Appendix A

Cape Fear River PFAS Mass Loading Model

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1 INTRODUCTION AND OBJECTIVE

The objective of this appendix is to estimate the mass discharge from the identified PFAS transport pathways using a Cape Fear River mass loading model developed and described in the *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec, 2020a) and to assess contributions by pathway. The following sections describe the transport pathways, the results from the mass loading model, the limitations of the mass loading model. Supporting tables for the Mass Loading Model are provided in Attachment ATT1.

The one-year period of monthly sampling of the mass loading model pathways per Consent Order (CO) Paragraph 1(b) was completed in December 2021. Quarterly sample collection was initiated in January 2022 and will continue for a period of 4 years (through Q4 2025) (Geosyntec, 2020a).

1.1 Mass Loading Model Transport Pathways

The nine potential pathways representing compartments to the mass loading model were identified as potential contributors of PFAS to river PFAS concentrations (Geosyntec, 2020a). Remedies have been implemented to capture PFAS and prevent PFAS from reaching the Cape Fear River at five of the nine pathways. In addition, these remedies have had a positive effect on reducing PFAS from the remaining pathways without remedies in place (e.g., the Thermal Oxidizer reduces aerial deposition [Transport Pathway 3] which also reduces deposition on Willis Creek [Transport Pathway 2]). The pathways are described below:

- **Transport Pathway 1**: Upstream Cape Fear River and Groundwater – This pathway is comprised of contributions from non-Chemours related PFAS sources on the Cape Fear River and tributaries upstream of the Site, and upstream offsite groundwater with PFAS present from aerial deposition.
- **Transport Pathway 2**: Willis Creek – Groundwater and stormwater discharge and aerial deposition to Willis Creek and then to the Cape Fear River.
- **Transport Pathway 3 (Remedy: Thermal Oxidizer and Carbon Bed Air Emission Treatment)**: Direct aerial deposition of PFAS on the Cape Fear River (see Attachment ATT2 for further details).
- **Transport Pathway 4 (Remedy: Stormwater Capture and Treatment in the Monomers IXM Manufacturing Area)**: Outfall 002 – Comprised of (i) water drawn from the Cape Fear River and used as non-contact cooling water, (ii) treated non-Chemours process water, (iii) Site stormwater, (iv) steam condensate, and (v) power neutralization discharge, which are then discharged through Outfall 002.
- **Transport Pathway 5 (Remedy: Barrier Wall and Groundwater Extraction Treatment)**: Onsite Groundwater – Direct upwelling of onsite groundwater to the Cape Fear River from the Black Creek Aquifer. Additional details are provided in Attachment ATT3.

- **Transport Pathway 6 (Remedy: Seep Flow-Through Cells)**: Seeps – Onsite groundwater seeps A, B, C and D and the offsite Lock and Dam Seep originating above the Cape Fear River water level on the bluff face from the facility that then discharge into the Cape Fear River.
- **Transport Pathway 7 (Remedy: Outfall 003 Stream Capture and Treatment System)**: Outfall 003 Stream (previously referred to as Old Outfall 002) – Groundwater discharge and stormwater runoff to the Outfall 003 Stream that flows into the Cape Fear River.
- **Transport Pathway 8**: Adjacent and Downstream Offsite Groundwater – Offsite groundwater adjacent and downstream of the Site upwelling to the Cape Fear River.
- **Transport Pathway 9**: Georgia Branch Creek – Groundwater, stormwater discharge and aerial deposition to Georgia Branch Creek and then to the Cape Fear River.

For the Q2 2024 mass loading model assessments, data sources used as model inputs for each potential pathway are described in Table A1.

2 SAMPLING ACTIVITIES AND LABORATORY ANALYSIS

The mass loading model sampling program for this reporting period consisted of collecting concentration and flow data from the various PFAS transport pathways during the reporting period (May 2024). As per Paragraph 1(b) of the CO Addendum, this sampling event was conducted during a wet weather event (i.e., rain event: >0.5 inches of rainfall), and the river stages and flows measured at W.O. Huske were much higher than previous dry weather events.

A total of 36 water samples were collected this quarter, which includes surface water (seep, creeks, Outfall 003 Stream, Outfall 002, and Cape Fear River) and groundwater. The sample collection, field parameters, and flow measurement methods of each pathway are outlined in Table A2. The field forms are provided in Appendix C. Details of the sampling methods and flow measurement methods can be found in *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec, 2020a).

2.1 Flow Measurements

The flow rates measured for the seep and surface water events are reported in Table A2. Details on the flow calculations for each model transport pathway along with measurement methods at each flow gauging location are provided in Attachment Tables ATT1-1 to ATT1-10.

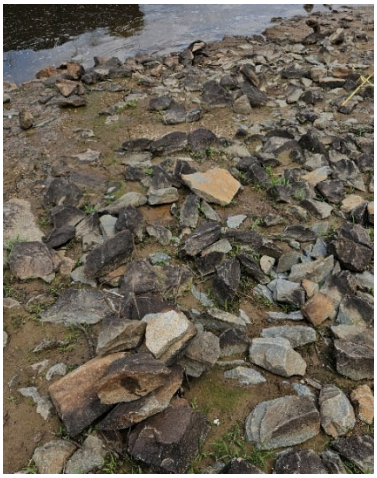
2.2 Surface Water Sample Collection

The seep water, surface water, and river water samples were collected from May 7 to 8, 2024. The sampling event occurred during a wet event (0.77 inches of rainfall), where the river stage reached 4.46 feet and 7,190 feet per second (ft^3/s or cfs). The three downstream samples along the Cape Fear River (Bladen Bluffs, Tar Heel, and Kings Bluff) were sampled before the wet event, from April 18 to 22, 2024. A total of 11 primary samples and 1 duplicate sample were collected. Below is a list of deviations from the sampling program:

- Seep A, B, C, and D effluents were not sampled because the seeps were dry during the sampling event.
- The location for Willis Creek and Outfall 003 stream were offset upstream due to high water levels.

2.3 Lock and Dam Seep Sampling

The Lock and Dam Seep and Lock and Dam North were sampled this quarter during the mass loading model sampling program, as shown in the photos below (left: Lock and Dam Seep; right: Lock and Dam North):



In addition, the Lock and Dam Seep and Lock and Dam North were also sampled on April 30 and June 4, 2024, in accordance with the "every six weekly" Lock and Dam sampling program based on the Workplan Approval with Modifications for the Lock and Dam Seep Updated Workplan, dated November 2, 2023 (NCDEQ, 2024).

2.4 Water Levels and Groundwater Sample Collection

One synoptic water level survey of the onsite groundwater monitoring well network was completed on April 9, 2024 (Table A3). From April 10 to 23, 2024, groundwater samples were collected from 21 locations, including 18 of the 20 monitoring wells outlined in CO Paragraph 16 (Table A4). This list of groundwater wells is derived from the Corrective Action Plan (CAP) (Geosyntec, 2019a). The groundwater field parameters are provided in Table A4.

2.5 Laboratory Analyses

Samples were sent to Eurofins Scientific (West Sacramento, CA) and were analyzed for Table 3+ and other PFAS compounds using Method 537 Mod Max (56 compounds which includes PFPrA).

3 PFAS ANALYTICAL RESULTS

The analytical results from samples during the Q2 2024 surface water and groundwater sampling events are presented in Tables A5[1] and A6, respectively. During this sampling event, all samples were within the acceptable temperature requirements for preservation during storage and shipping (i.e., between not frozen to 6°C with a target of 4°C) as outlined in the Chemours PFAS Program QAPP (AECOM, 2018). The laboratory reports and Data Verification Module (DVM) reports are provided in Appendix D of the main report. The analytical data have been reviewed and validated. The duplicate samples have also been compared to the primary samples.

3.1 Data Validation

Laboratory analytical data for the samples collected during the Q2 2024 reporting period were reviewed using the Data Verification Module (DVM) within the Locus™ Environmental Information Management (EIM) system, a commercial data management software program. Following the DVM process, a manual review of the data was conducted. The DVM and the manual review results were combined in a DVM narrative report for each set of sample results which is consistent with Stage 2b of the *USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (USEPA, 2009). The DVM narrative report summarizes which samples were qualified (if any), the specific reasons for the qualification, and any potential bias in reported results. The data usability, in view of the project's data quality objectives (DQOs), was assessed, and the data were entered into the EIM system.

The data were evaluated by the DVM against the following data usability checks:

- Hold time criteria
- Field and laboratory blank contamination
- Completeness of QA/QC samples
- Matrix spike/matrix spike duplicate recoveries and the relative percent differences (RPDs) between these spikes
- Laboratory control sample/laboratory control sample duplicate recoveries and the RPD between these spikes
- Surrogate spike recoveries for organic analyses
- RPD between field duplicate sample pairs

A manual review of the data was also conducted, which included visual inspection of sample chromatograms for appropriate integration and retention time, verification that detections in field

[1] The Lock and Dam Seep and Lock and Dam North results from April 30 and June 4, 2024, are included in Table A5 and in Attachment ATT1. However, these results are not incorporated to in the Q2 2024 mass loading model assessment presented in Section 4, as they were sampled outside of the mass loading model sampling program and were instead sampled for the Lock and Dam Seep sampling program.

or equipment blanks have been applied to all applicable samples, and review of temperature requirements for sample preservation during storage and shipping. Based on the results of the DVM plus manual review, the following data evaluation qualifiers were applied to the analytical results as required:

- J - Analyte present, reported value may not be accurate or precise.
- UJ - Analyte not present above the reporting limit, reporting limit may not be accurate or precise.
- B - Analyte present in a blank sample, reported value may have a high bias.

The DVM narrative reports are provided in Appendix D. Overall, the DQOs were met for accuracy and precision. During this sampling event, all samples were within the acceptable temperature requirements for preservation during storage and shipping (i.e., between not frozen to 6°C with a target of 4°C) as outlined in the Chemours PFAS Program QAPP (AECOM, 2018). The data collected are believed to be complete, representative, and comparable, with the exception of R-PSDA, Hydrolyzed PSDA, and R-EVE; matrix interference studies have shown that quantitation these compounds is inaccurate due to interferences by the sample matrix (Geosyntec, 2020b). Results for these three analytes are J-qualified as estimated.

3.2 Surface Water PFAS Analytical Results

For the surface and seep water samples, two equipment blanks were collected on May 7, 2024. PFAS were not detected above associated reporting limits in these equipment blanks. Two field duplicates were collected at the CFR-BLADEN and river water intake at facility locations on April 18, 2024, and May 7, 2024, respectively. PFAS results for the primary (CAP2Q24-CFR-BLADEN-041824 and RIVER-WATER-INTAKE-24-050724 and duplicate samples (CAP2Q24-CFR-BLADEN-041824-D and RIVER-WATER-INTAKE-24-050724-D) had relative percent differences of less than 30% for the reported compounds, except for R-PSDA at CFR-BLADEN.

Analytical results for the seep, surface, and river water samples are summarized in Table A5 (Table 3+) and Attachment Table ATT1-11 (Mod 537). Figure A1 shows the Total Table 3+ (17 compounds) concentrations reported for samples collected in Q1 2024 that corresponds to the mass loading model transport pathways. Figure A2 and A3 show the Total Table 3+ (17 compounds) concentrations and HFPO-DA concentrations at upstream and downstream locations along the Cape Fear River.

Among the collected river samples, Total Table 3+ (17 compounds) concentrations ranged from 2.5 ng/L (upstream sample at CFR MILE 76 on May 6, 2024) to 24 ng/L (downstream sample at CFR-BLADEN on April 18, 2024).

For the creeks, the Total Table 3+ (17 compounds) concentrations were 1,400 ng/L and 1,300 ng/L at Willis Creek and Georgia Branch, respectively. These concentrations are within the range of

concentrations observed during previous events (Geosyntec: 2020b,c,d; 2021a,b,c,d; 2022a,b,c,d; 2023a,b,c,d; 2024b,c).

Among the Seeps and Outfall 002 Stream, Outfall 002 effluent had the lowest Total Table 3+ (17 compounds) concentrations (180 ng/L), while Lock-Dam Seep had the highest Total Table 3+ (17 compounds) concentration (89,000 ng/L). The analytical results for the Seeps influent and effluent are not included in this report but are provided in *CFR Long-Term Remedy Performance Monitoring Report #6* (Geosyntec 2024a).

Figure A3 shows the HFPO-DA concentrations in the four near-site/downstream river sampling locations. HFPO-DA concentrations were either below 10 ng/L or non-detect (i.e., below the associated reporting limits) (CFR-BLADEN and CFR-TARHEEL on April 18, 2024, CFR-KINGS on April 22, 2024, CFR-MILE-76 on May 6, 2024, CFR-TARHEEL on May 7, 2024, and CFR-TARHEEL on May 8, 2024).

3.3 Groundwater PFAS Analytical Results

For the groundwater samples, the following observations were noted for the QA/QC samples:

- Three equipment blank samples were collected during the sampling event. No PFAS were detected above the associated reporting limits in any of the equipment blank samples.
- Two field duplicates were collected at the PW-07 location on April 19, 2024, and the PW-09 location on April 10, 2024. PFAS results for the primary (CAP2Q24-PW-07-041924 and CAP2Q24-PW-09-041024) and duplicate samples (CAP2Q24-PW-07-041924-D and CAP2Q24-PW-09-041024-D) had relative percent differences of less than 30% for the reported compounds, except for PFO4DA and R-PSDA at PW-07.

Individual PFAS and Total PFAS concentrations for the groundwater samples collected in Q2 2024 are summarized in Tables A6 (Table 3+), Attachment Table ATT1-12 (Mod 537), and Figure A4. Total Table 3+ (17 compounds) concentrations ranged from non-detect below the associated reporting limits (PW-09) to 250,000 ng/L (LTW-05). In general, the next highest concentrations were observed in the LTW, PZ, and PIW wells near the mouths of the seeps adjacent to the river (Figure A4).

On an aquifer basis, lower individual and Total Table 3+ (17 compounds) concentrations are observed in wells screened in the Surficial Aquifer. The results from the Q2 2024 monitoring are consistent with trends observed at these wells in previous monitoring events (Geosyntec: 2020b,c,d; 2021a,b,c,d; 2022a,b,c,d; 2023a,b,c,d; 2024b,c).

3.4 Groundwater Elevations

Groundwater elevations were calculated for onsite and offsite wells screened in the Perched Zone, Surficial Aquifer, and Black Creek Aquifer from the synoptic water level measurement survey performed in April 2024 (Table A4). Groundwater elevations from these synoptic water levels are

presented on the Perched Zone, Surficial Aquifer, and Black Creek Aquifer maps (Figures A5-1, A5-2, and A5-3, respectively).

4 MASS LOADING MODEL ASSESSMENT

The Total PFAS mass discharge per pathway to the Cape Fear River is summarized in Table A7. These mass discharge values from the mass loading model assessment are considered as a 'snapshot' in time. Analyte-specific mass discharges estimated from the Mass Loading Model are provided in Attachment ATT1.

4.1 Model-Estimated PFAS Mass Discharge

This quarter's mass loading model sampling event was completed during a wet weather event, which was the second wet weather event since the implementation of the groundwater extraction system and barrier wall remedy. The model-estimated Total Table 3+ (17 compounds) mass discharge from the potential transport pathways during Q2 2024 is 0.88 mg/s (Attachment able ATT1-13) and represents the mass discharge estimated downgradient of the remedies (i.e., after the water passes through the remedies, "after remedies"). In fact, this quarter's mass discharge was significantly lower than previous wet weather events, where mass discharge ranged from 1.26 to 11.2 mg/s (Geosyntec: 2021a; 2021d; 2023b; 2023d). Further, this quarter's mass discharge value of 0.88 mg/s continues to be less than the historical "after remedies" mass discharge estimates from mass loading model events prior to the operation of the groundwater extraction system (historical "after remedies" prior to operation of groundwater extraction system ranged from 2.3 to 24 mg/s) (Geosyntec: 2019b; 2020b,c,d; 2021a; 2021b; 2021c; 2021d; 2021e; 2022b; 2022c; 2022d; 2023a).

4.2 Comparison of Before Remedies and Current PFAS Mass Discharge

This section compares Q2 2024 mass discharge values downgradient of the remedies (i.e., after the water passes through the remedies, "after remedies") to mass discharge values from past quarters upgradient of the remedies (i.e., before the water passes through the remedies, "before remedies", or where no remedies were implemented) (Geosyntec: 2019b; 2020b; 2020c; 2020d; 2021a; 2021b; 2021c; 2021d; 2021e; 2022b; 2022c; 2022d; 2023a). The in-text table and figure below summarize the historical before remedies Total Table 3+ (17 compounds) mass discharge from Q3 2020 to Q4 2022 and the after remedies mass discharge for this quarter. The pathways with remedies (Seeps, Outfall 003 Stream, Outfall 002, and onsite groundwater) have substantially lower mass discharges, i.e., lower contributions to total mass discharge to the river, than the historical before remedies mass discharges. For the remaining transport pathways, mass discharges have either reduced since the implementation of the remedies, e.g., Willis Creek (as discussed in *CFR Long-Term Remedy Performance Monitoring Report #6;* Geosyntec, 2024a), or are within the range of previous values.

The in-text table and figure indicate three major findings:

1. The Q2 2024 mass discharges to the Cape Fear River are either equivalent to historical levels or significantly lower.

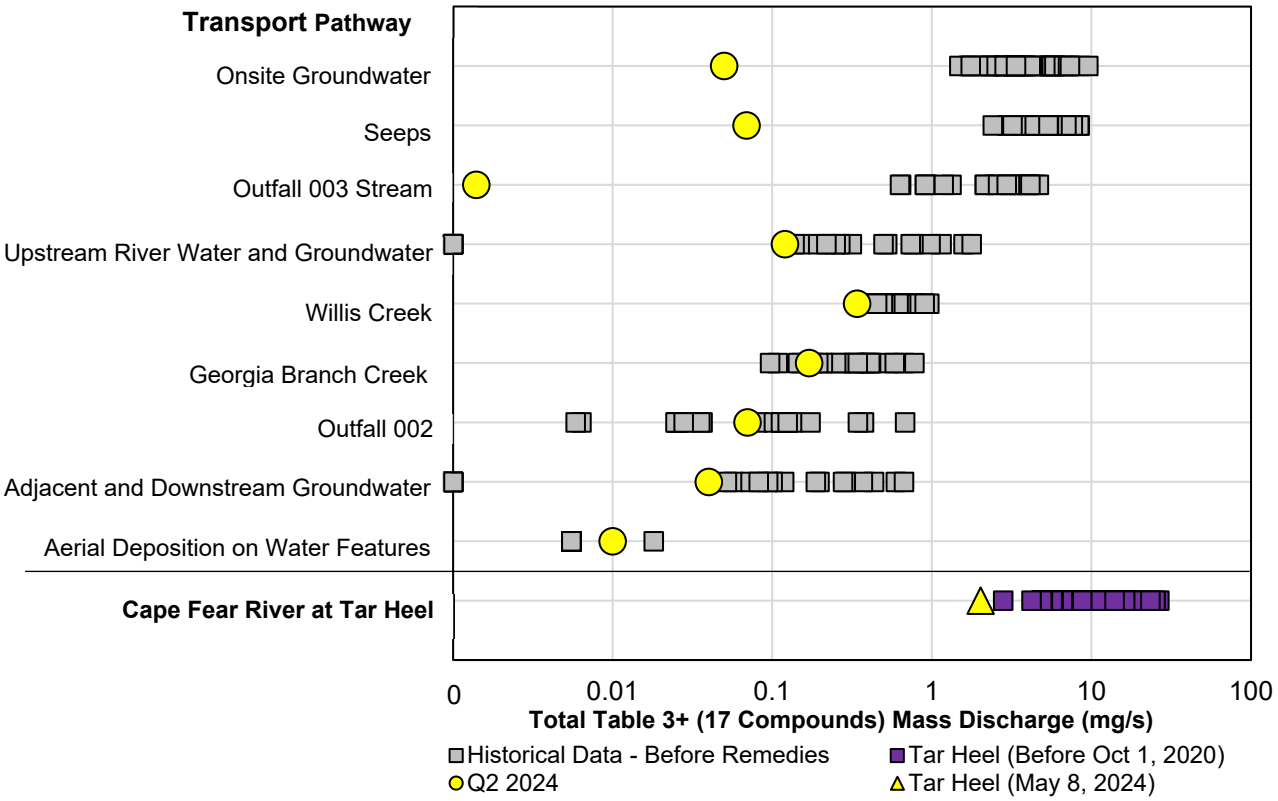
2. The pathways with remedies (Seeps, Outfall 003 Stream, and Onsite Groundwater) all show a significant mass discharge decrease in Q2 2024 compared to historical, pre-remediation ranges.

3. The total mass discharge to the Cape Fear River from the Site is much lower in Q2 2024 compared to historical before remedies mass discharges.

Model Transport Pathway	Historical Before Remedies Total Table 3+ (17 Compounds) Mass Discharge (mg/s)[1]			Q2 2024 Total Table 3+ (17 Compounds) Mass Discharge (mg/s)
	Min	Median	Max	
Aerial Deposition	0.01	0.01	0.02	0.01
Upstream River and Groundwater	0	0.27	4.5	0.12
Willis Creek	0.31	0.57	0.96	0.34
Seeps	3.0	5.4	8.4	0.07
Onsite Groundwater	1.5	3.6	9.6	0.05
Outfall 002	0.006	0.10	0.68	0.07
Georgia Branch Creek	0.10	0.32	0.78	0.17
Outfall 003 Stream	0.63	2.5	4.7	<0.002
Offsite Groundwater	0	0.10	1.7	0.05
Total[2]	**6.7**	**14**	**24**	**0.88**

1 – Historical Before remedies mass discharge values taken from mass loading model assessments conducted between April 2020 to November 2022, which pre-date the installation of the groundwater extraction and barrier wall remedy which significantly altered the hydrologic conditions at site.

2 – Total values for historical before remedies mass discharge come from individual mass loading model assessments and therefore do not equal the sum of the values above.



4.3 Variability in Input Parameters

The mass loading model assessments provide PFAS mass discharge estimates for a 'snapshot' in time. While controlling for temporal variability, the model-based mass discharge estimates contain some level of uncertainty due to the inherent variability, and measurement error in the input parameters (e.g., flow and concentrations).

5 SUMMARY

The objective of the mass loading model assessments is to provide PFAS mass discharge estimates for a 'snapshot' in time. In Q2 2024, 36 water samples collected from the PFAS transport pathways (seeps, creeks, Outfall 003 Stream, Outfall 002, groundwater) during a wet weather event and were used to estimate the mass discharge to the Cape Fear River. The model-estimated Total Table 3+ (17 compounds) mass discharge from the potential transport pathways during Q2 2024 is 0.88 mg/s. The mass discharge continues to be less than the after remedies mass discharge estimates from mass loading model events prior to the operation of the groundwater extraction system. The implementation of remedies (i.e., Outfall 003 treatment system, Seeps FTCs, and the groundwater extraction and barrier wall remedy) for the three transport pathways (Outfall 003, Seeps and Onsite Groundwater) that historically contributed the bulk of PFAS mass load correspond to a significant mass discharge decrease in Q2 2024 compared to historical, pre-remediation ranges. For the remaining transport pathways, mass discharges have either reduced since the implementation of the remedies, e.g., Willis Creek (as discussed in *CFR Long-Term Remedy Performance Monitoring Report #6;* Geosyntec, 2024a), or are within the range of previous values. Quarterly sample collection and evaluation will continue through Q4 2025. The data will continue to be incorporated into the mass loading model to estimate mass discharge to the Cape Fear River.

REFERENCES

AECOM, 2018. Poly and Perfluoroalkyl Substance Quality Assurance Project Plan for the Chemours Corporate Remediation Group. August 2018.

Geosyntec, 2019a. Corrective Action Plan. Chemours Fayetteville Works. December 2019.

Geosyntec. 2019b. On and Offsite Assessment. Chemours Fayetteville Works. September 30, 2019.

Geosyntec, 2020a. Cape Fear River Mass Loading Calculation Protocol Version 2, Chemours Fayetteville Works. November 18, 2020.

Geosyntec. 2020b. Matrix Interference During Analysis of Table 3+ Compounds. Chemours Fayetteville Works. June 30, 2020.

Geosyntec. 2020c. Cape Fear River Table 3+ PFAS Mass Loading Assessment – First Quarter 2020 Report, Chemours Fayetteville Works. July 31, 2020.

Geosyntec. 2020d. Cape Fear River PFAS Mass Loading Assessment – Second Quarter 2020 Report, Chemours Fayetteville Works. September 30, 2020.

Geosyntec. 2020e. Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2020 Report, Chemours Fayetteville Works. December 23, 2020.

Geosyntec, 2021a. Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2020 Report, Chemours Fayetteville Works. March 31, 2021.

Geosyntec, 2021b. Cape Fear River PFAS Mass Loading Assessment – First Quarter 2021 Report, Chemours Fayetteville Works. June 30, 2021.

Geosyntec 2021c. Cape Fear River PFAS Mass Loading Assessment – Second Quarter 2021 Report, Chemours Fayetteville Works. September 30, 2021.

Geosyntec 2021d. Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2021 Report, Chemours Fayetteville Works. December 23, 2021.

Geosyntec 2022a. Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2021 Report, Chemours Fayetteville Works. March 31, 2022.

Geosyntec 2022b. Cape Fear River PFAS Mass Loading Assessment – First Quarter 2022 Report, Chemours Fayetteville Works. June 30, 2022.

Geosyntec 2022c. Cape Fear River PFAS Mass Loading Assessment – Second Quarter 2022 Report, Chemours Fayetteville Works. September 30, 2022.

Geosyntec 2022d. Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2022 Report, Chemours Fayetteville Works. December 28, 2022.

Geosyntec 2023a. Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2022 Report, Chemours Fayetteville Works. March 31, 2023.

Geosyntec 2023b. Cape Fear River PFAS Mass Loading Assessment – First Quarter 2023 Report, Chemours Fayetteville Works. June 29, 2023.

Geosyntec 2023c. Cape Fear River PFAS Mass Loading Assessment – Second Quarter 2023 Report, Chemours Fayetteville Works. September 29, 2023.

Geosyntec 2023d. Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2023 Report, Chemours Fayetteville Works. December 22, 2023.

Geosyntec. 2024a. CFR Long-Term Remedy Performance Monitoring Report #6. Chemours Fayetteville Works. September 30, 2024.

Geosyntec. 2024b. Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2023 Report, Chemours Fayetteville Works. March 28, 2024.

Geosyntec. 2024c. Cape Fear River PFAS Mass Loading Assessment – First Quarter 2024 Report, Chemours Fayetteville Works. June 27, 2024.

North Carolina Department of Environmental Quality (NCDEQ) 2024. Workplan Approval with Modifications Lock and Dam Seep Updated Workplan, dated November 2, 2023. NCDEQ. February 22, 2024.

USEPA 2009. USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. January 13, 2009. OSWER No. 9200.1-85. EPA 540-R-08-005

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List of Attachments:

ATT1: Supplemental Tables to the Mass Loading Model

ATT2: Supporting Calculations – Direct Aerial Deposition on Cape Fear River

ATT3: Supporting Calculations – Onsite Groundwater Pathway

TABLE A1
PFAS MASS LOADING MODEL POTENTIAL PATHWAYS
Chemours Fayetteville Works, North Carolina

Transport Pathway Number	Potential PFAS Transport Pathway	Analytical Data Source for Mass Loading Model[1]	Flow Data Source for Mass Loading Model[1]
1	Upstream River and Groundwater	Measured from Cape Fear River Mile 76 samples collected in May 2024 as reported in Table A5.	Measured flow rates from USGS gauging station at W.O. Huske Dam during May 2024 volumetrically adjusted for flow pathways between River Mile 76 and W.O. Huske Dam.[2]
2	Willis Creek	Measured from Willis Creek samples collected in May 2024 as reported in Table A5.	Measured flow rates through Marsh-McBirney method during May 2024 as reported in Attachment ATT1.
3	Aerial Deposition on River	Estimated from air deposition modeling[3].	Estimated from air deposition modeling[3].
4	Outfall 002	Measured from Outfall 002 samples collected in May 2024 as reported in Table A5.	Measured daily Outfall 002 flow rates recorded in Facility discharge monitoring reports, summarized in Attachment ATT1.
5	Onsite Groundwater	Measured from monitoring well samples collected in May 2024 as reported in Table A6.	Estimated as the sum of the mass flux from the Black Creek Aquifer calculated from a transect along the Cape Fear River. Further details and supporting calculations provided in Attachment ATT2.
6	Seeps	Measured from Seeps A, B, C, D, and Lock and Dam Seep samples collected in May 2024 as reported in Table A5.	Measured flow rates through bucket and time for Lock and Dam Seep during May 2024 as reported in Appendix C. No flow was observed at Seeps A, B, C, and D Flow-Through Cells.
7	Outfall 003 Stream	Measured from Outfall 003 Stream samples collected in May 2024 as reported in Table A5.	Measured flow rates through Marsh-McBirney method during May 2024 as reported in Attachment ATT1.
8	Adjacent and Downstream Groundwater	Estimated using a scaling factor applied to upstream mass discharge. Refer to *Cape Fear River PFAS Mass Loading Calculation Protocol Version 2* (Geosyntec, 2020a) for details.	Estimated using a scaling factor applied to upstream mass discharge. Refer to *Cape Fear River PFAS Mass Loading Calculation Protocol Version 2* (Geosyntec, 2020a) for details.
9	Georgia Branch Creek	Measured from Georgia Branch Creek samples collected in May 2024 as reported in Table A5.	Measured flow rates through Marsh-McBirney method during May 2024 as reported in Attachment ATT1.

Notes:

1 - Flow and concentration data are multiplied together to estimate the PFAS mass discharge in the Cape Fear River originating from each pathway.

2 - Cape Fear River flow rates measured at USGS gauging station #02105500 located at William O Huske Lock & Dam accessed from https://waterdata.usgs.gov.

3 - ERM, 2018. Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

TABLE A2
SURFACE WATER SAMPLE SUMMARY, FIELD PARAMETERS, AND FLOW MEASUREMENTS - Q2 2024
Chemours Fayetteville Works, North Carolina

Pathway / Location	Location ID	Location Description	Sample ID	QA/QC	Sample Collection and Field Parameters									Flow Measurement Method[1]	
					Sample Date and Time	Sample Collection Method	Hours Composited[2]	pH (S.U.)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Specific Conductivity (µS/cm)	Temperature (°C)	Flow Measurement Method	Instantaneous Flow Rate (ft^3/s)[3]
Upstream River Water and Groundwater	CFR-RM-76	Cape Fear River Mile 76	CAP0524-CFR-RM-76050624	--	5/6/2024 12:00	Grab	0	8.12	5.89	-10.1	6.33	300.94	25.91	USGS Data[4]	1,679
Willis Creek	WC-1	Mouth of Willis Creek	CAP0524-WC-1-050724	--	5/7/2024 17:20	Grab	0	5.4	6.54	-2	23	199.22	26.52	--	--
			CAP2Q24WC-1-24-050824	--	5/8/2024 16:24	Composite	24	5.4	6.54	-2	23	199.22	26.52	Marsh-McBirney Flow	8.5
Intake River Water at Facility	INTAKE AT FACILITY	Water Drawn Through the Intake Sampled at the Power Area at the Site	CAP2Q24-River Water Intake-24-050724	--	5/7/2024 10:06	Composite	24	8.22	0	-78.5	20.5	1493.1	28.2	Facility DMRs	12.6
Outfall 002	OUTFALL-002	Upstream of Outfall 002 in open channel	CAP2Q24-OUTFALL 002-24050724	--	5/7/2024 11:42	Composite	24	8.4	7.94	-16.1	15	674.34	27.9	Facility DMRs	20.1
Seep A	SEEP-A	Effluent Basin of Seep A FTC	--	--	--	--	--	--	--	--	--	--	--	--	--
Seep B	SEEP-B	Effluent Basin of Seep B FTC	--	--	--	--	--	--	--	--	--	--	--	--	--
Seep C	SEEP-C	Effluent Basin of Seep C FTC	--	--	--	--	--	--	--	--	--	--	--	--	--
Seep D	SEEP-D	Effluent Basin of Seep D FTC	--	--	--	--	--	--	--	--	--	--	--	--	--
Lock and Dam Seep	LOCK-DAM-SEEP	Southside of the boat ramp at the Lock and Dam Seep	CAP0524-Lock-Dam Seep-050624	--	5/6/2024 14:20	Grab	0	7.15	3.15	46.4	15.2	160.92	25.43	Bottle and Stopwatch	0.026
Lock and Dam North	LOCK-DAM-NORTH	Northside of the boat ramp at the Lock and Dam Seep	CAP0524-Lock and Dam North-050624	--	5/6/2024 14:30	Grab	0	5.53	4.39	257.9	4.07	109.66	23.28	Bottle and Stopwatch	0.0081
Outfall 003 Stream	OLDOF-1	Mouth of Outfall 003 stream	CAP0524-OLDOF-2-050724	--	5/7/2024 17:00	Grab	0	5.97	6.99	40.9	6.49	327.6	26.49	--	--
			CAP2Q24-OLDOF-2-24050824	--	5/8/2024 15:36	Composite	24	5.97	6.99	40.9	6.49	327.6	26.49	Marsh-McBirney Flow	0.024
Georgia Branch Creek	GBC-1	Mouth of Georgia Branch Creek	CAP0524-GBC-1-050624	--	5/6/2024 17:15	Grab	0	4.21	7.58	331.7	20.5	118.41	21.77	Marsh-McBirney Flow	4.7
Tar Heel Ferry Road Bridge	CFR-TARHEEL	Cape Fear River at Tar Heel Ferry Road Bridge	CAP2Q24-CFR-TARHEEL-041824	--	4/18/2024 15:12	Grab	0	7.59	8.33	82.2	11.6	227.7	28.42	USGS Data[6]	1,830
			CFR-TARHEEL-050724	--	5/7/2024 11:30	Grab	0	6.86	6.09	98.8	20	160.33	26.33	USGS Data[6]	3,870
			CAP2Q24CFR-TARHEEL-24-050824	--	5/8/2024 11:07	Composite	24	6.57	6.54	4	36.6	337.08	25.28	USGS Data[6]	6,488
Bladen Bluffs	CFR-BLADEN	Cape Fear River at Bladen Bluffs	CAP2Q24-CFR-BLADEN-041824	--	4/18/2024 10:50	Grab	0	7.28	8.18	88	37.1	592.1	26.15	USGS Data[7]	1,850
Kings Bluffs	CFR-KINGS	Cape Fear River at Kings Bluff Raw Water	CAP2Q24-CFR-KINGS-042224	--	4/22/2024 13:20	Grab	0	7.79	7.22	42.1	11.6	305.03	19.76	USGS Data[8]	2,100

Notes:

1 - Flow measurement methods are described in Table A1. Supplemented flow measurement data are included in Attachment ATT1.

2 - Samples with a compositing duration of zero (0) hours are grab samples.

3 - The Stormwater Treatment System (SWTS) samples are collected over the typical daily operation period. During the May 2024 sampling event there was no stormwater flow to the stormwater treatment system.

4 - The volumetric flow rate for upstream river water and groundwater was estimated by subtracting inflows from Willis Creek, upwelling groundwater, seeps to the river, and Outfall 002 and by adding the river water intake from Chemours to the flow rate measurement from the W.O. Huske Dam.

5 - FTCs were used as the flumes installed at the Seeps A, B, C, and D were decomissioned following Q2 2022 sampling event.

6 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam used to estimate flow rate at Tar Heel Ferry Road Bridge during grab sample collection.

7 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam used to estimate flow rate at Bladen Bluff during sample collection.

8 - Flow rate measured at USGS gauging station #02105769 located at Lock #1 near Kelly used to estimate flow rate at Kings Bluff during sample collection.

-- - not measured/not sampled

DMRs - Discharge Monitoring Reports

FTC - Flow-through cell

USGS - United States Geological Survey

°C - degrees Celsius

mg/L - milligrams per liter

µS/cm - microsiemens per centimeter

mV- millivolts

NTU - Nephelometric Turbidity Units

ORP - oxidation reduction potential

S.U. - Standard Units

TABLE A3
GROUNDWATER ELEVATIONS - Q2 2024
Chemours Fayetteville Works, North Carolia

Area[1]	Water Bearing Unit[2]	Well ID	Gauging Date	Northing (ft, SPCS NAD83)[3]	Easting (ft, SPCS NAD83)[3]	Screened Interval (ft)	TOC Elevation (ft, NAVD 88)[4]	Depth to Water (ft from TOC)	Water Level (ft, NAVD88)[4]
Onsite	Black Creek Aquifer	BCA-01	2024-04-09	2050662.48	399779.96	91-101	146.25	66.89	79.36
Onsite	Black Creek Aquifer	BCA-02	2024-04-09	2051062.07	396242.02	92-102	148.37	78.41	69.96
Onsite	Black Creek Aquifer	BCA-03R	2024-04-09	2049522.22	398582.23	88-98	150.82	56.68	94.14
Onsite	Black Creek Aquifer	BCA-04	2024-04-09	2047823.03	395877.67	94-104	150.31	34.24	116.07
Offsite	Black Creek Aquifer	BLADEN-1DR	2024-04-09	2050233.40	387519.21	-	76.54	19.56	56.98
Offsite	Surficial Aquifer	BLADEN-1S	2024-04-09	2050233.35	387518.97	5-10	76.74	10.15	66.59
Offsite	Black Creek Aquifer	BLADEN-2D	2024-04-09	2042878.34	368827.09	70-75	138.27	17.60	120.67
Offsite	Surficial Aquifer	BLADEN-2S	2024-04-09	2042882.92	368821.46	10-20	138.04	4.45	133.59
Offsite	Black Creek Aquifer	BLADEN-3D	2024-04-09	2059006.56	396856.98	33.75-43.75	75.52	9.32	66.20
Offsite	Surficial Aquifer	BLADEN-3S	2024-04-09	2059012.93	396862.31	5-15	74.27	8.12	66.15
Offsite	Black Creek Aquifer	BLADEN-4D	2024-04-09	2087636.87	363255.12	46.75-51.75	59.66	1.00	58.66
Offsite	Surficial Aquifer	BLADEN-4S	2024-04-09	2087637.46	363263.19	4.75-14.75	59.68	5.36	54.32
Offsite	Black Creek Aquifer	CUMBERLAND-1D	2024-04-09	2011071.39	431459.95	40-50	174.60	4.45	170.15
Offsite	Surficial Aquifer	CUMBERLAND-1S	2024-04-09	2011071.39	431459.95	15-25	174.73	4.20	170.53
Offsite	Black Creek Aquifer	CUMBERLAND-2D	2024-04-09	2074019.14	449987.54	47-57	129.23	3.61	125.62
Offsite	Surficial Aquifer	CUMBERLAND-2S	2024-04-09	2074020.86	449979.10	7-17	129.06	3.56	125.50
Offsite	Black Creek Aquifer	CUMBERLAND-3D	2024-04-09	2060409.16	423248.12	22-27	78.79	7.05	71.74
Offsite	Surficial Aquifer	CUMBERLAND-3S	2024-04-09	2060413.30	423254.64	9-14	79.06	6.84	72.22
Offsite	Black Creek Aquifer	CUMBERLAND-4D	2024-04-09	2078249.95	413095.77	57-67	119.22	13.64	105.58
Offsite	Surficial Aquifer	CUMBERLAND-4S	2024-04-09	2078255.53	413086.63	10-20	119.36	6.95	112.41
Offsite	Black Creek Aquifer	CUMBERLAND-5DR	2024-04-09	2138241.13	405623.60	-	106.75	3.76	102.99
Offsite	Surficial Aquifer	CUMBERLAND-5S	2024-04-09	2138233.37	405623.27	14-24	106.65	7.96	98.69
Onsite	Perched Zone	FTA-01	2024-04-09	2049370.01	397906.09	12.0-22.0	149.60	16.63	132.97
Onsite	Perched Zone	FTA-02	2024-04-09	2049203.29	397784.99	11.5-22.0	149.30	17.53	131.77
Onsite	Perched Zone	FTA-03	2024-04-09	2049310.46	397766.23	12.0-22.0	150.10	15.62	134.48
Onsite	Surficial Aquifer	INSITU-01	2024-04-09	2046078.99	401657.39	-	89.12	6.45	82.67
Onsite	Surficial Aquifer	INSITU-02	2024-04-09	2049136.62	401863.46	-	113.12	DRY	DRY
Onsite	Floodplain Deposits	LTW-01	2024-04-09	2052150.62	399565.01	11.0-26.0	52.71	16.56	36.15
Onsite	Black Creek Aquifer	LTW-02	2024-04-09	2052355.48	398847.57	28.0-38.0	51.39	11.09	40.30
Onsite	Floodplain Deposits	LTW-03	2024-04-09	2052558.35	398114.45	15.0-30.0	51.75	13.65	38.10
Onsite	Floodplain Deposits	LTW-04	2024-04-09	2052584.95	397279.61	12.0-27.0	50.66	11.20	39.46
Onsite	Black Creek Aquifer	LTW-05	2024-04-09	2052740.40	396430.31	29.0-44.0	50.94	12.41	38.53
Onsite	Perched Zone	MW-11	2024-04-09	2049051.06	396544.40	11.5-21.5	148.53	23.52	125.01
Onsite	Perched Zone	MW-12S	2024-04-09	2049269.37	397262.90	17.5-22.5	151.08	20.06	131.02
Onsite	Surficial Aquifer	MW-13D	2024-04-09	2049821.12	397119.02	57-67	148.65	49.50	99.15
Onsite	Surficial Aquifer	MW-14D	2024-04-09	2049074.56	396974.49	62-72	149.73	45.99	103.74
Onsite	Surficial Aquifer	MW-15DRR	2024-04-09	2049511.75	398580.71	52.5-62.5	150.92	53.94	96.98
Onsite	Surficial Aquifer	MW-16D	2024-04-09	2048402.84	398493.70	72-82	148.41	42.06	106.35
Onsite	Surficial Aquifer	MW-17D	2024-04-09	2047366.50	398401.74	57-67	146.12	35.71	110.41
Onsite	Surficial Aquifer	MW-18D	2024-04-09	2046574.35	400947.30	50-60	108.10	24.13	83.97
Onsite	Surficial Aquifer	MW-19D	2024-04-09	2048272.93	401151.43	46-56	139.36	56.69	82.67
Onsite	Perched Zone	MW-1S	2024-04-09	2049117.99	397080.69	21.0-24.0	148.88	18.91	129.97
Onsite	Surficial Aquifer	MW-20D	2024-04-09	2048733.71	400791.01	65-75	137.20	53.42	83.78
Onsite	Surficial Aquifer	MW-21D	2024-04-09	2047074.92	399501.88	72-82	151.42	50.79	100.63
Onsite	Surficial Aquifer	MW-22D	2024-04-09	2048362.48	398518.40	52-72	149.09	41.99	107.10
Onsite	Perched Zone	MW-23	2024-04-09	2051063.25	396237.61	9.5-14.5	148.34	14.50	133.84
Onsite	Perched Zone	MW-24	2024-04-09	2048767.69	397303.94	18.8-23.8	150.31	21.52	128.79
Onsite	Perched Zone	MW-25	2024-04-09	2050989.82	396753.37	12-17	147.59	13.86	133.73
Onsite	Perched Zone	MW-26	2024-04-09	2051484.67	396265.18	5-10	147.70	11.25	136.45
Onsite	Perched Zone	MW-27	2024-04-09	2051472.00	396010.33	10-15	146.83	14.66	132.17
Onsite	Perched Zone	MW-28	2024-04-09	2051165.93	395719.79	9-14	144.70	14.24	130.46
Onsite	Perched Zone	MW-30	2024-04-09	2050776.09	397340.79	10-15	147.67	13.14	134.53
Onsite	Perched Zone	MW-31	2024-04-09	2049622.88	396390.70	17-22	147.70	NM	NM
Onsite	Perched Zone	MW-32	2024-04-09	2049651.79	396359.58	13-18.5	147.11	NM	NM
Onsite	Perched Zone	MW-33	2024-04-09	2049678.56	396337.51	12-17	146.82	NM	NM
Onsite	Perched Zone	MW-34	2024-04-09	2049619.09	396352.90	17-22	147.97	16.06	131.91
Onsite	Perched Zone	MW-35	2024-04-09	2049631.16	396332.94	14-19	147.54	15.55	131.99
Onsite	Perched Zone	MW-36	2024-04-09	2049651.17	396320.09	-	147.89	15.84	132.05
Onsite	Perched Zone	MW-7S	2024-04-09	2049809.73	397444.52	-	147.47	10.68	136.79
Onsite	Perched Zone	MW-8S	2024-04-09	2049867.77	397096.48	-	146.48	2.81	143.67
Onsite	Perched Zone	MW-9S	2024-04-09	2049734.30	396760.16	17.5-22.5	154.39	21.36	133.03
Onsite	Perched Zone	NAF-01	2024-04-09	2050339.68	398348.58	5.0-15.0	148.65	9.07	139.58
Onsite	Perched Zone	NAF-02	2024-04-09	2050634.55	398660.16	5.0-15.0	149.28	9.66	139.62
Onsite	Perched Zone	NAF-03	2024-04-09	2050743.04	398578.63	5.0-15.0	149.41	10.76	138.65
Onsite	Perched Zone	NAF-04	2024-04-09	2050713.13	398445.89	-	146.77	6.89	139.88
Onsite	Perched Zone	NAF-06	2024-04-09	2050913.93	398808.81	2.75-12.75	145.43	11.57	133.86
Onsite	Perched Zone	NAF-07	2024-04-09	2050618.12	398898.69	5.5-15.5	149.03	9.28	139.75
Onsite	Perched Zone	NAF-08A	2024-04-09	2050886.93	398098.22	5.0-15.0	147.74	8.13	139.61
Onsite	Surficial Aquifer	NAF-08B	2024-04-09	2050880.18	398095.97	43.5-53.5	147.83	56.73	91.10
Onsite	Perched Zone	NAF-09	2024-04-09	2050807.44	397708.78	7.0-17.0	148.62	11.55	137.07
Onsite	Perched Zone	NAF-10	2024-04-09	2050425.20	397611.81	8.25-18.25	149.25	11.96	137.29
Onsite	Perched Zone	NAF-11A	2024-04-09	2050999.77	398907.08	2.5-7.5	139.74	5.56	134.18
Onsite	Surficial Aquifer	NAF-11B	2024-04-09	2050995.88	398911.13	33.5-43.5	140.74	DRY	DRY
Onsite	Perched Zone	NAF-12	2024-04-09	2050777.49	398270.56	18-23	145.79	NM	NM
Onsite	Black Creek Aquifer	OW-1	2024-04-09	2051287.87	399930.53	40-50	95.01	37.95	57.06
Onsite	Black Creek Aquifer	OW-2	2024-04-09	2051801.62	398572.28	63-73	84.37	50.42	33.95
Onsite	Black Creek Aquifer	OW-3	2024-04-09	2051812.32	398601.08	63-73	84.64	50.83	33.81
Onsite	Black Creek Aquifer	OW-4R	2024-04-09	2052236.29	394990.53	51-61	80.03	39.46	40.57
Onsite	Black Creek Aquifer	OW-5	2024-04-09	2052196.97	395070.03	54-64	81.61	NM	NM
Onsite	Black Creek Aquifer	OW-6	2024-04-09	2052223.54	396168.41	-	80.53	NM	NM
Onsite	Black Creek Aquifer	OW-7	2024-04-09	2052052.69	397180.06	-	81.45	49.89	31.56
Onsite	Black Creek Aquifer	OW-8	2024-04-09	2052041.98	397202.33	-	82.30	51.51	30.79
Onsite	Black Creek Aquifer	OW-9R	2024-04-09	2052252.38	395001.93	-	78.35	38.00	40.35
Onsite	Black Creek Aquifer	OW-10	2024-04-09	2051291.21	399948.17	40-50	94.39	37.32	57.07
Onsite	Black Creek Aquifer	OW-11	2024-04-09	2049913.61	401683.39	74-84	94.92	49.33	45.59
Onsite	Black Creek Aquifer	OW-12	2024-04-09	2050721.09	401731.33	50-60	83.65	54.40	29.25
Onsite	Black Creek Aquifer	OW-13	2024-04-09	2051210.62	400769.33	50-60	85.12	53.04	32.08
Onsite	Black Creek Aquifer	OW-14	2024-04-09	2051608.03	400311.42	46-56	80.67	47.15	33.52
Onsite	Black Creek Aquifer	OW-15	2024-04-09	2051608.62	399719.91	34-44	87.86	29.90	57.96
Onsite	Black Creek Aquifer	OW-16	2024-04-09	2051993.25	399828.66	15-25	52.94	16.97	35.97
Onsite	Black Creek Aquifer	OW-17	2024-04-09	2051661.47	399433.03	58-68	89.67	56.85	32.82
Onsite	Black Creek Aquifer	OW-18	2024-04-09	2051836.19	398846.69	45-55	90.88	44.75	46.13

TABLE A3
GROUNDWATER ELEVATIONS - Q2 2024
Chemours Fayetteville Works, North Carolina

Area[1]	Water Bearing Unit[2]	Well ID	Gauging Date	Northing (ft, SPCS NAD83)[3]	Easting (ft, SPCS NAD83)[3]	Screened Interval (ft)	TOC Elevation (ft, NAVD 88)[4]	Depth to Water (ft from TOC)	Water Level (ft, NAVD88)[4]
Onsite	Black Creek Aquifer	OW-19	2024-04-09	2051976.50	398067.23	70-80	86.68	55.48	31.20
Onsite	Black Creek Aquifer	OW-20	2024-04-09	2052080.86	398229.85	48-58	69.59	29.78	39.81
Onsite	Black Creek Aquifer	OW-21	2024-04-09	2051950.75	397521.83	57-67	80.85	48.81	32.04
Onsite	Black Creek Aquifer	OW-22	2024-04-09	2052218.74	397325.34	43-53	66.63	26.74	39.89
Onsite	Black Creek Aquifer	OW-23	2024-04-09	2052355.66	396776.73	45-55	67.83	28.33	39.50
Onsite	Black Creek Aquifer	OW-24	2024-04-09	2052158.17	396677.42	50-60	78.67	48.48	30.19
Onsite	Black Creek Aquifer	OW-25	2024-04-09	2052428.46	396182.38	45-55	70.91	31.99	38.92
Onsite	Black Creek Aquifer	OW-26	2024-04-09	2052268.81	395503.74	50-60	80.85	39.13	41.72
Onsite	Black Creek Aquifer	OW-27	2024-04-09	2052622.16	395555.17	33-43	55.60	15.73	39.87
Onsite	Black Creek Aquifer	OW-28	2024-04-09	2052838.21	395570.57	20-30	48.49	8.91	39.58
Onsite	Black Creek Aquifer	OW-29	2024-04-09	2052143.81	395193.45	42-52	85.67	41.12	44.55
Onsite[5]	Black Creek Aquifer	OW-30	2024-04-09	2052537.53	394988.72	49-59	70.92	31.37	39.55
Onsite	Black Creek Aquifer	OW-31	2024-04-09	2051595.90	394812.07	85-95	106.10	65.98	40.12
Onsite	Black Creek Aquifer	OW-32	2024-04-09	2051792.16	394563.76	62-72	85.05	46.42	38.63
Onsite[5]	Black Creek Aquifer	OW-33	2024-04-09	2052806.54	395116.90	19-29	48.59	8.72	39.87
Onsite	Surficial Aquifer	OW-34	2024-04-09	2051813.31	398593.54	23-33	83.76	16.06	67.70
Onsite	Surficial Aquifer	OW-35	2024-04-09	2051977.75	398060.78	20-30	87.45	18.66	68.79
Onsite	Surficial Aquifer	OW-36	2024-04-09	2051997.45	397257.46	11-21	80.61	18.06	62.55
Onsite	Black Creek Aquifer	OW-37	2024-04-09	2052264.10	396154.99	25-35	77.82	21.41	56.41
Onsite	Black Creek Aquifer	OW-38	2024-04-09	2051883.97	394885.22	60-70	123.70	60.76	62.94
Onsite	Black Creek Aquifer	OW-39	2024-04-09	2052105.68	394728.70	68-78	92.07	51.50	40.57
Onsite[5]	Black Creek Aquifer	OW-40	2024-04-09	2052521.39	394588.05	49-59	72.88	32.48	40.40
Onsite	Black Creek Aquifer	OW-41	2024-04-09	2050119.92	401683.74	82-92	93.66	48.20	45.46
Onsite	Black Creek Aquifer	OW-42	2024-04-09	2050448.24	401696.05	58-68	87.37	42.47	44.90
Onsite	Black Creek Aquifer	OW-43	2024-04-09	2051116.17	400937.73	40-50	76.94	44.69	32.25
Onsite	Black Creek Aquifer	OW-44	2024-04-09	2051736.45	399741.48	34-44	73.18	36.71	36.47
Onsite	Black Creek Aquifer	OW-45	2024-04-09	2051955.99	398836.07	50-60	77.10	36.65	40.45
Onsite	Black Creek Aquifer	OW-46	2024-04-09	2052050.69	398164.94	59-69	72.05	32.22	39.83
Onsite	Black Creek Aquifer	OW-47	2024-04-09	2052136.32	397243.89	49-59	71.47	31.83	39.64
Onsite	Black Creek Aquifer	OW-48	2024-04-09	2052275.93	396698.39	42-52	69.54	30.21	39.33
Onsite	Black Creek Aquifer	OW-49	2024-04-09	2052348.51	396180.56	53-63	79.56	40.63	38.93
Onsite	Black Creek Aquifer	OW-50	2024-04-09	2052379.97	395529.59	43-53	71.53	31.52	40.01
Onsite	Black Creek Aquifer	OW-51	2024-04-09	2052262.14	396166.08	56-66	77.72	48.49	29.23
Onsite	Black Creek Aquifer	OW-52	2024-04-09	2052151.03	397562.30	37-47	60.66	21.30	39.36
Onsite	Black Creek Aquifer	OW-53	2024-04-09	2052055.05	397530.83	56-66	75.16	35.39	39.77
Onsite	Black Creek Aquifer	OW-54	2024-04-09	2051275.96	401068.86	-	47.42	DRY	DRY
Onsite	Black Creek Aquifer	OW-55	2024-04-09	2050875.02	401761.92	-	75.45	46.97	28.48
Onsite	Black Creek Aquifer	OW-56	2024-04-09	2050634.71	401983.45	-	44.69	8.03	36.66
Onsite	Black Creek Aquifer	OW-57	2024-04-09	2050174.65	401781.20	-	68.87	25.08	43.79
Onsite	Black Creek Aquifer	PIW-10DR	2024-04-09	2052297.49	395094.05	53-58	73.88	35.10	38.78
Onsite	Surficial Aquifer	PIW-10S	2024-04-09	2052297.29	395104.96	7-17	74.02	21.00	53.02
Onsite	Black Creek Aquifer	PIW-11	2024-04-09	2050416.29	401911.03	47-57	67.02	23.61	43.41
Onsite	Black Creek Aquifer	PIW-12	2024-04-09	2051025.77	401703.10	64-74	83.78	56.69	27.09
Onsite	Black Creek Aquifer	PIW-13	2024-04-09	2051122.60	401464.29	54-64	83.18	55.46	27.72
Onsite	Black Creek Aquifer	PIW-14	2024-04-09	2051186.57	401163.98	56-66	87.43	57.17	30.26
Onsite	Black Creek Aquifer	PIW-15	2024-04-09	2051532.80	400706.51	34-44	67.85	35.85	32.00
Onsite	Black Creek Aquifer	PIW-16D	2024-04-09	2046587.07	396257.96	90-100	150.06	26.23	123.83
Onsite	Surficial Aquifer	PIW-16S	2024-04-09	2046586.09	396267.84	35-45	149.74	22.48	127.26
Onsite	Black Creek Aquifer	PIW-1D	2024-04-09	2051801.28	400548.00	24.5-29.5	52.16	19.44	32.72
Onsite	Floodplain Deposits	PIW-1S	2024-04-09	2051792.39	400541.03	7.8-17.8	54.04	21.15	32.89
Onsite	Black Creek Aquifer	PIW-2D	2024-04-09	2051315.80	399925.40	40-50	96.19	39.14	57.05
Onsite	Black Creek Aquifer	PIW-3D	2024-04-09	2052086.94	399711.25	19-24	53.42	17.38	36.04
Onsite	Black Creek Aquifer	PIW-4D	2024-04-09	2052101.94	398816.52	32.3-37.3	52.85	12.60	40.25
Onsite	Surficial Aquifer	PIW-5SR	2024-04-09	2051977.42	398545.03	17-27	79.60	DRY	DRY
Onsite	Floodplain Deposits	PIW-6S	2024-04-09	2052539.79	398117.93	18-28	53.40	15.28	38.12
Onsite	Black Creek Aquifer	PIW-7D	2024-04-09	2052595.65	396787.77	29-34	48.93	9.04	39.89
Onsite	Floodplain Deposits	PIW-7S	2024-04-09	2052589.10	396786.97	7-17	47.97	9.08	38.89
Onsite	Black Creek Aquifer	PIW-8D	2024-04-09	2052682.10	396403.37	35.5-40	48.66	10.10	38.56
Onsite	Black Creek Aquifer	PIW-9D	2024-04-09	2052250.84	396155.84	40-45	79.64	NM	NM
Onsite	Surficial Aquifer	PIW-9S	2024-04-09	2052251.03	396148.52	24.8-29.8	79.64	NM	NM
Onsite	Perched Zone	PW-01	2024-04-09	2049654.30	399064.80	11-21	149.55	14.72	134.83
Onsite	Surficial Aquifer	PW-02	2024-04-09	2050649.47	399779.06	50-60	146.43	63.21	83.22
Onsite	Surficial Aquifer	PW-03	2024-04-09	2050765.32	397339.81	35-45	147.97	43.69	104.28
Onsite	Surficial Aquifer	PW-04	2024-04-09	2050940.66	394659.55	17-27	97.75	28.29	69.46
Onsite	Surficial Aquifer	PW-05	2024-04-09	2047812.93	395873.10	65-75	150.34	35.42	114.92
Onsite	Surficial Aquifer	PW-06	2024-04-09	2045288.77	392868.00	19-29	147.69	20.61	127.08
Onsite	Surficial Aquifer	PW-07	2024-04-09	2049258.26	390847.71	28-38	148.16	40.40	107.76
Onsite	Black Creek Aquifer	PW-09	2024-04-09	2048979.11	402000.08	44-54	72.93	25.24	47.68
Onsite	Black Creek Aquifer	PW-10RR	2024-04-09	2051965.93	398532.53	64-74	79.97	39.90	40.07
Onsite	Black Creek Aquifer	PW-11	2024-04-09	2052226.72	394354.36	53-63	73.26	32.52	40.74
Onsite	Black Creek Aquifer	PW-12	2024-04-09	2047063.51	399500.45	109-119	150.61	62.70	87.91
Onsite	Black Creek Aquifer	PW-13	2024-04-09	2048029.18	397584.26	120-130	149.36	39.28	110.08
Onsite	Black Creek Aquifer	PW-14	2024-04-09	2050766.36	397325.65	136-146	147.97	66.89	81.08
Onsite	Black Creek Aquifer	PW-15R	2024-04-09	2051011.75	398900.88	110-120	136.14	67.37	68.77
Onsite	Surficial Aquifer	PZ-1	2024-04-09	2051910.97	394928.45	28-38	126.65	36.90	89.75
Onsite	Perched Zone	PZ-11	2024-04-09	2049820.94	398646.25	15-20	151.03	10.31	140.72
Onsite	Perched Zone	PZ-12	2024-04-09	2048978.89	399091.19	15.1-20.1	149.89	19.05	130.84
Onsite	Perched Zone	PZ-13	2024-04-09	2050985.25	397707.82	-	148.14	10.89	137.25
Onsite	Perched Zone	PZ-14	2024-04-09	2050618.27	397589.92	9.0-14.0	148.38	10.61	137.77
Onsite	Perched Zone	PZ-15	2024-04-09	2050107.50	396806.39	10.2-15.2	147.76	13.32	134.44
Onsite	Perched Zone	PZ-17	2024-04-09	2048872.69	396614.82	21.1-26.1	150.08	DRY	DRY
Onsite	Perched Zone	PZ-19R	2024-04-09	2049919.52	397998.66	16-21	150.05	13.41	136.64
Onsite	Surficial Aquifer	PZ-2	2024-04-09	2052167.77	396631.77	15-25	78.05	14.03	64.02
Onsite	Perched Zone	PZ-20R	2024-04-09	2049784.60	398185.81	15-20	151.29	14.73	136.56
Onsite	Perched Zone	PZ-21R	2024-04-09	2049883.13	398445.16	17-22	150.67	13.16	137.51
Onsite	Black Creek Aquifer	PZ-22	2024-04-09	2052585.34	397271.94	42.5-47.5	50.70	11.13	39.57
Onsite	Perched Zone	PZ-24	2024-04-09	2050744.07	396117.94	11-16	147.53	14.63	132.90
Onsite	Perched Zone	PZ-25R	2024-04-09	2050748.23	395971.54	-	147.51	18.87	128.64
Onsite	Perched Zone	PZ-26	2024-04-09	2050382.35	396059.78	11-16	147.70	13.45	134.25
Onsite	Perched Zone	PZ-27	2024-04-09	2050376.76	395922.11	12-17	147.17	14.36	132.81

TABLE A3
GROUNDWATER ELEVATIONS - Q2 2024
Chemours Fayetteville Works, North Carolina

Area[1]	Water Bearing Unit[2]	Well ID	Gauging Date	Northing (ft, SPCS NAD83)[3]	Easting (ft, SPCS NAD83)[3]	Screened Interval (ft)	TOC Elevation (ft, NAVD 88)[4]	Depth to Water (ft from TOC)	Water Level (ft, NAVD88)[4]
Onsite	Perched Zone	PZ-28	2024-04-09	2049933.79	396304.55	13-18	148.64	13.57	135.07
Onsite	Perched Zone	PZ-29	2024-04-09	2049771.59	396377.59	12-18	147.74	14.89	132.85
Onsite	Perched Zone	PZ-31	2024-04-09	2049594.36	396428.73	14-19	148.00	18.21	129.79
Onsite	Perched Zone	PZ-32	2024-04-09	2049713.79	396418.47	13-18	148.47	15.67	132.80
Onsite	Perched Zone	PZ-33	2024-04-09	2049707.66	396308.92	12.5-17.5	146.72	14.31	132.40
Onsite	Perched Zone	PZ-34	2024-04-09	2049595.04	396292.05	13.5-18.5	147.70	15.99	131.70
Onsite	Perched Zone	PZ-35	2024-04-09	2050020.49	398232.64	13-18	150.43	12.97	137.46
Onsite	Perched Zone	PZ-36	2024-04-09	2051331.44	396086.17	5-8.5	135.20	2.47	132.73
Onsite	Perched Zone	PZ-37	2024-04-09	2051050.05	396042.40	5-8	135.56	2.64	132.92
Onsite	Perched Zone	PZ-38	2024-04-09	2050569.66	395970.01	5-9	137.34	DRY	DRY
Onsite	Perched Zone	PZ-39	2024-04-09	2050238.18	395921.87	5-10	137.93	3.82	134.11
Onsite	Perched Zone	PZ-40	2024-04-09	2050031.90	395943.02	5-9	138.51	4.19	134.32
Onsite	Perched Zone	PZ-41	2024-04-09	2050048.97	395979.29	5-8.5	138.13	3.52	134.61
Onsite	Perched Zone	PZ-42	2024-04-09	2050230.23	395961.73	3-7	138.17	NM	NM
Onsite	Perched Zone	PZ-43	2024-04-09	2050567.89	396011.61	5-9	137.06	DRY	DRY
Onsite	Perched Zone	PZ-44	2024-04-09	2051045.25	396082.75	5-7	136.26	3.02	133.24
Onsite	Perched Zone	PZ-45	2024-04-09	2051323.03	396124.41	2-4	135.69	2.72	132.97
Onsite	Surficial Aquifer	PZ-L	2024-04-09	2048684.01	396745.80	13-28	147.86	30.04	117.82
Offsite	Black Creek Aquifer	ROBESON-1D	2024-04-09	2020158.93	381416.28	42.75-52.75	156.36	12.00	144.36
Offsite	Surficial Aquifer	ROBESON-1S	2024-04-09	2020156.86	381408.19	17-27	156.66	9.12	147.54
Onsite	Surficial Aquifer	SMW-01	2024-04-09	2043688.29	395297.97	5.0-15.0	150.58	13.21	137.37
Onsite	Perched Zone	SMW-02	2024-04-09	2050655.91	399982.23	5.0-20.0	144.59	14.64	129.95
Onsite	Surficial Aquifer	SMW-02B	2024-04-09	2050654.77	399983.75	43.0-53.0	147.93	55.97	91.96
Onsite	Perched Zone	SMW-03	2024-04-09	2049445.32	399779.32	10.0-20.0	151.09	DRY	DRY
Onsite	Black Creek Aquifer	SMW-03B	2024-04-09	2049421.54	399785.75	72-82	150.43	65.25	85.18
Onsite	Perched Zone	SMW-04A	2024-04-09	2048387.57	399668.71	19.5-34.5	148.09	DRY	DRY
Onsite	Surficial Aquifer	SMW-04B	2024-04-09	2048392.37	399666.21	43.0-53.0	147.65	52.04	95.61
Onsite	Perched Zone	SMW-05	2024-04-09	2048557.33	399334.07	10.0-20.0	148.10	22.94	125.16
Onsite	Surficial Aquifer	SMW-05PR	2024-04-09	2048566.10	399338.19	45.0-60.0	147.79	50.52	97.27
Onsite	Perched Zone	SMW-06	2024-04-09	2048759.48	399172.35	12.0-22.0	150.97	DRY	DRY
Onsite	Surficial Aquifer	SMW-06B	2024-04-09	2048764.94	399144.74	58-68	150.32	53.85	96.47
Onsite	Perched Zone	SMW-07	2024-04-09	2048611.74	398931.13	13.0-23.0	146.79	19.21	127.58
Onsite	Perched Zone	SMW-08	2024-04-09	2048468.78	399064.97	21.0-31.0	151.02	DRY	DRY
Onsite	Surficial Aquifer	SMW-08B	2024-04-09	2048478.84	399058.33	58-68	148.81	47.07	101.74
Onsite	Surficial Aquifer	SMW-09	2024-04-09	2050017.41	401076.89	52-62	141.43	62.14	79.29
Onsite	Black Creek Aquifer	SMW-10	2024-04-09	2047923.84	402307.31	39-49	76.26	29.57	46.69
Onsite	Surficial Aquifer	SMW-11	2024-04-09	2048975.38	401996.15	13-23	71.95	15.95	56.00
Onsite	Black Creek Aquifer	SMW-12	2024-04-09	2051007.22	401314.20	88-98	118.22	89.02	29.20

Notes:
1 - Area - refers to location of well within site property boundary ("Onsite") and outside property boundary ("Offsite").
2 - Water Bearing Unit - refers to primary aquifer unit well screen is estimated to be screened within.
3 - Northing and Easting provided in North Carolina State Plane System (zone 3200), North American Datum 1983.
4 - Vertical datum is North American Vertical Datum of 1988.
5 - OW-30, OW-33, and OW-40 are within the USACE property but are labeled as onsite wells.
-- - TOC information not available
DRY - Well was dry at time of monitoring event.
ft - feet
NAVD88 - North American Vertical Datum of 1988
NM - Not measured, well inaccessible during monitoring event.
SPCS NAD83 - State Plane Coordinate System North American Datum 1983
TOC - top of casing

TABLE A4
GROUNDWATER SAMPLE SUMMARY AND FIELD PARAMETERS - Q2 2024
Chemours Fayetteville Works, North Carolina

Area	Location ID	Water Bearing Unit[1]	Adjacent Surface Water Feature	Synoptic Water Level Date	Sample ID	QA/QC	Sample Collection and Field Parameters						
							Sample Date and Time	pH (S.U.)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Specific Conductivity (µS/cm)	Temperature (°C)
Offsite	BLADEN-1DR	Black Creek Aquifer	Georgia Branch Creek	4/9/2024	CAP2Q24-BLADEN-10DR041224	--	4/12/2024 11:56	5.77	0.07	30.50	2.55	66.38	20.11
Onsite	LTW-01	Floodplain Deposits	Cape Fear River	4/9/2024	CAP2Q24-LTW-01-041524	--	4/15/2024 12:06	4.01	0.90	364.70	5.52	127.55	18.93
Onsite	LTW-02	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-LTW-02-041524	--	4/15/2024 11:05	4.46	0.44	328.50	0.60	103.11	18.34
Onsite	LTW-03	Floodplain Deposits	Cape Fear River	4/9/2024	CAP2Q24-LTW-03-041524	--	4/15/2024 15:05	4.70	0.01	209.10	2.94	98.72	17.86
Onsite	LTW-04	Floodplain Deposits	Cape Fear River	4/9/2024	CAP2Q24-LTW-04-041024	--	4/10/2024 12:30	4.68	0.43	242.30	15.80	56.25	17.97
Onsite	LTW-05	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-LTW-05-041024	--	4/10/2024 14:50	4.30	0.05	195.70	9.37	76.35	20.05
Onsite	OW-28	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-OW-28-041624	--	4/16/2024 10:45	4.39	0.04	96.40	0.80	52.76	17.82
Onsite	OW-33	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-OW-33-041624	--	4/16/2024 9:55	4.29	0.02	263.10	3.86	66.66	18.71
Onsite	PIW-1D	Black Creek Aquifer	Cape Fear River / Willis Creek	4/9/2024	CAP2Q24-PIW-1D-041524	--	4/15/2024 11:41	3.53	0.24	381.40	15.50	183.18	18.00
Onsite	PIW-3D	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-PIW-3D-041524	--	4/15/2024 13:10	4.63	0.00	155.20	6.84	95.20	19.12
Onsite	PIW-7D	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-PIW-7D-041524	--	4/15/2024 14:51	4.09	0.04	147.80	1.59	97.59	18.16
Onsite	PIW-7S	Floodplain Deposits	Cape Fear River	4/9/2024	CAP2Q24-PIW-7S-041024	--	4/10/2024 16:40	4.02	0.06	287.00	2.62	66.71	18.34
Onsite	PW-04	Surficial Aquifer	Outfall 003	4/9/2024	CAP2Q24-PW-04-042324	--	4/23/2024 11:20	3.32	0.08	381.20	10.60	558.46	14.23
Onsite	PW-06	Surficial Aquifer	Georgia Branch Creek	4/9/2024	CAP2Q24-PW-06-041624	--	4/16/2024 12:40	4.39	6.41	306.90	1.36	50.15	20.74
Onsite	PW-07	Surficial Aquifer	Georgia Branch Creek	4/9/2024	CAP2Q24-PW-07-041924	--	4/19/2024 11:00	6.50	8.74	81.80	7.76	113.26	26.45
				4/9/2024	CAP2Q24-PW-07-041924-D	Field Duplicate	4/19/2024 11:00	6.50	8.74	81.80	7.76	113.26	26.45
Onsite	PW-09	Black Creek Aquifer	Willis Creek	4/9/2024	CAP2Q24-PW-09-041024	--	4/10/2024 14:55	6.68	0.12	-129.3	19	76.24	18.63
				4/9/2024	CAP2Q24-PW-09-041024-D	Field Duplicate	4/10/2024 14:55	6.68	0.12	-129.3	19	76.24	18.63
Onsite	PZ-22	Black Creek Aquifer	Cape Fear River	4/9/2024	CAP2Q24-PZ-22-041624	--	4/16/2024 11:30	4.53	0.09	161.30	5.15	108.58	18.82
Onsite	SMW-10	Black Creek Aquifer	Willis Creek	4/9/2024	CAP2Q24-SMW-10-041224	--	4/12/2024 10:40	5.45	0.29	-3.10	14.30	89.50	18.21
Onsite	SMW-11	Surficial Aquifer	Willis Creek	4/9/2024	CAP2Q24-SMW-11-041524	--	4/15/2024 14:10	4.53	4.15	268.20	2.52	50.49	18.23
Onsite	SMW-12	Black Creek Aquifer	Willis Creek	4/9/2024	CAP2Q24-SMW-12-041024	--	4/10/2024 11:00	3.84	0.46	293.30	6.95	190.58	17.86

Notes:
1 - Water Bearing Unit - refers to the primary aquifer unit where the well screen is estimated to be located.
2 - PIW-1S and PIW-10S were dry during Q2 2024 sampling event and could not be sampled.
-- - not measured/not sampled
°C - degrees Celsius
mg/L - milligrams per liter
µS/cm - microsiemens per centimeter
mV- millivolts
NTU - Nephelometric Turbidity Units
ORP - oxidation reduction potential
S.U. - Standard Units
"-Z" in Sample ID denotes field filtration

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	CFR-BLADEN	CFR-BLADEN	CFR-KINGS	CFR-MILE-76
Field Sample ID	CAP2Q24-CFR-BLADEN-041824	CAP2Q24-CFR-BLADEN-041824-D	CAP2Q24-CFR-KINGS-042224	CAP2Q24-CFR-RM-76-050624
Sample Date	4/18/2024	4/18/2024	4/22/2024	5/6/2024
QA/QC		Field Duplicate		
Sample Delivery Group (SDG)	320-111655-1	320-111655-1	320-111655-1	320-112121-1
Lab Sample ID	320-111655-6	320-111655-7	320-111655-4	320-112121-2
Table 3+ (ng/L)				
HFPO-DA	**4.8**	**4.5**	<4.0	<4.0
PFMOAA	**7.8**	**8.3**	**10**	<2.0
PFO2HxA	**5.3**	**4.7**	**6.0**	<2.0
PFO3OA	<2.0	<2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0	<2.0
PMPA	**5.9**	**5.9**	**4.8**	**2.5**
PEPA	<2.0	<2.0	<2.0	<2.0
PS Acid	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0	<2.0
R-PSDA	**4.4 J**	<2.0	**10 J**	**2.2 J**
Hydrolyzed PSDA	**2.9 J**	<2.0	**3.6 J**	<2.0
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS	<3.0	<3.0	<3.0	<3.0
EVE Acid	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0	<2.0	**14 J**	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0
PFPrA	**20**	**19**	**23**	**12**
Perfluoroheptanoic Acid	**2.9**	**2.8**	**2.9**	**3.4**
Total Attachment C[1,2]	**24**	**23**	**21**	**2.5**
Total Table 3+ (17 compounds)[2,3]	**24**	**23**	**21**	**2.5**
Total Table 3+ (18 compounds)[2,4]	**44**	**42**	**44**	**15**
Total Table 3+ (21 compounds)[2]	**51**	**42**	**71**	**17**

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	GBC-1
Field Sample ID	CAP2Q24-CFR-TARHEEL-041824	CAP2Q24-CFR-TARHEEL-050724	CAP2Q24-CFR-TARHEEL-24-050824	CAP2Q24-GBC-1-050624
Sample Date	4/18/2024	5/7/2024	5/8/2024	5/6/2024
QA/QC				
Sample Delivery Group (SDG)	320-111655-1	320-112121-1	320-112338-1	320-112121-1
Lab Sample ID	320-111655-5	320-112121-3	320-112338-6	320-112121-1
Table 3+ (ng/L)				
HFPO-DA	**4.6**	**4.2**	<4.0	**280**
PFMOAA	**8.0**	**6.8**	**3.6**	**64**
PFO2HxA	**6.8**	**5.5**	**3.0**	**230**
PFO3OA	<2.0	<2.0	<2.0	**40**
PFO4DA	<2.0	<2.0	<2.0	**11**
PFO5DA	<2.0	<2.0	<2.0	**3.2**
PMPA	**5.9**	**6.8**	**4.4**	**530**
PEPA	<2.0	<2.0	<2.0	**160**
PS Acid	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0	**24**
R-PSDA	**4.4 J**	**4.4 J**	**2.7 J**	**110 J**
Hydrolyzed PSDA	**2.7 J**	**2.1 J**	<2.0	<2.0
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS	<3.0	<3.0	<3.0	**3.3**
EVE Acid	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0	<2.0	<2.0	**46 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0
PFPrA	**21**	**20**	**14**	**510**
Perfluoroheptanoic Acid	**2.7**	**3.0**	**4.1**	<2.0
Total Attachment C[1,2]	**25**	**23**	**11**	**1,300**
Total Table 3+ (17 compounds)[2,3]	**25**	**23**	**11**	**1,300**
Total Table 3+ (18 compounds)[2,4]	**46**	**43**	**25**	**1,900**
Total Table 3+ (21 compounds)[2]	**53**	**50**	**28**	**2,000**

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	LOCK-DAM NORTH	LOCK-DAM NORTH	LOCK-DAM NORTH	LOCK-DAM SEEP
Field Sample ID	**LOCK-DAM-NORTH-043024**	**CAP2Q24-LOCK-DAM-NORTH-050624**	**LOCK-DAM-NORTH-060424**	**LOCK-DAM-SEEPS-043024**
Sample Date	**4/30/2024**	**5/6/2024**	**6/4/2024**	**4/30/2024**
QA/QC				
Sample Delivery Group (SDG)	**320-112044-1**	**320-112121-1**	**320-112844-1**	**320-112044-1**
Lab Sample ID	**320-112044-1**	**320-112121-4**	**320-112844-1**	**320-112044-2**
Table 3+ (ng/L)				
HFPO-DA	**3,600**	**3,000**	**3,000**	**6,500**
PFMOAA	**3,700**	**4,100**	**4,000**	**53,000 J**
PFO2HxA	**2,300**	**2,900**	**2,300**	**16,000**
PFO3OA	**610**	**480**	**540**	**8,700**
PFO4DA	**100**	**98**	**110**	**3,300**
PFO5DA	**14**	<130	**11**	**160 J**
PMPA	**2,900**	**3,100**	**2,800**	**6,000**
PEPA	**990**	**980**	**800**	**1,500**
PS Acid	<2.0	<50	<2.0	<2.0 UJ
Hydro-PS Acid	**49**	<55	**55**	**210**
R-PSDA	**230 J**	**180 J**	**200 J**	**630 J**
Hydrolyzed PSDA	**3.0 J**	<34	**5.4 J**	**510 J**
R-PSDCA	<3.0	<180	<3.0	**12**
NVHOS	**59**	<160	**62**	**930**
EVE Acid	<2.0	<50	<2.0	<2.0 UJ
Hydro-EVE Acid	**12**	<30	**12**	**210**
R-EVE	**140 J**	**72 J**	**240 J**	**200 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<36	<2.0	**2.0**
PFECA B	<2.0	<78	<2.0	<2.0
PFECA-G	<2.0	<36	<2.0	<2.0
PFPrA	**4,700**	**4,200**	**4,300**	**22,000**
Perfluoroheptanoic Acid	--	<31	--	--
Total Attachment C[1,2]	**14,000**	**15,000**	**14,000**	**95,000**
Total Table 3+ (17 compounds)[2,3]	**14,000**	**15,000**	**14,000**	**97,000**
Total Table 3+ (18 compounds)[2,4]	**19,000**	**19,000**	**18,000**	**120,000**
Total Table 3+ (21 compounds)[2]	**19,000**	**19,000**	**18,000**	**120,000**

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	LOCK-DAM SEEP	LOCK-DAM SEEP	LOCK-DAM SEEP	LOCK-DAM SEEP
Field Sample ID	LOCK-DAM-SEEPS-043024-D	CAP2Q24-LOCK-DAM-SEEP-050624	LOCK-DAM-SEEPS-060424	LOCK-DAM-SEEPS-060424-D
Sample Date	4/30/2024	5/6/2024	6/4/2024	6/4/2024
QA/QC	Field Duplicate			Field Duplicate
Sample Delivery Group (SDG)	320-112044-1	320-112121-1	320-112844-1	320-112844-1
Lab Sample ID	320-112044-3	320-112121-5	320-112844-2	320-112844-3
Table 3+ (ng/L)				
HFPO-DA	**5,800**	**6,900**	**5,600**	**6,700**
PFMOAA	**51,000 J**	**46,000**	**52,000 J**	**54,000 J**
PFO2HxA	**20,000**	**18,000**	**20,000**	**21,000**
PFO3OA	**7,900**	**8,300**	**10,000**	**12,000**
PFO4DA	**3,100**	**2,100**	**2,500**	**2,200**
PFO5DA	**220 J**	**170**	**110 J**	**120**
PMPA	**5,600**	**5,200**	**4,800**	**4,700**
PEPA	**1,700**	**1,600**	**1,300**	**1,300**
PS Acid	<2.0	<50	<2.0	<2.0
Hydro-PS Acid	**240**	<55	**200**	**210**
R-PSDA	**630 J**	**500 J**	**750 J**	**660 J**
Hydrolyzed PSDA	**490 J**	**410 J**	**670 J**	**650 J**
R-PSDCA	**13**	<180	**13**	**13**
NVHOS	**900**	**840**	**940**	**940**
EVE Acid	<2.0	<50	<2.0	<2.0
Hydro-EVE Acid	**220**	**210**	**190**	**200**
R-EVE	**190 J**	**140 J**	**220 J**	**210 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<36	<2.0	<2.0
PFECA B	<2.0	<78	<2.0	<2.0
PFECA-G	<2.0	<36	<2.0	<2.0
PFPrA	**23,000**	**18,000**	**20,000**	**20,000**
Perfluoroheptanoic Acid	**--**	**73**	**--**	**--**
Total Attachment C[1,2]	**96,000**	**88,000**	**97,000**	**100,000**
Total Table 3+ (17 compounds)[2,3]	**97,000**	**89,000**	**98,000**	**100,000**
Total Table 3+ (18 compounds)[2,4]	**120,000**	**110,000**	**120,000**	**120,000**
Total Table 3+ (21 compounds)[2]	**120,000**	**110,000**	**120,000**	**120,000**

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	OLDOF-2	OLDOF-2	OUTFALL 002	RIVER WATER INTAKE 2
Field Sample ID	CAP2Q24-OLDOF-2-050724	CAP2Q24-OLDOF-2-23-050824	CAP2Q24-OUTFALL-002-24-050724	RIVER-WATER-INTAKE-24-050724
Sample Date	5/7/2024	5/8/2024	5/7/2024	5/7/2024
QA/QC				
Sample Delivery Group (SDG)	320-112338-1	320-112338-1	320-112338-1	320-112338-1
Lab Sample ID	320-112338-8	320-112338-7	320-112338-5	320-112338-3
Table 3+ (ng/L)				
HFPO-DA	**500**	**290**	**89**	**10**
PFMOAA	**1,700**	**940**	**28**	**15**
PFO2HxA	**680**	**350**	**20**	**9.7**
PFO3OA	**190**	**120**	**7.1**	**3.5**
PFO4DA	**79**	**95**	**6.0**	<2.0
PFO5DA	**34**	**21**	**2.8**	<2.0
PMPA	**320**	**190**	**17**	**12**
PEPA	**110**	**66**	**3.8**	<2.0
PS Acid	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	**22**	**15**	**3.1**	<2.0
R-PSDA	**29 J**	**16 J**	**57 J**	**5.9 J**
Hydrolyzed PSDA	**50 J**	**27 J**	**41 J**	**7.6 J**
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS	**31**	**17**	<3.0	<3.0
EVE Acid	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	**12**	**7.6**	**2.1**	<2.0
R-EVE	**15 J**	**8.5 J**	**15 J**	**3.1 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0
PFPrA	**870**	**510**	**150**	**120**
Perfluoroheptanoic Acid	**2.9**	<2.0	**3.6**	**3.4**
Total Attachment C[1,2]	**3,600**	**2,100**	**180**	**50**
Total Table 3+ (17 compounds)[2,3]	**3,700**	**2,100**	**180**	**50**
Total Table 3+ (18 compounds)[2,4]	**4,500**	**2,600**	**330**	**170**
Total Table 3+ (21 compounds)[2]	**4,600**	**2,700**	**440**	**190**

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	RIVER WATER INTAKE 2	WC-1	WC-1	EB
Field Sample ID	RIVER-WATER-INTAKE-24-050724-D	CAP2Q24-WC-1-050724	CAP2Q24-WC-1-24-050824	CAP2Q24-EQBLK-DV-041124
Sample Date	5/7/2024	5/7/2024	5/8/2024	4/11/2024
QA/QC	Field Duplicate			Equipment Blank
Sample Delivery Group (SDG)	320-112338-1	320-112338-1	320-112338-1	320-111363-1
Lab Sample ID	320-112338-4	320-112338-2	320-112338-1	320-111363-3
Table 3+ (ng/L)				
HFPO-DA	**11**	**160**	**190**	<4.0
PFMOAA	**15**	**380**	**480**	<2.0
PFO2HxA	**11**	**200**	**270**	<2.0
PFO3OA	**2.7**	**33**	**40**	<2.0
PFO4DA	<2.0	**6.7**	**11**	<2.0
PFO5DA	<2.0	<2.0	<2.0	<2.0
PMPA	**13**	**250**	**290**	<2.0
PEPA	<2.0	**53**	**59**	<2.0
PS Acid	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	**10**	**9.3**	<2.0
R-PSDA	**7.2 J**	**53 J**	**42 J**	<2.0
Hydrolyzed PSDA	**8.1 J**	**180 J**	**170 J**	<2.0
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS	<3.0	**8.8**	**10**	<3.0
EVE Acid	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	**2.5**	**2.6**	<2.0
R-EVE	**3.8 J**	**23 J**	**19 J**	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0
PFPrA	**120**	**420**	**460**	<5.0
Perfluoroheptanoic Acid	**3.8**	<2.0	<2.0	<2.0
Total Attachment C[1,2]	**53**	**1,100**	**1,300**	ND
Total Table 3+ (17 compounds)[2,3]	**53**	**1,100**	**1,400**	ND
Total Table 3+ (18 compounds)[2,4]	**170**	**1,500**	**1,800**	ND
Total Table 3+ (21 compounds)[2]	**190**	**1,800**	**2,100**	ND

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	EB	EB	EB
Field Sample ID	CAP2Q24-EQBLK-PP-041124	CAP2Q24-EQBLK-IS-050724	CAP2Q24-EQBLK-PP-050724
Sample Date	4/11/2024	5/7/2024	5/7/2024
QA/QC	Equipment Blank	Equipment Blank	Equipment Blank
Sample Delivery Group (SDG)	320-111363-1	320-112338-1	320-112121-1
Lab Sample ID	320-111363-2	320-112338-9	320-112121-6
Table 3+ (ng/L)			
HFPO-DA	<4.0	<4.0	<4.0
PFMOAA	<2.0	<2.0	<2.0
PFO2HxA	<2.0	<2.0	<2.0
PFO3OA	<2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0
PMPA	<2.0	<2.0	<2.0
PEPA	<2.0	<2.0	<2.0
PS Acid	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0
R-PSDA	<2.0	<2.0	<2.0
Hydrolyzed PSDA	<2.0	<2.0	<2.0
R-PSDCA	<3.0	<3.0	<3.0
NVHOS	<3.0	<3.0	<3.0
EVE Acid	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0
R-EVE	<2.0	<2.0	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0
PFPrA	<5.0	<5.0	<5.0
Perfluoroheptanoic Acid	<2.0	<2.0	<2.0
Total Attachment C[1,2]	ND	ND	ND
Total Table 3+ (17 compounds)[2,3]	ND	ND	ND
Total Table 3+ (18 compounds)[2,4]	ND	ND	ND
Total Table 3+ (21 compounds)[2]	ND	ND	ND

TABLE A5
SEEP AND SURFACE WATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	FBLK
Field Sample ID	FB-060424
Sample Date	6/4/2024
QA/QC	Field Blank
Sample Delivery Group (SDG)	320-112844-1
Lab Sample ID	320-112844-4
Table 3+ (ng/L)	
HFPO-DA	<4.0
PFMOAA	<2.0
PFO2HxA	<2.0
PFO3OA	<2.0
PFO4DA	<2.0
PFO5DA	<2.0
PMPA	<2.0
PEPA	<2.0
PS Acid	<2.0
Hydro-PS Acid	<2.0
R-PSDA	<2.0
Hydrolyzed PSDA	<2.0
R-PSDCA	<3.0
NVHOS	<3.0
EVE Acid	<2.0
Hydro-EVE Acid	<2.0
R-EVE	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0
PFECA B	<2.0
PFECA-G	<2.0
PFPrA	<5.0
Perfluoroheptanoic Acid	--
Total Attachment C[1,2]	ND
Total Table 3+ (17 compounds)[2,3]	ND
Total Table 3+ (18 compounds)[2,4]	ND
Total Table 3+ (21 compounds)[2]	ND

Notes:

-- Not measured

Bold - Analyte detected above associated reporting limit

J - Analyte detected. Reported value may not be accurate or precise.

ND - No analytes were detected above the associated reporting limits.

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SDG - Sample Delivery Group

< - Analyte not detected above associated reporting limit.

UJ – Analyte not detected. Reporting limit may not be accurate or precise.

1 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

2 - Total Table 3+ and Total Attachment C were calculated including J qualified data but not non-detect data. The sum is rounded to two significant figures.

3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.

4 - Total Table 3+ (18 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Black Creek Aquifer	Floodplain Deposits	Black Creek Aquifer	Floodplain Deposits
Location ID	BLADEN-1DR	LTW-01	LTW-02	LTW-03
Field Sample ID	CAP2Q24-BLADEN-1DR-041224	CAP2Q24-LTW-01-041524	CAP2Q24-LTW-02-041524	CAP2Q24-LTW-03-041524
Sample Date	4/12/2024	4/15/2024	4/15/2024	4/15/2024
QA/QC				
Sample Delivery Group (SDG)	320-111441-1	320-111473-1	320-111473-1	320-111473-1
Lab Sample ID	320-111441-2	320-111473-3	320-111473-7	320-111473-6
Table 3+ (ng/L)				
HFPO-DA	**180**	**17,000**	**16,000**	**11,000**
PFMOAA	**29**	**14,000**	**24,000**	**110,000**
PFO2HxA	**100**	**19,000**	**21,000**	**26,000**
PFO3OA	**12**	**4,200**	**4,900**	**6,100**
PFO4DA	<2.0	**1,200**	**260**	**160**
PFO5DA	<2.0	**160**	<130	<130
PMPA	**350**	**14,000 J**	**13,000 J**	**13,000 J**
PEPA	**94**	**4,900**	**3,700**	**2,800**
PS Acid	<2.0 UJ	<50 UJ	<50 UJ	<50 UJ
Hydro-PS Acid	<2.0	**250**	<55	<55
R-PSDA	**20 J**	**730 J**	**650 J**	**760 J**
Hydrolyzed PSDA	<2.0	**530 J**	**2,100 J**	**7,700 J**
R-PSDCA	<3.0	<180	<180	<180
NVHOS	<3.0	**330**	**510**	**1,200**
EVE Acid	<2.0 UJ	<50 UJ	<50 UJ	<50 UJ
Hydro-EVE Acid	<2.0	**110**	**75**	**52**
R-EVE	**8.8 J**	**760 J**	**900 J**	**730 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<36	<36	<36
PFECA B	<2.0	<78	<78	<78
PFECA-G	<2.0	<36	<36	<36
PFPrA	**210**	**16,000**	**20,000**	**52,000**
Perfluoroheptanoic Acid	<2.0	**42**	<31	<31
Total Attachment C[2,3]	**770**	**75,000**	**83,000**	**170,000**
Total Table 3+ (17 compounds)[3,4]	**770**	**75,000**	**83,000**	**170,000**
Total Table 3+ (18 compounds)[3,5]	**980**	**91,000**	**100,000**	**220,000**
Total Table 3+ (21 compounds)[3]	**1,000**	**93,000**	**110,000**	**230,000**

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Floodplain Deposits	Black Creek Aquifer	Black Creek Aquifer	Black Creek Aquifer
Location ID	LTW-04	LTW-05	OW-28	OW-33
Field Sample ID	CAP2Q24-LTW-04-041024	CAP2Q24-LTW-05-041024	CAP2Q24-OW-28-041624	CAP2Q24-OW-33-041624
Sample Date	4/10/2024	4/10/2024	4/16/2024	4/16/2024
QA/QC				
Sample Delivery Group (SDG)	320-111363-1	320-111363-1	320-111473-1	320-111473-1
Lab Sample ID	320-111363-4	320-111363-1	320-111473-10	320-111473-11
Table 3+ (ng/L)				
HFPO-DA	**21,000**	**26,000**	**4,500**	**6,200**
PFMOAA	**40,000**	**140,000**	**1,100**	**6,500**
PFO2HxA	**24,000**	**57,000**	**2,400**	**4,500**
PFO3OA	**4,100**	**14,000**	**510**	**790**
PFO4DA	**640**	**1,900**	**76**	<50
PFO5DA	<130	<130	<130	<130
PMPA	**16,000**	**5,600**	**4,600 J**	**5,000 J**
PEPA	**5,500**	**540**	**1,700**	**1,700**
PS Acid	<50	<50	<50 UJ	<50 UJ
Hydro-PS Acid	**180**	**170**	**70**	<55
R-PSDA	**2,300 J**	**1,200 J**	**210 J**	**240 J**
Hydrolyzed PSDA	**3,000 J**	**1,700 J**	<34	**48 J**
R-PSDCA	<180	<180	<180	<180
NVHOS	**1,000**	**1,400**	<160	<160
EVE Acid	<50	<50	<50 UJ	<50 UJ
Hydro-EVE Acid	**390**	**650**	<30	<30
R-EVE	**1,900 J**	**1,500 J**	**230 J**	**300 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<36	<36
PFECA B	<78	<78	<78	<78
PFECA-G	<36	<36	<36	<36
PFPrA	**39,000**	**100,000**	**4,000**	**7,400**
Perfluoroheptanoic Acid	**53**	**260**	<31	<31
Total Attachment C[2,3]	**110,000**	**250,000**	**15,000**	**25,000**
Total Table 3+ (17 compounds)[3,4]	**110,000**	**250,000**	**15,000**	**25,000**
Total Table 3+ (18 compounds)[3,5]	**150,000**	**350,000**	**19,000**	**32,000**
Total Table 3+ (21 compounds)[3]	**160,000**	**350,000**	**19,000**	**33,000**

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Floodplain Deposits	Black Creek Aquifer	Black Creek Aquifer	Floodplain Deposits
Location ID	**PIW-1D**	**PIW-3D**	**PIW-7D**	**PIW-7S**
Field Sample ID	**CAP2Q24-PIW-1D-041524**	**CAP2Q24-PIW-3D-041524**	**CAP2Q24-PIW-7D-041524**	**CAP2Q24-PIW-7S-041024**
Sample Date	**4/15/2024**	**4/15/2024**	**4/15/2024**	**4/10/2024**
QA/QC				
Sample Delivery Group (SDG)	**320-111473-1**	**320-111473-1**	**320-111473-1**	**320-111363-1**
Lab Sample ID	**320-111473-2**	**320-111473-5**	**320-111473-1**	**320-111363-6**
Table 3+ (ng/L)				
HFPO-DA	**11,000**	**16,000**	**16,000**	**17,000**
PFMOAA	**7,500**	**11,000**	**110,000**	**120,000**
PFO2HxA	**8,400**	**15,000**	**35,000**	**40,000**
PFO3OA	**1,600**	**3,200**	**6,500**	**6,000**
PFO4DA	**440**	**860**	**950**	**880**
PFO5DA	<130	<130	<130	<130
PMPA	**8,200 J**	**13,000 J**	**4,800 J**	**5,100**
PEPA	**2,900**	**4,700**	**1,000**	**980**
PS Acid	<50 UJ	<50 UJ	<50 UJ	<50
Hydro-PS Acid	**77**	**200**	**99**	**85**
R-PSDA	**330 J**	**620 J**	**490 J**	**770 J**
Hydrolyzed PSDA	<34	**70 J**	**1,400 J**	**1,000 J**
R-PSDCA	<180	<180	<180	<180
NVHOS	<160	**200**	**1,100**	**1,100**
EVE Acid	<50 UJ	<50 UJ	<50 UJ	<50
Hydro-EVE Acid	<30	**69**	**310**	**280**
R-EVE	**390 J**	**550 J**	**1,600 J**	**890 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<36	<36
PFECA B	<78	<78	<78	<78
PFECA-G	<36	<36	<36	<36
PFPrA	**10,000**	**16,000**	**67,000**	**62,000**
Perfluoroheptanoic Acid	<31	<31	**110**	**88**
Total Attachment C[2,3]	**40,000**	**64,000**	**170,000**	**190,000**
Total Table 3+ (17 compounds)[3,4]	**40,000**	**64,000**	**180,000**	**190,000**
Total Table 3+ (18 compounds)[3,5]	**50,000**	**80,000**	**240,000**	**250,000**
Total Table 3+ (21 compounds)[3]	**51,000**	**81,000**	**250,000**	**260,000**

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Surficial Aquifer	Surficial Aquifer	Surficial Aquifer	Surficial Aquifer
Location ID	PW-04	PW-06	PW-07	PW-07
Field Sample ID	CAP2Q24-PW-04-042324	CAP2Q24-PW-06-041624	CAP2Q24-PW-07-041924	CAP2Q24-PW-07-041924-D
Sample Date	4/23/2024	4/16/2024	04/19/2024	04/19/2024
QA/QC				Field Duplicate
Sample Delivery Group (SDG)	320-111966-1	320-111473-1	320-111966-2	320-111966-2
Lab Sample ID	320-111966-1	320-111473-9	320-111966-2	320-111966-3
Table 3+ (ng/L)				
HFPO-DA	**670**	**890**	**150 J**	**140 J**
PFMOAA	**220**	<51	**77 J**	**79 J**
PFO2HxA	**660**	**590**	**230 J**	**210 J**
PFO3OA	**270**	<110	**31 J**	**29 J**
PFO4DA	**95**	<50	**38 J**	**27 J**
PFO5DA	<130	<130	<2.0 UJ	<2.0 UJ
PMPA	**890**	**670 J**	**220 J**	**230 J**
PEPA	**320**	**310**	**50 J**	**46 J**
PS Acid	<50	<50 UJ	<2.0 UJ	<2.0 UJ
Hydro-PS Acid	<55	<55	**16 J**	**15 J**
R-PSDA	**82 J**	**37 J**	**380 J**	**95 J**
Hydrolyzed PSDA	<34	<34	<2.0 UJ	<2.0 UJ
R-PSDCA	<180	<180	<3.0 UJ	<3.0 UJ
NVHOS	<160	<160	<3.0 UJ	<3.0 UJ
EVE Acid	<50	<50 UJ	<2.0 UJ	<2.0 UJ
Hydro-EVE Acid	<30	<30	**8.3 J**	**8.1 J**
R-EVE	**46 J**	<39	**120 J**	**130 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<2.0 UJ	<2.0 UJ
PFECA B	<78	<78	<2.0 UJ	<2.0 UJ
PFECA-G	<36	<36	<2.0 UJ	<2.0 UJ
PFPrA	**1,300**	**740**	**510 J**	**590 J**
Perfluoroheptanoic Acid	<31	<31	**2.7 J**	**2.6 J**
Total Attachment C[2,3]	**3,100**	**2,500**	**810**	**780**
Total Table 3+ (17 compounds)[3,4]	**3,100**	**2,500**	**820**	**780**
Total Table 3+ (18 compounds)[3,5]	**4,400**	**3,200**	**1,300**	**1,400**
Total Table 3+ (21 compounds)[3]	**4,600**	**3,200**	**1,800**	**1,600**

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Black Creek Aquifer	Surficial Aquifer	Black Creek Aquifer
Location ID	**PW-09**	**PW-09**	**PZ-22**
Field Sample ID	**CAP2Q24-PW-09-041024**	**CAP2Q24-PW-09-041024-D**	**CAP2Q24-PZ-22-041624**
Sample Date	**04/10/2024**	**04/10/2024**	**4/16/2024**
QA/QC		**Field Duplicate**	
Sample Delivery Group (SDG)	**320-111363-2**	**320-111363-2**	**320-111473-1**
Lab Sample ID	**320-111363-7**	**320-111363-8**	**320-111473-8**
Table 3+ (ng/L)			
HFPO-DA	<4.0 UJ	<4.0 UJ	**13,000**
PFMOAA	<2.0 UJ	<2.0 UJ	**120,000**
PFO2HxA	<2.0 UJ	<2.0 UJ	**34,000**
PFO3OA	<2.0 UJ	<2.0 UJ	**4,100**
PFO4DA	<2.0 UJ	<2.0 UJ	**330**
PFO5DA	<2.0 UJ	<2.0 UJ	<130
PMPA	<2.0 UJ	<2.0 UJ	**6,000 J**
PEPA	<2.0 UJ	<2.0 UJ	**1,300**
PS Acid	<2.0 UJ	<2.0 UJ	<50 UJ
Hydro-PS Acid	<2.0 UJ	<2.0 UJ	<55
R-PSDA	<2.0 UJ	<2.0 UJ	**480 J**
Hydrolyzed PSDA	<2.0 UJ	<2.0 UJ	**1,500 J**
R-PSDCA	<3.0 UJ	<3.0 UJ	<180
NVHOS	<3.0 UJ	<3.0 UJ	**1,200**
EVE Acid	<2.0 UJ	<2.0 UJ	<50 UJ
Hydro-EVE Acid	<2.0 UJ	<2.0 UJ	**98**
R-EVE	<2.0 UJ	<2.0 UJ	**700 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0 UJ	<2.0 UJ	<36
PFECA B	<2.0 UJ	<2.0 UJ	<78
PFECA-G	<2.0 UJ	<2.0 UJ	<36
PFPrA	<5.0 UJ	<5.0 UJ	**64,000**
Perfluoroheptanoic Acid	<2.0 UJ	<2.0 UJ	**39**
Total Attachment C[2,3]	ND	ND	**180,000**
Total Table 3+ (17 compounds)[3,4]	ND	ND	**180,000**
Total Table 3+ (18 compounds)[3,5]	ND	ND	**240,000**
Total Table 3+ (21 compounds)[3]	ND	ND	**250,000**

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Surficial Aquifer	Surficial Aquifer	Black Creek Aquifer
Location ID	SMW-10	SMW-11	SMW-12
Field Sample ID	CAP2Q24-SMW-10-041224	CAP2Q24-SMW-11-041524	CAP2Q24-SMW-12-041024
Sample Date	4/12/2024	4/15/2024	4/10/2024
QA/QC			
Sample Delivery Group (SDG)	320-111441-1	320-111473-1	320-111363-1
Lab Sample ID	320-111441-1	320-111473-4	320-111363-5
Table 3+ (ng/L)			
HFPO-DA	**6.7**	**5,800**	**2,300**
PFMOAA	**170**	**3,500**	**7,100**
PFO2HxA	**19**	**3,200**	**3,300**
PFO3OA	<2.0	**600**	**370**
PFO4DA	<2.0	**290**	<50
PFO5DA	<2.0	<130	<130
PMPA	**30**	**2,300 J**	**2,600**
PEPA	<2.0	**730**	**400**
PS Acid	<2.0 UJ	<50 UJ	<50
Hydro-PS Acid	<2.0	<55	<55
R-PSDA	<2.0	**95 J**	**99 J**
Hydrolyzed PSDA	<2.0	<34	<34
R-PSDCA	<3.0	<180	<180
NVHOS	<3.0	<160	<160
EVE Acid	<2.0 UJ	<50 UJ	<50
Hydro-EVE Acid	<2.0	<30	<30
R-EVE	<2.0	**120 J**	**74 J**
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<36	<36
PFECA B	<2.0	<78	<78
PFECA-G	<2.0	<36	<36
PFPrA	**200**	**3,200**	**5,900**
Perfluoroheptanoic Acid	<2.0	<31	<31
Total Attachment C[2,3]	**230**	**16,000**	**16,000**
Total Table 3+ (17 compounds)[3,4]	**230**	**16,000**	**16,000**
Total Table 3+ (18 compounds)[3,5]	**430**	**20,000**	**22,000**
Total Table 3+ (21 compounds)[3]	**430**	**20,000**	**22,000**

TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	**--**
Location ID	**EB**
Field Sample ID	**CAP2Q24-EQBLK-BAILER-041924**
Sample Date	**4/19/2024**
QA/QC	**Equipment Blank**
Sample Delivery Group (SDG)	**320-111966-1**
Lab Sample ID	**320-111966-4**
Table 3+ (ng/L)	
HFPO-DA	<4.0
PFMOAA	<2.0
PFO2HxA	<2.0
PFO3OA	<2.0
PFO4DA	<2.0
PFO5DA	<2.0
PMPA	<2.0
PEPA	<2.0
PS Acid	<2.0 UJ
Hydro-PS Acid	<2.0
R-PSDA	<2.0
Hydrolyzed PSDA	<2.0
R-PSDCA	<3.0
NVHOS	<3.0
EVE Acid	<2.0 UJ
Hydro-EVE Acid	<2.0
R-EVE	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0
PFECA B	<2.0
PFECA-G	<2.0
PFPrA	<5.0
Perfluoroheptanoic Acid	<2.0
Total Attachment C[2,3]	ND
Total Table 3+ (17 compounds)[3,4]	ND
Total Table 3+ (18 compounds)[3,5]	ND
Total Table 3+ (21 compounds)[3]	ND

Notes:

B - Analyte detected in an associated blank

J - Analyte detected. Reported value may not be accurate or precise

ND - No Table 3+ analytes were detected above the associated reporting limits

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SDG - Sample Delivery Group

UJ – Analyte not detected. Reporting limit may not be accurate or precise.

"-Z" in Sample ID denotes field filtration

< - Analyte not detected above associated reporting limit.

-- - not applicable

1 - Refers to the primary aquifer unit that the well screen is estimated to be screened within

2 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

3 - Total Table 3+ and Total Attachment C were calculated including J qualified data but not non-detect data. The sum is rounded to two significant figures.

4 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.

5 - Total Table 3+ (18 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

TABLE A7
SUMMARY OF TOTAL PFAS MASS DISCHARGE BY PATHWAY AFTER REMEDIES
Chemours Fayetteville Works, North Carolina

Pathway	Pathway Name	Total Flow Volume on Sample Date (MG)[1]	Total Attachment C[2]		Total Table 3+ (17 compounds)[3]		Total Table 3+ (18 compounds)[4]		Total Table 3+ (21 compounds)	
			Concentration (ng/L)	Mass Discharge (mg/s)	Concentration (ng/L)	Mass Discharge (mg/s)	Concentration (ng/L)	Mass Discharge (mg/s)	Concentration (ng/L)	Mass Discharge (mg/s)
1	Upstream River Water and Groundwater[5]	1,085	2.5	0.1	2.5	0.1	15	0.71	17	0.81
2	Willis Creek	5.46	1,300	0.31	1,400	0.34	1,800	0.43	2,100	0.50
3	Aerial Deposition on Water Features	--	--	0.01	--	0.01	--	0.01	--	0.01
4	Outfall 002[6]	13	130	0.07	130	0.07	160	0.09	250	0.14
4A	Stormwater Treatment System[7]	--	--	--	--	--	--	--	--	--
5	Onsite Groundwater[8]	--	--	0.05	--	0.05	--	0.07	--	0.07
6A	Seep A	--	--	--	--	--	--	--	--	--
6B	Seep B	--	--	--	--	--	--	--	--	--
6C	Seep C	--	--	--	--	--	--	--	--	--
6D	Seep D	--	--	--	--	--	--	--	--	--
6E	Lock and Dam Seep	0.02	88,000	0.06	89,000	0.07	110,000	0.08	110,000	0.08
6F	Lock and Dam Seep North	5.2E-03	15,000	3.4E-03	15,000	3.4E-03	19,000	4.3E-03	19,000	4.3E-03
7	Outfall 003 Stream[9]	0.02	2,100	1.4E-03	2,100	1.4E-03	2,600	0.00	2,700	1.8E-03
8	Offsite Adjacent and Downstream Groundwater	--	--	0.04	--	0.04	--	0.27	--	0.30
9	Georgia Branch Creek	3.06	1,300	0.17	1,300	0.17	1,900	0.26	2,000	0.27
Calculated Total Table 3+ Loading (mg/s) at Tar Heel				**0.85**		**0.88**		**1.92**		**2.19**

Notes:

1 - Total flow volume is determined based on measurements taken over 24-hour sample collection period for all locations except Willis Creek, Lock and Dam Seep, Outfall 003, and Georgia Branch Creek. At these locations, the total flow volume was estimated based on the instantaneous flow measurement.

2 - Mass discharge calculations for Total Attachment C does not include Perfluorohepthanoic acid (PFHpA).

3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE and PFPrA.

4 - Total Table 3+ (18 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

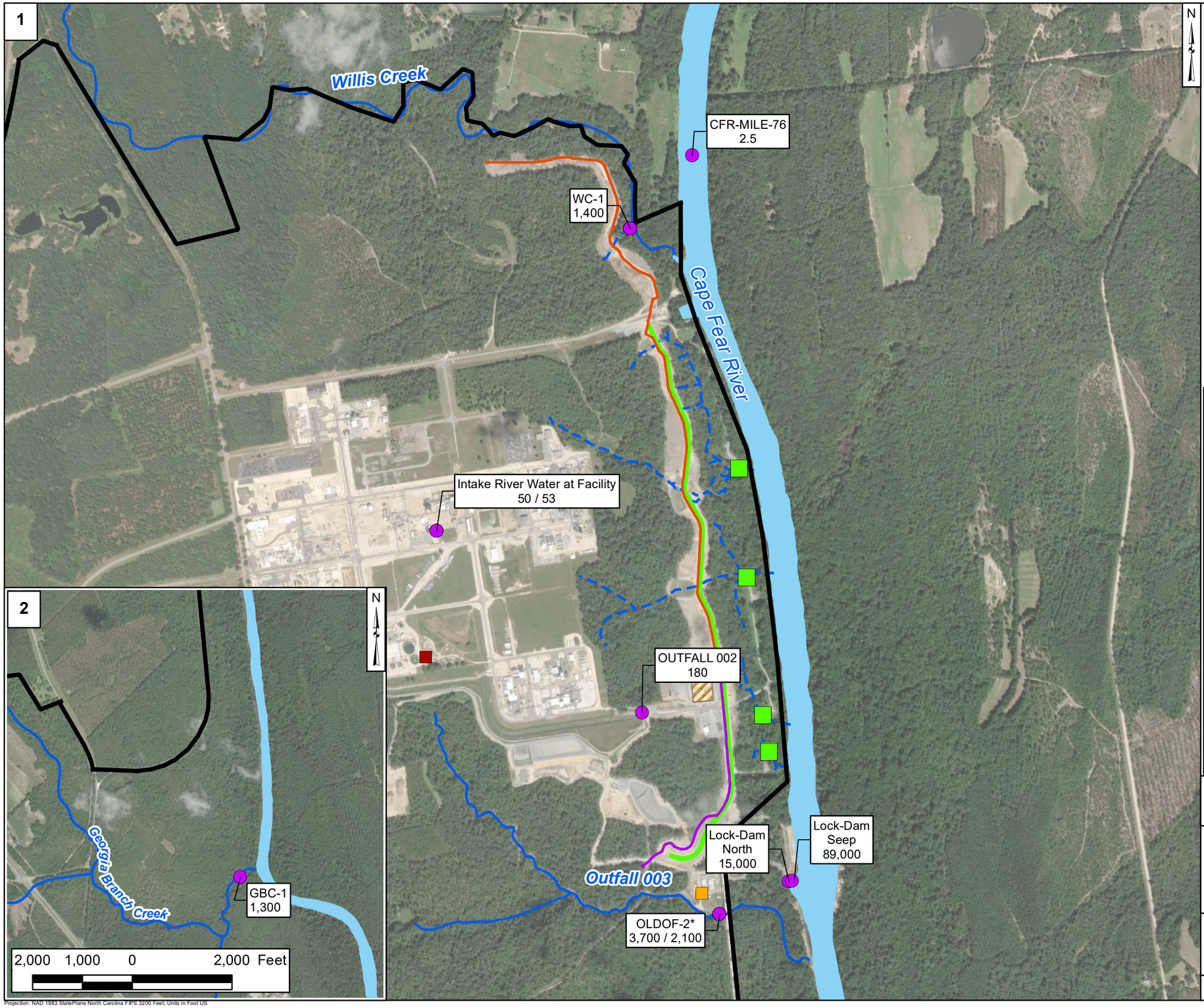
5 - The volumetric flow rate for upstream river water and groundwater was estimated by subtracting inflows from Willis Creek, upwelling groundwater, seeps to the river, and Outfall 002 and by adding the river water intake from Chemours to the flow rate measurement from the W.O. Huske Dam.

6 - Total PFAS concentrations at the Intake River Water at Facility location are subtracted from Outfall 002 concentrations to compute the mass discharge at Outfall 002.

7 - The stormwater treatment system captures PFAS originating from Stormwater in the Monomers/IXM area that would otherwise flow to Outfall 002 during storm events. During the May sampling event there was no stormwater flow to the stormwater treatment system, so there was no mass loading calculated for this location.

8 - Due to transient conditions as a result of the groundwater remedy installation and commissioning, gradient measurements are impacted from these activities and should be considered estimates.

9 - For May 2024, the concentrations from the stream sample collected downgradient from the Outfall 003 treatment system and effluent samples collected at the effluent basins of the Seep A, B, C and D flow-through cells were used to calculate the After Remedy mass discharge for these pathways.



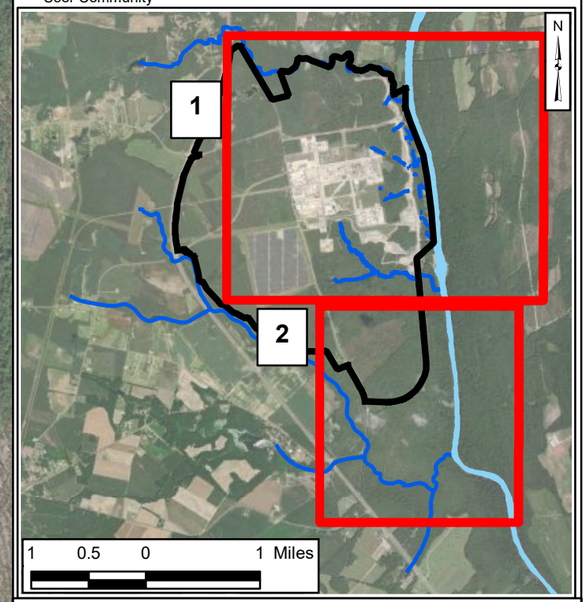
Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Legend

- Sample Location
- Flow-Through Cell
- Outfall 003 Treatment System
- Stormwater Treatment System
- Site Boundary
- Observed Seep
- Nearby Tributary
- North Forcemain
- South Forcemain
- Barrier Wall
- Groundwater Treatment Pad and Break Tank

OUTFALL 002
180
← Location Name
← Total Table 3+ (17 Compounds) Concentration (ng/L)

Notes:
NS - not sampled
ND - non-detect
* Multiple results are shown at OLDOF-2 for grab and composite sample
1. All results are in nanograms per liter (ng/L).
2. Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
3. Non-detect values were not included in sum of total Table 3+ results.
4. Total Table 3+ results include J-qualified data.
5. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS.
6. Basemap sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community



1,000 500 0 1,000 Feet

Total Table 3+ Concentrations (17 Compounds) in Surface Water - May 2024

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

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Figure **A1**

1

CFR-MILE-76*
2.5

CFR-BLADEN
24 / 23

CFR-TARHEEL
25

2 - Downstream

CFR-KINGS
21

1 0.5 0 1 Miles

N

Legend

Sample Location

Cape Fear River

Site Boundary

CFR-BLADEN
24 / 23

Location Name

Total Table 3+ (17 Compounds) Concentration (ng/L)

Notes:
ND - no Table 3+ analytes (17 compounds) were detected above the associated reporting limits
* Result shown at CFR-MILE-76 was collected on May 6, 2024.
1. All results are in nanograms per liter.
2. Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
3. Non-detect values were not included in sum of total Table 3+ results.
4. Total Table 3+ results include J-qualified data.
5. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS.
6. Basemap sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community.

1

2

25 12.5 0 25 Miles

2 1 0 2 Miles

Cape Fear River Total Table 3+ Concentrations (17 Compounds) - April 2024

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

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Figure
A2

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

1

CFR-MILE-76*
<4

CFR-BLADEN
4.8 / 4.5

CFR-TARHEEL
4.6

N

Legend

Sample Location

Cape Fear River

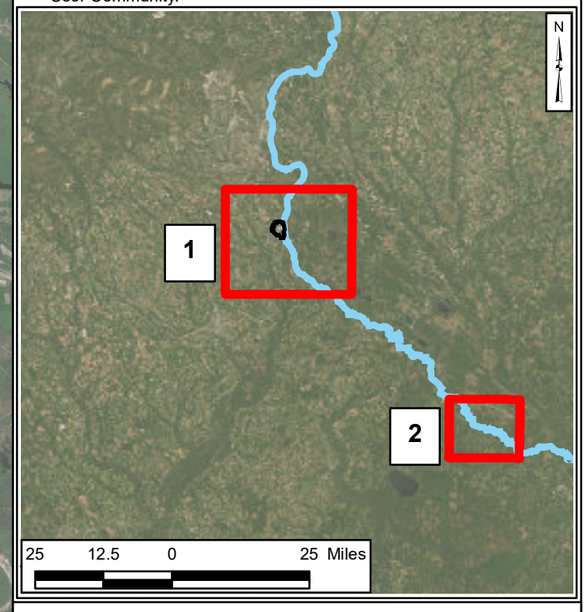
Site Boundary

CFR-TARHEEL
4.6

Location Name
HFPO-DA
Concentration (ng/L)

Notes:
*Result shown at CFR-MILE-76 was collected on May 6, 2024.
< - Analyte not detected above associated reporting limit.

1. All results are in nanograms per liter.
2. Basemap sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community.



2 1 0 2 Miles

2 - Downstream

CFR-KINGS
<4

N

1 0.5 0 1 Miles

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Cape Fear River HFPO-DA Concentrations
April 2024

Chemours Fayetteville Works, North Carolina

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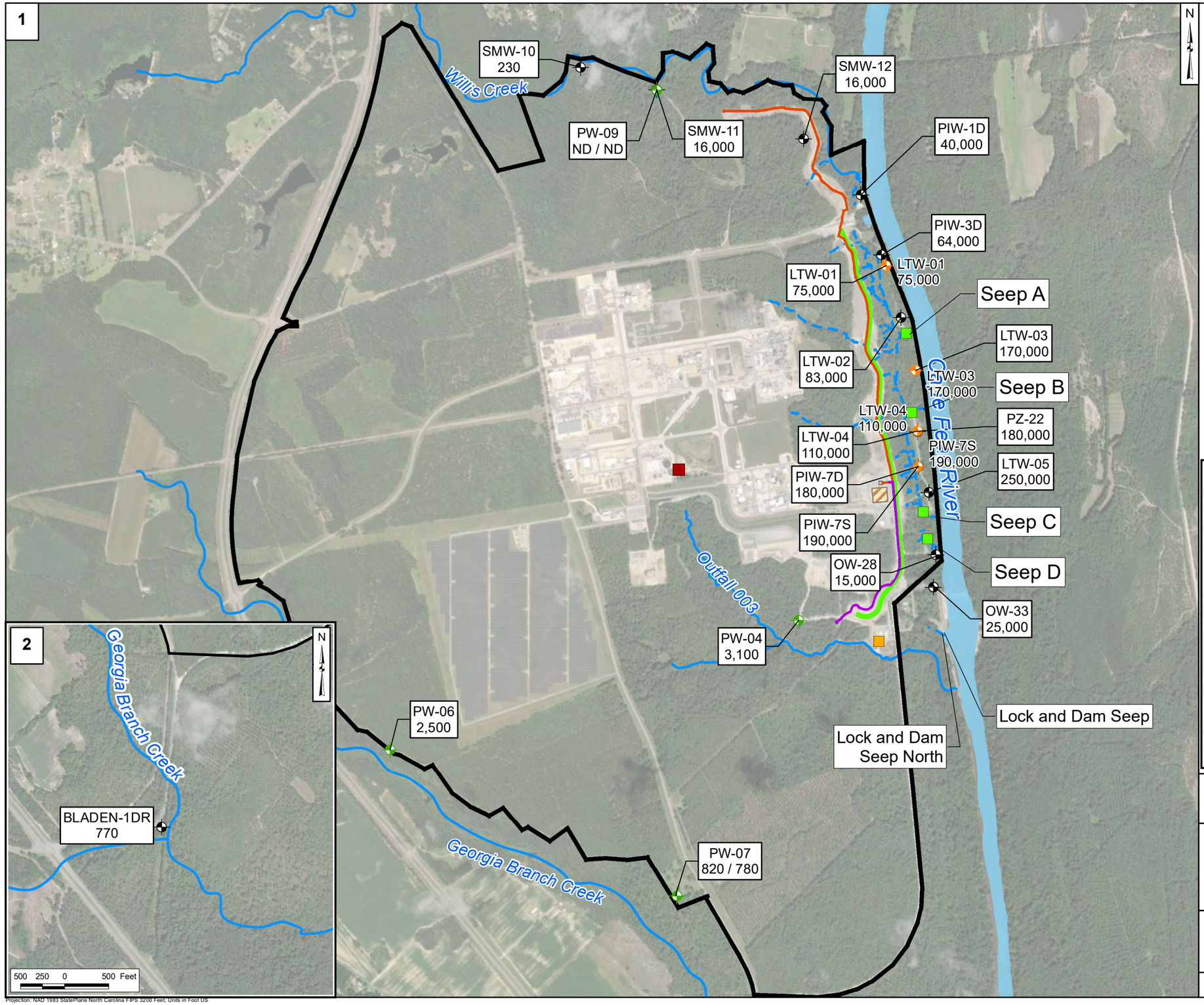
September 2024

Figure
A3

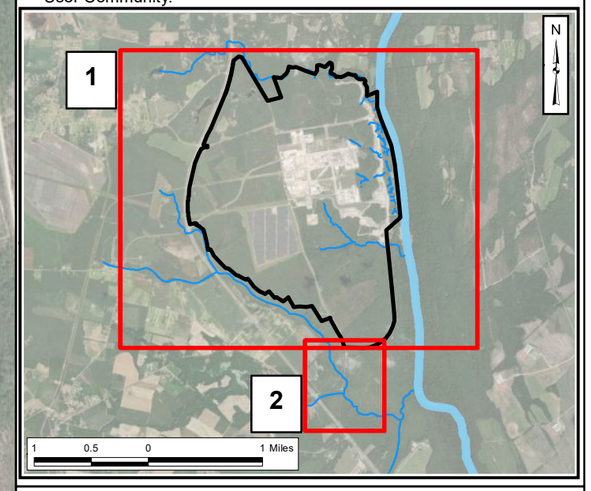


Legend

- Surficial Aquifer Monitoring Well
- Black Creek Aquifer Monitoring Well
- Floodplain Deposits Monitoring Well
- Flow-Through Cell
- Outfall 003 Treatment System
- Stormwater Treatment System
- Observed Seep
- Nearby Tributary
- Site Boundary
- North Forcemain
- South Forcemain
- Barrier Wall
- Groundwater Treatment Pad and Break Tank
- PIW-1D 40,000 — Location Name; Total Table 3+ Concentration (ng/L)

Notes:
ND - no Table 3+ analytes (17 compounds) were detected above the associated reporting limits

1. All results are in nanograms per liter.
2. Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
3. Non-detect values were not included in sum of total Table 3+ results.
4. Total Table 3+ results include J-qualified data.
5. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS.
6. Basemap sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community.



1,500 750 0 1,500 Feet

Total Table 3+ Concentrations (17 Compounds) in Groundwater - Q2 2024

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
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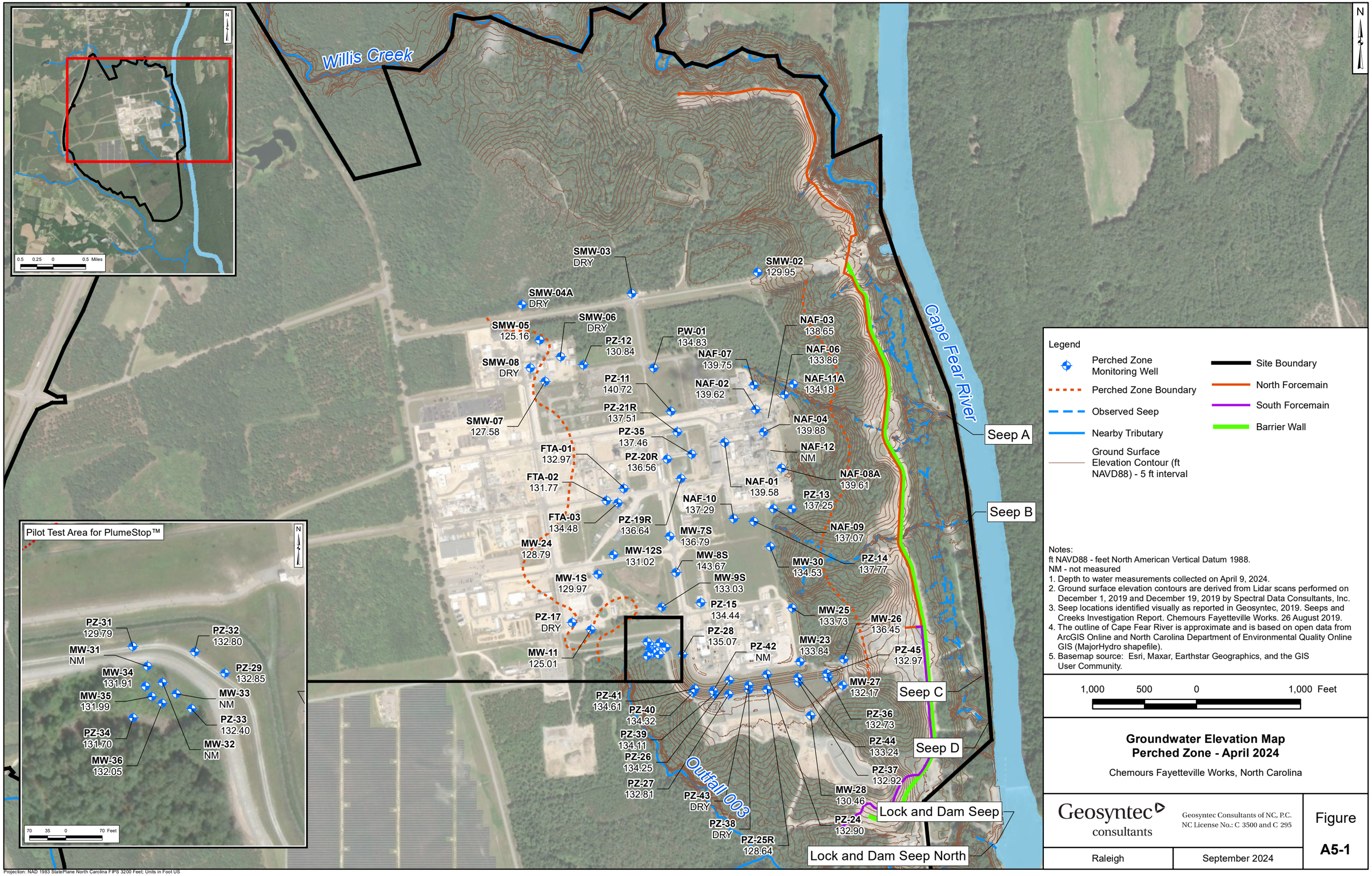
Figure **A4**

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 FeeT; Units in Foot US



Notes:
ft NAVD88 - feet North American Vertical Datum 1988.
NM - not measured

1. Depth to water measurements collected on April 9, 2024.
2. Ground surface elevation contours are derived from Lidar scans performed on December 1, 2019 and December 19, 2019 by Spectral Data Consultants, Inc.
3. Seep locations identified visually as reported in Geosyntec, 2019. Seeps and Creeks Investigation Report. Chemours Fayetteville Works. 26 August 2019.
4. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).
5. Basemap source: Esri, Maxar, Earthstar Geographics, and the GIS User Community.

1,000 500 0 1,000 Feet

Groundwater Elevation Map
Perched Zone - April 2024

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
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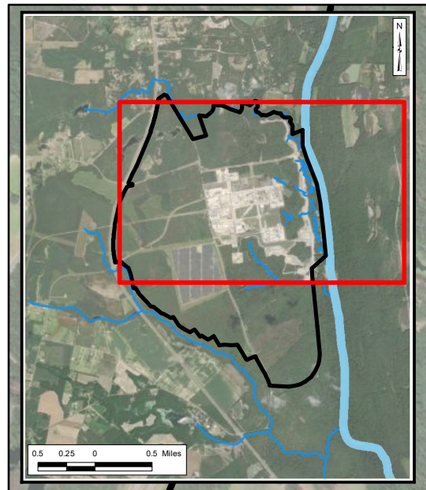
Figure
A5-1

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Willis Creek

Cape Fear River

SMW-11
56.00

INSITU-02
DRY

INSITU-01
82.67

MW-19D
82.67

SMW-09
79.29

MW-20D
83.78

MW-18D
83.97

SMW-02B
91.96

PW-02
83.22

SMW-04B
95.61

MW-21D
100.63

SMW-05PR
97.27

SMW-06B
96.47

NAF-11B
DRY

SMW-08B
101.74

MW-22D
107.10

MW-15DRR
96.98

OW-34
67.70

MW-17D
110.41

MW-16D
106.35

NAF-08B
91.10

PIW-5SR
DRY

OW-35
68.79

Seep A

Seep B

PW-03
104.28

MW-13D
99.15

OW-36
62.55

MW-14D
103.74

PZ-L
117.82

PIW-16S
127.26

OW-37
56.41

PIW-9S
NM

PW-05
114.92

Seep C

Seep D

SMW-01
137.37

PIW-10S
53.02

Outfall 003

PW-04
69.46

Lock and Dam Seep

Lock and Dam
Seep North

N

Legend

- Surficial Aquifer Monitoring Well
- Observed Seep
- Nearby Tributary
- Ground Surface Elevation Contour (ft NAVD88) - 5 ft interval
- Site Boundary
- North Forcemain
- South Forcemain
- Barrier Wall

Notes:
ft NAVD88 - feet North American Vertical Datum 1988.
NM - Not Measured

1. Depth to water measurements collected on April 9, 2024.
2. Ground surface elevation contours are derived from Lidar scans performed on December 1, 2019 and December 19, 2019 by Spectral Data Consultants, Inc.
3. Seep locations identified visually as reported in Geosyntec, 2019. Seeps and Creeks Investigation Report. Chemours Fayetteville Works. 26 August 2019.
4. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).
5. Basemap source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

1,000 500 0 1,000 Feet

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Groundwater Elevation Map
Surficial Aquifer - April 2024

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

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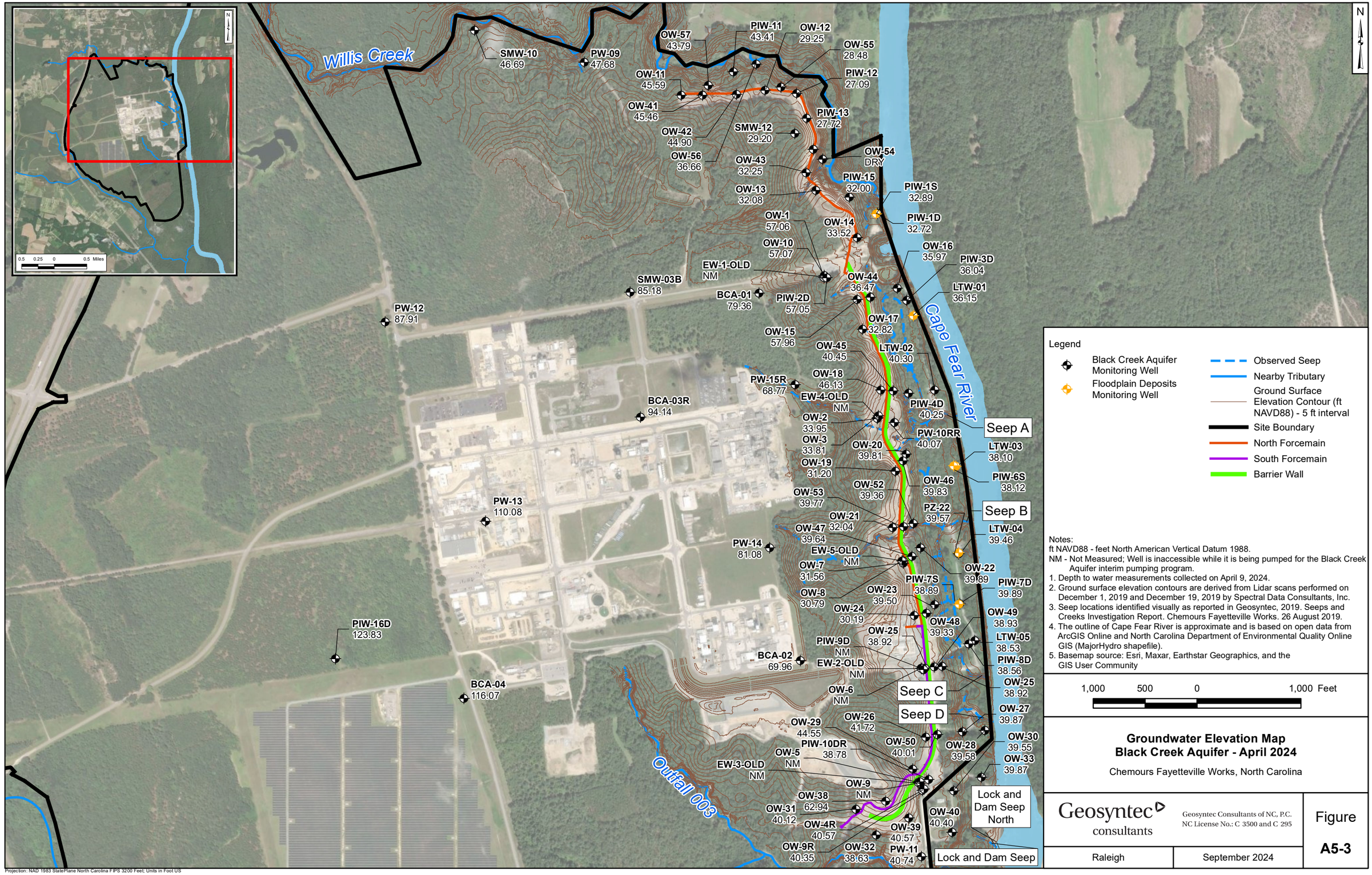
Figure
A5-2



Legend

- Black Creek Aquifer Monitoring Well
- Floodplain Deposits Monitoring Well
- Observed Seep
- Nearby Tributary
- Ground Surface Elevation Contour (ft NAVD88) - 5 ft interval
- Site Boundary
- North Forcemain
- South Forcemain
- Barrier Wall

Notes:
ft NAVD88 - feet North American Vertical Datum 1988.
NM - Not Measured; Well is inaccessible while it is being pumped for the Black Creek Aquifer interim pumping program.

1. Depth to water measurements collected on April 9, 2024.
2. Ground surface elevation contours are derived from Lidar scans performed on December 1, 2019 and December 19, 2019 by Spectral Data Consultants, Inc.
3. Seep locations identified visually as reported in Geosyntec, 2019. Seeps and Creeks Investigation Report. Chemours Fayetteville Works. 26 August 2019.
4. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).
5. Basemap source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

1,000 500 0 1,000 Feet

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Groundwater Elevation Map
Black Creek Aquifer - April 2024

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

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Figure
A5-3

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

Attachment ATT1

Supplemental Tables to the Mass Loading Model

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

Attachment ATT1

Supplemental Tables to the Mass Loading Model

TABLE ATT1-1
SEEP A FLOW THROUGH CELL (FTC) DATA
Chemours Fayetteville Works, North Carolina

Date/Time	Flow Rate[1] (gpm)	Bypass Spillway Flow Rate (gpm)	Bypass Spillway Volume (gal)	Flow Volume (gal)
--	--	--	--	--
Total Flow Volume (gal)				--

Notes:

gal - gallons

gpm - gallons per minute

FTC - Flow Through Cell

1 - There was insufficient flow observed in Seep A FTC Effluent Basin at the time of sampling and therefore a flow rate was not calculated.

TABLE ATT1-2
SEEP B FLOW THROUGH CELL (FTC) DATA
Chemours Fayetteville Works, North Carolina

Date/Time	Flow Rate[1] (gpm)	Bypass Spillway Flow Rate (gpm)	Bypass Spillway Volume (gal)	Flow Volume (gal)
--	--	--	--	--
Total Flow Volume (gal)				--

Notes:

gal - gallons

gpm - gallons per minute

FTC - Flow Through Cell

1 - There was insufficient flow observed in Seep B FTC Effluent Basin at the time of sampling and therefore a flow rate was not calculated.

TABLE ATT1-3
SEEP C FLOW THROUGH CELL (FTC) DATA
Chemours Fayetteville Works, North Carolina

Date/Time	Flow Rate[1] (gpm)	Bypass Spillway Flow Rate (gpm)	Bypass Spillway Volume (gal)	Flow Volume (gal)
--	--	--	--	--
Total Flow Volume (gal)				--

Notes:

gal - gallons

gpm - gallons per minute

FTC - Flow Through Cell

1 - There was insufficient flow observed in Seep C FTC Effluent Basin at the time of sampling and therefore a flow rate was not calculated.

TABLE ATT1-4
SEEP D FLOW THROUGH CELL (FTC) DATA
Chemours Fayetteville Works, North Carolina

Date/Time	Flow Rate[1] (gpm)	Bypass Spillway Flow Rate (gpm)	Bypass Spillway Volume (gal)	Flow Volume (gal)
--	--	--	--	--
Total Flow Volume (gal)				--

Notes:
gal - gallons
gpm - gallons per minute
FTC - Flow Through Cell
1 - There was insufficient flow observed in Seep D FTC Effluent Basin at the time of sampling and therefore a flow rate was not calculated.

TABLE ATT1-5
OUTFALL 003 STREAM VOLUMETRIC DISCHARGE CALCULATIONS
Chemours Fayetteville Works, North Carolina

Measurement Point	Distance Along Measured Cross Section	Measured Water Column Depth	Calculated Creek Cell Area[2]	Measured Creek Velocity	Cell Velocity	Calculated Discharge Through Creek Cell Area[1]
	(ft)	(ft)	(ft^2)	(ft/s)	(ft/s)	(ft^3/s)
Bank	0	0.02	0.017	0.06	0.08	1.3E-03
T	1	0.02	0.017	0.10	0.31	5.1E-03
T	2	0.02	0.017	0.51	0.61	0.010
B	2	0.03		0.52		
T	3	0.02	0.013	0.71	0.56	6.9E-03
T	4	0.01	0.001	0.40	0.20	1.7E-04
Bank	4.2	0.00		0		
			Total Volumetric Discharge			
			(ft^3/s)			0.02
			(gpm)			11
			(L/s)			0.7

Associated Measurement Notes
Location: Chemours Fayetteville
Station: Outfall 003 Treatment Plant Effluent Stream
Date: May 8, 2024

Acronyms
- - data not measured or calculated
B - Bottom depth of water
ft - feet
ft^2 - square feet
ft^3/s - cubic feet per second
gpm - gallons per minute
L/s - liters per second
M - Middle depth of water
T - Top depth of water (i.e., 0 ft)

Notes
1 - Discharge is calculated as product of creek velocity measured at the mid-depth (feet per second) times the cross sectional area of each measurement cell.
2 - Measurement cell areas are calculated assuming a trapezoidal geometry based on distances between measurement points and the measured water column depths. A measurement cell is an areal section from the width of the river channel.

TABLE ATT1-6
WILLIS CREEK VOLUMETRIC DISCHARGE CALCULATIONS
Chemours Fayetteville Works, North Carolina

Measurement Point	Distance Along Measured Cross Section	Measured Water Column Depth	Calculated Creek Cell Area[2]	Measured Creek Velocity	Cell Velocity	Calculated Discharge Through Creek Cell Area[1]
	(ft)	(ft)	(ft^2)	(ft/s)	(ft/s)	(ft^3/s)
Bank	0	0.00	1.95	0.00	0.02	0.03
B	3	1.30	4.65	0.06	0.16	0.72
M	3	0.65		0.03		
T	3	0.20		0.15		
B	6	1.80	5.10	0.20	0.36	1.81
M	6	0.90		0.28		
T	6	0.20		0.05		
B	9	1.60	4.50	0.36	0.46	2.07
M	9	0.80		0.43		
T	9	0.20		0.50		
B	12	1.40	4.35	0.46	0.52	2.26
M	12	0.70		0.49		
T	12	0.20		0.61		
B	15	1.50	4.05	0.51	0.33	1.32
M	15	0.75		0.55		
T	15	0.20		0.60		
B	18	1.20	2.40	0.10	0.10	0.23
M	18	0.60		0.10		
T	18	0.20		0.20		
B	21	0.40	0.20	0.05	0.05	0.01
T	21	0.20		0.14		
Bank	22	0.00		0.00		
			Total Volumetric Discharge			
			(ft^3/s)			8.5
			(gpm)			3,794
			(L/s)			239

Associated Measurement Notes
Location: Chemours Fayetteville
Station: Willis Creek 06 (SW-WC-06)
Date: May 8, 2024

Acronyms
- - data not measured or calculated
B - Bottom depth of water
ft - feet
ft^2 - square feet
ft^3/s - cubic feet per second
gpm - gallons per minute
L/s - liters per second
M - Middle depth of water
T - Top depth of water (i.e., 0 ft)

Notes
1 - Discharge is calculated as product of creek velocity measured at the mid-depth (feet per second) times the cross sectional area of each measurement cell.
2 - Measurement cell areas are calculated assuming a trapezoidal geometry based on distances between measurement points and the measured water column depths. A measurement cell is an areal section from the width of the river channel.

TABLE ATT1-7
GEORGIA BRANCH CREEK VOLUMETRIC DISCHARGE CALCULATIONS
Chemours Fayetteville Works, North Carolina

Location	Distance Along Measured Cross Section	Measured Water Column Depth	Calculated Creek Cell Area[2]	Measured Creek Velocity	Cell Velocity	Calculated Discharge Through Creek Cell Area[1]
	(ft)	(ft)	(ft^2)	(ft/s)	(ft/s)	(ft^3/s)
Bank	0	0.10	0.35	0.15	0.38	0.13
T	1	0.10		0.40		
M	1	0.30		0.60		
B	1	0.60	0.70	0.32	0.65	0.45
T	2	0.10		0.65		
M	2	0.40		0.69		
B	2	0.80	1.00	0.26	0.76	0.76
T	3	0.10		0.79		
M	3	0.60		0.83		
B	3	1.20	1.35	0.40	0.87	1.17
T	4	0.10		0.93		
M	4	0.70		0.90		
B	4	1.50	1.20	0.16	1.00	1.20
T	5	0.10		1.14		
M	5	0.50		1.10		
B	5	0.90	0.88	0.40	0.87	0.76
T	6	0.10		1.32		
M	6	0.45		0.63		
B	6	0.85	0.48	0.23	0.50	0.24
T	7	0.10	0.10	0.37	0.37	0.04
Bank	8	0.10		0.37		
			Total Volumetric Discharge			
			(ft^3/s)			4.7
			(gpm)			2,128
			(L/s)			134

Associated Measurement Notes
Location: Chemours Fayetteville
Station: Georgia Branch 05 (SW-GB-01)
Date: May 06, 2024

Acronyms
- - data not measured or calculated
B - Bottom depth of water
ft - feet
ft^2 - square feet
ft^3/s - cubic feet per second
gpm - gallons per minute
L/s - liters per second
M - Middle depth of water
T - Top depth of water (i.e., 0 ft)

Notes
1 - Discharge is calculated as product of creek velocity measured at the middle-depth (feet per second) times the cross sectional area of each measurement cell.
2 - Measurement cell areas are calculated assuming a trapezoidal geometry based on distances between measurement points and the measured water column depths. A measurement cell is an areal section from the width of the river channel.

TABLE ATT1-8
OUTFALL 002 FLOW RATE
Chemours Fayetteville Works, North Carolina

Q2 2024 Quarterly Event	Date	Outfall 002 Flow (MGD)	Total Daily Volume (gal)	Hours of Sample Collection	Approximate Total Volume during 24 hour Sample Collection (gal)
May 2024[1]	05/06/2024	13.34	13,336,000	11.3	6,279,033
	05/07/2024	13.75	13,747,000	11.7	6,701,663
	05/06/2024 12:42:00 PM to 05/07/2024 11:42:00 AM			23.0	12,980,696

Notes:
Daily flow rates collected from facility Discharge Monitoring Reports.
1 - Total flow volume for 24-hour temporal composite sample collected at 11:42 AM on 05/07/24 approximated based on flow rates for 05/06/24 and 05/07/24.

Acronyms:
gal - gallons
MGD - millions of gallons per day

TABLE ATT1-9
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Q2 2024 Quarterly Event	Pathway/ Location	Sample Collection Timepoint	Flow Gauging Location[1]	Grab Sample Instantaneous Flow Rate (ft^3/s)[2]
May 2024	Upstream River Water and Groundwater	05/06/24 12:00	William O Huske Lock and Dam	1,590

Notes:
1 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam, North Carolina.
2 - Instantaneous flow rate for grab samples is the recorded flow rate at the time of grab sample collection.

Acronyms:
ft^3/s - cubic feet per second
hr - hours
MGD - millions of gallons per day

TABLE ATT1-10
CHEMOURS FACILITY INTAKE FLOW RATE
Chemours Fayetteville Works, North Carolina

Q2 2024 Quarterly Event	Date	Intake Flow River Water Total Daily Flow Average (gpm)	Total Daily Volume (gal)	Hours of Sample Collection	Approximate Total Volume during 24 hour Sample Collection (gal)
May 2024[1]	5/6/2024	6,153	8,860,311	12.9	4,762,417
	5/7/2024	5,611	8,079,368	10.10	3,400,067
	05/06/24 11:06:00 AM to 05/07/24 10:06:00 AM			23.0	8,162,485

Notes:

Daily flow rates collected from facility Discharge Monitoring Reports.

1 - Total flow volume for 24-hour temporal composite sample collected at 10:06 am on 05/07/24 approximated based on flow rates for 05/06/24 and 05/07/24.

Acronyms:

gal - gallons

gpm - gallons per minute

TABLE ATT1-11
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	CFR-BLADEN	CFR-BLADEN	CFR-KINGS	CFR-MILE-76	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CAP2Q24-CFR-BLADEN-041824	CAP2Q24-CFR-BLADEN-041824-D	CAP2Q24-CFR-KINGS-042224	CAP2Q24-CFR-RM-76-050624	CAP2Q24-CFR-TARHEEL-041824	CAP2Q24-CFR-TARHEEL-050724
Sample Date	4/18/2024	4/18/2024	4/22/2024	5/6/2024	4/18/2024	5/7/2024
QA/QC		Field Duplicate				
Sample Matrix	Liquid	Liquid	Liquid	LIQUID	Liquid	LIQUID
Sample Delivery Group (SDG)	320-111655-1	320-111655-1	320-111655-1	320-112121-1	320-111655-1	320-112121-1
Lab Sample ID	320-111655-6	320-111655-7	320-111655-4	320-112121-2	320-111655-5	320-112121-3
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
11Cl-PF3OUdS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
9Cl-PF3ONS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
DONA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	**4.3**	**4.6**	**4.0**	**5.8**	**4.4**	**5.9**
Perfluorobutanoic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	**2.9**	**2.8**	**2.9**	**3.4**	**2.7**	**3.0**
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	**4.2**	**4.3**	**4.4**	**5.7**	**4.4**	**5.5**
Perfluorohexanoic Acid	**5.8**	**5.7**	**5.6**	**8.8**	**6.4**	**8.9**
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	**5.7**	**5.4**	**5.2**	**7.6**	**5.4**	**7.3**
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFOA	**6.3**	**6.0**	**5.5**	**7.4**	**5.7**	**7.3**
PFOS	**10**	**9.3**	**10**	**14**	**9.8**	**13**

TABLE ATT1-11
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	CFR-TARHEEL	GBC-1	LOCK-DAM NORTH	LOCK-DAM NORTH	LOCK-DAM NORTH	LOCK-DAM SEEP
Field Sample ID	CAP2Q24-CFR-TARHEEL-24-050824	CAP2Q24-GBC-1-050624	LOCK-DAM-NORTH-043024	CAP2Q24-LOCK-DAM-NORTH-050624	LOCK-DAM-NORTH-060424	LOCK-DAM-SEEPS-043024
Sample Date	5/8/2024	5/6/2024	4/30/2024	5/6/2024	6/4/2024	4/30/2024
QA/QC						
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-112338-1	320-112121-1	320-112044-1	320-112121-1	320-112844-1	320-112044-1
Lab Sample ID	320-112338-6	320-112121-1	320-112044-1	320-112121-4	320-112844-1	320-112044-2
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<84	<2.0	<2.0
11Cl-PF3OUdS	<2.0	<2.0	<2.0	<40	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<2.0	<2.0	<58	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<2.0	<2.0	<30	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<2.0	<2.0	<110	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<180	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<310	<5.0	<5.0
9Cl-PF3ONS	<2.0	<2.0	<2.0	<30	<2.0	<2.0
DONA	<2.0	<2.0	<2.0	<50	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<160	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<110	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<54	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<150	<5.0	<5.0
Perfluorobutane Sulfonic Acid	**6.9**	**3.3**	**2.0**	<25	<2.0	**2.0**
Perfluorobutanoic Acid	**5.0**	**8.8**	**41**	<300	**39**	**75**
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<40	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<39	<2.0	**2.3**
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<120	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<69	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<24	<2.0	<2.0
Perfluoroheptanoic Acid	**4.1**	<2.0	**7.1**	<31	**7.6**	**100**
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<110	<2.0	<2.0
Perfluorohexane Sulfonic Acid	**6.4**	<2.0	**2.2**	<71	**2.0**	**5.3**
Perfluorohexanoic Acid	**11**	**3.0**	**7.4**	<73	**7.1**	**20**
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<46	<2.0	<2.0
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<34	<2.0	**3.7**
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<120	<2.0	<2.0 UJ
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<120	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<38	<2.0	<2.0
Perfluoropentanoic Acid	**8.5**	**7.0**	**90**	**79**	**93**	**380**
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<91	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<160	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<140	<2.0	<2.0
PFOA	**9.3**	**3.4**	**8.6**	<110	**9.0**	**15**
PFOS	**15**	**2.7 J**	**7.4**	<68	**7.7**	**54**

TABLE ATT1-11
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	LOCK-DAM SEEP	LOCK-DAM SEEP	LOCK-DAM SEEP	LOCK-DAM SEEP	OLDOF-2	OLDOF-2
Field Sample ID	LOCK-DAM-SEEPS-043024-D	CAP2Q24-LOCK-DAM-SEEP-050624	LOCK-DAM-SEEPS-060424	LOCK-DAM-SEEPS-060424-D	CAP2Q24-OLDOF-2-050724	CAP2Q24-OLDOF-2-23-050824
Sample Date	4/30/2024	5/6/2024	6/4/2024	6/4/2024	5/7/2024	5/8/2024
QA/QC	Field Duplicate			Field Duplicate		
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-112044-1	320-112121-1	320-112844-1	320-112844-1	320-112338-1	320-112338-1
Lab Sample ID	320-112044-3	320-112121-5	320-112844-2	320-112844-3	320-112338-8	320-112338-7
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<2.0	<84	<2.0	<2.0	<2.0	<2.0
11Cl-PF3OUdS	<2.0	<40	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<58	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<30	<2.0	<2.0	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<110	<2.0	<2.0	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<180	<4.0	<4.0	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<310	<5.0	<5.0	<5.0	<5.0
9Cl-PF3ONS	<2.0	<30	<2.0	<2.0	<2.0	<2.0
DONA	<2.0	<50	<2.0	<2.0	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<160	<5.0	<5.0	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<110	<2.0	<2.0	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<54	<2.0	<2.0	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<150	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	**2.1**	<25	<2.0	<2.0	<2.0	<2.0
Perfluorobutanoic Acid	**79**	<300	**76**	**73**	**6.0**	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<40	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid	**2.5**	<39	<2.0	<2.0	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<120	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<69	<2.0	<2.0	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<24	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	**90**	**73**	**98**	**94**	**2.9**	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<110	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	**5.5**	<71	**3.7**	**3.7 J**	<2.0	<2.0
Perfluorohexanoic Acid	**19**	<73	**17**	**18**	<2.0	<2.0
Perfluorononanesulfonic Acid	<2.0	<46	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid	**4.7**	<34	**3.2**	**3.0**	**2.1 J**	<2.0
Perfluorooctadecanoic Acid	<2.0	<120	<2.0	<2.0	<2.0	<2.0
Perfluorooctane Sulfonamide	<2.0	<120	<2.0	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<38	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	**390**	**330**	**380**	**380**	**13**	**6.9**
Perfluorotetradecanoic Acid	<2.0	<91	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	<160	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<140	<2.0	<2.0	<2.0	<2.0
PFOA	**16**	<110	**12**	**12**	**2.9**	<2.0
PFOS	**61**	<68	**39**	**42**	<2.0	<2.0

TABLE ATT1-11
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	OUTFALL 002	RIVER WATER INTAKE 2	RIVER WATER INTAKE 2	WC-1	WC-1	EB
Field Sample ID	CAP2Q24-OUTFALL-002-24-050724	RIVER-WATER-INTAKE-24-050724	RIVER-WATER-INTAKE-24-050724-D	CAP2Q24-WC-1-050724	CAP2Q24-WC-1-24-050824	CAP2Q24-EQBLK-DV-041124
Sample Date	5/7/2024	5/7/2024	5/7/2024	5/7/2024	5/8/2024	4/11/2024
QA/QC			Field Duplicate			Equipment Blank
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-112338-1	320-112338-1	320-112338-1	320-112338-1	320-112338-1	320-111363-1
Lab Sample ID	320-112338-5	320-112338-3	320-112338-4	320-112338-2	320-112338-1	320-111363-3
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
11Cl-PF3OUdS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
9Cl-PF3ONS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
DONA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	**5.5**	**5.9**	**6.0**	**8.3**	**8.0**	<2.0
Perfluorobutanoic Acid	<5.0	**6.5**	**6.6**	**6.3**	**6.4**	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	**3.6**	**3.4**	**3.8**	<2.0	<2.0	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	**5.2**	**5.4**	**6.1**	<2.0	<2.0	<2.0
Perfluorohexanoic Acid	**8.9**	**9.0**	**10**	**4.4**	**4.5**	<2.0
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 UJ
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	**9.3**	**7.5**	**8.2**	**6.8**	**8.3**	<2.0
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0 UJ	<2.0
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFOA	**9.2**	**7.8**	**8.1**	**5.5**	**5.8**	<2.0
PFOS	**12**	**10**	**12**	**2.3**	<2.0	<2.0

TABLE ATT1-11
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Location ID	EB	EB	EB	FBLK
Field Sample ID	CAP2Q24-EQBLK-PP-041124	CAP2Q24-EQBLK-IS-050724	CAP2Q24-EQBLK-PP-050724	FB-060424
Sample Date	4/11/2024	5/7/2024	5/7/2024	6/4/2024
QA/QC	Equipment Blank	Equipment Blank	Equipment Blank	Field Blank
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-111363-1	320-112338-1	320-112121-1	320-112844-1
Lab Sample ID	320-111363-2	320-112338-9	320-112121-6	320-112844-4
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<2.0
11Cl-PF3OUdS	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<2.0	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<2.0	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<2.0	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<5.0
9Cl-PF3ONS	<2.0	<2.0	<2.0	<2.0
DONA	<2.0	<2.0	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorobutanoic Acid	<5.0	<5.0	<5.0	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorohexanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0 UJ	<2.0	<2.0	<2.0 UJ
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0
PFOA	<2.0	<2.0	<2.0	<2.0
PFOS	<2.0	<2.0	<2.0	<2.0

Notes:

Bold - Analyte detected above associated reporting limit

J - Analyte detected. Reported value may not be accurate or precise.

B - Analyte detected in an associated blank

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

< - Analyte not detected above associated reporting limit.

-- - Not measured / Not Applicable

TABLE ATT1-12
GROUNDWATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Black Creek Aquifer	Black Creek Aquifer	Black Creek Aquifer	Floodplain Deposits	Floodplain Deposits	Black Creek Aquifer
Location ID	**BLADEN-1DR**	**LTW-01**	**LTW-02**	**LTW-03**	**LTW-04**	**LTW-05**
Field Sample ID	**CAP2Q24-BLADEN-1DR-041224**	**CAP2Q24-LTW-01-041524**	**CAP2Q24-LTW-02-041524**	**CAP2Q24-LTW-03-041524**	**CAP2Q24-LTW-04-041024**	**CAP2Q24-LTW-05-041024**
Sample Date	**4/12/2024**	**4/15/2024**	**4/15/2024**	**4/15/2024**	**4/10/2024**	**4/10/2024**
QA/QC						
Sample Delivery Group (SDG)	**320-111441-1**	**320-111473-1**	**320-111473-1**	**320-111473-1**	**320-111363-1**	**320-111363-1**
Lab Sample ID	**320-111441-2**	**320-111473-3**	**320-111473-7**	**320-111473-6**	**320-111363-4**	**320-111363-1**
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<2.0	<84	<84	<84	<84	<84
11Cl-PF3OUdS	<2.0	<40	<40	<40	<40	<40
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<58	<58	<58	<58	<58
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<30	<30	<30	<30	<30
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<110	<110	<110	<110	<110
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<180	<180	<180	<180	<180
6:2 Fluorotelomer sulfonate	<5.0	<310	<310	<310	<310	<310
9Cl-PF3ONS	<2.0	<30	<30	<30	<30	<30
DONA	<2.0	<50	<50	<50	<50	<50
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<160	<160	<160	<160	<160
N-ethylperfluoro-1-octanesulfonamide	<2.0	<110 UJ	<110 UJ	<110 UJ	<110 UJ	<110 UJ
N-methyl perfluoro-1-octanesulfonamide	<2.0	<54	<54	<54	<54	<54
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<150	<150	<150	<150	<150
Perfluorobutane Sulfonic Acid	<2.0	<25	<25	<25	<25	<25
Perfluorobutanoic Acid	<5.0	<300	<300	<300	**380**	**340**
Perfluorodecane Sulfonic Acid	<2.0	<40	<40	<40	<40	<40
Perfluorodecanoic Acid	<2.0	<39	<39	<39	<39	<39
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<120	<120	<120	<120	<120
Perfluorododecanoic Acid	<2.0	<69	<69	<69	<69	<69
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<24	<24	<24	<24	<24
Perfluoroheptanoic Acid	<2.0	**42**	<31	<31	**53**	**260**
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<110	<110	<110	<110	<110
Perfluorohexane Sulfonic Acid	<2.0	<71	<71	<71	<71	<71
Perfluorohexanoic Acid	<2.0	<73	<73	<73	<73	**110**
Perfluorononanesulfonic Acid	<2.0	<46	<46	<46	<46	<46
Perfluorononanoic Acid	<2.0	<34	<34	<34	<34	<34
Perfluorooctadecanoic Acid	<2.0 UJ	<120	<120	<120	<120	<120
Perfluorooctane Sulfonamide	<2.0	<120	<120	<120	<120	<120
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<38	<38	<38	<38	<38
Perfluoropentanoic Acid	**3.7**	**310**	**370**	**640**	**1,300**	**2,300**
Perfluorotetradecanoic Acid	<2.0	<91	<91	<91	<91	<91
Perfluorotridecanoic Acid	<2.0	<160	<160	<160	<160	<160
Perfluoroundecanoic Acid	<2.0	<140	<140	<140	<140	<140
PFOA	<2.0	<110	<110	<110	<110	<110
PFOS	<2.0	<68	<68	<68	<68	<68

TABLE ATT1-12
GROUNDWATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Black Creek Aquifer	Black Creek Aquifer	Floodplain Deposits	Black Creek Aquifer	Black Creek Aquifer	Floodplain Deposits
Location ID	**OW-28**	**OW-33**	**PIW-1D**	**PIW-3D**	**PIW-7D**	**PIW-7S**
Field Sample ID	**CAP2Q24-OW-28-041624**	**CAP2Q24-OW-33-041624**	**CAP2Q24-PIW-1D-041524**	**CAP2Q24-PIW-3D-041524**	**CAP2Q24-PIW-7D-041524**	**CAP2Q24-PIW-7S-041024**
Sample Date	**4/16/2024**	**4/16/2024**	**4/15/2024**	**4/15/2024**	**4/15/2024**	**4/10/2024**
QA/QC						
Sample Delivery Group (SDG)	**320-111473-1**	**320-111473-1**	**320-111473-1**	**320-111473-1**	**320-111473-1**	**320-111363-1**
Lab Sample ID	**320-111473-10**	**320-111473-11**	**320-111473-2**	**320-111473-5**	**320-111473-1**	**320-111363-6**
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<84	<84	<84	<84	<84	<84
11Cl-PF3OUdS	<40	<40	<40	<40	<40	<40
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<58	<58	<58	<58	<58
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<30	<30	<30	<30	<30
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<110	<110	<110	<110	<110
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<180	<180	<180	<180	<180
6:2 Fluorotelomer sulfonate	<310	<310	<310	<310	**13,000**	<310
9Cl-PF3ONS	<30	<30	<30	<30	<30	<30
DONA	<50	<50	<50	<50	<50	<50
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<160	<160	<160	<160	<160
N-ethylperfluoro-1-octanesulfonamide	<110 UJ	<110 UJ	<110 UJ	<110 UJ	<110 UJ	<110 UJ
N-methyl perfluoro-1-octanesulfonamide	<54	<54	<54	<54	<54	<54
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<150	<150	<150	<150	<150
Perfluorobutane Sulfonic Acid	<25	<25	<25	<25	<25	<25
Perfluorobutanoic Acid	<300	<300	<300	<300	<300	<300
Perfluorodecane Sulfonic Acid	<40	<40	<40	<40	<40	<40
Perfluorodecanoic Acid	<39	<39	<39	<39	<39	<39
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<120	<120	<120	<120	<120
Perfluorododecanoic Acid	<69	<69	<69	<69	<69	<69
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<24	<24	<24	<24	<24
Perfluoroheptanoic Acid	<31	<31	<31	<31	**110**	**88**
Perfluorohexadecanoic Acid (PFHxDA)	<110	<110	<110	<110	<110	<110
Perfluorohexane Sulfonic Acid	<71	<71	<71	<71	<71	<71
Perfluorohexanoic Acid	<73	<73	<73	<73	**75 J**	**74**
Perfluorononanesulfonic Acid	<46	<46	<46	<46	<46	<46
Perfluorononanoic Acid	<34	<34	<34	<34	**2,100**	<34
Perfluorooctadecanoic Acid	<120	<120	<120	<120	<120	<120
Perfluorooctane Sulfonamide	<120	<120	<120	<120	<120	<120
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<38	<38	<38	<38	<38
Perfluoropentanoic Acid	**79**	**130**	**150**	**210**	**1,400**	**1,300**
Perfluorotetradecanoic Acid	<91	<91	<91	<91	<91	<91
Perfluorotridecanoic Acid	<160	<160	<160	<160	<160	<160
Perfluoroundecanoic Acid	<140	<140	<140	<140	**530**	<140
PFOA	<110	<110	<110	<110	<110	<110
PFOS	<68	<68	<68	<68	<68	<68

TABLE ATT1-12
GROUNDWATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Floodplain Deposits	Surficial Aquifer	Surficial Aquifer	Surficial Aquifer	Surficial Aquifer	Black Creek Aquifer
Location ID	**PW-04**	**PW-06**	**PW-07**	**PW-07**	**PW-09**	**PW-09**
Field Sample ID	**CAP2Q24-PW-04-042324**	**CAP2Q24-PW-06-041624**	**CAP2Q24-PW-07-041924**	**CAP2Q24-PW-07-041924-D**	**CAP2Q24-PW-09-041024**	**CAP2Q24-PW-09-041024-D**
Sample Date	**4/23/2024**	**4/16/2024**	**04/19/2024**	**04/19/2024**	**04/10/2024**	**04/10/2024**
QA/QC			**FS**	**DUP**	**FS**	**DUP**
Sample Delivery Group (SDG)	**320-111966-1**	**320-111473-1**	**320-111966-2**	**320-111966-2**	**320-111363-2**	**320-111363-2**
Lab Sample ID	**320-111966-1**	**320-111473-9**	**320-111966-2**	**320-111966-3**	**320-111363-7**	**320-111363-8**
537 Mod (ng/L)						
10:2 Fluorotelomer sulfonate	<84	<84	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
11Cl-PF3OUdS	<40	<40	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<58	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<30	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<110	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<180	<4.0 UJ	<4.0 UJ	<4.0 UJ	<4.0 UJ
6:2 Fluorotelomer sulfonate	<310	<310	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ
9Cl-PF3ONS	<30	<30	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
DONA	<50	<50	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<160	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ
N-ethylperfluoro-1-octanesulfonamide	<110	<110 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
N-methyl perfluoro-1-octanesulfonamide	<54	<54	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<150	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ
Perfluorobutane Sulfonic Acid	<25	<25	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorobutanoic Acid	<300	<300	**11 J**	**10 J**	<5.0 UJ	<5.0 UJ
Perfluorodecane Sulfonic Acid	<40	<40	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorodecanoic Acid	<39	<39	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<120	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorododecanoic Acid	<69	<69	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<24	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluoroheptanoic Acid	<31	<31	**2.7 J**	**2.6 J**	<2.0 UJ	<2.0 UJ
Perfluorohexadecanoic Acid (PFHxDA)	<110	<110	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorohexane Sulfonic Acid	<71	<71	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorohexanoic Acid	<73	<73	**2.7 J**	**2.3 J**	<2.0 UJ	<2.0 UJ
Perfluorononanesulfonic Acid	<46	<46	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorononanoic Acid	<34	<34	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorooctadecanoic Acid	<120	<120	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorooctane Sulfonamide	<120	<120	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<38	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluoropentanoic Acid	<61	<61	**6.1 J**	**6.0 J**	<2.0 UJ	<2.0 UJ
Perfluorotetradecanoic Acid	<91	<91	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluorotridecanoic Acid	<160	<160	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
Perfluoroundecanoic Acid	<140	<140	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ
PFOA	<110	<110	**4.7 J**	**4.0 J**	<2.0 UJ	<2.0 UJ
PFOS	<68	<68	<2.0 UJ	<2.0 UJ	<2.0 UJ	<2.0 UJ

TABLE ATT1-12
GROUNDWATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina

Water Bearing Unit[1]	Black Creek Aquifer	Surficial Aquifer	Surficial Aquifer	Black Creek Aquifer	--
Location ID	PZ-22	SMW-10	SMW-11	SMW-12	EB
Field Sample ID	CAP2Q24-PZ-22-041624	CAP2Q24-SMW-10-041224	CAP2Q24-SMW-11-041524	CAP2Q24-SMW-12-041024	CAP2Q24-EQBLK-BAILER-041924
Sample Date	4/16/2024	4/12/2024	4/15/2024	4/10/2024	4/19/2024
QA/QC					Equipment Blank
Sample Delivery Group (SDG)	320-111473-1	320-111441-1	320-111473-1	320-111363-1	320-111966-1
Lab Sample ID	320-111473-8	320-111441-1	320-111473-4	320-111363-5	320-111966-4
537 Mod (ng/L)					
10:2 Fluorotelomer sulfonate	<84	<2.0	<84	<84	<2.0
11Cl-PF3OUdS	<40	<2.0	<40	<40	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<2.0	<58	<58	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<2.0	<30	<30	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<2.0	<110	<110	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<4.0	<180	<180	<4.0
6:2 Fluorotelomer sulfonate	<310	<5.0	<310	<310	<5.0
9Cl-PF3ONS	<30	<2.0	<30	<30	<2.0
DONA	<50	<2.0	<50	<50	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<5.0	<160	<160	<5.0
N-ethylperfluoro-1-octanesulfonamide	<110 UJ	<2.0	<110 UJ	<110 UJ	<2.0
N-methyl perfluoro-1-octanesulfonamide	<54	<2.0	<54	<54	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<5.0	<150	<150	<5.0
Perfluorobutane Sulfonic Acid	<25	<2.0	<25	<25	<2.0
Perfluorobutanoic Acid	<300	<5.0	<300	<300	<5.0
Perfluorodecane Sulfonic Acid	<40	<2.0	<40	<40	<2.0
Perfluorodecanoic Acid	<39	<2.0	<39	<39	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<2.0	<120	<120	<2.0
Perfluorododecanoic Acid	<69	<2.0	<69	<69	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<2.0	<24	<24	<2.0
Perfluoroheptanoic Acid	**39**	<2.0	<31	<31	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<110	<2.0	<110	<110	<2.0
Perfluorohexane Sulfonic Acid	<71	<2.0	<71	<71	<2.0
Perfluorohexanoic Acid	<73	<2.0	<73	<73	<2.0
Perfluorononanesulfonic Acid	<46	<2.0	<46	<46	<2.0
Perfluorononanoic Acid	<34	<2.0	<34	<34	<2.0
Perfluorooctadecanoic Acid	<120	<2.0 UJ	<120	<120	<2.0
Perfluorooctane Sulfonamide	<120	<2.0	<120	<120	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<2.0	<38	<38	<2.0
Perfluoropentanoic Acid	**970**	<2.0	<61	**99**	<2.0
Perfluorotetradecanoic Acid	<91	<2.0	<91	<91	<2.0
Perfluorotridecanoic Acid	<160	<2.0	<160	<160	<2.0
Perfluoroundecanoic Acid	<140	<2.0	<140	<140	<2.0
PFOA	<110	<2.0	**130**	<110	<2.0
PFOS	<68	<2.0	<68	<68	<2.0

Notes:
1 - Refers to the primary aquifer unit that the well screen is estimated to be screened within.

Bold - Analyte detected above associated reporting limit.

J - Analyte detected. Reported value may not be accurate or precise.

B - Analyte detected in an associated blank

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SDG - Sample Delivery Group

"-Z" in Sample ID denotes field filtration

< - Analyte not detected above associated reporting limit.

-- - Not measured / Not Applicable

TABLE ATT1-13
TABLE 3+ PFAS MASS DISCHARGE BY PATHWAY DOWNGRADIENT OF REMEDIES (AFTER REMEDIES)
Chemours Fayetteville Works, North Carolina

Pathway Number[1]	1	2	4	4A
Pathway Name	Upstream River Water and Groundwater	Willis Creek	Outfall 002[3]	Stormwater Treatment System[4]
Flow (MG)	1,085	5	13	--
Program	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	STS Compliance Sampling
Location ID	CFR-MILE-76	WC-1	OUTFALL 002	STS DISCHARGE
Field Sample ID	CAP2Q24-CFR-RM-76-050624	CAP2Q24-WC-1-24-050824	CAP2Q24-OUTFALL-002-24-050724	--
Sample Date and Time[2]	05/06/24	05/08/24	05/07/24	--
Sample Delivery Group (SDG)	320-112121-1	320-112338-1	320-112338-1	--
Lab Sample ID	320-112121-2	320-112338-1	320-112338-5	--
Sample Type	Grab	Composite	Composite	--
Table 3+ Lab SOP Mass Discharge[6] (mg/s)				
HFPO-DA	ND	**0.05**	**0.04**	--
PFMOAA	ND	**0.11**	**7.4E-03**	--
PFO2HxA	ND	**0.06**	**5.9E-03**	--
PFO3OA	ND	**0.01**	**2.0E-03**	--
PFO4DA	ND	**2.6E-03**	ND	--
PFO5DA	ND	ND	ND	--
PMPA	**0.12**	**0.07**	**2.8E-03**	--
PEPA	ND	**0.01**	ND	--
PS Acid	ND	ND	ND	--
Hydro-PS Acid	ND	**2.2E-03**	ND	--
R-PSDA	**0.10**	**1.0E-02**	**0.03**	--
Hydrolyzed PSDA	ND	**0.04**	**0.02**	--
R-PSDCA	ND	ND	ND	--
NVHOS, Acid Form	ND	**2.4E-03**	ND	--
EVE Acid	ND	ND	ND	--
Hydro-EVE Acid	ND	**6.2E-04**	ND	--
R-EVE	ND	**4.5E-03**	**6.8E-03**	--
PES	ND	ND	ND	--
PFECA B	ND	ND	ND	--
PFECA-G	ND	ND	ND	--
PFPrA	**0.57**	**0.11**	**1.7E-02**	--
Total Attachment C Mass Discharge[7,8]	**0.12**	**0.31**	**0.07**	--
Total Table 3+ Mass Discharge (17 compounds)[7,9]	**0.12**	**0.34**	**0.07**	--
Total Table 3+ Mass Discharge (18 compounds)[7,10]	**0.71**	**0.43**	**0.09**	--
Total Table 3+ Mass Discharge (21 Compounds)[7]	**0.81**	**0.50**	**0.14**	--

TABLE ATT1-13
TABLE 3+ PFAS MASS DISCHARGE BY PATHWAY DOWNGRADIENT OF REMEDIES (AFTER REMEDIES)
Chemours Fayetteville Works, North Carolina

Pathway Number[1]	5	6A	6B	6C
Pathway Name	Onsite Groundwater[5]	Seep A	Seep B	Seep C
Flow (MG)	--	--	--	--
Program	--	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24
Location ID	--	SEEP-A-EFF	SEEP-B-EFF	SEEP-C-EFF
Field Sample ID	--	--	--	--
Sample Date and Time[2]	--	--	--	--
Sample Delivery Group (SDG)	--	--	--	--
Lab Sample ID	--	--	--	--
Sample Type	--	--	--	--
Table 3+ Lab SOP Mass Discharge[6] (mg/s)				
HFPO-DA	**7.6E-03**	--	--	--
PFMOAA	**0.03**	--	--	--
PFO2HxA	**0.01**	--	--	--
PFO3OA	**2.0E-03**	--	--	--
PFO4DA	**3.2E-04**	--	--	--
PFO5DA	ND	--	--	--
PMPA	**5.0E-03**	--	--	--
PEPA	**1.6E-03**	--	--	--
PS Acid	ND	--	--	--
Hydro-PS Acid	**5.4E-05**	--	--	--
R-PSDA	**2.9E-04**	--	--	--
Hydrolyzed PSDA	**4.5E-04**	--	--	--
R-PSDCA	ND	--	--	--
NVHOS, Acid Form	**2.5E-04**	--	--	--
EVE Acid	ND	--	--	--
Hydro-EVE Acid	**4.9E-05**	--	--	--
R-EVE	**3.4E-04**	--	--	--
PES	ND	--	--	--
PFECA B	ND	--	--	--
PFECA-G	ND	--	--	--
PFPrA	ND	--	--	--
Total Attachment C Mass Discharge[7,8]	**0.05**	--	--	--
Total Table 3+ Mass Discharge (17 compounds)[7,9]	**0.05**	--	--	--
Total Table 3+ Mass Discharge (18 compounds)[7,10]	**0.07**	--	--	--
Total Table 3+ Mass Discharge (21 Compounds)[7]	**0.07**	--	--	--

TABLE ATT1-13
TABLE 3+ PFAS MASS DISCHARGE BY PATHWAY DOWNGRADIENT OF REMEDIES (AFTER REMEDIES)
Chemours Fayetteville Works, North Carolina

Pathway Number[1]	6D	6E	6F	7
Pathway Name	Seep D	Lock and Dam Seep	Lock and Dam North	Outfall 003 Stream
Flow (MG)	--	0.02	5.2E-03	0.02
Program	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24
Location ID	SEEP-D-EFF	Lock-Dam Seep	Lock-Dam North	OLDOF-1
Field Sample ID	--	CAP2Q24-LOCK-DAM-SEEP-050624	CAP2Q24-LOCK-DAM-NORTH-050624	CAP2Q24-OLDOF-2-23-050824
Sample Date and Time[2]	--	05/06/24	05/06/24	05/08/24
Sample Delivery Group (SDG)	--	320-112121-1	320-112121-1	320-112338-1
Lab Sample ID	--	320-112121-5	320-112121-4	320-112338-7
Sample Type	--	Grab	Grab	Composite
Table 3+ Lab SOP Mass Discharge[6] (mg/s)	--			
HFPO-DA	--	5.1E-03	6.8E-04	2.0E-04
PFMOAA	--	0.03	9.4E-04	6.3E-04
PFO2HxA	--	0.01	6.6E-04	2.4E-04
PFO3OA	--	6.1E-03	1.1E-04	8.1E-05
PFO4DA	--	1.5E-03	2.2E-05	6.4E-05
PFO5DA	--	1.3E-04	ND	1.4E-05
PMPA	--	3.8E-03	7.1E-04	1.3E-04
PEPA	--	1.2E-03	2.2E-04	4.4E-05
PS Acid	--	ND	ND	ND
Hydro-PS Acid	--	ND	ND	1.0E-05
R-PSDA	--	3.7E-04	4.1E-05	1.1E-05
Hydrolyzed PSDA	--	3.0E-04	ND	1.8E-05
R-PSDCA	--	ND	ND	ND
NVHOS, Acid Form	--	6.2E-04	ND	1.1E-05
EVE Acid	--	ND	ND	ND
Hydro-EVE Acid	--	1.5E-04	ND	5.1E-06
R-EVE	--	1.0E-04	1.6E-05	5.7E-06
PES	--	ND	ND	ND
PFECA B	--	ND	ND	ND
PFECA-G	--	ND	ND	ND
PFPrA	--	0.01	9.6E-04	3.4E-04
Total Attachment C Mass Discharge[7,8]	--	0.06	3.4E-03	1.4E-03
Total Table 3+ Mass Discharge (17 compounds)[7,9]	--	0.07	3.4E-03	1.4E-03
Total Table 3+ Mass Discharge (18 compounds)[7,10]	--	0.08	4.3E-03	1.7E-03
Total Table 3+ Mass Discharge (21 Compounds)[7]	--	0.08	4.3E-03	1.8E-03

TABLE ATT1-13
TABLE 3+ PFAS MASS DISCHARGE BY PATHWAY DOWNGRADIENT OF REMEDIES (AFTER REMEDIES)
Chemours Fayetteville Works, North Carolina

Pathway Number[1]	**9**	**Sum of All Pathways**
Pathway Name	**Georgia Branch Creek**	
Flow (MG)	**3**	
Program	**CAP SW Sampling 2Q24**	
Location ID	**GBC-1**	
Field Sample ID	**CAP2Q24-GBC-1-050624**	
Sample Date and Time[2]	**05/06/24**	
Sample Delivery Group (SDG)	**320-112121-1**	
Lab Sample ID	**320-112121-1**	
Sample Type	**Grab**	
Table 3+ Lab SOP Mass Discharge[6] (mg/s)		
HFPO-DA	**0.04**	**0.14**
PFMOAA	**0.01**	**0.19**
PFO2HxA	**0.03**	**0.13**
PFO3OA	**0.01**	**0.03**
PFO4DA	**1.5E-03**	**0.01**
PFO5DA	**4.3E-04**	**5.7E-04**
PMPA	**0.07**	**0.27**
PEPA	**0.02**	**0.04**
PS Acid	ND	ND
Hydro-PS Acid	**3.2E-03**	**0.01**
R-PSDA	**0.01**	**0.16**
Hydrolyzed PSDA	ND	**0.06**
R-PSDCA	ND	ND
NVHOS, Acid Form	**4.4E-04**	**3.7E-03**
EVE Acid	ND	ND
Hydro-EVE Acid	ND	**8.3E-04**
R-EVE	**0.01**	**0.02**
PES	ND	ND
PFECA B	ND	ND
PFECA-G	ND	ND
PFPrA	**0.07**	ND
Total Attachment C Mass Discharge[7,8]	**0.17**	**0.80**
Total Table 3+ Mass Discharge (17 compounds)[7,9]	**0.17**	**0.83**
Total Table 3+ Mass Discharge (18 compounds)[7,10]	**0.26**	**1.65**
Total Table 3+ Mass Discharge (21 Compounds)[7]	**0.27**	**1.88**

Notes:

1 - Pathway 3 (Aerial Deposition on Water Features) and Pathway 8 (Offsite Adjacent and Downstream Groundwater) are not included in this table. Loading from Pathway 3 was estimated using relative concentration ratios from offsite wells, and loading from Pathway 8 was estimated by scaling to the upstream offsite groundwater loading. Further details are provided in Attachment 2 and Cape Fear River PFAS Mass Loading Calculation Protocol Version 2 (Geosyntec, 2020a).

2 - For composite samples, the end of the composite sample time period is listed as the sample date.

3 - Total Table 3+ concentrations at the Intake River Water at the Facility are subtracted from Outfall 002 concentrations to compute the mass discharge at Outfall 002.

4 - The stormwater treatment system treats PFAS originating from Stormwater in the Monomers/IXM area that would otherwise flow to Outfall 002 during storm events. During the May 2024 Sampling Event there was no stormwater flow to the stormwater treatment system, so there was no mass loading calculated for this location.

5 - Due to transient conditions as a result of the groundwater remedy installation and commissioning, gradient measurements are impacted from these activities and should be considered estimates.

6 - Mass discharge by analyte is calculated based on Table 3+ concentrations in Tables A5 and A6, and flow volumes reported in Table A2.

7 - Total PFAS mass discharge is based on the summed Total PFAS concentrations reported in Table A5 and Table A6, which are rounded to two significant figures.

8 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

9 - Total Table 3+ (17 compounds) does not include Perfluoroheptanoic acid (PFHpA), R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.

10 - Total Table 3+ (17 compounds) does not include Perfluoroheptanoic acid (PFHpA), R-PSDA, Hydrolyzed PSDA, and R-EVE.

Bold - Analyte detected above associated reporting limit.

SOP - Standard Operating Procedure.

MG - million gallons ; mg/s - milligrams per second.

ND - Analyte not detected above associated reporting limit.

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C-3500 and C-295

Attachment ATT2

Direct Aerial Deposition on Cape Fear River

Introduction and Objective

Nine pathways (Table A1 of Appendix A) were identified as potentially contributing to observed Cape Fear River per- and polyfluoroalkyl substances (PFAS) concentrations. These pathways include direct PFAS aerial deposition to the Cape Fear River. This pathway was identified as Transport Pathway Number 3 in the PFAS mass loading model. The mass discharge (mass per unit time measured in milligrams per second [mg/s]) from direct aerial deposition of PFAS to the Cape Fear River was estimated by scaling air deposition modeling results for Hexafluoropropylene oxide dimer acid (HFPO-DA; ERM, 2018). The objective of the supporting calculations presented in this appendix is to estimate aerially deposited PFAS directly on the Cape Fear River during a mass loading event.

Approach

HFPO-DA mass loading directly to the Cape Fear River was estimated using the reported aerial extent and deposition contours modeled for October 2018 (ERM, 2018). As depicted in Table ATT2-1, the HFPO-DA air loading data (micrograms per meters squared [µg/m^2]) provided from ERM (2018) was used to calculate the net hourly deposition rate (nanograms per meters squared per hour [ng/m^2/hr]) using the Equation 1 below:

Equation 1: Net Hourly Deposition Rate

$$DR_{NET} = \frac{ML_{AIR}}{t_{AIR}}$$

where,

DR_{NET} = Net hourly deposition rate with units of mass per area per time (M L^{-2} T^{-1}), typically in ng/m^2/hr;

ML_{AIR} = Air mass loading of HFPO-DA with units of mass per area (M L^{-2}), typically µg/m^2; and

t_{AIR} = Time that air mass loading was modeled (T), typically hours.

Depositional area along the river was calculated using available data for river width and computed river lengths where deposition contours were modeled. Eighteen sections (Figure ATT 2-1) provided from FEMA (2007) were selected along the Cape Fear River to measure the average river width (m). As depicted in Figures ATT2-2 through ATT2-6, sections along the Cape Fear River with HFPO-DA concentrations contours ranging from 40 to 640 µg/m^2 were selected, and the length of the Cape Fear River along each of the sections was measured. The average river width calculated in Table ATT2-2 and section lengths from Figures ATT2-2 through ATT2-6 were used to calculate section areas (m^2) as described in Equation 2 below:

Equation 2: Cape Fear River Surface Area for Each Section

$$A_s = L_s \times W_s$$

where,

A_s = Total spatial area over which deposition occurs between contours (L^2) in section "*s*", typically in m^2;

s = Section along the Cape Fear River with HFPO-DA concentrations contours ranging from 40 to 640 µg/m^2 (five sections in total);

L = Total length of river within section "*s"*, typically in m; and

W_s = Average river width in section "*s*", typically in m.

Start and end deposition rates (ng/m^2/hr) for each section along the Cape Fear River will be estimated based on the deposition contours and corresponding net hourly deposition rate (Table ATT2-1); a combined deposition rate for each section will be calculated as the average of the start and end deposition rates. River velocity (meters per hour [m/hr]) will be estimated from measured flow rates from USGS (2024) and the calculated river cross sectional area. Section lengths will be used to calculate HFPO-DA travel time based on the river velocities in Table ATT2-3. The combined deposition rate (ng/m^2/hr) from Table ATT2-1, section area (m^2), and travel time (hr) will be used to calculate mass HFPO-DA deposited (ng) as follows in **Equation 3** below.

Equation 3: Total HFPO-DA Mass Discharge to Cape Fear River

$$MD_{HFPO-DA} = \sum_{s=1}^{S} DR_{AVG,s} \times A_s \times t_s$$

where,

$MD_{HFPO-DA}$ = total mass discharge of HFPO-DA into the river across all sections, with units of mass per time (M T^{-1}), typically mg/s;

s = section along the Cape Fear River with HFPO-DA concentrations contours ranging from 40 to 640 µg/m^2;

S = total number of sections along the Cape Fear River with HFPO-DA concentrations contours ranging from 40 to 640 µg/m^2, five in total;

$DR_{AVG,s}$ = average deposition rate based from the ERM model (2018) in section "*s*", typically in ng/m^2/hr;

A_s = spatial area over which deposition occurs in section "*s*", typically in m^2; and

t_s = travel time through the river length in section "*s*", typically in hr.

As reported in the Corrective Action Plan (Geosyntec, 2019), ten offsite groundwater seeps south of Outfall 003 (Seeps E to M) were identified on the west bank of the Cape Fear River south of

the Site. Seeps E to M were sampled in October 2019 and Seeps E to K were sampled in March 2020 and analyzed for PFAS. The results of both sampling events indicate that Seeps E to M show an aerial deposition PFAS signature (concentrations decrease in seeps more distant from the Site). Accordingly, the offsite seep data were used to build a relationship between HFPO-DA and other PFAS compounds (Figure ATT 2-7). A scaling factor (Table ATT2-4) was used to estimate mass discharge of Total PFAS compounds to the Cape Fear River as shown in Equation 4. Table ATT2-5 shows the estimated mass discharges of HFPO-DA and Total PFAS compounds to the Cape Fear River.

Equation 4: Total PFAS Mass Discharge to Cape Fear River

$$MD_{PFAS} = MD_{HFPO-DA} \times R$$

where,

MD_{PFAS} = total mass discharge of PFAS compounds into the river, typically in mg/s;

$MD_{HFPO-DA}$ = total mass discharge of HFPO-DA into the river, typically in mg/s; and

R = average ratio of measured HFPO-DA to PFAS compounds across the nine offsite seeps.

References

ERM, 2018. Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

Federal Emergency Management Agency (FEMA), 2007. "A Report of Flood Hazards in Bladen County, North Carolina and Incorporated Areas." (2007) Flood Insurance Study, Federal Emergency Management Agency. North Carolina Flood Risk Information System Engineering Model. Cape Fear River ADJ. HEC-RAS 5.0.7.

Geosyntec, 2019. Corrective Action Plan. Chemours Fayetteville Works. December 31, 2019.

USGS, 2024. USGS 02105500 Cape Fear River at Wilm O Huske Lock near Tarheel, NC. Available at: https://waterdata.usgs.gov/nwis/uv?site_no=02105500

TABLE ATT2-1
NET HOURLY HFPO-DA DEPOSITION RATE
Chemours Fayetteville Works, North Carolina

Air Loading ($\mu g/m^2$)	Air Loading (ng/m^2)	Time (year)	Time (hour)	Net Hourly Deposition Rate ($ng/m^2/hr$)
40	40,000	1	8,760	4.6
80	80,000	1	8,760	9.1
160	160,000	1	8,760	18.3
320	320,000	1	8,760	36.5
640	640,000	1	8,760	73.1

Notes:

1. HFPO-DA model values are from ERM (2018). Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.
2. Air deposition contours are shown in Figures ATT2 through ATT6.
3. Net hourly deposition rates are used in the mass discharge calculations, Table ATT2-5.

Abbreviations:

$\mu g/m^2$: micrograms per meter square.
ng /L: nanograms per liter.
$ng/m^2/hr$: nanograms per meter square per hour.

TABLE ATT2-2
ESTIMATION OF CAPE FEAR RIVER AVERAGE WIDTH
Chemours Fayetteville Works, North Carolina

Cross section ID*	HEC-RAS Model Point ID**	Easting (ft)	Northing (ft)	Cape Fear River Width at Cross Section (m)
619506	0	2,052,368	399,949	84
	1	2,052,366	399,949	
	2	2,052,334	399,946	
	3	2,052,254	399,938	
	4	2,052,155	399,928	
	5	2,052,095	399,922	
	6	2,052,093	399,922	
614224	18	2,053,460	394,655	163
	19	2,053,436	394,649	
	20	2,053,281	394,613	
	21	2,053,277	394,612	
	22	2,053,180	394,590	
	23	2,053,079	394,566	
	24	2,052,977	394,543	
	25	2,052,949	394,536	
	26	2,052,924	394,531	
616535	7	2,053,113	396,901	91
	8	2,053,070	396,895	
	9	2,052,990	396,886	
	10	2,052,891	396,874	
	11	2,052,831	396,867	
	12	2,052,815	396,865	
613542	21	2,053,373	393,937	89
	22	2,053,349	393,931	
	23	2,053,271	393,913	
	24	2,053,174	393,891	
	25	2,053,115	393,877	
	26	2,053,081	393,869	
614517	13	2,053,209	394,897	76***
	14	2,053,130	394,878	
	15	2,053,032	394,854	
	16	2,052,974	394,840	
	17	2,052,961	394,837	
610240	31	2,053,769	390,652	60***
	32	2,053,729	390,645	
	33	2,053,643	390,630	
	34	2,053,602	390,623	
	35	2,053,572	390,618	
612082	27	2,053,560	392,482	72
	28	2,053,430	392,455	
	29	2,053,370	392,443	
	30	2,053,322	392,433	
606667	1271	2,054,059	387,249	101
	1272	2,054,022	387,215	
	1273	2,053,995	387,190	
	1274	2,053,946	387,145	
	1275	2,053,861	387,067	
	1276	2,053,812	387,023	
	1277	2,053,801	387,012	
	1278	2,053,727	386,945	
608468	1193	2,053,950	388,876	107
	1194	2,053,902	388,874	
	1195	2,053,843	388,871	
	1196	2,053,717	388,866	
	1197	2,053,659	388,864	
	1198	2,053,650	388,863	
	1199	2,053,600	388,861	
606667	1271	2,054,059	387,249	101
	1272	2,054,022	387,215	
	1273	2,053,995	387,190	
	1274	2,053,946	387,145	
	1275	2,053,861	387,067	
	1276	2,053,812	387,023	
	1277	2,053,801	387,012	
	1278	2,053,727	386,945	

TABLE ATT2-2
ESTIMATION OF CAPE FEAR RIVER AVERAGE WIDTH
Chemours Fayetteville Works, North Carolina

Cross section ID*	HEC-RAS Model Point ID**	Easting (ft)	Northing (ft)	Cape Fear River Width at Cross Section (m)
600052	1498	2,057,643	382,269	87
	1499	2,057,610	382,246	
	1500	2,057,556	382,208	
	1501	2,057,461	382,141	
	1502	2,057,408	382,103	
	1503	2,057,398	382,096	
	1504	2,057,358	382,067	
604474	1331	2,055,879	386,154	95
	1332	2,055,812	386,120	
	1333	2,055,753	386,090	
	1334	2,055,647	386,037	
	1335	2,055,588	386,007	
	1336	2,055,566	385,996	
597968	1565	2,058,901	380,593	116
	1566	2,058,830	380,549	
	1567	2,058,774	380,515	
	1568	2,058,675	380,453	
	1569	2,058,619	380,418	
	1570	2,058,518	380,356	
602061	1406	2,056,453	383,857	104
	1407	2,056,356	383,798	
	1408	2,056,301	383,763	
	1409	2,056,202	383,702	
	1410	2,056,146	383,667	
	1411	2,056,113	383,647	
594185	1717	2,060,560	377,186	100
	1718	2,060,482	377,157	
	1719	2,060,421	377,134	
	1720	2,060,312	377,094	
	1721	2,060,250	377,071	
	1722	2,060,232	377,065	
596259	1644	2,059,549	379,003	84
	1645	2,059,534	378,996	
	1646	2,059,474	378,970	
	1647	2,059,368	378,923	
	1648	2,059,308	378,896	
	1649	2,059,275	378,881	
587968	2042	2,061,270	371,304	93
	2043	2,061,246	371,290	
	2044	2,061,179	371,252	
	2045	2,061,092	371,203	
	2046	2,061,042	371,174	
	2047	2,060,966	371,131	
591595	1825	2,060,295	374,663	91
	1826	2,060,270	374,661	
	1827	2,060,201	374,658	
	1828	2,060,079	374,653	
	1829	2,060,010	374,650	
	1830	2,059,995	374,649	
590322	1931	2,060,424	373,459	100
	1932	2,060,378	373,442	
	1933	2,060,372	373,439	
	1934	2,060,311	373,416	
	1935	2,060,202	373,376	
	1936	2,060,140	373,353	
	1937	2,060,097	373,336	
Average River Cross Section Width (m) =				**99**

Notes:
*Cross sections locations are shown in Figure ATT2-1.
**Model point ID: are locations with northing, easting, and river depths provided in the HEC-RAS model.
1 - Data provided from: "A Report of Flood Hazards in Bladen County, North Carolina and Incorporated Areas." RiverADJ. HEC-RAS 5.0.7. (2007) Flood Insurance Study, Federal Emergency Management Agency. North Carolina Flood Risk Information System Engineering Model. Cape Fear RiverADJ. HEC-RAS 5.0.7.
2 - The horizontal datum is North American Datum 1983 projected into North Carolina East State Plane (3200).
3 - The vertical datum is North American Datum 1988 projected into North Carolina East State Plane (3200).

Abbreviations:
ft: feet
m: meter

TABLE ATT2-3
SUMMARY OF FLOW IN CAPE FEAR RIVER AT WILM O'HUSKE LOCK NR TARHEEL, NC
Chemours Fayetteville Works, North Carolina

Date	USGS Reported Average Discharge[1] (cfs)	USGS Reported Average Gage Height[1] (ft)	USGS Reported Total Precipitation[1,2] (inches)	USGS Reported Average Discharge (L/s)	Measured River Width (ft)	Estimated River Depth (ft)	Z Value[3]	Calculated Total Cross Sectional Area (ft^2)	Calculated River Velocity (ft/s)
4/18/2024	1836.98	1.88	0	52,017	323	18	2	5,270	0.3
5/6/2024	1695.21	1.79	0	48,003	323	18	3	4,912	0.3
5/7/2024	5354.48	3.66	0	151,622	323	20	4	4,895	1.1
5/8/2024	6294.06	4.09	0	178,228	323	21	5	4,541	1.4
								Average River Velocity:	**0.8**

Notes:

1 - Measurements are recorded from the USGS flow gauging station at the W.O. Huske Dam, ID 02105500 (USGS, 2023).

2 - The minimum value recorded by a USGS raingage is 0.01 inches. Anything detected below this threshold is recorded as 0 inches.

3 - Z value is an estimated factor used to compute total cross sectional area from river depth.

cfs: cubic feet per second

ft: feet

ft^2: feet squared

ft/s: feet per second

L/s: Liter per second

USGS - United States Geological Survey

TABLE ATT2-4
RATIO OF OTHER PFAS COMPOUNDS TO HFPO-DA
Chemours Fayetteville Works, North Carolina

Location ID	SEEP-E	SEEP-E	SEEP-F	SEEP-F	SEEP-G	SEEP-G	SEEP-H
Field Sample ID	SEEP-E-0930	Seep E-030420	SEEP-F-0923	Seep F-030420	SEEP-G-0911	Seep G-030420	SEEP-H-0905
Sample Date	10/22/2019	3/4/2020	10/22/2019	3/4/2020	10/22/2019	3/4/2020	10/22/2019
QA/QC	--	--	--	--	--	--	--
Sample Delivery Group (SDG)	320-55576-1	2091227	320-55576-1	2091227	320-55576-1	2091227	320-55576-1
Lab Sample ID	320-55576-1	1274949	320-55576-2	1274953	320-55576-3	1274957	320-55576-4
Table 3+ SOP (ng/L)							
HFPO-DA	**1,200**	**950**	**1,100**	**1,100**	**700**	**730**	**550**
PFMOAA	**480 J**	**390**	**900**	**730**	**190**	**220**	**140**
PFO2HxA	**800**	**470**	**810**	**640**	**470**	**410**	**350**
PFO3OA	**170**	**83**	**130**	**110**	**57**	**56**	**28**
PFO4DA	**83**	**17**	**7.3**	**9.1**	**9**	**7.9**	<2
PFO5DA	**46**	<2	<2	<2	<2	<2	<2
PMPA	**2,300**	**1,800**	**2,800**	**2,100**	**1,500**	**1,500**	**1,200**
PEPA	**710**	**600**	**870**	**710**	**490**	**520**	**360**
PS Acid	<2	<2	<2	<2	<2	<2	<2
Hydro-PS Acid	**90**	**24**	**9.6**	**10**	**22**	**11**	**16**
R-PSDA	**220 J**	**53 J**	**92**	**68 J**	**79 J**	**44 J**	**39 J**
Hydrolyzed PSDA	**2.1 J**	<2	<2.9	<2	<2	<2	<2
R-PSDCA	<2	<2	<2	<2	<2	<2	<2
NVHOS	**15**	**6**	**12**	**8**	**5.4**	**5**	**4.3**
EVE Acid	<2	<2	<2	<2	<2	<2	<2
Hydro-EVE Acid	**7.7**	**2.3**	**2**	<2	<2	<2	<2
R-EVE	**76**	**20**	**60**	**40**	**39**	**28**	**21 J**
PES	<2	<2	<2.3	<2	<2	<2	<2
PFECA B	<2	<2	<3	<2	<2	<2	<2
PFECA-G	<2	<2	<2	<2	<2	<2	<2
Total Attachment C (ng/L)[1,2]	**5,900**	**4,300**	**6,600**	**5,400**	**3,400**	**3,500**	**2,600**
Total Table 3+ (17 compounds) (ng/L)[2,3]	**5,900**	**4,300**	**6,600**	**5,400**	**3,400**	**3,500**	**2,600**
Ratio of Total Attachment C to HFPO-DA	**4.9**	**4.5**	**6.0**	**4.9**	**4.9**	**4.8**	**4.7**
Ratio of Total Table 3+ (17 compounds) to HFPO-DA	**4.9**	**4.5**	**6.0**	**4.9**	**4.9**	**4.8**	**4.7**
Average Ratio of Total Attachment C to HFPO-DA	**4.85**						
Average Ratio of Total Table 3+ (17 compounds) to HFPO-DA	**4.87**						

TABLE ATT2-4
RATIO OF OTHER PFAS COMPOUNDS TO HFPO-DA
Chemours Fayetteville Works, North Carolina

Location ID	SEEP-H	SEEP-I	SEEP-I	SEEP-J	SEEP-J	SEEP-K	SEEP-K
Field Sample ID	Seep H-030420	SEEP-I-0856	Seep I-030420	SEEP-J-0843	Seep J-030420	SEEP-K-0835	Seep K-030420
Sample Date	3/4/2020	10/22/2019	3/4/2020	10/22/2019	3/4/2020	10/22/2019	3/4/2020
QA/QC	--	--	--	--	--	--	--
Sample Delivery Group (SDG)	2091227	320-55576-1	2091227	320-55576-1	2091227	320-55576-1	2091227
Lab Sample ID	1274961	320-55576-5	1274965	320-55576-6	1274969	320-55576-7	1274973
Table 3+ SOP (ng/L)							
HFPO-DA	**540**	**570**	**470**	**580**	**250**	**640**	**490**
PFMOAA	**180**	**130**	**200**	**180 J**	**140**	**160**	**210**
PFO2HxA	**330**	**300**	**280**	**350 J**	**130**	**320**	**230**
PFO3OA	**30**	**17**	**18**	**120 J**	**16**	**41**	**28**
PFO4DA	<2	<2	<2	**58**	**4.7**	**11**	**5**
PFO5DA	<2	<2	<2	**20 J**	**2.2**	**4.8**	<2
PMPA	**1,100**	**1,200**	**1,100**	**810 J**	**660**	**1,300**	**1,000**
PEPA	**360**	**390**	**390**	**260**	**200**	**400**	**350**
PS Acid	<2	<2	<2	<2	<2	<2	<2
Hydro-PS Acid	**9.3**	**12**	**12**	**37**	**6.9**	**70**	**16**
R-PSDA	**30 J**	**53 J**	**36**	**110 J**	**23**	**130 J**	**49**
Hydrolyzed PSDA	<2	<2	<2	<2	<2	<2	<2
R-PSDCA	<2	<2	<2	<2	<2	<2	<2
NVHOS	**3.7**	**4.4**	**4.5**	**8.1 J**	**2.8**	**5.2**	**4.7**
EVE Acid	<2	<2	<2	<2	<2	<2	<2
Hydro-EVE Acid	<2	<2	<2	**2.7**	<2	**3.5**	<2
R-EVE	**20**	**23 J**	**17**	**16**	**13**	**46 J**	**25**
PES	<2	<2	<2	<2	<2	<2	<2
PFECA B	<2	<2	<2	<2	<2	<2	<2
PFECA-G	<2	<2	<2	<2	<2	<2	<2
Total Attachment C (ng/L)[1,2]	**2,500**	**2,600**	**2,500**	**2,400**	**1,400**	**2,900**	**2,300**
Total Table 3+ (17 compounds) (ng/L)[2,3]	**2,600**	**2,600**	**2,500**	**2,400**	**1,400**	**3,000**	**2,300**
Ratio of Total Attachment C to HFPO-DA	**4.6**	**4.6**	**5.3**	**4.1**	**5.6**	**4.5**	**4.7**
Ratio of Total Table 3+ (17 compounds) to HFPO-DA	**4.8**	**4.6**	**5.3**	**4.1**	**5.6**	**4.7**	**4.7**
Average Ratio of Total Attachment C to HFPO-DA	**4.85**						
Average Ratio of Total Table 3+ (17 compounds) to HFPO-DA	**4.87**						

TABLE ATT2-4
RATIO OF OTHER PFAS COMPOUNDS TO HFPO-DA
Chemours Fayetteville Works, North Carolina

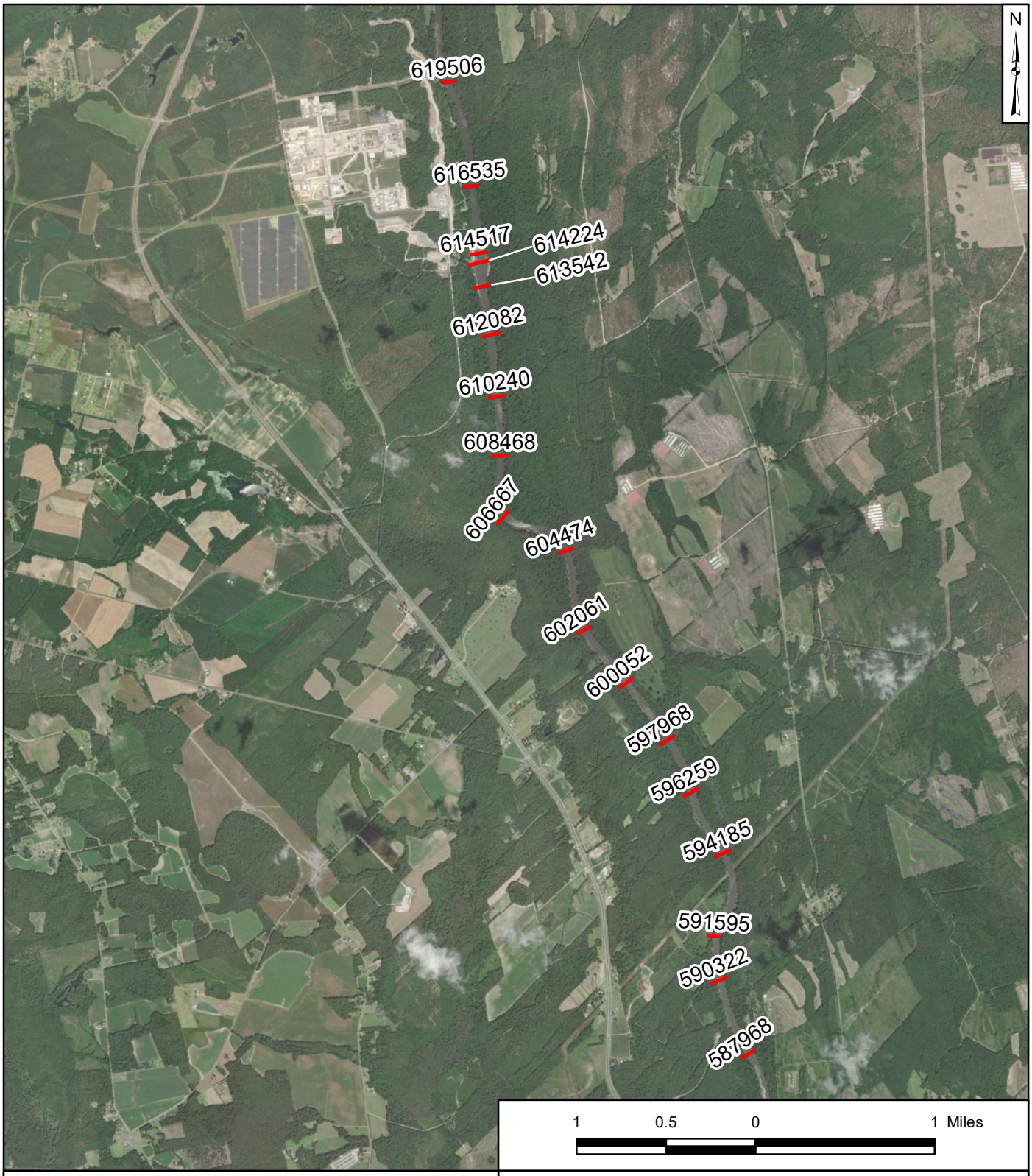
Location ID	SEEP-L	SEEP-M
Field Sample ID	SEEP-L-0825	SEEP-M-0818
Sample Date	10/22/2019	10/22/2019
QA/QC	--	--
Sample Delivery Group (SDG)	320-55576-1	320-55576-1
Lab Sample ID	320-55576-8	320-55576-9
Table 3+ SOP (ng/L)		
HFPO-DA	**520**	**570**
PFMOAA	**130**	**100**
PFO2HxA	**220**	**190**
PFO3OA	**18**	**15**
PFO4DA	**2.7**	<2
PFO5DA	<2	<2
PMPA	**1,200**	**1,300**
PEPA	**350**	**410**
PS Acid	<2	<2
Hydro-PS Acid	**44**	**28**
R-PSDA	**120 J**	**78 J**
Hydrolyzed PSDA	<2	<2
R-PSDCA	<2	<2
NVHOS	**5.9**	**5.6**
EVE Acid	<2	<2
Hydro-EVE Acid	<2	<2
R-EVE	**44 J**	**26 J**
PES	<2	<2
PFECA B	<2	<2
PFECA-G	<2	<2
Total Attachment C (ng/L)[1,2]	**2,500**	**2,600**
Total Table 3+ (17 compounds) (ng/L)[2,3]	**2,500**	**2,600**
Ratio of Total Attachment C to HFPO-DA	**4.8**	**4.6**
Ratio of Total Table 3+ (17 compounds) to HFPO-DA	**4.8**	**4.6**
Average Ratio of Total Attachment C to HFPO-DA	**4.85**	
Average Ratio of Total Table 3+ (17 compounds) to HFPO-DA	**4.87**	

Notes:
Bold - Analyte detected above associated reporting limit
J - Analyte detected. Reported value may not be accurate or precise
ng/L - nanograms per liter
QA/QC - Quality assurance/ quality control
SOP - standard operating procedure
< - Analyte not detected above associated reporting limit.
1 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).
2 - Total Table 3+ and Total Attachment C were calculated including J qualified data but not non-detect data. The sum is rounded to two significant figures.
3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.

TABLE ATT2-5
CALCULATION OF HFPO-DA DEPOSITED MASS AND MASS FLUX
Chemours Fayetteville Works, North Carolina

Section[1]	Start Air Loading (ug/m^2)	End Air Loading (ug/m^2)	Start Deposition Rate ($ng/m^2/hr$)[2]	End Deposition Rate ($ng/m^2/hr$)[2]	Average Deposition Rate ($ng/m^2/hr$)	Section Distance[3] (m)	Average River Width (m)	Section Area (m^2)	River Velocity[4] (ft/s)	River Velocity (m/hr)	Travel Time (hrs)	Mass Deposited (mg)	Mass Discharge (mg/s)
Center	160	160	18.3	18.3	18.3	903	98.59	89,028	0.8	870.60	1.04	1.7	0.00045
Up River Section 1	160	80	18.3	9.1	13.7	490	98.59	48,300	0.8	870.60	0.56	0.4	0.00018
Up River Section 2	80	40	9.1	4.6	6.8	909	98.59	89,570	0.8	870.60	1.04	0.6	0.00017
Down River Section 1	160	80	18.3	9.1	13.7	586	98.59	57,813	0.8	870.60	0.67	0.5	0.00022
Down River Section 2	80	40	9.1	4.6	6.8	565	98.59	55,672	0.8	870.60	0.65	0.2	0.00011
											Total HFPO-DA:		**0.0011**
											Total Attachment C[5]:		**0.01**
											Total Table 3+ (17 Compounds)[6]:		**0.006**

Notes:
1 - River cross sections are shown in Figure ATT2-1.
2 - Based on model deposition rate, Table ATT2-1.
3 - Section distances are measured in GIS as shown on Figures ATT2-2 through ATT2-6.
4 - River velocity is calculated as an average from USGS discharge data between April 18 and May 6 - 8, 2024, Table ATT2-3.
5 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).
6 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
$\mu g/m^2/yr$: micrograms per meter square per year
ft/s: feet per second
hr: hours
m/hr: meters per hour
m: meter
m^2: meter square
mg/s: milligrams per second
mg: milligrams
$ng/m^2/hr$: nanograms per meter square per hour



Legend

Cross Section

Notes:
1. Cape Fear River cross section locations obtained from "A Report of Flood Hazards in Bladen County, North Carolina and Incorporated Areas." (2007) Flood Insurance Study, Federal Emergency Management Agency. North Carolina Flood Risk Information System Engineering Model. Cape Fear RiverADJ. HEC-RAS 5.0.7.
2. Cross sections used for calculation of average river widths for calculation of aerial mass loading.
3. Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Cape Fear River Cross Sections Locations

Chemours Fayetteville Works, North Carolina

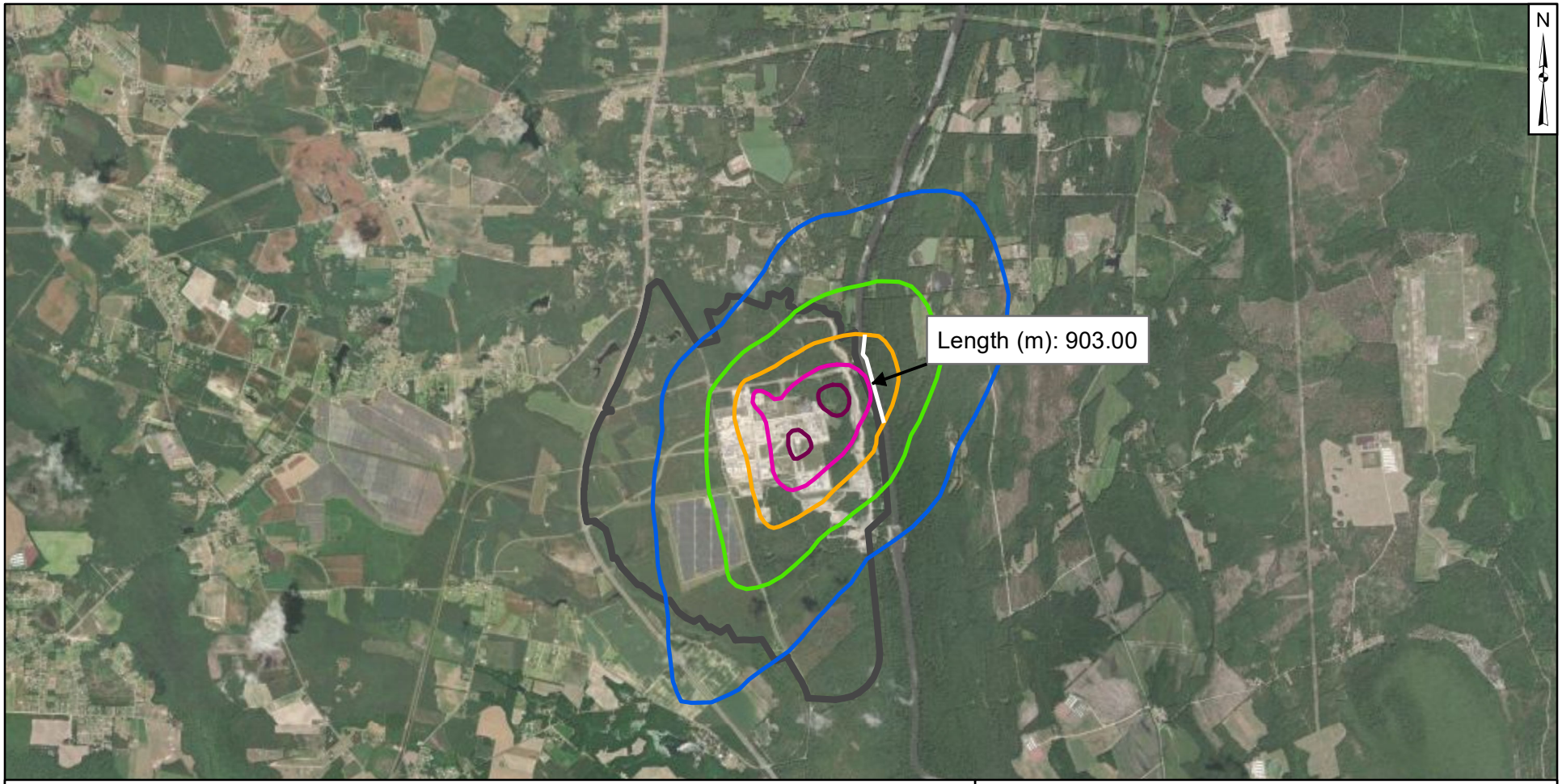
Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

Raleigh | September 2024

Figure

ATT2-1



Legend

Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 µg/m^2/yr
- 80 µg/m^2/yr
- 160 µg/m^2/yr
- 320 µg/m^2/yr
- 640 µg/m^2/yr

Notes:
µg / m^2/ yr - micrograms per square meter per year

HFPO-DA deposition model contours for October 2018 from ERM, 2018, Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 0.5 0 1 Miles

Measurement of Cape Fear River Length at Down-River Section 2

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
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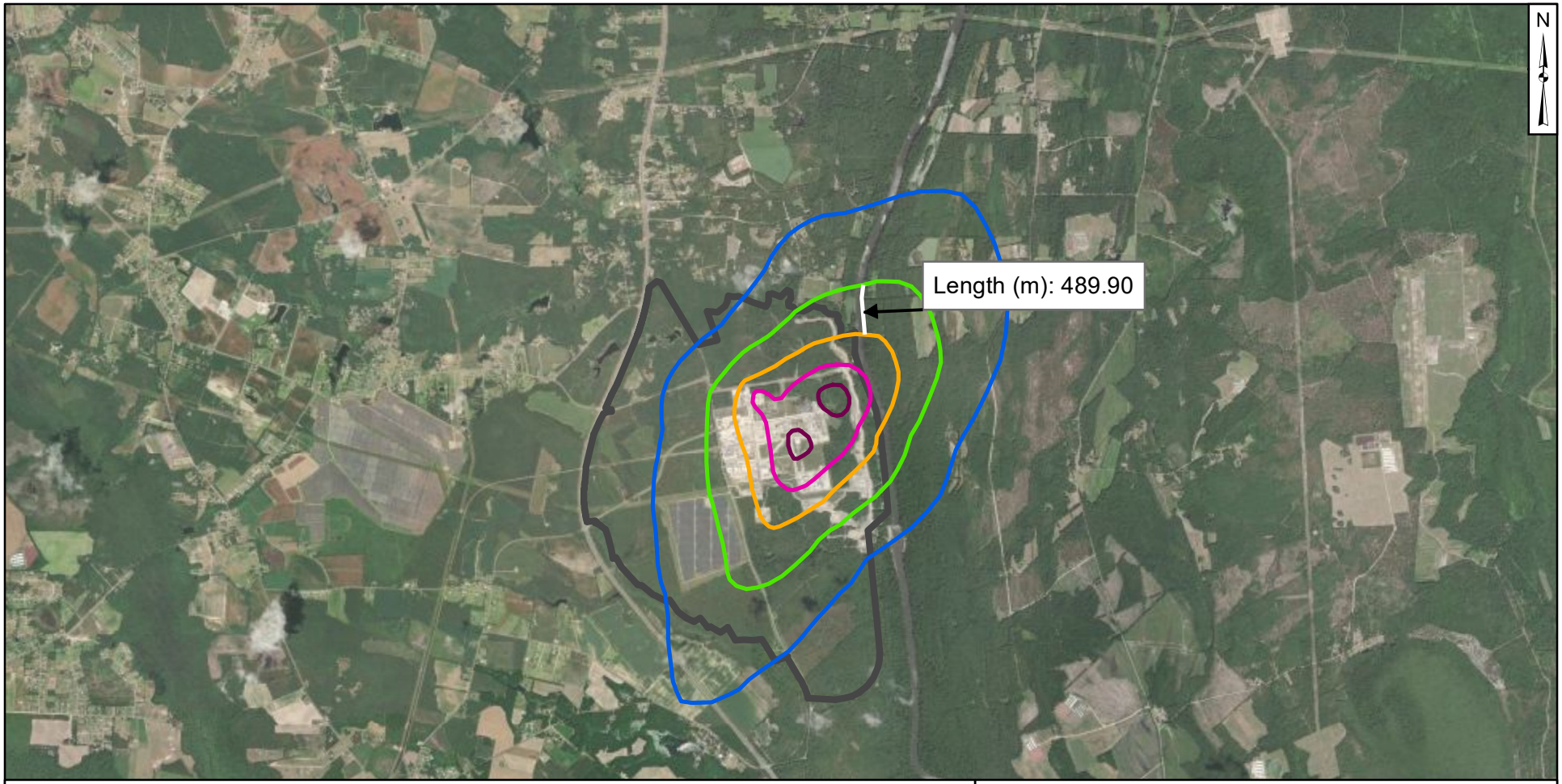
Figure
ATT2-2

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Legend

Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 µg/m^2/yr
- 80 µg/m^2/yr
- 160 µg/m^2/yr
- 320 µg/m^2/yr
- 640 µg/m^2/yr

Notes:
µg / m^2/ yr - micrograms per square meter per year

HFPO-DA deposition model contours for October 2018 from ERM, 2018, Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 0.5 0 1 Miles

Measurement of Cape Fear River Length at Up-River Section 1

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

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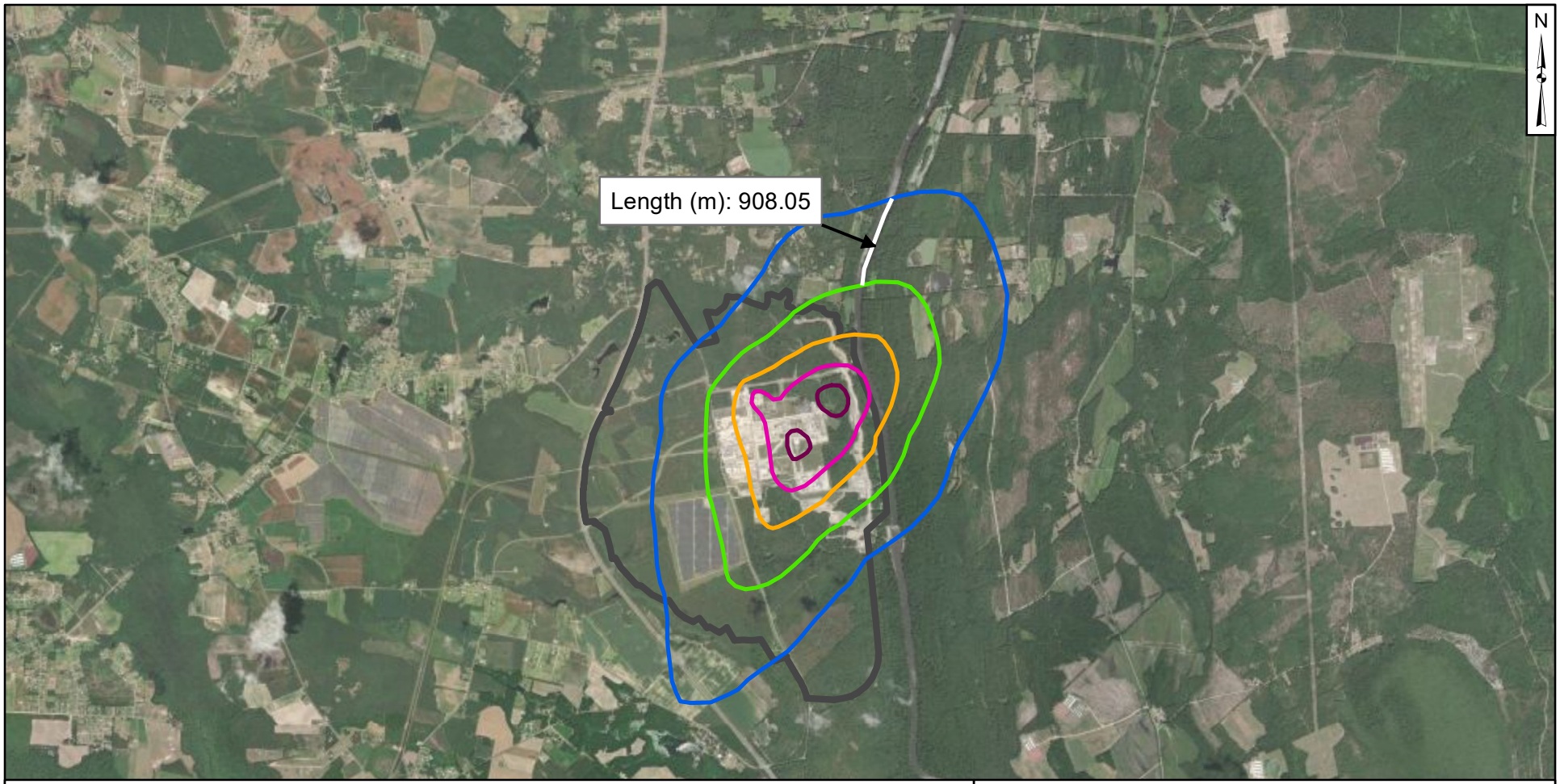
Figure
ATT2-3

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Legend

Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 µg/m^2/yr
- 80 µg/m^2/yr
- 160 µg/m^2/yr
- 320 µg/m^2/yr
- 640 µg/m^2/yr

Notes:
µg / m^2/ yr - micrograms per square meter per year

HFPO-DA deposition model contours for October 2018 from ERM, 2018, Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 0.5 0 1 Miles

Measurement of Cape Fear River Length at Up-River Section 2

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

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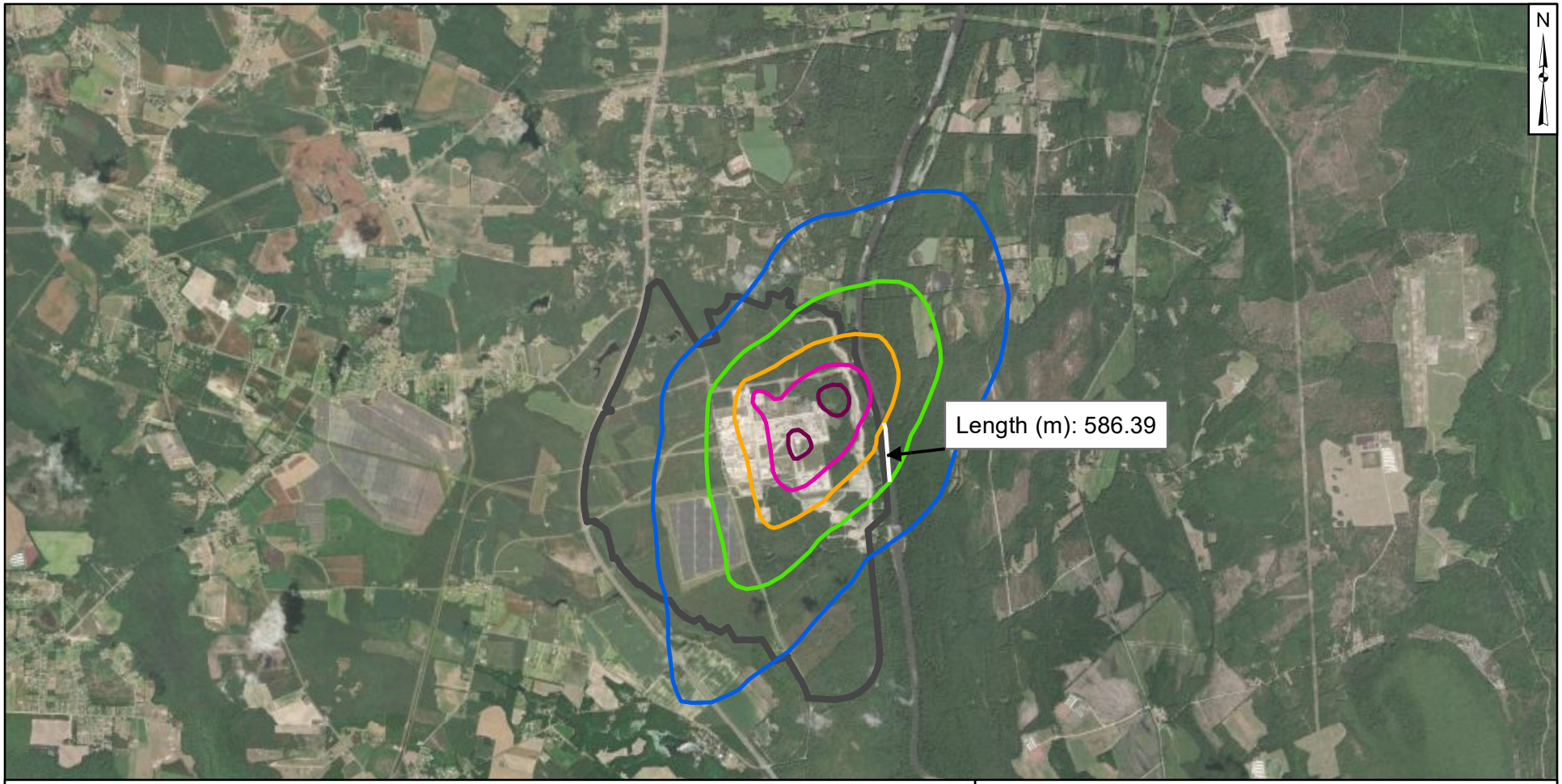
Figure
ATT2-4

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Legend

Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 µg/m^2/yr
- 80 µg/m^2/yr
- 160 µg/m^2/yr
- 320 µg/m^2/yr
- 640 µg/m^2/yr

Notes:
µg / m^2/ yr - micrograms per square meter per year

HFPO-DA deposition model contours for October 2018 from ERM, 2018, Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 0.5 0 1 Miles

Measurement of Cape Fear River Length at Down-River Section 1

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

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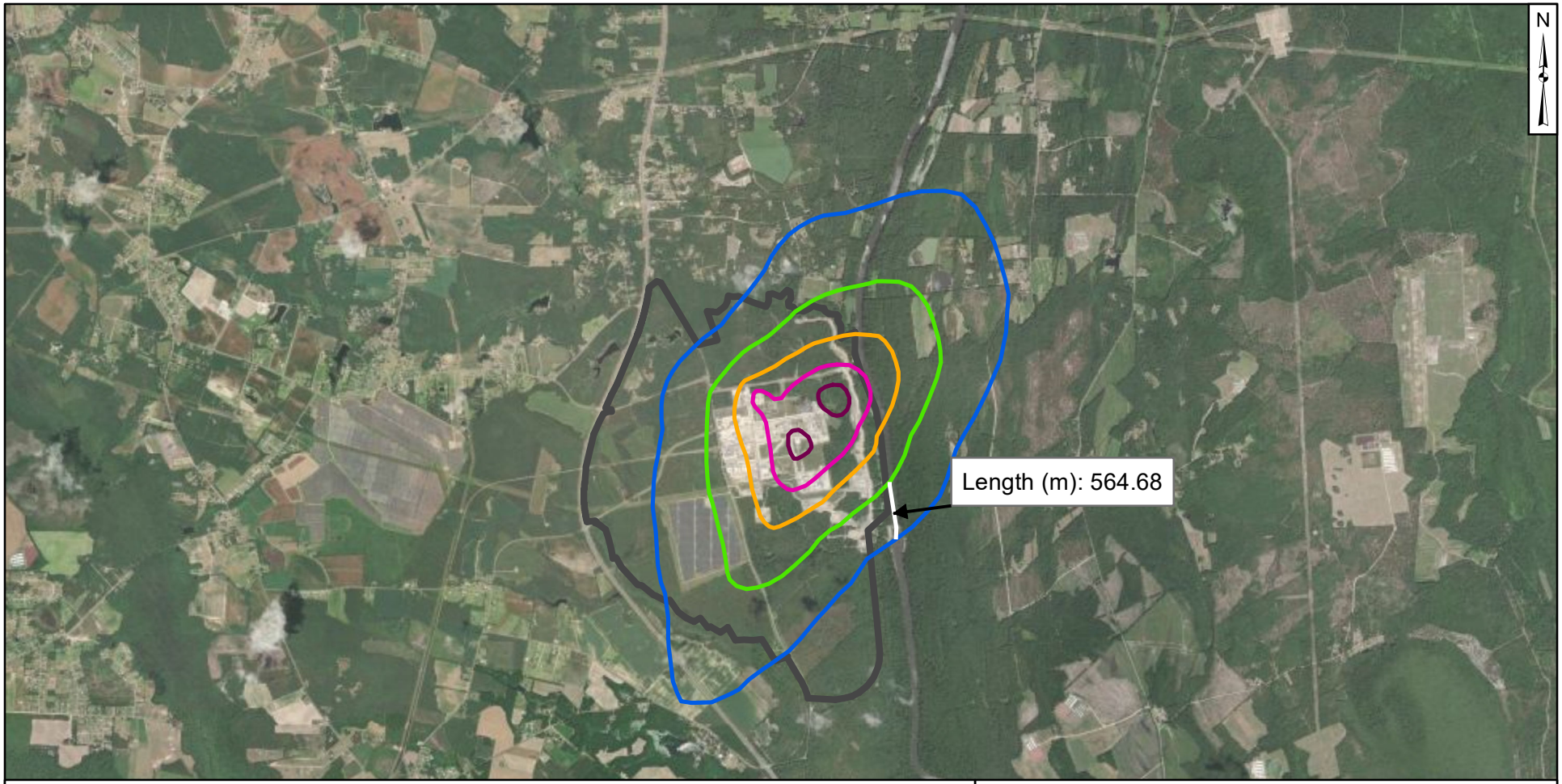
Figure
ATT2-5

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Legend

Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 µg/m^2/yr
- 80 µg/m^2/yr
- 160 µg/m^2/yr
- 320 µg/m^2/yr
- 640 µg/m^2/yr

Notes:
µg / m^2/ yr - micrograms per square meter per year

HFPO-DA deposition model contours for October 2018 from ERM, 2018, Modeling Report: HFPO-DA Atmospheric Deposition and Screening Groundwater Effects. 27 April 2018.

Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 0.5 0 1 Miles

Measurement of Cape Fear River Length at Down-River Section 2

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

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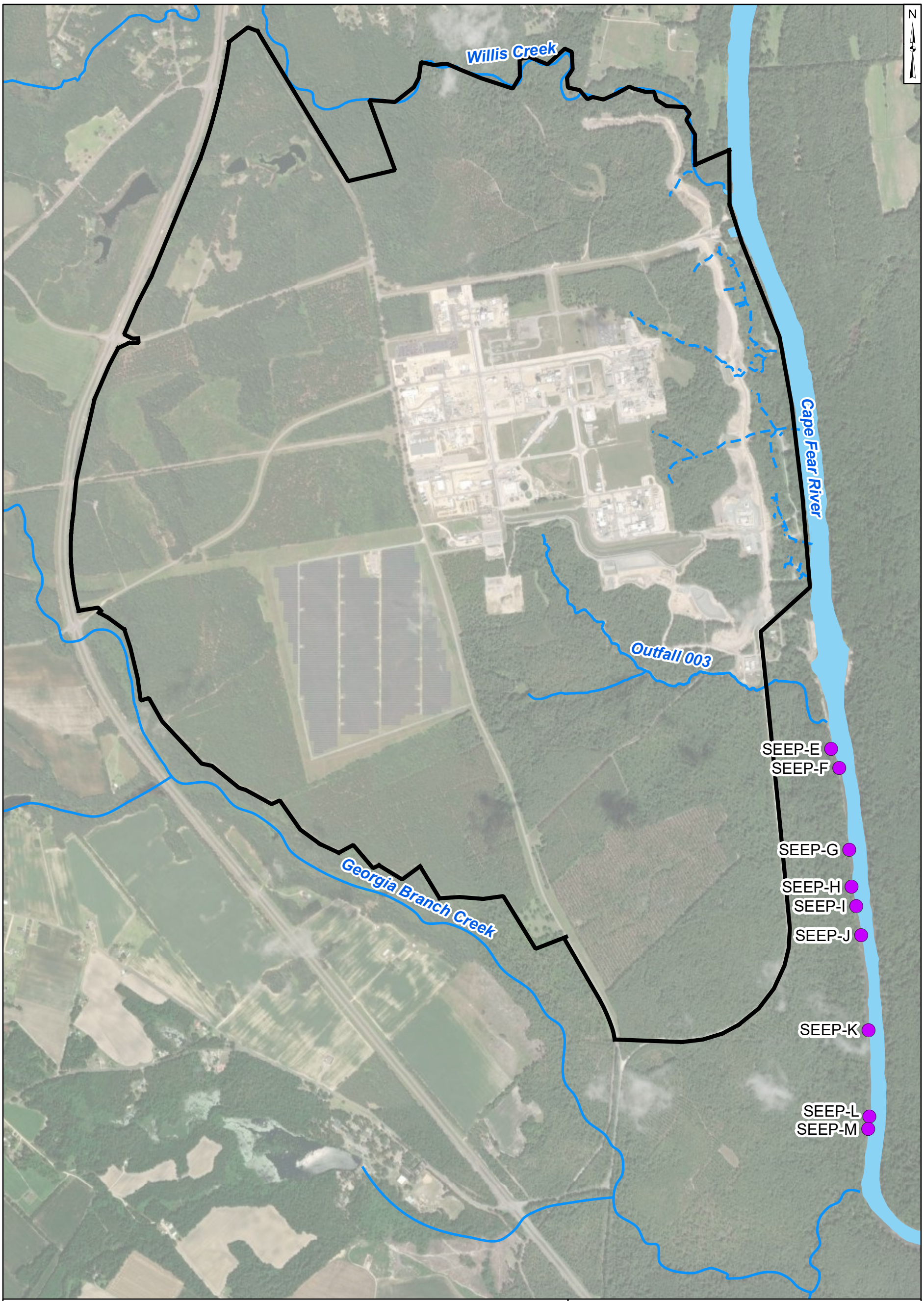
Figure
ATT2-6

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Legend

- Observed Seep
- Nearby Tributary
- Site Boundary

Notes:
1. Seep E to M samples were collected where the seeps entered the Cape Fear River. Their locations on this figure have been slightly adjusted to facilitate interpretation so that they do not appear to be in the Cape Fear River.
2. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).
3. Basemap Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

1,000 500 0 1,000 Feet

Southwestern Offsite Seeps Locations

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

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Figure
ATT2-7

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Attachment ATT3

Onsite Groundwater Pathway

Introduction and Objective

Based on the conceptual site model, the Black Creek Aquifer and the Flood Plain deposits at the river bank are the primary hydrogeologic units that are potentially in hydraulic connection with the Cape Fear River. The Cape Fear River stage is lower than the top of the Black Creek Aquifer, except during peak rainfall or flooding, indicating that the Cape Fear River is a discharge boundary for the aquifer. Onsite groundwater from the Black Creek Aquifer discharging to the Cape Fear River is therefore a potential pathway for per- and polyfluoroalkyl substances (PFAS) mass loading to the Cape Fear River. This pathway was identified as Transport Pathway Number 5 in the PFAS mass loading in this report. The objective of the supporting calculations presented in this appendix is to estimate PFAS mass loading from onsite groundwater discharge based on calculated PFAS mass flux for segments of the Black Creek Aquifer along the river frontage.

Prior to Q2 2023, hydraulic gradients were derived from potentiometric maps. Since Q2 2023, hydraulic gradients were estimated between well pairs downgradient of the remedy, since the prior method is considered not appropriate for these new conditions since barrier wall results in a discontinuous potentiometric surface. This change will continue to be incorporated in future mass loading assessments.

Approach

The PFAS mass loading from onsite groundwater discharge was estimated as follows. Supporting data are provided in Table ATT3-1:

1. The Cape Fear River frontage was divided into nine segments (Figure ATT3-1). Each segment includes one well pair, consisting of:
    a. One primary groundwater monitoring well that is considered representative of the Black Creek Aquifer and that is included in the Corrective Action Plan[1] (Geosyntec, 2019); and
    b. One secondary paired groundwater monitoring well that is generally west of the groundwater monitoring well, east of the Barrier Wall remedy, and also considered representative of the Black Creek Aquifer.
2. The thickness of the Black Creek Aquifer (h) was estimated for each segment based on the segment length and the cross-sectional area of the Black Creek Aquifer, as determined by the three-dimensional hydrostratigraphic model of the Site, constructed using CTech's Earth Volumetric Studio (EVS) software (Geosyntec, 2019):

[1] The Black Creek Aquifer is not observed in boreholes from Segment 4 suggesting a localized "pinch-out" of the Black Creek Aquifer in Segment 4. The monitoring well used to determine PFAS mass loading in this segment is screened in the Floodplain Deposits (LTW-03).

$$h = \frac{A}{l}$$

where,

h = the Black Creek Aquifer thickness [ft];

A = the cross-sectional area of the Black Creek Aquifer [ft^2]; and

l = the segment length [ft].

The EVS model output for each segment is presented in Figure ATT3-2.

3. The hydraulic gradient (i) for each segment was derived based on the groundwater elevations and distance between each well within the well pair (Figure ATT3-3):

$$i = \frac{-\Delta h}{d}$$

where,

i = the hydraulic gradient [ft/ft];

Δh = the head difference between the two wells [ft]; and

d = the distance between the two wells [ft]

Unlike past quarterly reports, only a single hydraulic gradient value was estimated for each segment (i.e., no lower and upper bound values). Based on the hydrographs from wells along the river presented in Figure ATT3-4, hydraulic gradients in the aquifer are relatively constant over time. With the exception of large changes in the river level (over 10 feet), these wells respond to river level fluctuation in the subdued manner.

4. The hydraulic conductivity (K) was estimated for each segment using the results of constant rate tests performed at five extraction wells installed in the Black Creek Aquifer upstream of the river frontage (Geosyntec, 2021). The extraction wells used to determine the hydraulic conductivity for each segment are as follows, based on their locations relative to the segments (Figure ATT 3-1):

Extraction Well	Segment
EW-1	1
	2
EW-4	3
	4
EW-5	5
	6
EW-2	7
EW-3	8
	9

5. The total PFAS concentration for each segment was determined based on grab samples collected from the primary groundwater monitoring wells. PFAS analytical results for these groundwater samples are presented in Table ATT1-15-1 and ATT1-15-2 in Attachment 1.

6. Mass flux for each segment, representing the PFAS mass loading to the river from groundwater, was determined as follows:

$$Q = lhKiCf$$

where,

Q = the mass flux [mg/sec];

l = the segment length [ft];

h = the Black Creek Aquifer thickness [ft];

K = the hydraulic conductivity of the aquifer [ft/sec];

i = the hydraulic gradient [ft/ft], using an upper and lower contour elevation difference;

C = the total PFAS concentration [ng/L]; and

f = the conversion factor between cubic feet and liters and between ng and mg.

The mass flux is interpreted as zero for segments where a negative hydraulic gradient was computed (i.e., groundwater flow is moving away from the river). Parameters listed above were used to estimate groundwater flow rates, shown in Table ATT3-2.

Potential Future Methodology Modifications

The groundwater flows in the Black Creek Aquifer have changed due to the implementation of the groundwater extraction system and the barrier wall construction remedy. Adjustments to this calculation methodology were made since Q2 2023 and may be required in future assessments based on changes in conditions or refinement of Site knowledge.

References

Geosyntec, 2019. Corrective Action Plan. Chemours Fayetteville Works. December 2019.

Geosyntec, 2021. Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2020 Report, Chemours Fayetteville Works. March 31, 2021.

TABLE ATT3-1
ONSITE GROUNDWATER PATHWAY SUPPORTING DATA
Chemours Fayetteville Works, North Carolina

											Total Attachment C[5]		Total Table 3+ (17 Compounds)[6]		Total Table 3+ (18 Compounds)[7]		Total Table 3+ (21 Compounds)	
Segment	**Primary Well**	**Sample Date**	**Segment Length (ft)**	**Cross-sectional Area of Black Creek Aquifer[1] (ft^2)**	**Average Thickness of Black Creek Aquifer (ft)**	**Secondary Paired Well[2]**	**Difference in Hydraulic Head[3] (ft)**	**Difference in Distance (ft)**	**Hydraulic Gradient (ft/ft)**	**Hydraulic Conductivity[4] (ft/sec)**	**Concentration[7] (ng/L)**	**Mass Loading[8] (mg/s)**	**Concentration[7] (ng/L)**	**Mass Loading[8] (mg/s)**	**Concentration[1] (ng/L)**	**Mass Loading (mg/s)**	**Concentration[7] (ng/L)**	**Mass Loading[8] (mg/s)**
1	PIW-1D	4/15/2024	1,150	13,400	11.7	OW-14	-1.04	305.47	0.0034	1.71E-04	40,000	0.0088	40,000	0.009	50,000	0.0110	51,000	0.0112
2	PIW-3D	4/15/2024	873	11,010	12.6	OW-44	-0.66	351.79	0.0019	1.71E-04	64,000	0	64,000	0	80,000	0	81,000	0
3	LTW-02	4/15/2024	875	5,560	6.4	OW-45	-0.18	399.66	0.0005	1.02E-04	83,000	0.0006	83,000	0.0006	100,000	0.0007	110,000	0.0008
4	LTW-03	4/15/2024	729	2,800	3.9	OW-46	-1.50	510.17	0.0029	1.02E-04	170,000	0.0041	170,000	0.004	220,000	0.0053	230,000	0.0055
5	PZ-22	4/16/2024	656	15,200	23.2	OW-22	-0.28	370.47	0.0008	3.28E-04	180,000	0.0193	180,000	0.019	240,000	0.0257	250,000	0.0268
6	PIW-7D	4/15/2024	524	16,000	30.5	OW-48	0.28	331.98	0.0000	3.28E-04	170,000	0	180,000	0	240,000	0	250,000	0
7	LTW-05	4/10/2024	672	11,800	19.4	OW-25	-0.39	398.47	0.0010	1.28E-04	250,000	0.0116	250,000	0.012	350,000	0.0162	350,000	0.0162
8	OW-28	4/16/2024	594	15,500	26.0	OW-27	-0.26	216.60	0.0012	2.59E-04	15,000	0.0020	15,000	0.002	19,000	0.0026	19,000	0.0026
9	OW-33	4/16/2024	1607	46,300	28.8	OW-30	0.37	297.99	0.0000	2.59E-04	25,000	0	25,000	0	32,000	0	33,000	0
										Total	**--**	**0.0527**	**--**	**0.0527**	**--**	**0.0694**	**--**	**0.0712**

Notes
1 - Cross sectional areas were determined using the three-dimensional hydrostratigraphic model of the Site, constructed using CTech's Earth Volumetric Studio (EVS) software (Figure ATT3-2).
2 - Second paired well is east of the Barrier Wall remedy and west of the primary well.
3 - Groundwater elevation difference for hydraulic gradient based on water levels measured on April 9, 2024 (Figure ATT3-3).
4 - Hydraulic conductivity values are based on constant rate pumping test results from extraction wells described in Attachment ATT3.
5 - Attachment C does not include Perfluorohepthanoic acid (PFHpA).
6 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
7 - Total Table 3+ (18 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.
8 - Detailed PFAS Concentrations provided in Appendix A.
9 - A value of zero represents a negative mass loading value (i.e., computed negative gradient).
-- not applicable
ft - feet
ft/sec - feet per second
ft^2 - square feet
mg/s - milligrams per second
ng/L - nanograms per liter

TABLE ATT3-2
MAY 2024 ONSITE GROUNDWATER FLOW RATE
Chemours Fayetteville Works, North Carolina

Segment	Cross-sectional Area of Black Creek Aquifer[1] (ft^2)	Hydraulic Gradient[1,2] (ft/ft)	Hydraulic Conductivity (ft/sec)[1]	Flow Upper Bound (ft^3/sec)	Flow Upper Bound (gal /day)
1	13,400	0.0034	1.71E-04	7.77E-03	5,023
2	11,010	0.0019	1.71E-04	3.52E-03	2,278
3	5,560	0.0005	1.02E-04	2.55E-04	165
4	2,800	0.0029	1.02E-04	8.47E-04	547
5	15,200	0.0008	3.28E-04	3.78E-03	2,442
6	16,000	0	3.28E-04	0	0
7	11,800	0.0010	1.28E-04	1.47E-03	952
8	15,500	0.0012	2.59E-04	4.81E-03	3,108
9	46,300	0	2.59E-04	0	0
				0.022	**14,515**

Notes

1 - Supporting data for cross-sectional area, hydraulic gradient, and hydraulic conductivity provided in Table ATT3-1.

2 - Hydraulic gradient based on water levels measured on April 9, 2024 (Figure ATT3-3).

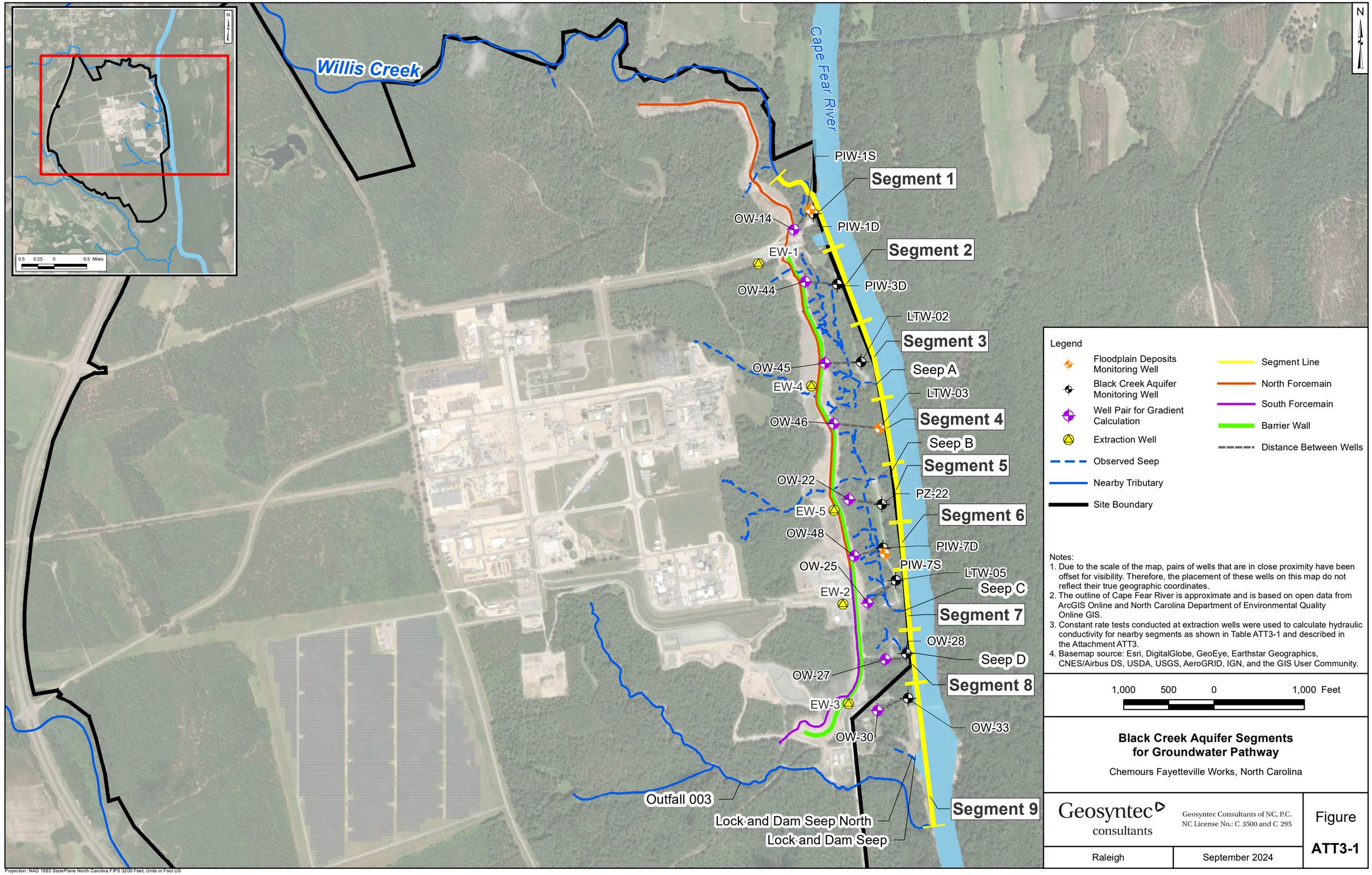
ft - feet

ft^2 - square feet

ft/sec - feet per second

ft^3/sec - cubic feet per second

gal/day - gallons per day



Notes:
1. Due to the scale of the map, pairs of wells that are in close proximity have been offset for visibility. Therefore, the placement of these wells on this map do not reflect their true geographic coordinates.
2. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS.
3. Constant rate tests conducted at extraction wells were used to calculate hydraulic conductivity for nearby segments as shown in Table ATT3-1 and described in the Attachment ATT3.
4. Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

1,000 500 0 1,000 Feet

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US

Black Creek Aquifer Segments for Groundwater Pathway

Chemours Fayetteville Works, North Carolina

Geosyntec consultants

Geosyntec Consultants of NC, P.C.
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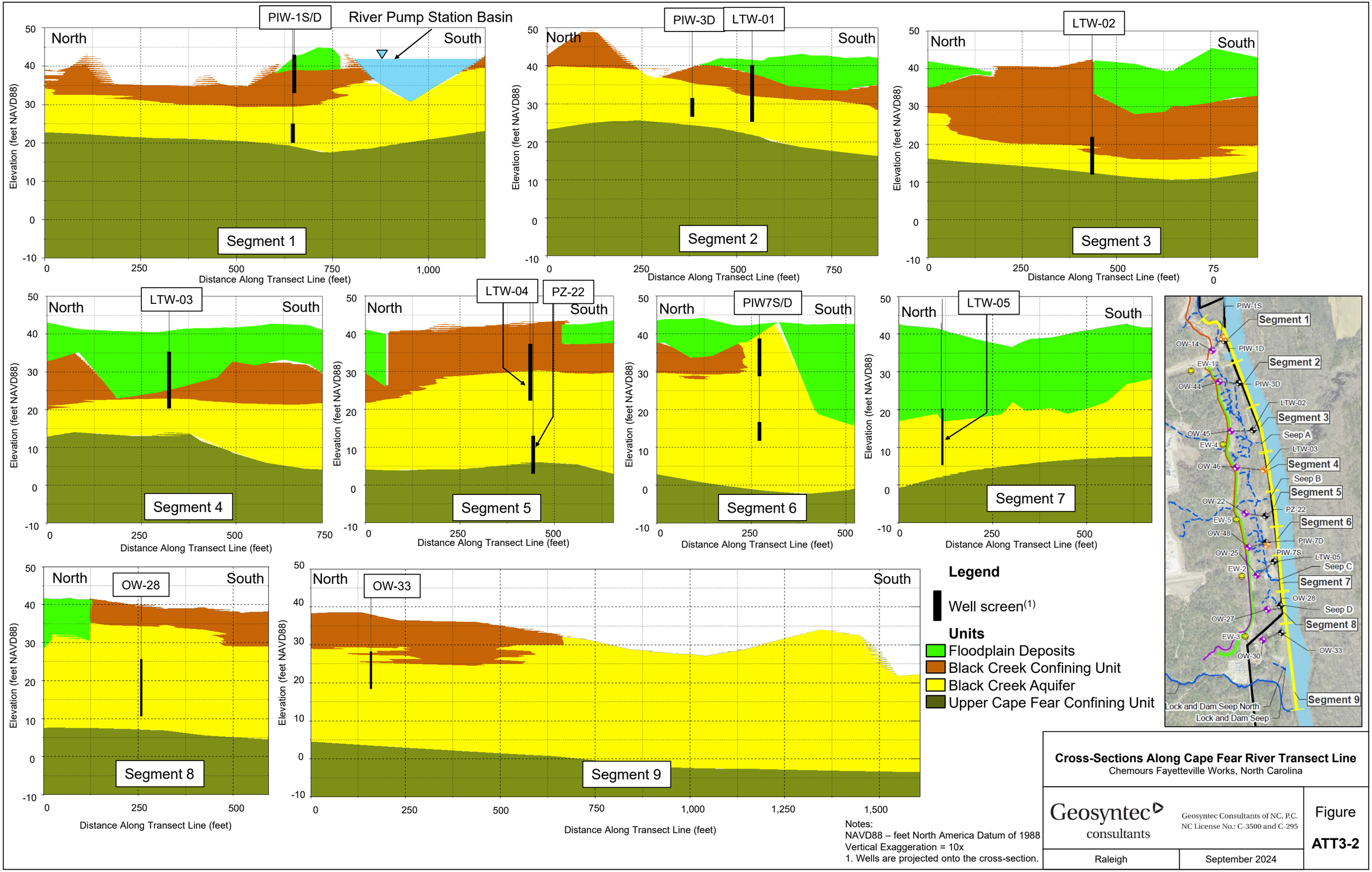
Figure
ATT3-1



Notes:
NAVD88 – feet North America Datum of 1988
Vertical Exaggeration = 10x
1. Wells are projected onto the cross-section.

Cross-Sections Along Cape Fear River Transect Line
Chemours Fayetteville Works, North Carolina

Geosyntec consultants
Geosyntec Consultants of NC, P.C.
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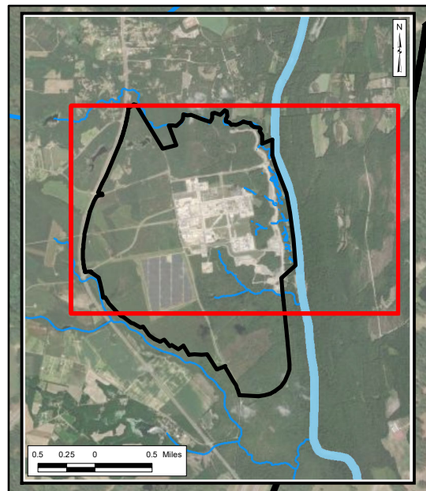
Figure
ATT3-2



Willis Creek

Cape Fear River

SMW-10 46.69
PW-09 47.68
OW-56 36.66
PIW-11 43.41
OW-57 43.79
OW-12 29.25
OW-55 28.48
PIW-12 27.09
PIW-13 27.72
OW-11 45.59
OW-41 45.46
OW-42 44.90
SMW-12 29.20
OW-54 DRY
PIW-14 30.26
OW-43 32.25
OW-13 32.08
PIW-15 32.00
PIW-1S 32.89
PIW-1D 32.72
OW-14 33.52
OW-10 57.07
OW-44 36.47
OW-16 35.97
PIW-3D 36.04
LTW-01 36.15
OW-1 57.06
SMW-03B 85.18
BCA-01 79.36
PW-12 87.91
PIW-2D 57.05
OW-15 57.96
OW-17 32.82
OW-45 40.45
OW-18 46.13
LTW-02 40.30
PW-15R 68.77
BCA-03R 94.14
PIW-4D 40.25
PW-10RR 40.07
PIW-6S 38.12
OW-3 33.81
OW-2 33.95
OW-20 39.81
LTW-03 38.10
OW-46 39.83
OW-19 31.20
OW-52 39.36
OW-53 NM
OW-21 32.04
PW-13 110.08
OW-22 39.89
LTW-04 39.46
OW-47 39.64
PW-14 81.08
OW-8 30.79
OW-7 31.56
OW-23 39.50
PIW-7S 38.89
PZ-22 39.57
OW-24 30.19
OW-25 38.92
OW-48 39.33
LTW-05 38.53
PIW-16D 123.83
BCA-02 69.96
OW-6 NM
OW-51 29.23
PIW-8D 38.56
PIW-9D NM
BCA-04 116.07
OW-49 38.93
OW-28 39.58
OW-26 41.72
OW-29 44.55
OW-50 40.01
OW-27 39.87
OW-5 NM
PIW-10DR 39.07
OW-33 39.87
OW-31 40.12
OW-4R 40.57
OW-30 39.55
OW-38 62.94
OW-32 38.63
OW-40 40.40
OW-9R 40.35
PW-11 40.74
OW-39 40.57

Segment 1 0.0034
Segment 2 0.0019
Segment 3 0.0005
Segment 4 0.0029
Segment 5 0.0008
Segment 6 -0.0008
Segment 7 0.0010
Segment 8 0.0012
Segment 9 -0.00012

Seep A
Seep B
Seep C
Seep D
Lock and Dam Seep
Lock and Dam Seep North
Outfall 003

N

Legend

- Observed Seep
- North Forcemain
- South Forcemain
- Barrier Wall
- Nearby Tributary
- Transect Line
- Site Boundary

Segment 1 / 0.0015 — Segment Number / Hydraulic Gradient (ft/ft)

Notes:
ft - feet
ft NAVD88 - feet North American Vertical Datum 1988.

1. Depth to water measurements were collected on April 29, 2024, and are provided in the Geosyntec, 2024. CFR Long-Term Remedy Performance Monitoring Report #6. Chemours Fayetteville Works. September 30, 2024. Wells screened within the Black Creek Aquifer that were not measured on this day are not shown.
2. Due to transient conditions as a result of the groundwater remedy installation and commissioning, potentiometric surfaces are impacted from these activities and should be considered estimates.
3. Ground surface elevation contours are derived from Lidar scans performed on December 1, 2019 and December 19, 2019 by Spectral Data Consultants, Inc.
4. Seep locations identified visually as reported in Geosyntec, 2019. Seeps and Creeks Investigation Report. Chemours Fayetteville Works. 26 August 2019.
5. A well pair was assigned for each segment. The hydraulic gradients were then derived at each segment by calculating the different between groundwater elevation at each well and dividing the remainder by the distance between the two wells. The well pairs for each segment are provided in Table ATT3-1.
6. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).
7. Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

1,000 500 0 1,000 Feet

Groundwater Elevation Map and Hydraulic Gradients - April 2024

Chemours Fayetteville Works, North Carolina

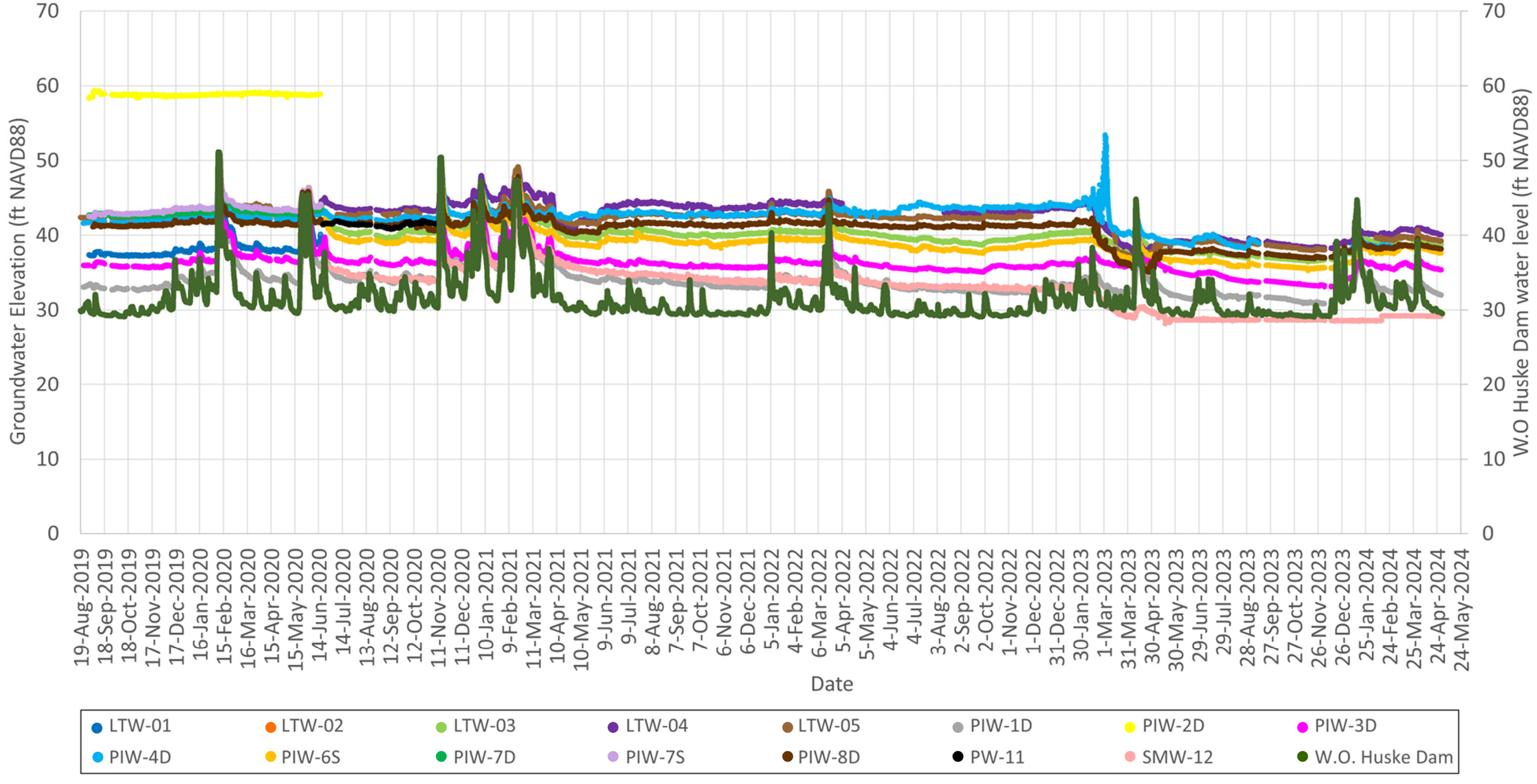
Geosyntec consultants

Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

Raleigh | September 2024

Figure ATT3-3

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet; Units in Foot US



Notes:
ft - feet
NAVD88 - North American Vertical Datum of 1988 NAVD88 - North American Vertical Datum of 1988

Hydrograph for Select Onsite Groundwater Monitoring Wells and W.O. Huske Dam
Chemours Fayetteville Works, North Carolina

Geosyntec consultants
Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

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Figure **ATT3-4**

Appendix B

Supplemental Tables

TABLE B1
OUTFALL 003 CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q2 2024
Chemours Fayetteville Works, North Carolina

Interval Details					Calculated Captured Mass Load (lbs)[1]																			
Interval ID	Start Time	End Time	Duration (hours)	Total Flow (MG)	HFPO-DA	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	Total Table 3+ (17 compounds)[2]
OF003_2024_Q2_1	4/1/24 0:00	4/30/24 23:59	720	10.6	0.35	1.4	0.47	0.14	0.062	0.025	0.25	0.077	0	0.016	0.011	0.022	0	0.018	0	0.0094	0.0061	0	0	0	2.9
OF003_2024_Q2_2	5/1/24 0:00	5/31/24 23:59	744	13.2	0.37	1.3	0.43	0.11	0.059	0.033	0.22	0.078	0	0.022	0.017	0.036	0.00055	0.018	0	0.010	0.0082	0	0	0	2.7
OF003_2024_Q2_3	6/1/24 0:00	6/30/24 23:59	720	10.6	0.43	1.2	0.41	0.11	0.057	0.028	0.21	0.075	0.018	0.019	0.018	0.043	0	0.018	0.00074	0.0092	0.0082	0	0	0	2.6
		Total	**34.3**	**1.1**	**3.9**	**1.3**	**0.36**	**0.18**	**0.085**	**0.68**	**0.23**	**0.018**	**0.057**	**0.046**	**0.10**	**0.00055**	**0.053**	**0.00074**	**0.028**	**0.023**	**0**	**0**	**0**	**8.2**

Notes:
1 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow at the influent for the sampling interval.
2 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
Where mass loads are equal to 0 lbs, the compound was not detected above the reporting limit.
OF003 - previously Old Outfall 002 treatment system
lbs - pounds
MG - million gallons

TABLE B2
STORMWATER TREATMENT SYSTEM CAPTURED MASS LOAD
BY COMPOUND AND DATE - Q2 2024
Chemours Fayetteville Works, North Carolina

Date[1]	Total Flow (MG)[2]	Calculated Captured Mass Load (lbs) [3,4]			
		HFPO-DA	PFMOAA	PMPA	Total of 3 Compounds [5]
5/3/24	0.0040	0.001	0.0003	0.0000	0.001
5/6/24	0.74	0.192	0.0587	0.0068	0.257
5/7/24	0.67	0.174	0.0532	0.0062	0.233
5/8/24	0.57	0.124	0.0435	0.0053	0.173
5/9/24	0.85	0.185	0.0647	0.0078	0.257
5/10/24	0.81	0.175	0.0611	0.0074	0.243
5/11/24	0.70	0.145	0.0470	0.0056	0.198
5/12/24	0.69	0.144	0.0465	0.0056	0.196
5/13/24	0.74	0.154	0.0498	0.0060	0.209
5/14/24	0.55	0.111	0.0346	0.0044	0.150
5/15/24	0.73	0.146	0.0456	0.0058	0.197
5/16/24	0.63	0.125	0.0392	0.0050	0.170
5/17/24	0.68	0.136	0.0426	0.0055	0.184
5/23/24	0.32	0.063	0.0198	0.0025	0.086
5/24/24	0.40	0.079	0.0247	0.0032	0.107
5/29/24	0.47	0.095	0.0297	0.0038	0.128
6/5/24	0.14	0.029	0.0072	0.0011	0.037
6/6/24	0.51	0.107	0.0270	0.0041	0.138
6/7/24	0.47	0.098	0.0248	0.0037	0.127
6/10/24	0.19	0.037	0.0059	0.0011	0.044
6/11/24	0.03	0.006	0.0010	0.0002	0.007
6/20/24	0.00	0.001	0.0001	0.0000	0.001
6/24/24	0.01	0.002	0.0004	0.0001	0.003
6/25/24	0.69	0.138	0.0213	0.0036	0.163
6/26/24	0.56	0.112	0.0173	0.0029	0.132
6/27/24	0.56	0.098	0.0224	0.0045	0.125
6/28/24	0.58	0.101	0.0231	0.0047	0.129
Total	**13.3**	**2.78**	**0.81**	**0.11**	**3.7**

Notes:
lbs - pounds
MG - million gallons
1 - Listed dates are days when flow was recorded at the Stormwater Treatment System.
2 - Total daily flows were based on the volume recorded via a totalizer at the Stormwater Treatment System effluent.
3 - The calculated captured mass load is a product of the concentration difference in the influent
4 - For days where only flow was recorded, the concentrations from the closest date were used to calculate mass loads.
5 - Only HFPO-DA, PFMOAA and PMPA are recorded at this location. Thus, the total captured mass load presented here is summed over these three compounds only.
6 - Data presented are based on Monthly Monitoring Reports submmited to the North Carolina Department of Environmental Quality by Chemours.

TABLE B3
FLOW SUMMARY FOR CAPE FEAR RIVER LOCATIONS
Chemours Fayetteville Works, North Carolina

Q2 2024 Quarterly Event	Pathway/ Location	Sample Collection Timepoint	Flow Gauging Location[1]	Travel Time Offset (hr)[2]	Adjusted Flow Gauging Timepoint	Composite Sample 24-Hour Flow Volume (MGD)[3]	Grab Sample Instantaneous Flow Rate (ft^3/s)[4]
April - May 2024	Upstream River Water and Groundwater	05/06/24 12:00	William O Huske Lock and Dam	--	05/06/24 12:00	--	1,679
	Tarheel (Grab Sample)	05/07/24 11:30	William O Huske Lock and Dam	5	05/07/24 6:00	--	3,870
	Tarheel (Composite Sample)	05/08/24 11:07	William O Huske Lock and Dam	4	05/08/24 7:15	4,190	--
	Bladen Bluff	04/18/24 10:50	William O Huske Lock and Dam	6	04/18/24 4:30	--	1,850
	Kings Bluff	04/22/24 13:20	Cape Fear River Lock and Dam #1	--	04/22/24 13:20	--	2,100

Notes:

1 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam and USGS gauging station # 02105769 located at Lock and Dam #1 near Kelly, North Carolina.

2 - Flow rates measured at William O Huske Lock and Dam were used for mass loading assessments at Tar heel and Bladen Bluff sample locations. Travel times between William O Huske Lock and Dam and the downstream locations were estimated based on the results of a numerical model of the Cape Fear River developed by Geosyntec which developed a regression curve between the USGS reported gage heights at William O Huske Lock and Dam and travel times.

3 - Total flow volume for composite samples is based on measurements taken over 24-hour sample collection period.

4 - Instantaneous flow rate for grab samples is the recorded flow rate at the time of grab sample collection.

Acronyms:

ft^3/s - cubic feet per second
hr - hours
MGD - millions of gallons per day

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
4/18/2024 0:00	1850	12,455,032	1.89	0
4/18/2024 0:15	1860	12,522,357	1.9	0
4/18/2024 0:30	1860	12,522,357	1.9	0
4/18/2024 0:45	1860	12,522,357	1.9	0
4/18/2024 1:00	1860	12,522,357	1.9	0
4/18/2024 1:15	1850	12,455,032	1.89	0
4/18/2024 1:30	1850	12,455,032	1.89	0
4/18/2024 1:45	1850	12,455,033	1.89	0
4/18/2024 2:00	1850	12,455,032	1.89	0
4/18/2024 2:15	1850	12,455,032	1.89	0
4/18/2024 2:30	1860	12,522,357	1.9	0
4/18/2024 2:45	1850	12,455,032	1.89	0
4/18/2024 3:00	1860	12,522,357	1.9	0
4/18/2024 3:15	1850	12,455,033	1.89	0
4/18/2024 3:30	1850	12,455,032	1.89	0
4/18/2024 3:45	1850	12,455,032	1.89	0
4/18/2024 4:00	1830	12,320,384	1.88	0
4/18/2024 4:15	1850	12,455,032	1.89	0
4/18/2024 4:30	1850	12,455,032	1.89	0
4/18/2024 4:45	1830	12,320,384	1.88	0
4/18/2024 5:00	1830	12,320,383	1.88	0
4/18/2024 5:15	1830	12,320,383	1.88	0
4/18/2024 5:30	1850	12,455,033	1.89	0
4/18/2024 5:45	1850	12,455,032	1.89	0
4/18/2024 6:00	1830	12,320,383	1.88	0
4/18/2024 6:15	1830	12,320,384	1.88	0
4/18/2024 6:30	1850	12,455,032	1.89	0
4/18/2024 6:45	1830	12,320,383	1.88	0
4/18/2024 7:00	1820	12,253,059	1.87	0
4/18/2024 7:15	1850	12,455,032	1.89	0
4/18/2024 7:30	1830	12,320,383	1.88	0
4/18/2024 7:45	1850	12,455,033	1.89	0
4/18/2024 8:00	1850	12,455,032	1.89	0
4/18/2024 8:15	1850	12,455,032	1.89	0
4/18/2024 8:30	1830	12,320,384	1.88	0
4/18/2024 8:45	1830	12,320,383	1.88	0
4/18/2024 9:00	1850	12,455,032	1.89	0
4/18/2024 9:15	1850	12,455,033	1.89	0
4/18/2024 9:30	1850	12,455,032	1.89	0
4/18/2024 9:45	1850	12,455,032	1.89	0
4/18/2024 10:00	1830	12,320,384	1.88	0
4/18/2024 10:15	1850	12,455,032	1.89	0
4/18/2024 10:30	1870	12,589,681	1.9	0
4/18/2024 10:45	1850	12,455,033	1.89	0
4/18/2024 11:00	1870	12,589,681	1.9	0
4/18/2024 11:15	1870	12,589,681	1.9	0
4/18/2024 11:30	1870	12,589,682	1.9	0
4/18/2024 11:45	1870	12,589,681	1.9	0
4/18/2024 12:00	1850	12,455,032	1.89	0
4/18/2024 12:15	1870	12,589,682	1.9	0
4/18/2024 12:30	1880	12,657,006	1.91	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
4/18/2024 12:45	1880	12,657,006	1.91	0
4/18/2024 13:00	1850	12,455,033	1.89	0
4/18/2024 13:15	1880	12,657,006	1.91	0
4/18/2024 13:30	1870	12,589,681	1.9	0
4/18/2024 13:45	1870	12,589,682	1.9	0
4/18/2024 14:00	1870	12,589,681	1.9	0
4/18/2024 14:15	1870	12,589,681	1.9	0
4/18/2024 14:30	1880	12,657,006	1.91	0
4/18/2024 14:45	1880	12,657,006	1.91	0
4/18/2024 15:00	1880	12,657,006	1.91	0
4/18/2024 15:15	1870	12,589,682	1.9	0
4/18/2024 15:30	1870	12,589,681	1.9	0
4/18/2024 15:45	1870	12,589,681	1.9	0
4/18/2024 16:00	1850	12,455,033	1.89	0
4/18/2024 16:15	1850	12,455,032	1.89	0
4/18/2024 16:30	1870	12,589,681	1.9	0
4/18/2024 16:45	1850	12,455,033	1.89	0
4/18/2024 17:00	1870	12,589,681	1.9	0
4/18/2024 17:15	1850	12,455,032	1.89	0
4/18/2024 17:30	1850	12,455,033	1.89	0
4/18/2024 17:45	1820	12,253,059	1.87	0
4/18/2024 18:00	1830	12,320,383	1.88	0
4/18/2024 18:15	1820	12,253,059	1.87	0
4/18/2024 18:30	1820	12,253,059	1.87	0
4/18/2024 18:45	1820	12,253,059	1.87	0
4/18/2024 19:00	1800	12,118,410	1.86	0
4/18/2024 19:15	1800	12,118,410	1.86	0
4/18/2024 19:30	1800	12,118,410	1.86	0
4/18/2024 19:45	1800	12,118,410	1.86	0
4/18/2024 20:00	1800	12,118,410	1.86	0
4/18/2024 20:15	1790	12,051,085	1.85	0
4/18/2024 20:30	1790	12,051,086	1.85	0
4/18/2024 20:45	1790	12,051,085	1.85	0
4/18/2024 21:00	1790	12,051,085	1.85	0
4/18/2024 21:15	1770	11,916,437	1.84	0
4/18/2024 21:30	1770	11,916,436	1.84	0
4/18/2024 21:45	1770	11,916,436	1.84	0
4/18/2024 22:00	1770	11,916,437	1.84	0
4/18/2024 22:15	1760	11,849,112	1.83	0
4/18/2024 22:30	1770	11,916,436	1.84	0
4/18/2024 22:45	1770	11,916,437	1.84	0
4/18/2024 23:00	1760	11,849,112	1.83	0
4/18/2024 23:15	1770	11,916,436	1.84	0
4/18/2024 23:30	1760	11,849,112	1.83	0
4/18/2024 23:45	1770	11,916,437	1.84	0
5/6/2024 0:00	1410	9,492,754	1.6	0
5/6/2024 0:15	1420	9,560,079	1.61	0
5/6/2024 0:30	1420	9,560,079	1.61	0
5/6/2024 0:45	1410	9,492,754	1.6	0
5/6/2024 1:00	1420	9,560,079	1.61	0
5/6/2024 1:15	1420	9,560,079	1.61	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
5/6/2024 1:30	1420	9,560,079	1.61	0
5/6/2024 1:45	1420	9,560,079	1.61	0
5/6/2024 2:00	1420	9,560,079	1.61	0
5/6/2024 2:15	1420	9,560,079	1.61	0
5/6/2024 2:30	1420	9,560,079	1.61	0
5/6/2024 2:45	1440	9,694,728	1.62	0
5/6/2024 3:00	1440	9,694,728	1.62	0
5/6/2024 3:15	1440	9,694,728	1.62	0
5/6/2024 3:30	1440	9,694,728	1.62	0
5/6/2024 3:45	1440	9,694,728	1.62	0
5/6/2024 4:00	1440	9,694,728	1.62	0
5/6/2024 4:15	1440	9,694,728	1.62	0
5/6/2024 4:30	1450	9,762,052	1.63	0
5/6/2024 4:45	1450	9,762,053	1.63	0
5/6/2024 5:00	1450	9,762,052	1.63	0
5/6/2024 5:15	1450	9,762,052	1.63	0
5/6/2024 5:30	1470	9,896,702	1.64	0
5/6/2024 5:45	1470	9,896,701	1.64	0
5/6/2024 6:00	1470	9,896,701	1.64	0
5/6/2024 6:15	1480	9,964,026	1.65	0
5/6/2024 6:30	1480	9,964,026	1.65	0
5/6/2024 6:45	1480	9,964,026	1.65	0
5/6/2024 7:00	1480	9,964,026	1.65	0
5/6/2024 7:15	1500	10,098,675	1.66	0
5/6/2024 7:30	1500	10,098,675	1.66	0
5/6/2024 7:45	1500	10,098,675	1.66	0
5/6/2024 8:00	1500	10,098,675	1.66	0
5/6/2024 8:15	1500	10,098,675	1.66	0
5/6/2024 8:30	1510	10,166,000	1.67	0
5/6/2024 8:45	1510	10,165,999	1.67	0
5/6/2024 9:00	1510	10,165,999	1.67	0
5/6/2024 9:15	1510	10,166,000	1.67	0
5/6/2024 9:30	1530	10,300,648	1.68	0
5/6/2024 9:45	1530	10,300,648	1.68	0
5/6/2024 10:00	1540	10,367,973	1.69	0
5/6/2024 10:15	1540	10,367,973	1.69	0
5/6/2024 10:30	1540	10,367,973	1.69	0
5/6/2024 10:45	1560	10,502,622	1.7	0
5/6/2024 11:00	1560	10,502,622	1.7	0
5/6/2024 11:15	1560	10,502,622	1.7	0
5/6/2024 11:30	1590	10,704,596	1.72	0
5/6/2024 11:45	1590	10,704,595	1.72	0
5/6/2024 12:00	1590	10,704,595	1.72	0
5/6/2024 12:15	1600	10,771,920	1.73	0
5/6/2024 12:30	1600	10,771,920	1.73	0
5/6/2024 12:45	1620	10,906,569	1.74	0
5/6/2024 13:00	1620	10,906,569	1.74	0
5/6/2024 13:15	1630	10,973,893	1.75	0
5/6/2024 13:30	1650	11,108,542	1.76	0
5/6/2024 13:45	1650	11,108,543	1.76	0
5/6/2024 14:00	1650	11,108,542	1.76	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
5/6/2024 14:15	1660	11,175,867	1.77	0
5/6/2024 14:30	1660	11,175,867	1.77	0
5/6/2024 14:45	1680	11,310,516	1.78	0
5/6/2024 15:00	1680	11,310,516	1.78	0
5/6/2024 15:15	1690	11,377,841	1.79	0
5/6/2024 15:30	1710	11,512,489	1.8	0
5/6/2024 15:45	1710	11,512,489	1.8	0.01
5/6/2024 16:00	1770	11,916,437	1.84	0.24
5/6/2024 16:15	1770	11,916,436	1.84	0.05
5/6/2024 16:30	1770	11,916,436	1.84	0.01
5/6/2024 16:45	1750	11,781,788	1.83	0.01
5/6/2024 17:00	1770	11,916,436	1.84	0.01
5/6/2024 17:15	1800	12,118,410	1.86	0
5/6/2024 17:30	1800	12,118,410	1.86	0.01
5/6/2024 17:45	1820	12,253,059	1.87	0
5/6/2024 18:00	1830	12,320,383	1.88	0
5/6/2024 18:15	1860	12,522,357	1.9	0
5/6/2024 18:30	1880	12,657,006	1.91	0
5/6/2024 18:45	1910	12,858,979	1.93	0
5/6/2024 19:00	1930	12,993,629	1.94	0
5/6/2024 19:15	1940	13,060,953	1.95	0
5/6/2024 19:30	1970	13,262,926	1.97	0
5/6/2024 19:45	1990	13,397,576	1.98	0
5/6/2024 20:00	2020	13,599,549	2	0
5/6/2024 20:15	2040	13,734,198	2.01	0
5/6/2024 20:30	2070	13,936,172	2.03	0
5/6/2024 20:45	2090	14,070,820	2.04	0
5/6/2024 21:00	2120	14,272,794	2.06	0
5/6/2024 21:15	2150	14,474,768	2.08	0
5/6/2024 21:30	2190	14,744,065	2.1	0
5/6/2024 21:45	2220	14,946,039	2.12	0
5/6/2024 22:00	2250	15,148,013	2.14	0
5/6/2024 22:15	2290	15,417,310	2.16	0
5/6/2024 22:30	2320	15,619,284	2.18	0
5/6/2024 22:45	2350	15,821,258	2.2	0
5/6/2024 23:00	2390	16,090,555	2.22	0
5/6/2024 23:15	2420	16,292,529	2.24	0
5/6/2024 23:30	2460	16,561,827	2.26	0.02
5/6/2024 23:45	2510	16,898,449	2.29	0.06
5/7/2024 0:00	2540	17,100,423	2.31	0
5/7/2024 0:15	2600	17,504,370	2.34	0
5/7/2024 0:30	2630	17,706,343	2.36	0
5/7/2024 0:45	2670	17,975,641	2.38	0
5/7/2024 1:00	2720	18,312,264	2.41	0
5/7/2024 1:15	2780	18,716,211	2.44	0
5/7/2024 1:30	2790	18,783,535	2.45	0
5/7/2024 1:45	2850	19,187,483	2.48	0
5/7/2024 2:00	2880	19,389,456	2.5	0
5/7/2024 2:15	2940	19,793,403	2.53	0
5/7/2024 2:30	3000	20,197,350	2.56	0
5/7/2024 2:45	3030	20,399,323	2.58	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
5/7/2024 3:00	3070	20,668,621	2.6	0
5/7/2024 3:15	3130	21,072,569	2.63	0
5/7/2024 3:30	3180	21,409,191	2.66	0
5/7/2024 3:45	3260	21,947,787	2.7	0
5/7/2024 4:00	3300	22,217,085	2.72	0.01
5/7/2024 4:15	3370	22,688,356	2.76	0.13
5/7/2024 4:30	3450	23,226,952	2.8	0.21
5/7/2024 4:45	3510	23,630,900	2.83	0
5/7/2024 5:00	3610	24,304,144	2.88	0
5/7/2024 5:15	3650	24,573,442	2.9	0
5/7/2024 5:30	3730	25,112,039	2.94	0
5/7/2024 5:45	3790	25,515,985	2.97	0
5/7/2024 6:00	3870	26,054,581	3.01	0
5/7/2024 6:15	3950	26,593,178	3.05	0
5/7/2024 6:30	4030	27,131,773	3.09	0
5/7/2024 6:45	4110	27,670,369	3.13	0
5/7/2024 7:00	4200	28,276,290	3.17	0
5/7/2024 7:15	4280	28,814,886	3.21	0
5/7/2024 7:30	4370	29,420,806	3.25	0
5/7/2024 7:45	4450	29,959,403	3.29	0
5/7/2024 8:00	4560	30,699,972	3.34	0
5/7/2024 8:15	4620	31,103,919	3.37	0
5/7/2024 8:30	4710	31,709,840	3.41	0
5/7/2024 8:45	4800	32,315,760	3.45	0
5/7/2024 9:00	4880	32,854,356	3.49	0
5/7/2024 9:15	4970	33,460,277	3.53	0
5/7/2024 9:30	5040	33,931,548	3.56	0
5/7/2024 9:45	5130	34,537,468	3.6	0
5/7/2024 10:00	5220	35,143,389	3.64	0
5/7/2024 10:15	5290	35,614,660	3.67	0
5/7/2024 10:30	5380	36,220,581	3.71	0
5/7/2024 10:45	5450	36,691,853	3.74	0
5/7/2024 11:00	5510	37,095,799	3.77	0
5/7/2024 11:15	5610	37,769,044	3.81	0
5/7/2024 11:30	5650	38,038,343	3.83	0
5/7/2024 11:45	5750	38,711,587	3.87	0
5/7/2024 12:00	5790	38,980,885	3.89	0
5/7/2024 12:15	5860	39,452,157	3.92	0
5/7/2024 12:30	5910	39,788,779	3.94	0
5/7/2024 12:45	5980	40,260,051	3.97	0
5/7/2024 13:00	6050	40,731,323	4	0
5/7/2024 13:15	6120	41,202,594	4.03	0
5/7/2024 13:30	6170	41,539,216	4.05	0
5/7/2024 13:45	6250	42,077,813	4.08	0
5/7/2024 14:00	6270	42,212,461	4.09	0
5/7/2024 14:15	6340	42,683,733	4.12	0
5/7/2024 14:30	6390	43,020,356	4.14	0
5/7/2024 14:45	6440	43,356,978	4.16	0
5/7/2024 15:00	6490	43,693,600	4.18	0
5/7/2024 15:15	6510	43,828,250	4.19	0
5/7/2024 15:30	6590	44,366,845	4.22	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
5/7/2024 15:45	6590	44,366,845	4.22	0
5/7/2024 16:00	6660	44,838,117	4.25	0
5/7/2024 16:15	6690	45,040,090	4.26	0
5/7/2024 16:30	6710	45,174,739	4.27	0
5/7/2024 16:45	6740	45,376,713	4.28	0
5/7/2024 17:00	6790	45,713,335	4.3	0
5/7/2024 17:15	6810	45,847,984	4.31	0
5/7/2024 17:30	6840	46,049,958	4.32	0
5/7/2024 17:45	6860	46,184,607	4.33	0
5/7/2024 18:00	6890	46,386,580	4.34	0
5/7/2024 18:15	6910	46,521,230	4.35	0
5/7/2024 18:30	6940	46,723,203	4.36	0
5/7/2024 18:45	6960	46,857,852	4.37	0
5/7/2024 19:00	6990	47,059,826	4.38	0
5/7/2024 19:15	7010	47,194,474	4.39	0
5/7/2024 19:30	7010	47,194,474	4.39	0
5/7/2024 19:45	7040	47,396,448	4.4	0
5/7/2024 20:00	7040	47,396,448	4.4	0
5/7/2024 20:15	7060	47,531,097	4.41	0
5/7/2024 20:30	7090	47,733,071	4.42	0
5/7/2024 20:45	7090	47,733,070	4.42	0
5/7/2024 21:00	7120	47,935,044	4.43	0
5/7/2024 21:15	7120	47,935,044	4.43	0
5/7/2024 21:30	7140	48,069,693	4.44	0
5/7/2024 21:45	7140	48,069,693	4.44	0
5/7/2024 22:00	7140	48,069,693	4.44	0
5/7/2024 22:15	7140	48,069,693	4.44	0
5/7/2024 22:30	7170	48,271,666	4.45	0
5/7/2024 22:45	7170	48,271,667	4.45	0
5/7/2024 23:00	7170	48,271,666	4.45	0
5/7/2024 23:15	7170	48,271,666	4.45	0
5/7/2024 23:30	7170	48,271,667	4.45	0
5/7/2024 23:45	7190	48,406,315	4.46	0
5/8/2024 0:00	7170	48,271,666	4.45	0
5/8/2024 0:15	7190	48,406,316	4.46	0
5/8/2024 0:30	7170	48,271,666	4.45	0
5/8/2024 0:45	7170	48,271,666	4.45	0
5/8/2024 1:00	7190	48,406,316	4.46	0
5/8/2024 1:15	7170	48,271,666	4.45	0
5/8/2024 1:30	7170	48,271,666	4.45	0
5/8/2024 1:45	7170	48,271,667	4.45	0
5/8/2024 2:00	7170	48,271,666	4.45	0
5/8/2024 2:15	7170	48,271,666	4.45	0
5/8/2024 2:30	7170	48,271,667	4.45	0
5/8/2024 2:45	7140	48,069,693	4.44	0
5/8/2024 3:00	7140	48,069,693	4.44	0
5/8/2024 3:15	7140	48,069,693	4.44	0
5/8/2024 3:30	7120	47,935,044	4.43	0
5/8/2024 3:45	7120	47,935,044	4.43	0
5/8/2024 4:00	7090	47,733,071	4.42	0
5/8/2024 4:15	7090	47,733,070	4.42	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
5/8/2024 4:30	7070	47,598,421	4.41	0
5/8/2024 4:45	7070	47,598,422	4.41	0
5/8/2024 5:00	7040	47,396,448	4.4	0
5/8/2024 5:15	7010	47,194,474	4.39	0
5/8/2024 5:30	7010	47,194,475	4.39	0
5/8/2024 5:45	6990	47,059,825	4.38	0
5/8/2024 6:00	6960	46,857,852	4.37	0
5/8/2024 6:15	6940	46,723,203	4.36	0
5/8/2024 6:30	6940	46,723,203	4.36	0
5/8/2024 6:45	6890	46,386,580	4.34	0
5/8/2024 7:00	6810	45,847,985	4.31	0
5/8/2024 7:15	6790	45,713,335	4.3	0
5/8/2024 7:30	6740	45,376,713	4.28	0
5/8/2024 7:45	6710	45,174,740	4.27	0
5/8/2024 8:00	6690	45,040,090	4.26	0
5/8/2024 8:15	6660	44,838,117	4.25	0
5/8/2024 8:30	6640	44,703,468	4.24	0
5/8/2024 8:45	6590	44,366,845	4.22	0
5/8/2024 9:00	6590	44,366,845	4.22	0
5/8/2024 9:15	6540	44,030,223	4.2	0
5/8/2024 9:30	6520	43,895,574	4.19	0
5/8/2024 9:45	6490	43,693,600	4.18	0
5/8/2024 10:00	6470	43,558,952	4.17	0
5/8/2024 10:15	6440	43,356,978	4.16	0
5/8/2024 10:30	6420	43,222,329	4.15	0
5/8/2024 10:45	6370	42,885,707	4.13	0
5/8/2024 11:00	6340	42,683,733	4.12	0
5/8/2024 11:15	6320	42,549,084	4.11	0
5/8/2024 11:30	6300	42,414,435	4.1	0
5/8/2024 11:45	6270	42,212,461	4.09	0
5/8/2024 12:00	6250	42,077,812	4.08	0
5/8/2024 12:15	6220	41,875,839	4.07	0
5/8/2024 12:30	6200	41,741,190	4.06	0
5/8/2024 12:45	6170	41,539,216	4.05	0
5/8/2024 13:00	6150	41,404,568	4.04	0
5/8/2024 13:15	6100	41,067,945	4.02	0
5/8/2024 13:30	6100	41,067,945	4.02	0
5/8/2024 13:45	6080	40,933,296	4.01	0
5/8/2024 14:00	6050	40,731,322	4	0
5/8/2024 14:15	6010	40,462,024	3.98	0
5/8/2024 14:30	5980	40,260,051	3.97	0
5/8/2024 14:45	5960	40,125,402	3.96	0
5/8/2024 15:00	5940	39,990,753	3.95	0
5/8/2024 15:15	5940	39,990,753	3.95	0
5/8/2024 15:30	5890	39,654,130	3.93	0
5/8/2024 15:45	5890	39,654,130	3.93	0
5/8/2024 16:00	5840	39,317,508	3.91	0
5/8/2024 16:15	5840	39,317,508	3.91	0
5/8/2024 16:30	5820	39,182,859	3.9	0
5/8/2024 16:45	5790	38,980,886	3.89	0
5/8/2024 17:00	5770	38,846,236	3.88	0

TABLE B4
FLOW DATA FOR W.O. HUSKE LOCK NR TAR HEEL, NC
Chemours Fayetteville Works, North Carolina

Date and Time	Flow Rate (ft^3/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)[1]
5/8/2024 17:15	5750	38,711,587	3.87	0
5/8/2024 17:30	5720	38,509,614	3.86	0
5/8/2024 17:45	5700	38,374,965	3.85	0
5/8/2024 18:00	5680	38,240,316	3.84	0
5/8/2024 18:15	5650	38,038,343	3.83	0
5/8/2024 18:30	5610	37,769,044	3.81	0
5/8/2024 18:45	5590	37,634,395	3.8	0
5/8/2024 19:00	5610	37,769,045	3.81	0
5/8/2024 19:15	5630	37,903,693	3.82	0.32
5/8/2024 19:30	5560	37,432,422	3.79	0.02
5/8/2024 19:45	5540	37,297,773	3.78	0.05
5/8/2024 20:00	5540	37,297,773	3.78	0
5/8/2024 20:15	5540	37,297,773	3.78	0
5/8/2024 20:30	5520	37,163,124	3.77	0
5/8/2024 20:45	5490	36,961,150	3.76	0
5/8/2024 21:00	5490	36,961,150	3.76	0
5/8/2024 21:15	5490	36,961,151	3.76	0
5/8/2024 21:30	5450	36,691,852	3.74	0
5/8/2024 21:45	5420	36,489,879	3.73	0
5/8/2024 22:00	5400	36,355,230	3.72	0
5/8/2024 22:15	5400	36,355,230	3.72	0
5/8/2024 22:30	5380	36,220,581	3.71	0
5/8/2024 22:45	5380	36,220,581	3.71	0.01
5/8/2024 23:00	5360	36,085,932	3.7	0
5/8/2024 23:15	5330	35,883,958	3.69	0
5/8/2024 23:30	5330	35,883,959	3.69	0
5/8/2024 23:45	5310	35,749,309	3.68	0

Notes

Measurements are recorded from the USGS flow gauging station at the W.O. Huske Dam, ID 02105500 (USGS, 2021).

1 - The minimum value recorded by a USGS raingage is 0.01 inches. Anything detected below this threshold is recorded as zero inches.

ft^3/sec - cubic feet per second
ft - feet
gal - gallons
in - inches
USGS - United States Geological Survey

TABLE B5
FLOW DATA FOR LOCK #1 NR KELLY, NC
Chemours Fayetteville Works, North Carolina

Date	Time	Discharge (cubic ft/sec)	Seconds	Volume (gal)
4/22/2024	0:00	2,100	900	14,138,145
4/22/2024	0:15	2,100	900	14,138,145
4/22/2024	0:30	2,100	900	14,138,145
4/22/2024	0:45	2,100	900	14,138,145
4/22/2024	1:00	2,100	900	14,138,145
4/22/2024	1:15	2,100	900	14,138,145
4/22/2024	1:30	2,100	900	14,138,145
4/22/2024	1:45	2,100	900	14,138,145
4/22/2024	2:00	2,100	900	14,138,145
4/22/2024	2:15	2,100	900	14,138,145
4/22/2024	2:30	2,100	900	14,138,145
4/22/2024	2:45	2,100	900	14,138,145
4/22/2024	3:00	2,100	900	14,138,145
4/22/2024	3:15	2,100	900	14,138,145
4/22/2024	3:30	2,100	900	14,138,145
4/22/2024	3:45	2,100	900	14,138,145
4/22/2024	4:00	2,120	900	14,272,794
4/22/2024	4:15	2,120	900	14,272,794
4/22/2024	4:30	2,120	900	14,272,794
4/22/2024	4:45	2,120	900	14,272,794
4/22/2024	5:00	2,100	900	14,138,145
4/22/2024	5:15	2,120	900	14,272,794
4/22/2024	5:30	2,100	900	14,138,145
4/22/2024	5:45	2,120	900	14,272,794
4/22/2024	6:00	2,120	900	14,272,794
4/22/2024	6:15	2,120	900	14,272,794
4/22/2024	6:30	2,120	900	14,272,794
4/22/2024	6:45	2,100	900	14,138,145
4/22/2024	7:00	2,100	900	14,138,145
4/22/2024	7:15	2,120	900	14,272,794
4/22/2024	7:30	2,100	900	14,138,145
4/22/2024	7:45	2,120	900	14,272,794
4/22/2024	8:00	2,120	900	14,272,794
4/22/2024	8:15	2,120	900	14,272,794
4/22/2024	8:30	2,120	900	14,272,794
4/22/2024	8:45	2,100	900	14,138,145
4/22/2024	9:00	2,120	900	14,272,794
4/22/2024	9:15	2,120	900	14,272,794
4/22/2024	9:30	2,120	900	14,272,794
4/22/2024	9:45	2,120	900	14,272,794
4/22/2024	10:00	2,120	900	14,272,794
4/22/2024	10:15	2,120	900	14,272,794
4/22/2024	10:30	2,130	900	14,340,118
4/22/2024	10:45	2,130	900	14,340,119
4/22/2024	11:00	2,120	900	14,272,794
4/22/2024	11:15	2,130	900	14,340,118
4/22/2024	11:30	2,130	900	14,340,119
4/22/2024	11:45	2,130	900	14,340,118
4/22/2024	12:00	2,150	900	14,474,767
4/22/2024	12:15	2,120	900	14,272,794
4/22/2024	12:30	2,130	900	14,340,118
4/22/2024	12:45	2,130	900	14,340,118
4/22/2024	13:00	2,120	900	14,272,794

TABLE B5
FLOW DATA FOR LOCK #1 NR KELLY, NC
Chemours Fayetteville Works, North Carolina

Date	Time	Discharge (cubic ft/sec)	Seconds	Volume (gal)
4/22/2024	13:15	2,100	900	14,138,145
4/22/2024	13:30	2,150	900	14,474,767
4/22/2024	13:45	2,180	900	14,676,741
4/22/2024	14:00	2,150	900	14,474,767
4/22/2024	14:15	2,130	900	14,340,118
4/22/2024	14:30	2,170	900	14,609,417
4/22/2024	14:45	2,120	900	14,272,794
4/22/2024	15:00	2,150	900	14,474,767
4/22/2024	15:15	2,170	900	14,609,417
4/22/2024	15:30	2,130	900	14,340,118
4/22/2024	15:45	2,170	900	14,609,416
4/22/2024	16:00	2,150	900	14,474,768
4/22/2024	16:15	2,150	900	14,474,767
4/22/2024	16:30	2,100	900	14,138,145
4/22/2024	16:45	2,150	900	14,474,768
4/22/2024	17:00	2,100	900	14,138,145
4/22/2024	17:15	2,170	900	14,609,416
4/22/2024	17:30	2,120	900	14,272,794
4/22/2024	17:45	2,120	900	14,272,794
4/22/2024	18:00	2,130	900	14,340,118
4/22/2024	18:15	2,130	900	14,340,119
4/22/2024	18:30	2,130	900	14,340,118
4/22/2024	18:45	2,130	900	14,340,118
4/22/2024	19:00	2,130	900	14,340,119
4/22/2024	19:15	2,120	900	14,272,794
4/22/2024	19:30	2,130	900	14,340,118
4/22/2024	19:45	2,130	900	14,340,119
4/22/2024	20:00	2,120	900	14,272,794
4/22/2024	20:15	2,130	900	14,340,118
4/22/2024	20:30	2,120	900	14,272,794
4/22/2024	20:45	2,120	900	14,272,794
4/22/2024	21:00	2,120	900	14,272,794
4/22/2024	21:15	2,120	900	14,272,794
4/22/2024	21:30	2,120	900	14,272,794
4/22/2024	21:45	2,130	900	14,340,118
4/22/2024	22:00	2,130	900	14,340,119
4/22/2024	22:15	2,130	900	14,340,118
4/22/2024	22:30	2,130	900	14,340,118
4/22/2024	22:45	2,130	900	14,340,119
4/22/2024	23:00	2,130	900	14,340,118
4/22/2024	23:15	2,120	900	14,272,794
4/22/2024	23:30	2,120	900	14,272,794
4/22/2024	23:45	2,120	900	14,272,794

Notes

Measurements are recorded from the USGS flow gauging station at Lock #1 near Kelly, ID 02105769 (USGS, 2021).

ft^3/sec - cubic feet per second

ft - feet

gal - gallons

USGS - United States Geological Survey

TABLE B6
Table 3+ PFAS MASS DISCHARGE AT DOWNSTREAM LOCATIONS
Chemours Fayetteville Works, North Carolina

Pathway Number	--	--	--	--
Pathway Name	Tar Heel Ferry Road Bridge[1,2]	Tar Heel Ferry Road Bridge[1]	Bladen Bluff[2]	Kings Bluff[2]
Flow (MG)	--	4,190	--	--
Instantaneous Flow (ft^3/sec)	3,870	--	1,850	2,100
Program	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24	CAP SW Sampling 2Q24
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-BLADEN	CFR-KINGS
Field Sample ID	CAP2Q24-CFR-TARHEEL-050724	CAP2Q24-CFR-TARHEEL-24-050824	CAP2Q24-CFR-BLADEN-041824	CAP2Q24-CFR-KINGS-042224
Sample Date and Time[1]	5/7/2024	5/8/2024	4/18/2024	4/22/2024
Sample Delivery Group (SDG)	320-112121-1	320-112338-1	320-111655-1	320-111655-1
Lab Sample ID	320-112121-3	320-112338-6	320-111655-6	320-111655-4
Sample Type	Grab	Composite	Grab	Grab
Table 3+ Mass Discharge[3] (mg/s)				
HFPO-DA	**0.46**	ND	**0.25**	ND
PFMOAA	**0.75**	**0.66**	**0.41**	**0.59**
PFO2HxA	**0.60**	**0.55**	**0.28**	**0.36**
PFO3OA	ND	ND	ND	ND
PFO4DA	ND	ND	ND	ND
PFO5DA	ND	ND	ND	ND
PMPA	**0.75**	**0.81**	**0.31**	**0.29**
PEPA	ND	ND	ND	ND
PS Acid	ND	ND	ND	ND
Hydro-PS Acid	ND	ND	ND	ND
R-PSDA	ND	ND	ND	ND
Hydrolyzed PSDA	ND	ND	ND	ND
R-PSDCA	ND	ND	ND	ND
NVHOS, Acid Form	ND	ND	ND	ND
EVE Acid	ND	ND	ND	ND
Hydro-EVE Acid	ND	ND	ND	ND
R-EVE	ND	ND	ND	ND
PES	ND	ND	ND	ND
PFECA B	ND	ND	ND	ND
PFECA-G	ND	ND	ND	ND
PFPrA	**2.19**	**2.57**	**1.05**	**1.37**
Total Attachment C Mass Discharge[4,5]	**2.52**	**2.02**	**1.26**	**1.25**
Total Table 3+ Mass Discharge (17 compounds)[4,6]	**2.52**	**2.02**	**1.26**	**1.25**
Total Table 3+ Mass Discharge (18 compounds)4,7	**4.71**	**4.59**	**2.30**	**2.62**
Total Table 3+ Mass Discharge (21 compounds)[4]	**5.48**	**5.14**	**2.67**	**4.22**

Notes:
1 - A paired composite sample was collected at Tar Heel Ferry Road Bridge on May 8, 2024.
2 - Mass discharge values for grab samples collected at Tar Heel Ferry Road Bridge, Bladen Bluff, and Kings Bluff are determined based on instantaneous flow rates.
3 - Mass discharge by analyte is calculated based on Table 3+ concentrations in Table 3, and 24-hour flow volumes reported in Table B5.
4 - Total PFAS mass discharge is based on the summed Total PFAS concentrations reported in Table 3, which are rounded to two significant figures.
5 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).
6 - Total Table 3+ (17 compounds) does not include Perfluoroheptanoic acid (PFHpA), R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
7 - Total Table 3+ (18 compounds) does not include Perfluoroheptanoic acid (PFHpA), R-PSDA, Hydrolyzed PSDA, and R-EVE.
Bold - Analyte detected above associated reporting limit
SOP - Standard Operating Procedure
mg/s - milligrams per second
ND - Analyte not detected above associated reporting limit.

Appendix C

Field Forms

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-01-2024	Time:	10:00		

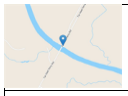
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-040124	04-01-2024 10:25		04-01-2024	10:30	7.49	9.28	44.80	64.90	470.41	18.65	Cloudy/brown	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:		Multi Meter ID:	706720
ISCO End Date and Time:			

WEATHER CONDITIONS	
Temperature (F):	70.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	10

Latitude:	34.7449036149127
Longitude:	-78.7852604714958
Staff Gauge Water Level Reading (ft):	13
Temperature Reading (degrees C):	26
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Re-installed ISCO; collected grab for CFR-TARHEEL-040124 at 1025
Sampling Comments:	ISCO program set to start at 0001 on 4/02

Staff gauge

ISCOs replaced

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-03-2024	Time:	10:35		

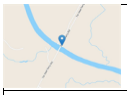
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-040324	04-03-2024 23:01		04-03-2024	11:09	6.93	6.06	110.70	60.80	123.06	26.12	Clear with particulates	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-03-2024 00:01	Multi Meter ID:	766679
ISCO End Date and Time:	04-03-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	70.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	20

Latitude:	34.7448953292932
Longitude:	-78.7852151399512
Staff Gauge Water Level Reading (ft):	7.5
Temperature Reading (degrees C):	19
Rain Reading (mm)	156



GPS Location (if collected)

General Comment:	Collected parameters for CFR-TARHEEL-24-040324; sample not collected; no errors for 4/2 or 4/3
Sampling Comments:	

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-05-2024	Time:	09:02		

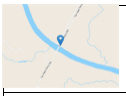
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-040424	04-04-2024 23:01		04-05-2024	09:20	7.66	6.58	64.50	38.50	204.71	21.99	Clear with particulates	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-04-2024 00:01	Multi Meter ID:	766679
ISCO End Date and Time:	04-04-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	62.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

Latitude:	34.7448953292932
Longitude:	-78.7852151399512
Staff Gauge Water Level Reading (ft):	6.9
Temperature Reading (degrees C):	13
Rain Reading (mm)	16



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-040224, CFR-TARHEEL-24-040324, CFR-TARHEEL-040424; no errors; set up DEQ; recalibrated main ISCO
Sampling Comments:	

ISCOs

Staff gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	HERBERT WATTS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-09-2024	Time:	08:25		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-040824	04-08-2024 23:01		04-09-2024	9:09	7.04	8.38	164.20	19.00	341.21	16.50	Clear	No	Yes

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-08-2024 00:01	Multi Meter ID:	706770
ISCO End Date and Time:	04-08-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	58.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	3

Latitude:	34.7449946165912
Longitude:	-78.7851833402867
Staff Gauge Water Level Reading (ft):	2
Temperature Reading (degrees C):	15
Rain Reading (mm)	0

GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-11-040524 (00:01-10:01), CFR-TARHEEL-8-040624 (16:01-03:01), CFR-TARHEEL-13-040724 (23:01-12:01), CFR-TARHEEL-24-040824 with DEQ Sample.
Sampling Comments:	ISCO malfunctioned - samples from Friday, Saturday, and Sunday mixed into two 2L jugs, will discard per David Yu; took grab sample for CFR-TARHEEL-040924 @ 0930

Staff Gauge

Iscos

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	KEN STUART|	Sampling Event:	Weekly River	Event Type:	Maintenance
Date:	04-10-2024	Time:	16:23		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
--	0		--	--	--	--	--	--	--	--	--	--	--

Sampling Data

Sampling Method:	--	Multi Meter Used:	--
ISCO Start Date and Time:	--	Multi Meter ID:	--
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	79.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	13

Latitude:	
Longitude:	
Staff Gauge Water Level Reading (ft):	
Temperature Reading (degrees C):	
Rain Reading (mm)	0

GPS Location (if collected)

General Comment:	Completed a change out of the regular Tarheel ISCO with a replacment isco and programmed to start at 00:01 on 4/11.
Sampling Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	TIM SMITH|SAIRA BOHAM	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-11-2024	Time:	09:37		

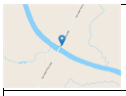
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-041024	04-10-2024 23:01		04-11-2024	09:39	7.78	8.82	31.80	17.30	176.74	19.35	Cloudy	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-10-2024 00:01	Multi Meter ID:	
ISCO End Date and Time:	04-10-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	66.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	16

Latitude:	34.7449909473137
Longitude:	-78.7851097604653
Staff Gauge Water Level Reading (ft):	2.8
Temperature Reading (degrees C):	18
Rain Reading (mm)	3



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-041024 and CFR-TARHEEL-041124 at 0945; parent ISCO reset to run at 4/12 at 0001
Sampling Comments:	

Staff Gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|	Sampling Event:	Weekly River	Event Type:	Maintenance
Date:	04-12-2024	Time:	09:25		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
--	0		--	--	--	--	--	--	--	--	--	--	--

Sampling Data

Sampling Method:	--	Multi Meter Used:	--
ISCO Start Date and Time:	--	Multi Meter ID:	--
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	63.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	16

Latitude:	34.74513991
Longitude:	-78.78521228
Staff Gauge Water Level Reading (ft):	2.5
Temperature Reading (degrees C):	19
Rain Reading (mm)	5

GPS Location (if collected)

General Comment:	Checked ISCO, program running for 4/12
Sampling Comments:	

ISCOs

Staff Gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-16-2024	Time:	12:07		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-041624	04-16-2024 23:01		04-16-2024	12:12	7.45	6.32	187.40	13.30	0.16	32.86	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-16-2024 00:01	Multi Meter ID:	706770
ISCO End Date and Time:	04-16-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

Latitude:	34.7448168688188
Longitude:	-78.7850524114231
Staff Gauge Water Level Reading (ft):	2
Temperature Reading (degrees C):	39
Rain Reading (mm)	0

GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-041224, CFR-TARHEEL-24-041324, CFR-TARHEEL-24-041424, and CFR-TARHEEL-24-041524; no errors. Fri-Mon and grab low volume- recalibrated
Sampling Comments:	

Staff gauge

Checking ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	HERBERT WATTS|Charles Pace	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-17-2024	Time:	15:14		

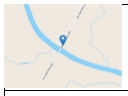
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-041724	04-17-2024 15:15		04-17-2024	15:15	7.07	8.44	155.30	11.10	146.04	23.08	Clear	No	--

Sampling Data

Sampling Method:	Bottle Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	706720
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	80.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	10

Latitude:	34.7450983957387
Longitude:	-78.7851256319655
Staff Gauge Water Level Reading (ft):	2.1
Temperature Reading (degrees C):	27
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	ISCO grabs significantly low; recalibrated ISCO and collected grab for CFR-TARHEEL-041724 @ 1515
Sampling Comments:	

River

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	SAIRA BOHAM|Charles Pace	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	04-18-2024	Time:	15:10		

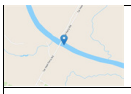
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24-CFR-TARHEEL-041824	04-18-2024 15:12		7.59	8.33	82.20	11.60	227.70	28.42	Clear	No	

Sampling Data

Sampling Method:	Peri Pump Grab	Tubing Depth (ft):	7.1	Distance to River Right:	38
Sampling Location:	Thalwag	Multi Meter Used:	Insitu Aqua Troll	Distance to River Left:	38
Total Depth to Bottom of Channel (ft):	14.2	Multi Meter ID:	706720	Distance to River (Right/Left) Units:	m

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	9

Latitude: 34.7442729357124
Longitude: -78.7850860373021



GPS Location (if collected)

General Comments:	
Sample Comments:	

RL

RR

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	HERBERT WATTS|Charles Pace	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-19-2024	Time:	10:05		

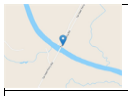
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-041824	04-18-2024 23:01		04-19-2024	10:11	7.76	7.79	109.40	11.00	478.73	19.86	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-18-2024 00:01	Multi Meter ID:	706770
ISCO End Date and Time:	04-18-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	71.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:	34.7450017963505
Longitude:	-78.7851070315619
Staff Gauge Water Level Reading (ft):	0.9
Temperature Reading (degrees C):	19
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-041624, CFR-TARHEEL-24-041724, CFR-TARHEEL-24-041824; no errors; recalibrated ISCO
Sampling Comments:	

Staff Gauge

ISCOs

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	KAYTLYN MARINGER|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-23-2024	Time:	10:26		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-042224	04-22-2024 23:01		04-23-2024	10:35	8.24	7.24	138.30	16.10	815.61	21.35	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-22-2024 00:01	Multi Meter ID:	706770
ISCO End Date and Time:	04-22-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	56.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

Latitude:	34.74493189
Longitude:	-78.78520873
Staff Gauge Water Level Reading (ft):	1
Temperature Reading (degrees C):	30
Rain Reading (mm)	11

GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-041924, CFR-TARHEEL-24-042024, CFR-TARHEEL-24-042124, CFR-TARHEEL-24-042224; no errors
Sampling Comments:	

Water gauge

Isco

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	KAYTLYN MARINGER|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-26-2024	Time:	09:01		

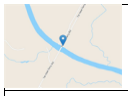
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-042524	04-25-2024 23:01		04-26-2024	09:04	7.56	7.91	174.70	10.20	195.67	17.43	Clear	No	

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-25-2024 00:01	Multi Meter ID:	706770
ISCO End Date and Time:	04-25-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	52.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	9

Latitude:	34.74493189
Longitude:	-78.78520873
Staff Gauge Water Level Reading (ft):	1
Temperature Reading (degrees C):	9
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-042324, CFR-TARHEEL-042424, CFR-TARHEEL-042524; no errors; ISCO still malfunctioning, replaced with new ISCO and set to start 0001 on 4/27
Sampling Comments:	

Water gauge

Isco

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|KEN STUART|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	04-30-2024	Time:	12:59		

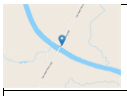
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-042924	04-29-2024 23:01		04-30-2024	13:08	7.53	7.22	116.60	13.80	221.20	23.82	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	04-29-2024 00:01	Multi Meter ID:	706770
ISCO End Date and Time:	04-29-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	80.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

Latitude:	34.7449593855736
Longitude:	-78.7851496263643
Staff Gauge Water Level Reading (ft):	0.5
Temperature Reading (degrees C):	29
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-042724, CFR-TARHEEL-24-042824, CFR-TARHEEL-24-042924; no errors
Sampling Comments:	

ISCOs

Staff gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-03-2024	Time:	08:48		

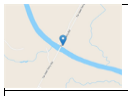
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-050224	05-02-2024 23:01		05-03-2024	08:55	7.99	7.14	-12.40	24.80	399.32	21.76	Cloudy	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-02-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	05-02-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	70.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	6

Latitude:	34.7449019012959
Longitude:	-78.7851087374743
Staff Gauge Water Level Reading (ft):	1
Temperature Reading (degrees C):	22
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-043024, CFR-TARHEEL-24-050124, CFR-TARHEEL-24-050224; no errors
Sampling Comments:	

Staff Gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|HERBERT WATTS|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-07-2024	Time:	12:00		

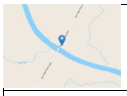
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-050624	05-06-2024 23:01		05-07-2024	12:03	6.57	6.54	4.00	36.60	337.08	25.28	Cloudy	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-06-2024 00:01	Multi Meter ID:	766679
ISCO End Date and Time:	05-06-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	77.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	10

Latitude:	34.7450110372057
Longitude:	-78.7850243935926
Staff Gauge Water Level Reading (ft):	3
Temperature Reading (degrees C):	31
Rain Reading (mm)	24



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-050324, CFR-TARHEEL-24-050424, CFR-TARHEEL-24-050524, CFR-TARHEEL-24-050624; no errors
Sampling Comments:	

ISCOs

Staff Gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|ERIN JANIGA|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-07-2024	Time:	11:16		

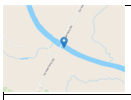
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-050724	05-07-2024 11:30		6.86	6.09	98.80	20.00	160.33	26.33	Clear	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Tubing Depth (ft):	8.5	Distance to River Right:	18
Sampling Location:	Thalweg	Multi Meter Used:	Insitu Aqua Troll	Distance to River Left:	59
Total Depth to Bottom of Channel (ft):	17	Multi Meter ID:	766679	Distance to River (Right/Left) Units:	m

WEATHER CONDITIONS	
Temperature (F):	77.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	10

Latitude:	34.7441698179825
Longitude:	-78.7851893643379



GPS Location (if collected)

General Comments:	
Sample Comments:	

River right

River left

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	ERIN JANIGA|KEN STUART|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-08-2024	Time:	11:58		

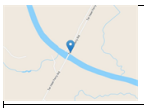
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24CFR-TARHEEL-24-050824	05-08-2024 11:07		6.57	6.54	4.00	36.60	337.08	25.28	Clear w particles	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	5/7/2024 12:07	Multi Meter ID:	706720
ISCO End Date and Time:	5/8/2024 11:07		

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

Longitude:	34.7449767212516
	-78.7852034287235



GPS Location (if collected)

General Comments:	
Sample Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|DEBORAH AYERS|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-10-2024	Time:	08:26		

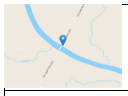
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-050924	05-09-2024 23:01		05-10-2024	08:35	7.28	6.76	29.70	14.60	183.90	22.09	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-09-2024 00:01	Multi Meter ID:	766679
ISCO End Date and Time:	05-09-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	67.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	8

Latitude:	34.74484003701626
Longitude:	-78.78517972401137
Staff Gauge Water Level Reading (ft):	4
Temperature Reading (degrees C):	21
Rain Reading (mm)	30



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-050724, CFR-TARHEEL-24-050824, CFR-TARHEEL-24-050924; no errors
Sampling Comments:	

ISCOs

Staff Gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	BRANDON WEIDNER|CHARLES PACE|	Sampling Event:	Weekly River	Event Type:	Maintenance
Date:	05-13-2024	Time:	09:30		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
--	0		--	--	--	--	--	--	--	--	--	--	--

Sampling Data

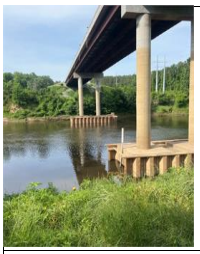
Sampling Method:	--	Multi Meter Used:	--
ISCO Start Date and Time:	--	Multi Meter ID:	--
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	66.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

Latitude:	34.7450041908337
Longitude:	-78.7851825314922
Staff Gauge Water Level Reading (ft):	1.75
Temperature Reading (degrees C):	18
Rain Reading (mm)	2

GPS Location (if collected)

General Comment:	Check on Tarheel and DEQ ISCOs, running good, no errors.
Sampling Comments:	



Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-14-2024	Time:	09:08		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-051324	05-13-2024 23:01		05-14-2024	09:09	7.76	7.11	-13.50	14.80	208.45	20.81	Clear	No	DUP|MS|MSD

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	5/13/2024 0:01	Multi Meter ID:	766679
ISCO End Date and Time:	5/13/2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	66.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	6

Latitude:	34.7454648394288
Longitude:	-78.7852400902565
Staff Gauge Water Level Reading (ft):	1.8
Temperature Reading (degrees C):	21
Rain Reading (mm)	5

GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-051024, CFR-TARHEEL-24-051124, CFR-TARHEEL-24-051224, and CFR-TARHEEL-24-051324 with DEQ; no errors
Sampling Comments:	

Staff gauge

ISCO with DEQ

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-17-2024	Time:	08:56		

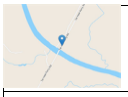
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-051624	05-16-2024 23:01		05-17-2024	09:05	7.45	8.50	26.80	317.00	220.61	22.13	Cloudy with particulates	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-16-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	05-16-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	71.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

Latitude:	34.7453199666387
Longitude:	-78.7850353140349
Staff Gauge Water Level Reading (ft):	12.5
Temperature Reading (degrees C):	24
Rain Reading (mm)	20



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-051424, CFR-TARHEEL-24-051524, and CFR-TARHEEL-24-051624; no errors
Sampling Comments:	

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|FELIPE SILVA|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-20-2024	Time:	09:40		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-052024	05-20-2024 09:50		5/20/2024	09:50	7.44	7.65	-8.90	85.60	98.20	21.73	Cloudy with particulates	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	706720
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	64.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	7

Latitude:	34.7449881
Longitude:	-78.7852373
Staff Gauge Water Level Reading (ft):	7
Temperature Reading (degrees C):	20
Rain Reading (mm)	2

GPS Location (if collected)

General Comment:	Replace ISCOs
Sampling Comments:	Grab sample due to setting up ISCO. ISCO set to run 0001 on 5/21

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-22-2024	Time:	09:28		

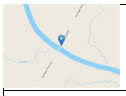
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-052124	05-21-2024 23:01		05-22-2024	09:30	8.06	8.21	-13.20	139.00	245.33	21.73	Cloudy with particulates	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-21-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	05-21-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	72.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

Latitude:	34.7449344467506
Longitude:	-78.7851646919867
Staff Gauge Water Level Reading (ft):	11.4
Temperature Reading (degrees C):	21
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Checked ISCO
Sampling Comments:	

ISCOs

Staff gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	FELIPE SILVA|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-24-2024	Time:	09:09		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-052424	05-24-2024 23:01		05-24-2024	09:30	8.15	6.63	-35.60	36.40	663.85	23.75	Clear with particles	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	706720
ISCO End Date and Time:	--		

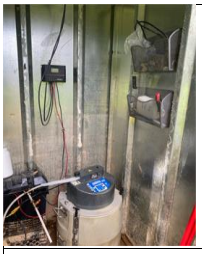
WEATHER CONDITIONS	
Temperature (F):	75.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	6

Latitude:	34.7453964791762
Longitude:	-78.7850960962697
Staff Gauge Water Level Reading (ft):	2
Temperature Reading (degrees C):	24
Rain Reading (mm)	5

GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-052124, CFR-TARHEEL-24-052224 and CFR-TARHEEL-052424 at 0930. ISCO didn't collect sample for 5/23 due to a power failure (low battery); ISCO program set up to start on Saturday at 0001
Sampling Comments:	

Water gauge



ISCO

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|FELIPE SILVA|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-28-2024	Time:	09:57		

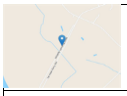
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-052824	05-28-2024 11:08		05-28-2024	10:53	7.86	6.20	34.60	18.00	279.94	28.54	Clear	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	766679
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	7

Latitude:	34.752670094025035
Longitude:	-78.78097666604454
Staff Gauge Water Level Reading (ft):	2.3
Temperature Reading (degrees C):	28
Rain Reading (mm)	21



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-20-052524, CFR-TARHEEL-13-052624, and CFR-TARHEEL-16-052724; no more liquid for various samples; collected CFR-TARHEEL-9-052825 and grab for 5/28 at 1108; reset ISCO to run at 0001 on 5/29
Sampling Comments:	

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-29-2024	Time:	09:32		

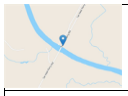
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-052924	05-29-2024 09:45		05-29-2024	09:50	8.25	1.49	-31.90	24.10	2767.80	24.26	Cloudy	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	766679
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	72.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

Latitude:	34.7449821507629
Longitude:	-78.7851686707863
Staff Gauge Water Level Reading (ft):	1.9
Temperature Reading (degrees C):	24
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Replaced Solar Panel Monitor for ISCO and reset ISCO for 0001 on 5/30 due to power and calibration errors
Sampling Comments:	

Staff Gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	BRANDON WEIDNER|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-30-2024	Time:	13:18		

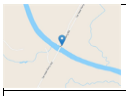
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-053024	05-30-2024 13:20		05-30-2024	13:20	8.02	7.59	-54.10	9.48	301.84	26.38	Clear	None	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	706682
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	8

Latitude:	34.7449543254956
Longitude:	-78.7851925120425
Staff Gauge Water Level Reading (ft):	2.2
Temperature Reading (degrees C):	30
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Tarheel ISCO still malfunctioning, overfilling samples; Shut down ISCO and collected grab for 5/30
Sampling Comments:	

Tarheel ISCO and water from over filling sampling containers/bottles

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	BRANDON WEIDNER|DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	05-31-2024	Time:	10:02		

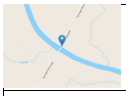
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-053124	05-31-2024 10:25		05-31-2024	10:26	7.71	7.15	-13.30	10.55	585.35	23.91	Clear	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	--	Multi Meter ID:	706770
ISCO End Date and Time:	--		

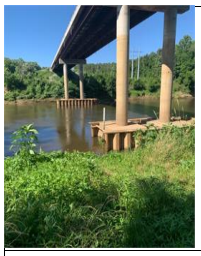
WEATHER CONDITIONS	
Temperature (F):	71.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	15

Latitude:	34.7449854860066
Longitude:	-78.7852788834265
Staff Gauge Water Level Reading (ft):	2
Temperature Reading (degrees C):	20
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Checked ISCO
Sampling Comments:	Switched ISCO and adjusted distributor arm; set to run 0001 on 6/1



Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-03-2024	Time:	09:23		

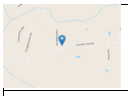
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-060224	06-02-2024 23:01		06-03-2024	12:10	8.32	6.05	-32.00	15.20	1654.80	26.76	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-02-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	06-02-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	69.00
Sky:	Partly Sunny
Precipitation:	Rain
Wind (mph)	10

Latitude:	34.84874426179266
Longitude:	-78.87397800317125
Staff Gauge Water Level Reading (ft):	1.5
Temperature Reading (degrees C):	24
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-060124 and CFR-TARHEEL-060224; no errors; issues with ISCO, collected grab in case today's sampling is incomplete: CFR-TARHEEL-060324 at 12:15
Sampling Comments:	ISCO missed sample 11 but resumed normal sampling for subsequent samples; unsure of reason for missed sample, will check tubing and pipe on Wednesday with boat

ISCOs

Staff gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|FELIPE SILVA|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-07-2024	Time:	09:55		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-060424	06-04-2024 23:01		06-07-2024	09:54	7.87	7.31	-30.70	10.80	351.01	24.44	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-06-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	06-06-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	79.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

Latitude:	34.744938894726
Longitude:	-78.7851738680669
Staff Gauge Water Level Reading (ft):	0.6
Temperature Reading (degrees C):	21
Rain Reading (mm)	18

GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-060324, CFR-TARHEEL-24-060424, CFR-TARHEEL-24-060524, and CFR-TARHEEL-24-060624; no errors
Sampling Comments:	Replaced buoy for sampling inlet pipe

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-10-2024	Time:	10:13		

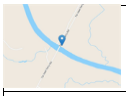
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-060724	06-07-2024 23:01		06-10-2024	10:15	8.16	1.18	-29.60	35.30	2213.10	24.83	Clear with particulates	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-07-2024 00:01	Multi Meter ID:	706682
ISCO End Date and Time:	06-07-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	69.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	3

Latitude:	34.7448855533647
Longitude:	-78.7850777769793
Staff Gauge Water Level Reading (ft):	0.4
Temperature Reading (degrees C):	26
Rain Reading (mm)	4



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-060724, CFR-TARHEEL-24-060824, CFR-TARHEEL-24-060924; no errors
Sampling Comments:	Set up DEQ

ISCOs

Staff gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	FELIPE SILVA|SAIRA BOHAM	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-12-2024	Time:	09:49		

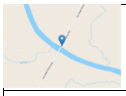
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-061124	06-11-2024 23:01		06-12-2024	09:50	8.05	5.49	-22.70	8.18	945.02	24.40	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-11-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	06-11-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	75.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

Latitude:	34.744995
Longitude:	-78.7852248
Staff Gauge Water Level Reading (ft):	0.5
Temperature Reading (degrees C):	25
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-061024 and CFR-TARHEEL-24-061124 ; no errors
Sampling Comments:	DEQ ISCO was overflowing, performed recalibration and restarted program for 6/13

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-13-2024	Time:	09:19		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-061324	06-13-2024 23:01		06-13-2024	09:26	8.50	7.50	-46.80	7.99	631.57	24.36	Clear	No	DUP|MS|MSD

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-12-2024 00:01	Multi Meter ID:	706682
ISCO End Date and Time:	06-12-2024 23:01		

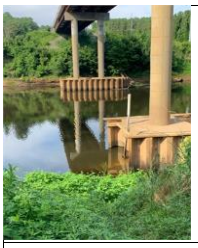
WEATHER CONDITIONS	
Temperature (F):	76.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	0

Latitude:	34.7449671522453
Longitude:	-78.7850940684493
Staff Gauge Water Level Reading (ft):	0.5
Temperature Reading (degrees C):	25
Rain Reading (mm)	0

GPS Location (if collected)

General Comment:	Collected CFR-Tarheel-24-061224; no errors; checked DEQ
Sampling Comments:	

ISCOs



Staff gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	KEN STUART|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-18-2024	Time:	11:03		

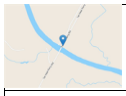
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-061724	06-17-2024 23:01		06-18-2024	11:25	7.93	7.43	32.10	9.37	227.96	26.95	Clear	None	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-17-2024 00:01	Multi Meter ID:	706720
ISCO End Date and Time:	06-17-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	8

Latitude:	34.7450055
Longitude:	-78.7851985
Staff Gauge Water Level Reading (ft):	0
Temperature Reading (degrees C):	35
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	CFR-TARHEEL-24-061324, CFR-TARHEEL-24-061424, CFR-TARHEEL-24-061524, CFR-TARHEEL-24-061624, CFR-TARHEEL-24-061724; No errors, ISCO running.
Sampling Comments:	

Low river water levels, staff gauge out of the water

ISCO shed after sample collection

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|FELIPE SILVA|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-21-2024	Time:	10:39		

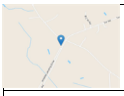
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-062024	06-20-2024 23:01		06-21-2024	11:40	7.69	6.44	19.00	13.20	418.49	28.81	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-20-2024 00:01	Multi Meter ID:	706751
ISCO End Date and Time:	06-20-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	8

Latitude:	34.7555750288799
Longitude:	-78.7792030979417
Staff Gauge Water Level Reading (ft):	0
Temperature Reading (degrees C):	42
Rain Reading (mm)	0



GPS Location (if collected)

General Comment:	Collected CFR-TARHEEL-24-061824, CFR-TARHEEL-24-061924, and CFR-TARHEEL-24-062024; no errors
Sampling Comments:	

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	HERBERT WATTS|KEN STUART|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-25-2024	Time:	09:43		

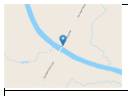
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-062524	06-25-2024 10:35		06-25-2024	10:28	7.65	6.07	84.10	5.19	245.75	27.63	Clear	None	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:		Multi Meter ID:	706770
ISCO End Date and Time:			

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	6

Latitude:	34.7449591
Longitude:	-78.7852296
Staff Gauge Water Level Reading (ft):	0
Temperature Reading (degrees C):	28
Rain Reading (mm)	3



GPS Location (if collected)

General Comment:	Power issue intermittent power to ISCO and solar panel controller. Maintenance requested on solar panel and wiring. Collected CFR-TARHEEL-24-062224, Collected CFR-TARHEEL-24-062324, Collected CFR-TARHEEL-21-062424 @2001, Collected CFR-TARHEEL-21-062524 @2301; June 24 missed 21:01, 22:01, and 23:0; June 25 missed 10:00, 17:00, & 18:00.Grab samples collected CFR-TARHEEL-062524@10:35; program restarted with new battery.
Sampling Comments:	ISCO grab at 1035 because of power fail

Staff gauge

ISCOs

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	BRANDON WEIDNER|SAIRA BOHAM|	Sampling Event:	Weekly River	Event Type:	Sampling
Date:	06-28-2024	Time:	09:25		

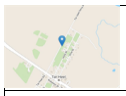
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-24-062724	06-27-2024 23:01		06-28-2024	09:30	8.06	6.76	-52.70	26.90	557.97	26.49	Clear	None	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	06-27-2024 00:01	Multi Meter ID:	706751
ISCO End Date and Time:	06-27-2024 23:01		

WEATHER CONDITIONS	
Temperature (F):	79.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	7

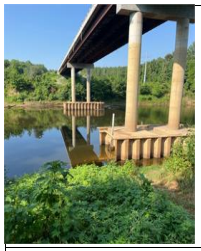
Latitude:	34.7374455255505
Longitude:	-78.7899238275433
Staff Gauge Water Level Reading (ft):	0.5
Temperature Reading (degrees C):	26
Rain Reading (mm)	10



GPS Location (if collected)

General Comment:	ISCO check and sample collection. Replace battery. Collect samples CFR-TARHEEL-24-062624 and CFR-TARHEEL-24-062724. No errors
Sampling Comments:	

ISCOs



Staff Gauge

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	HERBERT WATTS|	Sampling Event:	Weekly River	Event Type:	Maintenance
Date:	06-29-2024	Time:	08:45		

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time		mg/L	mV	NTU	µS/cm	°C			
--	0		--	--	--	--	--	--	--	--	--	--	

Sampling Data

Sampling Method:	--	Multi Meter Used:	--
ISCO Start Date and Time:	--	Multi Meter ID:	--
ISCO End Date and Time:	--		

WEATHER CONDITIONS	
Temperature (F):	80.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	2

Latitude:	34.7450001
Longitude:	-78.7852053
Staff Gauge Water Level Reading (ft):	0
Temperature Reading (degrees C):	22
Rain Reading (mm)	0

GPS Location (if collected)

General Comment:	Changing battery
Sampling Comments:	

Hook up and leave spare batteries

Staff gauge out of water

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	Bladen	Project Manager:	Tracy Ovbey
Samplers:	SAIRA BOHAM|Charles Peace	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	04-18-2024	Time:	10:40		

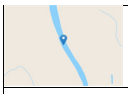
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24-CFR-BLADEN-041824	04-18-2024 10:50		7.28	8.18	88.00	37.10	592.10	26.15	Clear	No	DUP/MS/MSD

Sampling Data

Sampling Method:	Peri Pump Grab	Tubing Depth (ft):	6.5	Distance to River Right:	20
Sampling Location:	Thalweg	Multi Meter Used:	Insitu Aqua Troll	Distance to River Left:	56
Total Depth to Bottom of Channel (ft):	13	Multi Meter ID:	706720	Distance to River (Right/Left) Units:	m

WEATHER CONDITIONS	
Temperature (F):	77.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	8

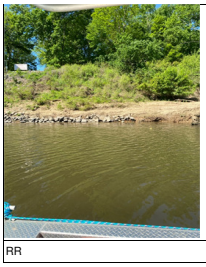
Latitude: 34.7724913643687
Longitude: -78.7983085096647



GPS Location (if collected)

General Comments:	
Sample Comments:	

RL



RR

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-RM-76	Project Manager:	Tracy Ovbey
Samplers:	KEN STUART|Karen Teague	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-06-2024	Time:	11:39		

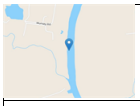
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0524-CFR-RM-76-050624	05-06-2024	12:00	8.12	5.89	-10.10	6.33	300.94	25.91	Clear	No	--

Sampling Data

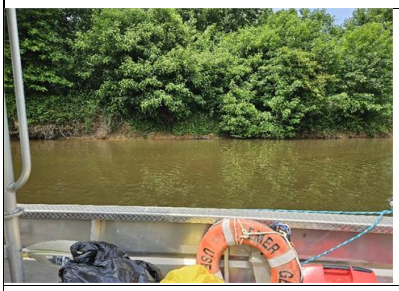
Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll	Flow Rate:	--
Water Quality Condition:		Multi Meter ID:	706770	Flow Rate Units:	--

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	9

Latitude:	34.8540606
Longitude:	-78.827062



GPS Location (if collected)



River right

River left

General Comments:	CAP SW Wet sample
Sampling Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|ERIN JANIGA|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-07-2024	Time:	11:16		

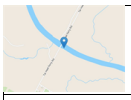
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CFR-TARHEEL-050724	05-07-2024 11:30		6.86	6.09	98.80	20.00	160.33	26.33	Clear	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Tubing Depth (ft):	8.5	Distance to River Right:	18
Sampling Location:	Thalweg	Multi Meter Used:	Insitu Aqua Troll	Distance to River Left:	59
Total Depth to Bottom of Channel (ft):	17	Multi Meter ID:	766679	Distance to River (Right/Left) Units:	m

WEATHER CONDITIONS	
Temperature (F):	77.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	10

Latitude:	34.7441698179825
Longitude:	-78.7851893643379



GPS Location (if collected)

General Comments:	
Sample Comments:	

River right

River left

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	CFR-TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	ERIN JANIGA|KEN STUART|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-08-2024	Time:	11:58		

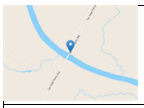
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24CFR-TARHEEL-24-050824	05-08-2024 11:07		6.57	6.54	4.00	36.60	337.08	25.28	Clear w particles	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	5/7/2024 12:07	Multi Meter ID:	706720
ISCO End Date and Time:	5/8/2024 11:07		

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

Longitude:	34.7449767212516
	-78.7852034287235



GPS Location (if collected)

General Comments:	
Sample Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	GBC-1	Project Manager:	Tracy Ovbey
Samplers:	KEN STUART|Karen Teague	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-06-2024	Time:	17:09		

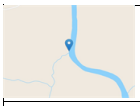
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0524-GBC-1-050624	05-06-2024 17:15		4.21	7.58	331.70	20.50	118.41	21.77	Clear	No	--

Sampling Data

Sampling Method:	Bottle Grab	Multi Meter Used:	Insitu Aqua Troll	Flow Rate:	--
Water Quality Condition:	--	Multi Meter ID:	706770	Flow Rate Units:	--

WEATHER CONDITIONS	
Temperature (F):	70.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	6

Latitude: 34.8148827
Longitude: -78.8214056



GPS Location (if collected)

Upstream on gbc-1

Gbc-1 flowing into the river

General Comments:	Flow rate on separate field form

Sampling Comments:	Bottle grab sample from stream channel

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name	Chemours Fayetteville	Location ID:	KINGS	Project Manager:	Tracy Ovbey
Samplers	KEN STUART|SAIRA BOHAM|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	04-22-2024	Time:	13:16		

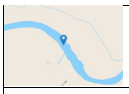
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24-CFR-KINGS-042224	04-22-2024 13:20		7.79	7.22	42.10	11.60	305.03	19.76	Clear	No	

Sampling Data

Sampling Method:	Peri Pump Grab	Tubing Depth (ft):	8.1	Distance to River Right:	45
Sampling Location:	Thalweg	Multi Meter Used:	Insitu Aqua Troll	Distance to River Left:	56
Total Depth to Bottom of Channel (ft):	16.2	Multi Meter ID:		Distance to River (Right/Left) Units:	m

WEATHER CONDITIONS	
Temperature (F):	56.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	12

Latitude:	34.4064157997493
Longitude:	-78.2947000404082



GPS Location (if collected)

General Comments:	
Sample Comments:	

River right

River left

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	Lock and Dam North	Project Manager:	Tracy Ovbey
Samplers:	KEN STUART|Karen Teague	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-06-2024	Time:	14:45		

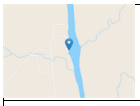
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0524-Lock and Dam North-050624	05-06-2024 14:30		5.53	4.39	257.90	4.07	109.66	23.28	Clear	No	--

Sampling Data

Sampling Method:	Bottle Grab	Multi Meter Used:	Insitu Aqua Troll	Flow Rate:	13.7
Water Quality Condition:	--	Multi Meter ID:	706770	Flow Rate Units:	L/min

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	8

Latitude: 34.8338236
Longitude: -78.8235066



GPS Location (if collected)

North seep

General Comments:	
Sampling Comments:	Bottle grab for CAP wet

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	Lock-Dam Seep	Project Manager:	Tracy Ovbey
Samplers:	KEN STUART|Karen Teague	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-06-2024	Time:	14:14		

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0524-Lock-Dam Seep-050624	05-06-2024 14:20		7.15	3.15	46.40	15.20	160.92	25.43	Clear	No	--

Sampling Data

Sampling Method:	Bottle Grab	Multi Meter Used:	Insitu Aqua Troll	Flow Rate:	16
Water Quality Condition:	--	Multi Meter ID:	706770	Flow Rate Units:	L/min

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	8

Latitude:	34.8338809
Longitude:	-78.8237227

GPS Location (if collected)

Water from the tree line

Water flowing into river

General Comments:	
Sampling Comments:	Bottle grab sample

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	OLDOF-2	Project Manager:	Tracy Ovbey
Samplers:	CHARLES PACE|KEN STUART|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-07-2024	Time:	16:50		

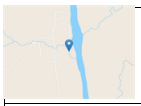
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0524-OLDOF-2-050724	05-07-2024	17:00	5.97	6.99	40.90	6.49	327.60	26.49	Clear	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll	Flow Rate:	--
Water Quality Condition:	--	Multi Meter ID:	706770	Flow Rate Units:	--

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	15

Latitude:	34.8323506928922
Longitude:	-78.82381138



GPS Location (if collected)

General Comments:	Additional sample requested by client partner because ISCO had to be reset

Sampling Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	OLDOF-2	Project Manager:	Tracy Ovbey
Samplers:	ERIN JANIGA|KEN STUART|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-08-2024	Time:	16:23		

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24OLDOF-2-24-050824	05-08-2024 15:36		5.97	6.99	40.90	6.49	327.60	26.49	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-07-2024 16:36	Multi Meter ID:	706720
ISCO End Date and Time:	05-08-2024 15:36		

WEATHER CONDITIONS	
Temperature (F):	88.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	11

Latitude:	34.8323506928922
Longitude:	-78.8238113848693

GPS Location (if collected)

General Comments:	
Sample Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	OUTFALL 002	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-06-2024	Time:	12:27		

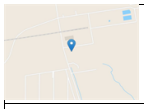
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24OUTFALL 002-24-050724	05-07-2024 11:42		8.40	7.94	-16.10	15.00	674.34	27.90	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-06-2024 12:42	Multi Meter ID:	706720
ISCO End Date and Time:	05-07-2024 11:42		

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	9

Latitude:	34.8400932317986
Longitude:	-78.8404506573956



GPS Location (if collected)

General Comments:	
Sample Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	Excess River Water	Project Manager:	Tracy Ovbey
Samplers:	DEBORAH AYERS|SAIRA BOHAM|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-06-2024	Time:	12:17		

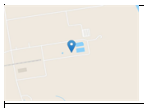
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24River Water Intake-24-050724	05-07-2024 10:06		8.22	0.00	-78.50	20.50	1493.10	28.20	Clear	No	DUP|MS|MSD

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-06-2024 11:06	Multi Meter ID:	706720
ISCO End Date and Time:	05-07-2024 10:06		

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	9

Latitude:	34.8435381720323
Longitude:	-78.834470001919



GPS Location (if collected)

General Comments:	
Sample Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	TARHEEL	Project Manager:	Tracy Ovbey
Samplers:	SAIRA BOHAM|Charles Pace	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	04-18-2024	Time:	15:10		

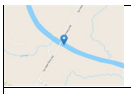
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24-CFR-TARHEEL-041824	04-18-2024 15:12		7.59	8.33	82.20	11.60	227.70	28.42	Clear	No	

Sampling Data

Sampling Method:	Peri Pump Grab	Tubing Depth (ft):	7.1	Distance to River Right:	38
Sampling Location:	Thalwag	Multi Meter Used:	Insitu Aqua Troll	Distance to River Left:	38
Total Depth to Bottom of Channel (ft):	14.2	Multi Meter ID:	706720	Distance to River (Right/Left) Units:	m

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	9

Latitude: 34.7442729357124
Longitude: -78.7850860373021



GPS Location (if collected)

General Comments:	
Sample Comments:	

RL

RR

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	WC-1	Project Manager:	Tracy Ovbey
Samplers:	BRANDON WEIDNER|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-07-2024	Time:	17:16		

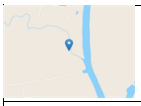
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0524-WC-1-050724	05-07-2024	17:20	5.40	6.54	-2.00	23.00	199.22	26.52	Clear	No	--

Sampling Data

Sampling Method:	Peri Pump Grab	Multi Meter Used:	Insitu Aqua Troll	Flow Rate:	--
Water Quality Condition:	--	Multi Meter ID:	706770	Flow Rate Units:	--

WEATHER CONDITIONS	
Temperature (F):	86.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	15

Latitude:	34.851769535252
Longitude:	-78.8290373698235



GPS Location (if collected)

General Comments:	Moved location WC-1 further up stream to avoid rising river conditions. Took additional grab sample per client partner due to ISCO reset.
Sampling Comments:	

PARSONS

SURFACE WATER SAMPLING RECORD

Site Name:	Chemours Fayetteville	Location ID:	WC-1	Project Manager:	Tracy Ovbey
Samplers:	ERIN JANIGA|KEN STUART|	Sampling Event:	Quarterly CAP	Event Type:	Sampling
Date:	05-08-2024	Time:	16:53		

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP2Q24WC-1-24-050824	05-08-2024 16:24		5.40	6.54	-2.00	23.00	199.22	26.52	Clear	No	--

Sampling Data

Sampling Method:	ISCO Composite	Multi Meter Used:	Insitu Aqua Troll
ISCO Start Date and Time:	05-07-2024 17:24	Multi Meter ID:	706720
ISCO End Date and Time:	05-08-2024 16:24		

WEATHER CONDITIONS	
Temperature (F):	88.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	11

Latitude:	34.8517762546098
Longitude:	-78.8289128360505

GPS Location (if collected)

General Comments:	
Sample Comments:	

WC-1

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: BLADEN-10DR | Well Diameter: 2 Inches

Samplers: DEBORAH AYERS | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 42

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-12-2024 | Time: 10:50

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 4.454

Initial Depth to Water (ft.): 19.56 | Depth to Well Bottom (ft.): 47.4

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
11:01	20.16	300.00	2100.00	5.45	0.19	71.30	17.90	67.29	18.92	Clear	Eggy	
11:06	20.16	300.00	1500.00	5.47	0.14	47.50	10.30	66.51	18.99	Clear	Eggy	
11:11	20.10	300.00	1500.00	5.59	0.12	35.50	7.72	67.28	19.07	Clear	Eggy	
11:16	20.09	300.00	1500.00	5.69	0.12	24.90	7.72	67.90	19.14	Clear	Eggy	
11:21	20.09	300.00	1500.00	5.75	0.10	21.30	7.14	67.41	19.12	Clear	Eggy	
11:26	20.04	300.00	1500.00	5.74	0.10	24.30	6.27	66.76	19.05	Clear	Eggy	
11:31	20.04	300.00	1500.00	5.74	0.09	26.90	4.47	66.51	19.37	Clear	Eggy	
11:36	20.04	300.00	1500.00	5.73	0.08	30.60	3.83	66.31	19.42	Clear	Eggy	
11:41	20.04	300.00	1500.00	5.75	0.08	28.90	2.96	66.45	19.49	Clear	Eggy	
11:46	20.04	300.00	1500.00	5.76	0.07	30.70	2.75	66.45	19.25	Clear	Eggy	
11:51	20.04	300.00	1500.00	5.77	0.07	29.90	2.17	66.58	20.17	Clear	Eggy	
11:56	20.04	300.00	1500.00	5.77	0.07	30.50	2.55	66.38	20.11	Clear	Eggy	

Screen Interval: 9.8 - 19.8

Sampling Data

Method: Low Flow | Date: 04-12-2024 | Time: 11:56

Field Filtered: No

Purge Start Time: 10:54

Total Volume Purged (mL): 18600

Field Parameters

STABILIZED PARAMETERS	
pH	5.77
Spec. Cond.(µS/cm)	66.38
Turbidity (NTU)	2.55
Temp.(°C)	20.11
DO (mg/L)	0.07
ORP (mV)	30.50

Sample ID: CAP2Q24-BLADEN-10DR-041224

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	66.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	14

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: LTW-01 | Well Diameter: 2 Inches

Samplers: HERBERT WATTS Charles Pace | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 20

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-15-2024 | Time: 11:37

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 1.474

Initial Depth to Water (ft.): 16.79 | Depth to Well Bottom (ft.): 26

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
11:50	17.31	220.00	440.00	3.96	1.08	347.60	5.11	128.53	19.56	Clear	No	
11:55	17.52	220.00	1100.00	3.96	0.98	368.30	5.81	128.88	18.90	Clear	No	
12:00	17.59	220.00	1100.00	3.99	0.90	366.20	8.62	128.59	18.78	Clear	No	
12:05	17.59	220.00	1100.00	4.01	0.90	364.70	5.52	127.55	18.93	Clear	No	

Screen Interval: 11.0-26.0

Sampling Data

Purge Start Time: 11:48

Method: Low Flow | Date: 04-15-2024 | Time: 12:06

Total Volume Purged (mL): 3740

Field Filtered:

Field Parameters

STABILIZED PARAMETERS	
pH	4.01
Spec. Cond.(µS/cm)	127.55
Turbidity (NTU)	5.52
Temp.(°C)	18.93
DO (mg/L)	0.90
ORP (mV)	364.70

Sample ID: CAP2Q24-LTW-01-041524

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	80.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: LTW-02 | Well Diameter: 2 Inches

Samplers: HERBERT WATTS Charles Pace | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 30

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-15-2024 | Time: 10:03

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = -1.824

Initial Depth to Water (ft.): 11.4 | Depth to Well Bottom (ft.):

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:15	11.49	220.00	660.00	4.13	1.76	290.00	1.41	100.36	18.48	Clear	No	
10:20	11.49	220.00	1100.00	4.17	1.70	350.90	1.54	101.02	18.21	Clear	No	
10:25	11.49	220.00	1100.00	4.19	1.68	387.90	0.81	100.96	18.19	Clear	No	
10:30	11.49	220.00	1100.00	4.23	1.53	391.20	0.73	100.19	18.27	Clear	No	
10:35	11.49	220.00	1100.00	4.25	1.42	385.00	0.87	99.96	18.39	Clear	No	
10:40	11.49	220.00	1100.00	4.32	1.17	365.20	1.09	100.07	18.31	Clear	No	
10:45	11.49	220.00	1100.00	4.4	0.60	346.10	0.66	102.23	18.19	Clear	No	
10:50	11.49	220.00	1100.00	4.4	0.52	338.80	0.54	102.13	18.33	Clear	No	
10:55	11.49	220.00	1100.00	4.44	0.44	333.00	0.52	103.69	18.31	Clear	No	
11:00	11.49	220.00	1100.00	4.44	0.44	332.10	0.44	103.42	18.37	Clear	No	
11:05	11.49	220.00	1100.00	4.46	0.44	328.50	0.60	103.11	18.34	Clear	No	

Screen Interval: 28.0-38.0

Sampling Data

Purge Start Time: 10:12

Method: Low Flow | Date: 04-15-2024 | Time: 11:05 | Total Volume Purged (mL): 11660

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.46
Spec. Cond.(µS/cm)	103.11
Turbidity (NTU)	0.60
Temp.(°C)	18.34
DO (mg/L)	0.44
ORP (mV)	328.50

Sample ID: CAP2Q24-LTW-02-041524

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	72.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	8

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	LTW-03	Well Diameter:	2 Inches
Samplers:	HERBERT WATTS Charles Pace	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 25
Pump Loc: within screen
Method: Peristaltic Pump Date: 04-15-2024 Time: 14:40

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 2.59

Initial Depth to Water (ft.): 13.81 Depth to Well Bottom (ft.): 30

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
14:50	14.41	300.00	600.00	4.66	0.04	241.20	37.60	98.95	18.04	Clear	No	
14:55	14.62	300.00	1500.00	4.69	0.01	222.30	3.57	98.72	17.87	Clear	No	
15:00	14.74	300.00	1500.00	4.7	0.00	215.50	5.33	98.58	17.86	Clear	No	
15:05	14.81	300.00	1500.00	4.7	0.01	209.10	2.94	98.72	17.86	Clear	No	

Screen Interval: 15.0-30.0

Sampling Data

Purge Start Time: 14:48
Method: Low Flow Date: 04-15-2024 Time: 15:05 Total Volume Purged (mL): 5100
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.70
Spec. Cond.(µS/cm)	98.72
Turbidity (NTU)	2.94
Temp.(°C)	17.86
DO (mg/L)	0.01
ORP (mV)	209.10

Sample ID: CAP2Q24-LTW-03-041524
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	7

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: LTW-04 | Well Diameter: 2 Inches

Samplers: HERBERT WATTS|SAIRA BOHAM | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 22

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-10-2024 | Time: 10:13

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 2.774

Initial Depth to Water (ft.): 11.26 | Depth to Well Bottom (ft.): 28.6

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:50	13.46	240.00	1200.00	4.15	2.64	272.10	128.00	68.27	17.44	Murky	No	
10:55	14.26	210.00	1050.00	4.17	2.71	286.90	113.00	66.59	17.46	Murky	No	
11:00	14.92	210.00	1050.00	4.26	2.50	287.70	87.20	64.69	17.50	Cloudy	No	
11:05	15.10	210.00	1050.00	4.26	2.50	287.70	87.20	64.69	17.50	Cloudy	No	
11:10	15.35	210.00	1050.00	4.34	1.98	270.30	81.00	62.99	17.72	Cloudy	No	
11:15	15.51	210.00	1050.00	4.34	1.70	264.00	67.00	61.38	17.81	Cloudy	No	
11:20	15.70	210.00	1050.00	4.42	1.55	259.50	52.20	60.67	17.82	Cloudy	No	
11:25	15.80	210.00	1050.00	4.48	1.33	253.60	59.80	59.40	17.75	Cloudy	No	
11:30	15.80	180.00	900.00	4.46	1.21	255.90	55.80	59.96	17.90	Cloudy	No	
11:35	15.80	180.00	900.00	4.56	1.01	244.10	48.20	58.23	18.02	Cloudy	No	
11:40	15.80	180.00	900.00	4.59	0.72	239.80	40.70	57.49	18.37	Cloudy	No	
11:45	15.80	180.00	900.00	4.58	0.74	242.20	39.00	57.76	18.34	Cloudy	No	
11:50	15.80	180.00	900.00	4.58	0.66	244.90	35.90	57.59	18.17	Cloudy	No	
11:55	15.80	180.00	900.00	4.56	0.50	247.20	29.90	57.72	18.09	Cloudy	No	
12:00	15.80	180.00	900.00	4.58	0.74	248.70	27.40	58.02	18.09	Cloudy	No	
12:05	15.80	180.00	900.00	4.59	0.48	249.40	23.20	57.54	10.07	Cloudy	No	
12:10	15.80	180.00	900.00	4.64	0.64	243.30	22.70	56.87	18.20	Cloudy	No	
12:15	15.80	180.00	900.00	4.63	0.54	246.10	21.40	57.21	17.98	Cloudy	No	
12:20	15.80	180.00	900.00	4.67	0.45	243.30	17.00	56.77	18.02	Clear	No	
12:25	15.80	180.00	900.00	4.64	0.43	247.50	15.80	57.01	18.06	Clear	No	
12:30	15.80	180.00	900.00	4.68	0.43	242.30	15.80	56.25	17.97	Clear	No	

Screen Interval: 12.0-27.0

Sampling Data

Purge Start Time: 10:45

Method: Low Flow | Date: 04-10-2024 | Time: 12:30 | Total Volume Purged (mL): 20250

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.68
Spec. Cond.(µS/cm)	56.25
Turbidity (NTU)	15.80
Temp.(°C)	17.97
DO (mg/L)	0.43
ORP (mV)	242.30

Sample ID: CAP2Q24-LTW-04-041024

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	67.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: LTW-05 | Well Diameter: 2 Inches

Samplers: HERBERT WATTS|SAIRA BOHAM | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 35

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-10-2024 | Time: 12:52

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 5.589

Initial Depth to Water (ft.): 12.39 | Depth to Well Bottom (ft.): 47.32

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
13:10	12.55	200.00	800.00	4.17	2.71	299.40	22.20	74.59	18.96	Clear	No	
13:15	12.48	200.00	1000.00	4.25	1.34	248.50	37.40	74.48	18.97	Cloudy	No	
13:20	12.37	200.00	1000.00	4.31	0.33	265.90	37.60	73.63	19.19	Cloudy	No	
13:25	12.47	200.00	1000.00	4.32	0.16	257.78	32.60	73.98	19.45	Cloudy	No	
13:30	12.47	200.00	1000.00	4.31	0.13	253.70	31.10	74.05	19.68	Cloudy	No	
13:35	12.47	200.00	1000.00	4.31	0.10	243.80	28.10	74.23	19.55	Cloudy	No	
13:40	12.47	200.00	1000.00	4.3	0.09	240.10	26.40	74.40	19.60	Cloudy	No	
13:45	12.47	200.00	1000.00	4.32	0.07	231.60	31.30	74.26	19.47	Cloudy	No	
13:50	12.47	200.00	1000.00	4.32	0.07	220.00	30.40	73.96	19.61			
13:55	12.47	200.00	1000.00	4.33	0.05	213.90	31.20	73.90	19.70	Cloudy	No	
14:00	12.47	200.00	1000.00	4.34	0.05	210.70	29.30	73.61	20.12	Cloudy	No	
14:05	12.47	200.00	1000.00	4.35	0.06	208.00	25.80	50.85	20.31	Cloudy	No	
14:10	12.47	200.00	1000.00	4.34	0.09	205.50	25.50	73.96	20.41	Cloudy	No	
14:15	12.47	200.00	1000.00	4.33	0.08	206.00	21.50	73.94	20.43	Cloudy	No	
14:20	12.47	200.00	1000.00	4.33	0.05	203.90	20.50	73.95	20.79	Clear	No	
14:25	12.47	200.00	1000.00	4.32	0.05	203.10	16.50	73.90	20.85	Clear	No	
14:30	12.47	200.00	1000.00	4.31	0.04	202.10	15.90	74.16	20.98	Clear	No	
14:35	12.47	200.00	1000.00	4.31	0.04	201.50	11.90	74.06	20.98	Clear	No	
14:40	12.47	200.00	1000.00	4.31	0.05	199.00	12.50	76.14	20.38	Clear	No	
14:45	12.47	200.00	1000.00	4.29	0.05	199.90	11.60	76.16	20.36	Clear	No	
14:50	12.47	200.00	1000.00	4.3	0.05	195.70	9.37	76.35	20.05	Clear	No	

Screen Interval: 29.0-44.0

Sampling Data

Purge Start Time: 13:06

Method: Low Flow | Date: 04-10-2024 | Time: 14:50

Total Volume Purged (mL): 20800

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.30
Spec. Cond.(µS/cm)	76.35
Turbidity (NTU)	9.37
Temp.(°C)	20.05
DO (mg/L)	0.05
ORP (mV)	195.70

Sample ID: CAP2Q24-LTW-05-041024

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	73.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	5

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RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: OW-28 | Well Diameter: 2 Inches

Samplers: BROCK SHATTUCK Charles Pace | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 25

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-16-2024 | Time: 10:10

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 3.214

Initial Depth to Water (ft.): 9.19 | Depth to Well Bottom (ft.): 30

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:20	9.58	300.00	900.00	4.39	0.10	153.60	4.68	54.66	17.75	Clear	No	
10:25	9.69	300.00	1500.00	4.33	0.08	126.40	1.60	52.83	17.75	Clear	No	
10:30	9.72	300.00	1500.00	4.38	0.06	110.80	4.72	52.82	17.92	Clear	No	
10:35	9.73	300.00	1500.00	4.38	0.04	104.60	1.22	52.68	17.75	Clear	No	
10:40	9.72	300.00	1500.00	4.38	0.04	101.10	1.00	52.82	17.87	Clear	No	
10:45	9.72	300.00	1500.00	4.39	0.04	96.40	0.80	52.76	17.82	Clear	No	

Screen Interval:

Sampling Data

Purge Start Time: 10:17

Method: Low Flow | Date: 04-16-2024 | Time: 10:45

Total Volume Purged (mL): 8400

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.39
Spec. Cond.(µS/cm)	52.76
Turbidity (NTU)	0.80
Temp.(°C)	17.82
DO (mg/L)	0.04
ORP (mV)	96.40

Sample ID: CAP2Q24-OW-28-041624

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	75.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	4

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RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: OW-33 | Well Diameter: 2 Inches

Samplers: BROCK SHATTUCK Charles Pace | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 25

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-16-2024 | Time: 09:25

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 3.202

Initial Depth to Water (ft.): 8.99 | Depth to Well Bottom (ft.): 29

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
09:30	9.05	300.00	600.00	4.01	0.14	170.60	308.00	68.20	18.12	Orange	No	
09:35	9.05	300.00	1500.00	4.08	0.09	232.70	14.90	67.36	18.23	Clear	No	
09:40	9.05	300.00	1500.00	4.2	0.06	266.00	3.85	66.87	18.14	Clear		
09:45	9.05	300.00	1500.00	4.25	0.02	265.90	5.42	66.73	18.09	Clear		
09:50	9.05	300.00	1500.00	4.28	0.02	259.10	2.58	66.40	18.26	Clear	No	
09:55	9.05	300.00	1500.00	4.29	0.02	263.10	3.86	66.66	18.17	Clear	No	

Screen Interval:

Sampling Data

Purge Start Time: 09:28

Method: Low Flow | Date: 04-16-2024 | Time: 09:55

Total Volume Purged (mL): 8100

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.29
Spec. Cond.(µS/cm)	66.66
Turbidity (NTU)	3.86
Temp.(°C)	18.71
DO (mg/L)	0.02
ORP (mV)	263.10

Sample ID: CAP2Q24-OW-33-041624

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	72.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	4

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RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: PIW-1D | Well Diameter: 2 Inches

Samplers: DEBORAH AYERS|SAIRA BOHAM | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 26

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-15-2024 | Time: 10:16

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 1.926

Initial Depth to Water (ft.): 19.86 | Depth to Well Bottom (ft.): 31.9

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:41	19.96	350.00	2100.00	3.51	0.43	223.70	310.00	182.10	17.82	Cloudy	No	
10:46	19.96	350.00	1750.00	3.54	0.25	271.80	410.00	183.51	17.76	Cloudy	No	
10:52	19.96	350.00	2100.00	3.55	0.32	311.20	211.00	183.37	17.82	Cloudy	No	
10:56	19.96	350.00	1400.00	3.55	0.22	321.30	154.00	183.48	17.80	Cloudy	No	
11:01	19.96	350.00	1750.00	3.55	0.23	321.30	79.20	183.11	17.78	Cloudy	No	
11:06	19.96	350.00	1750.00	3.54	0.22	338.60	56.10	183.30	17.77	Cloudy	No	
11:11	19.96	350.00	1750.00	3.54	0.22	348.90	39.60	182.27	17.80	Clear with particles	No	
11:16	19.96	350.00	1750.00	3.54	0.24	367.00	29.80	182.43	17.79	Clear	No	
11:21	19.96	350.00	1750.00	3.54	0.23	371.00	32.70	182.37	17.89	Clear	No	
11:26	19.96	350.00	1750.00	3.53	0.21	362.40	21.00	182.65	17.82	Cloudy	No	
11:31	19.96	350.00	1750.00	3.54	0.23	362.00	20.00	183.24	17.87	Clear	No	
11:36	19.96	350.00	1750.00	3.53	0.23	363.30	18.10	182.63	18.00	Clear	No	
11:41	19.96	350.00	1750.00	3.53	0.24	381.40	15.50	183.18	18.00	Clear	No	

Screen Interval:

Sampling Data

Method: Low Flow | Date: 04-15-2024 | Time: 11:41

Field Filtered: No

Purge Start Time: 10:35

Total Volume Purged (mL): 23100

Field Parameters

STABILIZED PARAMETERS	
pH	3.53
Spec. Cond.(µS/cm)	183.18
Turbidity (NTU)	15.50
Temp.(°C)	18.00
DO (mg/L)	0.24
ORP (mV)	381.40

Sample ID: CAP2Q24-PIW-1D-041524

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	74.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PIW-1S	Well Diameter:	2	Inches	
Samplers:	DEBORAH AYERS|SAIRA BOHAM	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey		

Purging Data

Pump Depth:	--				
Pump Loc:	--				
Method:	--	Date:	04-15-2024	Time:	13:40

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume =	0.05		
Initial Depth to Water (ft.):	21.64	Depth to Well Bottom (ft.):	21.95

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
--	--	--	--	--	--	--	--	--	--	--	--	Well Dry

Screen Interval:

Sampling Data

Method:		Date:		Time:	
Field Filtered:					

Purge Start Time: 11:52

Total Volume Purged (mL): 0

Field Parameters

STABILIZED PARAMETERS	
pH	
Spec. Cond.(µS/cm)	
Turbidity (NTU)	
Temp.(°C)	
DO (mg/L)	
ORP (mV)	

Sample ID:

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	74.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: PIW-3D | Well Diameter: 2 Inches

Samplers: HERBERT WATTS Charles Pace | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 21

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-15-2024 | Time: 12:26

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 1.173

Initial Depth to Water (ft.): 17.67 | Depth to Well Bottom (ft.): 25

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
12:35	17.86	220.00	660.00	4.52	0.18	249.10	88.90	97.09	18.88	Cloudy	No	
12:40	17.86	220.00	1100.00	4.5	0.03	228.70	89.60	96.37	18.60	Cloudy	No	
12:45	17.86	220.00	1100.00	4.52	0.01	203.20	25.80	97.26	18.72	Clear	No	
12:50	17.86	220.00	1100.00	4.54	0.00	182.40	19.10	97.09	18.78	Clear	No	
12:55	17.86	220.00	1100.00	4.55	0.00	160.90	29.80	96.86	18.91	Clear	No	
13:00	17.86	220.00	1100.00	4.58	0.00	152.40	10.50	96.18	18.88	Clear	No	
13:05	17.86	220.00	1100.00	4.61	0.00	157.60	7.22	95.76	19.19	Clear	No	
13:10	17.86	220.00	1100.00	4.63	0.00	155.20	6.84	95.20	19.12	Clear	No	

Screen Interval:

Sampling Data

Method: Low Flow | Date: 04-15-2024 | Time: 13:10

Field Filtered: No

Purge Start Time: 12:32

Total Volume Purged (mL): 8360

Field Parameters

STABILIZED PARAMETERS	
pH	4.63
Spec. Cond.(µS/cm)	95.20
Turbidity (NTU)	6.84
Temp.(°C)	19.12
DO (mg/L)	0.00
ORP (mV)	155.20

Sample ID: CAP2Q24-PIW-3D-041524

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	83.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PIW-7D	Well Diameter:	2 Inches
Samplers:	DEBORAH AYERS|SAIRA BOHAM	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 35
Pump Loc: within screen
Method: Peristaltic Pump Date: 04-15-2024 Time: 13:45

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 4.477

Initial Depth to Water (ft.): 9.52 Depth to Well Bottom (ft.): 37.5

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
14:06	9.55	300.00	1800.00	4.25	0.23	203.40	28.20	93.85	18.82	Clear	Yes (eggs)	
14:11	9.55	300.00	1500.00	4.1	0.24	216.30	16.90	94.56	18.32	Clear	Yes	
14:16	9.55	300.00	1500.00	4.09	0.17	198.80	8.30	94.96	18.73	Clear	No	
14:21	9.55	300.00	1500.00	4.07	0.10	183.00	4.47	95.43	18.40	Clear	No	
14:26	9.55	300.00	1500.00	4.04	0.07	164.50	3.19	95.78	18.53	Clear	Yes	
14:31	9.55	300.00	1500.00	4.06	0.06	155.40	2.93	96.23	18.38	Clear	No	
14:36	9.55	300.00	1500.00	4.06	0.05	153.50	1.71	96.89	18.31	Clear	Yes	
14:41	9.55	300.00	1500.00	4.06	0.04	147.20	1.82	97.78	18.14	Clear	Yes	
14:46	9.55	300.00	1500.00	4.08	0.04	148.60	1.55	97.25	18.43	Clear	Yes	
14:51	9.55	300.00	1500.00	4.09	0.04	147.80	1.59	97.59	18.16	Clear	Yes	

Screen Interval: 24.5 to 29.5

Sampling Data

Method: Low Flow Date: 04-15-2024 Time: 14:51
Field Filtered: No

Purge Start Time: 14:00
Total Volume Purged (mL): 15300

Field Parameters

STABILIZED PARAMETERS	
pH	4.09
Spec. Cond.(µS/cm)	97.59
Turbidity (NTU)	1.59
Temp.(°C)	18.16
DO (mg/L)	0.04
ORP (mV)	147.80

Sample ID: CAP2Q24-PIW-7D-041524
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	85.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: PIW-7S | Well Diameter: 2 Inches

Samplers: HERBERT WATTS|SAIRA BOHAM | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 22

Pump Loc: within screen

Method: Peristaltic Pump | Date: 04-10-2024 | Time: 15:20

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 4.506

Initial Depth to Water (ft.): 9.36 | Depth to Well Bottom (ft.): 27.52

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
15:35	9.39	240.00	480.00	3.92	0.89	390.80	15.10	66.27	138.71	Clear	No	
15:40	9.38	240.00	1200.00	3.93	0.80	404.80	13.10	66.04	18.62	Clear	No	
15:45	9.38	240.00	1200.00	3.98	0.37	364.40	16.80	65.65	18.56	Clear	No	
15:50	9.38	240.00	1200.00	3.96	0.24	346.90	14.20	65.22	18.25	Clear	No	
15:55	9.38	240.00	1200.00	3.98	0.16	332.30	10.40	65.47	18.53	Clear	No	
16:00	9.38	240.00	1200.00	3.98	0.12	318.20	8.12	64.94	18.34	Clear	No	
16:05	9.38	240.00	1200.00	3.97	0.10	309.10	6.51	64.96	18.50	Clear	No	
16:10	9.38	220.00	1100.00	3.95	0.09	306.60	5.10	65.36	18.52	Clear	No	
16:15	9.38	240.00	1200.00	3.95	0.08	304.10	3.54	65.03	18.35	Clear	No	
16:20	9.38	240.00	1200.00	3.95	0.08	304.10	3.35	65.03	18.35	Clear	No	
16:25	9.38	240.00	1200.00	3.97	0.07	296.50	2.74	65.66	18.51	Clear	No	
16:30	9.38	240.00	1200.00	4	0.06	289.80	2.26	65.30	18.22	Clear	No	
16:35	9.38	240.00	1200.00	4	0.06	289.80	1.71	65.54	18.39	Clear	No	
16:40	9.38	240.00	1200.00	4.02	0.06	287.00	2.62	66.71	18.34	Clear	No	

Screen Interval: 7 to 17

Sampling Data

Purge Start Time: 15:33

Method: Low Flow | Date: 04-10-2024 | Time: 16:40

Total Volume Purged (mL): 15980

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.02
Spec. Cond.(µS/cm)	66.71
Turbidity (NTU)	2.62
Temp.(°C)	18.34
DO (mg/L)	0.06
ORP (mV)	287.00

Sample ID: CAP2Q24-PIW-7S-041024

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PW-04	Well Diameter:	2 Inches
Samplers:	DEBORAH AYERS|SAIRA BOHAM	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth:
Pump Loc: within screen
Method: Bailer Date: 04-16-2024 Time: 10:45

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 0.499

Initial Depth to Water (ft.): 28.29 Depth to Well Bottom (ft.): 31.41

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:45	28.29		0.00	3.39	2.18	336.20	15.60	0.61	22.79	Clear	Eggy (slight)	Purged approximately 2150 mLs
11:45	28.27		0.00	3.37	4.51	405.00	7.93	376.89	20.22	Clear	No	Purged approximately 1850 mLs
08:59	28.28		0.00	3.4	5.70	335.80	7.76	466.62	20.76	Cloudy	No	Purged approximately 1750 mLs
10:10	28.50		0.00	12.91	2.90	-123.60	53.20	380.92	19.60	Cloudy	No	Purged approximately 1850 mLs
09:16	28.29		0.00	3.32	0.08	381.20	10.60	558.46	14.23	Cloudy	No	Purged approximatel 1900 mLs

Screen Interval: 56-66

Sampling Data

Purge Start Time: 10:45
Method: Five Well Volume Date: 04-23-2024 Time: 11:20 Total Volume Purged (mL): 0
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	3.32
Spec. Cond.(µS/cm)	558.46
Turbidity (NTU)	10.60
Temp.(°C)	14.23
DO (mg/L)	0.08
ORP (mV)	381.20

Sample ID: CAP2Q24-PW-04-042324
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	76.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PW-06	Well Diameter:	2 Inches
Samplers:	BROCK SHATTUCK Charles Pace	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 25
Pump Loc: within screen
Method: Peristaltic Pump Date: 04-16-2024 Time: 12:12

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 1.333

Initial Depth to Water (ft.): 20.67 Depth to Well Bottom (ft.): 29

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
12:20	21.74	300.00	1500.00	4.27	6.92	260.80	6.87	47.09	19.73	Clear	No	
12:25	22.25	300.00	1500.00	4.1	7.11	295.70	1.49	47.81	19.98	Clear	No	
12:30	22.00	200.00	1000.00	4.33	6.69	296.20	1.97	49.70	20.52	Clear	Yes	
12:35	21.96	200.00	1000.00	4.37	6.11	301.30	1.16	50.95	20.95	Clear	No	
12:40	21.97	200.00	1000.00	4.39	6.41	306.90	1.36	50.15	20.74	Clear	No	

Screen Interval: 35-45

Sampling Data

Purge Start Time: 12:15
Method: Low Flow Date: 04-16-2024 Time: 12:40 Total Volume Purged (mL): 6000
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.39
Spec. Cond.(µS/cm)	50.15
Turbidity (NTU)	1.36
Temp.(°C)	20.74
DO (mg/L)	6.41
ORP (mV)	306.90

Sample ID: CAP2Q24-PW-06-041624
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	4

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PW-07	Well Diameter:	2 Inches
Samplers:	DEBORAH AYERS|SAIRA BOHAM	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth:
Pump Loc: within screen
Method: Bailer Date: 04-16-2024 Time: 10:00

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 0.384

Initial Depth to Water (ft.): 40.28 Depth to Well Bottom (ft.): 42.68

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:13	40.28		0.00	5.08	7.56	238.40	9.62	0.05	22.36	Clear	No	Purged approximately 190 mL
10:35	40.21		0.00	6.15	8.03	158.10	5.55	81.82	20.45	Clear	No	Purged approximately 1150 mLs
12:26	40.15		0.00	6.5	8.74	81.80	7.76	113.26	26.45	Clear	No	Purged approximately 1200 mLs

Screen Interval: 90-100

Sampling Data

Purge Start Time: 10:13
Method: Low Flow Date: 04-19-2024 Time: 11:00 Total Volume Purged (mL): 0
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	6.50
Spec. Cond.(µS/cm)	113.26
Turbidity (NTU)	7.76
Temp.(°C)	26.45
DO (mg/L)	8.74
ORP (mV)	81.80

Sample ID: CAP2Q24-PW-07-041924
DuplicateID: CAP2Q24-PW-07-041924-D
QA/QC: Dup|MS|MSD

WEATHER CONDITIONS	
Temperature (F):	76.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PW-09	Well Diameter:	2 Inches
Samplers:	BROCK SHATTUCK Charles Pace	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 50
Pump Loc: within screen
Method: Double valve pump Date: 04-10-2024 Time: 11:48

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 4.603

Initial Depth to Water (ft.): 25.23 Depth to Well Bottom (ft.): 54

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
14:10	30.75	350.00	1750.00	6.75	0.12	-132.00	22.50	79.31	18.23	Clear	No	
14:15	30.75	350.00	1750.00	6.74	0.12	-131.80	23.00	79.04	18.28	Clear	No	
14:20	30.75	350.00	1750.00	6.73	0.13	-130.10	22.30	78.43	18.32	Clear	No	
14:25	30.75	350.00	1750.00	6.72	0.15	-128.40	21.60	78.52	18.42	Clear	No	
14:30	30.75	350.00	1750.00	6.71	0.12	-128.90	21.40	77.77	18.89	Clear	No	
14:35	30.75	350.00	1750.00	6.7	0.12	-127.60	21.00	77.42	18.34	Clear	No	
14:40	30.75	350.00	1750.00	6.69	0.12	-128.20	20.20	76.87	18.41	Clear	No	
14:45	30.75	350.00	1750.00	6.68	0.12	-130.60	19.60	76.56	18.50	Clear	No	
14:50	30.75	350.00	1750.00	6.68	0.12	-128.50	19.20	76.23	18.60	Clear	No	
14:55	30.75	350.00	1750.00	6.68	0.12	-129.30	19.00	76.24	18.63	Clear	No	

Screen Interval: 11 - 21

Sampling Data

Method: Low Flow Date: 04-10-2024 Time: 14:55
Field Filtered: No

Purge Start Time: 14:05
Total Volume Purged (mL): 17500

Field Parameters

STABILIZED PARAMETERS	
pH	6.68
Spec. Cond.(µS/cm)	76.24
Turbidity (NTU)	19.00
Temp.(°C)	18.63
DO (mg/L)	0.12
ORP (mV)	-129.30

Sample ID: CAP2Q24-PW-09-041024
DuplicateID: CAP2Q24-PW-09-041024-D
QA/QC: Dup|MS|MSD

WEATHER CONDITIONS	
Temperature (F):	75.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	8

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: PW-09 | Well Diameter: 2 Inches

Samplers: BROCK SHATTUCK Charles Pace | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 50

Pump Loc: within screen

Method: Double valve pump | Date: 04-10-2024 | Time: 11:48

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 4.603

Initial Depth to Water (ft.): 25.23 | Depth to Well Bottom (ft.): 54

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
14:10	30.75	350.00	1750.00	6.75	0.12	-132.00	22.50	79.31	18.23	Clear	No	
14:15	30.75	350.00	1750.00	6.74	0.12	-131.80	23.00	79.04	18.28	Clear	No	
14:20	30.75	350.00	1750.00	6.73	0.13	-130.10	22.30	78.43	18.32	Clear	No	
14:25	30.75	350.00	1750.00	6.72	0.15	-128.40	21.60	78.52	18.42	Clear	No	
14:30	30.75	350.00	1750.00	6.71	0.12	-128.90	21.40	77.77	18.89	Clear	No	
14:35	30.75	350.00	1750.00	6.7	0.12	-127.60	21.00	77.42	18.34	Clear	No	
14:40	30.75	350.00	1750.00	6.69	0.12	-128.20	20.20	76.87	18.41	Clear	No	
14:45	30.75	350.00	1750.00	6.68	0.12	-130.60	19.60	76.56	18.50	Clear	No	
14:50	30.75	350.00	1750.00	6.68	0.12	-128.50	19.20	76.23	18.60	Clear	No	
14:55	30.75	350.00	1750.00	6.68	0.12	-129.30	19.00	76.24	18.63	Clear	No	This second form is a continuance of the previous form submitted.

Screen Interval: 11 - 21

Sampling Data

Method: Low Flow | Date: 04-10-2024 | Time: 14:55

Field Filtered: No

Purge Start Time: 14:05

Total Volume Purged (mL): 17500

Field Parameters

STABILIZED PARAMETERS	
pH	6.68
Spec. Cond.(µS/cm)	76.24
Turbidity (NTU)	19.00
Temp.(°C)	18.63
DO (mg/L)	0.12
ORP (mV)	-129.30

Sample ID: CAP2Q24-PW-09-041024

DuplicateID: CAP2Q24-PW-09-041024-D

QA/QC: Dup|MS|MSD

WEATHER CONDITIONS	
Temperature (F):	75.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	8

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	PZ-22	Well Diameter:	.75 Inches
Samplers:	BROCK SHATTUCK Charles Pace	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 40
Pump Loc: above screen
Method: Peristaltic Pump Date: 04-16-2024 Time: 11:00

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 0.326

Initial Depth to Water (ft.): 11.29 Depth to Well Bottom (ft.): 47.5

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
11:05		200.00	400.00	4.32	0.77	189.40	12.10	125.87	19.24	Clear	No	
11:10		200.00	1000.00	4.5	0.26	180.00	4.81	110.75	18.91	Clear	No	
11:15		200.00	1000.00	4.54	0.13	172.40	10.30	109.23	18.81	Clear	No	
11:20		200.00	1000.00	4.54	0.10	169.10	10.20	108.87	18.82	Clear	No	
11:25		200.00	1000.00	4.54	0.09	164.70	11.10	108.96	19.28	Clear	No	
11:30		200.00	1000.00	4.53	0.09	161.30	5.15	108.58	18.82	Clear	No	

Screen Interval: 10.2-15.2

Sampling Data

Purge Start Time: 11:03
Method: Low Flow Date: 04-16-2024 Time: 11:30 Total Volume Purged (mL): 5400
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.53
Spec. Cond.(µS/cm)	108.58
Turbidity (NTU)	5.15
Temp.(°C)	18.82
DO (mg/L)	0.09
ORP (mV)	161.30

Sample ID: CAP2Q24-PZ-22-041624
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	4

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville | Well ID: SMW-10 | Well Diameter: 2 Inches

Samplers: SAIRA BOHAM|TIM SMITH | Event: Quarterly CAP | Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 47

Pump Loc: within screen

Method: Double valve pump | Date: 04-12-2024 | Time: 10:02

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 4.07

Initial Depth to Water (ft.): 29.64 | Depth to Well Bottom (ft.): 52.08

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:05	29.65	200.00	1000.00	5.51	0.12	20.70	31.10	114.98	17.85	Clear	No	
10:10	29.65	200.00	1000.00	5.41	0.18	12.10	28.40	103.67	17.94	Clear	No	
10:15	29.65	200.00	1000.00	5.49	0.24	4.90	26.10	100.18	18.04	Clear	No	
10:20	29.65	200.00	1000.00	5.48	0.28	2.50	20.60	99.69	18.13	Clear	No	
10:25	29.65	200.00	1000.00	5.41	0.28	3.20	20.30	98.39	18.12	Clear	No	
10:30	29.65	200.00	1000.00	5.45	0.30	-0.30	17.40	92.88	18.15	Clear	No	
10:35	26.65	200.00	1000.00	5.45	0.29	-1.10	17.10	91.19	18.14	Clear	No	
10:40	29.65	200.00	1000.00	5.45	0.29	-3.10	14.30	89.50	18.21	Clear	No	

Screen Interval: 45.0-60.0

Sampling Data

Purge Start Time: 10:00

Method: Low Flow | Date: 04-12-2024 | Time: 10:40

Total Volume Purged (mL): 8000

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	5.45
Spec. Cond.(µS/cm)	89.50
Turbidity (NTU)	14.30
Temp.(°C)	18.21
DO (mg/L)	0.29
ORP (mV)	-3.10

Sample ID: CAP2Q24-SMW-10-041224

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	64.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	20

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	SMW-11	Well Diameter:	2 Inches
Samplers:	HERBERT WATTS Charles Pace	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 18
Pump Loc: within screen
Method: Peristaltic Pump Date: 04-15-2024 Time: 13:37

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 1.122

Initial Depth to Water (ft.): 15.99 Depth to Well Bottom (ft.): 23

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
13:50	16.02	220.00	1320.00	4.38	3.97	246.90	7.27	50.58	18.64	Clear	No	
13:55	16.02	220.00	1100.00	4.47	4.44	254.40	7.84	50.45	18.36	Clear	No	
14:05	16.02	220.00	2200.00	4.51	4.22	264.50	6.87	50.52	18.08	Clear	No	
14:10	16.02	220.00	1100.00	4.53	4.15	268.20	2.52	50.49	18.23	Clear	No	

Screen Interval: 12.0-22.0

Sampling Data

Purge Start Time: 13:44
Method: Low Flow Date: 04-15-2024 Time: 14:10 Total Volume Purged (mL): 5720
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.53
Spec. Cond.(µS/cm)	50.49
Turbidity (NTU)	2.52
Temp.(°C)	18.23
DO (mg/L)	4.15
ORP (mV)	268.20

Sample ID: CAP2Q24-SMW-11-041524
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	86.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

RECORD OF WELL SAMPLING

Site Name:	Chemours Fayetteville	Well ID:	SMW-12	Well Diameter:	2 Inches
Samplers:	BROCK SHATTUCK Charles Pace	Event:	Quarterly CAP	Project Manager:	Tracy Ovbey

Purging Data

Pump Depth: 93
Pump Loc: bottom of well
Method: Double valve pump Date: 04-10-2024 Time: 09:45

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot

Water Volume = 1.112

Initial Depth to Water (ft.): 89.05 Depth to Well Bottom (ft.): 96

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
24 hr	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:20	89.09	250.00	1250.00	3.85	0.28	290.40	90.90	198.93	18.03	Cloudy	No	Data logger removed- 0950
10:25	89.10	250.00	1250.00	3.83	0.21	266.70	68.50	197.36	17.99	Cloudy	No	
10:30	89.10	250.00	1250.00	3.81	0.22	213.20	45.70	196.29	17.84	Cloudy	No	
10:35	89.10	250.00	1250.00	3.83	0.26	210.70	34.20	193.57	17.78	Cloudy	No	
10:40	89.10	250.00	1250.00	3.81	0.32	248.80	23.90	193.40	17.83	Clear	No	
10:45	89.10	250.00	1250.00	3.83	0.36	273.80	15.50	192.92	17.88	Clear	No	
10:50	89.10	250.00	1250.00	3.83	0.45	292.40	12.20	190.15	17.88	Clear	No	
10:55	89.10	250.00	1250.00	3.82	0.46	291.90	8.41	190.85	17.86	Clear	No	
11:00	89.10	250.00	1250.00	3.84	0.46	293.30	6.95	190.58	17.86	Clear	No	

Screen Interval: 58 to 68

Sampling Data

Purge Start Time: 10:15
Method: Low Flow Date: 04-10-2024 Time: 11:00 Total Volume Purged (mL): 11250
Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	3.84
Spec. Cond.(µS/cm)	190.58
Turbidity (NTU)	6.95
Temp.(°C)	17.86
DO (mg/L)	0.46
ORP (mV)	293.30

Sample ID: CAP2Q24-SMW-12-041024
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	66.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	7

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Appendix D
Laboratory Reports and DVM Report

ADQM Data Review

Site: Chemours Fayetteville

Project: Tarheel Sampling 2Q24

Project Reviewer: Bridget Gavaghan

Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CFR-TARHEEL-24-040324	320-111253-1	Surface Water	N	04/03/2024	23:01	FS
CFR-TARHEEL-24-040424	320-111253-2	Surface Water	N	04/04/2024	23:01	FS
CFR-TARHEEL-24-040824	320-111442-1	Surface Water	N	04/08/2024	23:01	FS
CFR-TARHEEL-24-040824-D	320-111442-2	Surface Water	N	04/08/2024	23:01	DUP
CFR-TARHEEL-24-041024	320-111442-3	Surface Water	N	04/10/2024	23:01	FS
CFR-TARHEEL-24-041724	320-111762-1	Surface Water	N	04/17/2024	23:01	FS
CFR-TARHEEL-24-041824	320-111762-2	Surface Water	N	04/18/2024	23:01	FS
CFR-TARHEEL-24-042224	320-111762-3	Surface Water	N	04/22/2024	23:01	FS
CFR-TARHEEL-24-042524	320-111976-1	Surface Water	N	04/25/2024	23:01	FS
CFR-TARHEEL-24-042924	320-112120-1	Surface Water	N	04/29/2024	23:01	FS
CFR-TARHEEL-24-050224	320-112120-2	Surface Water	N	05/02/2024	23:01	FS
CFR-TARHEEL-24-050624	320-112340-1	Surface Water	N	05/06/2024	23:01	FS
CFR-TARHEEL-24-050924	320-112340-2	Surface Water	N	05/09/2024	23:01	FS
CFR-TARHEEL-24-051324	320-112526-1	Surface Water	N	05/13/2024	23:01	FS
CFR-TARHEEL-24-051324-D	320-112526-2	Surface Water	N	05/13/2024	23:01	DUP
CFR-TARHEEL-24-051624	320-112526-3	Surface Water	N	05/16/2024	23:01	FS
CFR-TARHEEL-24-052124	320-112684-1	Surface Water	N	05/21/2024	23:01	FS
CFR-TARHEEL-052424	320-112684-2	Surface Water	N	05/24/2024	09:30	FS
CFR-TARHEEL-052824	320-112828-1	Surface Water	N	05/28/2024	11:08	FS
CFR-TARHEEL-053024	320-112828-2	Surface Water	N	05/30/2024	13:20	FS
CFR-TARHEEL-24-060224	320-113086-1	Surface Water	N	06/02/2024	23:01	FS
CFR-TARHEEL-24-060424	320-113086-2	Surface Water	N	06/04/2024	23:01	FS
CFR-TARHEEL-24-060724	320-113086-3	Surface Water	N	06/07/2024	23:01	FS
CFR-TARHEEL-24-061124	320-113353-1	Surface Water	N	06/11/2024	23:01	FS
CFR-TARHEEL-24-061324	320-113353-2	Surface Water	N	06/13/2024	23:01	FS
CFR-TARHEEL-24-061324-D	320-113353-3	Surface Water	N	06/13/2024	23:01	DUP
CFR-TARHEEL-24-061724	320-113353-4	Surface Water	N	06/17/2024	23:01	FS
CFR-TARHEEL-24-062024	320-113353-5	Surface Water	N	06/20/2024	23:01	FS
CFR-TARHEEL-062524	320-113571-1	Surface Water	N	06/25/2024	10:35	FS
CFR-TARHEEL-24-062724	320-113571-2	Surface Water	N	06/27/2024	23:01	FS

* FS=Field Sample
DUP=Field Duplicate
FB=Field Blank
EB=Equipment Blank
TB=Trip Blank

Analytical Protocol

Lab Name	Lab Method	Parameter Category	Sampling Program
Eurofins Environ Testing Northern Cali	537 Modified	Per- and Polyfluorinated Alkyl Substances (PFAS)	2024 Tarheel Sampling

ADQM Data Review Checklist

Item	Description	Yes	No*	DVM Narrative Report	Laboratory Report	Exception Report (ER) #
A	Did samples meet laboratory acceptability requirements upon receipt (i.e., intact, within temperature, properly preserved, and no headspace where applicable)?	X				
B	Were samples received by the laboratory in agreement with the associated chain of custody?	X				
C	Was the chain of custody properly completed by the laboratory and/or field team?		X		X	
D	Were samples prepped/analyzed by the laboratory within method holding times?		X	X	X	
E	Were data review criteria met for method blanks, LCSs/LCSDs, MSs/MSDs, PDSs, SDs, replicates, surrogates, sample results within calibration range, total/dissolved samples, field duplicates, field/equipment/trip blanks?		X	X	X	
F	Temperature upon laboratory receipt meets range not frozen to 6 C (manual check)?	X				
G	Were all data usable and not R qualified?	X				
ER#	**Description**					
Other QA/QC Items to Note:						

* See DVM Narrative Report, Laboratory Report, and/or ER # for further details as indicated.

The electronic data submitted for this project were reviewed via the Data Verification Module (DVM) process. Overall, the data are acceptable for use without qualification, except as noted on the attached DVM Narrative Report.

The lab reports due to a large page count are stored on a network shared drive and are available to be posted on external shared drives, or on a flash drive.

Data Verification Module (DVM)

The DVM is an internal review process used by the ADQM group to assist with the determination of data usability. The electronic data deliverables received from the laboratory are loaded into the Locus EIM™ database and processed through a series of data quality checks, which are a combination of software, Locus EIM™ database Data Verification Module (DVM), and manual reviewer evaluations. The data are evaluated against the following data usability checks:

- Field and laboratory blank contamination
- US EPA hold time criteria
- Missing Quality Control (QC) samples
- Matrix spike (MS)/matrix spike duplicate (MSD) recoveries and the relative percent differences (RPDs) between these spikes
- Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) recoveries and the RPD between these spikes
- Surrogate spike recoveries for organic analyses
- Difference/RPD between field duplicate sample pairs
- RPD between laboratory replicates for inorganic analyses
- Difference/percent difference between total and dissolved sample pairs
- Temperature upon laboratory receipt meets range not frozen to 6 C (manual check)

There are two qualifier fields in EIM:

Laboratory Qualifier is the qualifier assigned by the laboratory and may not reflect the usability of the data. This qualifier may have many different meanings and can vary between labs and over time within the same lab. Please refer to the laboratory report for a description of the laboratory qualifiers. As they are laboratory descriptors they are not to be used when evaluating the data.

Validation Qualifier is the 3rd party formal validation qualifier if this was performed. Otherwise this field contains the qualifier resulting from the ADQM DVM review process. This qualifier assesses the usability of the data and may not equal the laboratory qualifier. The DVM applies the following data evaluation qualifiers to analysis results, as warranted:

Qualifier	Definition
B	Not detected substantially above the level reported in the laboratory or field blanks.
R	Unusable result. Analyte may or may not be present in the sample.
J	Analyte present. Reported value may not be accurate or precise.
UJ	Not detected. Reporting limit may not be accurate or precise.

The **Validation Status Code** field is set to “DVM” if the ADQM DVM process has been performed. If the DVM has not been run, the field will be blank.

If the DVM has been run (**Validation Status Code** equals “DVM”), use the **Validation Qualifier.**

If the data have been validated by a third party, the field **“Validated By”** will be set to the validator (e.g., ESI for Environmental Standards, Inc.)

DVM Narrative Report

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-040824	04/08/2024	320-111442-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-040824-D	04/08/2024	320-111442-2	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-040824-D	04/08/2024	320-111442-2	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-041024	04/10/2024	320-111442-3	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-041024	04/10/2024	320-111442-3	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-040824	04/08/2024	320-111442-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded. The reporting limit may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	Hfpo Dimer Acid	0.0040	UG/L	PQL		0.0040	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded. The reporting limit may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: Associated MS and/or MSD analysis had relative percent recovery (RPR) values higher than the upper control limit. The reported result may be biased high.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-061324	06/13/2024	320-113353-2	R-PSDA	0.0047	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061324	06/13/2024	320-113353-2	Hydrolyzed PSDA	0.0033	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061324	06/13/2024	320-113353-2	R-EVE	0.0025	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-062524	06/25/2024	320-113571-1	R-PSDA	0.0064	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-062524	06/25/2024	320-113571-1	Hydrolyzed PSDA	0.0054	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-062524	06/25/2024	320-113571-1	R-EVE	0.0026	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-040824	04/08/2024	320-111442-1	PMPA	0.0055	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-042924	04/29/2024	320-112120-1	R-PSDA	0.0056	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-042924	04/29/2024	320-112120-1	Hydrolyzed PSDA	0.0029	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-042924	04/29/2024	320-112120-1	R-EVE	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-051324	05/13/2024	320-112526-1	R-PSDA	0.0028	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-051324	05/13/2024	320-112526-1	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: High relative percent difference (RPD) observed between field duplicate and parent sample. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-051324	05/13/2024	320-112526-1	R-PSDA	0.011	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-051324-D	05/13/2024	320-112526-2	R-PSDA	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: High relative percent difference (RPD) observed between MS and MSD samples. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-040824	04/08/2024	320-111442-1	PFMOAA	0.0047	ug/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-061324-D	06/13/2024	320-113353-3	R-PSDA	0.0055	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061324-D	06/13/2024	320-113353-3	Hydrolyzed PSDA	0.0031	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061324-D	06/13/2024	320-113353-3	R-EVE	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061724	06/17/2024	320-113353-4	R-PSDA	0.0046	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061724	06/17/2024	320-113353-4	Hydrolyzed PSDA	0.0029	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061724	06/17/2024	320-113353-4	R-EVE	0.0024	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-062024	06/20/2024	320-113353-5	R-PSDA	0.0046	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-062024	06/20/2024	320-113353-5	Hydrolyzed PSDA	0.0030	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-062024	06/20/2024	320-113353-5	R-EVE	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-062724	06/27/2024	320-113571-2	R-PSDA	0.0038	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-062724	06/27/2024	320-113571-2	Hydrolyzed PSDA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060424	06/04/2024	320-113086-2	R-PSDA	0.0039	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060424	06/04/2024	320-113086-2	Hydrolyzed PSDA	0.0025	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060724	06/07/2024	320-113086-3	R-PSDA	0.0051	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060724	06/07/2024	320-113086-3	Hydrolyzed PSDA	0.0038	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-052424	05/24/2024	320-112684-2	R-PSDA	0.0031	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-052824	05/28/2024	320-112828-1	R-PSDA	0.0031	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-053024	05/30/2024	320-112828-2	R-PSDA	0.0025	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-041724	04/17/2024	320-111762-1	R-PSDA	0.0052	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-041824	04/18/2024	320-111762-2	R-PSDA	0.0034	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-042224	04/22/2024	320-111762-3	R-PSDA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-042524	04/25/2024	320-111976-1	R-PSDA	0.015	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-050224	05/02/2024	320-112120-2	R-PSDA	0.0057	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-050224	05/02/2024	320-112120-2	Hydrolyzed PSDA	0.0039	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-050224	05/02/2024	320-112120-2	R-EVE	0.0025	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-050624	05/06/2024	320-112340-1	R-PSDA	0.013	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-050624	05/06/2024	320-112340-1	Hydrolyzed PSDA	0.0048	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-050624	05/06/2024	320-112340-1	R-EVE	0.0038	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-050924	05/09/2024	320-112340-2	R-PSDA	0.0026	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-051324	05/13/2024	320-112526-1	R-PSDA	0.018	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-051324-D	05/13/2024	320-112526-2	R-PSDA	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-051324-D	05/13/2024	320-112526-2	Hydrolyzed PSDA	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-052124	05/21/2024	320-112684-1	R-PSDA	0.019	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-052124	05/21/2024	320-112684-1	R-EVE	0.0040	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** 2024 Tarheel Sampling **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	R-EVE	0.0030	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PPF Acid	0.023	UG/L	PQL		0.0050	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFMOAA	0.0073	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	Perfluoroheptanoic Acid	0.0029	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PFO2HxA	0.0057	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	R-PSDA	0.0064	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	Hydrolyzed PSDA	0.0026	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	PMPA	0.010	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-061124	06/11/2024	320-113353-1	Hfpo Dimer Acid	0.0058	UG/L	PQL		0.0040	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PPF Acid	0.012	UG/L	PQL		0.0050	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFMOAA	0.0048	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	Perfluoroheptanoic Acid	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PFO2HxA	0.0028	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	R-PSDA	0.0031	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	Hydrolyzed PSDA	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-060224	06/02/2024	320-113086-1	PMPA	0.0036	UG/L	PQL		0.0020	J	537 Modified		3535

ADQM Data Review

Site: Chemours Fayetteville

Project: CAP GW Sampling 2Q24

Project Reviewer: Bridget Gavaghan

Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP2Q24-LTW-05-041024	320-111363-1	Groundwater	N	04/10/2024	14:50	FS
CAP2Q24-EQBLK-PP-041124	320-111363-2	Blank Water	N	04/11/2024	09:00	EB
CAP2Q24-EQBLK-DV-041124	320-111363-3	Blank Water	N	04/11/2024	09:30	EB
CAP2Q24-LTW-04-041024	320-111363-4	Groundwater	N	04/10/2024	12:30	FS
CAP2Q24-SMW-12-041024	320-111363-5	Groundwater	N	04/10/2024	11:00	FS
CAP2Q24-PIW-7S-041024	320-111363-6	Groundwater	N	04/10/2024	16:40	FS
CAP2Q24-PW-09-041024	320-111363-7	Groundwater	N	04/10/2024	14:55	FS
CAP2Q24-PW-09-041024-D	320-111363-8	Groundwater	N	04/10/2024	14:55	DUP
CAP2Q24-SMW-10-041224	320-111441-1	Groundwater	N	04/12/2024	10:40	FS
CAP2Q24-BLADEN-1DR-041224	320-111441-2	Groundwater	N	04/12/2024	11:56	FS
CAP2Q24-PIW-7D-041524	320-111473-1	Groundwater	N	04/15/2024	14:51	FS
CAP2Q24-OW-28-041624	320-111473-10	Groundwater	N	04/16/2024	10:45	FS
CAP2Q24-OW-33-041624	320-111473-11	Groundwater	N	04/16/2024	09:55	FS
CAP2Q24-PIW-1D-041524	320-111473-2	Groundwater	N	04/15/2024	11:41	FS
CAP2Q24-LTW-01-041524	320-111473-3	Groundwater	N	04/15/2024	12:05	FS
CAP2Q24-SMW-11-041524	320-111473-4	Groundwater	N	04/15/2024	14:10	FS
CAP2Q24-PIW-3D-041524	320-111473-5	Groundwater	N	04/15/2024	13:10	FS
CAP2Q24-LTW-03-041524	320-111473-6	Groundwater	N	04/15/2024	15:05	FS
CAP2Q24-LTW-02-041524	320-111473-7	Groundwater	N	04/15/2024	11:05	FS
CAP2Q24-PZ-22-041624	320-111473-8	Groundwater	N	04/16/2024	11:30	FS
CAP2Q24-PW-06-041624	320-111473-9	Groundwater	N	04/16/2024	12:40	FS
CAP2Q24-PW-04-042324	320-111966-1	Groundwater	N	04/23/2024	11:20	FS
CAP2Q24-PW-07-041924	320-111966-2	Groundwater	N	04/19/2024	11:00	FS
CAP2Q24-PW-07-041924-D	320-111966-3	Groundwater	N	04/19/2024	11:00	DUP
CAP2Q24-EQBLK-BAILER-041924	320-111966-4	Blank Water	N	04/19/2024	13:10	EB

* FS=Field Sample
DUP=Field Duplicate
FB=Field Blank
EB=Equipment Blank
TB=Trip Blank

Analytical Protocol

Lab Name	Lab Method	Parameter Category	Sampling Program
Eurofins Environ Testing Northern Cali	537 Modified	Per- and Polyfluorinated Alkyl Substances (PFAS)	CAP GW Sampling 2Q24

ADQM Data Review Checklist

Item	Description	Yes	No*	DVM Narrative Report	Laboratory Report	Exception Report (ER) #
A	Did samples meet laboratory acceptability requirements upon receipt (i.e., intact, within temperature, properly preserved, and no headspace where applicable)?	X				
B	Were samples received by the laboratory in agreement with the associated chain of custody?	X				
C	Was the chain of custody properly completed by the laboratory and/or field team?	X				
D	Were samples prepped/analyzed by the laboratory within method holding times?		X	X	X	
E	Were data review criteria met for method blanks, LCSs/LCSDs, MSs/MSDs, PDSs, SDs, replicates, surrogates, sample results within calibration range, total/dissolved samples, field duplicates, field/equipment/trip blanks?		X	X	X	
F	Temperature upon laboratory receipt meets range not frozen to 6 C (manual check)?	X				
G	Were all data usable and not R qualified?	X				
ER#	**Description**					
Other QA/QC Items to Note:						

* See DVM Narrative Report, Laboratory Report, and/or ER # for further details as indicated.

The electronic data submitted for this project were reviewed via the Data Verification Module (DVM) process. Overall, the data are acceptable for use without qualification, except as noted on the attached DVM Narrative Report.

The lab reports due to a large page count are stored on a network shared drive and are available to be posted on external shared drives, or on a flash drive.

Data Verification Module (DVM)

The DVM is an internal review process used by the ADQM group to assist with the determination of data usability. The electronic data deliverables received from the laboratory are loaded into the Locus EIM™ database and processed through a series of data quality checks, which are a combination of software, Locus EIM™ database Data Verification Module (DVM), and manual reviewer evaluations. The data are evaluated against the following data usability checks:

- Field and laboratory blank contamination
- US EPA hold time criteria
- Missing Quality Control (QC) samples
- Matrix spike (MS)/matrix spike duplicate (MSD) recoveries and the relative percent differences (RPDs) between these spikes
- Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) recoveries and the RPD between these spikes
- Surrogate spike recoveries for organic analyses
- Difference/RPD between field duplicate sample pairs
- RPD between laboratory replicates for inorganic analyses
- Difference/percent difference between total and dissolved sample pairs

There are two qualifier fields in EIM:

Laboratory Qualifier is the qualifier assigned by the laboratory and may not reflect the usability of the data. This qualifier may have many different meanings and can vary between labs and over time within the same lab. Please refer to the laboratory report for a description of the laboratory qualifiers. As they are laboratory descriptors they are not to be used when evaluating the data.

Validation Qualifier is the 3rd party formal validation qualifier if this was performed. Otherwise this field contains the qualifier resulting from the ADQM DVM review process. This qualifier assesses the usability of the data and may not equal the laboratory qualifier. The DVM applies the following data evaluation qualifiers to analysis results, as warranted:

Qualifier	Definition
B	Not detected substantially above the level reported in the laboratory or field blanks.
R	Unusable result. Analyte may or may not be present in the sample.
J	Analyte present. Reported value may not be accurate or precise.
UJ	Not detected. Reporting limit may not be accurate or precise.

The **Validation Status Code** field is set to “DVM” if the ADQM DVM process has been performed. If the DVM has not been run, the field will be blank.

If the DVM has been run (**Validation Status Code** equals “DVM”), use the **Validation Qualifier.**

If the data have been validated by a third party, the field **“Validated By”** will be set to the validator (e.g., ESI for Environmental Standards, Inc.).

DVM Narrative Report

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-SMW-12-041024	04/10/2024	320-111363-5	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	10:2 Fluorotelomer sulfonate	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PMPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hfpo Dimer Acid	0.0040	UG/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFOS	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoroundecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	0.0040	ug/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoropentanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoropentane Sulfonic Acid (PFPeS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	6:2 Fluorotelomer Sulfonate	0.0050	ug/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorohexanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorododecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-methyl perfluoro-1-octanesulfonamide	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFOA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorodecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorodecane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorohexane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorobutanoic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorobutane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoroheptanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoroheptane Sulfonic Acid (PFHpS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorononanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO2HxA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-ethylperfluoro-1-octanesulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PPF Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFMOAA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorononanesulfonic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorotridecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorooctane Sulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	9Cl-PF3ONS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	11Cl-PF3OUdS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorododecane Sulfonic Acid (PFDoS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	DONA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	10:2 Fluorotelomer sulfonate	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PMPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hfpo Dimer Acid	0.0040	UG/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFOS	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoroundecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	0.0040	ug/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoropentanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoropentane Sulfonic Acid (PFPeS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	6:2 Fluorotelomer Sulfonate	0.0050	ug/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorohexanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorododecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-methyl perfluoro-1-octanesulfonamide	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFOA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorodecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorodecane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorohexane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorobutanoic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorobutane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoroheptanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoroheptane Sulfonic Acid (PFHpS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorononanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO2HxA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-ethylperfluoro-1-octanesulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PPF Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFMOAA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorononanesulfonic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorotridecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorooctane Sulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	9Cl-PF3ONS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	11Cl-PF3OUdS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorododecane Sulfonic Acid (PFDoS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	DONA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-BLADEN-1DR-041224	04/12/2024	320-111441-2	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-EQBLK-DV-041124	04/11/2024	320-111363-3	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-EQBLK-PP-041124	04/11/2024	320-111363-2	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-BLADEN-1DR-041224	04/12/2024	320-111441-2	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-BLADEN-1DR-041224	04/12/2024	320-111441-2	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-SMW-10-041224	04/12/2024	320-111441-1	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-SMW-10-041224	04/12/2024	320-111441-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-SMW-10-041224	04/12/2024	320-111441-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-OW-28-041624	04/16/2024	320-111473-10	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-OW-28-041624	04/16/2024	320-111473-10	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-OW-28-041624	04/16/2024	320-111473-10	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PIW-1D-041524	04/15/2024	320-111473-2	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PIW-1D-041524	04/15/2024	320-111473-2	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PIW-1D-041524	04/15/2024	320-111473-2	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PW-06-041624	04/16/2024	320-111473-9	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PW-06-041624	04/16/2024	320-111473-9	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PW-06-041624	04/16/2024	320-111473-9	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-SMW-11-041524	04/15/2024	320-111473-4	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-SMW-11-041524	04/15/2024	320-111473-4	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-SMW-11-041524	04/15/2024	320-111473-4	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-EQBLK-BAILER-041924	04/19/2024	320-111966-4	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-EQBLK-BAILER-041924	04/19/2024	320-111966-4	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	EVE Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	10:2 Fluorotelomer sulfonate	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFOS	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluoroundecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	0.0040	ug/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluoropentane Sulfonic Acid (PFPeS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	6:2 Fluorotelomer Sulfonate	0.0050	ug/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorodecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorodecane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorohexane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorododecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	N-methyl perfluoro-1-octanesulfonamide	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorobutane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluoroheptane Sulfonic Acid (PFHpS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorononanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	N-ethylperfluoro-1-octanesulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorononanesulfonic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorotridecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorododecane Sulfonic Acid (PFDoS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	DONA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	10:2 Fluorotelomer sulfonate	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorooctane Sulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	9Cl-PF3ONS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	11Cl-PF3OUdS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFOS	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluoroundecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	0.0040	ug/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluoropentane Sulfonic Acid (PFPeS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	6:2 Fluorotelomer Sulfonate	0.0050	ug/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorodecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorodecane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorohexane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorododecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	N-methyl perfluoro-1-octanesulfonamide	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorobutane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluoroheptane Sulfonic Acid (PFHpS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorononanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	N-ethylperfluoro-1-octanesulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorononanesulfonic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorotridecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorooctane Sulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	9Cl-PF3ONS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	11Cl-PF3OUdS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorododecane Sulfonic Acid (PFDoS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	DONA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Associated MS and/or MSD analysis had relative percent recovery (RPR) values less than the lower control limit. The actual detection limits may be higher than reported.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: High relative percent difference (RPD) observed between field duplicate and parent sample. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFO4DA	0.027	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	R-PSDA	0.095	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFO4DA	0.038	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	R-PSDA	0.38	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PMPA	0.17	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PMPA	0.31	UG/L	PQL		0.043	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-SMW-11-041524	04/15/2024	320-111473-4	R-EVE	0.12	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-PW-04-042324	04/23/2024	320-111966-1	R-PSDA	0.082	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PW-04-042324	04/23/2024	320-111966-1	R-EVE	0.046	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	R-PSDA	0.089	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	R-PSDA	0.094	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	Hydrolyzed PSDA	1.5	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	R-EVE	0.70	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-SMW-12-041024	04/10/2024	320-111363-5	R-PSDA	0.099	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-SMW-12-041024	04/10/2024	320-111363-5	R-EVE	0.074	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	Hydrolyzed PSDA	1.4	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	R-EVE	1.6	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	Hydrolyzed PSDA	0.070	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	R-EVE	0.55	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-PIW-1D-041524	04/15/2024	320-111473-2	R-EVE	0.39	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	Hydrolyzed PSDA	0.048	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	R-EVE	0.30	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-OW-28-041624	04/16/2024	320-111473-10	R-EVE	0.23	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	Hydrolyzed PSDA	7.7	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	R-EVE	0.73	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	Hydrolyzed PSDA	2.1	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	R-EVE	0.90	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	Hydrolyzed PSDA	0.53	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	R-EVE	0.76	UG/L	PQL		0.039	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	R-PSDA	0.77	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	Hydrolyzed PSDA	1.0	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	R-EVE	0.89	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	R-PSDA	1.2	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	Hydrolyzed PSDA	1.7	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	R-EVE	1.5	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	R-PSDA	2.3	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	Hydrolyzed PSDA	3.0	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	R-EVE	1.9	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-BLADEN-1DR-041224	04/12/2024	320-111441-2	R-PSDA	0.020	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-BLADEN-1DR-041224	04/12/2024	320-111441-2	R-EVE	0.0088	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The ion ratio for the compound differed from the expected ion ratio by more than 50%. The reported positive result has been qualified "J" and should be considered estimated.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	Perfluorohexanoic Acid	0.075	UG/L	PQL		0.073	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Hydro-EVE Acid	0.0081	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Hydro-PS Acid	0.015	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PPF Acid	0.59	UG/L	PQL		0.011	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFMOAA	0.079	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFO2HxA	0.21	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFO3OA	0.029	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluoroheptanoic Acid	0.0026	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PFOA	0.0040	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorobutanoic Acid	0.010	UG/L	PQL		0.0050	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluorohexanoic Acid	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PEPA	0.046	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Perfluoropentanoic Acid	0.0060	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	R-EVE	0.13	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Hydro-EVE Acid	0.0083	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	PMPA	0.23	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924-D	04/19/2024	320-111966-3	Hfpo Dimer Acid	0.14	UG/L	PQL		0.0040	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Hydro-PS Acid	0.016	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PPF Acid	0.51	UG/L	PQL		0.012	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFMOAA	0.077	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFO2HxA	0.23	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFO3OA	0.031	ug/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluoroheptanoic Acid	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PFOA	0.0047	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorobutanoic Acid	0.011	UG/L	PQL		0.0050	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluorohexanoic Acid	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PEPA	0.050	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Perfluoropentanoic Acid	0.0061	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	R-EVE	0.12	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	PMPA	0.22	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PW-07-041924	04/19/2024	320-111966-2	Hfpo Dimer Acid	0.15	UG/L	PQL		0.0040	J	537 Modified		3535
CAP2Q24-SMW-11-041524	04/15/2024	320-111473-4	PMPA	2.3	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-SMW-11-041524	04/15/2024	320-111473-4	R-PSDA	0.095	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	PMPA	6.0	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PZ-22-041624	04/16/2024	320-111473-8	R-PSDA	0.48	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PW-06-041624	04/16/2024	320-111473-9	PMPA	0.67	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PW-06-041624	04/16/2024	320-111473-9	R-PSDA	0.037	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	PMPA	4.8	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PIW-7D-041524	04/15/2024	320-111473-1	R-PSDA	0.49	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	PMPA	13	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PIW-3D-041524	04/15/2024	320-111473-5	R-PSDA	0.62	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PIW-1D-041524	04/15/2024	320-111473-2	PMPA	8.2	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PIW-1D-041524	04/15/2024	320-111473-2	R-PSDA	0.33	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	PMPA	5.0	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-OW-33-041624	04/16/2024	320-111473-11	R-PSDA	0.24	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-OW-28-041624	04/16/2024	320-111473-10	PMPA	4.6	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-OW-28-041624	04/16/2024	320-111473-10	R-PSDA	0.21	UG/L	PQL		0.035	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	PMPA	13	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-LTW-03-041524	04/15/2024	320-111473-6	R-PSDA	0.76	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	PMPA	13	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-LTW-02-041524	04/15/2024	320-111473-7	R-PSDA	0.65	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	PMPA	14	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-LTW-01-041524	04/15/2024	320-111473-3	R-PSDA	0.73	UG/L	PQL		0.035	J	537 Modified		3535

ADQM Data Review

Site: Chemours Fayetteville

Project: CAP SW/GW Sampling 2Q24

Project Reviewer: Bridget Gavaghan

Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP2Q24-LTW-05-041024	320-111363-1	Groundwater	N	04/10/2024	14:50	FS
CAP2Q24-EQBLK-PP-041124	320-111363-2	Blank Water	N	04/11/2024	09:00	EB
CAP2Q24-EQBLK-DV-041124	320-111363-3	Blank Water	N	04/11/2024	09:30	EB
CAP2Q24-LTW-04-041024	320-111363-4	Groundwater	N	04/10/2024	12:30	FS
CAP2Q24-SMW-12-041024	320-111363-5	Groundwater	N	04/10/2024	11:00	FS
CAP2Q24-PIW-7S-041024	320-111363-6	Groundwater	N	04/10/2024	16:40	FS
CAP2Q24-PW-09-041024	320-111363-7	Groundwater	N	04/10/2024	14:55	FS
CAP2Q24-PW-09-041024-D	320-111363-8	Groundwater	N	04/10/2024	14:55	DUP
CAP2Q24-WC-1-24-041824	320-111655-1	Surface Water	N	04/18/2024	12:00	FS
CAP2Q24-WC-2-24-041824	320-111655-2	Surface Water	N	04/18/2024	12:00	FS
CAP2Q24-WC-3-24-041824	320-111655-3	Surface Water	N	04/18/2024	12:08	FS
CAP2Q24-CFR-KINGS-042224	320-111655-4	Surface Water	N	04/22/2024	13:20	FS
CAP2Q24-CFR-TARHEEL-041824	320-111655-5	Surface Water	N	04/18/2024	15:15	FS
CAP2Q24-CFR-BLADEN-041824	320-111655-6	Surface Water	N	04/18/2024	10:50	FS
CAP2Q24-CFR-BLADEN-041824-D	320-111655-7	Surface Water	N	04/18/2024	10:50	DUP
CAP2Q24-GBC-1-050624	320-112121-1	Surface Water	N	05/06/2024	17:15	FS
CAP2Q24-CFR-RM-76-050624	320-112121-2	Surface Water	N	05/06/2024	12:00	FS
CAP2Q24-CFR-TARHEEL-050724	320-112121-3	Surface Water	N	05/07/2024	11:30	FS
CAP2Q24-LOCK-DAM-NORTH-050624	320-112121-4	Surface Water	N	05/06/2024	14:30	FS
CAP2Q24-LOCK-DAM-SEEP-050624	320-112121-5	Surface Water	N	05/06/2024	14:20	FS
CAP2Q24-EQBLK-PP-050724	320-112121-6	Blank Water	N	05/07/2024	14:00	EB
CAP2Q24-WC-1-24-050824	320-112338-1	Surface Water	N	05/08/2024	16:24	FS
CAP2Q24-WC-1-050724	320-112338-2	Surface Water	N	05/07/2024	17:20	FS
RIVER-WATER-INTAKE-24-050724	320-112338-3	Surface Water	N	05/07/2024	10:06	FS
RIVER-WATER-INTAKE-24-050724-D	320-112338-4	Surface Water	N	05/07/2024	10:06	DUP
CAP2Q24-OUTFALL-002-24-050724	320-112338-5	Surface Water	N	05/07/2024	11:42	FS
CAP2Q24-CFR-TARHEEL-24-050824	320-112338-6	Surface Water	N	05/08/2024	11:07	FS
CAP2Q24-OLDOF-2-23-050824	320-112338-7	Surface Water	N	05/08/2024	15:36	FS
CAP2Q24-OLDOF-2-050724	320-112338-8	Surface Water	N	05/07/2024	17:00	FS
CAP2Q24-EQBLK-IS-050724	320-112338-9	Blank Water	N	05/07/2024	14:15	EB

* FS=Field Sample
DUP=Field Duplicate
FB=Field Blank
EB=Equipment Blank
TB=Trip Blank

Analytical Protocol

Lab Name	Lab Method	Parameter Category	Sampling Program
Eurofins Environ Testing Northern Cali	537 Modified	Per- and Polyfluorinated Alkyl Substances (PFAS)	CAP SW Sampling 2Q24
Eurofins Environ Testing Northern Cali	537 Modified	Per- and Polyfluorinated Alkyl Substances (PFAS)	CAP GW Sampling 2Q24

ADQM Data Review Checklist

Item	Description	Yes	No*	DVM Narrative Report	Laboratory Report	Exception Report (ER) #
A	Did samples meet laboratory acceptability requirements upon receipt (i.e., intact, within temperature, properly preserved, and no headspace where applicable)?	X				
B	Were samples received by the laboratory in agreement with the associated chain of custody?		X		X	
C	Was the chain of custody properly completed by the laboratory and/or field team?	X				
D	Were samples prepped/analyzed by the laboratory within method holding times?		X	X	X	
E	Were data review criteria met for method blanks, LCSs/LCSDs, MSs/MSDs, PDSs, SDs, replicates, surrogates, sample results within calibration range, total/dissolved samples, field duplicates, field/equipment/trip blanks?		X	X	X	
F	Temperature upon laboratory receipt meets range not frozen to 6 C (manual check)?	X				
G	Were all data usable and not R qualified?	X				
ER#	**Description**					
Other QA/QC Items to Note:						

* See DVM Narrative Report, Laboratory Report, and/or ER # for further details as indicated.

The electronic data submitted for this project were reviewed via the Data Verification Module (DVM) process. Overall, the data are acceptable for use without qualification, except as noted on the attached DVM Narrative Report.

The lab reports due to a large page count are stored on a network shared drive and are available to be posted on external shared drives, or on a flash drive.

Data Verification Module (DVM)

The DVM is an internal review process used by the ADQM group to assist with the determination of data usability. The electronic data deliverables received from the laboratory are loaded into the Locus EIM™ database and processed through a series of data quality checks, which are a combination of software, Locus EIM™ database Data Verification Module (DVM), and manual reviewer evaluations. The data are evaluated against the following data usability checks:

- Field and laboratory blank contamination
- US EPA hold time criteria
- Missing Quality Control (QC) samples
- Matrix spike (MS)/matrix spike duplicate (MSD) recoveries and the relative percent differences (RPDs) between these spikes
- Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) recoveries and the RPD between these spikes
- Surrogate spike recoveries for organic analyses
- Difference/RPD between field duplicate sample pairs
- RPD between laboratory replicates for inorganic analyses
- Difference/percent difference between total and dissolved sample pairs

There are two qualifier fields in EIM:

Laboratory Qualifier is the qualifier assigned by the laboratory and may not reflect the usability of the data. This qualifier may have many different meanings and can vary between labs and over time within the same lab. Please refer to the laboratory report for a description of the laboratory qualifiers. As they are laboratory descriptors they are not to be used when evaluating the data.

Validation Qualifier is the 3rd party formal validation qualifier if this was performed. Otherwise this field contains the qualifier resulting from the ADQM DVM review process. This qualifier assesses the usability of the data and may not equal the laboratory qualifier. The DVM applies the following data evaluation qualifiers to analysis results, as warranted:

Qualifier	Definition
B	Not detected substantially above the level reported in the laboratory or field blanks.
R	Unusable result. Analyte may or may not be present in the sample.
J	Analyte present. Reported value may not be accurate or precise.
UJ	Not detected. Reporting limit may not be accurate or precise.

The **Validation Status Code** field is set to “DVM” if the ADQM DVM process has been performed. If the DVM has not been run, the field will be blank.

If the DVM has been run (**Validation Status Code** equals “DVM”), use the **Validation Qualifier.**

If the data have been validated by a third party, the field **“Validated By”** will be set to the validator (e.g., ESI for Environmental Standards, Inc.).

DVM Narrative Report

Site: Fayetteville **Sampling Program:** CAP SW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: High relative percent difference (RPD) observed between field duplicate and parent sample. The reported detection limits may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-CFR-BLADEN-041824-D	04/18/2024	320-111655-7	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP SW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Only one surrogate has relative percent recovery (RPR) values outside control limits and the parameter is a PFC (Nondetects).

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-WC-1-24-050824	05/08/2024	320-112338-1	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-SMW-12-041024	04/10/2024	320-111363-5	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	10:2 Fluorotelomer sulfonate	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PMPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hfpo Dimer Acid	0.0040	UG/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFOS	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoroundecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	0.0040	ug/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoropentanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoropentane Sulfonic Acid (PFPeS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	6:2 Fluorotelomer Sulfonate	0.0050	ug/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorohexanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorododecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-methyl perfluoro-1-octanesulfonamide	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFOA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorodecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorodecane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorohexane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorobutanoic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorobutane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoroheptanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluoroheptane Sulfonic Acid (PFHpS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorononanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO2HxA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-ethylperfluoro-1-octanesulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PPF Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFMOAA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorononanesulfonic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorotridecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorooctane Sulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	9Cl-PF3ONS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	11Cl-PF3OUdS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	Perfluorododecane Sulfonic Acid (PFDoS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	DONA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	10:2 Fluorotelomer sulfonate	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PMPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hfpo Dimer Acid	0.0040	UG/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFOS	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoroundecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	0.0040	ug/L	PQL		0.0040	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoropentanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoropentane Sulfonic Acid (PFPeS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	6:2 Fluorotelomer Sulfonate	0.0050	ug/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorohexanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorododecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-methyl perfluoro-1-octanesulfonamide	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFOA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorodecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorodecane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorohexane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorobutanoic Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorobutane Sulfonic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoroheptanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluoroheptane Sulfonic Acid (PFHpS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorononanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorotetradecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO2HxA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-ethylperfluoro-1-octanesulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PPF Acid	0.0050	UG/L	PQL		0.0050	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFMOAA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorononanesulfonic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorotridecanoic Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorooctane Sulfonamide	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	9Cl-PF3ONS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	11Cl-PF3OUdS	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	Perfluorododecane Sulfonic Acid (PFDoS)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	DONA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-EQBLK-DV-041124	04/11/2024	320-111363-3	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP2Q24-EQBLK-PP-041124	04/11/2024	320-111363-2	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The preparation hold time for this sample was exceeded by a factor of 2. The reported result may be biased low.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	N-ethylperfluoro-1-octanesulfonamide	0.11	UG/L	PQL		0.11	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Associated MS and/or MSD analysis had relative percent recovery (RPR) values less than the lower control limit. The actual detection limits may be higher than reported.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PS Acid	0.050	UG/L	PQL		0.050	UJ	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP SW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Associated MS and/or MSD analysis had relative percent recovery (RPR) values higher than the upper control limit. The reported result may be biased high.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
RIVER-WATER-INTAKE-24-050724	05/07/2024	320-112338-3	R-PSDA	0.0059	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-050724	05/07/2024	320-112338-3	Hydrolyzed PSDA	0.0076	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-050724	05/07/2024	320-112338-3	R-EVE	0.0031	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-BLADEN-041824	04/18/2024	320-111655-6	Hydrolyzed PSDA	0.0029	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: High relative percent difference (RPD) observed between field duplicate and parent sample. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-PW-09-041024-D	04/10/2024	320-111363-8	PMPA	0.17	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-PW-09-041024	04/10/2024	320-111363-7	PMPA	0.31	UG/L	PQL		0.043	J	537 Modified		3535
CAP2Q24-CFR-BLADEN-041824	04/18/2024	320-111655-6	R-PSDA	0.0044	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP GW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-SMW-12-041024	04/10/2024	320-111363-5	R-PSDA	0.099	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-SMW-12-041024	04/10/2024	320-111363-5	R-EVE	0.074	UG/L	PQL		0.039	J	537 Modified		3535
RIVER-WATER-INTAKE-24-050724-D	05/07/2024	320-112338-4	R-PSDA	0.0072	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-050724-D	05/07/2024	320-112338-4	Hydrolyzed PSDA	0.0081	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-050724-D	05/07/2024	320-112338-4	R-EVE	0.0038	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	R-PSDA	0.77	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	Hydrolyzed PSDA	1.0	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-PIW-7S-041024	04/10/2024	320-111363-6	R-EVE	0.89	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	R-PSDA	1.2	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	Hydrolyzed PSDA	1.7	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-05-041024	04/10/2024	320-111363-1	R-EVE	1.5	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	R-PSDA	2.3	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	Hydrolyzed PSDA	3.0	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LTW-04-041024	04/10/2024	320-111363-4	R-EVE	1.9	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-CFR-KINGS-042224	04/22/2024	320-111655-4	R-PSDA	0.010	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-KINGS-042224	04/22/2024	320-111655-4	Hydrolyzed PSDA	0.0036	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-KINGS-042224	04/22/2024	320-111655-4	R-EVE	0.014	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-TARHEEL-041824	04/18/2024	320-111655-5	R-PSDA	0.0044	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-TARHEEL-041824	04/18/2024	320-111655-5	Hydrolyzed PSDA	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-24-041824	04/18/2024	320-111655-1	R-PSDA	0.10	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-24-041824	04/18/2024	320-111655-1	Hydrolyzed PSDA	0.37	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-24-041824	04/18/2024	320-111655-1	R-EVE	0.041	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-2-24-041824	04/18/2024	320-111655-2	R-PSDA	0.054	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP SW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-WC-2-24-041824	04/18/2024	320-111655-2	Hydrolyzed PSDA	0.081	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-2-24-041824	04/18/2024	320-111655-2	R-EVE	0.025	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-3-24-041824	04/18/2024	320-111655-3	R-PSDA	0.041	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-3-24-041824	04/18/2024	320-111655-3	R-EVE	0.017	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-RM-76-050624	05/06/2024	320-112121-2	R-PSDA	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-TARHEEL-050724	05/07/2024	320-112121-3	R-PSDA	0.0044	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-CFR-TARHEEL-050724	05/07/2024	320-112121-3	Hydrolyzed PSDA	0.0021	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-GBC-1-050624	05/06/2024	320-112121-1	R-PSDA	0.11	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-GBC-1-050624	05/06/2024	320-112121-1	R-EVE	0.046	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-LOCK-DAM-NORTH-050624	05/06/2024	320-112121-4	R-PSDA	0.18	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LOCK-DAM-NORTH-050624	05/06/2024	320-112121-4	R-EVE	0.072	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-LOCK-DAM-SEEP-050624	05/06/2024	320-112121-5	R-PSDA	0.50	UG/L	PQL		0.035	J	537 Modified		3535
CAP2Q24-LOCK-DAM-SEEP-050624	05/06/2024	320-112121-5	Hydrolyzed PSDA	0.41	UG/L	PQL		0.034	J	537 Modified		3535
CAP2Q24-LOCK-DAM-SEEP-050624	05/06/2024	320-112121-5	R-EVE	0.14	UG/L	PQL		0.039	J	537 Modified		3535
CAP2Q24-CFR-TARHEEL-24-050824	05/08/2024	320-112338-6	R-PSDA	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-050724	05/07/2024	320-112338-8	R-PSDA	0.029	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-050724	05/07/2024	320-112338-8	Hydrolyzed PSDA	0.050	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-050724	05/07/2024	320-112338-8	R-EVE	0.015	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-23-050824	05/08/2024	320-112338-7	R-PSDA	0.016	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-23-050824	05/08/2024	320-112338-7	Hydrolyzed PSDA	0.027	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-23-050824	05/08/2024	320-112338-7	R-EVE	0.0085	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OUTFALL-002-24-050724	05/07/2024	320-112338-5	R-PSDA	0.057	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OUTFALL-002-24-050724	05/07/2024	320-112338-5	Hydrolyzed PSDA	0.041	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP SW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: Uncertainty around the analysis of R-PSDA, Hydrolyzed PSDA and R-EVE; J-qualifier added to all detects in the data set, even if there was no matrix spike analyzed for that particular sample.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-OUTFALL-002-24-050724	05/07/2024	320-112338-5	R-EVE	0.015	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-050724	05/07/2024	320-112338-2	R-PSDA	0.053	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-050724	05/07/2024	320-112338-2	Hydrolyzed PSDA	0.18	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-050724	05/07/2024	320-112338-2	R-EVE	0.023	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-24-050824	05/08/2024	320-112338-1	R-PSDA	0.042	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-24-050824	05/08/2024	320-112338-1	Hydrolyzed PSDA	0.17	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-WC-1-24-050824	05/08/2024	320-112338-1	R-EVE	0.019	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville **Sampling Program:** CAP SW Sampling 2Q24 **Validation Options:** LABSTATS

Validation Reason Code: The ion ratio for the compound differed from the expected ion ratio by more than 50%. The reported positive result has been qualified "J" and should be considered estimated.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
CAP2Q24-GBC-1-050624	05/06/2024	320-112121-1	PFOS	0.0027	UG/L	PQL		0.0020	J	537 Modified		3535
CAP2Q24-OLDOF-2-050724	05/07/2024	320-112338-8	Perfluorononanoic Acid	0.0021	UG/L	PQL		0.0020	J	537 Modified		3535