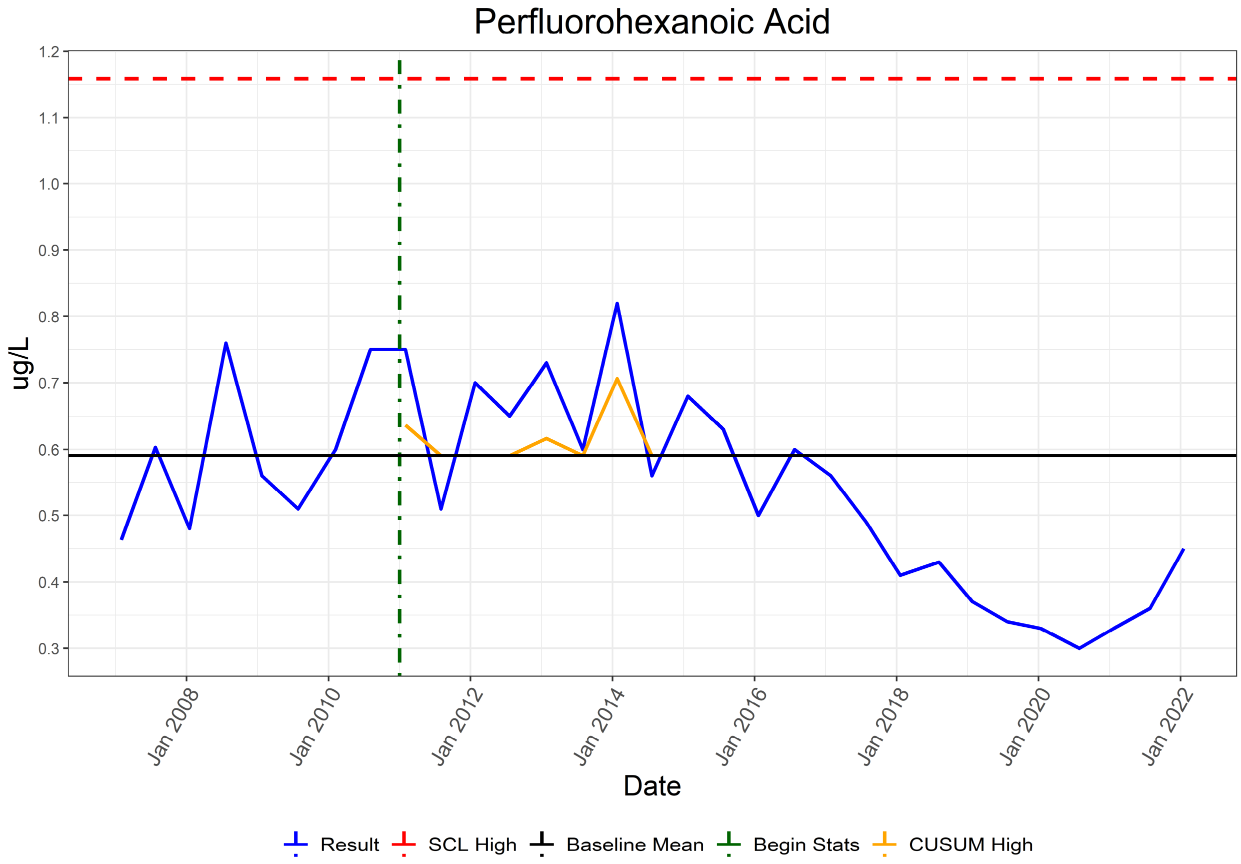
PFAS Monitoring Program (Program 9)

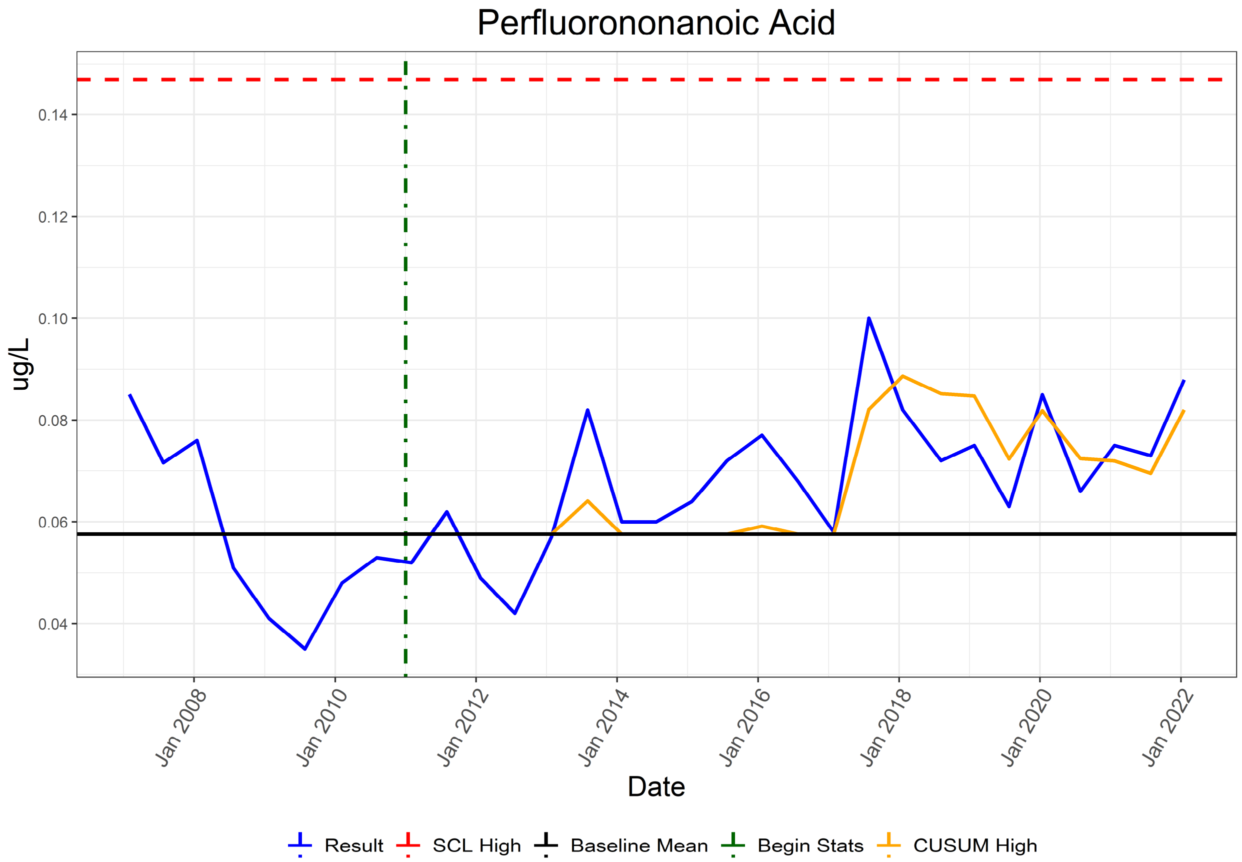
Well Name: AA22-M01B



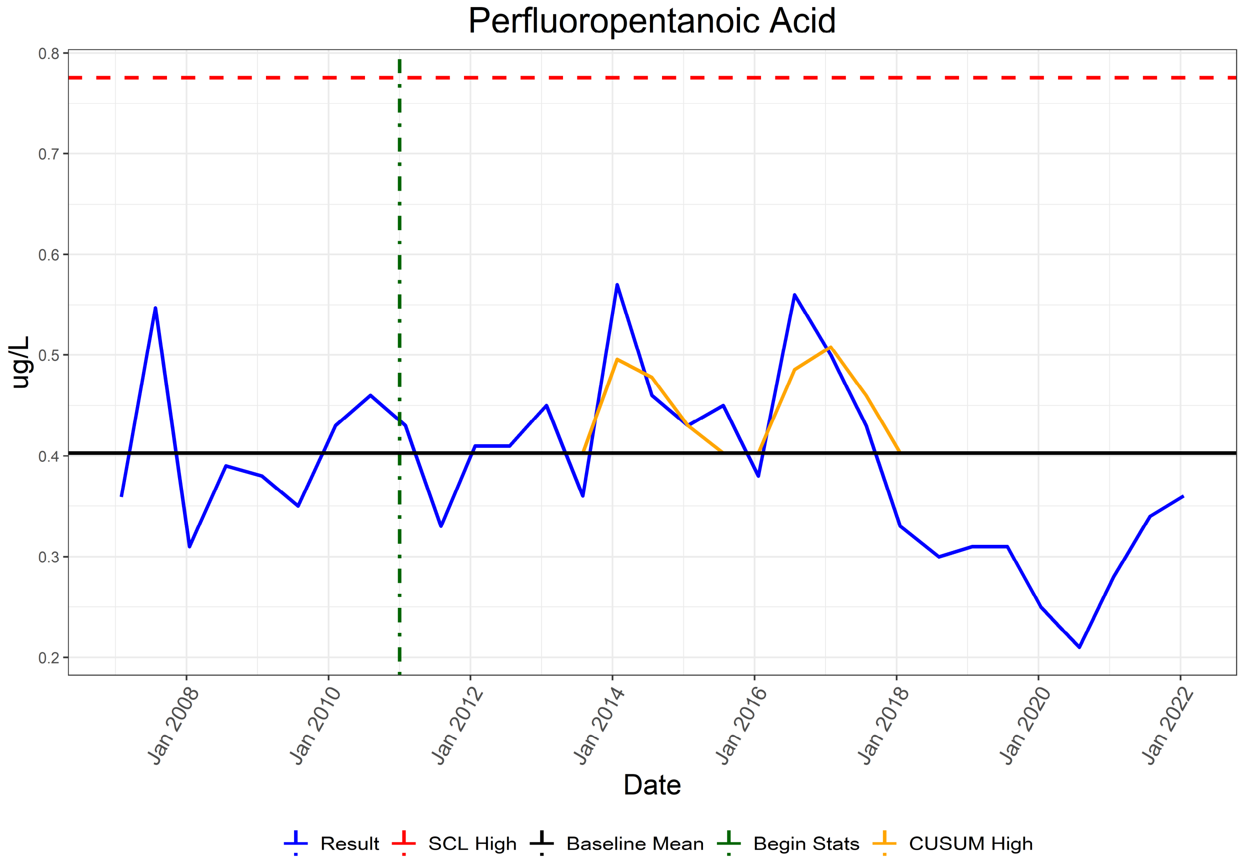



Perfluoroheptanoic Acid
ug/L
1.50
1.25
1.00
0.75
0.50
0.25
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

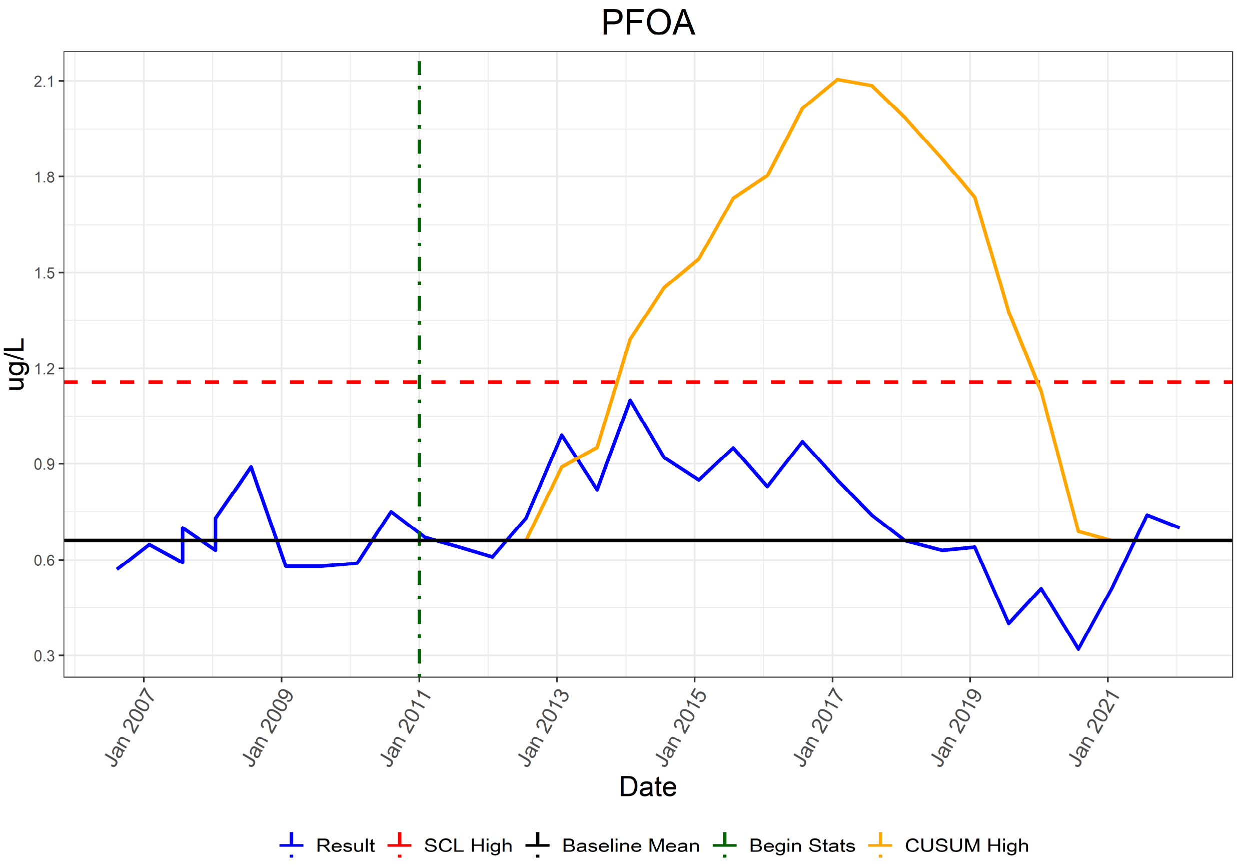

Perfluorohexanoic Acid
ug/L
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High



Perfluorononanoic Acid
ug/L
0.14
0.12
0.10
0.08
0.06
0.04
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

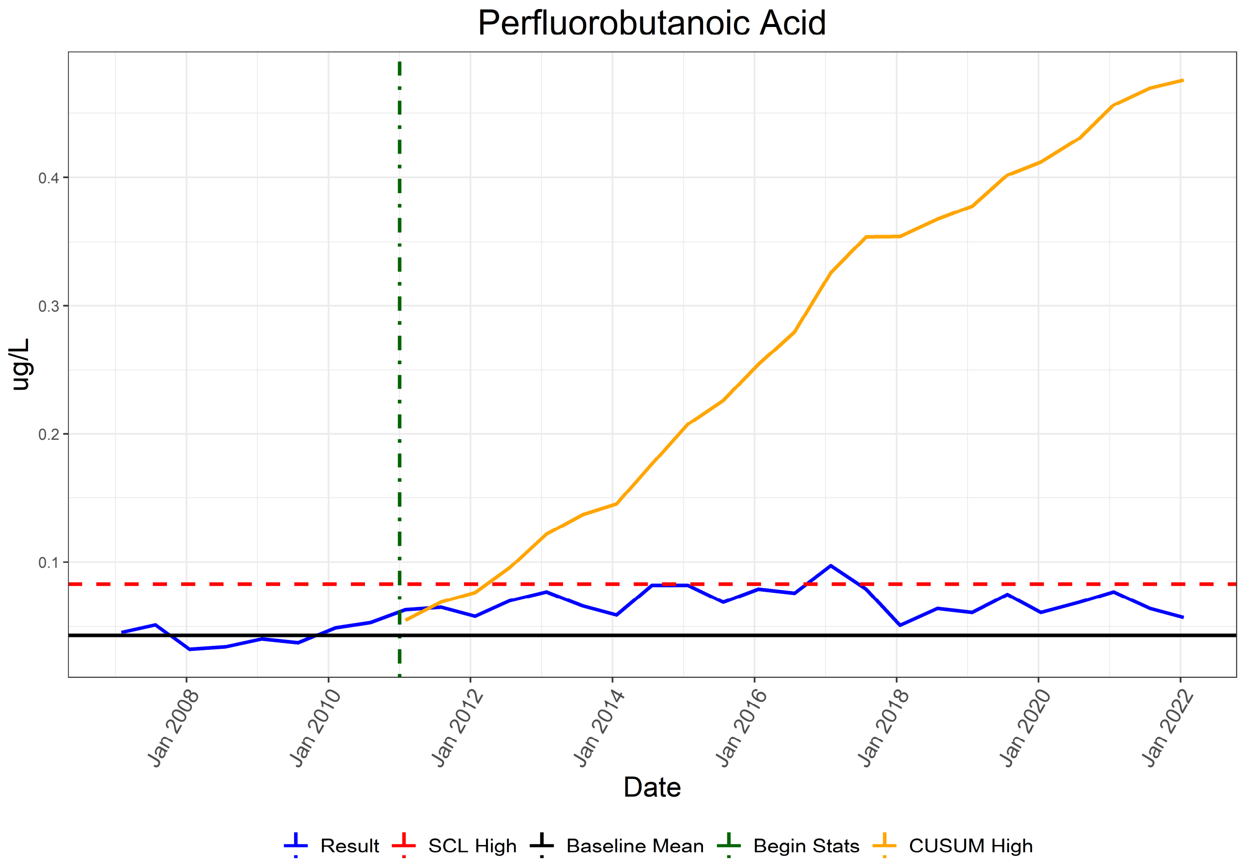


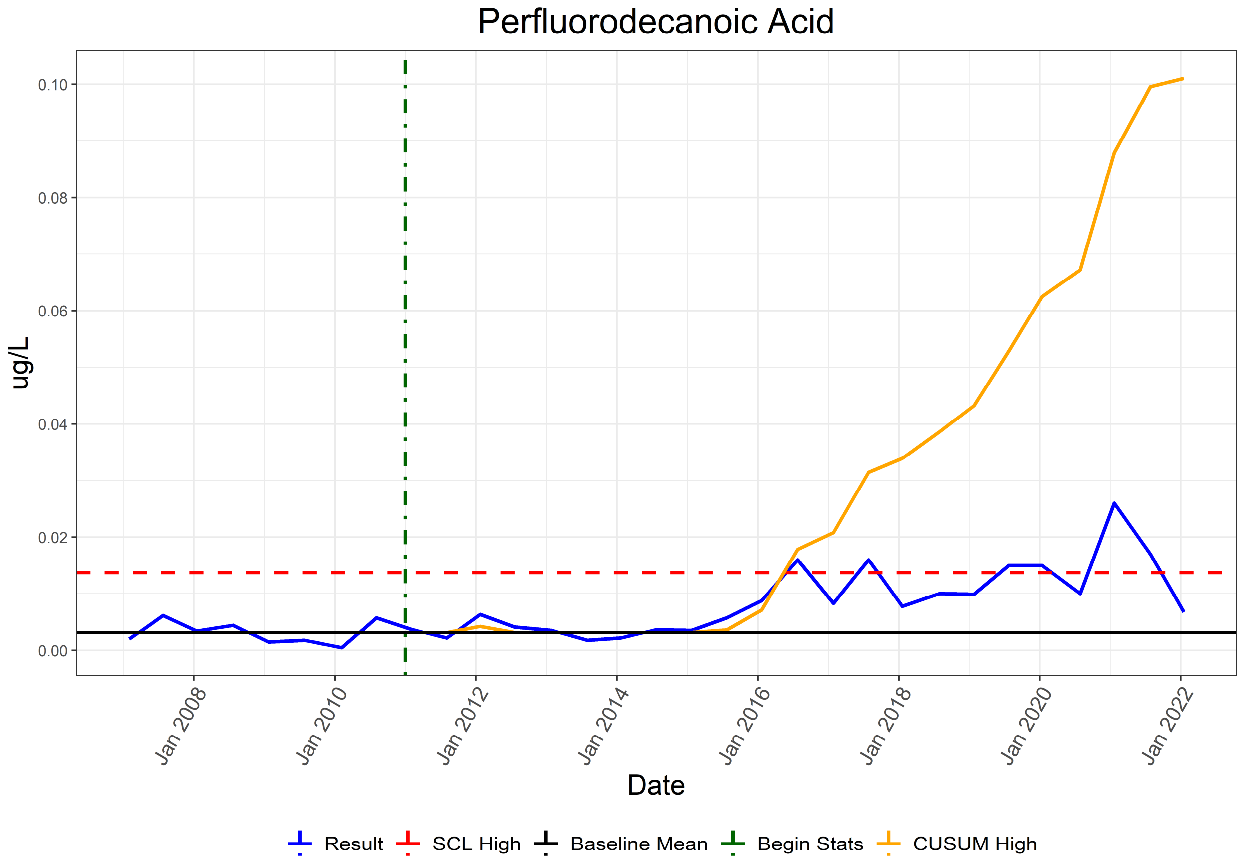
Perfluoropentanoic Acid
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

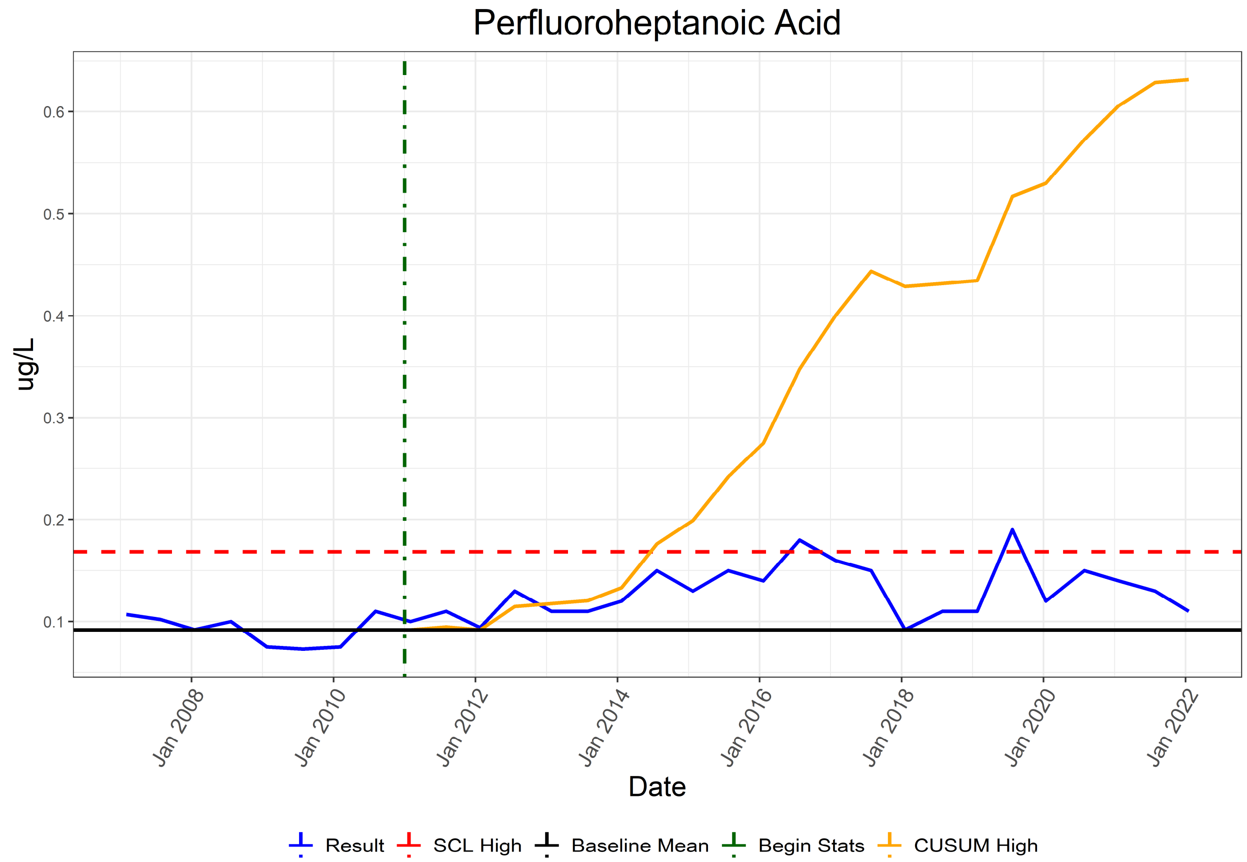

PFOA
ug/L
2.1
1.8
1.5
1.2
0.9
0.6
0.3
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

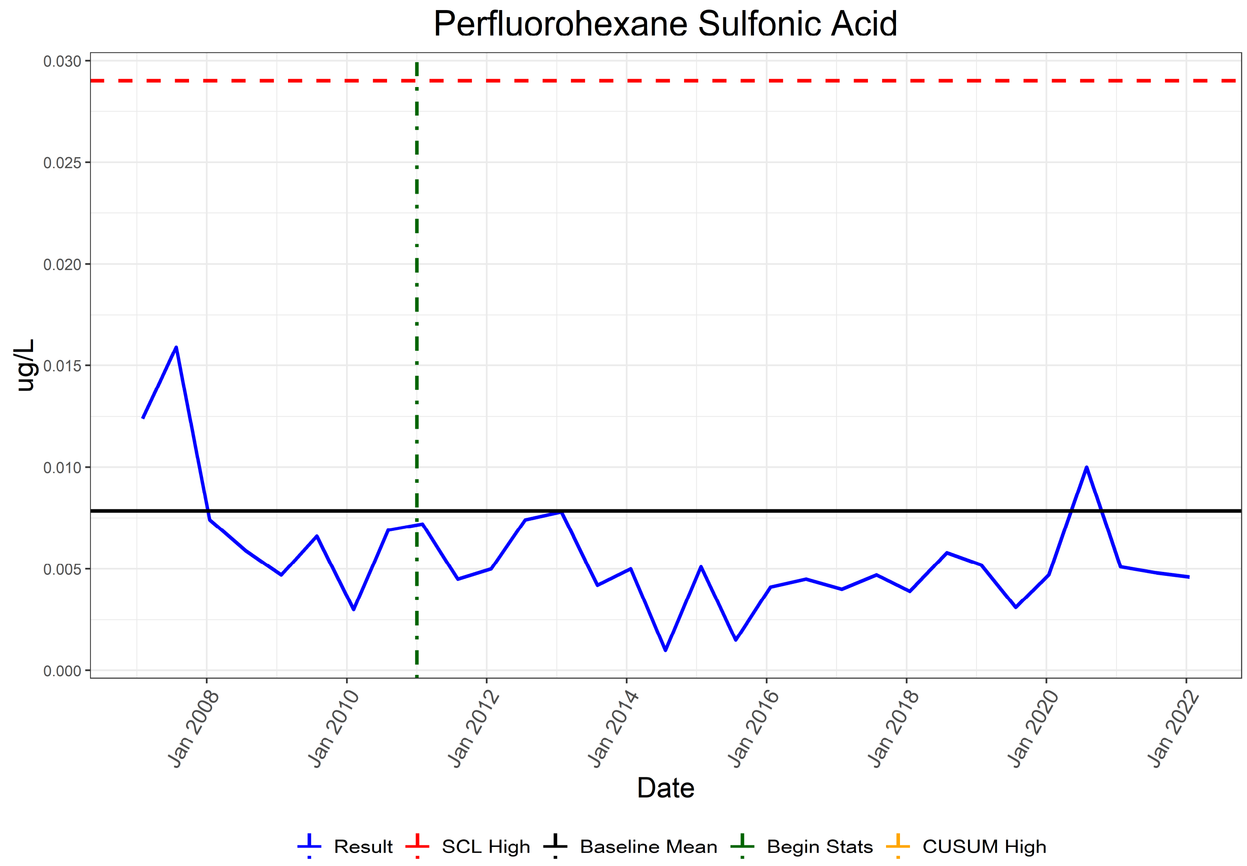
PFAS Monitoring Program (Program 9)

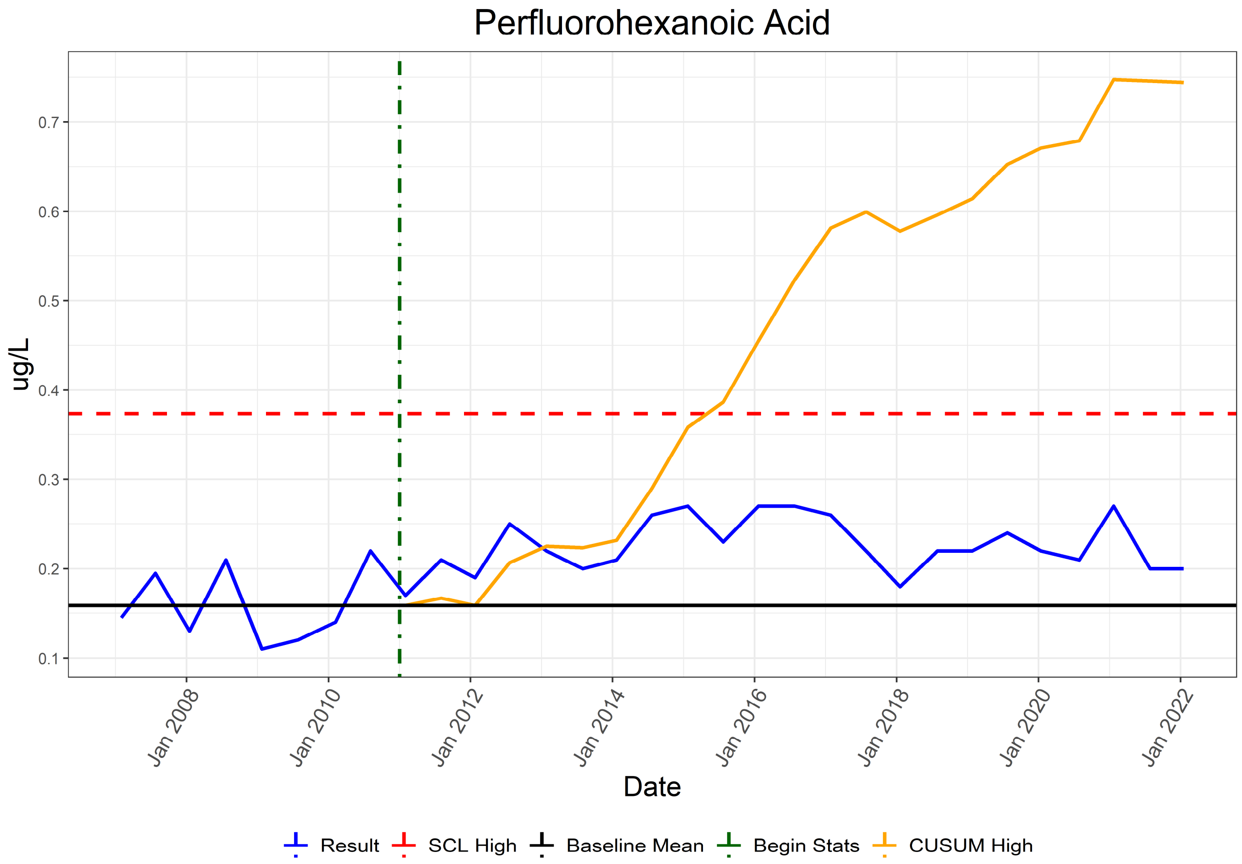
Well Name: AA25-M01B

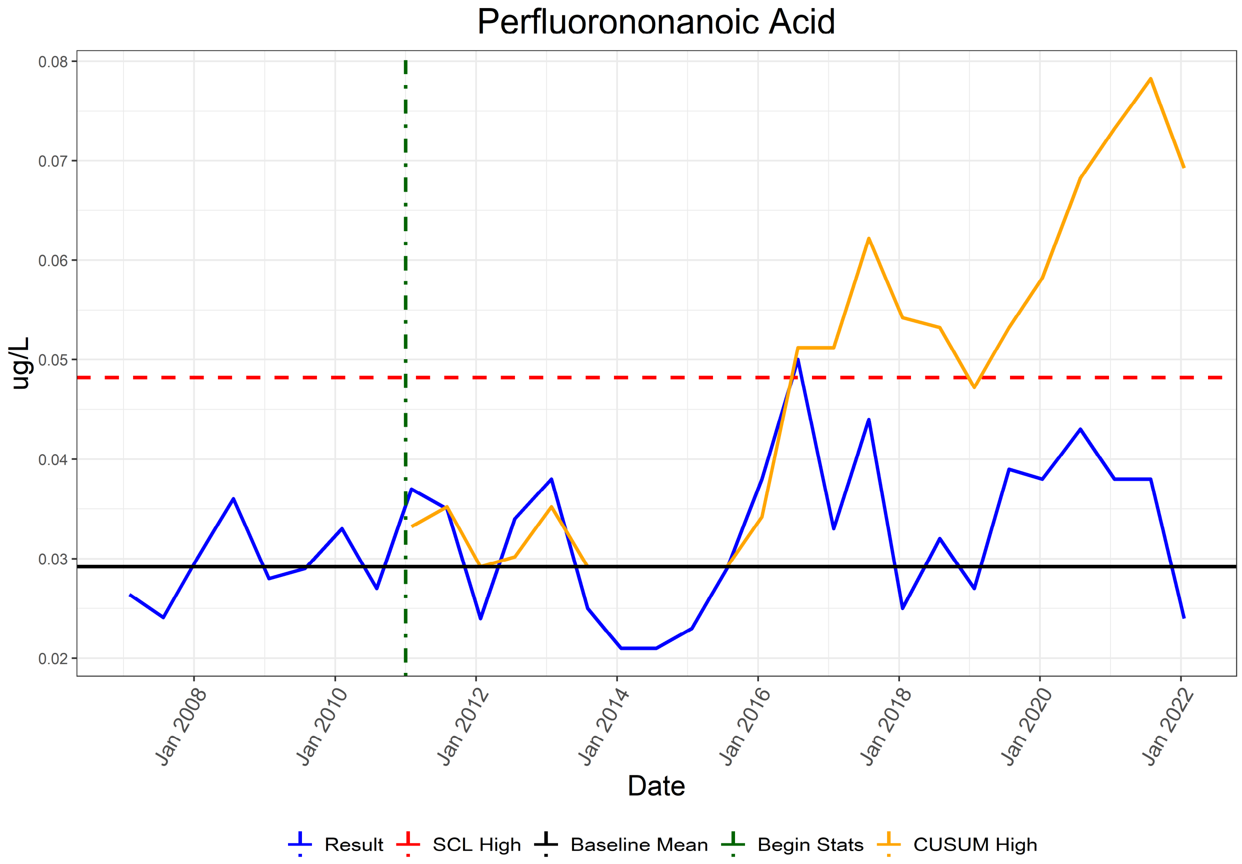


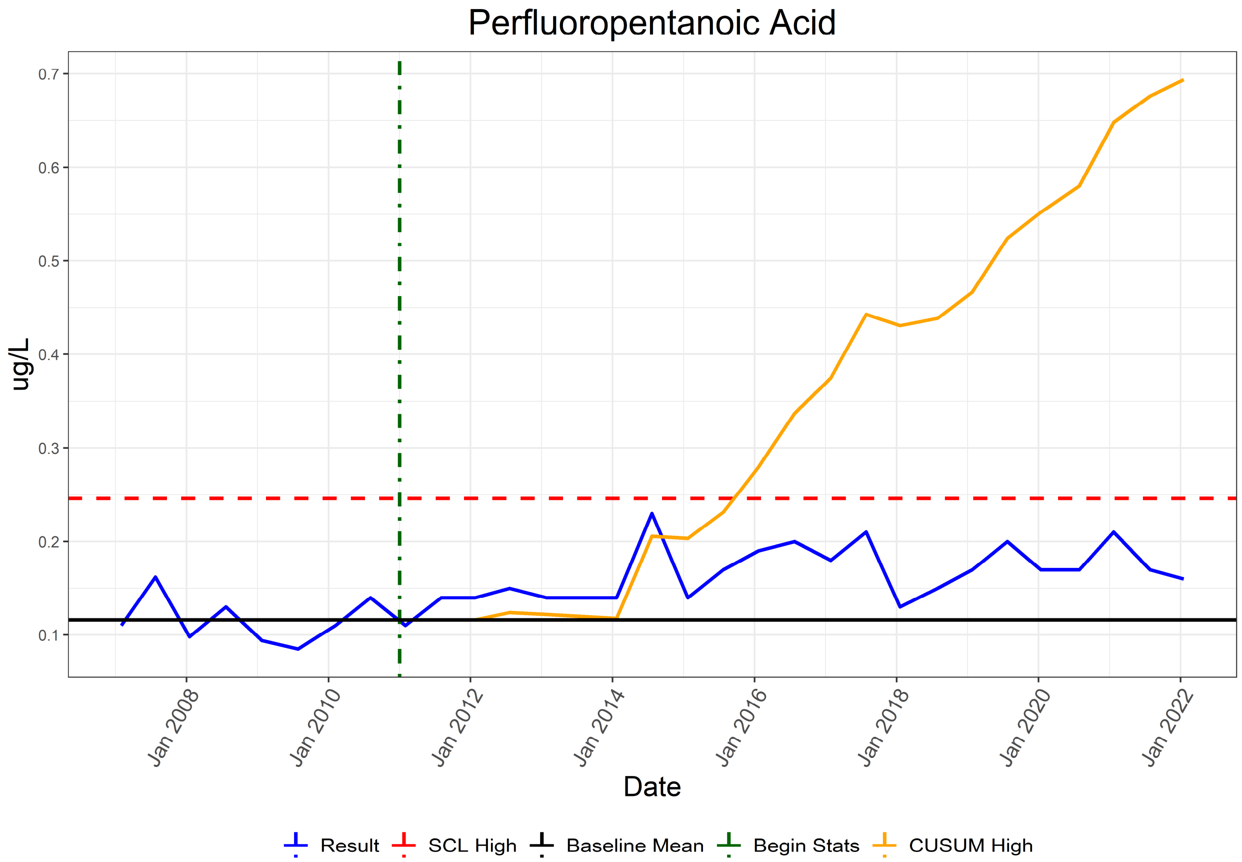


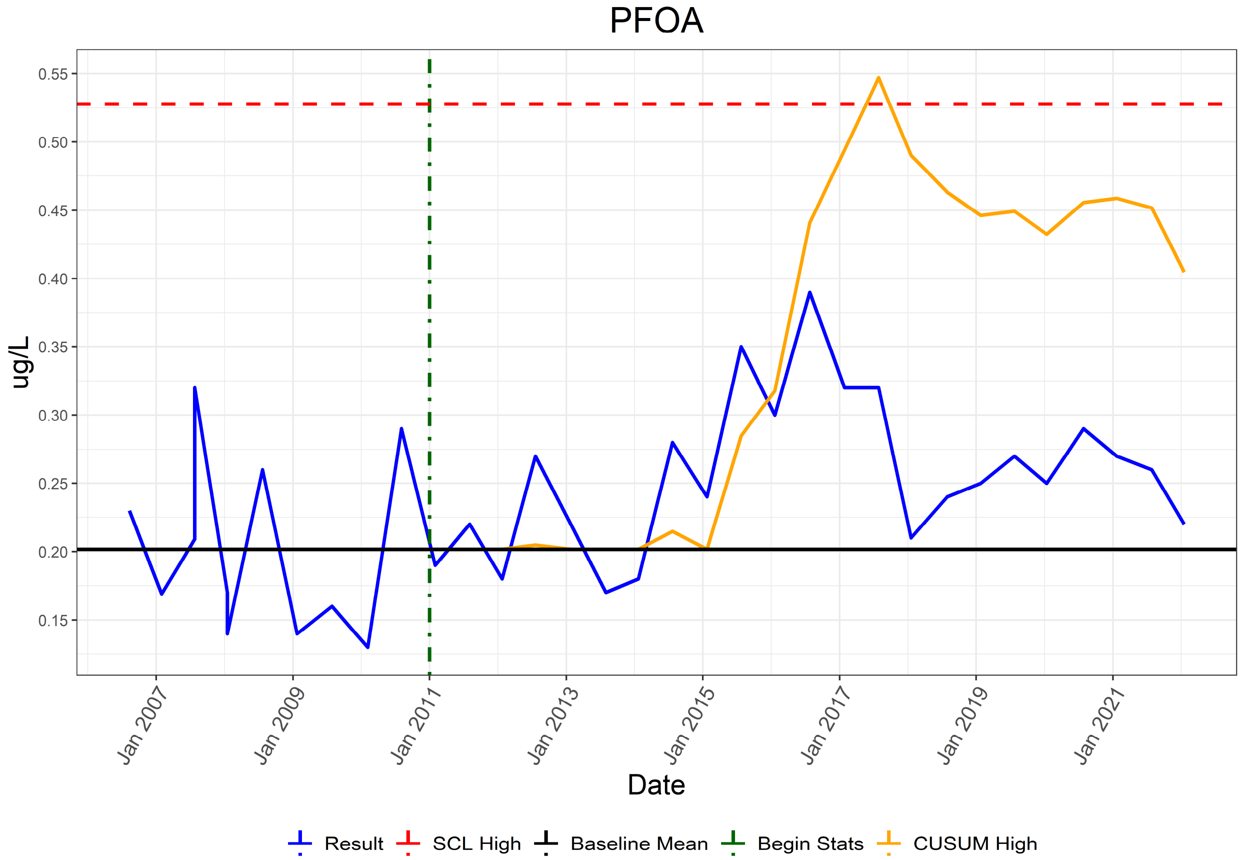

Perfluoroheptanoic Acid
ug/L
0.6
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

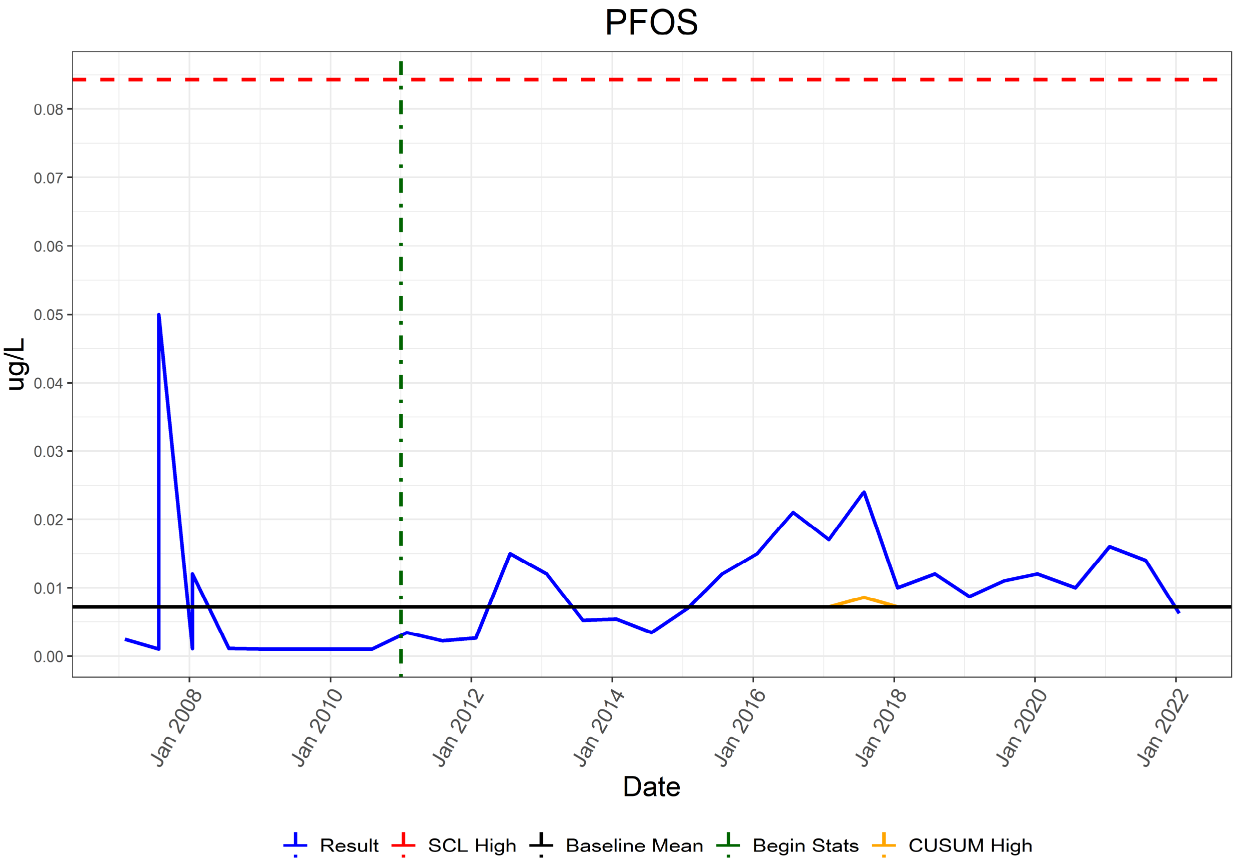

Perfluorohexane Sulfonic Acid
ug/L
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.02
0.03
0.04
0.05
0.06
0.07
0.08
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

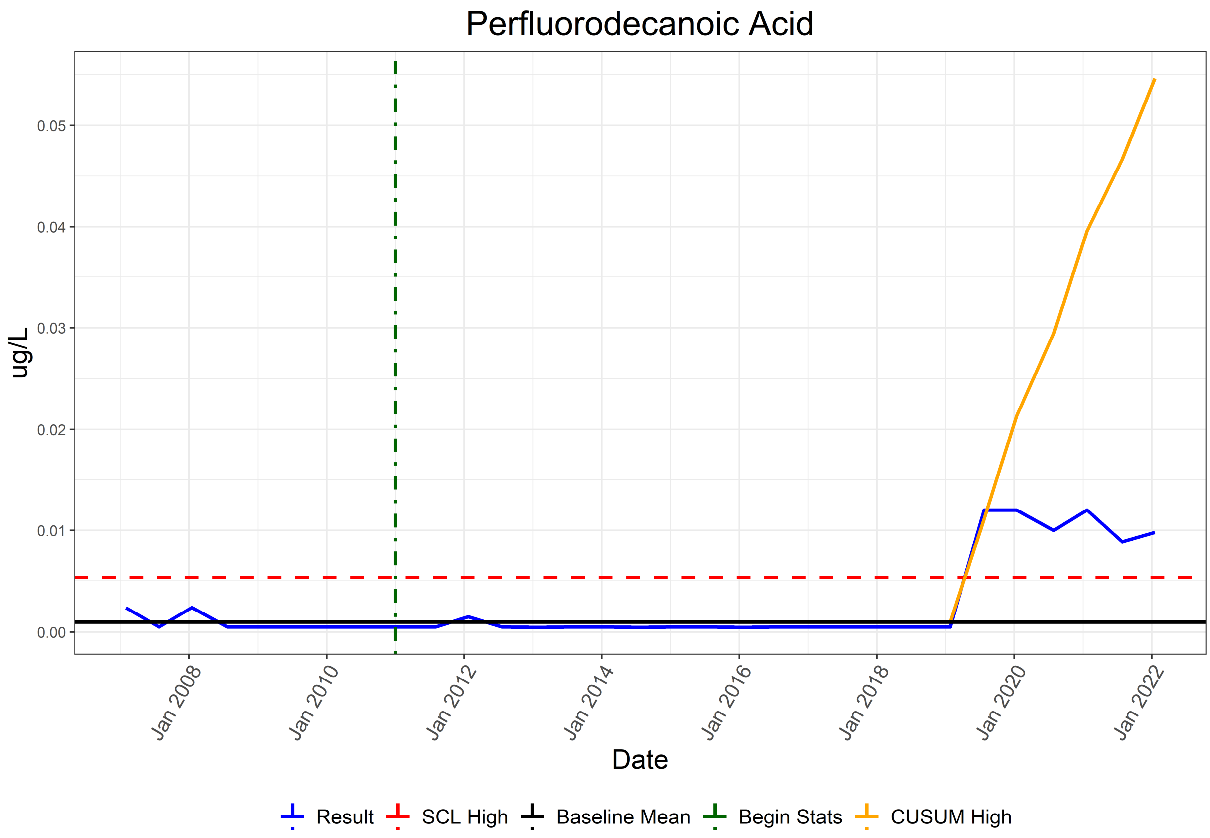

Perfluoropentanoic Acid
ug/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

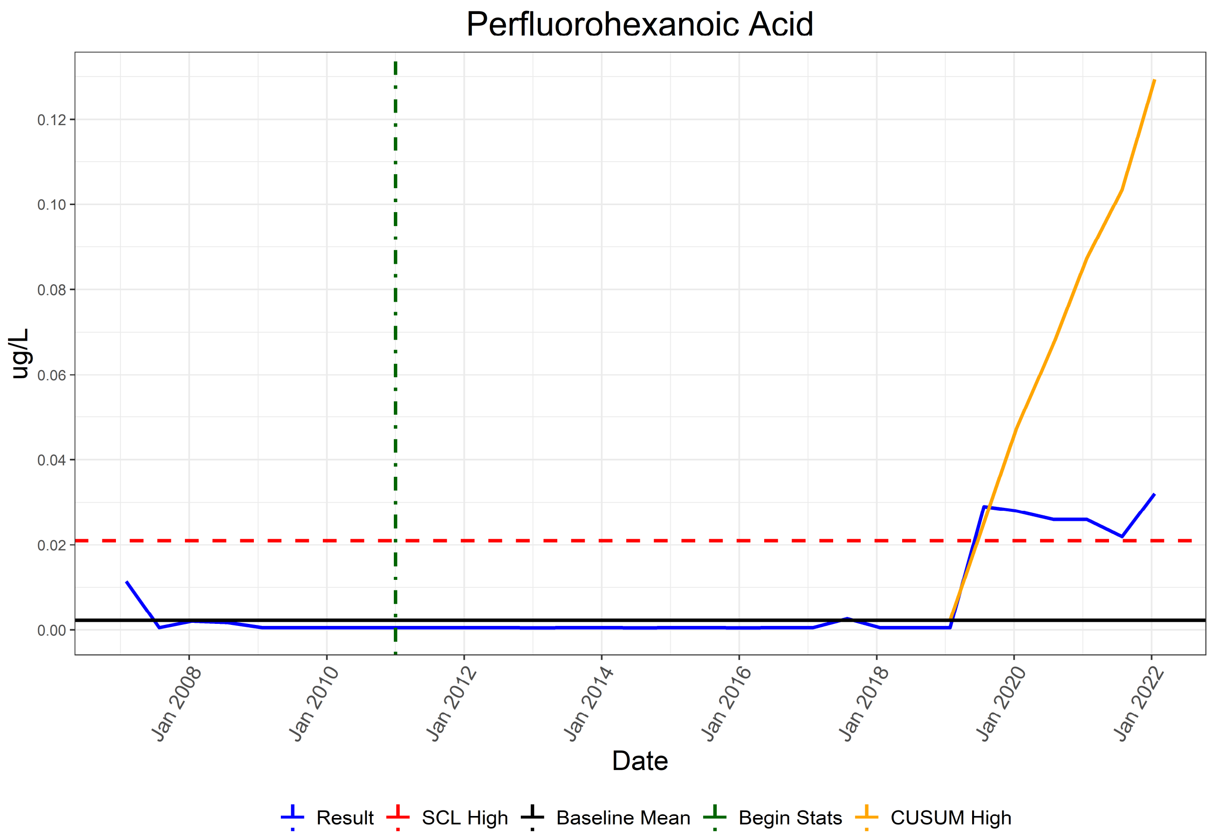

PFOA
ug/L
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
Date
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

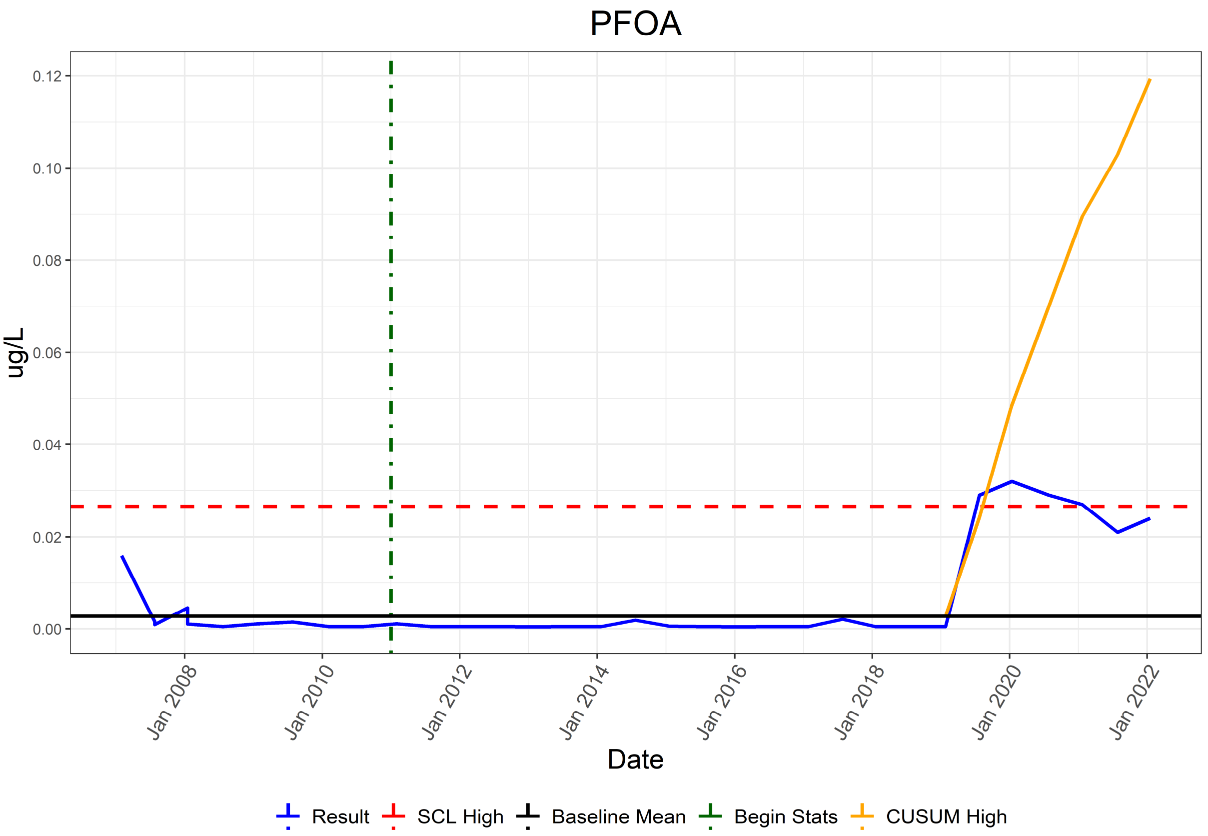

PFOS
ug/L
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

PFAS Monitoring Program (Program 9)

Well Name: AA25-M01C



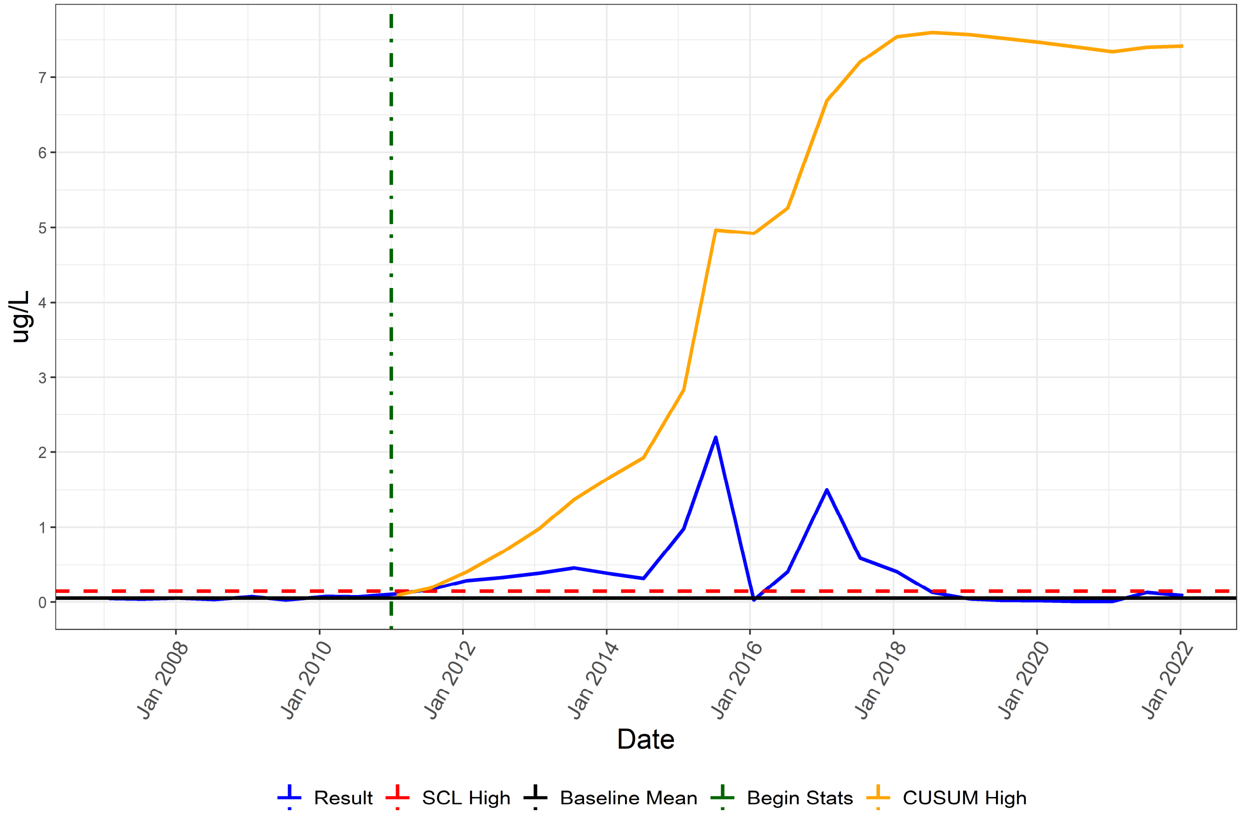



PFOA
ug/L
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

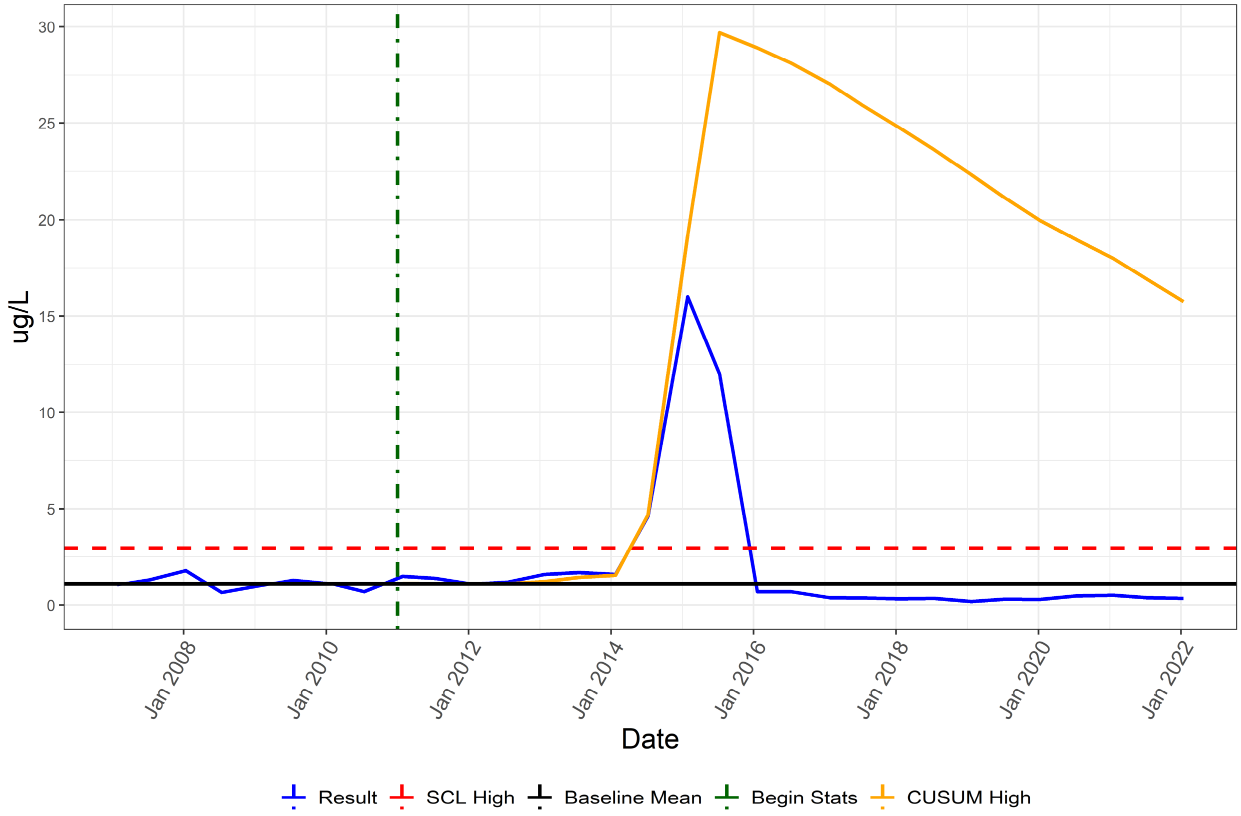
PFAS Monitoring Program (Program 9)

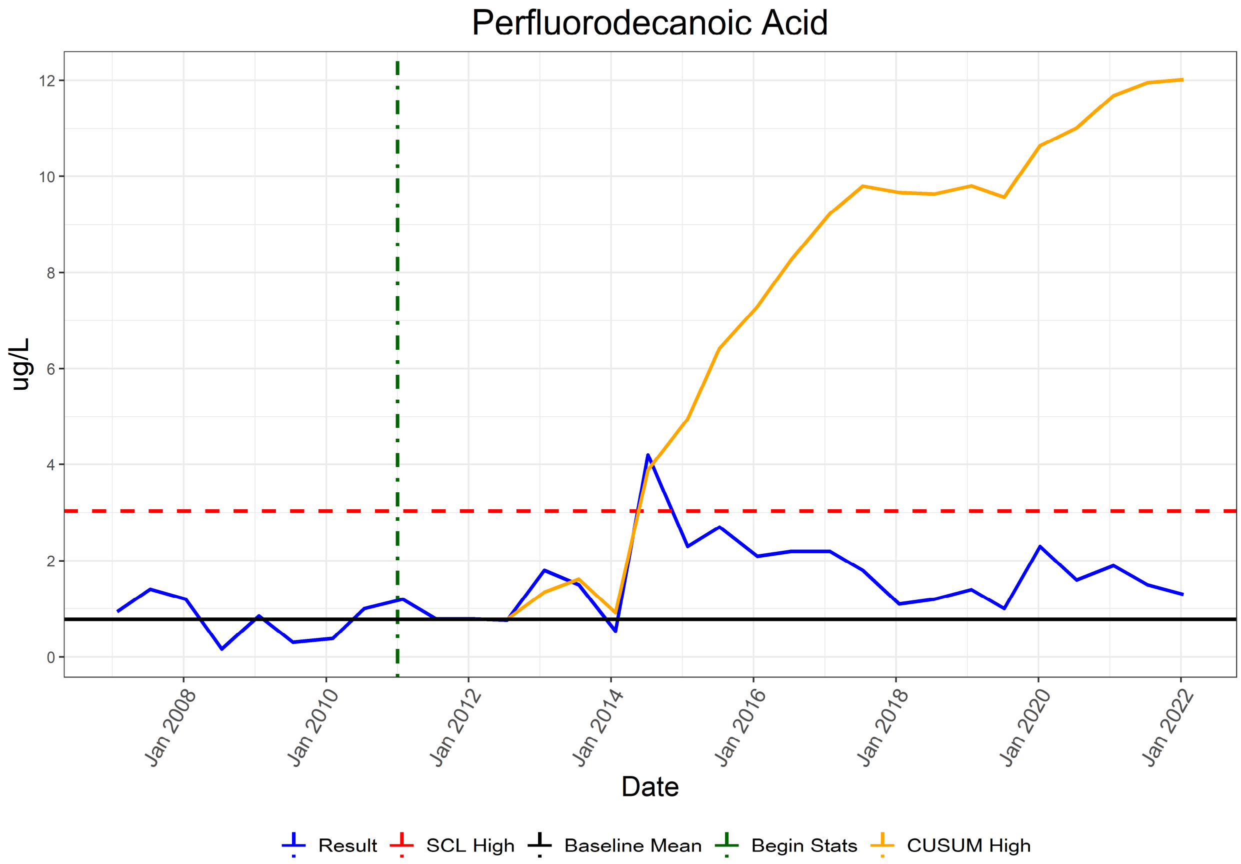
Well Name: C08-M01B

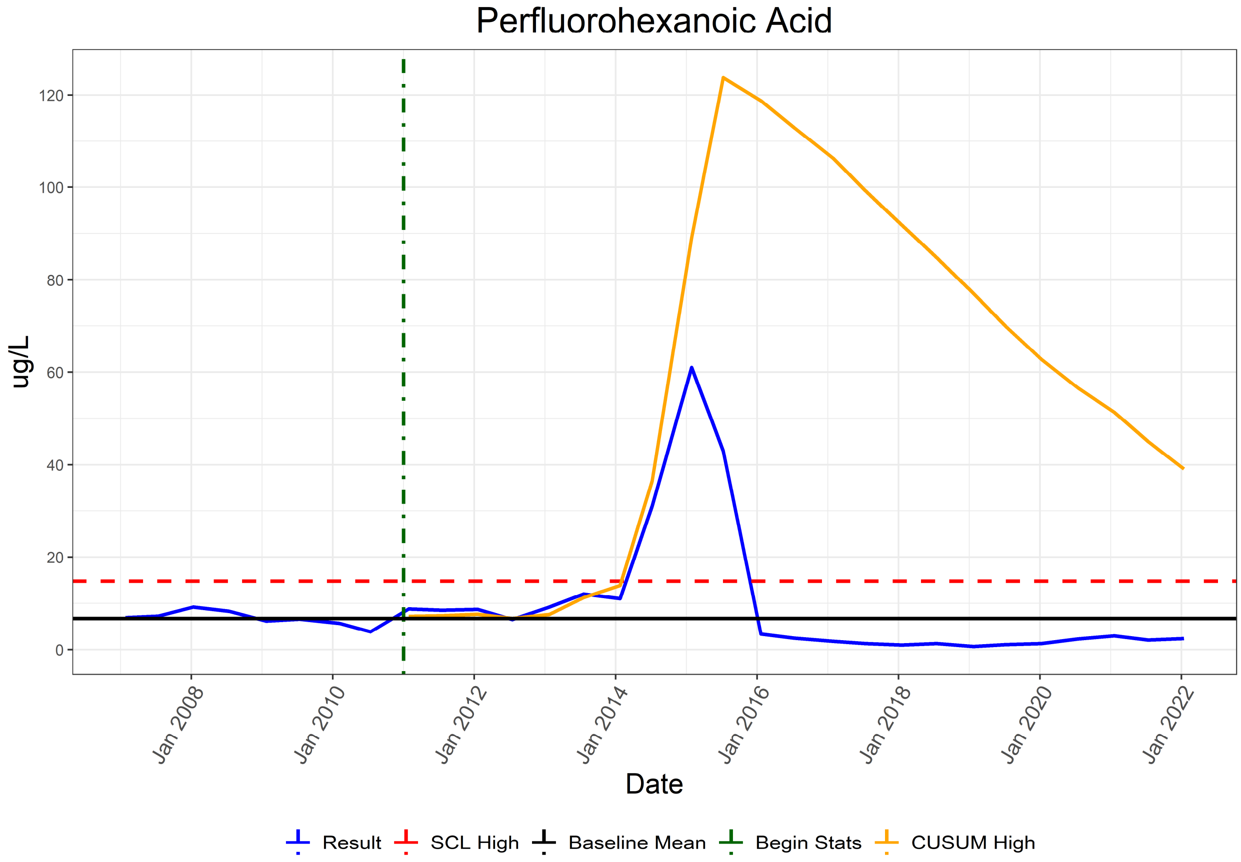
Perfluorobutane Sulfonic Acid

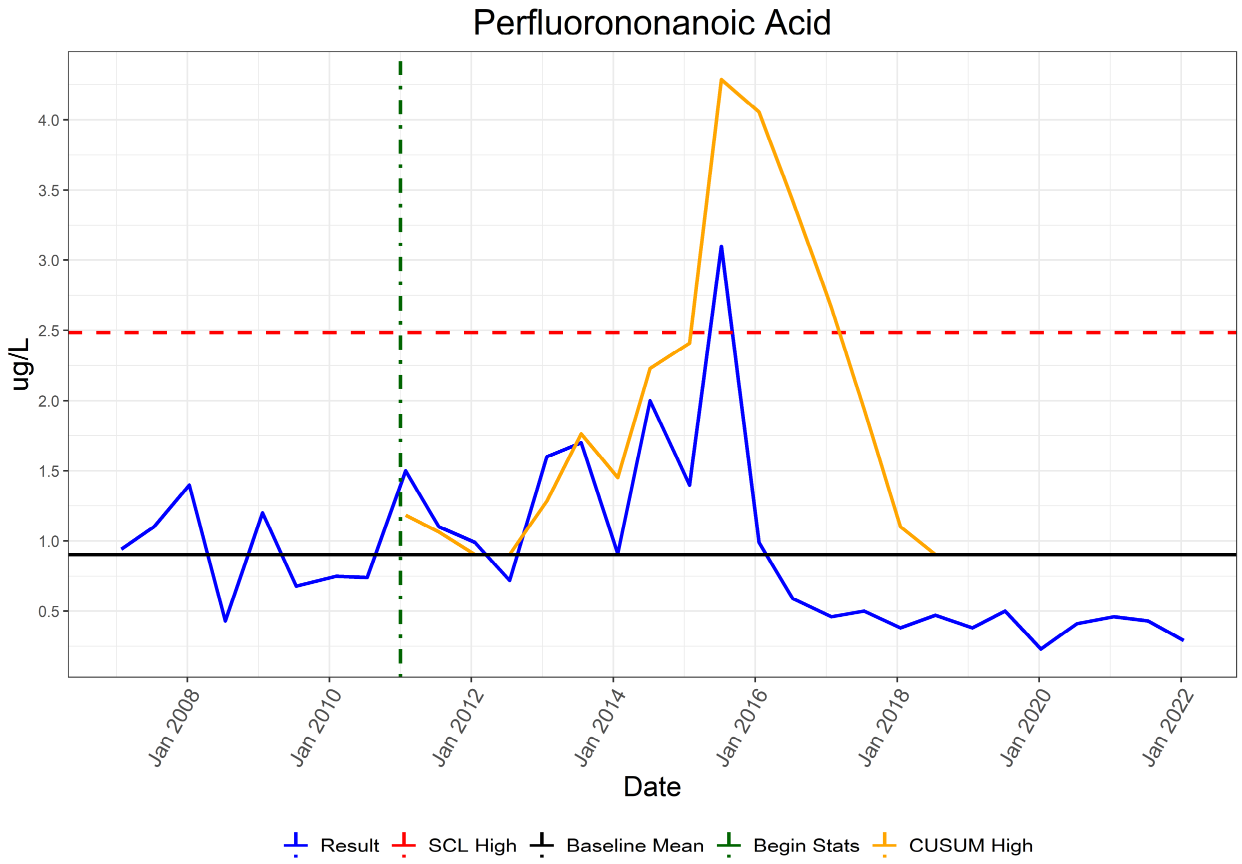


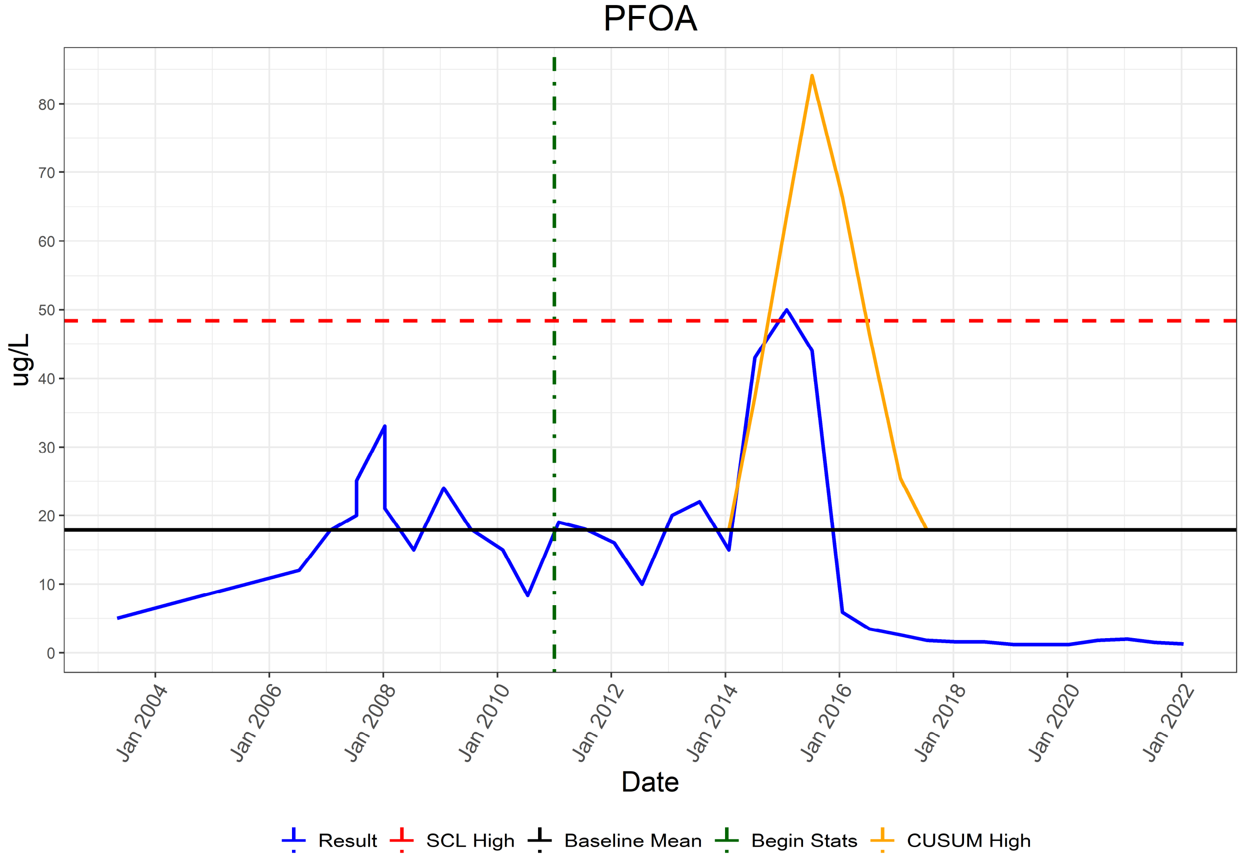
Perfluorobutanoic Acid

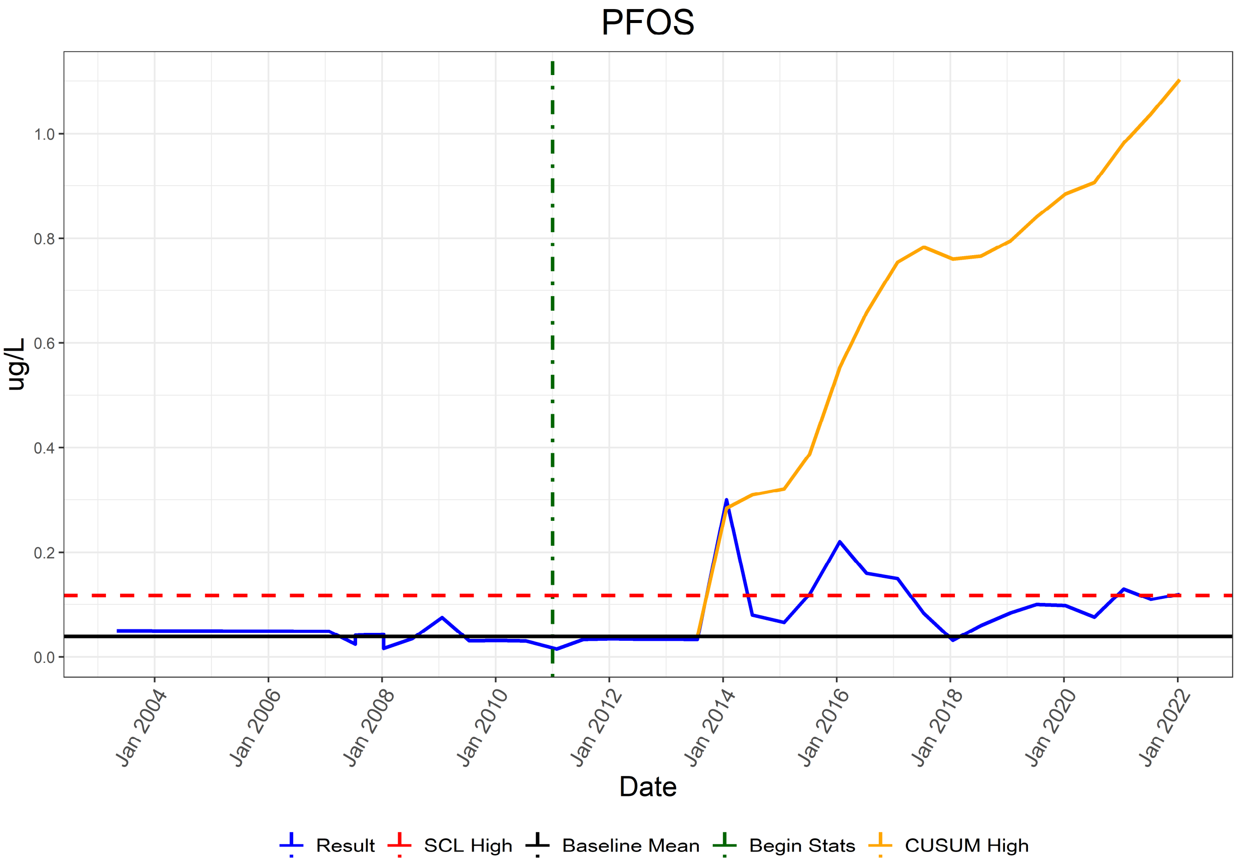



Perfluorodecanoic Acid
ug/L
0
2
4
6
8
10
12
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
0
20
40
60
80
100
120
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

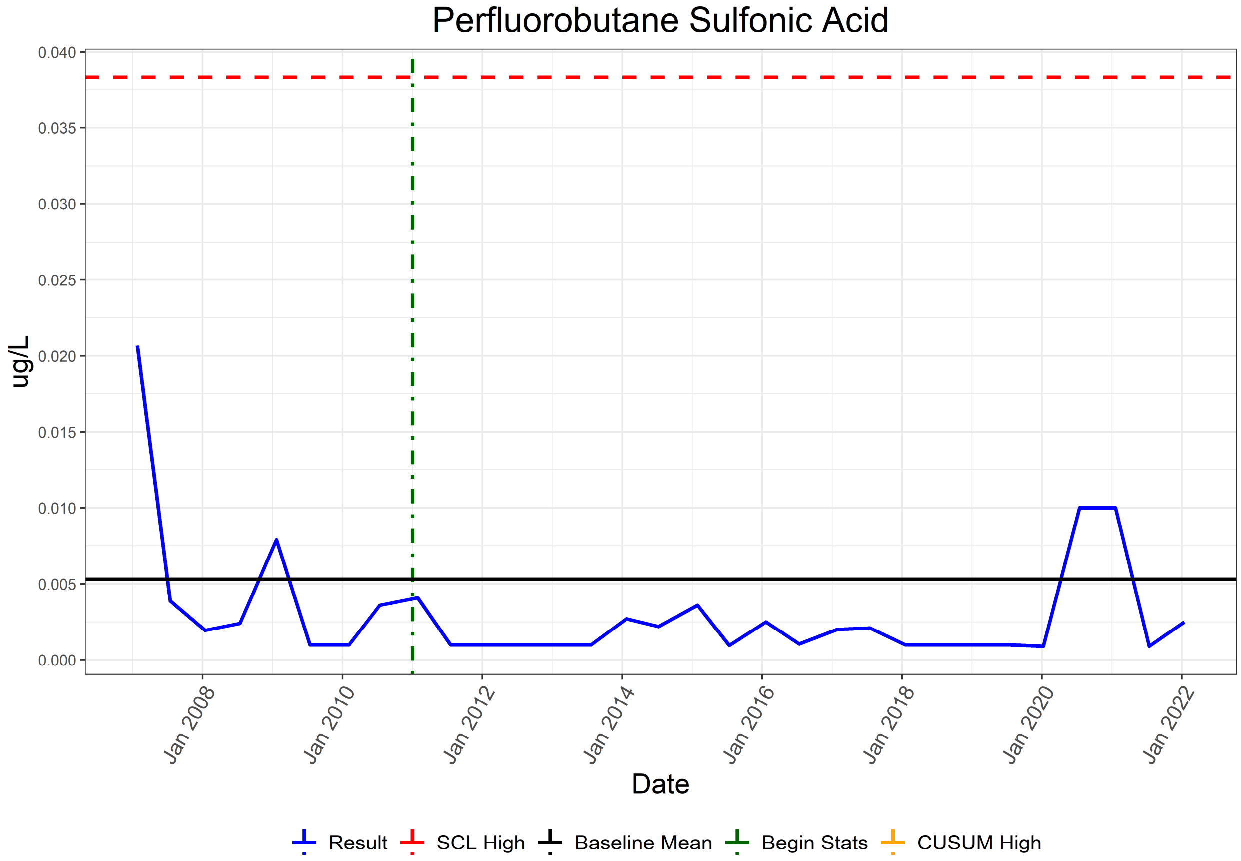

Perfluorononanoic Acid
ug/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

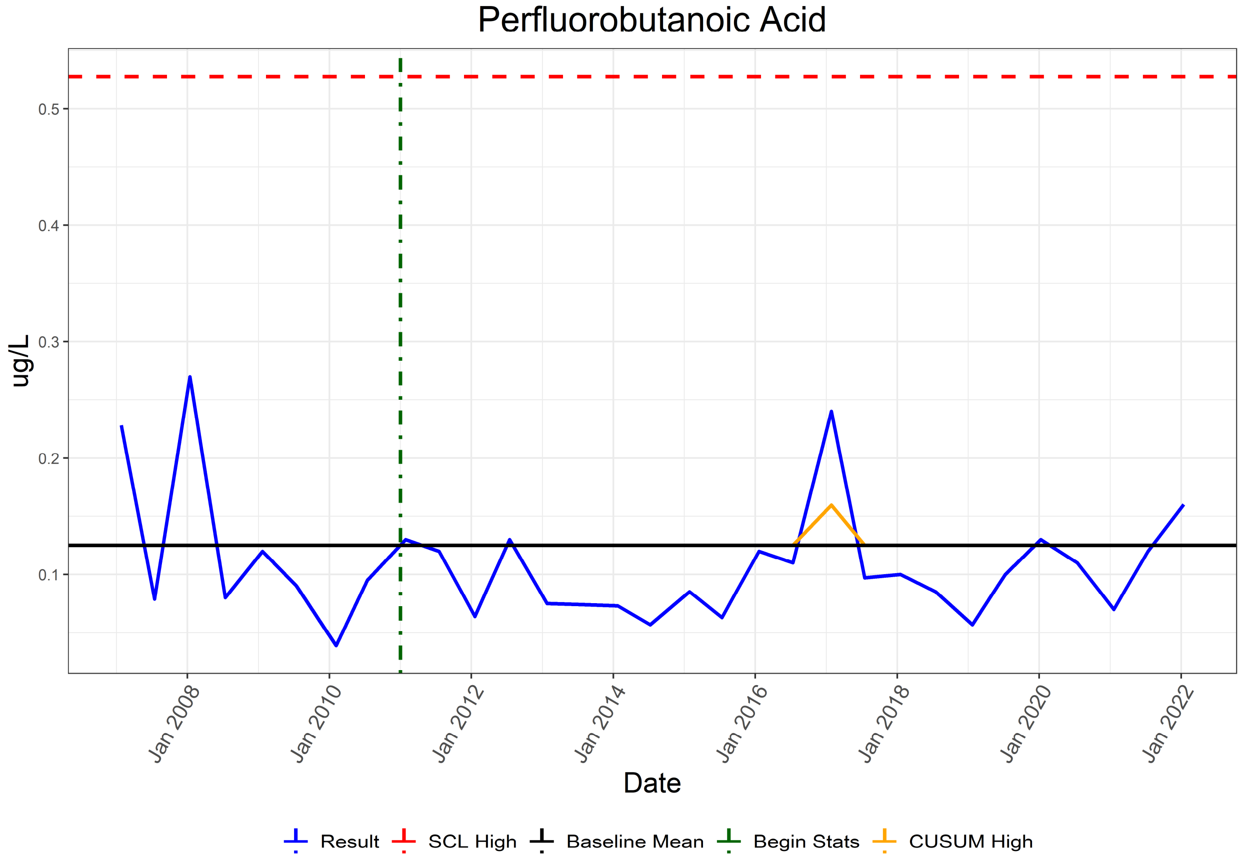

PFOA
ug/L
80
70
60
50
40
30
20
10
0
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

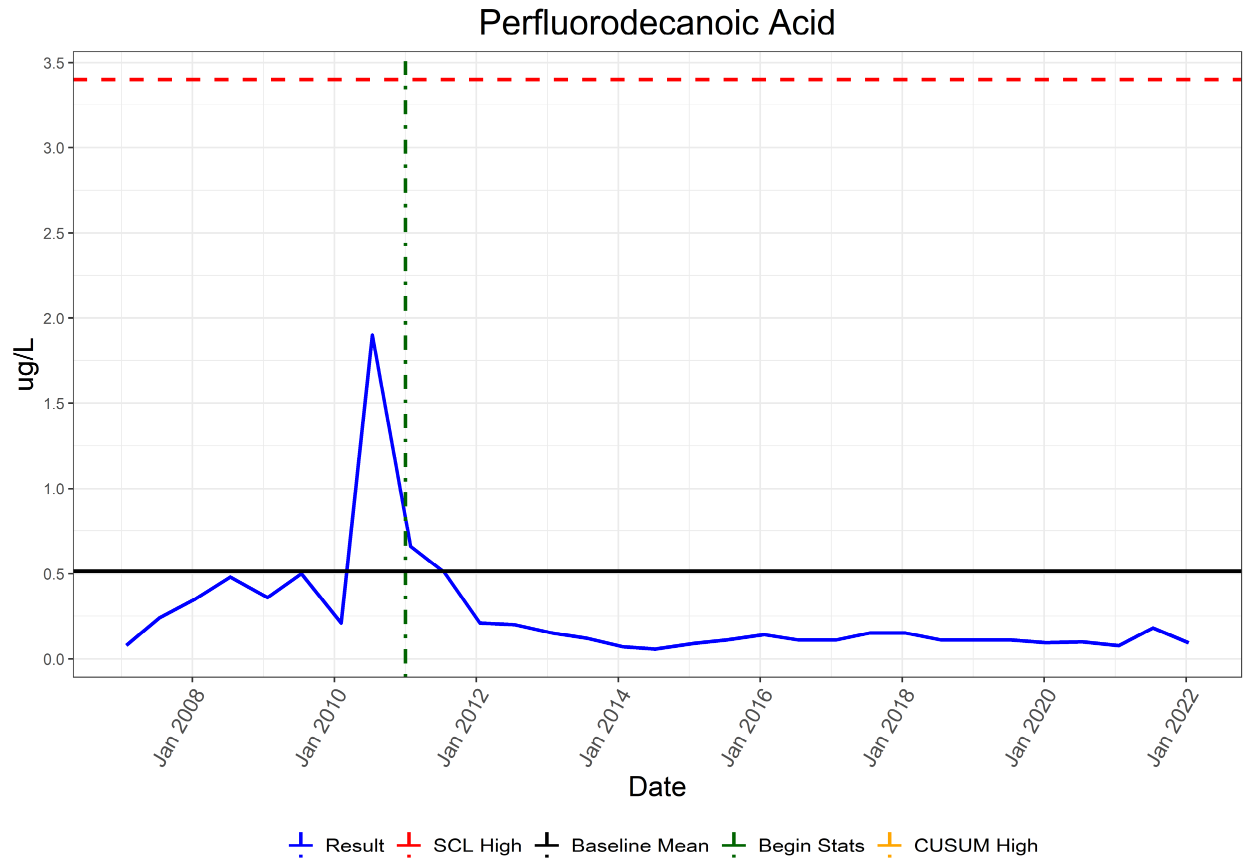

PFOS
ug/L
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

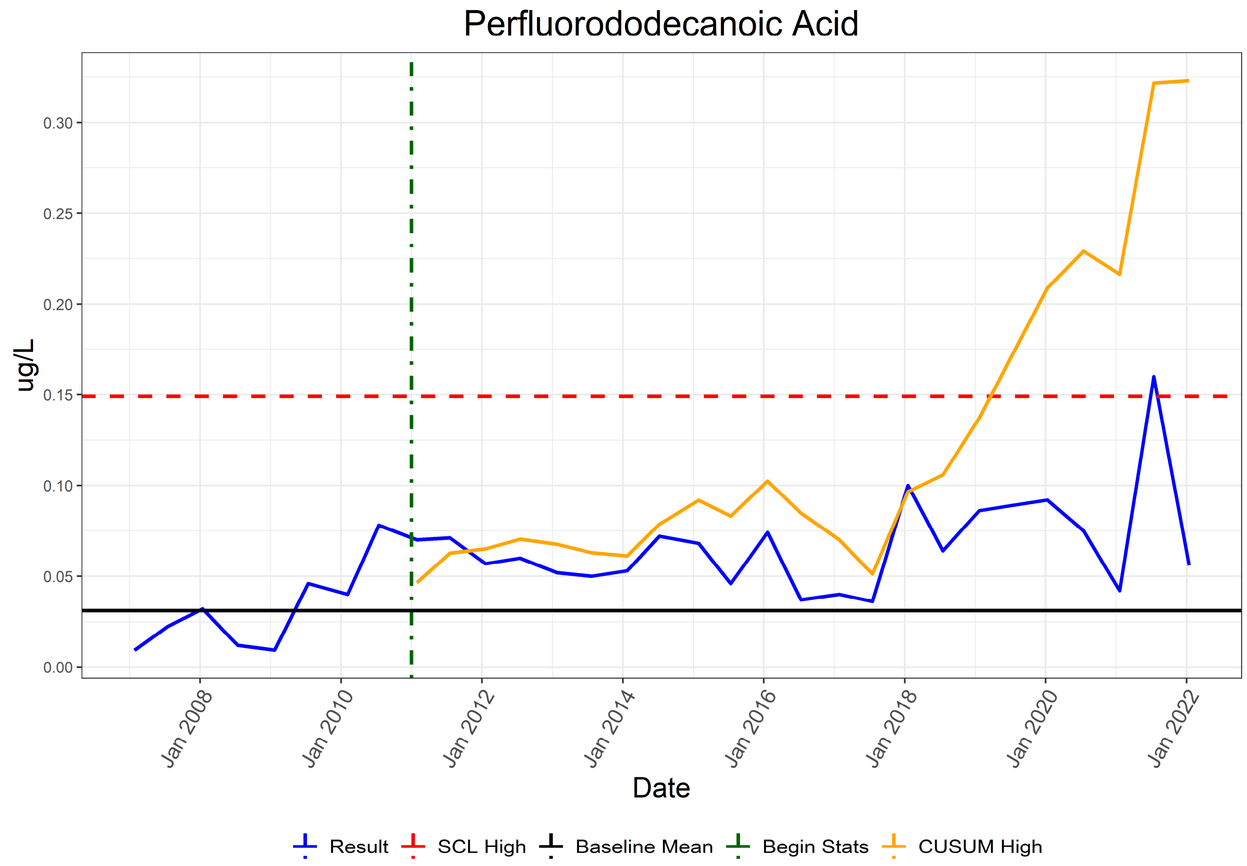
PFAS Monitoring Program (Program 9)

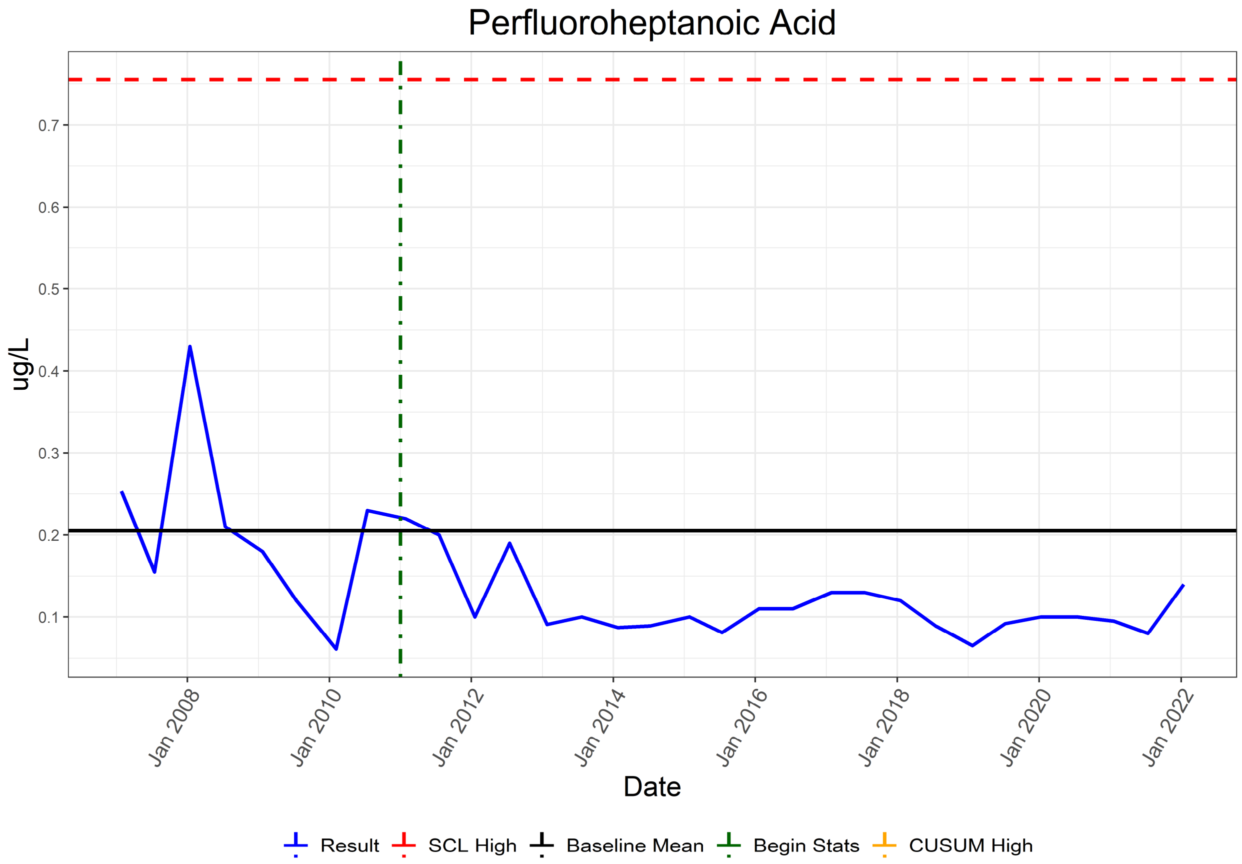
Well Name: C11-M01C

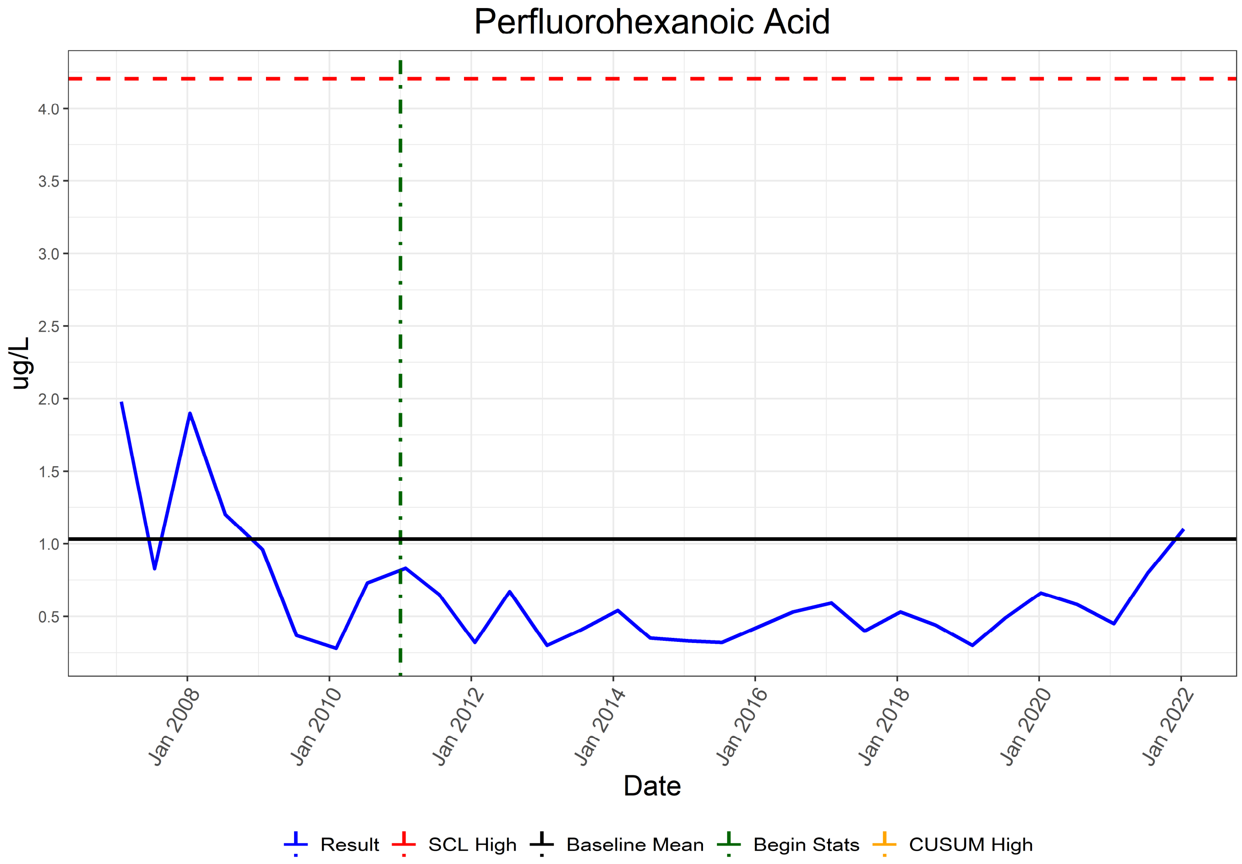


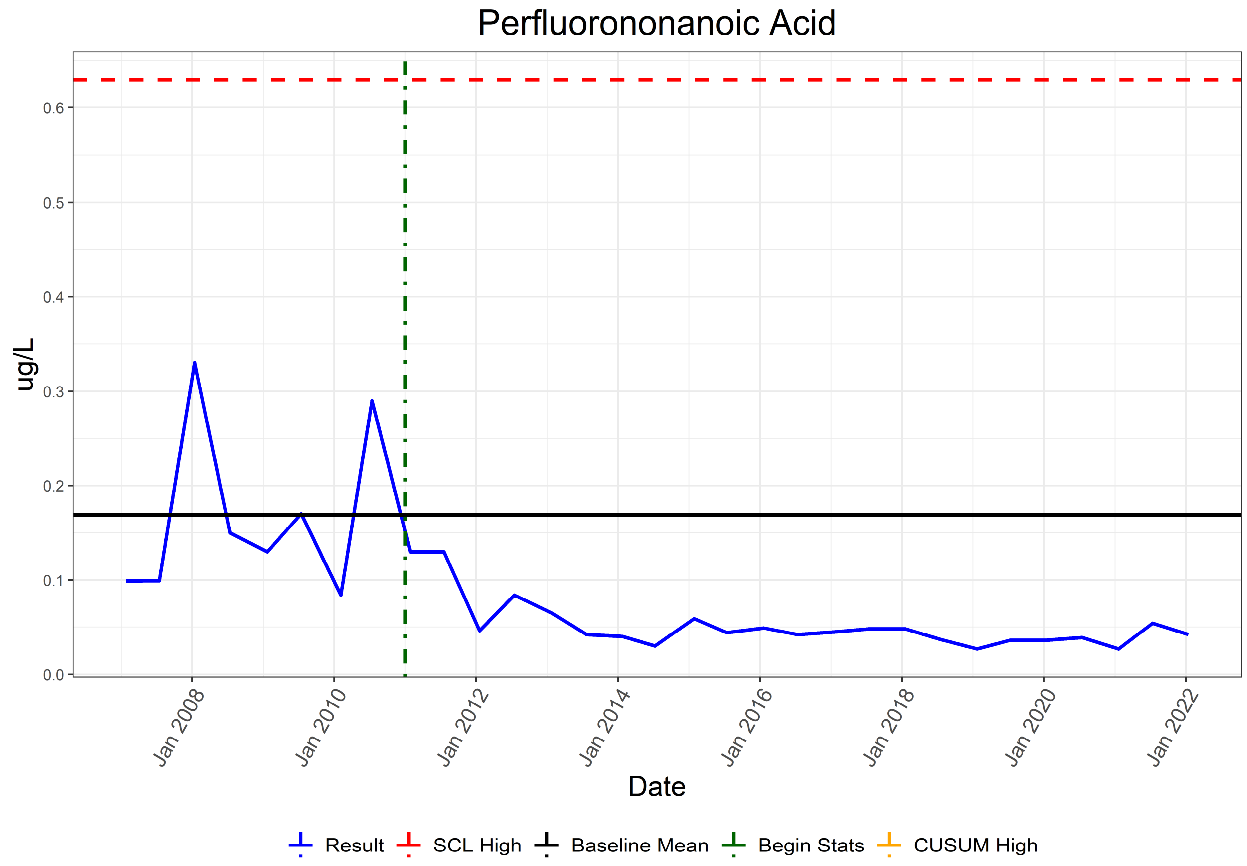


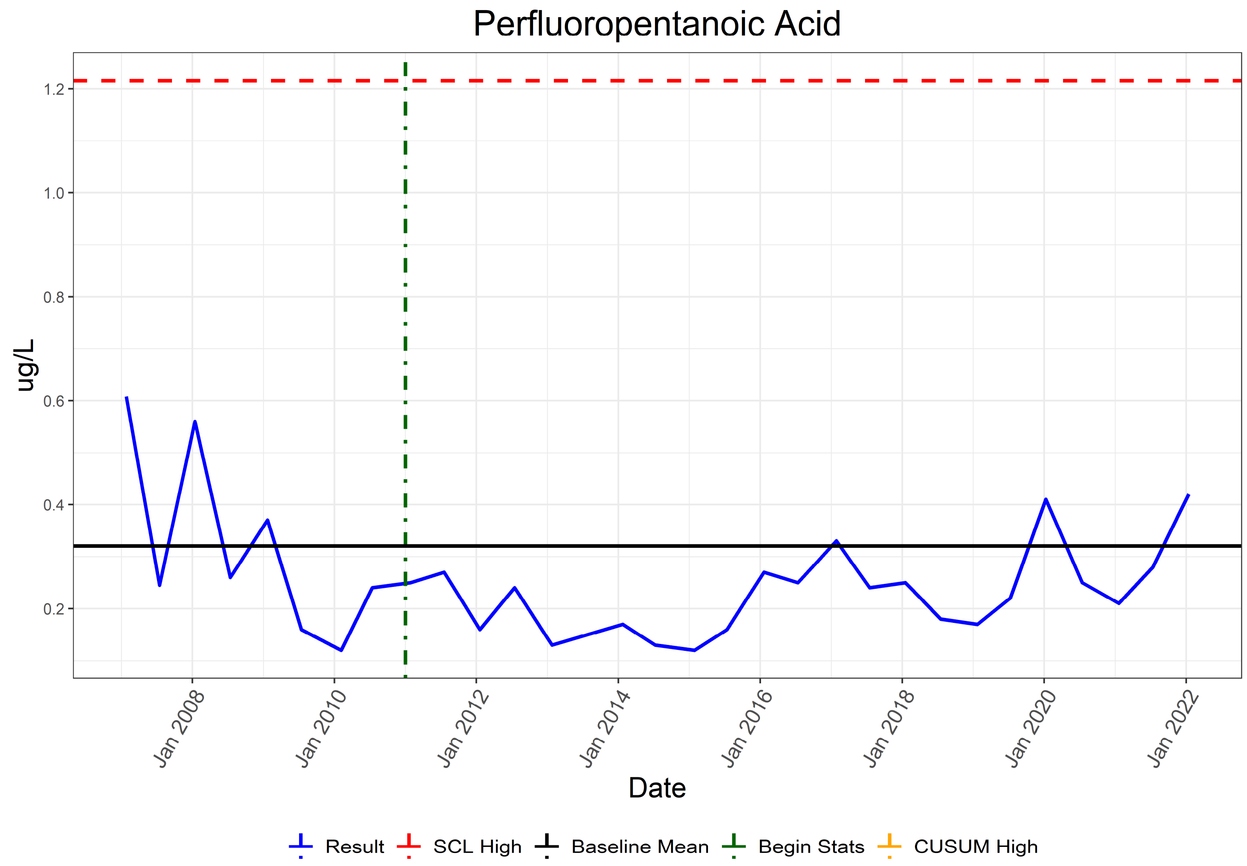

Perfluorodecanoic Acid
ug/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

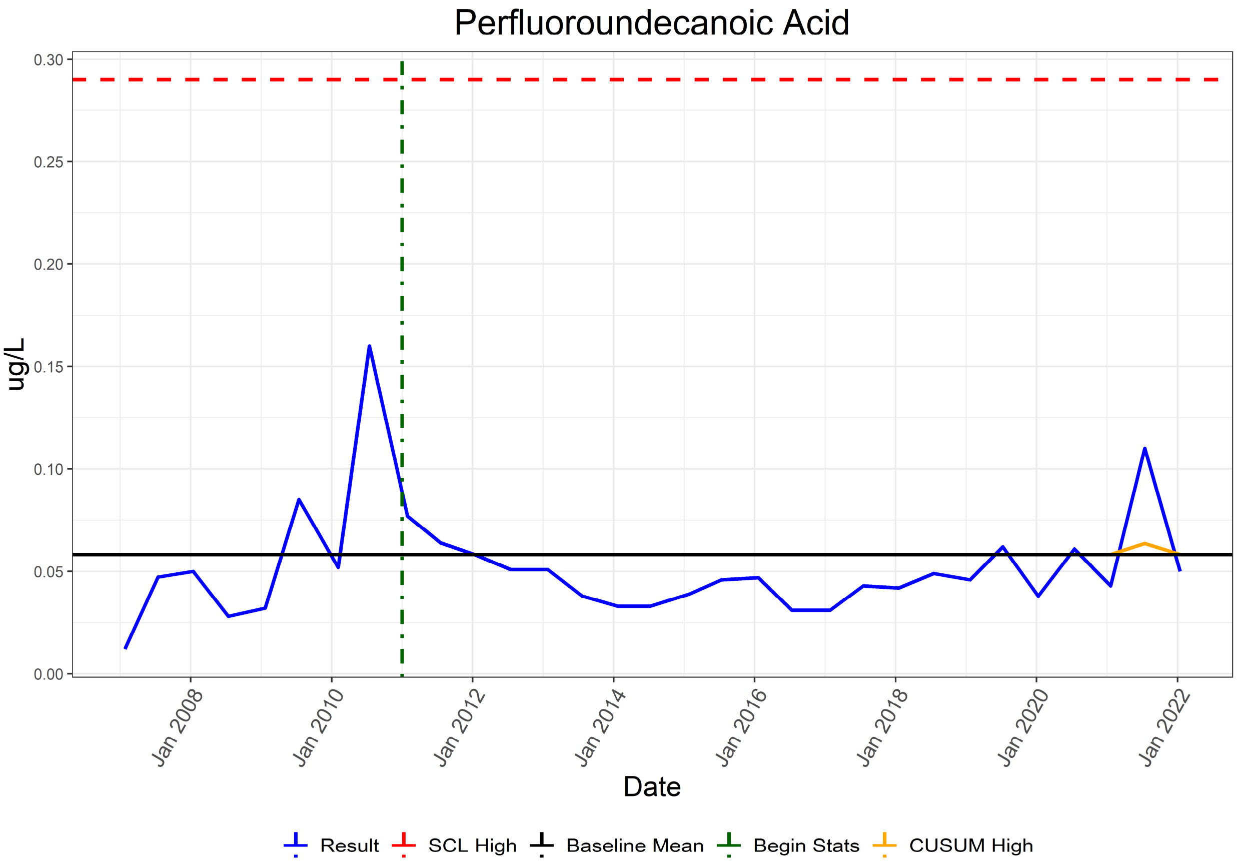

Perfluorododecanoic Acid
ug/L
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

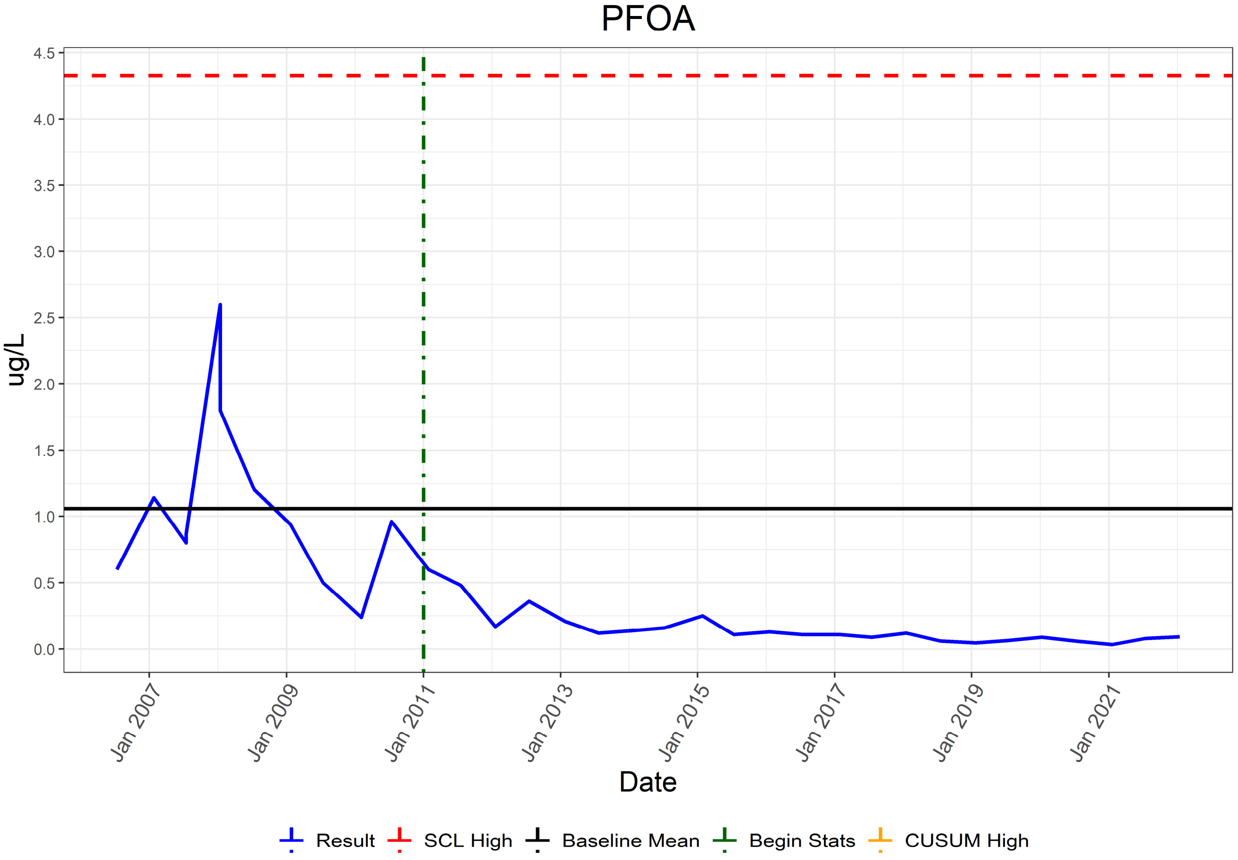

Perfluoroheptanoic Acid
ug/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

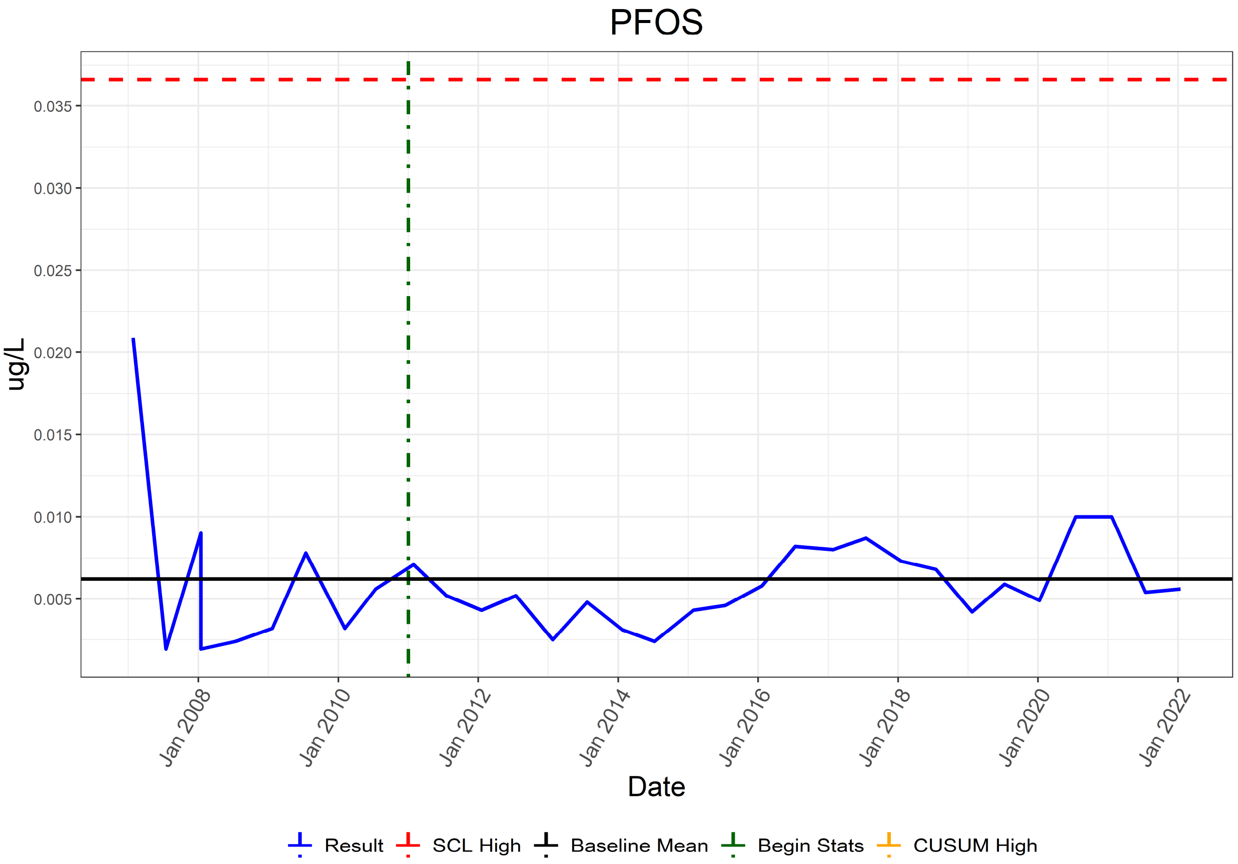

Perfluorohexanoic Acid
ug/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid


Perfluoropentanoic Acid

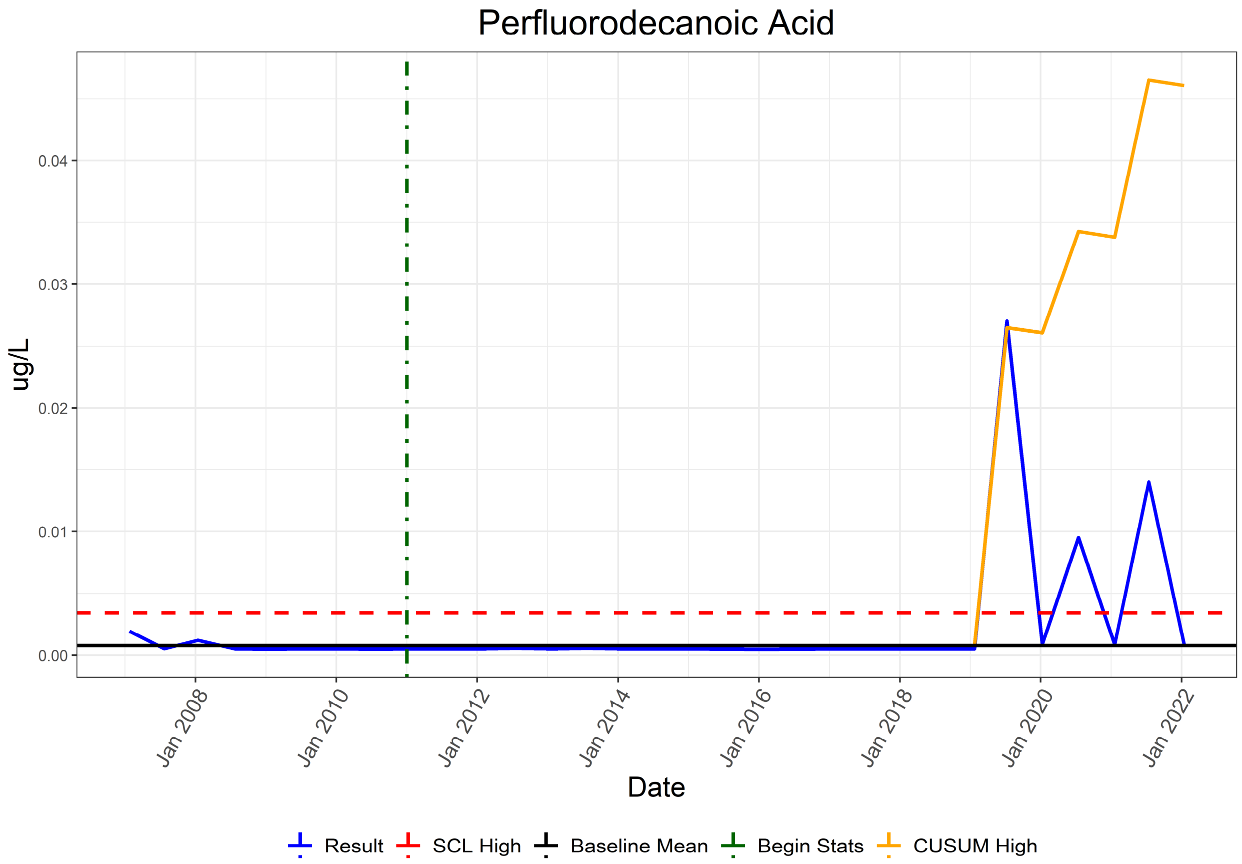

Perfluoroundecanoic Acid
ug/L
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

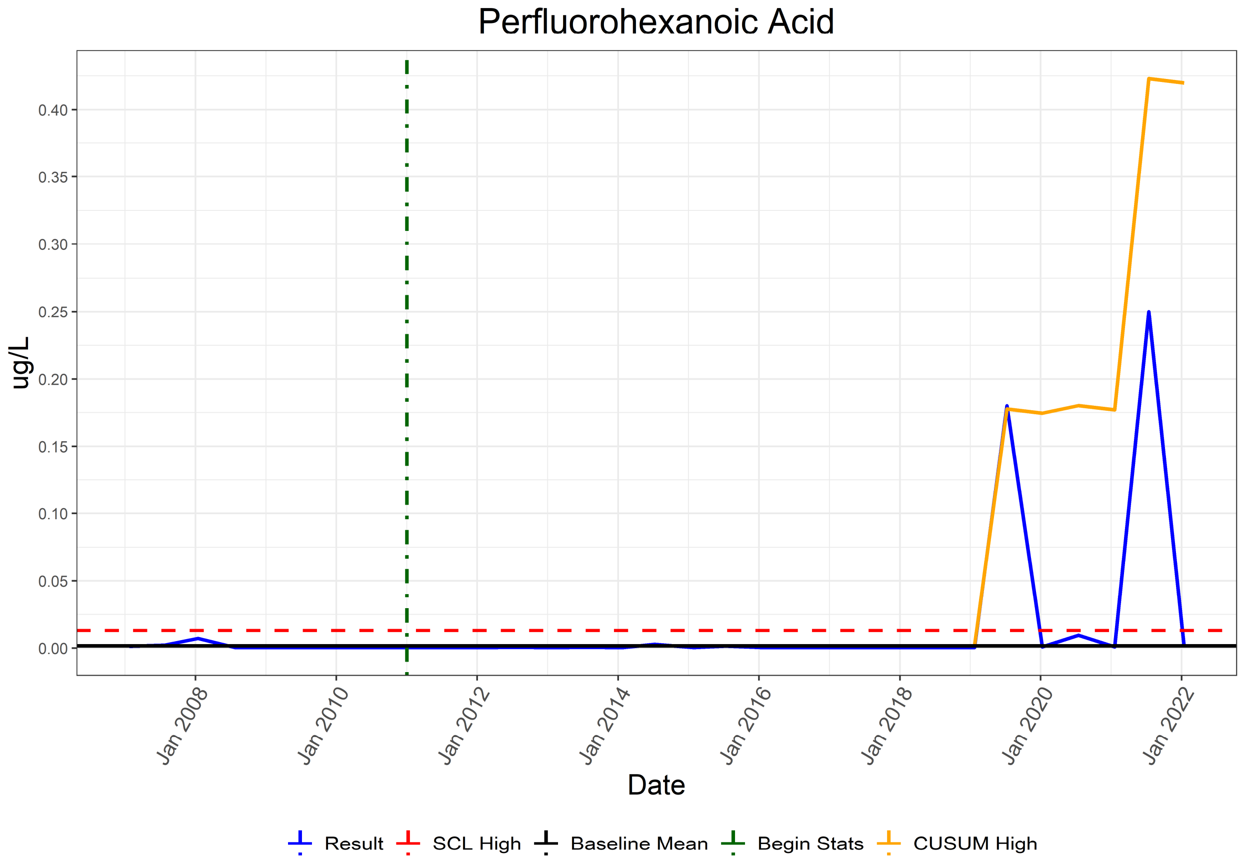

PFOA
ug/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

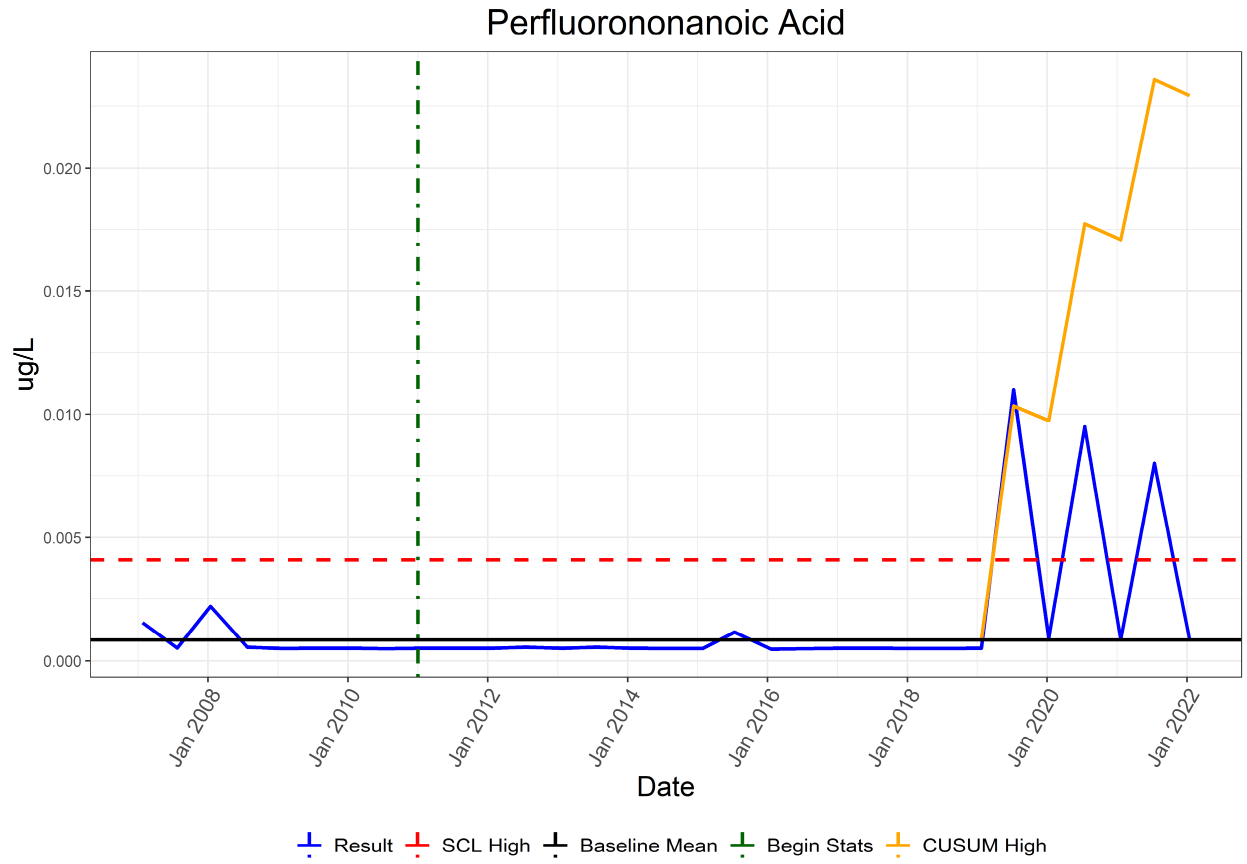

PFOS
ug/L
0.035
0.030
0.025
0.020
0.015
0.010
0.005
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

PFAS Monitoring Program (Program 9)

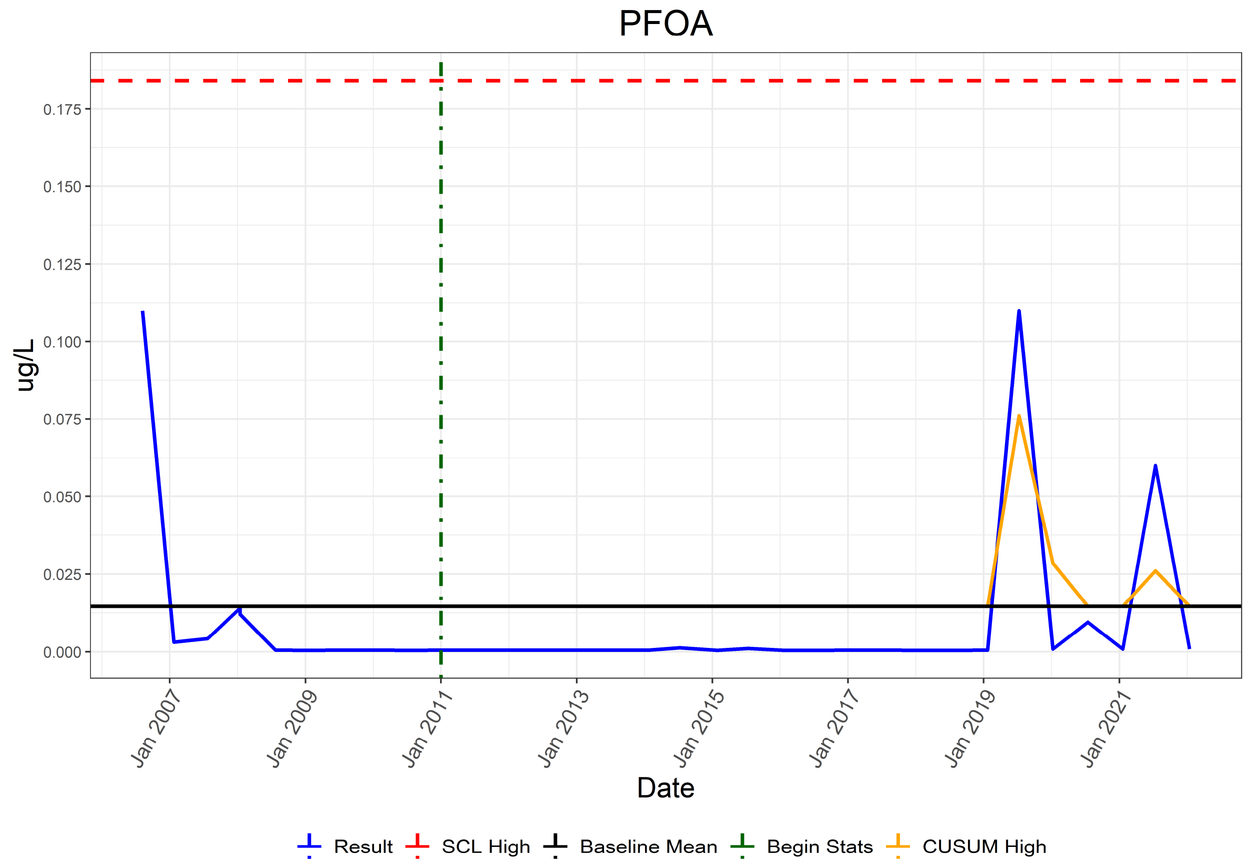
Well Name: C11-M01E







Perfluorononanoic Acid

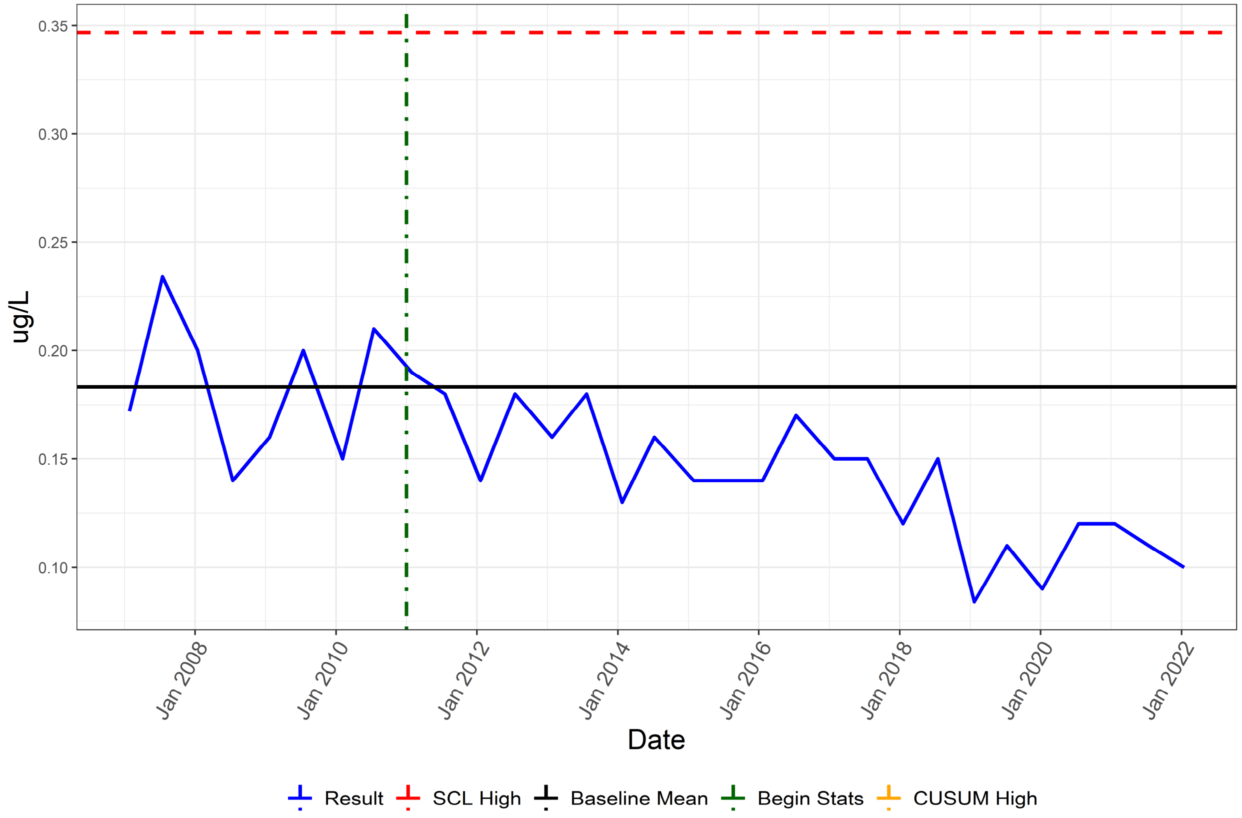


PFOA

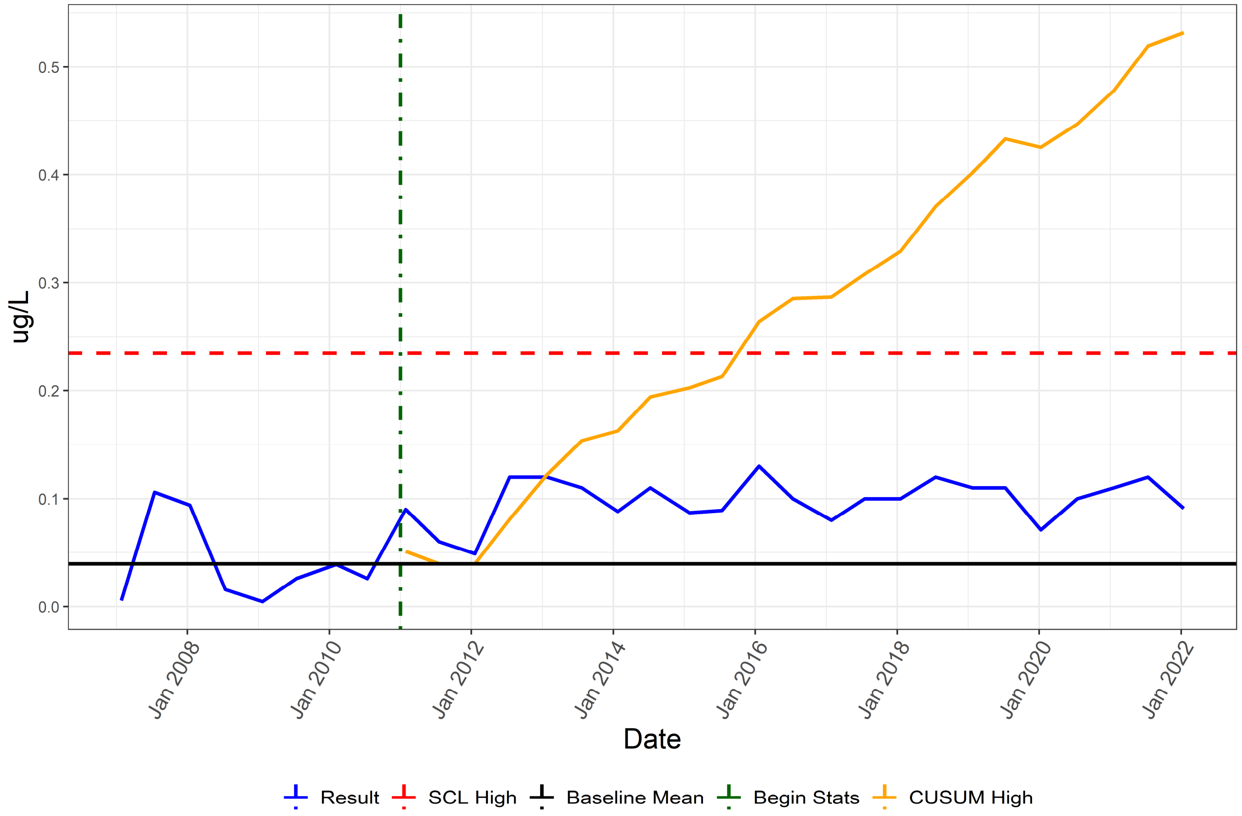
PFAS Monitoring Program (Program 9)

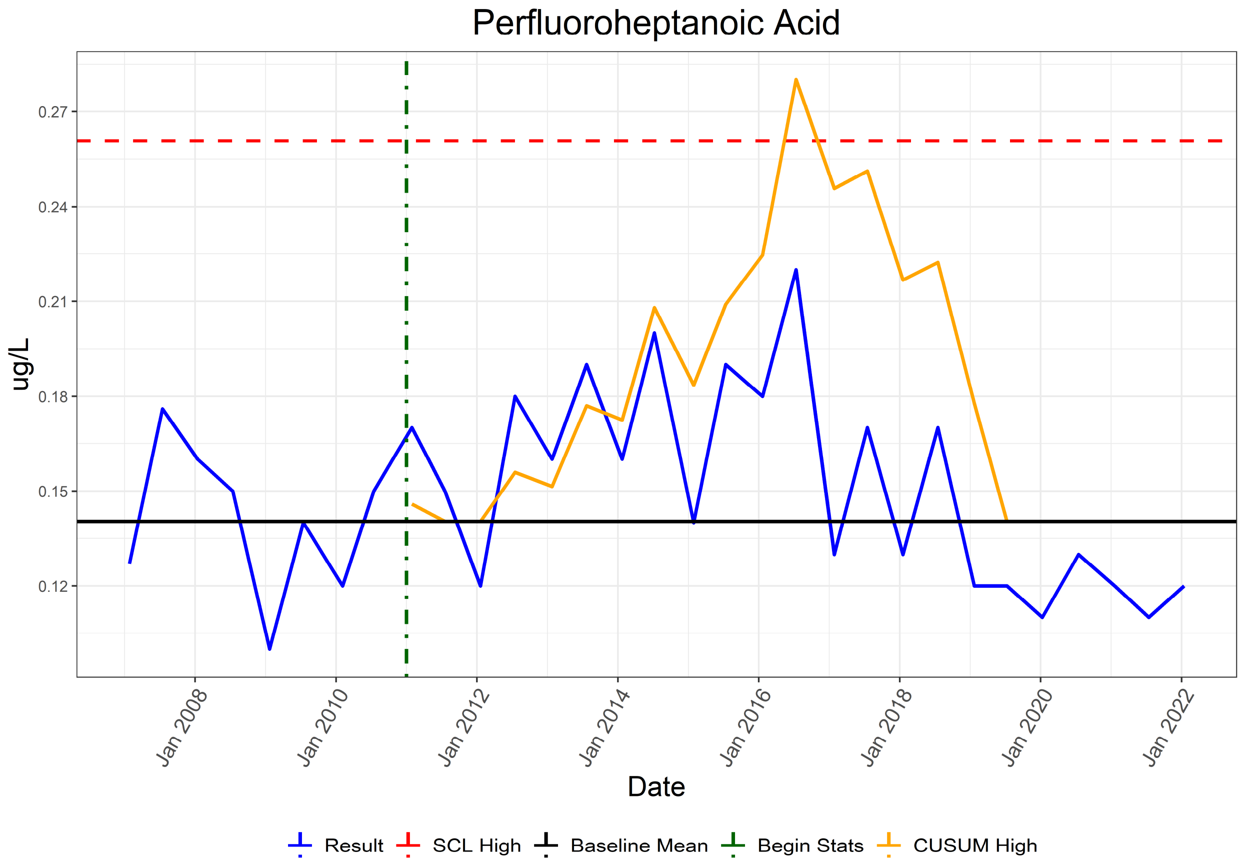
Well Name: C11-M02D

Perfluorobutanoic Acid

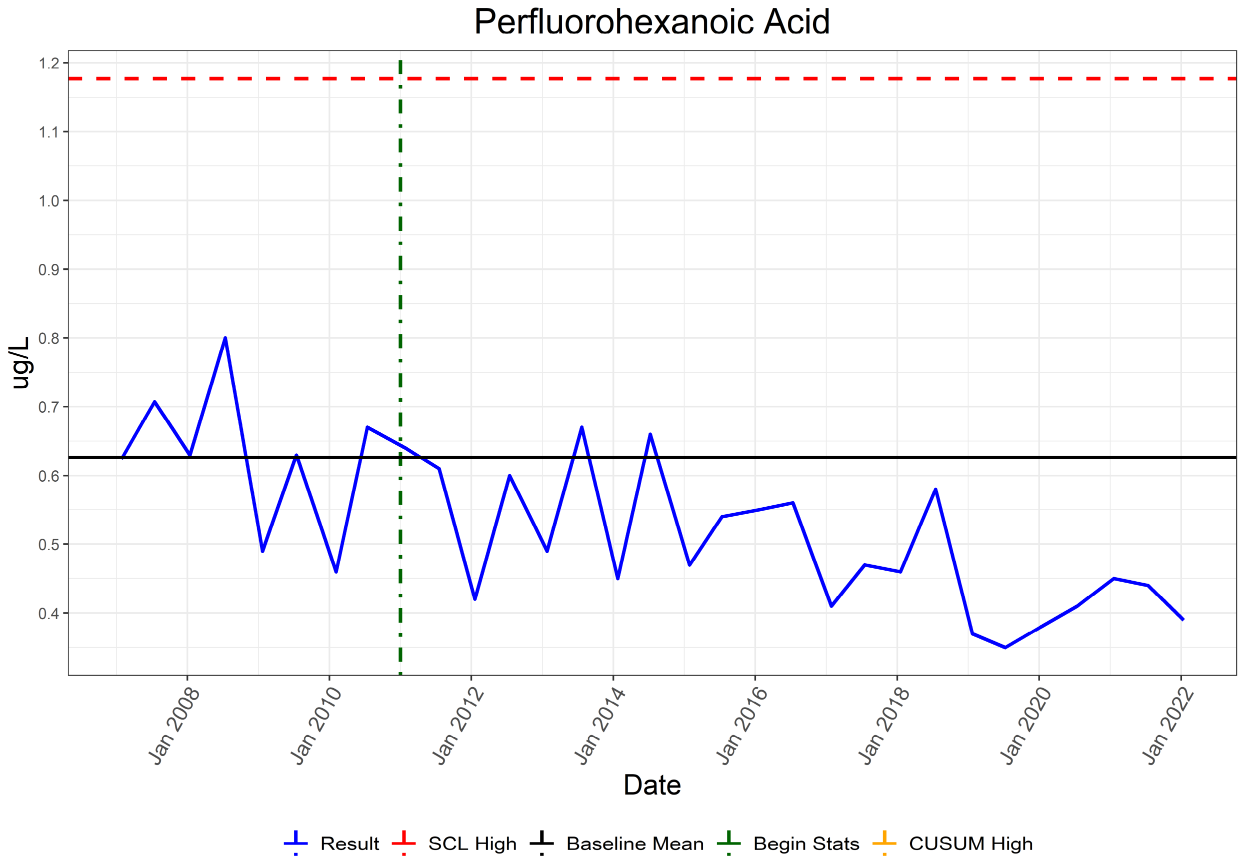


Perfluorodecanoic Acid

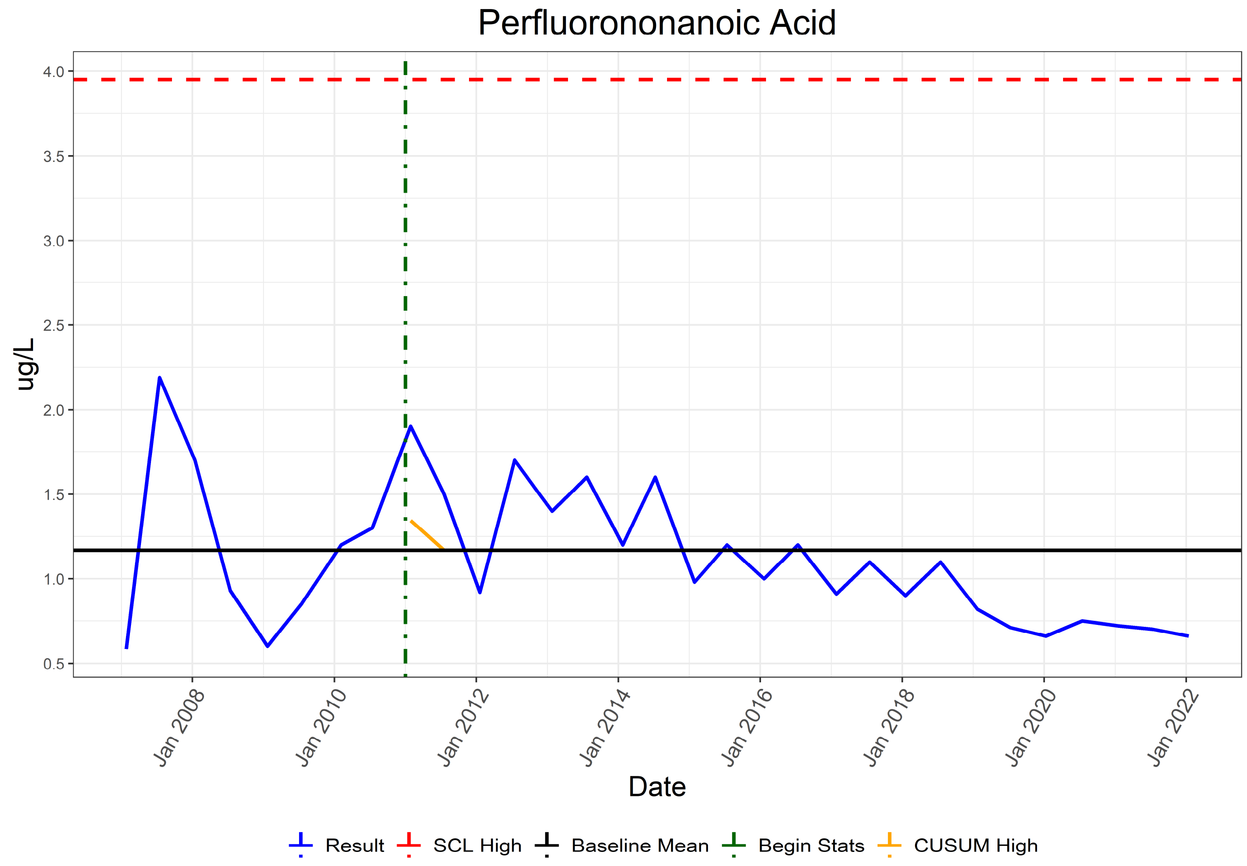


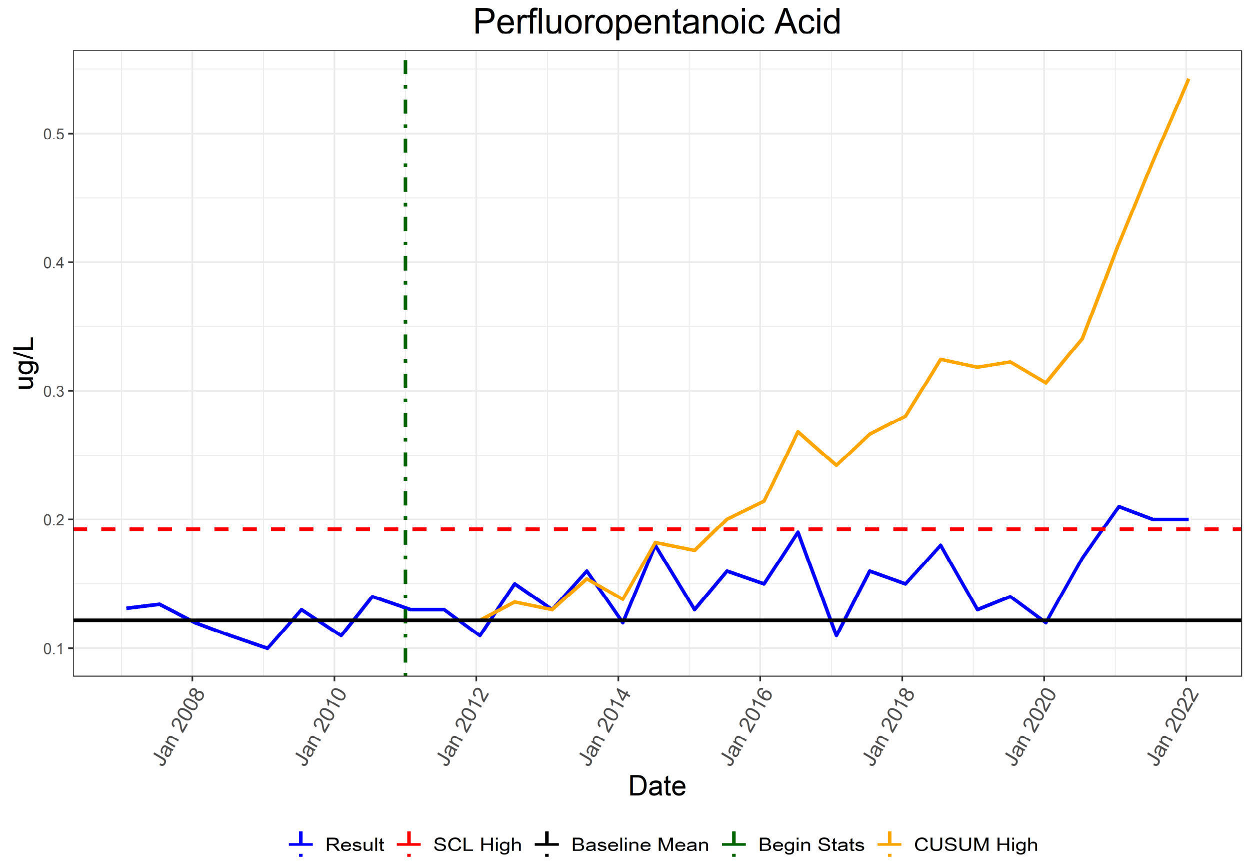


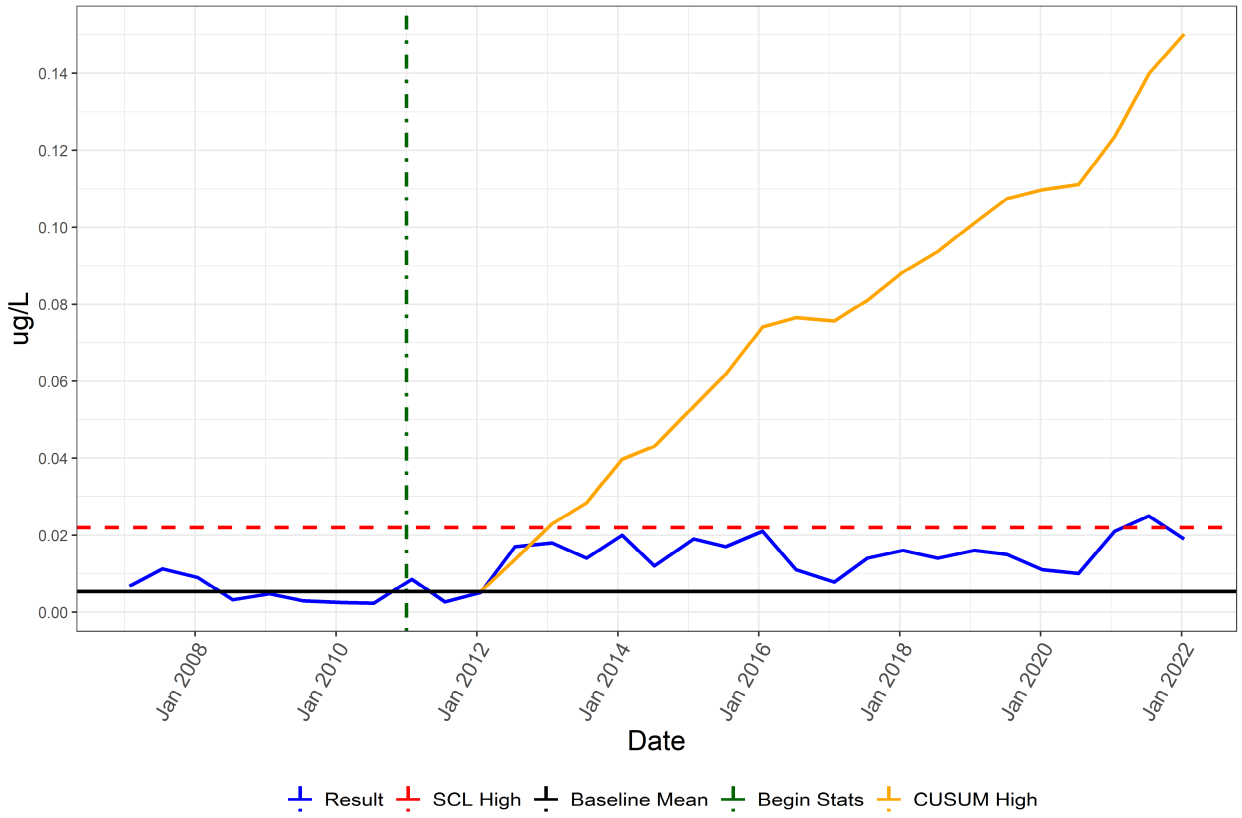
Perfluoroheptanoic Acid
ug/L
0.27
0.24
0.21
0.18
0.15
0.12
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High



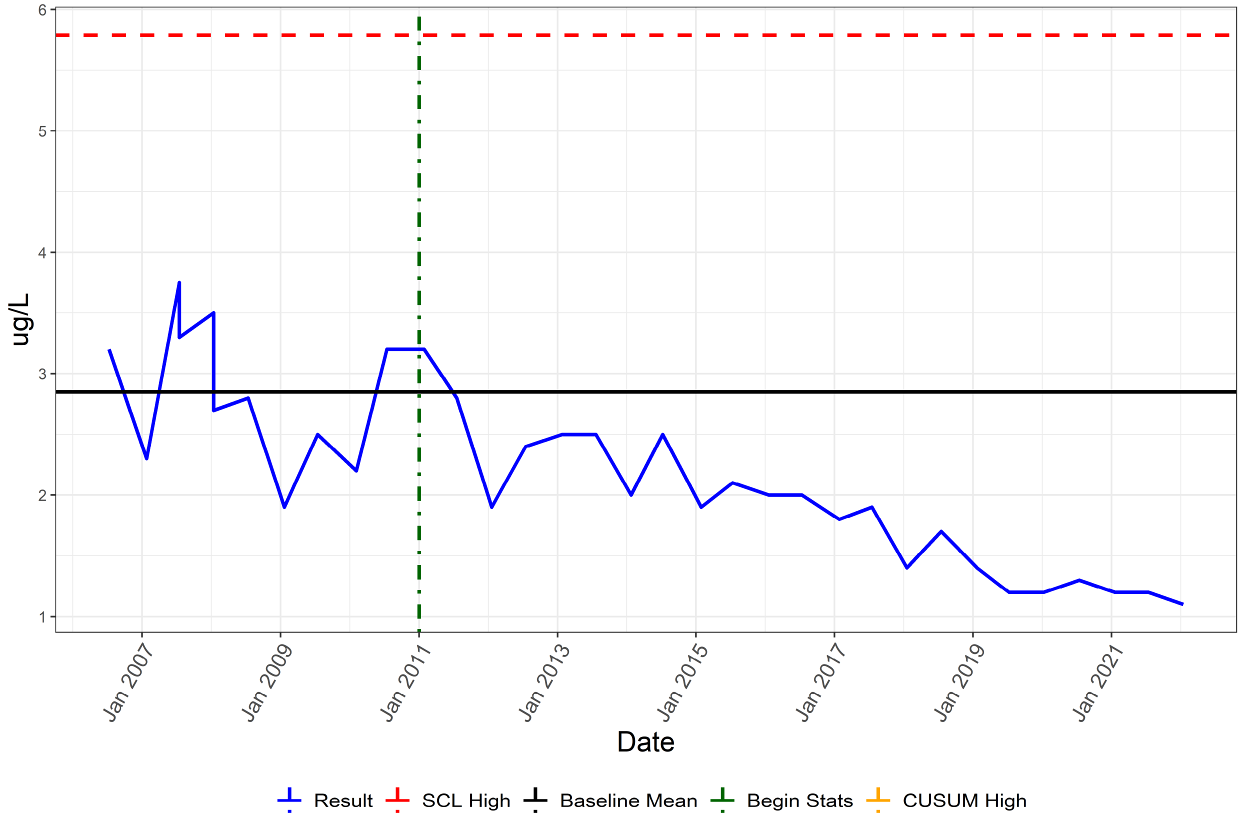
Perfluorohexanoic Acid
ug/L
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

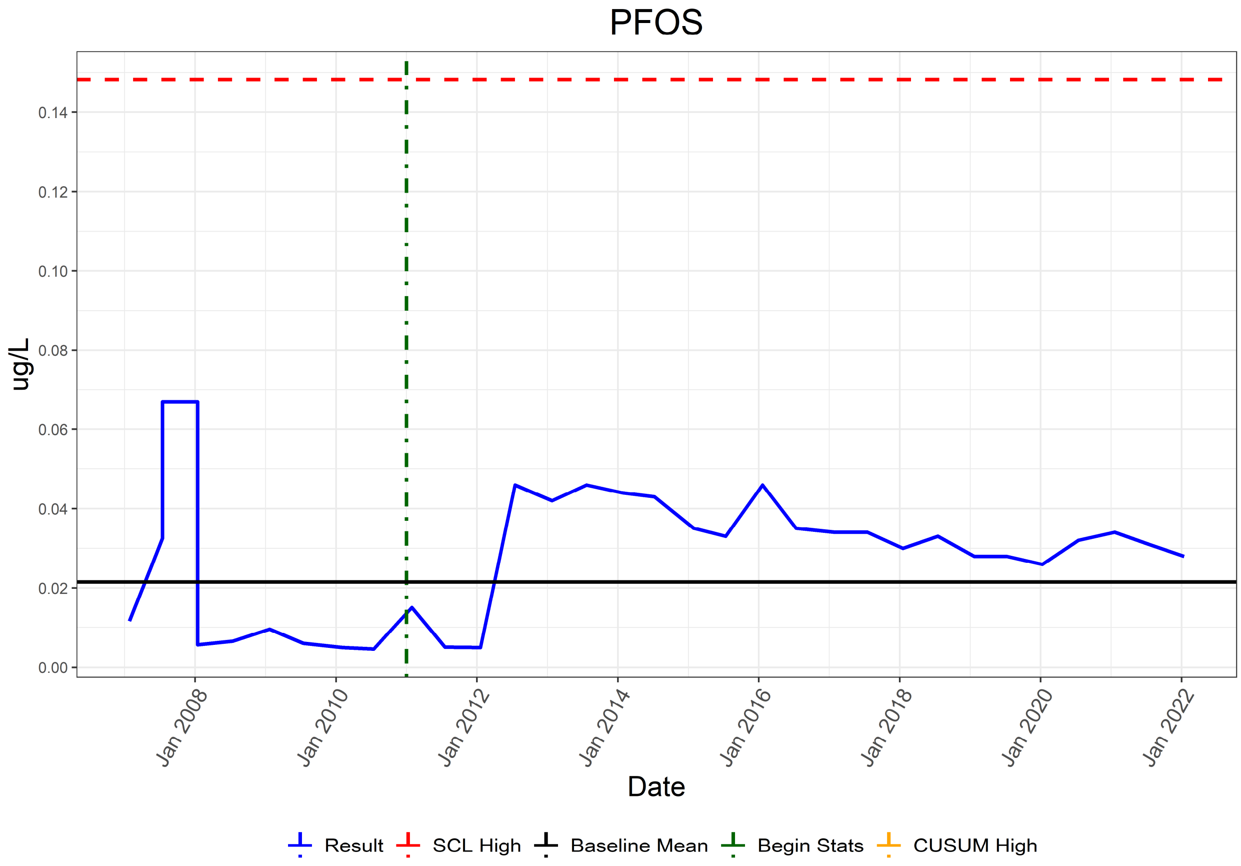

Perfluoropentanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High



Perfluoroundecanoic Acid

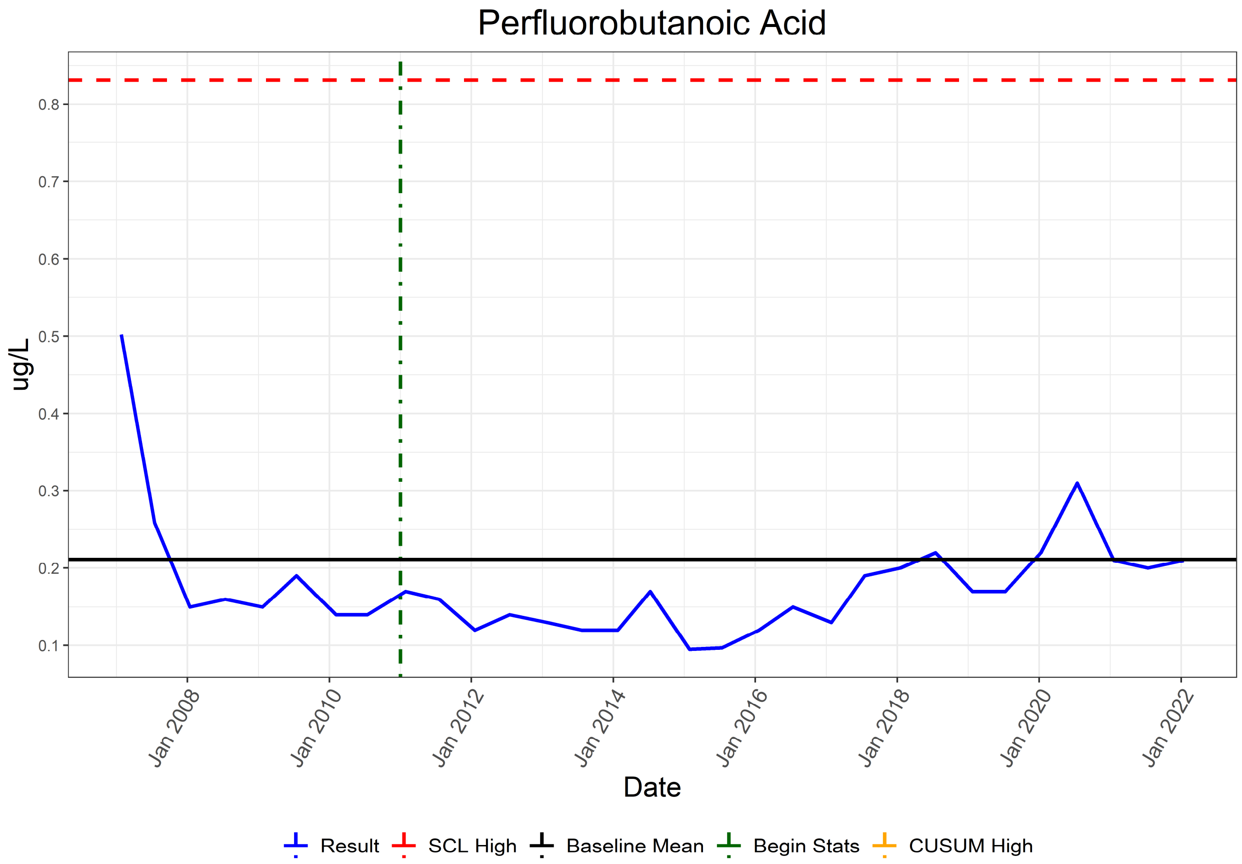


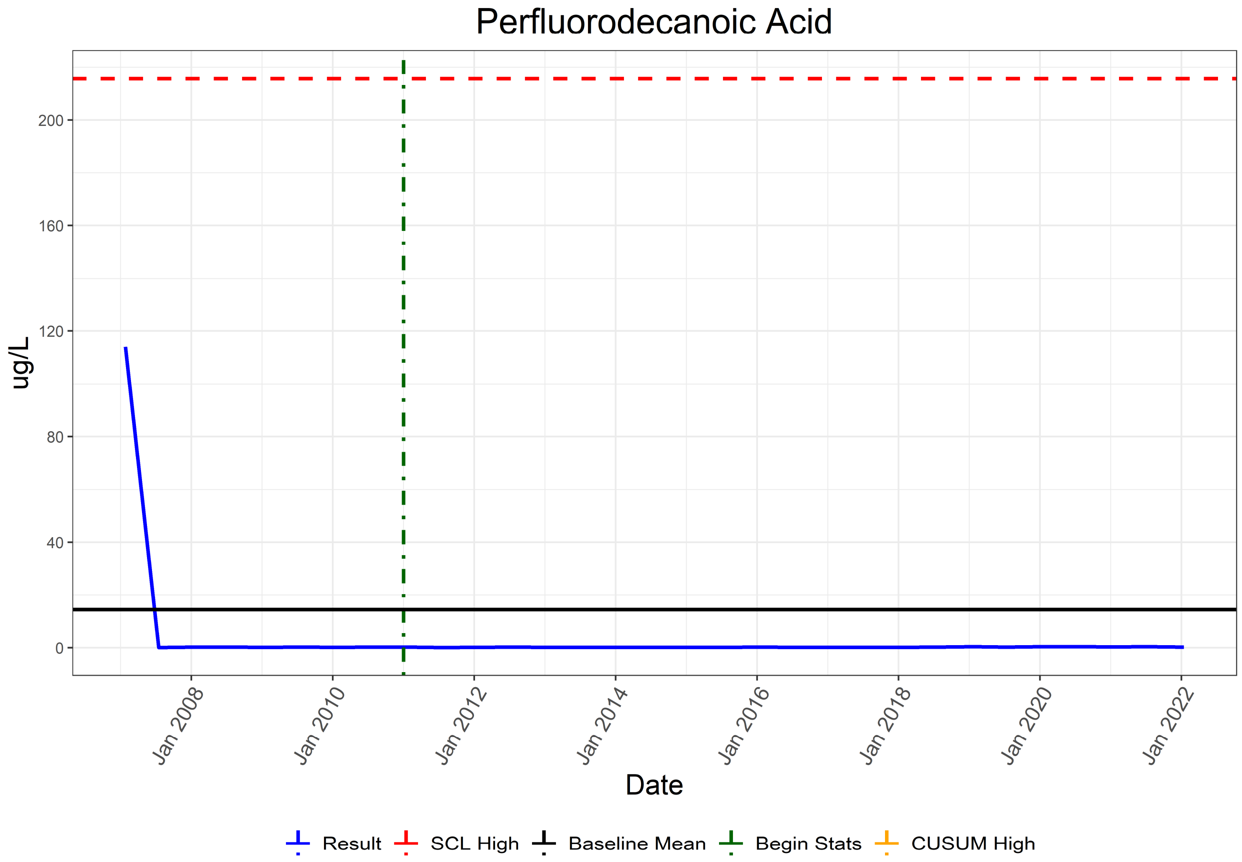
PFOA

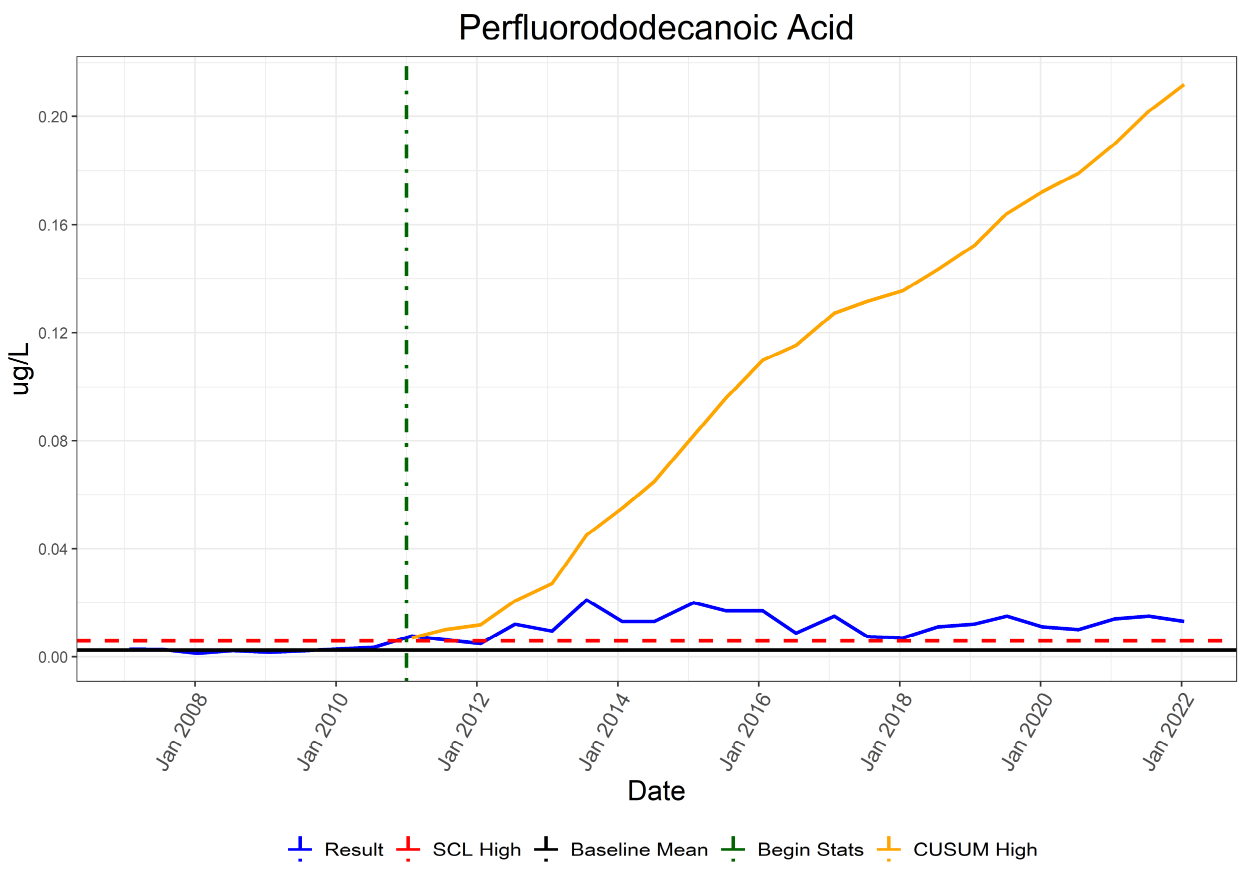

PFOS
ug/L
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

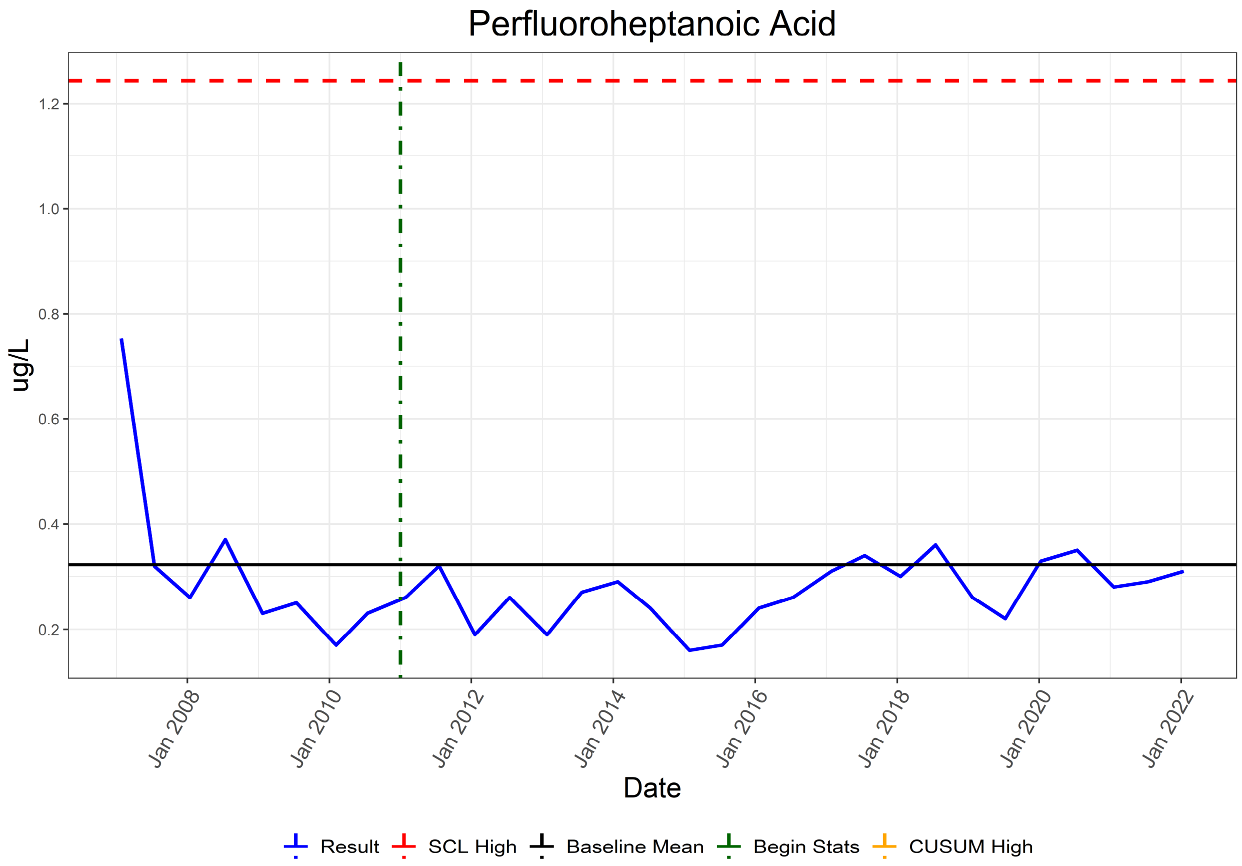
PFAS Monitoring Program (Program 9)

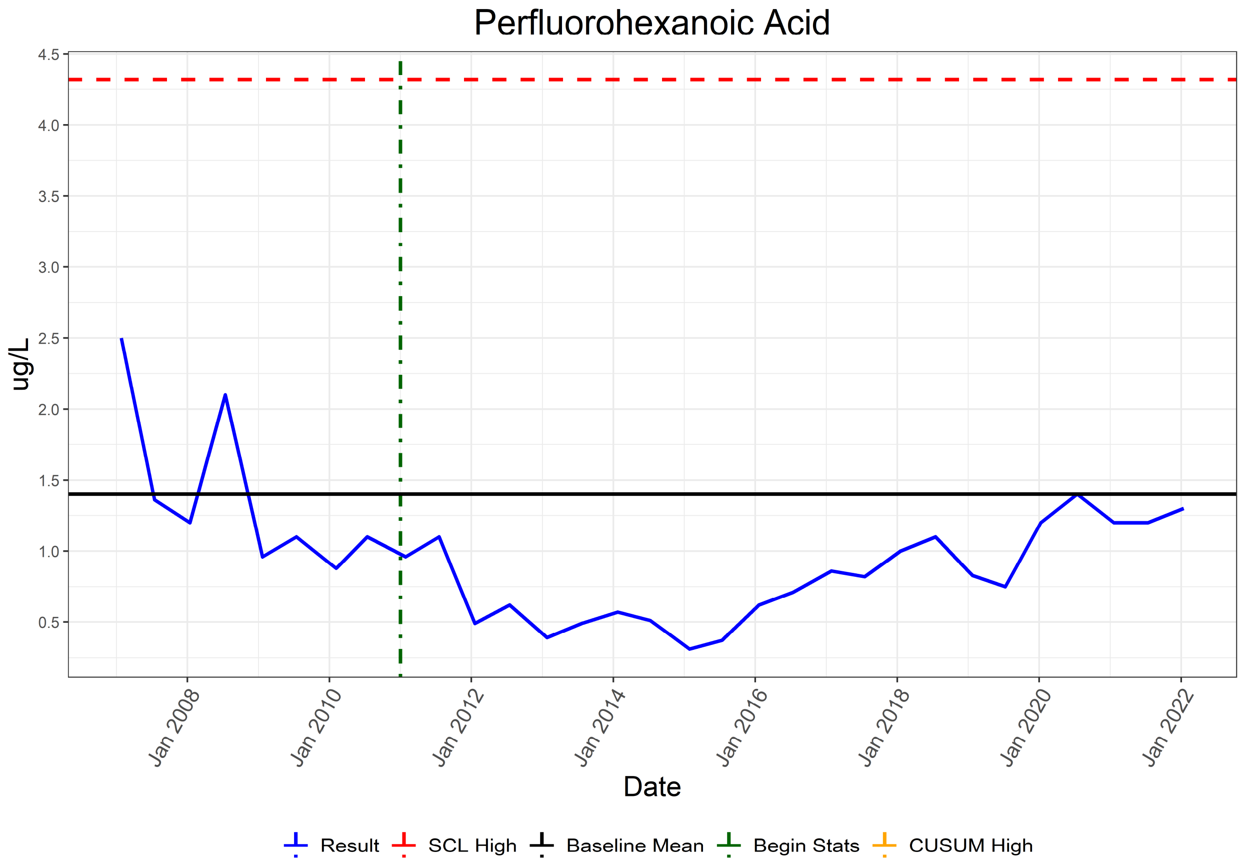
Well Name: C11-M03B

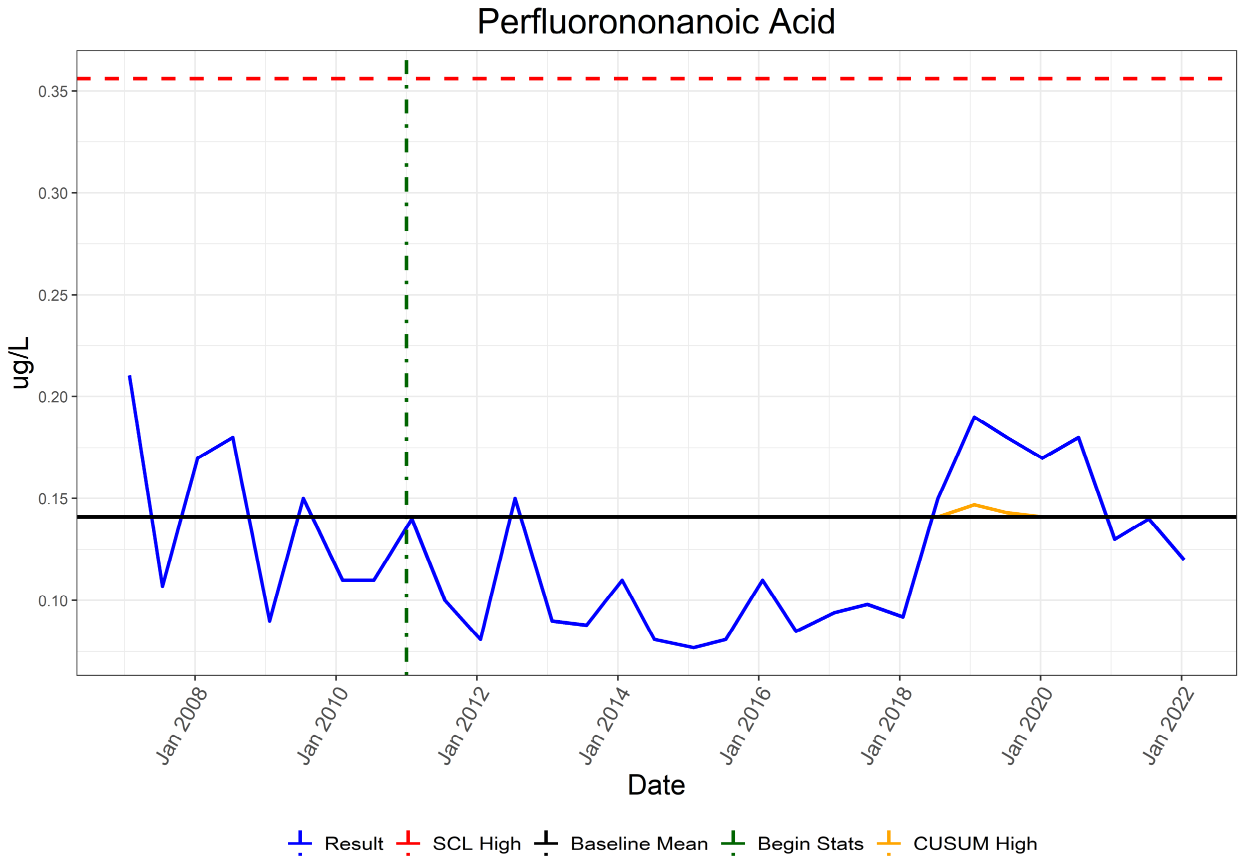


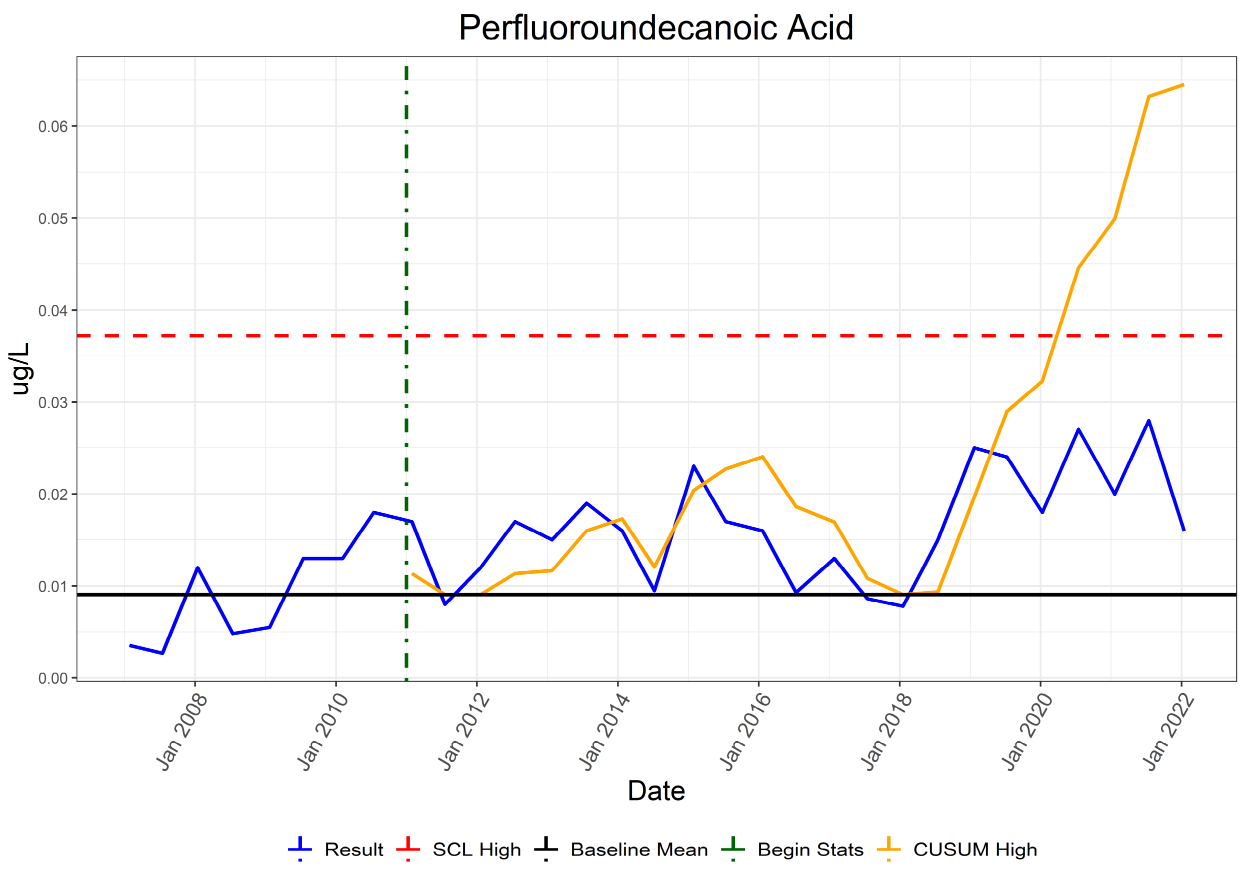


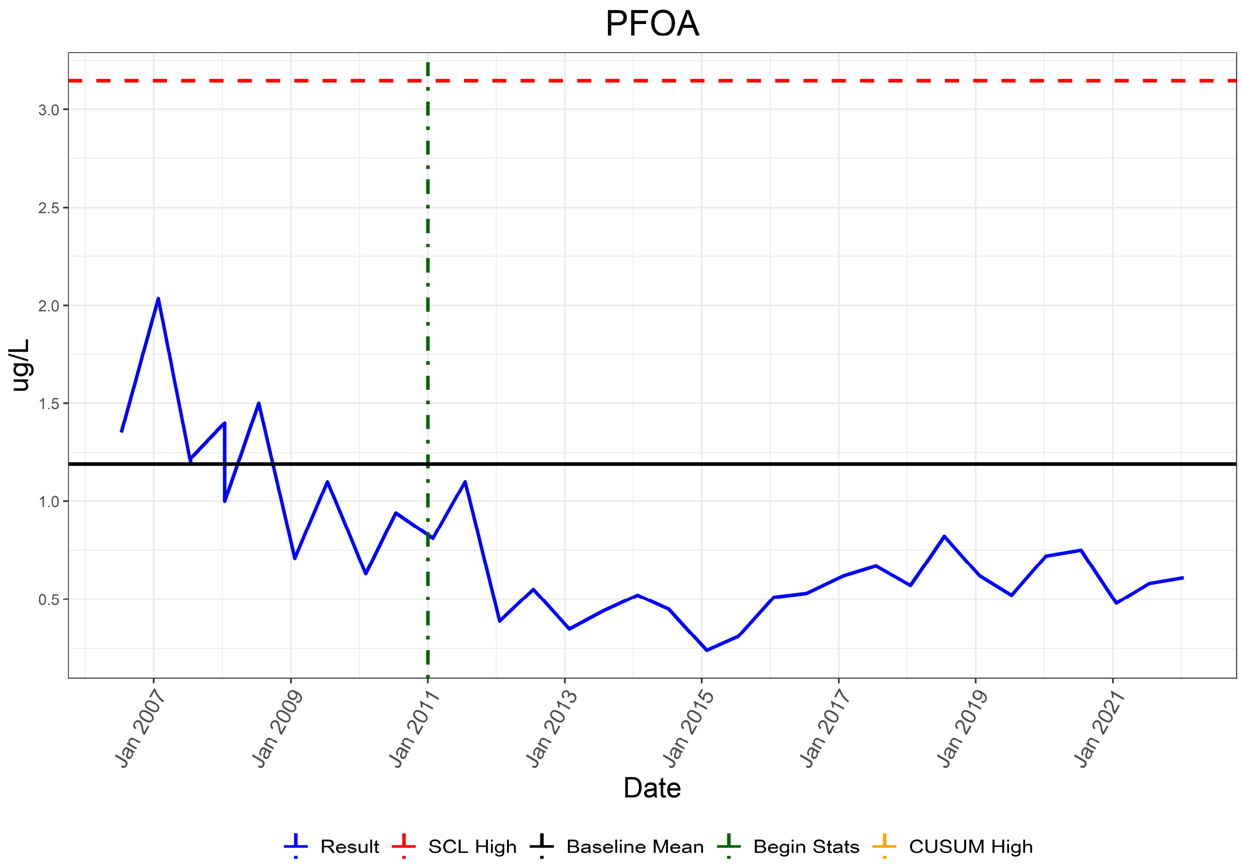

Perfluorododecanoic Acid
ug/L
0.20
0.16
0.12
0.08
0.04
0.00
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

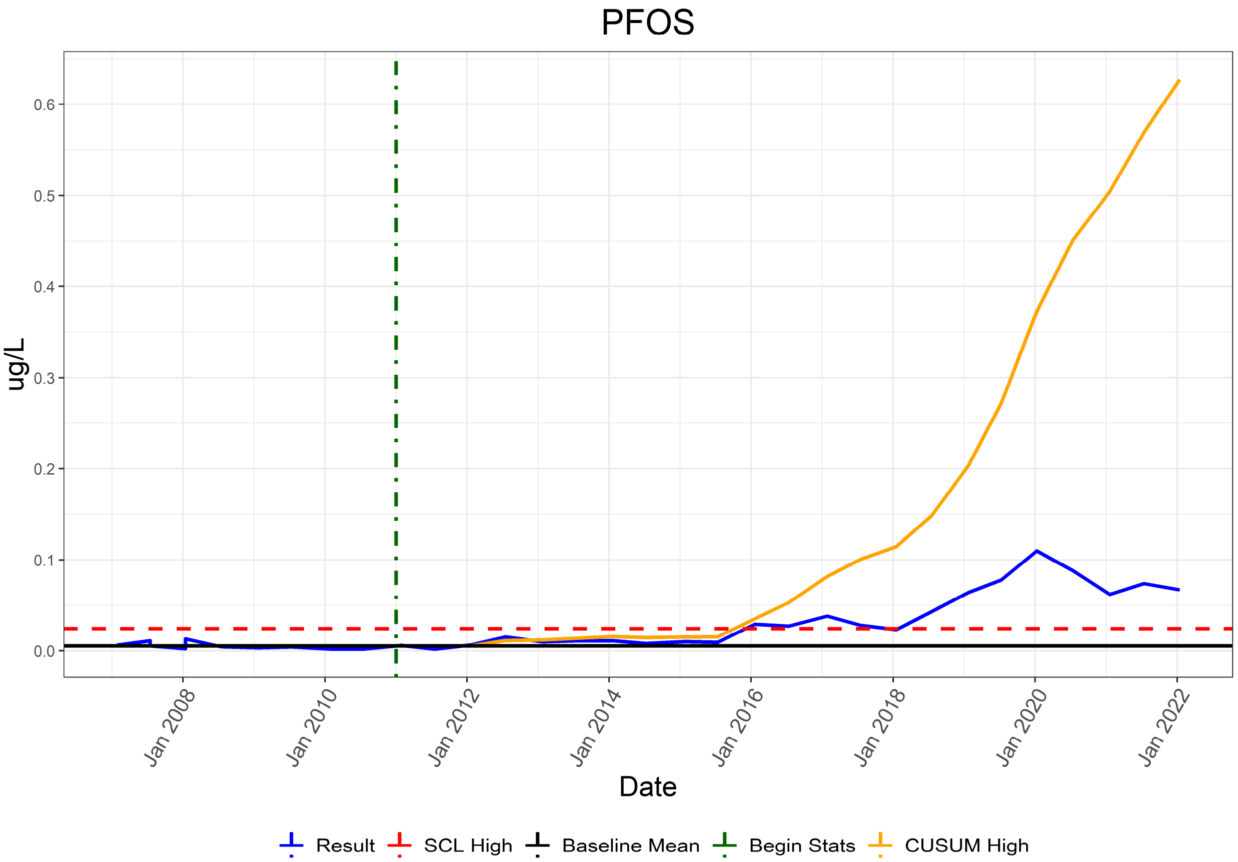

Perfluoroheptanoic Acid
ug/L
1.2
1.0
0.8
0.6
0.4
0.2
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.35
0.30
0.25
0.20
0.15
0.10
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

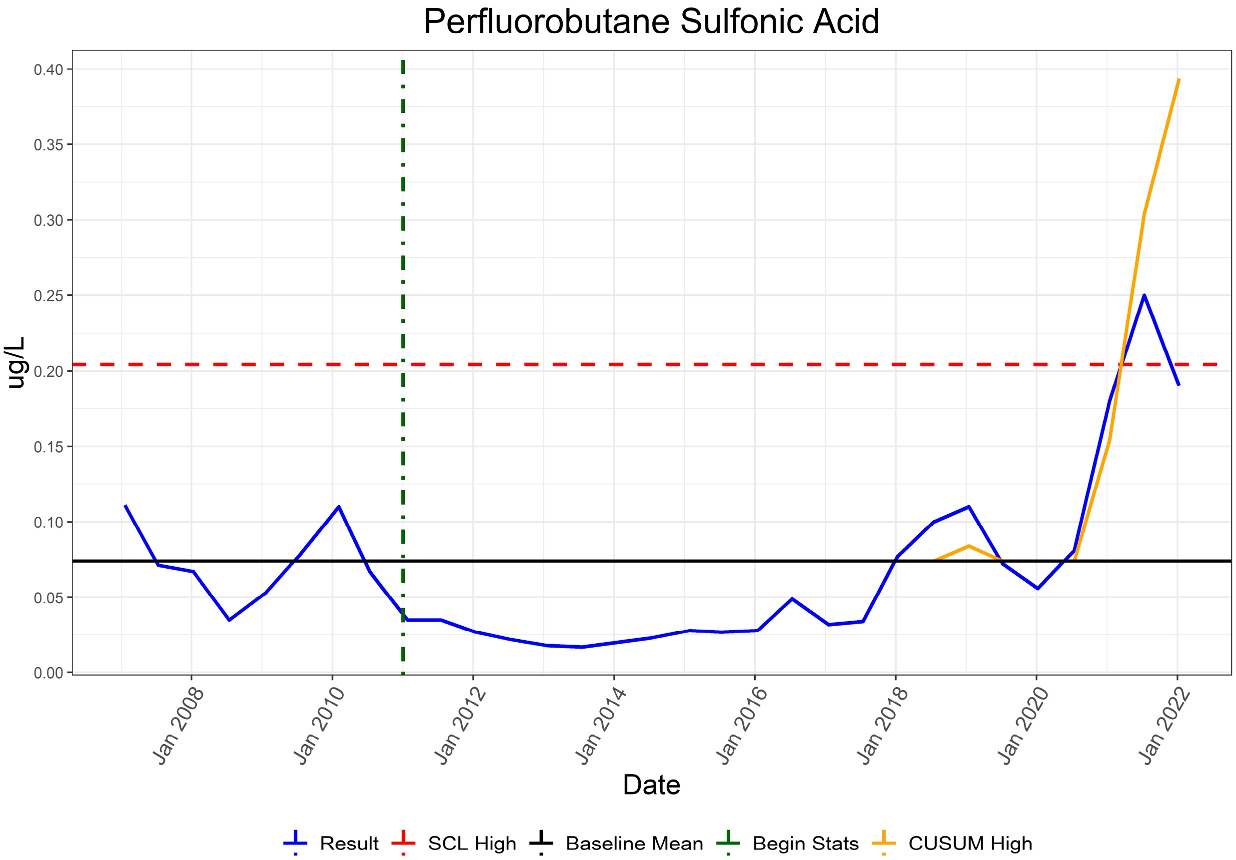

Perfluoroundecanoic Acid
ug/L
0.00
0.01
0.02
0.03
0.04
0.05
0.06
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

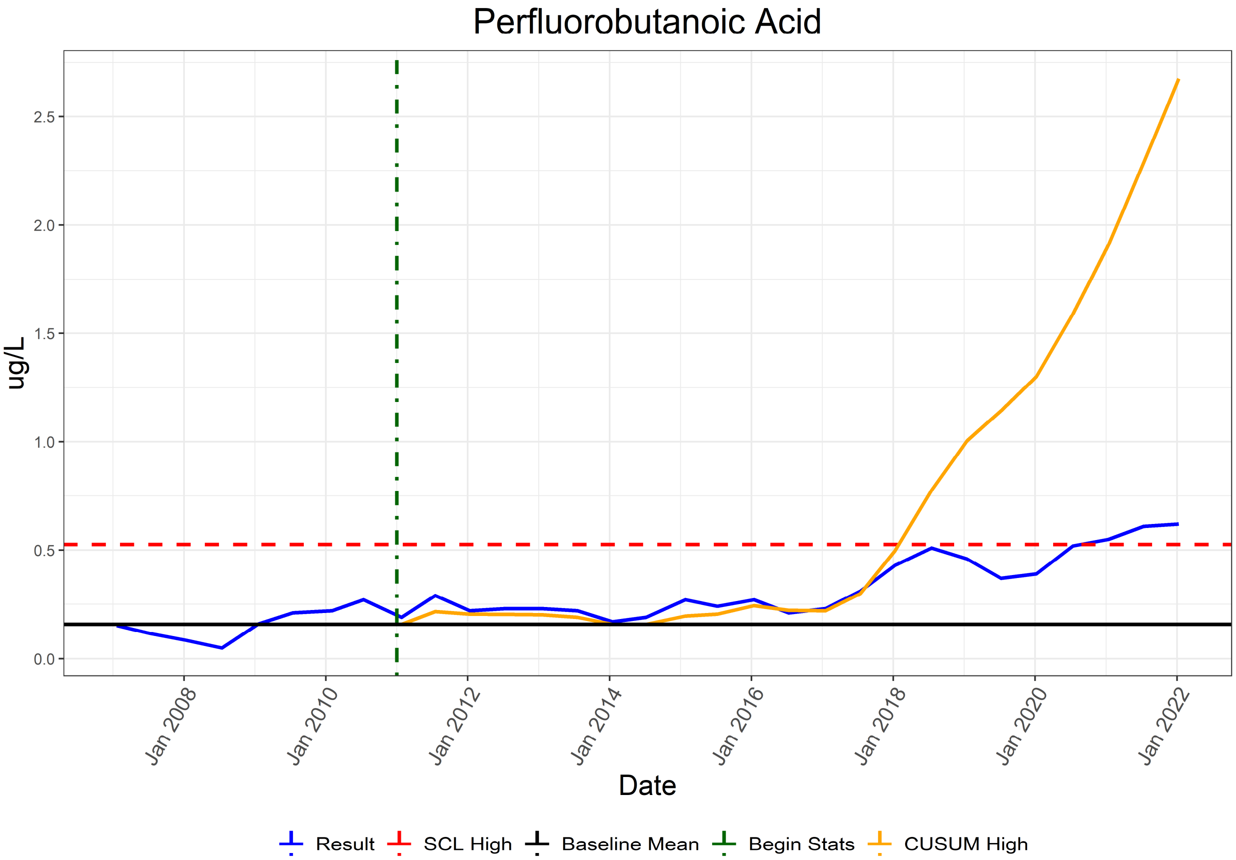

PFOA
ug/L
0.5
1.0
1.5
2.0
2.5
3.0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

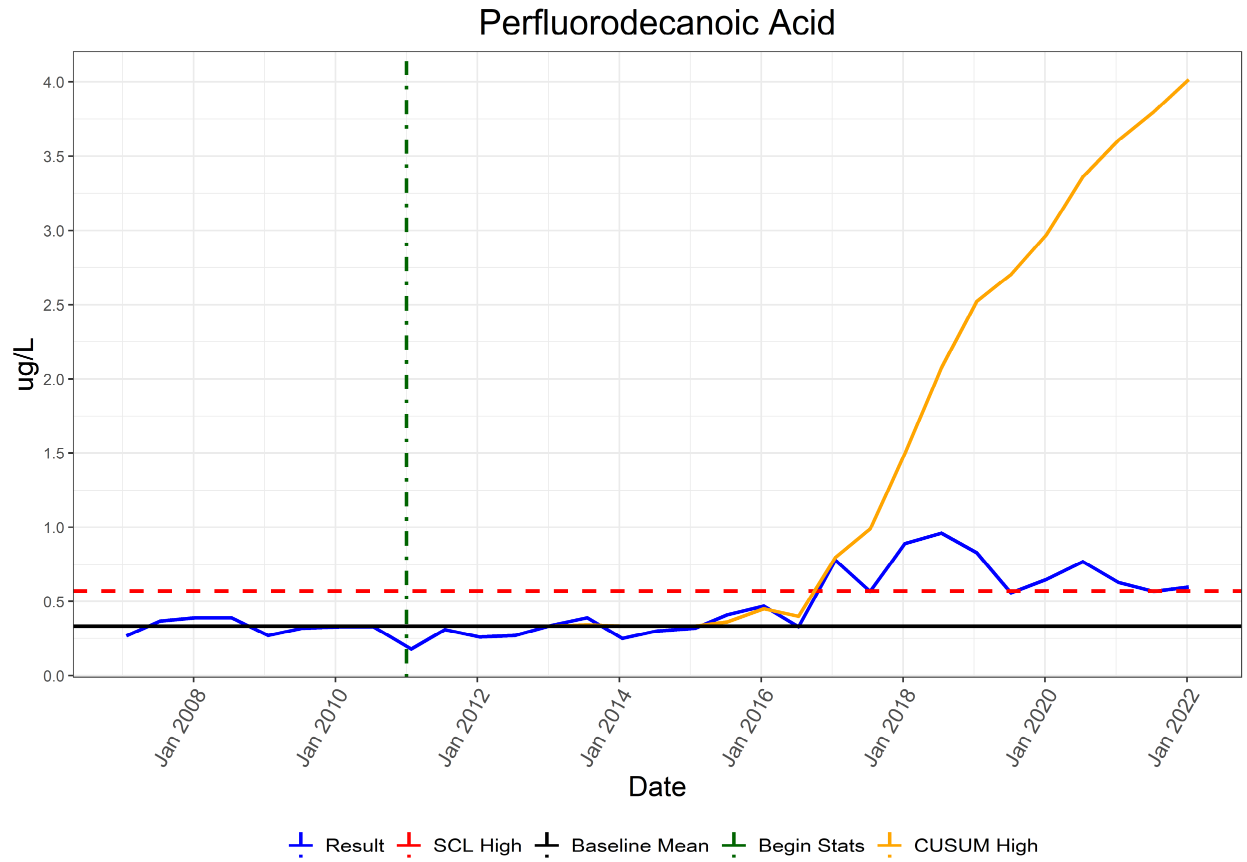

PFOS
ug/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

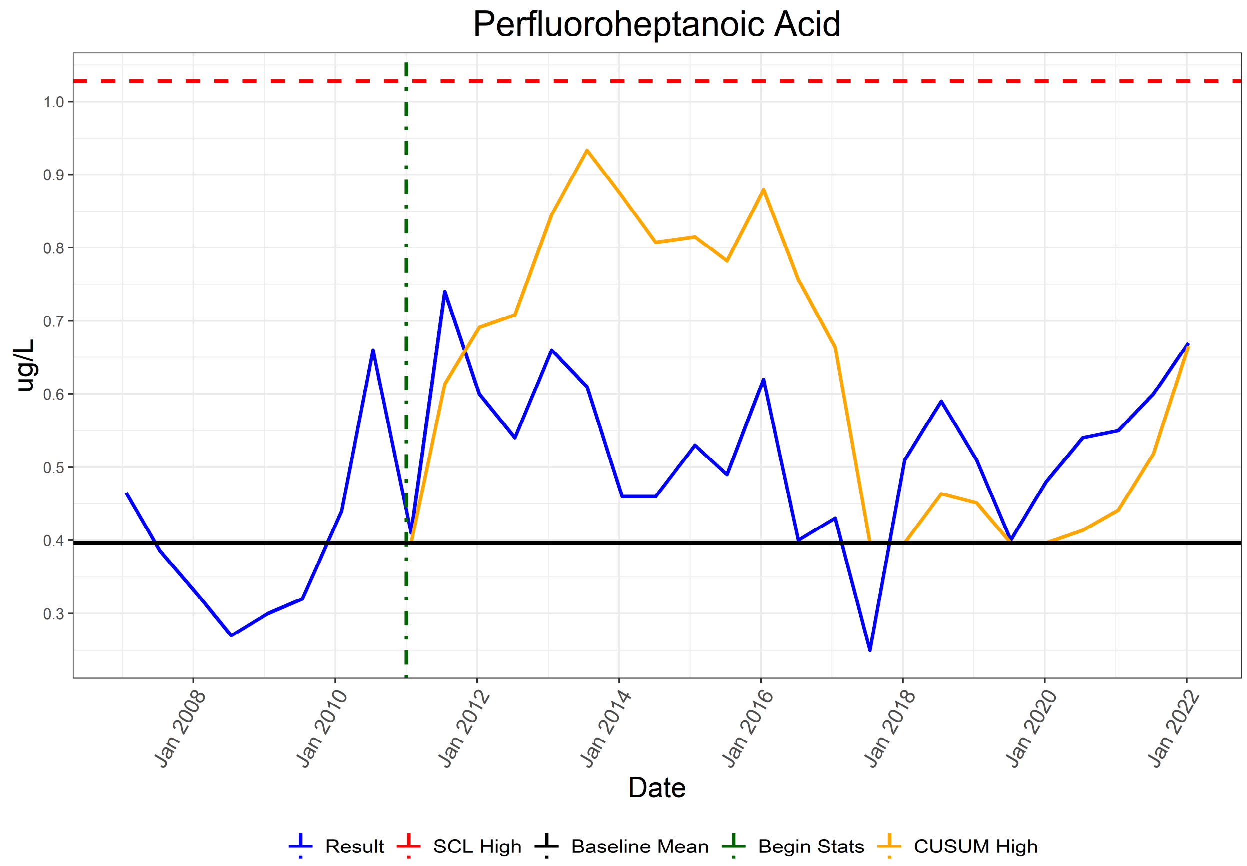
PFAS Monitoring Program (Program 9)

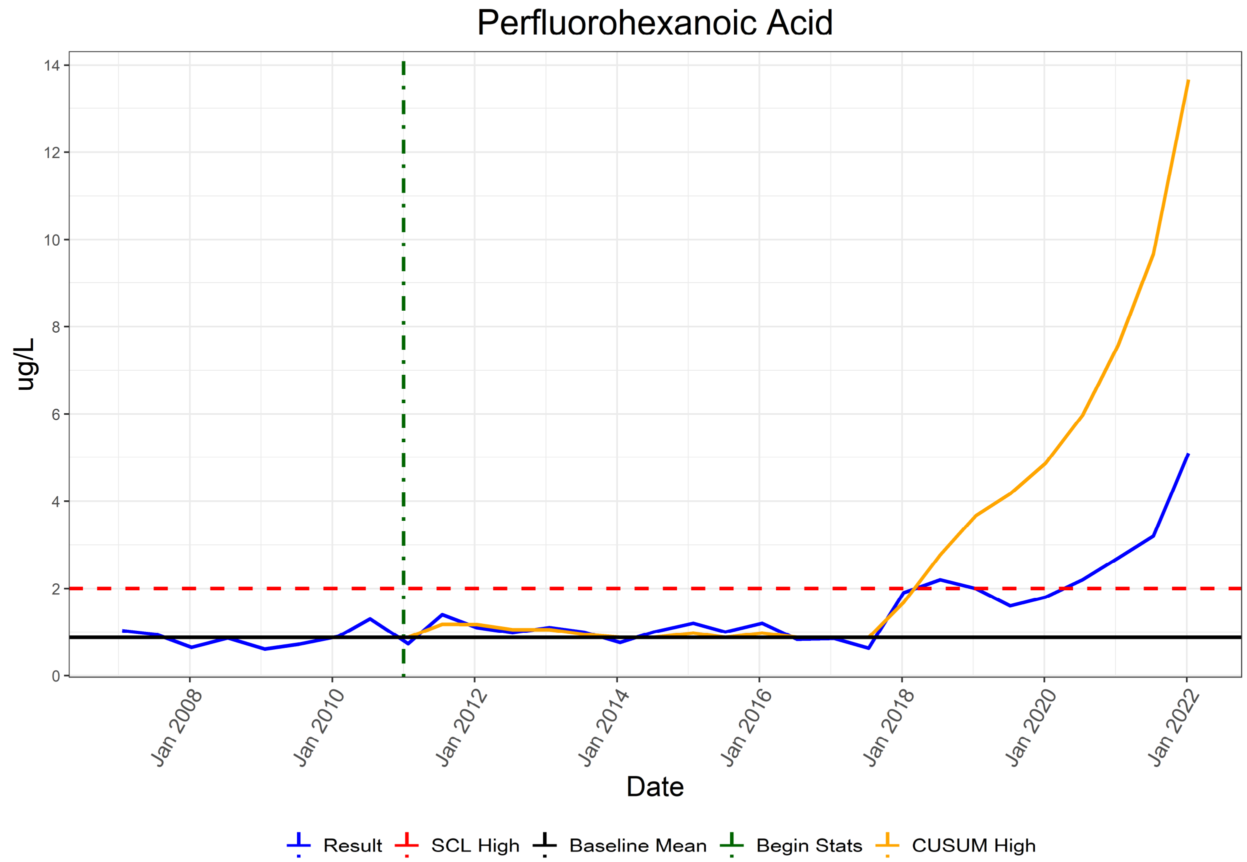
Well Name: D06-M01B

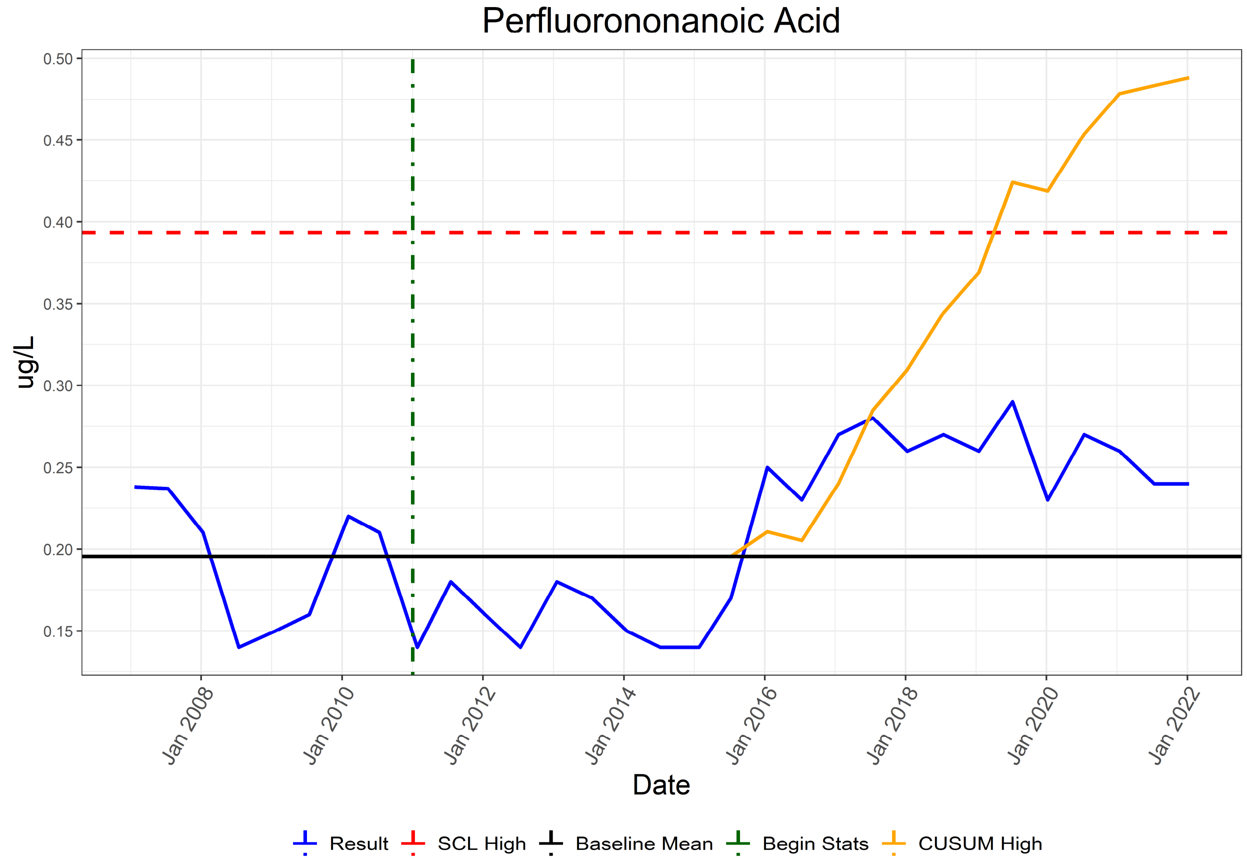




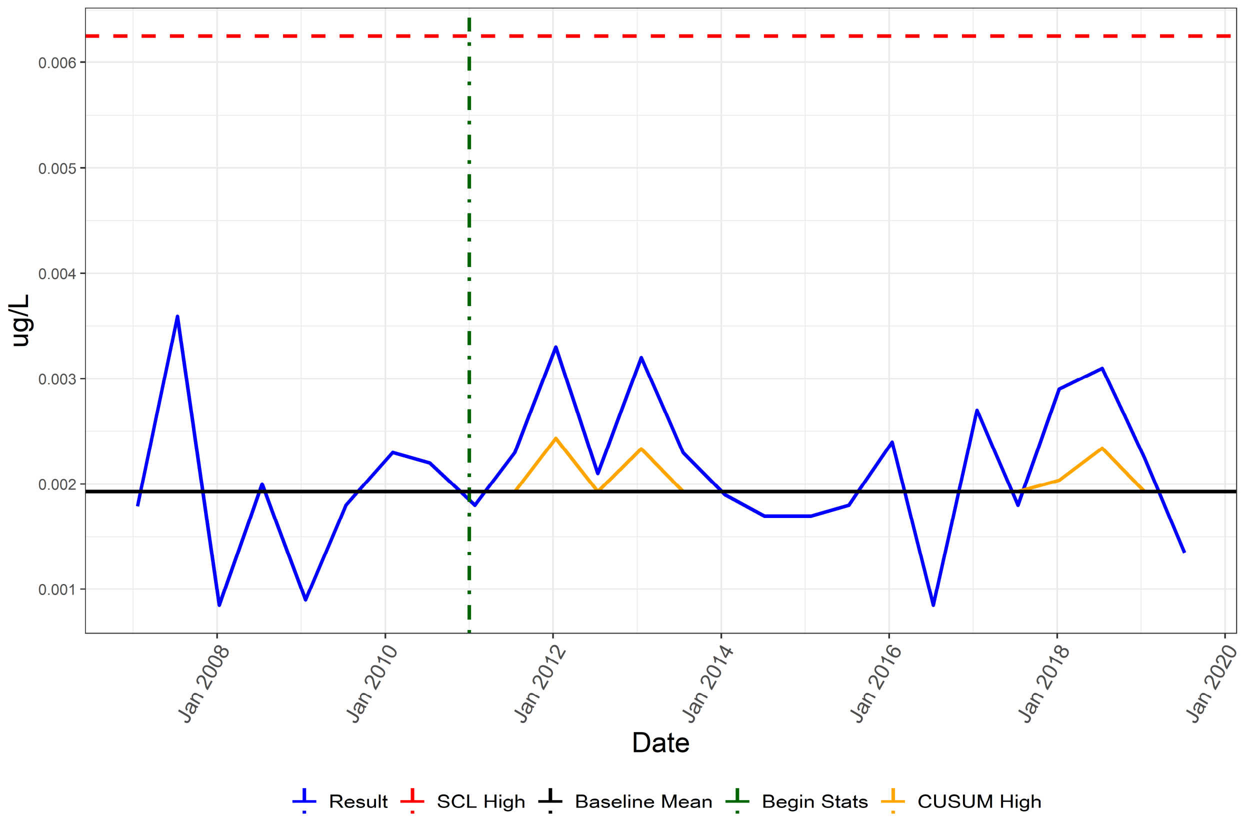

Perfluorodecanoic Acid
ug/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoroheptanoic Acid
ug/L
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

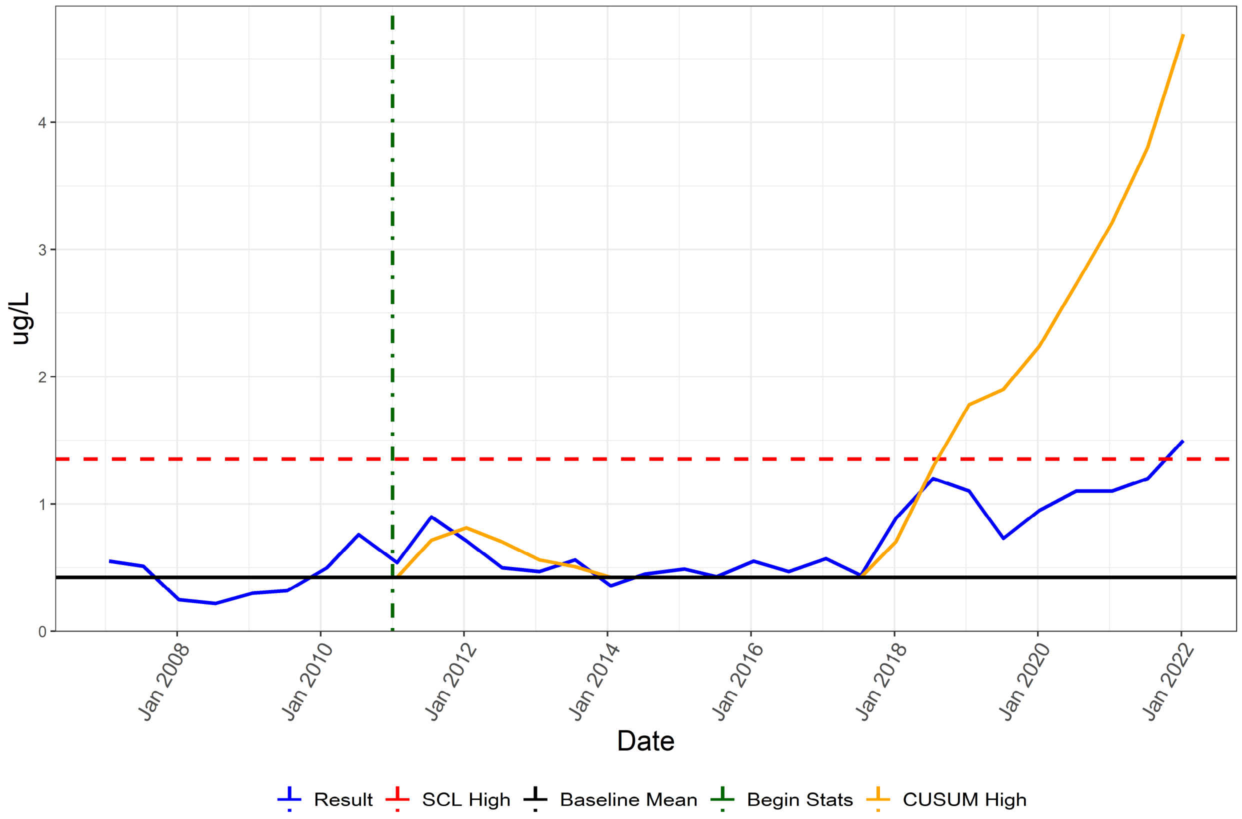

Perfluorohexanoic Acid
ug/L
0
2
4
6
8
10
12
14
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

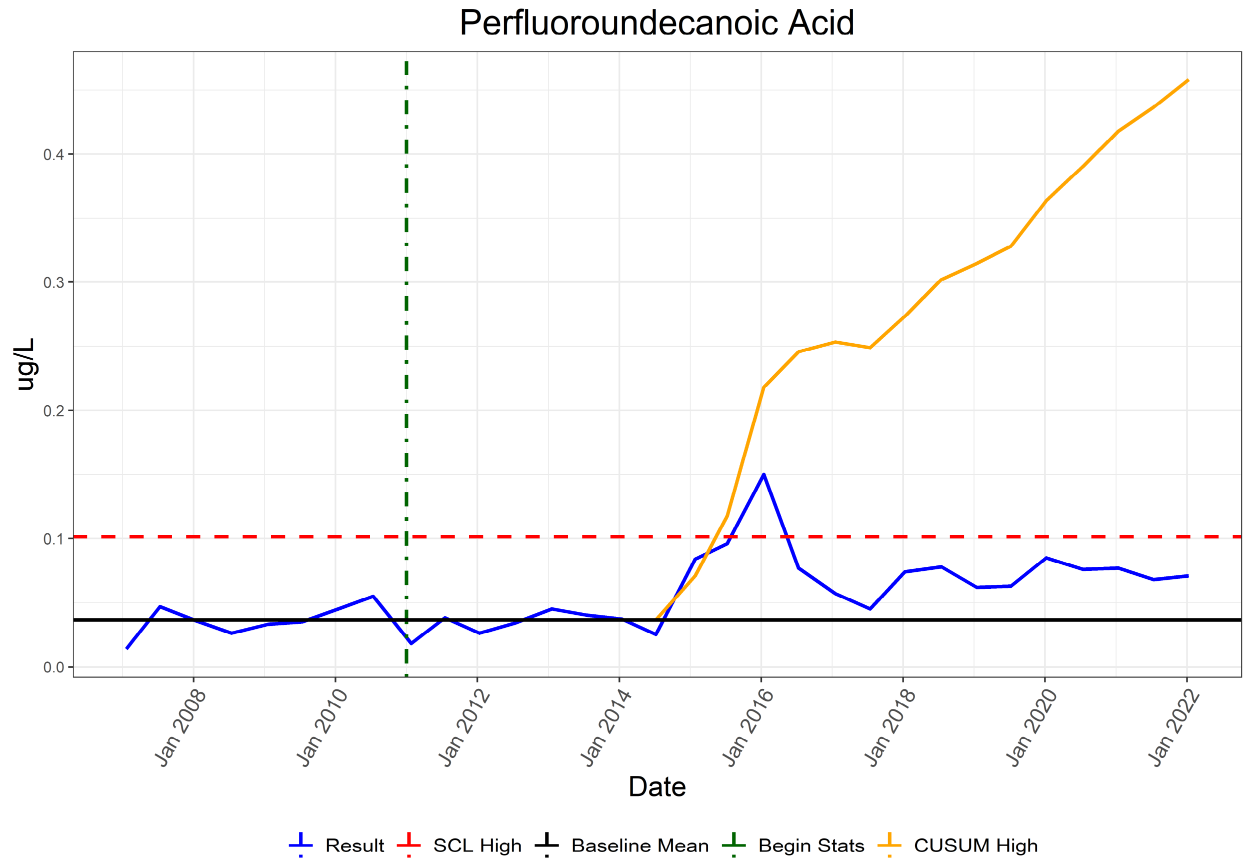

Perfluorononanoic Acid
ug/L
0.15
0.20
0.25
0.30
0.35
0.40
0.45
0.50
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

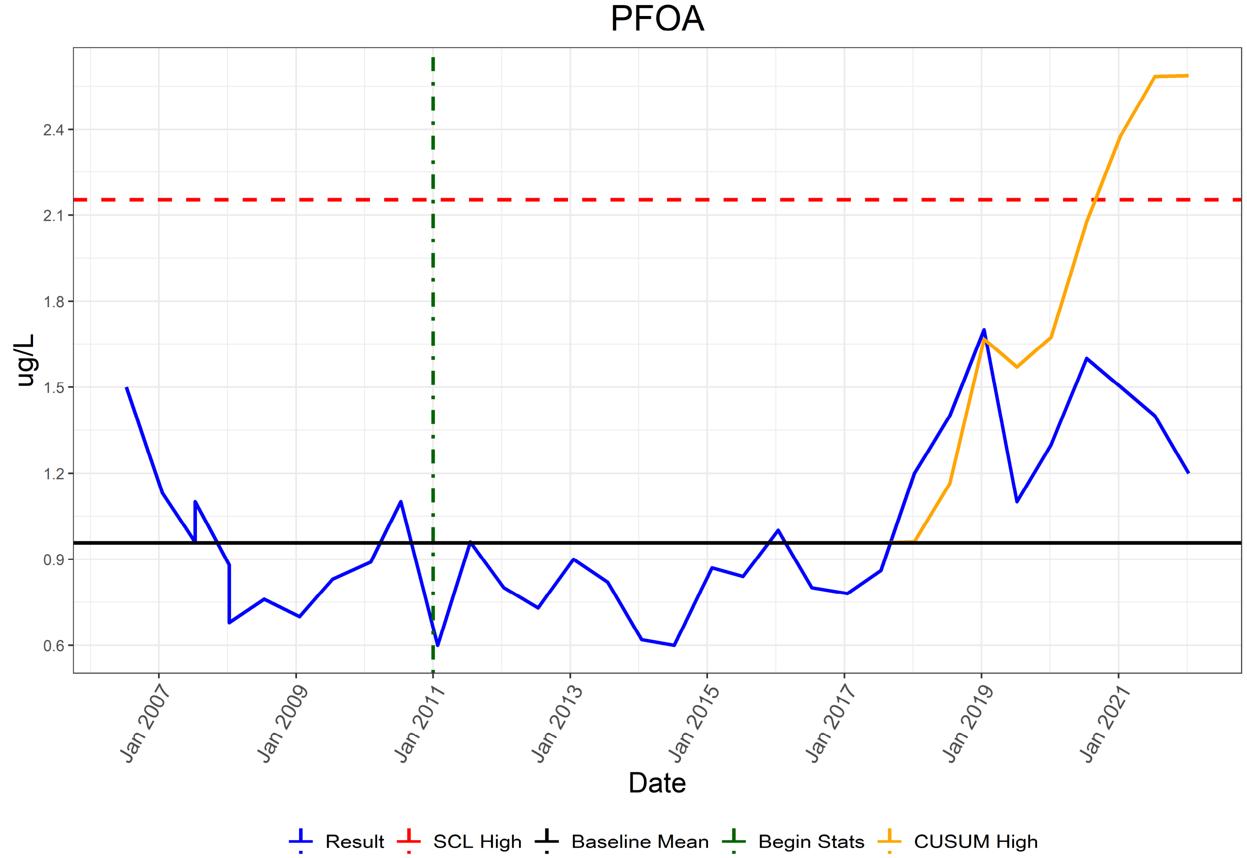
Perfluorooctane Sulfonamide

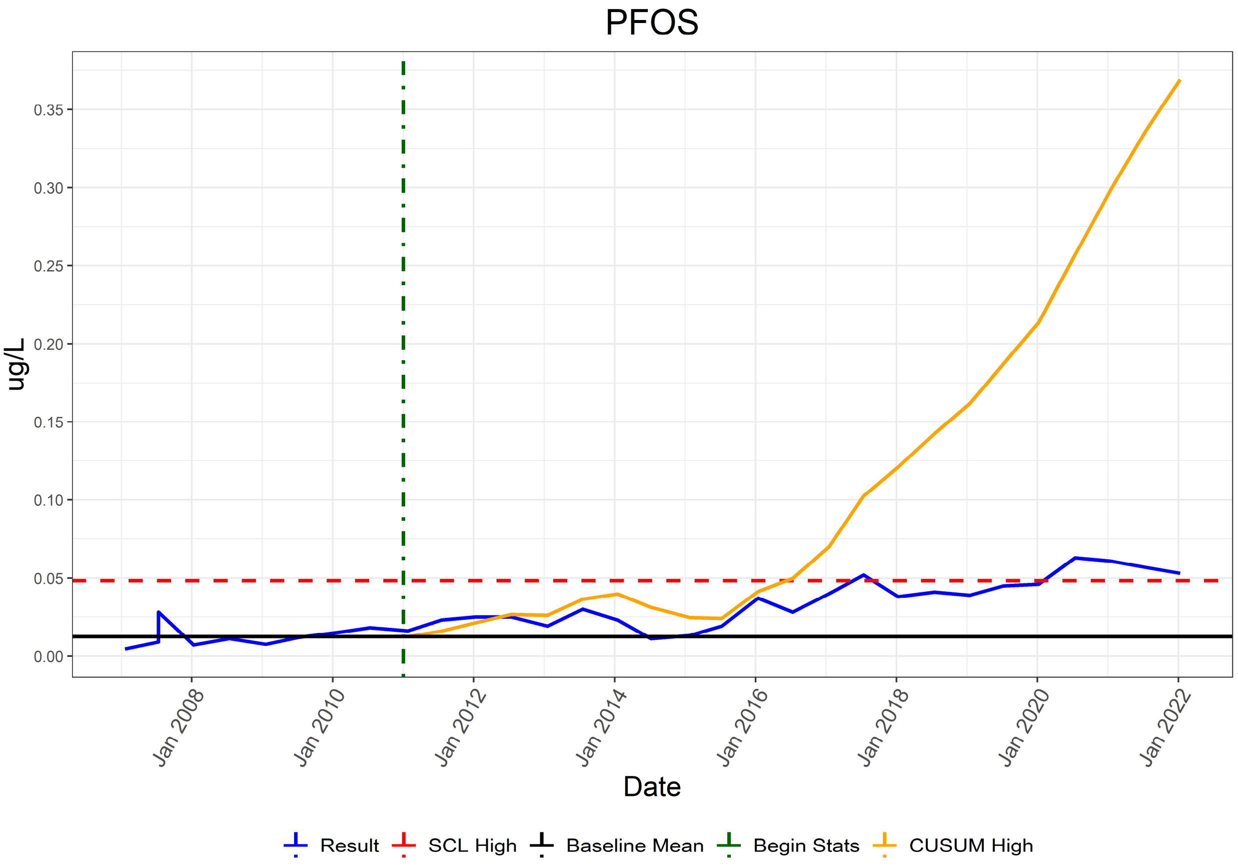


Perfluoropentanoic Acid



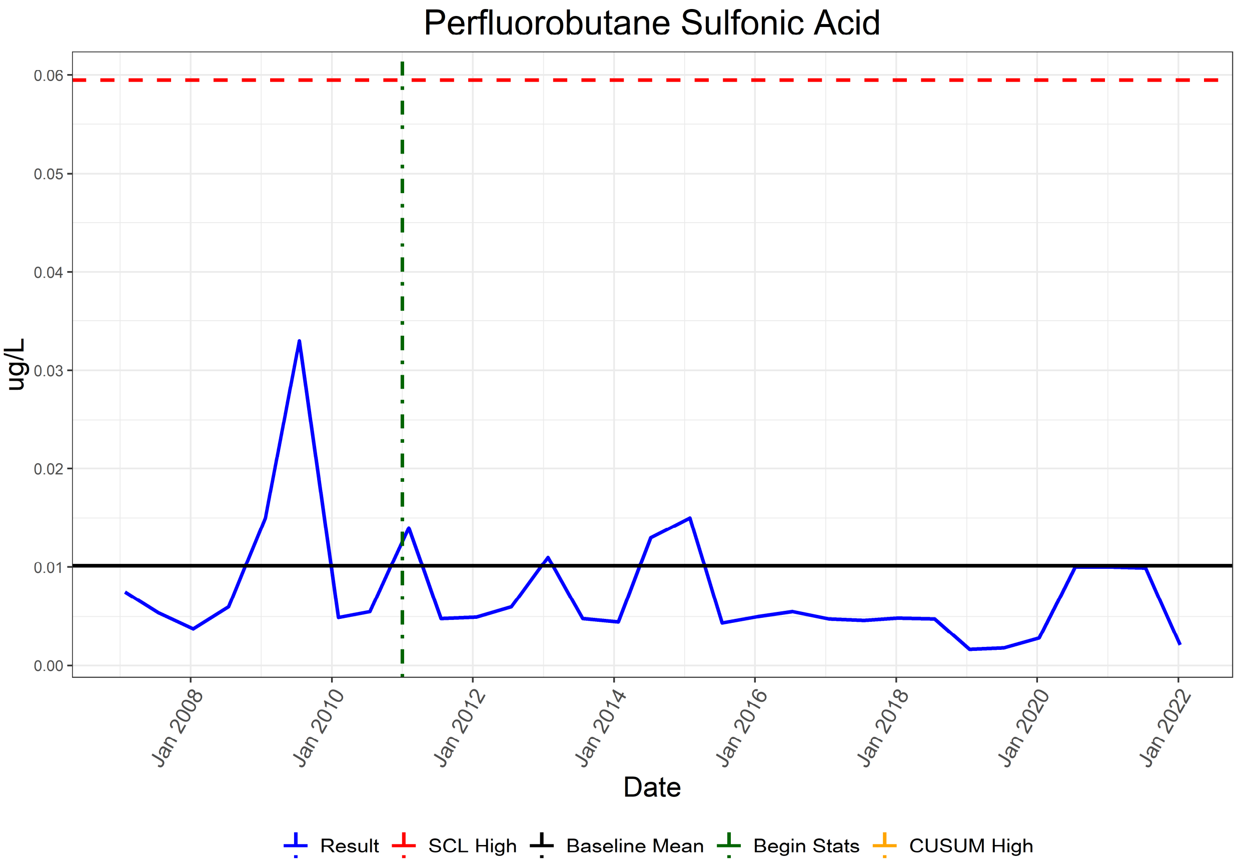

Perfluoroundecanoic Acid
ug/L
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

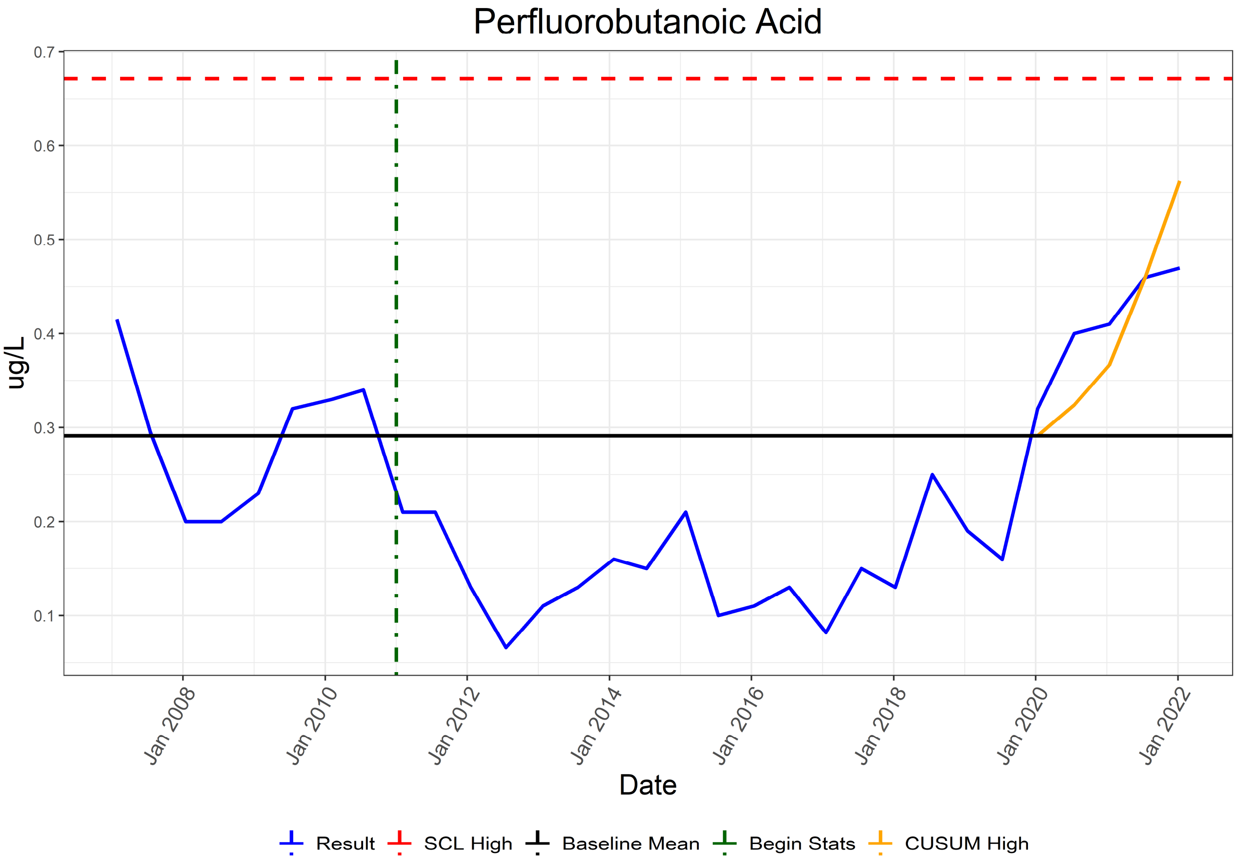

PFOA
ug/L
2.4
2.1
1.8
1.5
1.2
0.9
0.6
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

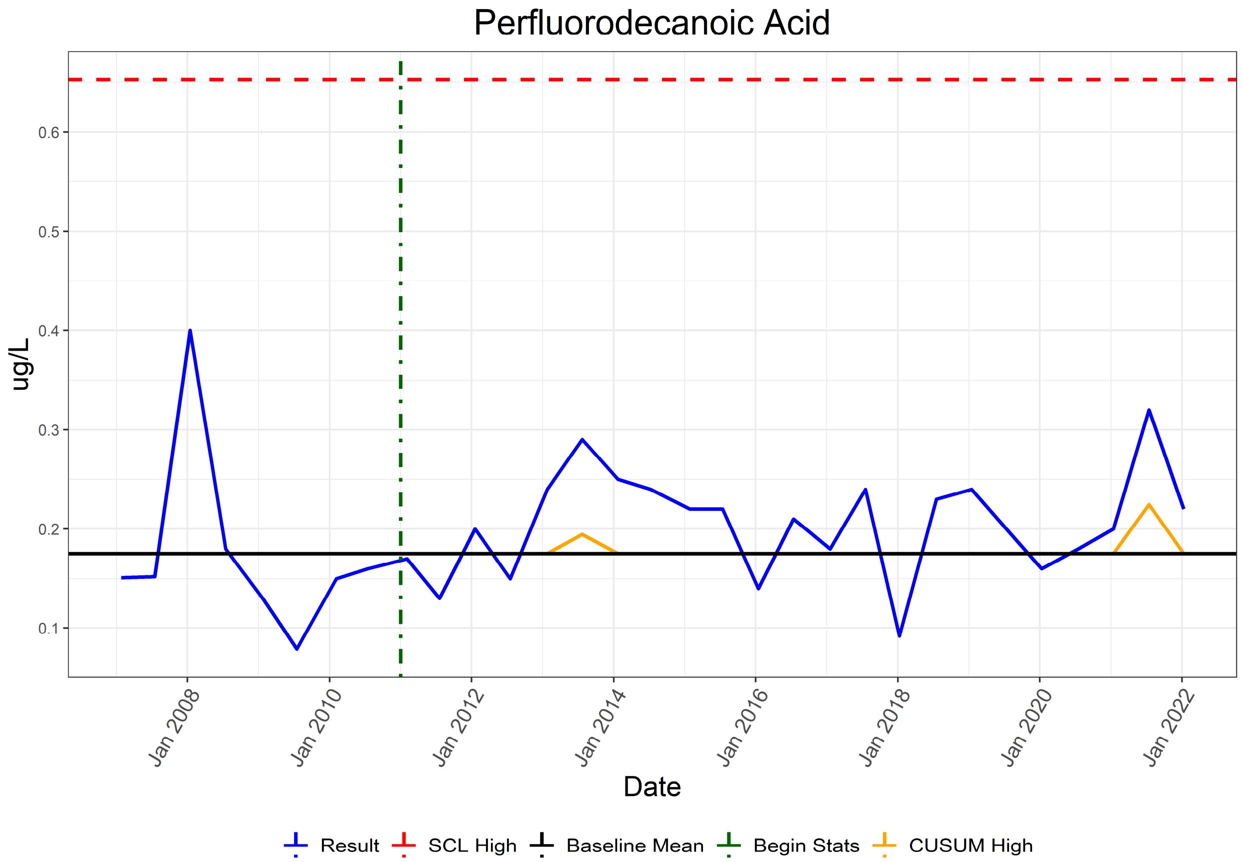

PFOS
ug/L
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

PFAS Monitoring Program (Program 9)

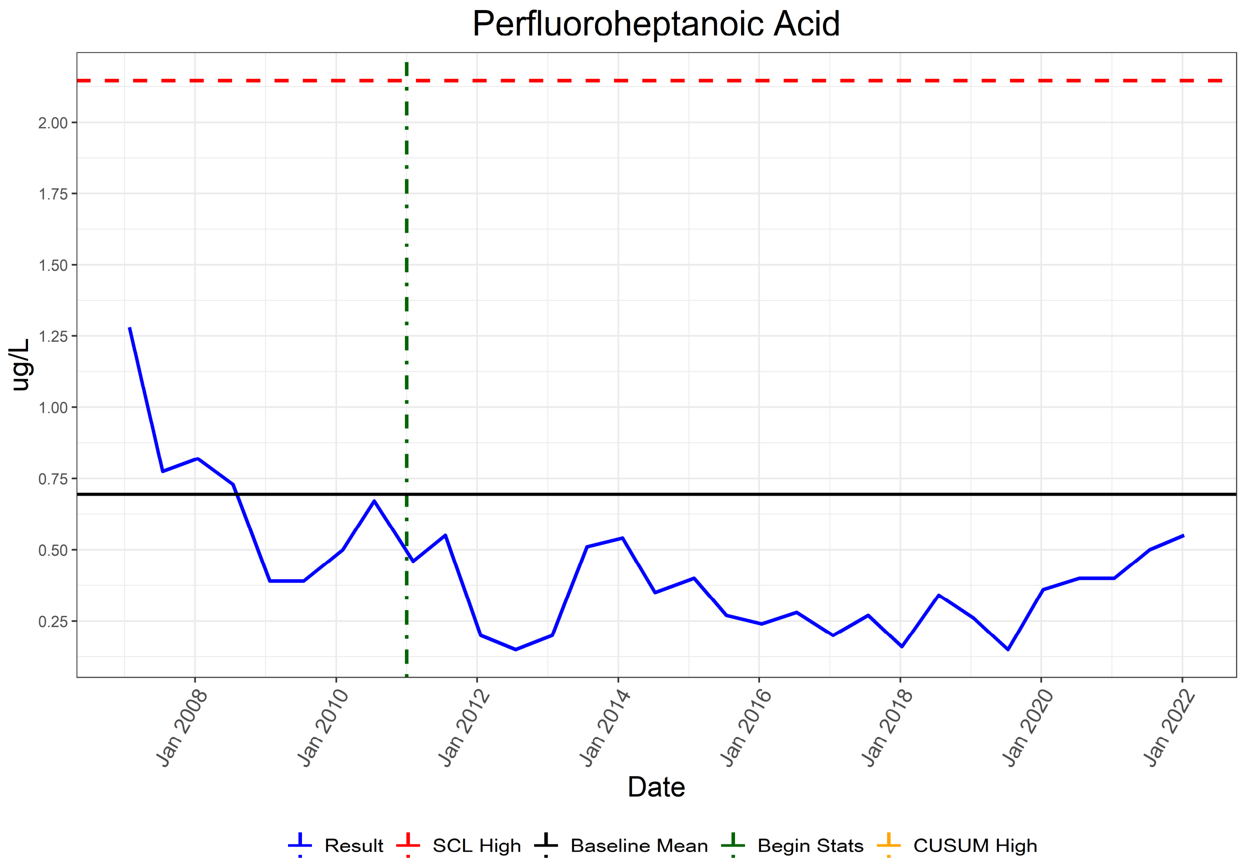
Well Name: D15-M01B



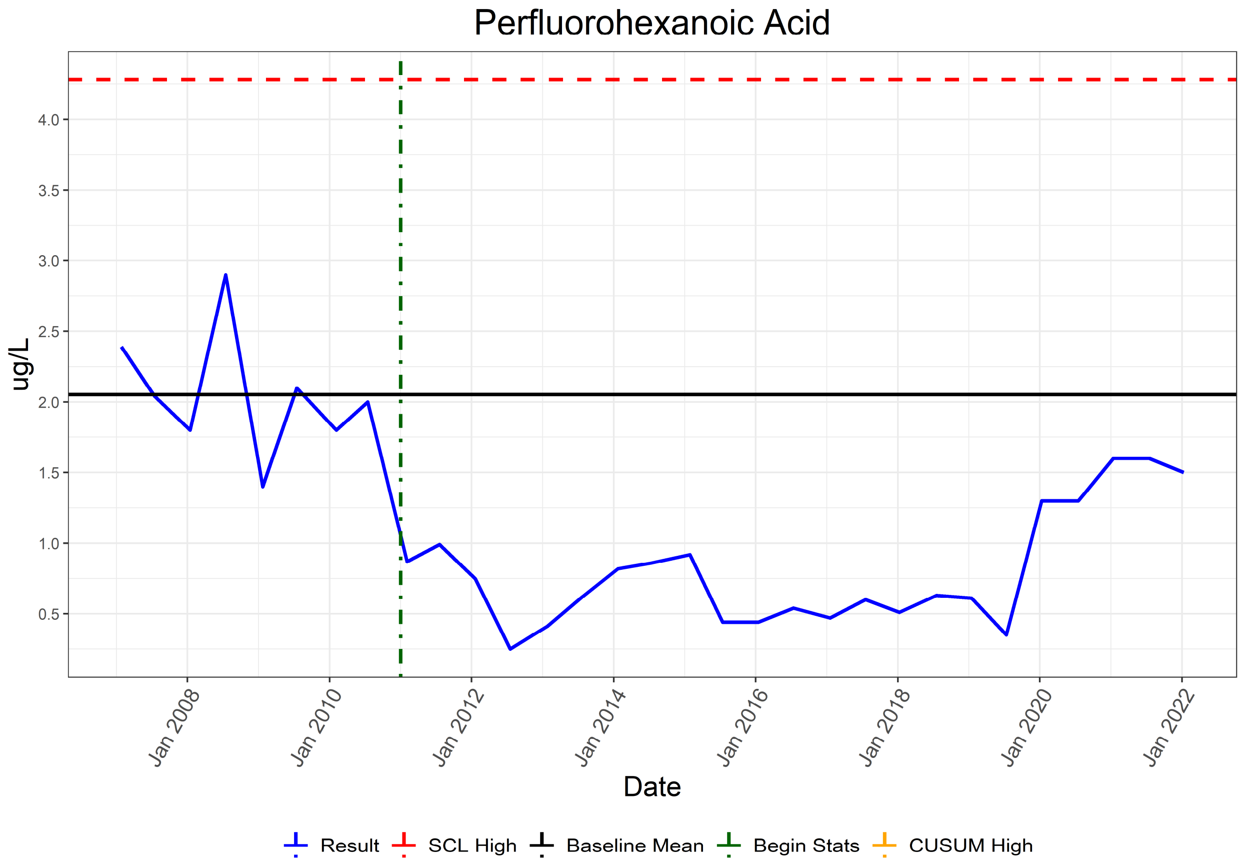


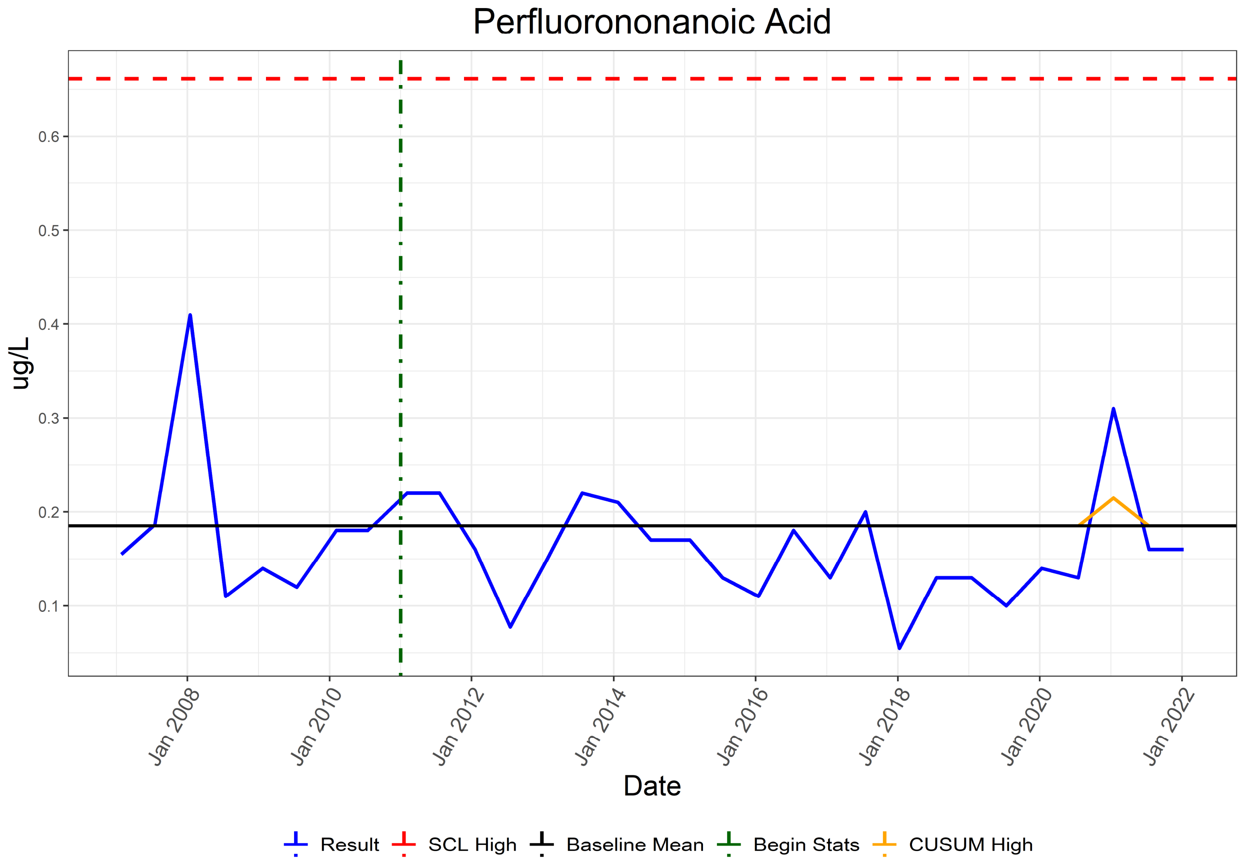


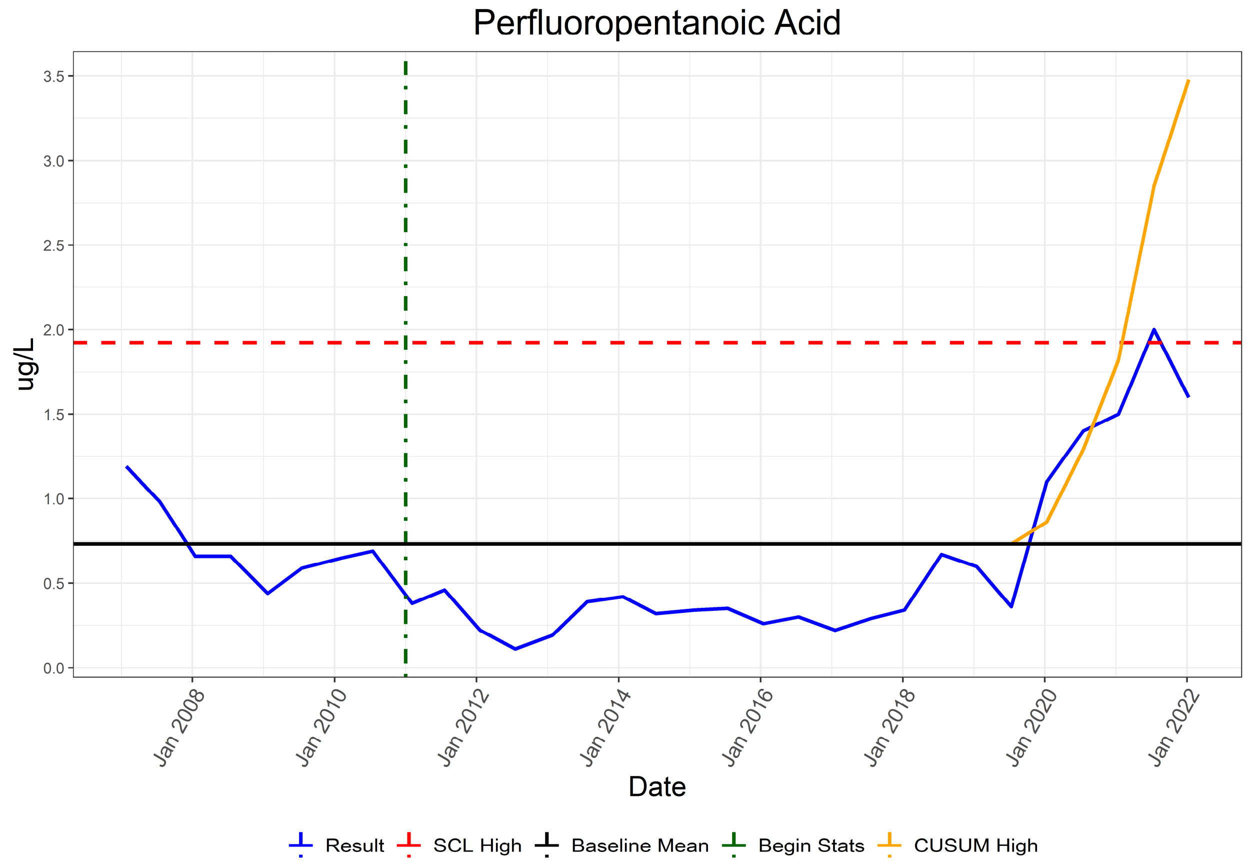
Perfluorodecanoic Acid

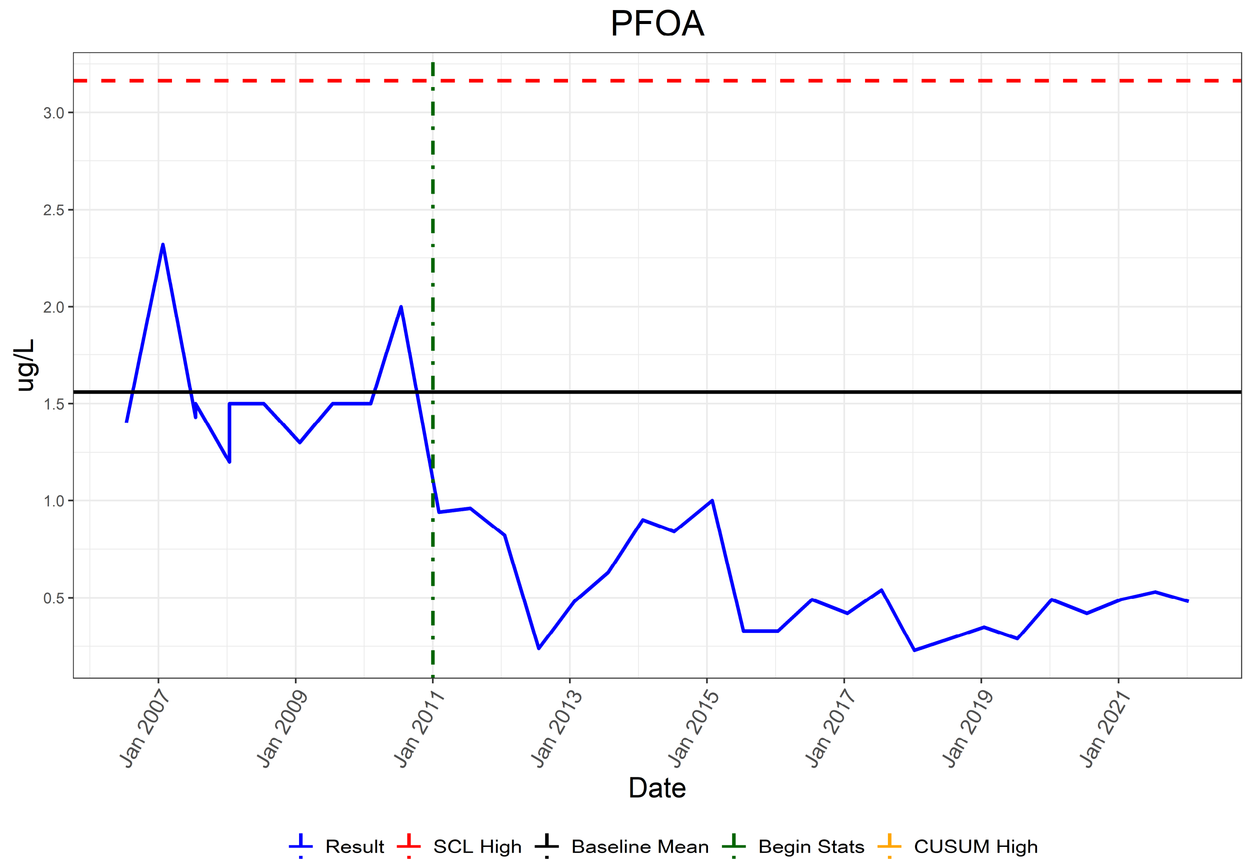


Perfluoroheptanoic Acid


Perfluorohexanoic Acid
ug/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

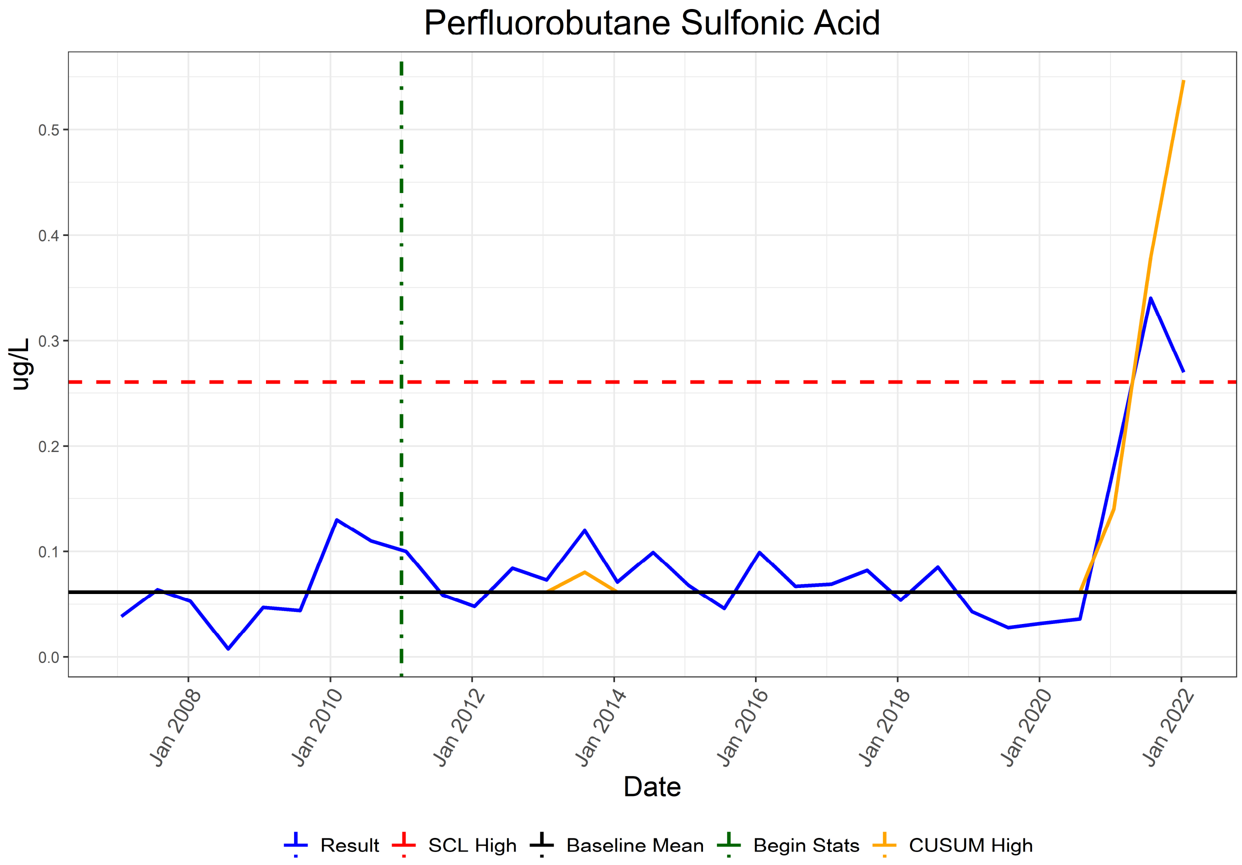

Perfluorononanoic Acid
ug/L
0.6
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

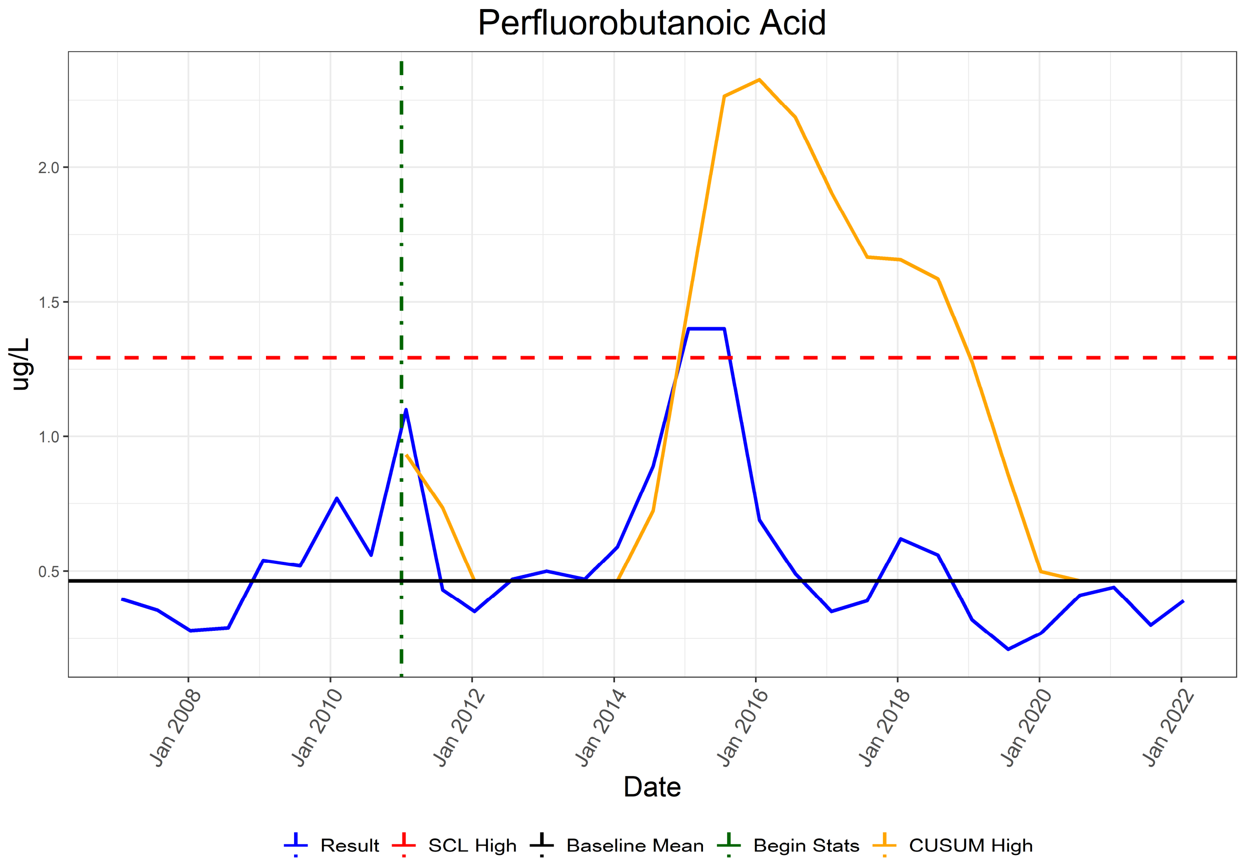

Perfluoropentanoic Acid
ug/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

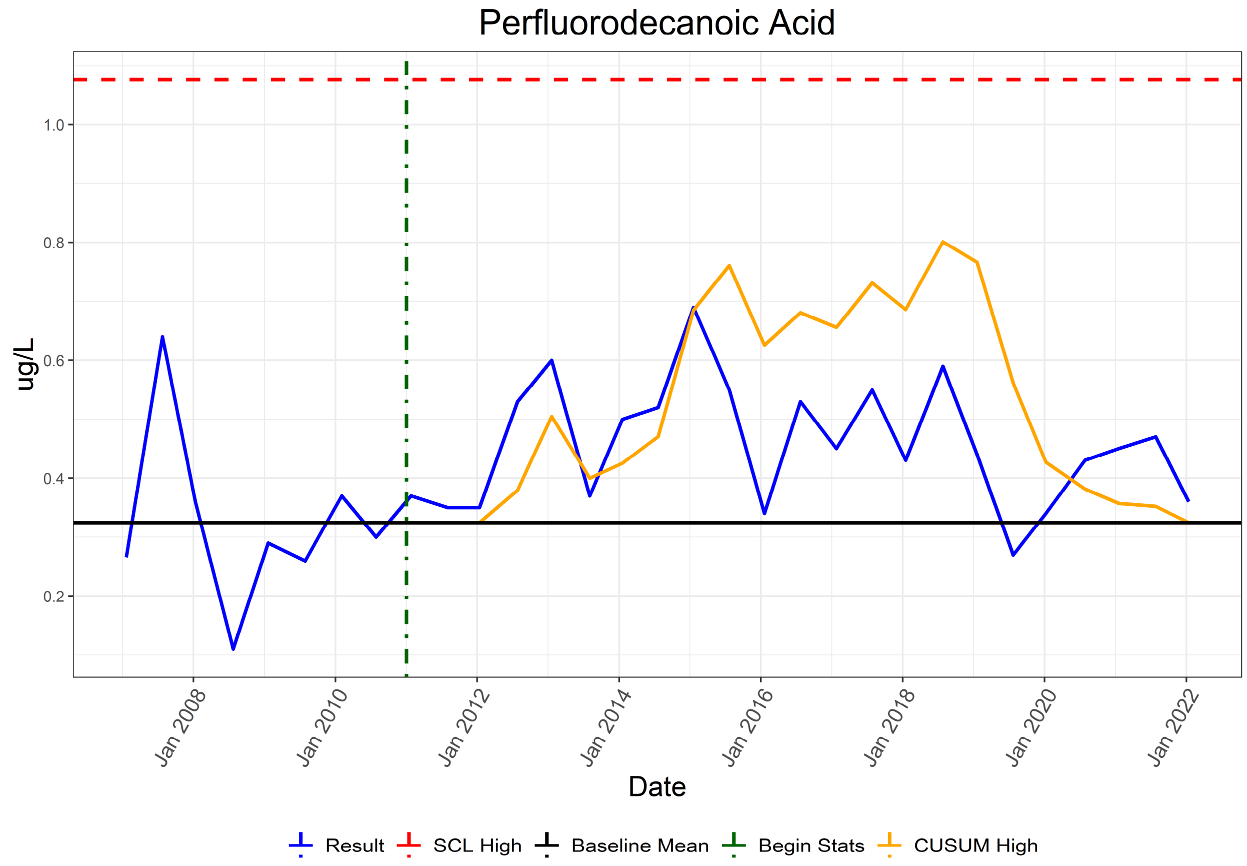

PFOA
ug/L
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

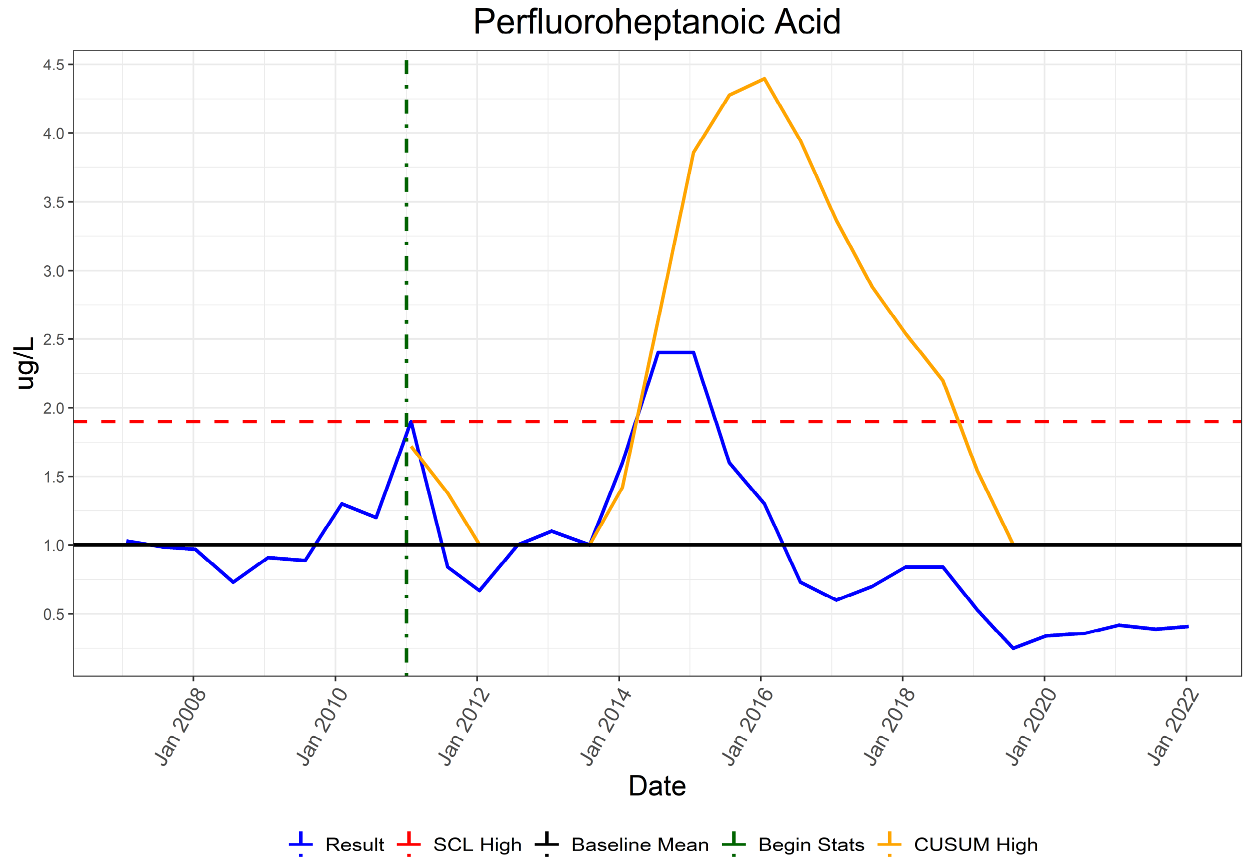
PFAS Monitoring Program (Program 9)

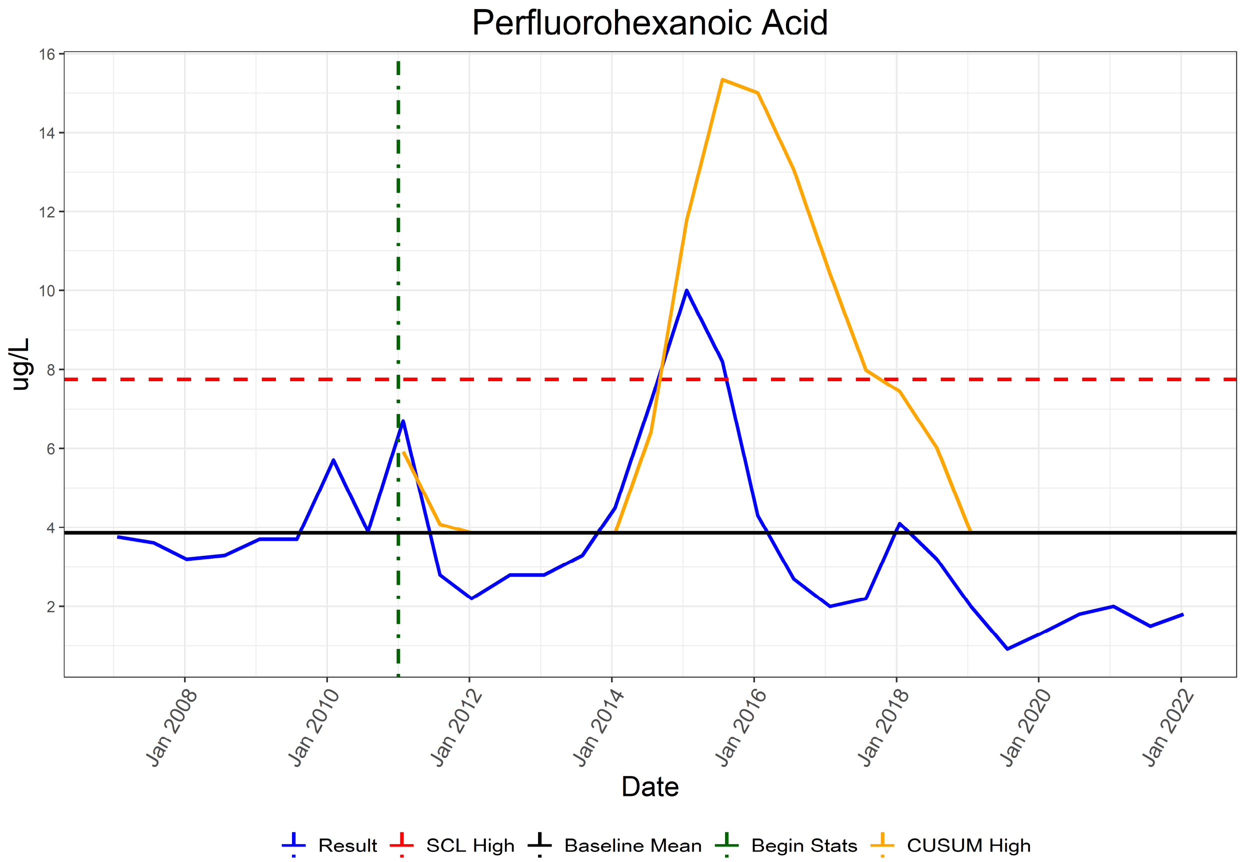
Well Name: F07-M01B

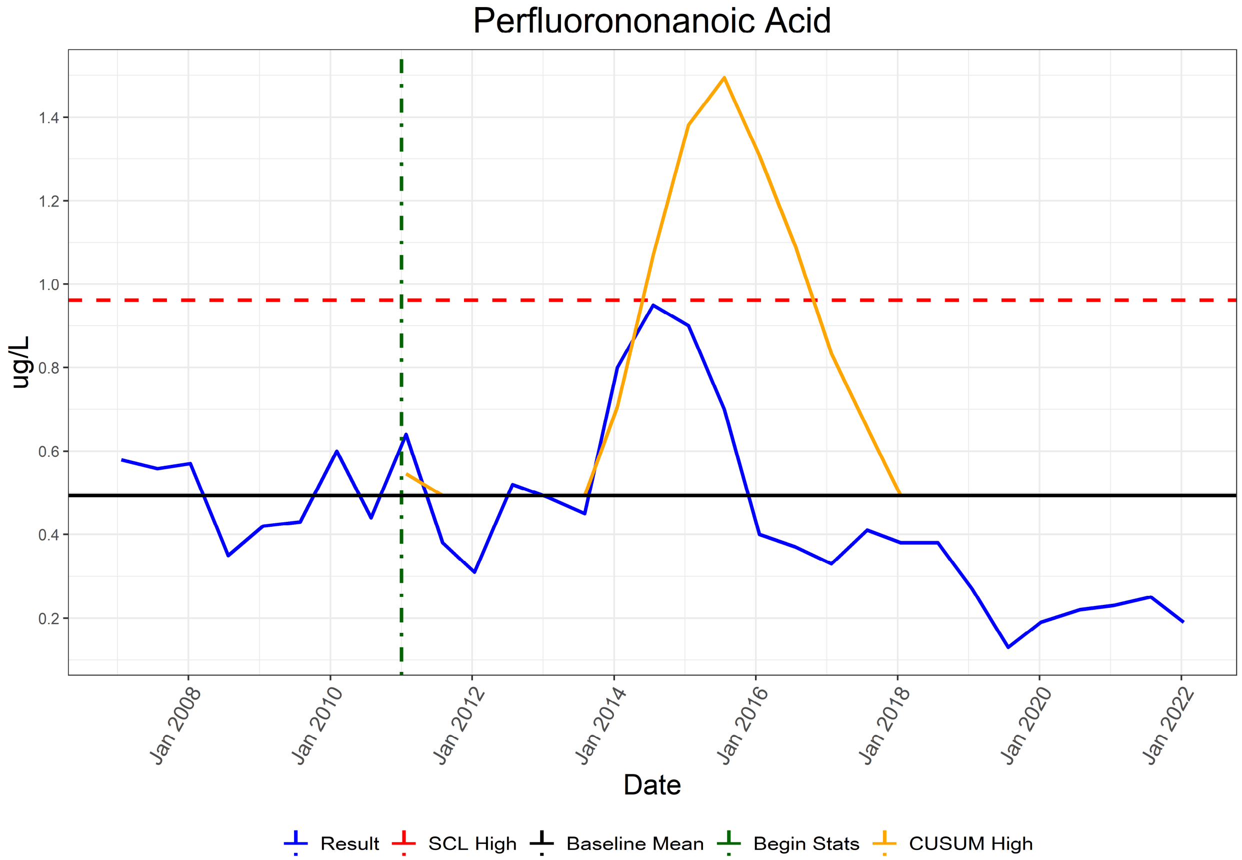


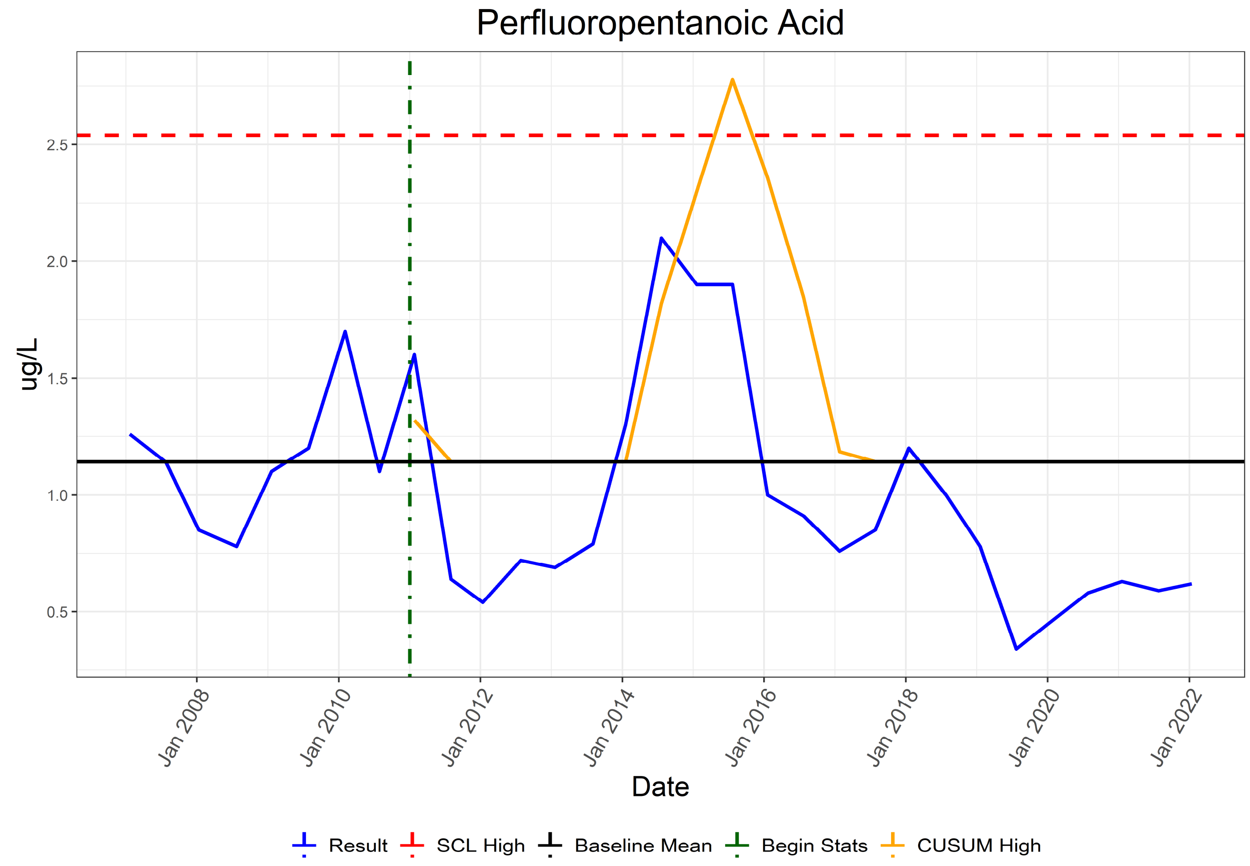


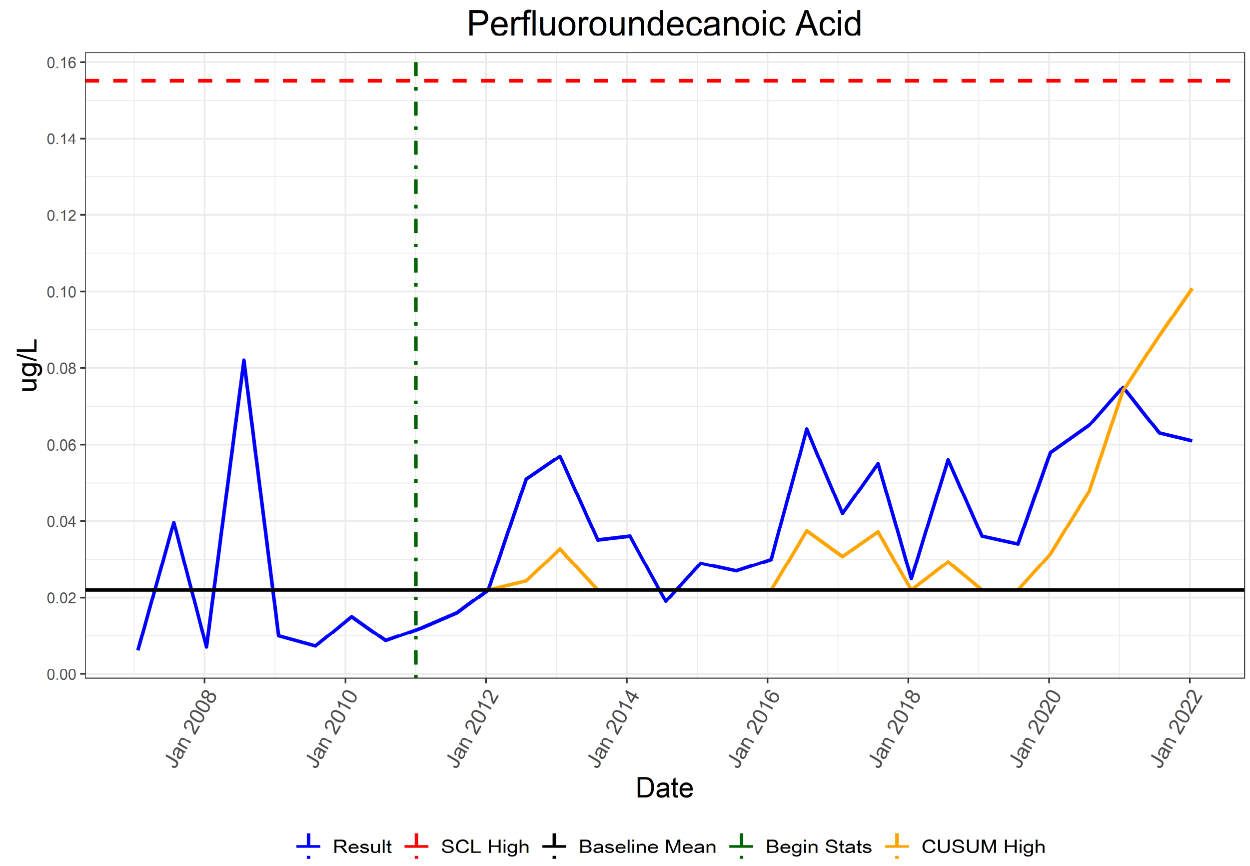

Perfluorodecanoic Acid
ug/L
1.0
0.8
0.6
0.4
0.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

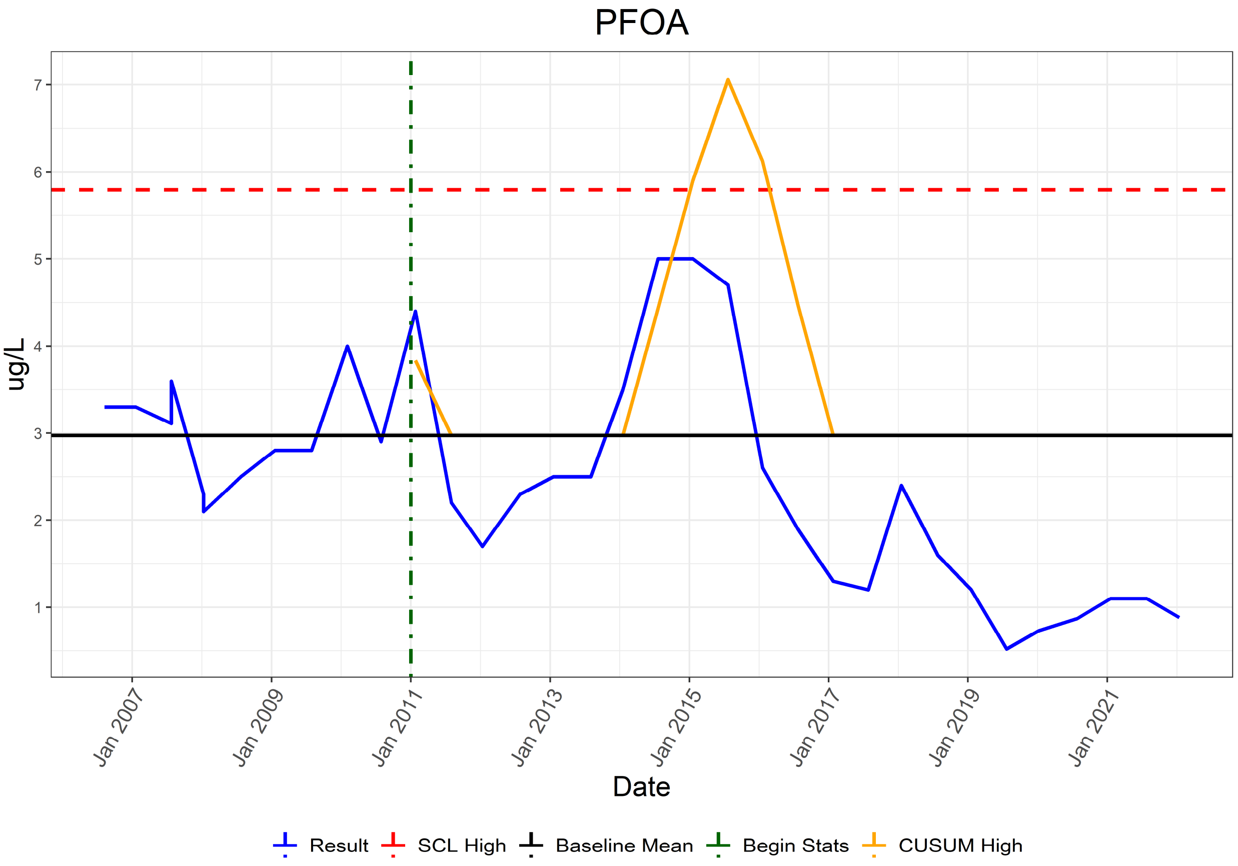

Perfluoroheptanoic Acid
ug/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
16
14
12
10
8
6
4
2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

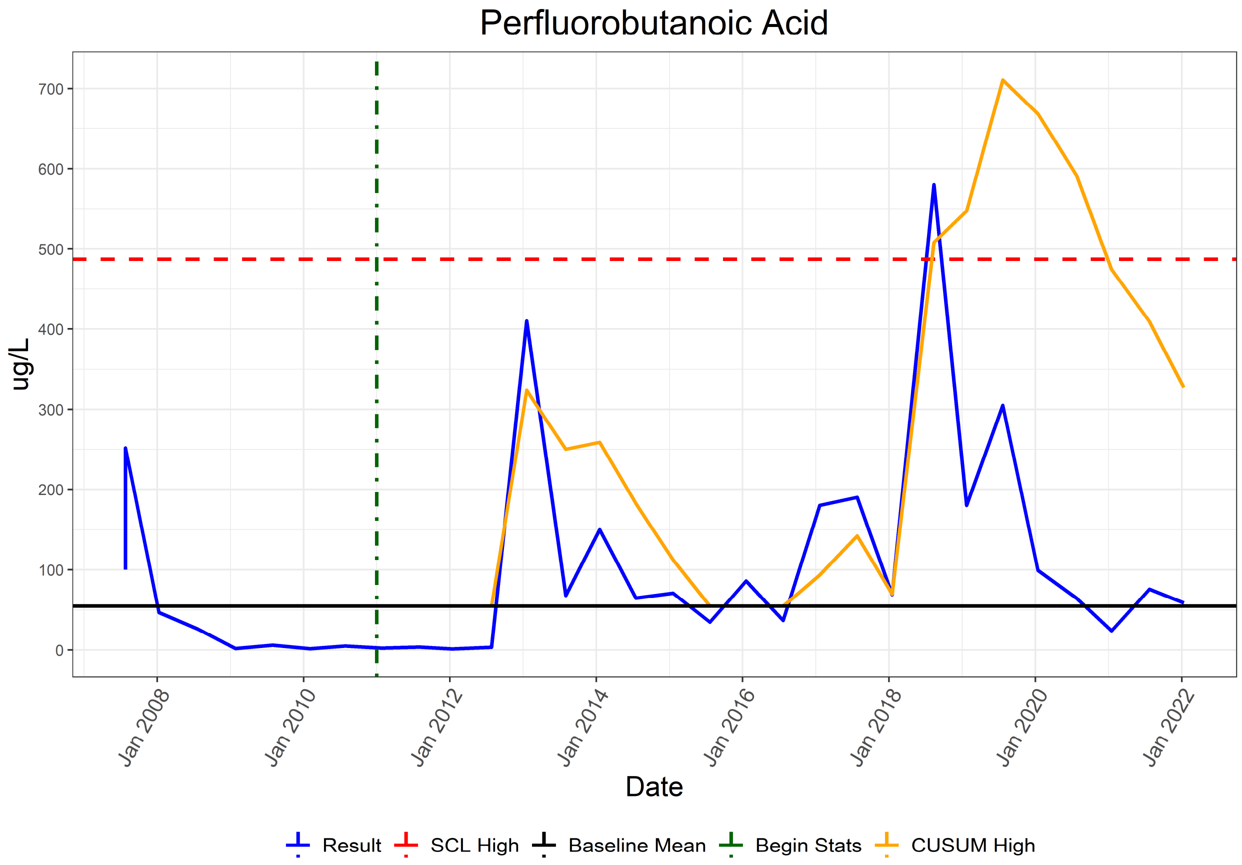

Perfluoropentanoic Acid
ug/L
2.5
2.0
1.5
1.0
0.5
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

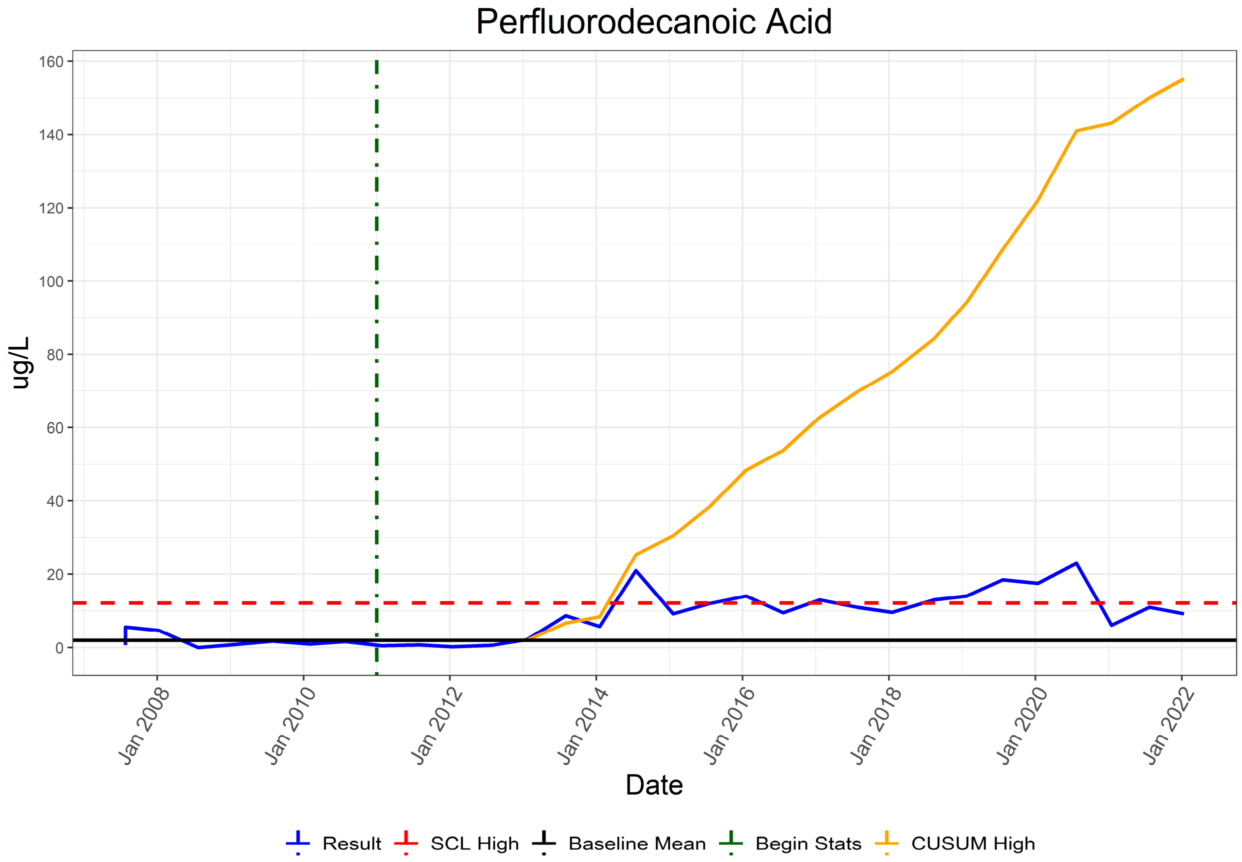

Perfluoroundecanoic Acid
ug/L
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
7
6
5
4
3
2
1
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

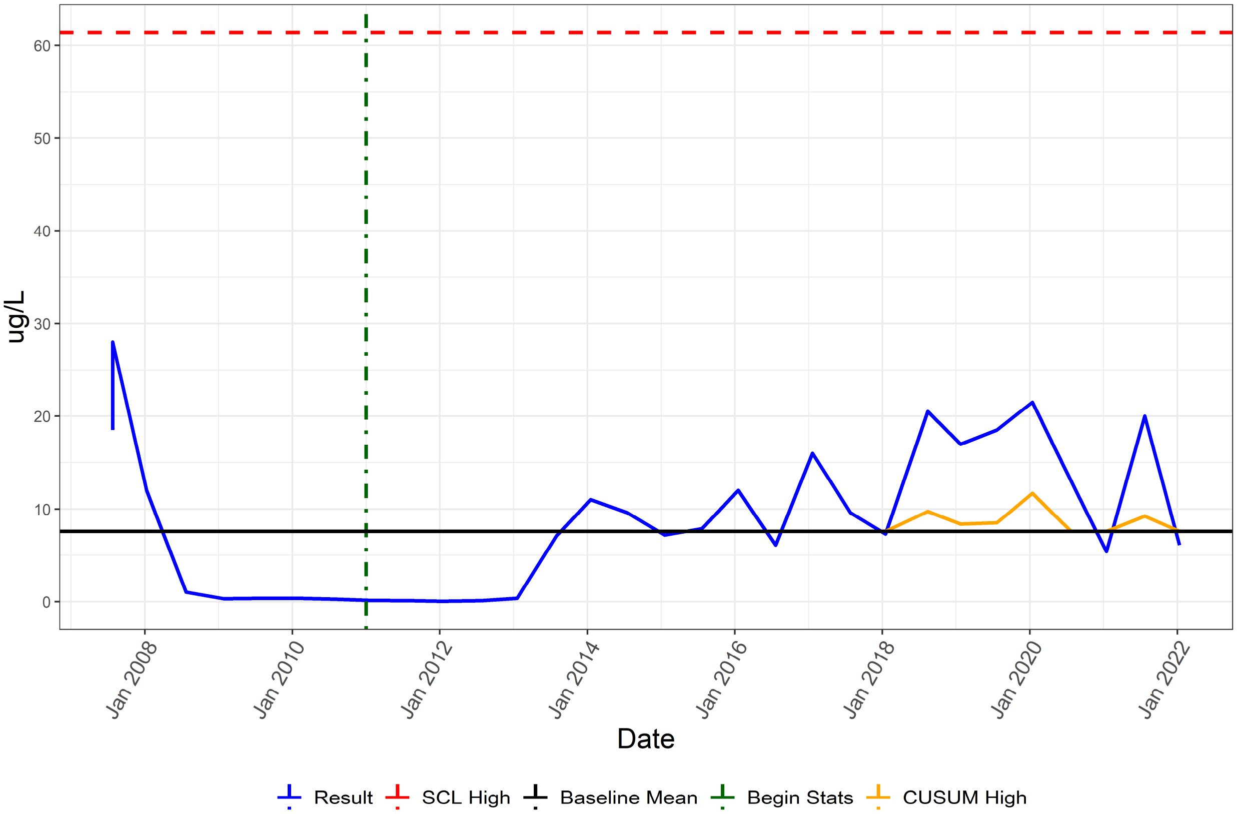
PFAS Monitoring Program (Program 9)

Well Name: F08-M01A

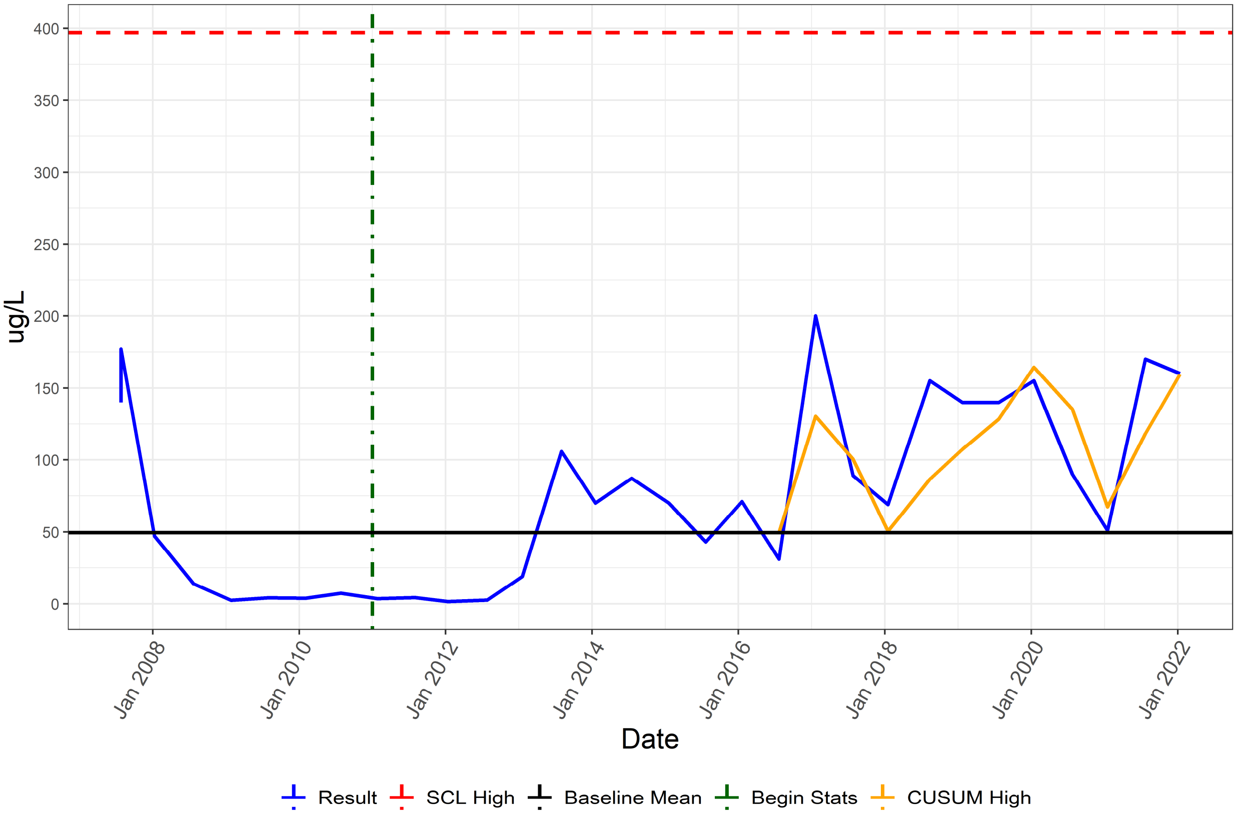


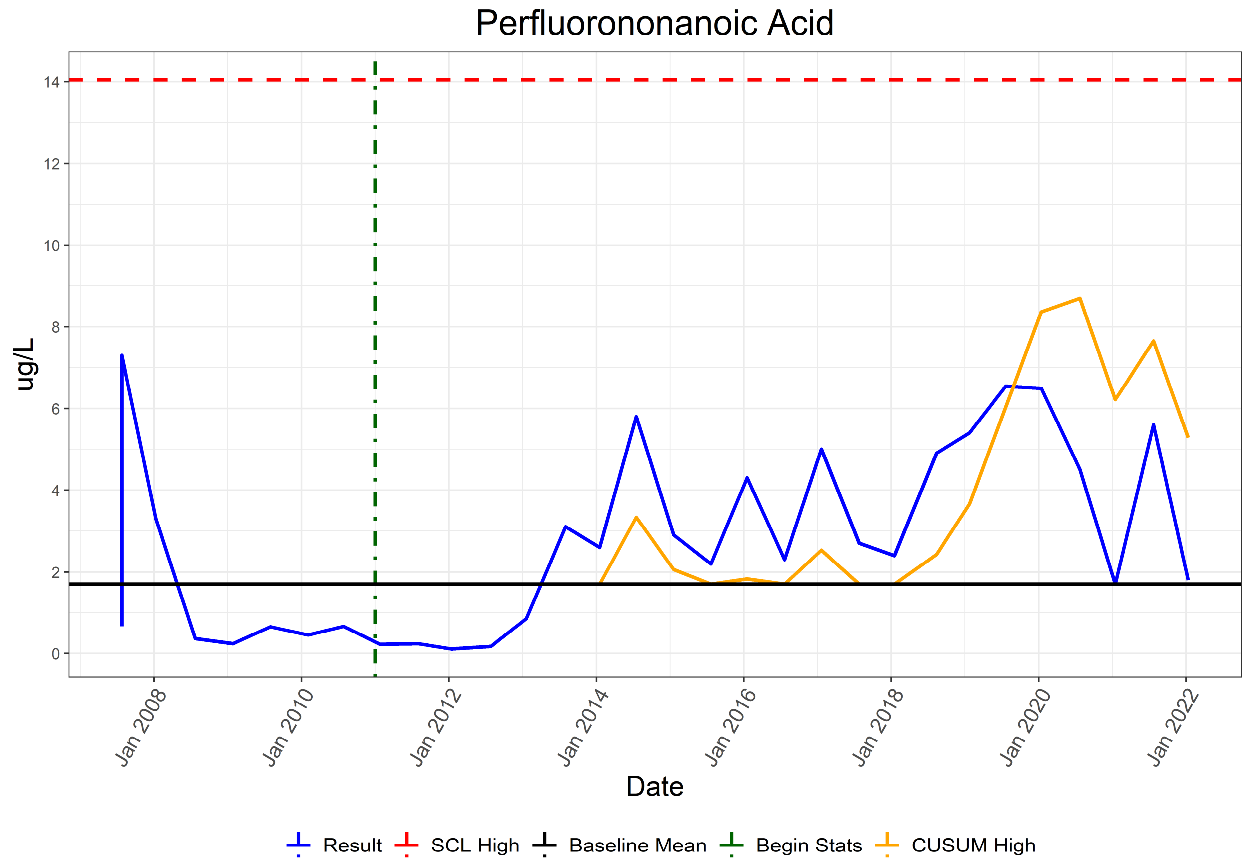


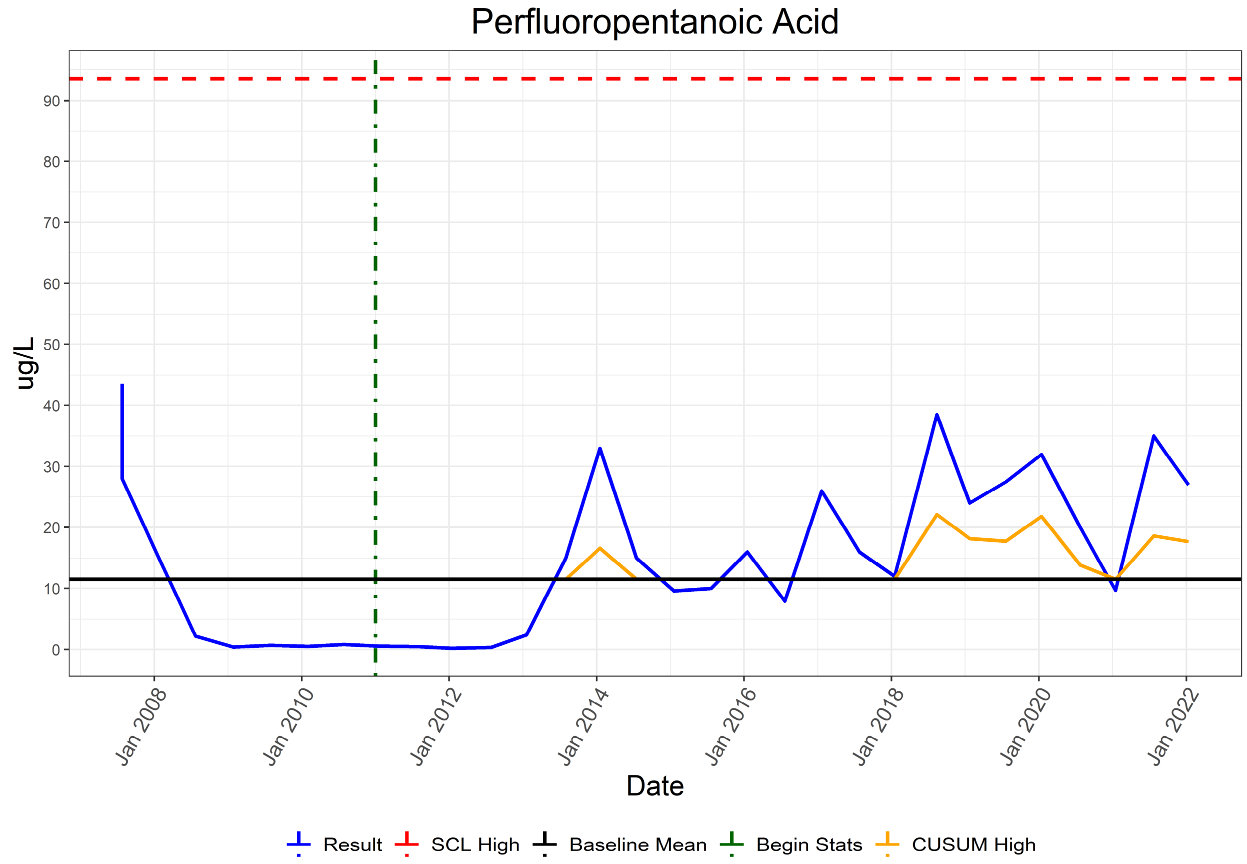
Perfluoroheptanoic Acid

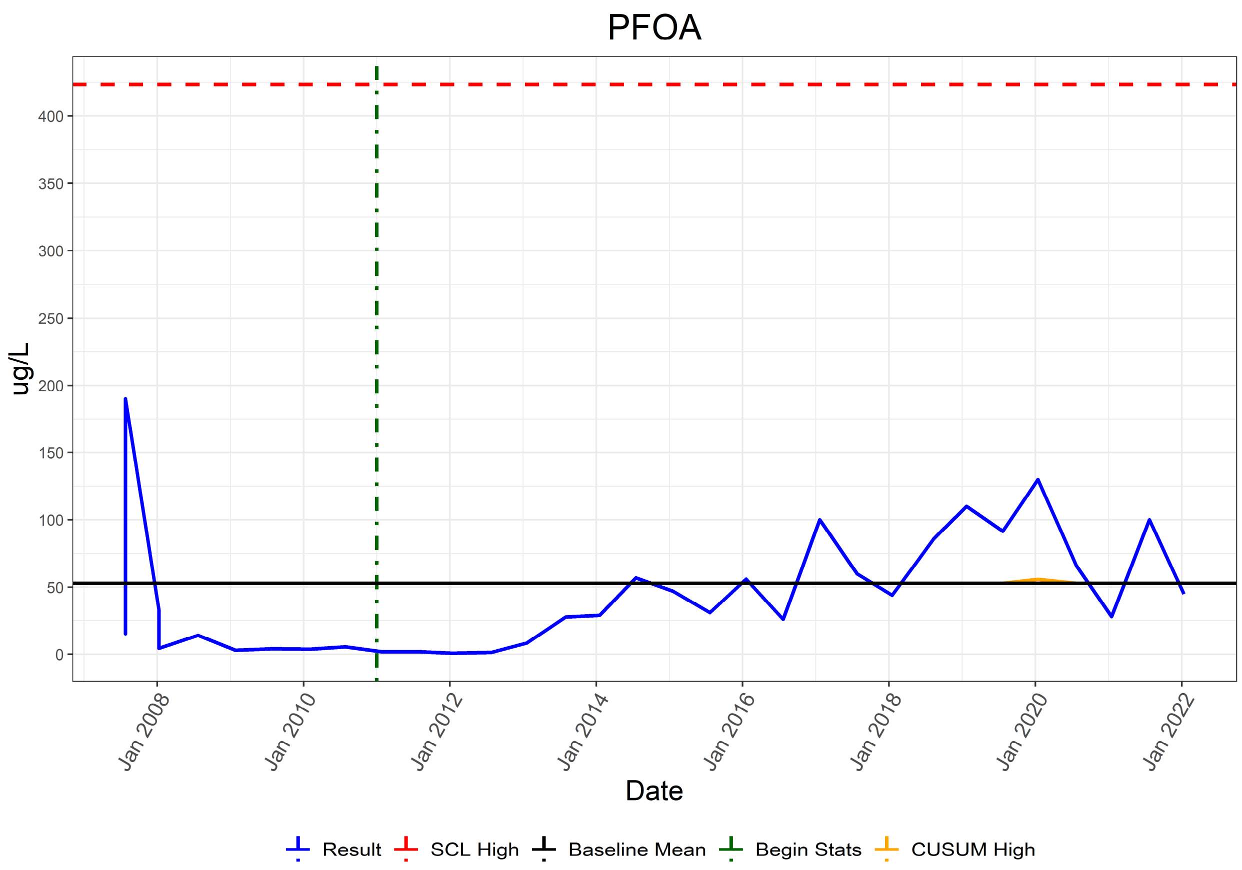


Perfluorohexanoic Acid



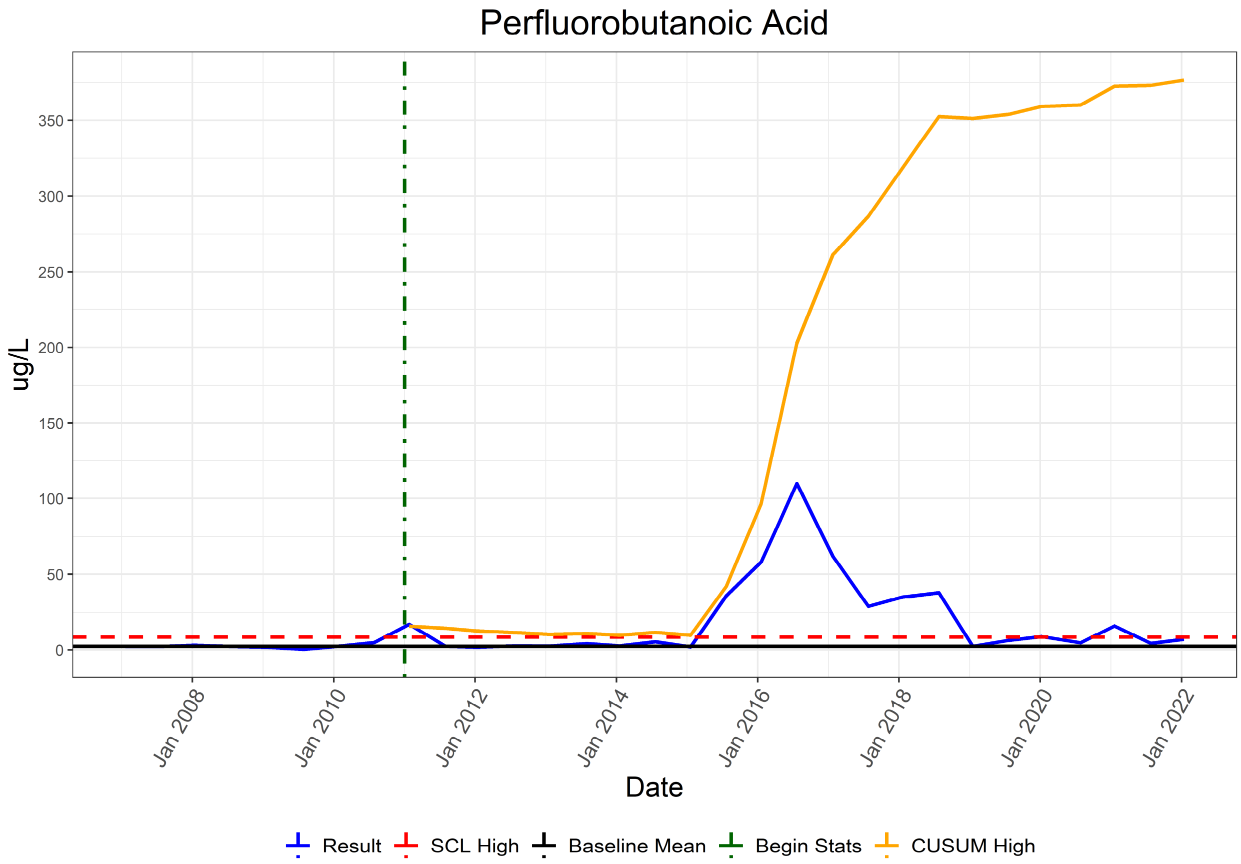

Perfluorononanoic Acid
ug/L
0
2
4
6
8
10
12
14
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

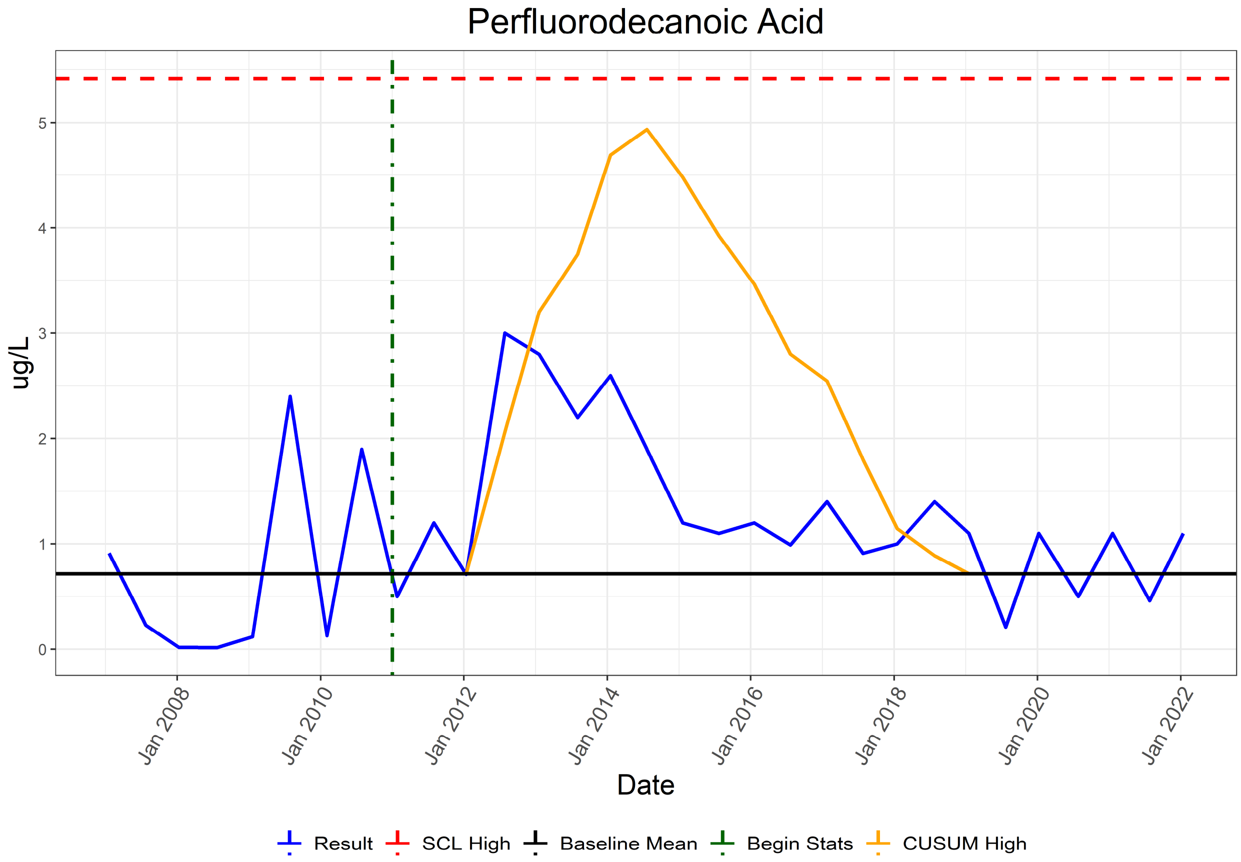

Perfluoropentanoic Acid
ug/L
0
10
20
30
40
50
60
70
80
90
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
400
350
300
250
200
150
100
50
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

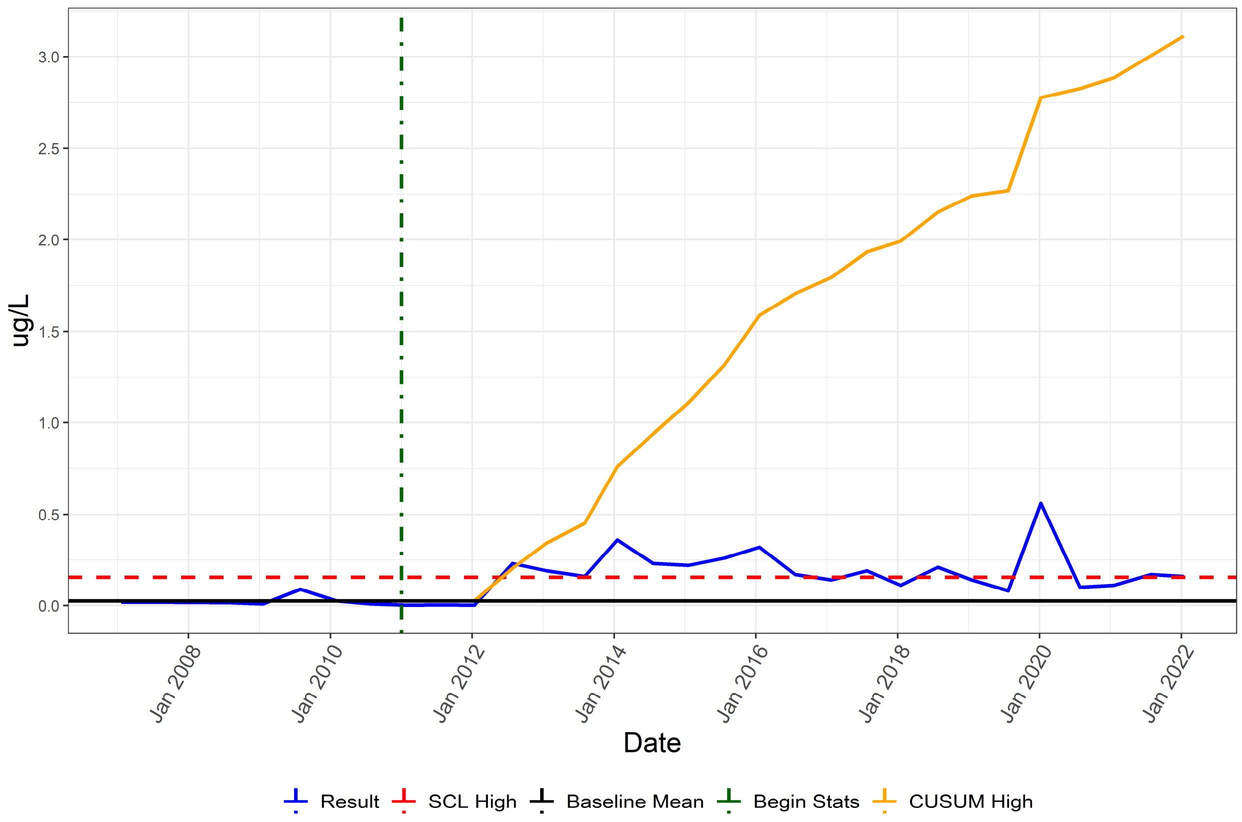
PFAS Monitoring Program (Program 9)

Well Name: F08-M01B

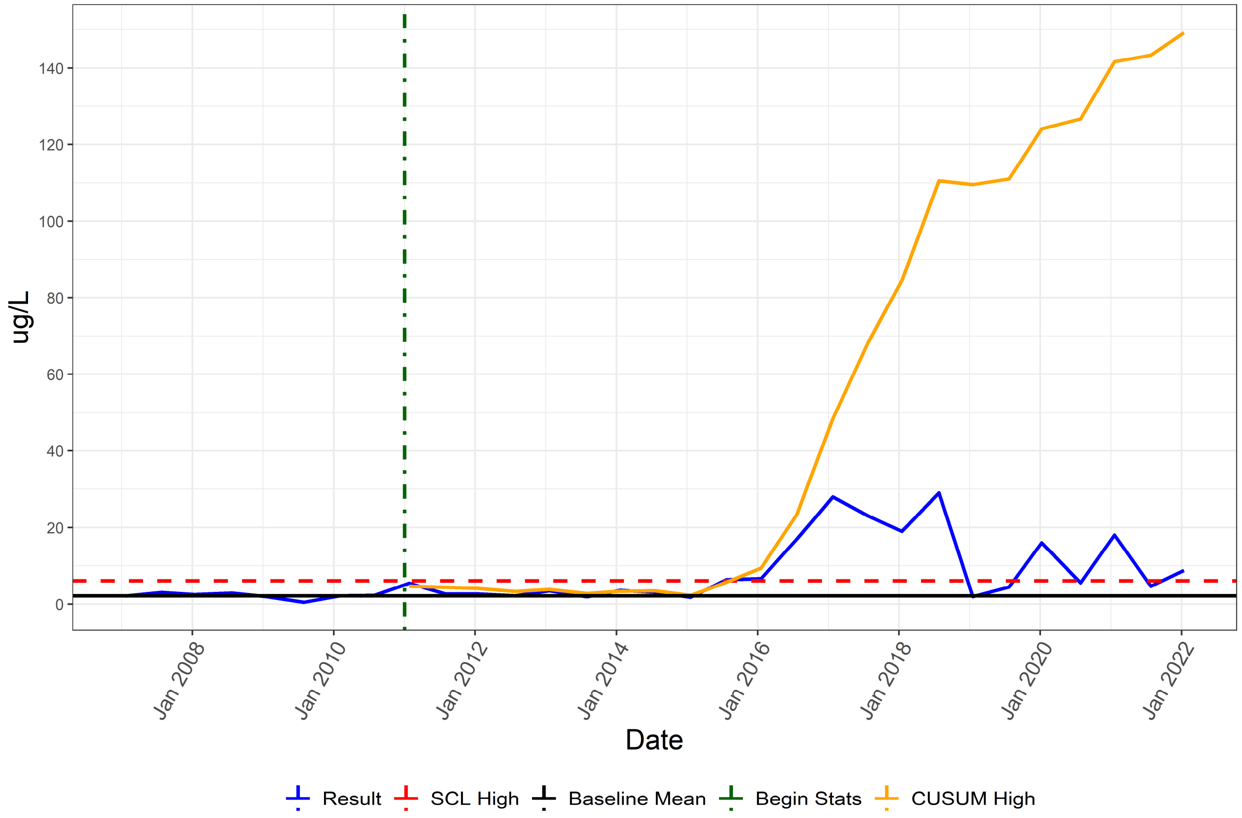


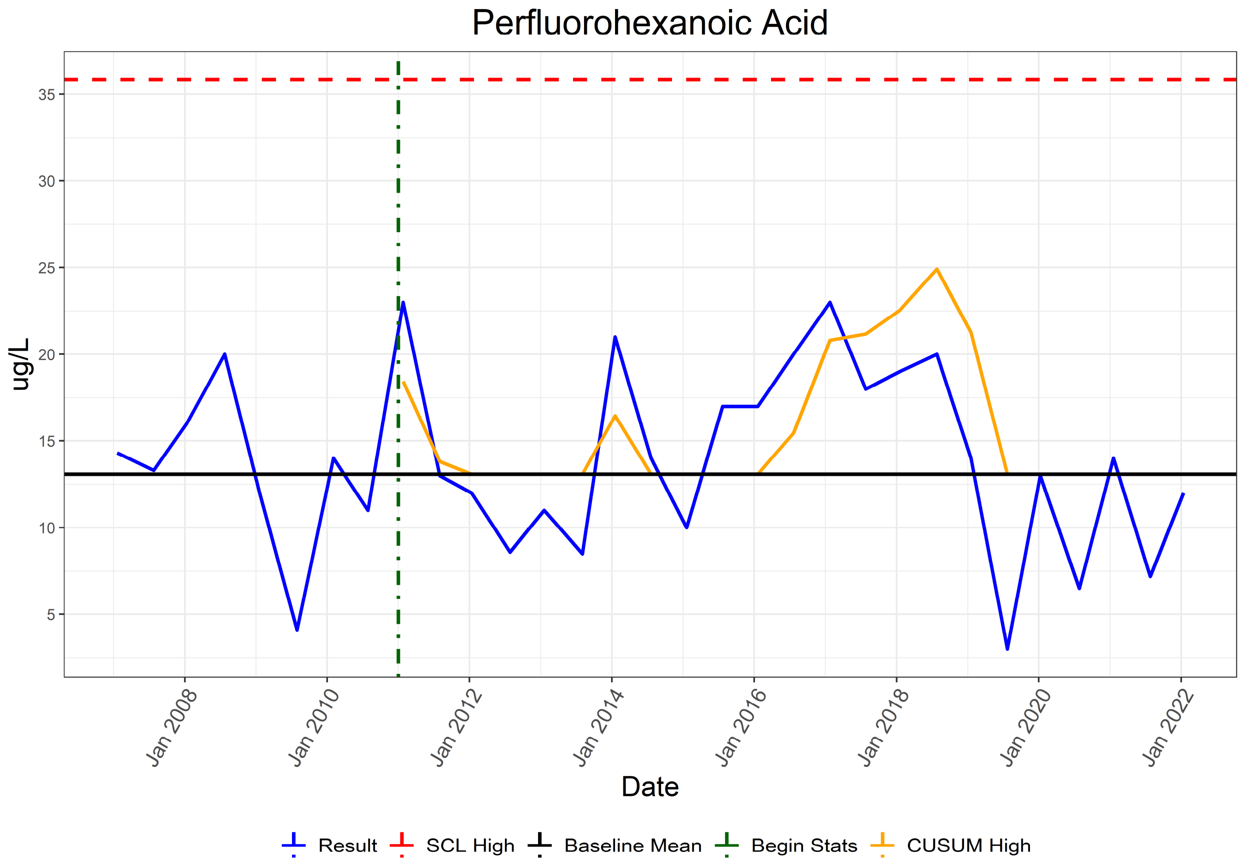


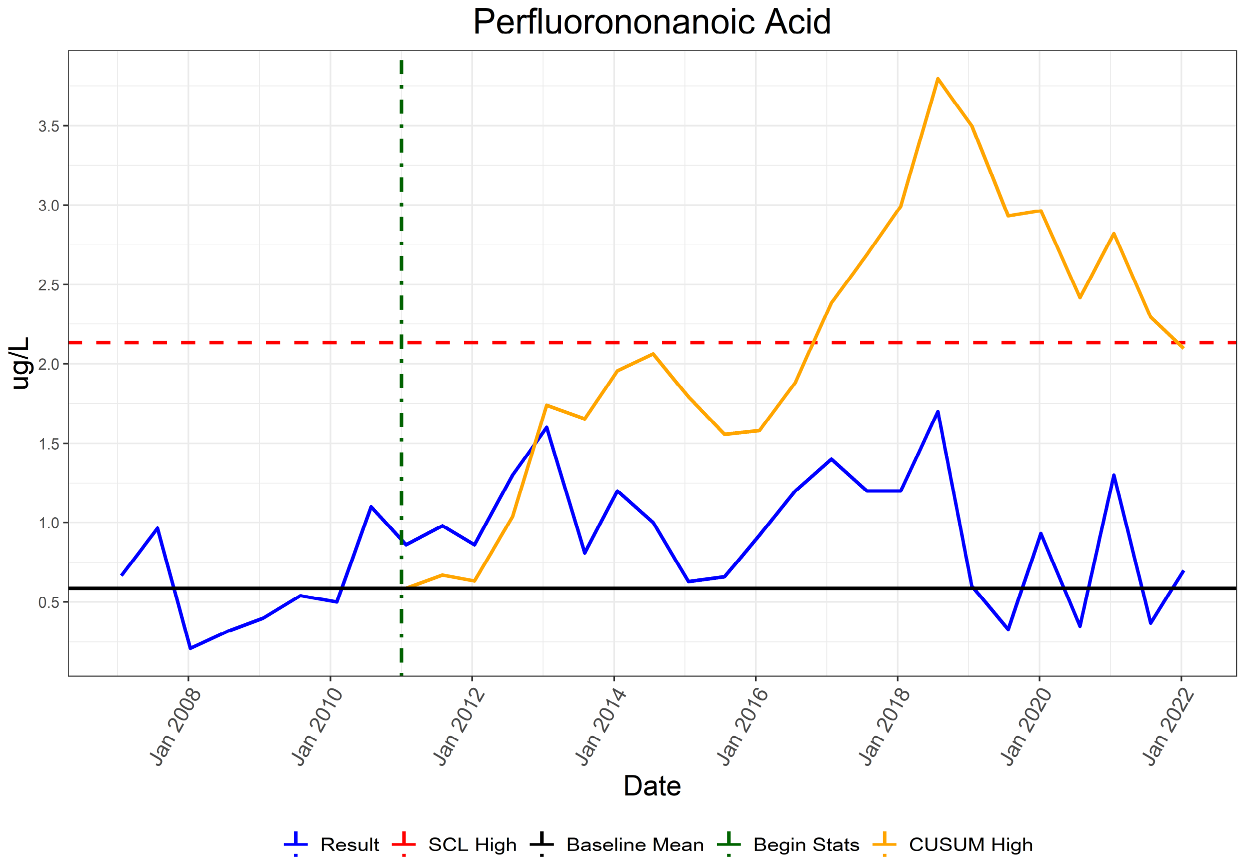
Perfluorododecanoic Acid

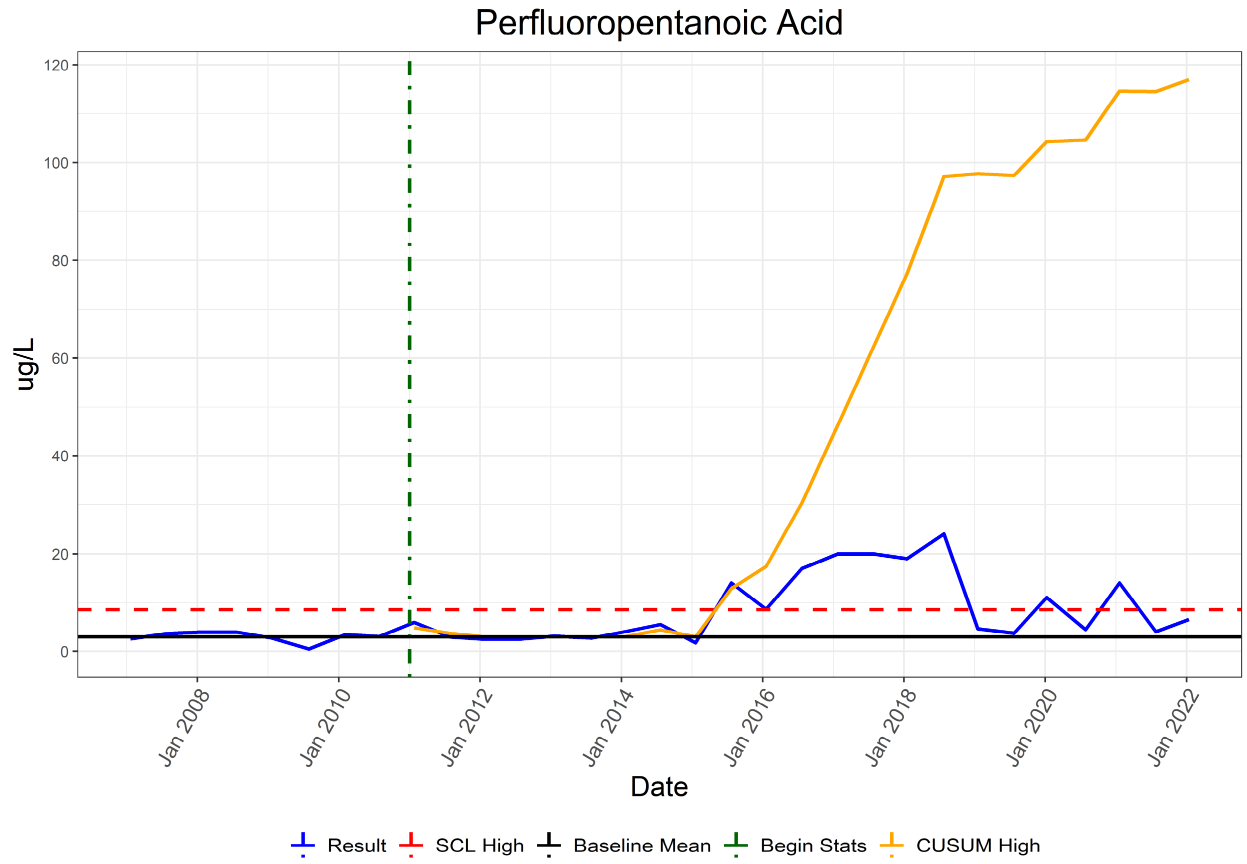


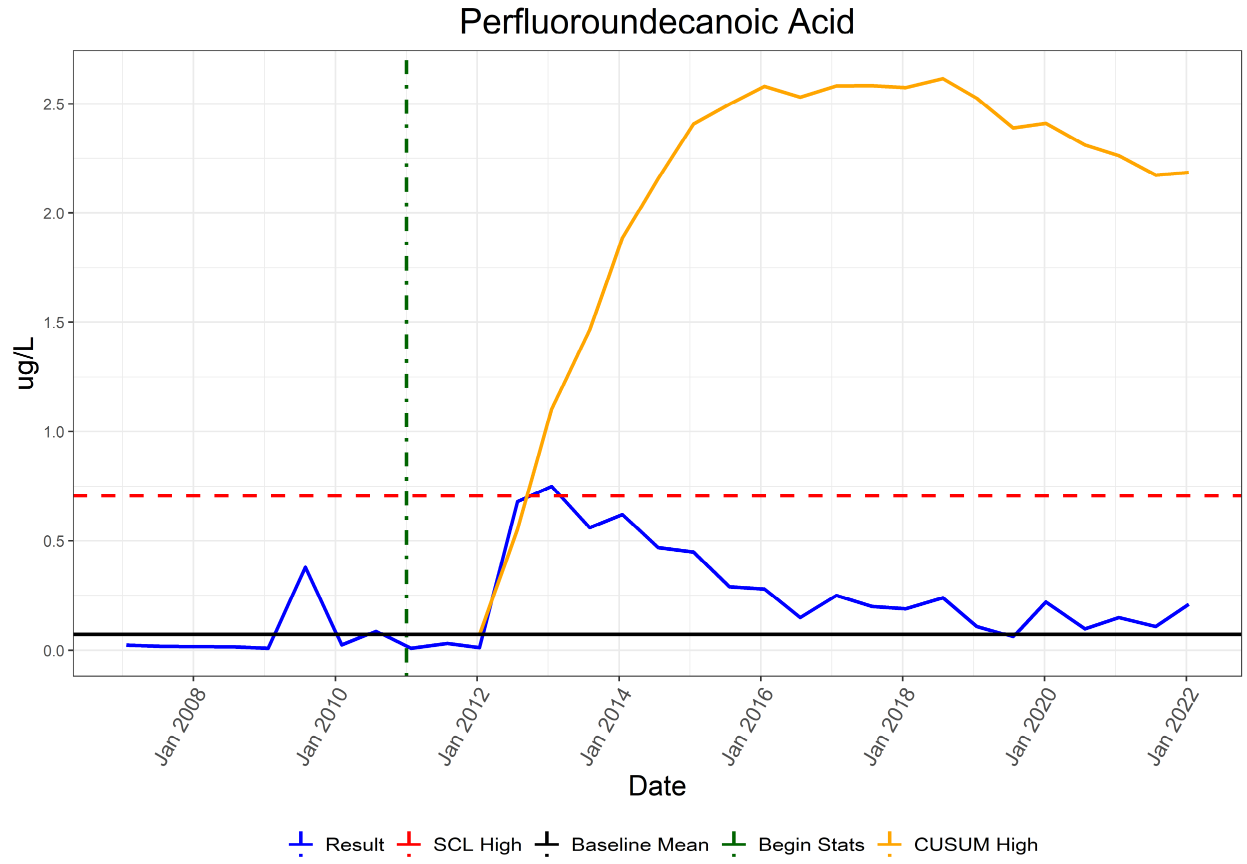
Perfluoroheptanoic Acid

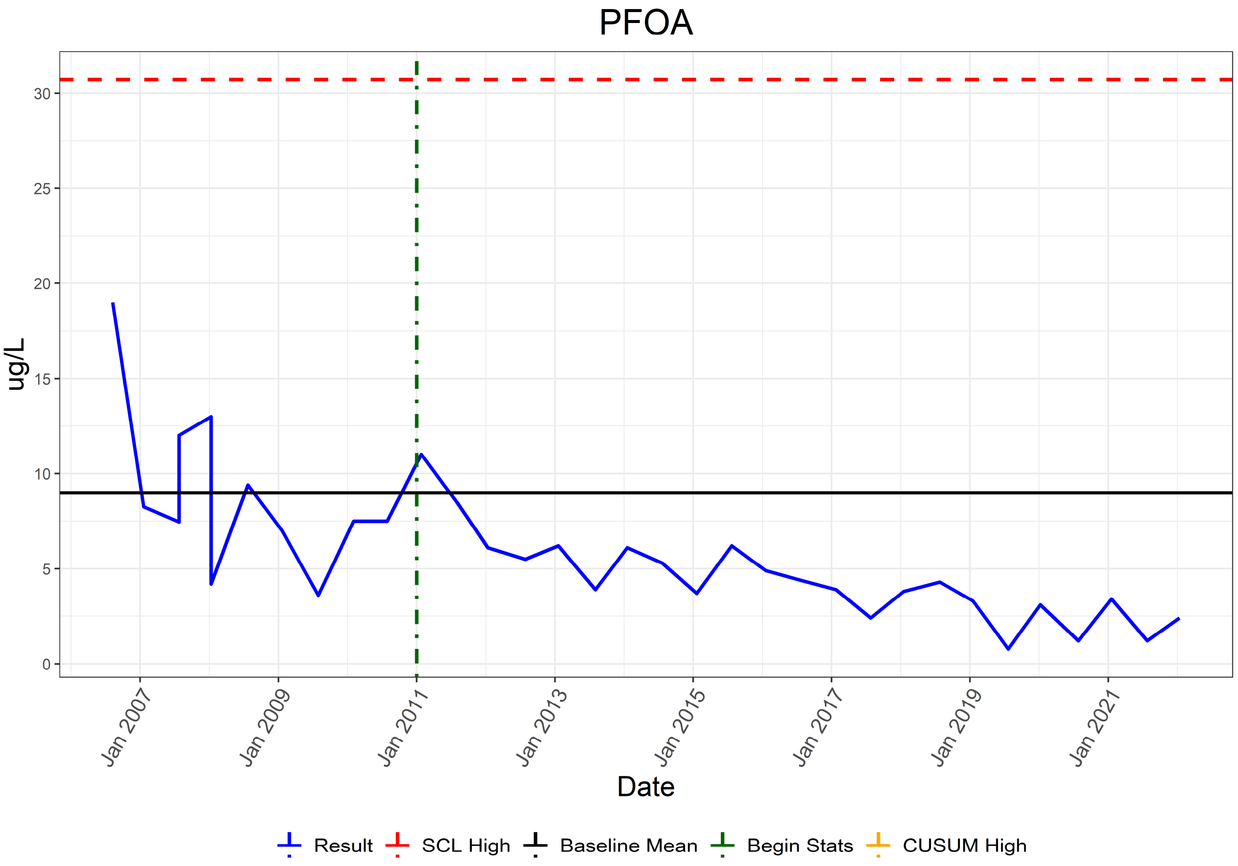



Perfluorohexanoic Acid
ug/L
35
30
25
20
15
10
5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

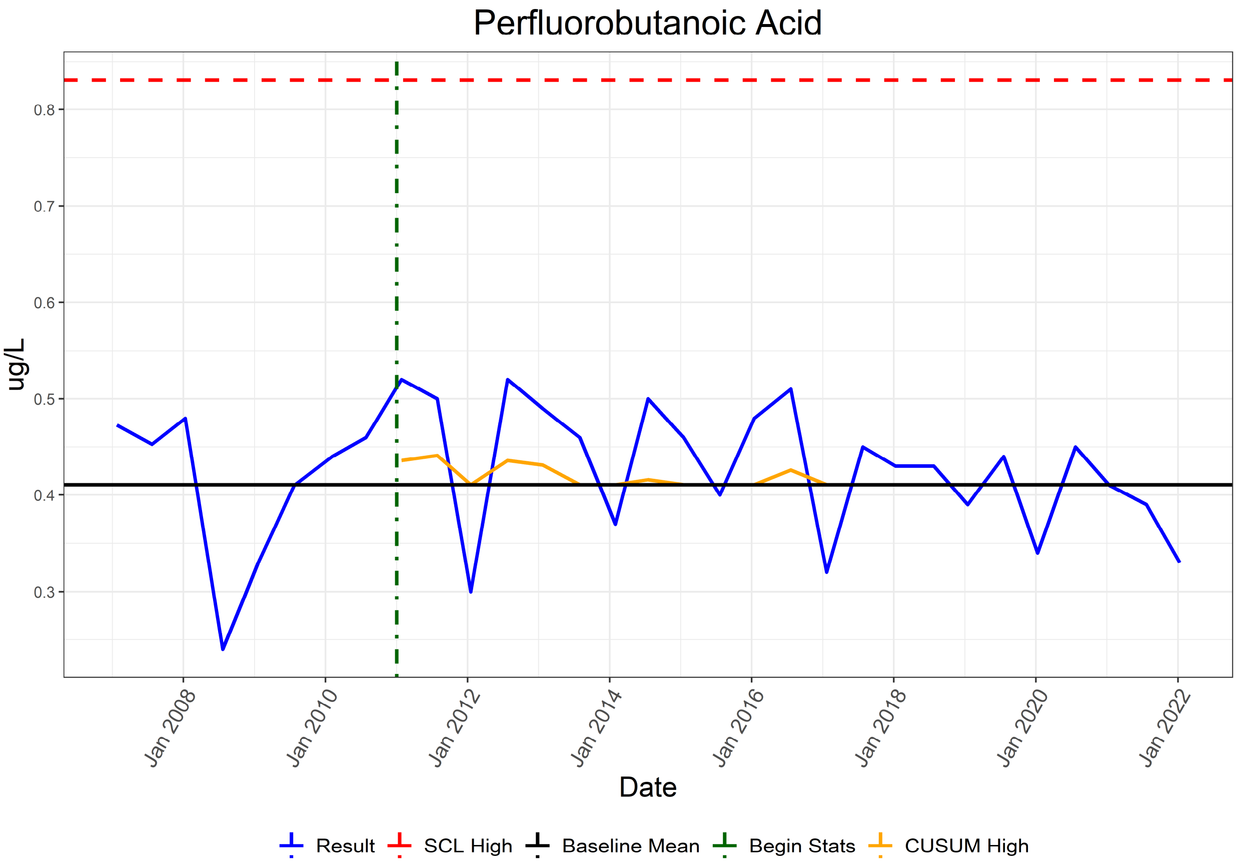

Perfluoropentanoic Acid

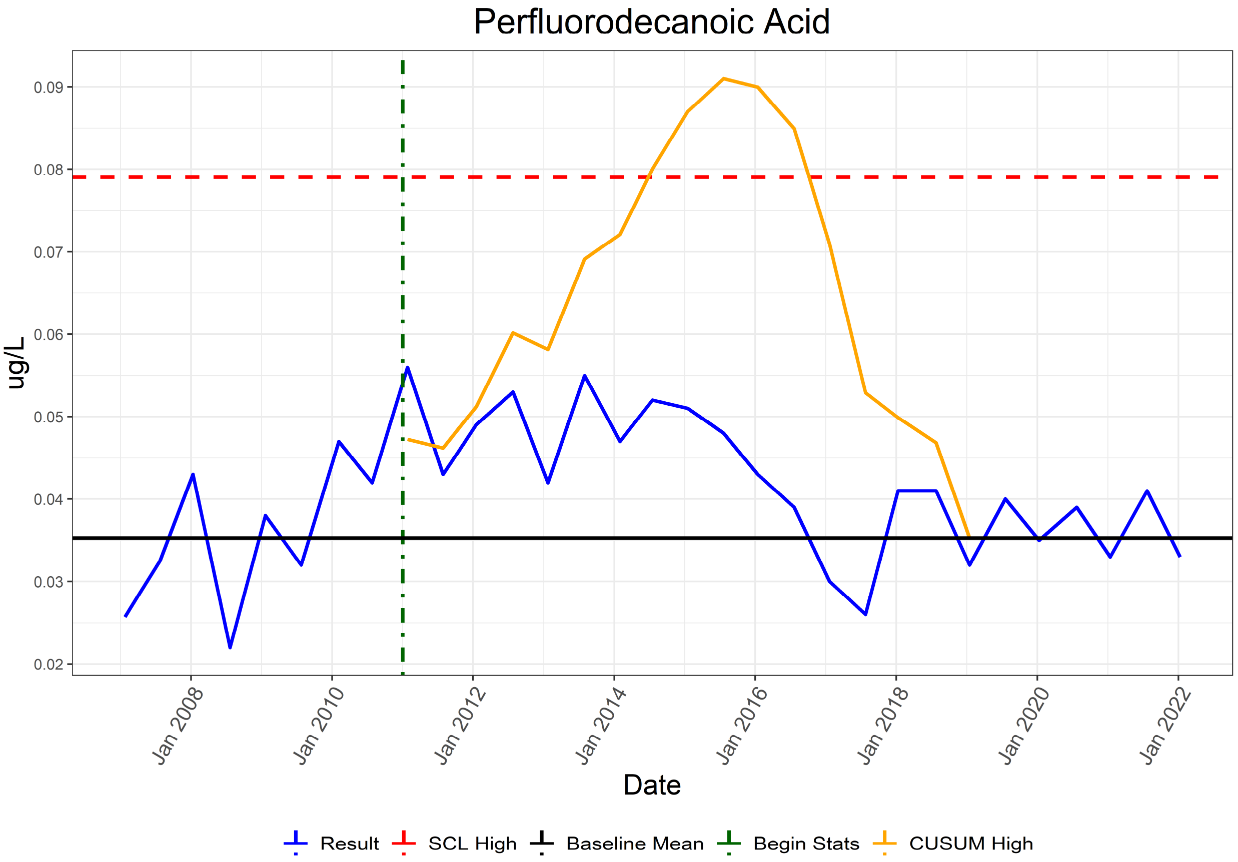

Perfluoroundecanoic Acid

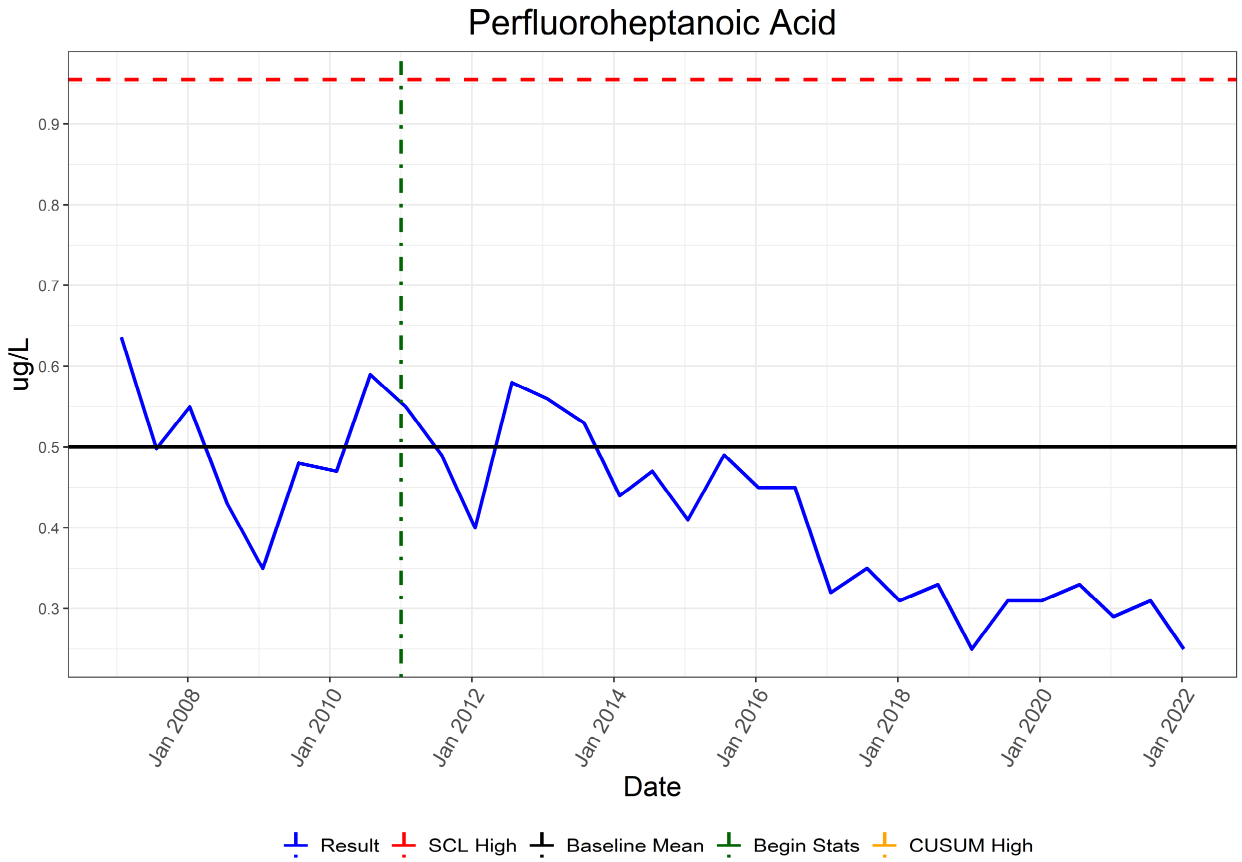

PFOA
ug/L
0
5
10
15
20
25
30
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

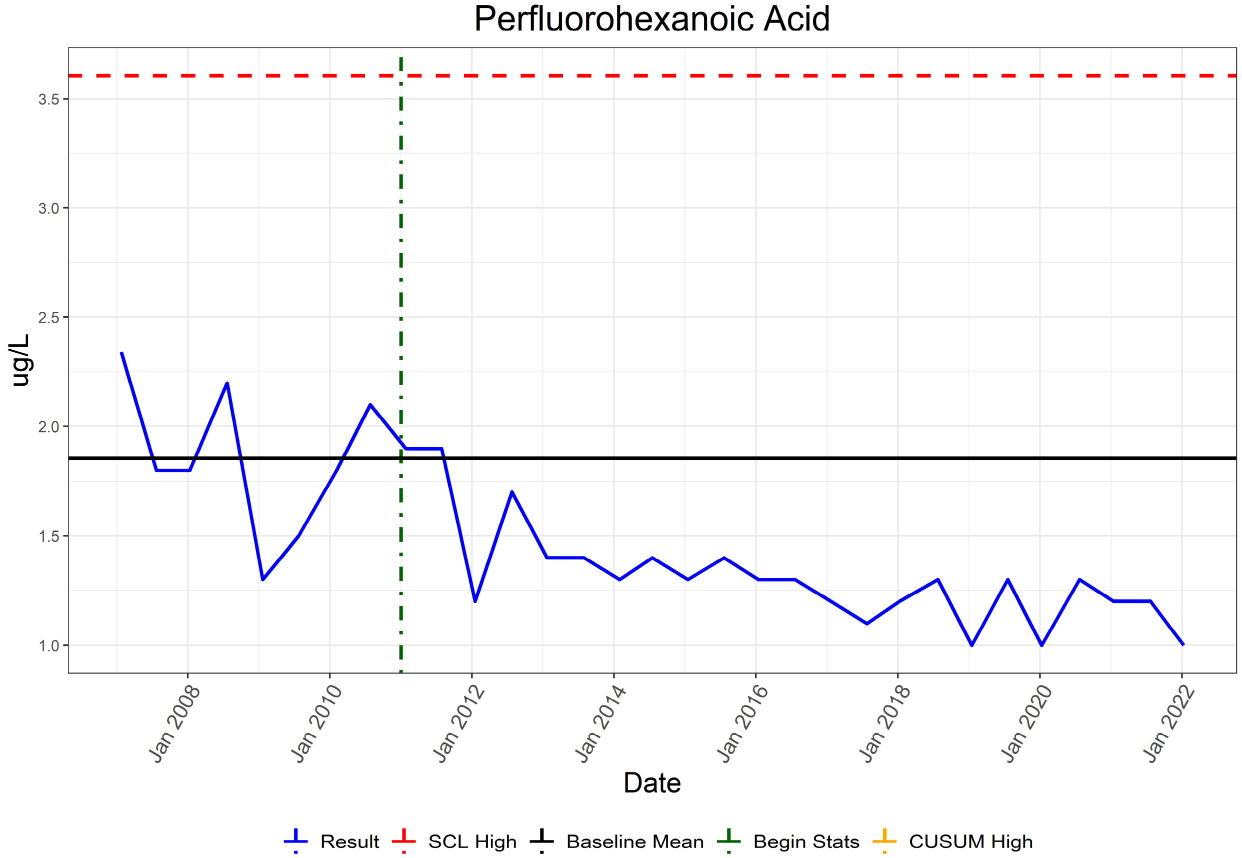
PFAS Monitoring Program (Program 9)

Well Name: G04-M01B

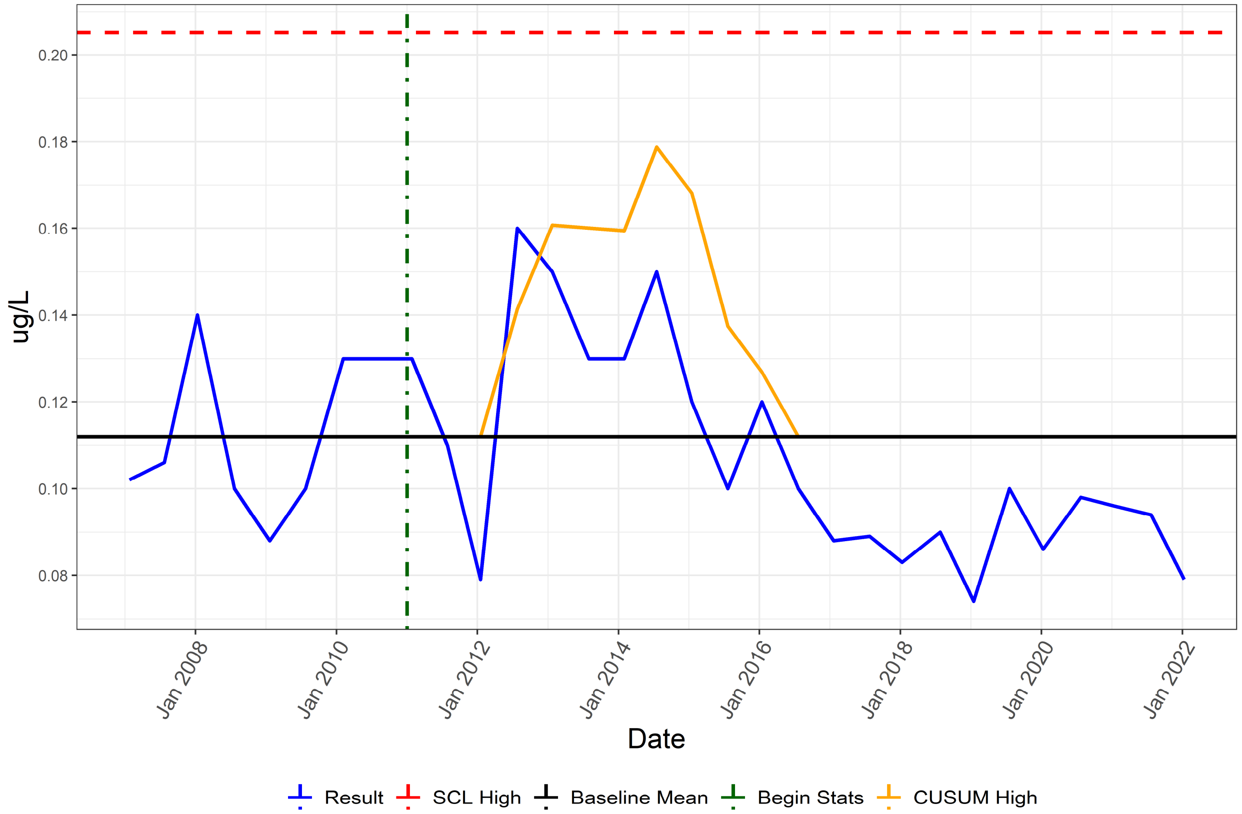




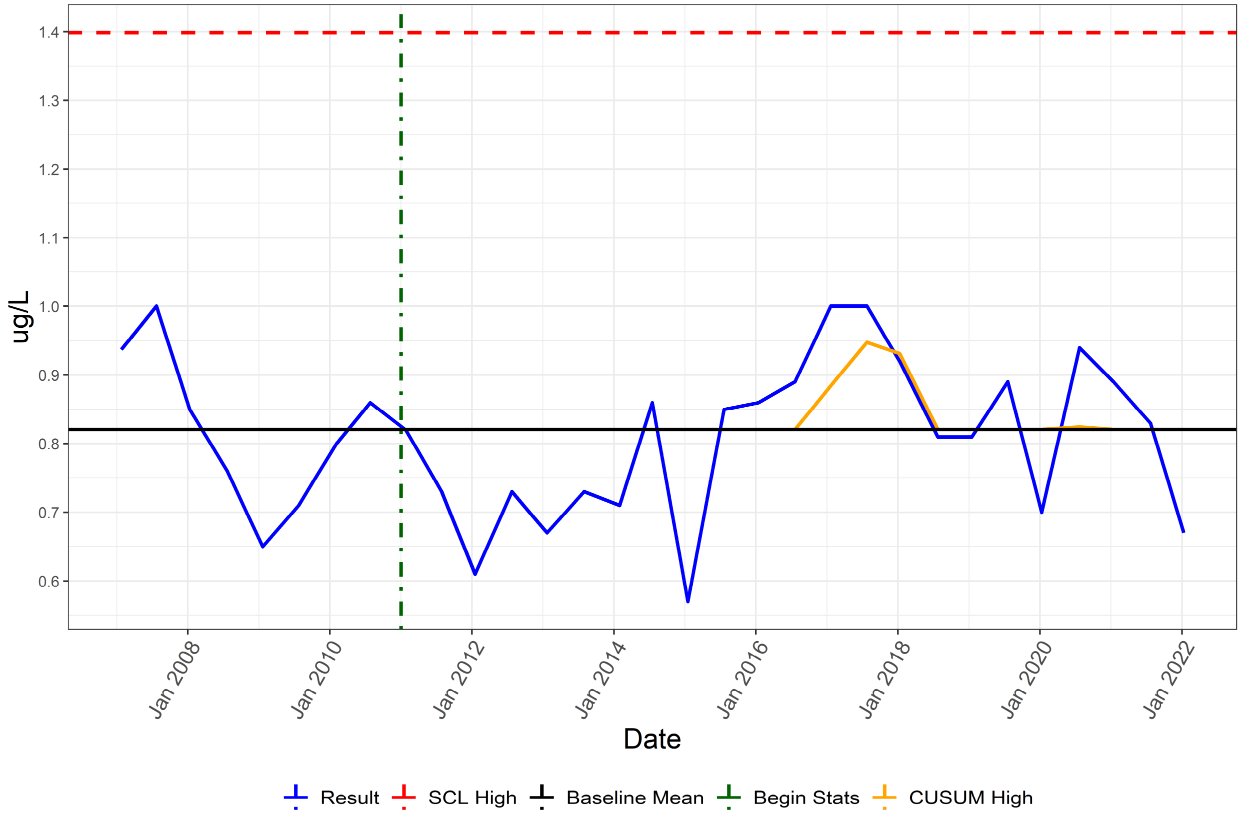

Perfluoroheptanoic Acid
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

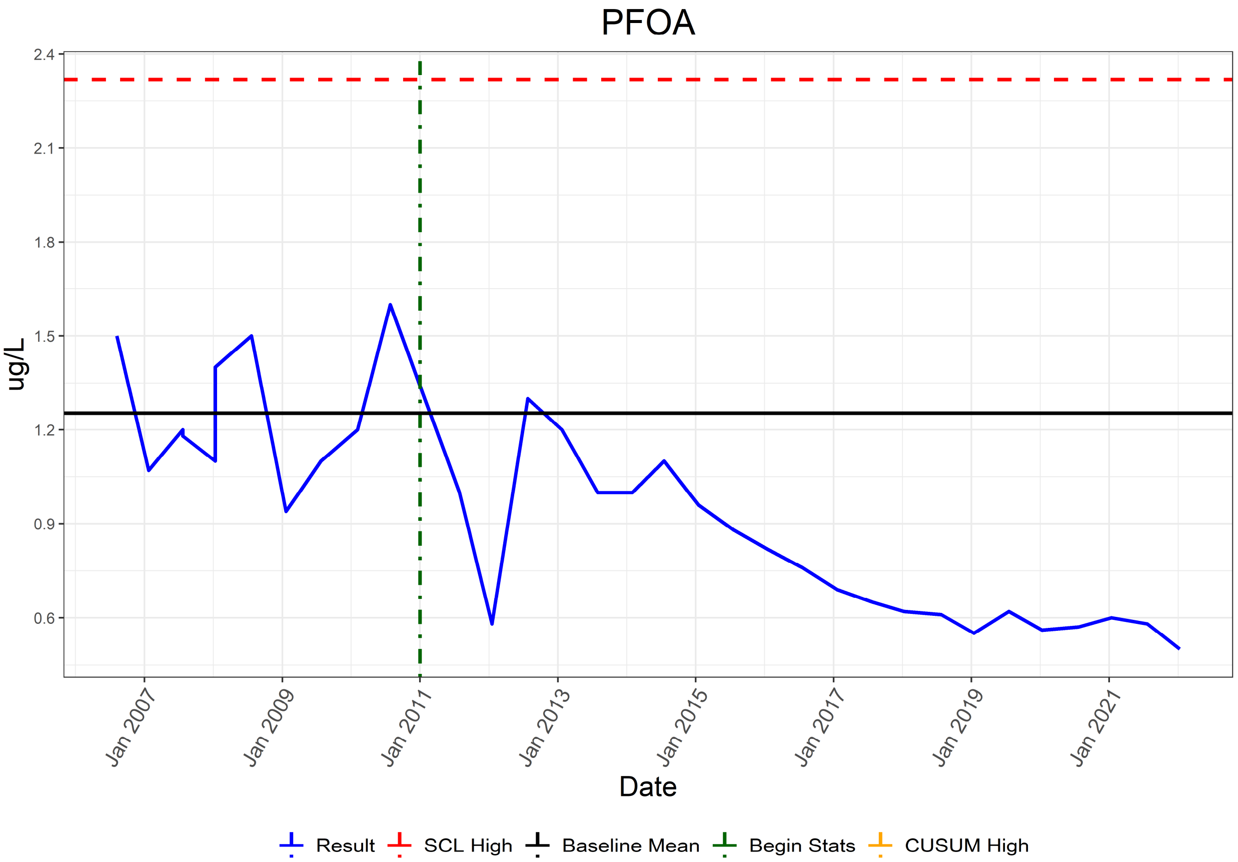

Perfluorohexanoic Acid
ug/L
3.5
3.0
2.5
2.0
1.5
1.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Perfluorononanoic Acid



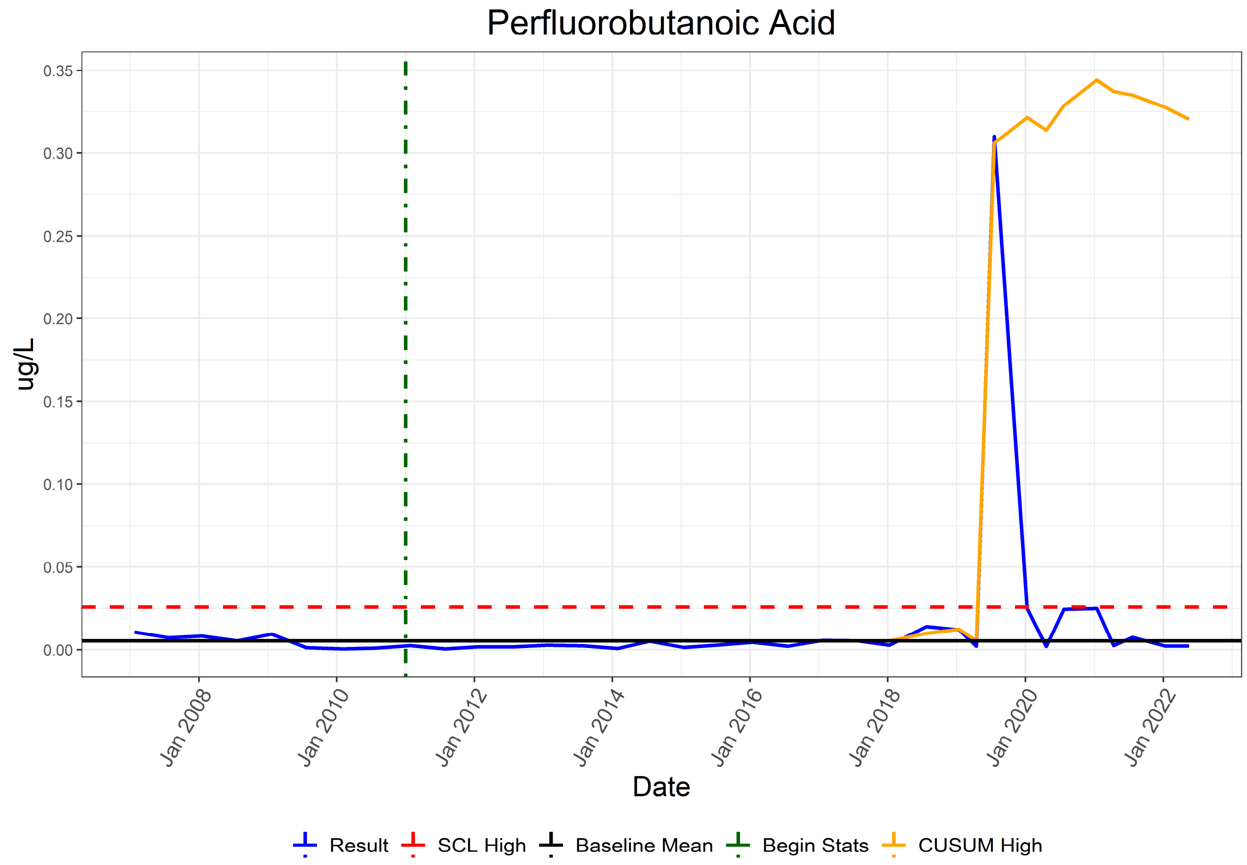
Perfluoropentanoic Acid

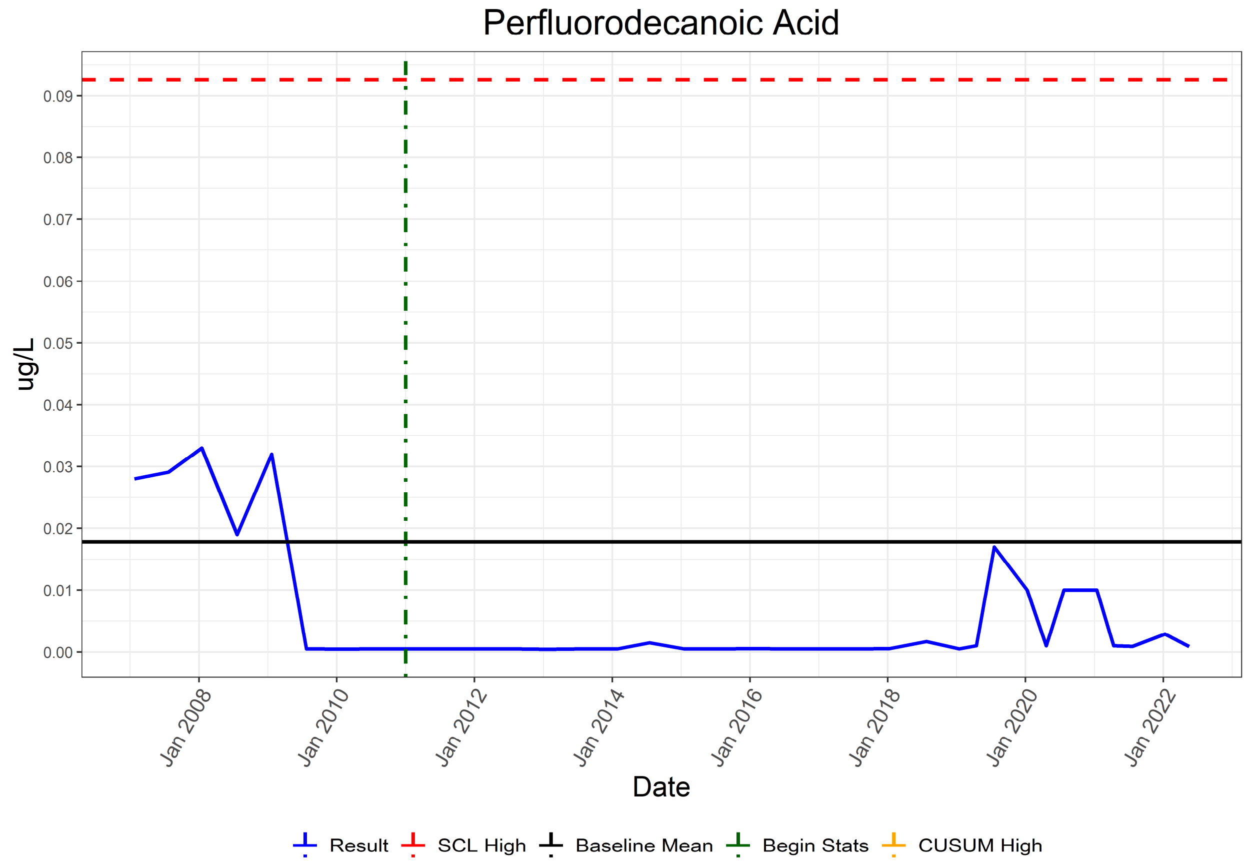


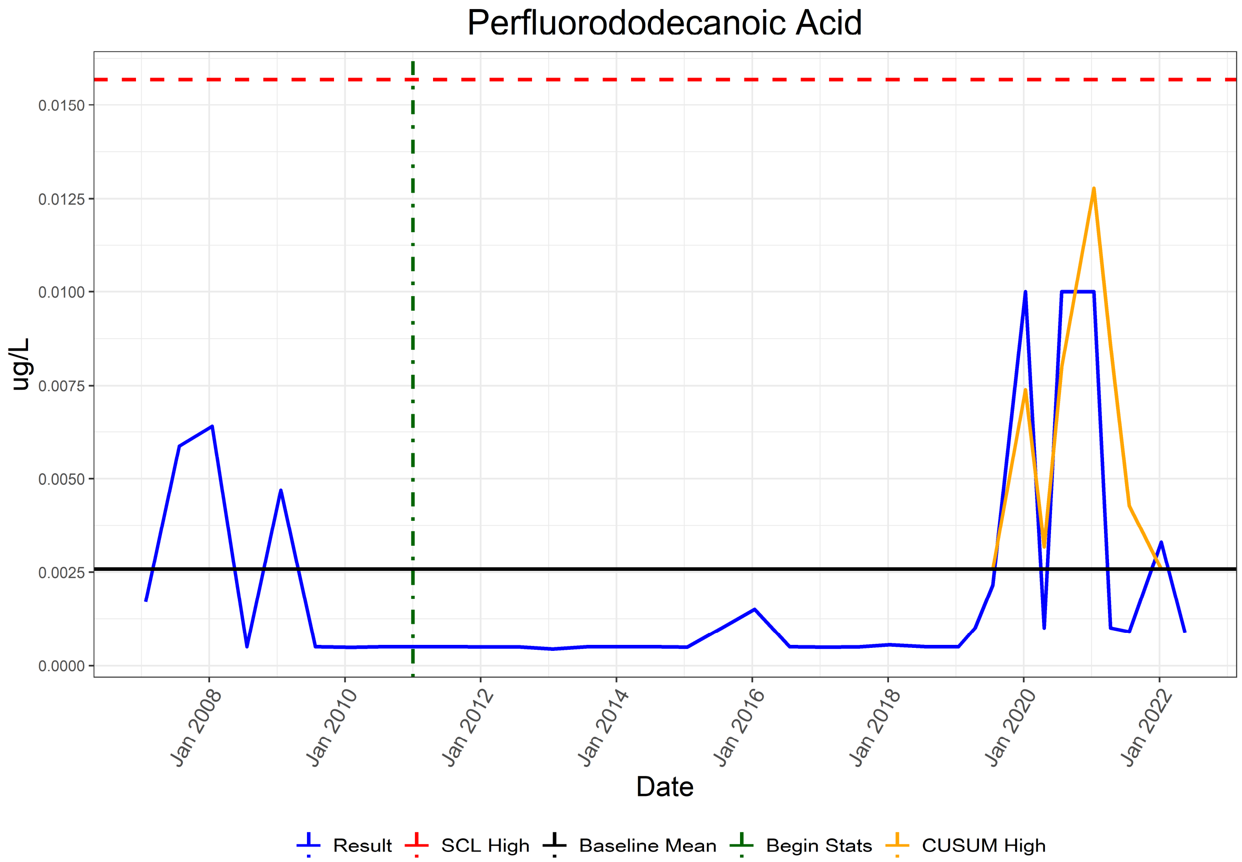

PFOA
ug/L
2.4
2.1
1.8
1.5
1.2
0.9
0.6
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

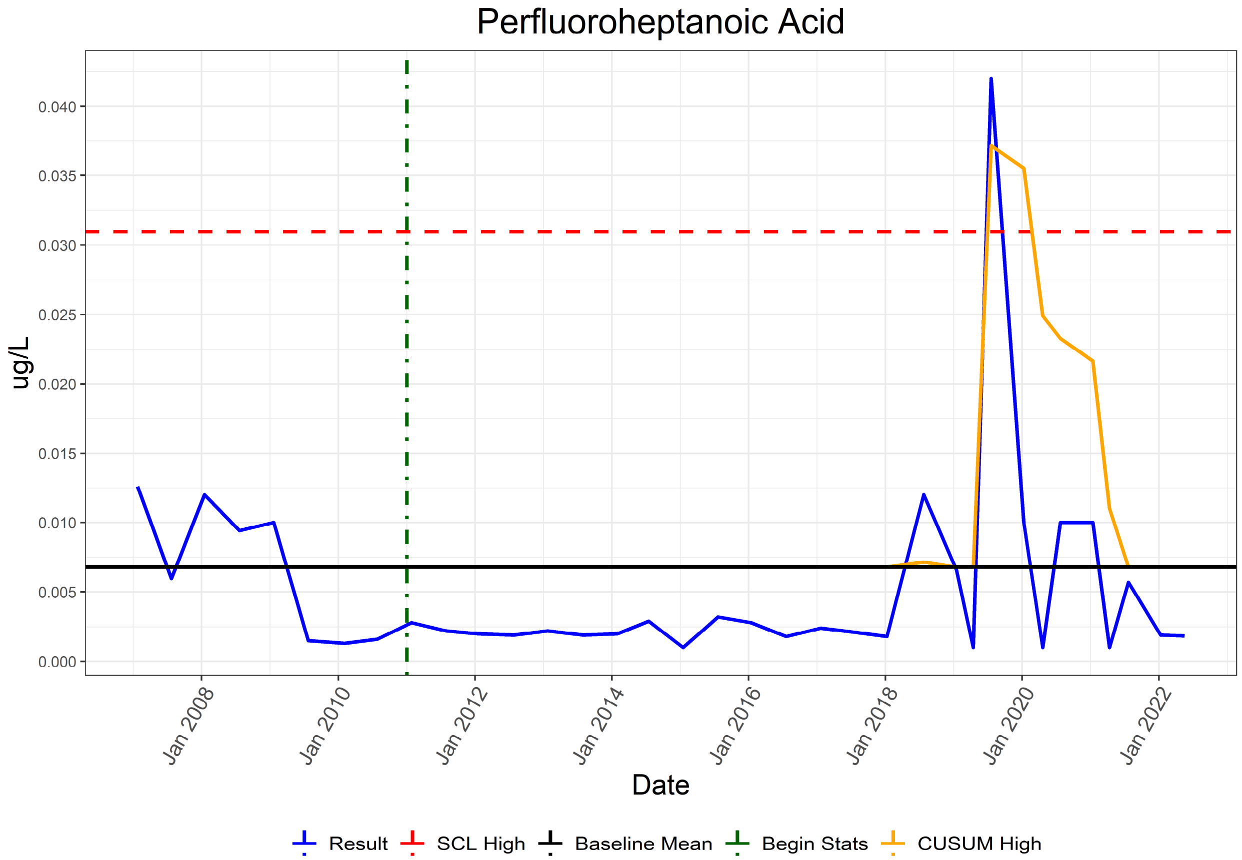
PFAS Monitoring Program (Program 9)

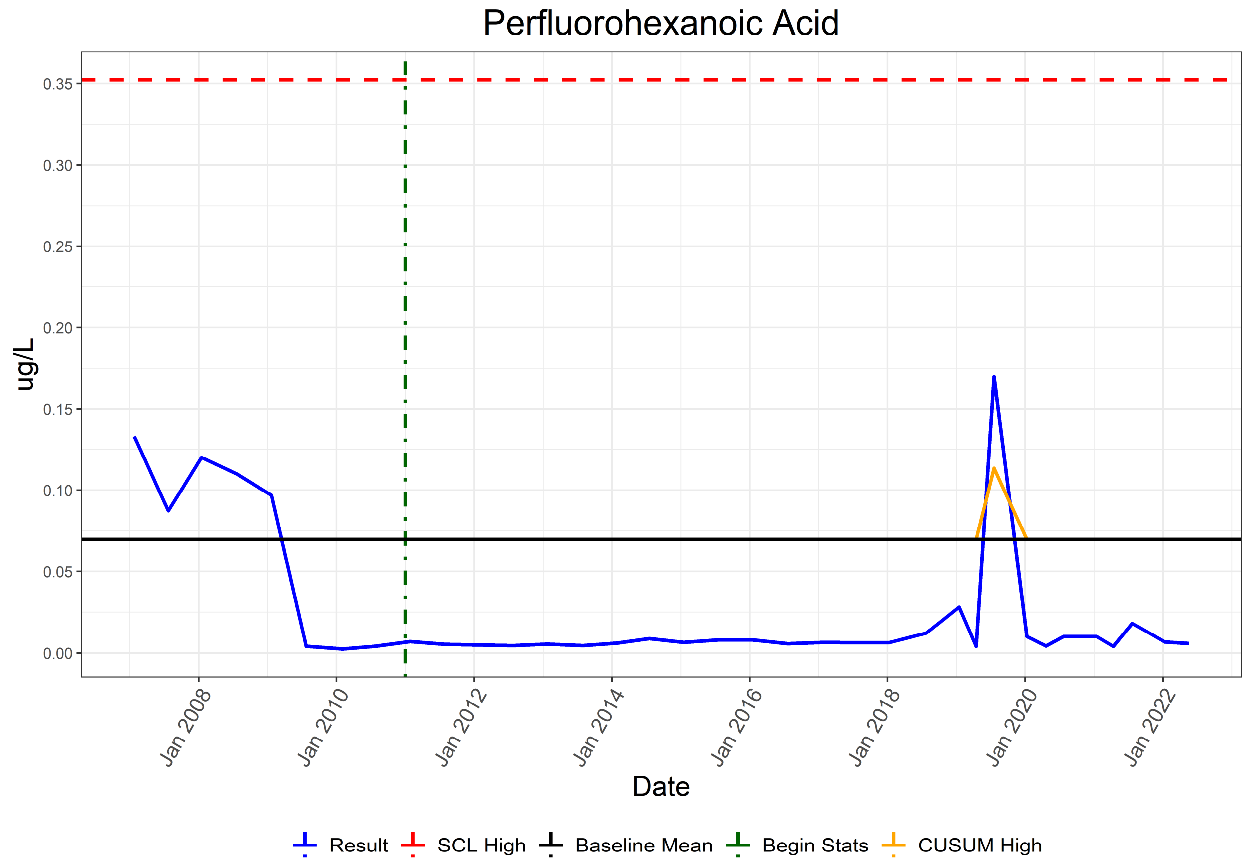
Well Name: G04-M01E

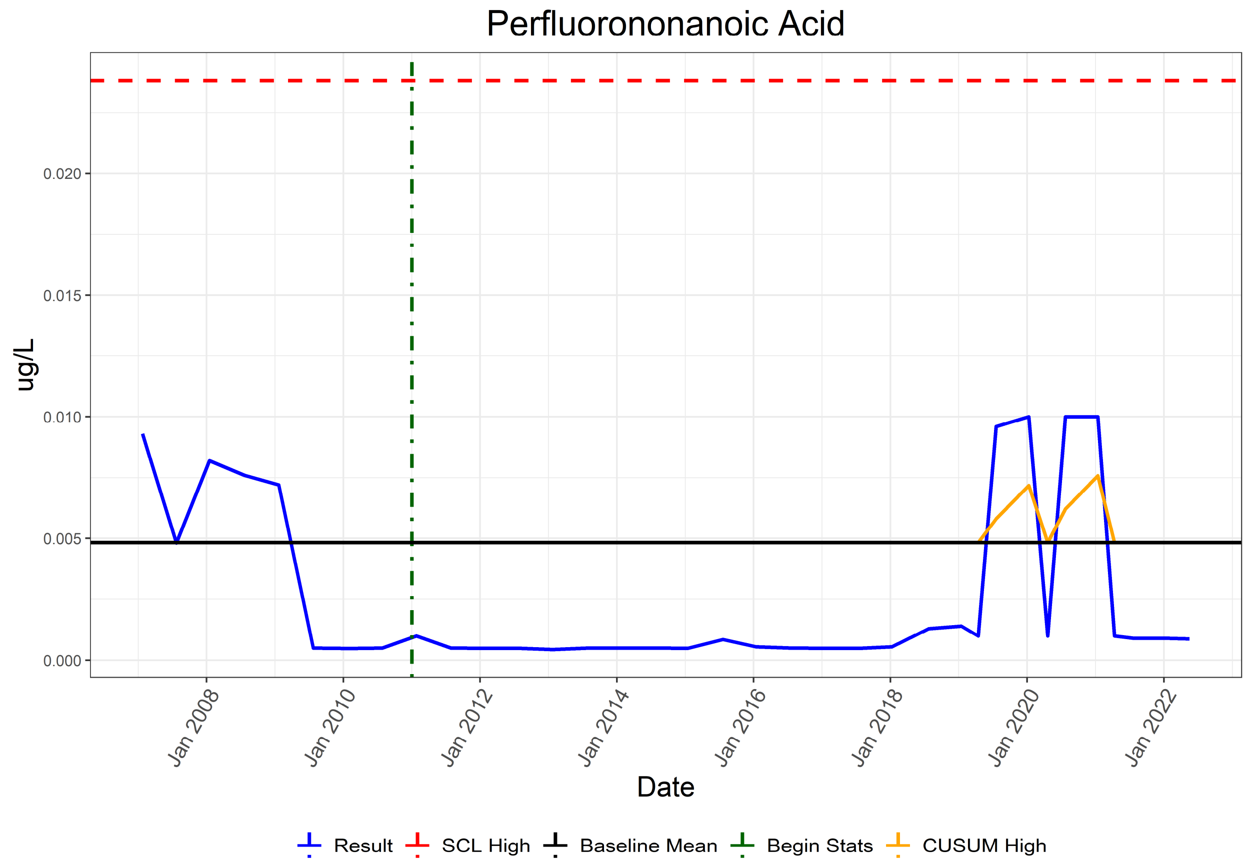


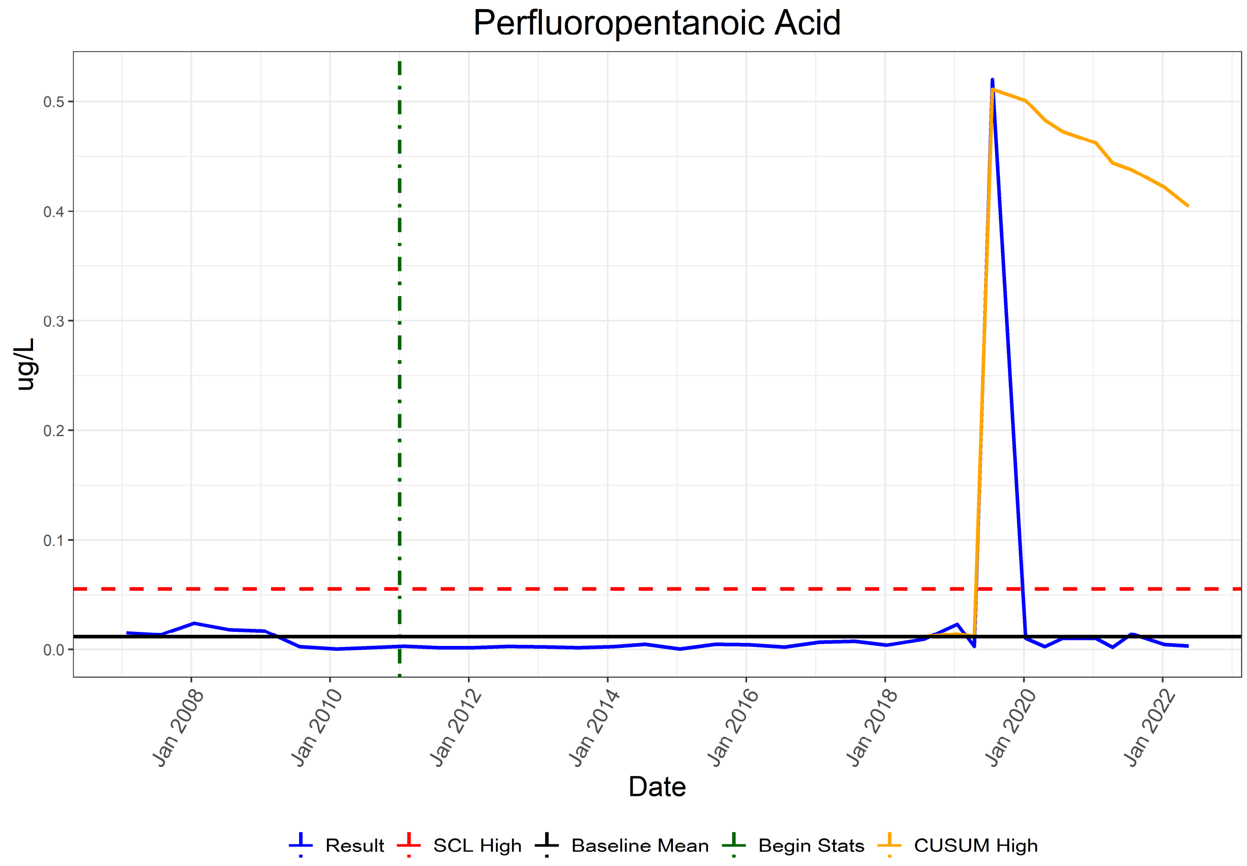


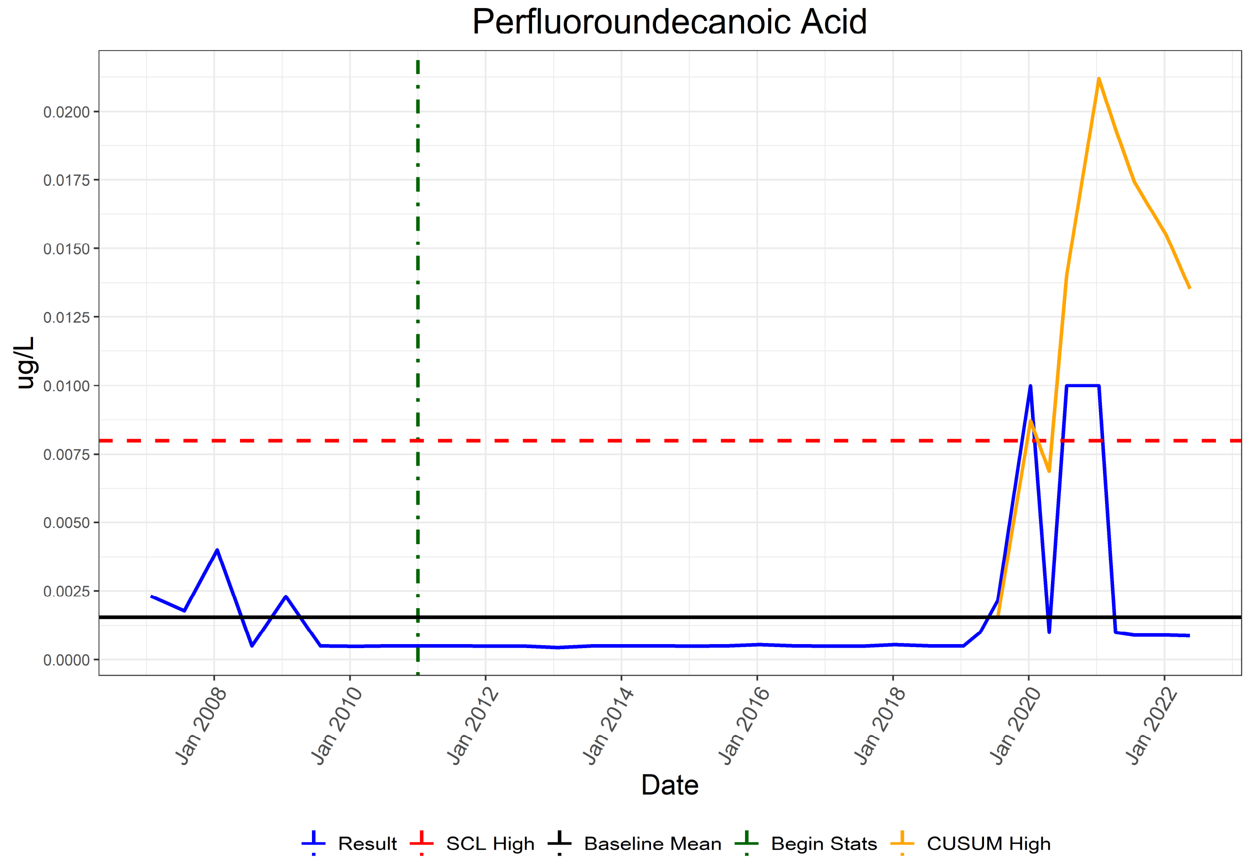

Perfluorododecanoic Acid
ug/L
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

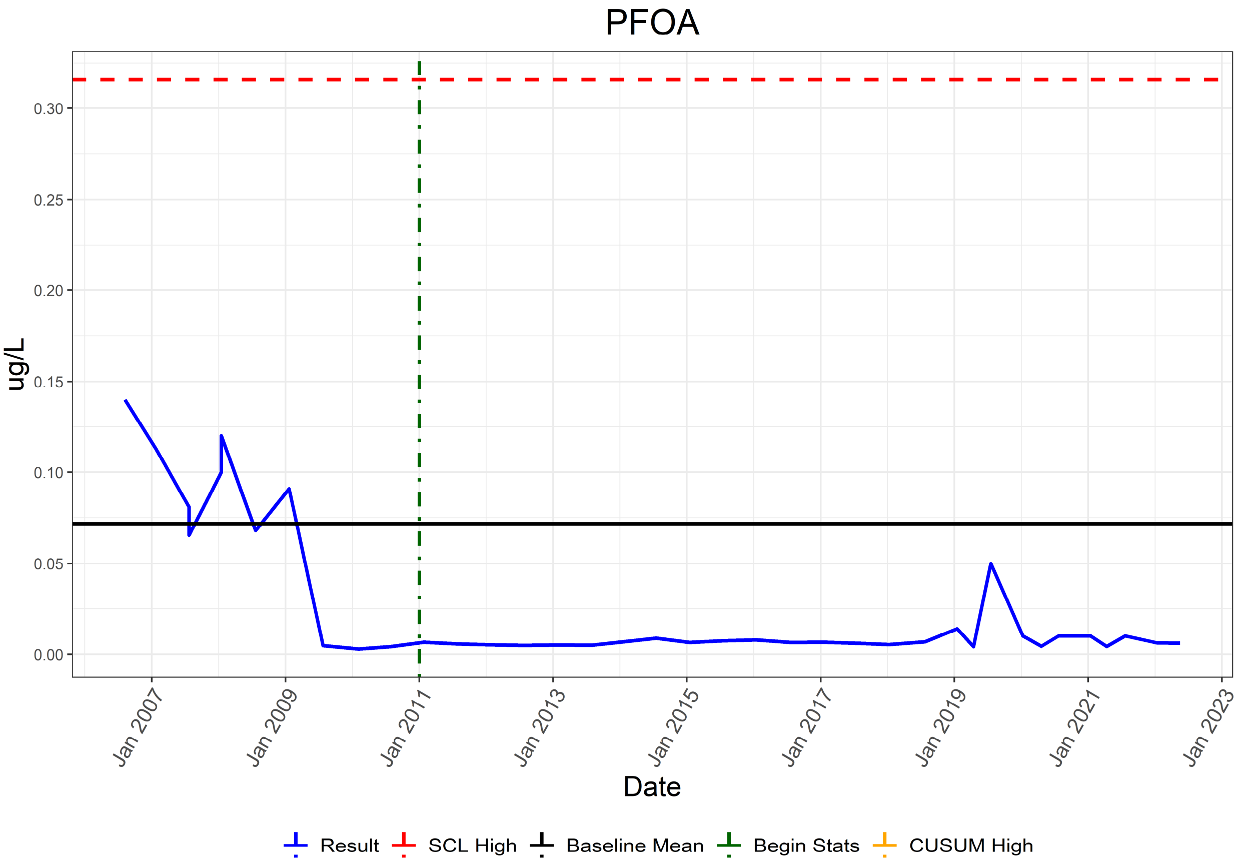

Perfluoroheptanoic Acid
ug/L
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.020
0.015
0.010
0.005
0.000
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoropentanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

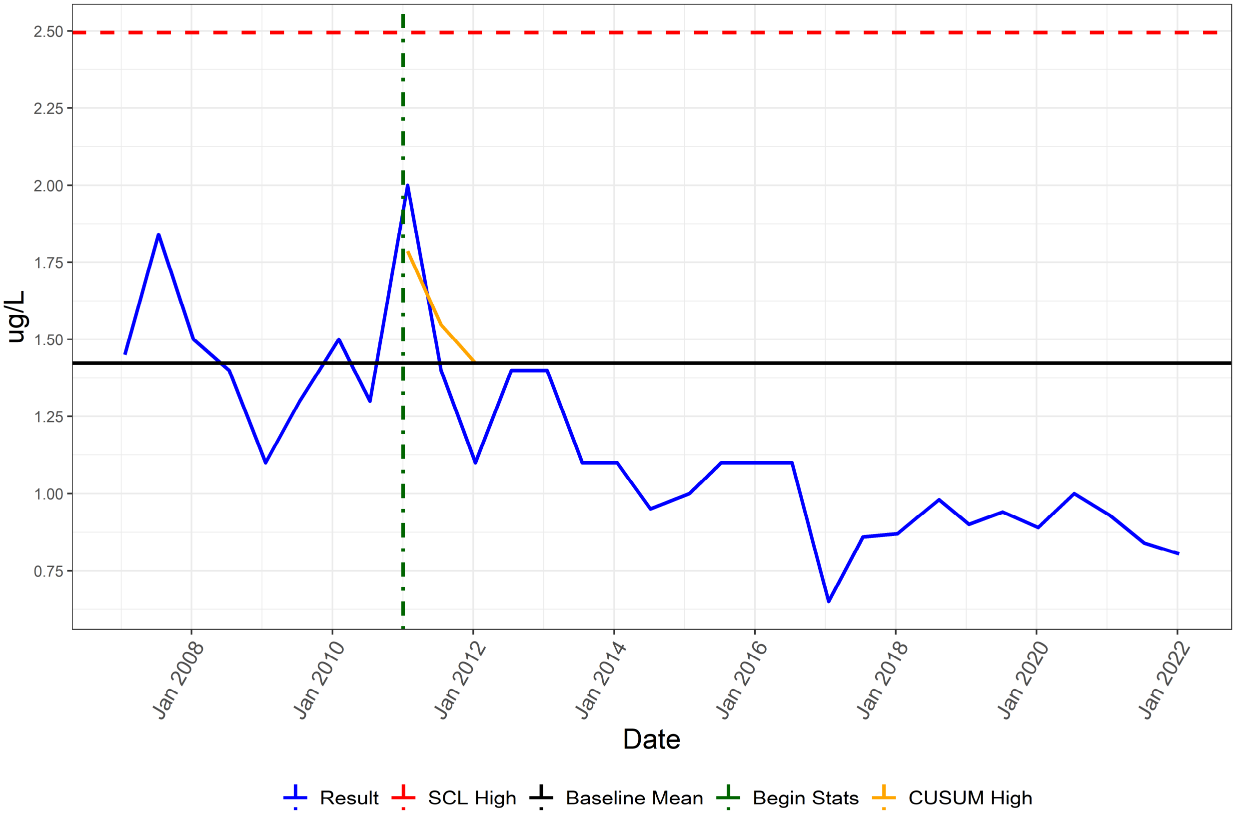

Perfluoroundecanoic Acid
ug/L
0.0200
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Jan 2023
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

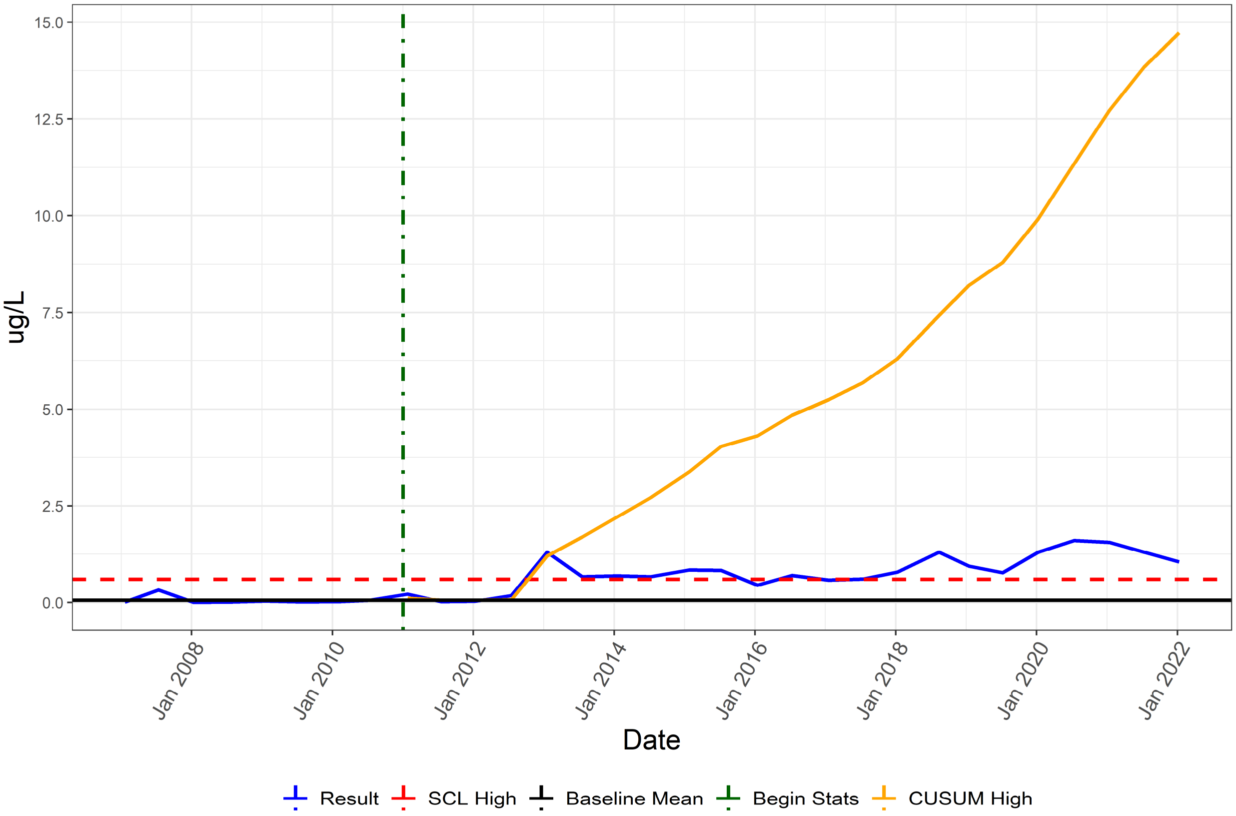
PFAS Monitoring Program (Program 9)

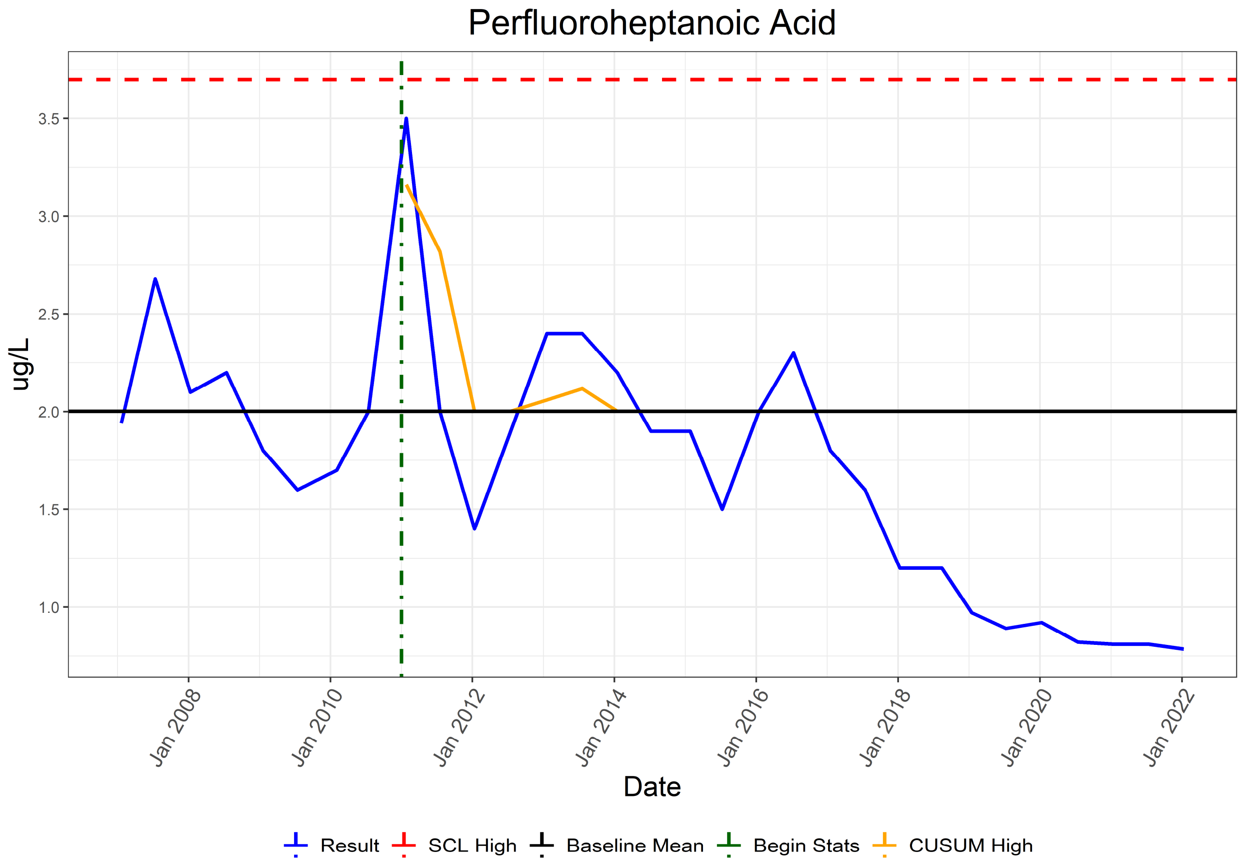
Well Name: G05-M02B

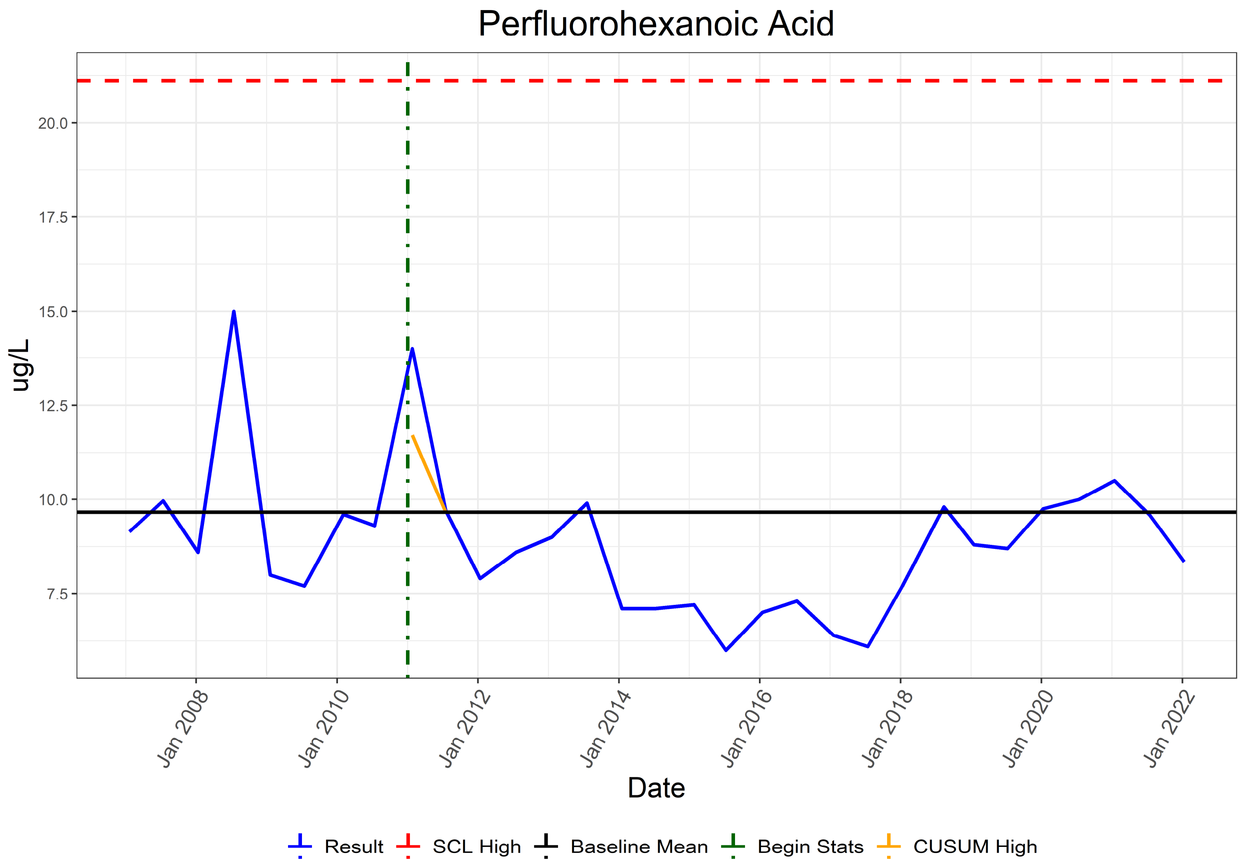
Perfluorobutanoic Acid



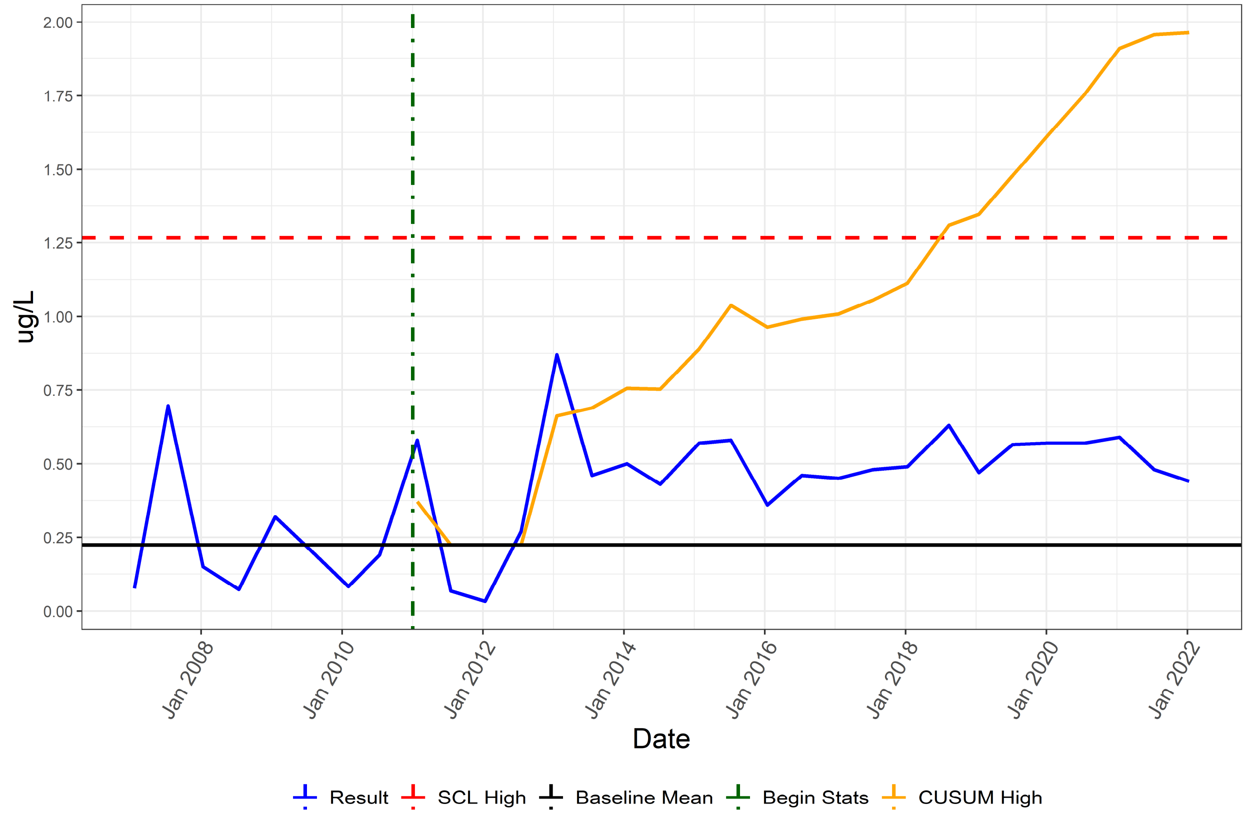
Perfluorodecanoic Acid



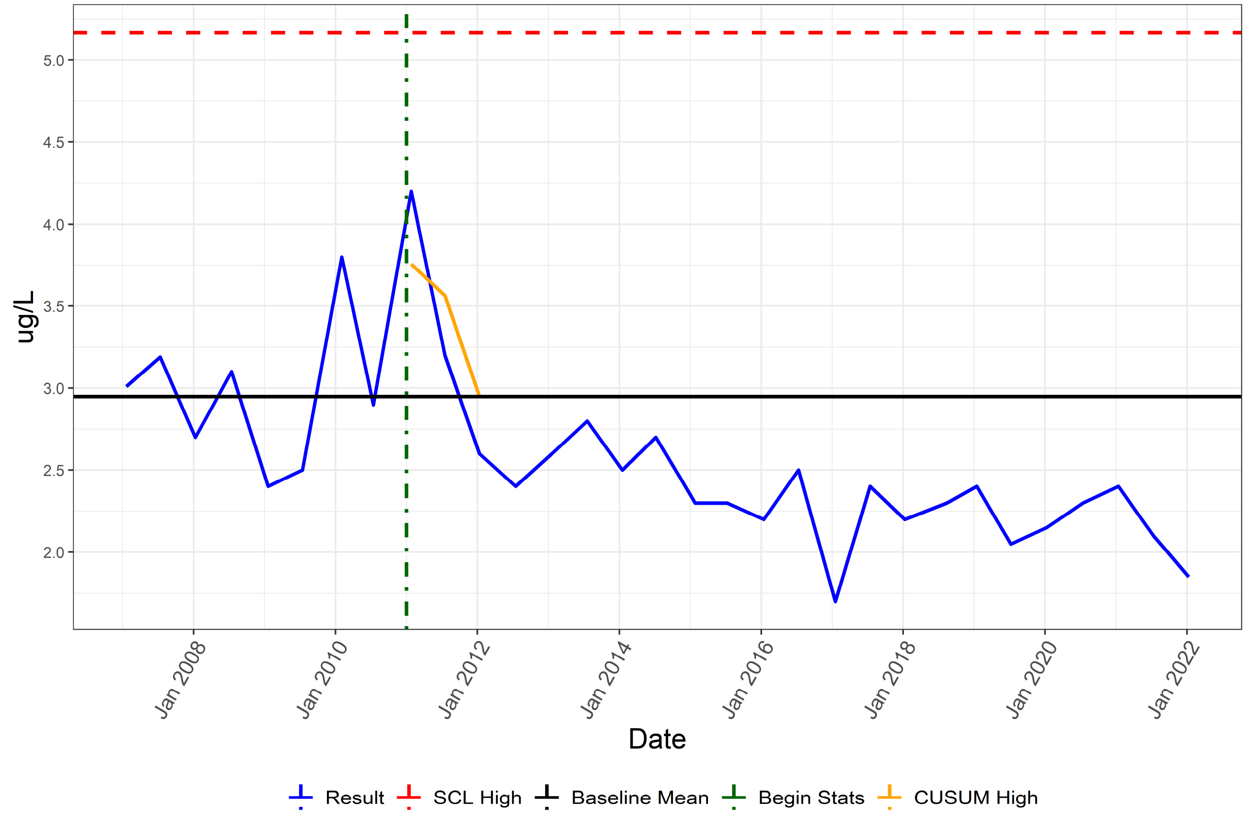

Perfluoroheptanoic Acid

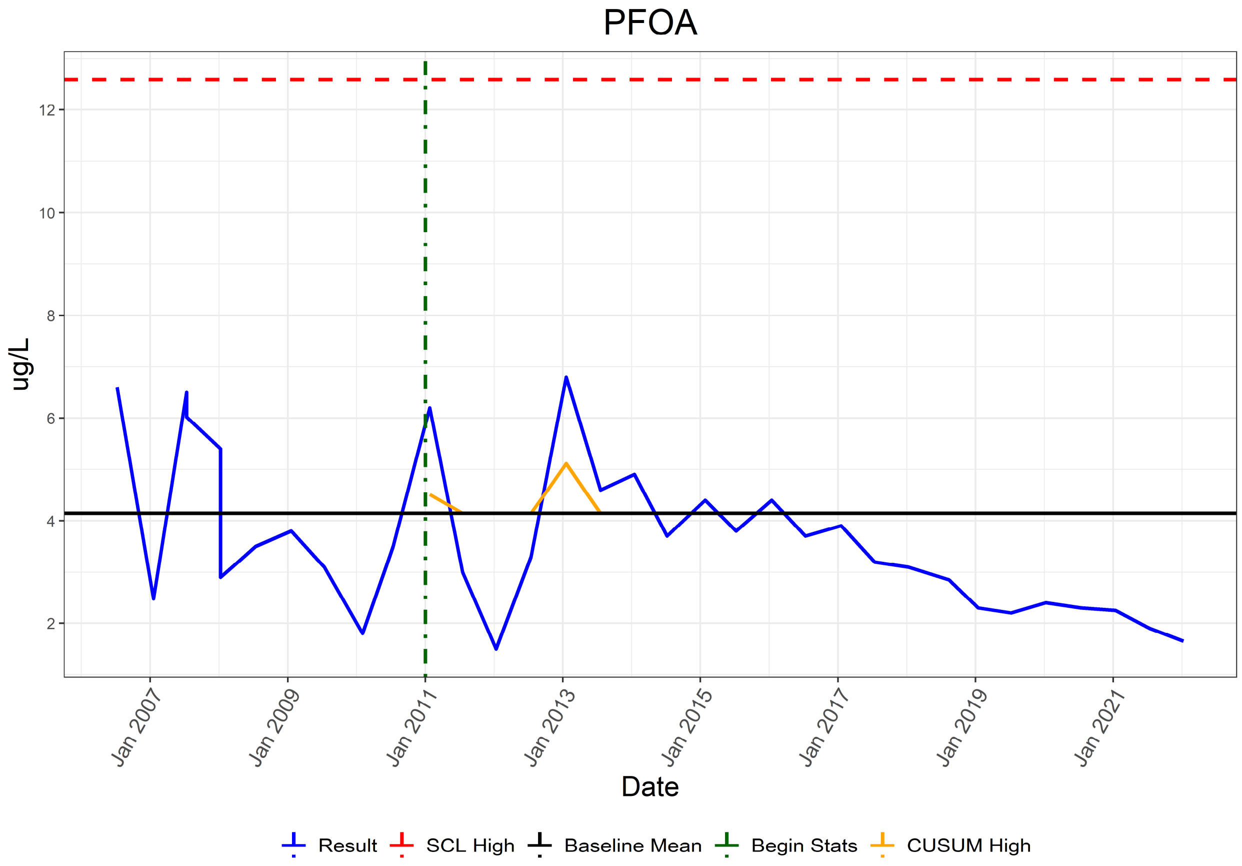

Perfluorohexanoic Acid

Perfluorononanoic Acid



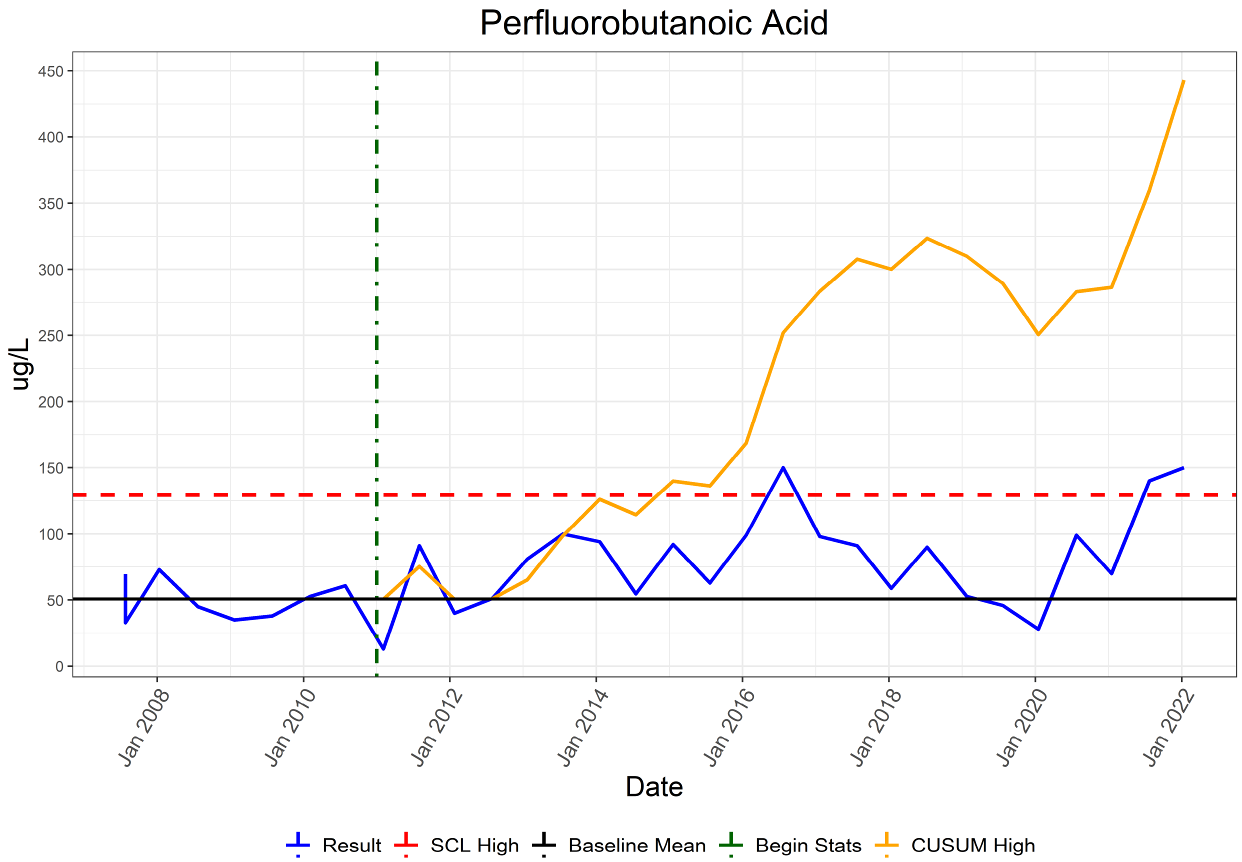
Perfluoropentanoic Acid

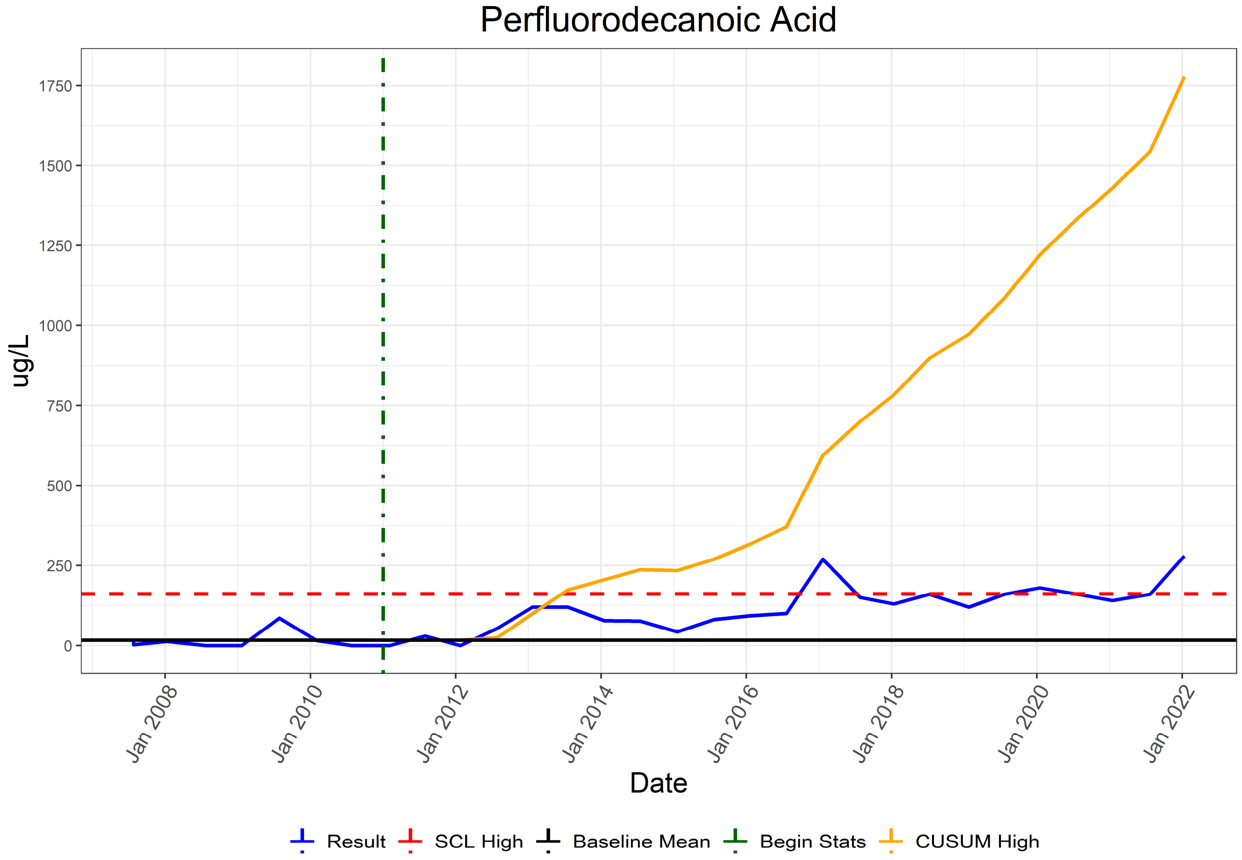



PFOA
ug/L
12
10
8
6
4
2
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

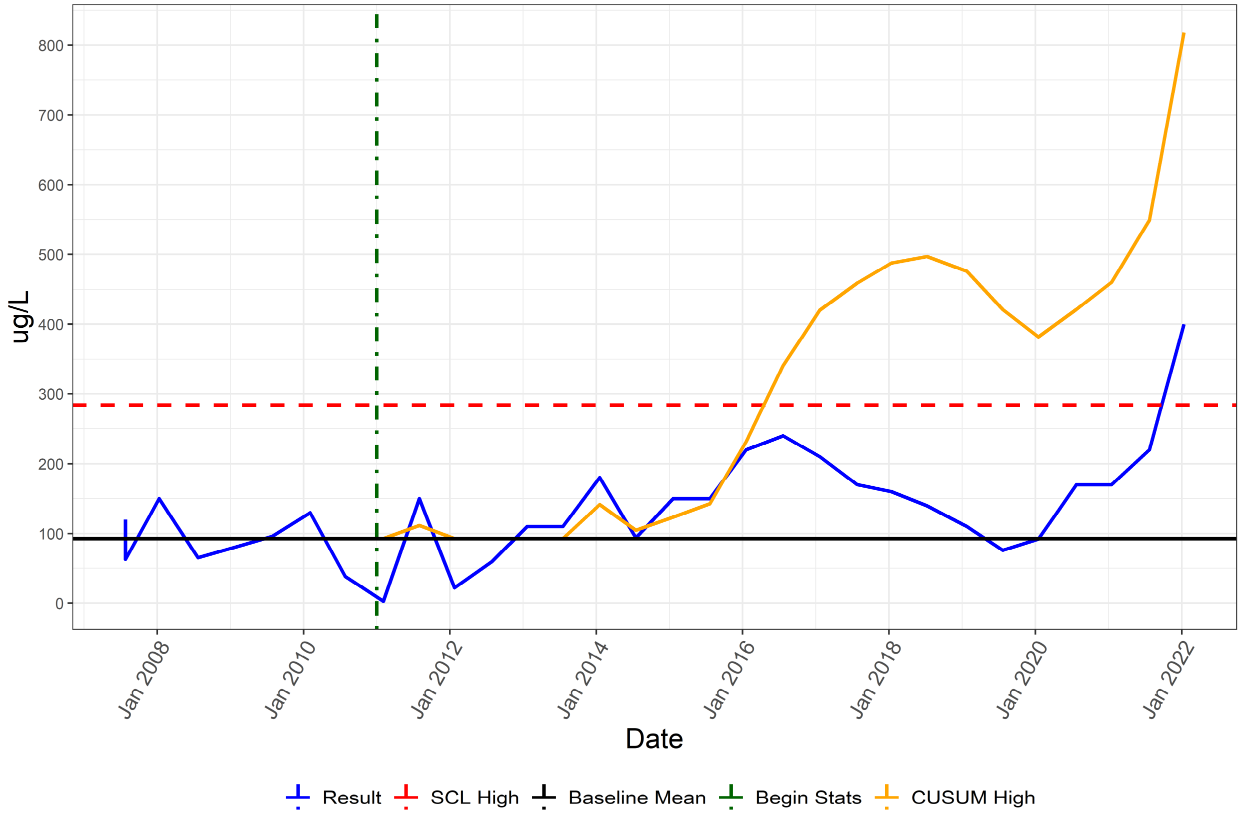
PFAS Monitoring Program (Program 9)

Well Name: G09-M01A

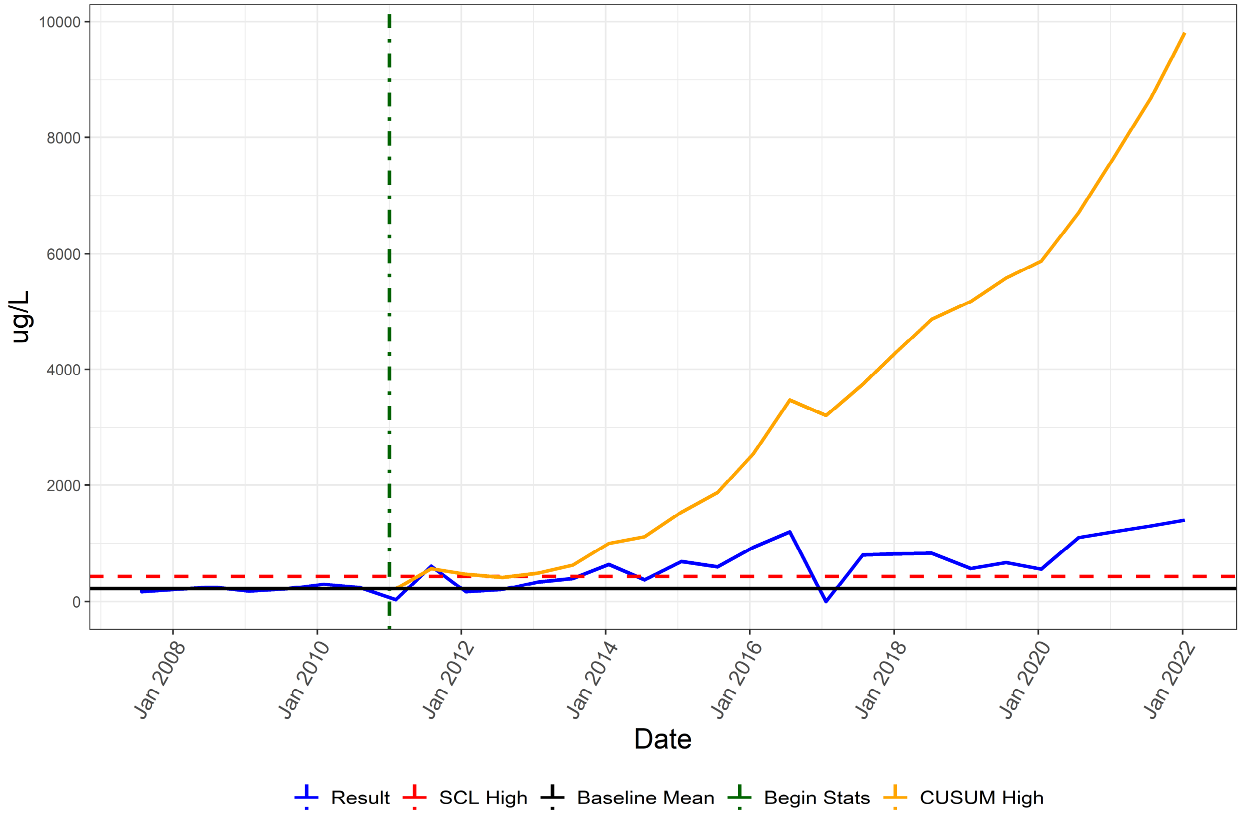


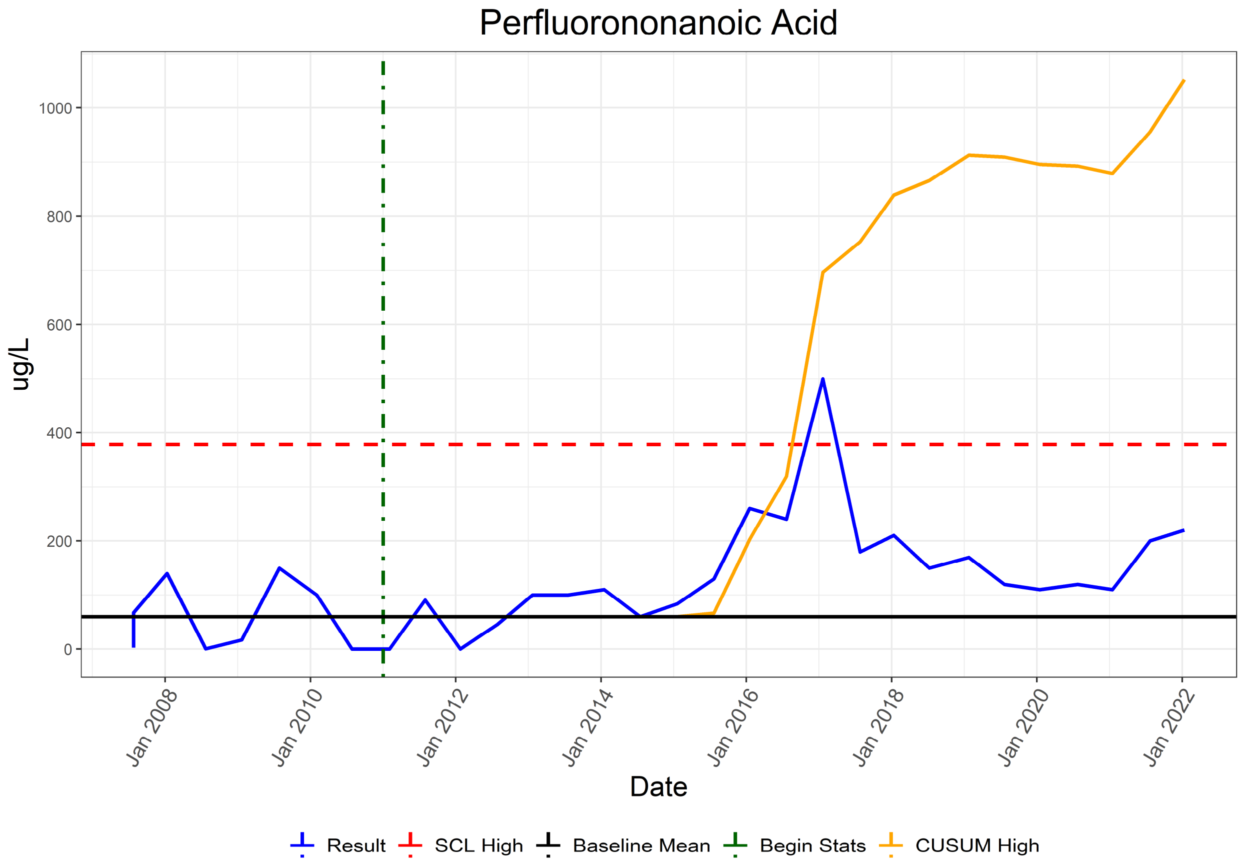


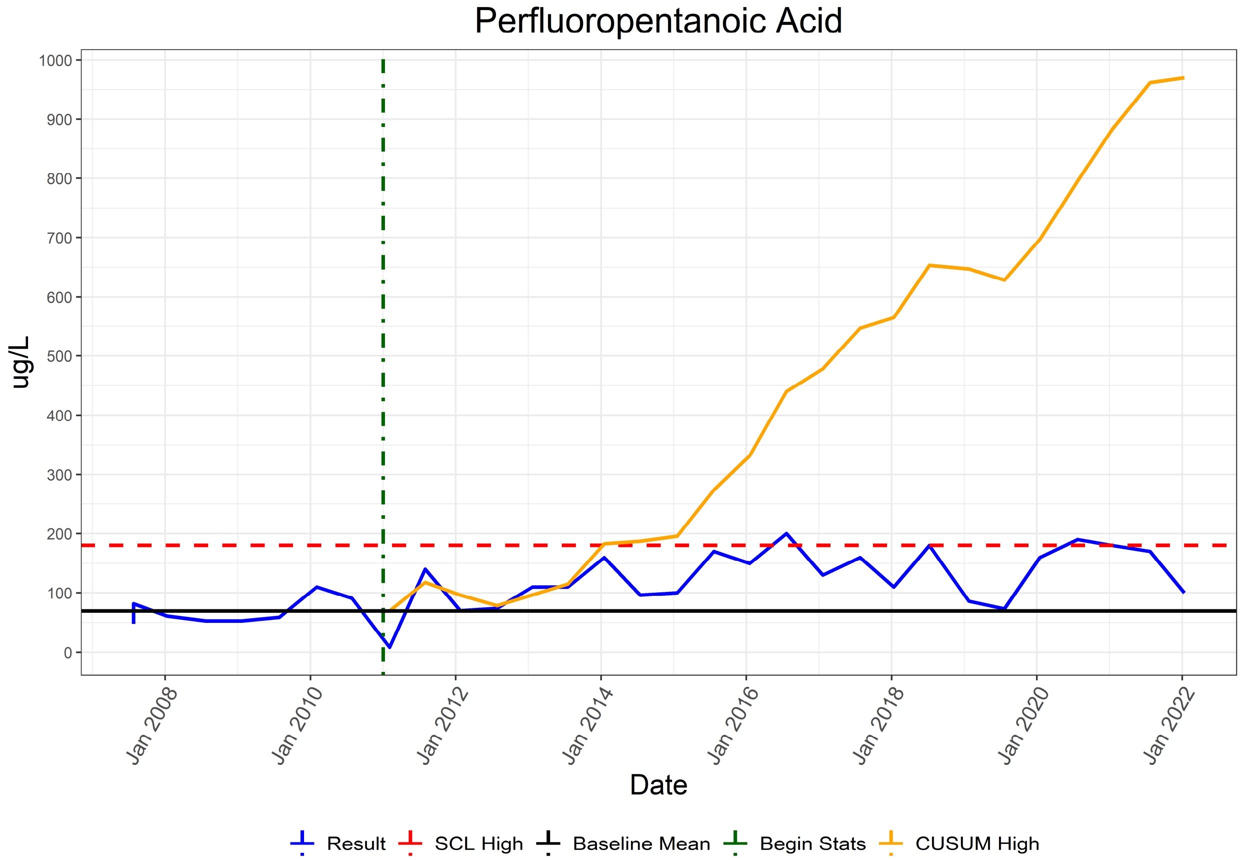
Perfluoroheptanoic Acid

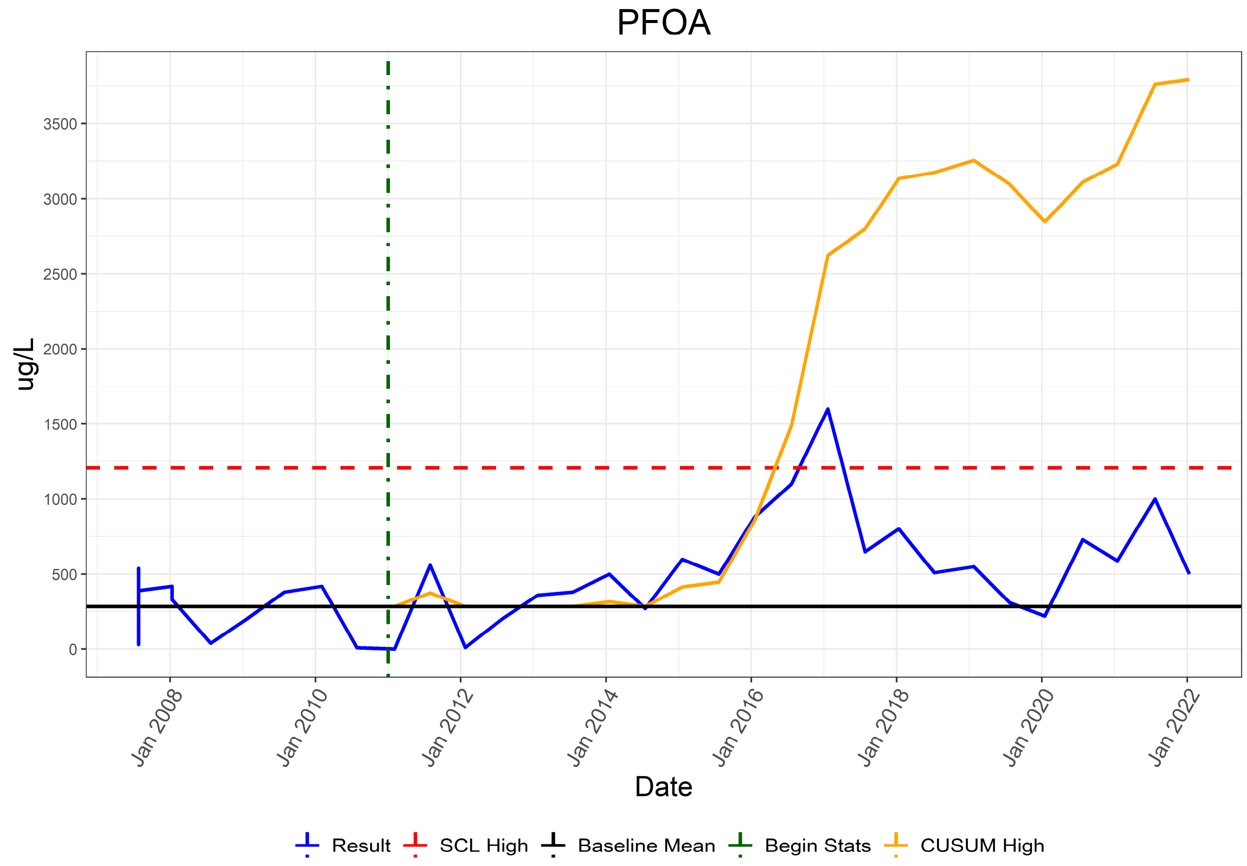


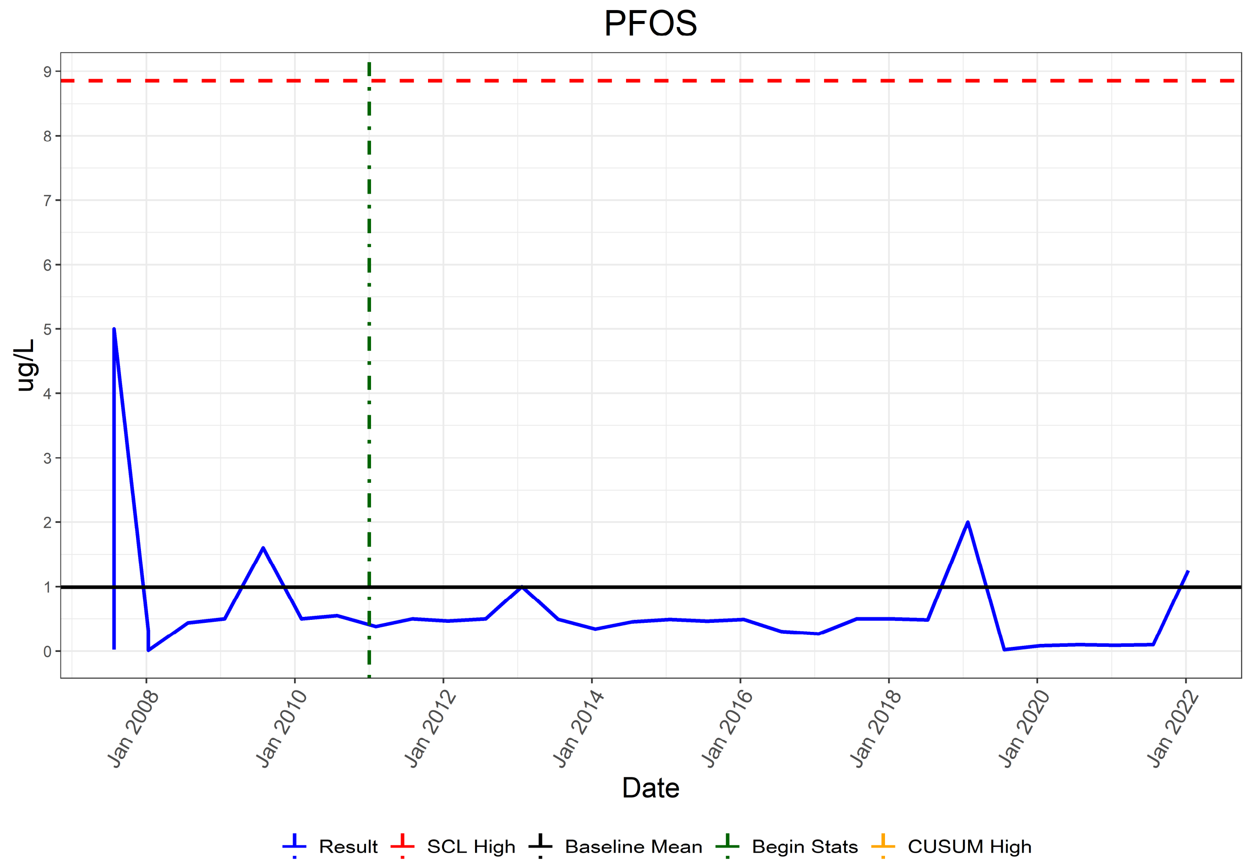
Perfluorohexanoic Acid




Perfluorononanoic Acid
ug/L
1000
800
600
400
200
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoropentanoic Acid
ug/L
1000
900
800
700
600
500
400
300
200
100
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

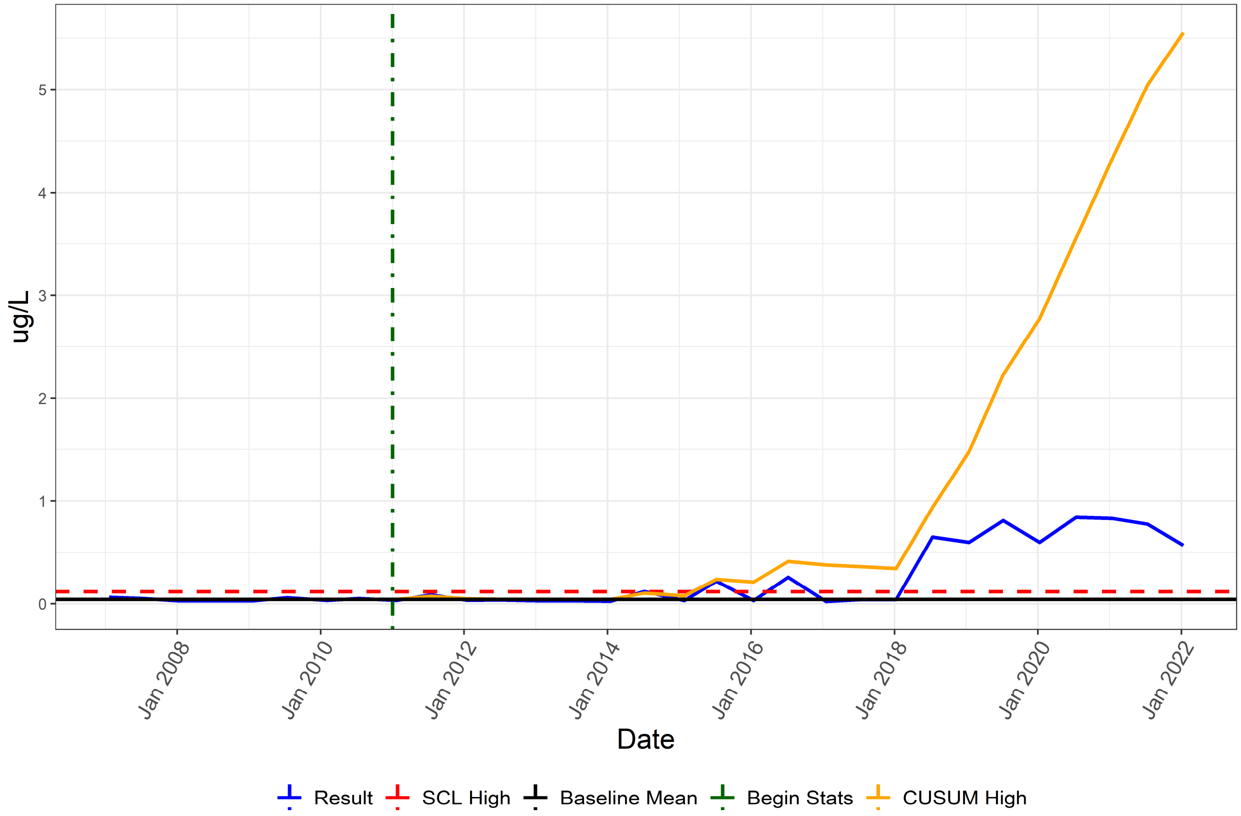

PFOA
ug/L
0
500
1000
1500
2000
2500
3000
3500
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOS
ug/L
0
1
2
3
4
5
6
7
8
9
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

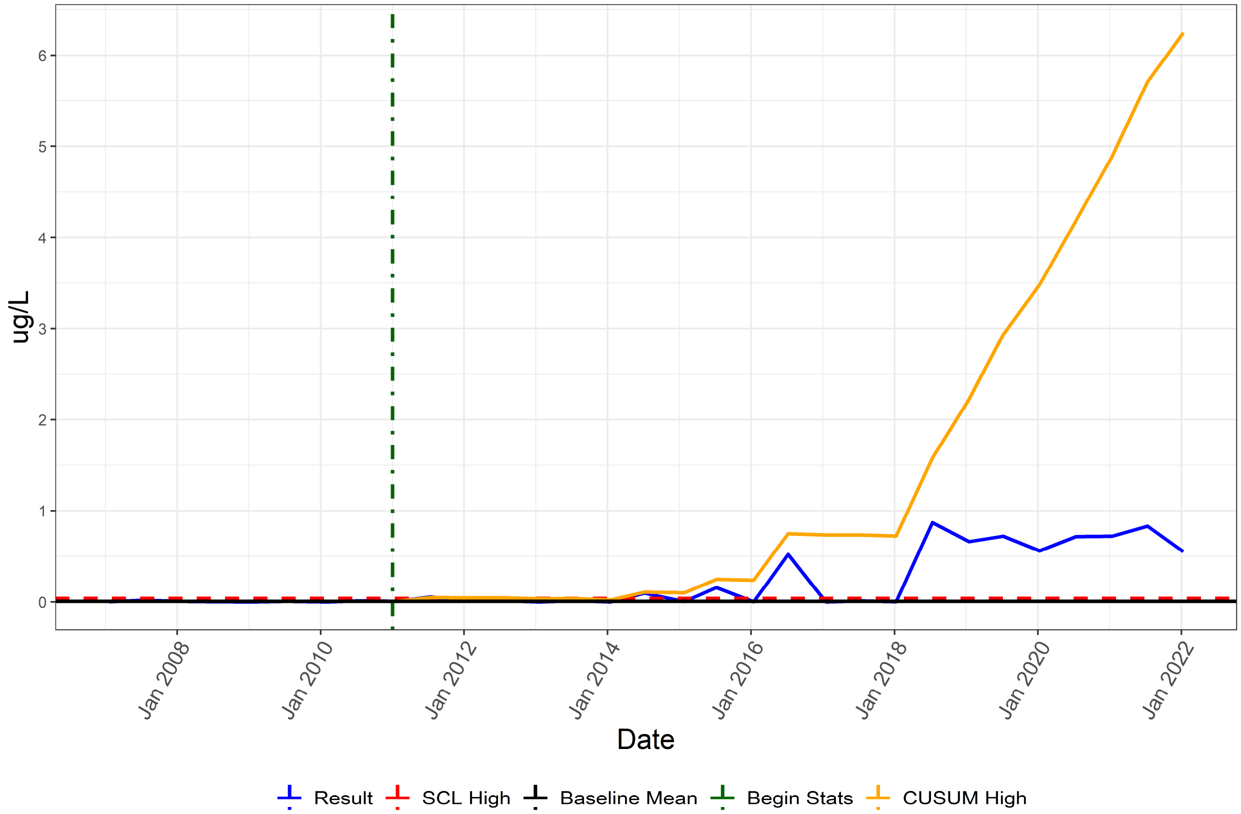
PFAS Monitoring Program (Program 9)

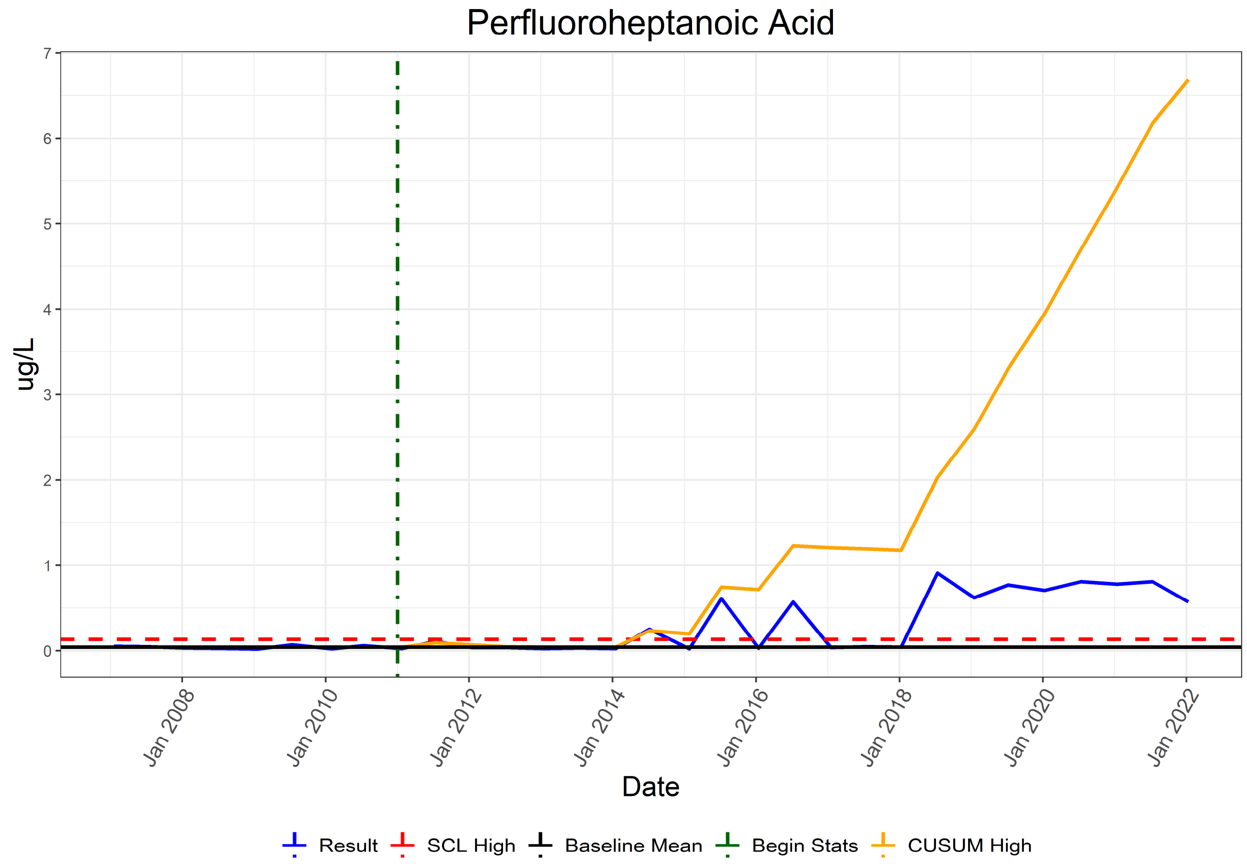
Well Name: J05-M01C

Perfluorobutanoic Acid

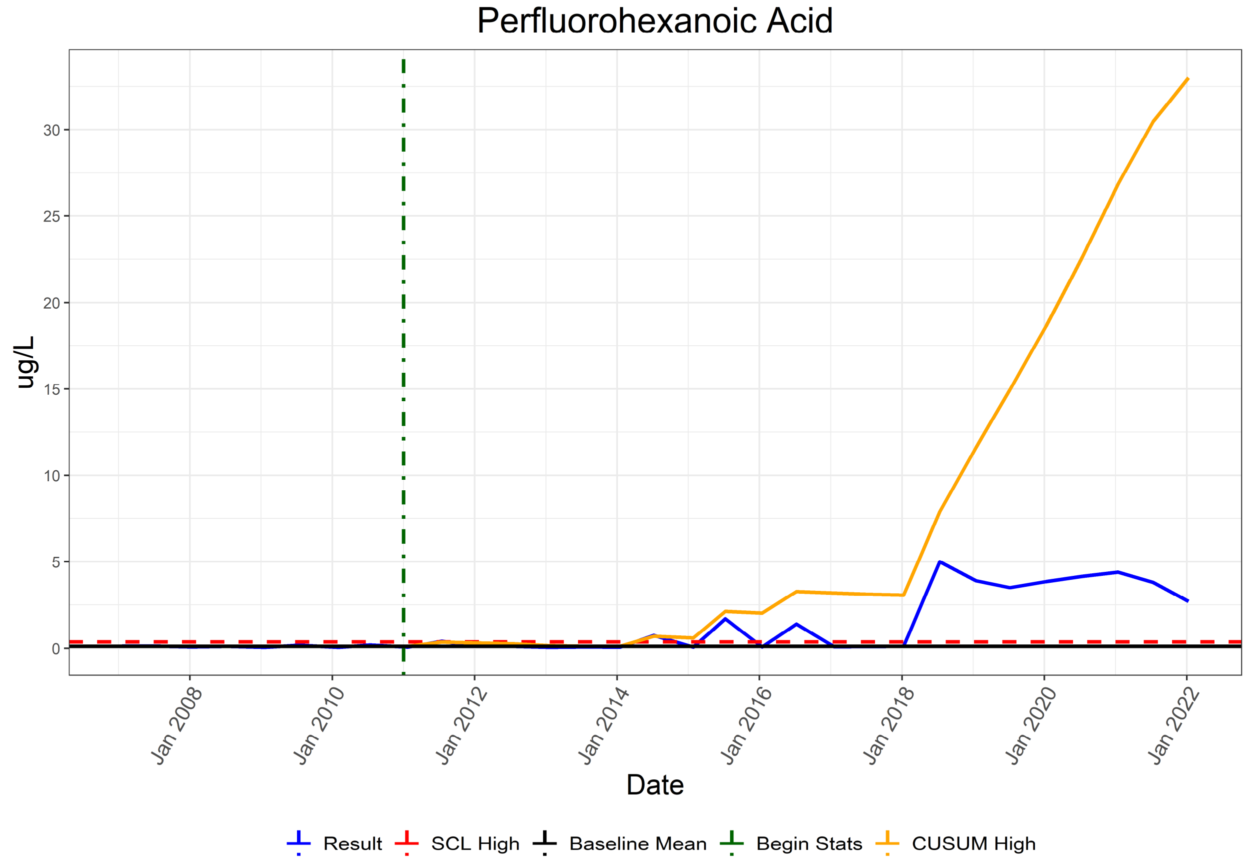


Perfluorodecanoic Acid

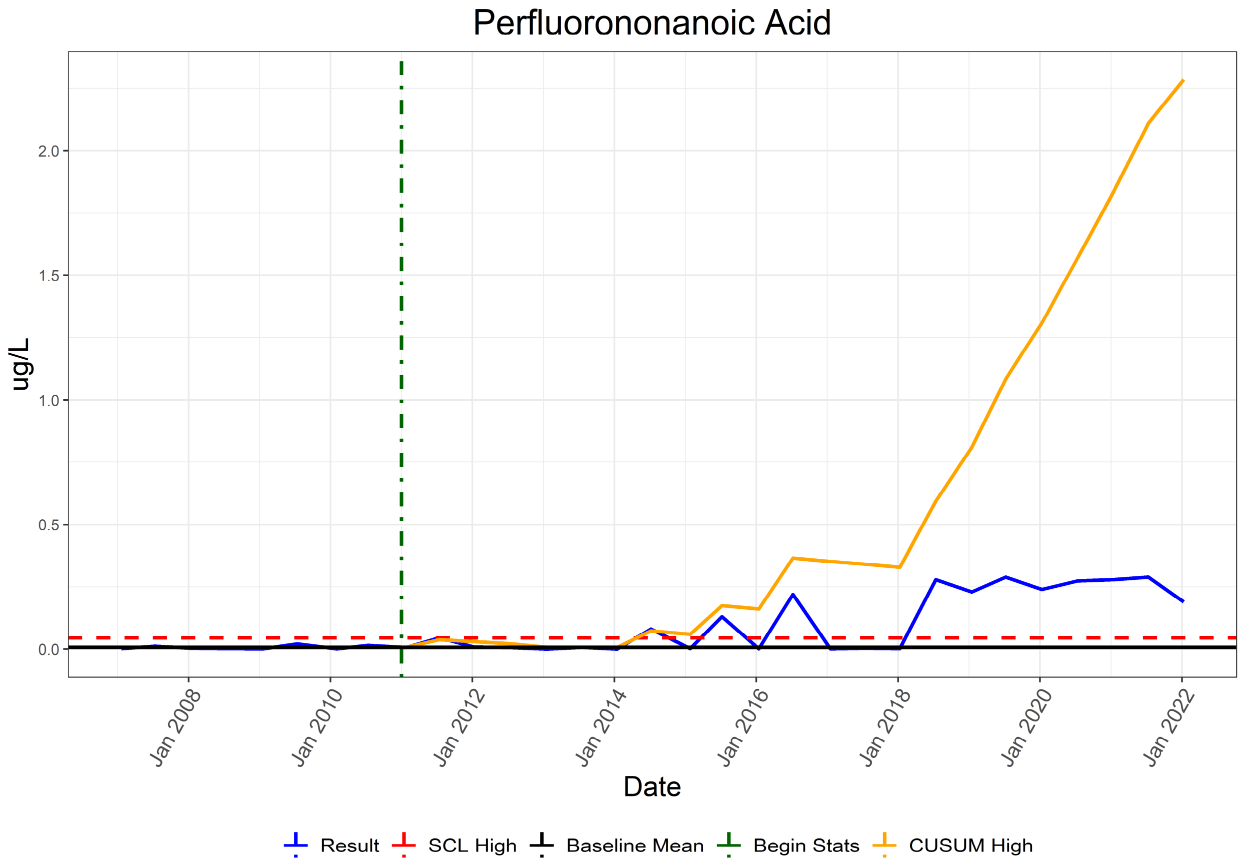




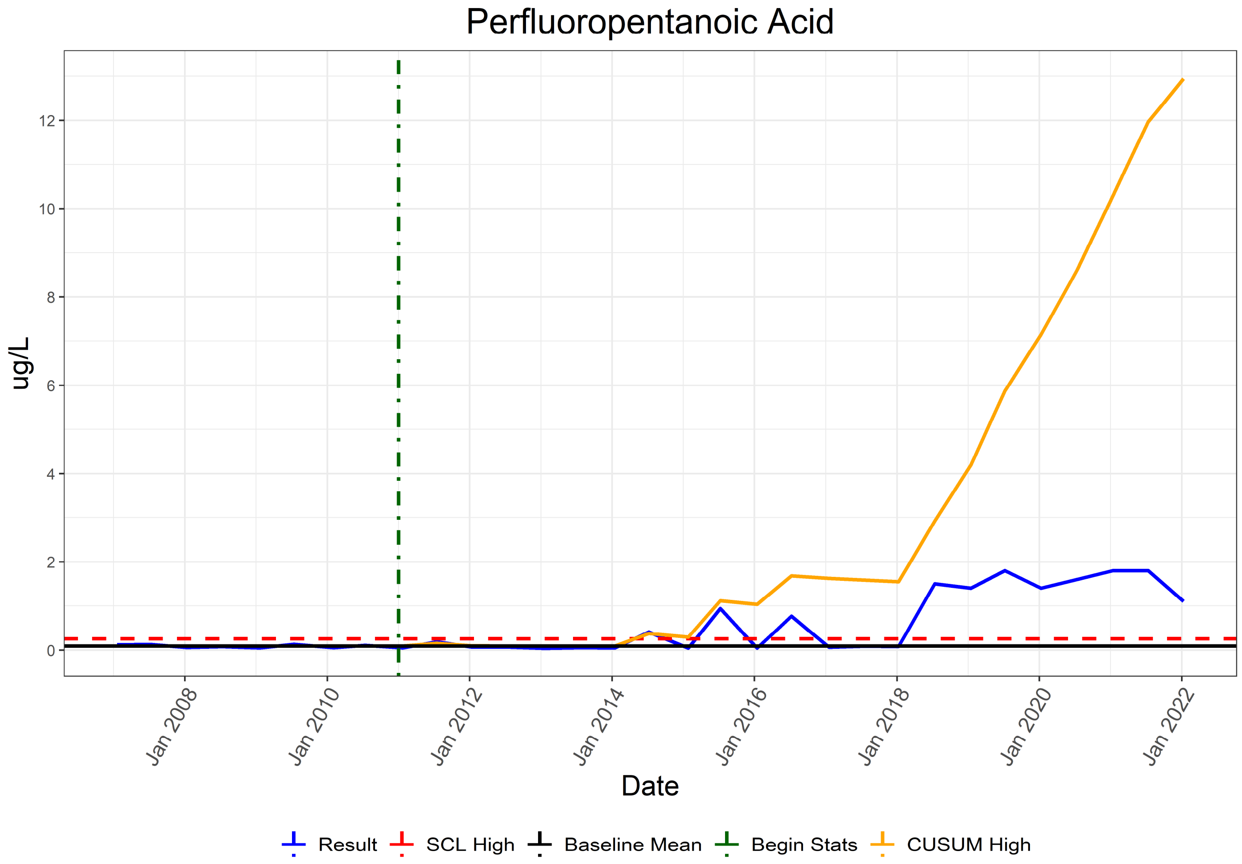
Perfluoroheptanoic Acid
ug/L
7
6
5
4
3
2
1
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High



Perfluorohexanoic Acid
ug/L
30
25
20
15
10
5
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

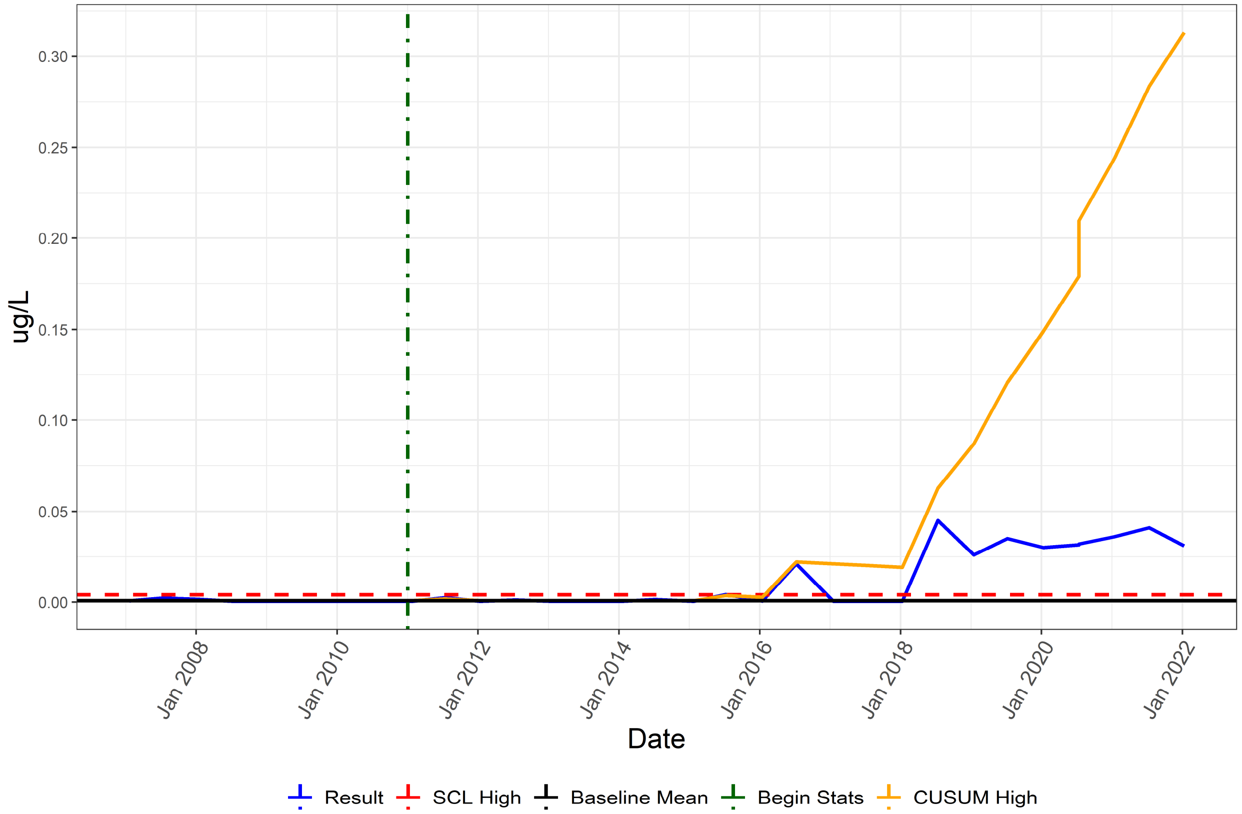


Perfluorononanoic Acid
ug/L
2.0
1.5
1.0
0.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

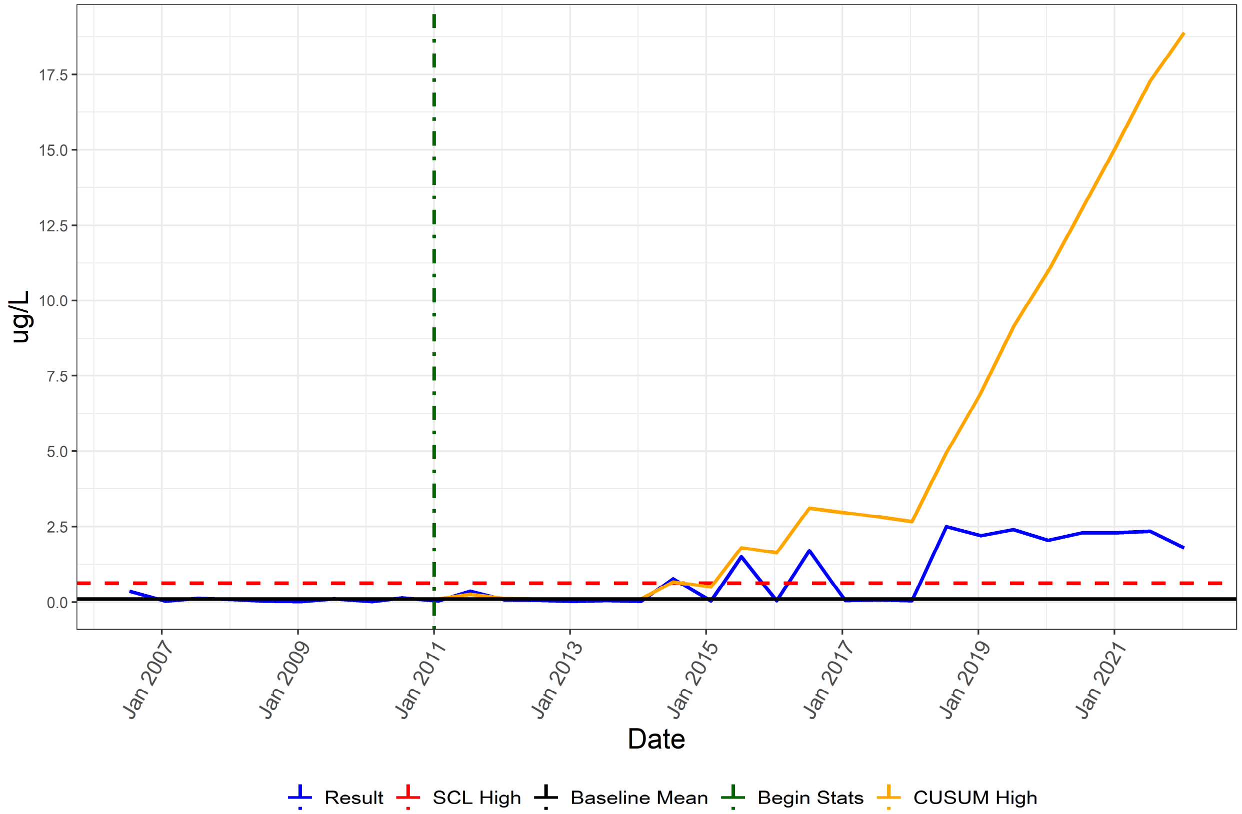


Perfluoropentanoic Acid
ug/L
12
10
8
6
4
2
0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Perfluoroundecanoic Acid

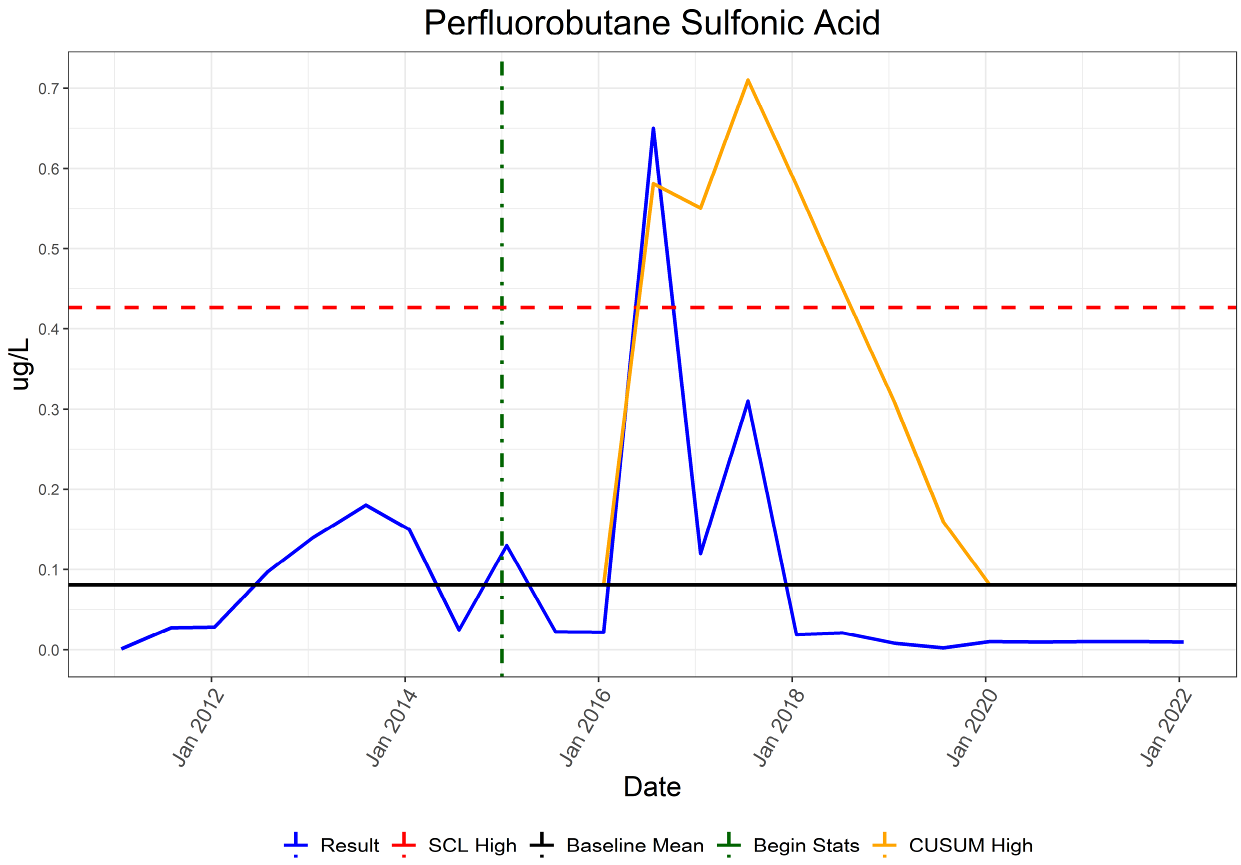


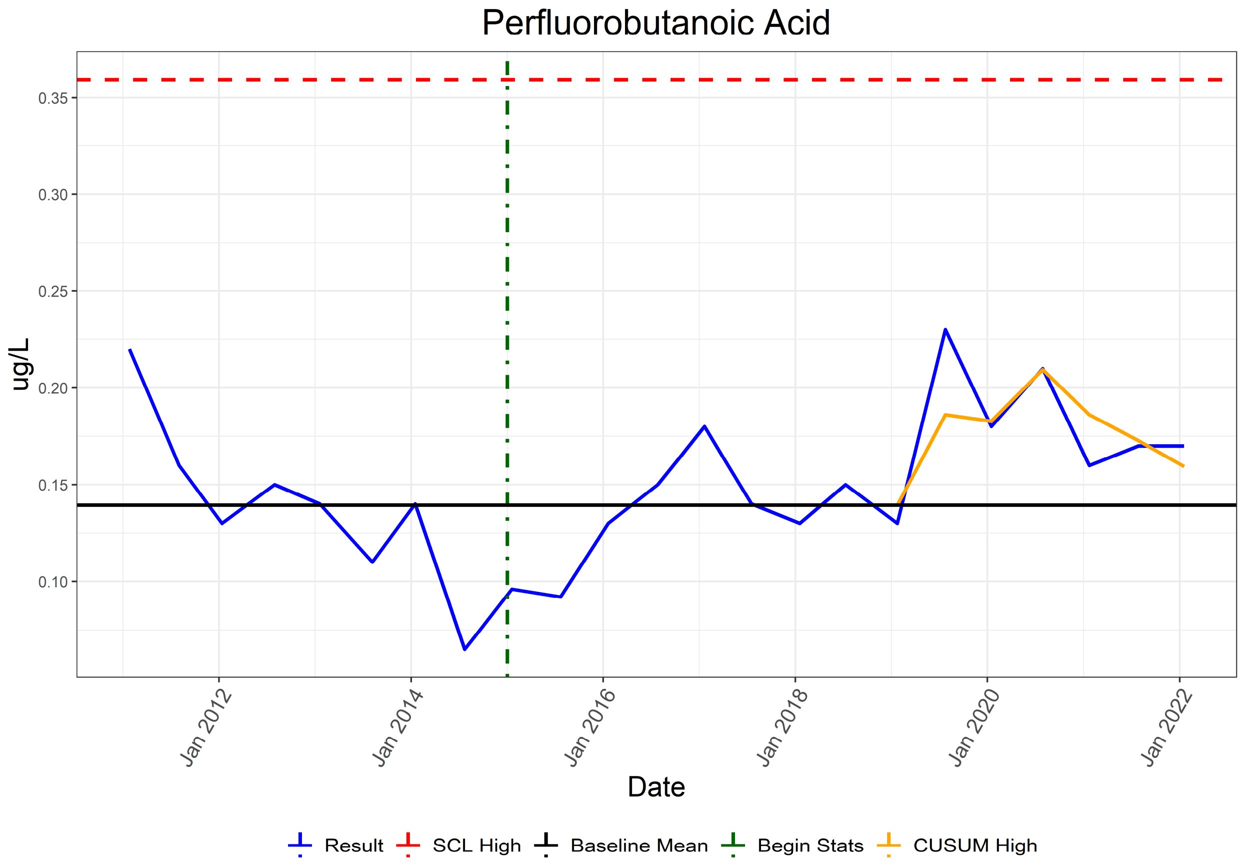
PFOA

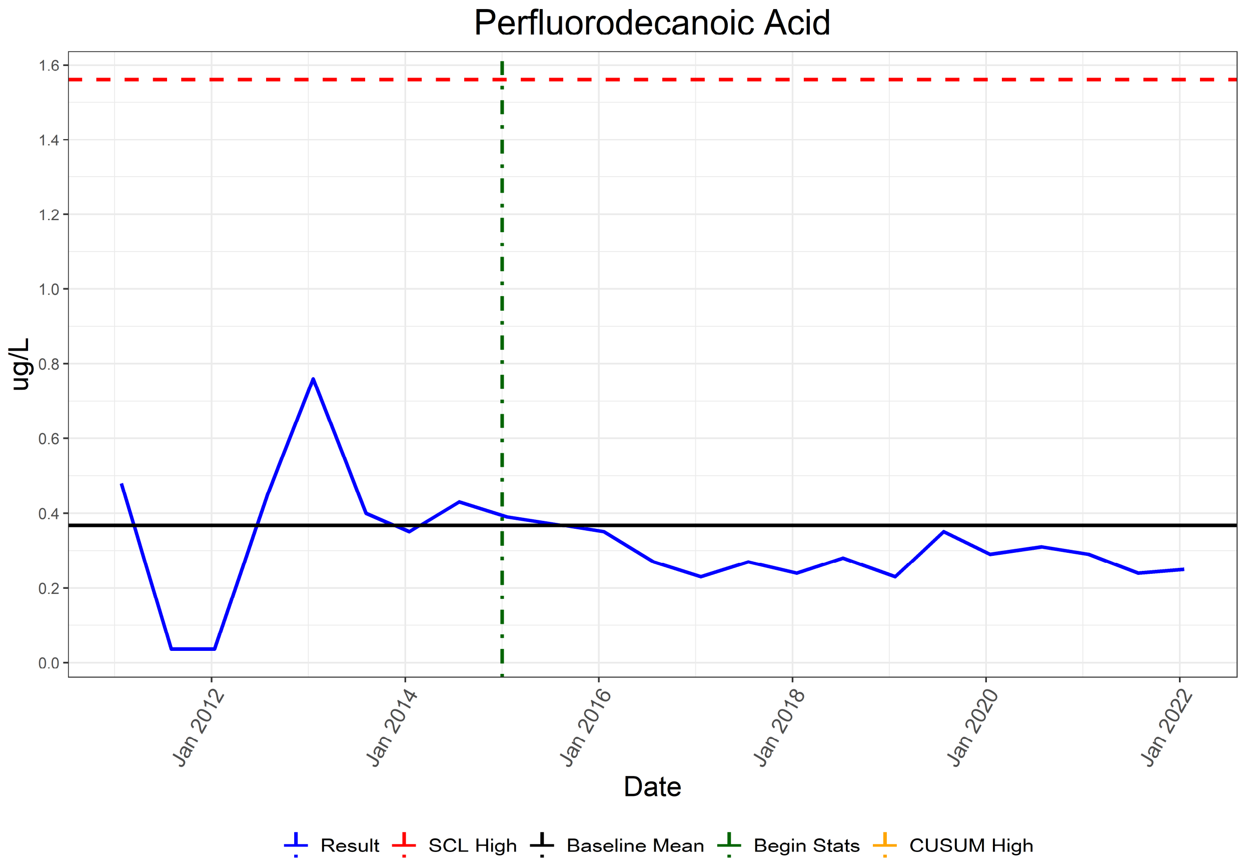


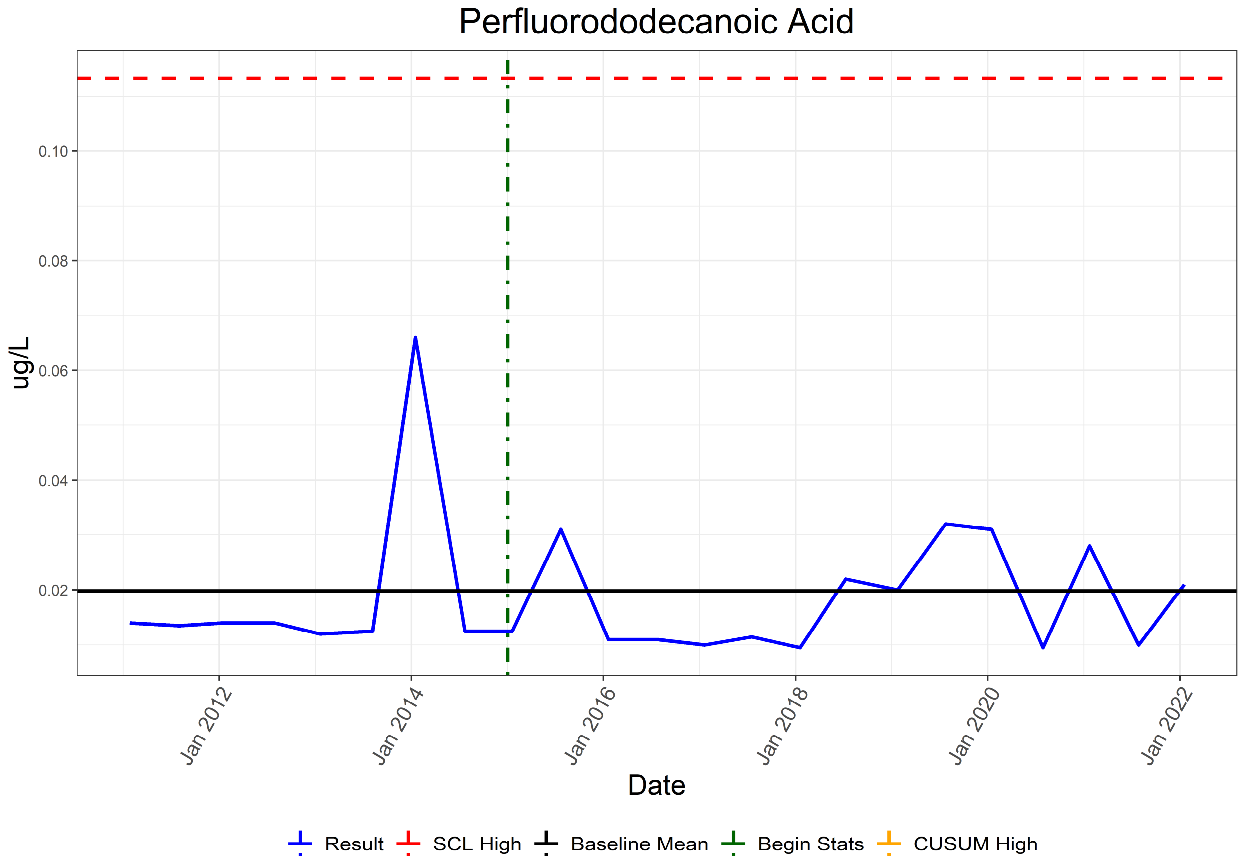
PFAS Monitoring Program (Program 9)

Well Name: J10-M02B

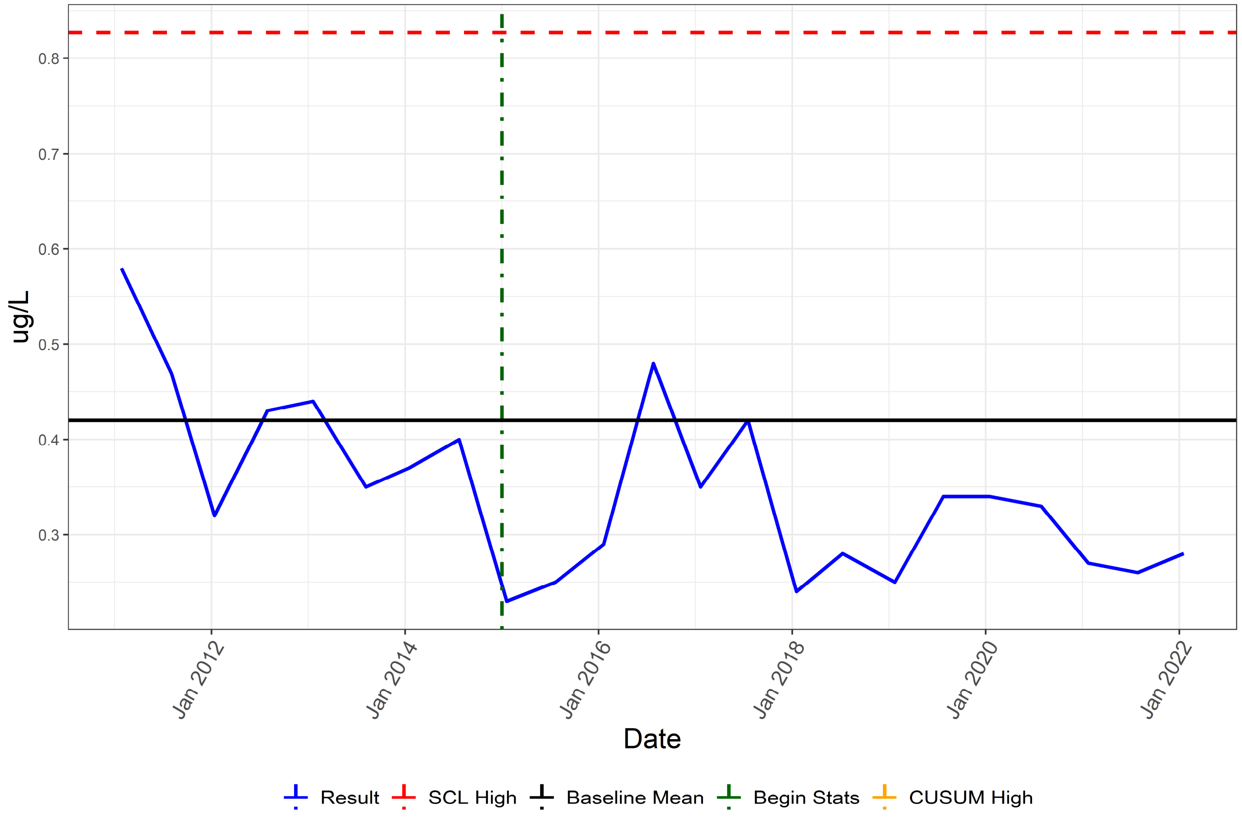




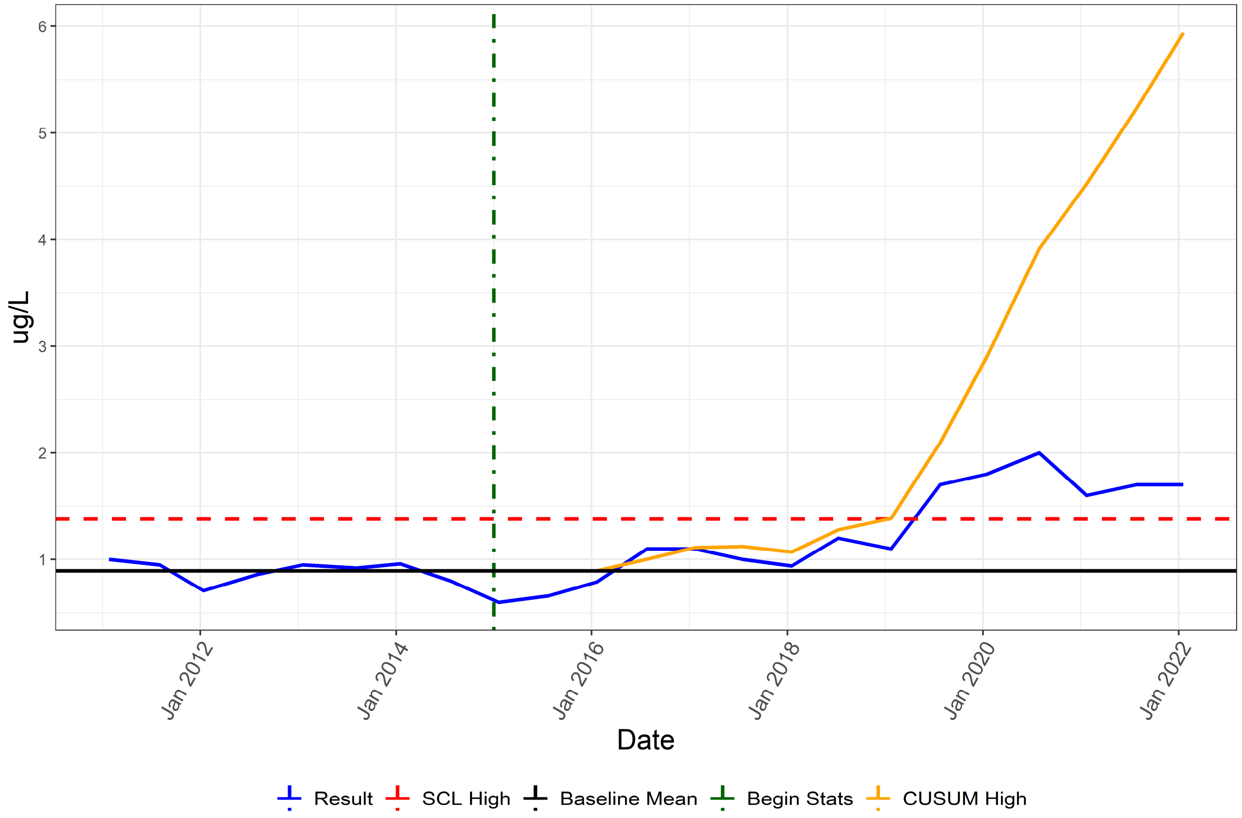

Perfluorodecanoic Acid
ug/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

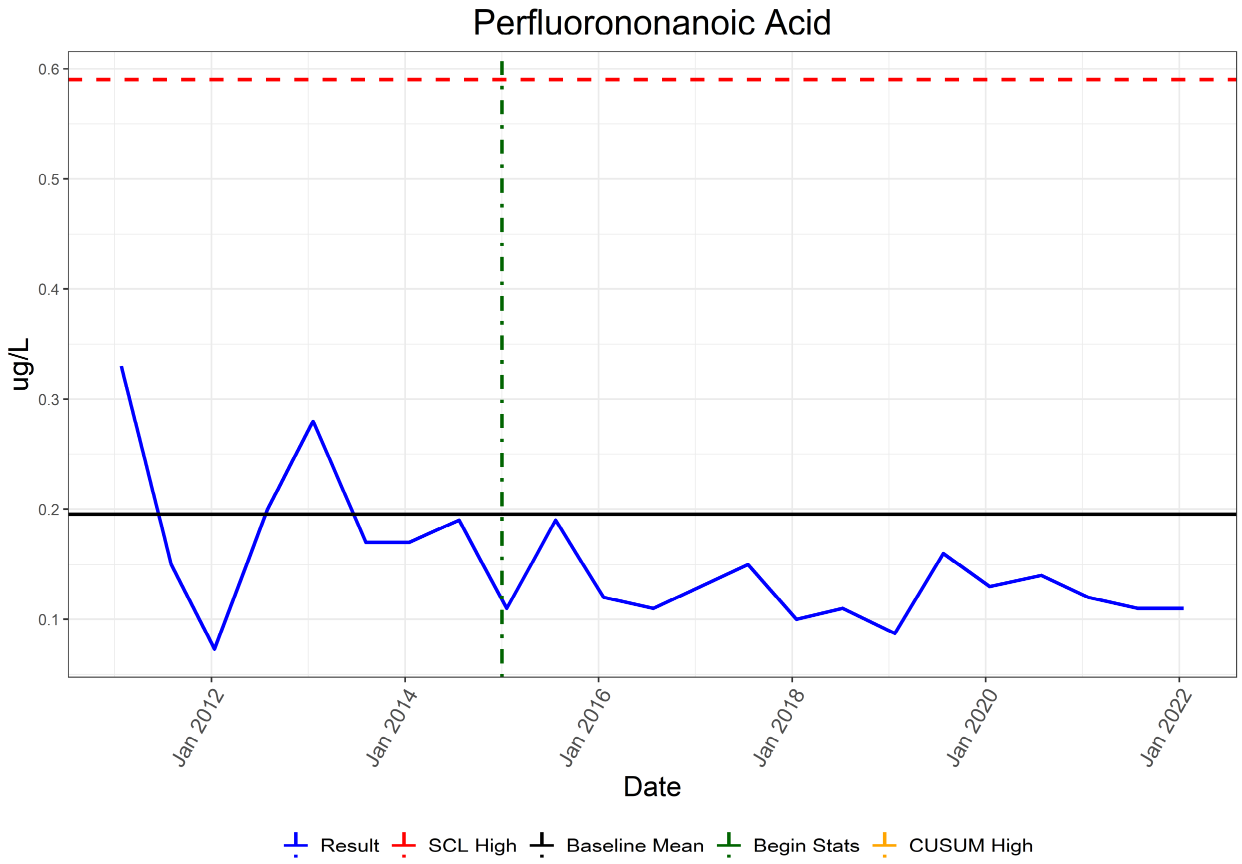

Perfluorododecanoic Acid
ug/L
0.10
0.08
0.06
0.04
0.02
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

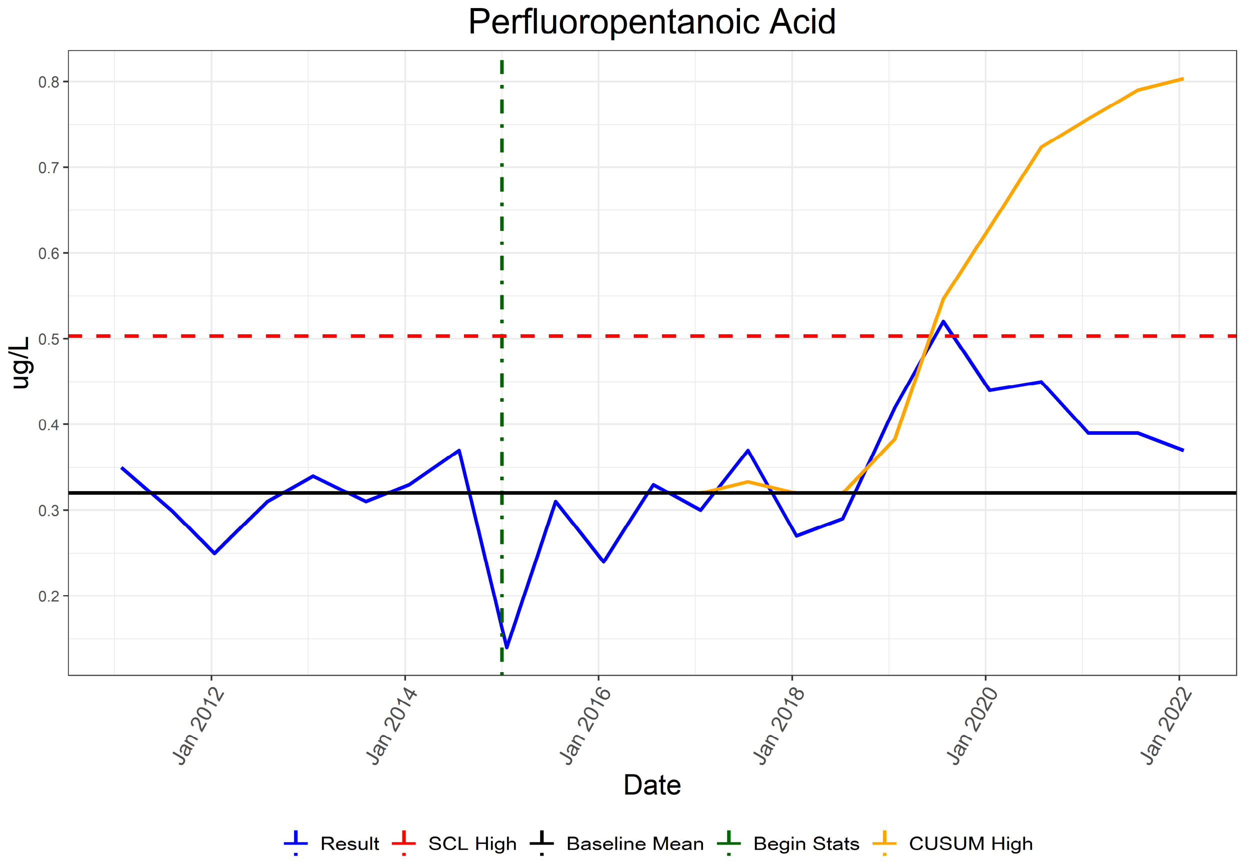
Perfluoroheptanoic Acid

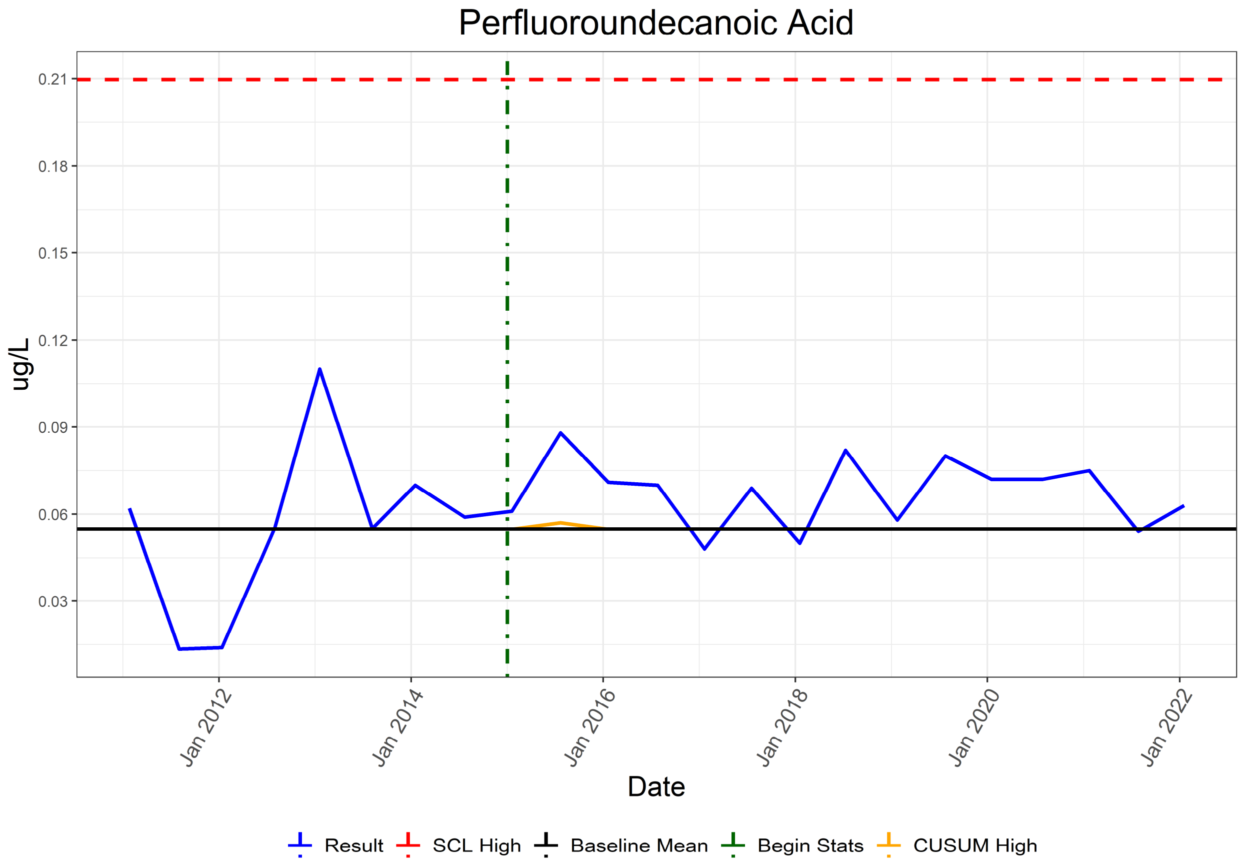


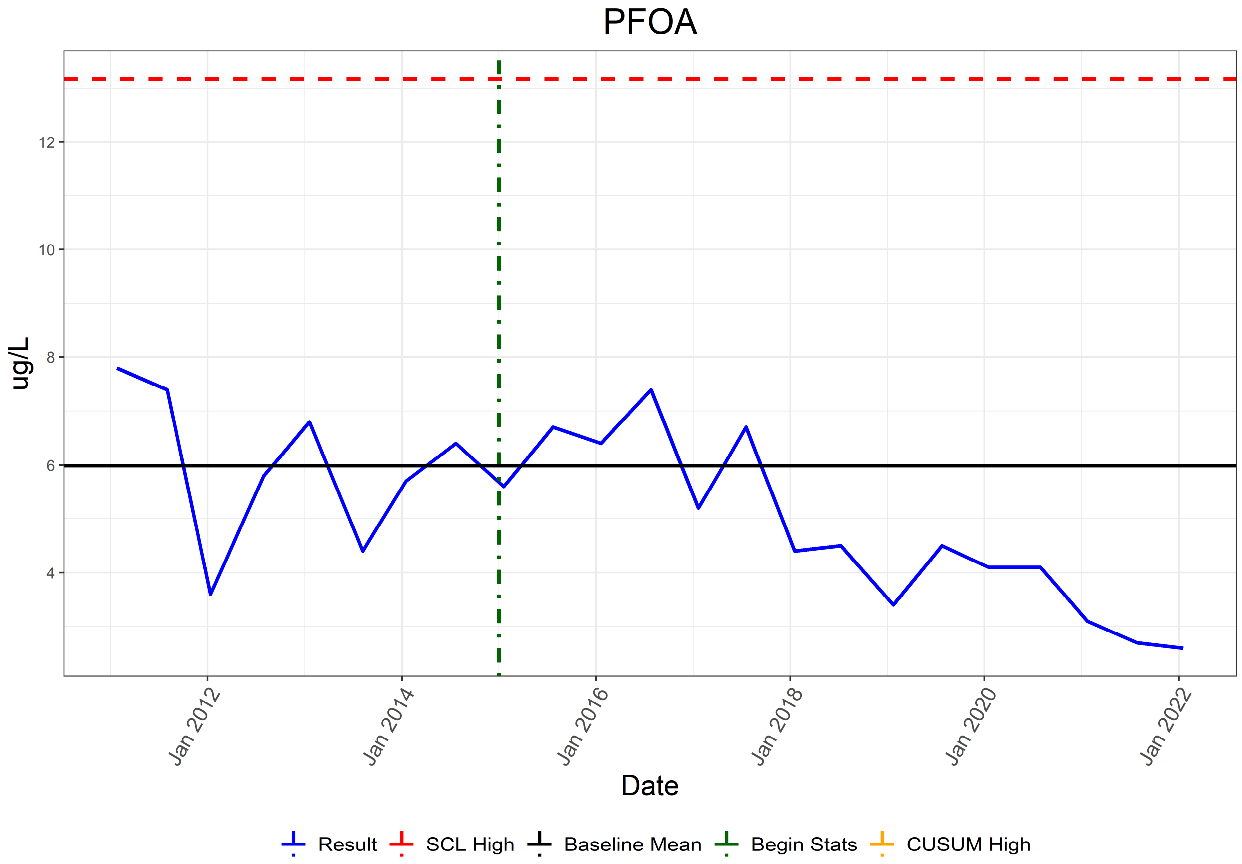
Perfluorohexanoic Acid




Perfluorononanoic Acid
ug/L
0.6
0.5
0.4
0.3
0.2
0.1
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

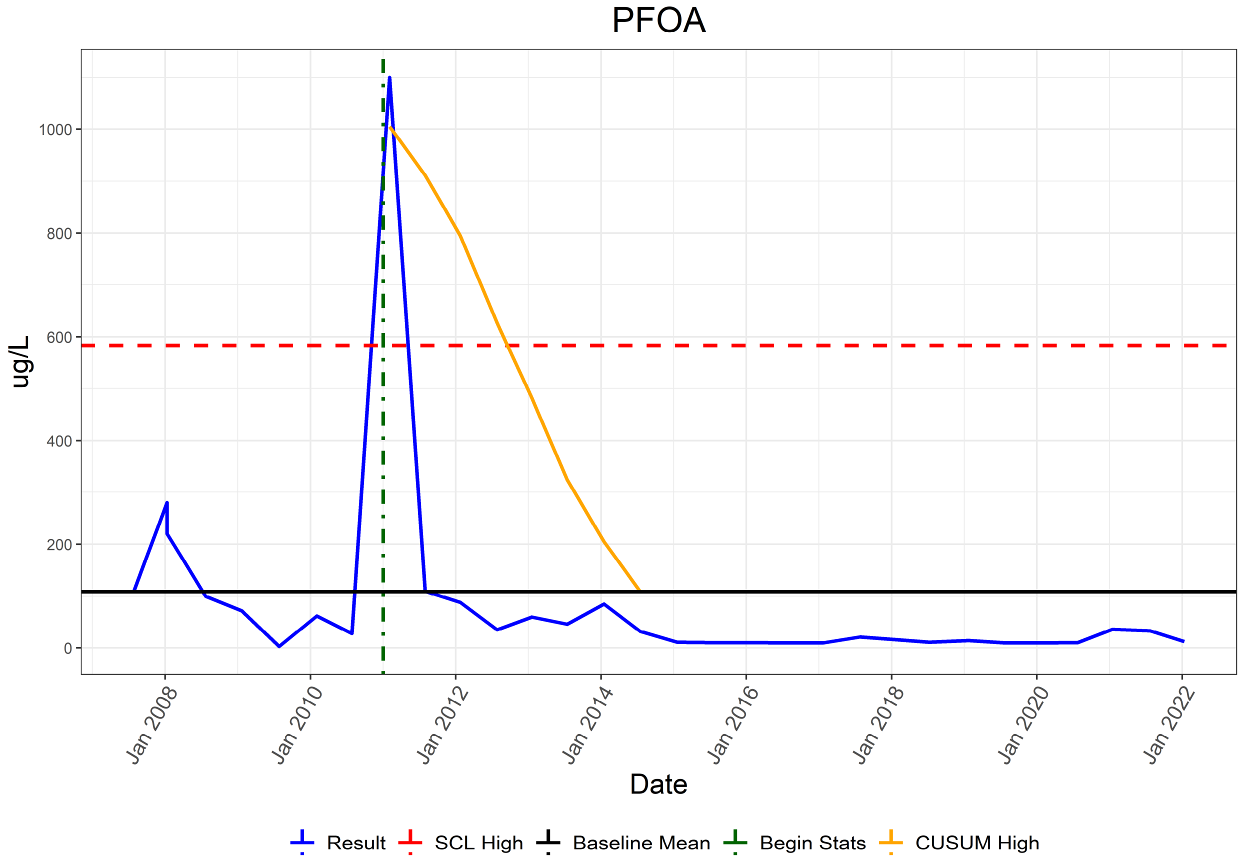

Perfluoropentanoic Acid
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoroundecanoic Acid
ug/L
0.21
0.18
0.15
0.12
0.09
0.06
0.03
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
12
10
8
6
4
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

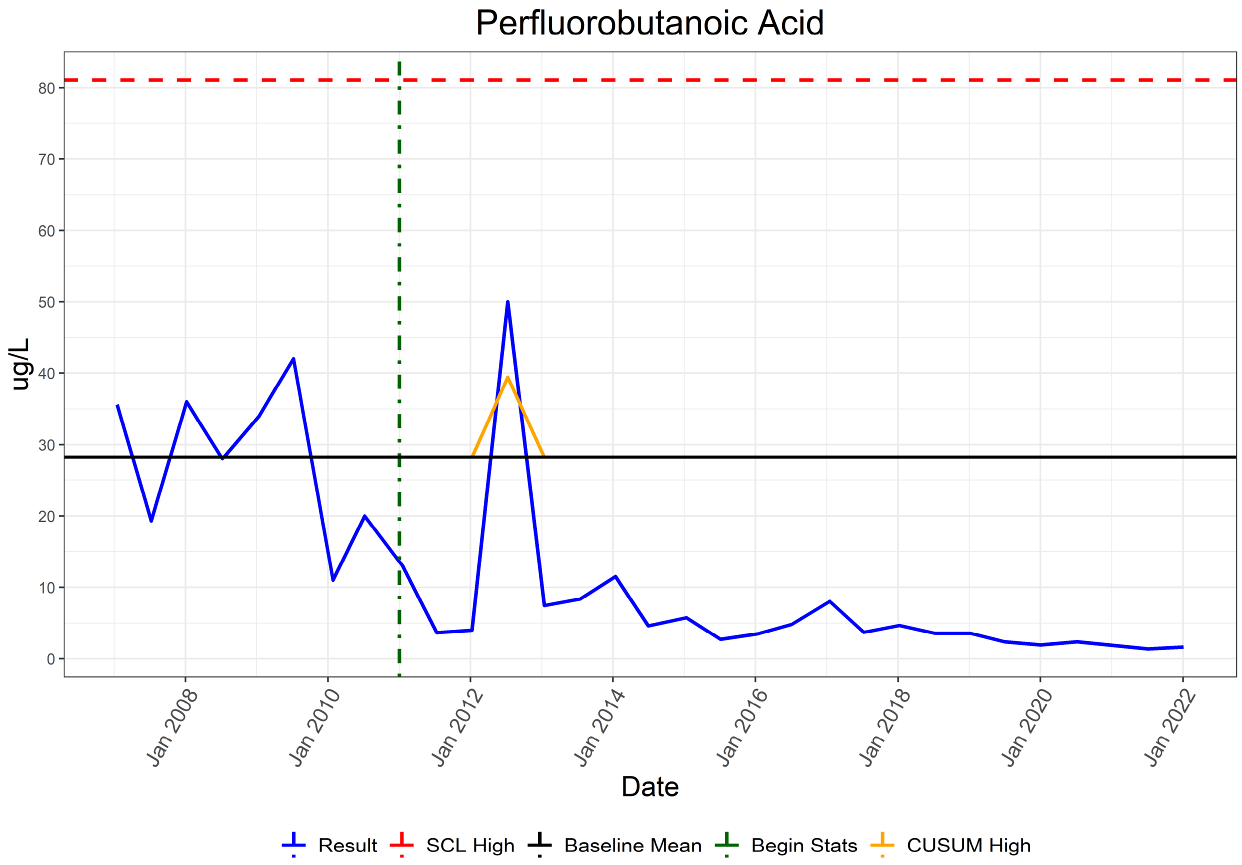
PFAS Monitoring Program (Program 9)

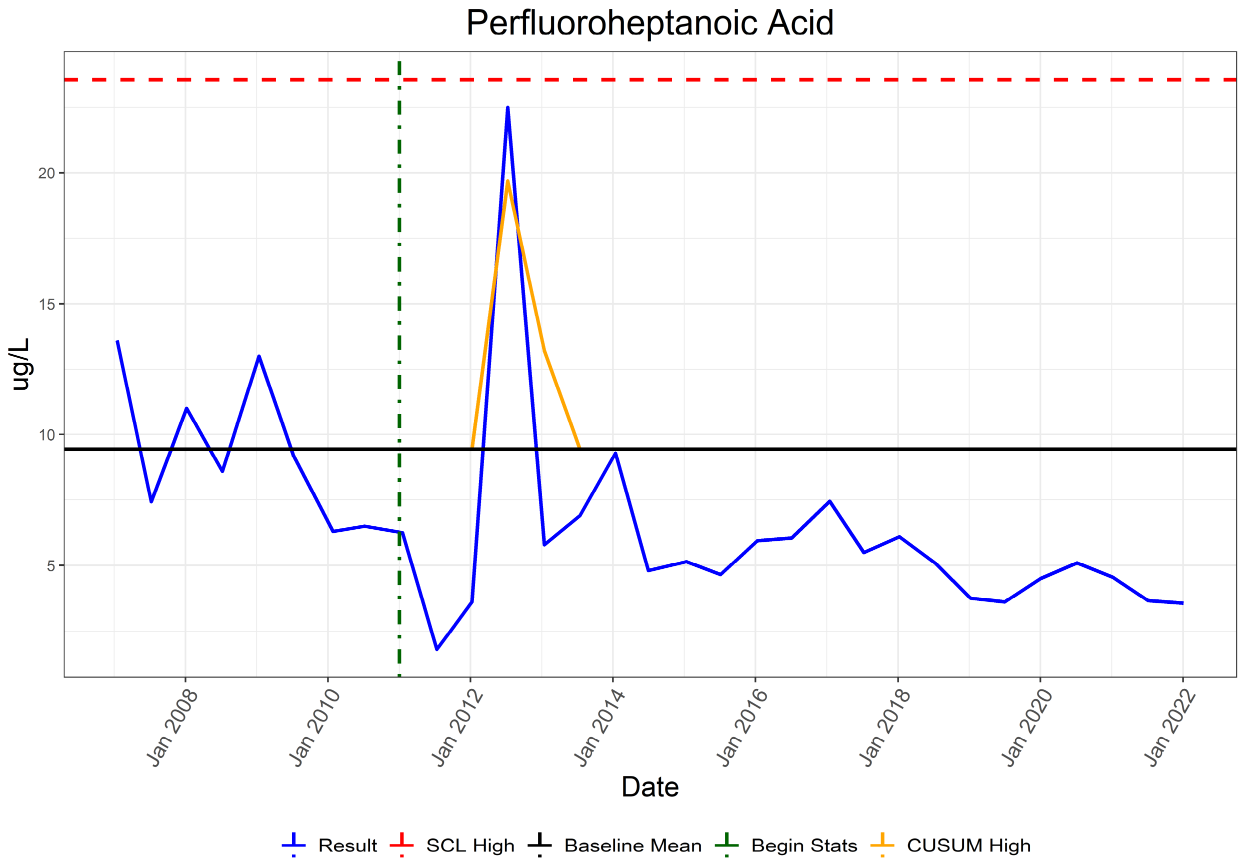
Well Name: K12-M01A

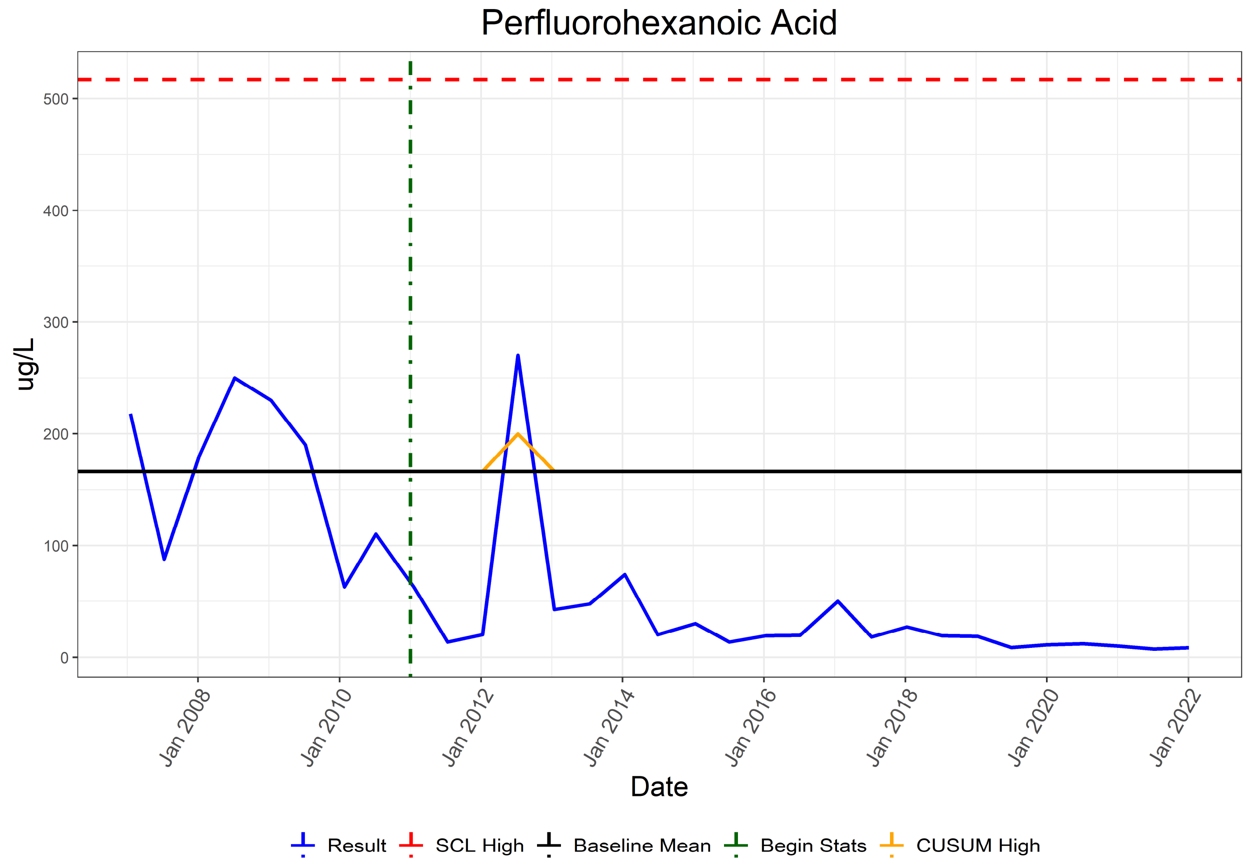


PFAS Monitoring Program (Program 9)

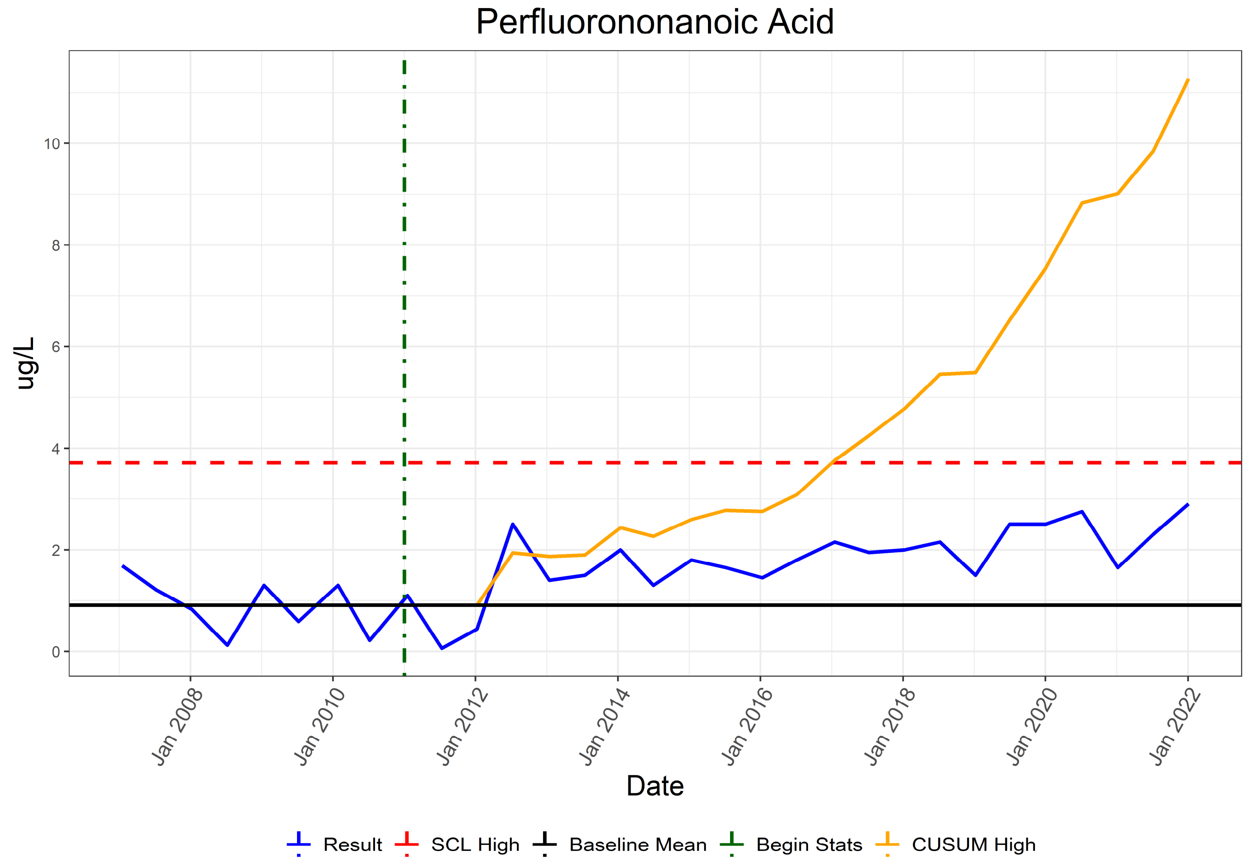
Well Name: K13-M02B



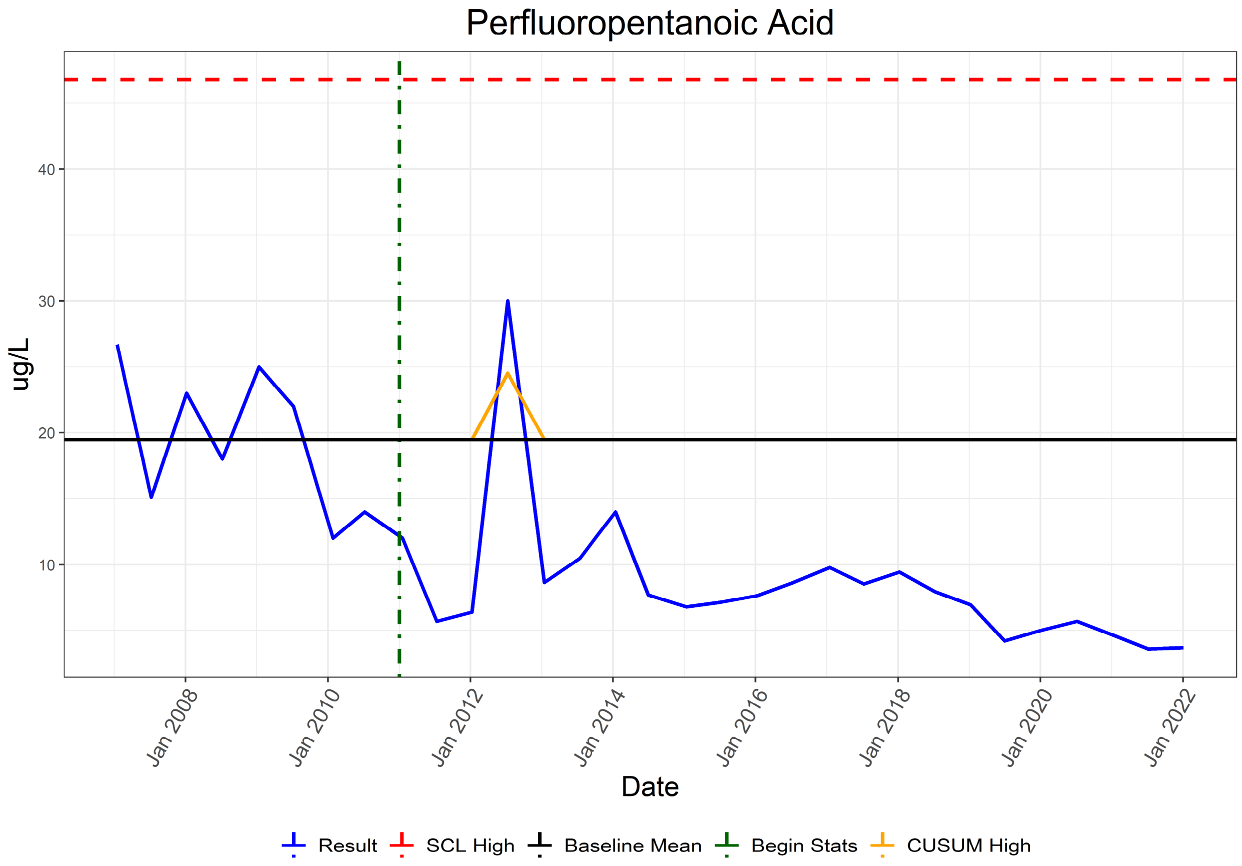


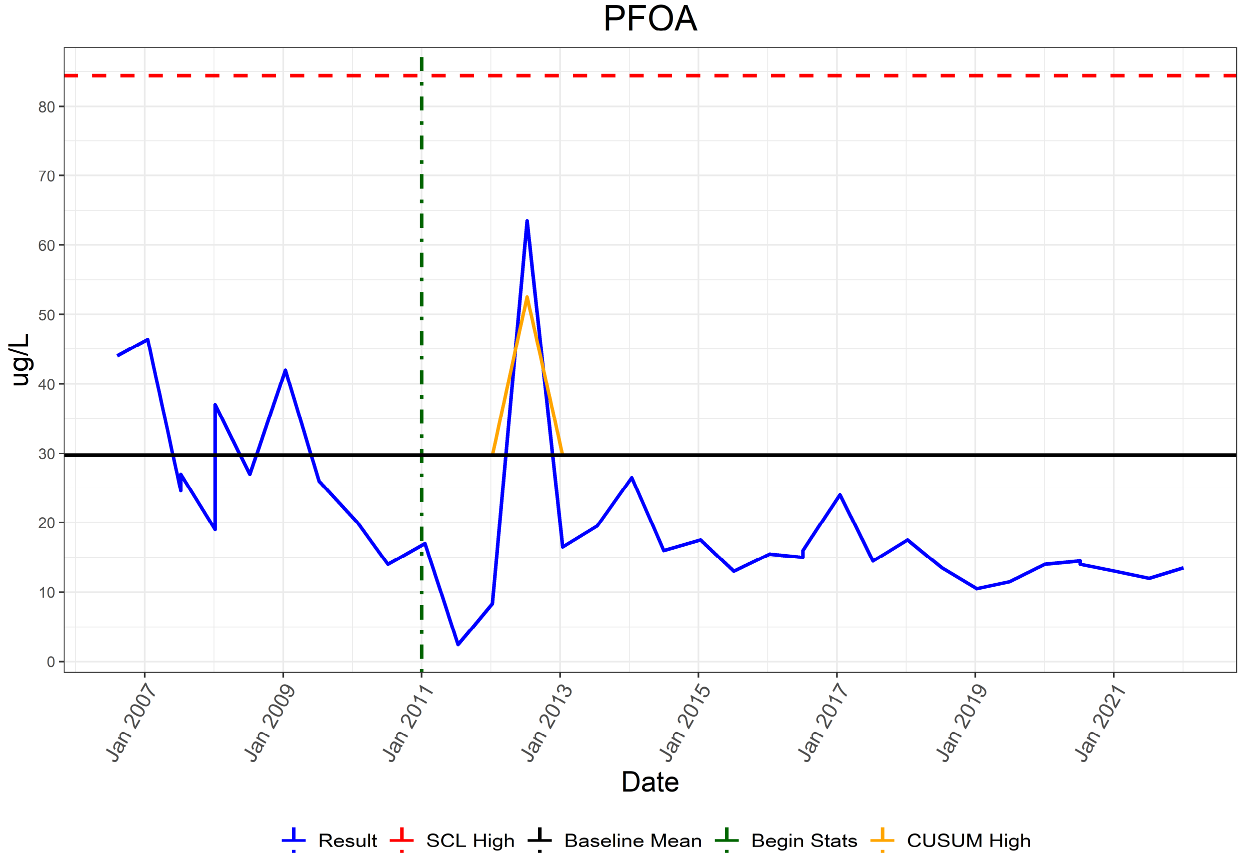


Perfluorohexanoic Acid



Perfluorononanoic Acid

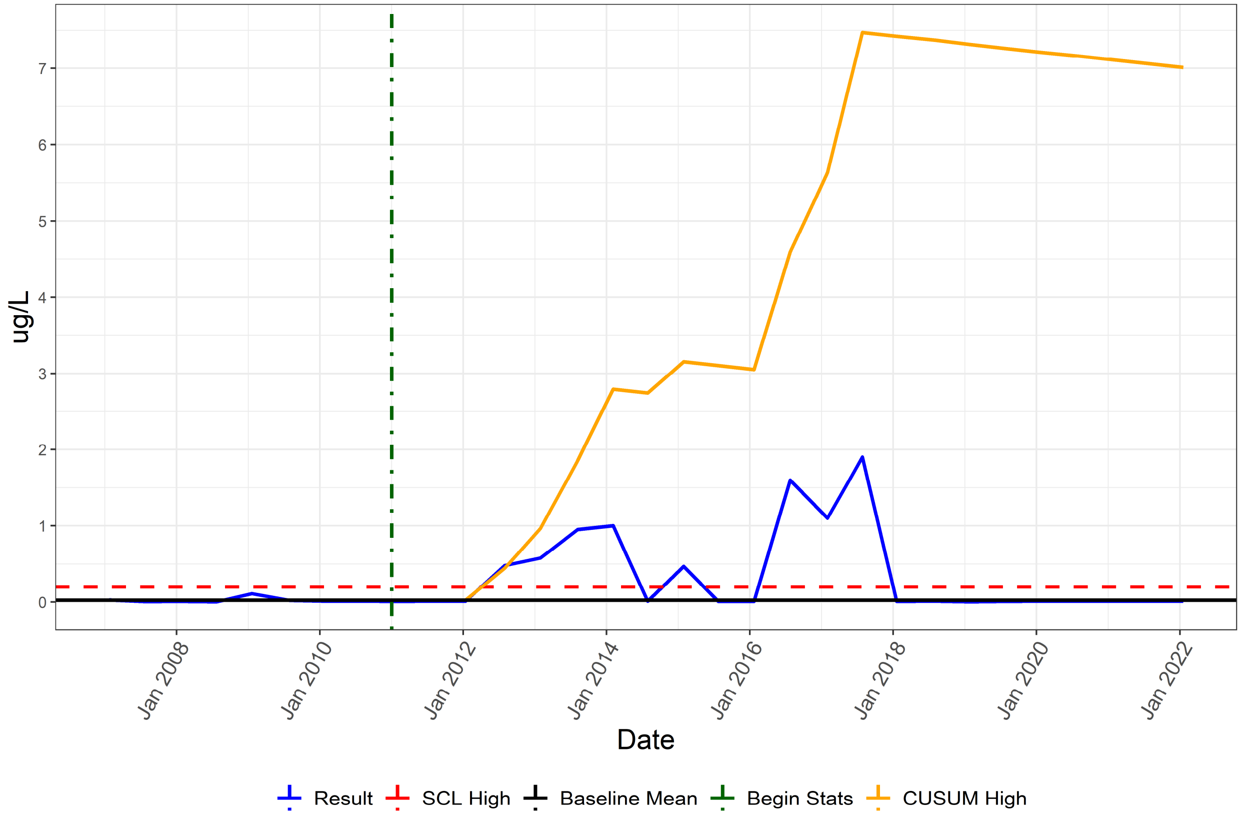

Perfluoropentanoic Acid
ug/L
40
30
20
10
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
80
70
60
50
40
30
20
10
0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

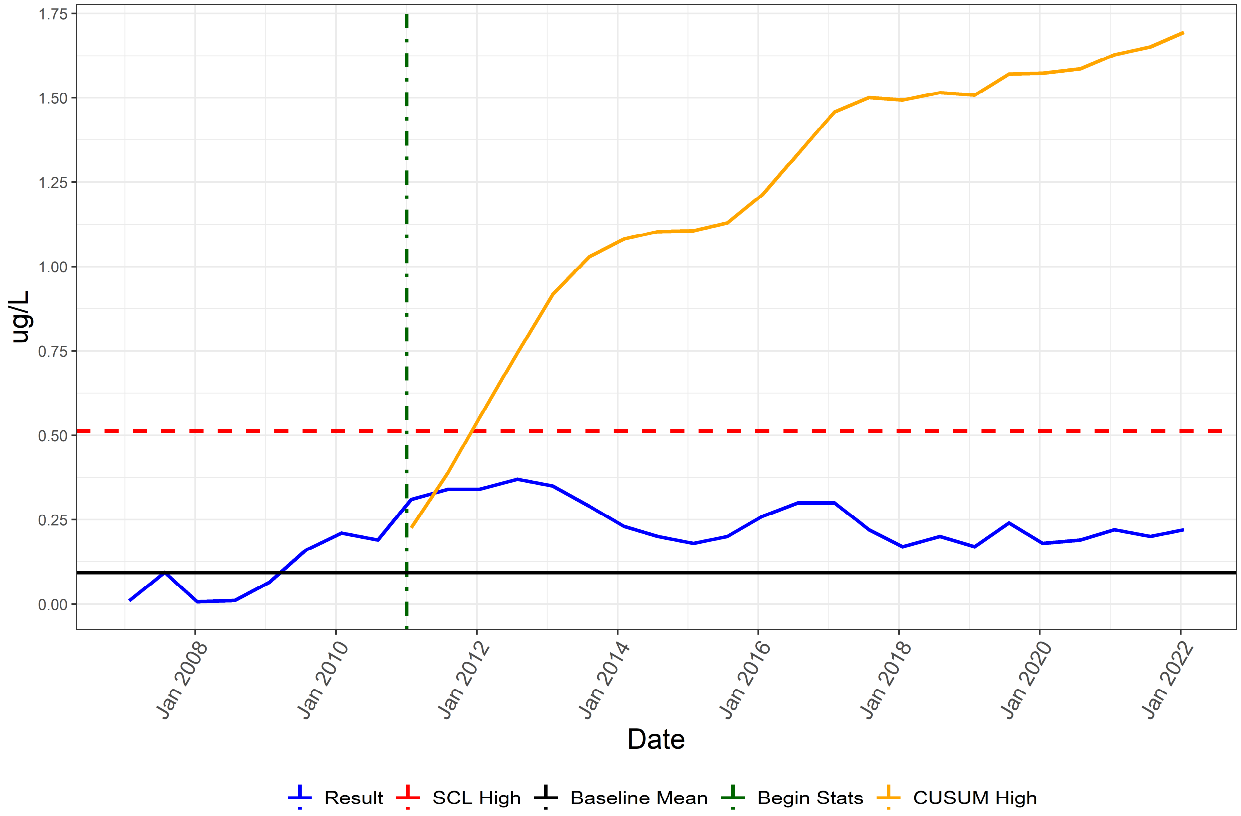
PFAS Monitoring Program (Program 9)

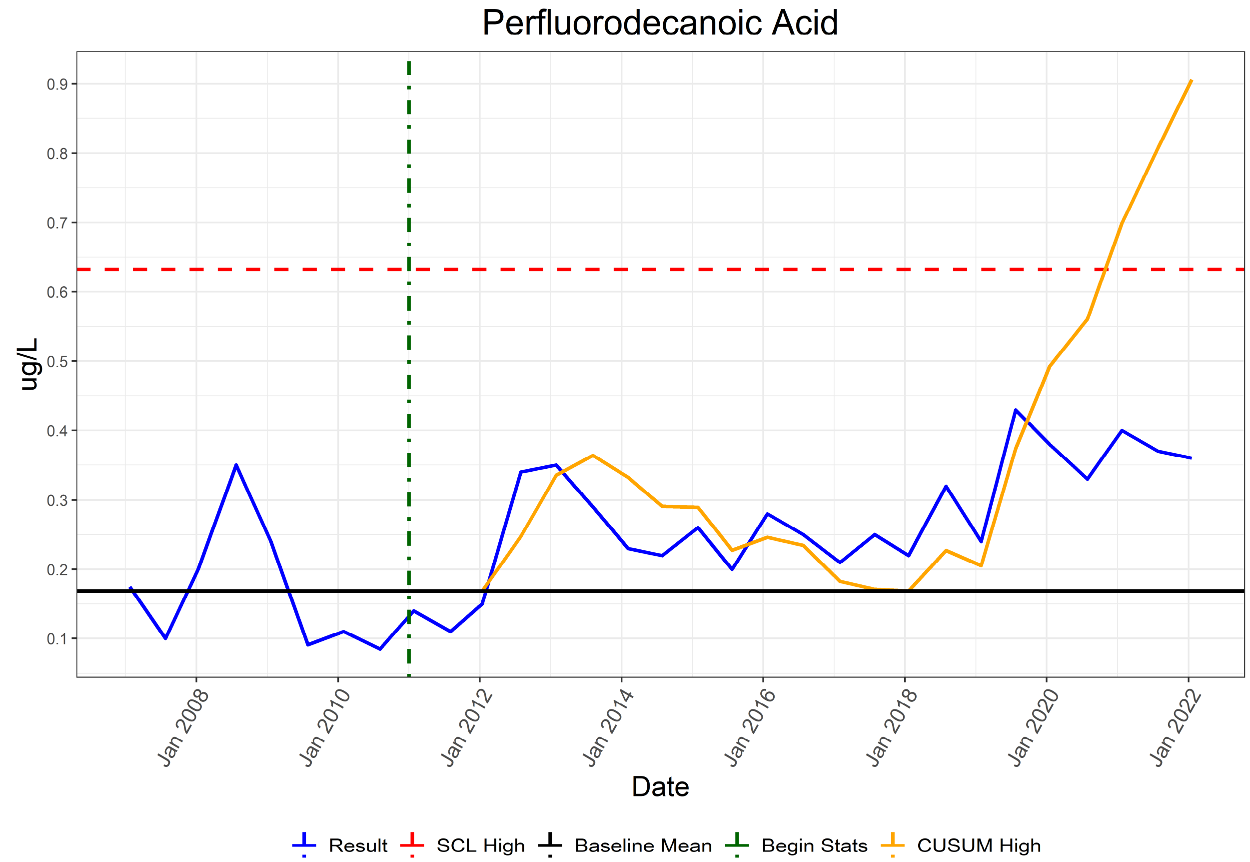
Well Name: L09-M01B

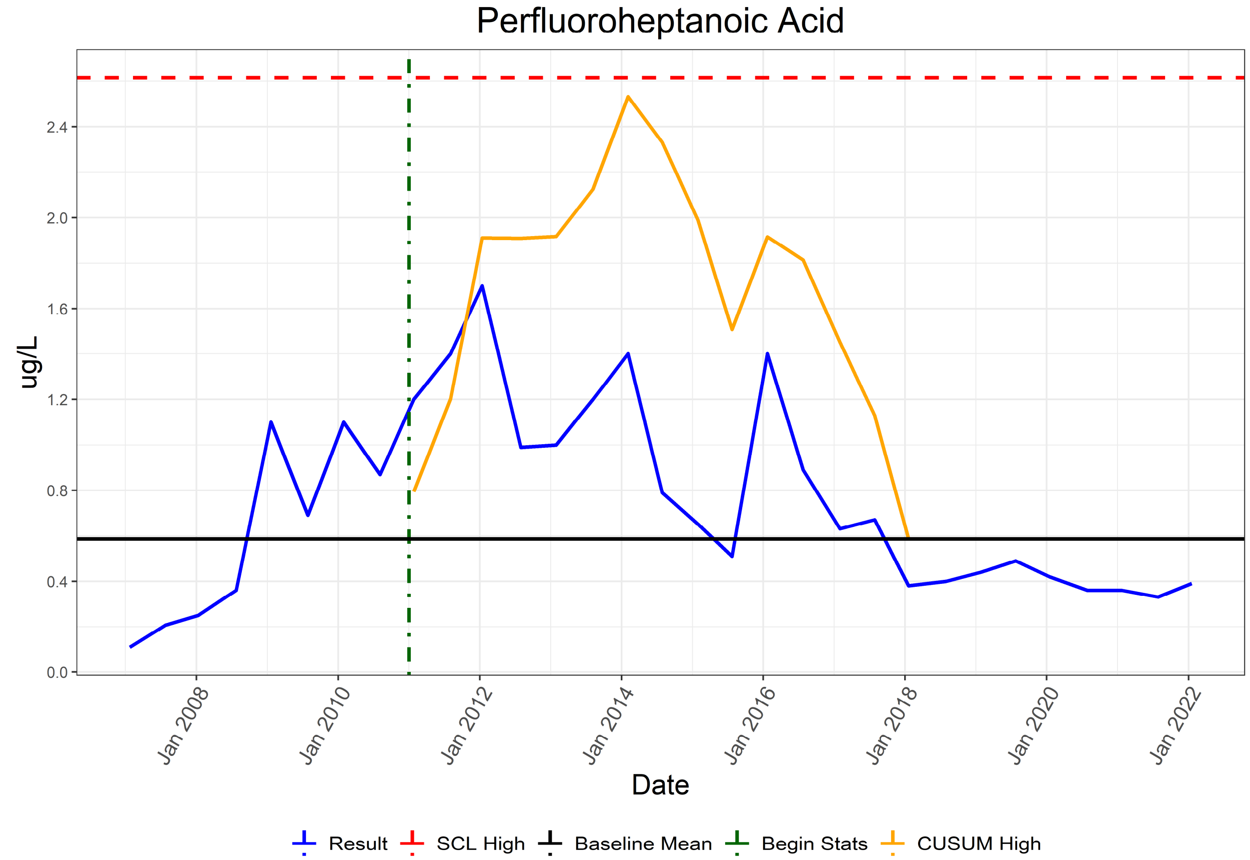
Perfluorobutane Sulfonic Acid

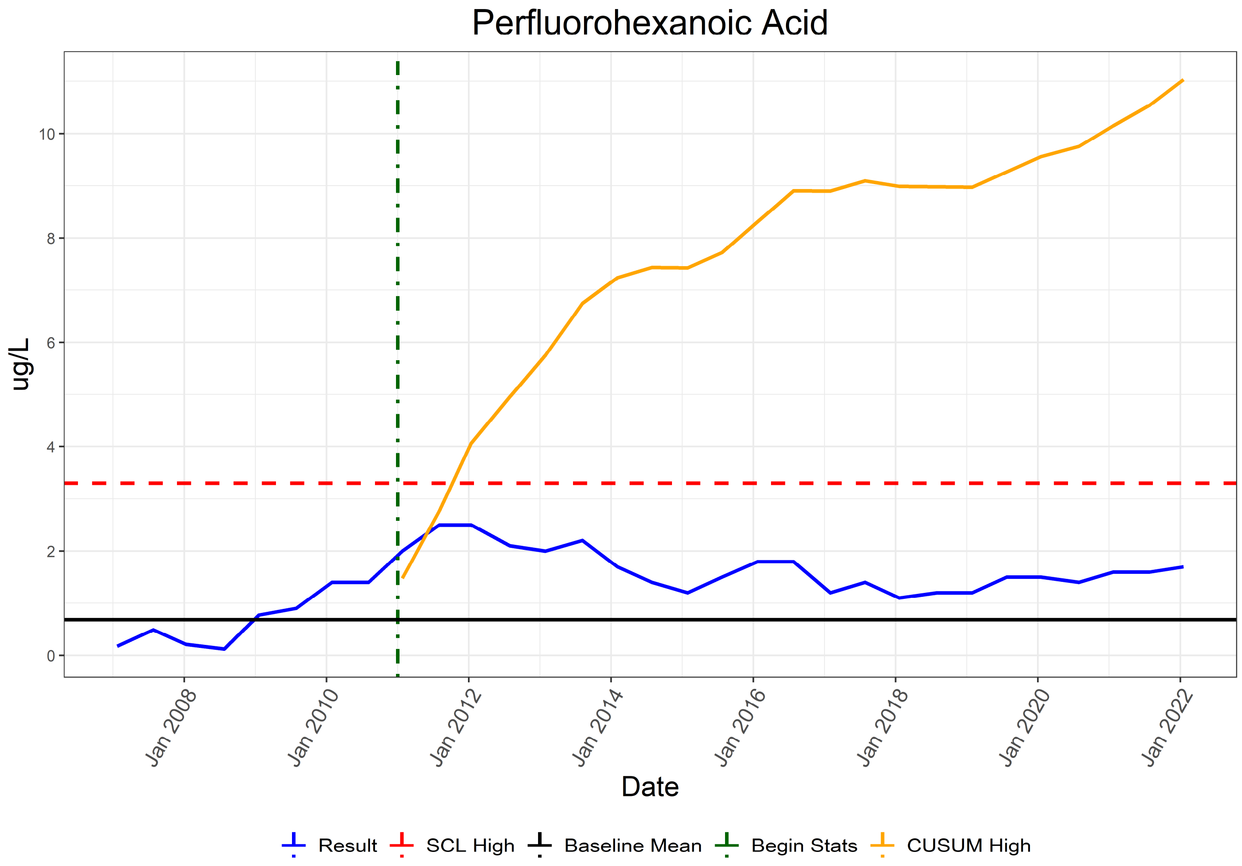


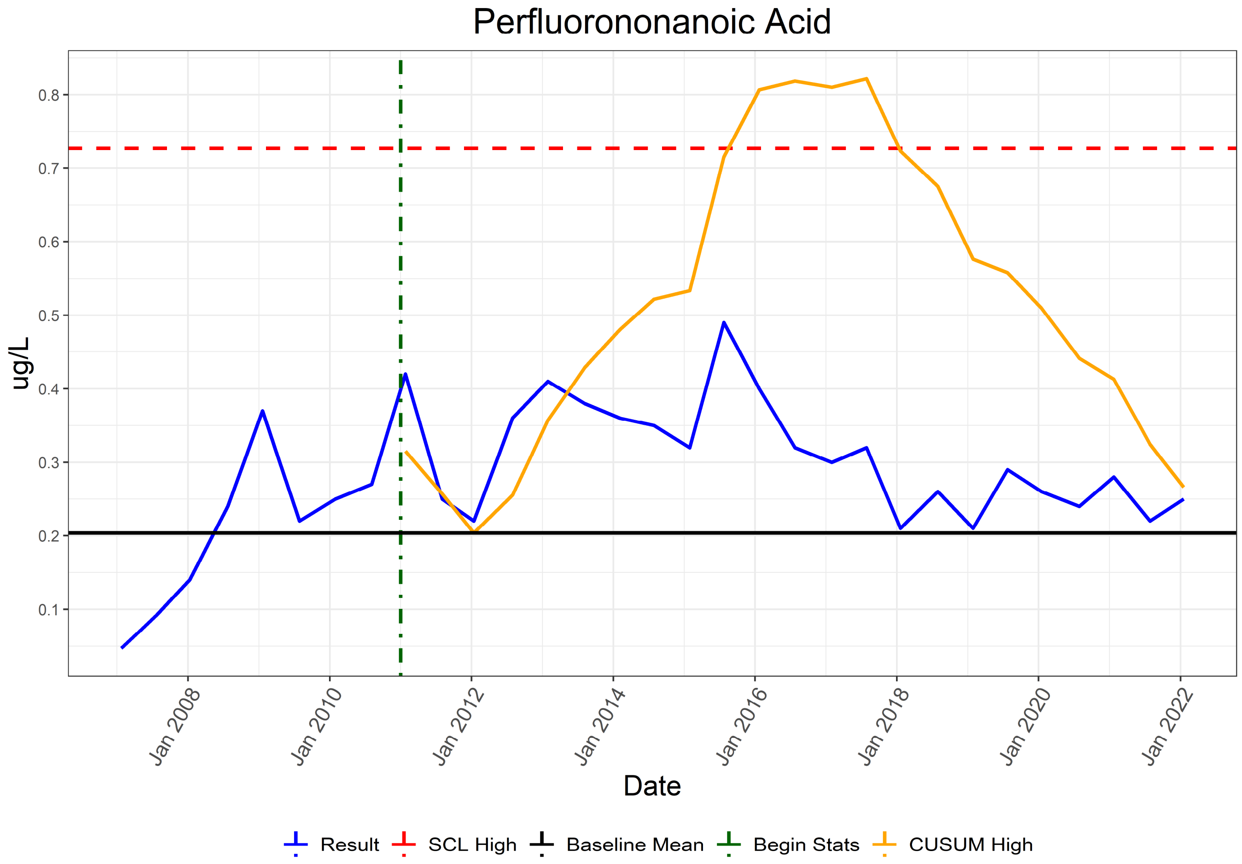
Perfluorobutanoic Acid

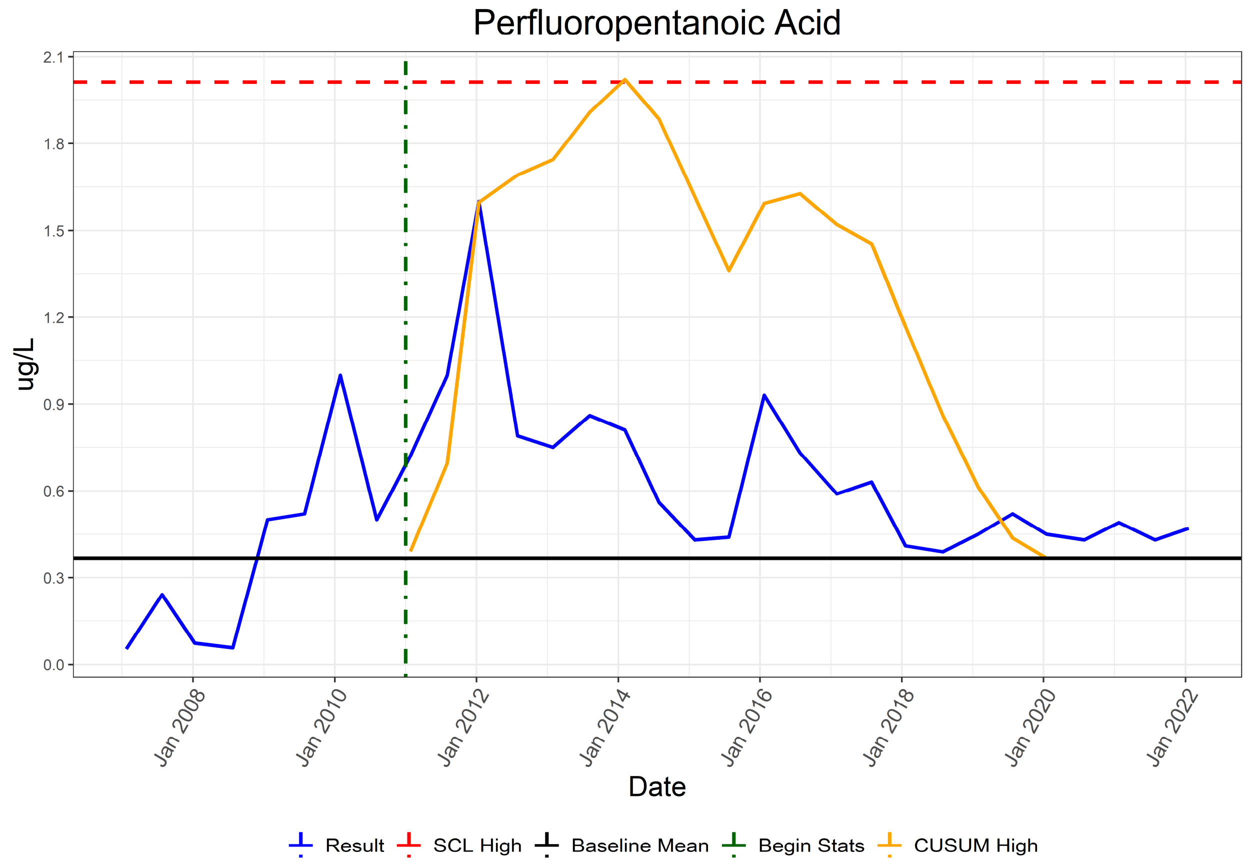


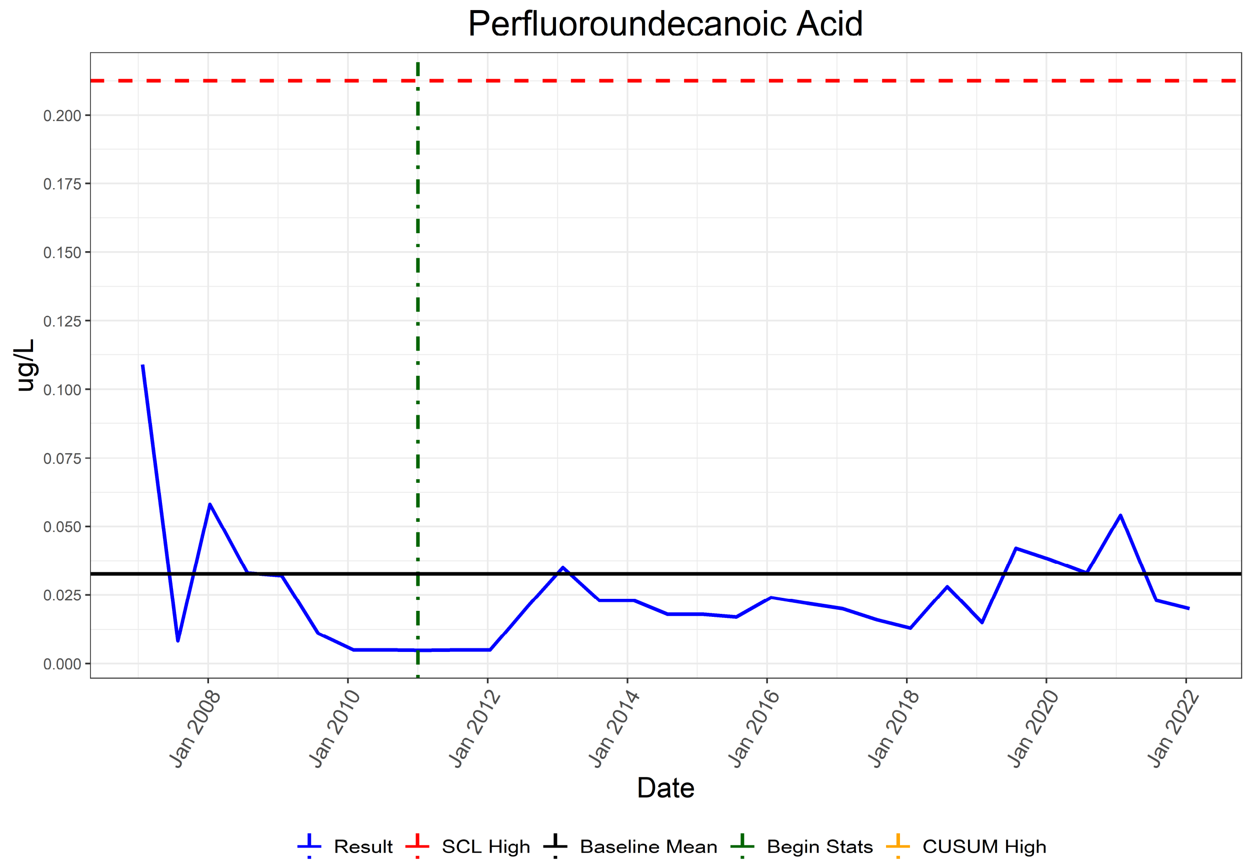

Perfluorodecanoic Acid
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

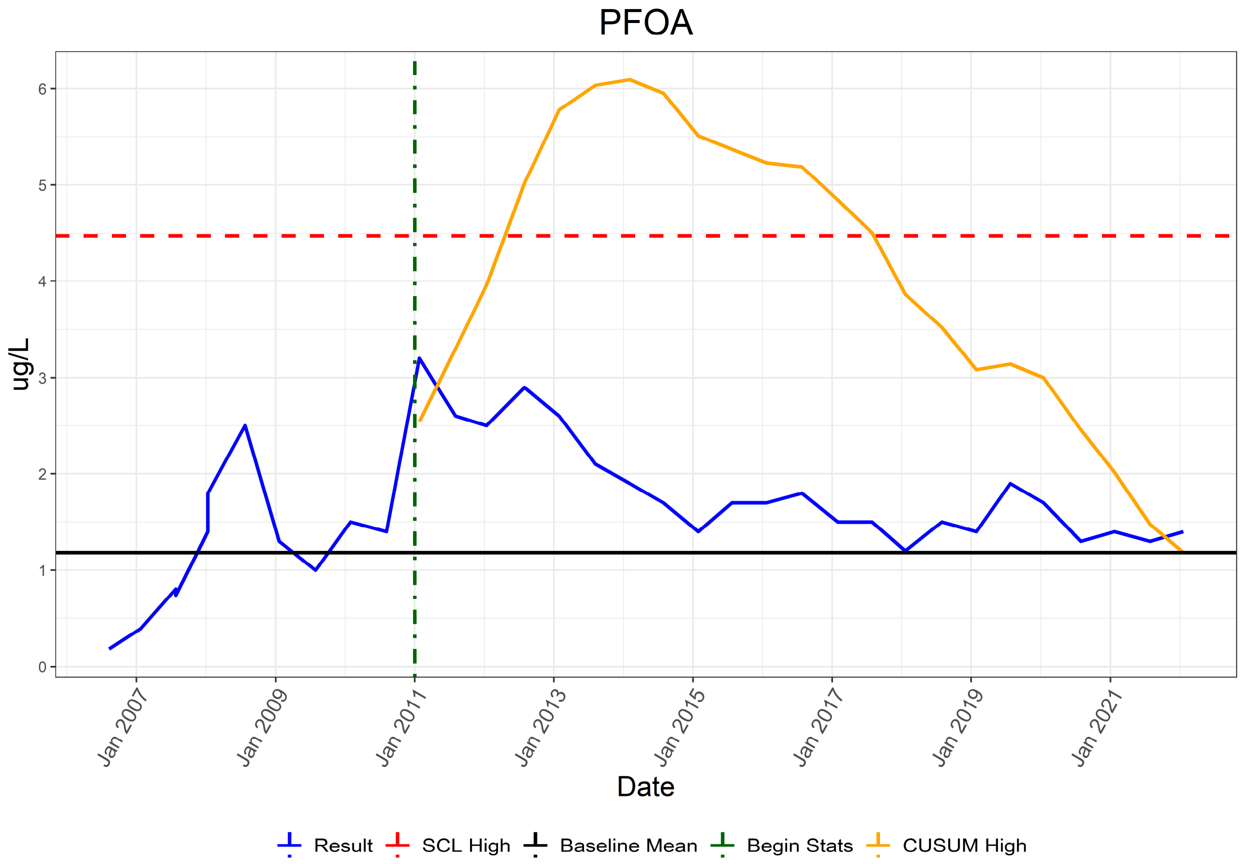

Perfluoroheptanoic Acid
ug/L
2.4
2.0
1.6
1.2
0.8
0.4
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
0
2
4
6
8
10
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoropentanoic Acid
ug/L
2.1
1.8
1.5
1.2
0.9
0.6
0.3
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

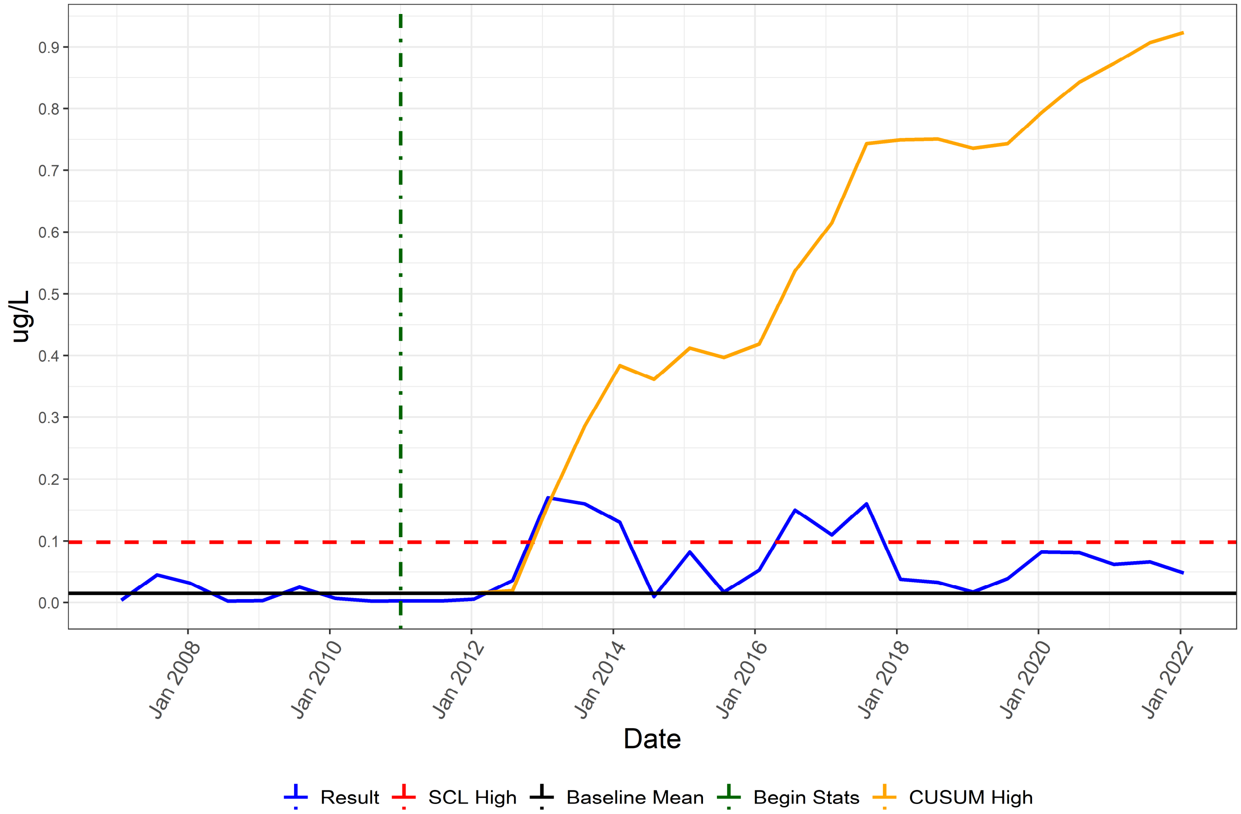

Perfluoroundecanoic Acid
ug/L
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
0
1
2
3
4
5
6
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

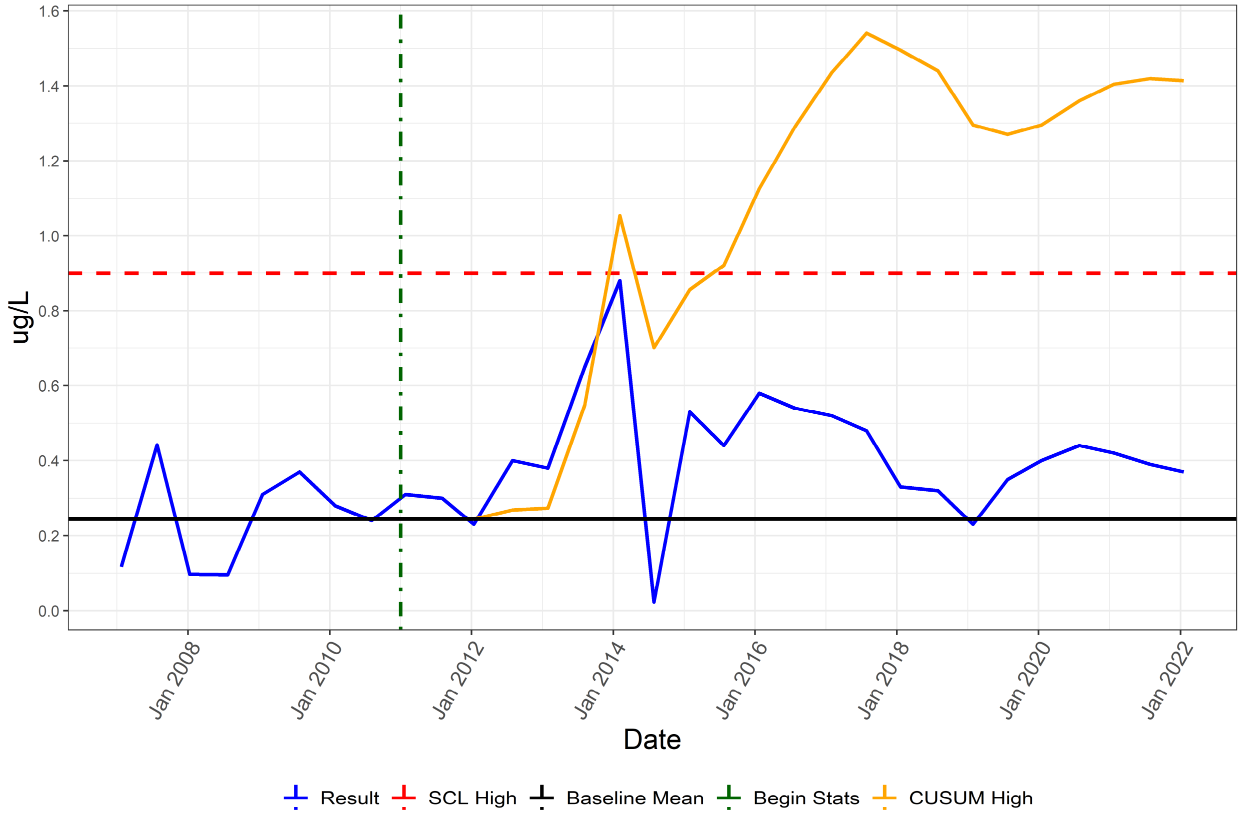
PFAS Monitoring Program (Program 9)

Well Name: L09-M01C

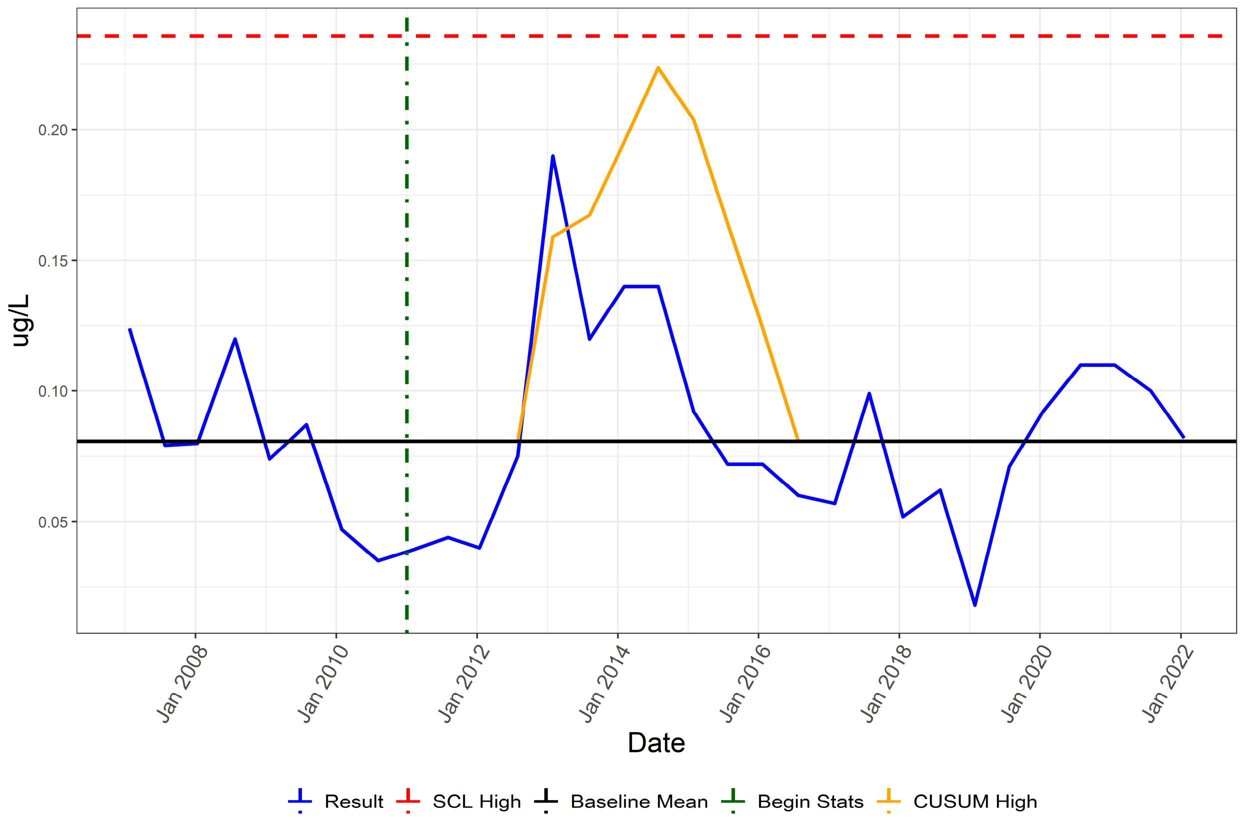
Perfluorobutane Sulfonic Acid



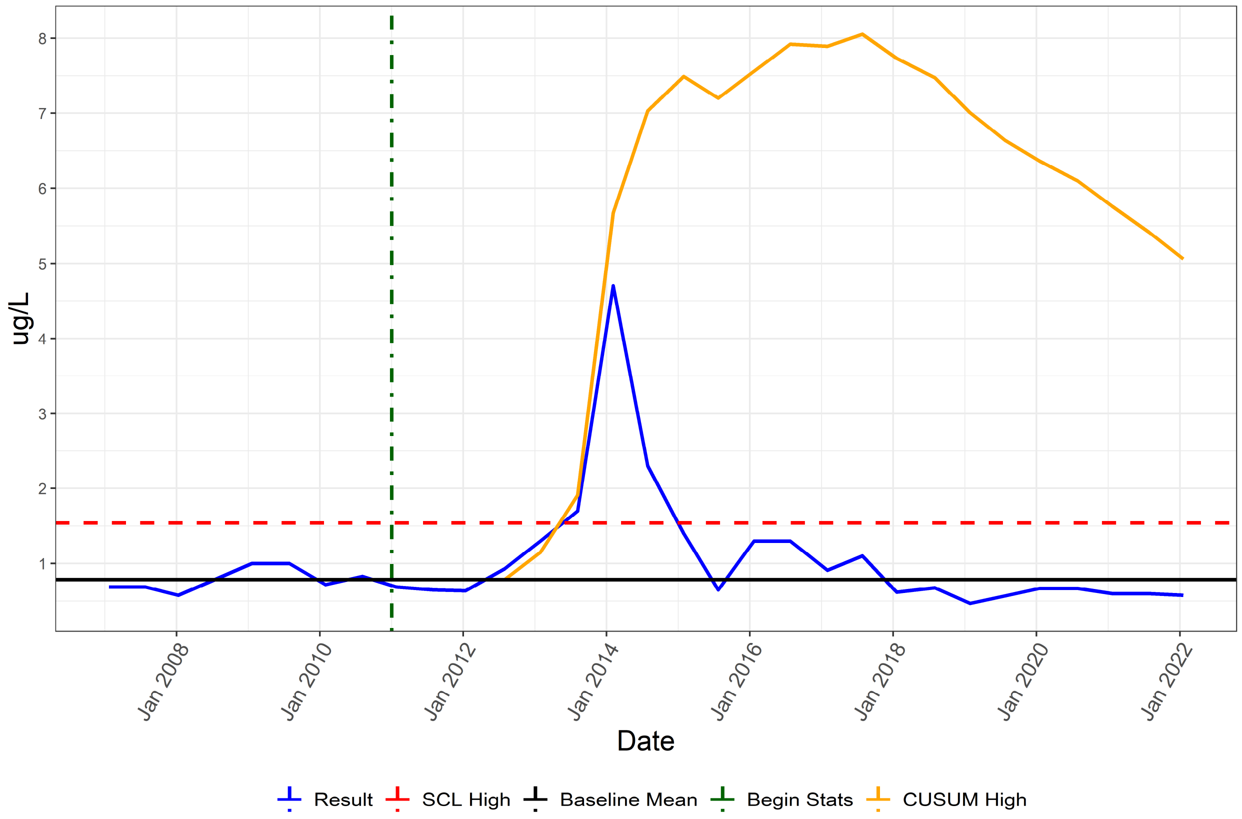
Perfluorobutanoic Acid

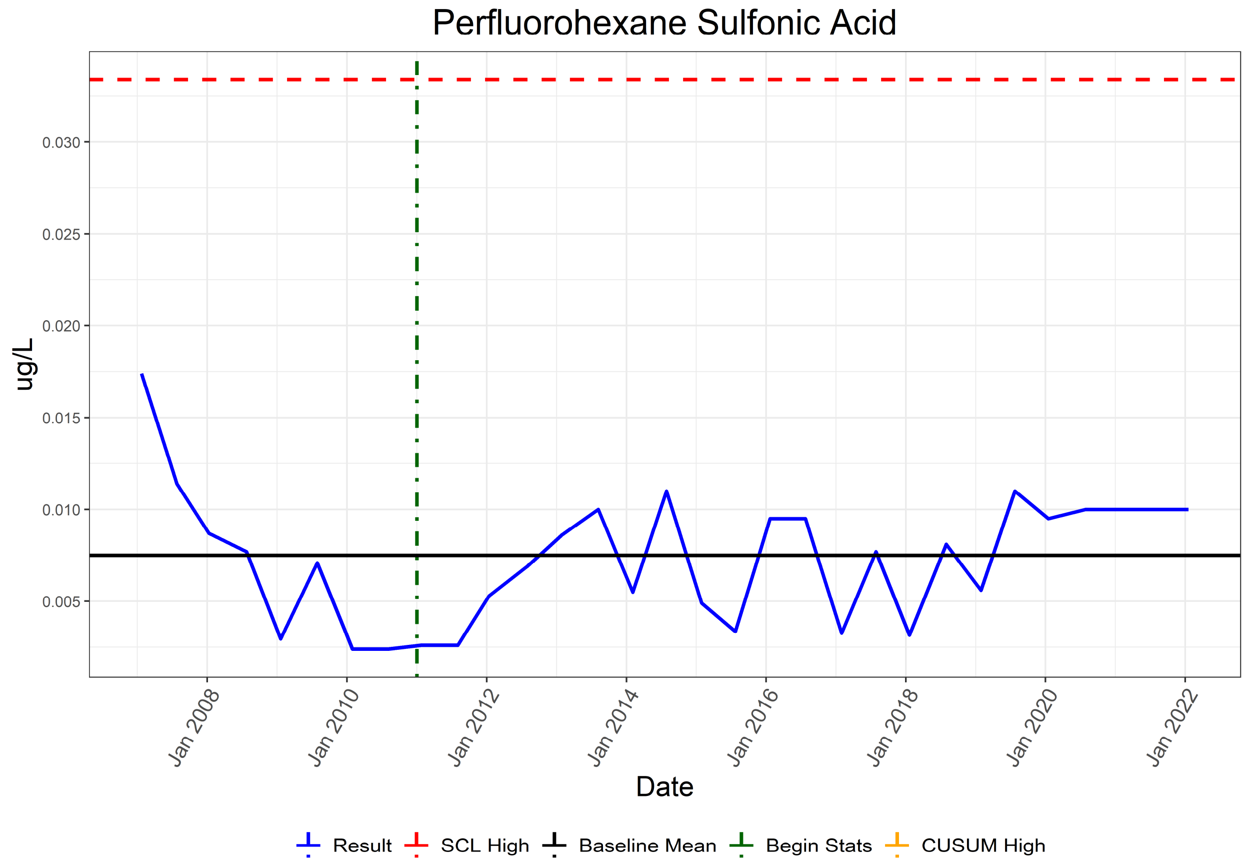


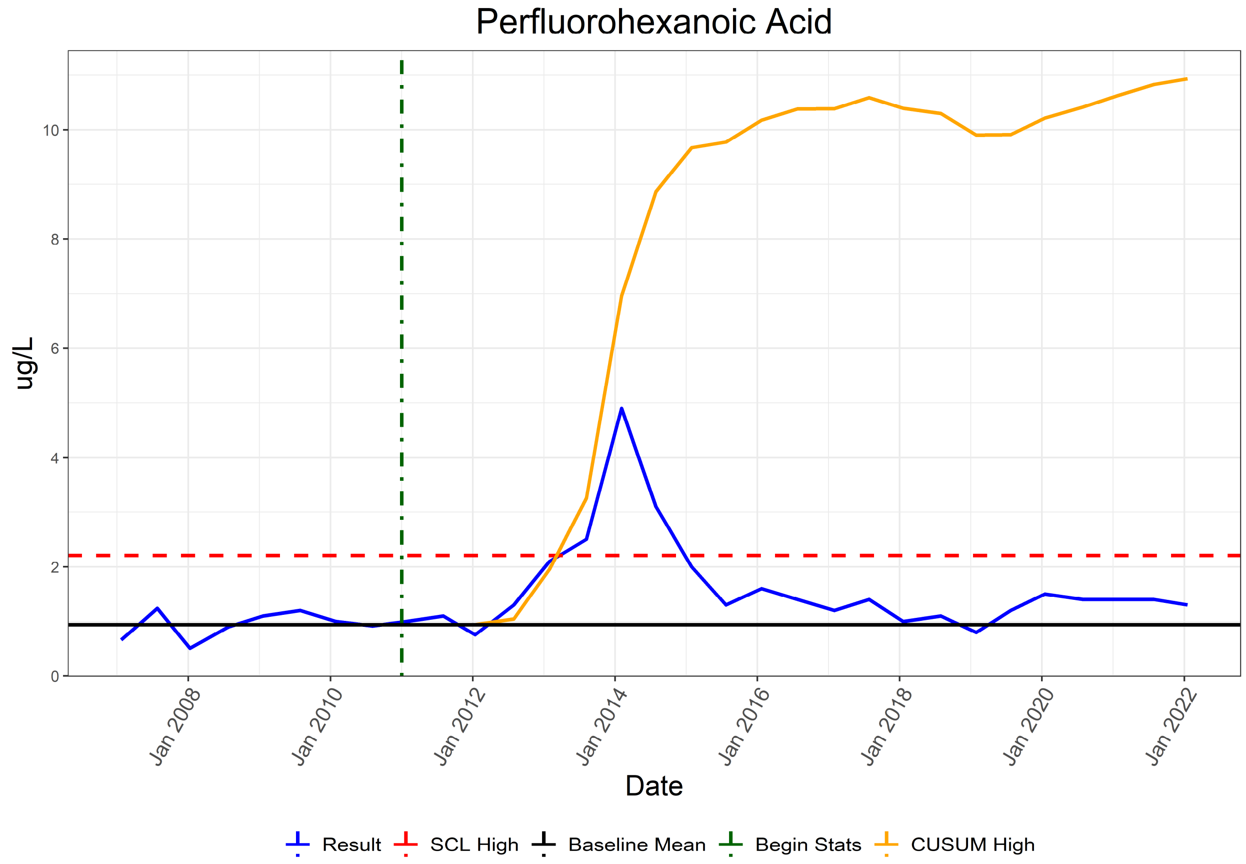
Perfluorodecanoic Acid

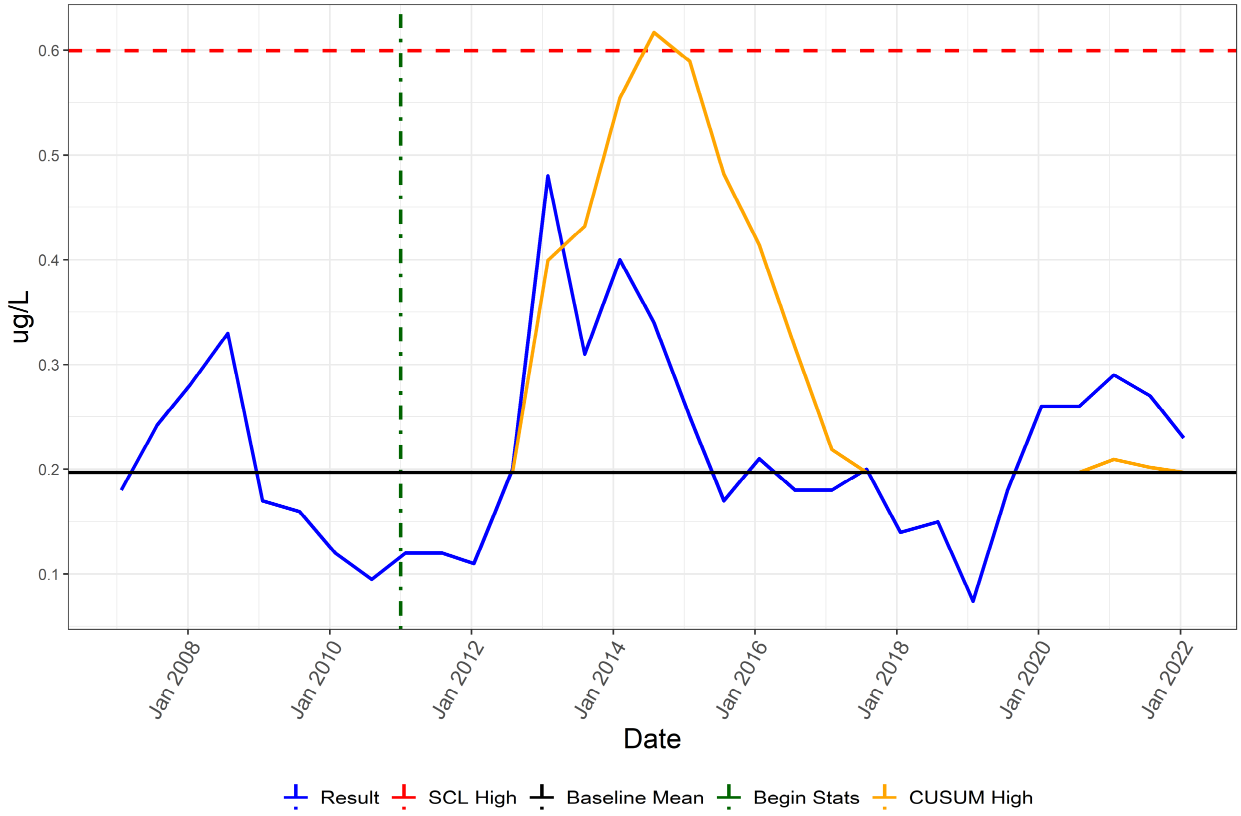


Perfluoroheptanoic Acid

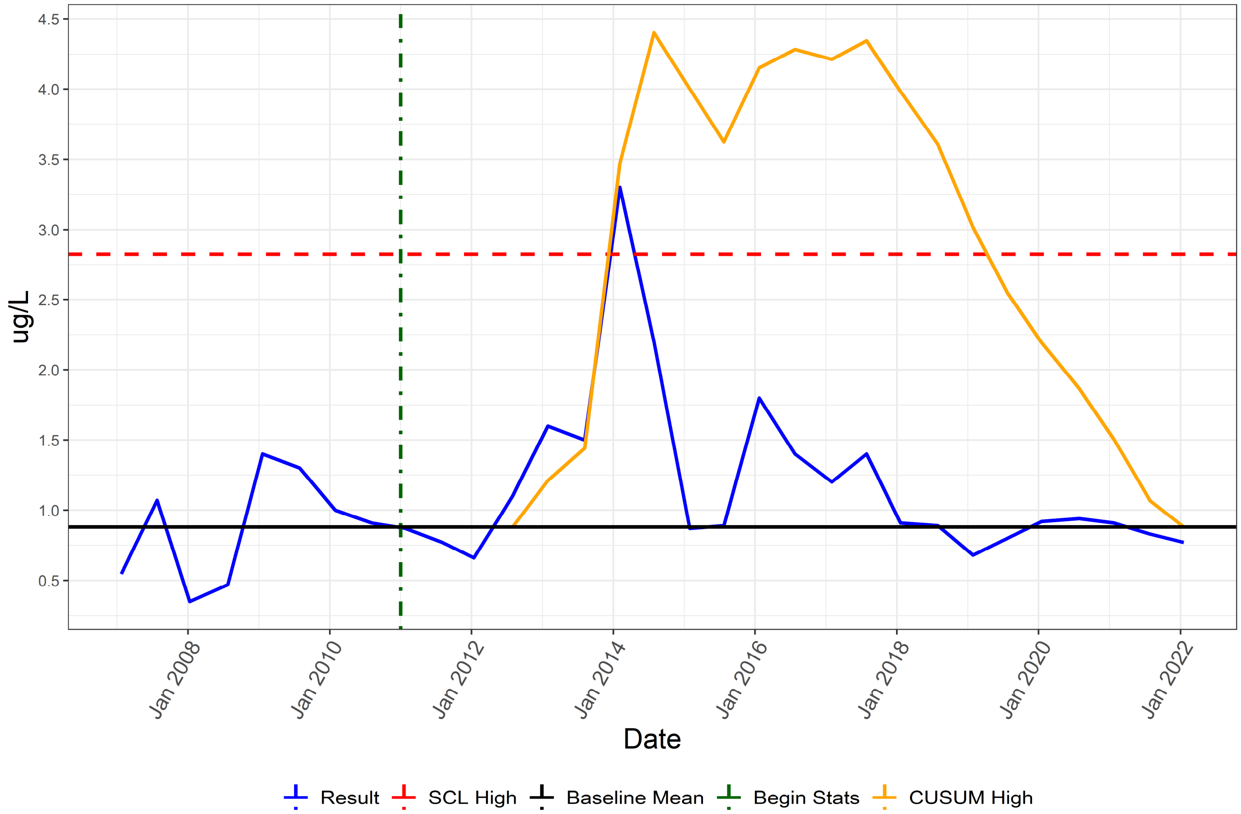



Perfluorohexane Sulfonic Acid
ug/L
0.030
0.025
0.020
0.015
0.010
0.005
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

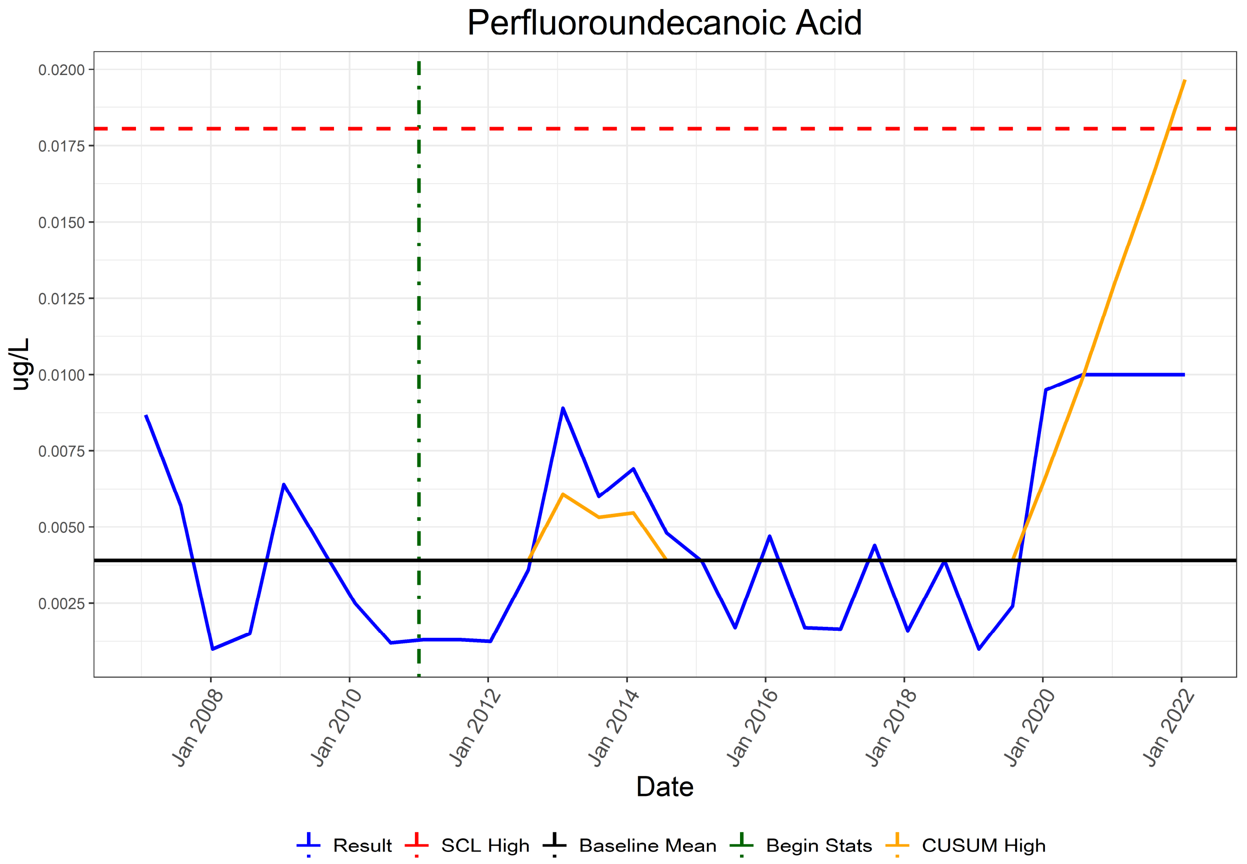

Perfluorohexanoic Acid
ug/L
10
8
6
4
2
0
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

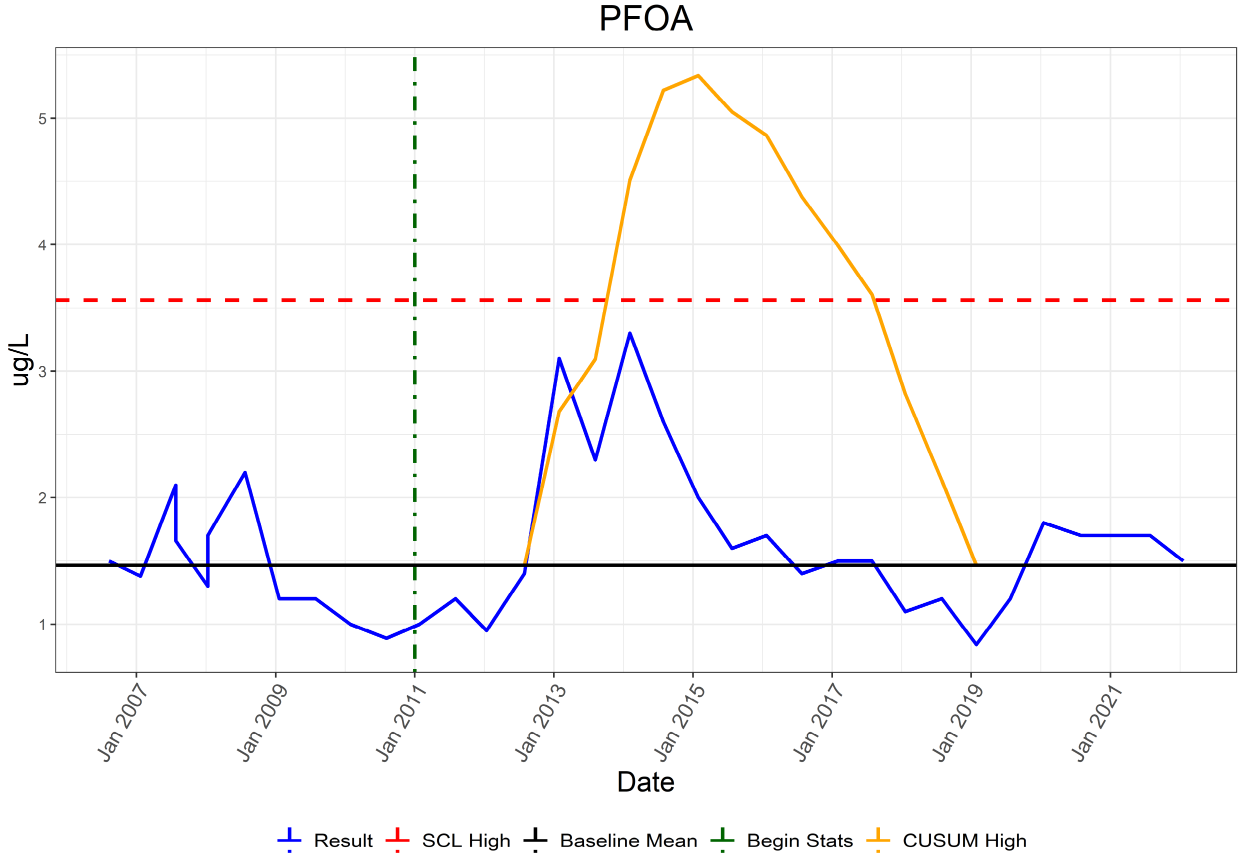


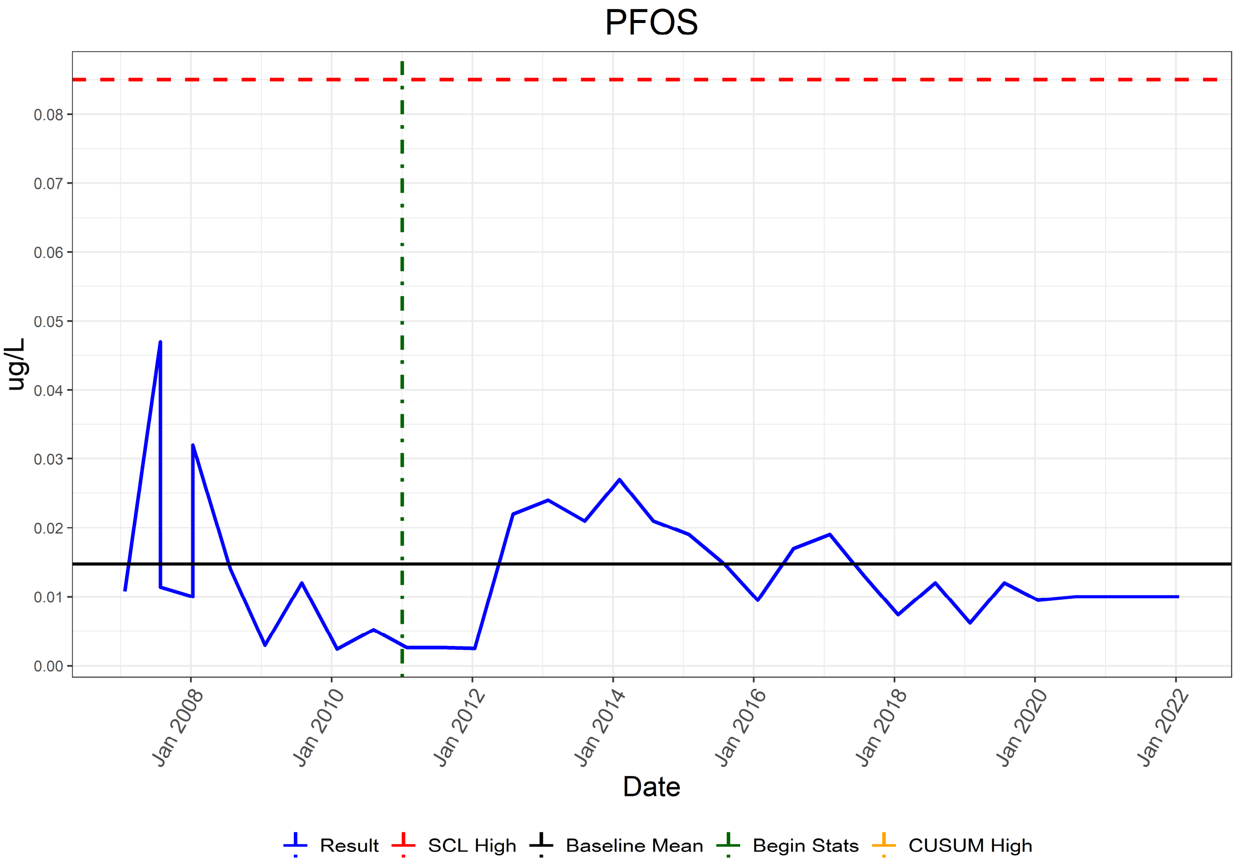
Perfluorononanoic Acid



Perfluoropentanoic Acid

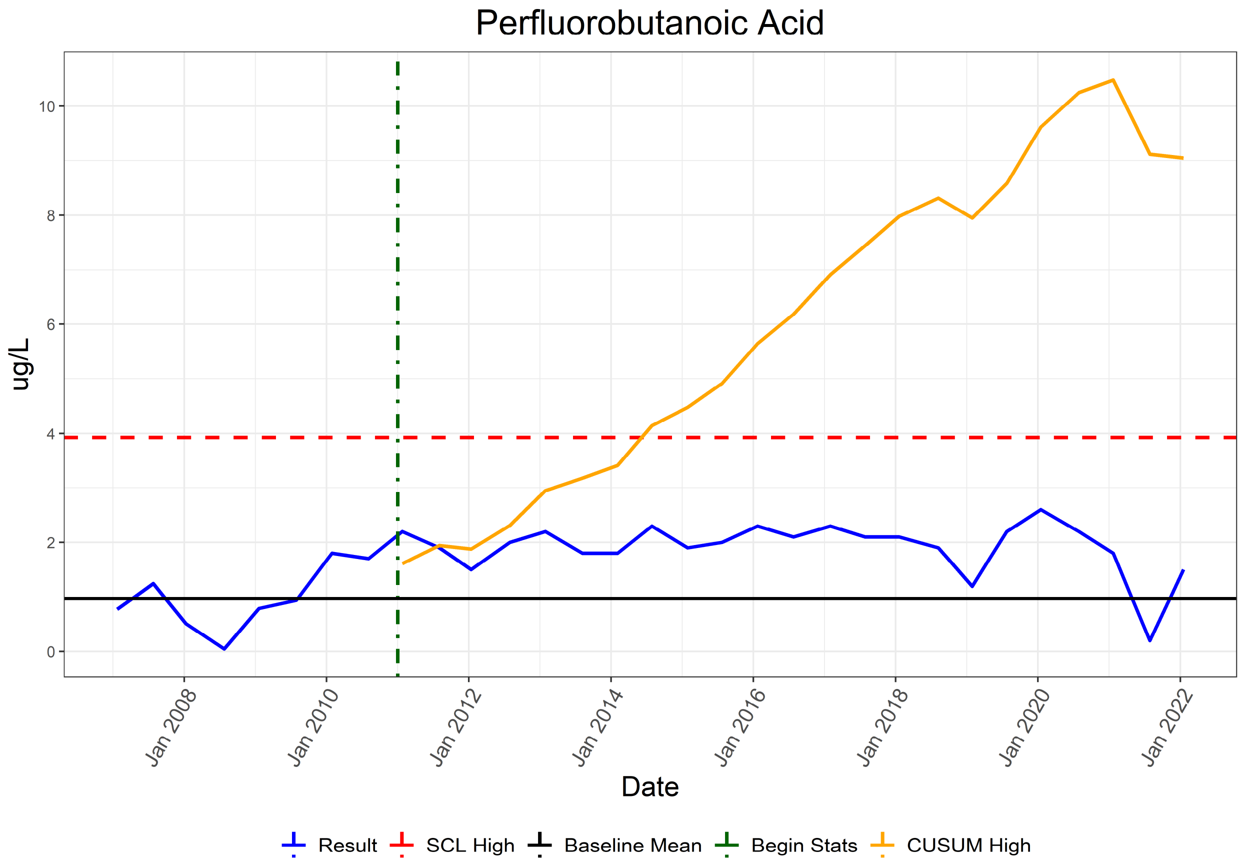

Perfluoroundecanoic Acid
ug/L
0.0200
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

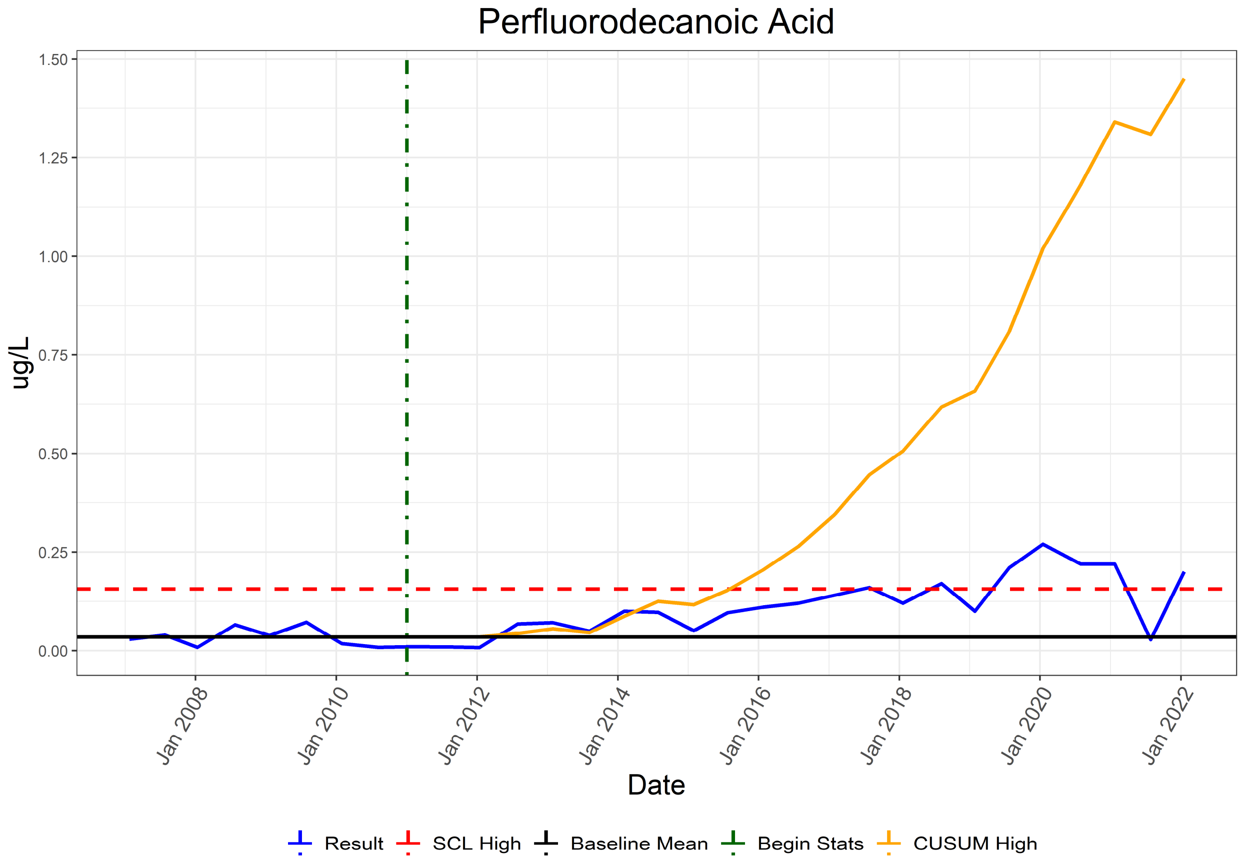

PFOA
ug/L
5
4
3
2
1
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

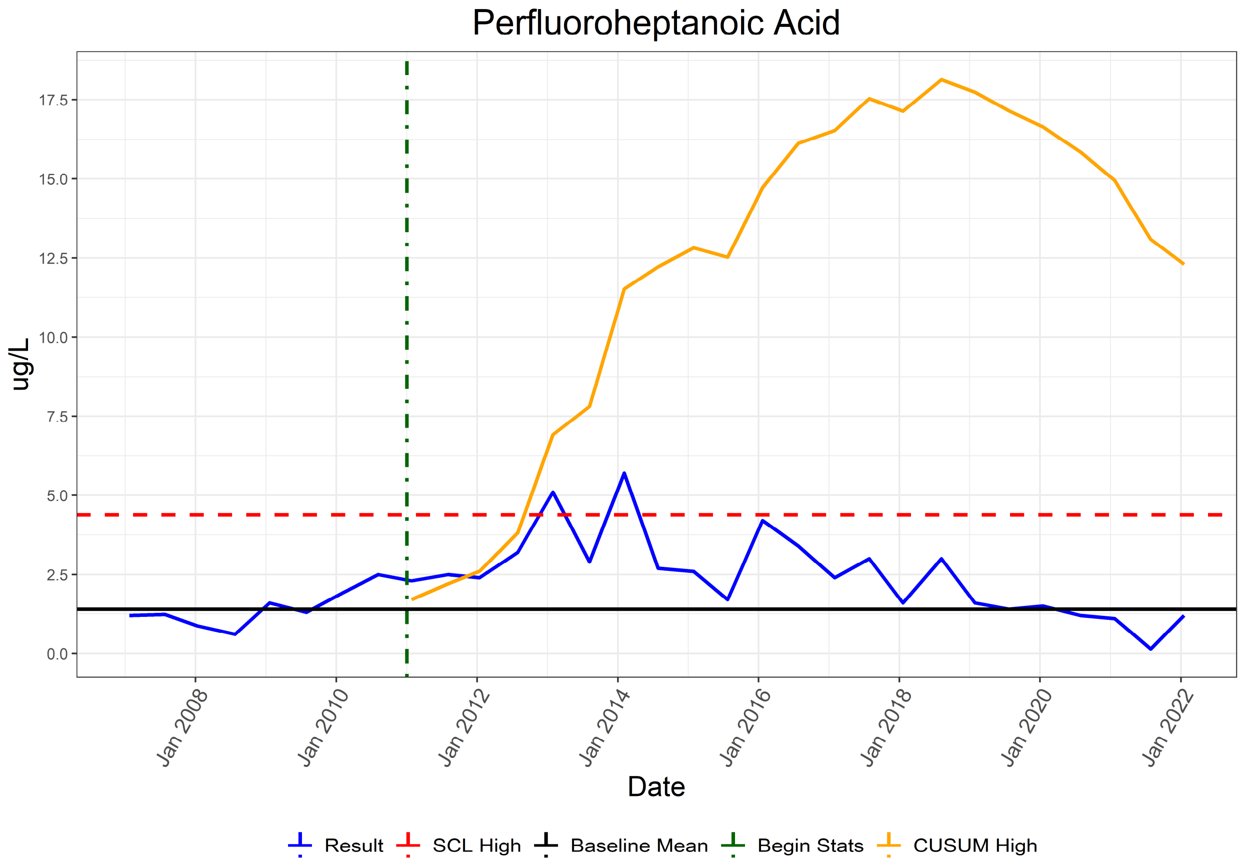

PFOS
ug/L
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

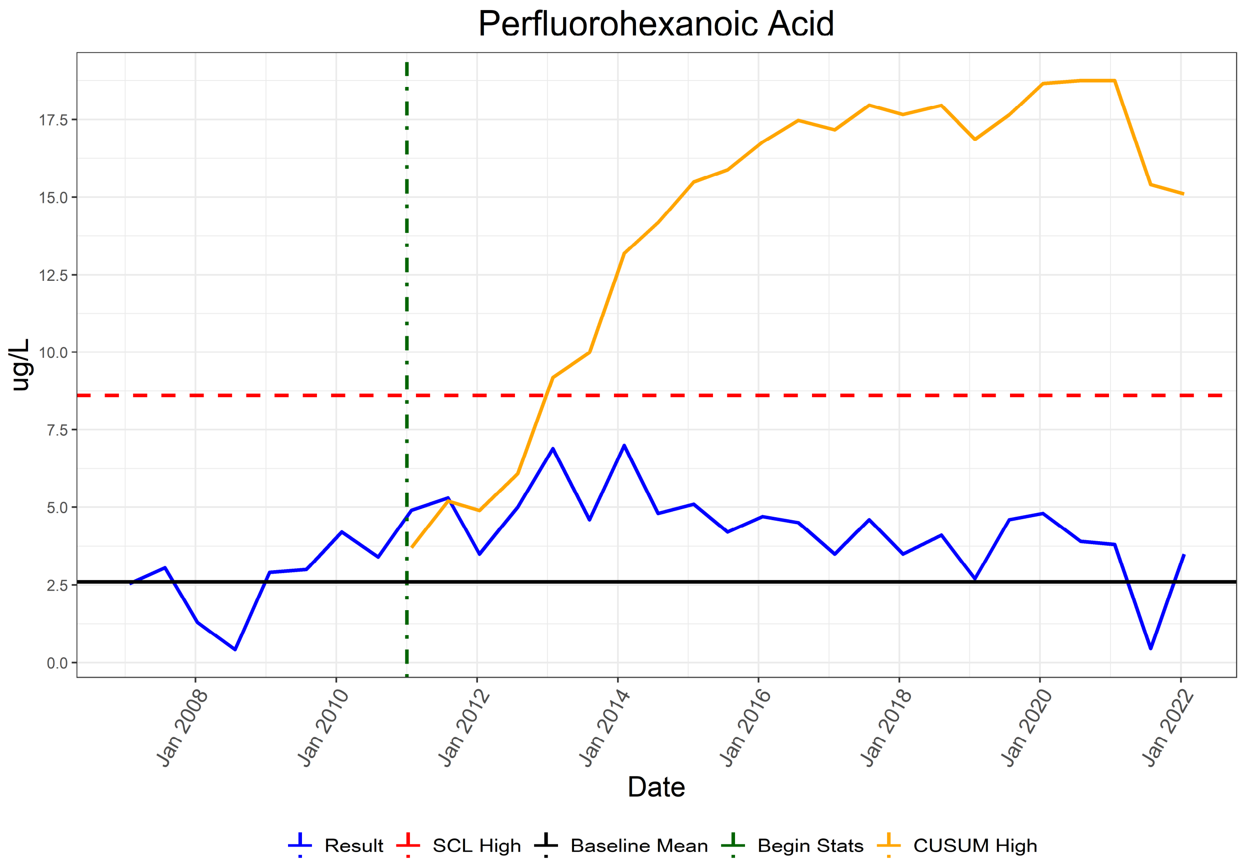
PFAS Monitoring Program (Program 9)

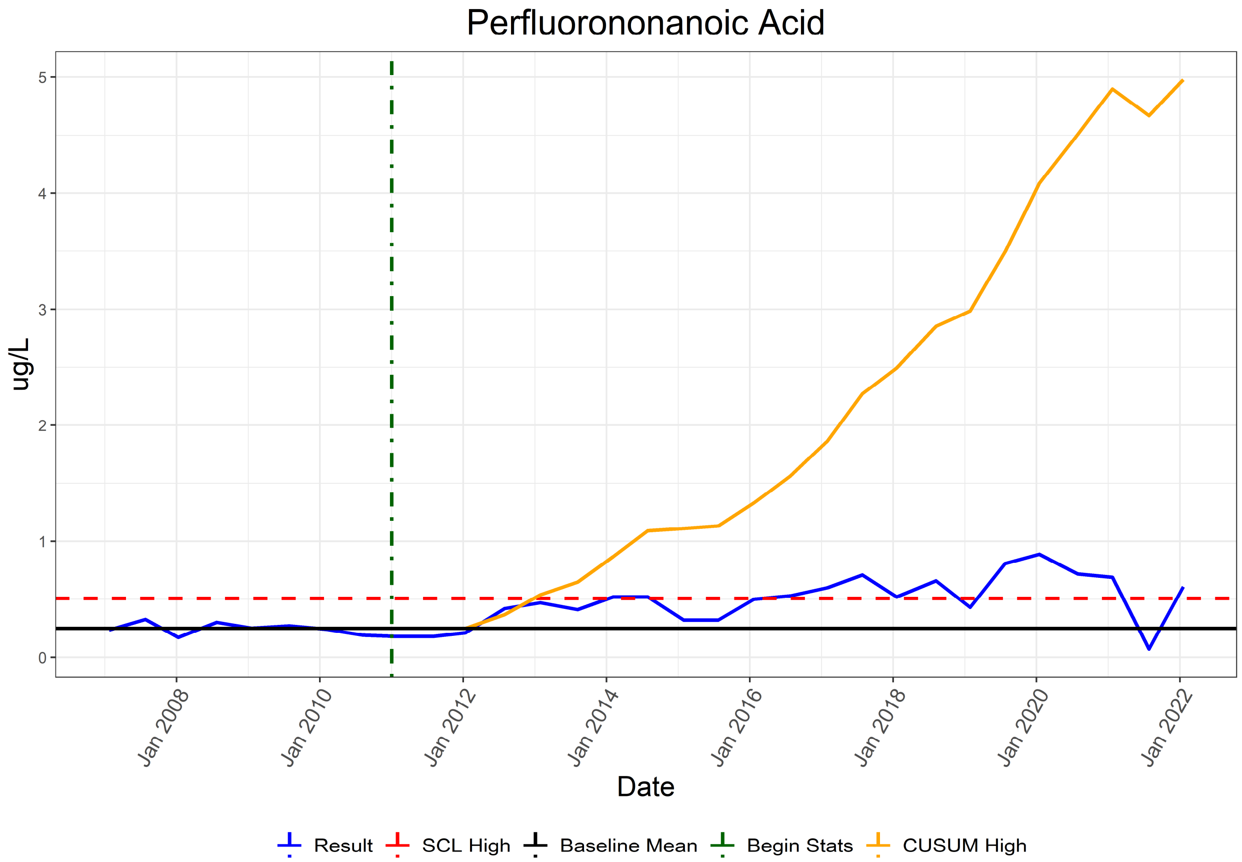
Well Name: L09-M01D

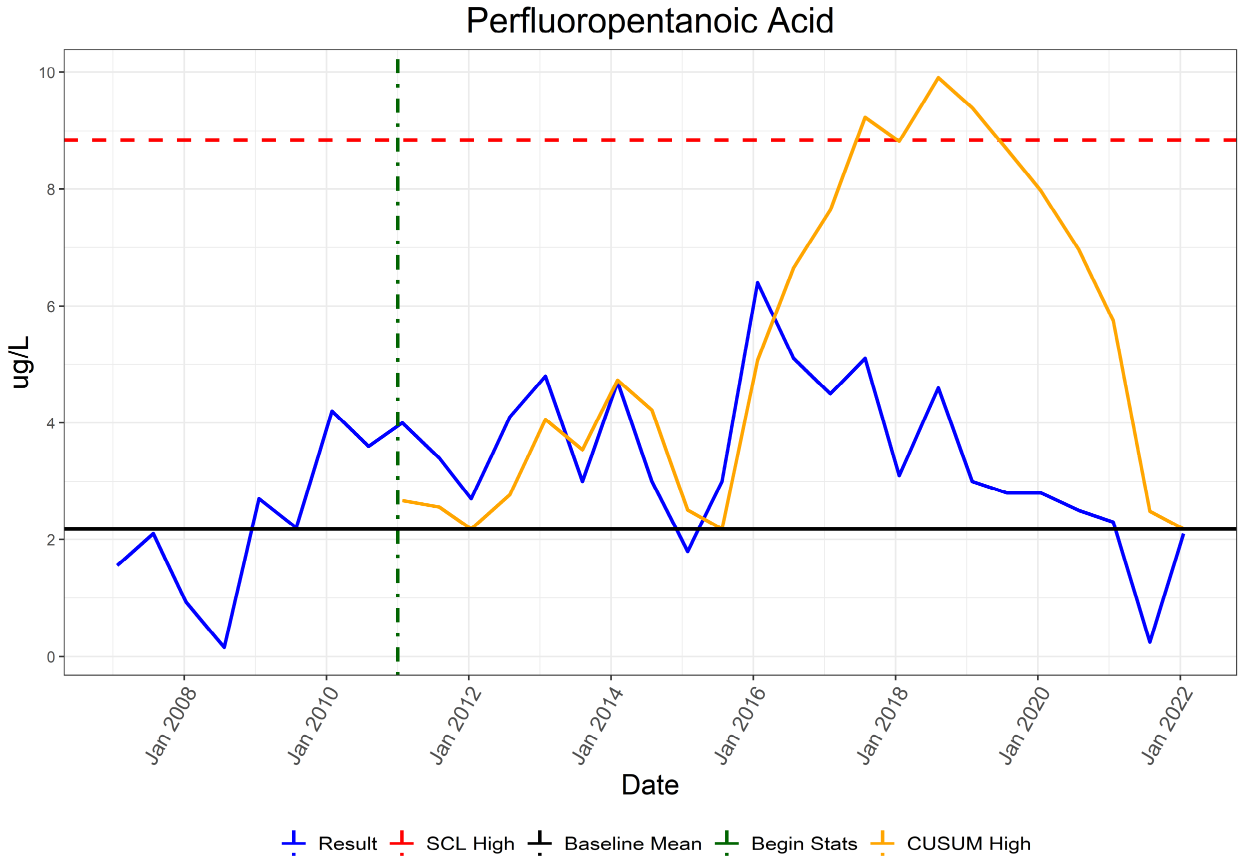


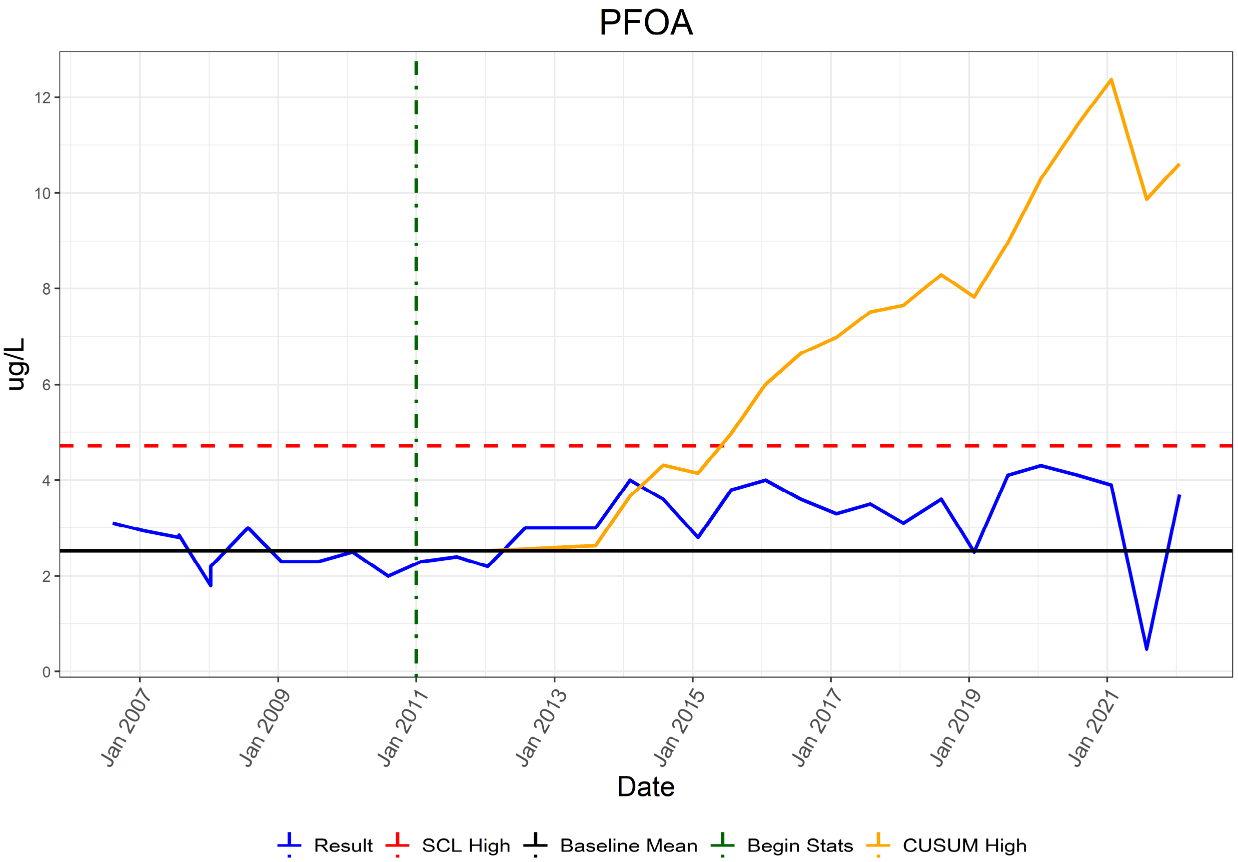



Perfluoroheptanoic Acid
ug/L
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

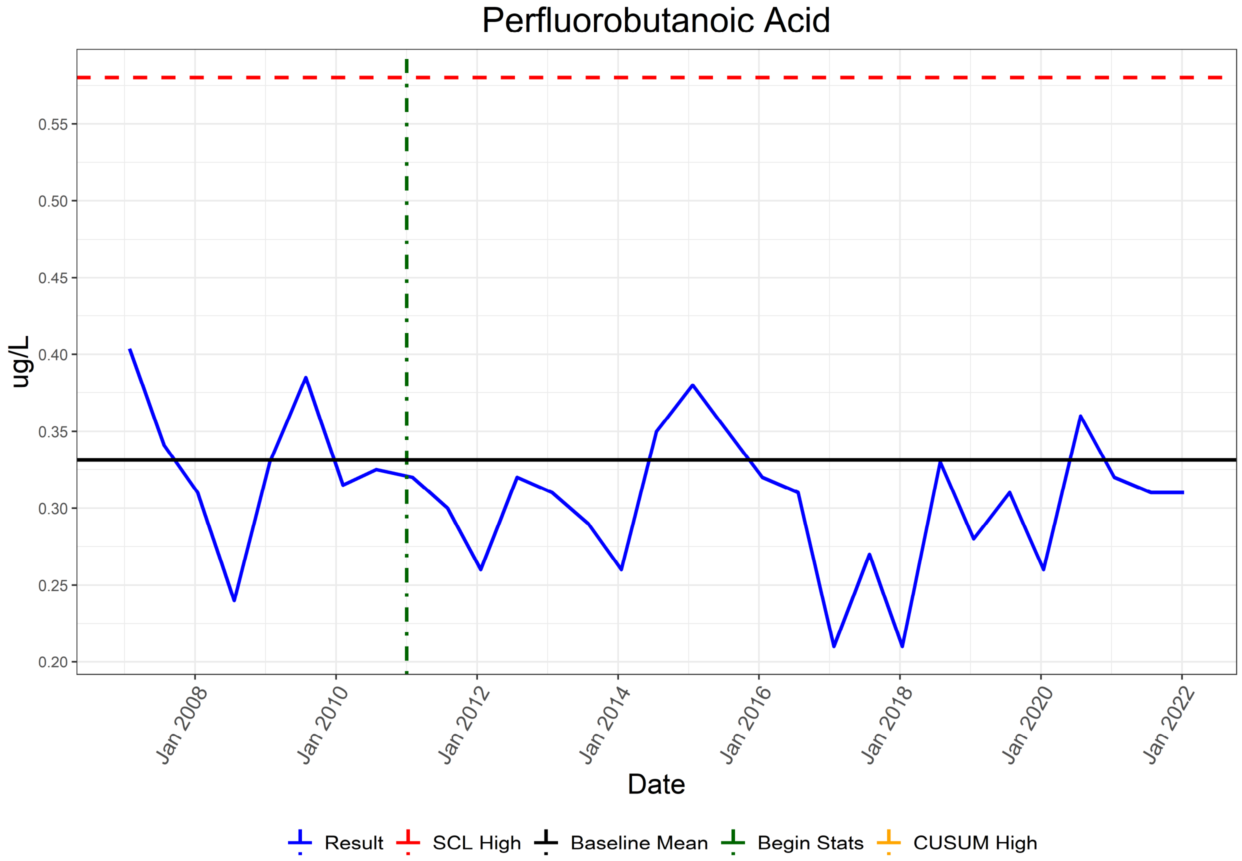

Perfluorononanoic Acid
ug/L
0
1
2
3
4
5
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

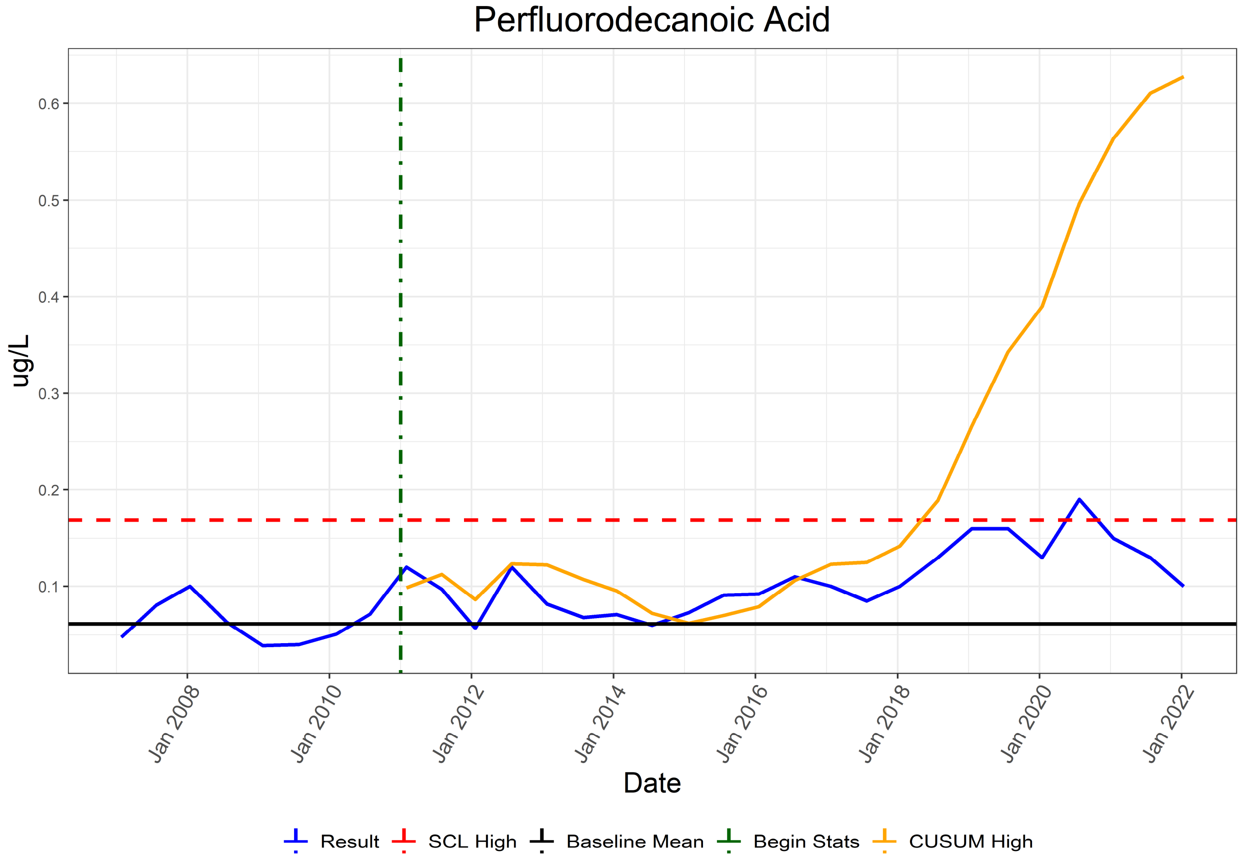

Perfluoropentanoic Acid
ug/L
0
2
4
6
8
10
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

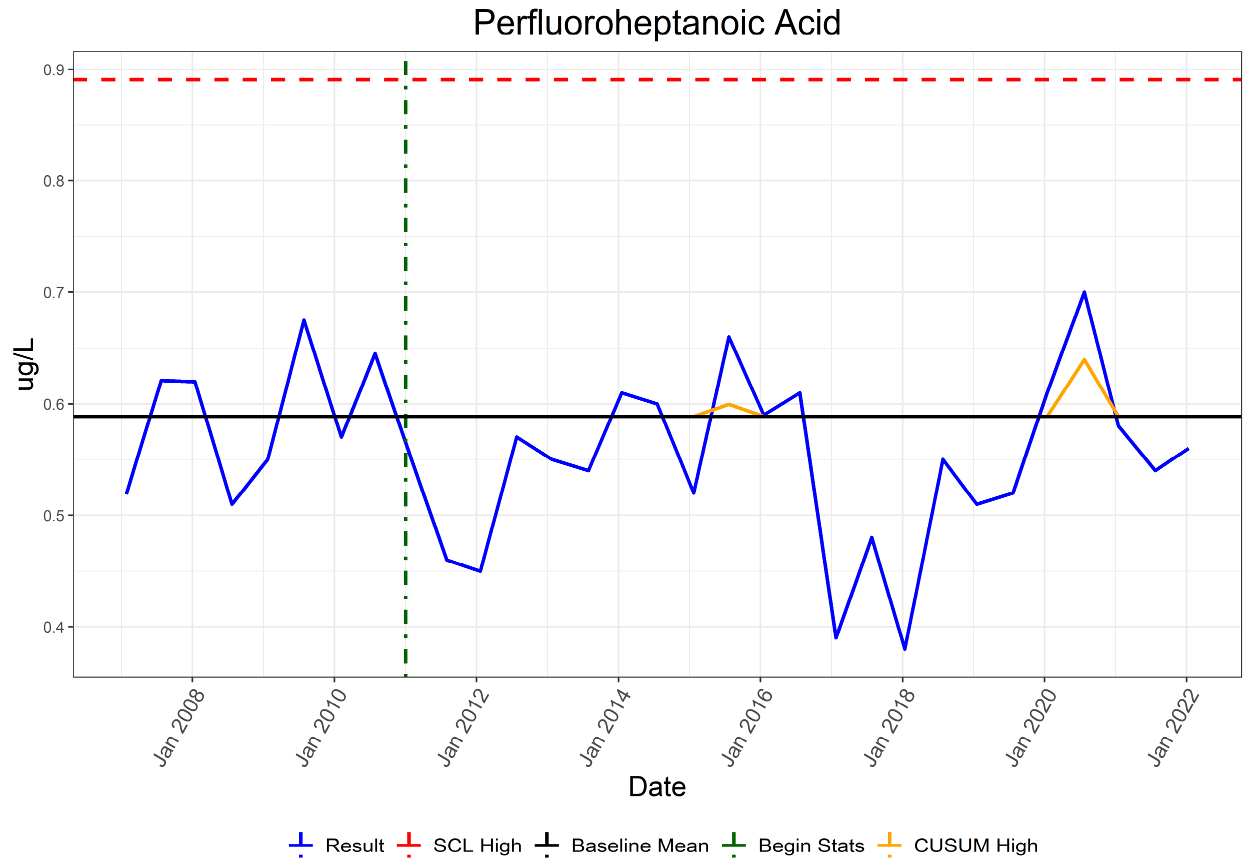

PFOA
ug/L
0
2
4
6
8
10
12
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

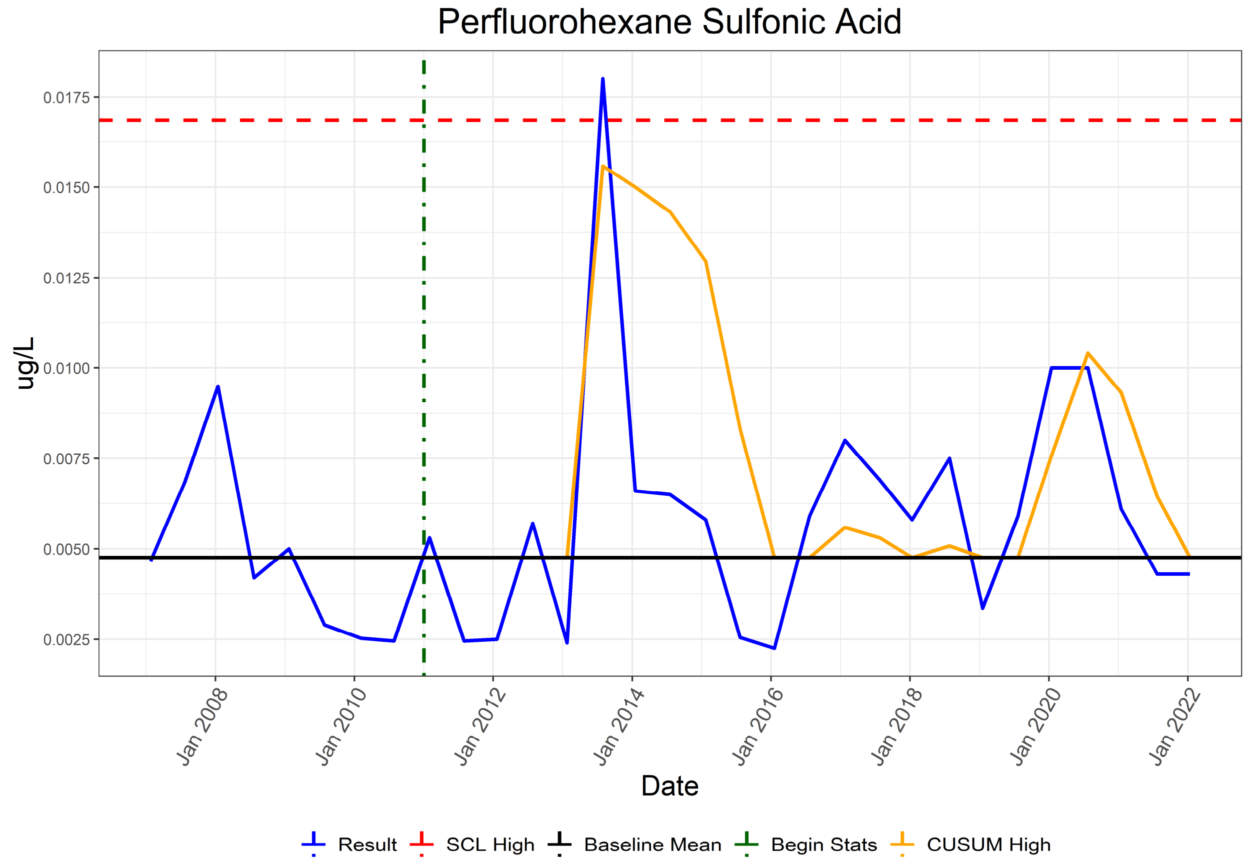
PFAS Monitoring Program (Program 9)

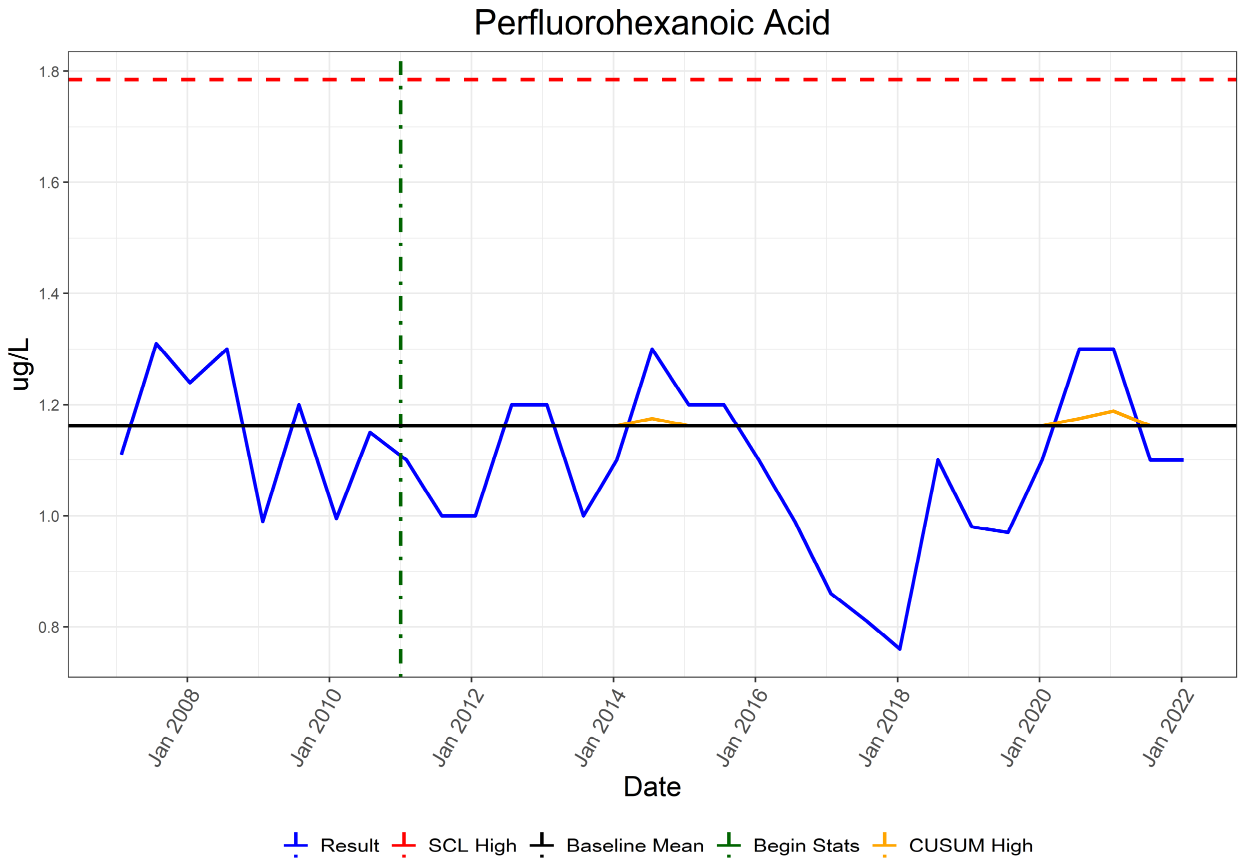
Well Name: N08-M01B

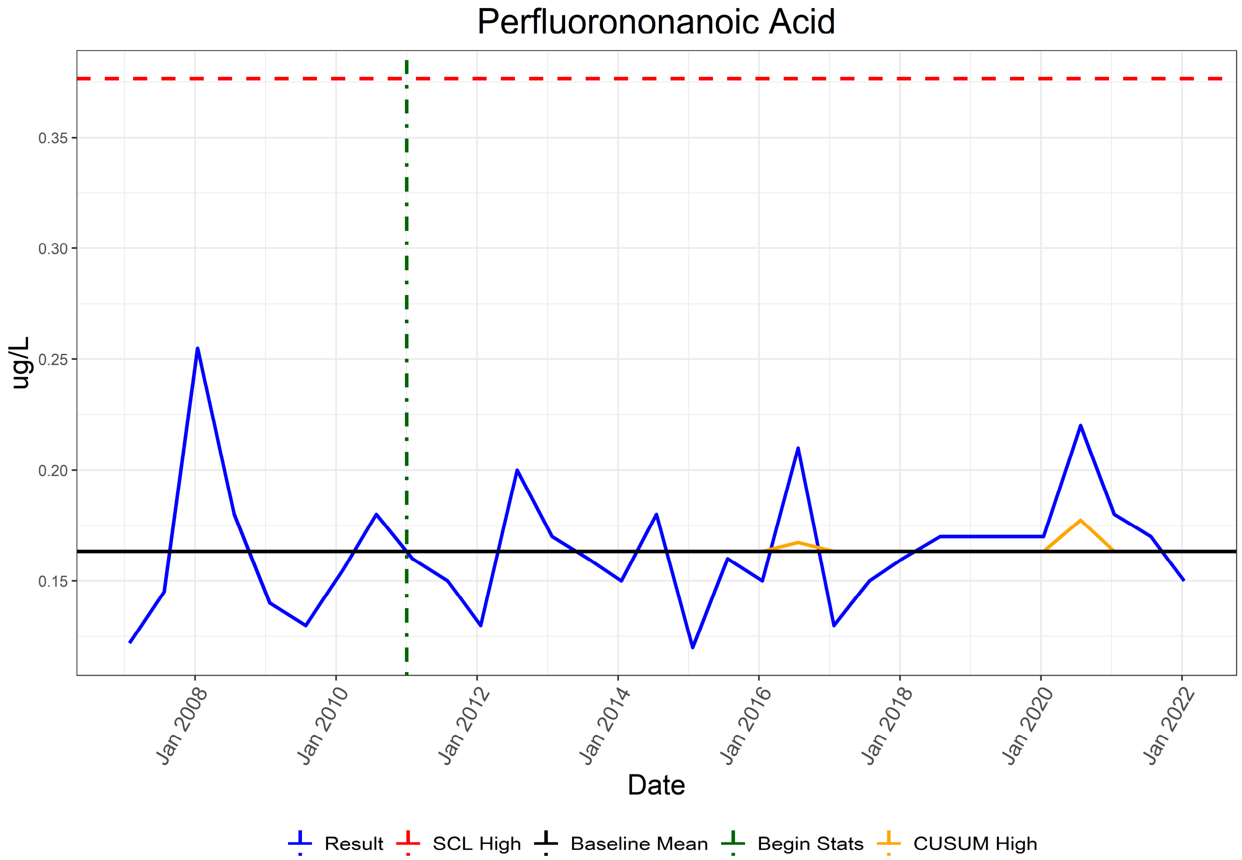




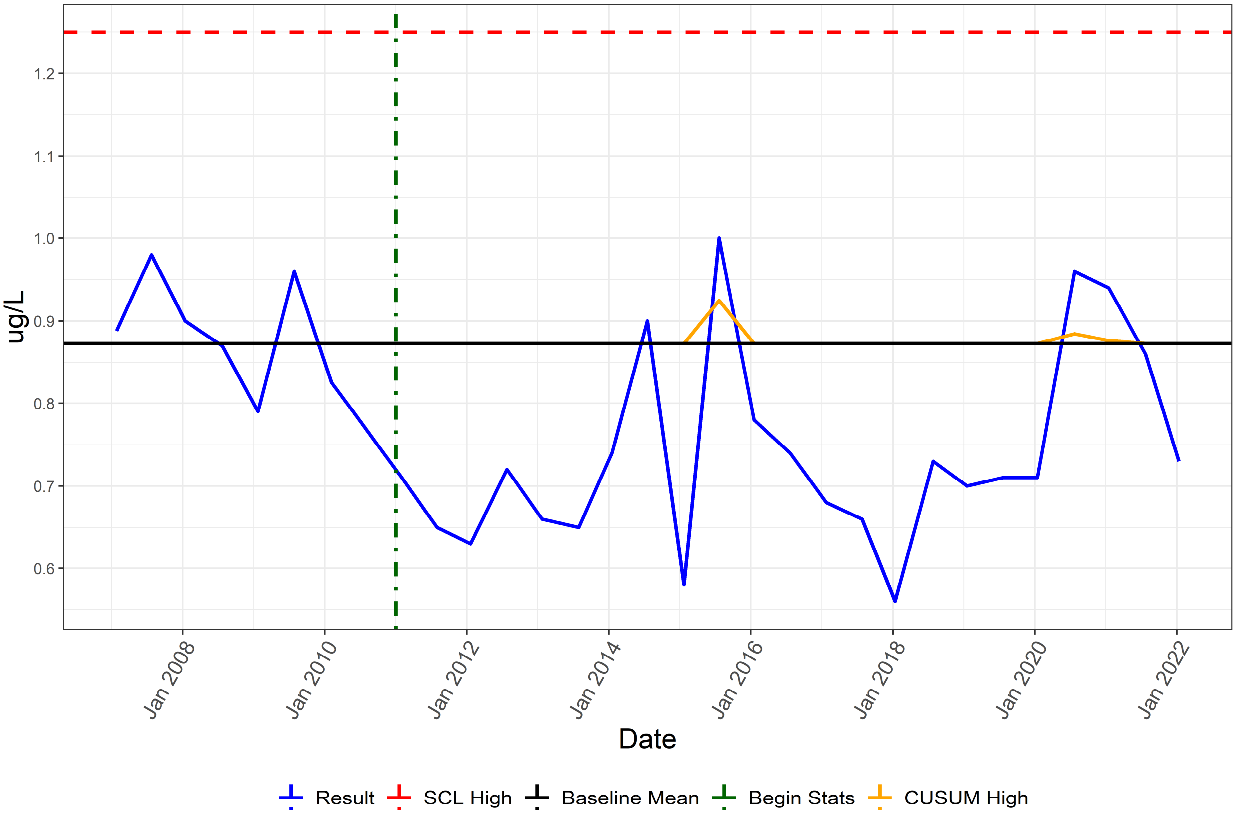

Perfluoroheptanoic Acid
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexane Sulfonic Acid
ug/L
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

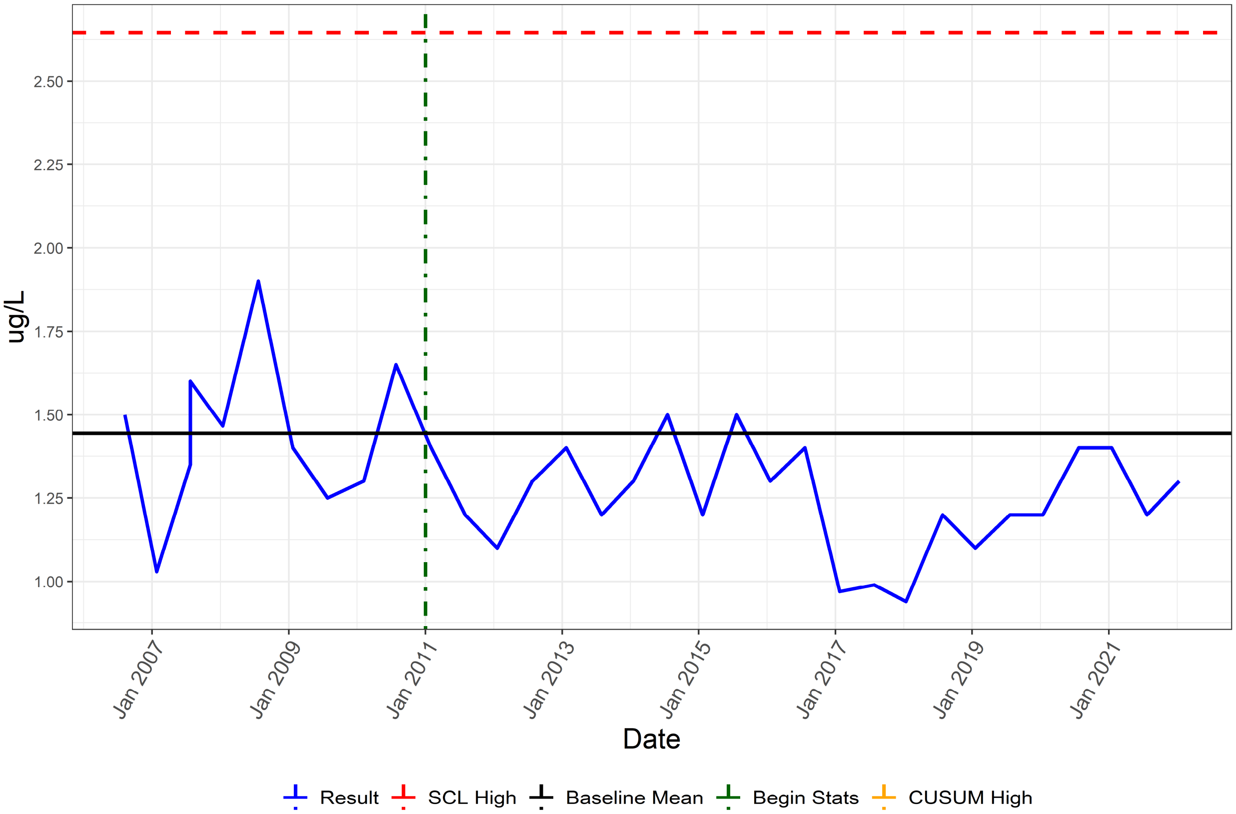

Perfluorohexanoic Acid
ug/L
1.8
1.6
1.4
1.2
1.0
0.8
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.35
0.30
0.25
0.20
0.15
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Perfluoropentanoic Acid

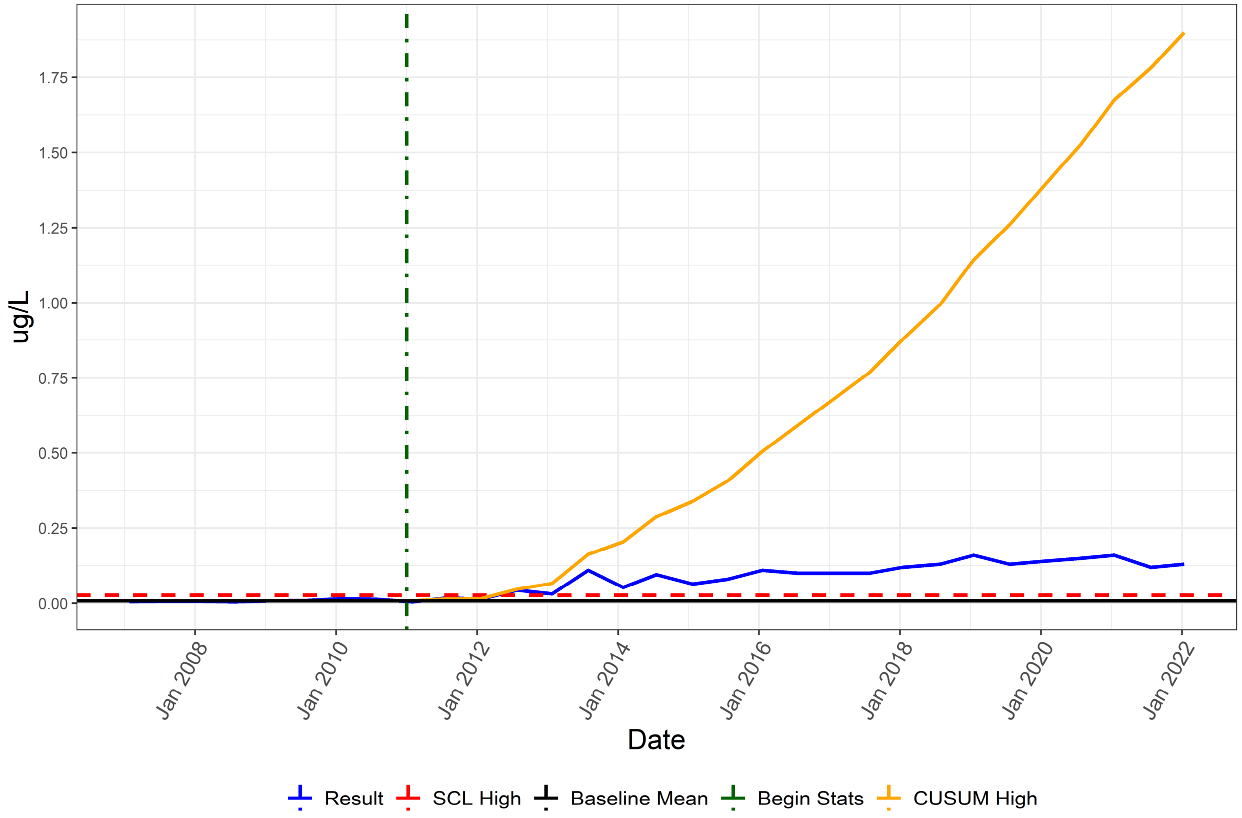


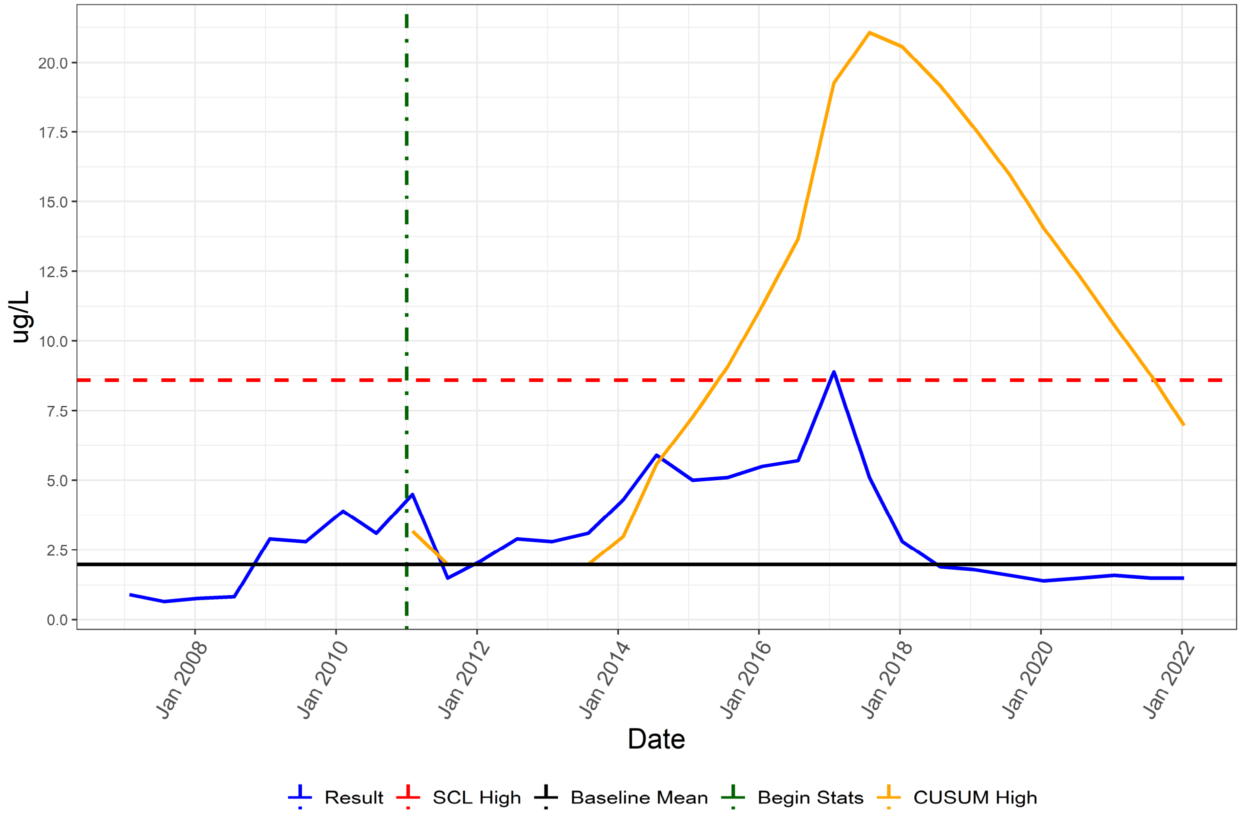
PFOA



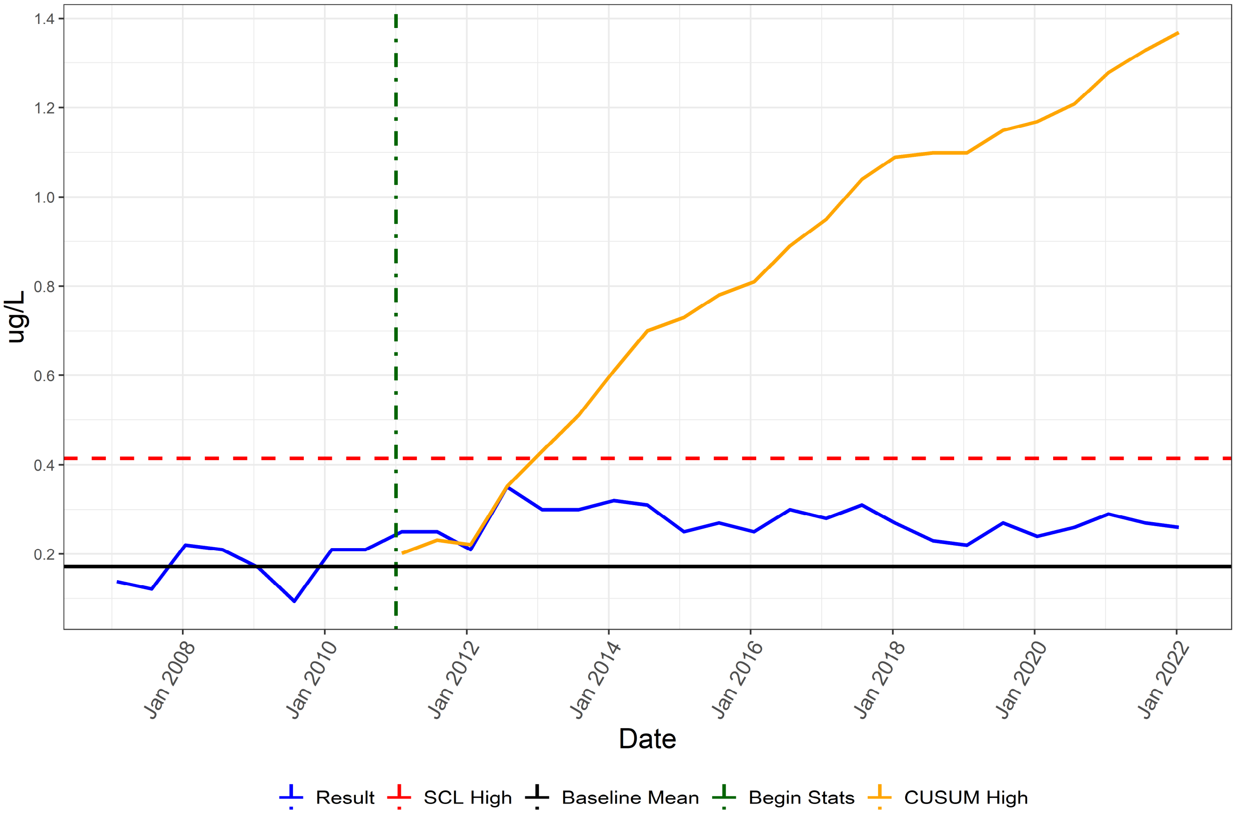
PFAS Monitoring Program (Program 9)

Well Name: N08-M01C

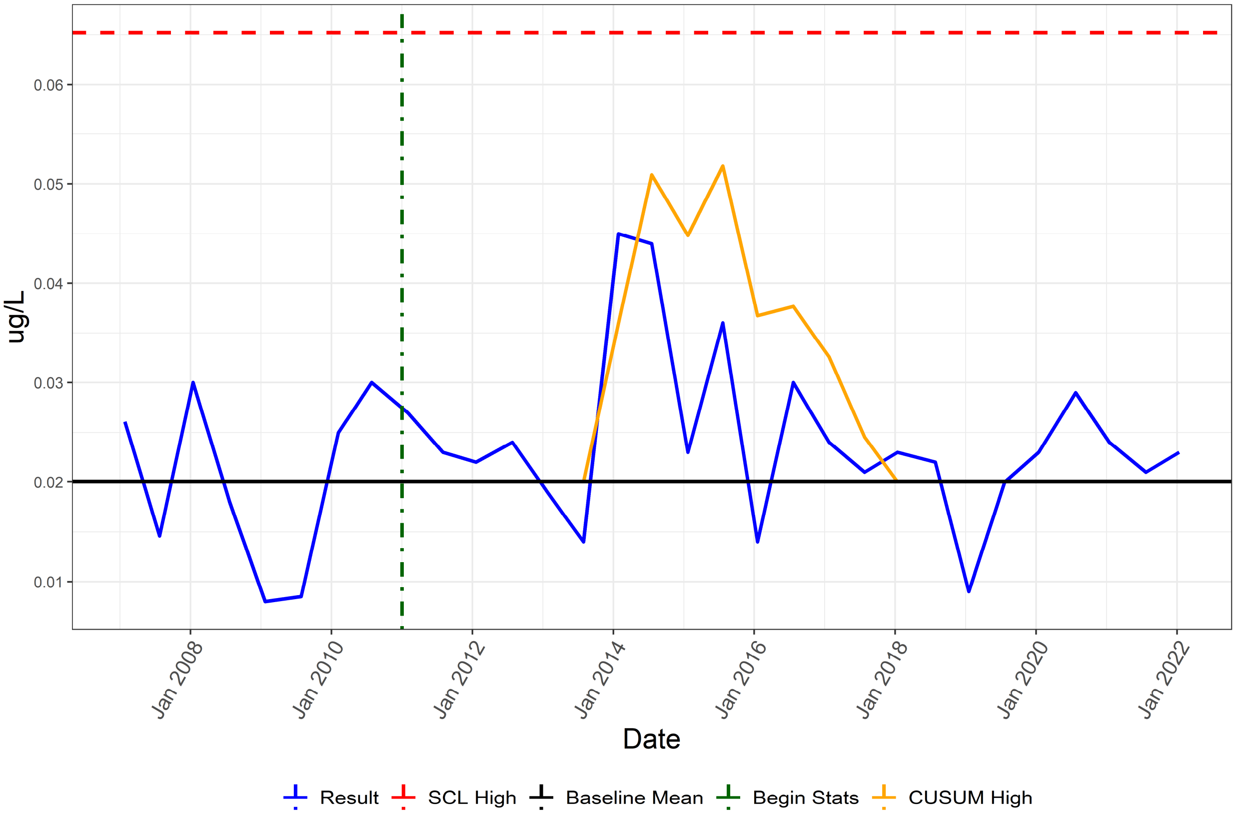

Perfluorobutane Sulfonic Acid

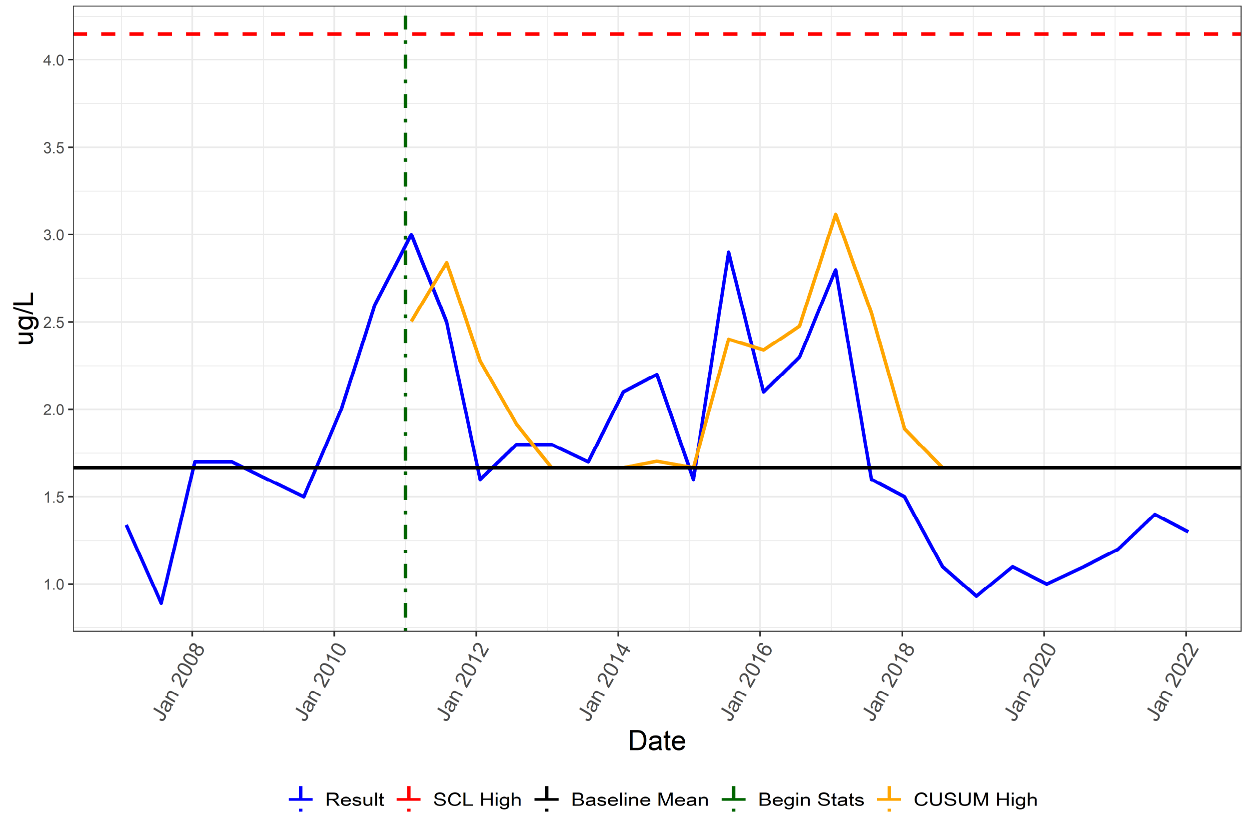

Perfluorobutanoic Acid

Perfluorodecanoic Acid

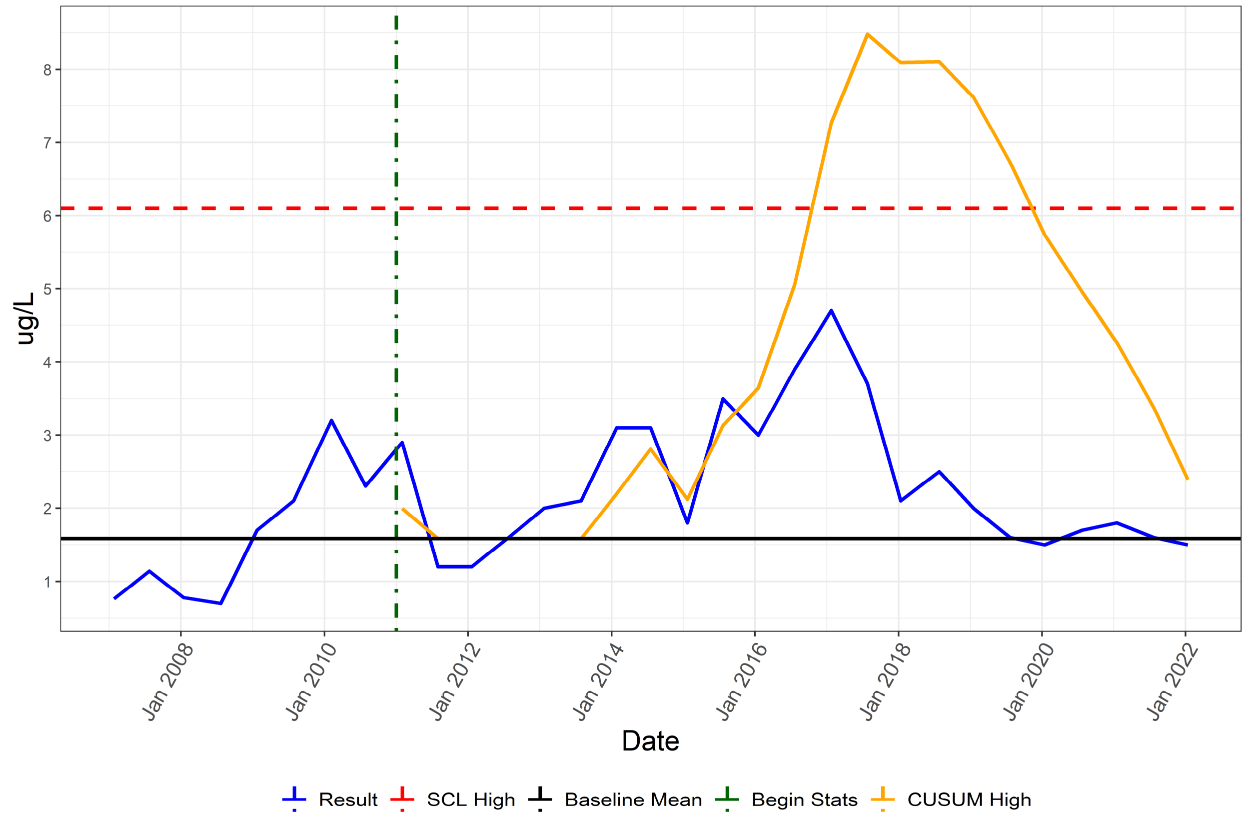


Perfluorohexane Sulfonic Acid

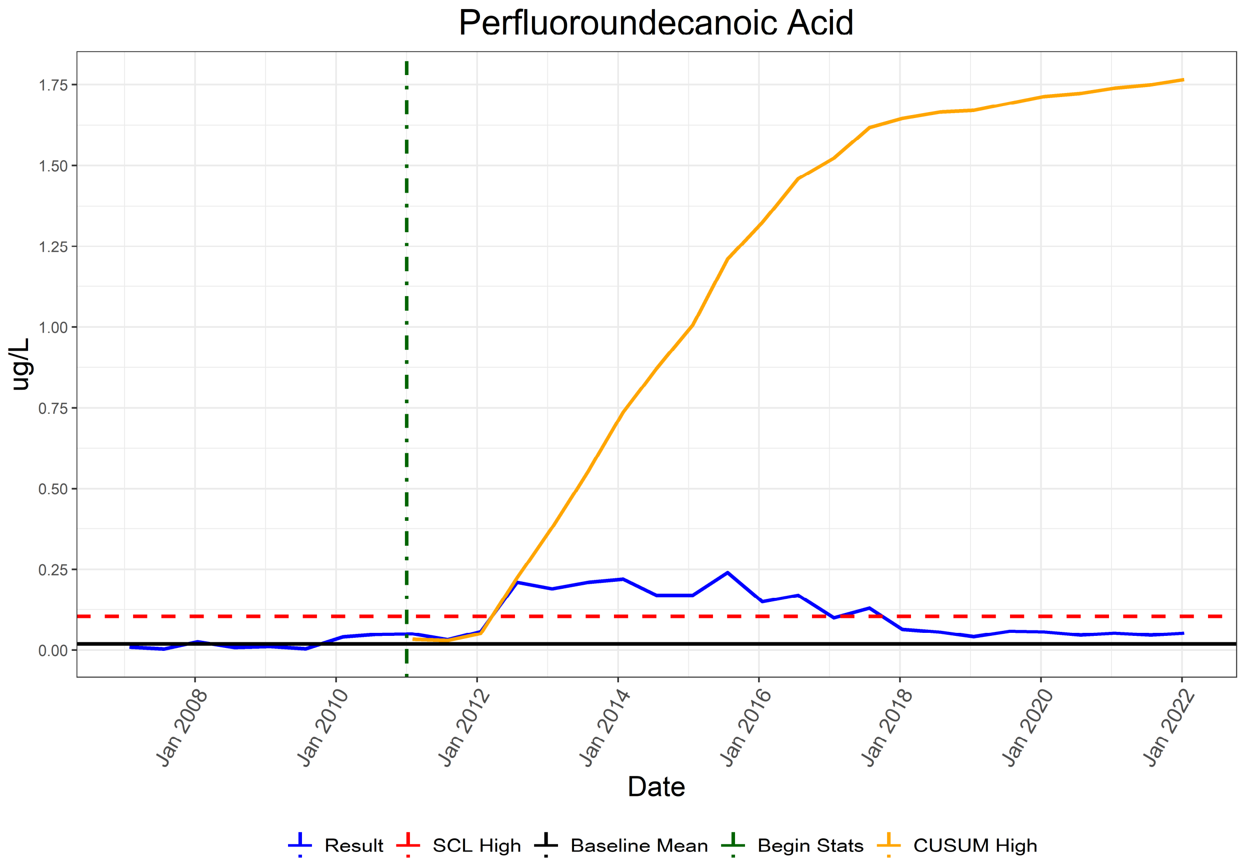


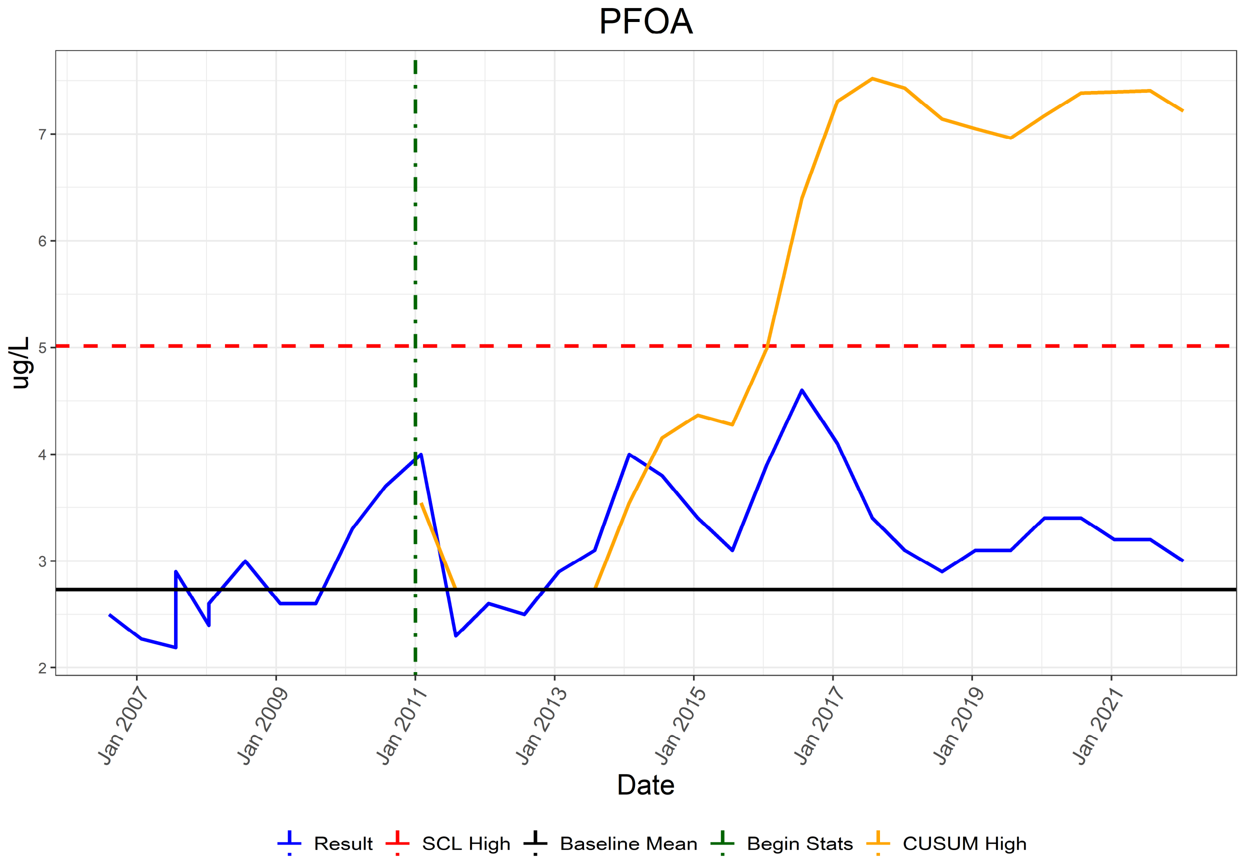


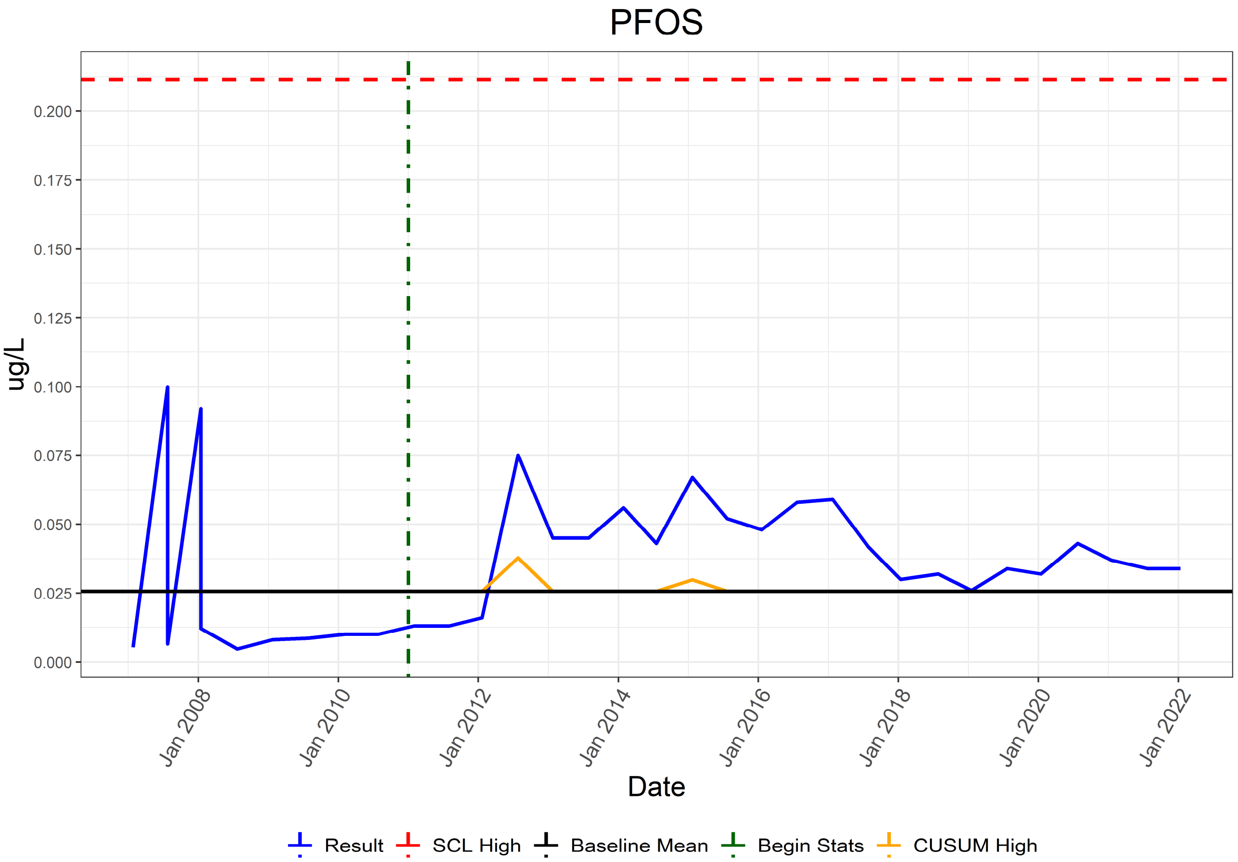
Perfluorononanoic Acid



Perfluoropentanoic Acid

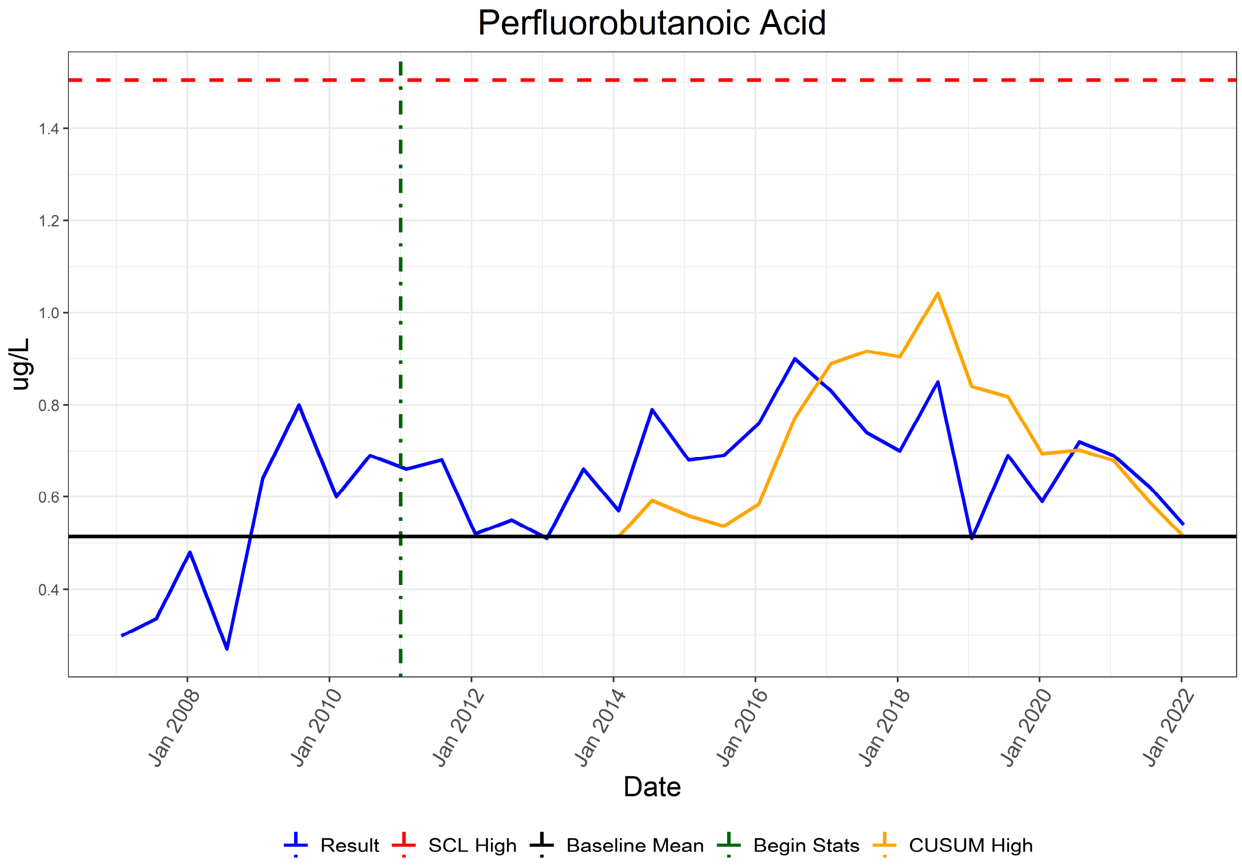

Perfluoroundecanoic Acid
ug/L
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

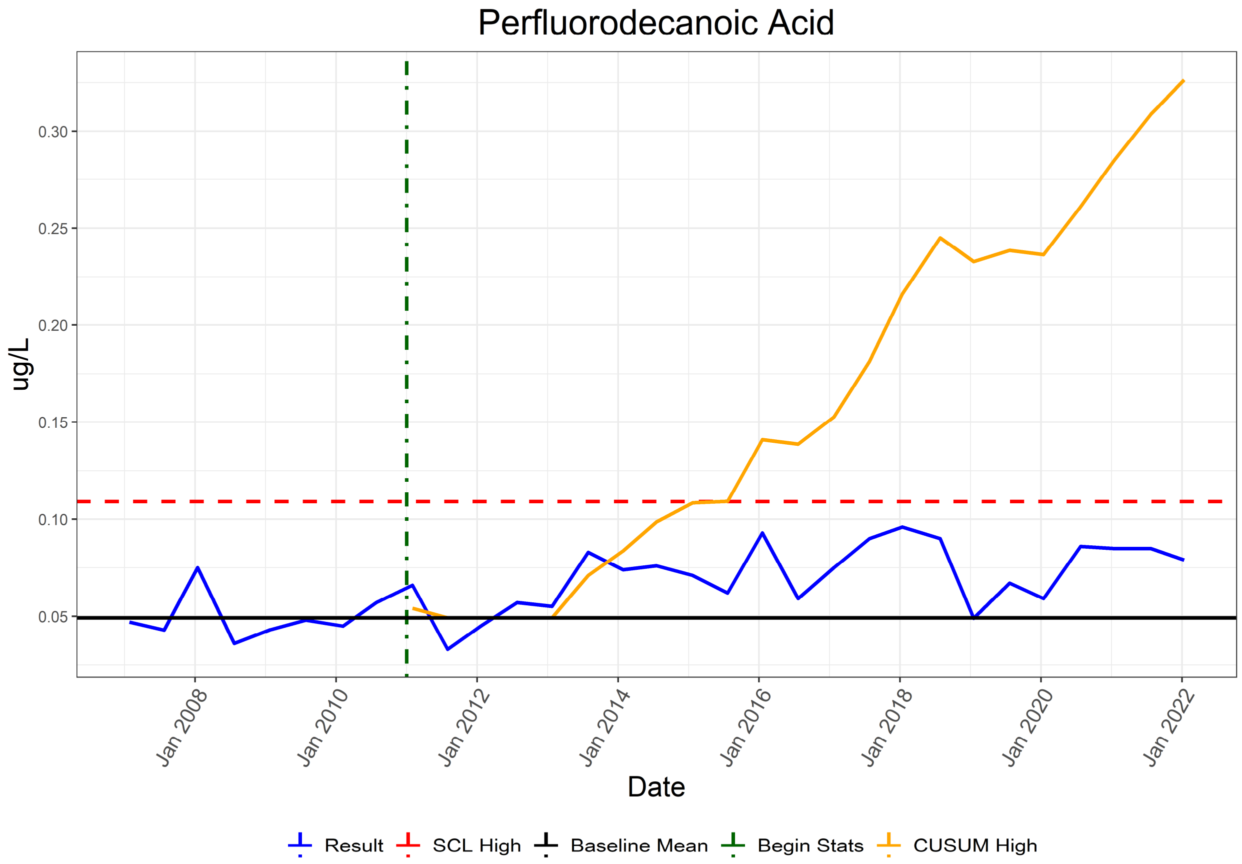

PFOA
ug/L
7
6
5
4
3
2
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOS
ug/L
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

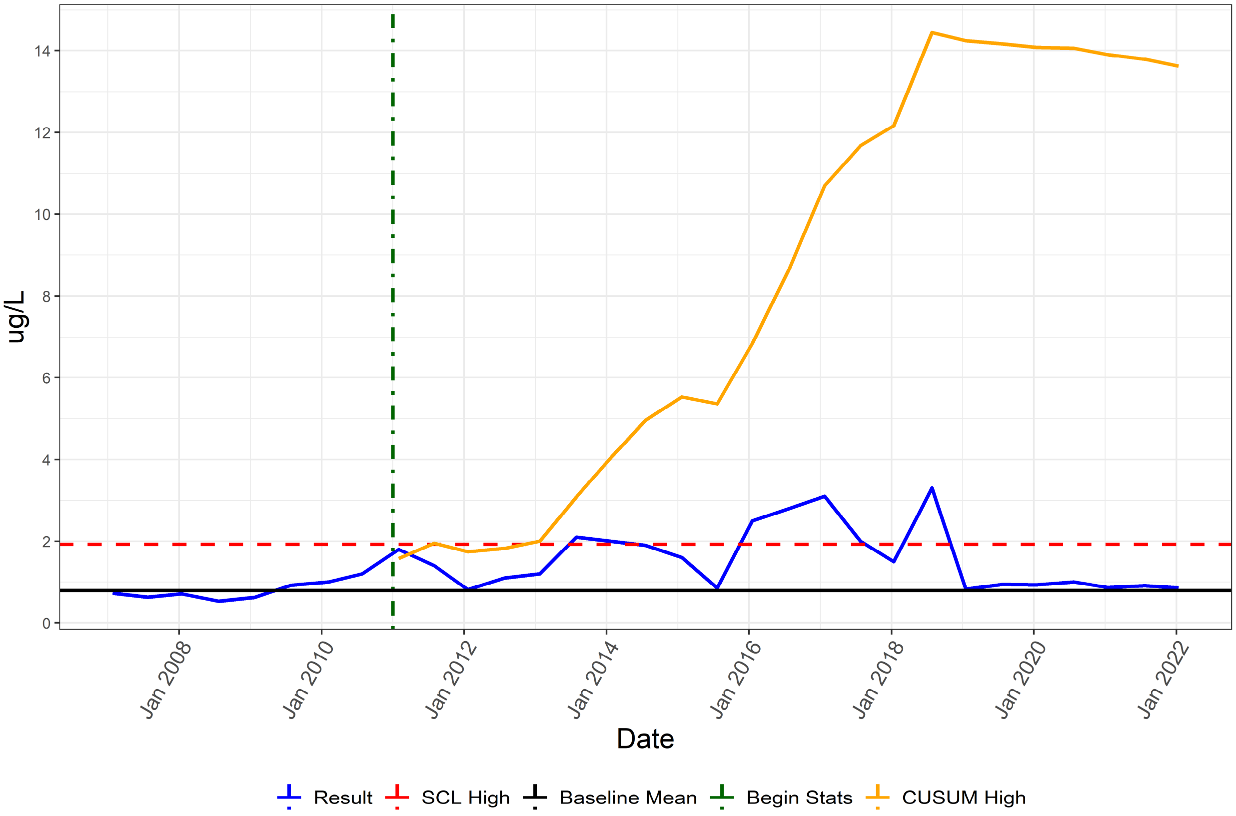
PFAS Monitoring Program (Program 9)

Well Name: N08-M01D

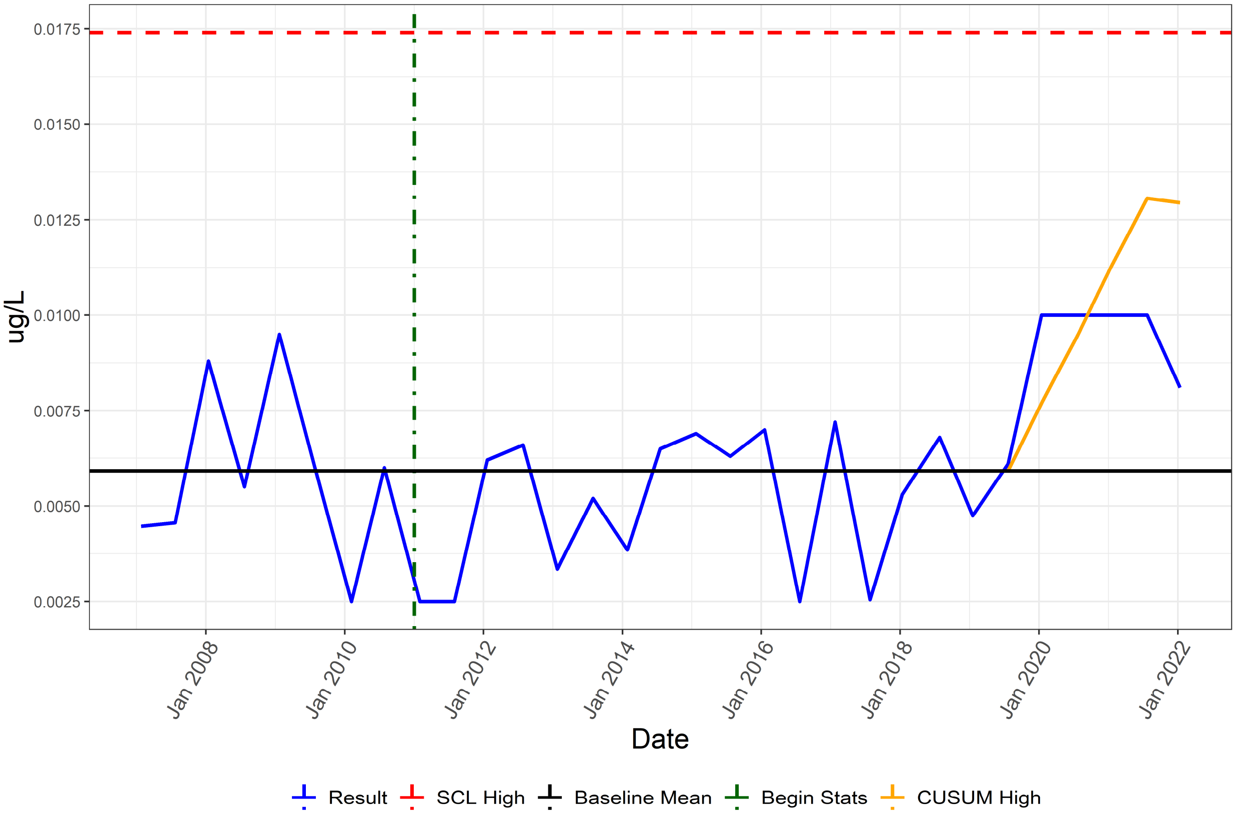


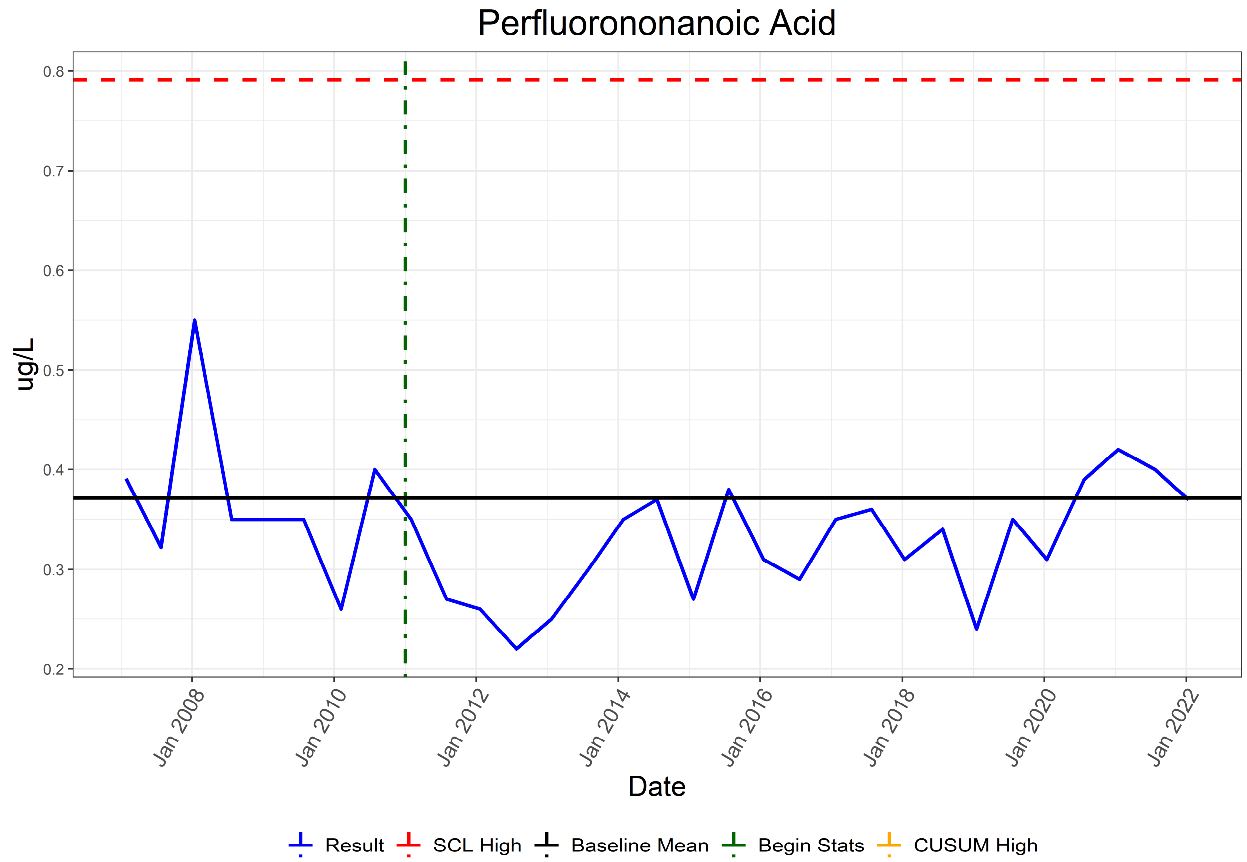


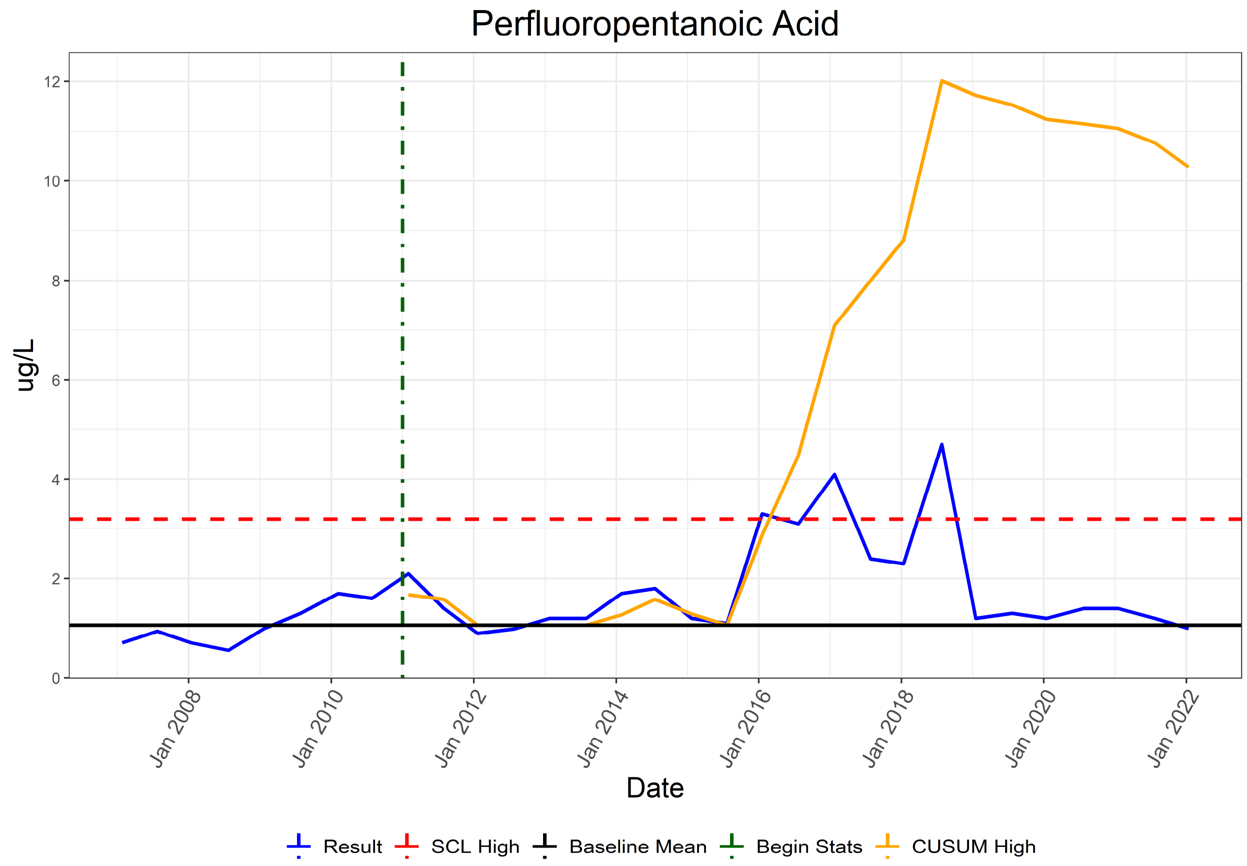
Perfluoroheptanoic Acid

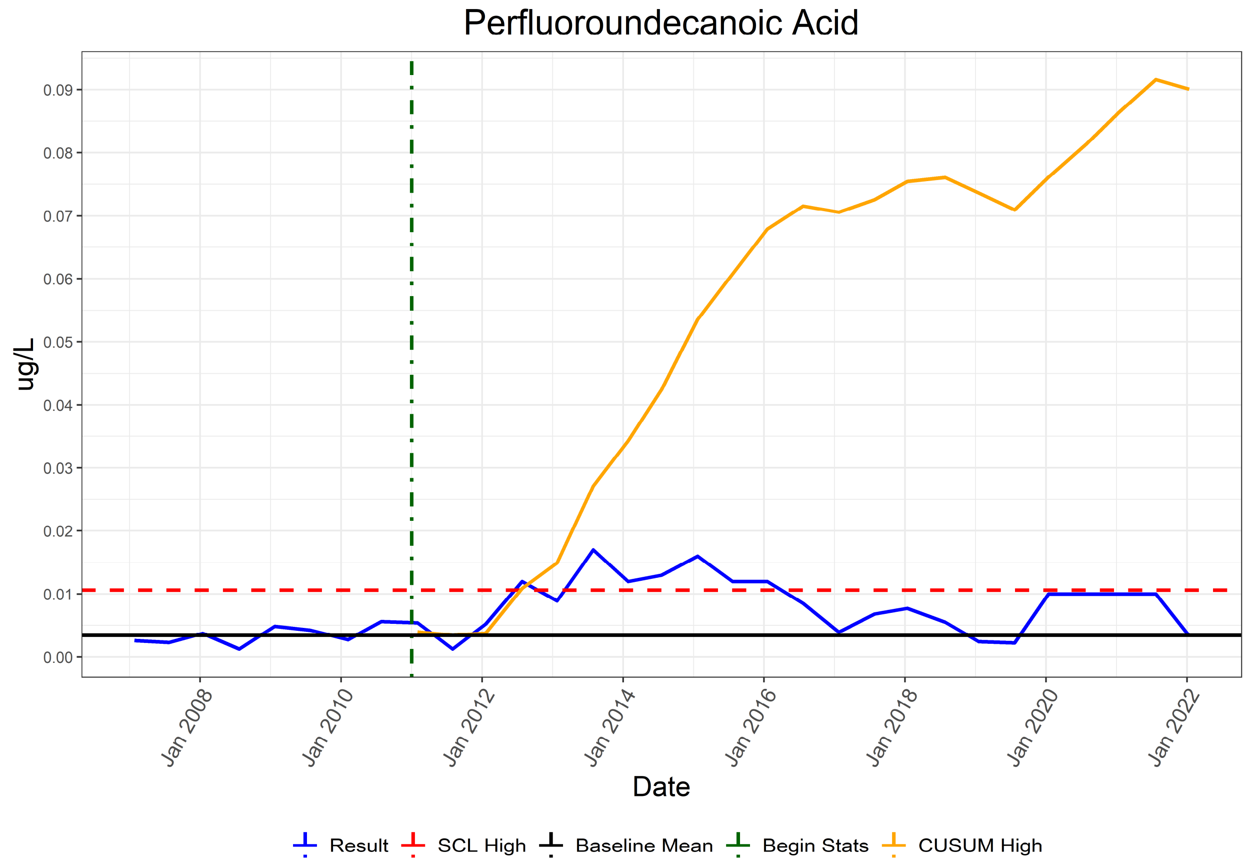


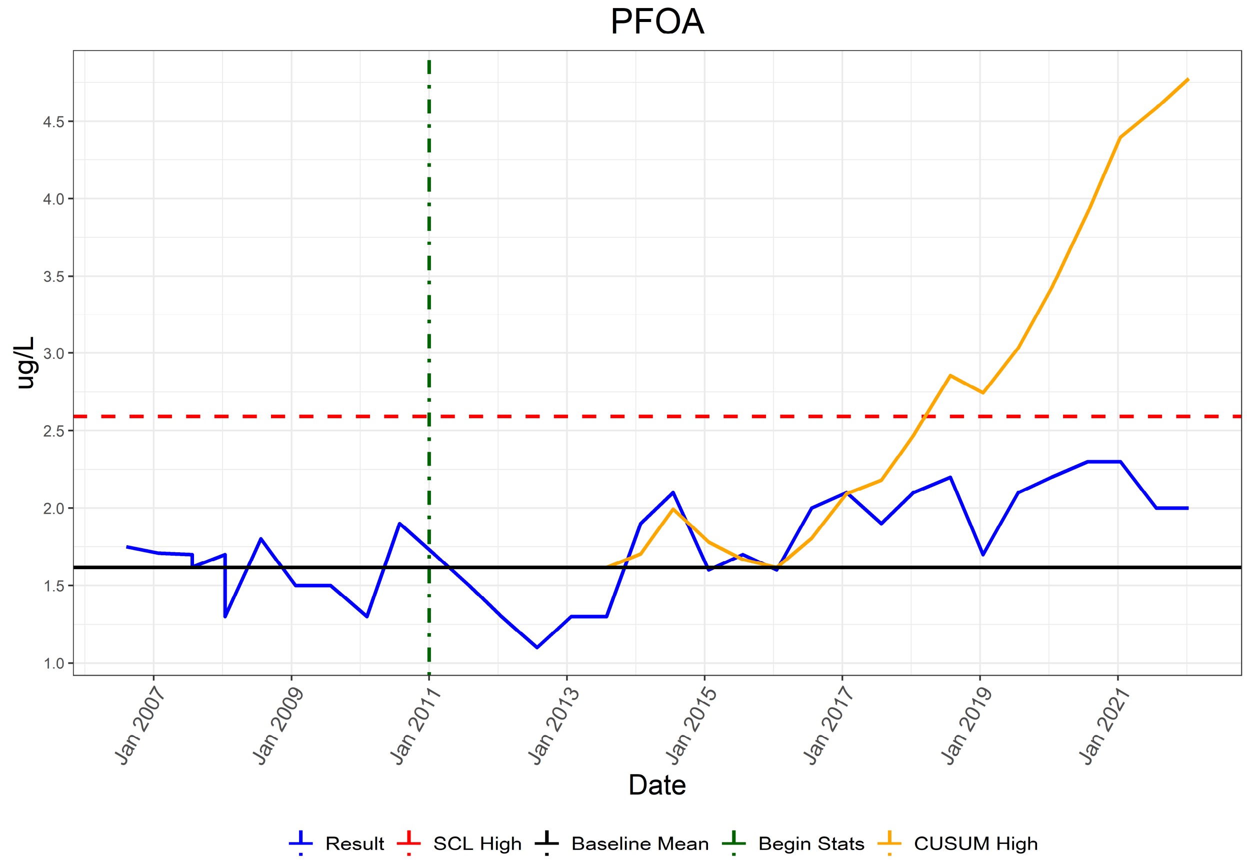
Perfluorohexane Sulfonic Acid

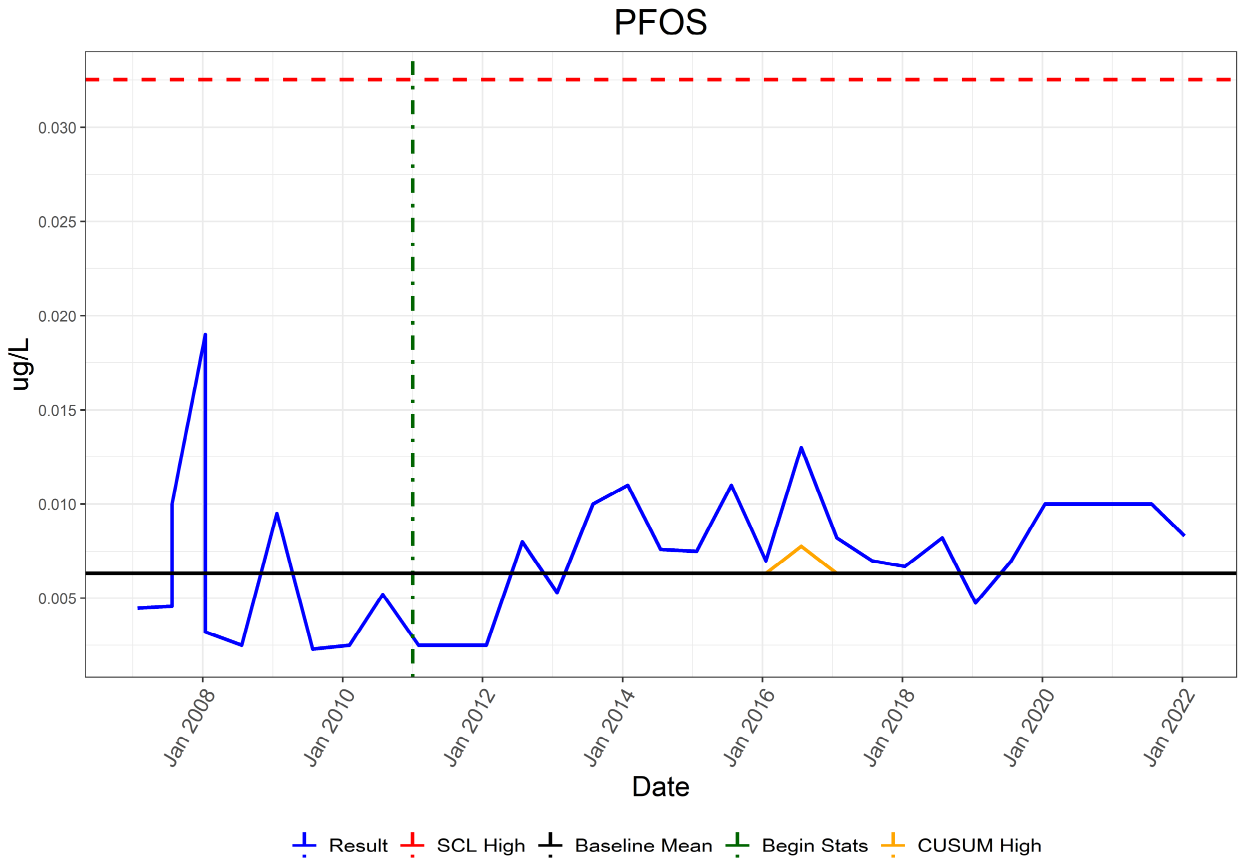



Perfluorononanoic Acid
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoropentanoic Acid
ug/L
12
10
8
6
4
2
0
Date
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

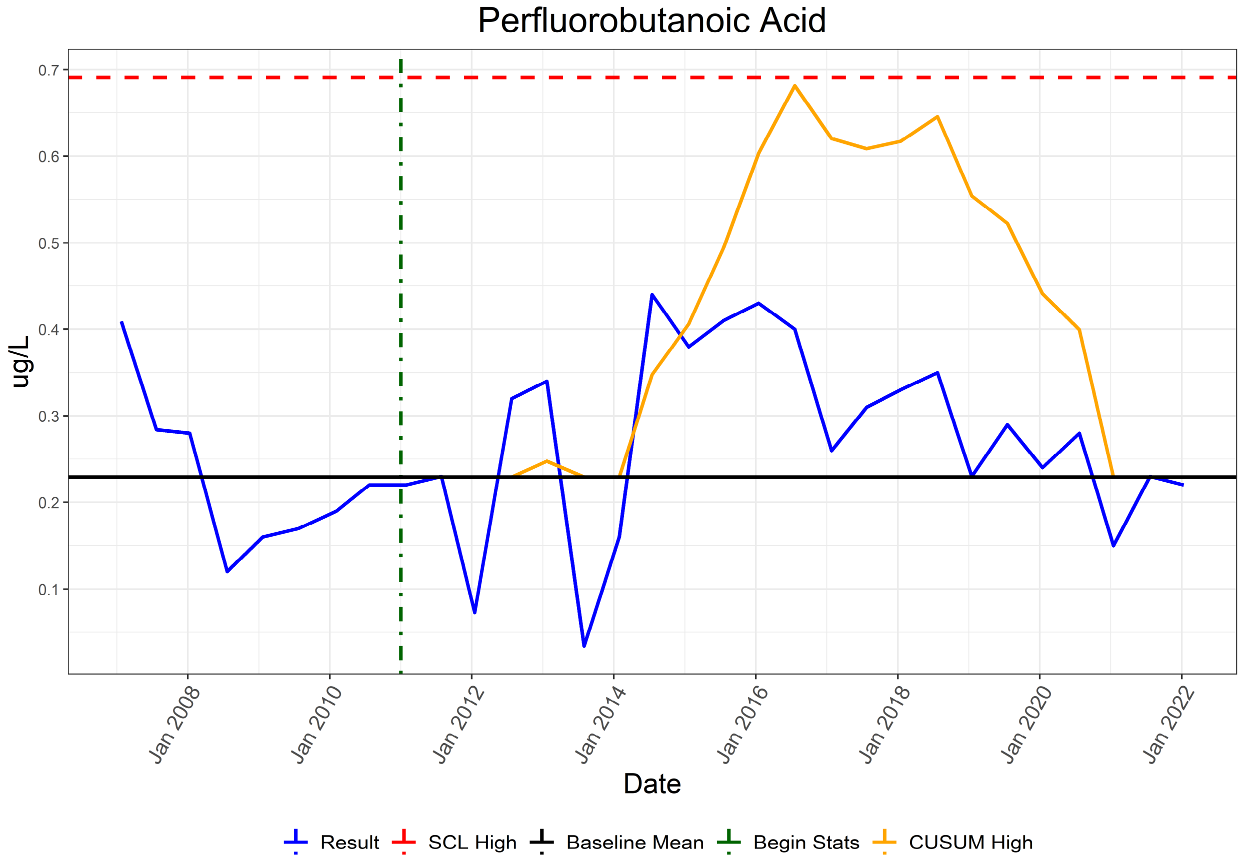

Perfluoroundecanoic Acid
ug/L
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

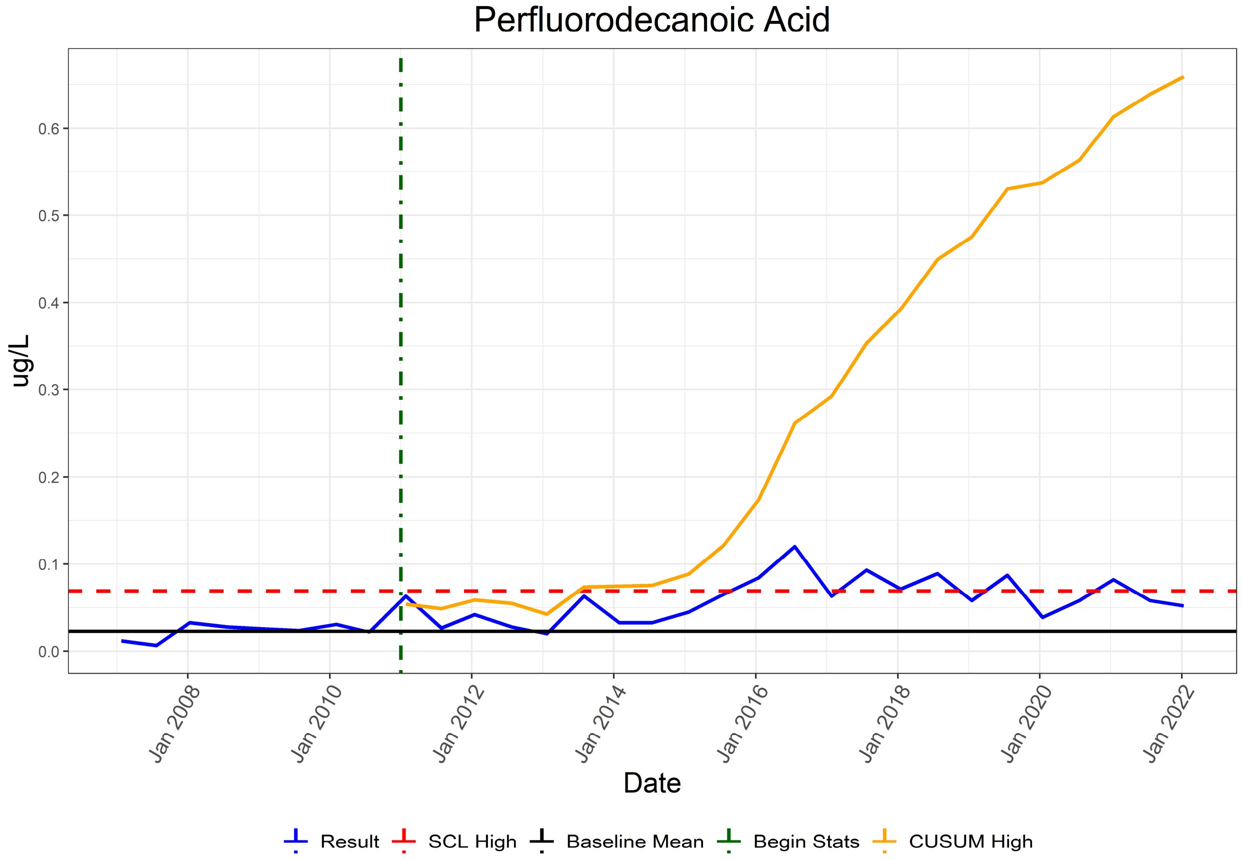

PFOA
ug/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

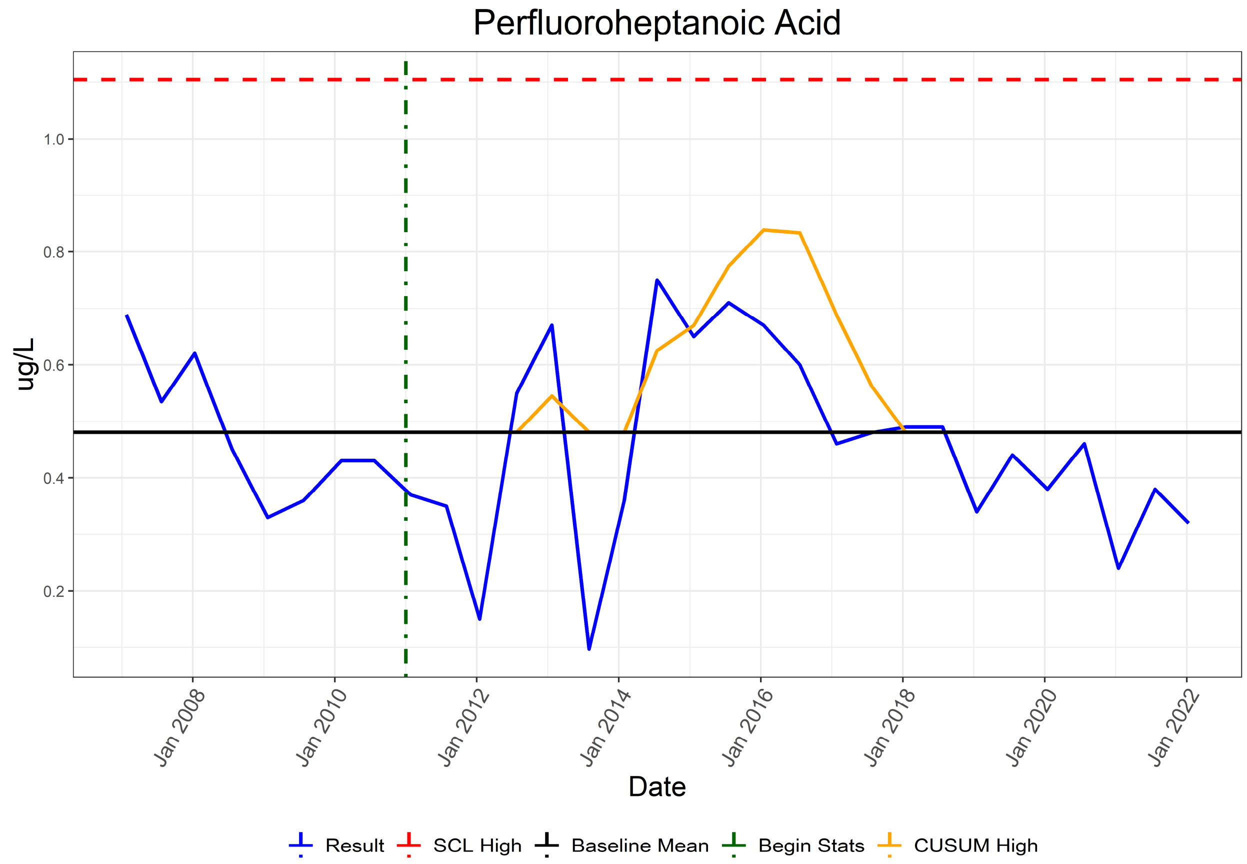

PFOS
ug/L
0.030
0.025
0.020
0.015
0.010
0.005
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

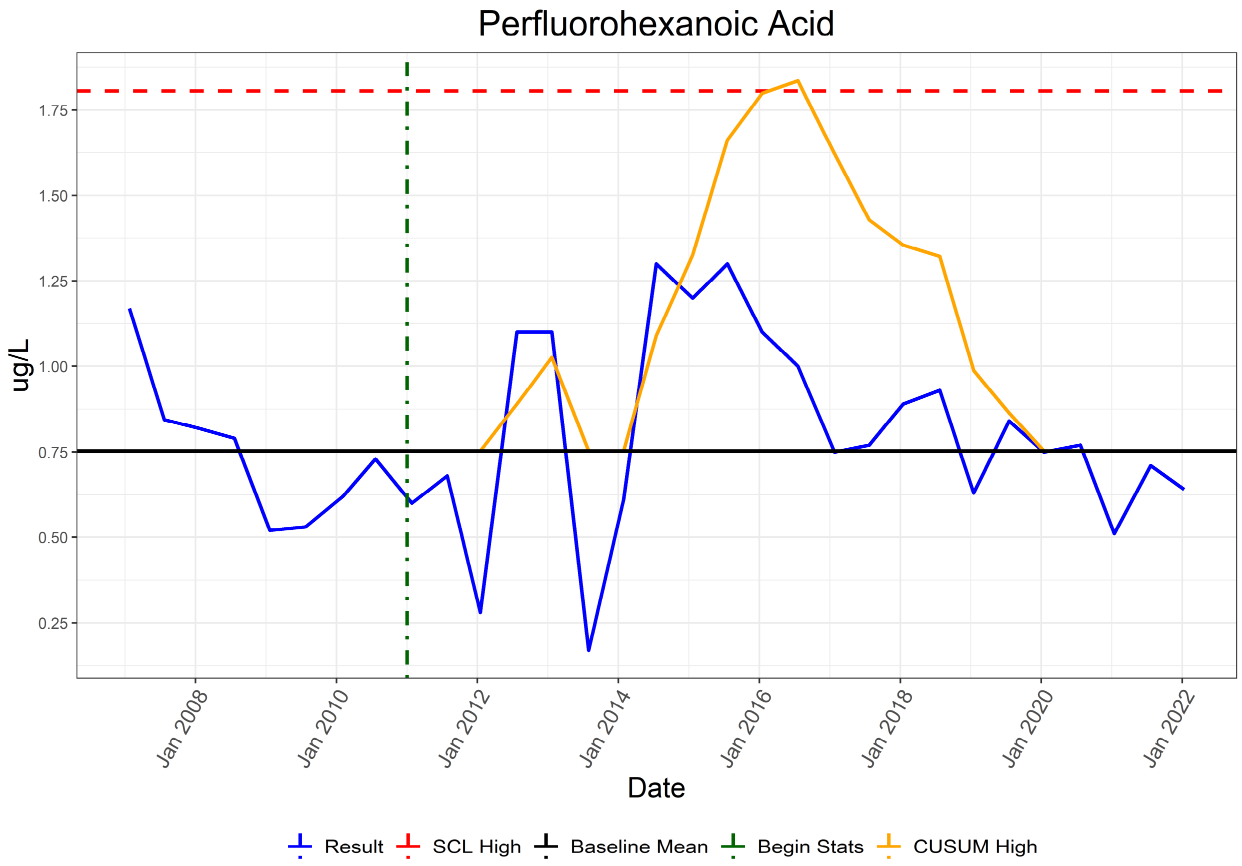
PFAS Monitoring Program (Program 9)

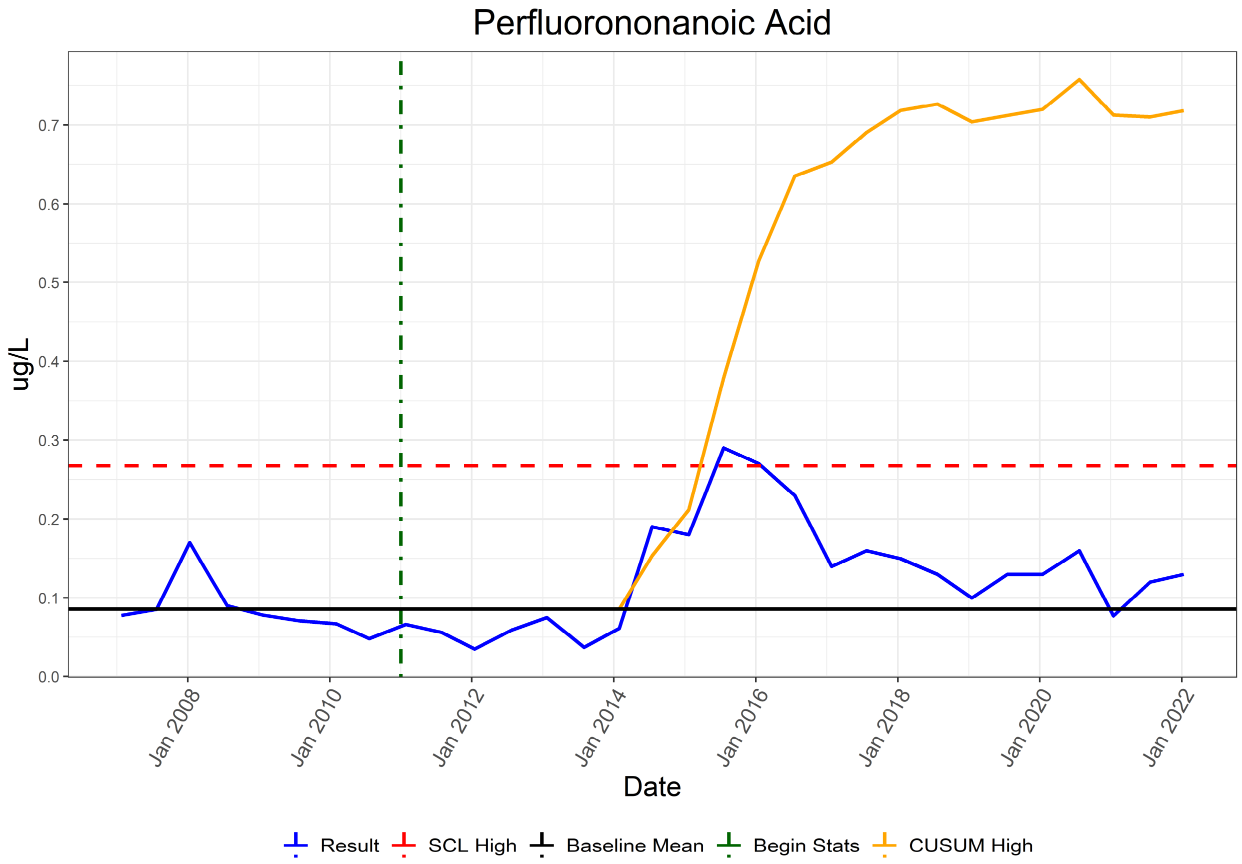
Well Name: P06-M01B

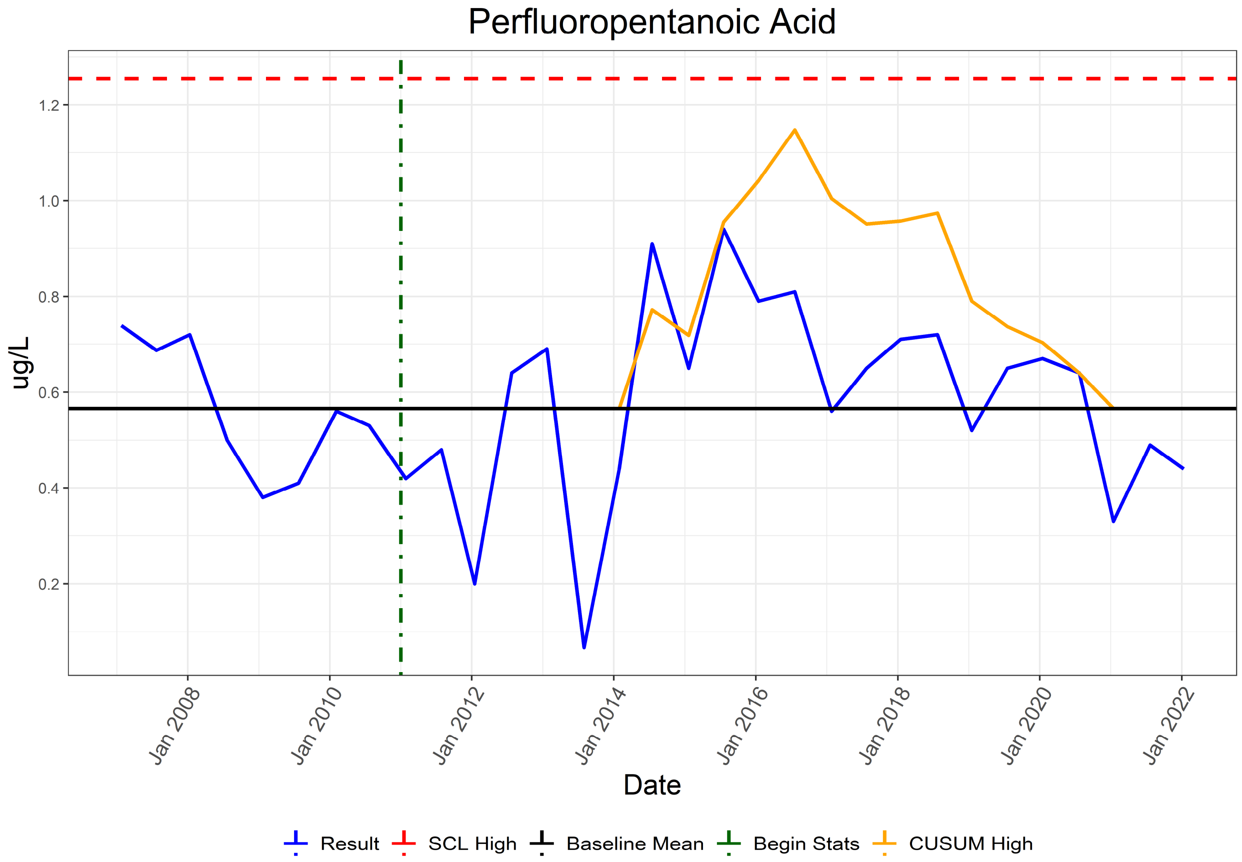




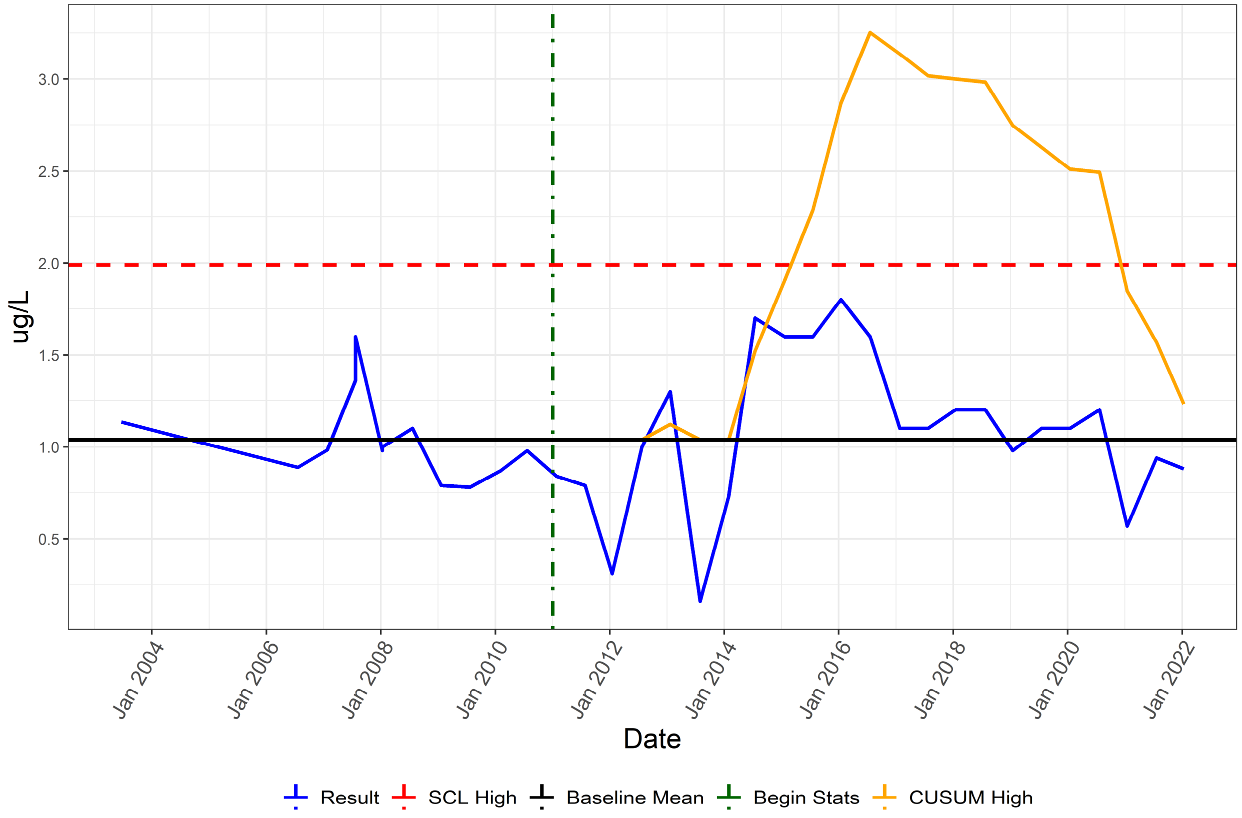

Perfluoroheptanoic Acid
ug/L
1.0
0.8
0.6
0.4
0.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
1.75
1.50
1.25
1.00
0.75
0.50
0.25
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoropentanoic Acid
ug/L
0.2
0.4
0.6
0.8
1.0
1.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

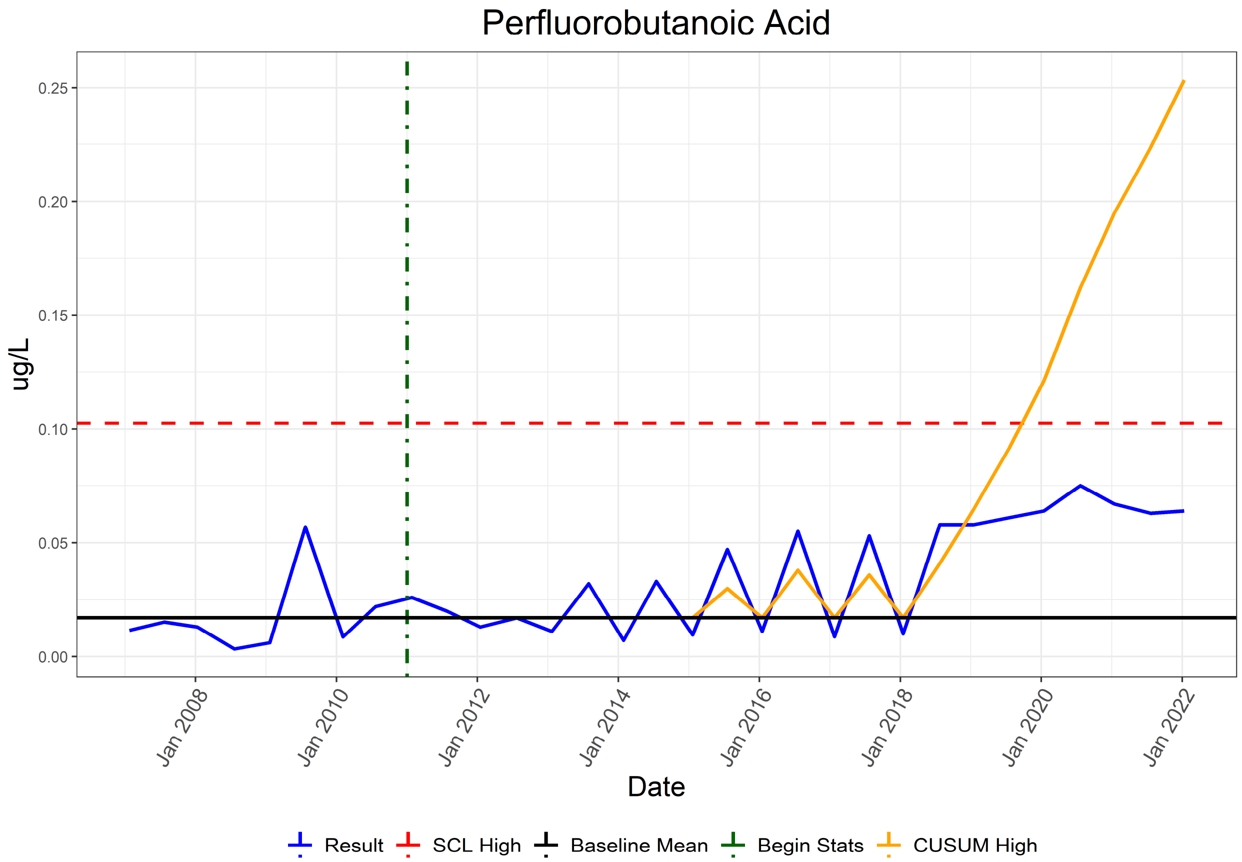
PFOA

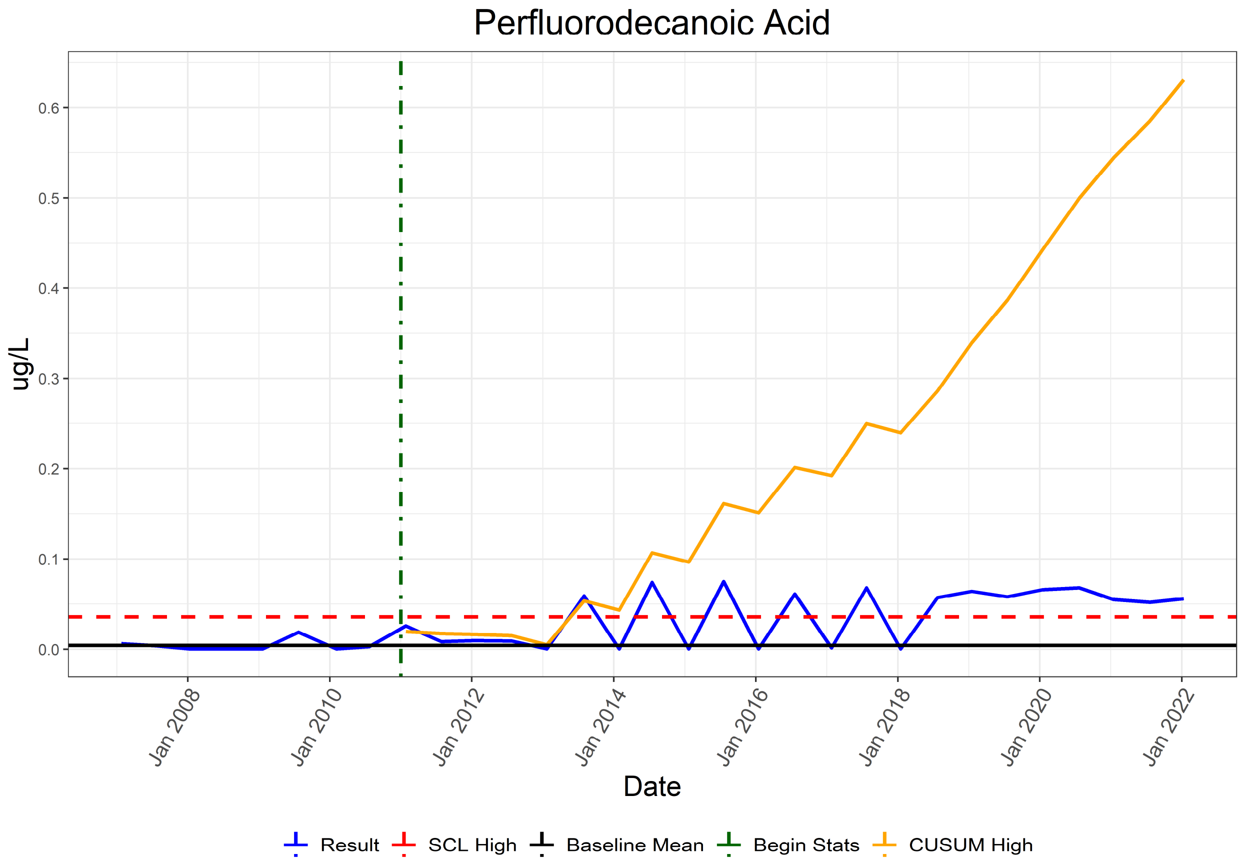


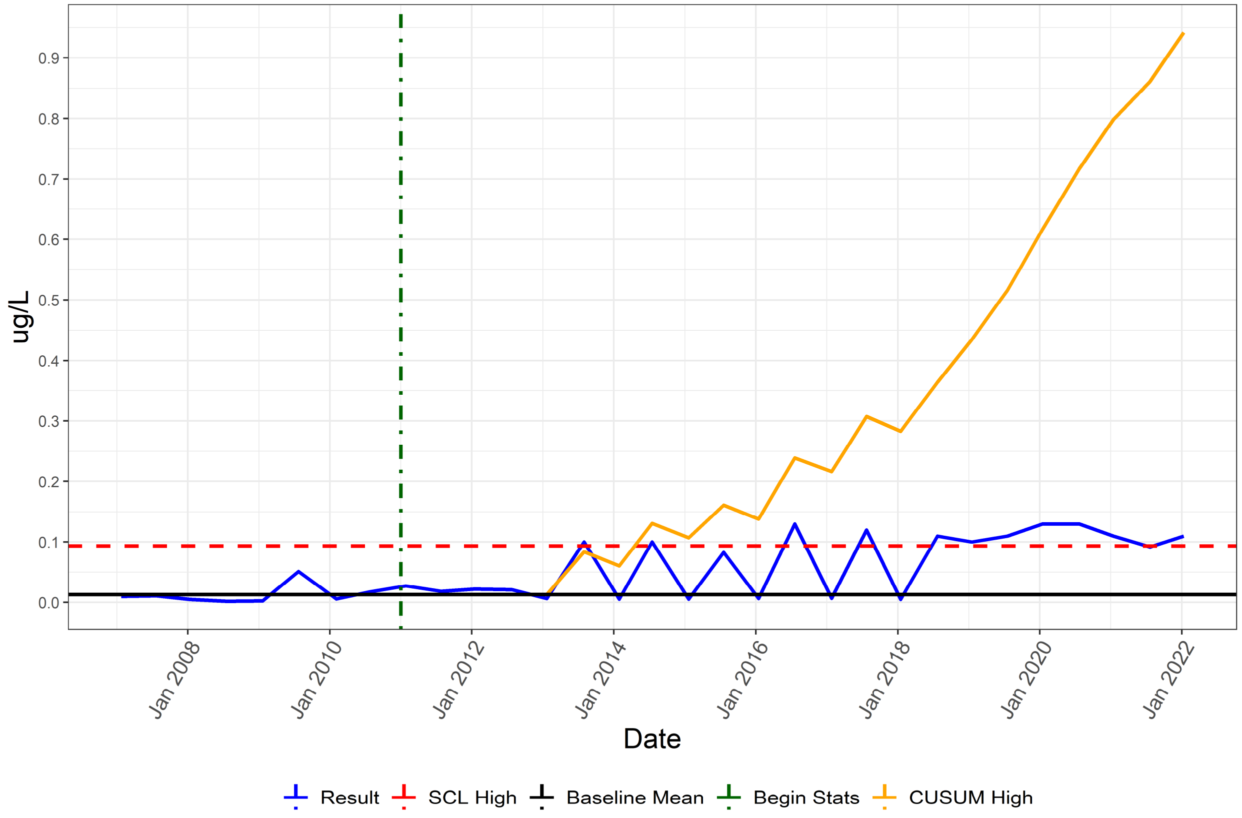
3.0
2.5
2.0
1.5
1.0
0.5
ug/L
Jan 2004
Jan 2006
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

PFAS Monitoring Program (Program 9)

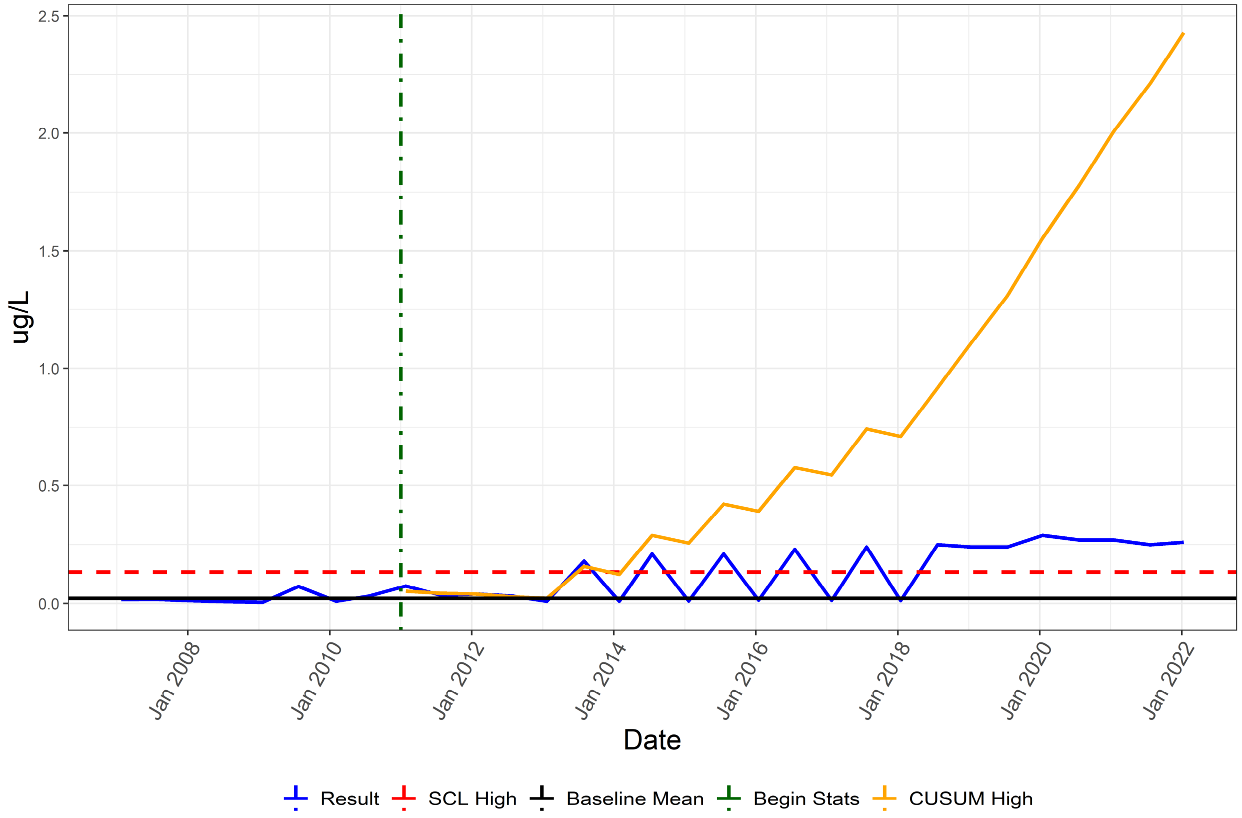
Well Name: P06-M01D



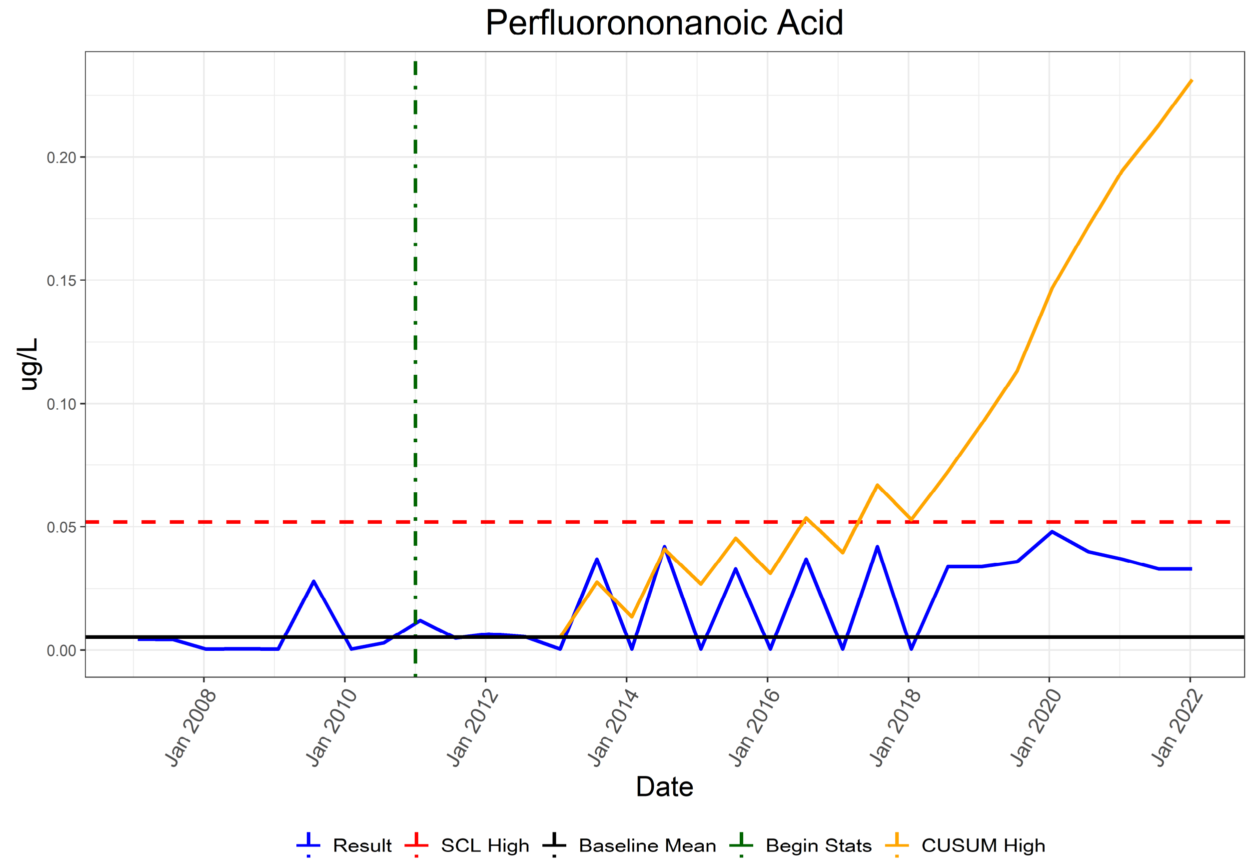


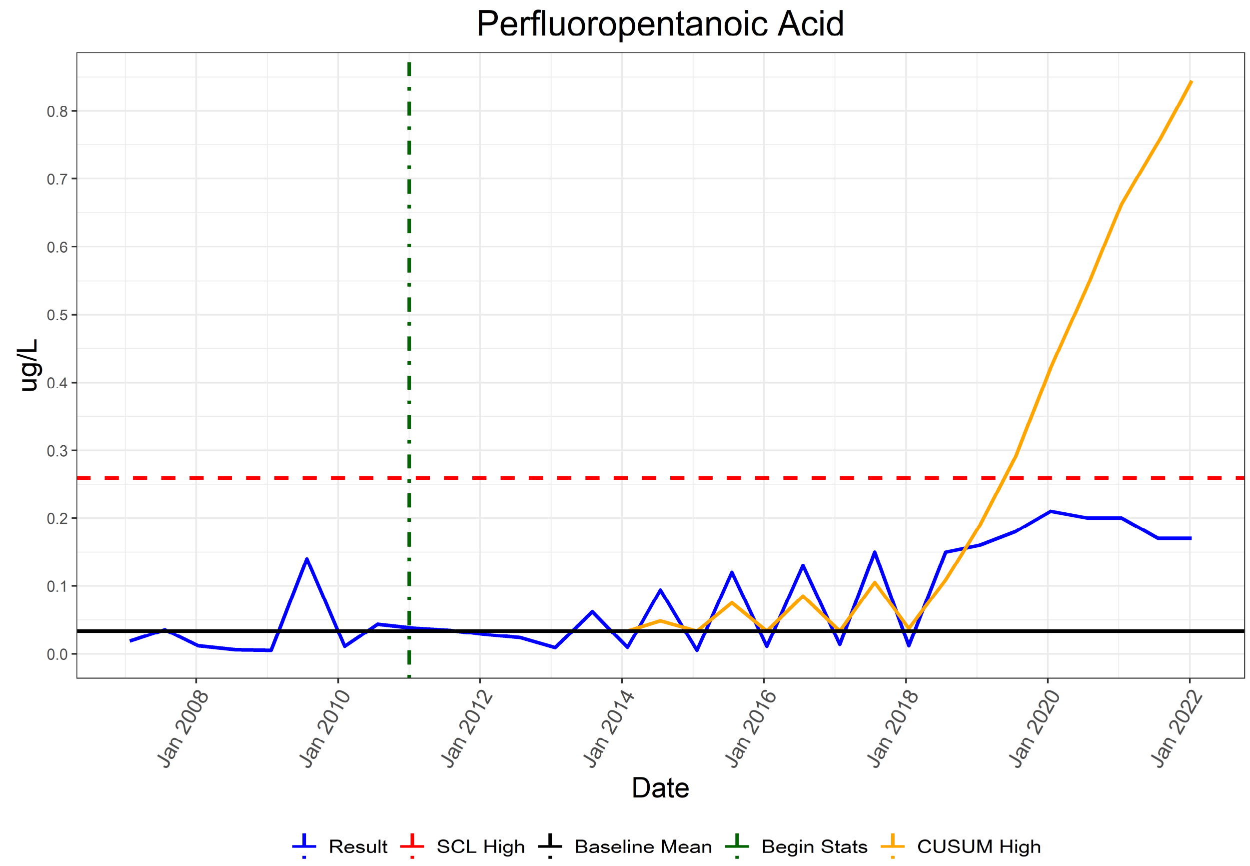


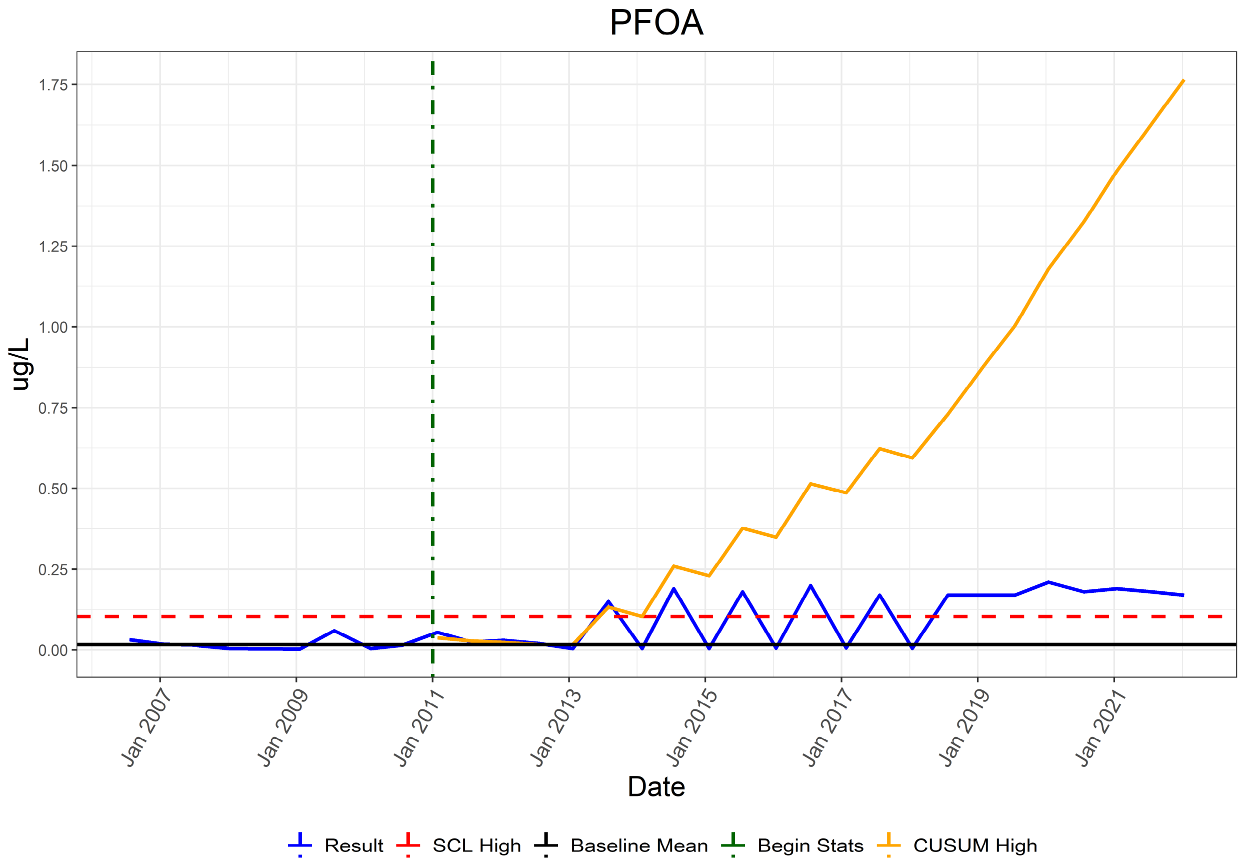
Perfluoroheptanoic Acid



Perfluorohexanoic Acid

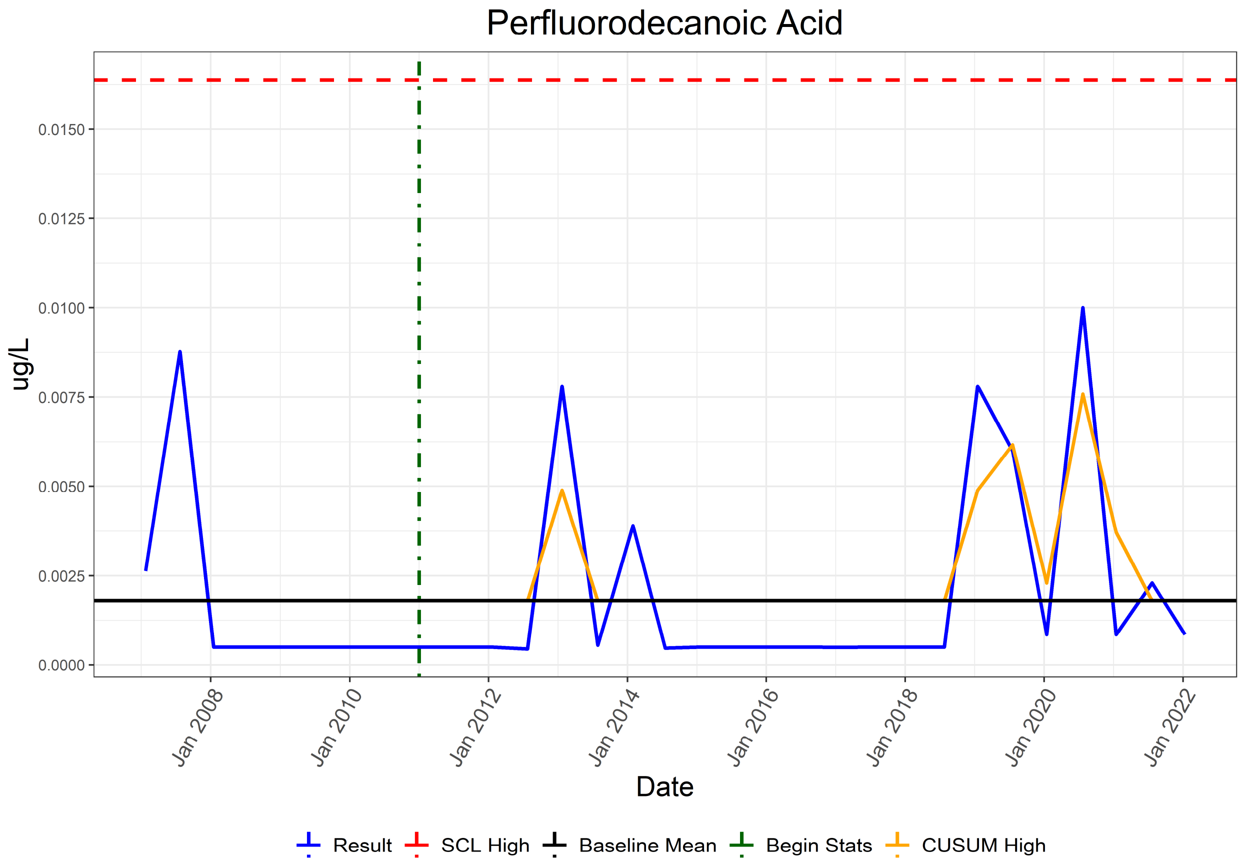

Perfluorononanoic Acid
ug/L
0.20
0.15
0.10
0.05
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

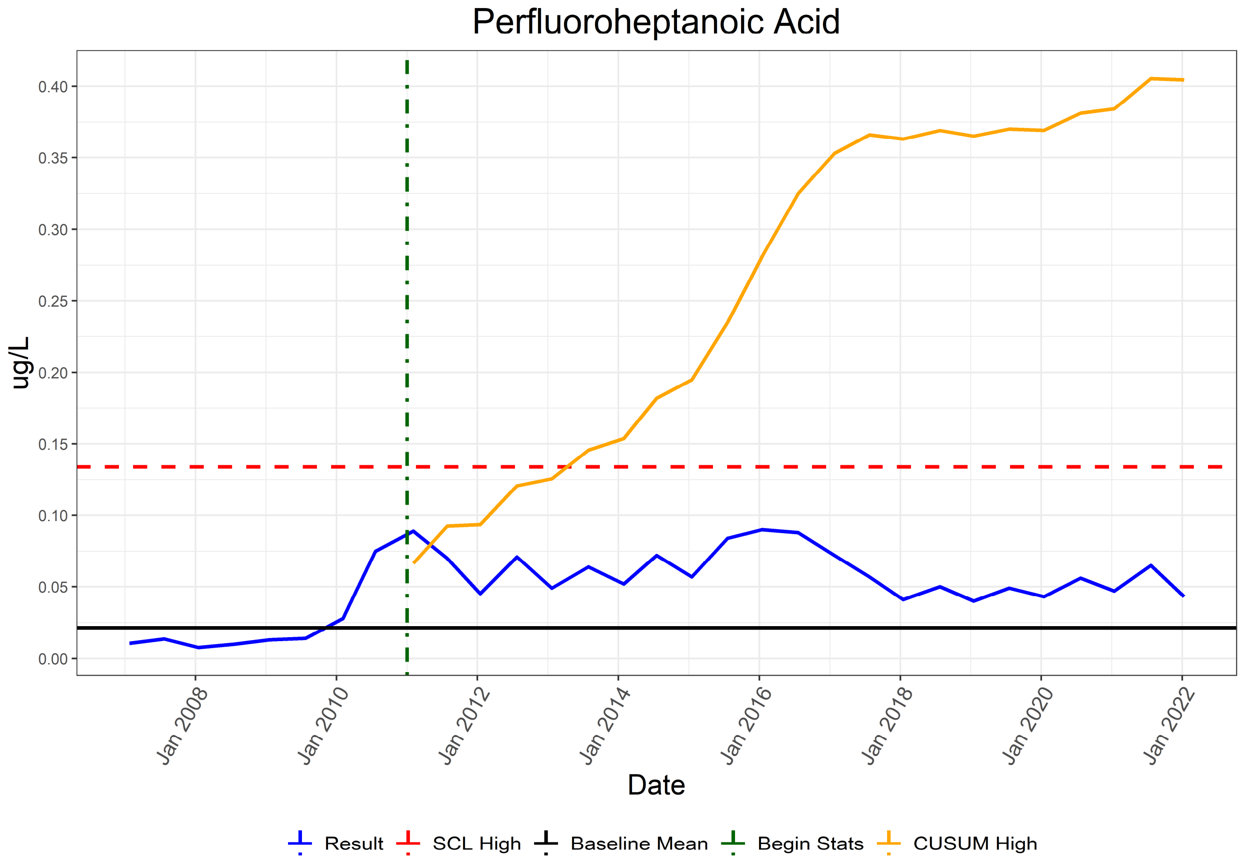

Perfluoropentanoic Acid
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

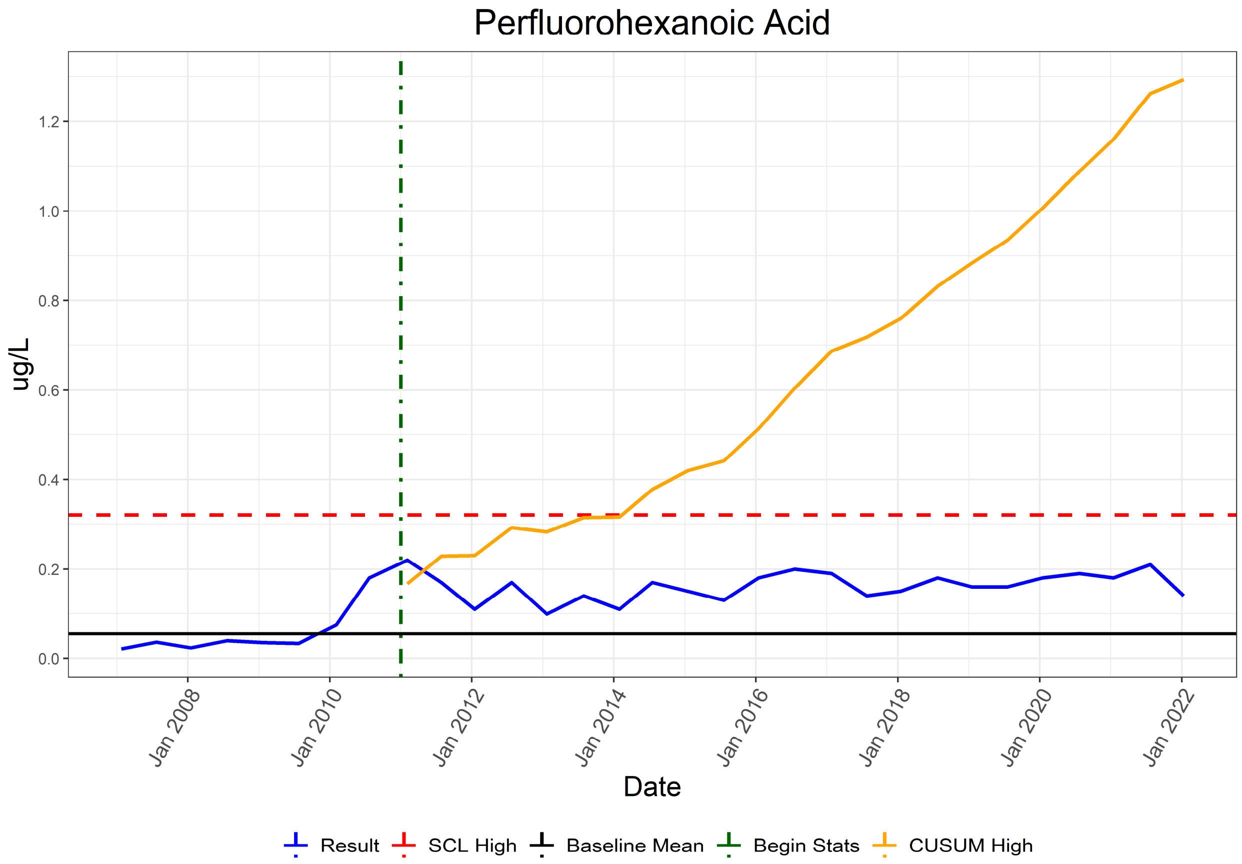

PFOA
ug/L
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

PFAS Monitoring Program (Program 9)

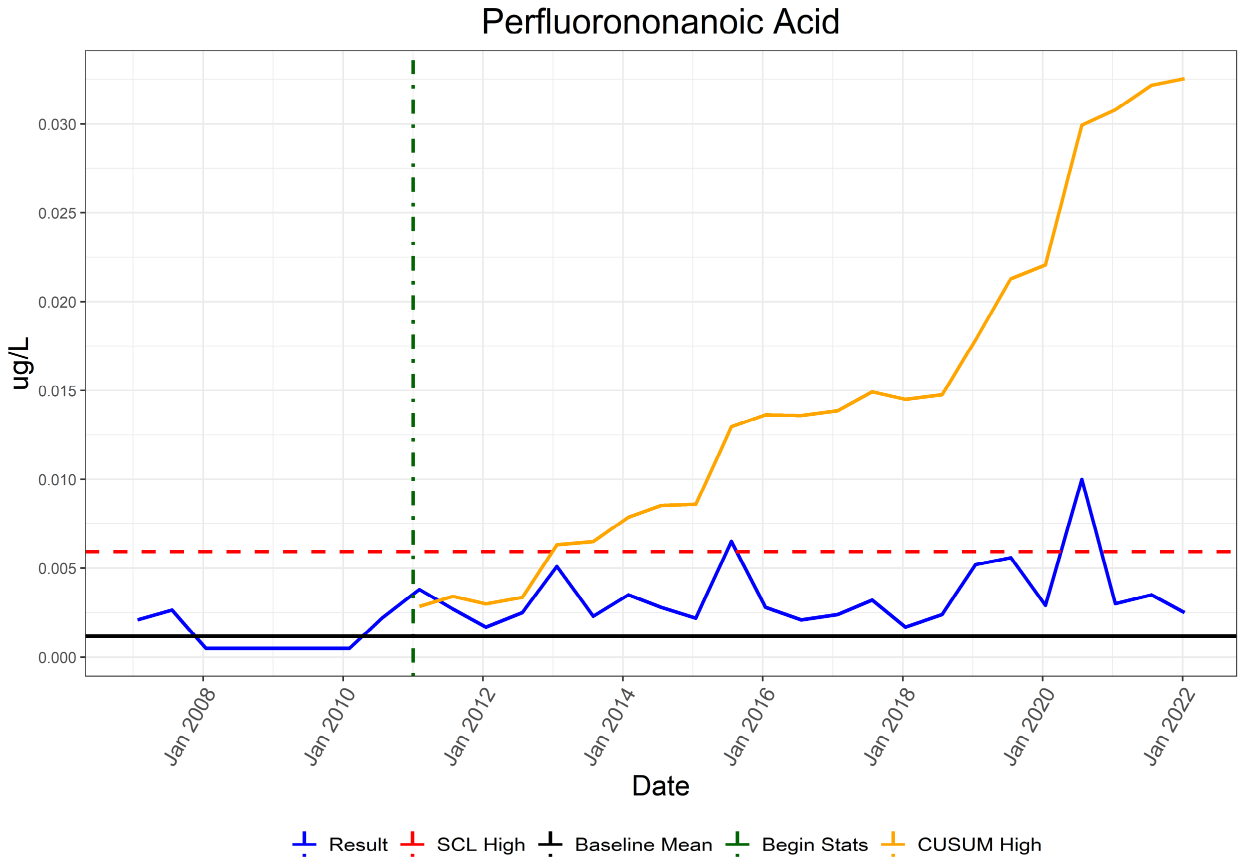
Well Name: P06-M01E



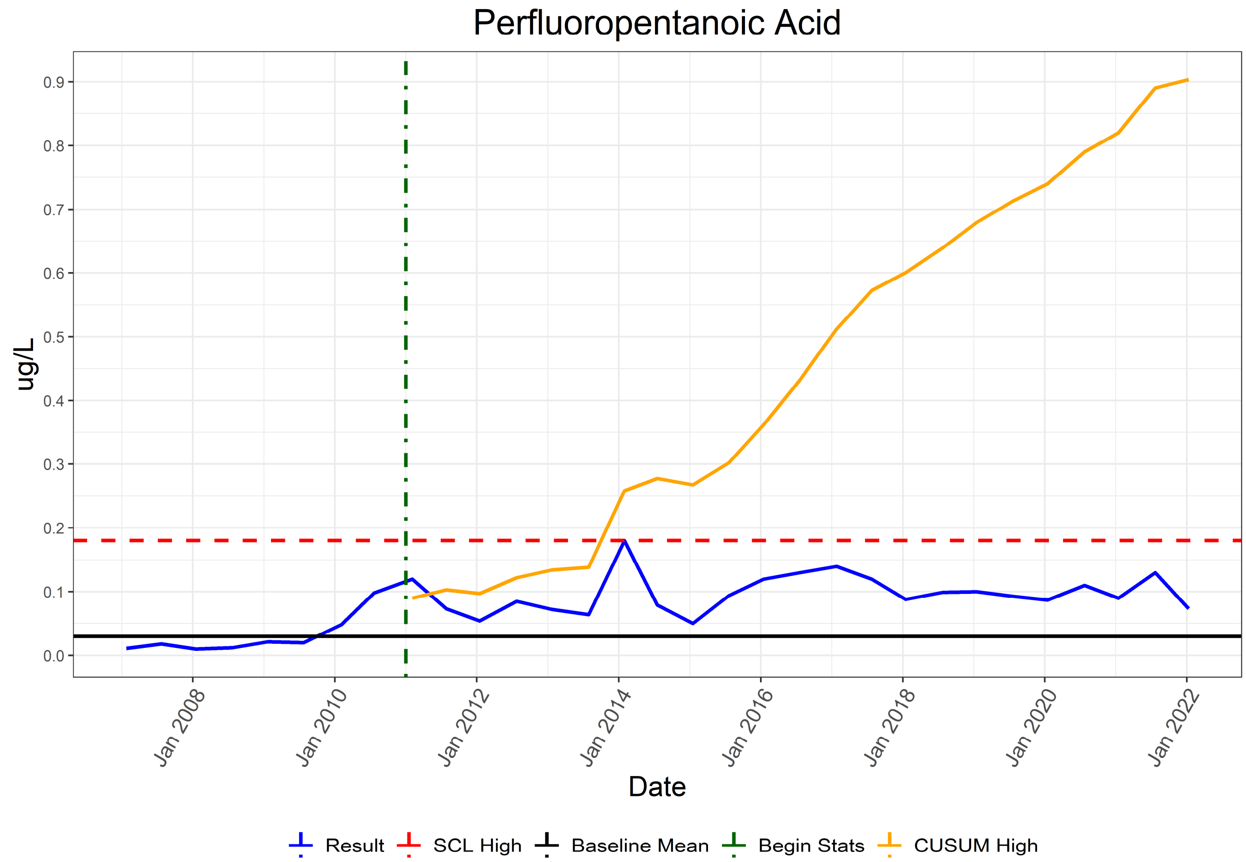


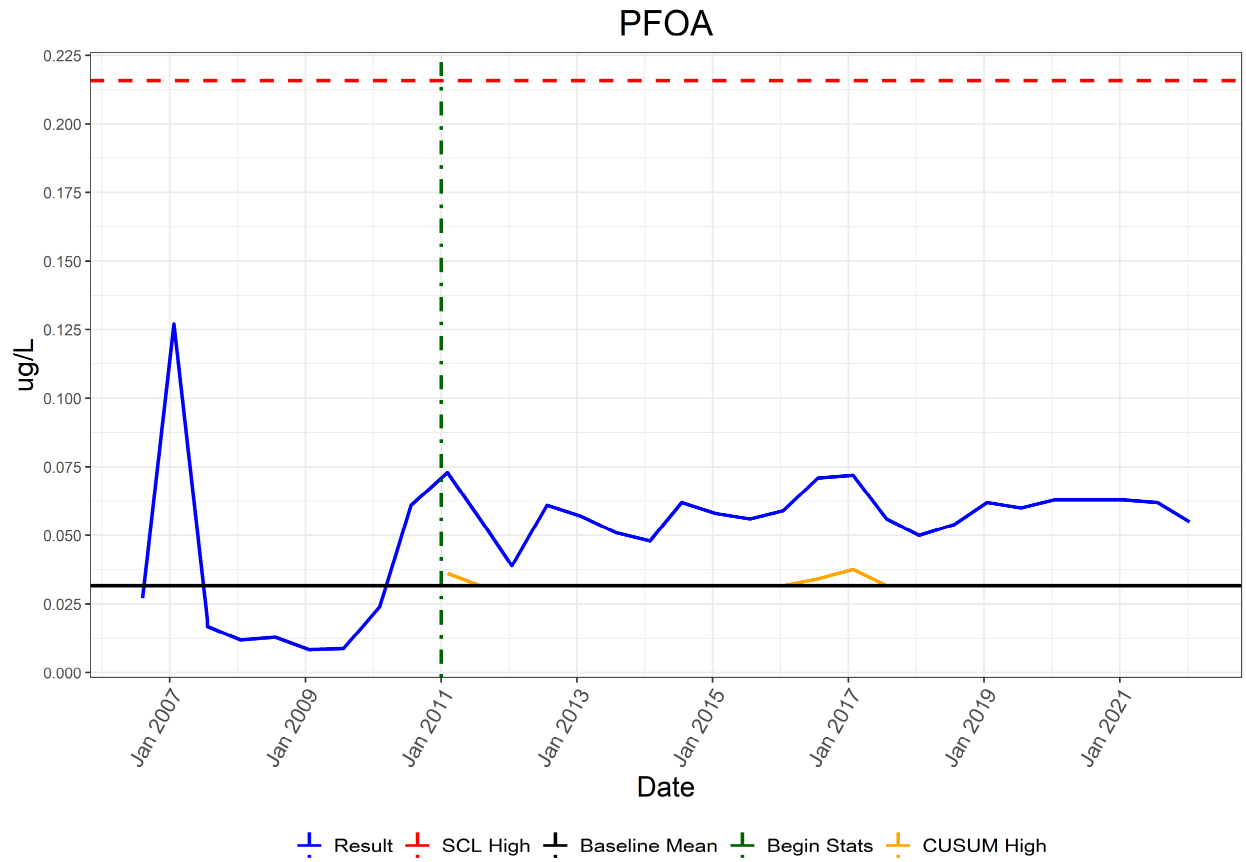


Perfluorohexanoic Acid



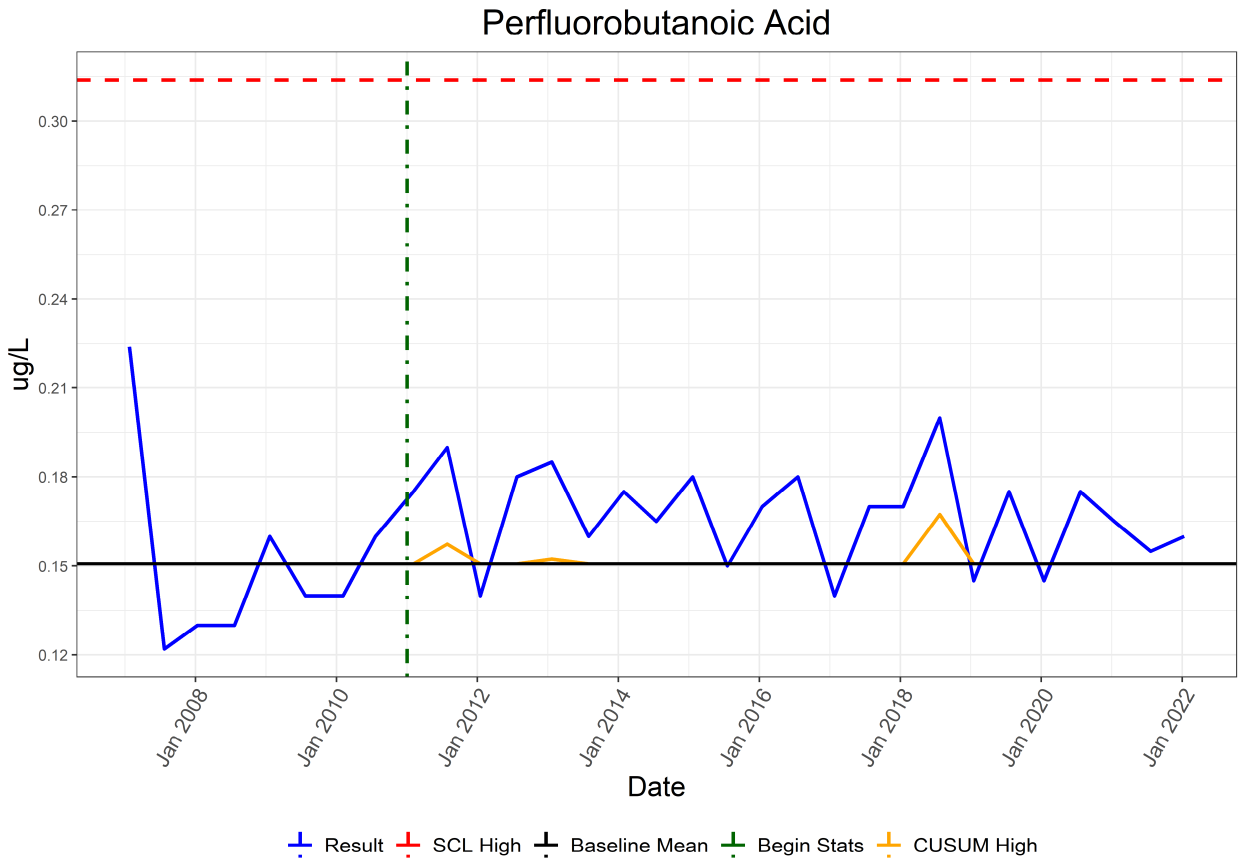
Perfluorononanoic Acid

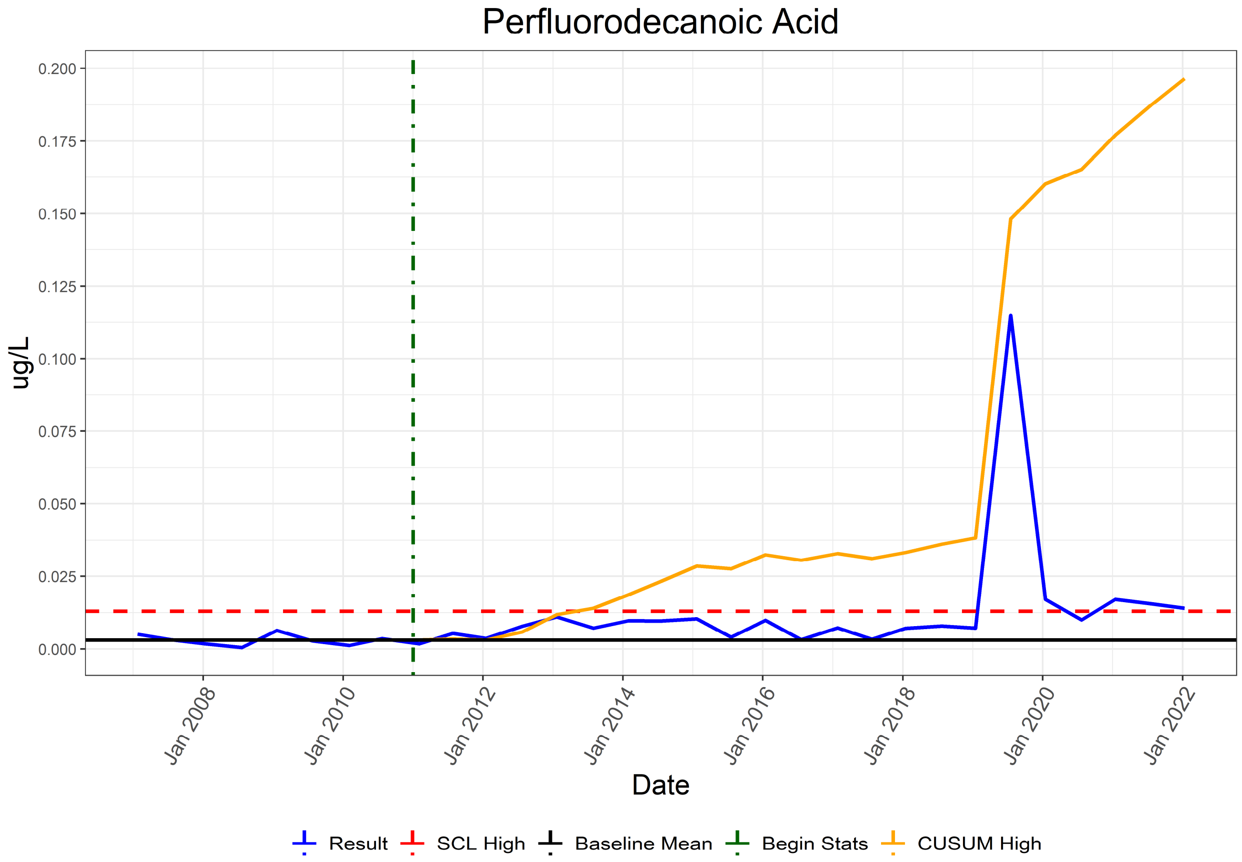

Perfluoropentanoic Acid
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
0.225
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

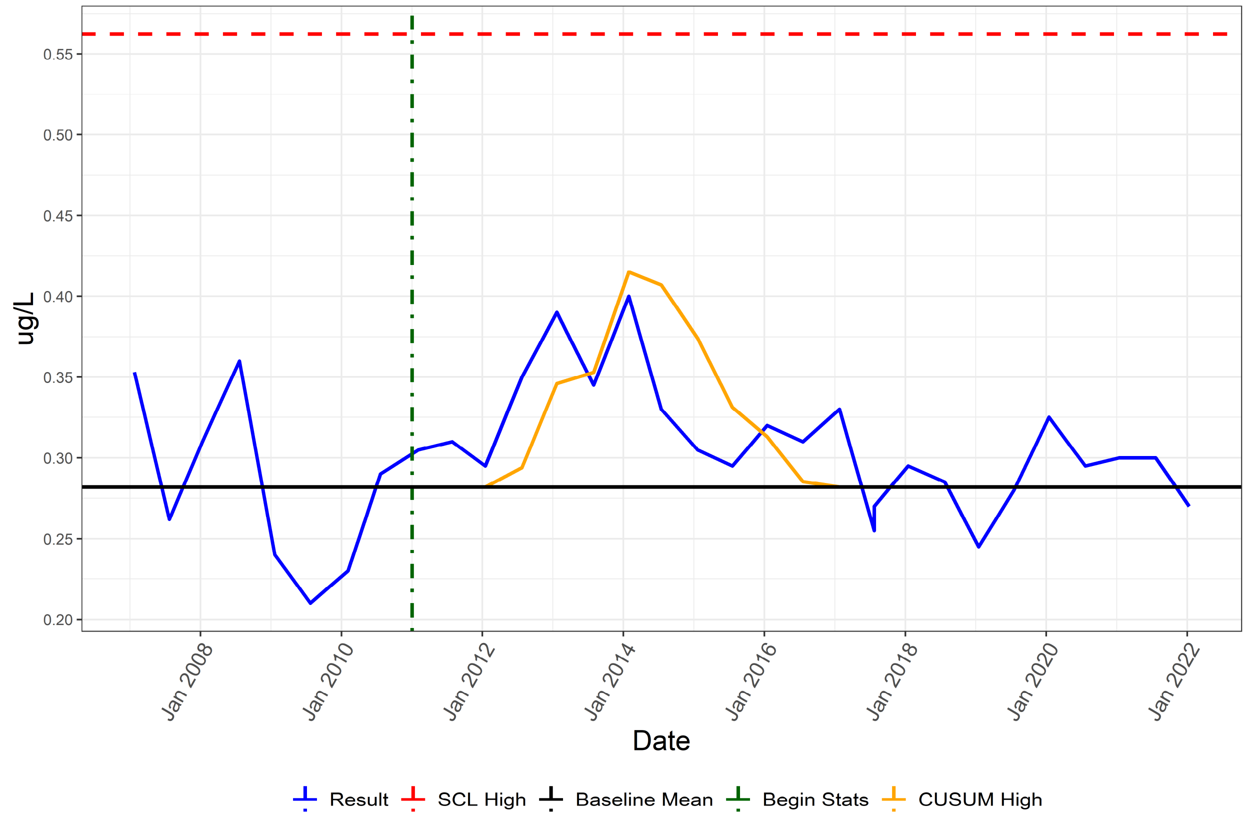
PFAS Monitoring Program (Program 9)

Well Name: P06-M02C

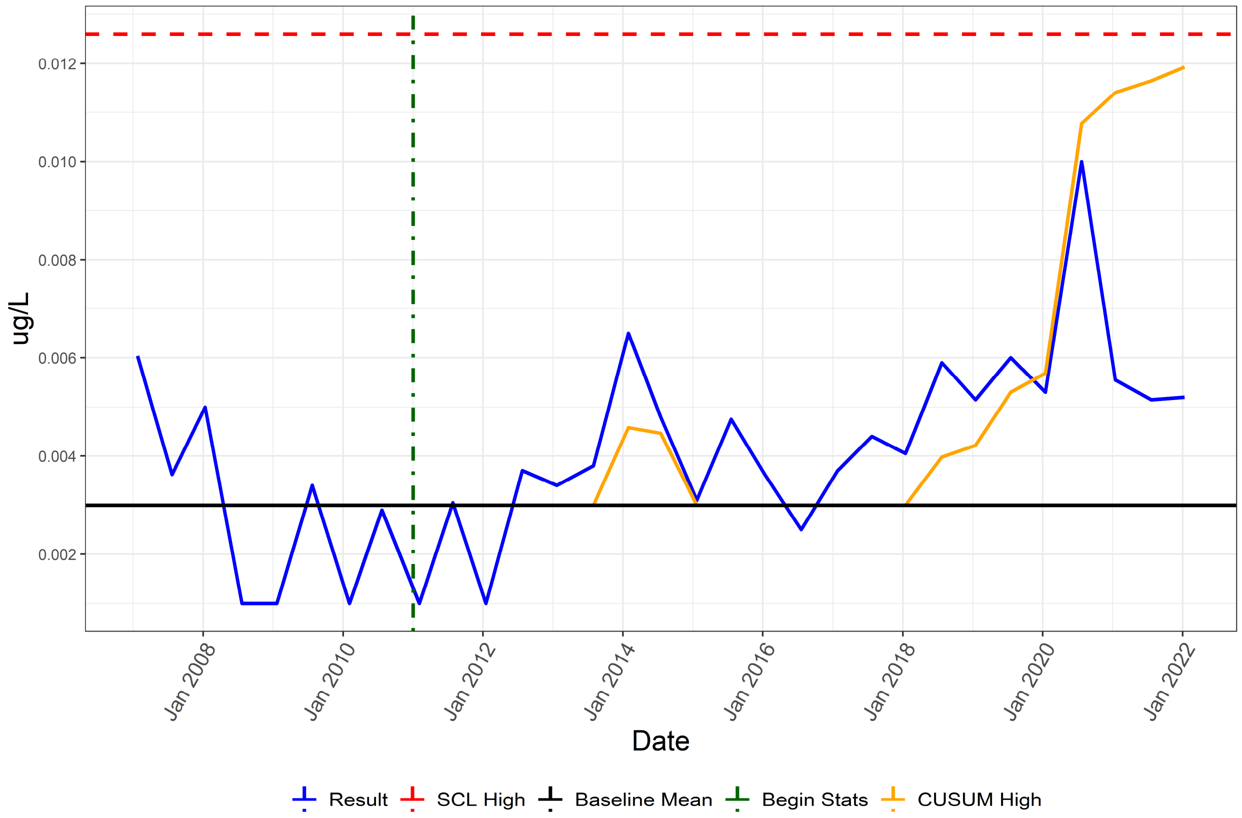




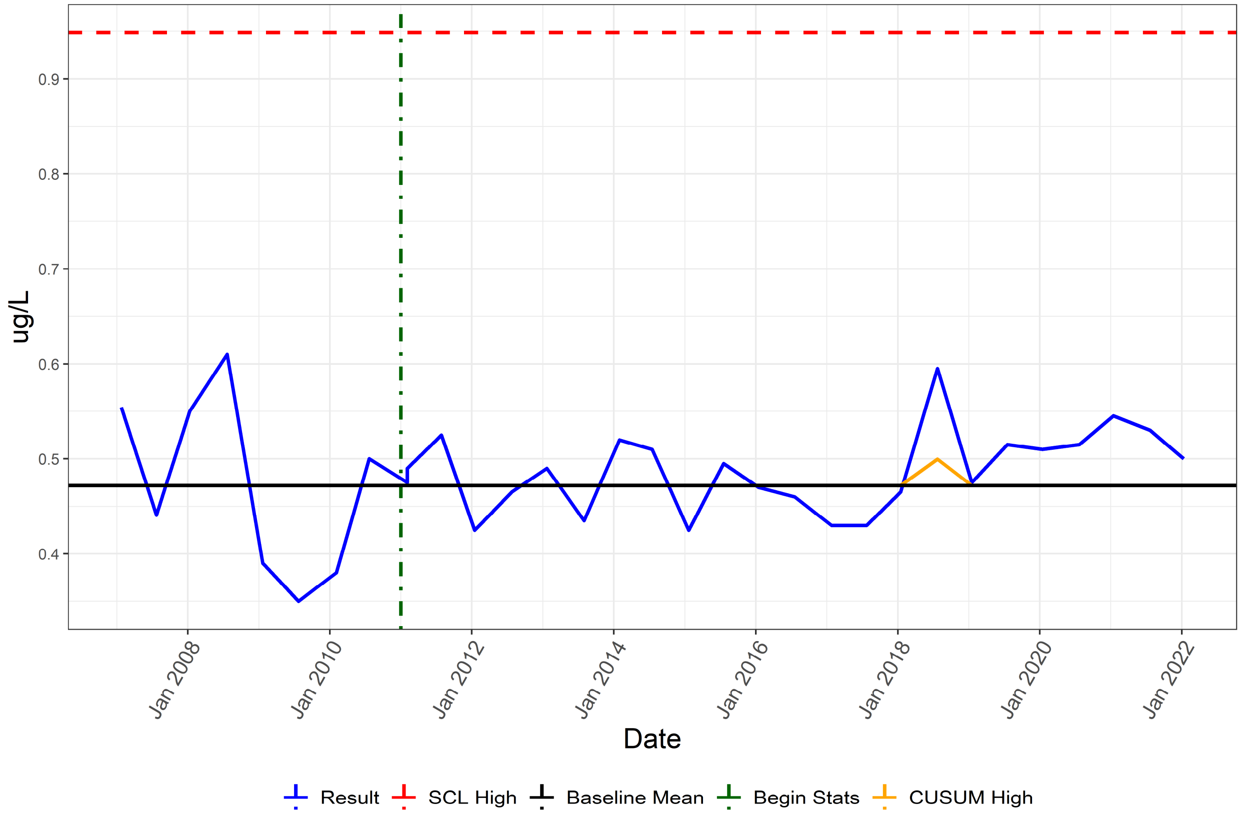
Perfluoroheptanoic Acid



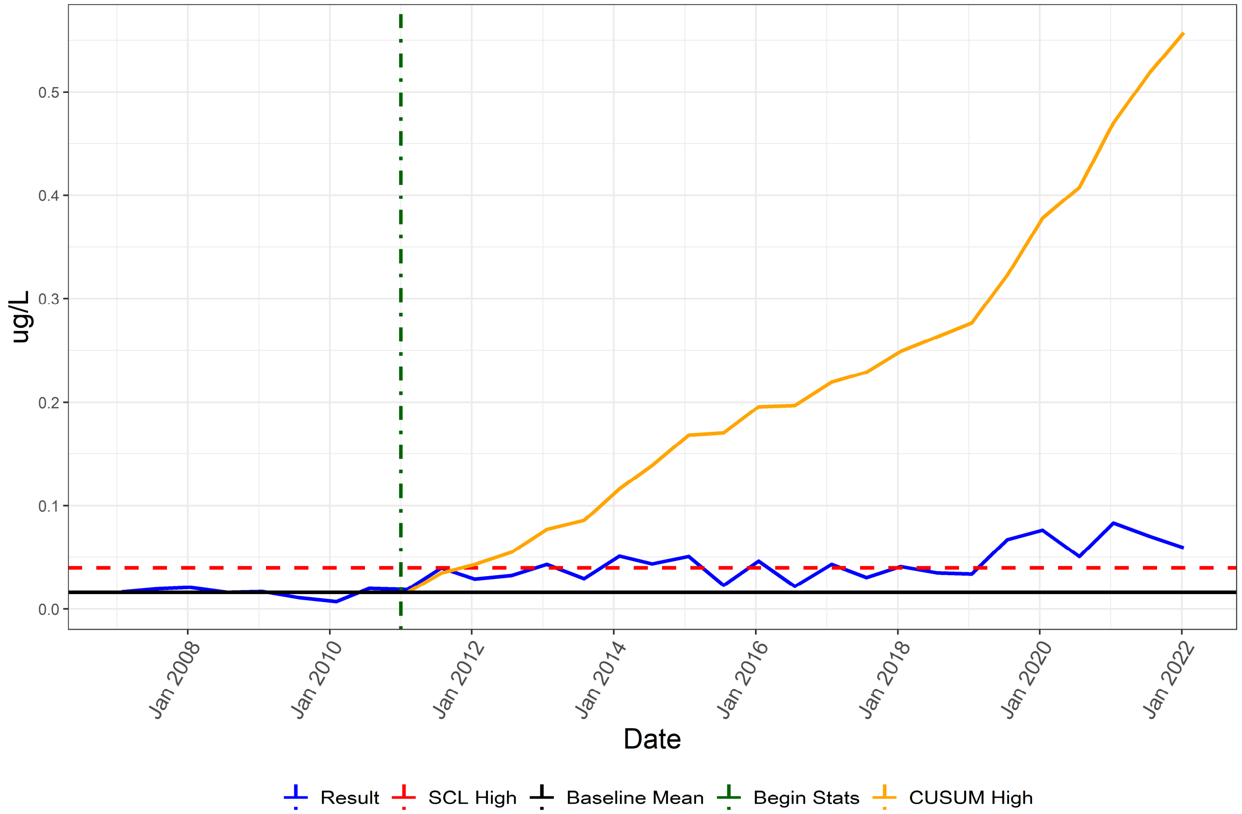
Perfluorohexane Sulfonic Acid

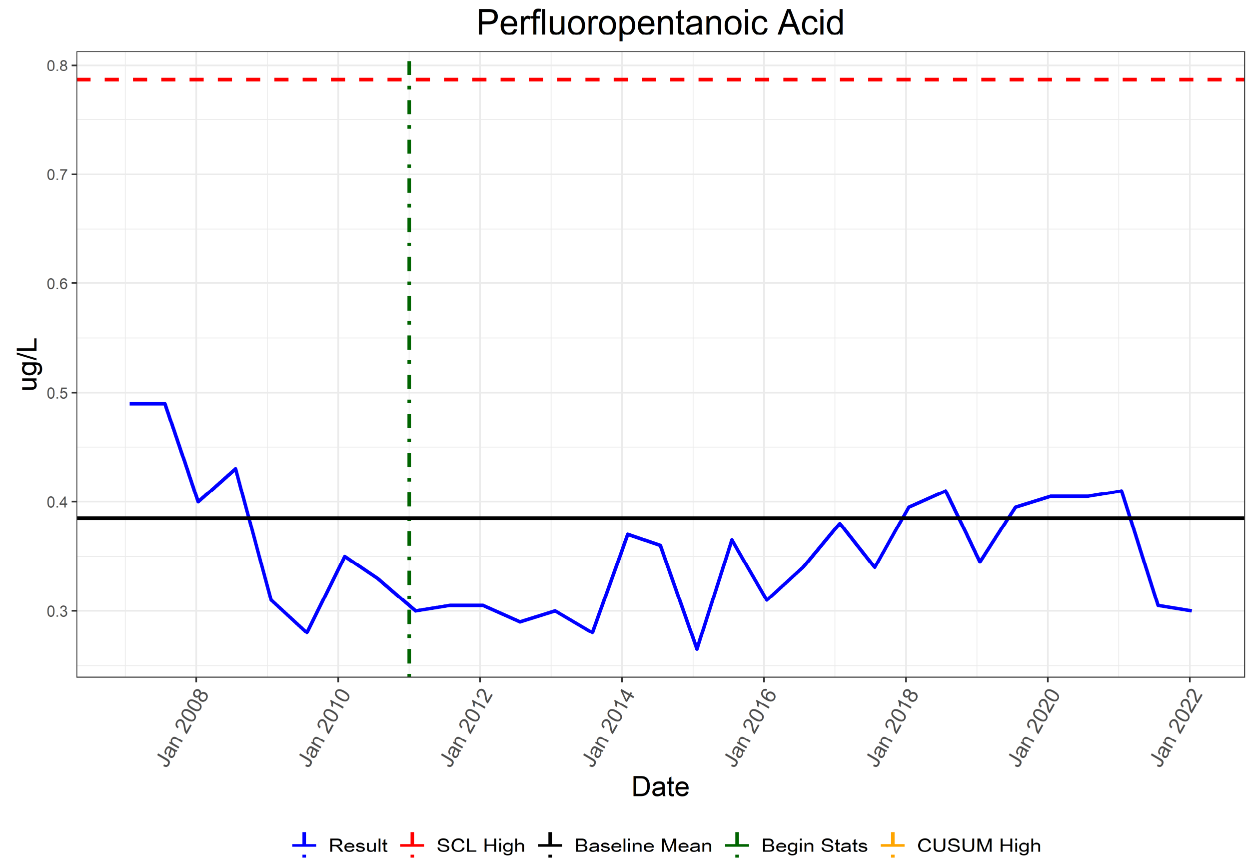


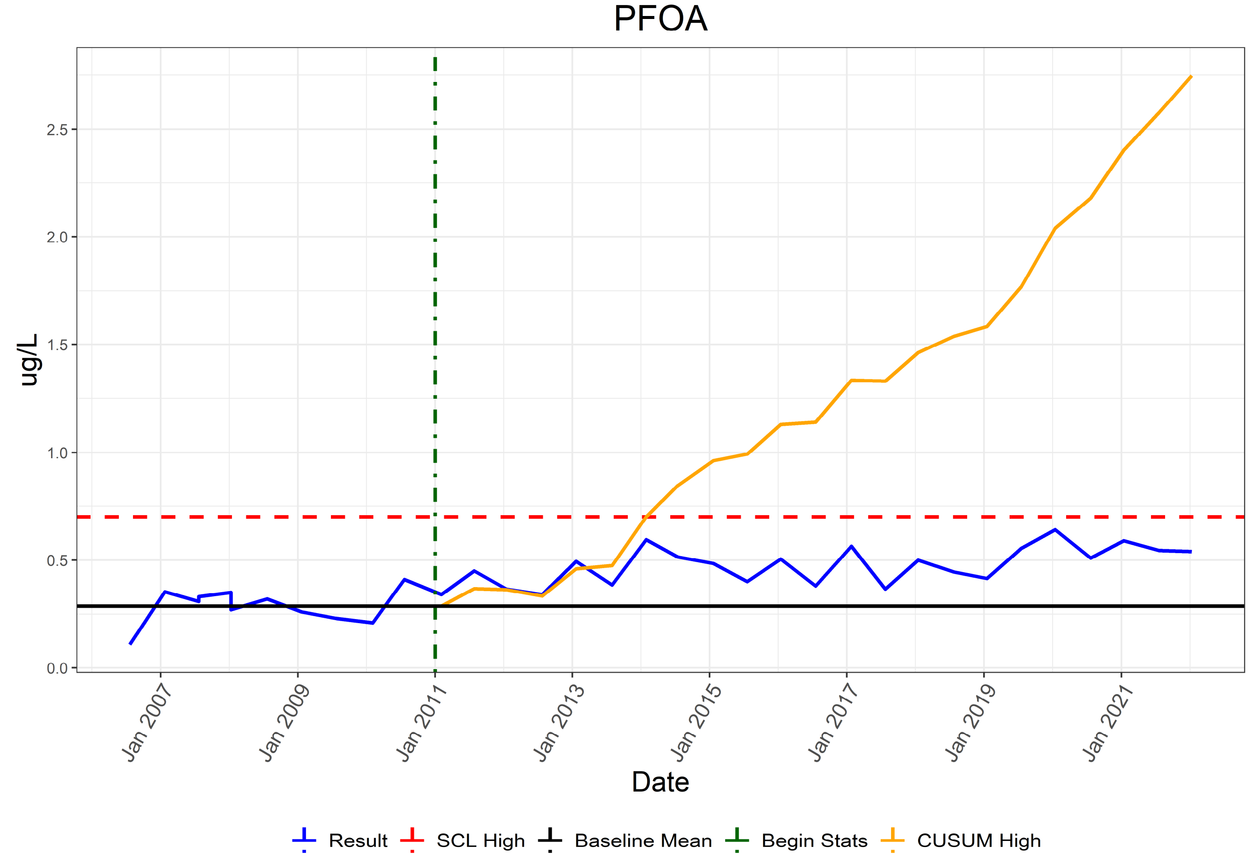
Perfluorohexanoic Acid



Perfluorononanoic Acid

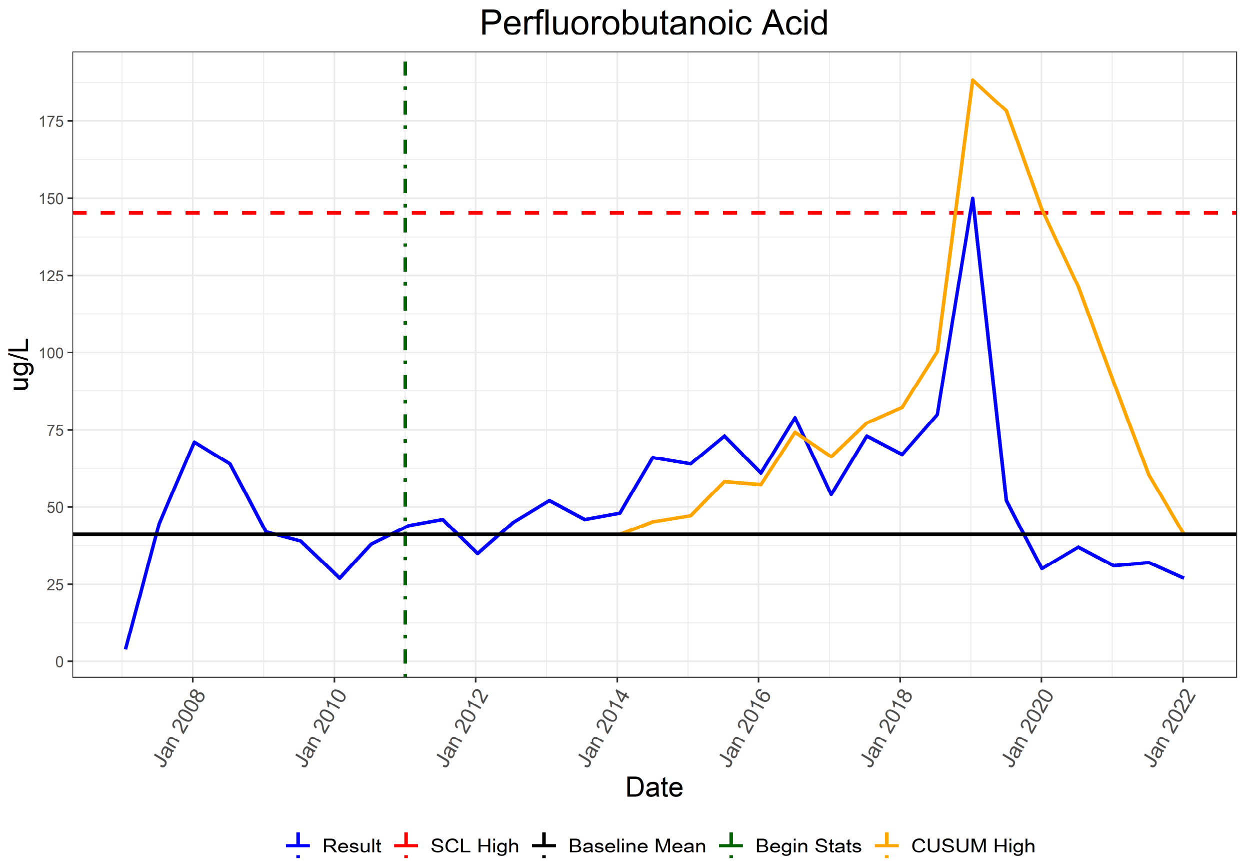


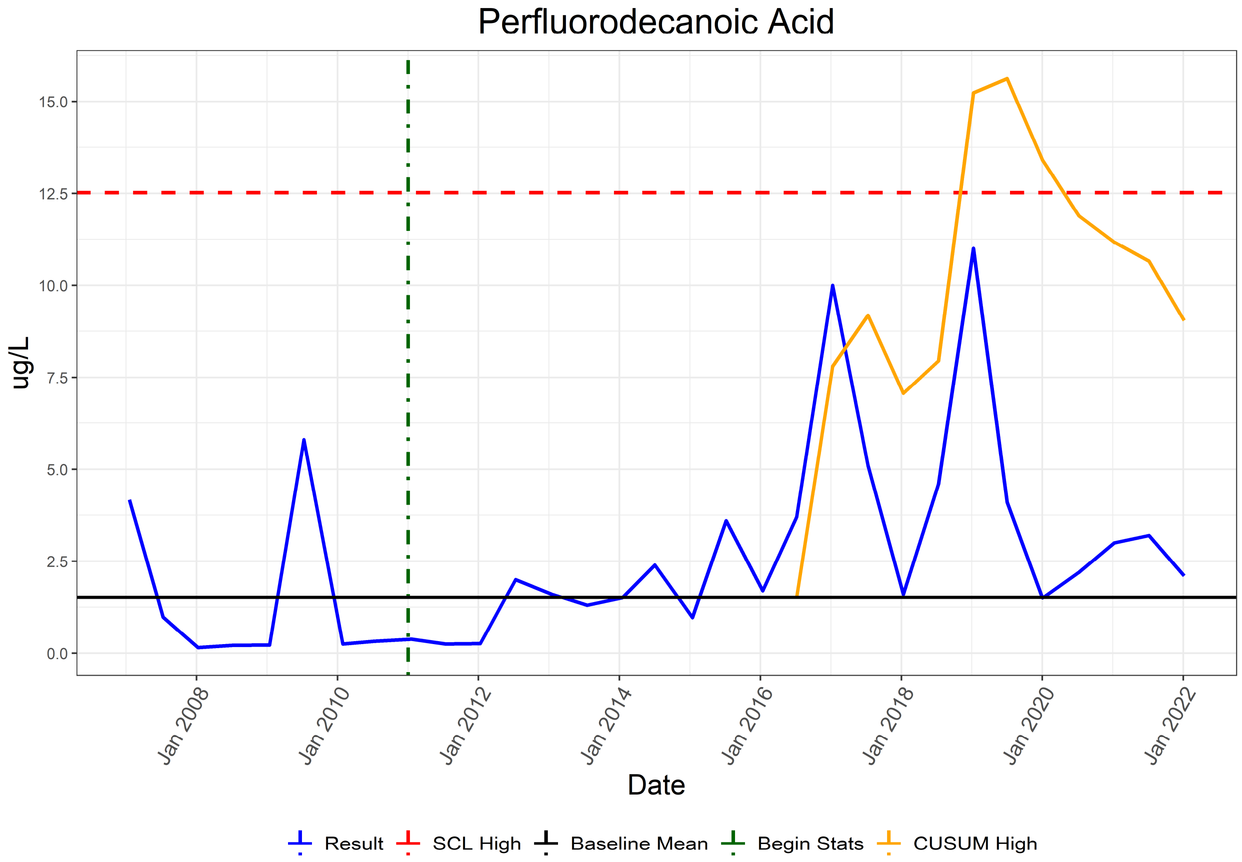

Perfluoropentanoic Acid
ug/L
0.8
0.7
0.6
0.5
0.4
0.3
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

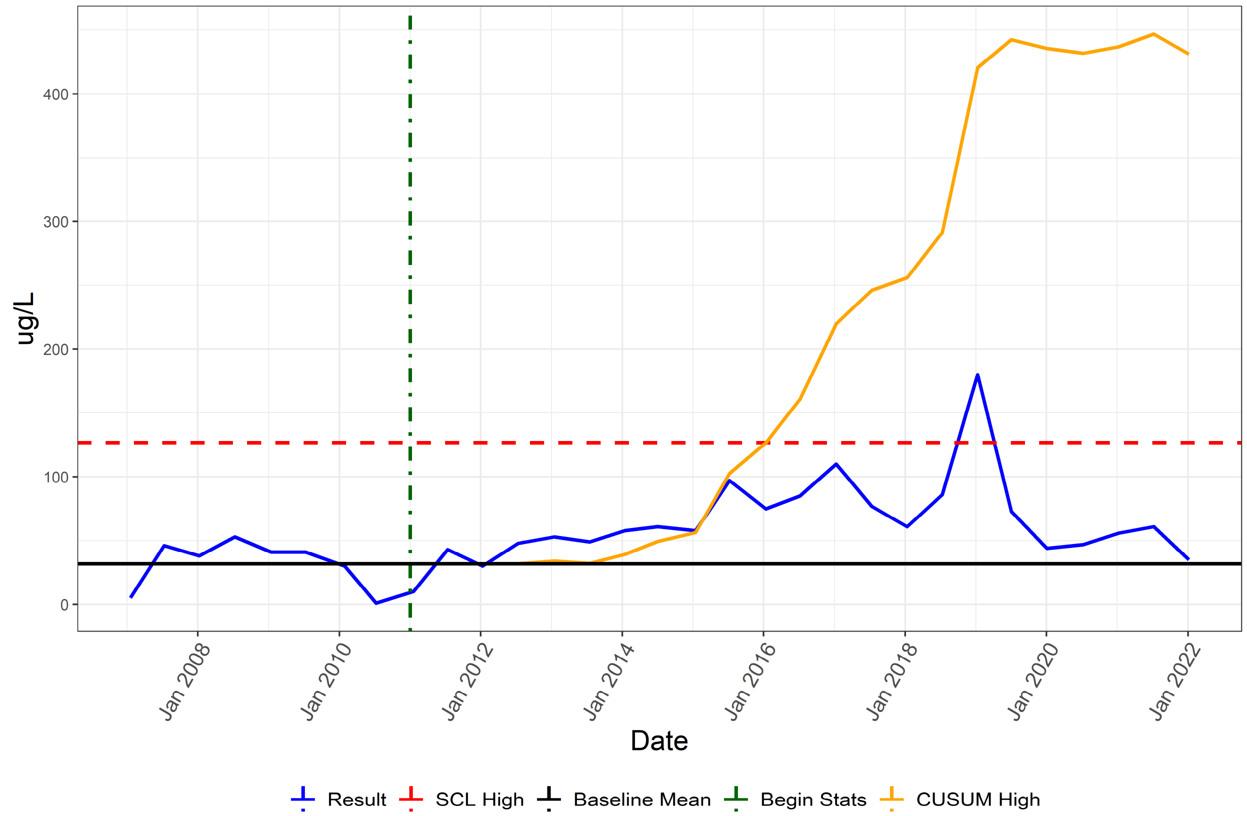
PFAS Monitoring Program (Program 9)

Well Name: P21-M01B

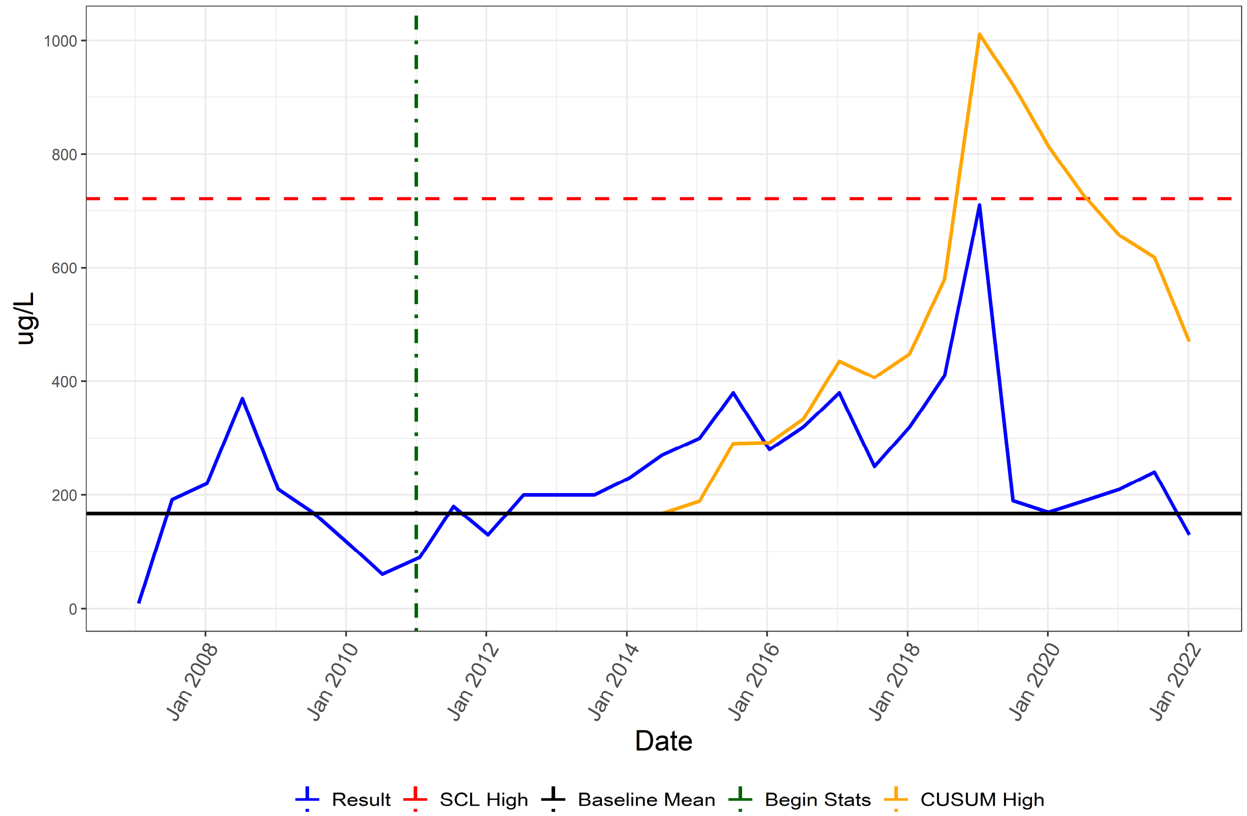




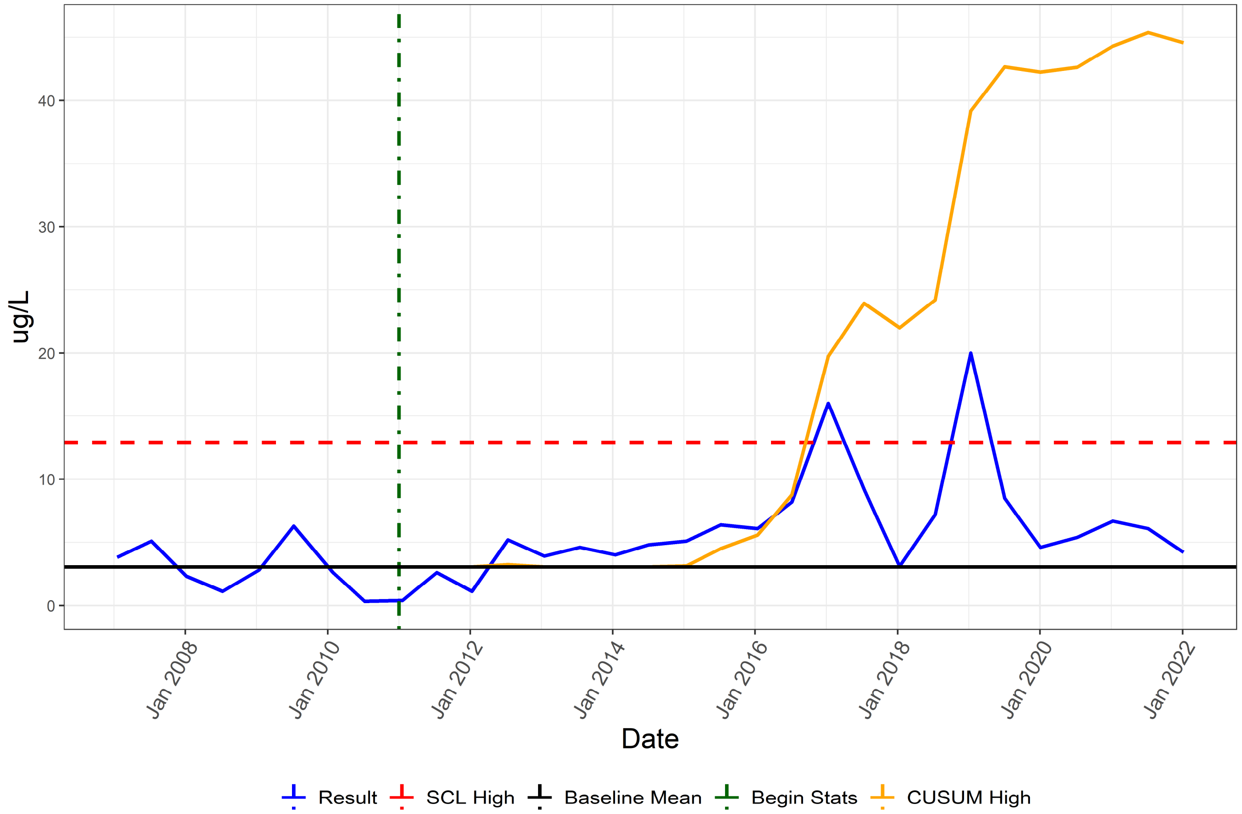
Perfluoroheptanoic Acid



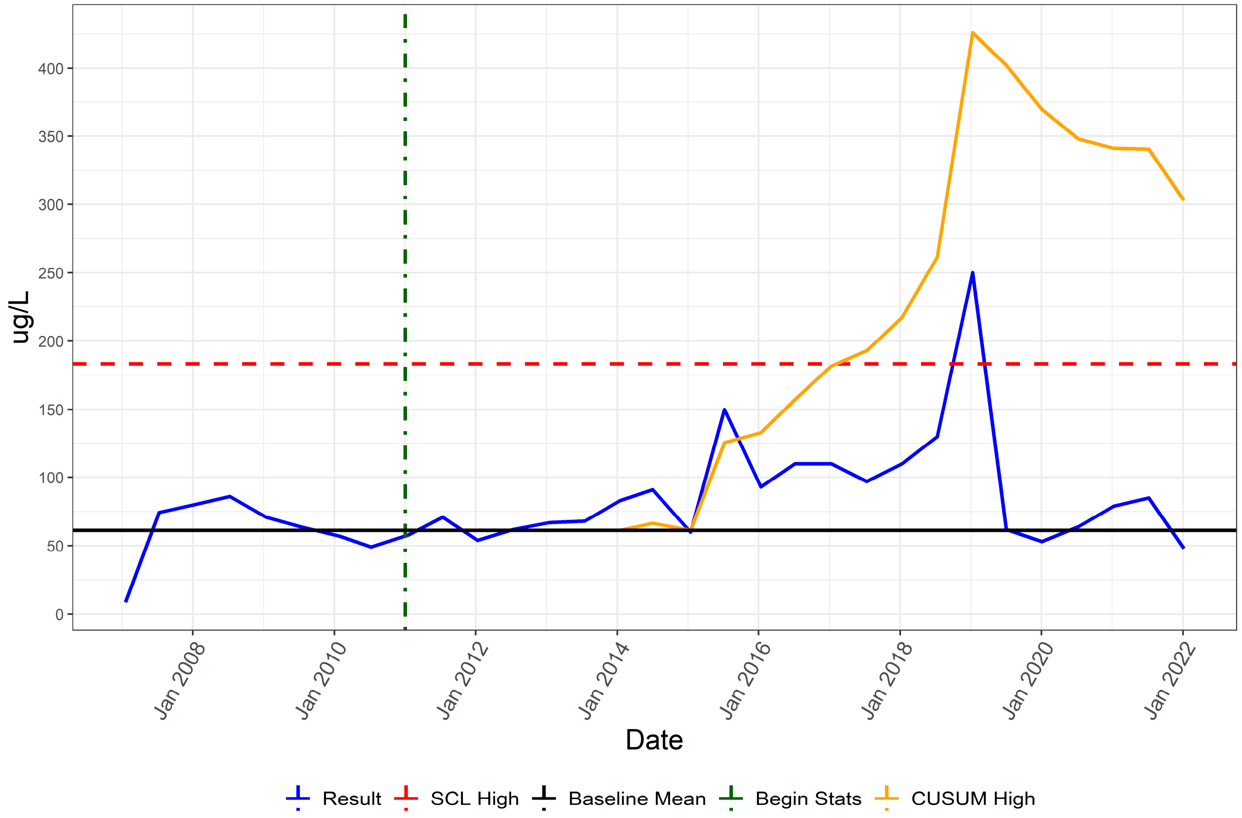
Perfluorohexanoic Acid

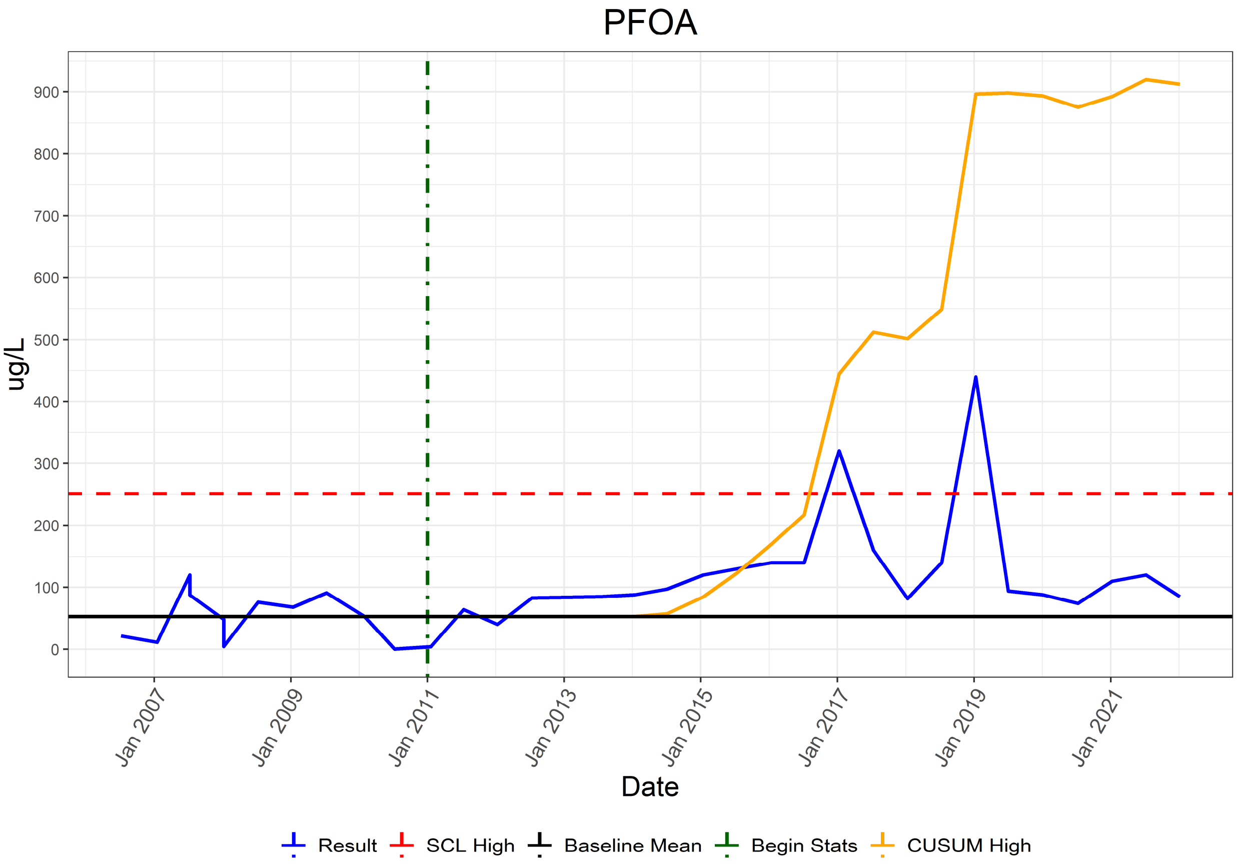


Perfluorononanoic Acid



Perfluoropentanoic Acid

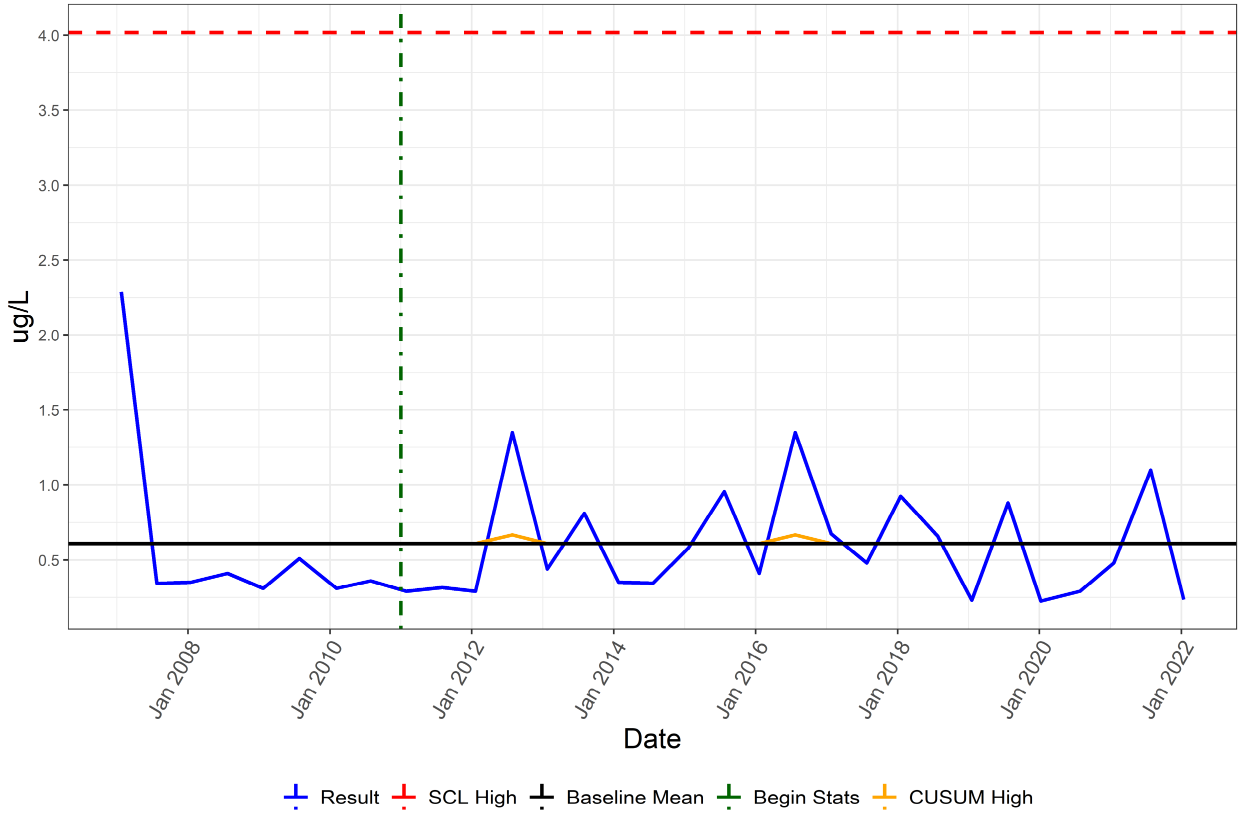



PFOA
ug/L
900
800
700
600
500
400
300
200
100
0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

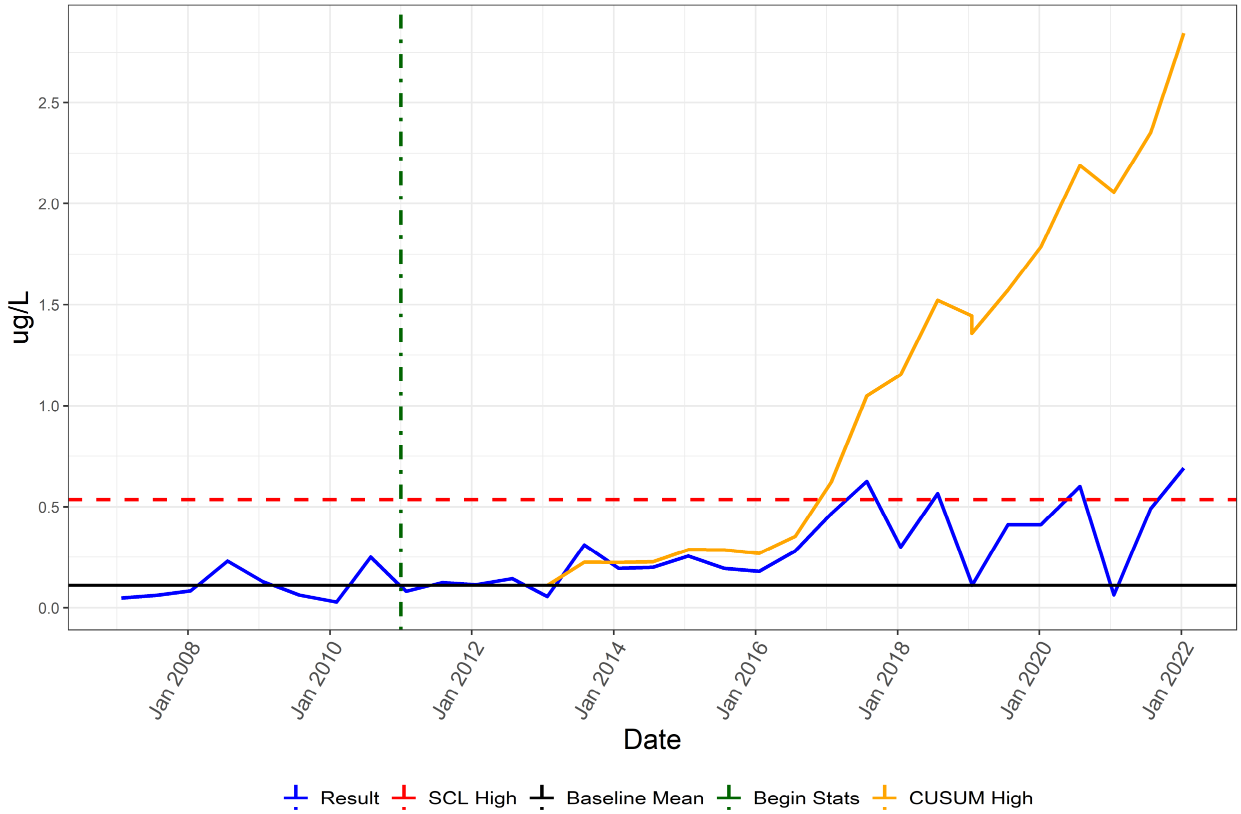
PFAS Monitoring Program (Program 9)

Well Name: R09-M02B

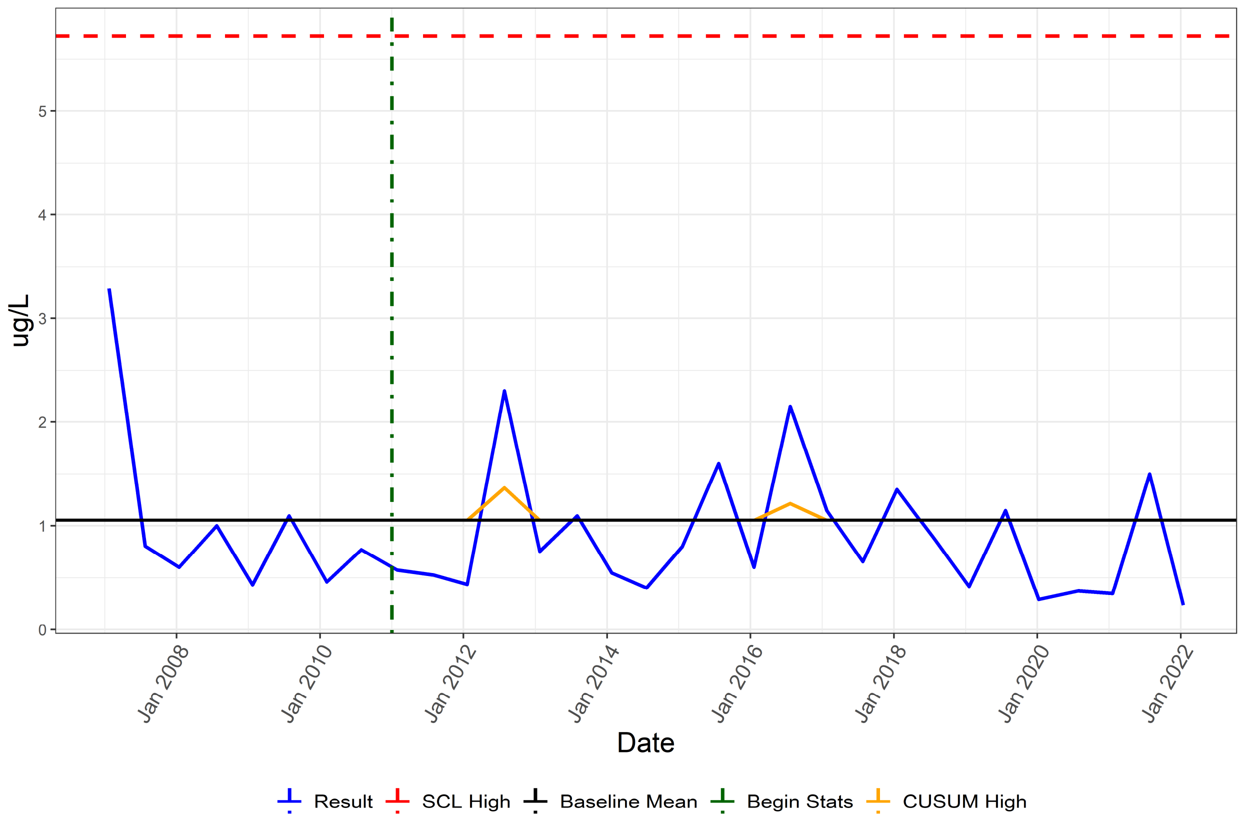
Perfluorobutanoic Acid



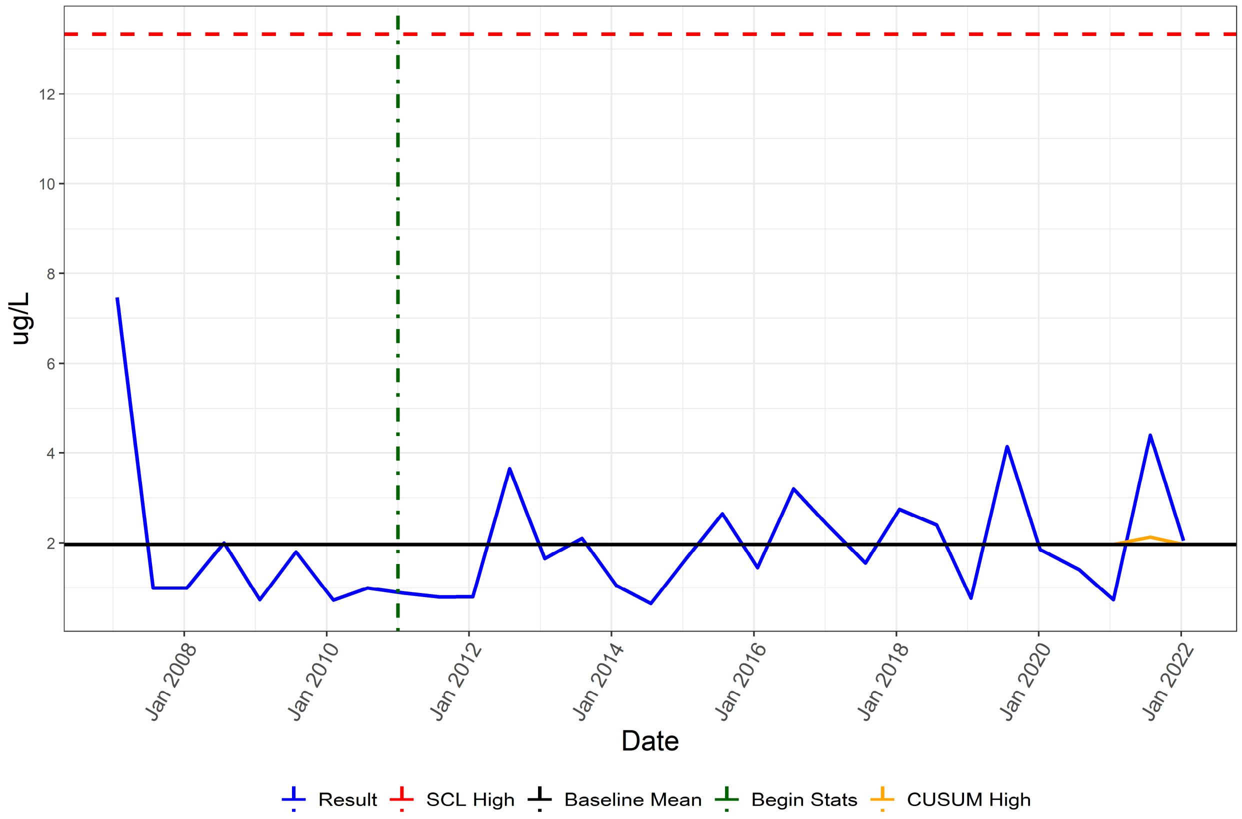
Perfluorodecanoic Acid

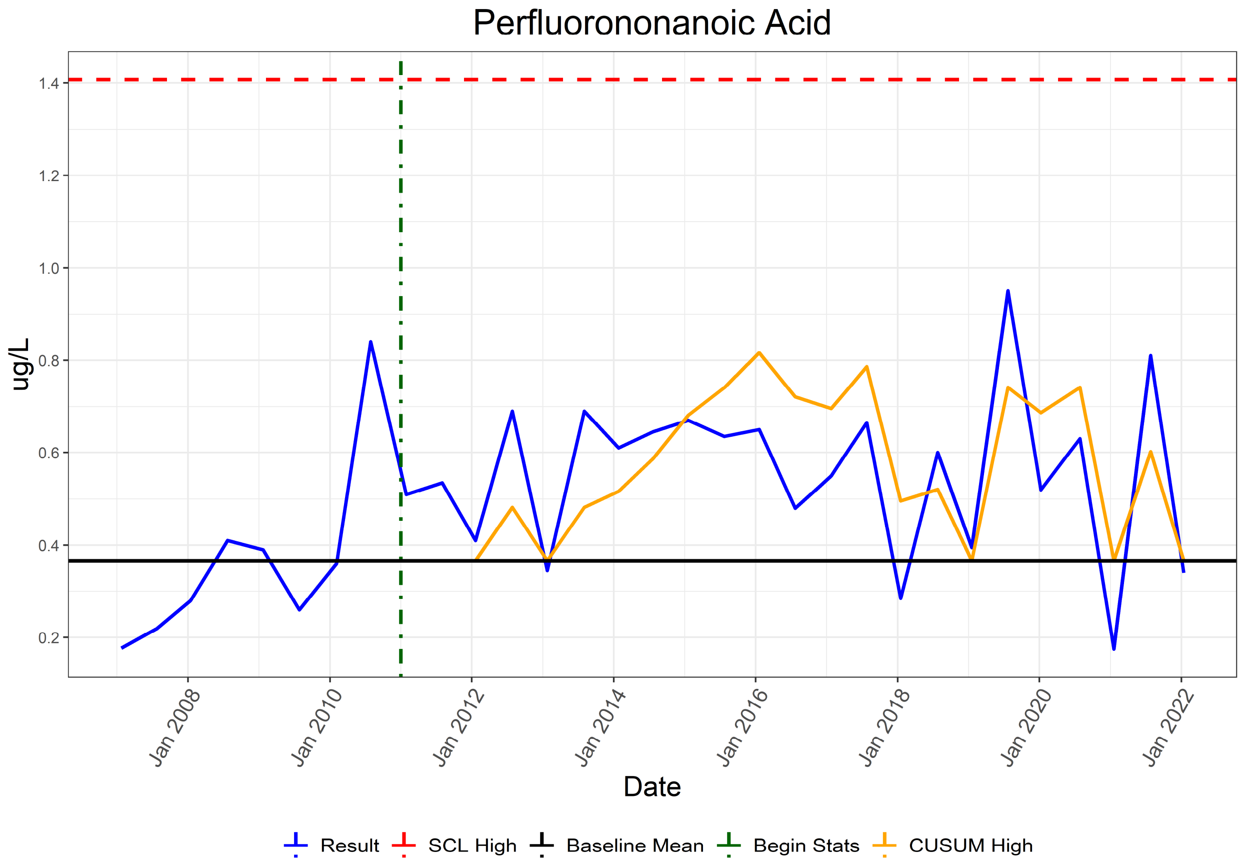


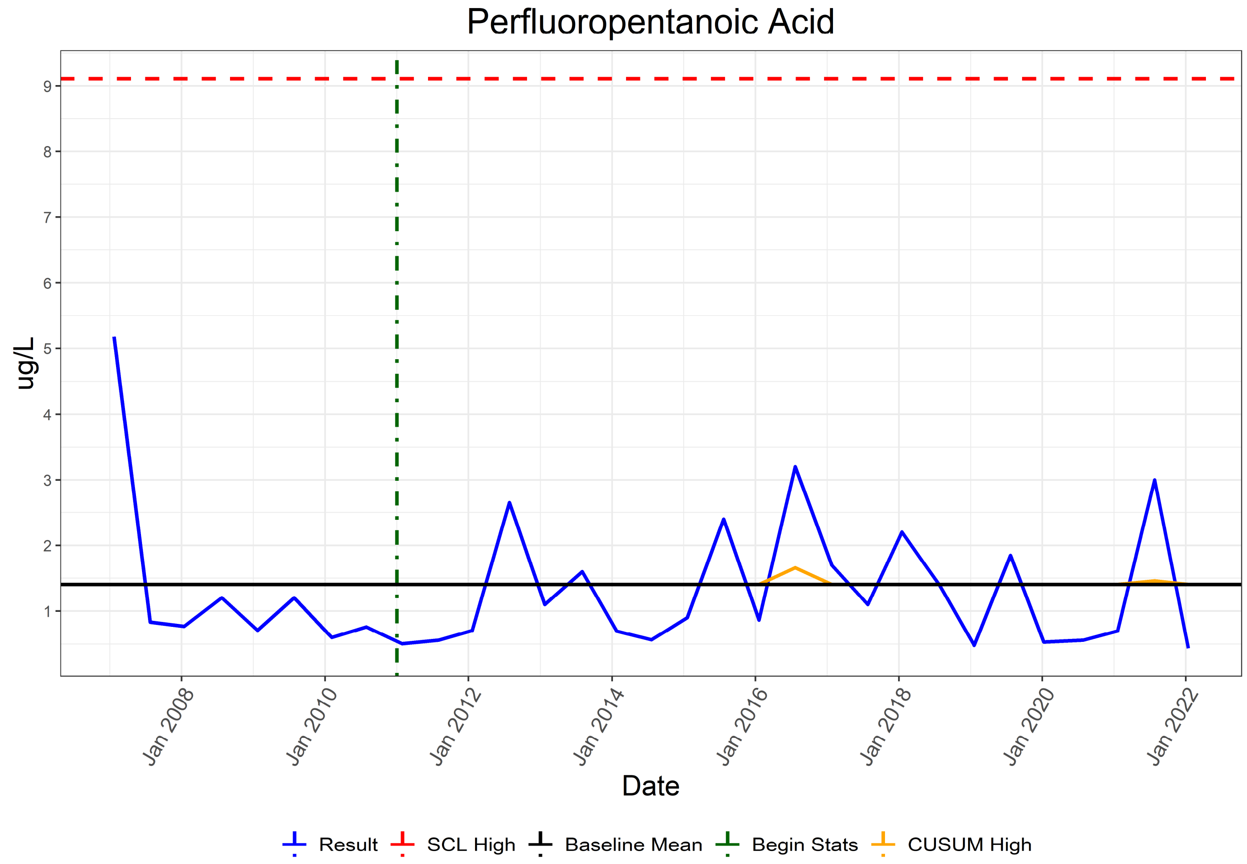
Perfluoroheptanoic Acid

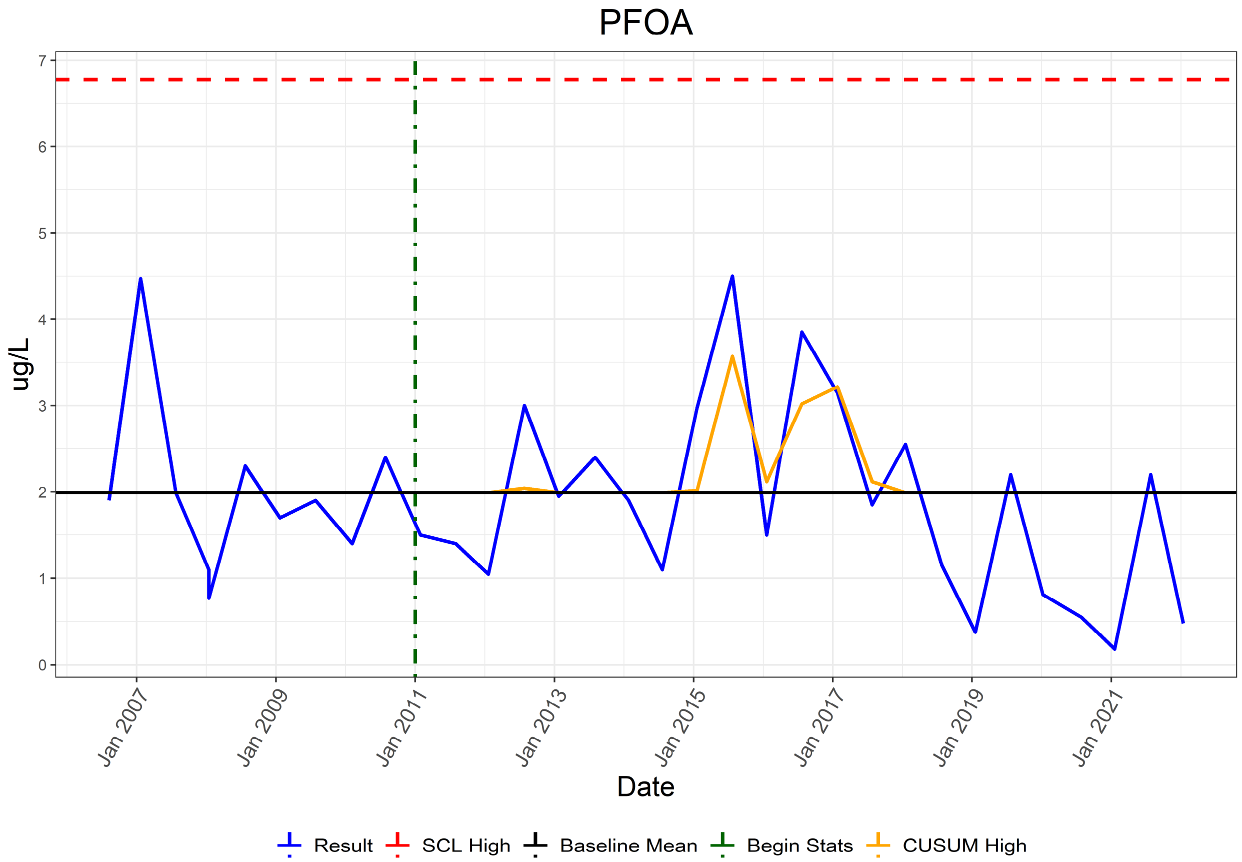


Perfluorohexanoic Acid



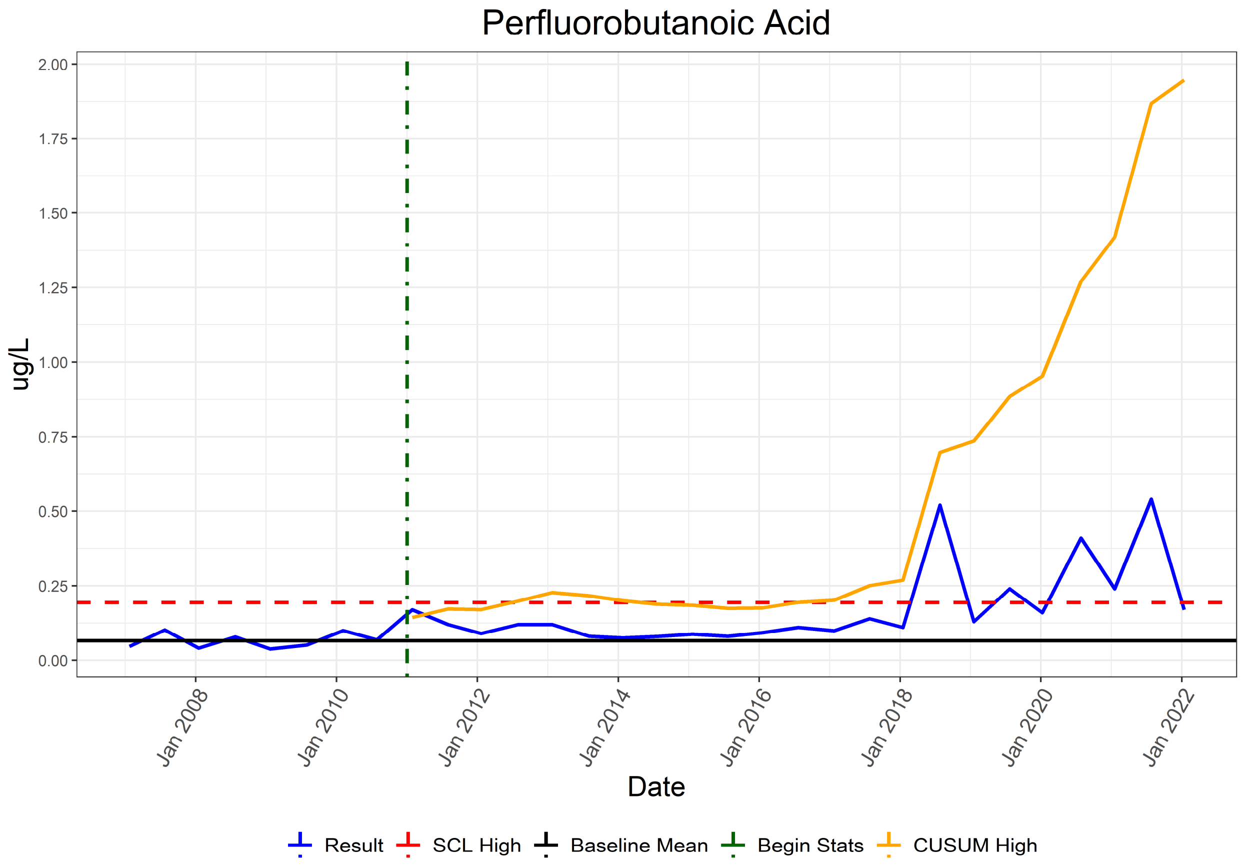

Perfluorononanoic Acid
ug/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

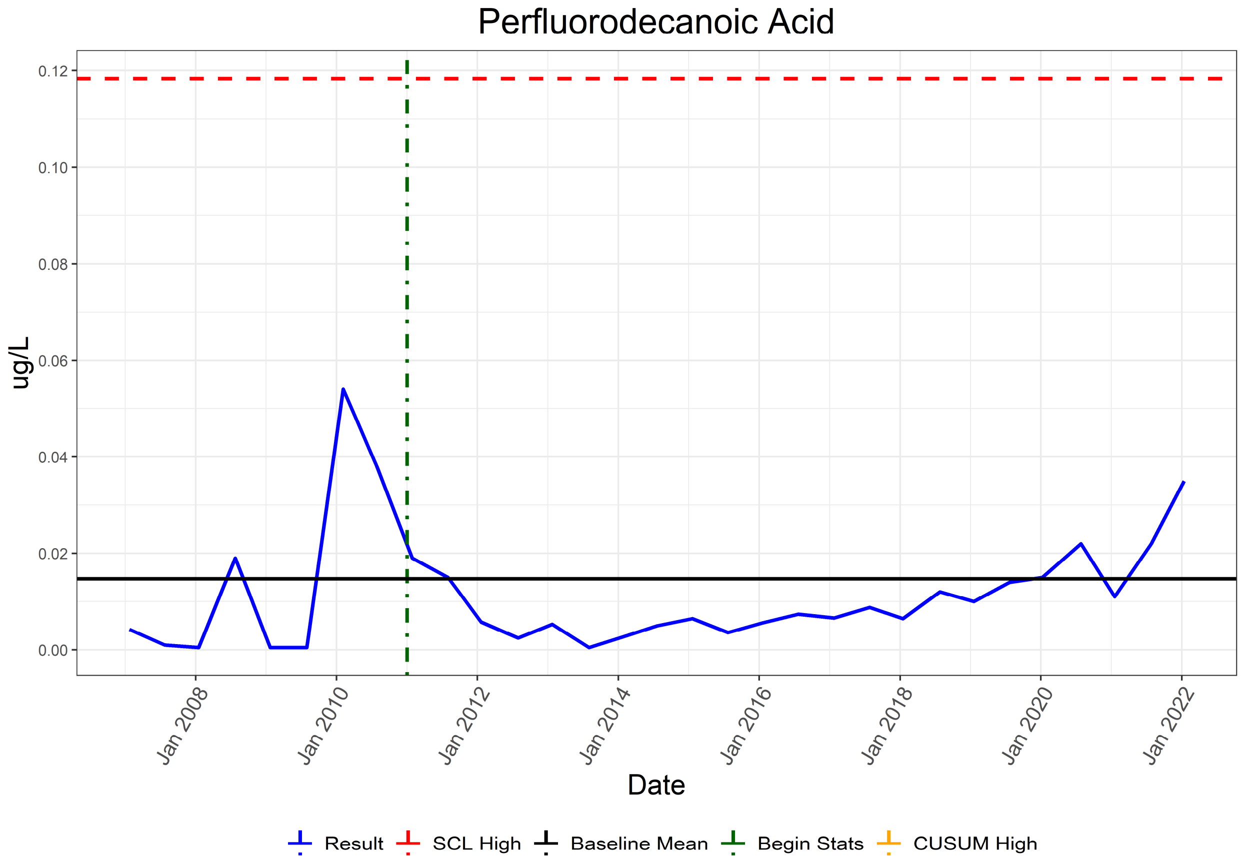

Perfluoropentanoic Acid
ug/L
9
8
7
6
5
4
3
2
1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

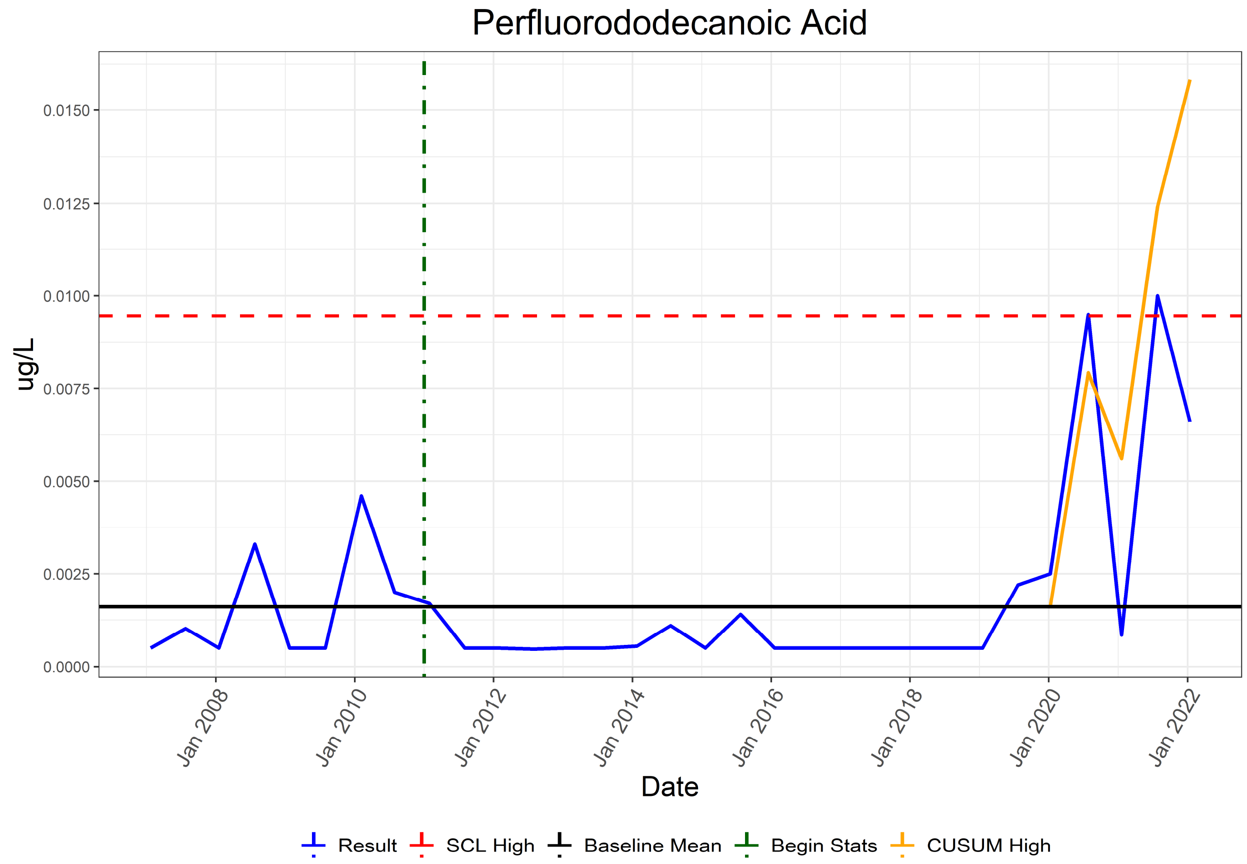

PFOA
ug/L
0
1
2
3
4
5
6
7
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

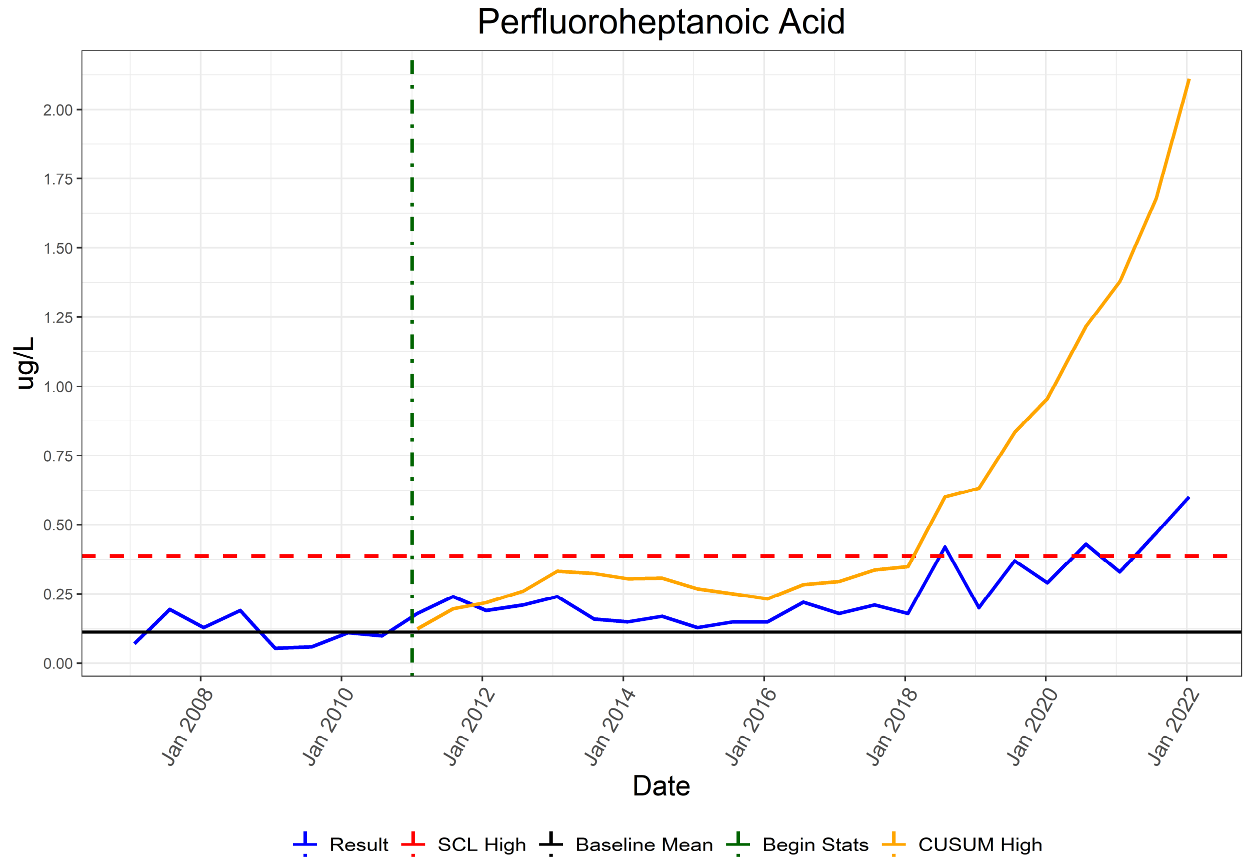
PFAS Monitoring Program (Program 9)

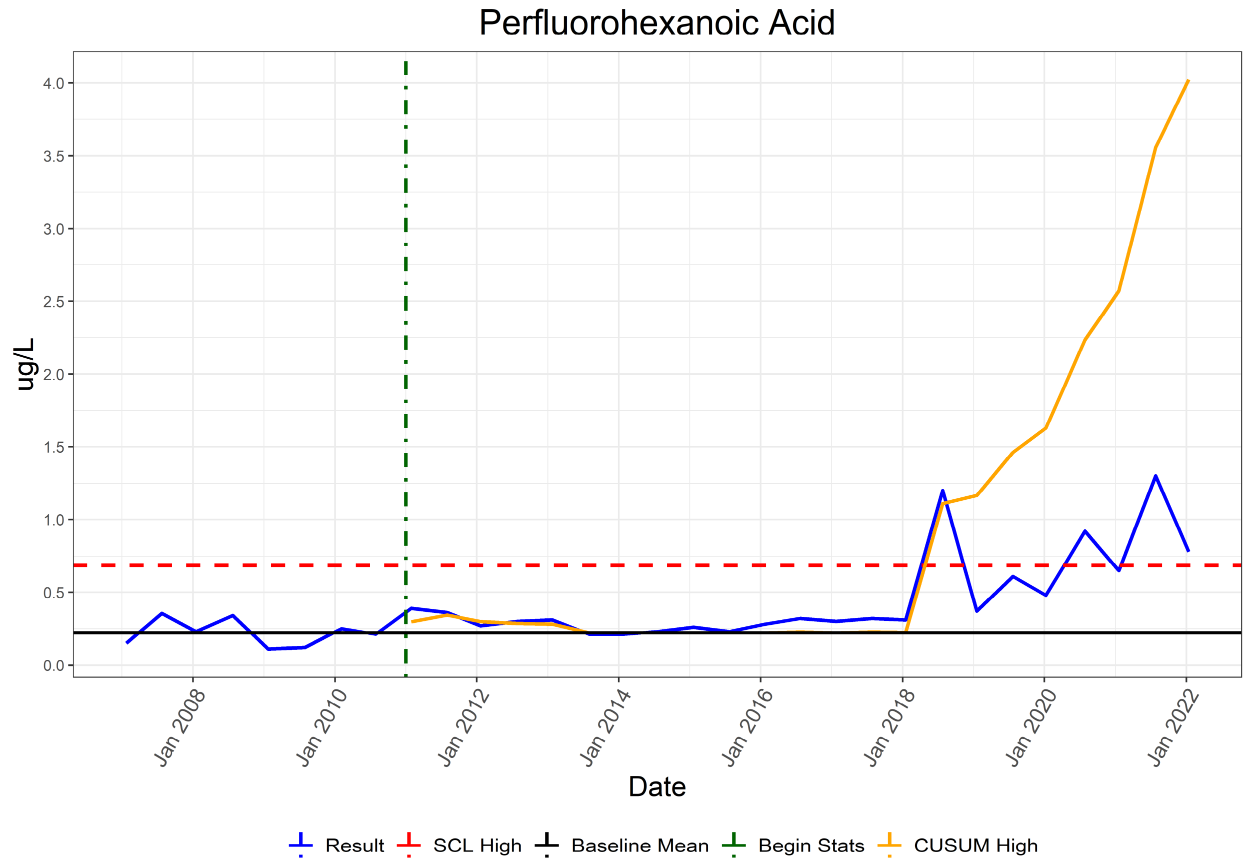
Well Name: R10-M01C

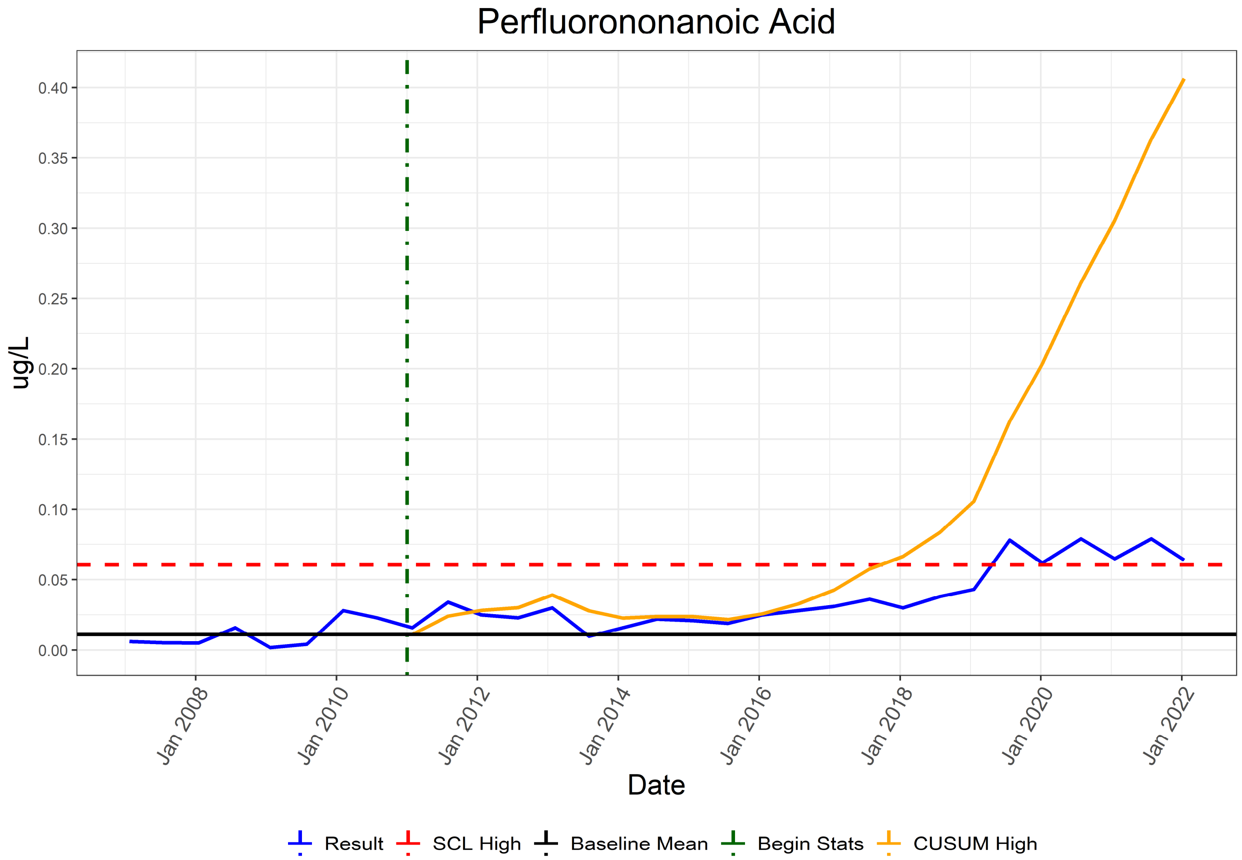


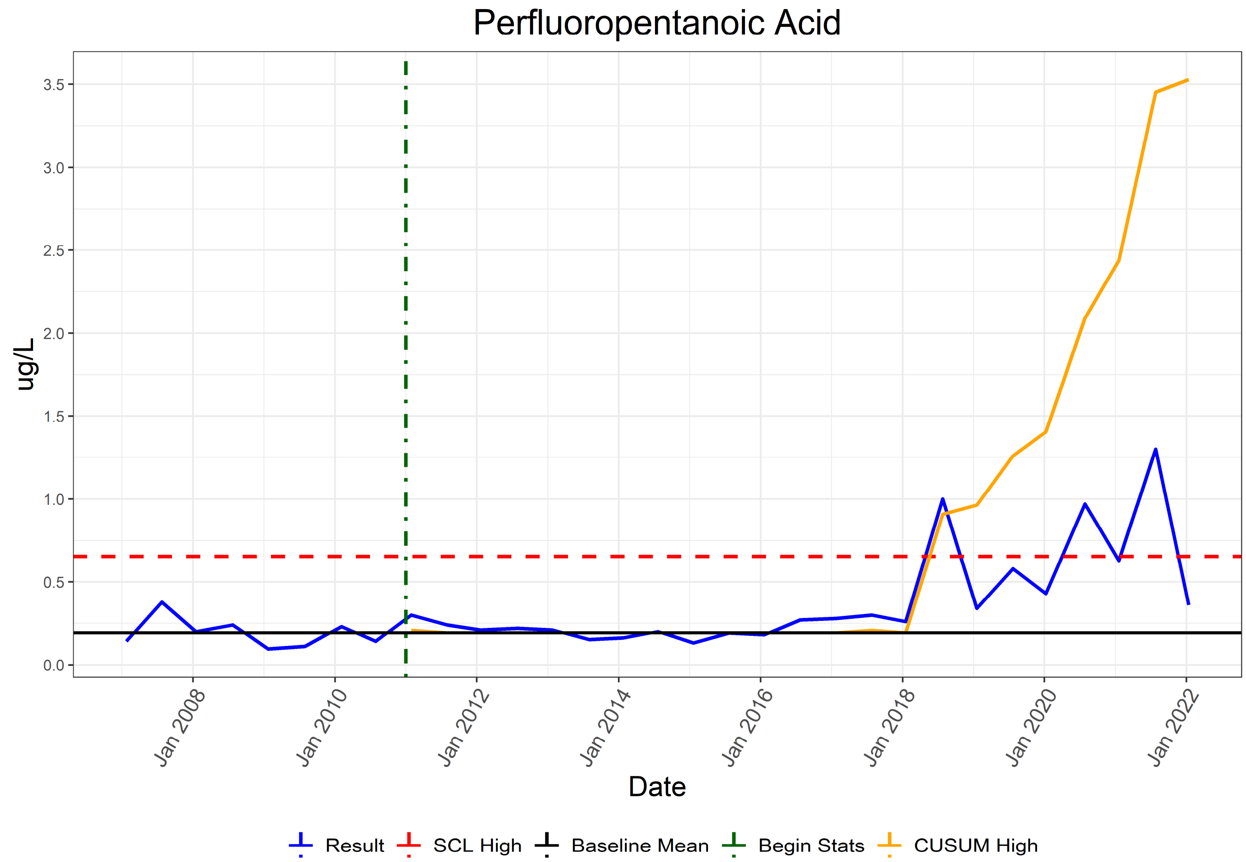



Perfluorododecanoic Acid
ug/L
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoroheptanoic Acid
ug/L
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid


Perfluorononanoic Acid


Perfluoropentanoic Acid
ug/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2008
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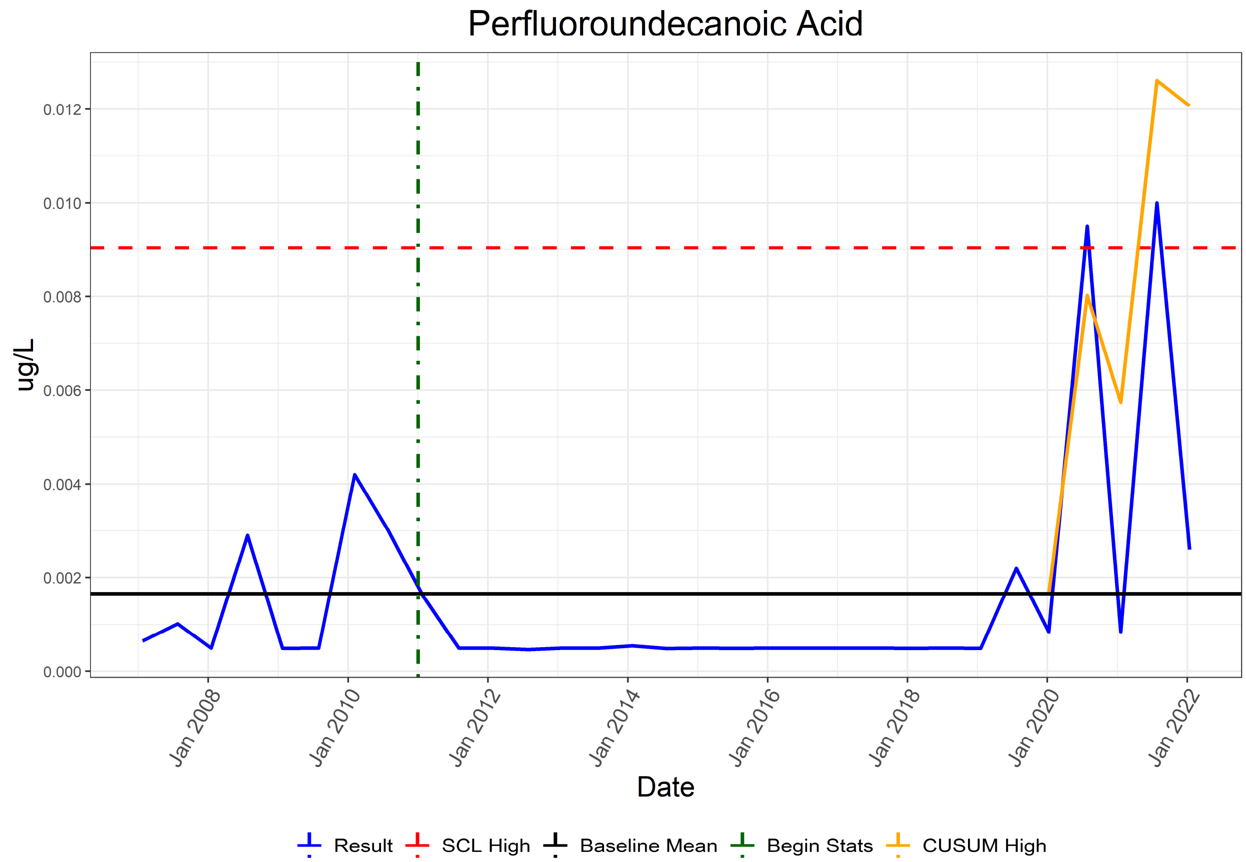
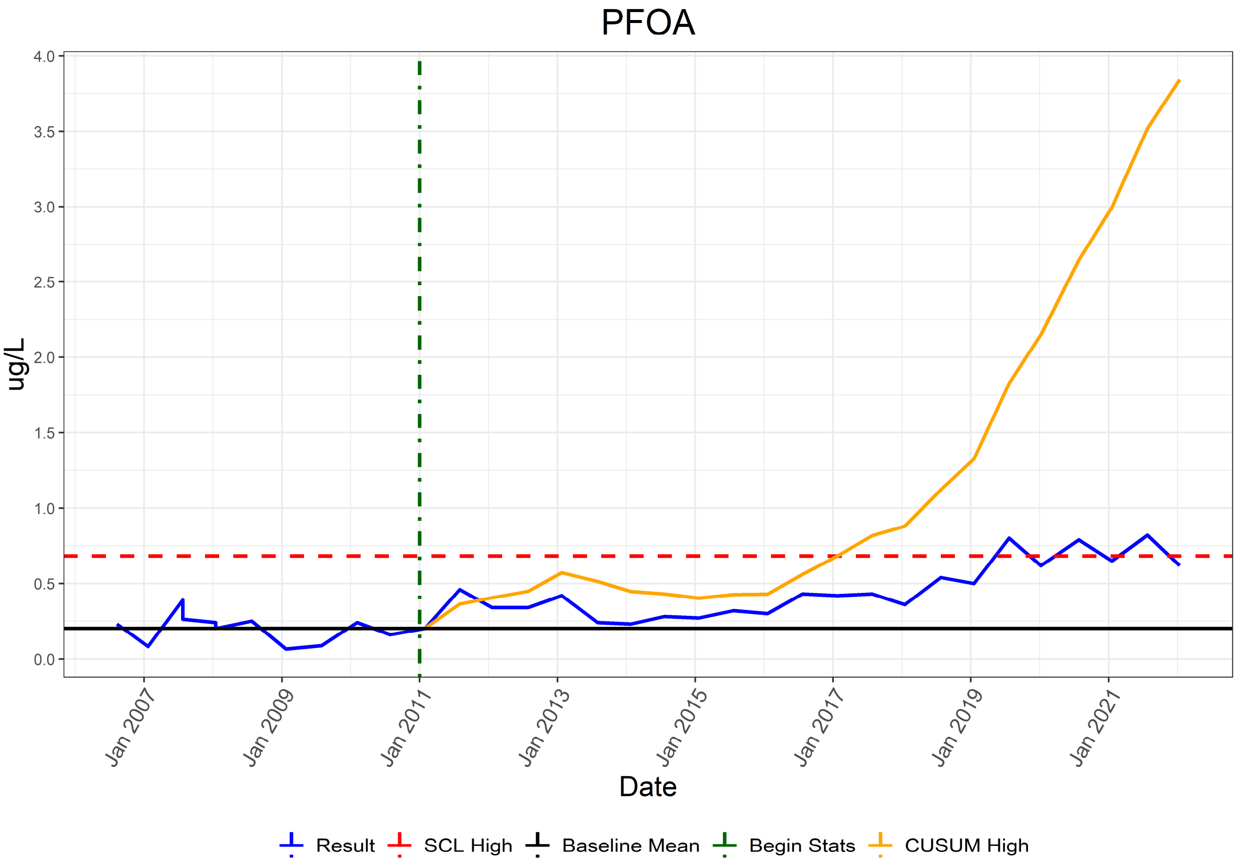
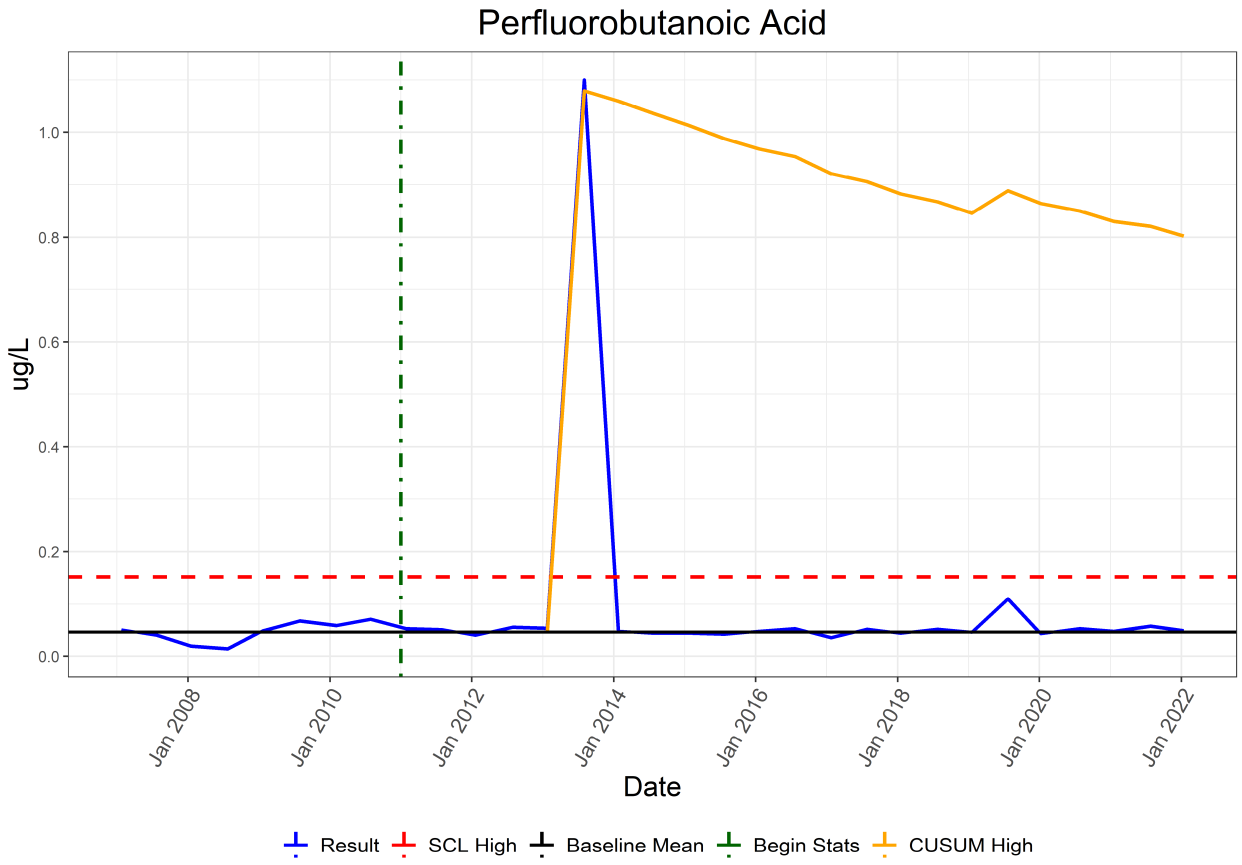
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

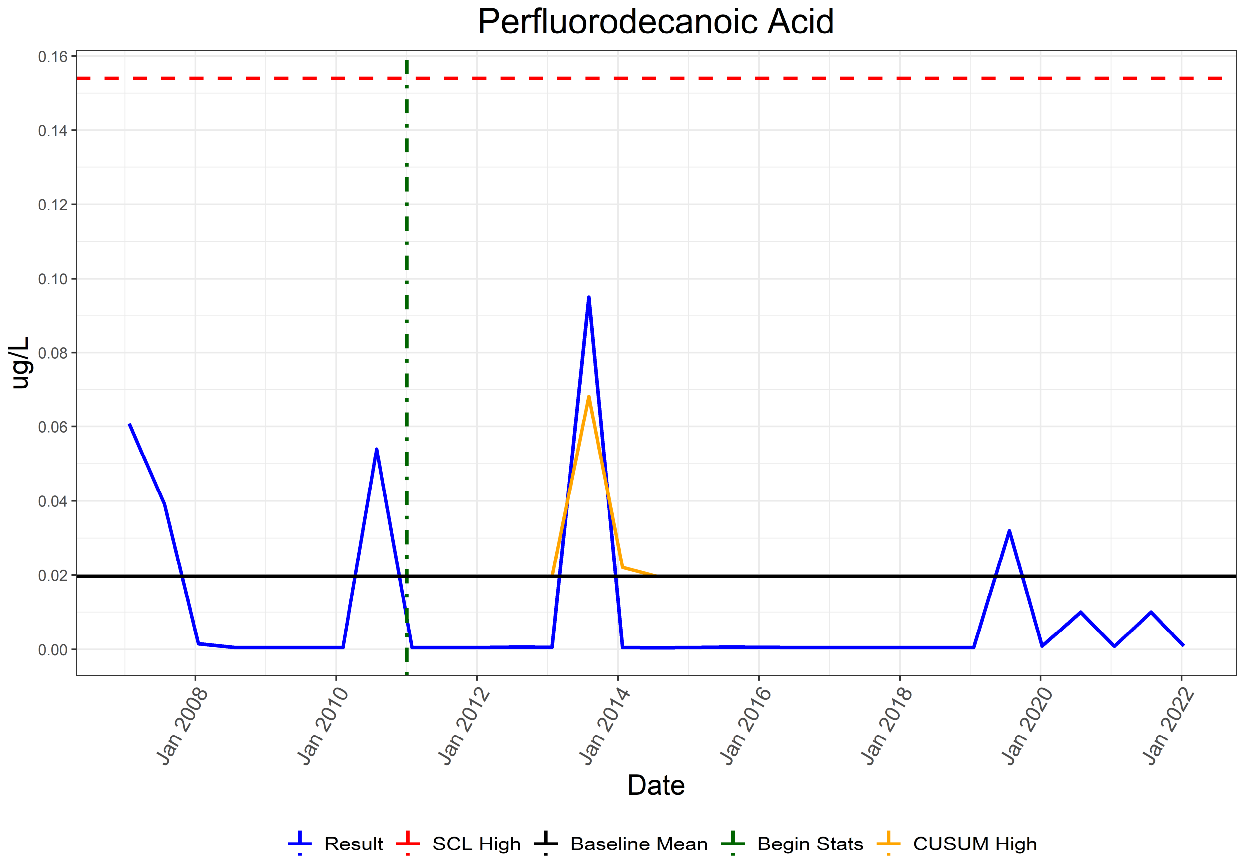

Perfluoroundecanoic Acid
ug/L
0.012
0.010
0.008
0.006
0.004
0.002
0.000
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

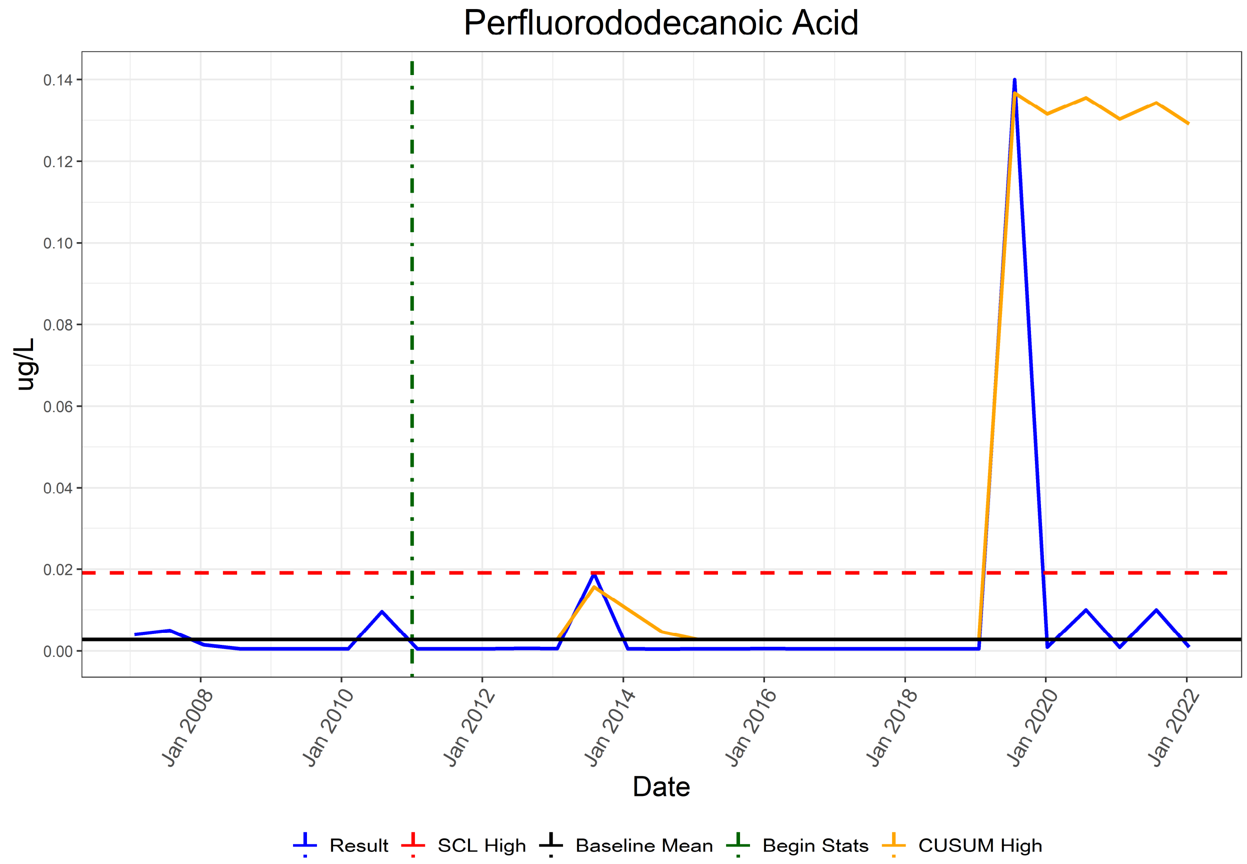

PFOA
ug/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

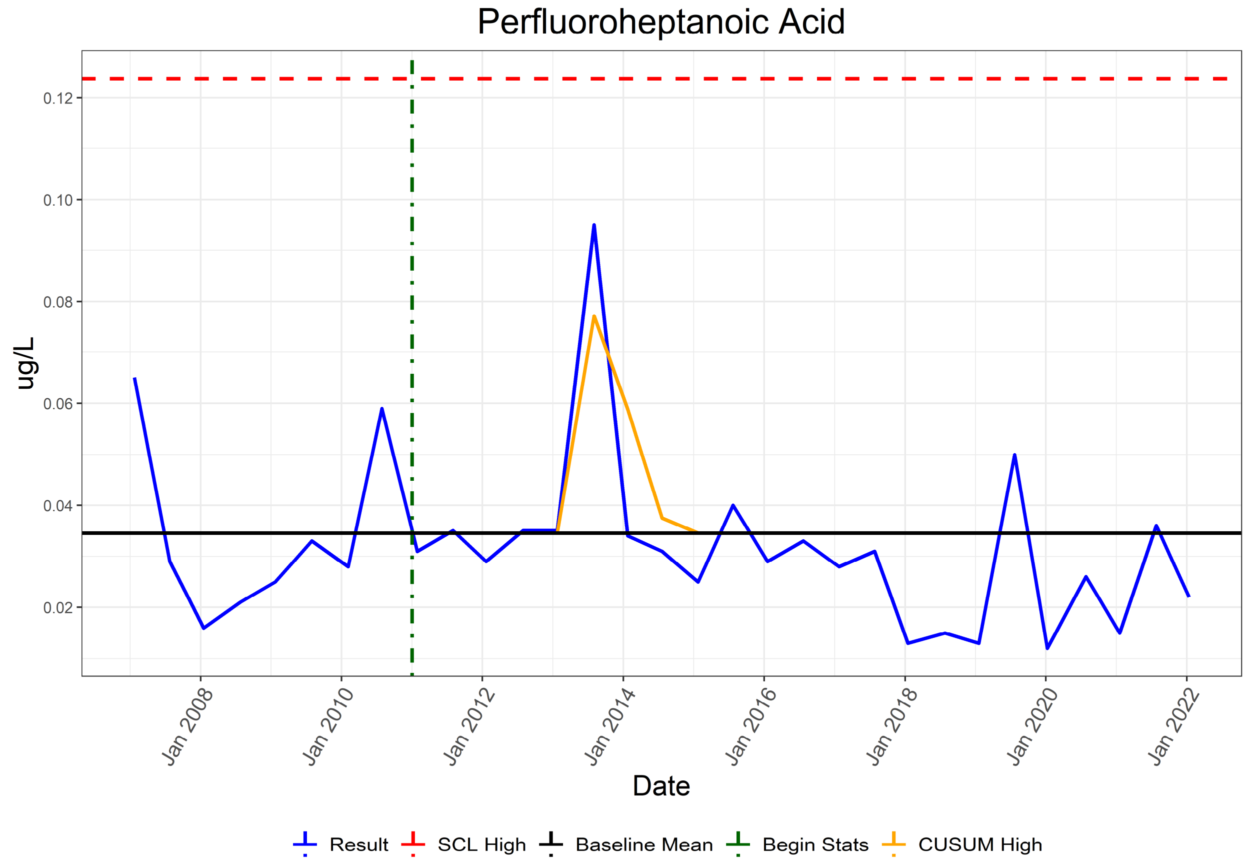
PFAS Monitoring Program (Program 9)

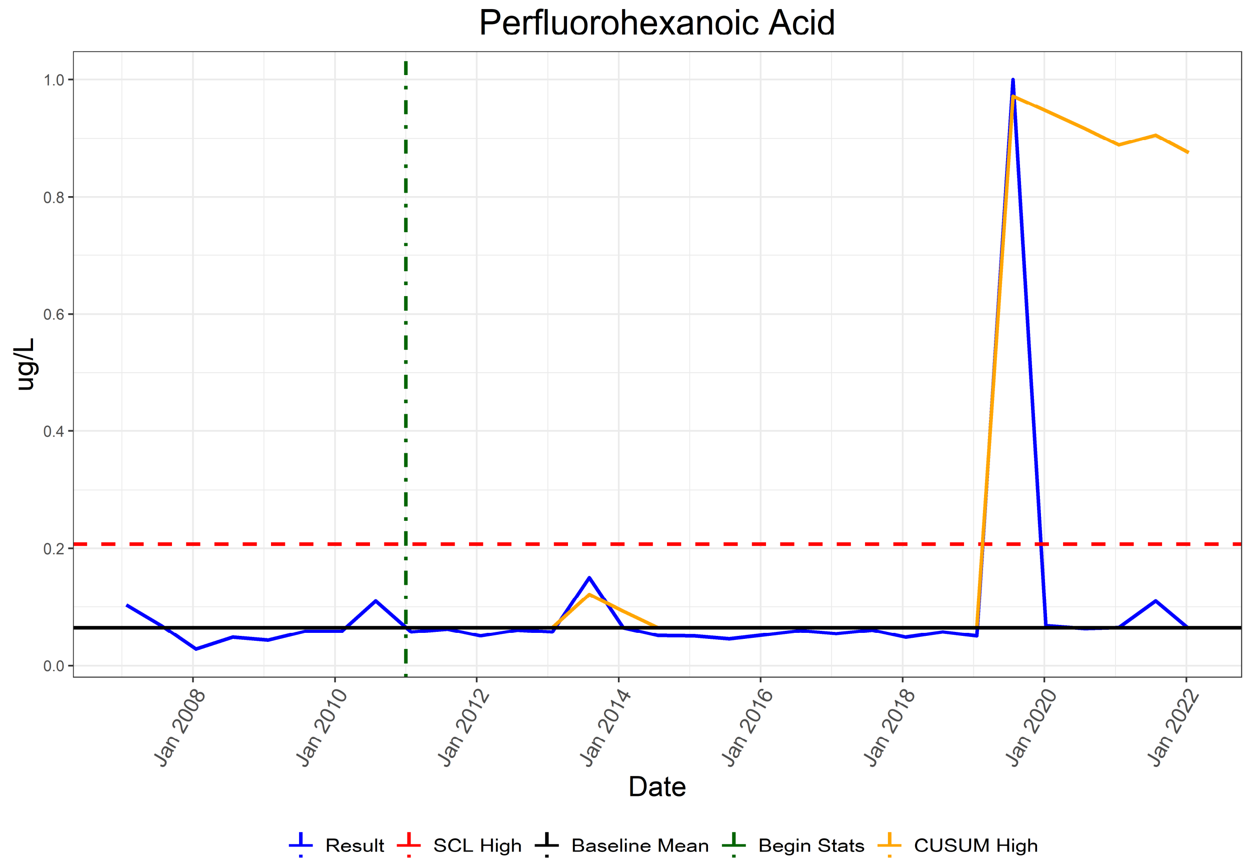
Well Name: R10-M01E

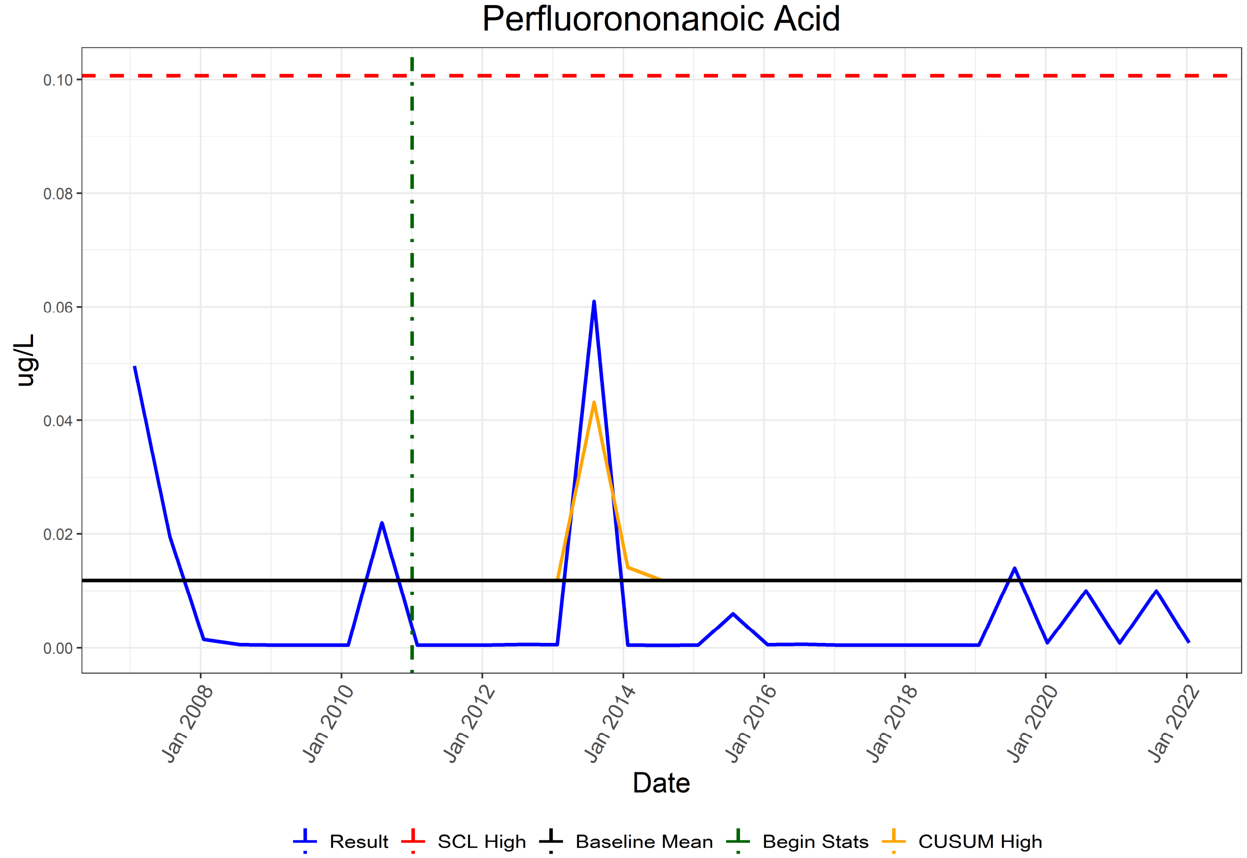




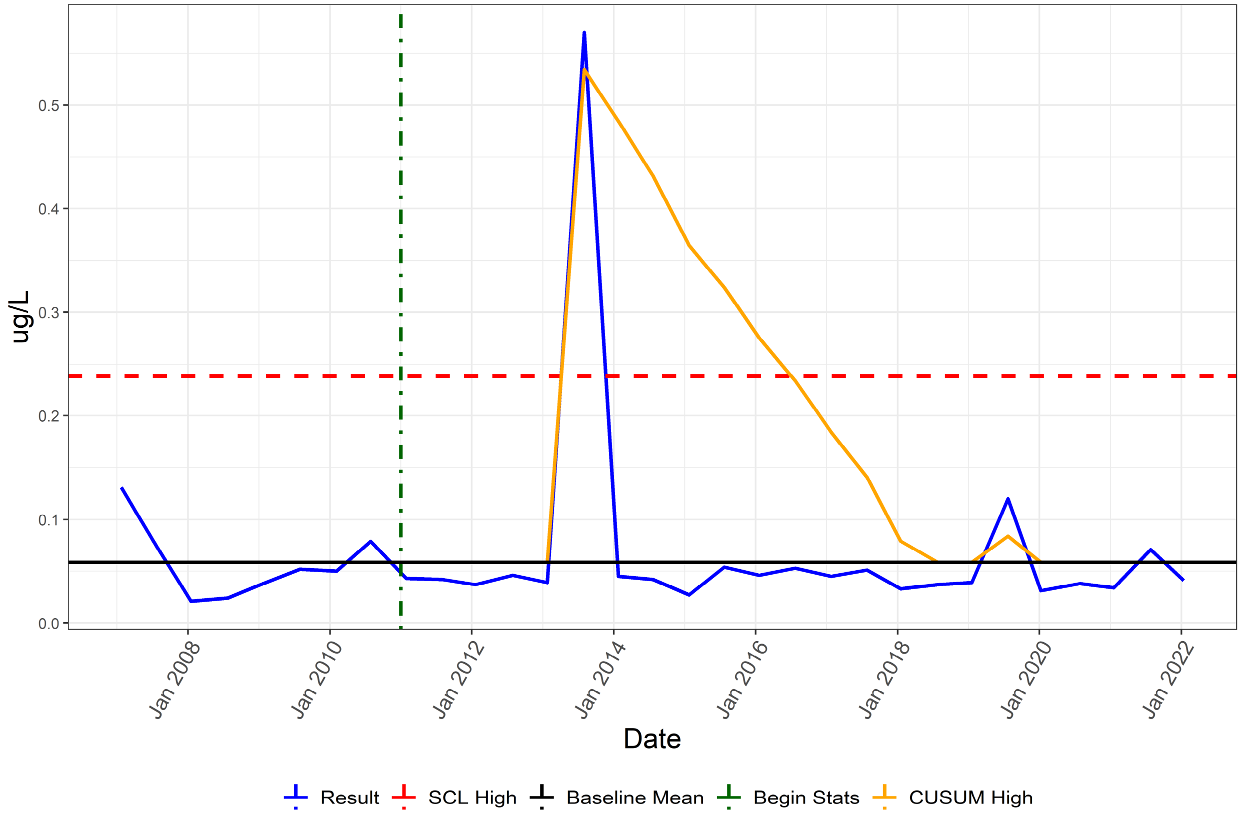

Perfluorododecanoic Acid
ug/L
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoroheptanoic Acid
ug/L
0.12
0.10
0.08
0.06
0.04
0.02
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

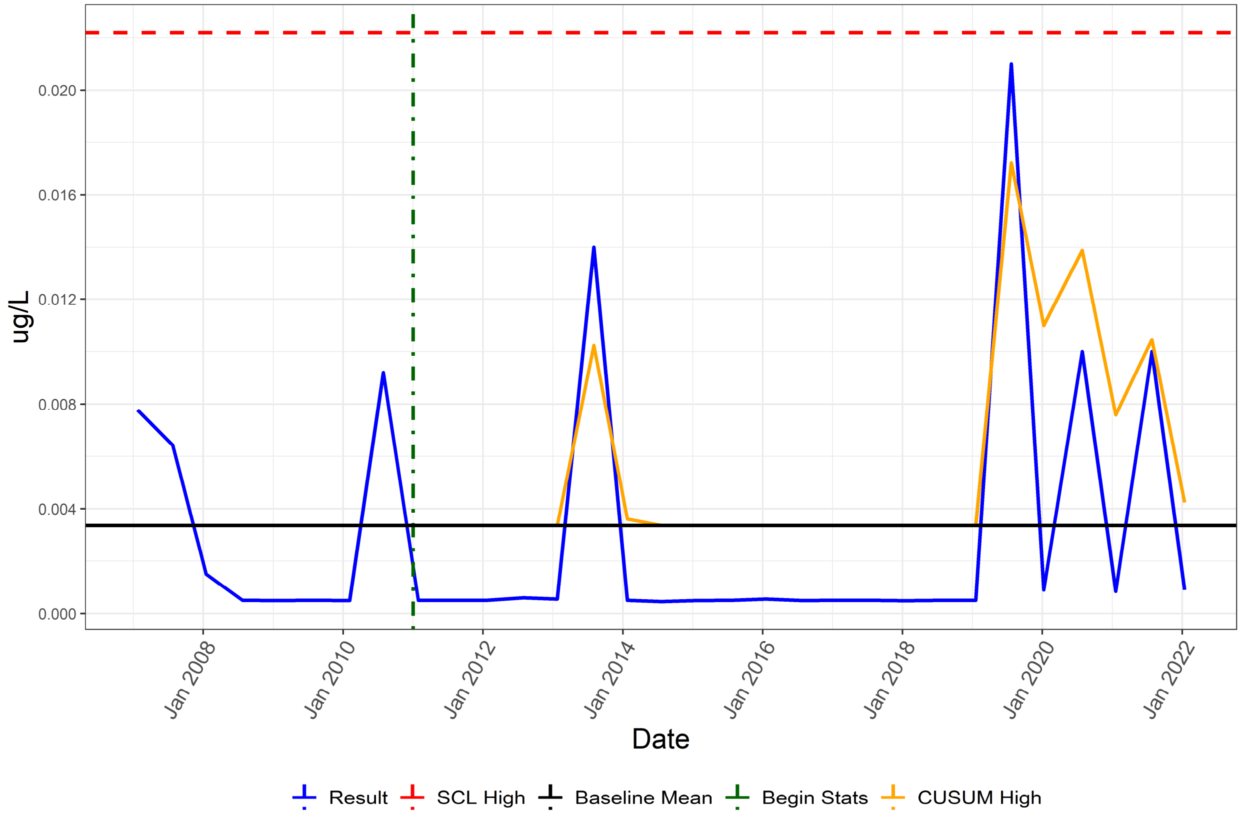

Perfluorohexanoic Acid
ug/L
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

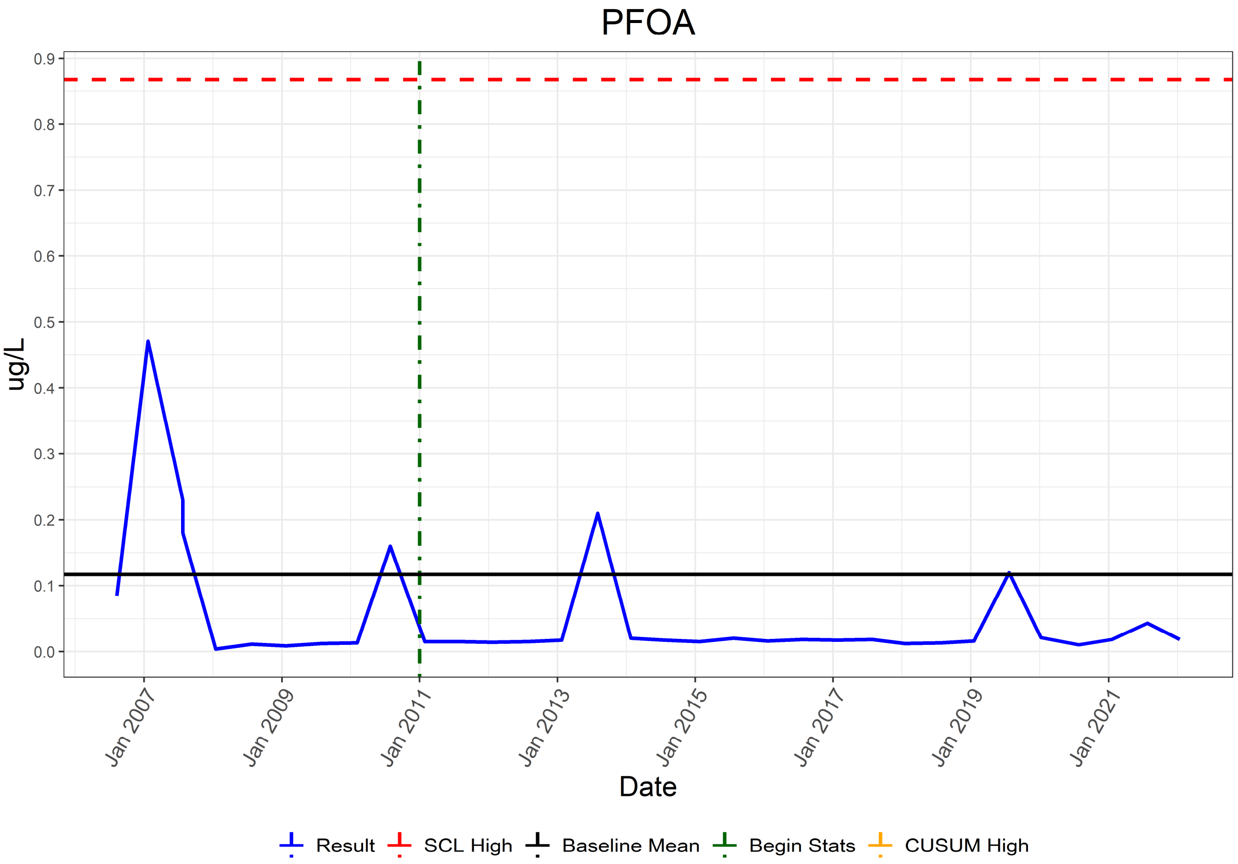

Perfluorononanoic Acid
ug/L
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Perfluoropentanoic Acid



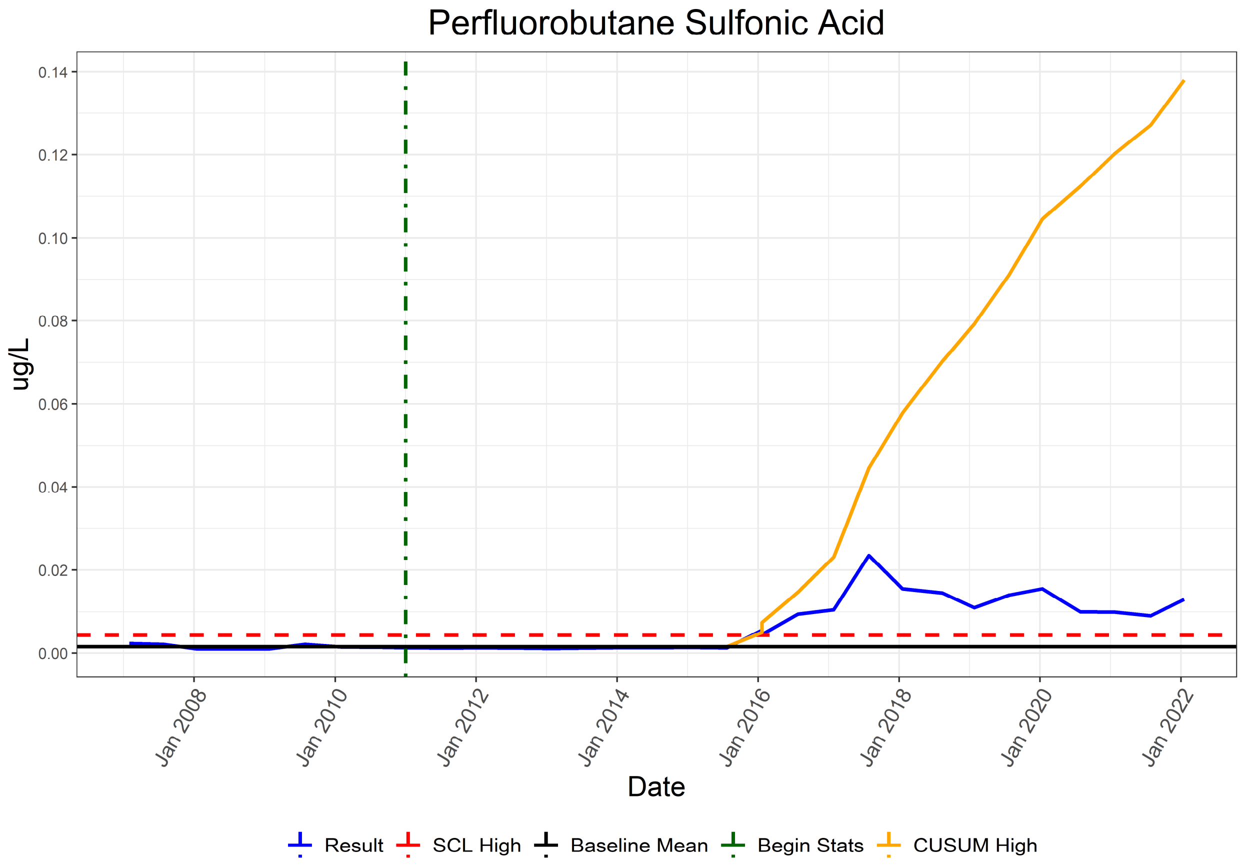
Perfluoroundecanoic Acid

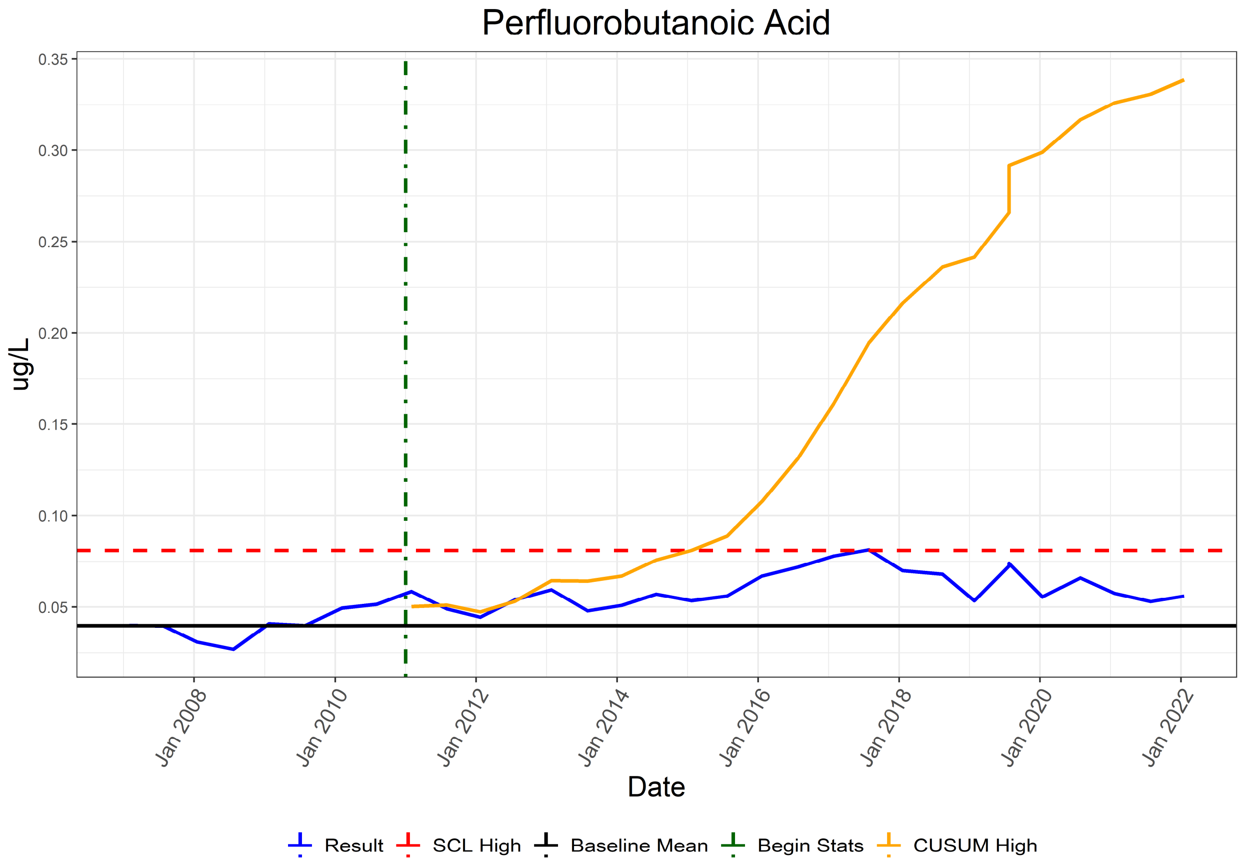


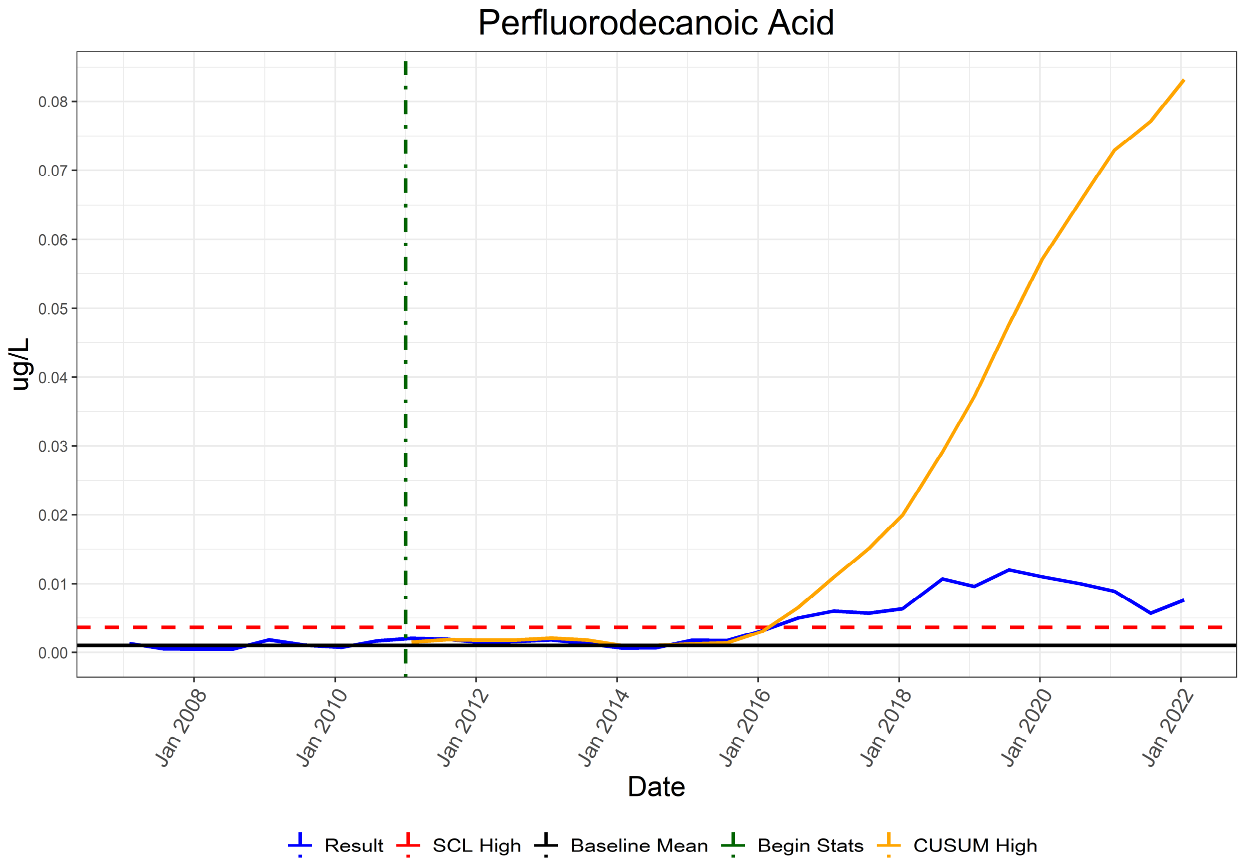

PFOA
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

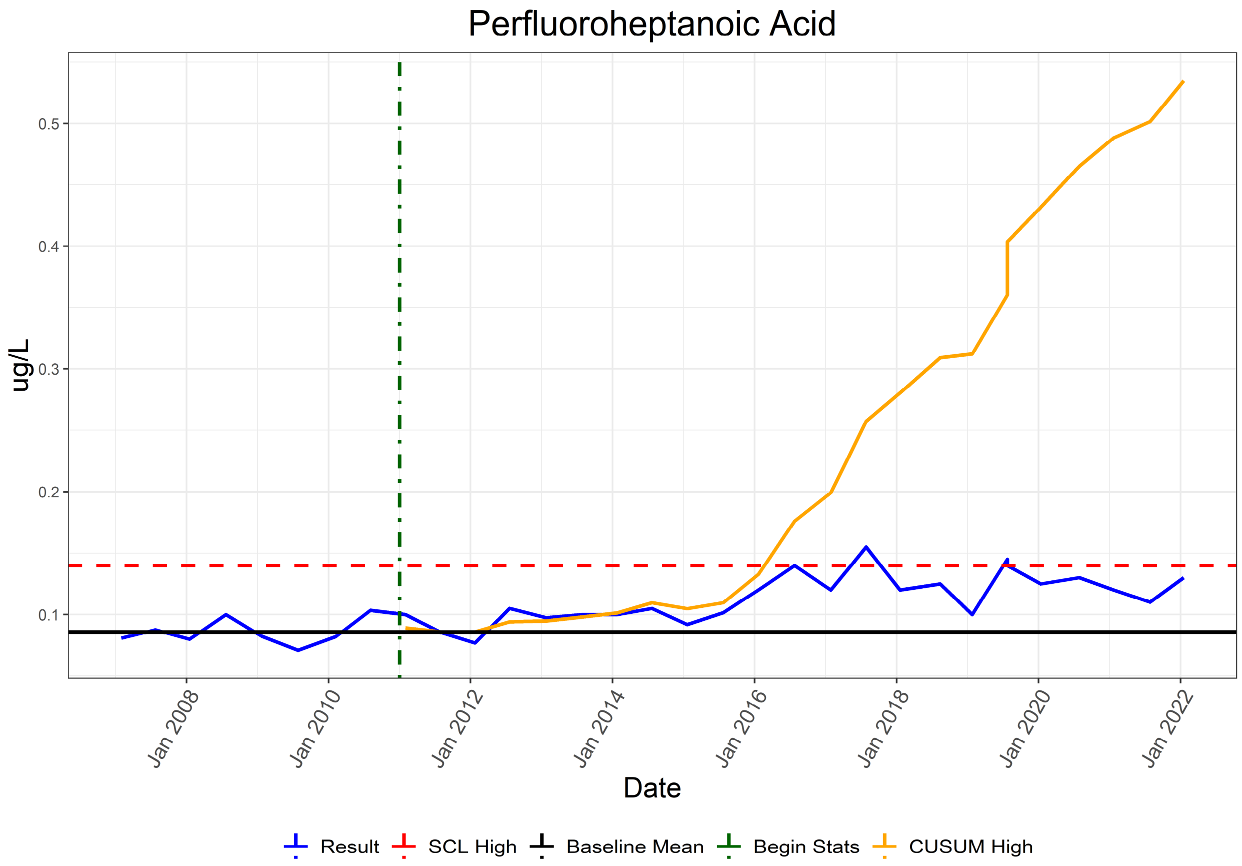
PFAS Monitoring Program (Program 9)

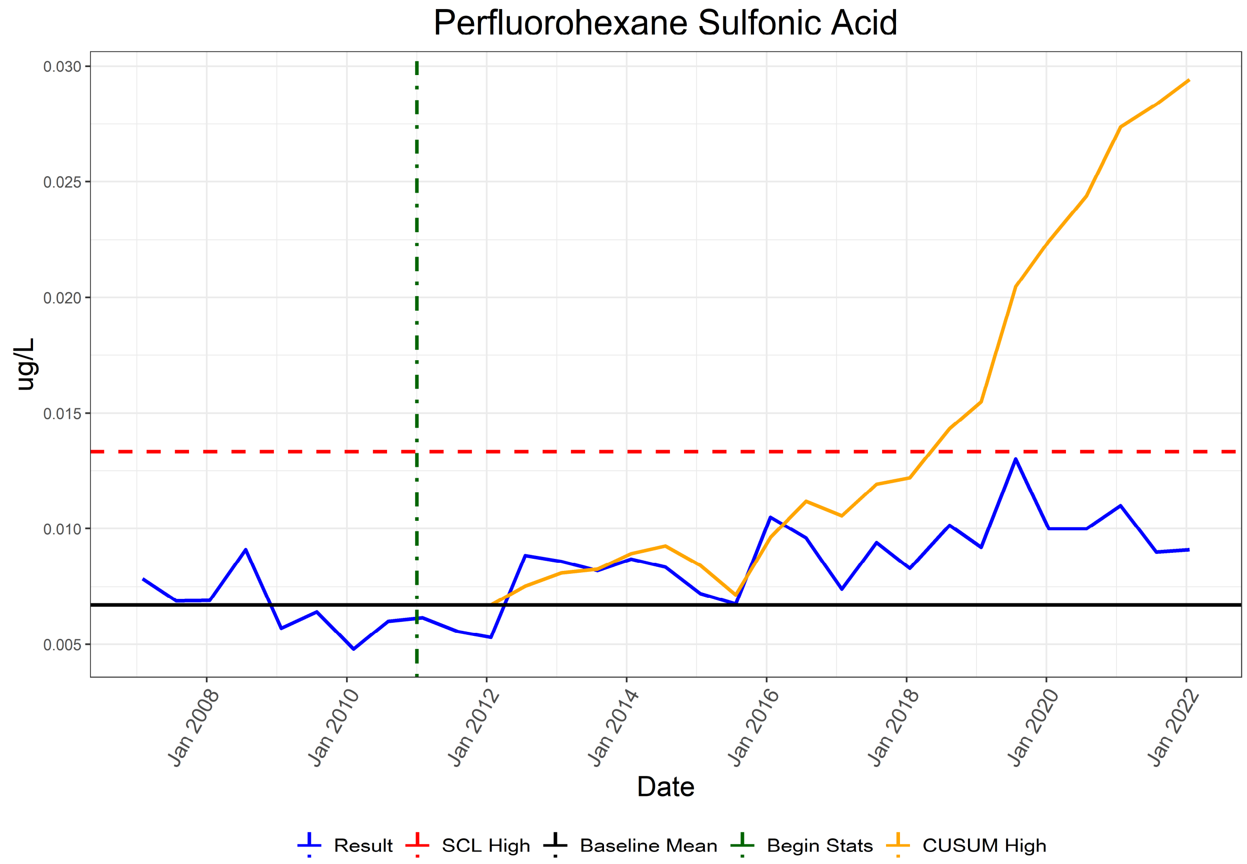
Well Name: Z28-M01B

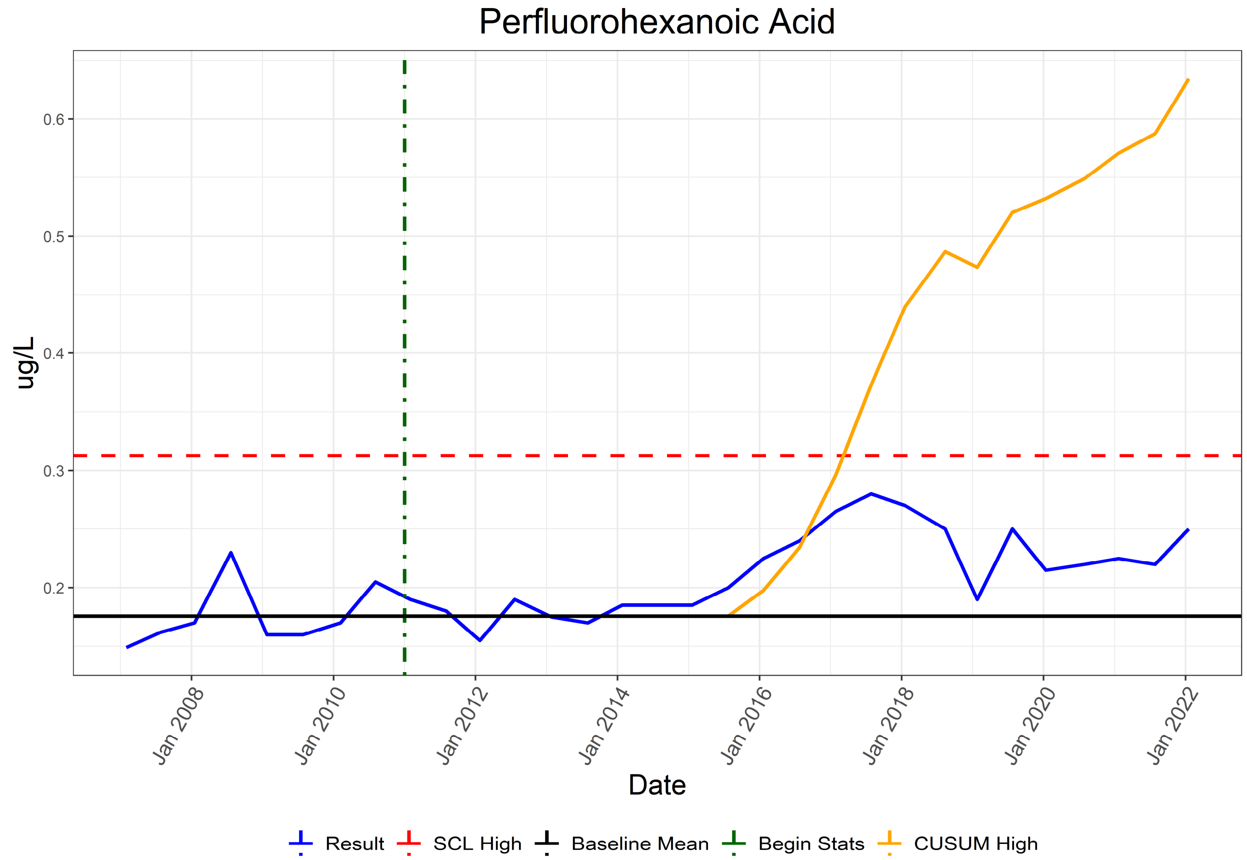


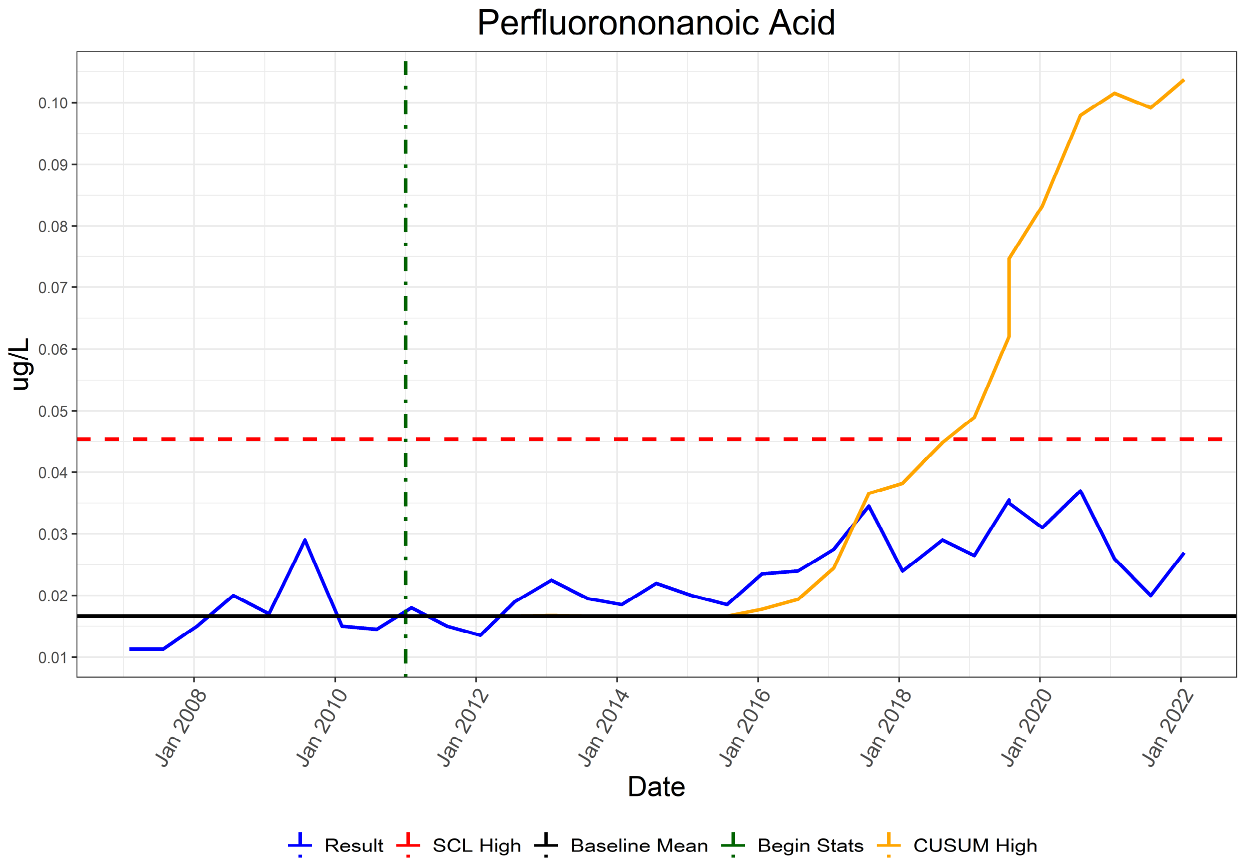


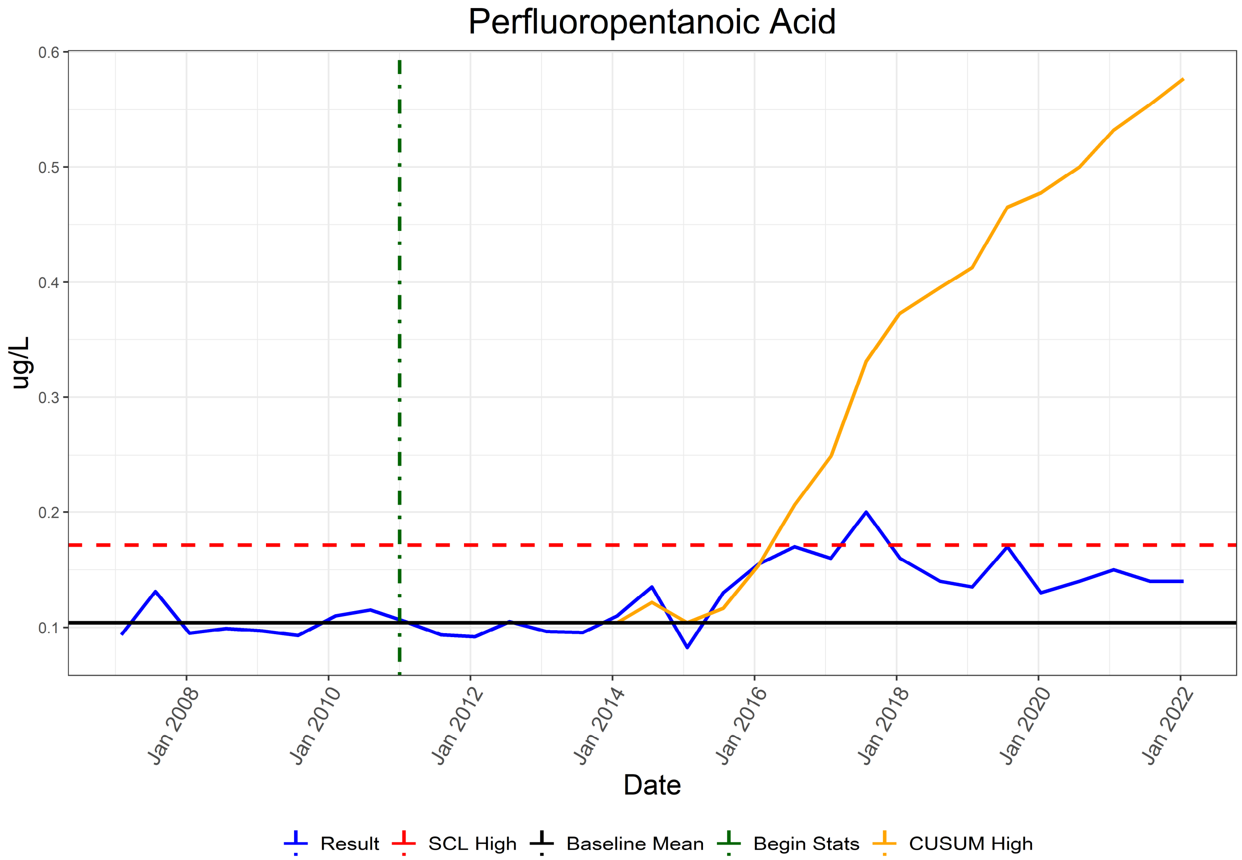

Perfluorodecanoic Acid
ug/L
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

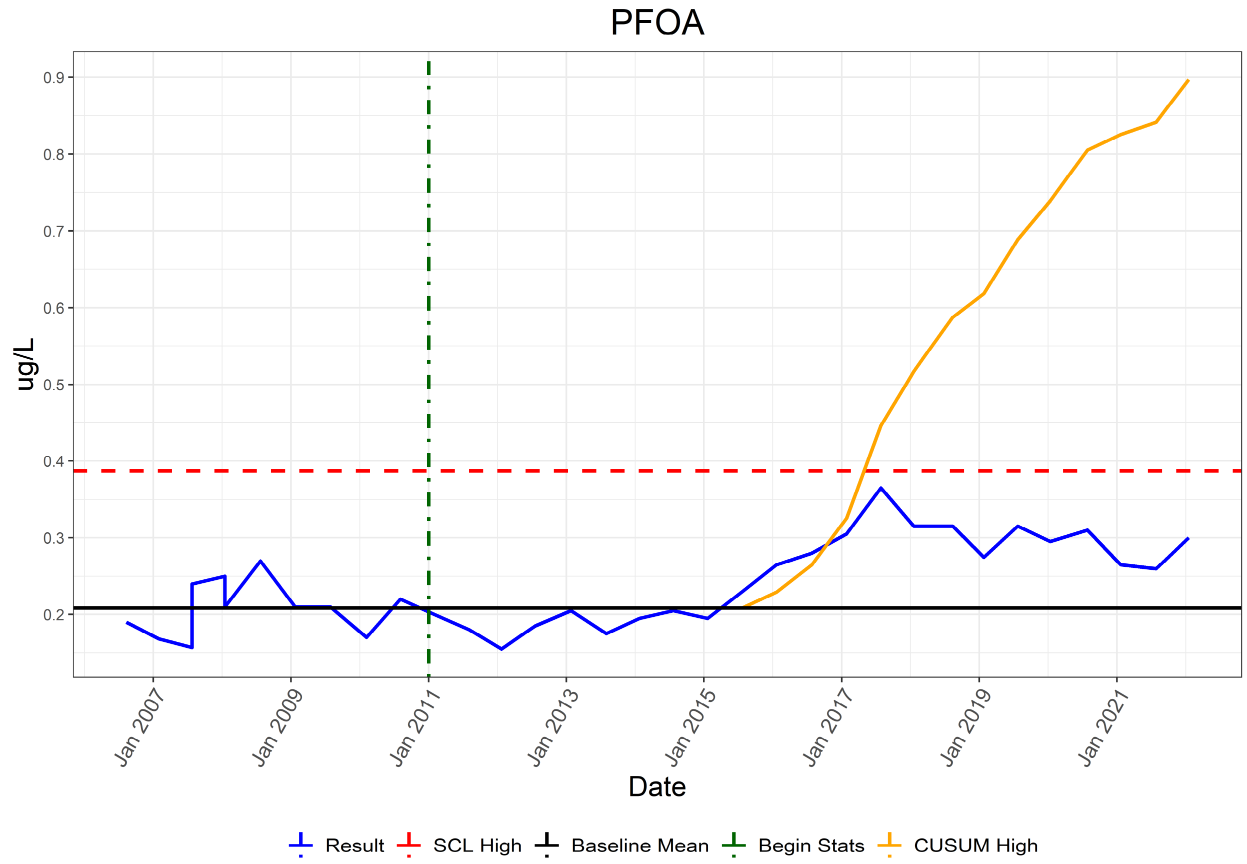

Perfluoroheptanoic Acid
ug/L
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

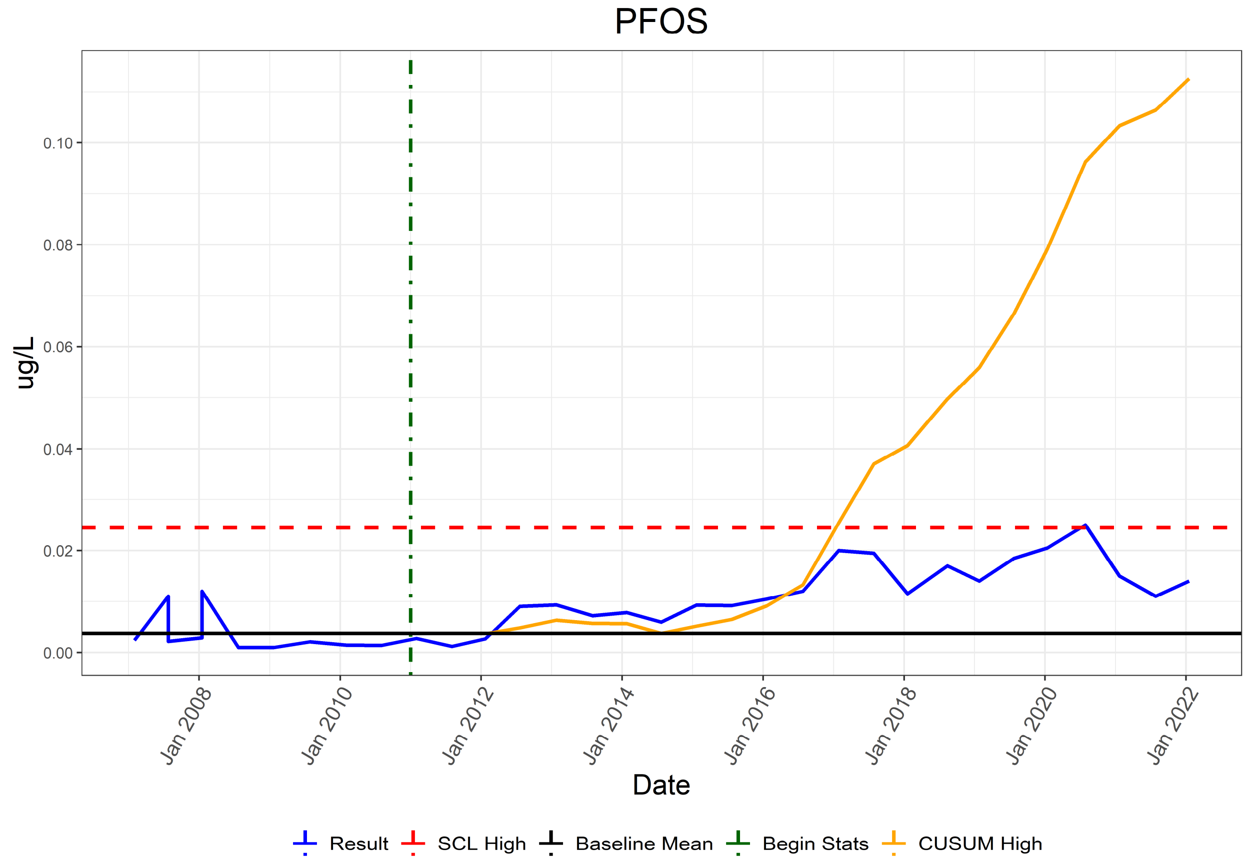

Perfluorohexane Sulfonic Acid
ug/L
0.030
0.025
0.020
0.015
0.010
0.005
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorohexanoic Acid
ug/L
0.6
0.5
0.4
0.3
0.2
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluorononanoic Acid
ug/L
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


Perfluoropentanoic Acid
ug/L
0.6
0.5
0.4
0.3
0.2
0.1
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOA
ug/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Jan 2007
Jan 2009
Jan 2011
Jan 2013
Jan 2015
Jan 2017
Jan 2019
Jan 2021
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High


PFOS
ug/L
0.10
0.08
0.06
0.04
0.02
0.00
Jan 2008
Jan 2010
Jan 2012
Jan 2014
Jan 2016
Jan 2018
Jan 2020
Jan 2022
Date
Result
SCL High
Baseline Mean
Begin Stats
CUSUM High

Appendix F

Monitoring Well Records

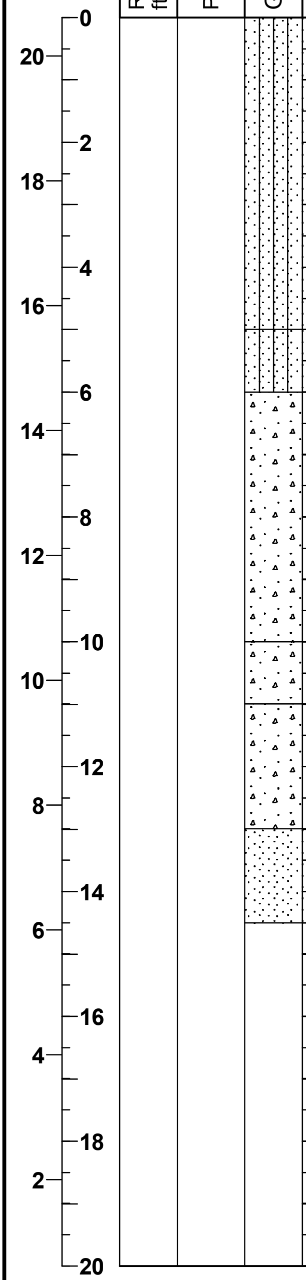
Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 1 of 9

Date(s) Drilled	**6/6/22 - 6/9/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotosonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**210.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**20.62**
NJDEP Permit	**E202206397**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**20.14**
Location	**N 287351.040 E 233673.412**	Borehole Completion	**Flushmount**		

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
					19 Sinnickson			



0'-5' SILTY SAND

5'-6' SILTY SAND, dark brown, dense, coarse, poorly sorted

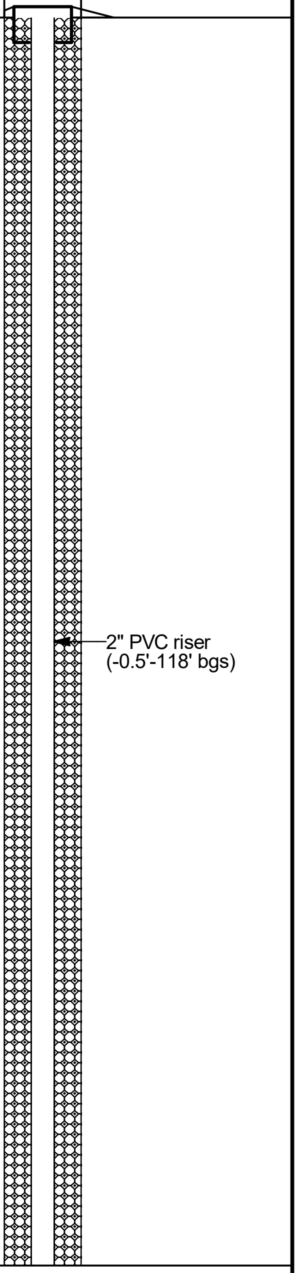
6'-10' SAND, light brown, micaceous, small gravel <1cm (angular), loose, coarse, poorly sorted, very coarse, dense

10'-11' SILTY SAND, brown, subrounded gravels 1-2sm, poorly sorted, very coarse, dense

11'-13' SAND, brownish orange, same gravels 1cm, loose, poorly sorted, very coarse

13'-14.5' SAND, light brown, loose, find, well sorted, moist at 14'

14.5'-20' No recovery



Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 2 of 9

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
0	20				20'-27' SAND, very coarse, saturated, loose, poorly sorted, brown 20'-23' then turns orange, large cobbles 20'-21', subangular gravel 1-2cm throughout, less gravel and smaller pieces downward			
-2	22							
-4	24							
-6	26							
					27' - 30' No Recovery			
-8	28							
-10	30				30'-38' SAND, reddish brown, coarse, saturated, loose, gravels <1cm throughout subrounded, poorly sorted			Cement Betonite Grout (0'-116' bgs)
-12	32							
-14	34							
-16	36							
-18	38				38'-40' No recovery			
-20	40				40'-45.7' Same as above, getting finer and more dense downward			
-22	42							
	44							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 3 of 9

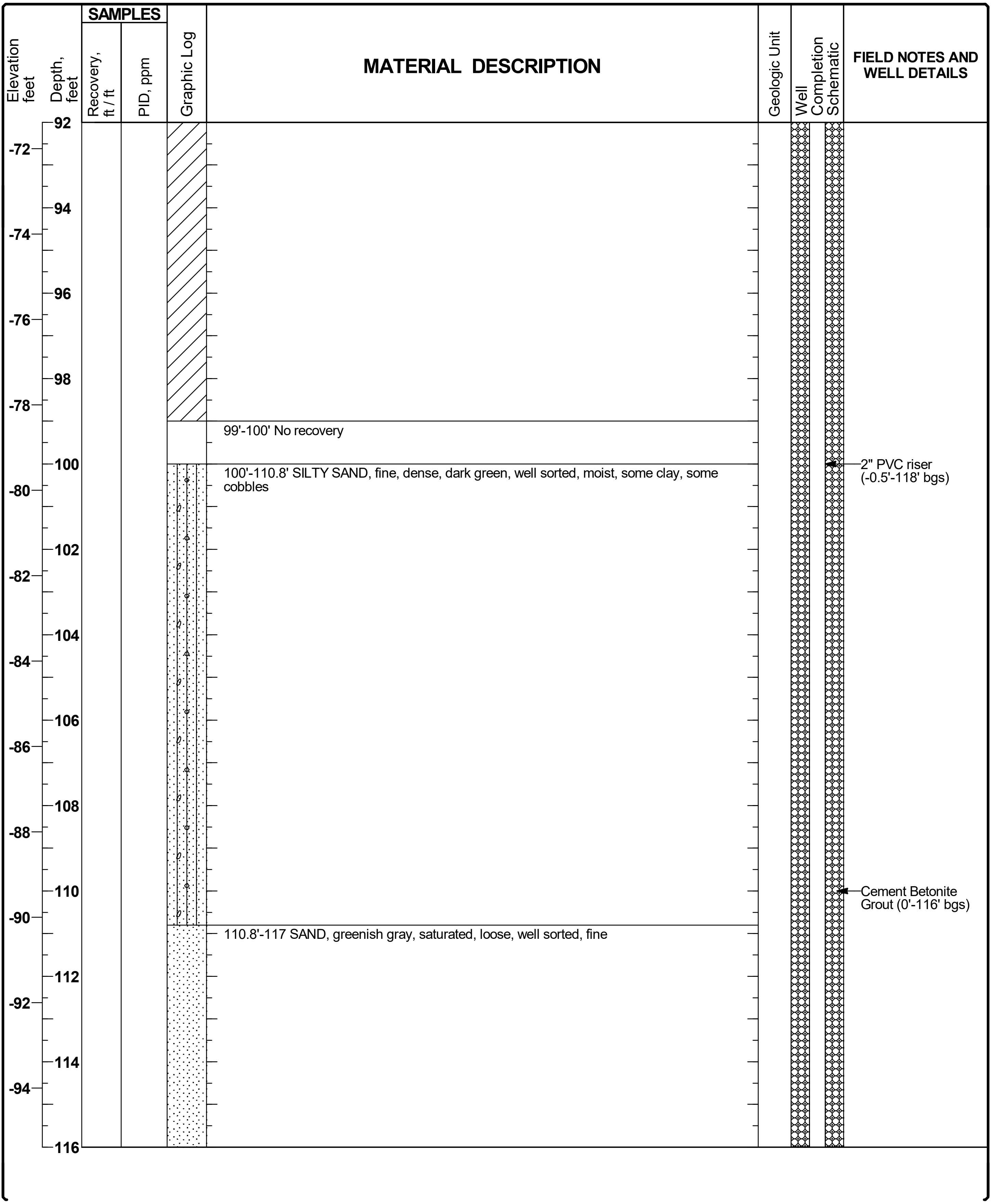
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	44							
-24								
					45.7'-48' SILTY SAND, brown to dark gray, some red motttles, dense, fine, well sorted			
	46							
-26								
	48				48'-50' No recovery			
-28								
	50							2" PVC riser (-0.5'-118' bgs)
-30								
	52							
-32								
	54							
-34								
	56							
-36								
	58							
-38								
	60				60'-68' SILTY SAND, dark gray/green, moist, dense, fine, trace clay, Gley 13/10Y			Cement Betonite Grout (0'-116' bgs)
-40								
	62							
-42								
	64							
-44								
	66							
-46								
	68							

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	 PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
-48	68				68'-70' No recovery			
-50 -52 -54 -56 -58	70 72 74 76 78			░	70' - 79' Same as above			2" PVC riser (-0.5'-118' bgs)
					79' - 80' No Recovery			
-60	80			░	80'-82' SANDY SILT, dense gray/green, moist, dense, fine increasing clay			Cement Betonite Grout (0'-116' bgs)
-62 -64 -66 -68	82 84 86 88			▨	82'-89- CLAY, dark gray/green, stiff, moist, trace fine sand and silt			
				▨	89'-90' No recovery			
-70	90 92			▨	90'-99' CLAY, same as aboce, increasing sand downward			

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 5 of 9



99'-100' No recovery

100'-110.8' SILTY SAND, fine, dense, dark green, well sorted, moist, some clay, some cobbles

110.8'-117 SAND, greenish gray, saturated, loose, well sorted, fine

2" PVC riser (-0.5'-118' bgs)

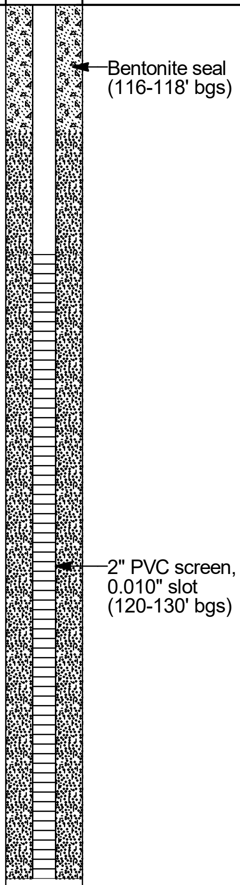
Cement Betonite Grout (0'-116' bgs)

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 6 of 9

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
-96	116							Bentonite seal (116-118' bgs)
	117				117'-120' No recovery			
-98	118							
-100	120				120'-128.5' SAND, clay at 126'-126.5', greenish gray, fine-med, loose, moist, well sorted			
-102	122							
-104	124							2" PVC screen, 0.010" slot (120-130' bgs)
-106	126							
-108	128				128.5'-130' No recovery			
-110	130				130'-140' SILTY CLAY, stiff, dark green/black, dry, micaceous			
-112	132							
-114	134							
-116	136							
-118	138							
	140							



Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	 PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
120 122 124 126 128 130 132 134 136 138 140 142	140 142 144 146 148 150 152 154 156 158 160 162 164			▨	140'-180'- CLAY, same as above			

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 8 of 9

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
144	164			▨				
146	166			▨				
148	168			▨				
150	170			▨				
152	172			▨				
154	174			▨				
156	176			▨				
158	178			▨				
160	180			▨	180'-187.5 SANDY CLAY, very dark gray, dry, stiff			
162	182			▨				
164	184			▨				
166	186			▨				
	188				187.5'-190' No recovery			

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01D

Sheet 9 of 9

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	 PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	188							
168								
	190			▨	190'-200' SANDY CLAY, same as above			
170								
	192							
172								
	194							
174								
	196							
176								
	198							
178								
	200			▨	200'-210' CLAY, dark gray, dry, very stiff			
180								
	202							
182								
	204							
184								
	206							
186								
	208							
188								
	210							
190								
	212							

Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: Residential

Location: 587 KINGS HWY

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation):	E202205397
Owner's well number (As shown on the application):	OSKH-M01D
Well completion date:	6/9/2022
Distance from top of casing (cap off) to ground surface (one-hundredth of a foot):	0
Total depth of well to the nearest ½ foot:	130
Depth to top of screen from top of casing (one-hundredth of a foot):	120
Screen length (or length of open hole in feet:	10
Screen or slot size:	.010
Screen or slot material:	PVC
Casing material (PVC, Steel or other-specify):	PVC
Casing diameter (inches):	2
Static water level from top of casing at the time of installation (one-hundredth of a foot):	48
Yield (gallons per minute):	1
Development technique (specify):	Pump
Length of time well was developed/pumped or bailed:	1/2 Hour

Authentication

I certify under penalty of law that I have personally examined and familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Mike Wilson

Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours

List all AKAs: DuPont Chambers Works

Street Address: 67 Canal Road

Municipality: Penns Grove (Township, Borough or City)

County: Salem Zip Code: 08023

Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Chemours
2. Well Location (Street Address) 587 Kings Highway
3. Well Location (Municipal Block and Lot) Block# 23 Lot # 14

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 202205397
2. Site Well Number (As shown on application or plans): OSKH-M01D
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 39° 37' 07.32" Longitude: West 75° 25' 03.02"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 287351 East 233673
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 20.14'
   Elevation Top of Outer casing: 20.62' Elevation of ground: 20.62'
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

   NAVD 88
7. Significant observations and notes:

   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: Date

Surveyor's Name: Andrew C. Putnam License Number: GS34873

Firm Name: AECOM Certificate of Authorization #: 24GA28042700

Mailing Address 4051 Ogletown Road, Suite 300

City/Town: Newark State Delaware Zip Code: 19713

Phone Number 302-781-5900 Ext.: 5874 Fax: 302-781-5901

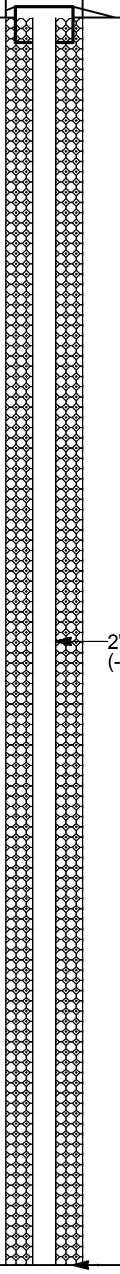
Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01S

Sheet 1 of 2

Date(s) Drilled	**6/9/22 - 6/10/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotosonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**40.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**20.94**
NJDEP Permit	**E202205395**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**20.34**
Location	**N 287346.075 E 233678.276**	Borehole Completion	**Flushmount**		

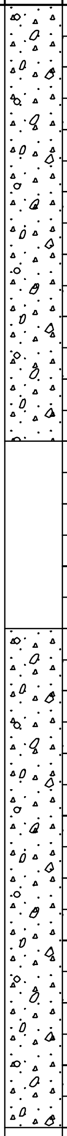
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
					19 Sinnickson			
	0				0'-5' SILTY SAND			
16	5				5'-6' SILTY SAND, dark brown, dense, coarse, poorly sorted			
	6				6'-10' SAND, light brown, micaceous, small gravel <1cm (angular), loose, coarse, poorly sorted, very coarse, dense			
	10				10'-11' SILTY SAND, brown, subrounded gravels 1-2sm, poorly sorted, very coarse, dense			2" PVC riser (-0.5'-30' bgs)
	11				11'-13' SAND, brownish orange, same gravels 1cm, loose, poorly sorted, very coarse			
8	13				13'-14.5' SAND, light brown, loose, find, well sorted, moist at 14'			
	14.5				14.5'-20' No recovery			

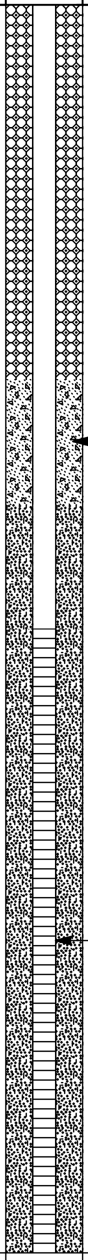


Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSKH-M01S

Sheet 2 of 2





Elevation feet	Depth, feet	Recovery, ft / ft	PID, ppm	MATERIAL DESCRIPTION	Geologic Unit	FIELD NOTES AND WELL DETAILS
	20			20'-27' SAND, very coarse, saturated, loose, poorly sorted, brown 20'-23' then turns orange, large cobbles 20'-21', subangular gravel 1-2cm throughout, less gravel and smaller pieces downward		Cement Betonite Grout (0'-26' bgs)
0	22					
-2	24					
-4	26					
-6				27' - 30' No Recovery		Bentonite seal (26-28' bgs)
	28					
-8	30			30'-38' SAND, reddish brown, coarse, saturated, loose, gravels <1cm throughout subrounded, poorly sorted		
-10	32					
-12	34					
-14						2" PVC screen, 0.010" slot (30-40' bgs)
	36					
-16	38			38'-40' No recovery		
-18	40					
-20	42					
-22	44					

Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: Residential

Location: 587 KINGS HWY

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation):	E202205395
Owner's well number (As shown on the application):	OSKH-M01S
Well completion date:	6/10/2021
Distance from top of casing (cap off) to ground surface (one-hundredth of a foot):	0
Total depth of well to the nearest ½ foot:	40
Depth to top of screen from top of casing (one-hundredth of a foot):	30
Screen length (or length of open hole in feet:	10
Screen or slot size:	.010
Screen or slot material:	PVC
Casing material (PVC, Steel or other-specify):	PVC
Casing diameter (inches):	2
Static water level from top of casing at the time of installation (one-hundredth of a foot):	22
Yield (gallons per minute):	1
Development technique (specify):	Pump
Length of time well was developed/pumped or bailed:	1/2 Hour

Authentication

I certify under penalty of law that I have personally examined and familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Mike Wilson

Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours

List all AKAs: DuPont Chambers Works

Street Address: 67 Canal Road

Municipality: Penns Grove (Township, Borough or City)

County: Salem Zip Code: 08023

Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Chemours
2. Well Location (Street Address) 587 Kings Highway
3. Well Location (Municipal Block and Lot) Block# 23 Lot # 14

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 202205395
2. Site Well Number (As shown on application or plans): OSKH-M01S
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 39° 37' 07.27" Longitude: West 75° 25' 02.96"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 287346 East 233678
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 20.34'
   Elevation Top of Outer casing: 20.94' Elevation of ground: 20.94'
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

   NAVD 88
7. Significant observations and notes:

   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: Date

Surveyor's Name: Andrew C. Putnam License Number: GS34873

Firm Name: AECOM Certificate of Authorization #: 24GA28042700

Mailing Address 4051 Ogletown Road, Suite 300

City/Town: Newark State Delaware Zip Code: 19713

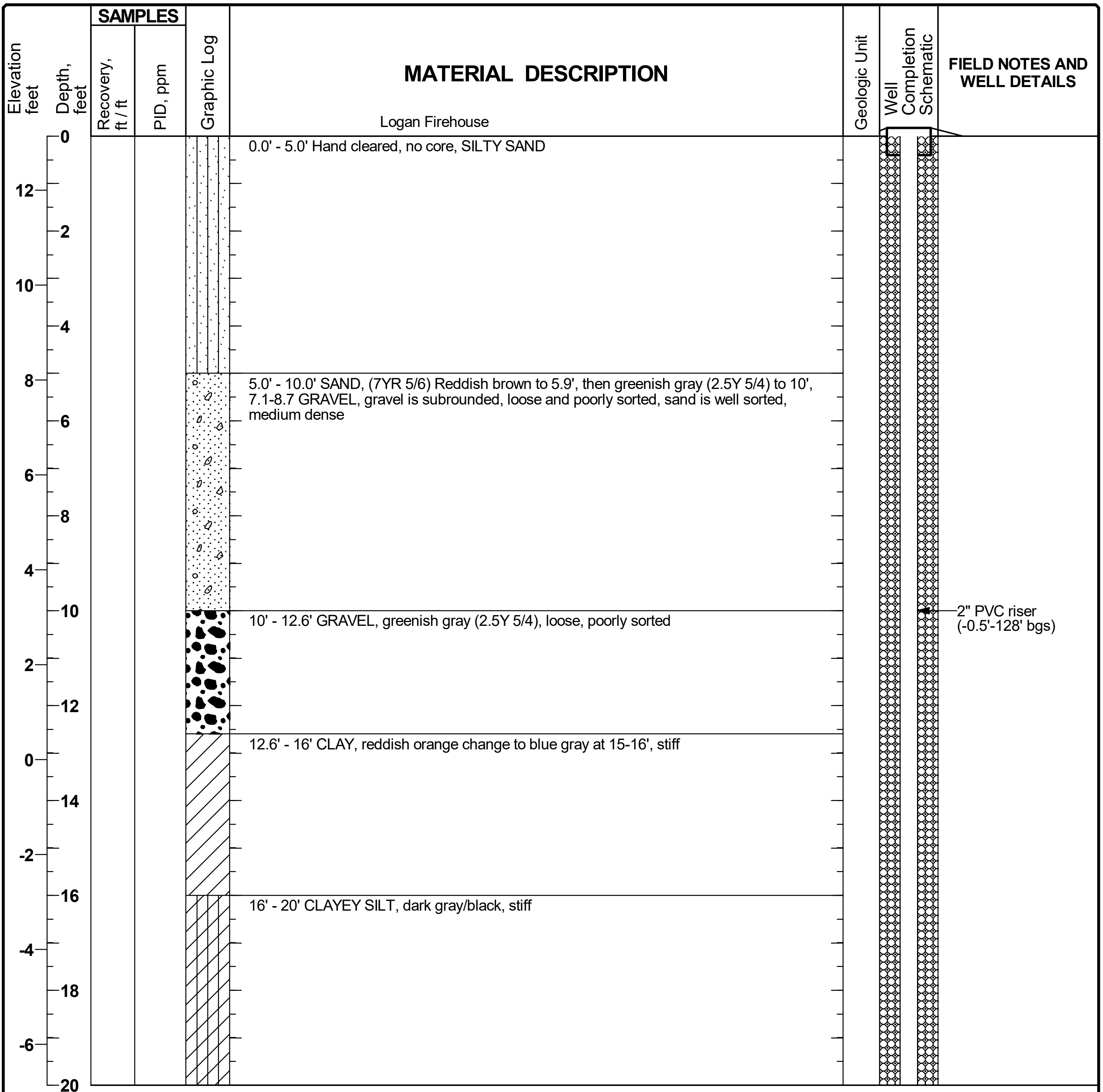
Phone Number 302-781-5900 Ext.: 5874 Fax: 302-781-5901

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01D

Sheet 1 of 6

Date(s) Drilled	**5/26/22 - 5/31/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotosonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**140.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**13.14**
NJDEP Permit	**E202205400**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**12.78**
Location	**N 337848.634 E 238311.573**	Borehole Completion	**Flushmount**		



Logan Firehouse

0.0' - 5.0' Hand cleared, no core, SILTY SAND

5.0' - 10.0' SAND, (7YR 5/6) Reddish brown to 5.9', then greenish gray (2.5Y 5/4) to 10', 7.1-8.7 GRAVEL, gravel is subrounded, loose and poorly sorted, sand is well sorted, medium dense

10' - 12.6' GRAVEL, greenish gray (2.5Y 5/4), loose, poorly sorted

12.6' - 16' CLAY, reddish orange change to blue gray at 15-16', stiff

16' - 20' CLAYEY SILT, dark gray/black, stiff

2" PVC riser
(-0.5'-128' bgs)

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01D

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	 PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
-8 -10 -12 -14	20 22 24 26 28				20' - 29' CLAY, very dark gray (10YR 3/1), moist, stiff, few organics, roots, little very fine sand			
-16					29' - 30' No Recovery			
-18 -20 -22	30 32 34				30'-35.5' Same as above, color change at 34.8ft to Gley1 3/2, very dark, greenish gray, moist			Cement Betonite Grout (0'-126' bgs)
	36				35.5'-36.6' SILTY SAND, moist to wet (Gley1 4/2), grayish green, sand is very coarse, some med, few rounded gravel 1-2"			
-24					36.6'-38' SAND, loose (104-5GY 5/104) light olive, m-vc, some angular to rounded gravel 1/4-3" diameter, wet			
-26	38				38'-40' SAND (7.5YR 8/1) white, wet, loose, mostly coarse, little f-med, little silt			
-28 -30	40 42 44				40'-45.7' Same as above, loose wet, color change to yellow from 42.4-43, very coarse, well sorted			

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01D

Sheet 3 of 6

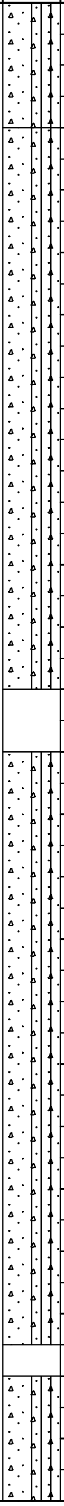
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	44							
-32								
	46				45.7'-46.7' Same as above, some silt, dense			
-34					46.7'-50' CLAY, very stiff, (10YR 7/1), light gray			
	48							
-36								
	50				50'-59.5'- SAND, white 104R 8/1, wet, med dense becoming loose for last 1.5ft m-f sand, well sorted			2" PVC riser (-0.5'-128' bgs)
-38								
	52							
-40								
	54							
-42								
	56							
-44								
	58							
-46								
					59.5' - 60.0' No Recovery			
	60				60'-64.5' Same as above, wet loose, very coarse			Cement Betonite Grout (0'-126' bgs)
-48								
	62							
-50								
	64							
					64.5'-66.3' Same as above, yellow, dense, little silt, m-vc (104R 7/8)			
-52								
	66							
					66.3'-67.7'- SILTY SAND, white, stiff, m-vc, poorly sorted			
-54								
	68							

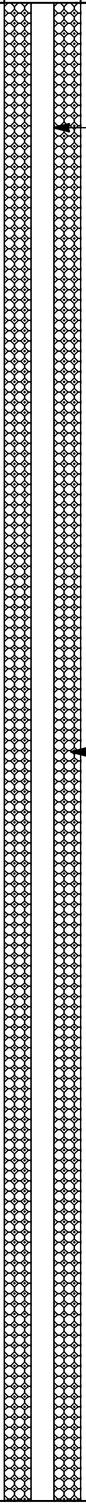
Project: **Off-site Wells**
Project Location: **Deepwater, NJ**
Project Number: **60673730**

Log of Boring/Well OSRA-M01D

Sheet 4 of 6

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	68				67.7'-70' SAND, Same as above, yellow to 68.4 then white again, wet, loose, m-vc			
-56								
	70				70'-79' SAND, Same as above, white to very pale brown, saturated, loose, c-vc becoming less coarse towards bottom			2" PVC riser (-0.5'-128' bgs)
-58								
	72							
-60								
	74							
-62								
	76							
-64								
	78							
					70' - 80' No Recovery			
-66								
	80				80'-89.5' SAND, Same as above, wet, loose, coarse-med, moderately well sorted			Cement Betonite Grout (0'-126' bgs)
-68								
	82							
-70								
	84							
-72								
	86							
-74								
	88							
-76								
					89.5' - 90' No Recovery			
	90				90'-100' SAND, same as abpve, wet, loose, course-med, white to light brown			
-78								
	92							





Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01D

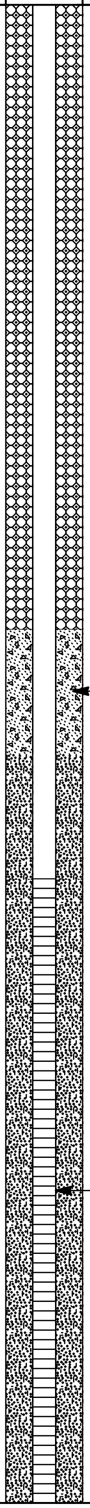
Sheet 5 of 6

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	92							
-80								
	94							
-82								
	96							
-84								
	98							
-86								
	100				100'-102.1' SAND, same as above, some gravel starting at 101.7'			2" PVC riser (-0.5'-128' bgs)
-88								
	102				102.1'-103.7' SAND w/ gravel 1-2cm subrounded, some clay			
-90								
	104				103.7'-108' Stiff clay, gray to orange/light red, some red/purple mottling			
-92								
	106							
-94								
	108				108' - 110' No recovery			
-96								
	110				110'-118- CLAY same as above, stiff, gray with red and orange mottling, silty between 16.9'-17.1', loose, well sorted			Cement Betonite Grout (0'-126' bgs)
-98								
	112							
-100								
	114							
-102								
	116							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01D

Sheet 6 of 6



Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	116			▨				
104								
	118				118' - 120' No Recovery			
106								
	120				120'-130' SAND, med-course, saturated, light gray to orange, dense downward, well sorted, silty white layer 120.3'-120.6'			
108								
	122							
110								
	124							
112								
	126							
114								Bentonite seal (126-128' bgs)
	128							
116								
	130				130'-140' SAND, med-coarse, saturated, light brown/orange then white at 133' dense			
118								
	132							
120								
	134							
122								2" PVC screen, 0.010" slot (130-140' bgs)
	136							
124								
	138							
126								
	140							

Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: LOGAN VOLUNTEER FIRE CO

Location: 39 S RAILROAD AVE

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation):	E202205400
Owner's well number (As shown on the application):	OSRA-M01D
Well completion date:	5/27/2022
Distance from top of casing (cap off) to ground surface (one-hundredth of a foot):	0
Total depth of well to the nearest ½ foot:	140
Depth to top of screen from top of casing (one-hundredth of a foot):	130
Screen length (or length of open hole in feet:	10
Screen or slot size:	.010
Screen or slot material:	PVC
Casing material (PVC, Steel or other-specify):	PVC
Casing diameter (inches):	2
Static water level from top of casing at the time of installation (one-hundredth of a foot):	46
Yield (gallons per minute):	1
Development technique (specify):	Pump
Length of time well was developed/pumped or bailed:	1/2 Hour

Authentication

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Mike Wilson

Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours

List all AKAs: DuPont Chambers Works

Street Address: 67 Canal Road

Municipality: Penns Grove (Township, Borough or City)

County: Salem Zip Code: 08023

Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Chemours
2. Well Location (Street Address) 39 South Railroad Avenue
3. Well Location (Municipal Block and Lot) Block# 11 Lot # 5

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 202205400
2. Site Well Number (As shown on application or plans): OSRA-M01D
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 39° 45' 26.83" Longitude: West 75° 24' 10.25"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 337849 East 238312
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 12.78'
   Elevation Top of Outer casing: 13.14' Elevation of ground: 13.14'
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

   NAVD 88
7. Significant observations and notes:

   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

SECTION D. LAND SURVEYOR'S CERTIFICATION

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SEAL

Professional Land Surveyor's Signature: Date

Surveyor's Name: Andrew C. Putnam License Number: GS34873

Firm Name: AECOM Certificate of Authorization #: 24GA28042700

Mailing Address 4051 Ogletown Road, Suite 300

City/Town: Newark State Delaware Zip Code: 19713

Phone Number 302-781-5900 Ext.: 5874 Fax: 302-781-5901

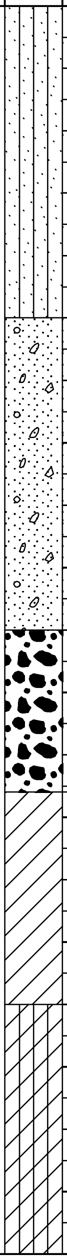
Project:	**Off-site Wells**
Project Location:	**Deepwater, NJ**
Project Number:	**60673730**

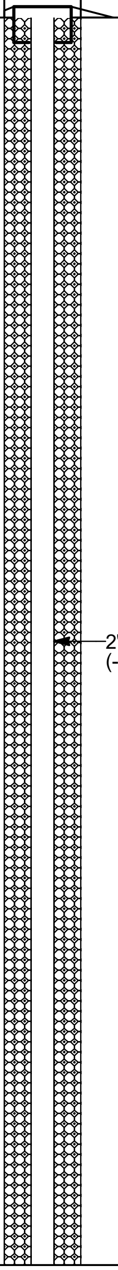
Log of Boring/Well OSRA-M01I

Sheet 1 of 5

Date(s) Drilled	**5/31/22 - 6/1/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotosonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**110.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**13.01**
NJDEP Permit	**E202205399**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**12.54**
Location	**N 337844.869 E 238305.355**	Borehole Completion	**Flushmount**		

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
					Logan Firehouse			
	0				0.0' - 5.0' Hand cleared, no core, SILTY SAND			
8	5				5.0' - 10.0' SAND, (7YR 5/6) Reddish brown to 5.9', then greenish gray (2.5Y 5/4) to 10', 7.1-8.7 GRAVEL, gravel is subrounded, loose and poorly sorted, sand is well sorted, medium dense			
	10				10' - 12.6' GRAVEL, greenish gray (2.5Y 5/4), loose, poorly sorted			2" PVC riser (-0.5'-92' bgs)
	12.6				12.6' - 16' CLAY, reddish orange change to blue gray at 15-16', stiff			
	16				16' - 20' CLAYEY SILT, dark gray/black, stiff			





Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01I

Sheet 2 of 5

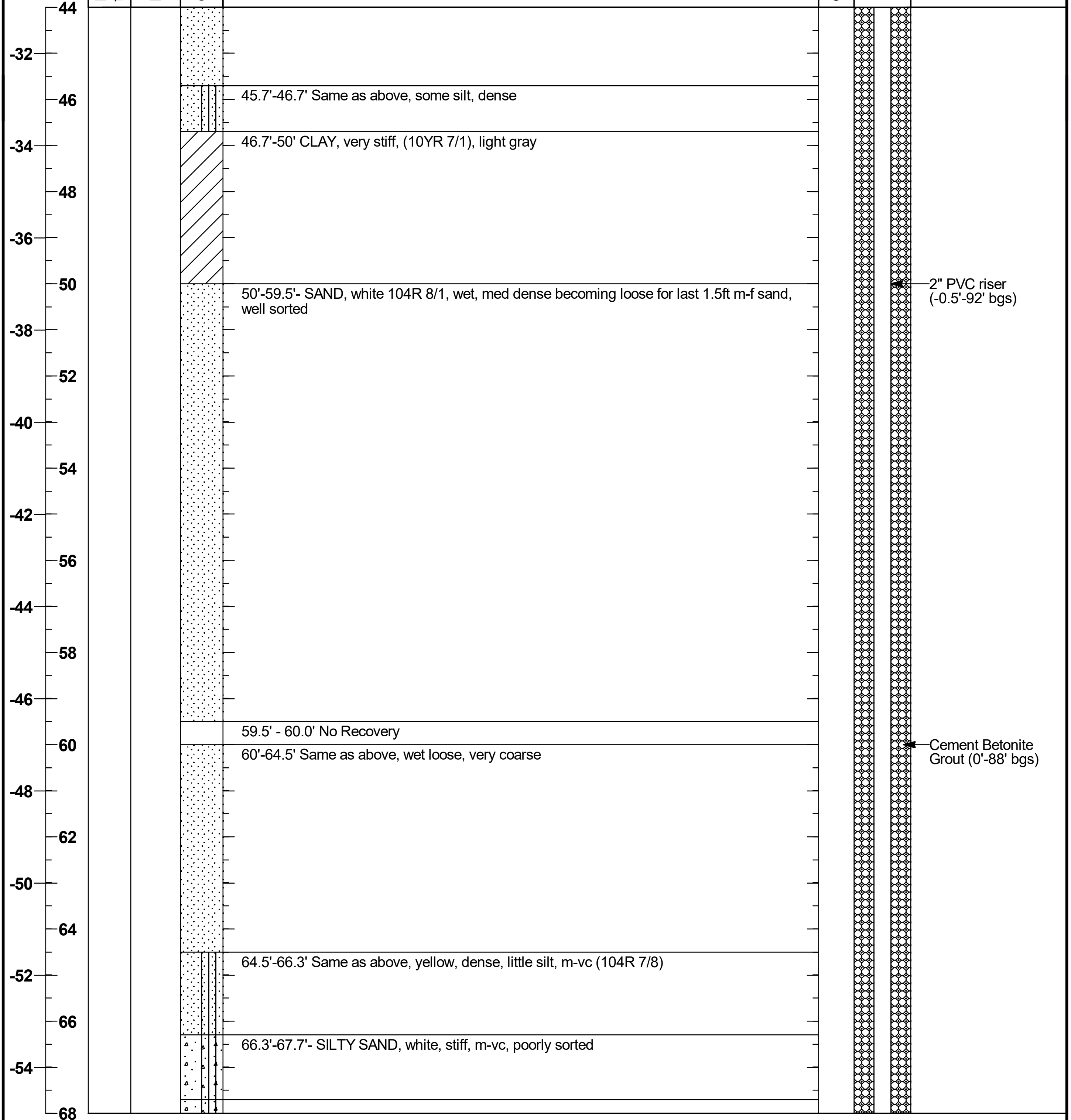
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	 PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
-8 -10 -12 -14	20 22 24 26 28			▨	20' - 29' CLAY, very dark gray (10YR 3/1), moist, stiff, few organics, roots, little very fine sand			
-16					29' - 30' No Recovery			
-18 -20 -22	30 32 34			▨	30'-35.5' Same as above, color change at 34.8ft to Gley1 3/2, very dark, greenish gray, moist			Cement Betonite Grout (0'-88' bgs)
	36				35.5'-36.6' SILTY SAND, moist to wet (Gley1 4/2), grayish green, sand is very coarse, some med, few rounded gravel 1-2"			
-24					36.6'-38' SAND, loose (104-5GY 5/104) light olive, m-vc, some angular to rounded gravel 1/4-3" diameter, wet			
-26	38				38'-40' SAND (7.5YR 8/1) white, wet, loose, mostly coarse, little f-med, little silt			
-28 -30	40 42 44				40'-45.7' Same as above, loose wet, color change to yellow from 42.4-43, very coarse, well sorted			

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01I

Sheet 3 of 5

Elevation feet	Depth, feet	SAMPLES: Recovery, ft / ft	SAMPLES: PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS



45.7'-46.7' Same as above, some silt, dense

46.7'-50' CLAY, very stiff, (10YR 7/1), light gray

50'-59.5'- SAND, white 104R 8/1, wet, med dense becoming loose for last 1.5ft m-f sand, well sorted

59.5' - 60.0' No Recovery

60'-64.5' Same as above, wet loose, very coarse

64.5'-66.3' Same as above, yellow, dense, little silt, m-vc (104R 7/8)

66.3'-67.7'- SILTY SAND, white, stiff, m-vc, poorly sorted

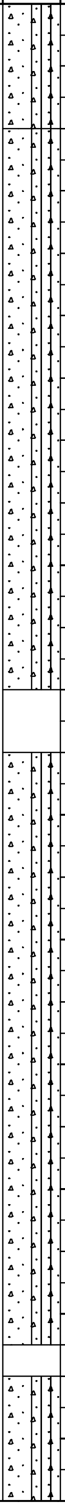
2" PVC riser (-0.5'-92' bgs)

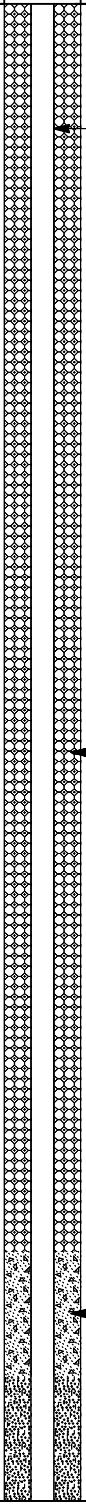
Cement Betonite Grout (0'-88' bgs)

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01I

Sheet 4 of 5



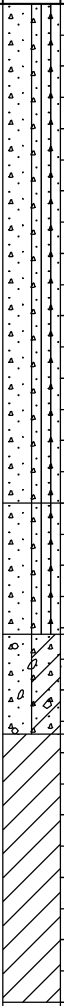


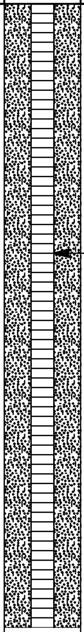
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	68				67.7'-70' SAND, Same as above, yellow to 68.4 then white again, wet, loose, m-vc			
-56								
	70				70'-79' SAND, Same as above, white to very pale brown, saturated, loose, c-vc becoming less coarse towards bottom			2" PVC riser (-0.5'-92' bgs)
-58								
	72							
-60								
	74							
-62								
	76							
-64								
	78							
-66					70' - 80' No Recovery			
	80				80'-89.5' SAND, Same as above, wet, loose, coarse-med, moderately well sorted			Cement Betonite Grout (0'-88' bgs)
-68								
	82							
-70								
	84							
-72								
	86							
-74								
	88							
-76								Bentonite seal (88-90' bgs)
					89.5' - 90' No Recovery			
	90				90'-100' SAND, same as abpve, wet, loose, course-med, white to light brown			
-78								
	92							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01I

Sheet 5 of 5





Elevation feet	Depth, feet	SAMPLES		Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
		Recovery, ft / ft	PID, ppm					
	92							
-80								
	94							
-82								
	96							2" PVC screen, 0.010" slot (92-102' bgs)
-84								
	98							
-86								
	100				100'-102.1' SAND, same as above, some gravel starting at 101.7'			
-88								
	102				102.1'-103.7' SAND w/ gravel 1-2cm subrounded, some clay			
-90								
	104				103.7'-108' Stiff clay, gray to orange/light red, some red/purple mottling			
-92								
	106							
-94								
	108				108' - 110' No recovery			
-96								
	110							
-98								
	112							
-100								
	114							
-102								
	116							

Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: LOGAN VOLUNTEER FIRE CO

Location: 39 S RAILROAD AVE

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation):	E202205399
Owner's well number (As shown on the application):	OSRA-M01I
Well completion date:	6/1/2022
Distance from top of casing (cap off) to ground surface (one-hundredth of a foot):	0
Total depth of well to the nearest ½ foot:	102
Depth to top of screen from top of casing (one-hundredth of a foot):	92
Screen length (or length of open hole in feet:	10
Screen or slot size:	.010
Screen or slot material:	PVC
Casing material (PVC, Steel or other-specify):	PVC
Casing diameter (inches):	2
Static water level from top of casing at the time of installation (one-hundredth of a foot):	38
Yield (gallons per minute):	1
Development technique (specify):	Pump
Length of time well was developed/pumped or bailed:	1/2 Hour

Authentication

I certify under penalty of law that I have personally examined and familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Mike Wilson

Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours
List all AKAs: DuPont Chambers Works
Street Address: 67 Canal Road
Municipality: Penns Grove (Township, Borough or City)
County: Salem Zip Code: 08023
Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Chemours
2. Well Location (Street Address) 39 South Railroad Avenue
3. Well Location (Municipal Block and Lot) Block# 11 Lot # 5

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 202205399
2. Site Well Number (As shown on application or plans): OSRA-M01I
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 39° 45' 26.80" Longitude: West 75° 24' 10.33"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 337845 East 238305
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 12.54'
   Elevation Top of Outer casing: 13.01' Elevation of ground: 13.01'
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

   NAVD 88
7. Significant observations and notes:

   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

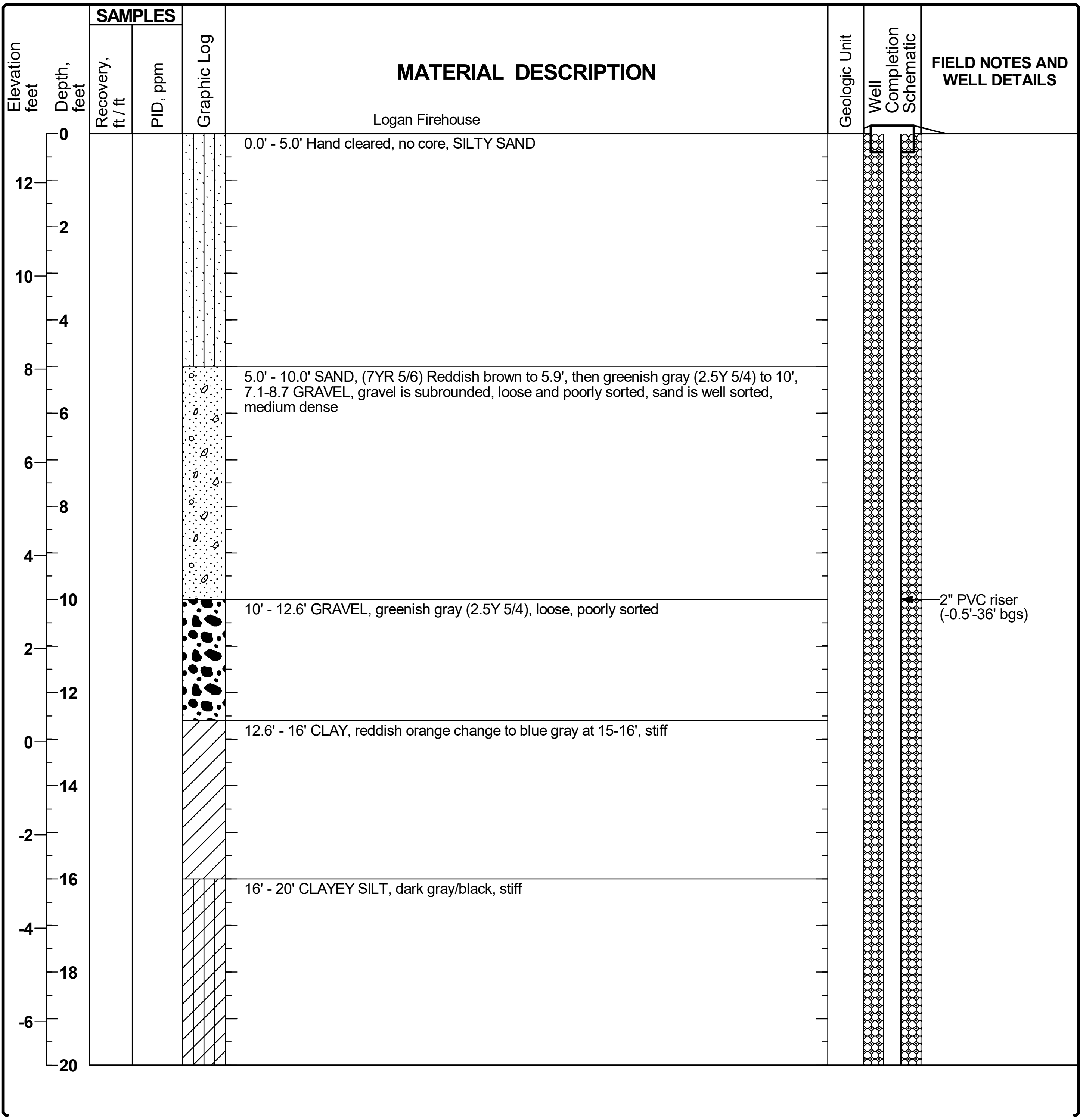
Professional Land Surveyor's Signature: Date
Surveyor's Name: Andrew C. Putnam License Number: GS34873
Firm Name: AECOM Certificate of Authorization #: 24GA28042700
Mailing Address 4051 Ogletown Road, Suite 300
City/Town: Newark State Delaware Zip Code: 19713
Phone Number 302-781-5900 Ext.: 5874 Fax: 302-781-5901

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01S

Sheet 1 of 3

Date(s) Drilled	**6/2/22 - 6/2/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotosonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**50.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**13.06**
NJDEP Permit	**E202205398**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**12.66**
Location	**N 337840.990 E 238299.022**	Borehole Completion	**Flushmount**		



0.0' - 5.0' Hand cleared, no core, SILTY SAND

5.0' - 10.0' SAND, (7YR 5/6) Reddish brown to 5.9', then greenish gray (2.5Y 5/4) to 10', 7.1-8.7 GRAVEL, gravel is subrounded, loose and poorly sorted, sand is well sorted, medium dense

10' - 12.6' GRAVEL, greenish gray (2.5Y 5/4), loose, poorly sorted

12.6' - 16' CLAY, reddish orange change to blue gray at 15-16', stiff

16' - 20' CLAYEY SILT, dark gray/black, stiff

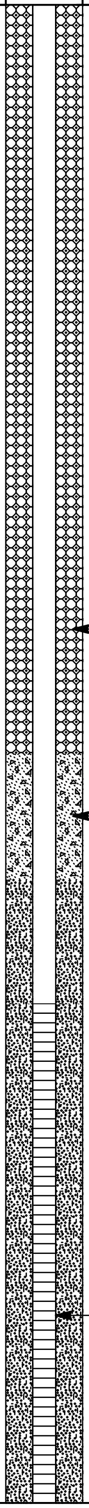
2" PVC riser (-0.5'-36' bgs)

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01S

Sheet 2 of 3

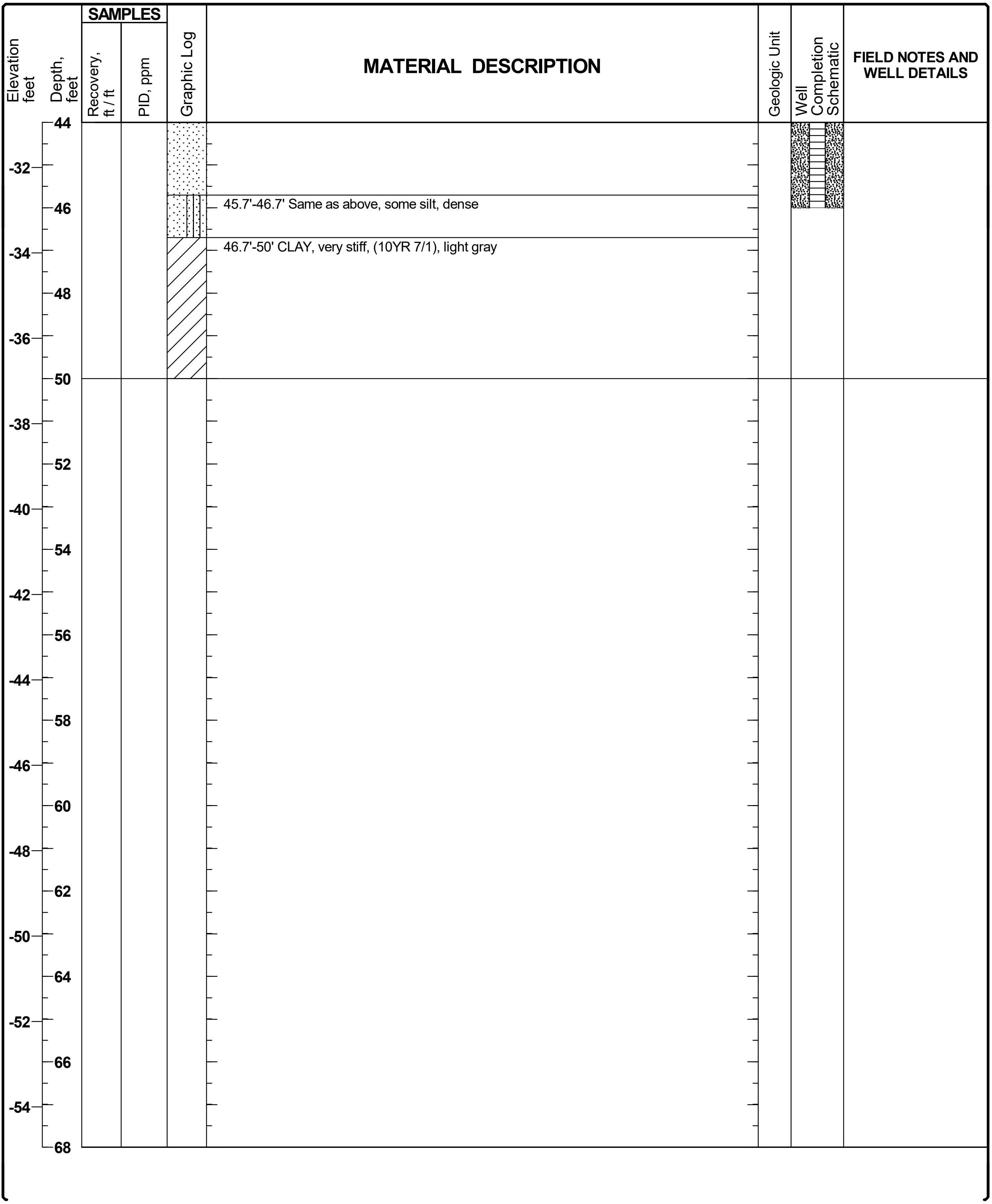
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	20				20' - 29' CLAY, very dark gray (10YR 3/1), moist, stiff, few organics, roots, little very fine sand			
-8								
	22							
-10								
	24							
-12								
	26							
-14								
	28							
-16					29' - 30' No Recovery			
	30				30'-35.5' Same as above, color change at 34.8ft to Gley1 3/2, very dark, greenish gray, moist			Cement Betonite Grout (0'-32' bgs)
-18								
	32							
-20								Bentonite seal (32-34' bgs)
	34							
-22								
					35.5'-36.6' SILTY SAND, moist to wet (Gley1 4/2), grayish green, sand is very coarse, some med, few rounded gravel 1-2"			
	36							
					36.6'-38' SAND, loose (104-5GY 5/104) light olive, m-vc, some angular to rounded gravel 1/4-3" diameter, wet			
-24								
	38				38'-40' SAND (7.5YR 8/1) white, wet, loose, mostly coarse, little f-med, little silt			
-26								
	40				40'-45.7' Same as above, loose wet, color change to yellow from 42.4-43, very coarse, well sorted			
-28								2" PVC screen, 0.010" slot (36-46' bgs)
	42							
-30								
	44							



Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSRA-M01S

Sheet 3 of 3



45.7'-46.7' Same as above, some silt, dense

46.7'-50' CLAY, very stiff, (10YR 7/1), light gray

Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: LOGAN VOLUNTEER FIRE CO

Location: 39 S RAILROAD AVE

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation):	E202205398
Owner's well number (As shown on the application):	OSRA-M01S
Well completion date:	6/2/2022
Distance from top of casing (cap off) to ground surface (one-hundredth of a foot):	0
Total depth of well to the nearest ½ foot:	46
Depth to top of screen from top of casing (one-hundredth of a foot):	36
Screen length (or length of open hole in feet:	10
Screen or slot size:	.010
Screen or slot material:	PVC
Casing material (PVC, Steel or other-specify):	PVC
Casing diameter (inches):	2
Static water level from top of casing at the time of installation (one-hundredth of a foot):	15
Yield (gallons per minute):	1
Development technique (specify):	Pump
Length of time well was developed/pumped or bailed:	1/2 Hour

Authentication

I certify under penalty of law that I have personally examined and familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Mike Wilson

Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours

List all AKAs: DuPont Chambers Works

Street Address: 67 Canal Road

Municipality: Penns Grove (Township, Borough or City)

County: Salem Zip Code: 08023

Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Chemours
2. Well Location (Street Address) 39 South Railroad Avenue
3. Well Location (Municipal Block and Lot) Block# 11 Lot # 5

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 202205398
2. Site Well Number (As shown on application or plans): OSRA-M01S
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:

   Latitude: North 39° 45' 26.76" Longitude: West 75° 24' 10.41"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:

   North 337841 East 238299
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 12.66'

   Elevation Top of Outer casing: 13.06' Elevation of ground: 13.06'

   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

   NAVD 88
7. Significant observations and notes:

   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: Date

Surveyor's Name: Andrew C. Putnam License Number: GS34873

Firm Name: AECOM Certificate of Authorization #: 24GA28042700

Mailing Address 4051 Ogletown Road, Suite 300

City/Town: Newark State Delaware Zip Code: 19713

Phone Number 302-781-5900 Ext.: 5874 Fax: 302-781-5901

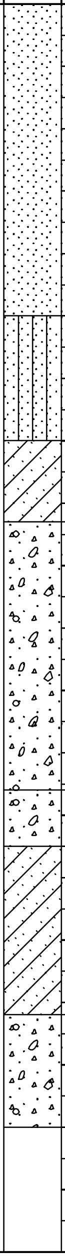
Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

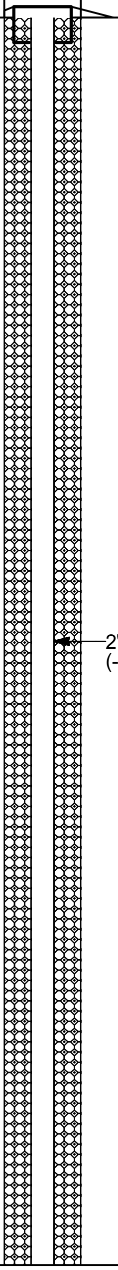
Log of Boring/Well OSSN-M01D

Sheet 1 of 7

Date(s) Drilled	**6/13/22 - 6/15/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotasonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**160.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**9.92**
NJDEP Permit	**E202205394**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**9.46**
Location	**N 288345.533 E 212148.543**	Borehole Completion	**Flushmount**		

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	0				0'-5' SAND			
8	2							
6	4							
					5'-7' SILTY SAND, light brown, fine, dense, well sorted			
4	6							
					7'-8.3' SANDY CLAY, stiff, light brown with gray/orange mottles			
2	8							
					8.3'- 12.6' SAND, coarse, brown, loose, poorly sorted, trace gravels <10cm subangular			
0	10							2" PVC riser (-0.5'-128' bgs)
-2	12							
					12.6'-13.5' SAND, same as above with cobbles about 1" subangular			
					13.5'-16.2' SANDY CLAY, very soft, light brown, dark gray starting at 14.1'			
-4	14							
-6	16							
					16.2'-18- SAND, orange then light brown, very coarse, poorly sorted, loose, trace gravel 1-2cm, damp			
-8	18				18'-20' No recovery			
-10	20							





Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01D

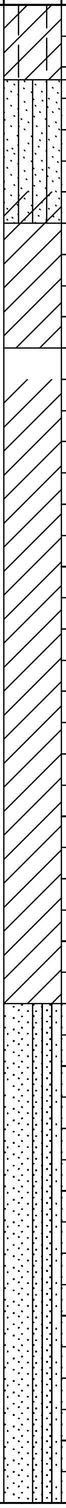
Sheet 2 of 7

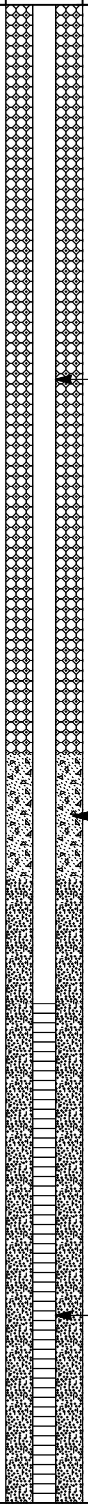
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	20				20'-28.5' GRAVELLY SAND, brown, very coarse, loose, poorly sorted, subrounded, moist, some large cobbles >1"			
-12	22							
-14	24							
-16	26							
-18	28							
					28.5'-29' CLAY, stiff, dark gray			
					29'-30' No recovery			
-20	30				30'-36.5' CLAY, traces of samd, dark gray, soft, silt			Cement Betonite Grout (0'-126' bgs)
-22	32							
-24	34							
-26	36							
					36.5'-39.2' SAND, dark gray, med, loose, moist, well sorted			
-28	38							
					39.2'-40' CLAY, med silt, dark gray, traces of sand			
-30	40				40'-45.2' SILTY CLAY, greenish/dark gray, soft, wet			
-32	42							
-34	44							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01D

Sheet 3 of 7



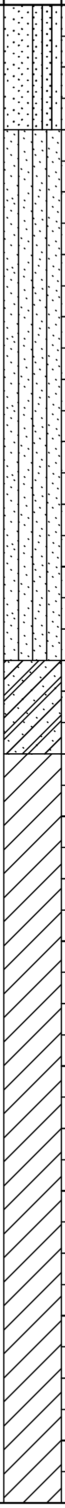


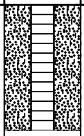
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	44				45.2-47.5' SILTY SAND, greenish gray, fine-coarse gravels 2-3cm, well-poorly sorted			
-36	46				47'-49.5' CLAY. Dark green, traces of silt, med soft			
-38	48							
-40	50				50'-60' CLAY, dark gray, stiff, traces of sand, dry			2" PVC riser (-0.5'-128' bgs)
-42	52							
-44	54							
-46	56							Bentonite seal (56-58' bgs)
-48	58							
-50	60				60'-70' SAND, dark grey, fine, well sorted, traces of silt and clay, some micaceous, moist, loose-dense			
-52	62							
-54	64							2" PVC screen, 0.010" slot (60-70' bgs)
-56	66							
-58	68							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01D

Sheet 4 of 7





Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	68							
-60	70				70'-78.5' SILTY SAND, dark gray, fine, well sorted, traces of clay, moist, dense			
-62	72							
-64	74							
-66	76							
-68	78							
					78.5'-80' CLAY, dense grey, stiff, traces of sand			
-70	80				80'-160' CLAY, dark gray, stiff, dry, trace sand, micaceous			
-72	82							
-74	84							
-76	86							
-78	88							
-80	90							
-82	92							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01D

Sheet 5 of 7

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	92			▨				
-84	94			▨				
-86	96			▨				
-88	98			▨				
-90	100			▨				
-92	102			▨				
-94	104			▨				
-96	106			▨				
-98	108			▨				
-100	110			▨				
-102	112			▨				
-104	114			▨				
-106	116							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01D

Sheet 6 of 7

Elevation feet	Depth, feet	SAMPLES		Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
		Recovery, ft / ft	PID, ppm					
	116			▨				
108	118							
110	120							
112	122							
114	124							
116	126							
118	128							
120	130							
122	132							
124	134							
126	136							
128	138							
130	140							

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01D

Sheet 7 of 7

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	140			▨				
132	142			▨				
134	144			▨				
136	146			▨				
138	148			▨				
140	150			▨				
142	152			▨				
144	154			▨				
146	156			▨				
148	158			▨				
150	160							
152	162							
154	164							

Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: Residential

Location: 19 SINNICKSON LN

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation): E202205394
Owner's well number (As shown on the application): OSSN-M01D
Well completion date: 6/15/2022
Distance from top of casing (cap off) to ground surface (one-hundredth of a foot): 0
Total depth of well to the nearest ½ foot: 70
Depth to top of screen from top of casing (one-hundredth of a foot): 60
Screen length (or length of open hole in feet: 10
Screen or slot size: .010
Screen or slot material: PVC
Casing material (PVC, Steel or other-specify): PVC
Casing diameter (inches): 2
Static water level from top of casing at the time of installation (one-hundredth of a foot): 15
Yield (gallons per minute): 1
Development technique (specify): Pump
Length of time well was developed/pumped or bailed: 1/2 Hour

Authentication

I certify under penalty of law that I have personally examined and familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Mike Wilson
Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours

List all AKAs: DuPont Chambers Works

Street Address: 67 Canal Road

Municipality: Penns Grove (Township, Borough or City)

County: Salem Zip Code: 08023

Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Chemours
2. Well Location (Street Address) 19 Sinnickson Lane
3. Well Location (Municipal Block and Lot) Block# 4301 Lot # 45

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 202205394
2. Site Well Number (As shown on application or plans): OSSN-M01D
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 39° 37' 14.89" Longitude: West 75° 29' 38.21"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 288346 East 212149
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 9.46'
   Elevation Top of Outer casing: 9.92' Elevation of ground: 9.92'
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

   NAVD 88
7. Significant observations and notes:

   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: Date

Surveyor's Name: Andrew C. Putnam License Number: GS34873

Firm Name: AECOM Certificate of Authorization #: 24GA28042700

Mailing Address 4051 Ogletown Road, Suite 300

City/Town: Newark State Delaware Zip Code: 19713

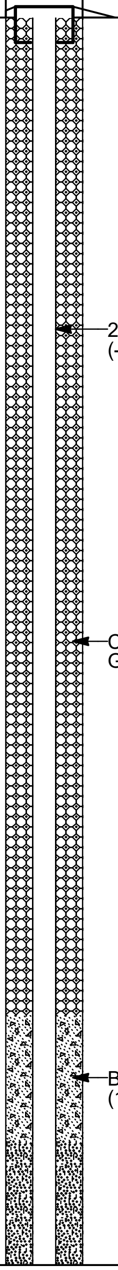
Phone Number 302-781-5900 Ext.: 5874 Fax: 302-781-5901

Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01S

Sheet 1 of 2

Date(s) Drilled	**6/15/22 - 6/16/22**	Geologist	**K. Lombardo**	Checked By	
Drilling Method	**Rotasonic**	Boring Diameter	**6 inch**	Total Depth of Borehole	**30.0 feet**
Drill Rig Type	**MRS Max XL**	Contractor [Operator]	**Summit Drilling [Mike Wilson]**	Surface Elevation	**9.96**
NJDEP Permit	**E202205392**	Sampling Method(s)	**10 ft continous core**	TOC Elevation	**9.51**
Location	**N 2888338.443 E 212148.677**	Borehole Completion	**Flushmount**		



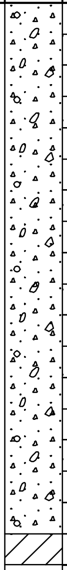
Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	0				0'-5' SAND			
8	2							
6	4							
					5'-7' SILTY SAND, light brown, fine, dense, well sorted			2" PVC riser (-0.5'-20' bgs)
4	6							
					7'-8.3' SANDY CLAY, stiff, light brown with gray/orange mottles			
2	8							
					8.3'- 12.6' SAND, coarse, brown, loose, poorly sorted, trace gravels <10cm subangular			
0	10							Cement Betonite Grout (0'-16' bgs)
-2	12							
					12.6'-13.5' SAND, same as above with cobbles about 1" subangular			
					13.5'-16.2' SANDY CLAY, very soft, light brown, dark gray starting at 14.1'			
-4	14							
-6	16							
					16.2'-18- SAND, orange then light brown, very coarse, poorly sorted, loose, trace gravel 1-2cm, damp			Bentonite seal (16-18' bgs)
-8	18				18'-20' No recovery			
-10	20							

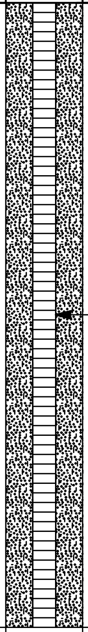
Project: Off-site Wells
Project Location: Deepwater, NJ
Project Number: 60673730

Log of Boring/Well OSSN-M01S

Sheet 2 of 2

Elevation feet	Depth, feet	SAMPLES Recovery, ft / ft	SAMPLES PID, ppm	Graphic Log	MATERIAL DESCRIPTION	Geologic Unit	Well Completion Schematic	FIELD NOTES AND WELL DETAILS
	20				20'-28.5' GRAVELLY SAND, brown, very coarse, loose, poorly sorted, subrounded, moist, some large cobbles >1"			2" PVC screen, 0.010" slot (20-30' bgs)
-12	22							
-14	24							
-16	26							
-18	28				28.5'-29' CLAY, stiff, dark gray			
					29'-30' No recovery			
-20	30							
-22	32							
-24	34							
-26	36							
-28	38							
-30	40							
-32	42							
-34	44							





Form A
Monitoring Well Certification – As-Built Certification

Name of Permittee: Summit Drilling Co., Inc.

Name of Facility: Residential

Location: 19 SINNICKSON LN

CERTIFICATION

Well permit number (as assigned by NJDEP's Bureau of Water Allocation):	E202205392
Owner's well number (As shown on the application):	OSSN-M01S
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Total depth of well to the nearest ½ foot:	30
Depth to top of screen from top of casing (one-hundredth of a foot):	20
Screen length (or length of open hole in feet:	10
Screen or slot size:	.010
Screen or slot material:	PVC
Casing material (PVC, Steel or other-specify):	PVC
Casing diameter (inches):	2
Static water level from top of casing at the time of installation (one-hundredth of a foot):	15
Yield (gallons per minute):	1
Development technique (specify):	Pump
Length of time well was developed/pumped or bailed:	1/2 Hour

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Mike Wilson
Driller's Name (type or print)

Driller's Signature

Certification or License No.

Corporate Seal

Certification by Executive Officer or Duly Authorized Representative

Name (type or print)

Signature

Title

Date

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Chemours

List all AKAs: DuPont Chambers Works

Street Address: 67 Canal Road

Municipality: Penns Grove (Township, Borough or City)

County: Salem Zip Code: 08023

Program Interest (PI) Number(s): 008221 Case Tracking Number(s): 9900

SECTION B. WELL OWNER AND LOCATION

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4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 288338 East 212149
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   Elevation Top of Outer casing: 9.96' Elevation of ground: 9.96'
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
   NAVD 88
7. Significant observations and notes:
   Coordinates established with a Trimble R8S GPS system operating via KeyNetGPS. N.J.S.P.C. (NAVD 88/ NAD 83)

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