

Appendix A

Cape Fear River PFAS Mass Loading Model

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, and 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.

Appendix A: Cape Fear River PFAS Mass Loading Model

- **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 Q3 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 (July 2024).

A total of 35 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

A total of 11 primary samples and 1 duplicate sample were collected on July 10 and 11, 2024. The three downstream samples along the Cape Fear River (Bladen Bluffs, Tar Heel, and Kings Bluff) were also sampled from July 10 to 11, 2024. Seep A, B, C, and D effluents were not sampled because the seeps were dry during the sampling event.

2.3 Lock and Dam Seep Sampling

During the mass loading model sampling program (July 10 to 11, 2024), the Lock and Dam North location was sampled, but the Lock and Dam Seep was not sampled because the location was dry, as shown in the photos below (left: Lock and Dam Seep; right: Lock and Dam North):



In addition, the Lock and Dam Seep was sampled on July 24 and September 4, 2024; and the Lock and Dam North was sampled on September 10, 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 July 2, 2024 (Table A3). From July 9 to 29, 2024, groundwater samples were collected from 23 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).

Appendix A: Cape Fear River PFAS Mass Loading Model

3 PFAS ANALYTICAL RESULTS

The analytical results from samples during the Q3 2024 surface water and groundwater sampling events are presented in Tables A5¹ 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 Q3 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

¹ The Lock and Dam Seep results from July 24 and September 4, 2024, and the Lock and Dam North results from September 10, 2024, are included in Table A5 and in Attachment ATT1. However, these results are not incorporated to in the Q3 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.

Appendix A: Cape Fear River PFAS Mass Loading Model

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 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, 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 July 11, 2024. PFAS were not detected above associated reporting limits in these equipment blanks. One field duplicate was collected at WC-1 location on July 11, 2024. PFAS results for the primary (CAP3Q24-WC-1-24-071124) and duplicate sample (CAP3Q24-WC-1-24-071124-D) had relative percent differences of less than 30% for the reported compounds.

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 Q3 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 2.4 ng/L (upstream sample at CFR MILE 76 on July 10, 2024) to 27 ng/L (downstream sample at CFR-TARHEEL on July 11, 2024).

For the creeks, the Total Table 3+ (17 compounds) concentrations were 3,200 ng/L and 1,400 ng/L at Willis Creek and Georgia Branch, respectively. These concentrations are within the range of

Appendix A: Cape Fear River PFAS Mass Loading Model

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

Among the Seeps and Outfall 003 Stream, Outfall 002 effluent had the lowest Total Table 3+ (17 compounds) concentrations (53 ng/L), while Lock and Dam North had the highest Total Table 3+ (17 compounds) concentration (15,000 ng/L) during the Mass Loading model sampling event. The analytical results for the Seeps influent and effluent collected for the FTC performance monitoring this quarter are not included in this report but are provided in *CFR Long-Term Remedy Performance Monitoring Report #7* (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-MILE 76 on July 10, 2024, and CFR-BLADEN, CFR-KINGS, and CFR-TARHEEL on July 11, 2024).

3.3 Groundwater PFAS Analytical Results

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

- Eight 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.
- No field duplicates were collected in Q3 2024 at the MLM locations. Field duplicates at other groundwater sampling locations will be reported in the 2024 Annual Groundwater Monitoring report.

Individual PFAS and Total PFAS concentrations for the groundwater samples collected in Q3 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 290,000 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 Q3 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,d).

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 July 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

The model-estimated Total Table 3+ (17 compounds) mass discharge from the potential transport pathways during Q3 2024 is 0.55 mg/s (Attachment ATT1 Table ATT1-13) and represents the mass discharge estimated downgradient of the remedies (i.e., after the water passes through the remedies, “after remedies”). This mass discharge value 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 Q3 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 #7*; Geosyntec, 2024a), or are within the range of previous values.

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

1. The Q3 2024 mass discharges to the Cape Fear River are either equivalent to historical levels or significantly lower. Note that the mass discharge of 0.32 mg/s for Willis Creek was less than the lower end of the range of “historical before remedies” mass discharge.
2. The pathways with remedies (Seeps, Outfall 003 Stream, and Onsite Groundwater) all show a significant mass discharge decrease in Q3 2024 compared to historical, pre-remediation ranges.

Appendix A: Cape Fear River PFAS Mass Loading Model

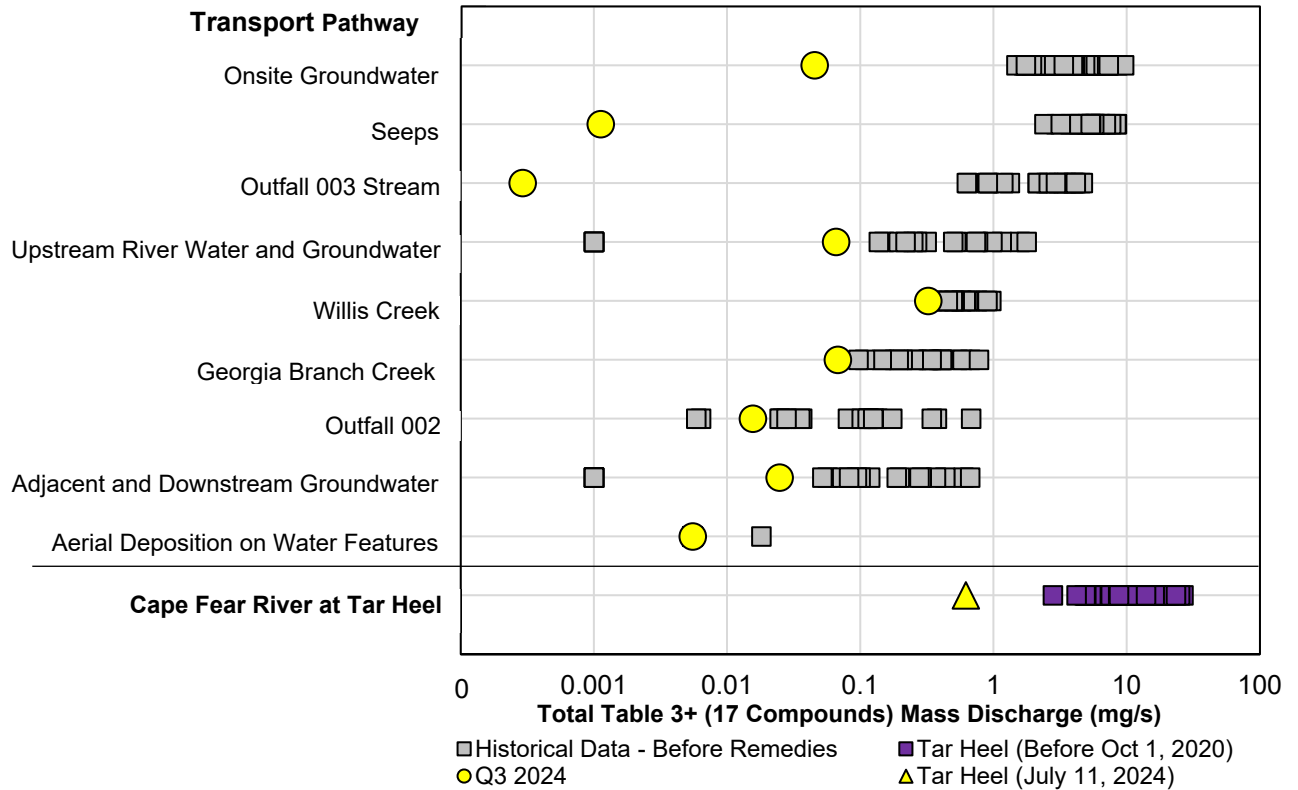
3. The total mass discharge to the Cape Fear River from the Site is much lower in Q3 2024 compared to historical before remedies mass discharges.

Model Transport Pathway	Historical Before Remedies Total Table 3+ (17 Compounds) Mass Discharge (mg/s) ¹			Q3 2024 Total Table 3+ (17 Compounds) Mass Discharge (mg/s)
	Min	Median	Max	
Aerial Deposition	0.01	0.01	0.02	0.013
Upstream River and Groundwater	0	0.27	4.5	0.066
Willis Creek	0.31	0.57	0.96	0.32
Seeps	3.0	5.4	8.4	0.001
Onsite Groundwater	1.5	3.6	9.6	0.045
Outfall 002	0.006	0.10	0.68	0.016
Georgia Branch Creek	0.10	0.32	0.78	0.068
Outfall 003 Stream	0.63	2.5	4.7	<0.001
Offsite Groundwater	0	0.10	1.7	0.02
Total²	6.7	14	24	0.55

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.

Appendix A: Cape Fear River PFAS Mass Loading Model



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 Q3 2024, 35 water samples collected from the PFAS transport pathways (seeps, creeks, Outfall 003 Stream, Outfall 002, groundwater) 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 Q3 2024 is 0.55 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 Q3 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 #7*; 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.

Appendix A: Cape Fear River PFAS Mass Loading Model

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 #7. Chemours Fayetteville Works. December 20, 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.

Geosyntec. 2024d. Cape Fear River PFAS Mass Loading Assessment – Second Quarter 2024 Report, Chemours Fayetteville Works. September 30, 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

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 July 2024 as reported in Table A5.	Measured flow rates from USGS gauging station at W.O. Huske Dam during July 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 July 2024 as reported in Table A5.	Measured flow rates through Marsh-McBirney method during July 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 July 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 July 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 North samples collected in July 2024 as reported in Table A5.	Measured flow rates through bucket and time for Lock and Dam North during July 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 July 2024 as reported in Table A5.	Measured flow rates through Marsh-McBirney method during July 2024 as reported in Attachment ATT1.
8	Adjacent and Downstream Groundwater	Estimated using a scaling factor applied to upstream mass discharge. Refer to <i>Cape Fear River PFAS Mass Loading Calculation Protocol Version 2</i> (Geosyntec, 2020a) for details.	Estimated using a scaling factor applied to upstream mass discharge. Refer to <i>Cape Fear River PFAS Mass Loading Calculation Protocol Version 2</i> (Geosyntec, 2020a) for details.
9	Georgia Branch Creek	Measured from Georgia Branch Creek samples collected in July 2024 as reported in Table A5.	Measured flow rates through Marsh-McBirney method during July 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 - Q3 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	CAP3Q24-CFR-RM-76071024	--	7/10/2024 8:40	Grab	0	7.74	5.3	7.7	10.65	402.53	29.15	USGS Data ⁶	967
Willis Creek	WC-1	Mouth of Willis Creek	CAP3Q24-WC-1-24-071124	--	7/11/2024 7:00	Composite	24	7.22	2.7	-7.1	18.8	552.82	28.62	Marsh-McBirney Flow	3.6
Intake River Water at Facility	INTAKE AT FACILITY	Water Drawn Through the Intake Sampled at the Power Area at the Site	River-Water-Intake-24-071124	--	7/11/2024 7:06	Composite	24	8.4	5.29	-25.1	29.3	2571.9	28.08	Facility DMRs	17.7
Outfall 002	OUTFALL-002	Upstream of Outfall 002 in open channel	CAP3Q24-OUTFALL-002-24-071124	--	7/11/2024 9:56	Composite	24	7.97	7.12	45	19.8	361.37	34.96	Facility DMRs	20.4
Stormwater Treatment System ³	STS DISCHARGE	Monomers/IXM Stormwater Treatment System Effluent	STS Discharge - 071124	--	7/11/2024 11:15	Grab	0	6.89	--	--	0.71	--	--	Facility DMRs	0.11
Seep A	SEEP-A	Effluent Basin of Seep A FTC	--	--	--	--	No sample collected, no water flow through flow cell.								
Seep B	SEEP-B	Effluent Basin of Seep B FTC	--	--	--	--	No sample collected, no water flow through flow cell.								
Seep C	SEEP-C	Effluent Basin of Seep C FTC	--	--	--	--	No sample collected, no water flow through flow cell.								
Seep D	SEEP-D	Effluent Basin of Seep D FTC	--	--	--	--	No sample collected, no water flow through flow cell.								
Lock and Dam Seep	LOCK-DAM-SEEP	Southside of the boat ramp at the Lock and Dam Seep	--	--	--	--	Lock-Dam Seep was dry and could not be sampled.								
Lock and Dam North	LOCK-DAM-NORTH	Northside of the boat ramp at the Lock and Dam Seep	CAP0724-Lock-Dam-North-071024	--	7/10/2024 10:32	Grab	0	6.04	3.18	101.9	47.1	313.93	28.71	Bottle and Stopwatch	0.0026
Outfall 003 Stream	OLDOF-1	Mouth of Outfall 003 stream	CAP3Q24-OLDOF-2-24071124	--	7/11/2024 10:22	Composite	24	5.72	6.35	41.1	25.8	268.85	31.4	Marsh-McBirney Flow	0.0015
Georgia Branch Creek	GBC-1	Mouth of Georgia Branch Creek	CAP3Q24-GBC-1-071024	--	7/10/2024 13:20	Grab	0	6.49	2.91	161	6.19	1315.8	30.97	Marsh-McBirney Flow	1.7
Tar Heel Ferry Road Bridge	CFR-TARHEEL	Cape Fear River at Tar Heel Ferry Road Bridge	CAP3Q24-CFR-TARHEEL-071124	--	7/11/2024 10:00	Grab	0	7.13	6.08	135.7	14.3	415.41	29.36	USGS Data ⁶	901
			CAP3Q24-CFR-TARHEEL-24-071124	--	7/11/2024 22:36	Composite	24	7.52	7.29	21.7	12	281.56	26.23	USGS Data ⁶	912
Bladen Bluffs	CFR-BLADEN	Cape Fear River at Bladen Bluffs	CAP3Q24-CFR-BLADEN-071124	--	7/11/2024 9:30	Grab	0	6.56	6.16	160	17	174.52	27.55	USGS Data ⁷	889
Kings Bluffs	CFR-KINGS	Cape Fear River at Kings Bluff Raw Water	CAP3Q24-CFR-KINGS-071124	--	7/11/2024 14:40	Grab	0	7.24	5.92	151.5	15.4	372.14	29.58	USGS Data ⁸	1,090

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 July 2024 sampling event a grab sample was taken.
- 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 decommissioned 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 - Q3 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	BCA-01	07/02/24	399779.96	2050662.48	91-101	146.25	66.98	79.27
Onsite	Black Creek Aquifer	BCA-02	07/02/24	396242.02	2051062.07	92-102	148.37	78.46	69.91
Onsite	Black Creek Aquifer	BCA-03R	07/02/24	398582.23	2049522.22	88-98	150.82	56.67	94.15
Onsite	Black Creek Aquifer	BCA-04	07/02/24	395877.67	2047823.03	94-104	150.31	34.37	115.94
Offsite	Black Creek Aquifer	BLADEN-1DR	07/02/24	387522.25	2050247.40	NM	76.54	19.69	56.85
Offsite	Surficial Aquifer	BLADEN-1S	07/02/24	387518.97	2050233.35	5-10	76.74	10.15	66.59
Offsite	Black Creek Aquifer	BLADEN-2D	07/02/24	368827.09	2042878.34	70-75	138.27	24.15	114.12
Offsite	Surficial Aquifer	BLADEN-2S	07/02/24	368821.46	2042882.92	10-20	138.04	6.12	131.92
Offsite	Black Creek Aquifer	BLADEN-3D	07/02/24	396856.98	2059006.56	33.75-43.75	75.52	10.13	65.39
Offsite	Surficial Aquifer	BLADEN-3S	07/02/24	396862.31	2059012.93	5-15	74.27	9.53	64.74
Offsite	Black Creek Aquifer	BLADEN-4D	07/02/24	363255.12	2087636.87	46.75-51.75	59.66	2.39	57.27
Offsite	Surficial Aquifer	BLADEN-4S	07/02/24	363263.19	2087637.46	4.75-14.75	59.68	6.40	53.28
Offsite	Black Creek Aquifer	CUMBERLAND-1D	07/02/24	431459.95	2011071.39	40-50	174.60	6.42	168.18
Offsite	Surficial Aquifer	CUMBERLAND-1S	07/02/24	431459.95	2011071.39	15-25	174.73	6.60	168.13
Offsite	Black Creek Aquifer	CUMBERLAND-2D	07/02/24	449987.54	2074019.14	47-57	129.23	5.60	123.63
Offsite	Surficial Aquifer	CUMBERLAND-2S	07/02/24	449979.10	2074020.86	7-17	129.06	5.16	123.90
Offsite	Black Creek Aquifer	CUMBERLAND-3D	07/02/24	423248.12	2060409.16	22-27	78.79	8.26	70.53
Offsite	Surficial Aquifer	CUMBERLAND-3S	07/02/24	423254.64	2060413.30	9-14	79.06	8.48	70.58
Offsite	Black Creek Aquifer	CUMBERLAND-4D	07/02/24	413095.77	2078249.95	57-67	119.22	14.84	104.38
Offsite	Surficial Aquifer	CUMBERLAND-4S	07/02/24	413086.63	2078255.53	10-20	119.36	8.37	110.99
Offsite	Black Creek Aquifer	CUMBERLAND-5DR	07/02/24	405619.17	2138238.59	NM	106.67	12.53	94.22
Offsite	Surficial Aquifer	CUMBERLAND-5S	07/02/24	405623.27	2138233.37	14-24	106.65	7.20	99.45
Onsite	Black Creek Aquifer	EW-1	NM	399934.65	2051297.51	40-60	91.33	NM	NM
Onsite	Black Creek Aquifer	EW-2	NM	396164.48	2052232.61	40-65	77.25	NM	NM
Onsite	Black Creek Aquifer	EW-3	NM	395059.78	2052214.66	37-67	76.48	NM	NM
Onsite	Black Creek Aquifer	EW-4	NM	398581.51	2051805.58	53-73	80.64	NM	NM
Onsite	Black Creek Aquifer	EW-5	NM	397200.16	2052052.65	37-67	78.50	NM	NM
Onsite	Perched Zone	FTA-01	07/02/24	397906.09	2049370.01	12.0-22.0	149.60	16.06	133.54
Onsite	Perched Zone	FTA-02	07/02/24	397784.99	2049203.29	11.5-22.0	149.30	17.66	131.64
Onsite	Perched Zone	FTA-03	07/02/24	397766.23	2049310.46	12.0-22.0	150.10	17.81	132.29
Onsite	Surficial Aquifer	INSITU-01	07/02/24	401657.39	2046078.99	7.0-17.0	89.12	7.50	81.62
Onsite	Surficial Aquifer	INSITU-02	NM	401863.46	2049136.62	7.0-17.0	113.12	NM	NM
Onsite	Floodplain Deposits	LTW-01	07/02/24	399565.01	2052150.62	11.0-26.0	52.71	18.23	34.48
Onsite	Black Creek Aquifer	LTW-02	07/02/24	398847.57	2052355.48	28.0-38.0	51.39	12.93	38.46
Onsite	Floodplain Deposits	LTW-03	07/02/24	398114.45	2052558.35	15.0-30.0	51.75	15.56	36.19
Onsite	Floodplain Deposits	LTW-04	07/02/24	397279.61	2052584.95	12.0-27.0	50.66	12.54	38.12
Onsite	Black Creek Aquifer	LTW-05	07/02/24	396430.31	2052740.40	29.0-44.0	50.94	13.39	37.55
Onsite	Perched Zone	MW-11	NM	396544.40	2049051.06	11.5-21.5	148.53	NM	NM
Onsite	Perched Zone	MW-12S	07/02/24	397262.90	2049269.37	17.5-22.5	151.08	20.44	130.64
Onsite	Surficial Aquifer	MW-13D	07/02/24	397119.02	2049821.12	57-67	148.65	49.61	99.04
Onsite	Surficial Aquifer	MW-14D	07/02/24	396974.49	2049074.56	62-72	149.73	45.82	103.91
Onsite	Surficial Aquifer	MW-15DRR	07/02/24	398580.71	2049511.75	52.5-62.5	150.92	53.97	96.95
Onsite	Surficial Aquifer	MW-16D	07/02/24	398493.70	2048402.84	72-82	148.41	41.81	106.60
Onsite	Surficial Aquifer	MW-17D	07/02/24	398401.74	2047366.50	57-67	146.12	35.41	110.71
Onsite	Surficial Aquifer	MW-18D	07/02/24	400947.30	2046574.35	50-60	108.10	24.65	83.45
Onsite	Surficial Aquifer	MW-19D	07/02/24	401151.43	2048272.93	46-56	139.36	57.02	82.34
Onsite	Perched Zone	MW-1S	07/02/24	397080.69	2049117.99	21.0-24.0	148.88	19.23	129.65
Onsite	Surficial Aquifer	MW-20D	07/02/24	400791.01	2048733.71	65-75	137.20	53.67	83.53
Onsite	Surficial Aquifer	MW-21D	07/02/24	399501.88	2047074.92	72-82	151.42	50.80	100.62
Onsite	Surficial Aquifer	MW-22D	07/02/24	398518.40	2048362.48	52-72	149.09	41.73	107.36
Onsite	Perched Zone	MW-23	07/02/24	396237.61	2051063.25	9.5-14.5	148.34	14.74	133.60
Onsite	Perched Zone	MW-24	07/02/24	397303.94	2048767.69	18.8-23.8	150.31	21.58	128.73
Onsite	Perched Zone	MW-25	07/02/24	396753.37	2050989.82	12-17	147.59	14.18	133.41
Onsite	Perched Zone	MW-26	07/02/24	396265.18	2051484.67	5-10	147.70	12.71	134.99
Onsite	Perched Zone	MW-27	07/02/24	396010.33	2051472.00	10-15	146.83	15.20	131.63
Onsite	Perched Zone	MW-28	07/02/24	395719.79	2051165.93	9-14	144.70	14.46	130.24
Onsite	Perched Zone	MW-30	07/02/24	397340.79	2050776.09	10-15	147.67	14.09	133.58
Onsite	Perched Zone	MW-31	NM	396390.70	2049622.88	17-22	147.70	NM	NM
Onsite	Perched Zone	MW-32	NM	396359.58	2049651.79	13-18.5	147.11	NM	NM
Onsite	Perched Zone	MW-33	NM	396337.51	2049678.56	12-17	146.82	NM	NM
Onsite	Perched Zone	MW-34	NM	396352.90	2049619.09	17-22	147.97	NM	NM
Onsite	Perched Zone	MW-35	NM	396332.94	2049631.16	14-19	147.54	NM	NM
Onsite	Perched Zone	MW-36	NM	396320.09	2049651.17	12-17	147.89	NM	NM
Onsite	Perched Zone	MW-7S	07/02/24	397444.52	2049809.73	NM	147.47	11.05	136.42
Onsite	Perched Zone	MW-8S	NM	397096.48	2049867.77	NM	146.48	NM	NM
Onsite	Perched Zone	MW-9S	07/02/24	396760.16	2049734.30	17.5-22.5	154.39	21.39	133.00
Onsite	Perched Zone	NAF-01	07/02/24	398348.58	2050339.68	5.0-15.0	148.65	9.43	139.22
Onsite	Perched Zone	NAF-02	07/02/24	398660.16	2050634.55	5.0-15.0	149.28	10.16	139.12
Onsite	Perched Zone	NAF-03	07/02/24	398578.63	2050743.04	5.0-15.0	149.41	10.56	138.85
Onsite	Perched Zone	NAF-04	07/02/24	398445.89	2050713.13	5.0-15.0	146.77	7.45	139.32
Onsite	Perched Zone	NAF-06	07/02/24	398808.81	2050913.93	2.75-12.75	145.43	11.86	133.57
Onsite	Perched Zone	NAF-07	07/02/24	398898.69	2050618.12	5.5-15.5	149.03	9.82	139.21
Onsite	Perched Zone	NAF-08A	07/02/24	398098.22	2050886.93	5.0-15.0	147.74	8.97	138.77
Onsite	Surficial Aquifer	NAF-08B	07/02/24	398095.97	2050880.18	43.5-53.5	147.83	56.76	91.07
Onsite	Perched Zone	NAF-09	07/02/24	397708.78	2050807.44	7.0-17.0	148.62	12.48	136.14
Onsite	Perched Zone	NAF-10	07/02/24	397611.81	2050425.20	8.25-18.25	149.25	12.49	136.76
Onsite	Perched Zone	NAF-11A	07/02/24	398907.08	2050999.77	2.5-7.5	139.74	7.89	131.85
Onsite	Surficial Aquifer	NAF-11B	NM	398911.13	2050995.88	33.5-43.5	140.74	NM	NM
Onsite	Perched Zone	NAF-12	07/02/24	398270.56	2050777.49	18-23	145.79	6.18	139.61
Onsite	Black Creek Aquifer	OW-1	07/02/24	399930.53	2051287.87	40-50	95.01	38.07	56.94
Onsite	Black Creek Aquifer	OW-10	07/02/24	399948.17	2051291.21	40-50	94.39	37.45	56.94
Onsite	Black Creek Aquifer	OW-11	07/02/24	401683.39	2049913.61	74-84	94.92	49.70	45.22
Onsite	Black Creek Aquifer	OW-12	07/02/24	401731.33	2050721.09	50-60	83.65	55.26	28.39
Onsite	Black Creek Aquifer	OW-13	07/02/24	400769.33	2051210.62	50-60	85.12	54.62	30.50
Onsite	Black Creek Aquifer	OW-14	07/02/24	400311.42	2051608.03	46-56	80.67	48.63	32.04
Onsite	Black Creek Aquifer	OW-15	07/02/24	399719.91	2051608.62	34-44	87.86	30.10	57.76
Onsite	Black Creek Aquifer	OW-16	07/02/24	399828.66	2051993.25	15-25	52.94	18.61	34.33
Onsite	Black Creek Aquifer	OW-17	07/02/24	399433.03	2051661.47	58-68	89.67	56.76	32.91
Onsite	Black Creek Aquifer	OW-18	07/02/24	398846.69	2051836.19	45-55	90.88	44.58	46.30
Onsite	Black Creek Aquifer	OW-19	07/02/24	398067.23	2051976.50	70-80	86.68	54.85	31.83

TABLE A3
GROUNDWATER ELEVATIONS - Q3 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-2	07/02/24	398572.28	2051801.62	63-73	84.37	50.05	34.32
Onsite	Black Creek Aquifer	OW-20	07/02/24	398229.85	2052080.86	48-58	69.59	31.04	38.55
Onsite	Black Creek Aquifer	OW-21	07/02/24	397521.83	2051950.75	57-67	80.85	48.12	32.73
Onsite	Black Creek Aquifer	OW-22	07/02/24	397325.34	2052218.74	43-53	66.63	27.99	38.64
Onsite	Black Creek Aquifer	OW-23	07/02/24	396776.73	2052355.66	45-55	67.83	29.52	38.31
Onsite	Black Creek Aquifer	OW-24	07/02/24	396677.42	2052158.17	50-60	78.67	47.75	30.92
Onsite	Black Creek Aquifer	OW-25	07/02/24	396182.38	2052428.46	45-55	70.91	33.00	37.91
Onsite	Black Creek Aquifer	OW-26	07/02/24	395503.74	2052268.81	50-60	80.85	39.21	41.64
Onsite	Black Creek Aquifer	OW-27	07/02/24	395555.17	2052622.16	33-43	55.60	17.14	38.46
Onsite	Black Creek Aquifer	OW-28	07/02/24	395570.57	2052838.21	20-30	48.49	10.19	38.30
Onsite	Black Creek Aquifer	OW-29	07/02/24	395193.45	2052143.81	42-52	85.67	41.34	44.33
Onsite	Black Creek Aquifer	OW-3	07/02/24	398601.08	2051812.32	63-73	84.64	50.42	34.22
Onsite ⁵	Black Creek Aquifer	OW-30	07/02/24	394988.72	2052537.53	49-59	70.92	32.54	38.38
Onsite	Black Creek Aquifer	OW-31	07/02/24	394812.07	2051595.90	85-95	106.10	66.38	39.72
Onsite ⁵	Black Creek Aquifer	OW-33	07/02/24	395116.90	2052806.54	19-29	48.59	9.89	38.70
Onsite	Surficial Aquifer	OW-34	07/02/24	398593.54	2051813.31	23-33	83.76	16.23	67.53
Onsite	Surficial Aquifer	OW-35	07/02/24	398060.78	2051977.75	20-30	87.45	18.80	68.65
Onsite	Surficial Aquifer	OW-36	07/02/24	397257.46	2051997.45	11-21	80.61	17.85	62.76
Onsite	Black Creek Aquifer	OW-38	07/02/24	394885.22	2051883.97	60-70	123.70	60.55	63.15
Onsite	Black Creek Aquifer	OW-4	NM	395049.16	2052210.81	47-57	80.85	NM	NM
Onsite ⁵	Black Creek Aquifer	OW-40	07/02/24	394588.05	2052521.39	49-59	72.88	33.12	39.76
Onsite	Black Creek Aquifer	OW-41	07/02/24	401683.74	2050119.92	82-92	93.66	48.58	45.08
Onsite	Black Creek Aquifer	OW-42	07/02/24	401696.05	2050448.24	58-68	87.37	42.81	44.56
Onsite	Black Creek Aquifer	OW-43	07/02/24	400937.73	2051116.17	40-50	76.94	45.76	31.18
Onsite	Black Creek Aquifer	OW-44	07/02/24	399741.48	2051736.45	34-44	73.18	38.12	35.06
Onsite	Black Creek Aquifer	OW-45	07/02/24	398836.07	2051955.99	50-60	77.10	38.40	38.70
Onsite	Black Creek Aquifer	OW-46	07/02/24	398164.94	2052050.69	59-69	72.05	33.40	38.65
Onsite	Black Creek Aquifer	OW-47	07/02/24	397243.89	2052136.32	49-59	71.47	33.09	38.38
Onsite	Black Creek Aquifer	OW-48	07/02/24	396698.39	2052275.93	42-52	69.54	31.39	38.15
Onsite	Black Creek Aquifer	OW-49	07/02/24	396180.56	2052348.51	53-63	79.56	41.63	37.93
Onsite	Black Creek Aquifer	OW-5	NM	395070.03	2052196.97	54-64	81.61	NM	NM
Onsite	Black Creek Aquifer	OW-55	07/02/24	401761.92	2050875.02	43-58	75.45	48.01	27.44
Onsite	Black Creek Aquifer	OW-57	07/02/24	401781.20	2050174.65	33-43	68.87	25.34	43.53
Onsite	Black Creek Aquifer	OW-6	NM	396168.41	2052223.54	50-60	80.53	NM	NM
Onsite	Black Creek Aquifer	OW-7	07/02/24	397180.06	2052052.69	57-67	81.45	49.14	32.31
Onsite	Black Creek Aquifer	OW-8	07/02/24	397202.33	2052041.98	57-67	82.30	50.77	31.53
Onsite	Black Creek Aquifer	OW-9	NM	395075.14	2052211.07	54-64	79.78	NM	NM
Onsite	Black Creek Aquifer	PIW-10DR	07/02/24	395093.99	2052297.30	53-58	75.91	34.16	39.72
Onsite	Surficial Aquifer	PIW-10S	07/02/24	395104.95	2052296.98	7-17	76.32	18.04	55.98
Onsite	Black Creek Aquifer	PIW-11	07/02/24	401911.03	2050416.29	47-57	67.02	23.98	43.04
Onsite	Black Creek Aquifer	PIW-12	07/02/24	401703.10	2051025.77	64-74	83.78	57.85	25.93
Onsite	Black Creek Aquifer	PIW-13	07/02/24	401464.29	2051122.60	54-64	83.18	57.52	25.66
Onsite	Black Creek Aquifer	PIW-14	07/02/24	401163.98	2051186.57	56-66	87.43	58.40	29.03
Onsite	Black Creek Aquifer	PIW-15	NM	400706.51	2051532.80	34-44	67.85	NM	NM
Onsite	Black Creek Aquifer	PIW-16D	07/02/24	396257.96	2046587.07	90-100	150.06	25.85	124.21
Onsite	Surficial Aquifer	PIW-16S	07/02/24	396267.84	2046586.09	35-45	149.74	22.80	126.94
Onsite	Black Creek Aquifer	PIW-1D	07/02/24	400548.00	2051801.28	24.5-29.5	52.16	21.15	31.01
Onsite	Floodplain Deposits	PIW-1S	07/02/24	400541.03	2051792.39	7.8-17.8	54.04	21.68	32.36
Onsite	Black Creek Aquifer	PIW-2D	07/02/24	399925.40	2051315.80	40-50	96.19	39.26	56.93
Onsite	Black Creek Aquifer	PIW-3D	07/02/24	399711.25	2052086.94	19-24	53.42	19.02	34.40
Onsite	Black Creek Aquifer	PIW-4D	07/02/24	398816.52	2052101.94	32.3-37.3	52.85	14.39	38.46
Onsite	Surficial Aquifer	PIW-5SR	NM	398545.10	2051977.53	9.8-19.8	79.02	DRY	DRY
Onsite	Floodplain Deposits	PIW-6S	07/02/24	398117.93	2052539.79	18-28	53.40	17.19	36.21
Onsite	Black Creek Aquifer	PIW-7D	07/02/24	396787.77	2052595.65	29-34	48.93	10.56	38.37
Onsite	Floodplain Deposits	PIW-7S	NM	396786.97	2052589.10	7-17	47.97	NM	NM
Onsite	Black Creek Aquifer	PIW-8D	07/02/24	396403.37	2052682.10	35.5-40	48.66	11.09	37.57
Onsite	Black Creek Aquifer	PIW-9D	NM	396155.84	2052250.84	40-45	79.64	NM	NM
Onsite	Surficial Aquifer	PIW-9S	NM	396148.52	2052251.03	24.8-29.8	79.64	NM	NM
Onsite	Perched Zone	PW-01	07/02/24	399064.80	2049654.30	11-21	149.55	15.66	133.89
Onsite	Surficial Aquifer	PW-02	07/02/24	399779.06	2050649.47	50-60	146.43	63.17	83.26
Onsite	Surficial Aquifer	PW-03	07/02/24	397339.81	2050765.32	35-45	147.97	43.71	104.26
Onsite	Surficial Aquifer	PW-04	07/02/24	394659.55	2050940.66	17-27	97.75	29.01	68.74
Onsite	Surficial Aquifer	PW-05	07/02/24	395873.10	2047812.93	65-75	150.34	35.88	114.46
Onsite	Surficial Aquifer	PW-06	07/02/24	392868.00	2045288.77	19-29	147.69	21.20	126.49
Onsite	Surficial Aquifer	PW-07	07/02/24	390847.71	2049258.26	28-38	148.16	39.75	108.41
Onsite	Black Creek Aquifer	PW-09	07/02/24	402000.08	2048979.11	44-54	72.93	25.51	47.41
Onsite	Black Creek Aquifer	PW-10RR	07/02/24	398532.45	2051965.91	57-67	79.97	41.38	38.59
Onsite	Black Creek Aquifer	PW-11	07/02/24	394354.36	2052226.72	53-63	73.26	33.04	40.22
Onsite	Black Creek Aquifer	PW-12	07/02/24	399500.45	2047063.51	109-119	150.61	63.50	87.11
Onsite	Black Creek Aquifer	PW-13	07/02/24	397584.26	2048029.18	120-130	149.36	39.05	110.31
Onsite	Black Creek Aquifer	PW-14	07/02/24	397325.65	2050766.36	136-146	147.97	66.77	81.20
Onsite	Black Creek Aquifer	PW-15R	07/02/24	398900.88	2051011.75	110-120	136.14	67.35	68.79
Onsite	Surficial Aquifer	PZ-1	07/02/24	394928.45	2051910.97	28-38	126.65	36.93	89.72
Onsite	Perched Zone	PZ-11	07/02/24	398646.25	2049820.94	15-20	151.03	11.15	139.88
Onsite	Perched Zone	PZ-12	07/02/24	399091.19	2048978.89	15.1-20.1	149.89	19.67	130.22
Onsite	Perched Zone	PZ-13	07/02/24	397707.82	2050985.25	7.1-12.1	148.14	11.94	136.20
Onsite	Perched Zone	PZ-14	07/02/24	397589.92	2050618.27	9.0-14.0	148.38	11.28	137.10
Onsite	Perched Zone	PZ-15	07/02/24	396806.39	2050107.50	10.2-15.2	147.76	13.39	134.37
Onsite	Perched Zone	PZ-17	NM	396614.82	2048872.69	21.1-26.1	150.08	NM	NM
Onsite	Perched Zone	PZ-19R	07/02/24	397998.66	2049919.52	16-21	150.05	13.75	136.30
Onsite	Surficial Aquifer	PZ-2	07/02/24	396631.77	2052167.77	15-25	78.05	13.64	64.41
Onsite	Perched Zone	PZ-20R	07/02/24	398185.81	2049784.60	15-20	151.29	15.11	136.18
Onsite	Perched Zone	PZ-21R	07/02/24	398445.16	2049883.13	17-22	150.67	13.67	137.00
Onsite	Black Creek Aquifer	PZ-22	07/02/24	397271.94	2052585.34	42.5-47.5	50.70	12.30	38.40
Onsite	Perched Zone	PZ-24	07/02/24	396117.94	2050744.07	11-16	147.53	14.64	132.89
Onsite	Perched Zone	PZ-25R	NM	395971.54	2050748.23	NM	147.51	NM	NM
Onsite	Perched Zone	PZ-26	07/02/24	396059.78	2050382.35	11-16	147.70	13.01	134.69
Onsite	Perched Zone	PZ-27	07/02/24	395922.11	2050376.76	12-17	147.17	14.13	133.04
Onsite	Perched Zone	PZ-28	07/02/24	396304.55	2049933.79	13-18	148.64	13.09	135.55

**TABLE A3
GROUNDWATER ELEVATIONS - Q3 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-29	NM	396377.59	2049771.59	12-18	147.74	NM	NM
Onsite	Perched Zone	PZ-31	NM	396428.73	2049594.36	14-19	148.00	NM	NM
Onsite	Perched Zone	PZ-32	NM	396418.47	2049713.79	13-18	148.47	NM	NM
Onsite	Perched Zone	PZ-33	NM	396308.92	2049707.66	12.5-17.5	146.72	NM	NM
Onsite	Perched Zone	PZ-34	NM	396292.05	2049595.04	13.5-18.5	147.70	NM	NM
Onsite	Perched Zone	PZ-35	07/02/24	398232.64	2050020.49	13-18	150.43	13.37	137.06
Onsite	Perched Zone	PZ-36	NM	396086.17	2051331.44	5-8.5	135.20	NM	NM
Onsite	Perched Zone	PZ-37	NM	396042.40	2051050.05	5-8	135.56	NM	NM
Onsite	Perched Zone	PZ-38	NM	395970.01	2050569.66	5-9	137.34	NM	NM
Onsite	Perched Zone	PZ-39	NM	395921.87	2050238.18	5-10	137.93	NM	NM
Onsite	Perched Zone	PZ-40	NM	395943.02	2050031.90	5-9	138.51	NM	NM
Onsite	Perched Zone	PZ-41	NM	395979.29	2050048.97	5-8.5	138.13	NM	NM
Onsite	Perched Zone	PZ-42	NM	395961.73	2050230.23	3-7	138.17	NM	NM
Onsite	Perched Zone	PZ-43	NM	396011.61	2050567.89	5-9	137.06	NM	NM
Onsite	Perched Zone	PZ-44	NM	396082.75	2051045.25	5-7	136.26	NM	NM
Onsite	Perched Zone	PZ-45	NM	396124.41	2051323.03	2-4	135.69	NM	NM
Onsite	Surficial Aquifer	PZ-L	07/02/24	396745.80	2048684.01	13-28	147.86	30.04	117.82
Offsite	Black Creek Aquifer	ROBESON-1D	07/02/24	381416.28	2020158.93	42.75-52.75	156.36	15.27	141.09
Offsite	Surficial Aquifer	ROBESON-1S	07/02/24	381408.19	2020156.86	17-27	156.66	12.61	144.05
Onsite	Surficial Aquifer	SMW-01	07/02/24	395297.97	2043688.29	5.0-15.0	150.58	13.90	136.68
Onsite	Perched Zone	SMW-02	07/02/24	399982.23	2050655.91	5.0-20.0	144.59	16.80	127.79
Onsite	Surficial Aquifer	SMW-02B	07/02/24	399983.75	2050654.77	43.0-53.0	147.93	55.97	91.96
Onsite	Perched Zone	SMW-03	NM	399779.32	2049445.32	10.0-20.0	151.09	NM	NM
Onsite	Black Creek Aquifer	SMW-03B	07/02/24	399785.75	2049421.54	72-82	150.43	65.26	85.17
Onsite	Perched Zone	SMW-04A	NM	399668.71	2048387.57	19.5-34.5	148.09	NM	NM
Onsite	Surficial Aquifer	SMW-04B	07/02/24	399666.21	2048392.37	43.0-53.0	147.65	52.10	95.55
Onsite	Perched Zone	SMW-05	NM	399334.07	2048557.33	10.0-20.0	148.10	NM	NM
Onsite	Surficial Aquifer	SMW-05PR	07/02/24	399391.46	2049235.07	45.0-60.0	149.66	50.58	97.21
Onsite	Perched Zone	SMW-06	NM	399172.35	2048759.48	12.0-22.0	150.97	NM	NM
Onsite	Surficial Aquifer	SMW-06B	07/02/24	399144.74	2048764.94	58-68	150.32	53.93	96.39
Onsite	Perched Zone	SMW-07	07/02/24	398931.13	2048611.74	13.0-23.0	146.79	19.36	127.43
Onsite	Perched Zone	SMW-08	NM	399064.97	2048468.78	21.0-31.0	151.02	NM	NM
Onsite	Surficial Aquifer	SMW-08B	07/02/24	399058.33	2048478.84	58-68	148.81	46.95	101.86
Onsite	Surficial Aquifer	SMW-09	07/02/24	401076.89	2050017.41	52-62	141.43	62.15	79.28
Onsite	Black Creek Aquifer	SMW-10	07/02/24	402307.31	2047923.84	39-49	76.26	29.75	46.51
Onsite	Surficial Aquifer	SMW-11	07/02/24	401996.15	2048975.38	13-23	71.95	16.30	55.65
Onsite	Black Creek Aquifer	SMW-12	07/02/24	401314.20	2051007.22	88-98	118.22	90.27	27.95

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.
- 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 - Q3 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		CAP3Q24-BLADEN-1DR071824	--	7/18/24 14:55	5.56	0.13	7.10	6.01	64.93	25.71
Onsite	LTW-01	Floodplain Deposits	Cape Fear River		CAP3Q24-LTW-01-072624	--	7/26/24 11:40	3.13	0.7	428.1	5.85	98.92	20.55
Onsite	LTW-02	Black Creek Aquifer	Cape Fear River		CAP3Q24-LTW-02-071824	--	7/18/24 11:25	4.72	0.05	84.1	4.38	84.15	20.81
Onsite	LTW-03	Floodplain Deposits	Cape Fear River		CAP3Q24-LTW-03-072924	--	7/29/24 10:35	4.55	0.01	133.1	13.2	100.05	18.51
Onsite	LTW-04	Floodplain Deposits	Cape Fear River		CAP3Q24-LTW-04-072424	--	7/24/24 15:45	5.18	0.06	58	15.01	88.84	27.28
Onsite	LTW-05	Black Creek Aquifer	Cape Fear River		CAP3Q24-LTW-05-072524	--	7/25/24 10:28	4.4	0.02	64.6	12.9	165.06	21.81
Onsite	OW-28	Black Creek Aquifer	Cape Fear River		CAP3Q24-OW-28-071824	--	7/18/24 12:50	4.2	0.11	122.8	6.14	49.82	28.05
Onsite	OW-33	Black Creek Aquifer	Cape Fear River		CAP3Q24-OW-33-071624	--	7/16/24 12:05	4.48	0.01	73.1	7.85	63.89	22.71
Onsite	PIW-1D	Black Creek Aquifer	Cape Fear River / Willis Creek		CAP3Q24-PIW-1D-072324-Z	--	7/23/24 15:40	3.56	0.23	207.4	>1000	184.53	22.89
Onsite	PIW-3D	Black Creek Aquifer	Cape Fear River		CAP3Q24-PIW-3D-072324	--	7/23/24 12:50	4.07	0.03	116.5	5.72	87.56	21.68
Onsite	PIW-7D	Black Creek Aquifer	Cape Fear River		CAP3Q24-PIW-7S-072324	--	7/23/24 14:26	5.2	0	-182.9	12.97	83.46	20.81
Onsite	PIW-7S	Floodplain Deposits	Cape Fear River		CAP3Q24-PIW-7S-072424	--	7/24/24 12:35	4.76	0.05	64.1	2.94	129.05	25.61
Onsite	PW-04	Surficial Aquifer	Outfall 003		CAP3Q24-PW-04-072924-Z	--	7/29/24 9:55	3.34	0.01	441.2	64.4	820.18	24.27
Onsite	PW-06	Surficial Aquifer	Georgia Branch Creek		CAP3Q24-PW-06-072324	--	7/23/24 14:23	4.38	7.12	330.6	4.62	42.17	24.4
Onsite	PW-07	Surficial Aquifer	Georgia Branch Creek		CAP3Q24-PW-07-071124	--	7/11/24 8:35	6.35	9.05	108.7	66.8	190.39	22.66
					CAP3Q24-PW-07-071124-Z	--	7/11/24 8:35	6.35	9.05	108.7	66.8	190.39	22.66
Onsite	PW-09	Black Creek Aquifer	Willis Creek		CAP3Q24-PW-09-071124	--	7/11/24 12:35	6.84	0.25	-39.1	18.35	70.4	18.85
Onsite	PZ-22	Black Creek Aquifer	Cape Fear River		CAP3Q24-PZ-22-072524	--	7/25/24 14:00	4.88	0.01	-57.4	15	137.8	24.97
Onsite	SMW-10	Black Creek Aquifer	Willis Creek		CAP3Q24-SMW-10-070924	--	7/9/24 14:40	5.4	0.05	33.4	1.58	77.26	22.59
Onsite	SMW-11	Surficial Aquifer	Willis Creek		CAP3Q24-SMW-11-071824	--	7/18/24 15:10	3.86	3.75	386.2	1.2	50.32	22.77
Onsite	SMW-12	Black Creek Aquifer	Willis Creek		CAP3Q24-SMW-12-071624	--	7/16/24 13:00	3.61	0.4	210.1	14.28	185.27	24.09

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 Q3 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-KINGS	CFR-MILE-76	CFR-TARHEEL
Field Sample ID	CAP3Q24-CFR-BLADEN-071124	CAP3Q24-CFR-KINGS-071124	CAP3Q24-CFR-RM-76-071024	CAP3Q24-CFR-TARHEEL-071124
Sample Date	7/11/2024	7/11/2024	7/10/2024	7/11/2024
QA/QC				
Sample Delivery Group (SDG)	320-113821-1	320-113821-1	320-113746-1	320-113821-1
Lab Sample ID	320-113821-3	320-113821-4	320-113746-2	320-113821-1
<i>Table 3+ (ng/L)</i>				
HFPO Dimer Acid	4.2	<4.0	<4.0	4.3
PFMOAA	9.4	9.5	<2.0	8.8
PFO2HxA	5.5	6.7	<2.0	6.9
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	6.4	5.3	2.4	6.9
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	4.8 J	5.6 J	15 J	5.5 J
Hydrolyzed PSDA	3.8 J	2.4 J	<2.0	3.2 J
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS, Acid Form	<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 J	3.4 J	2.1 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	24	21	14	26
Perfluoroheptanoic Acid	4.5	4.7	4.1	4.2
Total Attachment C^{1,2}	26	22	2.4	27
Total Table 3+ (17 compounds)^{1,2}	26	22	2.4	27
Total Table 3+ (18 compounds)^{1,3}	50	43	16	53
Total Table 3+ (21 compounds)¹	58	53	35	64

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

Location ID	CFR-TARHEEL	GBC-1	LOCK-DAM NORTH	LOCK-DAM NORTH ⁵
Field Sample ID	CAP3Q24-CFR-TARHEEL-24-071124	CAP3Q24-GBC-1-071124	CAP3Q24-LOCK-DAM-NORTH-071024	LOCK-DAM-NORTH-091024
Sample Date	7/11/2024	7/11/2024	7/10/2024	9/10/2024
QA/QC				
Sample Delivery Group (SDG)	320-113821-1	320-113746-1	320-113746-1	320-115358-1
Lab Sample ID	320-113821-2	320-113746-3	320-113746-1	320-115358-1
<i>Table 3+ (ng/L)</i>				
HFPO Dimer Acid	4.5	320	2,500	2,400
PFMOAA	8.7	64	4,600	4,500
PFO2HxA	4.3	250	3,000	3,000
PFO3OA	<2.0	49	430	560
PFO4DA	<2.0	12	98	110
PFO5DA	<2.0	<2.0	10	10
PMPA	6.4	550	3,200	3,100
PEPA	<2.0	140	970	1,000
PS Acid	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	21	57	58
R-PSDA	4.5 J	100 J	240 J	170 J
Hydrolyzed PSDA	2.8 J	<2.0	4.3 J	3.5 J
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS, Acid Form	<3.0	3.1	60	58
EVE Acid	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	13	14
R-EVE	2.2 J	37 J	110 J	260 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	23	520	4,600	4,100
Perfluoroheptanoic Acid	4.0	2.1	7.6	7.9
Total Attachment C^{1,2}	24	1,400	15,000	15,000
Total Table 3+ (17 compounds)^{1,2}	24	1,400	15,000	15,000
Total Table 3+ (18 compounds)^{1,3}	47	1,900	20,000	19,000
Total Table 3+ (21 compounds)¹	54	2,100	20,000	19,000

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

Location ID	LOCK-DAM SEEP ⁶	LOCK-DAM SEEP ⁷	LOCK-DAM SEEP ⁷	LOCK-DAM SEEP ⁷
Field Sample ID	--	CAP3Q24-LOCK-DAM-SEEP-072424	LOCK-DAM-SEEPS-090424	LOCK-DAM-SEEPS-090424-D
Sample Date	--	7/24/2024	9/4/2024	9/4/2024
QA/QC	--			Field Duplicate
Sample Delivery Group (SDG)	--	320-114129-1	320-115213-1	320-115213-1
Lab Sample ID	--	320-114129-2	320-115213-1	320-115213-2
<i>Table 3+ (ng/L)</i>				
HFPO Dimer Acid	--	3,500	4,900	5,500
PFMOAA	--	32,000	31,000	32,000
PFO2HxA	--	12,000	13,000	14,000
PFO3OA	--	6,200	6,600	6,800
PFO4DA	--	1,700	2,100	2,000
PFO5DA	--	120	120	<100
PMPA	--	3,100	3,400	3,600
PEPA	--	1,100	1,200	1,200
PS Acid	--	<2.0	<40 UJ	<40 UJ
Hydro-PS Acid	--	160	180	180
R-PSDA	--	450 J	410 J	390 J
Hydrolyzed PSDA	--	340 J	370 J	320 J
R-PSDCA	--	8.5	<140	<140
NVHOS, Acid Form	--	450	420	370
EVE Acid	--	<2.0	<40 UJ	<40 UJ
Hydro-EVE Acid	--	140	160	160
R-EVE	--	170 J	130 J	130 J
Perfluoro(2-ethoxyethane)sulfonic Acid	--	<2.0	<29	<29
PFECA B	--	<2.0	<62	<62
PFECA-G	--	<2.0	<29	<29
PFPrA	--	11,000	11,000	12,000
Perfluoroheptanoic Acid	--	53	55	57
Total Attachment C^{1,2}	--	60,000	63,000	65,000
Total Table 3+ (17 compounds)^{1,2}	--	60,000	63,000	66,000
Total Table 3+ (18 compounds)^{1,3}	--	71,000	74,000	78,000
Total Table 3+ (21 compounds)¹	--	72,000	75,000	79,000

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

Location ID	OLDOF-2	OUTFALL 002	RIVER WATER INTAKE 2	WC-1
Field Sample ID	CAP3Q24-OLDOF-2-24-071124	CAP3Q24-OUTFALL-002-24-071124	RIVER-WATER-INTAKE-24-071124	CAP3Q24-WC-1-24-071124
Sample Date	7/11/2024	7/11/2024	7/11/2024	7/11/2024
QA/QC				
Sample Delivery Group (SDG)	320-113747-1	320-113747-1	320-113746-1	320-113748-1
Lab Sample ID	320-113747-4	320-113747-3	320-113746-4	320-113748-2
<i>Table 3+ (ng/L)</i>				
HFPO Dimer Acid	800	19	4.2	460
PFMOAA	3,300	13	6.1	1,400
PFO2HxA	1,300	9.3	6.0	540
PFO3OA	380	2.2	<2.0	79 J
PFO4DA	160	<2.0	<2.0	17
PFO5DA	55	<2.0	<2.0	<2.0
PMPA	500	9.5	9.7	500
PEPA	140	<2.0	<2.0	110
PS Acid	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	32	<2.0	<2.0	12
R-PSDA	73 J	32 J	5.4 J	160 J
Hydrolyzed PSDA	150 J	23 J	2.8 J	340 J
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS, Acid Form	49	<3.0	<3.0	28
EVE Acid	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	19	<2.0	<2.0	7.5
R-EVE	33 J	8.1 J	2.0 J	64 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	2,300	94	87	780
Perfluoroheptanoic Acid	4.6	5.0	4.7	2.8
Total Attachment C^{1,2}	6,700	53	26	3,100
Total Table 3+ (17 compounds)^{1,2}	6,700	53	26	3,200
Total Table 3+ (18 compounds)^{1,3}	9,000	150	110	3,900
Total Table 3+ (21 compounds)¹	9,300	210	120	4,500

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

Location ID	WC-1	EB
Field Sample ID	CAP3Q24-WC-1-24-071124-D	CAP3Q24-EQBLK-IS-071124
Sample Date	7/11/2024	7/11/2024
QA/QC	Field Duplicate	Equipment Blank
Sample Delivery Group (SDG)	320-113748-1	320-113747-1
Lab Sample ID	320-113748-3	320-113747-1
Table 3+ (ng/L)		
HFPO Dimer Acid	420	<4.0
PFMOAA	1,400	<2.0
PFO2HxA	630	<2.0
PFO3OA	93	<2.0
PFO4DA	18	<2.0
PFO5DA	<2.0	<2.0
PMPA	490	<2.0
PEPA	100	<2.0
PS Acid	<2.0	<2.0
Hydro-PS Acid	12	<2.0
R-PSDA	160 J	<2.0
Hydrolyzed PSDA	400 J	<2.0
R-PSDCA	<3.0	<3.0
NVHOS, Acid Form	27	<3.0
EVE Acid	<2.0	<2.0
Hydro-EVE Acid	6.8	<2.0
R-EVE	61 J	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0
PFECA B	<2.0	<2.0
PFECA-G	<2.0	<2.0
PFPrA	790	<5.0
Perfluoroheptanoic Acid	2.4	<2.0
Total Attachment C^{1,2}	3,200	ND
Total Table 3+ (17 compounds)^{1,2}	3,200	ND
Total Table 3+ (18 compounds)^{1,3}	4,000	ND
Total Table 3+ (21 compounds)¹	4,600	ND

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

Location ID	EB
Field Sample ID	CAP3Q24-EQBLK-PP-SW-071124
Sample Date	7/11/2024
QA/QC	Equipment Blank
Sample Delivery Group (SDG)	320-113747-1
Lab Sample ID	320-113747-2
Table 3+ (ng/L)	
HFPO Dimer Acid	<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, Acid Form	<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	<2.0
Total Attachment C^{1,2}	ND
Total Table 3+ (17 compounds)^{1,2}	ND
Total Table 3+ (18 compounds)^{1,3}	ND
Total Table 3+ (21 compounds)¹	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.

5 - The Lock and Dam North sample collected on September 10, 2024 was not used in the mass loading calculation.

6 - Lock and Dam Seep was not sampled because location was dry during the July 2024 CAP sampling event.

7 - The Lock and Dam Seep samples collected on July 24, 2024 and September 4, 2024 were not used in the mass loading calculations.

**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	CAP3Q24-BLADEN-1DR-071824	CAP3Q24-LTW-01-072624	CAP3Q24-LTW-02-071824	CAP3Q24-LTW-03-072924
Sample Date	7/18/2024	7/26/2024	7/18/2024	7/29/2024
QA/QC				
Sample Delivery Group (SDG)	320-113926-1	320-114201-1	320-113921-1	320-114196-1
Lab Sample ID	320-113926-2	320-114201-4	320-113921-5	320-114196-2
Table 3+ (ng/L)				
HFPO-DA	<190	16,000	14,000	9,800
PFMOAA	<51	20,000	31,000	120,000
PFO2HxA	100	20,000	22,000	37,000
PFO3OA	<110	5,500	5,300	6,000
PFO4DA	<50	960	270	230
PFO5DA	<130	<130	<130	<130
PMPA	290	13,000	13,000	16,000
PEPA	75	5,100	3,700	3,400
PS Acid	<50	<50	<50	<50
Hydro-PS Acid	<55	150	<55	<55
R-PSDA	<35	950 J	860 J	1,000 J
Hydrolyzed PSDA	<34	570 J	1,700 J	8,200 J
R-PSDCA	<180	<180	<180	<180
NVHOS, Acid Form	<160	350	460	1,400
EVE Acid	<50	<50	<50	<50
Hydro-EVE Acid	<30	100	74	64
R-EVE	<39	560 J	650 J	500 J
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<36	<36
PFECA B	<78	<78	<78	<78
PFECA-G	<36	<36	<36	<36
PFPrA	<310	20,000	21,000	41,000
Perfluoroheptanoic Acid	<31	41	<31	<31
Total Attachment C^{2,3}	470	81,000	89,000	190,000
Total Table 3+ (17 compounds)^{3,4}	470	81,000	90,000	190,000
Total Table 3+ (18 compounds)^{3,5}	470	100,000	110,000	230,000
Total Table 3+ (21 compounds)³	470	100,000	110,000	240,000

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit¹	Floodplain Deposits	Black Creek Aquifer	Black Creek Aquifer	Black Creek Aquifer
Location ID	LTW-04	LTW-05	OW-28	OW-33
Field Sample ID	CAP3Q24-LTW-04-072424	CAP3Q24-LTW-5-072524	CAP3Q24-OW-28-071824	CAP3Q24-OW-33-071624
Sample Date	7/24/2024	7/25/2024	7/18/2024	7/16/2024
QA/QC				
Sample Delivery Group (SDG)	320-114134-1	320-114129-1	320-113926-1	320-113883-1
Lab Sample ID	320-114134-1	320-114129-1	320-113926-1	320-113883-4
Table 3+ (ng/L)				
HFPO-DA	20,000	28,000	3,600	3,900
PFMOAA	57,000	170,000	1,500	9,100
PFO2HxA	24,000	63,000	2,200	5,000
PFO3OA	5,500	20,000	360	550
PFO4DA	650	1,800	89	39
PFO5DA	<130	<130	<130	<2.0
PMPA	18,000	6,400	4,600	5,400
PEPA	6,600	740	1,400	1,800
PS Acid	<50	<50	<50	<2.0
Hydro-PS Acid	160	190	68	32
R-PSDA	2,000 J	1,300 J	230 J	320 J
Hydrolyzed PSDA	4,000 J	2,300 J	<34	100 J
R-PSDCA	<180	<180	<180	<3.0
NVHOS, Acid Form	1,300	1,900	<160	120
EVE Acid	<50	<50	<50	<2.0
Hydro-EVE Acid	410	740	<30	11
R-EVE	1,900 J	1,600 J	130 J	330 J
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<36	<2.0
PFECA B	<78	<78	<78	<2.0
PFECA-G	<36	<36	<36	<2.0
PFPrA	47,000	85,000	4,000	8,300
Perfluoroheptanoic Acid	58	270	<31	6.3
Total Attachment C^{2,3}	130,000	290,000	14,000	26,000
Total Table 3+ (17 compounds)^{3,4}	130,000	290,000	14,000	26,000
Total Table 3+ (18 compounds)^{3,5}	180,000	380,000	18,000	34,000
Total Table 3+ (21 compounds)³	190,000	380,000	18,000	35,000

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit¹	Floodplain Deposits	Floodplain Deposits	Black Creek Aquifer	Black Creek Aquifer
Location ID	PIW-1D	PIW-1D	PIW-3D	PIW-7D
Field Sample ID	CAP3Q24-PIW-1D-072324	CAP3Q24-PIW-1D-072324-Z	CAP3Q24-PIW-3D-072324	CAP3Q24-PIW-7D-072324
Sample Date	7/23/2024	7/23/2024	7/23/2024	7/23/2024
QA/QC				
Sample Delivery Group (SDG)	320-114137-1	320-114137-1	320-114046-1	320-114131-1
Lab Sample ID	320-114137-1	320-114137-2	320-114046-2	320-114131-1
Table 3+ (ng/L)				
HFPO-DA	11,000	10,000	16,000	16,000
PFMOAA	9,900	9,700	18,000	120,000
PFO2HxA	9,900	8,400	20,000	35,000
PFO3OA	1,900	1,900	3,700	7,200
PFO4DA	320	270	1,500	860
PFO5DA	<130	<130	130	<130
PMPA	12,000	11,000	13,000	4,500
PEPA	3,500	3,300	5,300	1,100
PS Acid	<50	<50	<50	<50
Hydro-PS Acid	<55	<55	250	86
R-PSDA	480 J	320 J	790 J	700 J
Hydrolyzed PSDA	<34	<34	140 J	1,200 J
R-PSDCA	<180	<180	<180	<180
NVHOS, Acid Form	<160	<160	280	1,100
EVE Acid	<50	<50	<50	<50
Hydro-EVE Acid	<30	<30	85	260
R-EVE	350 J	240 J	420 J	790 J
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<36	<36
PFECA B	<78	<78	<78	<78
PFECA-G	<36	<36	<36	<36
PFPrA	12,000	12,000	21,000	70,000
Perfluoroheptanoic Acid	<31	<31	31	70
Total Attachment C^{2,3}	49,000	45,000	78,000	180,000
Total Table 3+ (17 compounds)^{3,4}	49,000	45,000	78,000	190,000
Total Table 3+ (18 compounds)^{3,5}	61,000	57,000	99,000	260,000
Total Table 3+ (21 compounds)³	61,000	57,000	100,000	260,000

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit ¹	Floodplain Deposits	Surficial Aquifer	Surficial Aquifer	Surficial Aquifer
Location ID	PIW-7S	PW-04	PW-04	PW-06
Field Sample ID	CAP3Q24-PIW-7S-072424	CAP3Q24-PW-04-072624	CAP3Q24-PW-04-072624-Z	CAP3Q24-PW-06-072324
Sample Date	7/24/2024	7/26/2024	7/26/2024	7/23/2024
QA/QC				
Sample Delivery Group (SDG)	320-114134-1	320-114245-1	320-114245-1	320-114137-1
Lab Sample ID	320-114134-3	320-114245-1	320-114245-2	320-114137-4
Table 3+ (ng/L)				
HFPO-DA	16,000	760	850	480
PFMOAA	16,000	240	340	68
PFO2HxA	12,000	750	910	420
PFO3OA	4,400	330	320	<110
PFO4DA	560	73	<50	65
PFO5DA	<130	<130	<130	<130
PMPA	9,900	900	1,000	310
PEPA	4,000	310	370	190
PS Acid	<50	<50	<50	<50
Hydro-PS Acid	310	<55	<55	<55
R-PSDA	1,200 J	<35	<35	36 J
Hydrolyzed PSDA	42 J	<34	<34	<34
R-PSDCA	<180	<180	<180	<180
NVHOS, Acid Form	790	<160	<160	<160
EVE Acid	<50	<50	<50	<50
Hydro-EVE Acid	500	<30	<30	<30
R-EVE	1,400 J	<39	<39	<39 J
Perfluoro(2-ethoxyethane)sulfonic Acid	<36	<36	<36	<36
PFECA B	<78	<78	<78	<78
PFECA-G	<36	<36	<36	<36
PFPrA	17,000	1,200	1,300	380
Perfluoroheptanoic Acid	73	<31	<31	<31
Total Attachment C^{2,3}	63,000	3,400	3,800	1,500
Total Table 3+ (17 compounds)^{3,4}	64,000	3,400	3,800	1,500
Total Table 3+ (18 compounds)^{3,5}	81,000	4,600	5,100	1,900
Total Table 3+ (21 compounds)³	84,000	4,600	5,100	1,900

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit ¹	Surficial Aquifer	Surficial Aquifer	Black Creek Aquifer	Black Creek Aquifer
Location ID	PW-07	PW-07	PW-09	PZ-22
Field Sample ID	CAP3Q24-PW-07-071124	CAP3Q24-PW-07-071124-Z	CAP3Q24-PW-09-071124	CAP3Q24-PZ-22-072524
Sample Date	7/11/2024	7/11/2024	7/11/2024	7/25/2024
QA/QC				
Sample Delivery Group (SDG)	320-113817-1	320-113817-1	320-113821-1	320-114118-1
Lab Sample ID	320-113817-2	320-113817-3	320-113821-5	320-114118-4
Table 3+ (ng/L)				
HFPO-DA	140	140	<4.0	12,000
PFMOAA	76	75	<2.0	140,000
PFO2HxA	210	210	<2.0	47,000
PFO3OA	26	26	<2.0	6,000
PFO4DA	27	23	<2.0	350
PFO5DA	<2.0	<2.0	<2.0	<130
PMPA	240	220	<2.0	5,800
PEPA	42	42	<2.0	1,500
PS Acid	<2.0	<2.0	<2.0	<50
Hydro-PS Acid	11	7.0	<2.0	<55
R-PSDA	140 J	150 J	<2.0	610 J
Hydrolyzed PSDA	<2.0	<2.0	<2.0	1,600 J
R-PSDCA	<3.0	<3.0	<3.0	<180
NVHOS, Acid Form	<3.0	<3.0	<3.0	1,200
EVE Acid	<2.0	<2.0	<2.0	<50
Hydro-EVE Acid	4.5	3.8	<2.0	96
R-EVE	53 J	63 J	<2.0	440 J
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0	<2.0	<36
PFECA B	<2.0	<2.0	<2.0	<78
PFECA-G	<2.0	<2.0	<2.0	<36
PFPrA	500	530	<5.0	65,000
Perfluoroheptanoic Acid	2.8	2.5	<2.0	45
Total Attachment C^{2,3}	770	740	ND	210,000
Total Table 3+ (17 compounds)^{3,4}	780	750	ND	210,000
Total Table 3+ (18 compounds)^{3,5}	1,300	1,300	ND	280,000
Total Table 3+ (21 compounds)³	1,500	1,500	ND	280,000

**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	EB
Field Sample ID	CAP3Q24-SMW-10-070924	CAP3Q24-SMW-11-071824	CAP3Q24-SMW-12-071624	CAP3Q24-BAILER-070924
Sample Date	7/9/2024	7/18/2024	7/16/2024	7/9/2024
QA/QC				Equipment Blank
Sample Delivery Group (SDG)	320-113750-1	320-113926-1	320-113886-1	320-113749-1
Lab Sample ID	320-113750-1	320-113926-4	320-113886-2	320-113749-3
Table 3+ (ng/L)				
HFPO-DA	6.9	5,200	2,300	<4.0
PFMOAA	210	10,000	9,100	<2.0
PFO2HxA	18	4,200	2,900	<2.0
PFO3OA	<2.0	790	320	<2.0
PFO4DA	<2.0	310	<50	<2.0
PFO5DA	<2.0	<130	<130	<2.0
PMPA	32	3,000	2,700	<2.0
PEPA	<2.0	720	410	<2.0
PS Acid	<2.0	<50	<50	<2.0
Hydro-PS Acid	<2.0	58	<55	<2.0
R-PSDA	<2.0	96 J	71 J	<2.0
Hydrolyzed PSDA	<2.0	49 J	<34	<2.0
R-PSDCA	<3.0	<180	<180	<3.0
NVHOS, Acid Form	<3.0	160	<160	<3.0
EVE Acid	<2.0	<50	<50	<2.0
Hydro-EVE Acid	<2.0	<30	<30	<2.0
R-EVE	<2.0	74 J	70 J	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<36	<36	<2.0
PFECA B	<2.0	<78	<78	<2.0
PFECA-G	<2.0	<36	<36	<2.0
PFPrA	260	5,200	6,500	<5.0
Perfluoroheptanoic Acid	<2.0	<31	<31	<2.0
Total Attachment C^{2,3}	270	24,000	18,000	ND
Total Table 3+ (17 compounds)^{3,4}	270	24,000	18,000	ND
Total Table 3+ (18 compounds)^{3,5}	530	30,000	24,000	ND
Total Table 3+ (21 compounds)³	530	30,000	24,000	ND

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit¹	--	--	--	--
Location ID	EB	EB	EB	EB
Field Sample ID	CAP3Q24-EQBLK-DV-071124	CAP3Q24-EQBLK-PP-070824	CAP3Q24-EQBLK-PP-071124	CAP3Q24-EQBLK-PP-071124-Z
Sample Date	7/11/2024	7/8/2024	7/11/2024	7/11/2024
QA/QC	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Delivery Group (SDG)	320-113749-1	320-113685-1	320-113749-1	320-113749-1
Lab Sample ID	320-113749-4	320-113685-3	320-113749-1	320-113749-2
Table 3+ (ng/L)				
HFPO-DA	<4.0	<4.0	<4.0	<4.0
PFMOAA	<2.0	<2.0	<2.0	<2.0
PFO2HxA	<2.0	<2.0	<2.0	<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	<2.0	<2.0	<2.0	<2.0
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	<2.0	<2.0	<2.0	<2.0
Hydrolyzed PSDA	<2.0	<2.0	<2.0	<2.0
R-PSDCA	<3.0	<3.0	<3.0	<3.0
NVHOS, Acid Form	<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	<2.0	<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	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic Acid	<2.0	<2.0	<2.0	<2.0
Total Attachment C^{2,3}	ND	ND	ND	ND
Total Table 3+ (17 compounds)^{3,4}	ND	ND	ND	ND
Total Table 3+ (18 compounds)^{3,5}	ND	ND	ND	ND
Total Table 3+ (21 compounds)³	ND	ND	ND	ND

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit¹	--	--
Location ID	EB	EB
Field Sample ID	CAP3Q24-EQBLK-BP-071624	CAP3Q24-EQBLK-PP-071924
Sample Date	7/16/2024	7/19/2024
QA/QC	Equipment Blank	Equipment Blank
Sample Delivery Group (SDG)	320-113888-1	320-114046-1
Lab Sample ID	320-113888-1	320-114046-5
Table 3+ (ng/L)		
HFPO-DA	<4.0	<4.0
PFMOAA	<2.0	<2.0
PFO2HxA	<2.0	<2.0
PFO3OA	<2.0	<2.0
PFO4DA	<2.0	<2.0
PFO5DA	<2.0	<2.0
PMPA	<2.0	<2.0
PEPA	<2.0	<2.0
PS Acid	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0
R-PSDA	<2.0	<2.0
Hydrolyzed PSDA	<2.0	<2.0
R-PSDCA	<3.0	<3.0
NVHOS, Acid Form	<3.0	<3.0
EVE Acid	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0
R-EVE	<2.0	<2.0
Perfluoro(2-ethoxyethane)sulfonic Acid	<2.0	<2.0
PFECA B	<2.0	<2.0
PFECA-G	<2.0	<2.0
PFPrA	<5.0	<5.0
Perfluoroheptanoic Acid	<2.0	<2.0
Total Attachment C^{2,3}	ND	ND
Total Table 3+ (17 compounds)^{3,4}	ND	ND
Total Table 3+ (18 compounds)^{3,5}	ND	ND
Total Table 3+ (21 compounds)³	ND	ND

**TABLE A6
GROUNDWATER ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Water Bearing Unit¹	--
Location ID	EB
Field Sample ID	CAP3Q24-EQBK-DV-072924
Sample Date	7/29/2024
QA/QC	Equipment Blank
Sample Delivery Group (SDG)	320-114245-1
Lab Sample ID	320-114245-3
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, Acid Form	<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	<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	625	2.4	0.1	2.4	0.1	16	0.44	35	0.96
2	Willis Creek	2.31	3,100	0.31	3,200	0.32	3,900	0.39	4,500	0.46
3	Aerial Deposition on Water Features	--	--	0.01	--	0.01	--	0.01	--	0.01
4	Outfall 002 ⁶	13	27	0.02	27	0.02	40	0.02	90	0.05
4A	Stormwater Treatment System ⁷	0.07	0	0	0	0	0	0	0	0
5	Onsite Groundwater ⁸	--	--	0.05	--	0.05	--	0.06	--	0.06
6A	Seep A	--	--	--	--	--	--	--	--	--
6B	Seep B	--	--	--	--	--	--	--	--	--
6C	Seep C	--	--	--	--	--	--	--	--	--
6D	Seep D	--	--	--	--	--	--	--	--	--
6E	Lock and Dam Seep ⁹	--	--	--	--	--	--	--	--	--
6F	Lock and Dam Seep North	1.7E-03	15,000	1.1E-03	15,000	1.1E-03	20,000	1.5E-03	20,000	1.5E-03
7	Outfall 003 Stream ¹⁰	9.9E-04	6,700	2.9E-04	6,700	2.9E-04	9,000	0.00	9,300	4.0E-04
8	Offsite Adjacent and Downstream Groundwater	--	--	0.02	--	0.02	--	0.17	--	0.36
9	Georgia Branch Creek	1.10	1,400	0.07	1,400	0.07	1,900	0.09	2,100	0.10
Calculated Total Table 3+ Loading (mg/s) at Tar Heel				0.54		0.55		1.18		2.00

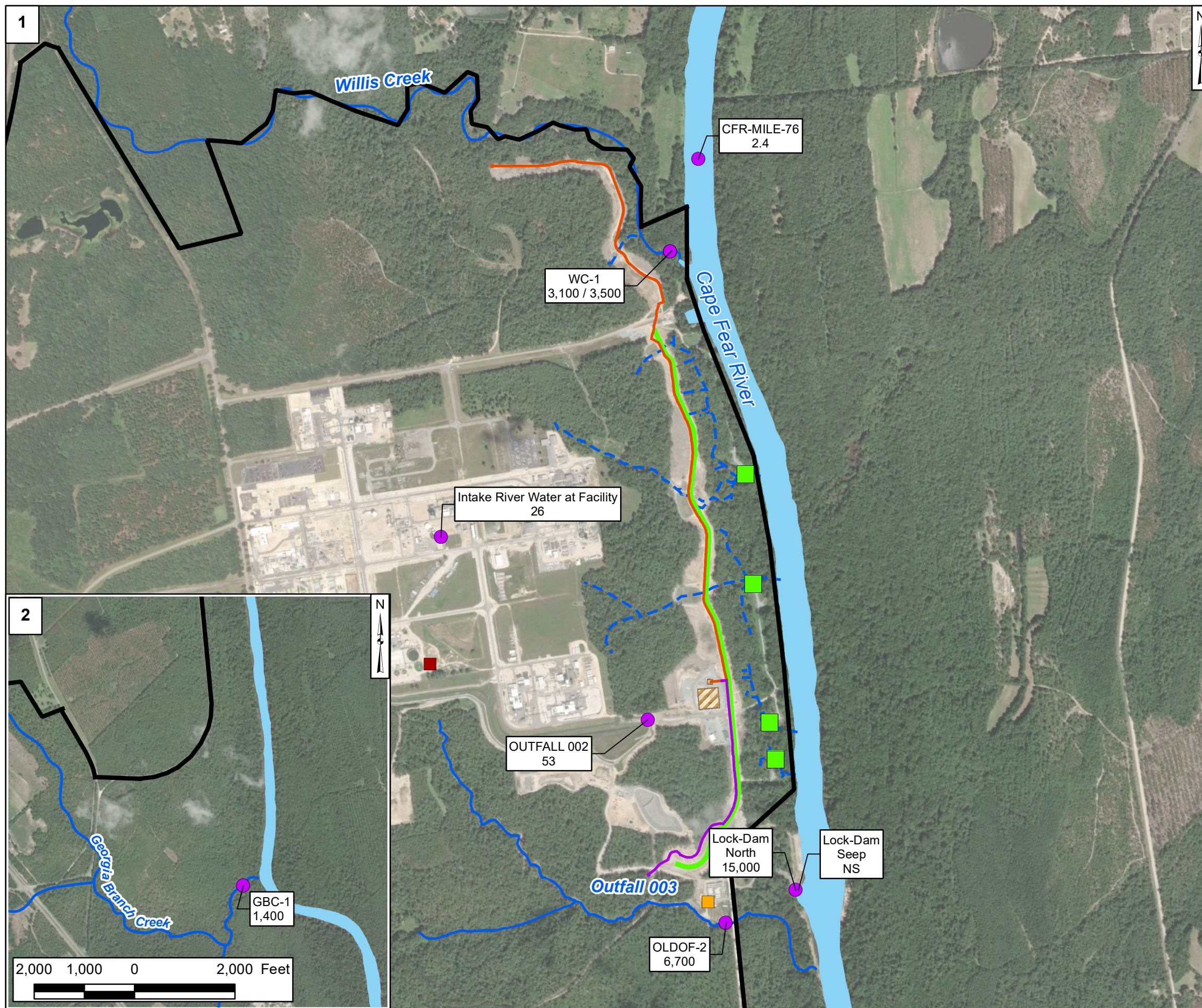
Notes:

- Not calculated. The location was not sampled during the mass loading model event.
- 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 Perfluorohexanoic 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. When stormwater is being treated by the stormwater treatment system, HFPO-DA, PFMOAA, and PMPA concentrations are measured in the stormwater treatment system influent and effluent flows. The concentrations and mass loads reported here are the sum of these 3 compounds in the stormwater treatment system influent flow.

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 - Lock and Dam Seep was not sampled because location was dry during the July 2024 CAP sampling event.

10 - For July 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.

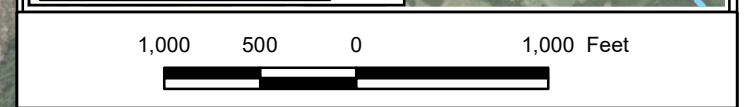
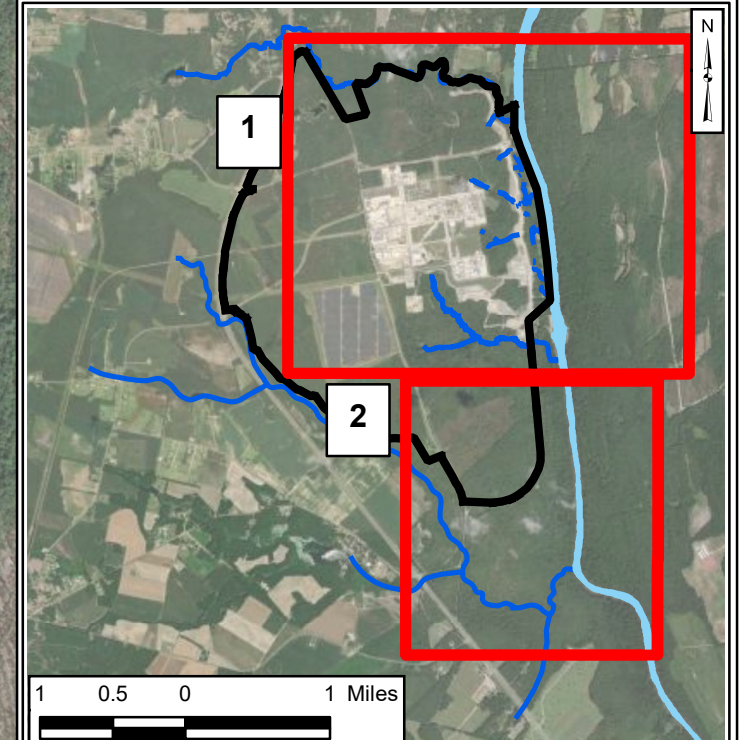


Legend

- 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

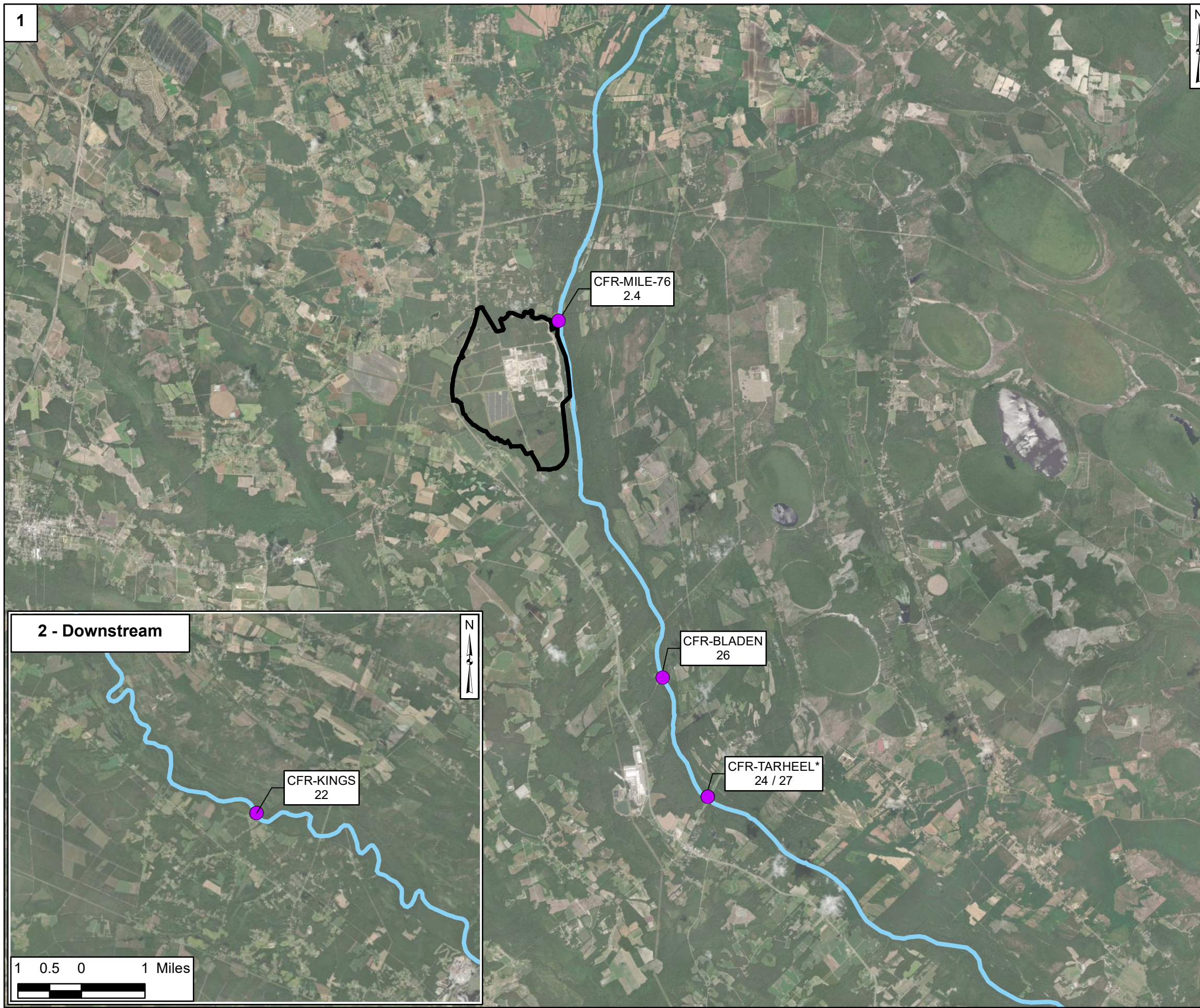
OUTFALL 002 53 ← Location Name
 ← Total Table 3+ (17 Compounds) Concentration (ng/L)

Notes:
 NS - not sampled
 ND - non-detect
 * Multiple results are shown at WC-1 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. Lock and Dam Seep was not sampled because the location was dry.
 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.
 7. Basemap sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Total Table 3+ Concentrations (17 Compounds) in Surface Water - July 2024
 Chemours Fayetteville Works, North Carolina

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



Legend

- Sample Location
- Cape Fear River
- Site Boundary

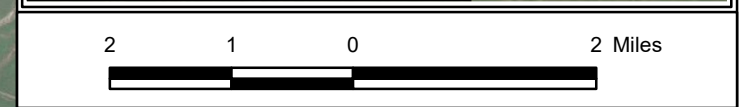
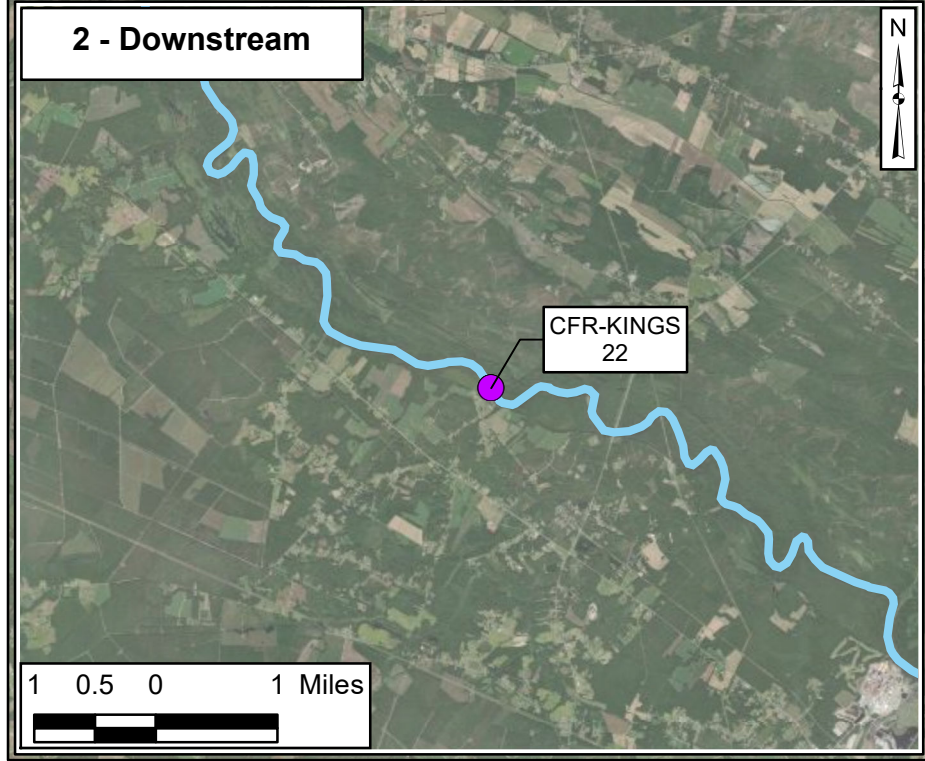
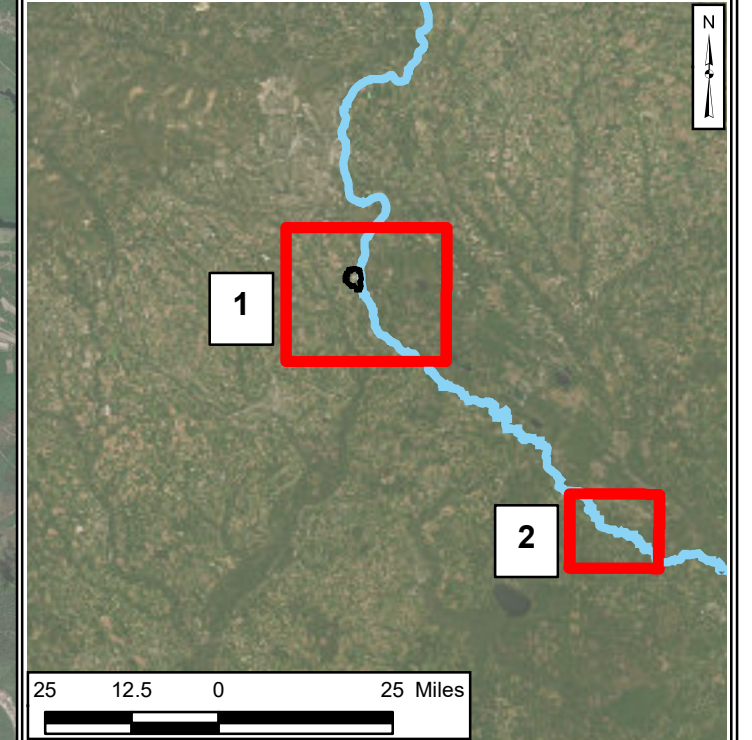
CFR-BLADEN
26

Location Name

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

Notes:

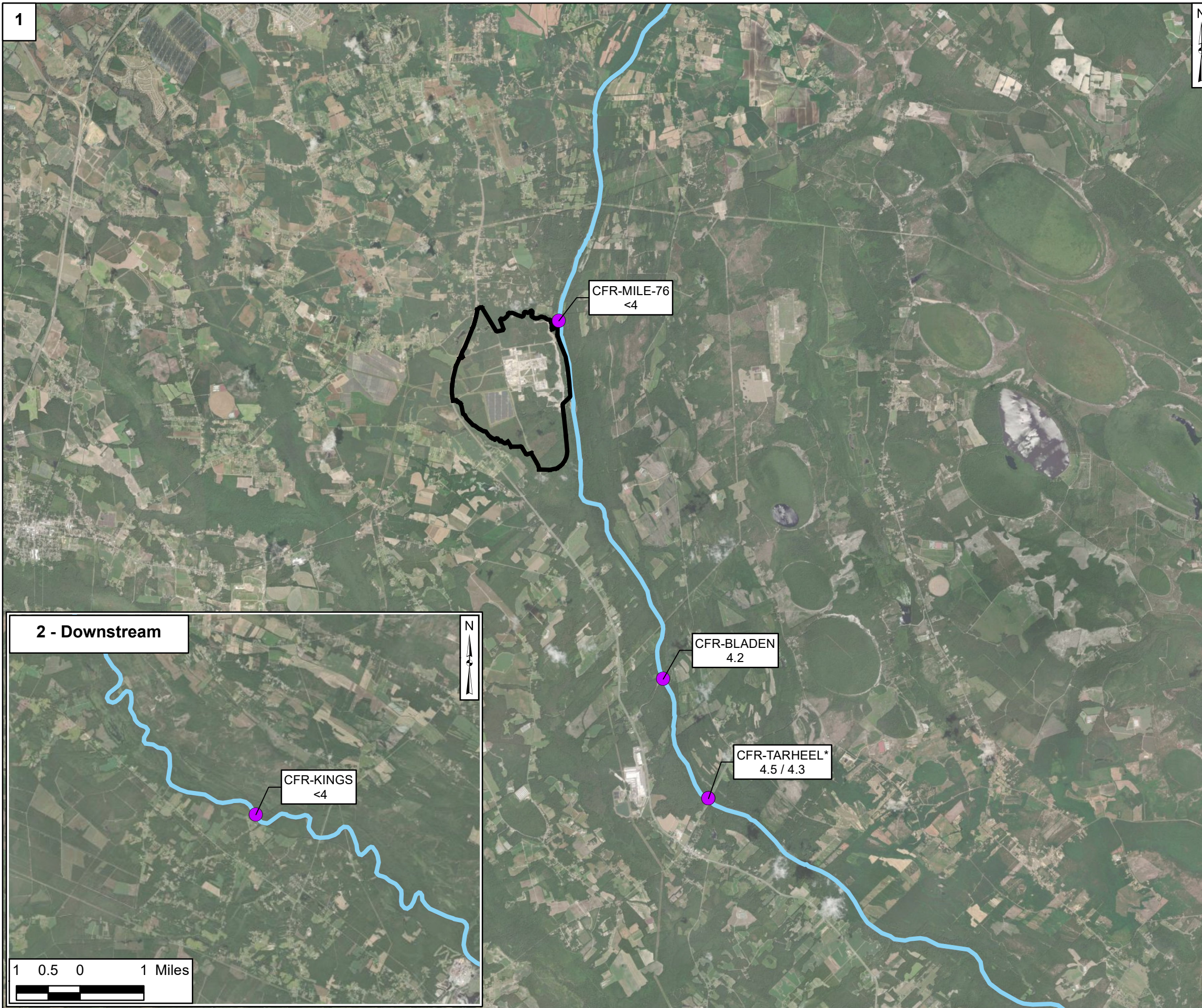
- * Multiple results are shown at CFR-TARHEEL for composite and grab sample
- ND - no Table 3+ analytes (17 compounds) were detected above the associated reporting limits
- 1. All results are in nanograms per liter.
- 2. Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, 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.



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

Chemours Fayetteville Works, North Carolina

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



Legend

- Sample Location
- Cape Fear River
- Site Boundary

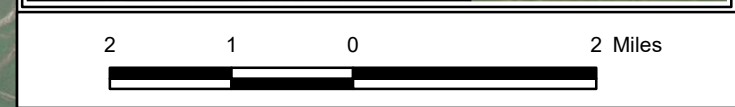
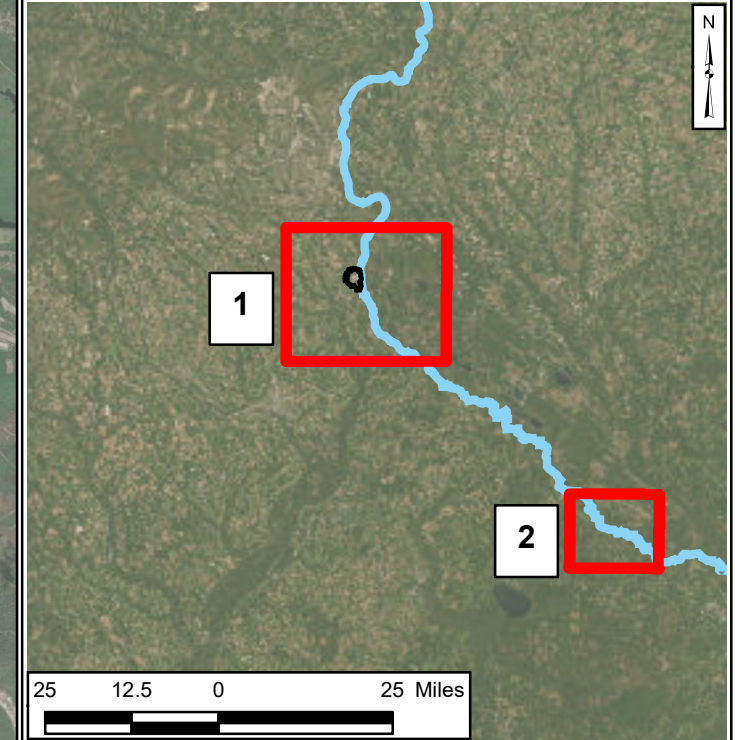
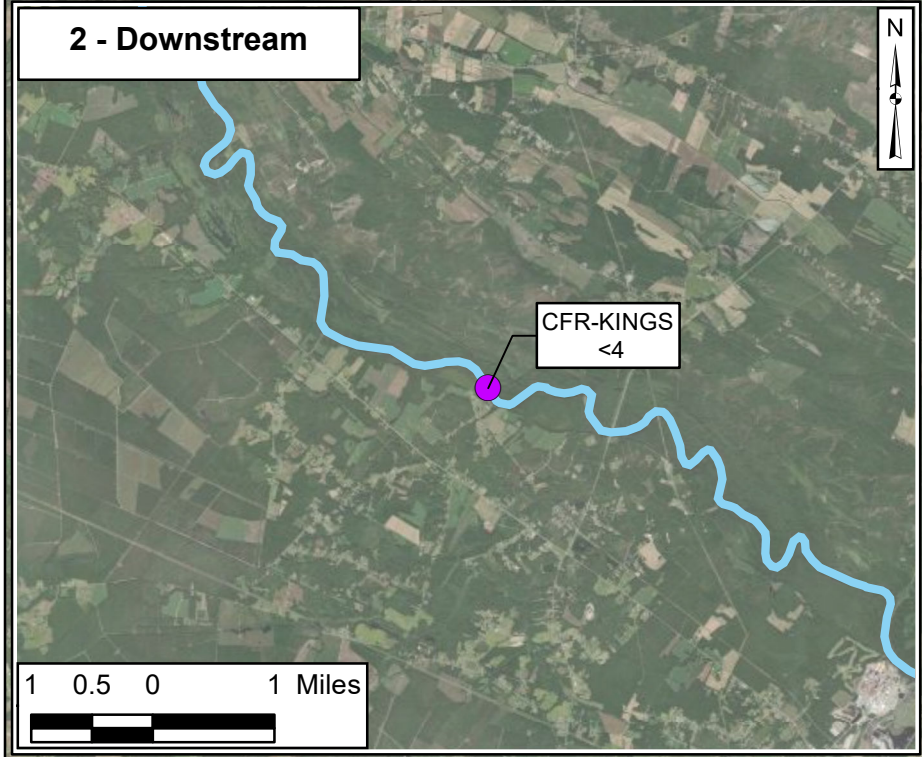
CFR-TARHEEL*
4.5 / 4.3

← Location Name
← HFPO-DA
← Concentration (ng/L)

Notes:

- * Multiple results are shown at CFR-TARHEEL for composite and grab sample
- < - 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.

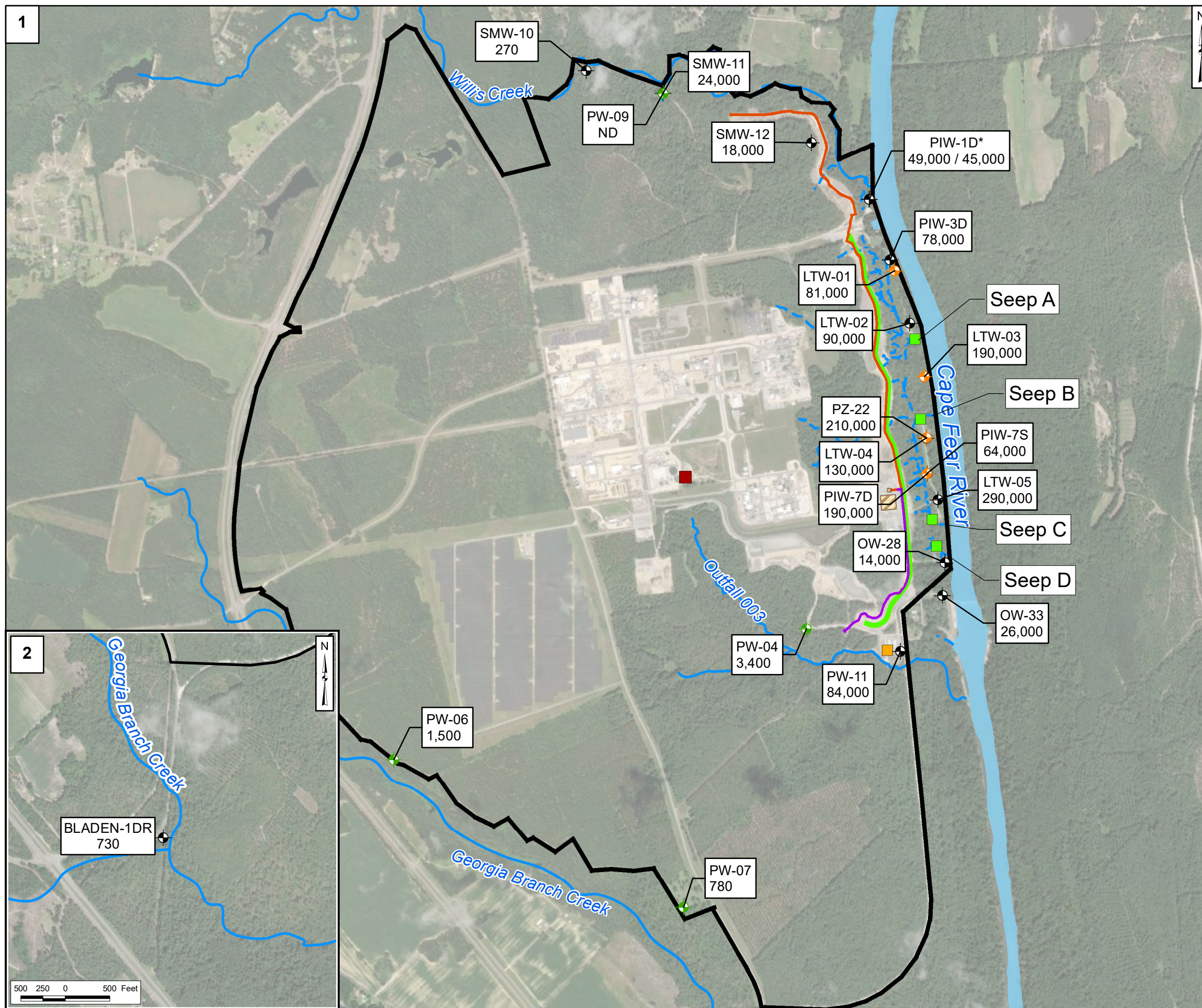


**Cape Fear River HFPO-DA Concentrations
July 2024**

Chemours Fayetteville Works, North Carolina

	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295	Figure A3
	Raleigh	

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



Legend

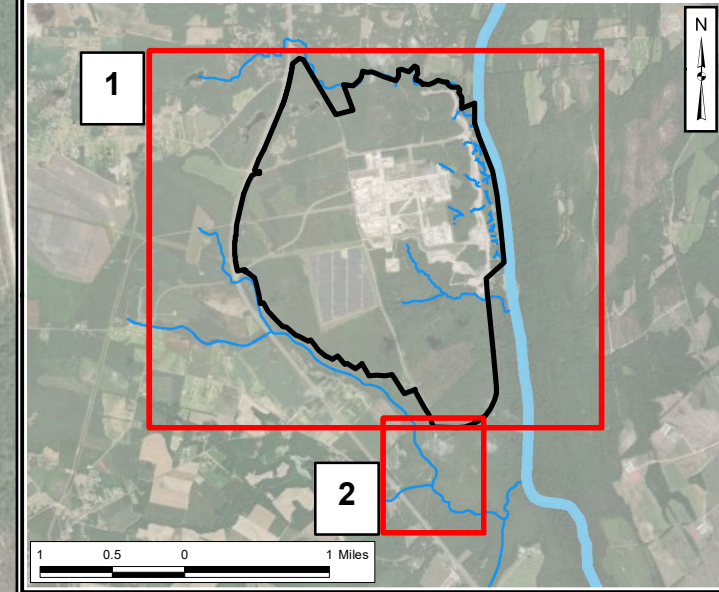
- Surficial Aquifer Monitoring Well
- Black Creek Aquifer Monitoring Well
- Floodplain Deposits Monitoring Well
- Flow-Through Cell
- Outfall 003 Treatment System
- Stormwater Treatment System
- Observed Seep
- Nearby Tributary
- Site Boundary
- North Forcemain
- South Forcemain
- Barrier Wall
- Groundwater Treatment Pad and Break Tank

Location Name
 Total Table 3+ Concentration (ng/L)

Notes:

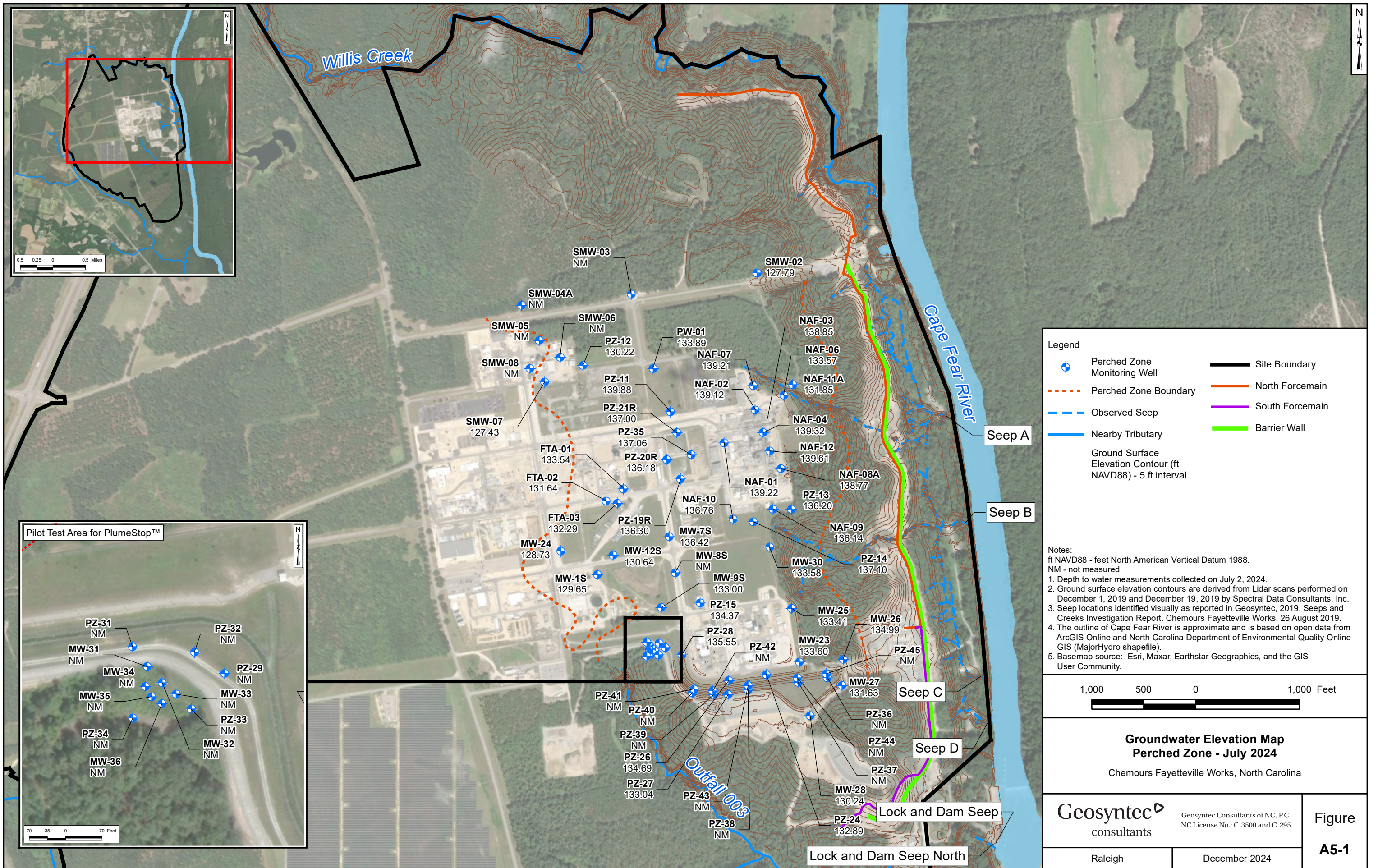
ND - no Table 3+ analytes (17 compounds) were detected above the associated reporting limits

- All results are in nanograms per liter.
- Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.
- Non-detect values were not included in sum of total Table 3+ results.
- Total Table 3+ results include J-qualified data.
- 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.
- Basemap sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community.

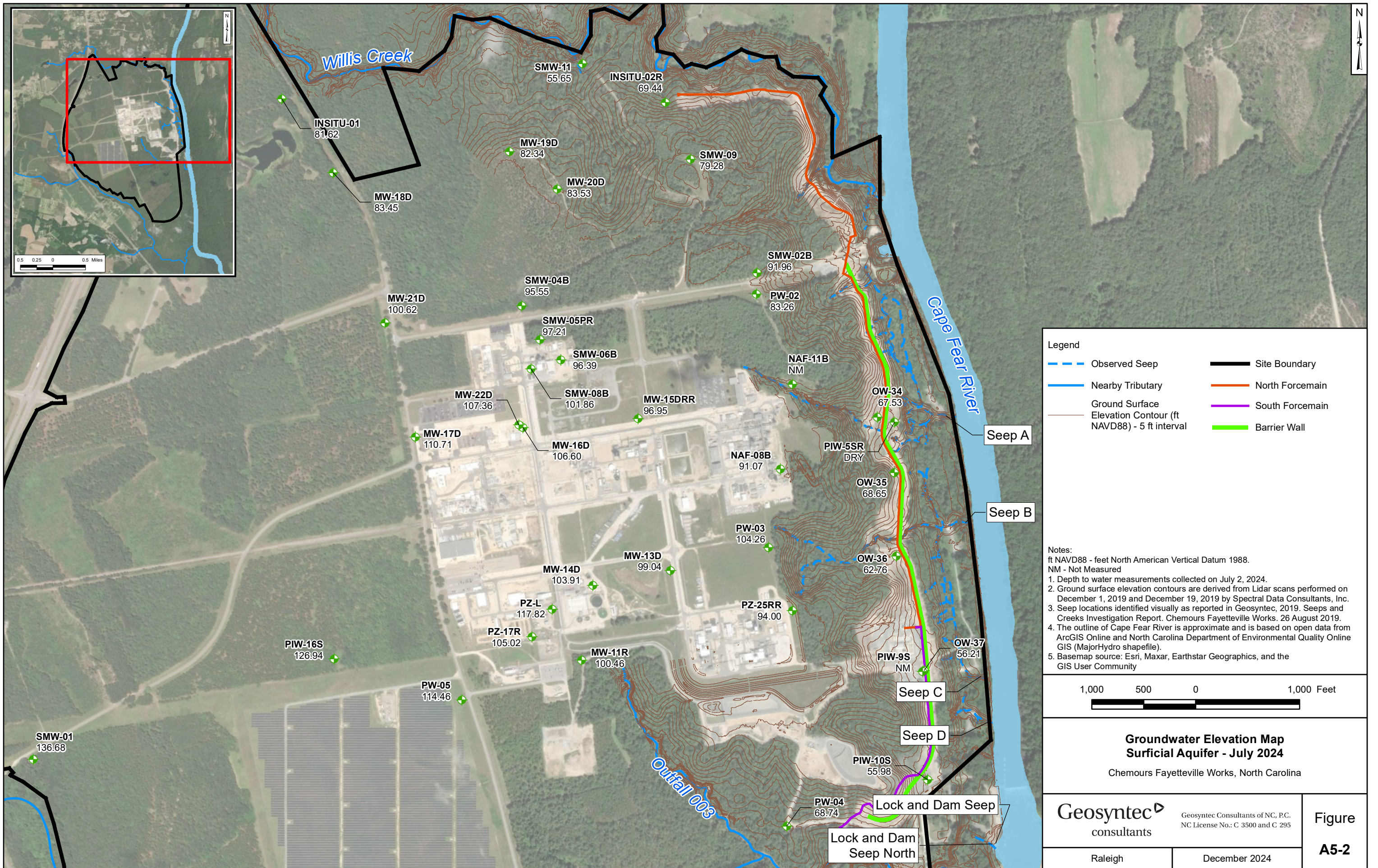


**Total Table 3+ Concentrations
(17 Compounds) in Groundwater - Q3 2024**
Chemours Fayetteville Works, North Carolina

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



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

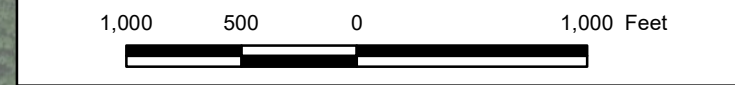


Legend

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

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

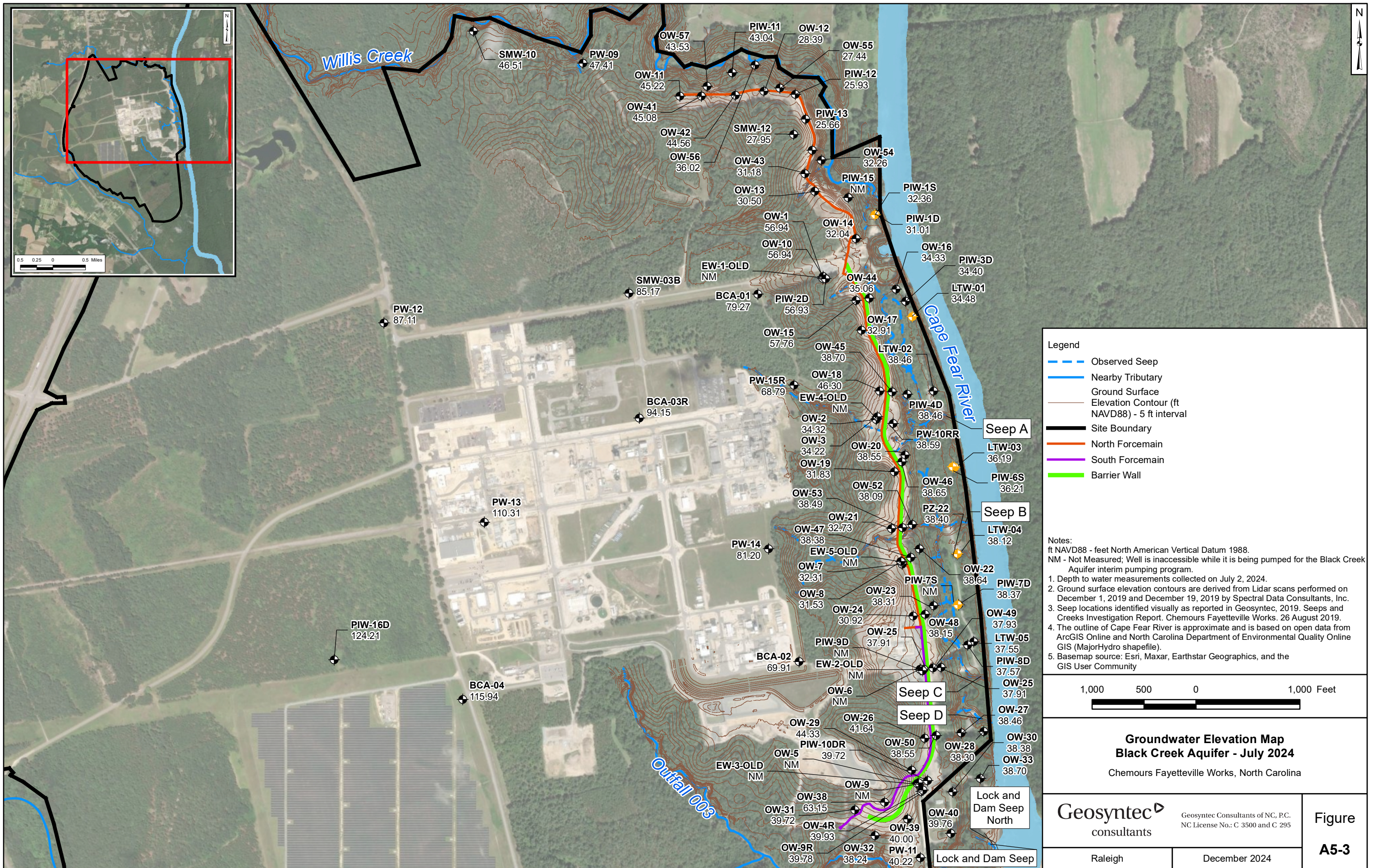
1. Depth to water measurements collected on July 2, 2024.
2. Ground surface elevation contours are derived from Lidar scans performed on December 1, 2019 and December 19, 2019 by Spectral Data Consultants, Inc.
3. Seep locations identified visually as reported in Geosyntec, 2019. Seeps and Creeks Investigation 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



**Groundwater Elevation Map
 Surficial Aquifer - July 2024**
 Chemours Fayetteville Works, North Carolina

	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295	Figure A5-2
	Raleigh	

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



Attachment ATT1

Supplemental Tables to the Mass Loading Model

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

Geosyntec Consultants of NC, P.C.

Date/Time	Flow Rate¹ (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

Geosyntec Consultants of NC, P.C.

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

Geosyntec Consultants of NC, P.C.

Date/Time	Flow Rate¹ (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

Geosyntec Consultants of NC, P.C.

Date/Time	Flow Rate¹ (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

Geosyntec Consultants of NC, P.C.

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	0.001	0	-0.02	-1.6E-05
B	0.5	0.00	0.004	-0.03	0.01	3.5E-05
B	1	0.01	0.005	0.05	0.09	0.000
B	1.5	0.01	0.004	0.12	0.14	0.001
B	2	0.01	0.004	0.15	0.10	4.2E-04
B	2.5	0.01	0.004	0.05	0.04	1.3E-04
B	3	0.01	0.002	0	0.01	0.000
Total Volumetric Discharge						
(ft ³ /s)						0.0015
(gpm)						0.69
(L/s)						0.044

Associated Measurement Notes

Location: Chemours Fayetteville
 Station: Outfall 003 Treatment Plant Effluent Stream
 Date: July 10, 2024

Acronyms

-- data not measured or calculated
 B - Bottom depth of water
 ft - feet
 ft² - square feet
 ft³/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

Geosyntec Consultants of NC, P.C.

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	0.15	0.00	0.06	0.01
B	1	0.30	0.38	-0.05	0.34	0.13
T	1	0.00		0.30		
B	2	0.45	0.59	0.14	0.59	0.35
M	2	0.22		0.55		
T	2	0.00		0.45		
B	3	0.72	0.61	0.17	0.70	0.42
M	3	0.40		0.63		
T	3	0.00		0.71		
B	4	0.50	0.55	0.58	0.72	0.40
M	4	0.25		0.76		
T	4	0.00		0.84		
B	5	0.60	0.48	0.30	0.69	0.33
M	5	0.30		0.68		
T	5	0.00		0.78		
B	6	0.35	0.37	0.57	0.71	0.26
T	6	0.00		0.84		
B	7	0.38	0.35	0.55	0.75	0.26
T	7	0.00		0.87		
B	8	0.32	0.34	0.62	0.82	0.27
T	8	0.00		0.97		
B	9	0.35	0.37	0.73	0.83	0.30
T	9	0.00		0.95		
B	10	0.38	0.34	0.52	0.90	0.30
T	10	0.00		1.10		
B	11	0.30	0.30	0.81	0.90	0.27
T	11	0.00		1.15		
B	12	0.29	0.27	0.63	0.71	0.19
T	12	0.00		1.02		
B	13	0.25	0.18	0.37	0.43	0.07
T	13	0.00		0.80		
T	14	0.10	0.10	0.27	0.13	0.01
T	15	0.10	0.03	-0.01	-0.01	0.00
Bank	15.5	0.00		0.00		

Associated Measurement Notes
 Location: Chemours Fayetteville
 Station: Willis Creek 06 (SW-WC-06)
 Date: July 10, 2024

Total Volumetric Discharge	
(ft ³ /s)	3.6
(gpm)	1,605
(L/s)	101

Acronyms

-- data not measured or calculated
 B - Bottom depth of water
 ft - feet
 ft² - square feet
 ft³/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

Geosyntec Consultants of NC, P.C.

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)
Downstream Bank	0	0.00	0.25	0.00	0.19	0.05
B	0.5	1.00	0.48	0.14	0.43	0.20
M	0.5	0.50		0.37		
T	0.5	0.00		0.14		
B	1	0.90	0.44	0.32	0.50	0.22
M	1	0.45		0.48		
T	1	0.00		0.60		
B	1.5	0.85	0.41	0.18	0.50	0.20
M	1.5	0.43		0.52		
T	1.5	0.00		0.68		
B	2	0.80	0.38	0.34	0.51	0.19
M	2	0.40		0.47		
T	2	0.00		0.64		
B	2.5	0.70	0.35	0.16	0.60	0.21
M	2.5	0.35		0.55		
T	2.5	0.00		0.61		
B	3	0.70	0.34	0.32	0.62	0.21
M	3	0.35		0.64		
T	3	0.00		0.67		
B	3.5	0.65	0.33	0.29	0.55	0.18
M	3.5	0.33		0.60		
T	3.5	0.00		0.71		
B	4	0.65	0.31	0.18	0.48	0.15
M	4	0.33		0.49		
T	4	0.00		0.61		
B	4.5	0.60	0.30	0.29	0.34	0.10
M	4.5	0.30		0.46		
T	4.5	0.00		0.58		
B	5	0.60	0.03	0.12	0.11	0.00
M	5	0.30		0.21		
T	5	0.00		0.30		
Upstream Bank	5.1	0.00		0.00		
Total Volumetric Discharge						
						1.7
						767
						48

Associated Measurement Notes

Location: Chemours Fayetteville
 Station: Georgia Branch 05 (SW-GB-01)
 Date: July 10, 2024

Acronyms

- data not measured or calculated
- B - Bottom depth of water
- ft - feet
- ft² - square feet
- ft³/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

Geosyntec Consultants of NC, P.C.

Q3 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)
July 2024 ¹	7/10/2024	14.24	14,239,000	13.1	7,762,233
	7/11/2024	13.12	13,122,000	9.9	5,431,050
	07/10/2024 10:55:00 AM to 07/11/2024 09:56:00 AM			23.0	13,193,283

Notes:

Daily flow rates collected from facility Discharge Monitoring Reports.

1 - Total flow volume for 24-hour temporal composite sample collected at 09:56 AM on 07/11/24 approximated based on flow rates for 07/10/24 and 07/11/24.

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

Q3 2024 Quarterly Event	Pathway/ Location	Sample Collection Timepoint	Flow Gauging Location¹	Grab Sample Instantaneous Flow Rate (ft³/s)²
July 2024	Upstream River Water and Groundwater	07/10/24 8:40	William O Huske Lock and Dam	976

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:

- ft³/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

Geosyntec Consultants of NC, P.C.

Q3 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)
July 2024 ¹	7/10/2024	8,265	11,901,393	15.9	7,884,673
	7/11/2024	8,399	12,094,876	7.10	3,578,067
	07/10/24 8:06:00 AM to 07/11/24 7:06:00 AM			23.0	11,462,741

Notes:

Daily flow rates collected from facility Discharge Monitoring Reports.

1 - Total flow volume for 24-hour temporal composite sample collected at 7:06 am on 07/11/24 approximated based on flow rates for 07/10/24 and 07/11/24.

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-KINGS	CFR-MILE-76	CFR-TARHEEL	CFR-TARHEEL	GBC-1	LOCK-DAM NORTH
Field Sample ID	CAP3Q24-CFR-BLADEN-071124	CAP3Q24-CFR-KINGS-071124	CAP3Q24-CFR-RM-76-071024	CAP3Q24-CFR-TARHEEL-071124	CAP3Q24-CFR-TARHEEL-24-071124	CAP3Q24-GBC-1-071124	CAP3Q24-LOCK-DAM-NORTH-071024
Sample Date	7/11/2024	7/11/2024	7/10/2024	7/11/2024	7/11/2024	7/11/2024	7/10/2024
QA/QC							
Sample Delivery Group (SDG)	320-113821-1	320-113821-1	320-113746-1	320-113821-1	320-113821-1	320-113746-1	320-113746-1
Lab Sample ID	320-113821-3	320-113821-4	320-113746-2	320-113821-1	320-113821-2	320-113746-3	320-113746-1
537 Mod (ng/L)							
10:2 Fluorotelomer sulfonate	<2.0	<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	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<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	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<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	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<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	<2.0
DONA	<2.0	<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	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<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	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	7.0	7.7	6.5	6.8	5.9	2.7	<2.0
Perfluorobutanoic Acid	7.0	6.6	6.8	7.6	6.3	9.0	39
Perfluorodecane Sulfonic Acid	<2.0	<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	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<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	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	4.5	4.7	4.1	4.2	4.0	2.1	7.6
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	5.8	6.2	5.8	5.6	5.4	<2.0	<2.0
Perfluorohexanoic Acid	12	11	10	11	9.4	3.7	8.0
Perfluorononanesulfonic Acid	<2.0	<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	<2.0
Perfluorooctadecanoic Acid	<2.0	<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	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	11	12	11	12	9.0	8.3	84
Perfluorotetradecanoic Acid	<2.0	<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	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFOA	8.5	9.5	8.6	8.1	8.6	2.6	7.9
PFOS	14	16	14	13	17	<2.0	7.7

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

Location ID	LOCK-DAM NORTH	LOCK-DAM SEEP ¹	LOCK-DAM SEEP	LOCK-DAM SEEP	LOCK-DAM SEEP	OLDOF-2	OUTFALL 002
Field Sample ID	LOCK-DAM-NORTH-091024	--	CAP3Q24-LOCK-DAM-SEEP-072424	LOCK-DAM-SEEPS-090424	LOCK-DAM-SEEPS-090424-D	CAP3Q24-OLDOF-2-24-071124	CAP3Q24-OUTFALL-002-24-071124
Sample Date	9/10/2024	--	7/24/2024	9/4/2024	9/4/2024	7/11/2024	7/11/2024
QA/QC		--			Field Duplicate		
Sample Delivery Group (SDG)	320-115358-1	--	320-114129-1	320-115213-1	320-115213-1	320-113747-1	320-113747-1
Lab Sample ID	320-115358-1	--	320-114129-2	320-115213-1	320-115213-2	320-113747-4	320-113747-3
537 Mod (ng/L)							
10:2 Fluorotelomer sulfonate	<2.0	--	<2.0	<67	<67	<2.0	<2.0
11Cl-PF3OUdS	<2.0	--	<2.0	<32	<32	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	--	<2.0	<46	<46	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	--	<2.0	<24	<24	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	--	<2.0	<85	<85	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	--	<4.0	<140	<140	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	--	<5.0	<250	<250	<5.0	<5.0
9Cl-PF3ONS	<2.0	--	<2.0	<24	<24	<2.0	<2.0
DONA	<2.0	--	<2.0	<40	<40	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	--	<5.0	<130	<130	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	--	<2.0	<87	<87	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	--	<2.0	<43	<43	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	--	<5.0	<120	<120	<5.0	<5.0
Perfluorobutane Sulfonic Acid	2.2	--	2.2	<20	<20	<2.0	7.0
Perfluorobutanoic Acid	37	--	49	<240	<240	8.8	7.7
Perfluorodecane Sulfonic Acid	<2.0	--	<2.0	<32	<32	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	--	<2.0	<31	<31	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	--	<2.0	<97	<97	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	--	<2.0	<55	<55	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	--	<2.0	<19	<19	<2.0	<2.0
Perfluoroheptanoic Acid	7.9	--	53	55	57	4.6	5.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	--	<2.0	<89	<89	<2.0	<2.0
Perfluorohexane Sulfonic Acid	3.6	--	4.9	<57	<57	<2.0	5.8
Perfluorohexanoic Acid	7.4	--	11	<58	<58	2.8	13
Perfluorononanesulfonic Acid	<2.0	--	<2.0	<37	<37	<2.0	<2.0
Perfluorononanoic Acid	<2.0	--	2.9	<27	<27	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	--	<2.0	<94	<94	<2.0	<2.0
Perfluorooctane Sulfonamide	<2.0	--	<2.0	<98	<98	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	--	<2.0	<30	<30	<2.0	<2.0
Perfluoropentanoic Acid	78	--	250	200	230	21	13
Perfluorotetradecanoic Acid	<2.0	--	<2.0	<73	<73	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	--	<2.0	<130	<130	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	--	<2.0	<110	<110	<2.0	<2.0
PFOA	12	--	11	<85	<85	4.4	9.2
PFOS	10	--	29	<54	<54	<2.0	13

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

Location ID	RIVER WATER INTAKE 2	WC-1	WC-1	EB	EB
Field Sample ID	RIVER-WATER-INTAKE-24-071124	CAP3Q24-WC-1-24-071124	CAP3Q24-WC-1-24-071124-D	CAP3Q24-EQBLK-IS-071124	CAP3Q24-EQBLK-PP-SW-071124
Sample Date	7/11/2024	7/11/2024	7/11/2024	7/11/2024	7/11/2024
QA/QC			Field Duplicate	Equipment Blank	Equipment Blank
Sample Delivery Group (SDG)	320-113746-1	320-113748-1	320-113748-1	320-113747-1	320-113747-1
Lab Sample ID	320-113746-4	320-113748-2	320-113748-3	320-113747-1	320-113747-2
537 Mod (ng/L)					
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<2.0	<2.0
11Cl-PF3OUdS	<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
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<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-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<5.0	<5.0
9Cl-PF3ONS	<2.0	<2.0	<2.0	<2.0	<2.0
DONA	<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
N-ethylperfluoro-1-octanesulfonamide	<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
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	7.4	5.5	5.4	<2.0	<2.0
Perfluorobutanoic Acid	8.1	8.6	8.2	<5.0	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	4.7	2.8	2.4	<2.0	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	5.6	<2.0	<2.0	<2.0	<2.0
Perfluorohexanoic Acid	13	4.3	4.8	<2.0	<2.0
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	13	13	11	<2.0	<2.0
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
PFOA	9.3	11	10	<2.0	<2.0
PFOS	12	<2.0	<2.0	<2.0	<2.0

Notes:

- 1 - Lock and Dam Seep was not sampled because location was dry during the July 2024 CAP sampling event.
- 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	Floodplain Deposits	Black Creek Aquifer	Floodplain Deposits
Location ID	BLADEN-1DR	LTW-01	LTW-02	LTW-03
Field Sample ID	CAP3Q24-BLADEN-1DR-071824	CAP3Q24-LTW-01-072624	CAP3Q24-LTW-02-071824	CAP3Q24-LTW-03-072924
Sample Date	7/18/2024	7/26/2024	7/18/2024	7/29/2024
QA/QC				
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-113926-1	320-114201-1	320-113921-1	320-114196-1
Lab Sample ID	320-113926-2	320-114201-4	320-113921-5	320-114196-2
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<84	<84	<84	<84
11Cl-PF3OUdS	<40	<40	<40	<40
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<58	<58	<58
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<30	<30	<30
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<110	<110	<110
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<180	<180	<180
6:2 Fluorotelomer sulfonate	<310	<310	<310	<310
9Cl-PF3ONS	<30	<30	<30	<30
DONA	<50	<50	<50	<50
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<160	<160	<160
N-ethylperfluoro-1-octanesulfonamide	<110	<110	<110	<110
N-methyl perfluoro-1-octanesulfonamide	<54	<54	<54	<54
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<150	<150	<150
Perfluorobutane Sulfonic Acid	<25	<25	<25	<25
Perfluorobutanoic Acid	<300	<300	<300	<300
Perfluorodecane Sulfonic Acid	<40	<40	<40	<40
Perfluorodecanoic Acid	<39	<39	<39	<39
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<120	<120	<120
Perfluorododecanoic Acid	<69	<69	<69	<69
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<24	<24	<24
Perfluoroheptanoic Acid	<31	41	<31	<31
Perfluorohexadecanoic Acid (PFHxDA)	<110	<110	<110	<110
Perfluorohexane Sulfonic Acid	<71	<71	<71	<71
Perfluorohexanoic Acid	<73	<73	<73	<73
Perfluorononanesulfonic Acid	<46	<46	<46	<46
Perfluorononanoic Acid	<34	<34	<34	<34
Perfluorooctadecanoic Acid	<120	<120	<120	<120
Perfluorooctane Sulfonamide	<120	<120	<120	<120
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<38	<38	<38
Perfluoropentanoic Acid	<61	280	390	640
Perfluorotetradecanoic Acid	<91	<91	<91	<91
Perfluorotridecanoic Acid	<160	<160	<160	<160
Perfluoroundecanoic Acid	<140	<140	<140	<140
PFOA	<110	<110	<110	<110
PFOS	<68	<68	<68	<68

**TABLE ATT1-12
GROUNDWATER OTHER PFAS 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	CAP3Q24-LTW-04-072424	CAP3Q24-LTW-5-072524	CAP3Q24-OW-28-071824	CAP3Q24-OW-33-071624
Sample Date	7/24/2024	7/25/2024	7/18/2024	7/16/2024
QA/QC				
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-114134-1	320-114129-1	320-113926-1	320-113883-1
Lab Sample ID	320-114134-1	320-114129-1	320-113926-1	320-113883-4
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<84	<84	<84	<2.0
11Cl-PF3OUdS	<40	<40	<40	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<58	<58	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<30	<30	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<110	<110	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<180	<180	<4.0
6:2 Fluorotelomer sulfonate	<310	<310	<310	<5.0
9Cl-PF3ONS	<30	<30	<30	<2.0
DONA	<50	<50	<50	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<160	<160	<5.0
N-ethylperfluoro-1-octanesulfonamide	<110	<110	<110 UJ	<2.0
N-methyl perfluoro-1-octanesulfonamide	<54	<54	<54	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<150	<150	<5.0
Perfluorobutane Sulfonic Acid	<25	<25	<25	<2.0
Perfluorobutanoic Acid	320	320	<300	62
Perfluorodecane Sulfonic Acid	<40	<40	<40	<2.0
Perfluorodecanoic Acid	<39	<39	<39	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<120	<120	<2.0
Perfluorododecanoic Acid	<69	<69	<69	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<24	<24	<2.0
Perfluoroheptanoic Acid	58	270	<31	6.3
Perfluorohexadecanoic Acid (PFHxDA)	<110	<110	<110	<2.0
Perfluorohexane Sulfonic Acid	<71	<71	<71	<2.0
Perfluorohexanoic Acid	<73	<73	<73	8.8
Perfluorononanesulfonic Acid	<46	<46	<46	<2.0
Perfluorononanoic Acid	<34	<34	<34	<2.0
Perfluorooctadecanoic Acid	<120	<120	<120	<2.0
Perfluorooctane Sulfonamide	<120	<120	<120	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<38	<38	<2.0
Perfluoropentanoic Acid	1,200	2,600	79	110
Perfluorotetradecanoic Acid	<91	<91	<91	<2.0
Perfluorotridecanoic Acid	<160	<160	<160	<2.0
Perfluoroundecanoic Acid	<140	<140	<140	<2.0
PFOA	<110	<110	<110	<2.0
PFOS	<68	<68	<68	<2.0

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	Black Creek Aquifer
Location ID	PIW-1D	PIW-1D	PIW-3D	PIW-7D
Field Sample ID	CAP3Q24-PIW-1D-072324	CAP3Q24-PIW-1D-072324-Z	CAP3Q24-PIW-3D-072324	CAP3Q24-PIW-7D-072324
Sample Date	7/23/2024	7/23/2024	7/23/2024	7/23/2024
QA/QC				
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-114137-1	320-114137-1	320-114046-1	320-114131-1
Lab Sample ID	320-114137-1	320-114137-2	320-114046-2	320-114131-1
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<84	<84	<84	<84
11Cl-PF3OUdS	<40	<40	<40	<40
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<58	<58	<58
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<30	<30	<30
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<110	<110	<110
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<180	<180	<180
6:2 Fluorotelomer sulfonate	<310	<310	<310	<310
9Cl-PF3ONS	<30	<30	<30	<30
DONA	<50	<50	<50	<50
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<160	<160	<160
N-ethylperfluoro-1-octanesulfonamide	<110	<110	<110	<110
N-methyl perfluoro-1-octanesulfonamide	<54	<54	<54	<54
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<150	<150	<150
Perfluorobutane Sulfonic Acid	<25	<25	<25	<25
Perfluorobutanoic Acid	<300	<300	<300	<300
Perfluorodecane Sulfonic Acid	<40	<40	<40	<40
Perfluorodecanoic Acid	<39	<39	<39	<39
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<120	<120	<120
Perfluorododecanoic Acid	<69	<69	<69	<69
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<24	<24	<24
Perfluoroheptanoic Acid	<31	<31	31	70
Perfluorohexadecanoic Acid (PFHxDA)	<110	<110	<110	<110
Perfluorohexane Sulfonic Acid	<71	<71	<71	<71
Perfluorohexanoic Acid	<73	<73	<73	<73
Perfluorononanesulfonic Acid	<46	<46	<46	<46
Perfluorononanoic Acid	<34	<34	<34	<34
Perfluorooctadecanoic Acid	<120	<120	<120	<120
Perfluorooctane Sulfonamide	<120	<120	<120	<120
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<38	<38	<38
Perfluoropentanoic Acid	160	130	220	1,300
Perfluorotetradecanoic Acid	<91	<91	<91	<91
Perfluorotridecanoic Acid	<160	<160	<160	<160
Perfluoroundecanoic Acid	<140	<140	<140	<140
PFOA	<110	<110	<110	<110
PFOS	<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
Location ID	PIW-7S	PW-04	PW-04	PW-06
Field Sample ID	CAP3Q24-PIW-7S-072424	CAP3Q24-PW-04-072624	CAP3Q24-PW-04-072624-Z	CAP3Q24-PW-06-072324
Sample Date	7/24/2024	7/26/2024	7/26/2024	7/23/2024
QA/QC				
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-114134-1	320-114245-1	320-114245-1	320-114137-1
Lab Sample ID	320-114134-3	320-114245-1	320-114245-2	320-114137-4
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<84	<84	<84	<84
11Cl-PF3OUdS	<40	<40	<40	<40
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<58	<58	<58	<58
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<30	<30	<30	<30
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<110	<110	<110	<110
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<180	<180	<180	<180
6:2 Fluorotelomer sulfonate	<310	<310	<310	<310
9Cl-PF3ONS	<30	<30	<30	<30
DONA	<50	<50	<50	<50
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<160	<160	<160	<160
N-ethylperfluoro-1-octanesulfonamide	<110	<110	<110	<110
N-methyl perfluoro-1-octanesulfonamide	<54	<54	<54	<54
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<150	<150	<150	<150
Perfluorobutane Sulfonic Acid	<25	<25	<25	<25
Perfluorobutanoic Acid	<300	<300	<300	<300
Perfluorodecane Sulfonic Acid	<40	<40	<40	<40
Perfluorodecanoic Acid	<39	<39	<39	<39
Perfluorododecane Sulfonic Acid (PFDoS)	<120	<120	<120	<120
Perfluorododecanoic Acid	<69	<69	<69	<69
Perfluoroheptane Sulfonic Acid (PFHpS)	<24	<24	<24	<24
Perfluoroheptanoic Acid	73	<31	<31	<31
Perfluorohexadecanoic Acid (PFHxDA)	<110	<110	<110	<110
Perfluorohexane Sulfonic Acid	<71	<71	<71	<71
Perfluorohexanoic Acid	<73	<73	<73	<73
Perfluorononanesulfonic Acid	<46	<46	<46	<46
Perfluorononanoic Acid	<34	<34	<34	<34
Perfluorooctadecanoic Acid	<120	<120	<120	<120
Perfluorooctane Sulfonamide	<120	<120	<120	<120
Perfluoropentane Sulfonic Acid (PFPeS)	<38	<38	<38	<38
Perfluoropentanoic Acid	580	<61	<61	<61
Perfluorotetradecanoic Acid	<91	<91	<91	<91
Perfluorotridecanoic Acid	<160	<160	<160	<160
Perfluoroundecanoic Acid	<140	<140	<140	<140
PFOA	<110	<110	<110	<110
PFOS	<68	<68	<68	<68

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

Water Bearing Unit ¹	Surficial Aquifer	Surficial Aquifer	Black Creek Aquifer	Black Creek Aquifer
Location ID	PW-07	PW-07	PW-09	PZ-22
Field Sample ID	CAP3Q24-PW-07-071124	CAP3Q24-PW-07-071124-Z	CAP3Q24-PW-09-071124	CAP3Q24-PZ-22-072524
Sample Date	7/11/2024	7/11/2024	7/11/2024	7/25/2024
QA/QC				
Sample Matrix	LIQUID	LIQUID	Liquid	LIQUID
Sample Delivery Group (SDG)	320-113817-1	320-113817-1	320-113821-1	320-114118-1
Lab Sample ID	320-113817-2	320-113817-3	320-113821-5	320-114118-4
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<84
11Cl-PF3OUdS	<2.0	<2.0	<2.0	<40
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<2.0	<2.0	<58
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<2.0	<2.0	<30
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<2.0	<2.0	<110
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<180
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<310
9Cl-PF3ONS	<2.0	<2.0	<2.0	<30
DONA	<2.0	<2.0	<2.0	<50
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<160
N-ethylperfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<110
N-methyl perfluoro-1-octanesulfonamide	<2.0	<2.0	<2.0	<54
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<150
Perfluorobutane Sulfonic Acid	<2.0	<2.0	<2.0	<25
Perfluorobutanoic Acid	11	11	<5.0	<300
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<40
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<39
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<120
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<69
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<24
Perfluoroheptanoic Acid	2.8	2.5	<2.0	45
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<110
Perfluorohexane Sulfonic Acid	<2.0	<2.0	<2.0	<71
Perfluorohexanoic Acid	<2.0	<2.0	<2.0	<73
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<46
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<34
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<120
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<120
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<38
Perfluoropentanoic Acid	6.3	6.2	<2.0	870
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<91
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<160
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<140
PFOA	3.0	2.4	<2.0	<110
PFOS	<2.0	<2.0	<2.0	<68

**TABLE ATT1-12
GROUNDWATER OTHER PFAS 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	EB
Field Sample ID	CAP3Q24-SMW-10-070924	CAP3Q24-SMW-11-071824	CAP3Q24-SMW-12-071624	CAP3Q24-EQBLK-DV-070824
Sample Date	7/9/2024	7/18/2024	7/16/2024	7/8/2024
QA/QC				Equipment Blank
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-113750-1	320-113926-1	320-113886-1	320-113685-1
Lab Sample ID	320-113750-1	320-113926-4	320-113886-2	320-113685-4
537 Mod (ng/L)				
10:2 Fluorotelomer sulfonate	<2.0	<84	<84	<2.0
11Cl-PF3OUdS	<2.0	<40	<40	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<58	<58	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	<30	<30	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<110	<110	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<180	<180	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<310	<310	<5.0
9Cl-PF3ONS	<2.0	<30	<30	<2.0
DONA	<2.0	<50	<50	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<160 UJ	<160	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<110	<110	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	<54	<54	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<150	<150	<5.0
Perfluorobutane Sulfonic Acid	<2.0	<25	<25	<2.0
Perfluorobutanoic Acid	<5.0	<300	<300	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<40	<40	<2.0
Perfluorodecanoic Acid	<2.0	<39	<39	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<120	<120	<2.0
Perfluorododecanoic Acid	<2.0	<69	<69	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<24	<24	<2.0
Perfluoroheptanoic Acid	<2.0	<31	<31	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<110	<110	<2.0
Perfluorohexane Sulfonic Acid	<2.0	<71	<71	<2.0
Perfluorohexanoic Acid	<2.0	<73	<73	<2.0
Perfluorononanesulfonic Acid	<2.0	<46	<46	<2.0
Perfluorononanoic Acid	<2.0	<34	<34	<2.0
Perfluorooctadecanoic Acid	<2.0	<120	<120	<2.0
Perfluorooctane Sulfonamide	<2.0	<120	<120	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<38	<38	<2.0
Perfluoropentanoic Acid	<2.0	63	88	<2.0
Perfluorotetradecanoic Acid	<2.0	<91	<91	<2.0
Perfluorotridecanoic Acid	<2.0	<160	<160	<2.0
Perfluoroundecanoic Acid	<2.0	<140	<140	<2.0
PFOA	<2.0	240	<110	<2.0
PFOS	<2.0	<68	<68	<2.0

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

Water Bearing Unit ¹	--	--	--	--
Location ID	EB	EB	EB	EB
Field Sample ID	CAP3Q24-EQBLK-PP-070824	CAP3Q24-BAILER-070924	CAP3Q24-EQBLK-DV-071124	CAP3Q24-EQBLK-PP-071124
Sample Date	7/8/2024	7/9/2024	7/11/2024	7/11/2024
QA/QC	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-113685-1	320-113749-1	320-113749-1	320-113749-1
Lab Sample ID	320-113685-3	320-113749-3	320-113749-4	320-113749-1
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
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	<2.0	<2.0	<2.0
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

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

Water Bearing Unit ¹	--	--	--	--
Location ID	EB	EB	EB	EB
Field Sample ID	CAP3Q24-EQBLK-PP-071124-Z	CAP3Q24-EQBLK-BP-071624	CAP3Q24-EQBLK-PP-071924	CAP3Q24-EQBK-DV-072924
Sample Date	7/11/2024	7/16/2024	7/19/2024	7/29/2024
QA/QC	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Matrix	LIQUID	LIQUID	LIQUID	LIQUID
Sample Delivery Group (SDG)	320-113749-1	320-113888-1	320-114046-1	320-114245-1
Lab Sample ID	320-113749-2	320-113888-1	320-114046-5	320-114245-3
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
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
Perfluoronanesulfonic Acid	<2.0	<2.0	<2.0	<2.0
Perfluoronanoic Acid	<2.0	<2.0	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<2.0
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:

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 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)	625	2.3	13	0.07
Program	CAP SW Sampling 3Q24	CAP SW Sampling 3Q24	CAP SW Sampling 3Q24	STS Compliance Sampling
Location ID	CFR-MILE-76	WC-1	OUTFALL 002	STS DISCHARGE
Field Sample ID	CAP3Q24-CFR-RM-76-071024	CAP3Q24-WC-1-24-071124	CAP3Q24-OUTFALL-002-24-071124	STS Discharge - 071124
Sample Date and Time ²	07/10/24	07/11/24	07/11/24	07/11/24
Sample Delivery Group (SDG)	320-113746-1	320-113748-1	320-113747-1	320-113755-2
Lab Sample ID	320-113746-2	320-113748-2	320-113747-3	320-113755-6
Sample Type	Grab	Composite	Composite	Composite
<i>Table 3+ Lab SOP Mass Discharge⁶ (mg/s)</i>				
HFPO-DA	ND	0.05	0.01	ND
PFMOAA	ND	0.14	4.0E-03	ND
PFO2HxA	ND	0.05	1.9E-03	--
PFO3OA	ND	0.01	ND	--
PFO4DA	ND	1.7E-03	ND	--
PFO5DA	ND	ND	ND	--
PMPA	0.07	0.05	ND	ND
PEPA	ND	0.01	ND	--
PS Acid	ND	ND	ND	--
Hydro-PS Acid	ND	1.2E-03	ND	--
R-PSDA	0.41	0.02	0.02	--
Hydrolyzed PSDA	ND	0.03	0.01	--
R-PSDCA	ND	ND	ND	--
NVHOS, Acid Form	ND	2.8E-03	ND	--
EVE Acid	ND	ND	ND	--
Hydro-EVE Acid	ND	7.6E-04	ND	--
R-EVE	0.093	6.5E-03	3.5E-03	--
PES	ND	ND	ND	--
PFECA B	ND	ND	ND	--
PFECA-G	ND	ND	ND	--
PFPrA	0.38	0.08	4.0E-03	--
Total Attachment C Mass Discharge^{7,8}	0.07	0.31	0.02	ND
Total Table 3+ Mass Discharge (17 compounds)^{7,9}	0.07	0.32	0.02	ND
Total Table 3+ Mass Discharge (18 compounds)^{7,10}	0.44	0.39	0.02	ND
Total Table 3+ Mass Discharge (21 Compounds)⁷	0.96	0.46	0.05	ND

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	--	--	--	--
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 Discharge⁶ (mg/s)				
HFPO-DA	5.4E-03	--	--	--
PFMOAA	0.02	--	--	--
PFO2HxA	0.01	--	--	--
PFO3OA	1.9E-03	--	--	--
PFO4DA	2.6E-04	--	--	--
PFO5DA	9.2E-06	--	--	--
PMPA	4.4E-03	--	--	--
PEPA	1.3E-03	--	--	--
PS Acid	ND	--	--	--
Hydro-PS Acid	3.0E-05	--	--	--
R-PSDA	2.7E-04	--	--	--
Hydrolyzed PSDA	3.7E-04	--	--	--
R-PSDCA	ND	--	--	--
NVHOS, Acid Form	2.1E-04	--	--	--
EVE Acid	ND	--	--	--
Hydro-EVE Acid	3.9E-05	--	--	--
R-EVE	2.0E-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}	0.06	--	--	--
Total Table 3+ Mass Discharge (21 Compounds)⁷	0.06	--	--	--

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 ¹¹	Lock and Dam North	Outfall 003 Stream
Flow (MG)	--	--	1.7E-03	9.9E-04
Program	--	--	CAP SW Sampling 3Q24	CAP SW Sampling 3Q24
Location ID	SEEP-D-EFF	Lock-Dam Seep	Lock-Dam North	OLDOF-1
Field Sample ID	--	--	CAP3Q24-LOCK-DAM-NORTH-071024	CAP3Q24-OLDOF-2-24-071124
Sample Date and Time ²	--	--	07/10/24	07/11/24
Sample Delivery Group (SDG)	--	--	320-113746-1	320-113747-1
Lab Sample ID	--	--	320-113746-1	320-113747-4
Sample Type	--	--	Grab	Composite
Table 3+ Lab SOP Mass Discharge⁶ (mg/s)	--	--	--	--
HFPO-DA	--	--	1.9E-04	3.5E-05
PFMOAA	--	--	3.4E-04	1.4E-04
PFO2HxA	--	--	2.2E-04	5.7E-05
PFO3OA	--	--	3.2E-05	1.7E-05
PFO4DA	--	--	7.3E-06	7.0E-06
PFO5DA	--	--	7.5E-07	2.4E-06
PMPA	--	--	2.4E-04	2.2E-05
PEPA	--	--	7.3E-05	6.1E-06
PS Acid	--	--	ND	ND
Hydro-PS Acid	--	--	4.3E-06	1.4E-06
R-PSDA	--	--	1.8E-05	3.2E-06
Hydrolyzed PSDA	--	--	3.2E-07	6.5E-06
R-PSDCA	--	--	ND	ND
NVHOS, Acid Form	--	--	4.5E-06	2.1E-06
EVE Acid	--	--	ND	ND
Hydro-EVE Acid	--	--	9.7E-07	8.3E-07
R-EVE	--	--	8.2E-06	1.4E-06
PES	--	--	ND	ND
PFECA B	--	--	ND	ND
PFECA-G	--	--	ND	ND
PFPrA	--	--	3.4E-04	1.0E-04
Total Attachment C Mass Discharge^{7,8}	--	--	1.1E-03	2.9E-04
Total Table 3+ Mass Discharge (17 compounds)^{7,9}	--	--	1.1E-03	2.9E-04
Total Table 3+ Mass Discharge (18 compounds)^{7,10}	--	--	1.5E-03	3.9E-04
Total Table 3+ Mass Discharge (21 Compounds)⁷	--	--	1.5E-03	4.0E-04

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)	1.1	
Program	CAP SW Sampling 3Q24	
Location ID	GBC-1	
Field Sample ID	CAP3Q24-GBC-1-071124	
Sample Date and Time ²	07/11/24	
Sample Delivery Group (SDG)	320-113746-1	
Lab Sample ID	320-113746-3	
Sample Type	Grab	
Table 3+ Lab SOP Mass Discharge⁶ (mg/s)		
HFPO-DA	0.02	0.08
PFMOAA	0.00	0.17
PFO2HxA	0.01	0.08
PFO3OA	0.00	0.01
PFO4DA	5.8E-04	2.6E-03
PFO5DA	ND	1.2E-05
PMPA	0.03	0.15
PEPA	0.01	0.02
PS Acid	ND	ND
Hydro-PS Acid	1.0E-03	2.3E-03
R-PSDA	0.00	0.45
Hydrolyzed PSDA	ND	0.05
R-PSDCA	ND	ND
NVHOS, Acid Form	1.5E-04	3.2E-03
EVE Acid	ND	ND
Hydro-EVE Acid	ND	8.0E-04
R-EVE	1.8E-03	0.11
PES	ND	ND
PFECA B	ND	ND
PFECA-G	ND	ND
PFPrA	0.03	ND
Total Attachment C Mass Discharge^{7,8}	0.07	0.51
Total Table 3+ Mass Discharge (17 compounds)^{7,9}	0.07	0.52
Total Table 3+ Mass Discharge (18 compounds)^{7,10}	0.09	1.01
Total Table 3+ Mass Discharge (21 Compounds)⁷	0.10	1.63

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. When stormwater is being treated by the stormwater treatment system, HFPO-DA, PFMOAA, and PMPA concentrations are measured in the stormwater treatment system influent and effluent flows. The concentrations and mass loads reported here are the sum of these 3 compounds in the stormwater treatment system influent flow.

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.

11 - Lock and Dam Seep was not sampled because the location was dry during the July 2024 CAP sampling event.

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.

Attachment ATT2

Direct Aerial Deposition on Cape Fear River

Attachment ATT2: Supporting Calculations – 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 [$\mu\text{g}/\text{m}^2$]) provided from ERM (2018) was used to calculate the net hourly deposition rate (nanograms per meters squared per hour [$\text{ng}/\text{m}^2/\text{hr}$]) 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 ($\text{M L}^{-2} \text{T}^{-1}$), typically in $\text{ng}/\text{m}^2/\text{hr}$;

ML_{AIR} = Air mass loading of HFPO-DA with units of mass per area (M L^{-2}), typically $\mu\text{g}/\text{m}^2$;
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 $\mu\text{g}/\text{m}^2$ 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:

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

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 $640 \mu g/m^2$ (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 $640 \mu g/m^2$;

S = total number of sections along the Cape Fear River with HFPO-DA concentrations contours ranging from 40 to $640 \mu g/m^2$, 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

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

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 ($\mu\text{g}/\text{m}^2$)	Air Loading (ng/m^2)	Time (year)	Time (hour)	Net Hourly Deposition Rate ($\text{ng}/\text{m}^2/\text{hr}$)
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:

- $\mu\text{g}/\text{m}^2$: micrograms per meter square.
 ng/L : nanograms per liter.
 $\text{ng}/\text{m}^2/\text{hr}$: 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 Discharge¹ (cfs)	USGS Reported Average Gage Height¹ (ft)	USGS Reported Total Precipitation^{1,2} (inches)	USGS Reported Average Discharge (L/s)	Measured River Width (ft)	Estimated River Depth (ft)	Z Value³	Calculated Total Cross Sectional Area (ft²)	Calculated River Velocity (ft/s)
7/10/2024	973.61	1.35	0	27,570	323	18	2	5,136	0.2
7/11/2024	883.31	1.28	0	25,013	323	18	3	4,802	0.2
Average River Velocity:									0.2

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
 ft²: 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
<i>Table 3+ SOP (ng/L)</i>							
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
<i>Table 3+ SOP (ng/L)</i>							
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	0.2	204.93	4.41	7.2	0.00045
Up River Section 1	160	80	18.3	9.1	13.7	490	98.59	48,300	0.2	204.93	2.39	1.6	0.00018
Up River Section 2	80	40	9.1	4.6	6.8	909	98.59	89,570	0.2	204.93	4.43	2.7	0.00017
Down River Section 1	160	80	18.3	9.1	13.7	586	98.59	57,813	0.2	204.93	2.86	2.3	0.00022
Down River Section 2	80	40	9.1	4.6	6.8	565	98.59	55,672	0.2	204.93	2.76	1.1	0.00011
Total HFPO-DA:												0.0011	
Total Attachment C⁵:												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 July 10 - 11, 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.

µg/m²/yr: micrograms per meter square per year

ft/s: feet per second

hr: hours

m/hr: meters per hour

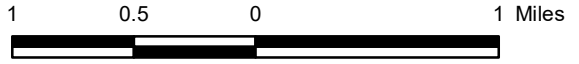
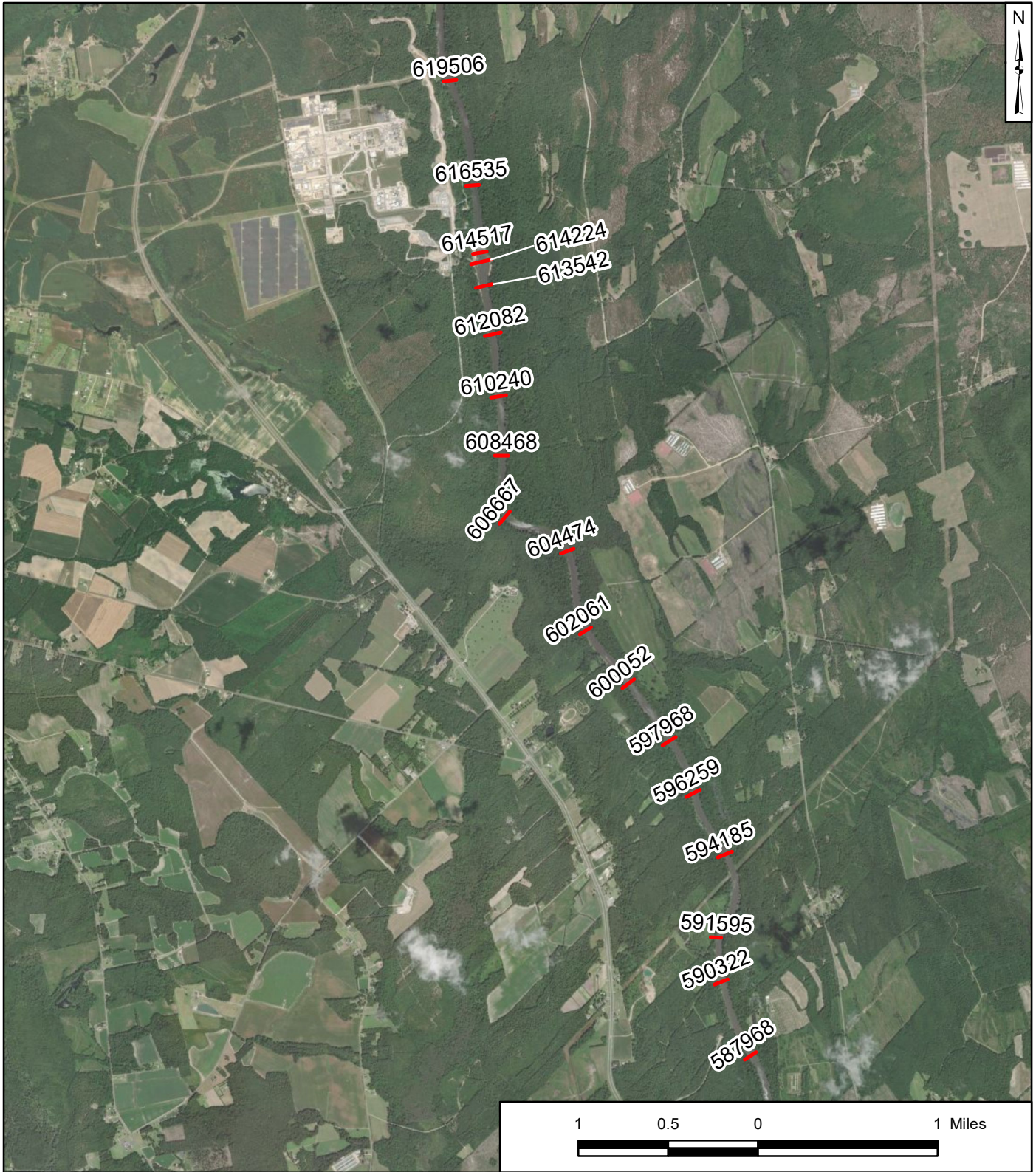
m: meter

m²: meter square

mg/s: milligrams per second

mg: milligrams

ng/m²/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

Cape Fear River Cross Sections Locations

Chemours Fayetteville Works, North Carolina

Geosyntec
consultants

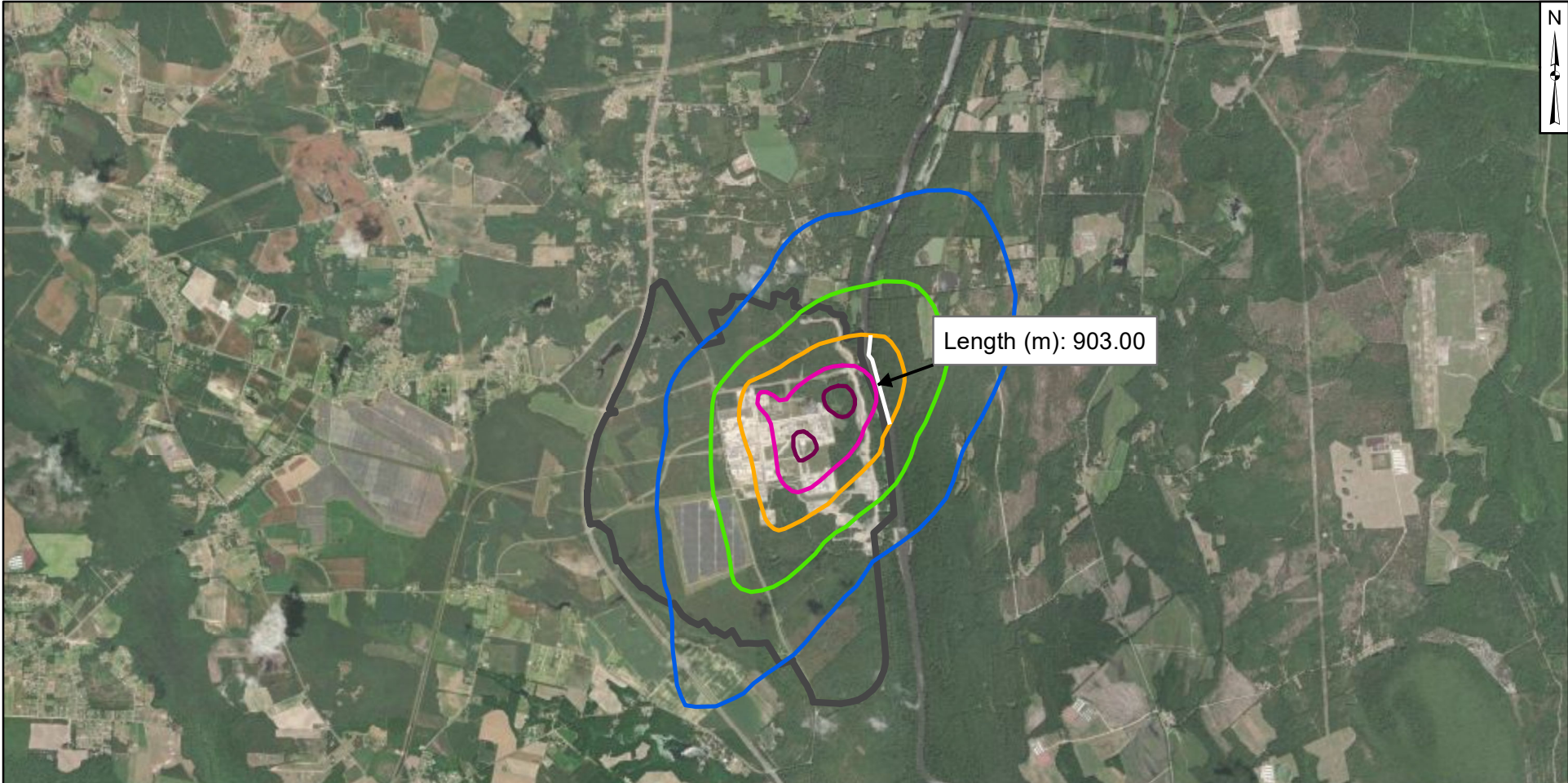
Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

Figure

ATT2-1

Raleigh

December 2024



Legend

— Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 $\mu\text{g}/\text{m}^2/\text{yr}$
- 80 $\mu\text{g}/\text{m}^2/\text{yr}$
- 160 $\mu\text{g}/\text{m}^2/\text{yr}$
- 320 $\mu\text{g}/\text{m}^2/\text{yr}$
- 640 $\mu\text{g}/\text{m}^2/\text{yr}$

Notes:
 $\mu\text{g} / \text{m}^2 / \text{yr}$ - 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

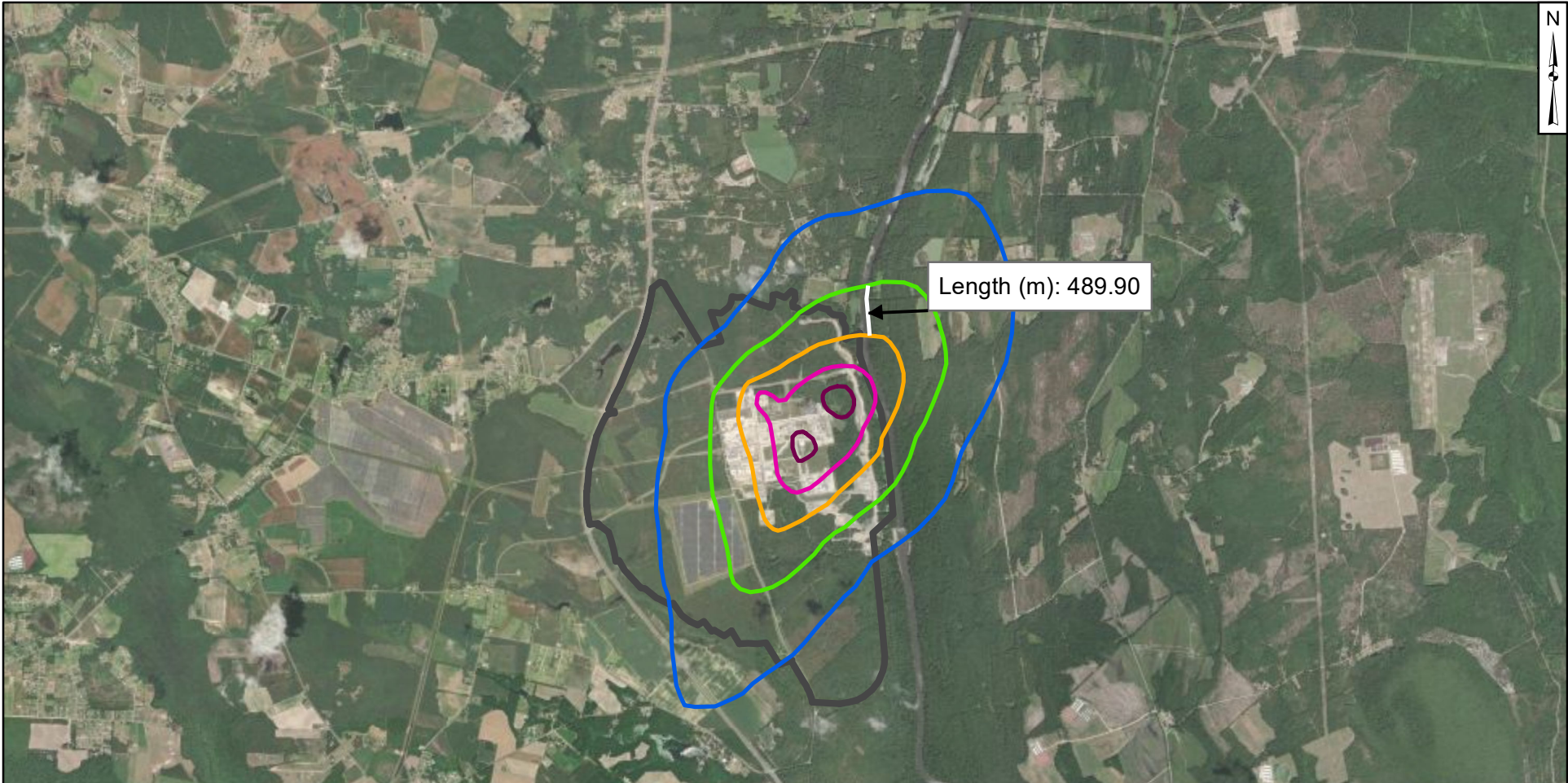
Geosyntec Consultants of NC, P.C.
 NC License No.: C 3500 and C 295

Figure

ATT2-2

Raleigh

December 2024



Legend

— Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 $\mu\text{g}/\text{m}^2/\text{yr}$
- 80 $\mu\text{g}/\text{m}^2/\text{yr}$
- 160 $\mu\text{g}/\text{m}^2/\text{yr}$
- 320 $\mu\text{g}/\text{m}^2/\text{yr}$
- 640 $\mu\text{g}/\text{m}^2/\text{yr}$

Notes:
 $\mu\text{g} / \text{m}^2 / \text{yr}$ - 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

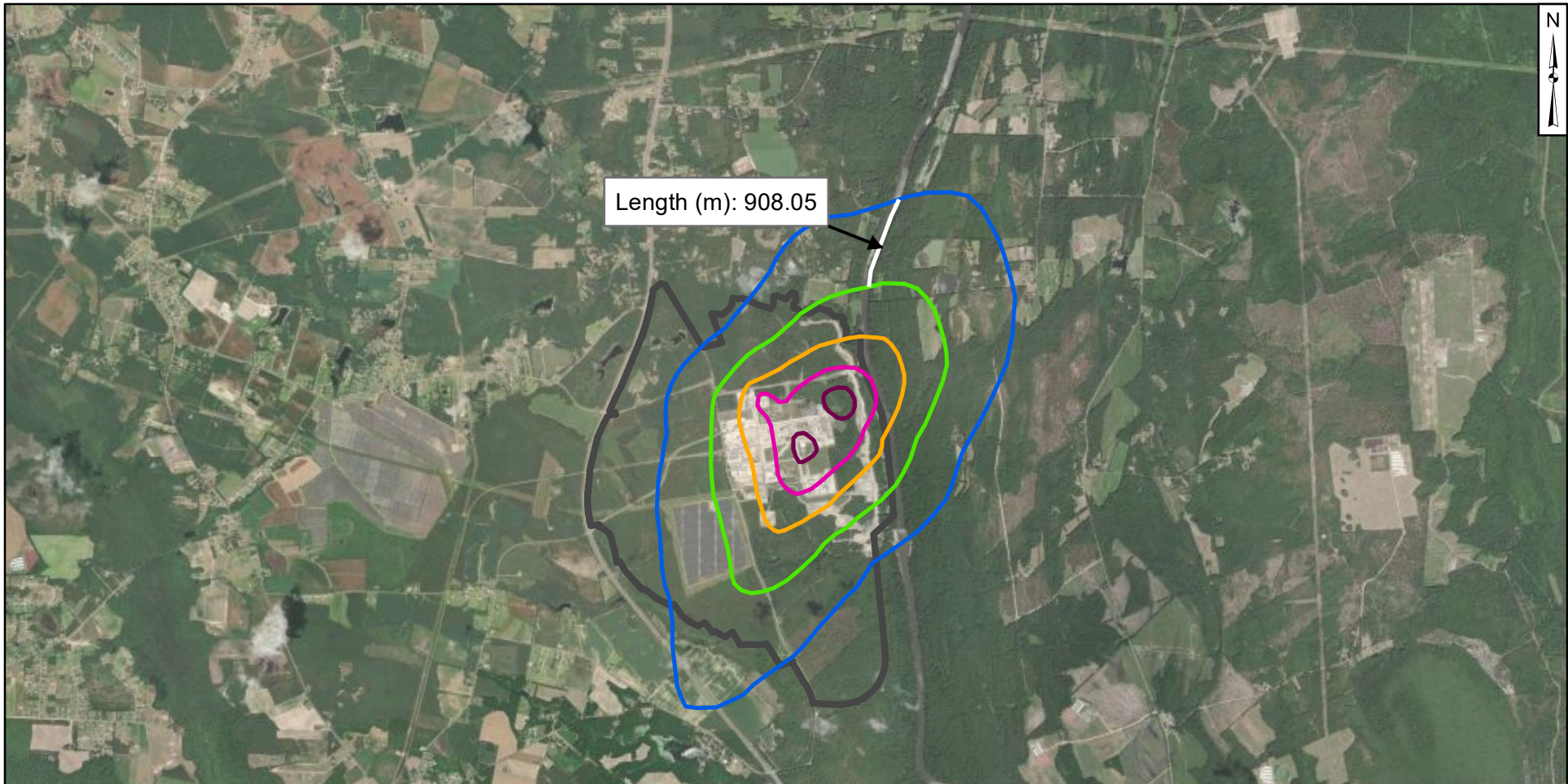
Geosyntec Consultants of NC, P.C.
 NC License No.: C 3500 and C 295

Figure

ATT2-3

Raleigh

December 2024



Legend

— Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 $\mu\text{g}/\text{m}^2/\text{yr}$
- 80 $\mu\text{g}/\text{m}^2/\text{yr}$
- 160 $\mu\text{g}/\text{m}^2/\text{yr}$
- 320 $\mu\text{g}/\text{m}^2/\text{yr}$
- 640 $\mu\text{g}/\text{m}^2/\text{yr}$

Notes:
 $\mu\text{g} / \text{m}^2 / \text{yr}$ - 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

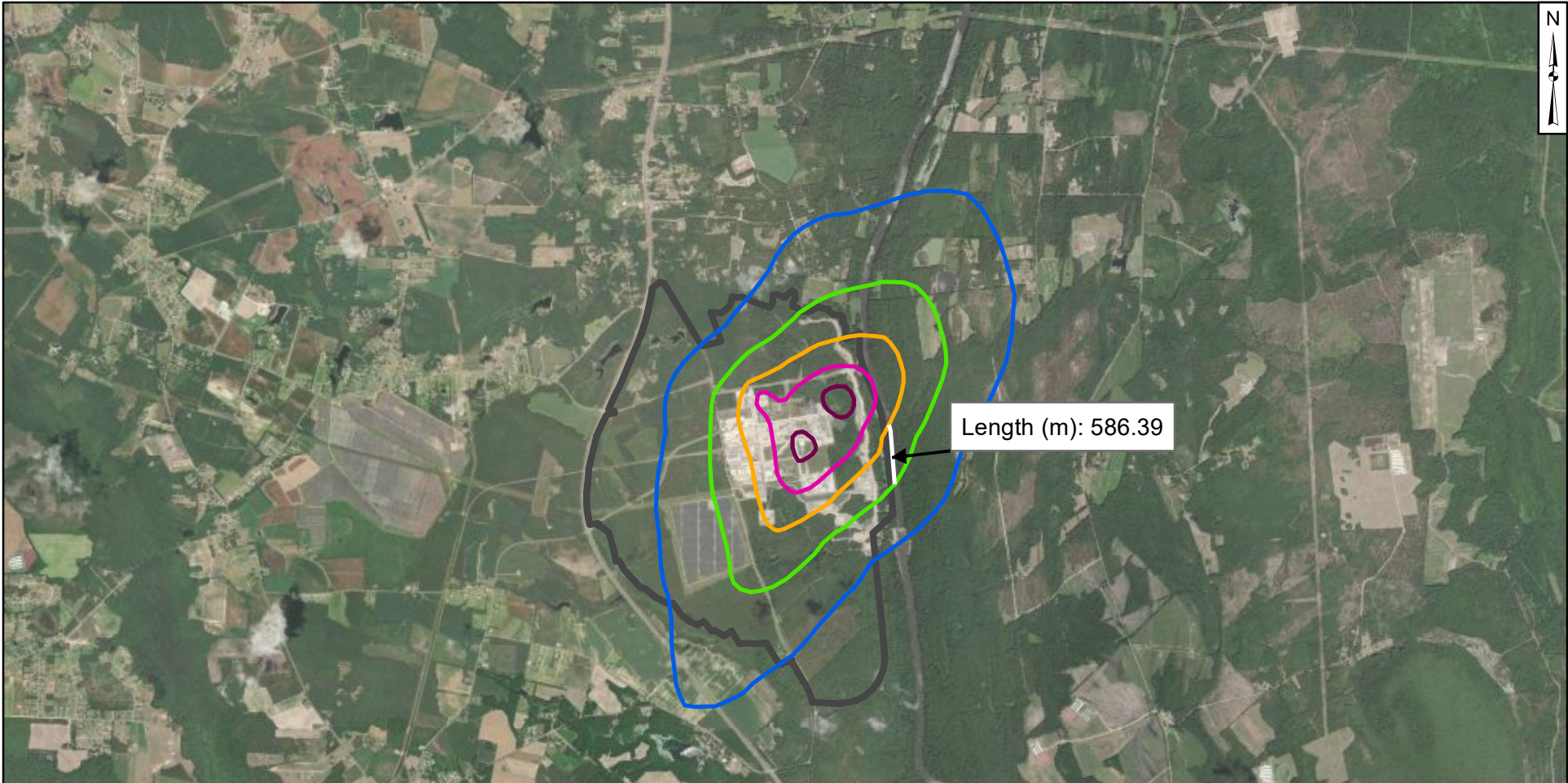
Geosyntec Consultants of NC, P.C.
 NC License No.: C 3500 and C 295

Figure

ATT2-4

Raleigh

December 2024



Legend

— Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 $\mu\text{g}/\text{m}^2/\text{yr}$
- 80 $\mu\text{g}/\text{m}^2/\text{yr}$
- 160 $\mu\text{g}/\text{m}^2/\text{yr}$
- 320 $\mu\text{g}/\text{m}^2/\text{yr}$
- 640 $\mu\text{g}/\text{m}^2/\text{yr}$

Notes:

$\mu\text{g} / \text{m}^2 / \text{yr}$ - 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

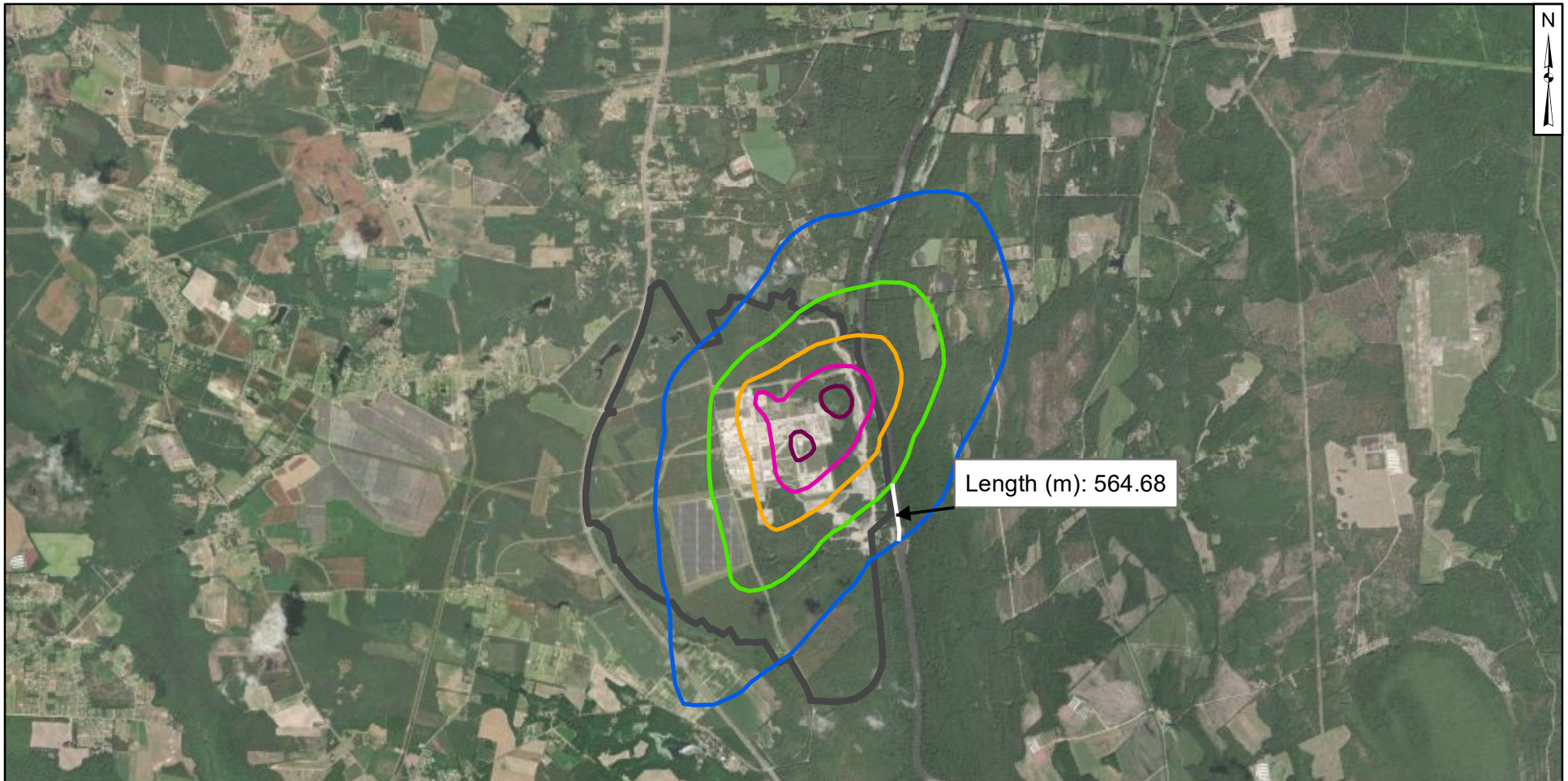
Geosyntec Consultants of NC, P.C.
NC License No.: C 3500 and C 295

Figure

ATT2-5

Raleigh

December 2024



Legend

— Site Boundary

Modeled Deposition Contours, October 2018 Scenario

- 40 $\mu\text{g}/\text{m}^2/\text{yr}$
- 80 $\mu\text{g}/\text{m}^2/\text{yr}$
- 160 $\mu\text{g}/\text{m}^2/\text{yr}$
- 320 $\mu\text{g}/\text{m}^2/\text{yr}$
- 640 $\mu\text{g}/\text{m}^2/\text{yr}$

Notes:
 $\mu\text{g} / \text{m}^2 / \text{yr}$ - 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

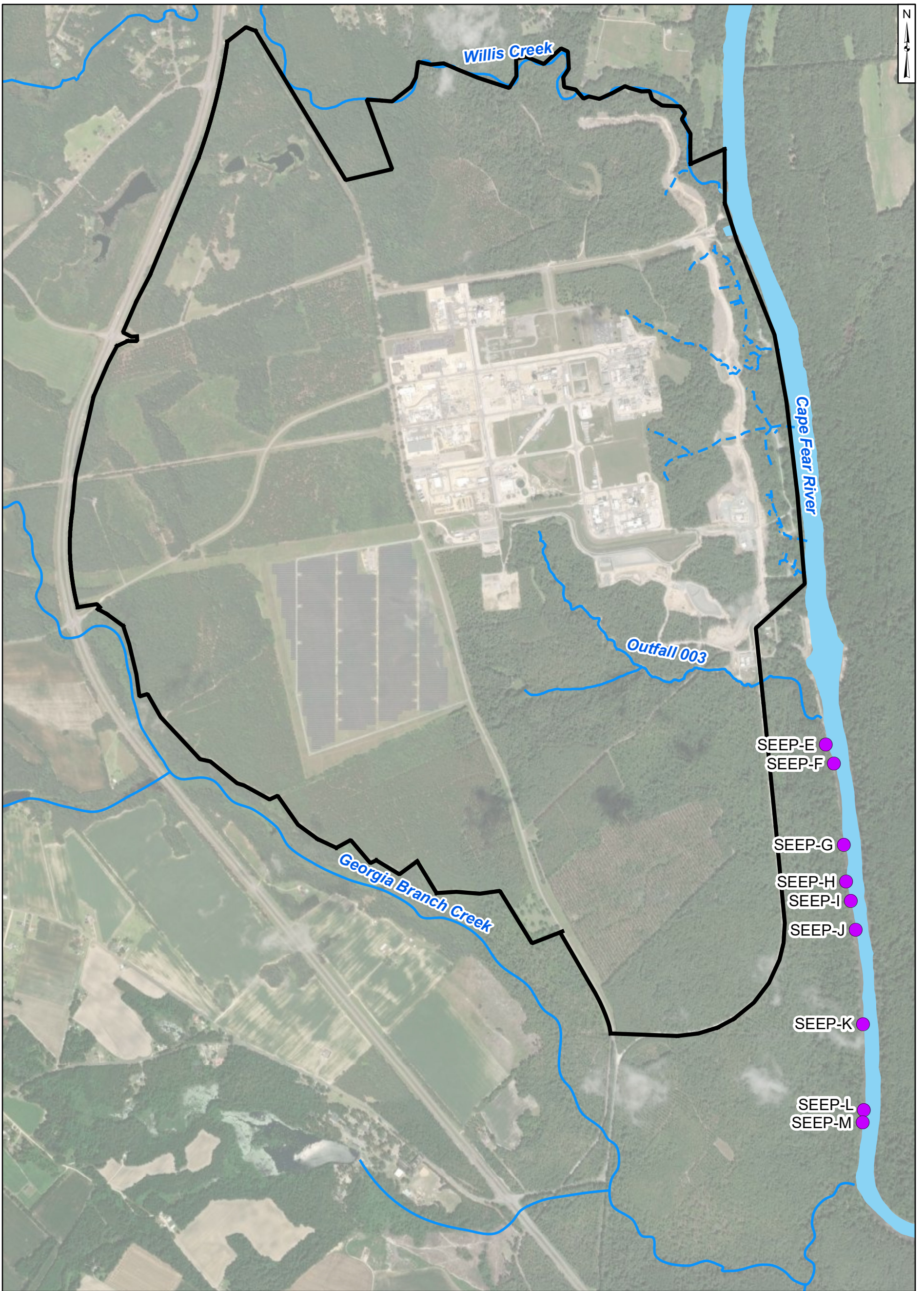
Geosyntec Consultants of NC, P.C.
 NC License No.: C 3500 and C 295

Figure

ATT2-6

Raleigh

December 2024



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

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

Figure

Raleigh

December 2024

ATT2-7

Attachment ATT3

Onsite Groundwater Pathway

Attachment ATT3: Supporting Calculations – 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 Plan¹ (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).

**Attachment ATT3: Supporting Calculations – Onsite
Groundwater Pathway**

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

where,

h = the Black Creek Aquifer thickness [ft];

A = the cross-sectional area of the Black Creek Aquifer [ft²]; 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):

**Attachment ATT3: Supporting Calculations – Onsite
Groundwater Pathway**

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.

**Attachment ATT3: Supporting Calculations – Onsite
Groundwater Pathway**

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**

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)	Total Attachment C ⁵		Total Table 3+ (17 Compounds) ⁶		Total Table 3+ (18 Compounds) ⁷		Total Table 3+ (21 Compounds)	
											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	7/23/2024	1,150	13,400	11.7	OW-14	-0.78	305.47	0.0026	1.71E-04	49,000	0.0081	49,000	0.0081	61,000	0.0101	61,000	0.0101
2	PIW-3D	7/23/2024	873	11,010	12.6	OW-44	-0.47	351.79	0.0013	1.71E-04	78,000	0.0055	78,000	0.0055	99,000	0.0070	100,000	0.0071
3	LTW-02	7/18/2024	875	5,560	6.4	OW-45	-0.16	399.66	0.0004	1.02E-04	89,000	0.0006	90,000	0.0006	110,000	0.0007	110,000	0.0007
4	LTW-03	7/29/2024	729	2,800	3.9	OW-46	-1.10	510.17	0.0022	1.02E-04	190,000	0.0033	190,000	0.0033	230,000	0.0040	240,000	0.0042
5	PZ-22	7/25/2024	656	15,200	23.2	OW-22	-0.22	370.47	0.0006	3.28E-04	210,000	0.0177	210,000	0.0177	280,000	0.0235	280,000	0.0235
6	PIW-7D	7/23/2024	524	16,000	30.5	OW-48	0.19	331.98	0	3.28E-04	180,000	0	190,000	0	260,000	0	260,000	0
7	LTW-05	7/25/2024	672	11,800	19.4	OW-25	-0.26	398.47	0.0007	1.28E-04	290,000	0.0089	290,000	0.0089	380,000	0.0117	380,000	0.0117
8	OW-28	7/18/2024	594	15,500	26.0	OW-27	-0.18	216.60	0.0008	2.59E-04	14,000	0.0013	14,000	0.0013	18,000	0.0017	18,000	0.0017
9	OW-33	7/16/2024	1607	46,300	28.8	OW-30	0.34	297.99	0	2.59E-04	26,000	0	26,000	0	34,000	0	35,000	0
Total											--	0.0455	--	0.0455	--	0.0588	--	0.0591

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 July 02, 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 Perfluoroohepthanoic 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
- ft² - square feet
- mg/s - milligrams per second
- ng/L - nanograms per liter

**TABLE ATT3-2
JULY 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	0.0026	1.71E-04	5.83E-03	3,767
2	11,010	0.0013	1.71E-04	2.51E-03	1,622
3	5,560	0.0004	1.02E-04	2.26E-04	146
4	2,800	0.0022	1.02E-04	6.21E-04	401
5	15,200	0.0006	3.28E-04	2.97E-03	1,919
6	16,000	0	3.28E-04	0	0
7	11,800	0.0007	1.28E-04	9.82E-04	635
8	15,500	0.0008	2.59E-04	3.33E-03	2,152
9	46,300	0	2.59E-04	0	0
				0.016	10,642

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 July 02, 2024 (Figure ATT3-3).

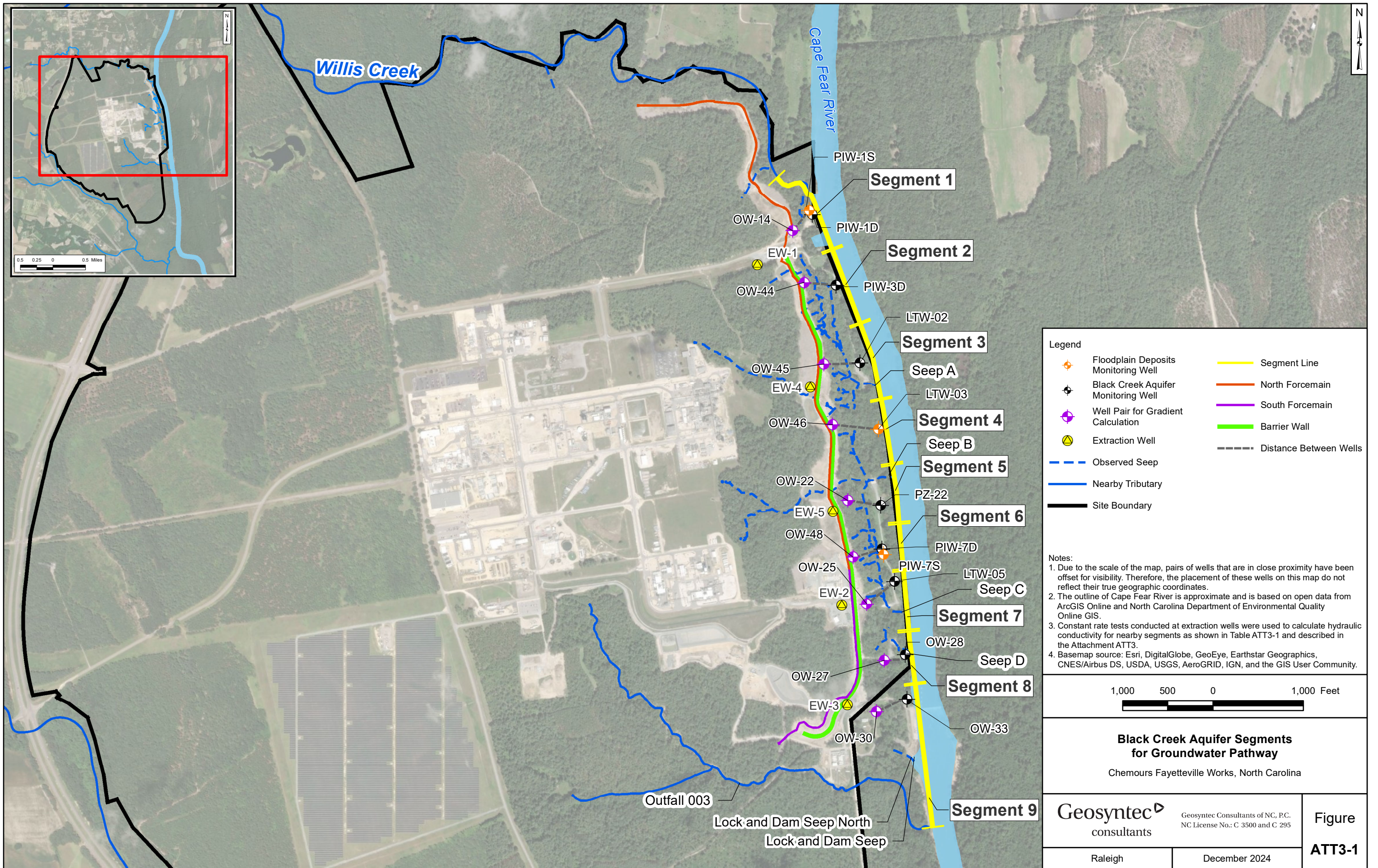
ft - feet

ft² - square feet

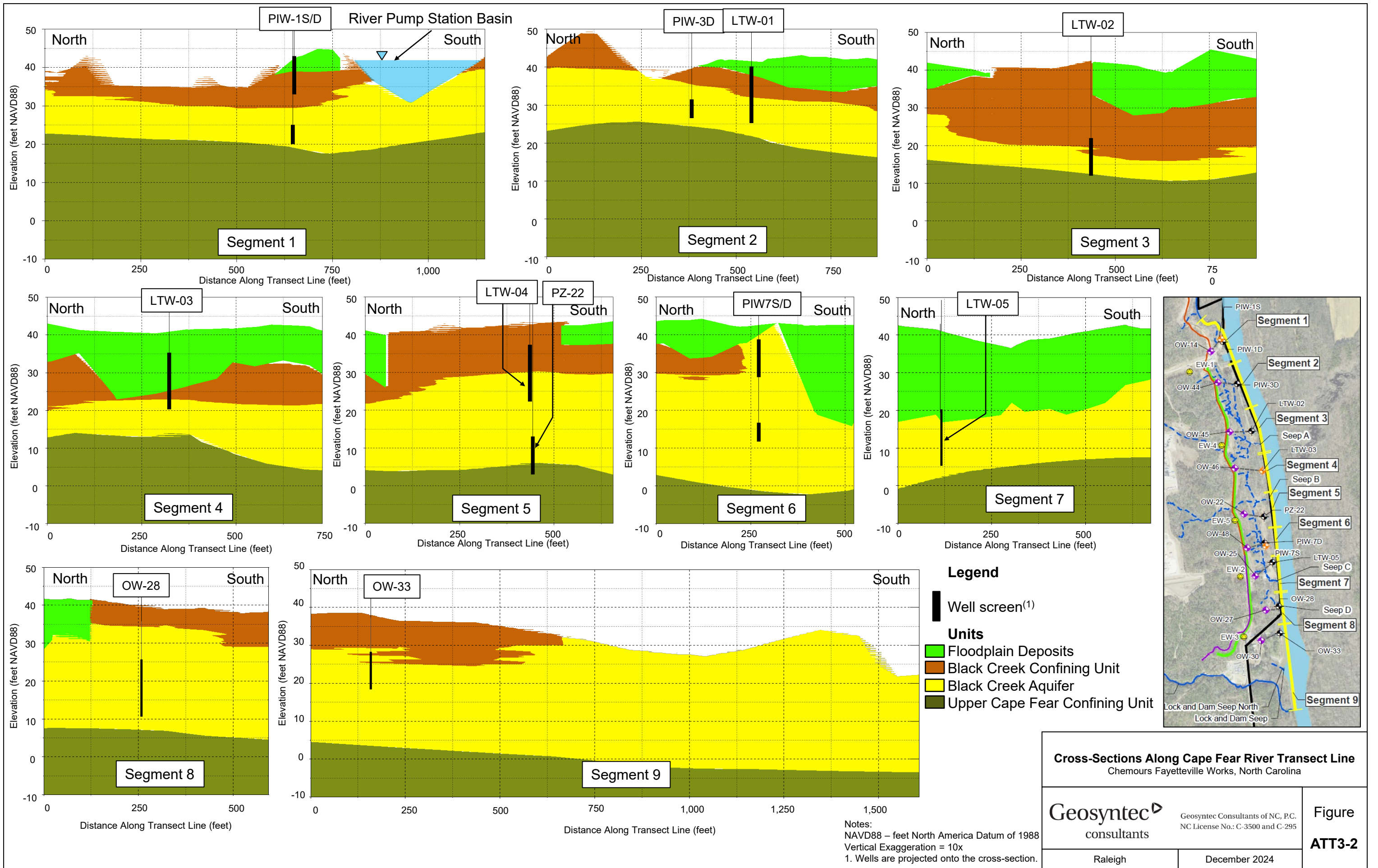
ft/sec - feet per second

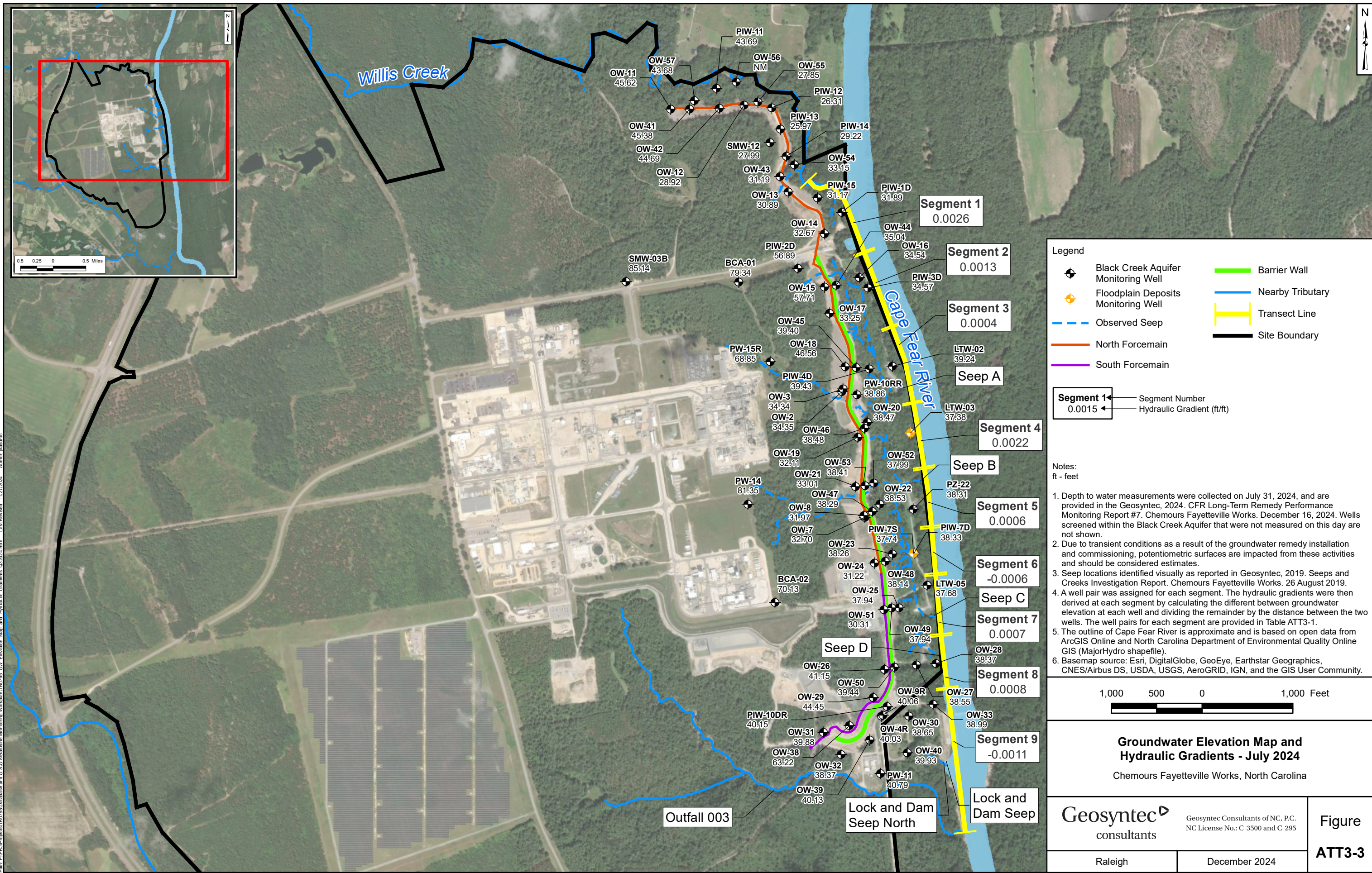
ft³/sec - cubic feet per second

gal/day - gallons per day

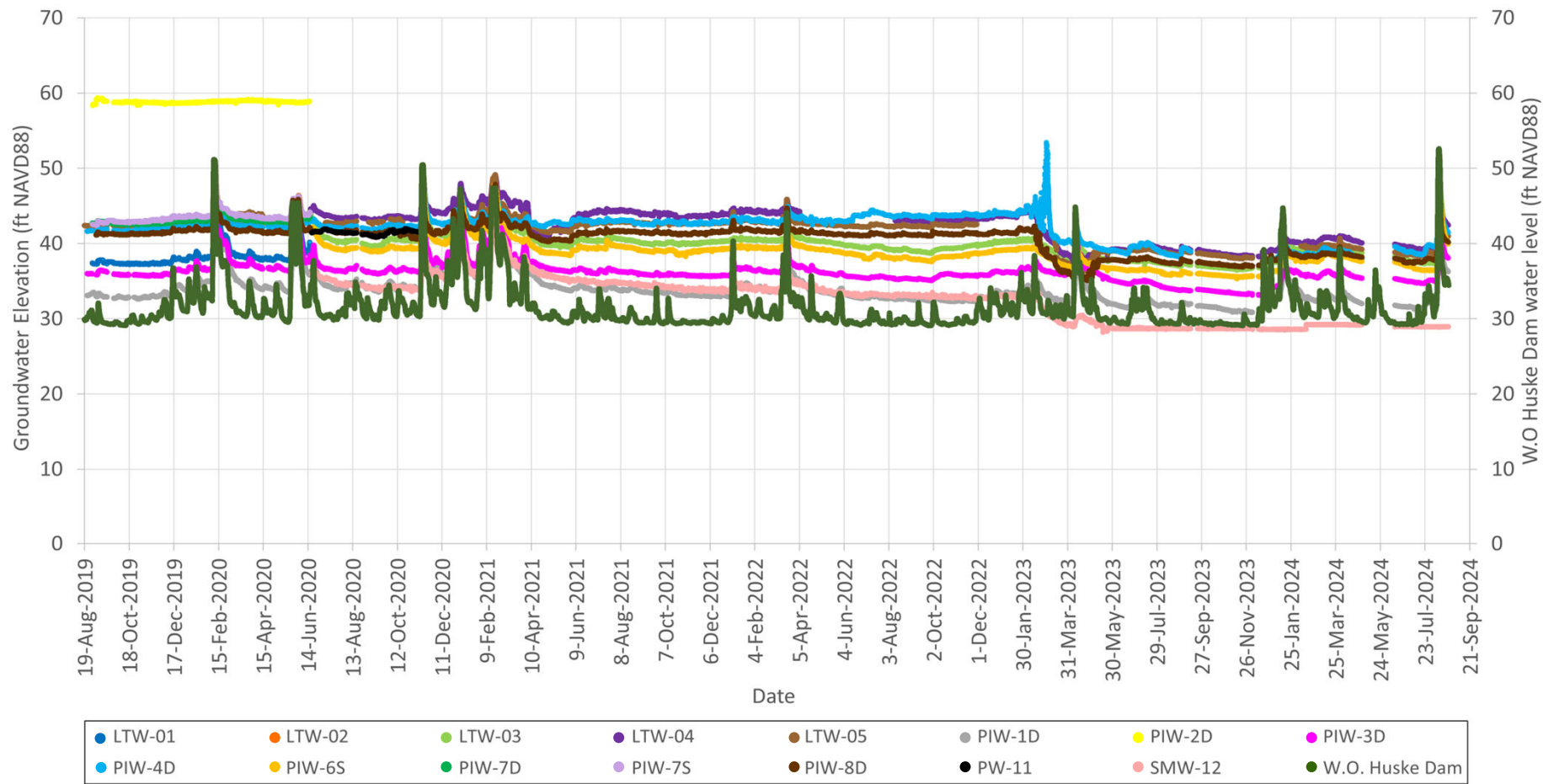


Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet Units in Foot US





Path: P:\P\Projects\170725\Baseline Monitor\Work\dm170725_GW_Elevation_Map_and_Hydraulic_Gradients_032024.mxd Last Revised: 11/27/2024 Author: kkaunic
 Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet Units in Foot US



Notes:
 ft - feet
 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
Raleigh	December 2024

Figure
ATT3-4

Appendix B

Supplemental Tables

**TABLE B1-1
OUTFALL 003 CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 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	PF030A	PFO4DA	PFO5DA	PMPA	PFPA	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_Q3_1	7/1/24 0:00	7/31/24 23:59	744	11.9	0.35	1.2	0.46	0.13	0.065	0.025	0.23	0.076	0	0.027	0.020	0.047	0	0.016	0	0.012	0.0085	0	0	0	2.6
OF003_2024_Q3_2	8/1/24 0:00	8/31/24 23:59	744	14.0	0.37	1.2	0.47	0.14	0.075	0.032	0.25	0.085	0.000	0.022	0.020	0.040	0	0.025	0	0.010	0.010	0	0	0	2.7
OF003_2024_Q3_3	9/1/24 0:00	9/30/24 23:59	720	15.3	0.48	1.4	0.52	0.14	0.071	0.037	0.28	0.10	0	0.027	0.027	0.047	0	0.023	0	0.011	0.014	0	0	0	3.1
Total				41.2	1.2	3.8	1.4	0.41	0.21	0.093	0.75	0.26	0.000	0.076	0.066	0.13	0	0.063	0	0.033	0.033	0	0	0	8.3

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 B1-2
STORMWATER TREATMENT SYSTEM CAPTURED MASS LOAD
BY COMPOUND AND DATE - Q3 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
7/1/24	0.13	0.024	0.0048	0.0011	0.030
7/2/24	0.12	0.022	0.0043	0.0010	0.027
7/3/24	0.12	0.022	0.0045	0.0010	0.028
7/8/24	0.07	0.012	0.0027	0.0005	0.016
7/9/24	0.09	0.015	0.0033	0.0007	0.019
7/10/24	0.09	0.016	0.0033	0.0008	0.020
7/11/24	0.07	0.012	0.0027	0.0006	0.016
7/12/24	0.10	0.017	0.0037	0.0008	0.022
7/13/24	0.12	0.020	0.0043	0.0010	0.025
7/16/24	0.07	0.012	0.0022	0.0004	0.015
7/19/24	0.13	0.022	0.0040	0.0007	0.027
7/20/24	0.09	0.016	0.0029	0.0005	0.019
7/21/24	0.04	0.007	0.0013	0.0002	0.009
7/22/24	0.12	0.021	0.0038	0.0007	0.025
7/23/24	0.15	0.026	0.0046	0.0009	0.031
7/24/24	0.17	0.029	0.0052	0.0010	0.035
7/25/24	0.19	0.033	0.0060	0.0011	0.040
7/26/24	0.20	0.035	0.0063	0.0012	0.043
7/27/24	0.20	0.035	0.0062	0.0012	0.042
7/29/24	0.02	0.003	0.0005	0.0001	0.003
7/30/24	0.12	0.020	0.0036	0.0007	0.024
8/5/24	0.24	0.022	0.0061	0.0014	0.029
8/6/24	0.30	0.028	0.0078	0.0018	0.037
8/7/24	0.24	0.024	0.0059	0.0014	0.031
8/8/24	0.21	0.021	0.0051	0.0012	0.028
8/9/24	0.22	0.022	0.0053	0.0012	0.028
8/12/24	0.24	0.016	0.0026	0.0019	0.020
8/13/24	0.33	0.022	0.0036	0.0027	0.028
8/14/24	0.16	0.011	0.0018	0.0013	0.014
9/4/24	0.05	0.008	0.0009	0.0004	0.009
9/11/24	0.12	0.022	0.0145	0.0013	0.038
9/16/24	0.20	0.023	0.0017	0.0018	0.027
9/17/24	0.28	0.033	0.0024	0.0026	0.000
9/18/24	0.20	0.023	0.0017	0.0018	0.027
9/24/24	0.17	0.018	0.0109	0.0018	0.031
9/25/24	0.19	0.020	0.0124	0.0020	0.035
9/26/24	0.09	0.010	0.0059	0.0010	0.017
9/27/24	0.08	0.009	0.0055	0.0009	0.016
9/28/24	0.13	0.014	0.0085	0.0014	0.024
9/29/24	0.09	0.010	0.0059	0.0010	0.016
9/30/24	0.09	0.009	0.0057	0.0009	0.016
Total	6.03	0.78	0.194	0.046	1.02

Notes:

- 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 submitted to the North Carolina Department of Environmental Quality by Chemours.

**TABLE B2
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Location ID	CFR-BLADEN	CFR-KINGS	CFR-MILE-76	CFR-TARHEEL	CFR-TARHEEL	GBC-1	LOCK-DAM NORTH
Field Sample ID	CAP3Q24-CFR-BLADEN-071124	CAP3Q24-CFR-KINGS-071124	CAP3Q24-CFR-RM-76-071024	CAP3Q24-CFR-TARHEEL-071124	CAP3Q24-CFR-TARHEEL-24-071124	CAP3Q24-GBC-1-071124	CAP3Q24-LOCK-DAM-NORTH-071024
Sample Date	7/11/2024	7/11/2024	7/10/2024	7/11/2024	7/11/2024	7/11/2024	7/10/2024
QA/QC							
Sample Delivery Group (SDG)	320-113821-1	320-113821-1	320-113746-1	320-113821-1	320-113821-1	320-113746-1	320-113746-1
Lab Sample ID	320-113821-3	320-113821-4	320-113746-2	320-113821-1	320-113821-2	320-113746-3	320-113746-1
537 Mod (ng/L)							
10:2 Fluorotelomer sulfonate	<2.0	<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	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	<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	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	<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	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<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	<2.0
DONA	<2.0	<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	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	<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	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	7.0	7.7	6.5	6.8	5.9	2.7	<2.0
Perfluorobutanoic Acid	7.0	6.6	6.8	7.6	6.3	9.0	39
Perfluorodecane Sulfonic Acid	<2.0	<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	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<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	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	4.5	4.7	4.1	4.2	4.0	2.1	7.6
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	5.8	6.2	5.8	5.6	5.4	<2.0	<2.0
Perfluorohexanoic Acid	12	11	10	11	9.4	3.7	8.0
Perfluorononanesulfonic Acid	<2.0	<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	<2.0
Perfluorooctadecanoic Acid	<2.0	<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	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	11	12	11	12	9.0	8.3	84
Perfluorotetradecanoic Acid	<2.0	<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	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFOA	8.5	9.5	8.6	8.1	8.6	2.6	7.9
PFOS	14	16	14	13	17	<2.0	7.7

**TABLE B2
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Location ID	LOCK-DAM NORTH	LOCK-DAM SEEP ¹	LOCK-DAM SEEP	LOCK-DAM SEEP	LOCK-DAM SEEP	OLDOF-2	OUTFALL 002
Field Sample ID	LOCK-DAM-NORTH-091024	--	CAP3Q24-LOCK-DAM-SEEP-072424	LOCK-DAM-SEEPS-090424	LOCK-DAM-SEEPS-090424-D	CAP3Q24-OLDOF-2-24-071124	CAP3Q24-OUTFALL-002-24-071124
Sample Date	9/10/2024	--	7/24/2024	9/4/2024	9/4/2024	7/11/2024	7/11/2024
QA/QC		--			Field Duplicate		
Sample Delivery Group (SDG)	320-115358-1	--	320-114129-1	320-115213-1	320-115213-1	320-113747-1	320-113747-1
Lab Sample ID	320-115358-1	--	320-114129-2	320-115213-1	320-115213-2	320-113747-4	320-113747-3
537 Mod (ng/L)							
10:2 Fluorotelomer sulfonate	<2.0	--	<2.0	<67	<67	<2.0	<2.0
11Cl-PF3OUdS	<2.0	--	<2.0	<32	<32	<2.0	<2.0
1H,1H,2H,2H-perfluorodecanesulfonate (8:2 FTS)	<2.0	--	<2.0	<46	<46	<2.0	<2.0
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<2.0	--	<2.0	<24	<24	<2.0	<2.0
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	<2.0	--	<2.0	<85	<85	<2.0	<2.0
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	--	<4.0	<140	<140	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	--	<5.0	<250	<250	<5.0	<5.0
9Cl-PF3ONS	<2.0	--	<2.0	<24	<24	<2.0	<2.0
DONA	<2.0	--	<2.0	<40	<40	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	--	<5.0	<130	<130	<5.0	<5.0
N-ethylperfluoro-1-octanesulfonamide	<2.0	--	<2.0	<87	<87	<2.0	<2.0
N-methyl perfluoro-1-octanesulfonamide	<2.0	--	<2.0	<43	<43	<2.0	<2.0
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	--	<5.0	<120	<120	<5.0	<5.0
Perfluorobutane Sulfonic Acid	2.2	--	2.2	<20	<20	<2.0	7.0
Perfluorobutanoic Acid	37	--	49	<240	<240	8.8	7.7
Perfluorodecane Sulfonic Acid	<2.0	--	<2.0	<32	<32	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	--	<2.0	<31	<31	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	--	<2.0	<97	<97	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	--	<2.0	<55	<55	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	--	<2.0	<19	<19	<2.0	<2.0
Perfluoroheptanoic Acid	7.9	--	53	55	57	4.6	5.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	--	<2.0	<89	<89	<2.0	<2.0
Perfluorohexane Sulfonic Acid	3.6	--	4.9	<57	<57	<2.0	5.8
Perfluorohexanoic Acid	7.4	--	11	<58	<58	2.8	13
Perfluorononanesulfonic Acid	<2.0	--	<2.0	<37	<37	<2.0	<2.0
Perfluorononanoic Acid	<2.0	--	2.9	<27	<27	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	--	<2.0	<94	<94	<2.0	<2.0
Perfluorooctane Sulfonamide	<2.0	--	<2.0	<98	<98	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	--	<2.0	<30	<30	<2.0	<2.0
Perfluoropentanoic Acid	78	--	250	200	230	21	13
Perfluorotetradecanoic Acid	<2.0	--	<2.0	<73	<73	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	--	<2.0	<130	<130	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	--	<2.0	<110	<110	<2.0	<2.0
PFOA	12	--	11	<85	<85	4.4	9.2
PFOS	10	--	29	<54	<54	<2.0	13

**TABLE B2
SEEP AND SURFACE WATER OTHER PFAS ANALYTICAL RESULTS
Chemours Fayetteville Works, North Carolina**

Location ID	RIVER WATER INTAKE 2	WC-1	WC-1	EB	EB
Field Sample ID	RIVER-WATER-INTAKE-24-071124	CAP3Q24-WC-1-24-071124	CAP3Q24-WC-1-24-071124-D	CAP3Q24-EQBLK-IS-071124	CAP3Q24-EQBLK-PP-SW-071124
Sample Date	7/11/2024	7/11/2024	7/11/2024	7/11/2024	7/11/2024
QA/QC			Field Duplicate	Equipment Blank	Equipment Blank
Sample Delivery Group (SDG)	320-113746-1	320-113748-1	320-113748-1	320-113747-1	320-113747-1
Lab Sample ID	320-113746-4	320-113748-2	320-113748-3	320-113747-1	320-113747-2
537 Mod (ng/L)					
10:2 Fluorotelomer sulfonate	<2.0	<2.0	<2.0	<2.0	<2.0
11Cl-PF3OUdS	<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
1H,1H,2H,2H-perfluorohexanesulfonate (4:2 FTS)	<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-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	<4.0	<4.0	<4.0	<4.0	<4.0
6:2 Fluorotelomer sulfonate	<5.0	<5.0	<5.0	<5.0	<5.0
9Cl-PF3ONS	<2.0	<2.0	<2.0	<2.0	<2.0
DONA	<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
N-ethylperfluoro-1-octanesulfonamide	<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
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorobutane Sulfonic Acid	7.4	5.5	5.4	<2.0	<2.0
Perfluorobutanoic Acid	8.1	8.6	8.2	<5.0	<5.0
Perfluorodecane Sulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecane Sulfonic Acid (PFDoS)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	4.7	2.8	2.4	<2.0	<2.0
Perfluorohexadecanoic Acid (PFHxDA)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid	5.6	<2.0	<2.0	<2.0	<2.0
Perfluorohexanoic Acid	13	4.3	4.8	<2.0	<2.0
Perfluorononanesulfonic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctadecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctane Sulfonamide	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoropentanoic Acid	13	13	11	<2.0	<2.0
Perfluorotetradecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic Acid	<2.0	<2.0	<2.0	<2.0	<2.0
PFOA	9.3	11	10	<2.0	<2.0
PFOS	12	<2.0	<2.0	<2.0	<2.0

Notes:

1 - Lock and Dam Seep was not sampled because location was dry during the July 2024 CAP sampling event.
 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 B3
FLOW SUMMARY FOR CAPE FEAR RIVER LOCATIONS
Chemours Fayetteville Works, North Carolina**

Q3 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
July 2024	Upstream River Water and Groundwater	07/10/24 8:40	William O Huske Lock and Dam	--	07/10/24 8:40	--	967
	Tarheel (Grab Sample)	07/11/24 10:00	William O Huske Lock and Dam	17	07/10/24 17:15	--	901
	Tarheel (Composite Sample)	07/11/24 22:36	William O Huske Lock and Dam	18	07/11/24 5:00	590	--
	Bladen Bluff	07/11/24 9:30	William O Huske Lock and Dam	12	07/10/24 22:00	--	889
	Kings Bluff	07/11/24 14:40	Cape Fear River Lock and Dam #1	--	07/11/24 14:40	--	1,090

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:

- ft³/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 (ft³/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)¹
7/10/2024 0:00	1140	7,674,993	1.48	0
7/10/2024 0:15	1140	7,674,993	1.48	0
7/10/2024 0:30	1130	7,607,668	1.47	0
7/10/2024 0:45	1130	7,607,668	1.47	0
7/10/2024 1:00	1120	7,540,344	1.46	0
7/10/2024 1:15	1120	7,540,344	1.46	0
7/10/2024 1:30	1120	7,540,344	1.46	0
7/10/2024 1:45	1120	7,540,344	1.46	0
7/10/2024 2:00	1120	7,540,344	1.46	0
7/10/2024 2:15	1100	7,405,695	1.45	0
7/10/2024 2:30	1090	7,338,371	1.44	0
7/10/2024 2:45	1090	7,338,370	1.44	0
7/10/2024 3:00	1080	7,271,046	1.43	0
7/10/2024 3:15	1080	7,271,046	1.43	0
7/10/2024 3:30	1070	7,203,721	1.42	0
7/10/2024 3:45	1080	7,271,046	1.43	0
7/10/2024 4:00	1050	7,069,073	1.41	0
7/10/2024 4:15	1070	7,203,721	1.42	0
7/10/2024 4:30	1050	7,069,072	1.41	0
7/10/2024 4:45	1050	7,069,073	1.41	0
7/10/2024 5:00	1050	7,069,072	1.41	0
7/10/2024 5:15	1040	7,001,748	1.4	0
7/10/2024 5:30	1030	6,934,424	1.39	0
7/10/2024 5:45	1030	6,934,423	1.39	0
7/10/2024 6:00	1030	6,934,423	1.39	0
7/10/2024 6:15	1010	6,799,775	1.38	0
7/10/2024 6:30	1010	6,799,774	1.38	0
7/10/2024 6:45	1010	6,799,774	1.38	0
7/10/2024 7:00	1010	6,799,775	1.38	0
7/10/2024 7:15	1010	6,799,774	1.38	0
7/10/2024 7:30	1000	6,732,450	1.37	0
7/10/2024 7:45	1000	6,732,450	1.37	0
7/10/2024 8:00	988	6,651,661	1.36	0
7/10/2024 8:15	988	6,651,661	1.36	0
7/10/2024 8:30	976	6,570,871	1.35	0
7/10/2024 8:45	976	6,570,871	1.35	0
7/10/2024 9:00	976	6,570,871	1.35	0
7/10/2024 9:15	976	6,570,871	1.35	0
7/10/2024 9:30	976	6,570,871	1.35	0
7/10/2024 9:45	963	6,483,349	1.34	0
7/10/2024 10:00	963	6,483,349	1.34	0
7/10/2024 10:15	963	6,483,349	1.34	0
7/10/2024 10:30	963	6,483,349	1.34	0
7/10/2024 10:45	963	6,483,349	1.34	0
7/10/2024 11:00	963	6,483,349	1.34	0
7/10/2024 11:15	963	6,483,349	1.34	0
7/10/2024 11:30	951	6,402,560	1.33	0
7/10/2024 11:45	951	6,402,560	1.33	0
7/10/2024 12:00	963	6,483,349	1.34	0
7/10/2024 12:15	963	6,483,349	1.34	0
7/10/2024 12:30	963	6,483,349	1.34	0
7/10/2024 12:45	963	6,483,349	1.34	0

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

Date and Time	Flow Rate (ft³/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)¹
7/10/2024 13:00	951	6,402,560	1.33	0
7/10/2024 13:15	951	6,402,560	1.33	0
7/10/2024 13:30	951	6,402,560	1.33	0
7/10/2024 13:45	951	6,402,560	1.33	0
7/10/2024 14:00	951	6,402,560	1.33	0
7/10/2024 14:15	938	6,315,038	1.32	0
7/10/2024 14:30	938	6,315,038	1.32	0
7/10/2024 14:45	926	6,234,249	1.31	0
7/10/2024 15:00	926	6,234,249	1.31	0
7/10/2024 15:15	926	6,234,249	1.31	0
7/10/2024 15:30	913	6,146,727	1.3	0
7/10/2024 15:45	926	6,234,249	1.31	0
7/10/2024 16:00	913	6,146,727	1.3	0
7/10/2024 16:15	913	6,146,727	1.3	0
7/10/2024 16:30	901	6,065,937	1.29	0
7/10/2024 16:45	913	6,146,727	1.3	0
7/10/2024 17:00	901	6,065,937	1.29	0
7/10/2024 17:15	901	6,065,937	1.29	0
7/10/2024 17:30	901	6,065,937	1.29	0
7/10/2024 17:45	901	6,065,937	1.29	0
7/10/2024 18:00	889	5,985,148	1.28	0
7/10/2024 18:15	901	6,065,937	1.29	0
7/10/2024 18:30	901	6,065,937	1.29	0
7/10/2024 18:45	889	5,985,148	1.28	0
7/10/2024 19:00	889	5,985,148	1.28	0
7/10/2024 19:15	901	6,065,937	1.29	0
7/10/2024 19:30	901	6,065,937	1.29	0
7/10/2024 19:45	901	6,065,937	1.29	0
7/10/2024 20:00	901	6,065,937	1.29	0
7/10/2024 20:15	901	6,065,937	1.29	0
7/10/2024 20:30	901	6,065,937	1.29	0
7/10/2024 20:45	901	6,065,937	1.29	0
7/10/2024 21:00	889	5,985,148	1.28	0
7/10/2024 21:15	877	5,904,359	1.27	0
7/10/2024 21:30	889	5,985,148	1.28	0
7/10/2024 21:45	889	5,985,148	1.28	0
7/10/2024 22:00	889	5,985,148	1.28	0
7/10/2024 22:15	889	5,985,148	1.28	0
7/10/2024 22:30	889	5,985,148	1.28	0
7/10/2024 22:45	889	5,985,148	1.28	0
7/10/2024 23:00	889	5,985,148	1.28	0
7/10/2024 23:15	889	5,985,148	1.28	0
7/10/2024 23:30	889	5,985,148	1.28	0
7/10/2024 23:45	901	6,065,937	1.29	0
7/11/2024 0:00	889	5,985,148	1.28	0
7/11/2024 0:15	889	5,985,148	1.28	0
7/11/2024 0:30	901	6,065,937	1.29	0
7/11/2024 0:45	901	6,065,937	1.29	0
7/11/2024 1:00	913	6,146,727	1.3	0
7/11/2024 1:15	901	6,065,937	1.29	0
7/11/2024 1:30	877	5,904,359	1.27	0
7/11/2024 1:45	865	5,823,569	1.26	0

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

Date and Time	Flow Rate (ft³/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)¹
7/11/2024 2:00	853	5,742,780	1.25	0
7/11/2024 2:15	865	5,823,569	1.26	0
7/11/2024 2:30	865	5,823,569	1.26	0
7/11/2024 2:45	865	5,823,569	1.26	0
7/11/2024 3:00	853	5,742,780	1.25	0
7/11/2024 3:15	853	5,742,780	1.25	0
7/11/2024 3:30	853	5,742,780	1.25	0
7/11/2024 3:45	865	5,823,569	1.26	0
7/11/2024 4:00	853	5,742,780	1.25	0
7/11/2024 4:15	853	5,742,780	1.25	0
7/11/2024 4:30	853	5,742,780	1.25	0
7/11/2024 4:45	853	5,742,780	1.25	0
7/11/2024 5:00	853	5,742,780	1.25	0
7/11/2024 5:15	853	5,742,780	1.25	0
7/11/2024 5:30	853	5,742,780	1.25	0
7/11/2024 5:45	841	5,661,990	1.24	0
7/11/2024 6:00	853	5,742,780	1.25	0
7/11/2024 6:15	853	5,742,780	1.25	0
7/11/2024 6:30	853	5,742,780	1.25	0
7/11/2024 6:45	853	5,742,780	1.25	0
7/11/2024 7:00	853	5,742,780	1.25	0
7/11/2024 7:15	841	5,661,990	1.24	0
7/11/2024 7:30	841	5,661,990	1.24	0
7/11/2024 7:45	841	5,661,990	1.24	0
7/11/2024 8:00	841	5,661,990	1.24	0
7/11/2024 8:15	841	5,661,990	1.24	0
7/11/2024 8:30	841	5,661,990	1.24	0
7/11/2024 8:45	841	5,661,990	1.24	0
7/11/2024 9:00	841	5,661,990	1.24	0
7/11/2024 9:15	841	5,661,990	1.24	0
7/11/2024 9:30	841	5,661,990	1.24	0
7/11/2024 9:45	853	5,742,780	1.25	0
7/11/2024 10:00	853	5,742,780	1.25	0
7/11/2024 10:15	853	5,742,780	1.25	0
7/11/2024 10:30	865	5,823,569	1.26	0
7/11/2024 10:45	865	5,823,569	1.26	0
7/11/2024 11:00	853	5,742,780	1.25	0
7/11/2024 11:15	877	5,904,359	1.27	0
7/11/2024 11:30	877	5,904,359	1.27	0
7/11/2024 11:45	865	5,823,569	1.26	0
7/11/2024 12:00	877	5,904,359	1.27	0
7/11/2024 12:15	877	5,904,359	1.27	0
7/11/2024 12:30	877	5,904,359	1.27	0
7/11/2024 12:45	889	5,985,148	1.28	0
7/11/2024 13:00	877	5,904,359	1.27	0
7/11/2024 13:15	877	5,904,359	1.27	0
7/11/2024 13:30	877	5,904,359	1.27	0
7/11/2024 13:45	877	5,904,359	1.27	0
7/11/2024 14:00	877	5,904,359	1.27	0
7/11/2024 14:15	877	5,904,359	1.27	0
7/11/2024 14:30	877	5,904,359	1.27	0
7/11/2024 14:45	889	5,985,148	1.28	0

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

Date and Time	Flow Rate (ft³/sec)	Flow Volume (gal)	Gage Height (ft)	Precipitation (in)¹
7/11/2024 15:00	889	5,985,148	1.28	0
7/11/2024 15:15	889	5,985,148	1.28	0
7/11/2024 15:30	889	5,985,148	1.28	0
7/11/2024 15:45	889	5,985,148	1.28	0
7/11/2024 16:00	889	5,985,148	1.28	0
7/11/2024 16:15	901	6,065,937	1.29	0
7/11/2024 16:30	901	6,065,937	1.29	0
7/11/2024 16:45	889	5,985,148	1.28	0
7/11/2024 17:00	901	6,065,937	1.29	0
7/11/2024 17:15	901	6,065,937	1.29	0
7/11/2024 17:30	901	6,065,937	1.29	0
7/11/2024 17:45	913	6,146,727	1.3	0
7/11/2024 18:00	913	6,146,727	1.3	0
7/11/2024 18:15	913	6,146,727	1.3	0
7/11/2024 18:30	913	6,146,727	1.3	0
7/11/2024 18:45	913	6,146,727	1.3	0
7/11/2024 19:00	913	6,146,727	1.3	0
7/11/2024 19:15	913	6,146,727	1.3	0
7/11/2024 19:30	913	6,146,727	1.3	0
7/11/2024 19:45	913	6,146,727	1.3	0
7/11/2024 20:00	913	6,146,727	1.3	0
7/11/2024 20:15	926	6,234,249	1.31	0
7/11/2024 20:30	926	6,234,249	1.31	0
7/11/2024 20:45	926	6,234,249	1.31	0
7/11/2024 21:00	926	6,234,249	1.31	0
7/11/2024 21:15	926	6,234,249	1.31	0
7/11/2024 21:30	926	6,234,249	1.31	0
7/11/2024 21:45	926	6,234,249	1.31	0
7/11/2024 22:00	938	6,315,038	1.32	0
7/11/2024 22:15	938	6,315,038	1.32	0
7/11/2024 22:30	938	6,315,038	1.32	0
7/11/2024 22:45	938	6,315,038	1.32	0
7/11/2024 23:00	938	6,315,038	1.32	0
7/11/2024 23:15	951	6,402,560	1.33	0
7/11/2024 23:30	951	6,402,560	1.33	0
7/11/2024 23:45	951	6,402,560	1.33	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.

ft³/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)
7/11/2024	0:00	1,200	900	8,078,940
7/11/2024	0:15	1,200	900	8,078,940
7/11/2024	0:30	1,190	900	8,011,615
7/11/2024	0:45	1,190	900	8,011,615
7/11/2024	1:00	1,190	900	8,011,616
7/11/2024	1:15	1,190	900	8,011,615
7/11/2024	1:30	1,190	900	8,011,615
7/11/2024	1:45	1,190	900	8,011,616
7/11/2024	2:00	1,170	900	7,876,966
7/11/2024	2:15	1,170	900	7,876,966
7/11/2024	2:30	1,170	900	7,876,967
7/11/2024	2:45	1,170	900	7,876,966
7/11/2024	3:00	1,160	900	7,809,642
7/11/2024	3:15	1,160	900	7,809,642
7/11/2024	3:30	1,160	900	7,809,642
7/11/2024	3:45	1,160	900	7,809,642
7/11/2024	4:00	1,160	900	7,809,642
7/11/2024	4:15	1,150	900	7,742,317
7/11/2024	4:30	1,150	900	7,742,317
7/11/2024	4:45	1,150	900	7,742,318
7/11/2024	5:00	1,150	900	7,742,317
7/11/2024	5:15	1,150	900	7,742,317
7/11/2024	5:30	1,140	900	7,674,993
7/11/2024	5:45	1,140	900	7,674,993
7/11/2024	6:00	1,140	900	7,674,993
7/11/2024	6:15	1,120	900	7,540,344
7/11/2024	6:30	1,120	900	7,540,344
7/11/2024	6:45	1,120	900	7,540,344
7/11/2024	7:00	1,110	900	7,473,020
7/11/2024	7:15	1,110	900	7,473,019
7/11/2024	7:30	1,110	900	7,473,019
7/11/2024	7:45	1,110	900	7,473,020
7/11/2024	8:00	1,110	900	7,473,019
7/11/2024	8:15	1,120	900	7,540,344
7/11/2024	8:30	1,140	900	7,674,993
7/11/2024	8:45	1,160	900	7,809,642
7/11/2024	9:00	1,140	900	7,674,993
7/11/2024	9:15	1,120	900	7,540,344
7/11/2024	9:30	1,110	900	7,473,019
7/11/2024	9:45	1,110	900	7,473,019
7/11/2024	10:00	1,110	900	7,473,020
7/11/2024	10:15	1,100	900	7,405,695
7/11/2024	10:30	1,110	900	7,473,019
7/11/2024	10:45	1,110	900	7,473,020
7/11/2024	11:00	1,110	900	7,473,019
7/11/2024	11:15	1,100	900	7,405,695
7/11/2024	11:30	1,100	900	7,405,695
7/11/2024	11:45	1,100	900	7,405,695
7/11/2024	12:00	1,090	900	7,338,370
7/11/2024	12:15	1,090	900	7,338,371
7/11/2024	12:30	1,090	900	7,338,370
7/11/2024	12:45	1,090	900	7,338,370
7/11/2024	13:00	1,090	900	7,338,371

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

Date	Time	Discharge (cubic ft/sec)	Seconds	Volume (gal)
7/11/2024	13:15	1,080	900	7,271,046
7/11/2024	13:30	1,080	900	7,271,046
7/11/2024	13:45	1,060	900	7,136,397
7/11/2024	14:00	1,090	900	7,338,370
7/11/2024	14:15	1,080	900	7,271,046
7/11/2024	14:30	1,090	900	7,338,371
7/11/2024	14:45	1,090	900	7,338,370
7/11/2024	15:00	1,080	900	7,271,046
7/11/2024	15:15	1,080	900	7,271,046
7/11/2024	15:30	1,080	900	7,271,046
7/11/2024	15:45	1,080	900	7,271,046
7/11/2024	16:00	1,090	900	7,338,371
7/11/2024	16:15	1,080	900	7,271,046
7/11/2024	16:30	1,080	900	7,271,046
7/11/2024	16:45	1,080	900	7,271,046
7/11/2024	17:00	1,060	900	7,136,397
7/11/2024	17:15	1,060	900	7,136,397
7/11/2024	17:30	1,060	900	7,136,397
7/11/2024	17:45	1,060	900	7,136,397
7/11/2024	18:00	1,060	900	7,136,397
7/11/2024	18:15	1,050	900	7,069,073
7/11/2024	18:30	1,060	900	7,136,397
7/11/2024	18:45	1,050	900	7,069,072
7/11/2024	19:00	1,050	900	7,069,073
7/11/2024	19:15	1,050	900	7,069,072
7/11/2024	19:30	1,050	900	7,069,072
7/11/2024	19:45	1,040	900	7,001,748
7/11/2024	20:00	1,040	900	7,001,748
7/11/2024	20:15	1,040	900	7,001,748
7/11/2024	20:30	1,040	900	7,001,748
7/11/2024	20:45	1,040	900	7,001,748
7/11/2024	21:00	1,040	900	7,001,748
7/11/2024	21:15	1,030	900	6,934,424
7/11/2024	21:30	1,030	900	6,934,423
7/11/2024	21:45	1,030	900	6,934,423
7/11/2024	22:00	1,030	900	6,934,424
7/11/2024	22:15	1,030	900	6,934,423
7/11/2024	22:30	1,030	900	6,934,423
7/11/2024	22:45	1,030	900	6,934,424
7/11/2024	23:00	1,030	900	6,934,423
7/11/2024	23:15	1,030	900	6,934,423
7/11/2024	23:30	1,030	900	6,934,424
7/11/2024	23:45	1,030	900	6,934,424

Notes

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

ft³/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)	--	590	--	--
Instantaneous Flow (ft ³ /sec)	901	--	889	1,090
Program	CAP SW Sampling 3Q24	CAP SW Sampling 3Q24	CAP SW Sampling 3Q24	CAP SW Sampling 3Q24
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-BLADEN	CFR-KINGS
Field Sample ID	CAP3Q24-CFR-TARHEEL-071124	CAP3Q24-CFR-TARHEEL-24-071124	CAP3Q24-CFR-BLADEN-071124	CAP3Q24-CFR-KINGS-071124
Sample Date and Time ¹	7/11/2024	7/11/2024	7/11/2024	7/11/2024
Sample Delivery Group (SDG)	320-113821-1	320-113821-1	320-113821-1	320-113821-1
Lab Sample ID	320-113821-1	320-113821-2	320-113821-3	320-113821-4
Sample Type	Grab	Composite	Grab	Grab
<i>Table 3+ Mass Discharge³ (mg/s)</i>				
HFPO-DA	0.11	0.12	0.11	ND
PFMOAA	0.22	0.22	0.24	0.29
PFO2HxA	0.18	0.11	0.14	0.21
PFO3OA	ND	ND	ND	ND
PFO4DA	ND	ND	ND	ND
PFO5DA	ND	ND	ND	ND
PMPA	0.18	0.17	0.16	0.16
PEPA	ND	ND	ND	ND
PS Acid	ND	ND	ND	ND
Hydro-PS Acid	ND	ND	ND	ND
R-PSDA	0.14	0.12	0.12	0.17
Hydrolyzed PSDA	0.08	0.07	0.10	0.07
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	0.05	ND	ND	0.06
PES	ND	ND	ND	ND
PFECA B	ND	ND	ND	ND
PFECA-G	ND	ND	ND	ND
PFPrA	0.66	0.59	0.60	0.65
Total Attachment C Mass Discharge^{4,5}	0.69	0.62	0.65	0.68
Total Table 3+ Mass Discharge (17 compounds)^{4,6}	0.69	0.62	0.65	0.68
Total Table 3+ Mass Discharge (18 compounds)^{4,7}	1.35	1.21	1.26	1.33
Total Table 3+ Mass Discharge (21 compounds)⁴	1.63	1.40	1.46	1.64

Notes:

- 1 - A paired composite sample was collected at Tar Heel Ferry Road Bridge on July 11, 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: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-070224	07-02-2024	23:01	07-03-2024	14:01	8.39	0.03	-84.50	32.80	1096.10	32.28	Clear	No	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	86.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	7

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



General Comment:

Sampling Comments:



Staff gauge



ISCOs

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

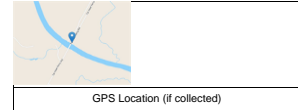
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-070424	07-04-2024	23:01	7/5/2024	12:58	7.96	3.57	-55.10	7.48	412.61	27.48	Clear	None	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	77.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	12

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

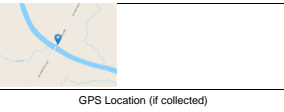
Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-070824	07-08-2024	23:01	07-09-2024	15:41	8.09	4.59	-29.30	23.20	933.63	28.70	Clear	None	--

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

WEATHER CONDITIONS	
Temperature (F):	94.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	8

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-071124	07-11-2024	23:01	7-12-2024	10:05	7.55	6.25	122.00	9.45	271.34	26.89	Clear	None	--

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

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	3

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



GPS Location (if collected)

General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

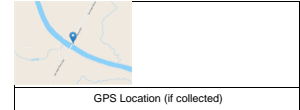
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-071124	07-11-2024	23:01	7-12-2024	10:05	7.55	6.25	122.00	9.45	271.34	26.89	Clear	None	

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	3

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

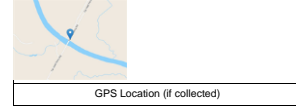
Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-071524	07-15-2024	23:01	07-16-2024	10:12	7.31	7.03	116.60	24.50	347.50	27.29	Clear	None	DUP MS MSD

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

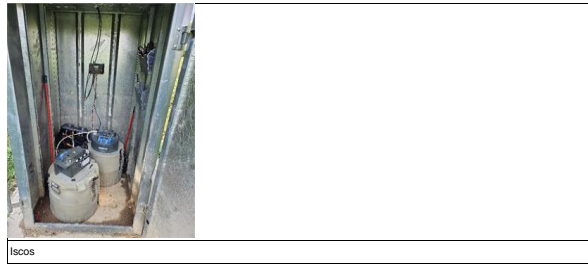
WEATHER CONDITIONS	
Temperature (F):	86.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	7

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-071824	07-18-2024	23:01	07-19-2024	08:55	8.16	4.68	16.60	16.02	1431.80	25.61	Clear	No	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	76.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	3

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-072224	07-22-2024	23:01	07-23-2024	09:25	7.75	7.23	5.90	96.00	179.80	27.28	Cloudy with particulates	No	--

Sampling Data

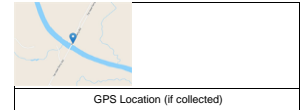
Sampling Method: Multi Meter Used:
 ISCO Start Date and Time: Multi Meter ID:
 ISCO End Date and Time:

WEATHER CONDITIONS

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

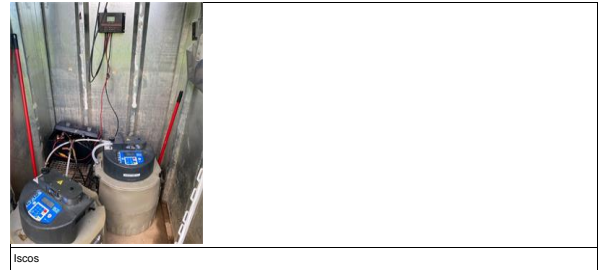
Latitude:
 Longitude:

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-072524	07-25-2024	23:01	07-26-2024	09:25	8.21	6.40	27.70	50.50	840.25	26.43	Cloudy with particles	No	--

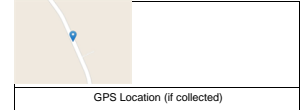
Sampling Data

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

WEATHER CONDITIONS

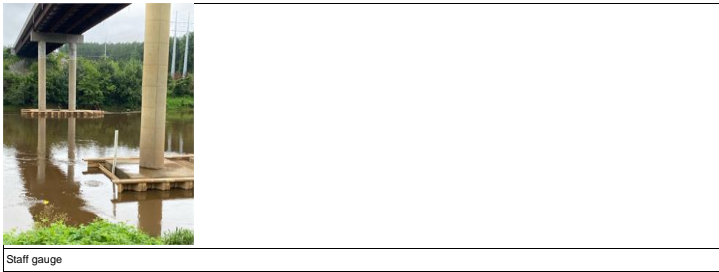
Temperature (F):	75.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	3

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-072924	07-29-2024	23:01	07-30-2024	10:40	6.70	6.43	44.60	198.00	143.62	26.72	Murky	None	

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:	Sunny
Precipitation:	None
Wind (mph)	6

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-080124	08-01-2024	23:01	08-02-2024	08:55	7.35	7.34	33.50	64.00	266.60	26.91	Murky	No	--

Sampling Data

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

WEATHER CONDITIONS

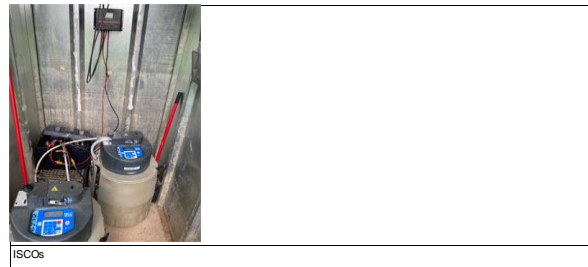
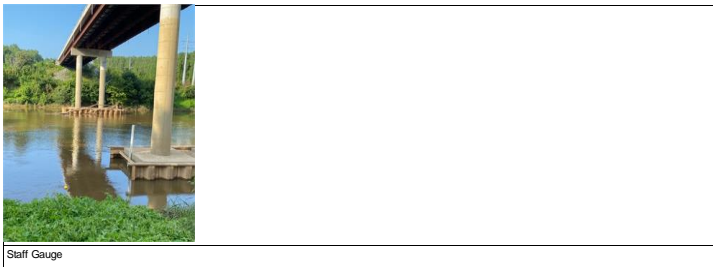
Temperature (F):	80.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

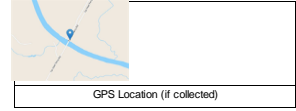
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-080424	08-04-2024	23:01	08-04-2024	23:01	--	--	--	--	--	--	--	--	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

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



General Comment:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

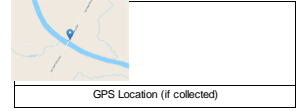
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-080524	08-05-2024	23:01	08-04-2024	23:01	--	--	--	--	--	--	--	--	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

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



General Comment:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

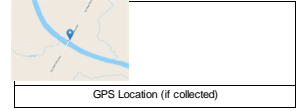
Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-080624	08-06-2024	23:01	08-06-2024	23:01	--	--	--	--	--	--	--	--	--

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

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

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



General Comment:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-080624	8-6-2024	12:40:00	08-06-2024	12:40	7.93	7.29	6.40	18.41	685.98	27.35	Clear	No	--

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

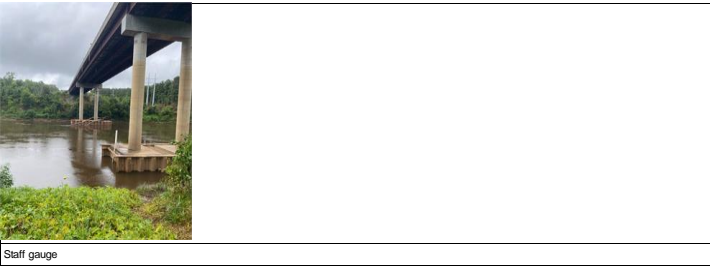
WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	5

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



General Comment: Collected CFR-TARHEEL-24-080224, CFR-TARHEEL-24-080324, CFR-TARHEEL-24-080424, CFR-TARHEEL-24-080524, CFR-TARHEEL-13-080624(partial 13 sample @ 12:01) and CFR-TARHEEL-080624 @ 1240 ; no errors. ISCO removed due rising river.

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

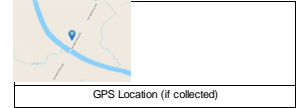
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-081424	08-14-2024	11:35	08-14-2024	11:35	7.26	7.40	-59.00	29.00	268.43	24.76	Hazy	None	--

Sampling Data

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

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

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

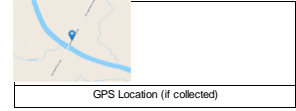
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-081524	08-15-2024	11:10	08-15-2024	11:15	7.35	5.12	6.50	25.10	203.48	29.02	Clear	No	--

Sampling Data

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

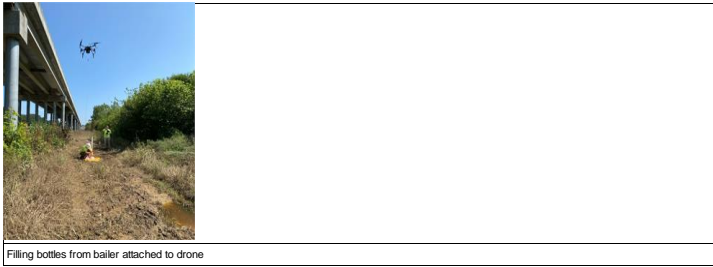
WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	4

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-082024	08-20-2024	12:45	08-20-2024	12:45	7.16	5.41	-2.80	69.80	197.62	27.26	Hazy	None	--

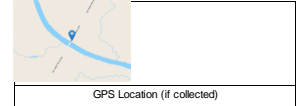
Sampling Data

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

WEATHER CONDITIONS

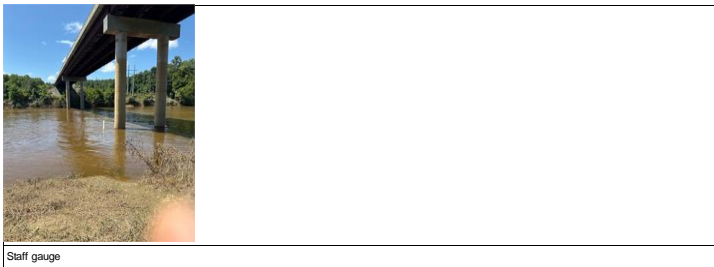
Temperature (F):	78.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	7

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-082124	08-21-2024	23:01	08-22-2024	11:10	7.62	7.53	-16.40	36.20	775.05	28.03	Clear	None	DUP[MS]MSD

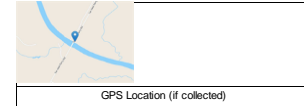
Sampling Data

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

WEATHER CONDITIONS

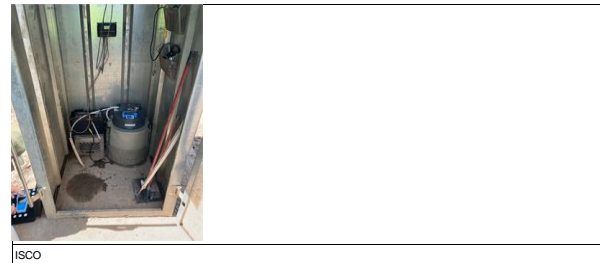
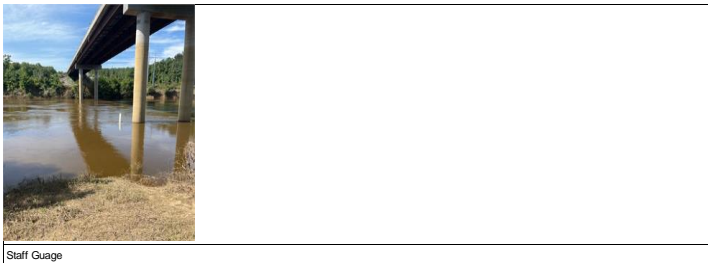
Temperature (F):	73.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	8

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

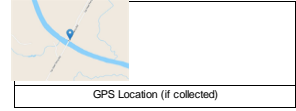
Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-082324	08-23-2024	23:01	08-23-2024	23:01	--	--	--	--	--	--	--	--	--

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:	Sunny
Precipitation:	None
Wind (mph)	5

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



General Comment:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO mg/L	Redox mV	Turbidity NTU	Spec. Cond. µS/cm	Temp. °C	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-082624	08-26-2024	23:01	08-27-2024	10:55	8.33	2.55	-31.80	18.76	4497.70	27.10	Clear with particles	No	--

Sampling Data

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

WEATHER CONDITIONS

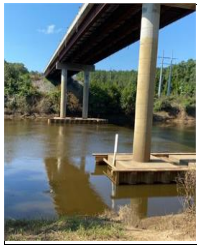
Temperature (F):	81.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

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



General Comment:

Sampling Comments:



Staff gauge



ISCOS

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-082924	08-29-2024 23:01	08-30-2024 11:50			8.09	5.32	-6.00	38.00	685.46	30.21	Clear with particles	No	

Sampling Data

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

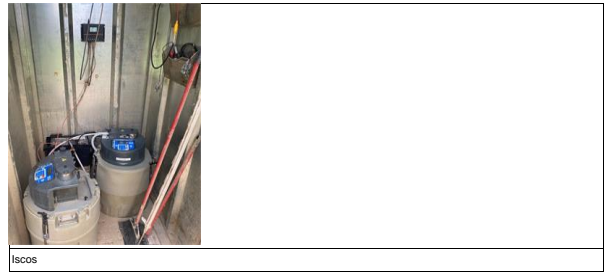
WEATHER CONDITIONS	
Temperature (F):	88.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Chemours Fayetteville Location ID: CFR-TARHEEL Project Manager: Tracy Ovbey
 Samplers: DEBORAH AYERS|EDWARD ELLIOTT Sampling Event: Weekly River Event Type: Sampling
 Date: 09-03-2024 Time: 10:45

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-090224	09-02-2024	23:01	09-03-2024	10:50	8.46	1.95	-28.90	28.00	4650.00	25.89	Clear	No	--

Sampling Data

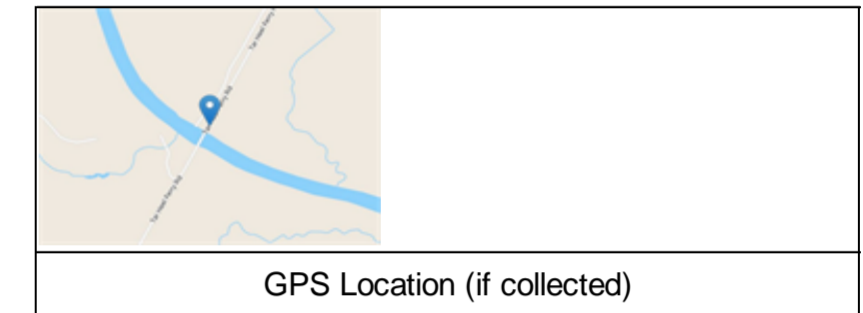
Sampling Method: ISCO Composite Multi Meter Used: Insitu Aqua Troll
 ISCO Start Date and Time: 09-02-2024 00:01 Multi Meter ID: 706720
 ISCO End Date and Time: 09-02-2024 23:01

WEATHER CONDITIONS

Temperature (F):	73.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	14

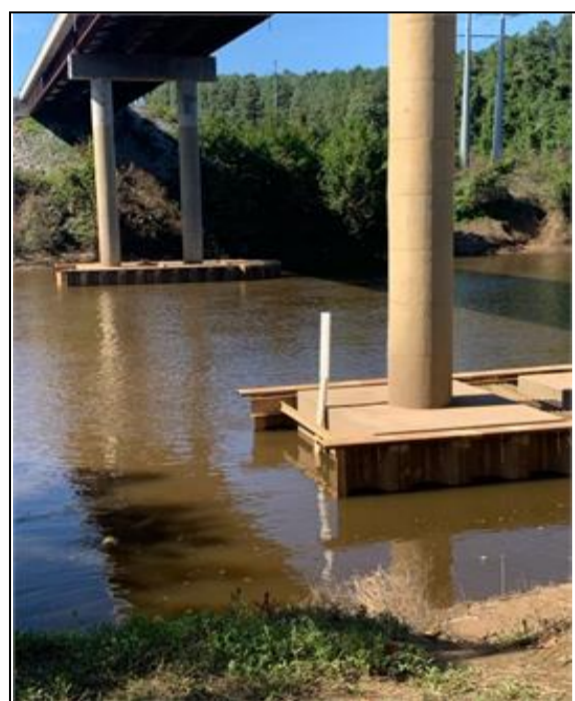
Latitude: 34.7451393972367
 Longitude: -78.7851483679552

Staff Gauge Water Level Reading (ft): 4.8
 Temperature Reading (degrees C): 28
 Rain Reading (mm): 22



General Comment: Collected CFR-TARHEEL-24-083024, CFR-TARHEEL-24-083124, CFR-TARHEEL-24-090124, and CFR-TARHEEL-24-090224; no errors

Sampling Comments:



Staff gauge



ISCOs

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: 09-05-2024 Time: 13:20

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-090424	09-04-2024	23:01	09-05-2024	13:24	6.60	7.84	164.90	45.80	108.66	26.19	Hazy	None	--

Sampling Data

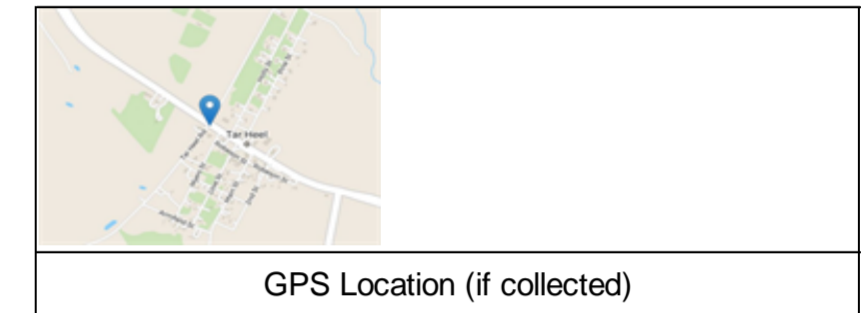
Sampling Method: ISCO Composite Multi Meter Used: Insitu Aqua Troll
 ISCO Start Date and Time: 09-04-2024 00:01 Multi Meter ID: 706770
 ISCO End Date and Time: 09-04-2024 23:01

WEATHER CONDITIONS

Temperature (F):	78.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	10

Latitude: 34.7339466449168
 Longitude: -78.7922636661717

Staff Gauge Water Level Reading (ft): 5
 Temperature Reading (degrees C): 82
 Rain Reading (mm): 0



General Comment: Collect CFR-TARHEEL-24-090324 and CFR-TARHEEL-24-090424; No errors.

Sampling Comments:



ISCOs



Staff gauge

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-090924	09-09-2024	23:01	09-10-2024	09:25	8.04	2.91	-21.50	15.43	844.21	21.34	Clear	No	--

Sampling Data

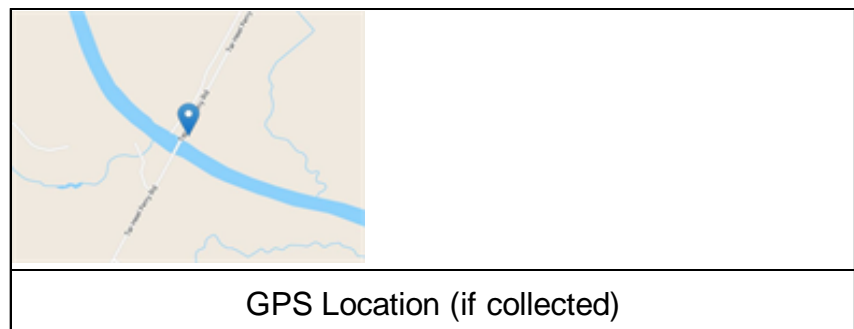
Sampling Method: Multi Meter Used:
 ISCO Start Date and Time: Multi Meter ID:
 ISCO End Date and Time:

WEATHER CONDITIONS

Temperature (F):	57.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	2

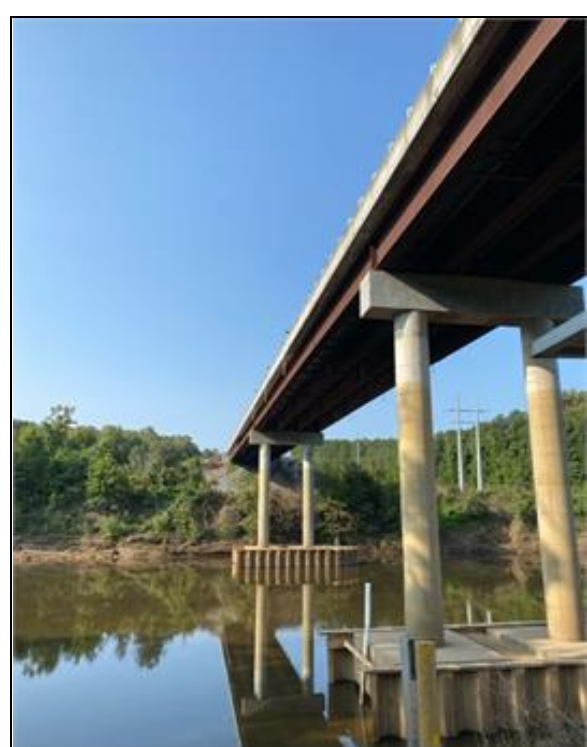
Latitude:
 Longitude:

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



General Comment:

Sampling Comments:



Staff Gauge



ISCOs

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: 09-13-2024	Time: 08:45	

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-091224	09-12-2024	23:01	09-13-2024	08:55	6.92	8.24	152.30	13.25	396.53	22.75	Clear	No	DUP MS MSD

Sampling Data

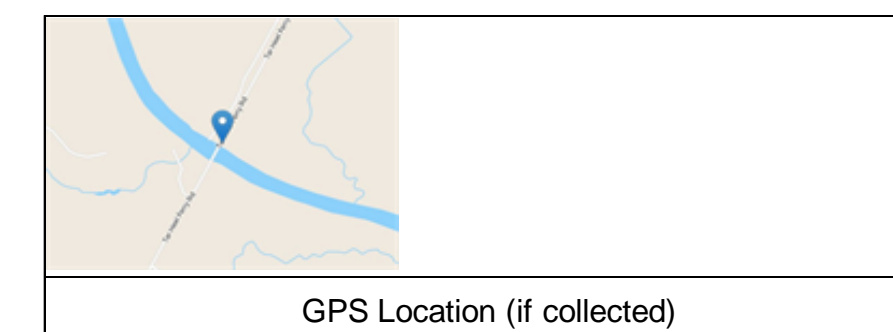
Sampling Method: ISCO Composite	Multi Meter Used: Insitu Aqua Troll
ISCO Start Date and Time: 09-12-2024 00:01	Multi Meter ID: 706751
ISCO End Date and Time: 09-12-2024 23:01	

WEATHER CONDITIONS

Temperature (F):	70.00
Sky:	Cloudy
Precipitation:	Rain
Wind (mph)	15

Latitude: 34.7449803809401
 Longitude: -78.785219005139

Staff Gauge Water Level Reading (ft): 0.5
 Temperature Reading (degrees C): 22
 Rain Reading (mm): 8



General Comment: Collected CFR-TARHEEL-24-091024, CFR-TARHEEL-24-091124 and CFR-TARHEEL-24-091224 DEQ

Sampling Comments:



ISCOs



Staff Gauge

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: 9-15-2024	Time: 08:06	

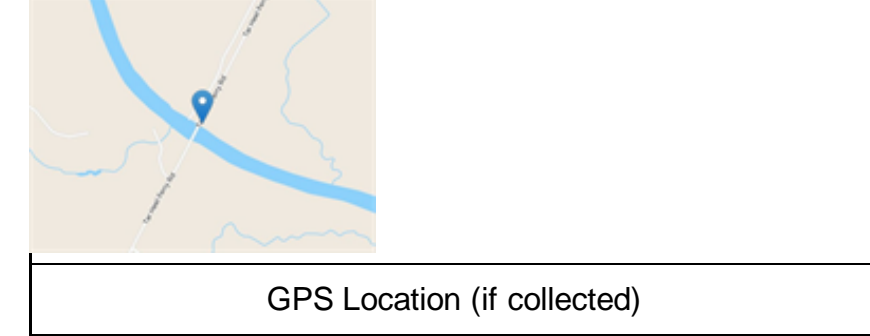
Spl ID	Spl Date	Time	Parameters		pH	DO mg/L	Redox mV	Turbidity NTU	Spec. Cond. µS/cm	Temp. °C	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-091524	09-15-2024	23:01	09-15-2024	08:15	--	--	--	--	--	--	--	--	--

Sampling Data

Sampling Method: ISCO Composite	Multi Meter Used: --
ISCO Start Date and Time: 09-15-2024 00:01	Multi Meter ID: --
ISCO End Date and Time: 09-15-2024 23:01	

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

Latitude:	34.7449458
Longitude:	-78.7851873
Staff Gauge Water Level Reading (ft):	--
Temperature Reading (degrees C):	27
Rain Reading (mm)	--



General Comment:	No parameters taken , ISCO remove due rising river. Alternative sample requested for David.
------------------	---

Sampling Comments:	
--------------------	--

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: 09-17-2024 Time: 08:16

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-11-091724	09-17-2024	10:01	09-17-2024	08:23	--	--	--	--	--	--	--	--	--

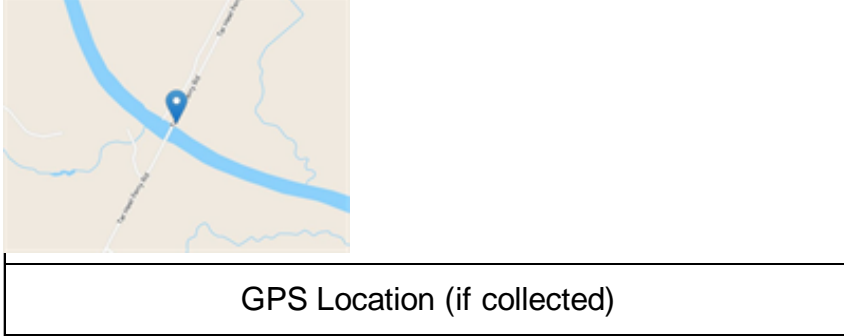
Sampling Data

Sampling Method: ISCO Composite Multi Meter Used: --
 ISCO Start Date and Time: 09-17-2024 00:01 Multi Meter ID: --
 ISCO End Date and Time: 09-17-2024 10:01

WEATHER CONDITIONS	
Temperature (F):	68.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	7

Latitude: 34.7449458
 Longitude: -78.7851873

Staff Gauge Water Level Reading (ft): 10.82
 Temperature Reading (degrees C): 22
 Rain Reading (mm): 150



General Comment: No parameters taken , alternative sample requested for David due rising river.

Sampling Comments:

SURFACE WATER SAMPLING RECORD

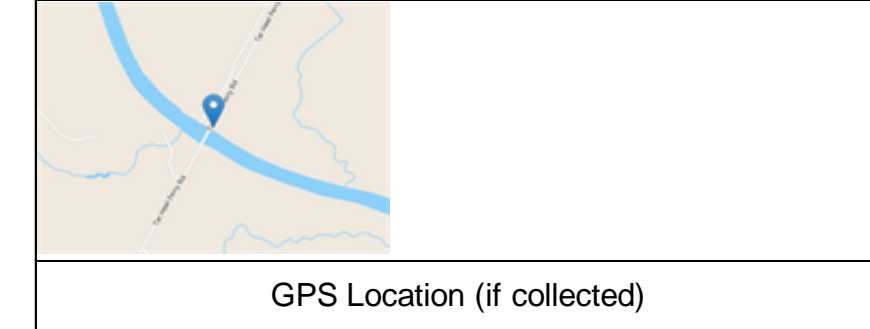
Site Name: Chemours Fayetteville Location ID: CFR-TARHEEL Project Manager: Tracy Ovbey
 Samplers: KEN STUART Sampling Event: Weekly River Event Type: Sampling
 Date: 09-17-2024 Time: 09:40

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-091624	09-16-2024	23:01	09-17-2024	10:15	7.10	8.34	53.20	81.30	97.64	22.59	Tan with particles	None	--

Sampling Data
 Sampling Method: ISCO Composite Multi Meter Used: In situ Aqua Troll
 ISCO Start Date and Time: 09-16-2024 00:01 Multi Meter ID: 706751
 ISCO End Date and Time: 09-16-2024 23:01

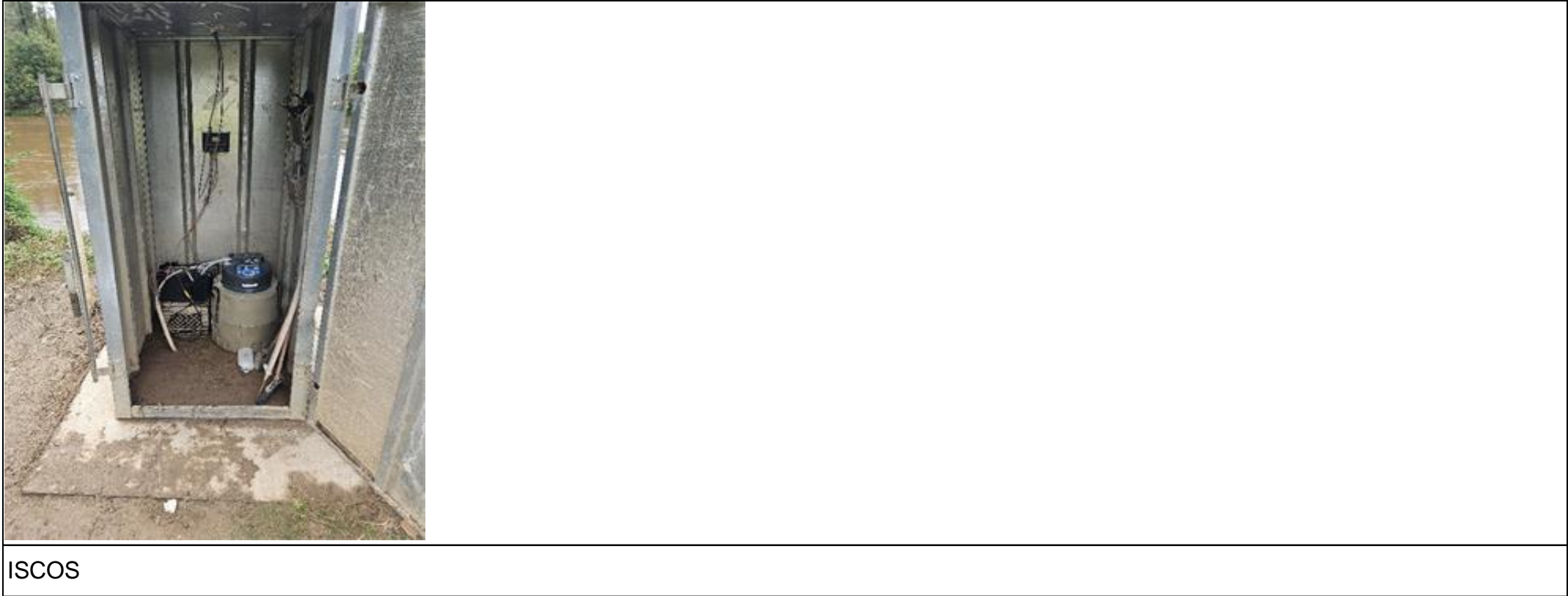
WEATHER CONDITIONS	
Temperature (F):	68.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

Latitude: 34.7449458
 Longitude: -78.7851873
 Staff Gauge Water Level Reading (ft): 10.82
 Temperature Reading (degrees C): 22
 Rain Reading (mm): 150



General Comment: Collected CFR- TARHEEL-24-091324, CFR-TARHEEL-24-091424, CFR-TARHEEL-24-091524, CFR-TARHEEL-24-091624, CFR-TARHEEL-11-091724 @ 10:01 and grab CFR- TARHEEL-091724 @ 10:15; No errors

Sampling Comments: Isco removed due rising river



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: 09-19-2024 Time: 09:02

Spl ID	Spl Date	Time	Parameters		pH	DO mg/L	Redox mV	Turbidity NTU	Spec. Cond. µS/cm	Temp. °C	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-091924	09-19-2024	09:05	09-19-2024	09:11	6.64	6.19	-3.50	63.50	218.53	22.26	Hazy with particles	No	--

Sampling Data

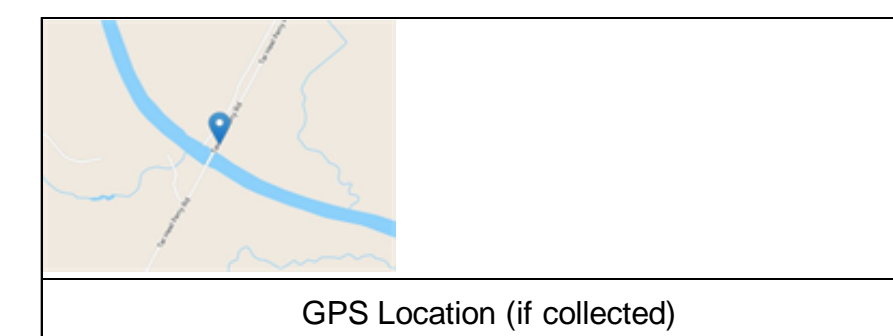
Sampling Method: Bailer Multi Meter Used: Insitu Aqua Troll
 ISCO Start Date and Time: Multi Meter ID: 766679
 ISCO End Date and Time:

WEATHER CONDITIONS

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

Latitude: 34.7451224888697
 Longitude: -78.7851095646825

Staff Gauge Water Level Reading (ft): --
 Temperature Reading (degrees C): 29
 Rain Reading (mm): 0



General Comment: Grab CFR-TARHEEL-091924 @ 9:05 ,staff gauge under water unable to take level reading.

Sampling Comments:



Isco Shed



Bailer Grab

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: 09-24-2024 Time: 12:00

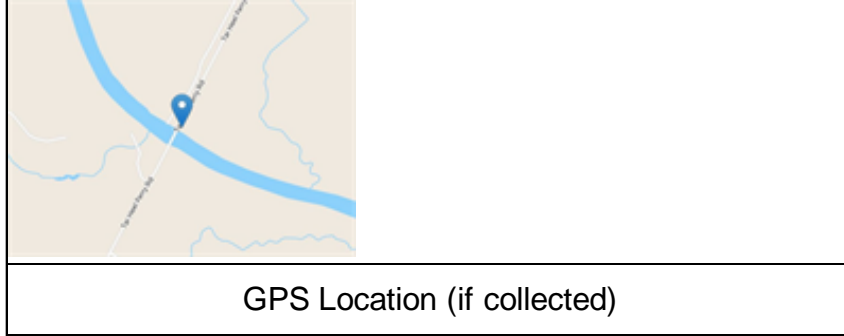
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-092424	9/24/2024	12:45	09-24-2024	12:50	7.28	5.83	-8.00	23.20	163.18	27.07	Clear	None	--

Sampling Data

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

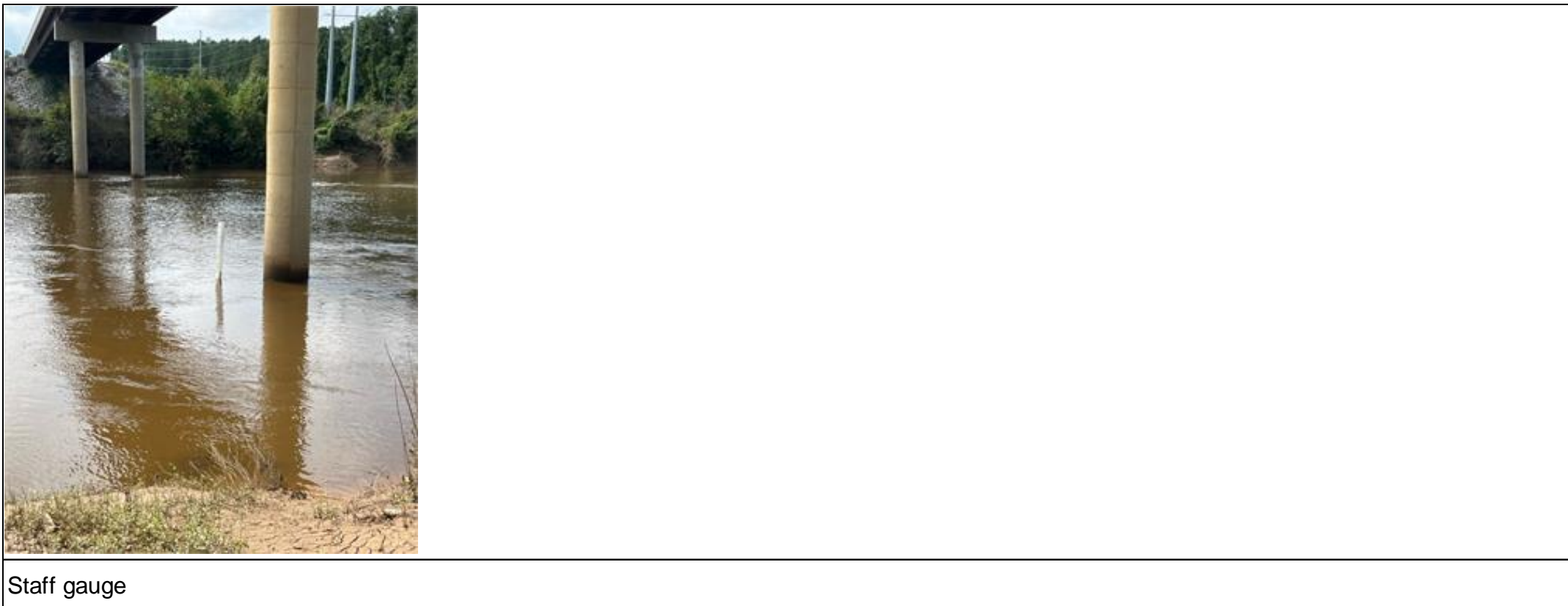
WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	8

Latitude: 34.7449556272801
 Longitude: -78.7851340883214
 Staff Gauge Water Level Reading (ft): 9.8
 Temperature Reading (degrees C): 84
 Rain Reading (mm): 7



General Comment: Reinstall ISCOs and collect grab sample @ 12:45 with drone

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

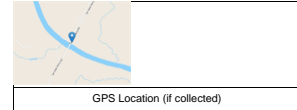
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-092524	09-25-2024	23:01	09-26-2024	12:14	6.60	6.17	14.10	63.30	99.04	27.08	Hazy	None	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	9

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-24-092724	09-27-2024	23:01	9/28/2024	14:30	4.71	8.45	13.60	163.00	160.40	24.32	Cloudy	No	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	85.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	15

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



General Comment:

Sampling Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

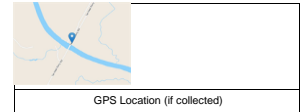
Spl ID	Spl Date	Time	Parameters		pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
			Date	Time									
CFR-TARHEEL-092824	09-28-2024	14:35	09-30-2024	10:53	7.85	7.56	2.90	156.00	248.62	25.03	Cloudy	No	--

Sampling Data

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

WEATHER CONDITIONS	
Temperature (F):	85.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	15

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



General Comment:

Sampling Comments:



Rising River



Emptied Shed

SURFACE WATER SAMPLING RECORD

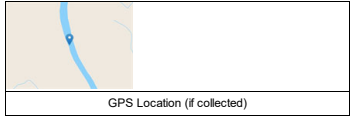
Site Name: Chemours Fayetteville Location ID: CFR-BLADEN Project Manager: Tracy Ovbey
 Samplers: CHARLES PACE|KEN STUART Sampling Event: Quarterly CAP Event Type: Sampling
 Date: 07-11-2024 Time: 9:20

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-CFR-BALDEN-071124	07-11-2024	09:30	6.56	6.16	160.00	17.00	174.52	27.55	Clear	None	

Sampling Data
 Sampling Method: Peri Pump Grab Tubing Depth (ft): 7.5 Distance to River Right: 15
 Sampling Location: Thalweg Multi Meter Used: Insitu Aqua Troll Distance to River Left: 51
 Total Depth to Bottom of Channel (ft): 15 Multi Meter ID: 706770 Distance to River (Right/Left) Units: m

WEATHER CONDITIONS	
Temperature (F):	85.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	5

Latitude: 34.7740267
 Longitude: -78.7990292



General Comments:

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-CFR-KINGS-071124	07-11-2024	14:40	7.24	5.92	151.50	15.40	372.14	29.58	Clear	No	

Sampling Data

Sampling Method: Tubing Depth (ft): Distance to River Right:
 Sampling Location: Multi Meter Used: Distance to River Left:
 Total Depth to Bottom of Channel (ft): Multi Meter ID: Distance to River (Right/Left) Units:

WEATHER CONDITIONS

Temperature (F):	<input type="text" value="88.00"/>
Sky:	<input type="text" value="Partly Cloudy"/>
Precipitation:	<input type="text" value="None"/>
Wind (mph)	<input type="text" value="6"/>

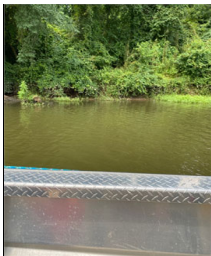
Latitude:
 Longitude:



GPS Location (if collected)

General Comments:

Sample Comments:



River left



River right

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-CFR-RM-76-071024	07-10-2024 08:40		7.74	5.30	7.70	10.65	402.53	29.15	Clear	No	

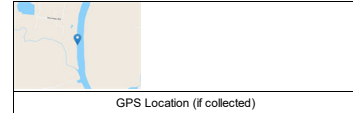
Sampling Data

Sampling Method: Tubing Depth (ft): Distance to River Right:
 Sampling Location: Multi Meter Used: Distance to River Left:
 Total Depth to Bottom of Channel (ft): Multi Meter ID: Distance to River (Right/Left) Units:

WEATHER CONDITIONS

Temperature (F):	<input type="text" value="79.00"/>
Sky:	<input type="text" value="Sunny"/>
Precipitation:	<input type="text" value="None"/>
Wind (mph):	<input type="text" value="7"/>

Latitude:
 Longitude:



General Comments:

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-CFR-TARHEEL-24-071124	07-11-2024	22:36	7.52	7.29	21.70	12.00	281.56	26.23	Clear	None	

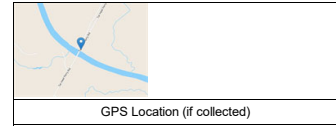
Sampling Data

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

WEATHER CONDITIONS

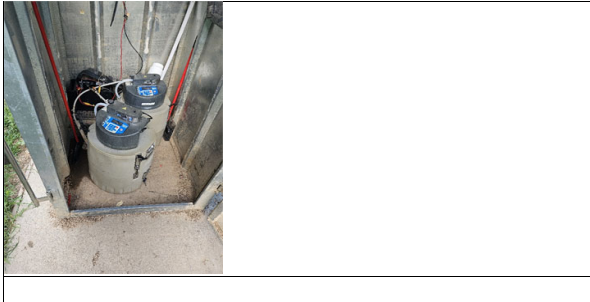
Temperature (F):	84.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:



General Comments:

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-CFR-TARHEEL-071124	07-11-2024	10:00	7.13	6.08	135.70	14.30	415.41	29.36	Clear	None	

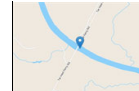
Sampling Data

Sampling Method: Multi Meter Used: Flow Rate:
 Water Quality Condition: Multi Meter ID: Flow Rate Units:

WEATHER CONDITIONS

Temperature (F):	85.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:



GPS Location (if collected)



River Right



River Left

General Comments:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

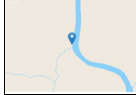
Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-GBC-1-071024	07-10-2024	13:20	6.49	2.91	161.00	6.19	1315.80	30.97	Clear	No Odor	

Sampling Data
 Sampling Method: Multi Meter Used: Flow Rate:
 Water Quality Condition: Multi Meter ID: Flow Rate Units:

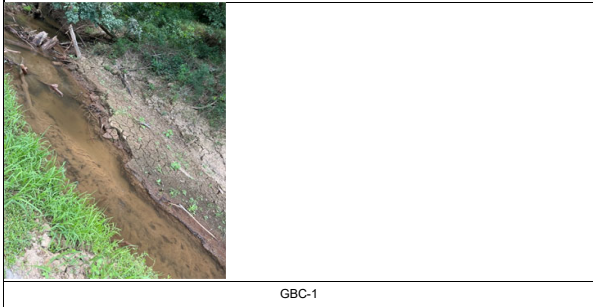
WEATHER CONDITIONS	
Temperature (F):	96.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

Latitude:
 Longitude:



GPS Location (if collected)

--	--	--	--



General Comments:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

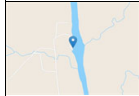
Site Name: Chemours Fayetteville Location ID: Lock and Dam North Project Manager: Tracy Ovbey
 Samplers: BRANDON WEIDNER|CHARLES PACE| Sampling Event: Quarterly CAP Event Type: Sampling
 Date: 07-10-2024 Time: 10:18

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0724-Lock-Dam-North-071024	07-10-2024	10:32	6.04	3.18	101.90	47.10	313.93	28.71	Murky	No Odor	

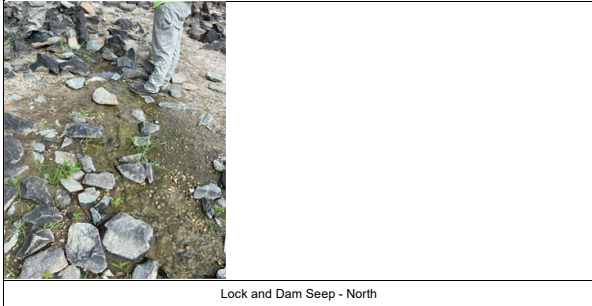
Sampling Data
 Sampling Method: Bottle Grab Multi Meter Used: Insitu Aqua Troll Flow Rate: 4.5
 Water Quality Condition: Multi Meter ID: 766679 Flow Rate Units: L/min

WEATHER CONDITIONS	
Temperature (F):	86.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	7

Latitude: 34.8339238297519
 Longitude: -78.8234667946387



GPS Location (if collected)



General Comments:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

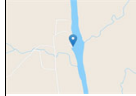
Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP0724-LOCK-DAM-SEEP-071024	--	--	--	--	--	--	--	--	--	--	--

Sampling Data
 Sampling Method: Multi Meter Used: Flow Rate:
 Water Quality Condition: Multi Meter ID: Flow Rate Units:

WEATHER CONDITIONS	
Temperature (F):	87.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

Latitude:
 Longitude:



GPS Location (if collected)

--	--	--	--



General Comments:

Sampling Comments:

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-OLDOF-2-24-071124	07-11-2024	10:22	5.72	6.35	41.10	25.80	268.85	31.40	Clear	None	

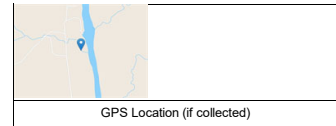
Sampling Data

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

WEATHER CONDITIONS

Temperature (F):	89.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	9

Latitude:
 Longitude:



General Comments:

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Chemours Fayetteville Location ID: OUTFALL 002 Project Manager: Tracy Ovbey
 Samplers: HERBERT WATTS|KEN STUART Sampling Event: Quarterly CAP Event Type: Sampling
 Date: 07-10-2024 Time: 10:37

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-OUTFALL-002-24-071124	07-11-2024	09:56	7.97	7.12	45.00	19.80	361.37	34.96	Clear	None	

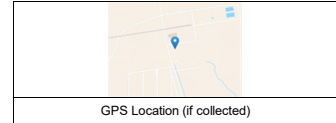
Sampling Data

Sampling Method: ISCO Composite Multi Meter Used: Insitu Aqua Troll
 ISCO Start Date and Time: 07-10-2024 10:55 Multi Meter ID: 706751
 ISCO End Date and Time: 07-11-2024 09:56

WEATHER CONDITIONS

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

Latitude: 34.8400932317986
 Longitude: -78.8404506573956



General Comments: original isco did not run had to replace isco

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
River-Water-Intake-24-071124	07-11-2024	07:06	8.40	5.29	-25.10	29.30	2571.90	28.08	Clear	None	

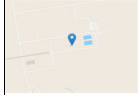
Sampling Data

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

WEATHER CONDITIONS

Temperature (F):	78.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:



GPS Location (if collected)

General Comments:

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name:
 Location ID:
 Project Manager:

Samplers:
 Sampling Event:
 Event Type:

Date:
 Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-SEEP-A-071024											

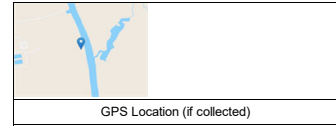
Sampling Data
 Sampling Method:
 Multi Meter Used:

ISCO Start Date and Time:
 Multi Meter ID:

ISCO End Date and Time:

WEATHER CONDITIONS	
Temperature (F):	91.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:



General Comments:

Sample Comments:



SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-SEEP-B-071024											

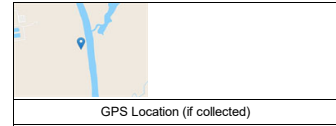
Sampling Data

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

WEATHER CONDITIONS

Temperature (F):	91.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:

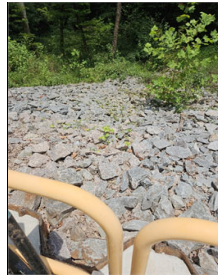


General Comments:

Sample Comments:



No flow at inlet



No flow at outlet

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-SEEP-C-071024											

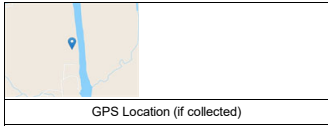
Sampling Data

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

WEATHER CONDITIONS

Temperature (F):	91.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:



General Comments:

Sample Comments:



No water flow at inlet



No water flow at outlet

SURFACE WATER SAMPLING RECORD

Site Name: <input type="text" value="Chemours Fayetteville"/>	Location ID: <input type="text" value="SEEP-D"/>	Project Manager: <input type="text" value="Tracy Ovbey"/>
Samplers: <input type="text" value="HERBERT WATTS KEN STUART "/>	Sampling Event: <input type="text" value="Quarterly CAP"/>	Event Type: <input type="text" value="Sampling"/>
Date: <input type="text" value="07-10-2024"/>	Time: <input type="text" value="14:00"/>	

Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-SEEP-D-071024											

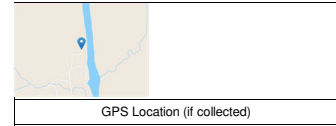
Sampling Data

Sampling Method: <input type="text" value="ISCO Composite"/>	Multi Meter Used: <input type="text"/>
ISCO Start Date and Time: <input type="text" value="07-10-2024 14:03"/>	Multi Meter ID: <input type="text"/>
ISCO End Date and Time: <input type="text" value="07-10-2024 14:03"/>	

WEATHER CONDITIONS

Temperature (F):	91.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	7

Latitude:	<input type="text" value="34.8373499"/>
Longitude:	<input type="text" value="-78.8243821"/>



General Comments:	No sample collected, no water flow through flow cell.
-------------------	---

Sample Comments:	No flow, no sample collected.
------------------	-------------------------------



No water at inlet



No water flow at outlet

SURFACE WATER SAMPLING RECORD

Site Name: Location ID: Project Manager:
 Samplers: Sampling Event: Event Type:
 Date: Time:

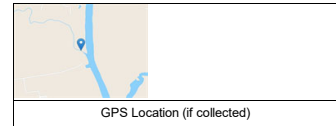
Spl ID	Spl Date	Time	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	QA/QC
				mg/L	mV	NTU	µS/cm	°C			
CAP3Q24-WC-1-24-071124	07-11-2024	07:00	7.22	2.70	-7.10	18.80	552.82	28.62	Clear	None	DUP MS MSD

Sampling Data

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

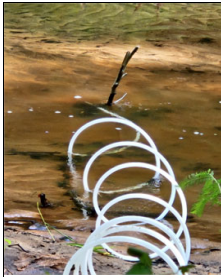
WEATHER CONDITIONS	
Temperature (F):	83.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	7

Latitude:
 Longitude:



General Comments:

Sample Comments:



RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: BLADEN-1DR

Well Diameter: 2 Inches

Samplers: BRANDON WEIDNER/JERIN JANIGA

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 44

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-18-2024

Time: 14:55

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	4.414		
Initial Depth to Water (ft.):	19.8	Depth to Well Bottom (ft.):	47.39

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			
15:15	20.35	220.00	1100.00	5.68	0.30	7.20	101.00	51.96	25.71	Cloudy	No	
15:20	20.35	220.00	1100.00	5.48	0.19	-8.50	56.60	60.06	24.50	Cloudy	No	
15:25	20.35	220.00	1100.00	5.48	0.13	-8.10	25.90	49.12	24.82	Clear	No	
15:30	20.35	220.00	1100.00	5.46	0.10	-6.90	17.10	56.75	24.77	Clear	No	
15:35	20.35	220.00	1100.00	5.41	0.09	1.20	11.10	9.64	25.62	Clear	No	
15:40	20.35	220.00	1100.00	5.4	0.11	9.10	9.30	68.80	25.26	Clear	No	
15:45	20.35	220.00	1100.00	5.42	0.11	7.70	8.36	65.24	25.77	Clear	No	
15:50	20.35	220.00	1100.00	5.43	0.11	9.50	6.97	65.11	25.56	Clear	No	
15:55	20.35	220.00	1100.00	5.49	0.12	7.60	7.54	63.57	25.71	Clear	No	
16:00	20.35	220.00	1100.00	5.52	0.12	7.00	5.79	65.11	25.78	Clear	No	
16:05	20.35	220.00	1100.00	5.56	0.13	7.10	6.01	64.93	25.71	Clear	No	

Screen Interval: 37-47

Sampling Data

Method: Low Flow

Date: 07-18-2024

Time: 16:05

Purge Start Time: 15:10

Field Filtered: No

Total Volume Purged (mL): 12100

Field Parameters

STABILIZED PARAMETERS	
pH	5.56
Spec. Cond. (µS/cm)	64.93
Turbidity (NTU)	6.01
Temp. (°C)	25.71
DO (mg/L)	0.13
ORP (mV)	7.10

Sample ID: CAP3Q24-BLADEN-1DR-071824

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	93.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: LTW-01

Well Diameter: 2 Inches

Samplers: GRANT WALLACE|SAIRA BOHAM

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 21

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-26-2024

Time: 10:50

WATER VOLUME CALCULATION

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

Water Volume =	1.68		
Initial Depth to Water (ft.):	18.21	Depth to Well Bottom (ft.):	28.71

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			
11:10	19.65	200.00	2000.00	3.72	0.61	376.20	42.50	114.63	20.72	Cloudy	No	
11:15	20.42	200.00	1000.00	3.15	0.99	438.60	12.54	114.48	20.92	Clear	No	
11:20	20.53	150.00	750.00	3.11	0.99	454.60	11.09	99.59	20.95	Clear	No	
11:25	20.57	150.00	750.00	3.11	0.94	457.40	8.92	99.56	21.14	Clear	No	
11:30	20.54	150.00	750.00	3.12	0.74	446.70	8.88	99.27	20.80	Clear	No	
11:35	20.51	150.00	750.00	3.12	0.75	436.00	7.52	98.90	20.68	Clear	No	
11:40	20.50	150.00	750.00	3.13	0.70	428.10	5.85	98.92	20.55	Clear	No	

Screen Interval: 11.0-26.0

Sampling Data

Method: Low Flow

Date: 07-26-2024 Time: 11:40

Purge Start Time: 11:00

Total Volume Purged (mL): 6750

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	3.13
Spec. Cond.(µS/cm)	98.92
Turbidity (NTU)	5.85
Temp.(°C)	20.55
DO (mg/L)	0.70
ORP (mV)	428.10

Sample ID: CAP3Q24-LTW-01-072624
 DuplicateID: --
 QA/QC: --

WEATHER CONDITIONS	
Temperature (F):	78.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: LTW-02

Well Diameter: 2 Inches

Samplers: BRANDON WEIDNER/JERIN JANIGA

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 37

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-18-2024

Time: 10:00

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	4.376		
Initial Depth to Water (ft.):	13.31	Depth to Well Bottom (ft.):	40.66

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
10:15	13.39	240.00	1200.00	4.97	0.22	-5.70	14.30	113.47	19.85	Clear	None	
10:20	13.39	240.00	1200.00	4.65	0.12	-9.30	9.39	93.34	19.79	Clear	None	
10:25	13.39	240.00	1200.00	4.67	0.10	3.30	8.78	89.62	20.13			
10:30	13.39	240.00	1200.00	4.62	0.11	9.00	5.98	87.73	20.65	Clear	None	
10:35	13.39	240.00	1200.00	4.65	0.09	19.40	5.02	87.30	20.61	Clear	None	
10:40	13.39	240.00	1200.00	4.66	0.08	35.50	5.28	87.65	20.51	Clear	None	
10:45	13.39	240.00	1200.00	4.67	0.08	40.50	4.91	87.13	20.60	Clear	None	
10:50	13.39	240.00	1200.00	4.66	0.08	46.50	4.24	85.97	20.68			
10:55	13.39	240.00	1200.00	4.66	0.07	57.50	5.96	85.95	20.84	Clear	None	
11:00	13.39	240.00	1200.00	4.68	0.06	62.40	4.27	85.87	20.97	Clear	None	
11:05	13.39	240.00	1200.00	4.67	0.06	68.40	4.58	85.71	20.84	Clear	None	
11:10	13.39	240.00	1200.00	4.7	0.05	71.00	4.26	85.63	20.86	Clear	None	
11:15	13.39	240.00	1200.00	4.71	0.05	79.00	4.20	85.00	20.76	Clear	None	
11:20	13.39	240.00	1200.00	4.7	0.05	80.60	3.32	84.60	20.87	Clear	None	
11:25	13.39	240.00	1200.00	4.72	0.05	84.10	4.38	84.15	20.81	Clear	None	

Screen Interval: 28.0-38.0

Sampling Data

Method: Low Flow

Date: 07-18-2024 Time: 11:25

Purge Start Time: 10:10

Field Filtered: No

Total Volume Purged (mL): 18000

Field Parameters

STABILIZED PARAMETERS	
pH	4.72
Spec. Cond.(µS/cm)	84.15
Turbidity (NTU)	4.38
Temp.(°C)	20.81
DO (mg/L)	0.05
ORP (mV)	84.10

Sample ID: CAP3Q24-LTW-02-071824

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	83.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	10

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: LTW-03

Well Diameter: 2 Inches

Samplers: ERIN JANIGA|ZACHARY TOMEK

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 25

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-29-2024

Time: 09:50

WATER VOLUME CALCULATION

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

Water Volume = 2.698

Initial Depth to Water (ft.): 15.91 Depth to Well Bottom (ft.): 32.77

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			
10:10	16.40	200.00	1000.00	4.69	0.22	98.70	19.60	99.81	18.73	Clearish	No	
10:15	16.53	200.00	1000.00	4.54	0.04	120.40	24.10	100.72	18.61	Clear	No	
10:20	16.42	200.00	1000.00	4.57	0.01	126.90	24.70	100.82	19.34	Clearish	No	
10:25	16.43	200.00	1000.00	4.56	0.01	132.40	17.00	99.89	19.13	Clear	No	
10:30	16.51	200.00	1000.00	4.55	0.01	131.60	15.00	99.63	18.61	Clear	No	
10:35	16.59	200.00	1000.00	4.55	0.01	133.10	13.20	100.05	18.51	Clear	No	

Screen Interval: 15.0-30.0

Sampling Data

Method: Low Flow

Date: 07-29-2024 Time: 10:35

Purge Start Time: 10:05

Field Filtered: No

Total Volume Purged (mL): 6000

Field Parameters

STABILIZED PARAMETERS	
pH	4.55
Spec. Cond.(µS/cm)	100.05
Turbidity (NTU)	13.20
Temp.(°C)	18.51
DO (mg/L)	0.01
ORP (mV)	133.10

Sample ID: CAP3Q24-LTW-03-072924
 DuplicateID: --
 QA/QC: --

WEATHER CONDITIONS	
Temperature (F):	85.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	6

RECORD OF WELL SAMPLING

 Site Name: Chemours Fayetteville

 Well ID: LTW-04

 Well Diameter: 2 Inches

 Samplers: GRANT WALLACE|SAIRA BOHAM

 Event: Quarterly CAP

 Project Manager: Tracy Ovbey
Purging Data

 Pump Depth: 21

 Pump Loc: within screen

 Method: Peristaltic Pump

 Date: 07-24-2024

 Time: 13:01
WATER VOLUME CALCULATION

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

Water Volume =	2.518
Initial Depth to Water (ft.):	12.73
Depth to Well Bottom (ft.):	28.47

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			
13:20	14.59	200.00	1400.00	5	0.46	155.20	151.00	93.50	24.64	Cloudy	No	
13:25	15.35	200.00	1000.00	4.81	0.43	161.80	171.00	93.38	24.40	Cloudy	No	
13:30	15.76	160.00	800.00	4.54	0.27	170.00	124.00	93.63	25.35	Cloudy	No	
13:35	15.96	160.00	800.00	4.6	0.19	157.00	96.90	93.44	25.37	Cloudy	No	
13:40	16.09	160.00	800.00	4.83	0.15	124.80	87.20	95.66	24.97	Cloudy	No	
13:45	16.22	160.00	800.00	4.94	0.14	103.10	73.40	95.95	25.11	Cloudy	No	
13:50	15.21	160.00	800.00	4.85	0.66	112.90	68.00	91.78	25.70	Cloudy	No	
13:55	16.25	160.00	800.00	4.97	0.60	101.60	57.50	91.83	25.74	Cloudy	No	
14:00	16.25	160.00	800.00	5	0.61	98.80	53.30	91.64	25.79	Cloudy	No	
14:05	16.31	160.00	800.00	4.91	0.53	93.30	66.10	89.77	25.44	Cloudy	No	
14:10	16.32	100.00	500.00	5.03	0.55	86.60	41.60	89.53	25.12	Cloudy	No	
14:15	16.33	100.00	500.00	5.08	0.61	83.00	40.90	89.62	25.29	Cloudy	No	
14:20	16.33	100.00	500.00	5.18	0.99	77.70	37.10	89.49	25.57	Cloudy	No	
14:25	16.23	100.00	500.00	5.18	0.70	78.40	42.40	89.33	26.00	Cloudy	No	
14:30	16.38	100.00	500.00	5.3	0.80	70.00	38.80	90.00	25.70	Cloudy	No	
14:35	16.45	100.00	500.00	5.29	0.50	72.60	33.80	88.24	25.70	Cloudy	No	
14:40	16.73	100.00	500.00	5.26	0.12	68.50	41.20	90.54	24.80	Cloudy	No	
14:45	16.96	100.00	500.00	5.31	0.10	51.80	46.40	91.38	24.42	Cloudy	No	
14:50	16.93	100.00	500.00	5.24	0.08	51.30	46.00	91.64	25.85	Cloudy	No	
14:55	16.77	100.00	500.00	5.24	0.08	50.10	44.30	90.30	25.83	Cloudy	No	
15:00	16.67	100.00	700.00	5.24	0.08	51.10	34.60	89.63	26.14	Cloudy	No	
15:05	16.66	100.00	500.00	5.18	0.07	57.00	32.10	88.96	27.10	Cloudy	No	
15:10	16.60	100.00	500.00	5.18	0.07	58.00	30.60	88.76	27.06	Cloudy	No	
15:15	16.55	100.00	500.00	5.16	0.07	59.90	26.30	88.15	26.35	Cloudy	No	
15:20	16.53	100.00	12700.00	5.17	0.06	58.90	25.00	88.41	26.25	Cloudy	No	
15:25	16.53	100.00	500.00	5.17	0.06	59.00	22.40	88.48	26.83	Cloudy	No	
15:30	16.52	100.00	500.00	5.17	0.06	57.50	21.00	88.98	26.46	Cloudy	No	
15:35	16.52	100.00	500.00	5.18	0.06	56.30	19.12	89.11	26.61	Cloudy	No	
15:40	16.52	100.00	500.00	5.22	0.06	54.00	17.47	88.95	26.85	Cloudy	No	
15:45	16.52	100.00	500.00	5.18	0.06	58.00	15.01	88.84	27.28	Cloudy	No	

 Screen Interval: 12 to 27
Sampling Data

 Method: Low Flow

 Date: 07-24-2024 Time: 15:45

 Purge Start Time: 13:13
 Total Volume Purged (mL): 16000

 Field Filtered: No
Field Parameters

STABILIZED PARAMETERS	
pH	5.18
Spec. Cond.(µS/cm)	88.84
Turbidity (NTU)	15.01
Temp.(°C)	27.28
DO (mg/L)	0.06

 Sample ID: CAP3Q24-LTW-04-072424
 DuplicateID:
 QA/QC:

WEATHER CONDITIONS	
Temperature (F):	89.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

ORP (mV)	58.00
----------	-------

RECORD OF WELL SAMPLING

Site Name:
 Samplers:

Well ID:
 Event:

Well Diameter: Inches
 Project Manager:

Purging Data

Pump Depth:
 Pump Loc:

Method: Date: Time:

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	5.515		
Initial Depth to Water (ft.):	13.32	Depth to Well Bottom (ft.):	47.79

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			
09:48	13.43	200.00	1000.00	4.51	0.12	83.70	9.36	162.64	22.16	Clearish	No	
09:53	13.42	200.00	1000.00	4.41	0.04	108.60	10.40	160.90	21.73	Clear	No	
09:58	13.42	200.00	1000.00	4.37	0.10	92.60	13.10	163.28	22.23	Clear	No	
10:03	13.42	200.00	1000.00	4.36	0.05	79.20	14.40	163.70	22.08	Clear	No	
10:08	13.42	200.00	1000.00	4.37	0.01	70.40	14.20	164.85	22.11	Clear	No	
10:13	13.42	200.00	1000.00	4.36	0.01	65.70	21.40	163.90	21.94	Clear	No	
10:18	13.42	200.00	1000.00	4.37	0.02	65.90	14.50	164.12	22.05	Clear	No	
10:23	13.42	200.00	1000.00	4.46	0.02	70.80	13.30	165.88	22.06	Clear	No	
10:28	13.42	200.00	1000.00	4.4	0.02	64.60	12.90	165.06	21.81	Clear	No	

Screen Interval:

Sampling Data

Method:
 Field Filtered:

Date: Time:

Purge Start Time:
 Total Volume Purged (mL):

Field Parameters

STABILIZED PARAMETERS	
pH	4.40
Spec. Cond. (µS/cm)	165.06
Turbidity (NTU)	12.90
Temp. (°C)	21.81
DO (mg/L)	0.02
ORP (mV)	64.60

Sample ID:
 DuplicateID:
 QA/QC:

WEATHER CONDITIONS	
Temperature (F):	81.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	5

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: OW-28

Well Diameter: 2 Inches

Samplers: BRANDON WEIDNER/JERIN JANIGA

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 27

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-18-2024

Time: 12:10

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	3.674		
Initial Depth to Water (ft.):	10.55	Depth to Well Bottom (ft.):	33.51

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
24 hr												
12:20	10.78	220.00	1100.00	4.23	0.36	160.00	33.40	51.52	29.40	Clear	No	
12:25	10.81	220.00	1100.00	3.95	0.22	150.00	18.90	51.35	29.11	Clear	No	
12:30	10.81	220.00	1100.00	4.07	0.19	138.60	15.50	51.40	29.31	Clear	No	
12:35	10.83	220.00	1100.00	4.15	0.14	134.80	13.10	51.31	27.59	Clear	No	
12:40	10.83	220.00	1100.00	4.08	0.12	132.40	7.70	50.87	27.04	Clear	No	
12:45	10.83	220.00	1100.00	4.11	0.12	128.10	6.92	50.02	27.05	Clear	No	
12:50	10.83	220.00	1100.00	4.2	0.11	122.80	6.14	49.82	28.05	Clear	No	

Screen Interval: 20 to 30

Sampling Data

Method: Low Flow

Date: 07-18-2024 Time: 12:50

Purge Start Time: 12:15

Field Filtered: No

Total Volume Purged (mL): 7700

Field Parameters

STABILIZED PARAMETERS	
pH	4.20
Spec. Cond.(µS/cm)	49.82
Turbidity (NTU)	6.14
Temp.(°C)	28.05
DO (mg/L)	0.11
ORP (mV)	122.80

Sample ID: CAP3Q24-OW-28-071824

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	88.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	9

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: OW-33

Well Diameter: 2 Inches

Samplers: BRANDON WEIDNER

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 27

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-16-2024

Time: 10:55

WATER VOLUME CALCULATION

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

Water Volume =	3.51
Initial Depth to Water (ft.):	10.05
Depth to Well Bottom (ft.):	31.99

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
11:20	10.08	225.00	1125.00	4.25	0.08	30.30	34.90	64.47	23.38	Cloudy	None	
11:25	10.08	225.00	1125.00	4.29	0.10	45.40	31.20	64.37	24.29	Cloudy	None	
11:30	10.08	225.00	1125.00	4.32	0.05	53.00	15.07	64.13	24.08	Clear	None	
11:35	10.05	225.00	1125.00	4.33	0.07	56.40	11.45	64.31	24.04	Clear	None	
11:40	10.08	225.00	1125.00	4.32	0.04	58.20	10.70	64.43	24.87	Clear	None	
11:45	10.08	225.00	1125.00	4.43	0.01	58.20	13.57	63.68	21.74	Clear	None	
11:50	10.08	225.00	1125.00	4.44	0.02	65.20	10.56	63.90	22.60	Clear	None	
11:55	10.08	225.00	1125.00	4.45	0.01	69.10	11.85	63.87	22.87	Clear	None	
12:00	10.08	225.00	1125.00	4.48	0.01	72.20	7.07	63.98	22.56	Clear	None	
12:05	10.08	225.00	1125.00	4.48	0.01	73.10	7.85	63.89	22.71	Clear	None	

Screen Interval: 19 to 29

Sampling Data

Method: Low Flow

Date: 07-16-2024 Time: 12:05

Purge Start Time: 11:15

Total Volume Purged (mL): 11250

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.48
Spec. Cond.(µS/cm)	63.89
Turbidity (NTU)	7.85
Temp.(°C)	22.71
DO (mg/L)	0.01
ORP (mV)	73.10

Sample ID: CAP3Q24-OW-33-071624

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	88.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	3

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: PIW-1D

Well Diameter: 2 Inches

Samplers: BRANDON WEIDNER|ZACHARY TOMEK

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 28

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-23-2024

Time: 13:50

WATER VOLUME CALCULATION

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

Water Volume = 1.76

Initial Depth to Water (ft.): 20.75 Depth to Well Bottom (ft.): 31.72

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
14:00	20.88	260.00	1300.00	3.75	0.13	181.89	416.00	181.69	24.19	Grey	No	
14:05	20.88	260.00	1300.00	3.68	0.10	204.60	364.00	183.01	23.83	Tan	No	
14:10	20.88	260.00	1300.00	3.59	0.09	191.40	1000.00	175.11	24.16	Tan	No	
14:15	20.88	260.00	1300.00	3.48	0.12	225.90	1000.00	180.19	25.02	Brown	No	
14:20	20.88	260.00	1300.00	3.5	0.12	227.40	1000.00	177.62	24.28	Light Brown	No	
14:25	20.88	260.00	1300.00	3.54	0.14	225.80	1000.00	180.53	24.80	Light brown	No	
14:30	20.88	260.00	1300.00	3.82	0.09	119.50	1000.00	154.99	24.77	Light brown	No	Brought sampling tube depth up 1 foot
14:35	20.88	260.00	1300.00	3.72	0.10	142.80	177.00	173.14	25.06	Cloudy	No	
14:40	20.88	260.00	1300.00	3.7	0.17	180.60	1000.00	179.20	25.26	Brown	No	
14:45	20.88	260.00	1300.00	3.69	0.18	195.50	1000.00	183.38	25.05	Brown	No	
14:50	20.88	260.00	1300.00	3.7	0.20	193.90	1000.00	182.71	25.38	Light brown	No	
14:55	20.88	260.00	1300.00	3.71	0.20	194.70	1000.00	182.69	24.90	Brown	No	
15:00	20.88	460.00	2300.00	3.7	0.20	193.80	1000.00	182.57	24.72	Light brown	No	Increased flow due to high turbidity
15:05	20.94	460.00	2300.00	3.7	0.20	201.20	1000.00	181.07	13.11	Light brown	No	
15:10	20.94	460.00	2300.00	3.51	0.20	186.50	1000.00	177.75	22.97	Light brown	No	
15:15	20.94	460.00	2300.00	3.43	0.20	212.80	1000.00	177.77	22.67	Brown	No	
15:20	20.94	460.00	2300.00	3.44	0.20	217.90	1000.00	177.00	23.21	Brown	No	
15:25	20.94	460.00	2300.00	3.49	0.20	214.50	1000.00	178.03	23.03	Brown	No	
15:30	20.94	460.00	2300.00	3.49	0.21	211.50	1000.00	180.66	22.94	Brown	No	
15:35	20.94	460.00	2300.00	3.53	0.22	210.00	1000.00	182.51	23.29	Brown	No	
15:40	20.94	460.00	2300.00	3.56	0.23	207.40	1000.00	184.53	22.89	Brown	No	

Screen Interval: 24.5 to 29.5

Sampling Data

Method: Five Well Volume

Date: 07-23-2024 Time: 15:40

Purge Start Time: 13:55

Field Filtered: Yes

Total Volume Purged (mL): 36300

Field Parameters

STABILIZED PARAMETERS	
pH	3.56
Spec. Cond. (µS/cm)	184.53
Turbidity (NTU)	>1000
Temp. (°C)	22.89
DO (mg/L)	0.23
ORP (mV)	207.40

Sample ID: CAP3Q24-PIW-1D-072324-Z

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	84.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	6

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: PIW-3D

Well Diameter: 2 Inches

Samplers: BRANDON WEIDNER|ZACHARY TOMEK

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 25

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-23-2024 Time: 12:05

WATER VOLUME CALCULATION

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

Water Volume =	1.232
Initial Depth to Water (ft.):	19.08
Depth to Well Bottom (ft.):	26.78

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
12:15	19.44	200.00	0.00	5.06	0.98	128.20	88.20	91.52	22.62	Cloudy	No	
12:20	19.44	200.00	1000.00	4.68	0.15	113.50	69.30	88.60	21.64	Clearish	No	
12:25	19.44	200.00	1000.00	4.09	0.13	133.80	34.40	87.67	21.92	Clearish	No	
12:30	19.44	200.00	1000.00	3.91	0.08	89.13	22.90	89.22	21.58	Clear	No	
12:35	19.44	200.00	1000.00	3.88	0.05	131.00	13.90	88.84	21.54	Clear	None	
12:40	19.44	200.00	1000.00	3.89	0.04	125.80	10.60	88.76	21.77	Clear	None	
12:45	19.44	200.00	1000.00	3.96	0.03	118.70	5.75	88.32	21.69	Clear	No	
12:50	19.44	200.00	1000.00	4.07	0.03	116.50	5.72	87.56	21.68	Clear	None	

Screen Interval: 19 to 24

Sampling Data

Method: Low Flow

Date: 07-23-2024 Time: 12:50

Purge Start Time: 12:15

Field Filtered: No

Total Volume Purged (mL): 7000

Field Parameters

STABILIZED PARAMETERS	
pH	4.07
Spec. Cond. (µS/cm)	87.56
Turbidity (NTU)	5.72
Temp. (°C)	21.68
DO (mg/L)	0.03
ORP (mV)	116.50

Sample ID: CAP3Q24-PIW-3D-072324

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	85.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	5

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: PIW-7D

Well Diameter: 2 Inches

Samplers: BROCK SHATTUCK|DEBORAH AYERS

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 35

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-23-2024

Time: 13:50

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	4.272		
Initial Depth to Water (ft.):	10.77	Depth to Well Bottom (ft.):	37.47

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			
14:01	10.80	300.00	1500.00	5.29	0.04	-173.80	88.70	79.62	21.40	Slight haze	Sulfur smell	
14:06	10.79	300.00	1500.00	5.19	0.06	-162.90	47.40	79.46	20.52	Very slight haze	Sulfur smell	
14:11	10.80	300.00	1500.00	5.2	0.03	-169.20	28.70	80.79	20.61	Slightly cloudy	Sulfur smell	
14:16	10.80	300.00	1500.00	5.25	0.00	-180.30	17.76	83.32	20.85	Clear	Sulfur smell	
14:21	10.80	300.00	1500.00	5.24	0.00	-177.00	16.01	82.49	20.63	Clear	Sulfur smell	
14:26	10.80	300.00	1500.00	5.2	0.00	-182.90	12.97	83.46	20.81	Clear	Sulfur smell	

Screen Interval: 29 to 34

Sampling Data

Method: Low Flow

Date: 07-23-2024 Time: 14:26

Purge Start Time: 13:56

Field Filtered: No

Total Volume Purged (mL): 9000

Field Parameters

STABILIZED PARAMETERS	
pH	5.20
Spec. Cond.(µS/cm)	83.46
Turbidity (NTU)	12.97
Temp.(°C)	20.81
DO (mg/L)	0.00
ORP (mV)	-182.90

Sample ID: CAP3Q24-PIW-7S-072324

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	88.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	7

RECORD OF WELL SAMPLING

Site Name:

Well ID:

Well Diameter: Inches

Samplers:

Event:

Project Manager:

Purging Data

Pump Depth:

Pump Loc:

Method:

Date:

Time:

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.595		
Initial Depth to Water (ft.):	10.29	Depth to Well Bottom (ft.):	20.26

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			
11:00	10.69	200.00	1200.00	5.1	0.18	51.50	29.90	122.83	21.87	Cloudy	No	
11:05	10.70	200.00	1000.00	5.06	0.12	63.00	36.50	122.42	21.99			
11:10	10.70	180.00	900.00	5.2	0.12	49.80	64.80	124.41	22.60	Cloudy	No	
11:15	10.68	180.00	900.00	5.2	0.10	44.11	43.00	120.73	22.39	Cloudy	No	
11:20	10.68	180.00	900.00	5.19	0.10	43.30	31.90	118.72	22.86	Cloudy	No	
11:25	10.68	180.00	900.00	5.22	0.10	42.60	28.20	119.27	22.74	Cloudy	No	
11:30	10.68	180.00	900.00	5.24	0.09	39.20	22.40	118.68	22.89	Cloudy	No	
11:35	10.68	180.00	900.00	5.3	0.08	36.80	16.26	118.12	22.65	Clear	No	
11:40	10.68	180.00	900.00	5.33	0.07	32.90	16.25	118.26	22.69	Clear	No	
11:45	10.68	180.00	720.00	5.34	0.08	30.60	11.10	115.66	22.81	Clear	No	
11:50	10.68	180.00	900.00	5.36	0.08	27.70	9.61	93.23	22.97	Clear	No	
11:55	10.68	180.00	900.00	5.44	0.08	20.00	7.48	107.06	24.20	Clear	No	
12:15	10.68	180.00	3600.00	5.43	0.09	48.90	12.55	126.19	24.84	Clear	No	
12:20	10.69	180.00	900.00	5.2	0.05	56.50	4.17	126.06	24.95	Clear	No	
12:25	10.69	180.00	900.00	4.81	0.05	68.80	3.04	127.44	25.14	Clear	No	
12:30	10.68	180.00	720.00	4.75	0.05	66.80	2.88	129.27	25.29	Clear	No	
12:35	10.68	180.00	900.00	4.76	0.05	64.10	2.94	129.05	25.61	Clear	No	

Screen Interval:

Sampling Data

Method:

Date: Time:

Purge Start Time:

Field Filtered:

Total Volume Purged (mL):

Field Parameters

STABILIZED PARAMETERS	
pH	4.76
Spec. Cond.(µS/cm)	129.05
Turbidity (NTU)	2.94
Temp.(°C)	25.61
DO (mg/L)	0.05
ORP (mV)	64.10

Sample ID:

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: PW-04

Well Diameter: 2 Inches

Samplers: GRANT WALLACE|SAIRA BOHAM

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: --

Pump Loc: --

Method: Bailer

Date: 07-22-2024

Time: 11:15

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.266		
Initial Depth to Water (ft.):	29.15	Depth to Well Bottom (ft.):	30.81

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			
11:35	29.15	--	0.00	3.28	3.37	130.50	244.00	388.04	22.84	Cloudy	No	Volume = 1125 ml
10:25	29.15	--	0.00	3.47	4.46	386.60	31.70	387.60	22.56	Cloudy	No	Volume = 1005ml
09:30	29.18	--	0.00	3.09	2.26	349.80	44.60	468.89	21.32	Cloudy	No	Volume = 1200 ml
09:00	29.12	--	0.00	3.14	1.49	456.00	22.90	458.34	20.92	Clear	No	Volume = 1250 ml
09:55	29.03	--	0.00	3.34	0.01	441.20	64.40	820.18	24.27	Cloudy	No	Volume = 1305 ml

Screen Interval: 17-27

Sampling Data

Method: Five Well Volume
Field Filtered: Yes

Date: 07-29-2024 Time: 09:55

Purge Start Time: 11:08
Total Volume Purged (mL): 0

Field Parameters

STABILIZED PARAMETERS	
pH	3.34
Spec. Cond.(µS/cm)	820.18
Turbidity (NTU)	64.40
Temp.(°C)	24.27
DO (mg/L)	0.01
ORP (mV)	441.20

Sample ID: CAP3Q24-PW-04-072924-Z
DuplicateID: --
QA/QC: --

WEATHER CONDITIONS	
Temperature (F):	80.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	5

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: PW-06

Well Diameter: 2 Inches

Samplers: EDWARD ELLIOTT|KEN STUART

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 28

Pump Loc: within screen

Method: PFC Free Bladder Pump

Date: 07-23-2024

Time: 13:28

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.85		
Initial Depth to Water (ft.):	21.31	Depth to Well Bottom (ft.):	32.85

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
24 hr												
13:53	21.85	140.00	1680.00	4.68	3.80	294.20	46.00	51.35	25.94	Clear	None	Bladder pump used to sample
13:58	21.99	140.00	700.00	4.47	4.69	306.20	42.10	47.48	23.68	Clear	None	
14:03	21.99	140.00	700.00	4.49	5.05	306.30	35.20	46.72	23.83	Clear	None	
14:08	21.99	140.00	700.00	4.47	6.55	317.20	26.80	43.73	23.64	Clear	None	
14:13	22.01	140.00	700.00	4.43	7.26	321.90	11.70	40.86	23.57	Clear	None	
14:18	21.93	140.00	700.00	4.52	7.23	327.30	7.01	41.55	24.59	Clear	None	
14:23	21.87	140.00	700.00	4.38	7.12	330.60	4.62	42.17	24.40	Clear	None	

Screen Interval: 19 to 29

Sampling Data

Method: Low Flow

Date: 07-23-2024 Time: 14:23

Purge Start Time: 13:41

Total Volume Purged (mL): 5880

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	4.38
Spec. Cond. (µS/cm)	42.17
Turbidity (NTU)	4.62
Temp. (°C)	24.40
DO (mg/L)	7.12
ORP (mV)	330.60

Sample ID: CAP3Q24-PW-06-072324

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	89.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	7

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: PW-07

Well Diameter: 2 Inches

Samplers: CHARLES PACE|HERBERT WATTS

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: --

Pump Loc: --

Method: Bailer

Date: 07-08-2024

Time: 10:40

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.315		
Initial Depth to Water (ft.):	39.8	Depth to Well Bottom (ft.):	41.77

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
11:00	39.80	NM	0.00	5.88	3.00	128.20	7.52	55.41	27.33	Clear	No	Purged 0.32 gallons from well
09:15	39.81	NM	0.00	7.6	2.21	-14.90	NM	844.87	28.76	NM	No	Purged 0.319 gallons from well. 7/9/24
15:34	40.00	NM	0.00	5.46	8.68	194.60	89.50	46.26	26.70	Cloudy	No	7/9/24, purged 0.288 gallons
15:52	NM	NM	0.00	5.19	7.87	151.30	458.00	474.73	21.40	Brown	Slight	7/10/24, purged 0.291 gallons
08:45	39.81	NM	0.00	7.69	8.51	76.00	48.50	491.22	22.19	Cloudy	No	7/10/24, purged 0.343 gallons

Screen Interval: 28 to 38

Sampling Data

Method: Five Well Volume

Date: 07-11-2024

Time: 08:35

Purge Start Time: --

Field Filtered: Yes

Total Volume Purged (mL): 5962

Field Parameters

STABILIZED PARAMETERS	
pH	6.35
Spec. Cond.(µS/cm)	190.39
Turbidity (NTU)	66.80
Temp.(°C)	22.66
DO (mg/L)	9.05
ORP (mV)	108.70

Sample ID: CAP3Q24-PW-07-071124
 DuplicateID: CAP3Q24-PW-07-071124-Z
 QA/QC: --

WEATHER CONDITIONS	
Temperature (F):	86.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	4

RECORD OF WELL SAMPLING

 Site Name: Chemours Fayetteville

 Well ID: PW-09

 Well Diameter: 2 Inches

 Samplers: BROCK SHATTUCK|KAYTLYN MARINGER

 Event: Quarterly CAP

 Project Manager: Tracy Ovbey
Purging Data

 Pump Depth: 50
 Pump Loc: within screen

 Method: Double valve pump Date: 07-11-2024 Time: 10:27
WATER VOLUME CALCULATION

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

Water Volume =	5.333
Initial Depth to Water (ft.):	25.6
Depth to Well Bottom (ft.):	58.93

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			
10:35	29.00	500.00	4000.00	9.79	8.02	34.40	10.56	110.30	18.62	Clear	No	
10:40	30.50	500.00	2500.00	9.95	7.84	35.10	10.10	116.50	18.39	Clear	No	
10:45	31.60	500.00	2500.00	11.23	3.73	5.70	12.71	346.15	18.53	Clear	No	
10:50	32.70	500.00	2500.00	10.91	2.33	-28.40	28.90	203.73	18.39	Clear	No	
10:55	33.20	500.00	2500.00	9.94	1.73	-34.70	40.10	129.60	18.70	Clear	No	
11:00	33.60	500.00	2500.00	9.26	1.29	-40.50	37.40	107.61	18.45	Clear	No	
11:05	33.80	500.00	2500.00	8.49	0.78	-149.10	31.00	98.58	18.50	Clear	No	
11:10	34.00	500.00	2500.00	8.02	0.83	-117.60	30.50	92.93	18.66	Clear	No	
11:15	34.00	500.00	2500.00	7.7	0.59	-87.40	27.00	88.61	18.51	Clear	No	
11:20	34.00	500.00	2500.00	7.48	0.60	-78.50	28.40	84.96	18.65	Clear	No	
11:25	34.00	500.00	2500.00	7.4	0.47	-65.10	27.40	83.41	18.43	Clear	No	
11:30	34.00	500.00	2500.00	7.28	0.47	-60.50	25.80	81.85	18.46	Clear	No	
11:35	34.00	500.00	2500.00	7.19	0.44	-54.80	24.60	80.14	18.46	Clear	No	
11:40	34.00	500.00	2500.00	7.12	0.40	-50.20	23.80	78.07	18.49	Clear	No	
11:45	34.00	500.00	2500.00	7.03	0.47	-49.80	23.70	76.22	18.44	Clear	No	
11:50	34.00	500.00	2500.00	7.01	0.44	-46.90	23.40	75.91	18.44	Clear	No	
11:55	33.80	400.00	2000.00	6.95	0.28	-44.90	23.90	73.66	18.70	Clear	No	Flow rate reduced to see effect on turbidity.
12:00	33.20	400.00	2000.00	6.94	0.41	-43.80	21.90	73.21	18.72	Clear	No	
12:05	32.80	400.00	2000.00	6.86	0.43	-40.00	21.20	72.71	18.73	Clear	No	
12:10	32.60	400.00	2000.00	6.89	0.45	-40.20	21.70	72.19	18.62	Clear	No	
12:15	31.80	300.00	1500.00	6.86	0.27	-39.30	23.50	71.20	19.01	Clear	No	Reduced flow rate to stabilize turbidity
12:20	31.40	300.00	1500.00	6.77	0.25	-44.50	20.40	71.44	19.05	No	Clear	
12:25	31.10	300.00	1500.00	6.77	0.26	-43.40	18.30	71.02	19.09	Clear	No	
12:30	30.80	300.00	1500.00	6.82	0.27	-41.60	19.05	70.84	19.10	Clear	No	
12:35	30.60	300.00	1500.00	6.84	0.25	-39.10	18.35	70.40	18.85	Clear	No	

 Screen Interval: 44 to 54
Sampling Data

 Method: Low Flow
 Field Filtered: No

 Date: 07-11-2024 Time: 12:35

 Purge Start Time: 10:27
 Total Volume Purged (mL): 57000
Field Parameters

STABILIZED PARAMETERS	
pH	6.84
Spec. Cond.(µS/cm)	70.40
Turbidity (NTU)	18.35
Temp.(°C)	18.85
DO (mg/L)	0.25
ORP (mV)	-39.10

 Sample ID: CAP3Q24-PW-09-071124
 DuplicateID:
 QA/QC:

WEATHER CONDITIONS	
Temperature (F):	83.00
Sky:	Partly Sunny
Precipitation:	None
Wind (mph)	10

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: PZ-22

Well Diameter: 1 Inches

Samplers: ERIN JANIGA|ZACHARY TOMEK

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 45

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-25-2024

Time: 12:48

WATER VOLUME CALCULATION

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

Water Volume = 1.572

Initial Depth to Water (ft.): 12.42 Depth to Well Bottom (ft.): 50.76

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			
13:05	12.42	160.00	800.00	4.9	0.21	-5.70	69.40	137.15	23.86	Hazy	Yes	
13:10	12.42	160.00	960.00	4.85	0.09	-11.80	118.00	133.96	24.10	Hazy	Yes	
13:15	12.42	160.00	800.00	4.93	0.05	-24.70	154.00	133.10	24.21	Hazy	Yes	
13:20	12.42	160.00	800.00	4.9	0.01	-32.60	116.00	133.15	21.14	Hazy	Yes	
13:25	12.42	160.00	800.00	4.88	0.02	-40.70	60.90	134.42	24.34	Hazy	No	
13:30	12.42	160.00	800.00	4.87	0.02	-44.00	40.10	134.50	24.45	Clearish	Yes	
13:35	12.42	160.00	800.00	4.89	0.03	-48.20	32.40	135.86	24.47	Clear	Yes	
13:40	12.42	160.00	800.00	4.89	0.01	-51.10	26.50	135.79	24.73	Clear	Yes	
13:45	12.42	160.00	800.00	4.9	0.02	-53.80	20.50	135.96	24.49	Clear	Yes	
13:50	12.42	160.00	800.00	4.89	0.01	-55.50	17.20	136.54	24.58	Clear	Yes	
13:55	12.42	160.00	800.00	4.89	0.01	-55.80	15.80	137.63	24.89	Clear	Yes	
14:00	12.42	160.00	800.00	4.88	0.01	-57.40	15.00	137.80	24.97	Clear	Yes	

Screen Interval: 42.5-47.5

Sampling Data

Method: Low Flow

Date: 07-25-2024 Time: 14:00

Purge Start Time: 13:00

Field Filtered: No

Total Volume Purged (mL): 9760

Field Parameters

STABILIZED PARAMETERS	
pH	4.88
Spec. Cond.(µS/cm)	137.80
Turbidity (NTU)	15.00
Temp.(°C)	24.97
DO (mg/L)	0.01
ORP (mV)	-57.40

Sample ID: CAP3Q24-PZ-22-072524

DuplicateID: --

QA/QC: --

WEATHER CONDITIONS	
Temperature (F):	84.00
Sky:	Cloudy
Precipitation:	None
Wind (mph)	7

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: SMW-10

Well Diameter: 2 Inches

Samplers: FELIPE SILVA|SAIRA BOHAM

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 47

Pump Loc: within screen

Method: Peristaltic Pump

Date: 07-09-2024 Time: 12:57

WATER VOLUME CALCULATION

= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	3.717		
Initial Depth to Water (ft.):	29.83	Depth to Well Bottom (ft.):	52.06

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	29.85	250.00	2500.00	5.14	0.57	44.40	12.77	90.67	20.66	Clear	No	
13:15	29.85	250.00	1250.00	5.15	0.34	53.60	8.72	89.92	20.67	Clear		
13:20	29.87	250.00	1250.00	5.17	0.24	51.40	6.58	89.10	21.05	Clear	No	
13:25	29.86	250.00	1250.00	5.14	0.20	49.50	6.41	89.52	21.53	Clear	No	
13:30	29.86	250.00	1250.00	5.13	0.14	50.60	5.30	89.78	22.07	Clear	No	
13:35	29.86	250.00	1250.00	5.16	0.11	49.80	5.52	89.36	21.37	Clear	No	
13:40	29.83	250.00	1250.00	5.2	0.14	49.30	4.80	88.41	21.25	Clear	No	
13:45	29.86	250.00	1250.00	5.22	0.13	48.10	4.68	88.47	21.40	Clear	No	
13:50	29.86	250.00	1250.00	5.29	0.10	42.90	4.67	88.71	22.37	Clear	No	
13:55	26.89	250.00	1250.00	5.38	0.06	37.80	3.52	87.67	22.82	Clear	No	
14:00	29.86	250.00	1250.00	5.41	0.07	36.10	3.02	85.78	22.62	Clear	No	
14:05	29.86	250.00	1250.00	5.41	0.10	36.80	2.78	80.86	22.37	Clear	No	
14:10	29.86	250.00	1250.00	5.39	0.05	35.90	2.97	77.53	22.30	Clear	No	
14:15	29.86	250.00	1250.00	5.51	0.05	33.80	2.78	78.61	22.48	Clear	No	
14:20	29.86	250.00	1250.00	5.43	0.07	32.30	1.87	77.58	22.76	Clear	No	
14:25	29.86	250.00	1250.00	5.45	0.06	30.60	1.92	78.38	23.10	Clear	No	
14:30	29.86	250.00	1250.00	5.46	0.05	31.60	1.57	78.57	23.05	Clear	No	
14:35	29.86	250.00	1250.00	5.41	0.05	32.10	1.51	76.80	22.20	Clear	No	
14:40	29.86	250.00	1250.00	5.4	0.05	33.40	1.58	77.26	22.59	Clear	No	

Screen Interval: 45.0-60.0

Sampling Data

Method: Low Flow
Field Filtered: No

Date: 07-09-2024 Time: 14:40

Purge Start Time: 13:00
Total Volume Purged (mL): 25000

Field Parameters

STABILIZED PARAMETERS	
pH	5.40
Spec. Cond.(µS/cm)	77.26
Turbidity (NTU)	1.58
Temp.(°C)	22.59
DO (mg/L)	0.05
ORP (mV)	33.40

Sample ID: CAP3Q24-SMW-10-070924
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	90.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	5

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: SMW-11

Well Diameter: 2 Inches

Samplers: KAYTLYN MARINGER|SAIRA BOHAM

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 20

Pump Loc: within screen

Method: Peristaltic Pump Date: 07-18-2024 Time: 14:42

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.506		
Initial Depth to Water (ft.):	16.39	Depth to Well Bottom (ft.):	25.8

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
24 hr												
14:50	16.43	200.00	1200.00	4.47	3.79	331.80	68.70	50.46	23.21	Clear	No	
14:55	16.43	200.00	1000.00	4.04	3.16	363.00	44.50	50.45	22.62	Clear	No	
15:00	16.43	200.00	1000.00	3.88	3.52	377.50	6.75	50.42	22.72	Clear	No	
15:05	16.43	200.00	1000.00	3.86	3.58	383.80	3.45	50.38	22.92	Clear	No	
15:10	16.43	200.00	1000.00	3.86	3.75	386.20	1.20	50.32	22.77	Clear	No	

Screen Interval: 13 to 23

Sampling Data

Method: Low Flow
Field Filtered: No

Date: 07-18-2024 Time: 15:10

Purge Start Time: 14:44
Total Volume Purged (mL): 5200

Field Parameters

STABILIZED PARAMETERS	
pH	3.86
Spec. Cond.(µS/cm)	50.32
Turbidity (NTU)	1.20
Temp.(°C)	22.77
DO (mg/L)	3.75
ORP (mV)	386.20

Sample ID: CAP3Q24-SMW-11-071824
DuplicateID:
QA/QC:

WEATHER CONDITIONS	
Temperature (F):	82.00
Sky:	Partly Cloudy
Precipitation:	None
Wind (mph)	10

RECORD OF WELL SAMPLING

Site Name: Chemours Fayetteville

Well ID: SMW-12

Well Diameter: 2 Inches

Samplers: KAYTLYN MARINGER|SAIRA BOHAM

Event: Quarterly CAP

Project Manager: Tracy Ovbey

Purging Data

Pump Depth: 98

Pump Loc: within screen

Method: Double valve pump

Date: 07-16-2024

Time: 11:39

WATER VOLUME CALCULATION

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

Water Volume =	2.157
Initial Depth to Water (ft.):	90.37
Depth to Well Bottom (ft.):	103.85

Time	DTW	Pump Rate	Vol.	pH	DO	Redox	Turbidity	Spec. Cond.	Temp.	Color	Odor	Comments
	ft	mL/min	mL	pH units	mg/L	mV	NTU	µS/cm	°C			
24 hr												
12:20	90.37	150.00	750.00	3.62	0.55	297.80	41.10	182.62	24.59	Clear	No	
12:25	90.37	150.00	750.00	3.6	0.48	299.00	41.30	182.22	24.72	Clear	No	
12:30	90.37	150.00	750.00	3.76	0.41	260.70	37.00	181.33	24.25	Clear	No	
12:35	90.37	150.00	750.00	3.65	0.34	209.70	26.60	182.40	24.28	Clear	No	
12:40	90.37	150.00	750.00	3.59	0.33	192.00	22.20	180.32	23.93	Clear	No	
12:45	90.37	150.00	750.00	3.43	0.37	208.90	20.40	180.07	24.17	Clear	No	
12:50	90.37	150.00	750.00	3.61	0.41	204.70	18.54	180.39	24.21	Clear	No	
12:55	90.37	150.00	750.00	3.62	0.43	212.90	14.53	185.82	23.81	Clear	No	
13:00	90.37	150.00	750.00	3.61	0.40	210.10	14.28	185.27	24.09	Clear	No	

Screen Interval: 88 to 98

Sampling Data

Method: Low Flow

Date: 07-16-2024 Time: 13:00

Purge Start Time: 12:15

Total Volume Purged (mL): 6750

Field Filtered: No

Field Parameters

STABILIZED PARAMETERS	
pH	3.61
Spec. Cond. (µS/cm)	185.27
Turbidity (NTU)	14.28
Temp. (°C)	24.09
DO (mg/L)	0.40
ORP (mV)	210.10

Sample ID: CAP3Q24-SMW-12-071624

DuplicateID:

QA/QC:

WEATHER CONDITIONS	
Temperature (F):	89.00
Sky:	Sunny
Precipitation:	None
Wind (mph)	9

Appendix D

Laboratory Reports and DVM

Report



ADQM Data Review

Site: Chemours Fayetteville

Project: 2024 Tarheel Sampling 3Q24

Project Reviewer: Bridget Gavaghan



Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP3Q24-EQBLK-IS-071124	320-113747-1	Blank Water	N	07/11/2024	14:10	EB
CAP3Q24-EQBLK-PP-SW-071124	320-113747-2	Blank Water	N	07/11/2024	14:00	EB
CFR-TARHEEL-24-070224	320-113809-1	Surface Water	N	07/02/2024	23:01	FS
CFR-TARHEEL-24-070424	320-113809-2	Surface Water	N	07/04/2024	23:01	FS
CFR-TARHEEL-24-070824	320-113809-3	Surface Water	N	07/08/2024	23:01	FS
CFR-TARHEEL-24-071124	320-113809-4	Surface Water	N	07/11/2024	23:01	FS
CAP3Q24-CFR-TARHEEL-071124	320-113821-1	Surface Water	N	07/11/2024	10:00	FS
CAP3Q24-CFR-TARHEEL-24-071124	320-113821-2	Surface Water	N	07/11/2024	22:36	FS
CFR-TARHEEL-24-075124	320-113846-1	Surface Water	N	07/15/2024	23:01	FS
CFR-TARHEEL-24-075124-D	320-113846-2	Surface Water	N	07/15/2024	23:01	DUP
CFR-TARHEEL-24-071824	320-114205-1	Surface Water	N	07/18/2024	23:01	FS
CFR-TARHEEL-24-072224	320-114205-2	Surface Water	N	07/22/2024	23:01	FS
CFR-TARHEEL-24-072524	320-114205-3	Surface Water	N	07/25/2024	23:01	FS
CFR-TARHEEL-24-072924	320-114361-1	Surface Water	N	07/29/2024	23:01	FS
CFR-TARHEEL-24-080124	320-114361-2	Surface Water	N	08/01/2024	23:01	FS
CFR-TARHEEL-24-080424	320-114550-1	Surface Water	N	08/04/2024	23:01	FS
CFR-TARHEEL-24-080524	320-114550-2	Surface Water	N	08/05/2024	23:01	FS
CFR-TARHEEL-13-080624	320-114550-3	Surface Water	N	08/06/2024	12:01	FS
CFR-TARHEEL-080624	320-114550-4	Surface Water	N	08/06/2024	12:40	FS
CFR-TARHEEL-081424	320-114718-1	Surface Water	N	08/14/2024	11:35	FS
CFR-TARHEEL-081524	320-114718-2	Surface Water	N	08/15/2024	11:10	FS
CFR-TARHEEL-082024	320-114913-1	Surface Water	N	08/20/2024	12:45	FS
CFR-TARHEEL-24-082124	320-114913-2	Surface Water	N	08/21/2024	23:01	FS
CFR-TARHEEL-24-082124-D	320-114913-3	Surface Water	N	08/21/2024	23:01	DUP



Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CFR-TARHEEL-24-082324	320-114913-4	Surface Water	N	08/23/2024	23:01	FS
CFR-TARHEEL-24-082624	320-115212-1	Surface Water	N	08/26/2024	23:01	FS
CFR-TARHEEL-24-082924	320-115212-2	Surface Water	N	08/29/2024	23:01	FS
CFR-TARHEEL-24-090224	320-115212-3	Surface Water	N	09/02/2024	23:01	FS
CFR-TARHEEL-24-090424	320-115212-4	Surface Water	N	09/04/2024	23:01	FS
CFR-TARHEEL-24-090924	320-115487-1	Surface Water	N	09/09/2024	23:01	FS
CFR-TARHEEL-24-091224	320-115487-2	Surface Water	N	09/12/2024	23:01	FS
CFR-TARHEEL-24-091224	320-115529-1	Surface Water	N	09/12/2024	23:01	FS
CFR-TARHEEL-24-091224-D	320-115529-2	Surface Water	N	09/12/2024	23:01	DUP
CFR-TARHEEL-24-091624	320-115574-1	Surface Water	N	09/16/2024	23:01	FS
CFR-TARHEEL-24-091524	320-115574-2	Surface Water	N	09/15/2024	23:01	FS
CFR-TARHEEL-11-091724	320-115574-3	Surface Water	N	09/17/2024	10:01	FS
CFR-TARHEEL-092424	320-115835-1	Surface Water	N	09/24/2024	12:45	FS
CFR-TARHEEL-24-092624	320-115835-2	Surface Water	N	09/26/2024	23:01	FS
CFR-TARHEEL-24-092724	320-115835-3	Surface Water	N	09/27/2024	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				
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 the range of not frozen to 6°C with a target of 4°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: Associated LCS and/or LCSD analysis had relative percent recovery (RPR) values less than the lower control limit but above 10%. 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
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-090424	09/04/2024	320-115212-4	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535

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-24-070224	07/02/2024	320-113809-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	Hfpo Dimer Acid	0.0040	UG/L	PQL		0.0040	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	R-PSDCA	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PEPA	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PFO3OA	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-24-082624	08/26/2024	320-115212-1	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	NVHOS, Acid Form	0.0030	UG/L	PQL		0.0030	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	Perfluoro(2-ethoxyethane)sulfonic	0.0020	UG/L	PQL		0.0020	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-24-091224	09/12/2024	320-115529-1	R-PSDA	0.0083	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224	09/12/2024	320-115529-1	Hydrolyzed PSDA	0.0039	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224	09/12/2024	320-115529-1	R-EVE	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-075124	07/15/2024	320-113846-1	R-PSDA	0.0045	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-082124	08/21/2024	320-114913-2	R-PSDA	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-081424	08/14/2024	320-114718-1	R-PSDA	0.0093	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-081424	08/14/2024	320-114718-1	R-EVE	0.0033	UG/L	PQL		0.0020	J	537 Modified		3535

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-24-090924	09/09/2024	320-115487-1	R-PSDA	0.0044	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224	09/12/2024	320-115487-2	R-PSDA	0.0056	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224	09/12/2024	320-115487-2	Hydrolyzed PSDA	0.0023	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224-D	09/12/2024	320-115529-2	R-PSDA	0.0075	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224-D	09/12/2024	320-115529-2	Hydrolyzed PSDA	0.0035	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091224-D	09/12/2024	320-115529-2	R-EVE	0.0030	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091524	09/15/2024	320-115574-2	R-PSDA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-091624	09/16/2024	320-115574-1	R-PSDA	0.0049	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-092624	09/26/2024	320-115835-2	R-PSDA	0.0020	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-092724	09/27/2024	320-115835-3	R-PSDA	0.0029	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070424	07/04/2024	320-113809-2	R-PSDA	0.0054	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070824	07/08/2024	320-113809-3	R-PSDA	0.0068	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070824	07/08/2024	320-113809-3	R-PSDA	0.0061	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070824	07/08/2024	320-113809-3	Hydrolyzed PSDA	0.0033	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-071124	07/11/2024	320-113809-4	R-PSDA	0.021	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-071124	07/11/2024	320-113809-4	R-PSDA	0.018	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-071124	07/11/2024	320-113809-4	Hydrolyzed PSDA	0.0030	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-071124	07/11/2024	320-113809-4	R-EVE	0.0040	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-071824	07/18/2024	320-114205-1	R-PSDA	0.0030	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-071824	07/18/2024	320-114205-1	Hydrolyzed PSDA	0.0021	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-072524	07/25/2024	320-114205-3	R-PSDA	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-075124-D	07/15/2024	320-113846-2	R-PSDA	0.0053	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-080424	08/04/2024	320-114550-1	R-PSDA	0.0042	UG/L	PQL		0.0020	J	537 Modified		3535

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-24-080524	08/05/2024	320-114550-2	R-PSDA	0.0025	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-082124-D	08/21/2024	320-114913-3	R-PSDA	0.0030	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-082324	08/23/2024	320-114913-4	R-PSDA	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-071124	07/11/2024	320-113821-1	R-PSDA	0.0055	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-071124	07/11/2024	320-113821-1	Hydrolyzed PSDA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-071124	07/11/2024	320-113821-1	R-EVE	0.0021	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-24-071124	07/11/2024	320-113821-2	R-PSDA	0.0045	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-24-071124	07/11/2024	320-113821-2	Hydrolyzed PSDA	0.0028	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-24-071124	07/11/2024	320-113821-2	R-EVE	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-080624	08/06/2024	320-114550-4	R-PSDA	0.0036	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-081524	08/15/2024	320-114718-2	R-PSDA	0.0053	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-081524	08/15/2024	320-114718-2	R-EVE	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-082024	08/20/2024	320-114913-1	R-PSDA	0.0047	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-082024	08/20/2024	320-114913-1	R-EVE	0.0028	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-092424	09/24/2024	320-115835-1	R-PSDA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-11-091724	09/17/2024	320-115574-3	R-PSDA	0.019	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-11-091724	09/17/2024	320-115574-3	Hydrolyzed PSDA	0.0052	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-11-091724	09/17/2024	320-115574-3	R-EVE	0.0052	UG/L	PQL		0.0020	J	537 Modified		3535

Site: Fayetteville

Sampling Program: 2024 Tarheel Sampling

Validation Options: LABSTATS

Validation Reason Code: Associated LCS and/or LCSD analysis had relative percent recovery (RPR) values less than the lower control limit. 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-24-082924	08/29/2024	320-115212-2	R-PSDA	0.0028	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-090224	09/02/2024	320-115212-3	R-PSDA	0.0035	UG/L	PQL		0.0020	J	537 Modified		3535

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-24-082624	08/26/2024	320-115212-1	PMPA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PPF Acid	0.012	UG/L	PQL		0.0050	J	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PFMOAA	0.0020	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PPF Acid	0.020	UG/L	PQL		0.0050	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFMOAA	0.0065	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	Perfluoroheptanoic Acid	0.0035	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-082624	08/26/2024	320-115212-1	PFO2HxA	0.0022	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	Perfluoroheptanoic Acid	0.0042	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PFO2HxA	0.0044	ug/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	R-PSDA	0.0034	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	PMPA	0.0061	UG/L	PQL		0.0020	J	537 Modified		3535
CFR-TARHEEL-24-070224	07/02/2024	320-113809-1	Hfpo Dimer Acid	0.0041	UG/L	PQL		0.0040	J	537 Modified		3535
CFR-TARHEEL-24-080424	08/04/2024	320-114550-1	PPF Acid	0.015	UG/L	PQL		0.0050	J	537 Modified		3535
CFR-TARHEEL-24-080524	08/05/2024	320-114550-2	PPF Acid	0.017	UG/L	PQL		0.0050	J	537 Modified		3535



ADQM Data Review

Site: Chemours Fayetteville

Project: CAP SW Sampling 3Q24

Project Reviewer: Michael Aucoin



Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP3Q24-LOCK-DAM-NORTH-071024	320-113746-1	Surface Water	N	07/10/2024	10:32	FS
CAP3Q24-CFR-RM-76-071024	320-113746-2	Surface Water	N	07/10/2024	08:40	FS
CAP3Q24-GBC-1-071124	320-113746-3	Surface Water	N	07/11/2024	13:20	FS
RIVER-WATER-INTAKE-24-071124	320-113746-4	Surface Water	N	07/11/2024	07:06	FS
CAP3Q24-EQBLK-IS-071124	320-113747-1	Blank Water	N	07/11/2024	14:10	EB
CAP3Q24-EQBLK-PP-SW-071124	320-113747-2	Blank Water	N	07/11/2024	14:00	EB
CAP3Q24-OUTFALL-002-24-071124	320-113747-3	Surface Water	N	07/11/2024	09:56	FS
CAP3Q24-OLDOF-2-24-071124	320-113747-4	Surface Water	N	07/11/2024	10:22	FS
CAP3Q24-WC-3-24-071124	320-113747-5	Surface Water	N	07/11/2024	07:40	FS
CAP3Q24-WC-2-24-071124	320-113748-1	Surface Water	N	07/11/2024	07:01	FS
CAP3Q24-WC-1-24-071124	320-113748-2	Surface Water	N	07/11/2024	07:00	FS
CAP3Q24-WC-1-24-071124-D	320-113748-3	Surface Water	N	07/11/2024	07:00	DUP
CAP3Q24-CFR-TARHEEL-071124	320-113821-1	Surface Water	N	07/11/2024	10:00	FS
CAP3Q24-CFR-TARHEEL-24-071124	320-113821-2	Surface Water	N	07/11/2024	22:36	FS
CAP3Q24-CFR-BLADEN-071124	320-113821-3	Surface Water	N	07/11/2024	09:30	FS
CAP3Q24-CFR-KINGS-071124	320-113821-4	Surface Water	N	07/11/2024	14:40	FS
CAP3Q24-PW-09-071124	320-113821-5	Groundwater	N	07/11/2024	12:35	FS
CAP3Q24-LOCK-DAM-SEEP-072424	320-114129-2	Surface Water	N	07/24/2024	10:00	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)	CAP SW Sampling 3Q24



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				
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 the range of not frozen to 6°C with a target of 4°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: CAP SW Sampling 3Q24

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
CAP3Q24-WC-1-24-071124	07/11/2024	320-113748-2	R-EVE	0.064	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-1-24-071124	07/11/2024	320-113748-2	PFO3OA	0.079	ug/L	PQL		0.0020	J	537 Modified		3535

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
CAP3Q24-CFR-BLADEN-071124	07/11/2024	320-113821-3	R-PSDA	0.0048	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-BLADEN-071124	07/11/2024	320-113821-3	Hydrolyzed PSDA	0.0038	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-KINGS-071124	07/11/2024	320-113821-4	R-PSDA	0.0068	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-KINGS-071124	07/11/2024	320-113821-4	R-PSDA	0.0056	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-KINGS-071124	07/11/2024	320-113821-4	Hydrolyzed PSDA	0.0024	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-KINGS-071124	07/11/2024	320-113821-4	R-EVE	0.0024	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-KINGS-071124	07/11/2024	320-113821-4	R-EVE	0.0020	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-RM-76-071024	07/10/2024	320-113746-2	R-PSDA	0.015	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-RM-76-071024	07/10/2024	320-113746-2	R-EVE	0.0034	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-071124	07/11/2024	320-113821-1	R-PSDA	0.0055	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-071124	07/11/2024	320-113821-1	Hydrolyzed PSDA	0.0032	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-071124	07/11/2024	320-113821-1	R-EVE	0.0021	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-24-071124	07/11/2024	320-113821-2	R-PSDA	0.0045	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-24-071124	07/11/2024	320-113821-2	Hydrolyzed PSDA	0.0028	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CFR-TARHEEL-24-071124	07/11/2024	320-113821-2	R-EVE	0.0022	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-GBC-1-071124	07/11/2024	320-113746-3	R-PSDA	0.10	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-GBC-1-071124	07/11/2024	320-113746-3	R-EVE	0.037	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-LOCK-DAM-NORTH-071024	07/10/2024	320-113746-1	R-PSDA	0.24	UG/L	PQL		0.023	J	537 Modified		3535
CAP3Q24-LOCK-DAM-NORTH-071024	07/10/2024	320-113746-1	Hydrolyzed PSDA	0.0043	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-LOCK-DAM-NORTH-071024	07/10/2024	320-113746-1	R-EVE	0.11	UG/L	PQL		0.026	J	537 Modified		3535
CAP3Q24-LOCK-DAM-SEEP-072424	07/24/2024	320-114129-2	R-PSDA	0.45	UG/L	PQL		0.027	J	537 Modified		3535
CAP3Q24-LOCK-DAM-SEEP-072424	07/24/2024	320-114129-2	Hydrolyzed PSDA	0.34	UG/L	PQL		0.026	J	537 Modified		3535
CAP3Q24-LOCK-DAM-SEEP-072424	07/24/2024	320-114129-2	R-EVE	0.17	UG/L	PQL		0.030	J	537 Modified		3535

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
CAP3Q24-OLDOF-2-24-071124	07/11/2024	320-113747-4	R-PSDA	0.073	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-OLDOF-2-24-071124	07/11/2024	320-113747-4	Hydrolyzed PSDA	0.15	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-OLDOF-2-24-071124	07/11/2024	320-113747-4	R-EVE	0.033	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-OUTFALL-002-24-071124	07/11/2024	320-113747-3	R-PSDA	0.032	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-OUTFALL-002-24-071124	07/11/2024	320-113747-3	Hydrolyzed PSDA	0.023	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-OUTFALL-002-24-071124	07/11/2024	320-113747-3	R-EVE	0.0081	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-1-24-071124	07/11/2024	320-113748-2	R-PSDA	0.16	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-1-24-071124	07/11/2024	320-113748-2	Hydrolyzed PSDA	0.34	UG/L	PQL		0.0048	J	537 Modified		3535
CAP3Q24-WC-1-24-071124-D	07/11/2024	320-113748-3	R-PSDA	0.16	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-1-24-071124-D	07/11/2024	320-113748-3	Hydrolyzed PSDA	0.40	UG/L	PQL		0.0049	J	537 Modified		3535
CAP3Q24-WC-1-24-071124-D	07/11/2024	320-113748-3	R-EVE	0.061	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-2-24-071124	07/11/2024	320-113748-1	R-PSDA	0.10	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-2-24-071124	07/11/2024	320-113748-1	Hydrolyzed PSDA	0.030	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-2-24-071124	07/11/2024	320-113748-1	R-EVE	0.051	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-3-24-071124	07/11/2024	320-113747-5	R-PSDA	0.097	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-WC-3-24-071124	07/11/2024	320-113747-5	R-EVE	0.040	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-071124	07/11/2024	320-113746-4	R-PSDA	0.0054	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-071124	07/11/2024	320-113746-4	Hydrolyzed PSDA	0.0028	UG/L	PQL		0.0020	J	537 Modified		3535
RIVER-WATER-INTAKE-24-071124	07/11/2024	320-113746-4	R-EVE	0.0020	UG/L	PQL		0.0020	J	537 Modified		3535



ADQM Data Review

Site: Chemours Fayetteville

Project: CAP GW Sampling 3Q24

Project Reviewer: Bridget Gavaghan



Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP3Q24-BCA-04-070824	320-113685-1	Groundwater	N	07/08/2024	14:10	FS
CAP3Q24-PIW-16D-070824	320-113685-2	Groundwater	N	07/08/2024	13:05	FS
CAP3Q24-EQBLK-PP-070824	320-113685-3	Blank Water	N	07/08/2024	16:40	EB
CAP3Q24-EQBLK-DV-070824	320-113685-4	Blank Water	N	07/08/2024	16:45	EB
CAP3Q24-EQBLK-PP-071124	320-113749-1	Blank Water	N	07/11/2024	14:00	EB
CAP3Q24-EQBLK-PP-071124-Z	320-113749-2	Blank Water	Y	07/11/2024	14:35	EB
CAP3Q24-BAILER-070924	320-113749-3	Blank Water	N	07/09/2024	10:00	EB
CAP3Q24-EQBLK-DV-071124	320-113749-4	Blank Water	N	07/11/2024	14:10	EB
CAP3Q24-BLADEN-4S-071024-Z	320-113749-5	Groundwater	Y	07/10/2024	14:20	FS
CAP3Q24-SMW-10-070924	320-113750-1	Groundwater	N	07/09/2024	14:40	FS
CAP3Q24-BLADEN-4D-071024	320-113750-2	Groundwater	N	07/10/2024	13:55	FS
CAP3Q24-BLADEN-4S-071024	320-113750-3	Groundwater	N	07/10/2024	14:20	FS
CAP3Q24-CUMBERLAND-4D-071024	320-113750-4	Groundwater	N	07/10/2024	11:25	FS
CAP3Q24-CUMBERLAND-4S-071024	320-113750-5	Groundwater	N	07/10/2024	10:45	FS
CAP3Q24-CUMBERLAND-1D-071024	320-113817-1	Groundwater	N	07/10/2024	16:20	FS
CAP3Q24-PW-07-071124	320-113817-2	Groundwater	N	07/11/2024	08:35	FS
CAP3Q24-PW-07-071124-Z	320-113817-3	Groundwater	Y	07/11/2024	08:35	FS
CAP3Q24-PW-12-071224	320-113817-4	Groundwater	N	07/12/2024	10:10	FS
CAP3Q24-BLADEN-3S-071224-D	320-113817-5	Groundwater	N	07/12/2024	09:50	DUP
CAP3Q24-PW-09-071124	320-113821-5	Groundwater	N	07/11/2024	12:35	FS
CAP3Q24-MW-20D-071624	320-113886-1	Groundwater	N	07/16/2024	11:15	FS
CAP3Q24-SMW-12-071624	320-113886-2	Groundwater	N	07/16/2024	13:00	FS
CAP3Q24-MW-7S-071624	320-113886-3	Groundwater	N	07/16/2024	13:05	FS
CAP3Q24-MW-1S-071624	320-113886-4	Groundwater	N	07/16/2024	12:05	FS
CAP3Q24-OW-30-071624	320-113886-5	Groundwater	N	07/16/2024	13:04	FS
CAP3Q24-EQBLK-BP-071624	320-113888-1	Blank Water	N	07/16/2024	17:15	EB
CAP3Q24-SMW-01-071724	320-113888-2	Groundwater	N	07/17/2024	09:40	FS
CAP3Q24-BCA-02-071724	320-113888-3	Groundwater	N	07/17/2024	10:55	FS
CAP3Q24-MW-16D-071724	320-113888-4	Groundwater	N	07/17/2024	11:45	FS
CAP3Q24-MW-17D-071724	320-113888-5	Groundwater	N	07/17/2024	13:40	FS
CAP3Q24-PIW-2D-071724	320-113921-1	Groundwater	N	07/17/2024	15:31	FS
CAP3Q24-PZ-17R-071724	320-113921-2	Groundwater	N	07/17/2024	09:50	FS
CAP3Q24-PZ-25RR-071724	320-113921-3	Groundwater	N	07/17/2024	12:16	FS
CAP3Q24-INSITU-01-071824	320-113921-4	Groundwater	N	07/18/2024	11:25	FS
CAP3Q24-LTW-02-071824	320-113921-5	Groundwater	N	07/18/2024	11:25	FS
CAP3Q24-OW-28-071824	320-113926-1	Groundwater	N	07/18/2024	12:50	FS
CAP3Q24-BLADEN-1DR-071824	320-113926-2	Groundwater	N	07/18/2024	16:05	FS
CAP3Q24-OW-55-071824	320-113926-3	Groundwater	N	07/18/2024	15:01	FS



Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP3Q24-SMW-11-071824	320-113926-4	Groundwater	N	07/18/2024	15:10	FS
CAP3Q24-SMW-07-072324	320-114046-1	Groundwater	N	07/23/2024	12:33	FS
CAP3Q24-PIW-3D-072324	320-114046-2	Groundwater	N	07/23/2024	12:50	FS
CAP3Q24-PIW-4D-072324	320-114046-3	Groundwater	N	07/23/2024	12:40	FS
CAP3Q24-OW-56-072324	320-114046-4	Groundwater	N	07/23/2024	11:30	FS
CAP3Q24-EQBLK-PP-071924	320-114046-5	Blank Water	N	07/19/2024	11:55	EB
CAP3Q24-PW-15R-072524	320-114118-1	Groundwater	N	07/25/2024	15:05	FS
CAP3Q24-PIW-10DR-072524	320-114118-2	Groundwater	N	07/25/2024	15:00	FS
CAP3Q24-OW-57-072524	320-114118-3	Groundwater	N	07/25/2024	16:15	FS
CAP3Q24-PZ-22-072524	320-114118-4	Groundwater	N	07/25/2024	14:00	FS
CAP3Q24-PIW-8D-072524	320-114118-5	Groundwater	N	07/25/2024	12:20	FS
CAP3Q24-SMW-03B-072524	320-114118-6	Groundwater	N	07/25/2024	10:25	FS
CAP3Q24-LTW-5-072524	320-114129-1	Groundwater	N	07/25/2024	10:28	FS
CAP3Q24-PIW-7D-072324	320-114131-1	Groundwater	N	07/23/2024	14:26	FS
CAP3Q24-MW-30-072324	320-114131-2	Groundwater	N	07/23/2024	10:22	FS
CAP3Q24-MW-15DRR-072424	320-114131-3	Groundwater	N	07/24/2024	11:05	FS
CAP3Q24-BCA-03R-072424	320-114131-4	Groundwater	N	07/24/2024	12:50	FS
CAP3Q24-BCA-01-072424	320-114131-5	Groundwater	N	07/24/2024	15:00	FS
CAP3Q24-LTW-04-072424	320-114134-1	Groundwater	N	07/24/2024	15:45	FS
CAP3Q24-OW-4R-072424	320-114134-2	Groundwater	N	07/24/2024	16:20	FS
CAP3Q24-PIW-7S-072424	320-114134-3	Groundwater	N	07/24/2024	12:35	FS
CAP3Q24-PW-11-072424	320-114134-4	Groundwater	N	07/24/2024	11:38	FS
CAP3Q24-FTA-03-072524	320-114134-5	Groundwater	N	07/25/2024	13:55	FS
CAP3Q24-PIW-1D-072324	320-114137-1	Groundwater	N	07/23/2024	15:40	FS
CAP3Q24-PIW-1D-072324-Z	320-114137-2	Groundwater	Y	07/23/2024	15:40	FS
CAP3Q24-PZ-24-072324	320-114137-3	Groundwater	N	07/23/2024	11:10	FS
CAP3Q24-PW-06-072324	320-114137-4	Groundwater	N	07/23/2024	14:23	FS
CAP3Q24-SMW-9-072324	320-114137-5	Groundwater	N	07/23/2024	12:35	FS
CAP3Q24-PZ-21R-072624	320-114196-1	Groundwater	N	07/26/2024	12:10	FS
CAP3Q24-LTW-03-072924	320-114196-2	Groundwater	N	07/29/2024	10:35	FS
CAP3Q24-PIW-6S-072924	320-114196-3	Groundwater	N	07/29/2024	12:20	FS
CAP3Q24-SMW-08B-072924	320-114196-4	Groundwater	N	07/29/2024	11:55	FS
CAP3Q24-MW-27-072924	320-114196-5	Groundwater	N	07/29/2024	14:30	FS
CAP3Q24-PW-03-072624	320-114201-1	Groundwater	N	07/26/2024	10:30	FS
CAP3Q24-MW-24-072624	320-114201-2	Groundwater	N	07/26/2024	10:20	FS
CAP3Q24-MW-13D-072624	320-114201-3	Groundwater	N	07/26/2024	10:25	FS
CAP3Q24-LTW-01-072624	320-114201-4	Groundwater	N	07/26/2024	11:40	FS
CAP3Q24-PW-14-072624	320-114201-5	Groundwater	N	07/26/2024	12:05	FS
CAP3Q24-PW-04-072624	320-114245-1	Groundwater	N	07/26/2024	09:55	FS



Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
CAP3Q24-PW-04-072624-Z	320-114245-2	Groundwater	Y	07/26/2024	09:55	FS
CAP3Q24-EQBK-DV-072924	320-114245-3	Blank Water	N	07/29/2024	10:30	EB
CAP3Q24-NAF-09-073024	320-114245-4	Groundwater	N	07/30/2024	11:15	FS
CAP3Q24-PW-10RR-073024	320-114245-5	Groundwater	N	07/30/2024	12:15	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)	CAP GW Sampling 3Q24



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				
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 the range of not frozen to 6°C with a target of 4°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: CAP GW Sampling 3Q24

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
CAP3Q24-CUMBERLAND-4S-071024	07/10/2024	320-113750-5	Perfluorohexadecanoic Acid (PFHxDA)	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535
CAP3Q24-CUMBERLAND-4S-071024	07/10/2024	320-113750-5	Perfluorooctadecanoic Acid	0.0020	ug/L	PQL		0.0020	UJ	537 Modified		3535

Site: Fayetteville

Sampling Program: CAP GW Sampling 3Q24

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
CAP3Q24-SMW-11-071824	07/18/2024	320-113926-4	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.16	UG/L	PQL		0.16	UJ	537 Modified		3535

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
CAP3Q24-CUMBERLAND-4S-071024	07/10/2024	320-113750-5	R-PSDA	0.036	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-CUMBERLAND-4S-071024	07/10/2024	320-113750-5	R-EVE	0.0059	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-BCA-02-071724	07/17/2024	320-113888-3	R-PSDA	0.41	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-BCA-02-071724	07/17/2024	320-113888-3	Hydrolyzed PSDA	0.79	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-BCA-02-071724	07/17/2024	320-113888-3	R-EVE	0.39	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-LTW-02-071824	07/18/2024	320-113921-5	R-PSDA	0.86	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-LTW-02-071824	07/18/2024	320-113921-5	Hydrolyzed PSDA	1.7	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-LTW-02-071824	07/18/2024	320-113921-5	R-EVE	0.65	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-1S-071624	07/16/2024	320-113886-4	R-PSDA	0.29	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-1S-071624	07/16/2024	320-113886-4	Hydrolyzed PSDA	0.16	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-1S-071624	07/16/2024	320-113886-4	R-EVE	0.21	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-20D-071624	07/16/2024	320-113886-1	R-PSDA	0.050	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-20D-071624	07/16/2024	320-113886-1	Hydrolyzed PSDA	0.055	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-20D-071624	07/16/2024	320-113886-1	R-EVE	0.064	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-7S-071624	07/16/2024	320-113886-3	R-PSDA	1.4	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-7S-071624	07/16/2024	320-113886-3	Hydrolyzed PSDA	15	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-7S-071624	07/16/2024	320-113886-3	R-EVE	0.62	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-OW-28-071824	07/18/2024	320-113926-1	R-PSDA	0.23	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-OW-28-071824	07/18/2024	320-113926-1	R-EVE	0.13	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-OW-30-071624	07/16/2024	320-113886-5	R-PSDA	0.50	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-OW-30-071624	07/16/2024	320-113886-5	Hydrolyzed PSDA	0.69	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-OW-30-071624	07/16/2024	320-113886-5	R-EVE	0.54	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-OW-55-071824	07/18/2024	320-113926-3	R-PSDA	0.10	UG/L	PQL		0.035	J	537 Modified		3535

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
CAP3Q24-OW-55-071824	07/18/2024	320-113926-3	R-EVE	0.063	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-OW-56-072324	07/23/2024	320-114046-4	R-PSDA	0.15	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-OW-56-072324	07/23/2024	320-114046-4	R-EVE	0.12	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-2D-071724	07/17/2024	320-113921-1	R-PSDA	0.074	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-2D-071724	07/17/2024	320-113921-1	Hydrolyzed PSDA	0.057	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-2D-071724	07/17/2024	320-113921-1	R-EVE	0.056	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-3D-072324	07/23/2024	320-114046-2	R-PSDA	0.79	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-3D-072324	07/23/2024	320-114046-2	Hydrolyzed PSDA	0.14	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-3D-072324	07/23/2024	320-114046-2	R-EVE	0.42	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-4D-072324	07/23/2024	320-114046-3	R-PSDA	0.14	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-4D-072324	07/23/2024	320-114046-3	Hydrolyzed PSDA	0.62	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-4D-072324	07/23/2024	320-114046-3	R-EVE	0.097	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PW-07-071124	07/11/2024	320-113817-2	R-PSDA	0.14	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-PW-07-071124	07/11/2024	320-113817-2	R-EVE	0.053	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-PW-07-071124-Z	07/11/2024	320-113817-3	R-PSDA	0.15	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-PW-07-071124-Z	07/11/2024	320-113817-3	R-EVE	0.063	UG/L	PQL		0.0020	J	537 Modified		3535
CAP3Q24-PZ-17R-071724	07/17/2024	320-113921-2	R-PSDA	0.099	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PZ-17R-071724	07/17/2024	320-113921-2	R-EVE	0.14	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PZ-25RR-071724	07/17/2024	320-113921-3	R-PSDA	0.78	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PZ-25RR-071724	07/17/2024	320-113921-3	Hydrolyzed PSDA	0.76	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PZ-25RR-071724	07/17/2024	320-113921-3	R-EVE	0.63	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-SMW-11-071824	07/18/2024	320-113926-4	R-PSDA	0.096	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-SMW-11-071824	07/18/2024	320-113926-4	Hydrolyzed PSDA	0.049	UG/L	PQL		0.034	J	537 Modified		3535

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
CAP3Q24-SMW-11-071824	07/18/2024	320-113926-4	R-EVE	0.074	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-SMW-12-071624	07/16/2024	320-113886-2	R-PSDA	0.071	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-SMW-12-071624	07/16/2024	320-113886-2	R-EVE	0.070	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-BCA-01-072424	07/24/2024	320-114131-5	R-PSDA	0.80	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-BCA-01-072424	07/24/2024	320-114131-5	Hydrolyzed PSDA	5.4	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-BCA-01-072424	07/24/2024	320-114131-5	R-EVE	0.45	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-BCA-03R-072424	07/24/2024	320-114131-4	R-PSDA	5.7	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-BCA-03R-072424	07/24/2024	320-114131-4	Hydrolyzed PSDA	32	UG/L	PQL		0.34	J	537 Modified		3535
CAP3Q24-BCA-03R-072424	07/24/2024	320-114131-4	R-EVE	0.89	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-FTA-03-072524	07/25/2024	320-114134-5	R-PSDA	1.8	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-FTA-03-072524	07/25/2024	320-114134-5	Hydrolyzed PSDA	0.87	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-FTA-03-072524	07/25/2024	320-114134-5	R-EVE	2.6	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-LTW-01-072624	07/26/2024	320-114201-4	R-PSDA	0.95	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-LTW-01-072624	07/26/2024	320-114201-4	Hydrolyzed PSDA	0.57	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-LTW-01-072624	07/26/2024	320-114201-4	R-EVE	0.56	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-LTW-03-072924	07/29/2024	320-114196-2	R-PSDA	1.0	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-LTW-03-072924	07/29/2024	320-114196-2	Hydrolyzed PSDA	8.2	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-LTW-03-072924	07/29/2024	320-114196-2	R-EVE	0.50	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-LTW-04-072424	07/24/2024	320-114134-1	R-PSDA	2.0	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-LTW-04-072424	07/24/2024	320-114134-1	Hydrolyzed PSDA	4.0	UG/L	PQL		0.034	J	537 Modified		3535

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
CAP3Q24-LTW-04-072424	07/24/2024	320-114134-1	R-EVE	1.9	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-LTW-5-072524	07/25/2024	320-114129-1	R-PSDA	1.3	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-LTW-5-072524	07/25/2024	320-114129-1	Hydrolyzed PSDA	2.3	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-LTW-5-072524	07/25/2024	320-114129-1	R-EVE	1.6	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-13D-072624	07/26/2024	320-114201-3	R-PSDA	1.8	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-13D-072624	07/26/2024	320-114201-3	Hydrolyzed PSDA	1.9	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-13D-072624	07/26/2024	320-114201-3	R-EVE	1.8	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-15DRR-072424	07/24/2024	320-114131-3	R-PSDA	3.0	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-15DRR-072424	07/24/2024	320-114131-3	Hydrolyzed PSDA	29	UG/L	PQL		0.17	J	537 Modified		3535
CAP3Q24-MW-15DRR-072424	07/24/2024	320-114131-3	R-EVE	0.57	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-24-072624	07/26/2024	320-114201-2	R-PSDA	2.6	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-24-072624	07/26/2024	320-114201-2	Hydrolyzed PSDA	7.4	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-24-072624	07/26/2024	320-114201-2	R-EVE	0.49	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-27-072924	07/29/2024	320-114196-5	R-PSDA	1.1	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-27-072924	07/29/2024	320-114196-5	Hydrolyzed PSDA	4.9	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-27-072924	07/29/2024	320-114196-5	R-EVE	0.29	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-MW-30-072324	07/23/2024	320-114131-2	R-PSDA	1.1	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-MW-30-072324	07/23/2024	320-114131-2	Hydrolyzed PSDA	0.069	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-MW-30-072324	07/23/2024	320-114131-2	R-EVE	0.46	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-NAF-09-073024	07/30/2024	320-114245-4	R-PSDA	8.7	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-NAF-09-073024	07/30/2024	320-114245-4	Hydrolyzed PSDA	38	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-NAF-09-073024	07/30/2024	320-114245-4	R-EVE	5.4	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-OW-4R-072424	07/24/2024	320-114134-2	R-PSDA	0.79	UG/L	PQL		0.035	J	537 Modified		3535

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
CAP3Q24-OW-4R-072424	07/24/2024	320-114134-2	Hydrolyzed PSDA	3.2	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-OW-4R-072424	07/24/2024	320-114134-2	R-EVE	0.61	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-OW-57-072524	07/25/2024	320-114118-3	R-PSDA	1.5	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-OW-57-072524	07/25/2024	320-114118-3	Hydrolyzed PSDA	23	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-OW-57-072524	07/25/2024	320-114118-3	R-EVE	0.29	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-10DR-072524	07/25/2024	320-114118-2	R-PSDA	0.62	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-10DR-072524	07/25/2024	320-114118-2	Hydrolyzed PSDA	2.3	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-10DR-072524	07/25/2024	320-114118-2	R-EVE	0.49	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-1D-072324	07/23/2024	320-114137-1	R-PSDA	0.48	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-1D-072324	07/23/2024	320-114137-1	R-EVE	0.35	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-1D-072324-Z	07/23/2024	320-114137-2	R-PSDA	0.32	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-1D-072324-Z	07/23/2024	320-114137-2	R-EVE	0.24	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-6S-072924	07/29/2024	320-114196-3	R-PSDA	0.89	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-6S-072924	07/29/2024	320-114196-3	Hydrolyzed PSDA	5.9	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-6S-072924	07/29/2024	320-114196-3	R-EVE	0.49	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-7D-072324	07/23/2024	320-114131-1	R-PSDA	0.70	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-7D-072324	07/23/2024	320-114131-1	Hydrolyzed PSDA	1.2	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-7D-072324	07/23/2024	320-114131-1	R-EVE	0.79	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-7S-072424	07/24/2024	320-114134-3	R-PSDA	1.2	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-7S-072424	07/24/2024	320-114134-3	Hydrolyzed PSDA	0.042	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PIW-7S-072424	07/24/2024	320-114134-3	R-EVE	1.4	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PIW-8D-072524	07/25/2024	320-114118-5	R-PSDA	2.7	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PIW-8D-072524	07/25/2024	320-114118-5	Hydrolyzed PSDA	5.1	UG/L	PQL		0.034	J	537 Modified		3535

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
CAP3Q24-PIW-8D-072524	07/25/2024	320-114118-5	R-EVE	2.8	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PW-03-072624	07/26/2024	320-114201-1	R-PSDA	14	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PW-03-072624	07/26/2024	320-114201-1	Hydrolyzed PSDA	40	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PW-03-072624	07/26/2024	320-114201-1	R-EVE	11	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PW-06-072324	07/23/2024	320-114137-4	R-PSDA	0.036	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PW-10RR-073024	07/30/2024	320-114245-5	Hydrolyzed PSDA	0.095	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PW-10RR-073024	07/30/2024	320-114245-5	R-EVE	0.12	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PW-11-072424	07/24/2024	320-114134-4	R-PSDA	0.49	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PW-11-072424	07/24/2024	320-114134-4	Hydrolyzed PSDA	1.3	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PW-11-072424	07/24/2024	320-114134-4	R-EVE	0.20	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PW-14-072624	07/26/2024	320-114201-5	R-PSDA	1.2	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PW-14-072624	07/26/2024	320-114201-5	Hydrolyzed PSDA	1.5	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PW-14-072624	07/26/2024	320-114201-5	R-EVE	0.87	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PW-15R-072524	07/25/2024	320-114118-1	R-PSDA	5.0	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PW-15R-072524	07/25/2024	320-114118-1	Hydrolyzed PSDA	34	UG/L	PQL		0.17	J	537 Modified		3535
CAP3Q24-PW-15R-072524	07/25/2024	320-114118-1	R-EVE	0.81	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PZ-21R-072624	07/26/2024	320-114196-1	R-PSDA	0.67	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PZ-21R-072624	07/26/2024	320-114196-1	Hydrolyzed PSDA	0.16	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PZ-21R-072624	07/26/2024	320-114196-1	R-EVE	0.32	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PZ-22-072524	07/25/2024	320-114118-4	R-PSDA	0.61	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-PZ-22-072524	07/25/2024	320-114118-4	Hydrolyzed PSDA	1.6	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-PZ-22-072524	07/25/2024	320-114118-4	R-EVE	0.44	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-PZ-24-072324	07/23/2024	320-114137-3	R-PSDA	0.17	UG/L	PQL		0.035	J	537 Modified		3535

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
CAP3Q24-PZ-24-072324	07/23/2024	320-114137-3	R-EVE	0.14	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-SMW-03B-072524	07/25/2024	320-114118-6	R-PSDA	4.0	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-SMW-03B-072524	07/25/2024	320-114118-6	Hydrolyzed PSDA	22	UG/L	PQL		0.34	J	537 Modified		3535
CAP3Q24-SMW-03B-072524	07/25/2024	320-114118-6	R-EVE	0.68	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-SMW-07-072324	07/23/2024	320-114046-1	R-PSDA	0.078	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-SMW-07-072324	07/23/2024	320-114046-1	R-EVE	0.050	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-SMW-08B-072924	07/29/2024	320-114196-4	R-PSDA	0.75	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-SMW-08B-072924	07/29/2024	320-114196-4	Hydrolyzed PSDA	3.0	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-SMW-08B-072924	07/29/2024	320-114196-4	R-EVE	0.25	UG/L	PQL		0.039	J	537 Modified		3535
CAP3Q24-SMW-9-072324	07/23/2024	320-114137-5	R-PSDA	0.70	UG/L	PQL		0.035	J	537 Modified		3535
CAP3Q24-SMW-9-072324	07/23/2024	320-114137-5	Hydrolyzed PSDA	15	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-SMW-9-072324	07/23/2024	320-114137-5	R-EVE	0.29	UG/L	PQL		0.039	J	537 Modified		3535

Site: Fayetteville

Sampling Program: CAP GW Sampling 3Q24

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
CAP3Q24-MW-1S-071624	07/16/2024	320-113886-4	Perfluorononanoic Acid	0.076	UG/L	PQL		0.034	J	537 Modified		3535
CAP3Q24-SMW-9-072324	07/23/2024	320-114137-5	PFOA	0.11	UG/L	PQL		0.11	J	537 Modified		3535

Site: Fayetteville

Sampling Program: CAP GW Sampling 3Q24

Validation Options: LABSTATS

Validation Reason Code: Associated MS and/or MSD analysis had relative percent recovery (RPR) values less than the rejection level. 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
CAP3Q24-CUMBERLAND-1D-071024	07/10/2024	320-113817-1	PPF Acid	0.016	UG/L	PQL		0.0050	J	537 Modified		3535