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INTERIM SEEP REMEDIATION OPERATION AND MAINTENANCE REPORT #3

Chemours Fayetteville Works

Prepared for

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Geosyntec Project Number TR0795A

July 30, 2021

EXECUTIVE SUMMARY

This Operations and Maintenance Report #3 (O&M Report #3) has been prepared to document the operations, maintenance, and performance of the flow-through cells at Seeps A, B, C, and D from May 1 through June 30, 2021. Seeps B and D were initiated in the latter part of the reporting period (June 8 and June 24, 2021, respectively). The median flow rate processed by the Seep A, B, and C FTCs was 140, 131, and 90 gallons per minute (gpm), respectively. Flow data for the Seep D flow-through cell will be available in the next O&M Report. As documented in the previous O&M Reports #1 and #2, the FTC systems are capable of capturing total base flow under favorable hydraulic conditions, and additionally capture and treat a portion of wet weather flow as well. In total, over the two-month reporting period, the systems processed approximately 27,800,000 gallons of seep flow. Composite samples from performance monitoring indicated the average PFAS removal efficiency of the captured base flow was approximately 98.8%; it is estimated that the FTCs prevented approximately 45.0 pounds (lbs) of PFAS from being discharged to the Cape Fear River in the reporting period, and 62.4 lbs of PFAS over the lifetime of the systems to date.

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%	percent
CO Addendum	Addendum to Consent Order Paragraph 12
DB	Discharge Basin
DO	Dissolved oxygen
ESB	Effluent Stilling Basin
FB1	Filter Bed-1
FB2	Filter Bed-2
FTC	flow-through cell
ft msl	feet mean sea level
GAC	granular activated carbon
gpm	gallons per minute
HDPE	high-density polyethylene
HFPO-DA	hexafluoropropylene oxide dimer
IC	Inlet Chamber
IP	Individual Permit
ISB	Influent Stilling Basin
lbs	pounds
mg/L	milligrams per liter
ng/L	nanograms per liter
NTU	nephelometric turbidity units
O&M	Operation and Maintenance
OM&M	operation, maintenance, and monitoring
PFAS	per- and polyfluoroalkyl substances
PFD	Process Flow Diagram
PFMOAA	perfluoro-2-methoxyaceticacid
PMPA	perfluoromethoxypropyl carboxylic acid
TB	Transfer Basin
TSS	total suspended solids
USGS	United States Geological Survey

1. INTRODUCTION

Geosyntec Consultants of NC, PC (Geosyntec) has prepared this Interim Seep Remediation Operation and Maintenance (O&M) Report #3 ("O&M Report #3") on behalf of The Chemours Company FC, LLC (Chemours) to provide a summary report of Operations and Maintenance for the flow-through cells (FTCs) installed as the interim remediation systems at Seeps A, B, C and D at the Chemours Fayetteville Works Site (the Site). This O&M Report #3 has been prepared for the operational period of May 1 through June 30, 2021 and includes startup of the Seep B and D FTCs (June 8 and 24, 2021, respectively). The next O&M Report (#4) will cover the bimonthly period of July 1 through August 31, 2021.

As the O&M Report #1 from March 31, 2021 presented FTC performance data for the first time, detailed information was provided on the hydraulic mechanics of the system, flood management practices, data collection methodology and reduction process, and flow calculation formulas. As a simplifying step for presentation clarity, at various sections in this O&M Report #3, reference is made to these details in O&M Report #1. For an overview of the hydraulic functionality of the system, see Section 1.1 of O&M Report #1.

1.1 Construction and Startup of Seeps B and D

Substantial completion of construction was achieved at Seeps B and D FTCs on June 8 and 24, 2021, respectively, and startup commenced thereafter. A record of construction, including as-built record drawings, will be provided in the forthcoming Interim Effectiveness Reports for Seeps B and D that will be submitted to North Carolina Department of Environmental Quality by October 8 and 24, 2021, respectively. The process flow diagram for Seep A, which applies to Seeps B and D as well, was provided in O&M Report #2.

As detailed in paragraph 2(vi) of the CO Addendum, the Interim Effectiveness Report is required within four months after construction. The Interim Effectiveness Report is required by the CO Addendum to include analysis of the second and third full calendar months of operation (i.e., August and September 2021) which extends beyond the reporting period of this Report (May 1 through June 30, 2021).

2. INSPECTIONS, OPERATION, AND MAINTENANCE

The following sections describe the inspections, operation, and maintenance activities completed at the four FTCs during the current reporting period (May 1 through June 30, 2021).

2.1 Inspections

Per the CO Addendum, routine inspections occurred on a weekly basis (at a minimum), and also occurred after 0.5 inch or greater rain events within a 24-hour period. An Inspection Form was filled out by operation, maintenance, and monitoring (OM&M) personnel during each inspection.

The routine inspections included, but were not limited to:

- documenting the system duty cycle (i.e., lead/lag orientation of the GAC filter beds)
- measuring and collecting operational parameters/data, notably water elevation data that are used to evaluate influent flowrate and the occurrence (if any) of bypass
- documenting any potential observed issues, such as sediment accumulation in the impoundment basin, structural problems, GAC fouling, and debris that is impairing flow through the system
- inspecting the autosamplers
- photographing the conditions observed, including any bypass flow

A summary of the inspection and maintenance events completed during this reporting period is provided in Tables 1A-D for Seeps A-D, respectively. Further details of these events are provided in the following subsections.

2.2 Duty Cycling

As described in Section 1.1 of the O&M Report #1, the Seep FTCs are constructed of two filter beds which operate in series. Tables 1A-D detail the filter bed configurations for Seeps A, B, C, and D over the reporting period of May 1 through June 30, 2021. The approximate number of days each filter bed was in lead during the reporting period for Seeps A, B, C, and D is summarized in the table below:

Seep	FB1 Lead (days)	FB2 Lead (days)	Total Uptime in Reporting Period (days)
A	55.5	5.5	61
B	23	0	23
C	52	9	61
D	7	0	7

2.3 FTC Management During River Flooding

As described in the Interim Seeps Remediation System Plan (Geosyntec, 2020), to treat total base flow of each seep, it was necessary to install the interim remedies within the floodway. The historical river elevations were referenced to develop the design elevations of key features such as the spillway and the top of the wall. Additionally, an action level was developed for autosampler removal to prevent damage to electronic components by flood waters. Based on a review of the historical record, a W.O. Huske Lock and Dam gage height of 10 feet (or approximately 38 ft above mean sea level) was selected as the action level for removing autosamplers. Review of historical river stage data indicated that once the river level exceeded this action level, it would typically continue to rise past the level of the FTC walls.

During this reporting period (May 1 through June 30, 2021), the Cape Fear River was not above the action level. More details regarding the Cape Fear River are described in Section 4.5.

2.4 Material Changeouts

As discussed in the Interim Seeps Remediation System Plan (Geosyntec, 2020), when breakthrough monitoring sampling indicates the concentration of PFAS in the midpoint of the system has reached approximately 30% of the concentration of PFAS in the influent, a GAC changeout will be scheduled.

During this reporting period (May 1 through June 30, 2021), breakthrough sampling and visual inspections of the lag filter bed (FB2) in Seep A indicated a preferential flow pathway had developed. As a conservative precaution, the full bed of GAC was replaced on May 28, 2021. A GAC changeout was also completed on the lead filter bed (FB1) in Seep C on June 30, 2021, due to total age of GAC (146 days), age of GAC as lead service (approximately 87 days), and breakthrough sampling indicating an increasing concentration trend in the midpoint sample location.

2.5 Issues Encountered and Resolutions

Observations from routine inspections noted fine-grained sediment with the addition of algae accumulating on the surface of the filter beds, especially in the lead filter bed. The table below summarizes the average turbidity, in nephelometric turbidity units (NTU), prior to construction of each FTC (Geosyntec, 2020) and the average turbidity following startup of each system through this reporting period (May 1 through June 30, 2021):

Seep	Average Turbidity Prior to Construction (NTU)	Average Turbidity Following Startup (NTU)	Average Turbidity During Storm Events (NTU)
A	13	62	234
B	11	16	To Be Determined
C	28	66	485
D	5	47	To Be Determined

As documented in O&M Reports #1 and #2, sediment management techniques were developed and refined, and included scrubbing and vacuuming the geocomposite layer above the GAC, periodic replacement of both the geocomposite and the top few inches of GAC underneath the geocomposite, and the installation of a turbidity curtain in the upstream impoundment. In addition, since O&M Report #2, the following steps have been implemented:

- Installation of rip rap aprons in front of the FTC inlet chambers, with geocomposite above the rip rap, to provide additional surface area for sediment deposition prior to entering the flow-through cell.
- Addition of masonry sand on top of the stone layer in the Inlet Chamber (IC) to reduce sediment loading into the filter beds.
- Installation of tarps to cover all FTC chambers, most notably the filter beds, to reduce sunlight reaching the geocomposite layer and minimize algae growth.

3. DATA COLLECTED

The FTC includes design components to measure water levels in the system, precipitation, water quality, and PFAS removal performance. The W.O. Huske Lock and Dam gage station is also used to reference nearby precipitation and river levels.

3.1 Pressure Transducers

The Influent Chamber (IC) and Effluent Stilling Basin (ESB) are each equipped with a stilling well in which a non-vented Levelogger® is installed below the operational water level. The water levels acquired from processing the transducer data are used to estimate flows the system processes, and to record the occurrence of flow that is diverted past the system via the Bypass Spillway. Section 4.1 of the O&M Report #1 describes the process used to calculate the flowrates through the FTC based on the water levels.

The pressure transducer data were downloaded regularly as part of routine inspections (weekly at a minimum). Additionally, manual water level measurements were collected in the basins and stilling wells whenever transducers were downloaded to equilibrate the transducer readings (discussed in Section 4.1).

3.2 Rainfall and River Stage

Precipitation and river stage are monitored by using the United States Geological Survey (USGS) weather monitoring station at the W.O. Huske Dam (gage 02105500). This station is approximately 1,200 feet from Seep C and records precipitation and river elevation data every 15 minutes.

3.3 Operational and Treatment Performance Monitoring

Operational and performance monitoring of the system includes the composite collection of water samples from various locations in the system, and direct measurement of water quality parameters. The operational and performance monitoring is completed on a regular basis to evaluate:

- PFAS removal efficiency (i.e. performance monitoring)
- breakthrough of PFAS compounds between GAC filter beds, using grab samples on an as-needed basis (i.e. breakthrough monitoring)
- water quality parameters specified in the CO Addendum
- potential effects of 0.5-inch rain events on PFAS concentrations (i.e. wet weather monitoring)

3.3.1 Performance Monitoring

Composite samples for performance monitoring are collected using portable, battery-powered autosamplers (e.g. Teledyne ISCO 6712 Full-Size Portable Sampler). At the end of the sampling period, the OM&M personnel fill laboratory-supplied sample containers from the common container within the autosampler. Sampling is conducted in accordance with the PFAS Quality

Assurance Project Plan (AECOM, 2018). Any adjustments made to address potential deficiencies (e.g. low battery power, river flooding) are documented on the Inspection Form.

During this reporting period, five performance monitoring samples were collected for Seep C, four performance monitoring samples were collected for Seep A, and three performance monitoring samples were collected for Seep B (Table 2). Due to equipment malfunctions at Seeps B and C that interrupted a few 14-day composite cycles, a combination of aliquot collection (14-days and 24-hours) was utilized to obtain the necessary quantity of performance monitoring samples required by CO Addendum Paragraph 2a(iii). Dates of composite periods for each sample are listed in Table 2. Seep D samples for performance monitoring were not collected as startup occurred near the end of the reporting period. Performance and wet weather monitoring for Seep D will begin in July 2021 and will be included in O&M Report #4.

Samples were stored on wet ice in a cooler until shipment to an external laboratory (Eurofins TestAmerica Laboratories Sacramento or Lancaster). Chain-of-custody documents were completed and included with each shipment. Performance monitoring samples were analyzed for Table 3+ PFAS, as outlined in the *Interim Seep Remediation System Plan* (Geosyntec, 2020).

3.3.2 Breakthrough Monitoring

Grab samples were collected from the IC, TB, and ESB at Seeps A-D for evaluation of system performance and the need for GAC changeouts. The total number of breakthrough monitoring samples collected during this reporting period for Seep A, B, C and D were 8, 1, 6, and 1, respectively (16 total).

3.3.3 Water Quality Monitoring

The water quality in the IC and ESB at Seeps A-D was monitored at the same minimum frequency as performance monitoring described above – at least twice per month. Dissolved oxygen (DO), pH, turbidity, specific conductivity, temperature, and total suspended solids (TSS) were measured using a calibrated In-Situ Aqua TROLL 500 multiparameter sonde.

3.3.4 Rain Event Monitoring

Wet weather samples were collected at a frequency of once per calendar month following a rain event of at least 0.5 inches within a 24-hour period. Composite samples for wet weather monitoring are collected using Teledyne ISCO 6712 Full-Size Portable Samplers (the same make and model as performance monitoring discussed above, but a dedicated set for wet weather sampling only). The wet weather autosamplers are equipped with Teledyne 674 rain gauges that measure rainfall depth. When rainfall exceeds 0.5 inches in a 24-hour period, the rain gauge sends a signal to the Teledyne 6712 to begin a sampling cycle, where the autosampler collects aliquots every hour for 24 hours. OM&M personnel fill sample containers and follow the same sample collection protocols for wet weather as described in Section 3.3.1 above.

Wet weather monitoring samples were analyzed for Table 3+ PFAS, as outlined in the *Interim Seep Remediation System Plan* (Geosyntec, 2020). Table 2 lists the wet weather sample collected at Seeps A and C during the reporting period and the associated cumulative rainfall prior to the sampling timeframe.

3.4 Deviations

Deviations for each of the data types collected are described below.

3.4.1 Transducer Monitoring Deviations

There were no deviations in the download or analysis of transducer data during this reporting period.

3.4.2 Performance Monitoring and Wet Weather Sampling Deviations

There were no deviations in the planned number of collected performance monitoring samples during this reporting period. Similarly, there were no deviations in the planned number of collected wet weather samples for Seeps A and C (Seeps B and D were not fully operational in June and will be assessed for wet weather performance starting in July).

3.4.3 Precipitation Data from USGS Monitoring Station

The USGS precipitation data for this reporting period is missing information about the rainfall received during May 7 and May 27. There is no indication from USGS on the cause of this data gap.

4. RESULTS

The results for each type of data collected are described in detail in the following subsections. A brief overview of the results is as follows:

Reporting Period Metric	Seep A	Seep B	Seep C	Seep D[2]	Total
Duration	61 days *(May 1 - June 30, 2021)*				
Rainfall, Actual (in)	9.34 *(May 1 - June 30, 2021)* [3]				
Rainfall, Historical Average (in)	8.50 *(May 1 - June 30, 2004-2020)*				
River Above Spillway (days)	0	0	0	0	N/A
Operational Period (days)	61	23	61	7	N/A
Median Flow Rate (gpm)	140	131	90	N/A	N/A
Seep Volume Treated (gallons)	16,000,000	3,900,000	7,900,000	N/A	27,800,000
PFAS Removed (lbs)	30.3	6.8	7.9	N/A	45.0
GAC Replaced (lbs)	27,000	0	9,000	0	36,000

4.1 System Flowrates and Operational Periods

4.1.1 System Flowrate

A detailed discussion of pressure transducer water level measurements in the Effluent Stilling Basin, and the data reduction process to convert these levels to flow rates, is provided in Sections 3.1, 3.4.1, and 4.1.1 of O&M Report #1. This data reduction process, updated for the current reporting period, is provided in Appendix A.

Figures 2A-C show the measurable flowrates through the FTC over the reporting period for Seeps A-C, respectively. As noted above, the flow calculations for Seep B are suspected to significantly

[2] As the Seep D flow-through cell was commissioned at the end of the reporting period, transducer data and analytical samples were initiated July 1. Flow and PFAS data for Seep D will be included in the O&M Report #4.
[3] As noted in Section 3.4.3, there is a missing period of rainfall data from the Huske gage (May 7 and May 27), therefore this amount underestimates the true total of actual rainfall. It is noted, however, that drought conditions were generally observed in May, and the underestimate is not likely to be significant.

underestimate actual flow, and a survey will be re-performed in late July to update the calculations. The re-survey is also being performed at Seep A as a conservative precaution.

The flowrate statistics calculated from measurable discharge flowrates for Seeps A-C for the current reporting period are tabulated below:

Flowrate Metric	Seep A	Seep B	Seep C
Median Flow Rate (gpm) during the Reporting Period	140	131	90
95th percentile Flow Rate (gpm) during the Reporting Period	347	262	161
Design Basis Flow Rate * (gpm)	205	226	76

** The design basis flow rate was selected as the 95th percentile value of dry weather base flow from flume pre-design data.*

Approximately 16,000,000 gallons, 3,900,000 gallons, and 7,900,000 gallons of water (27,800,000 gallons total) were treated by the Seeps A, B, and C FTCs, respectively, from May 1 through June 30, 2021.

4.1.2 Bypass Flow

A discussion of pressure transducer water level measurements in the FTC Influent Stilling Basin (ISB), and the data reduction process to convert these levels to the elevation of the bypass spillway, is provided in Section 3.1, 3.4.1, and 4.1.2 of O&M Report #1. This data reduction process, updated for the current reporting period, is provided in Appendix A.

As there were only 7 days of startup operation at Seep D, with no bypass observed, a detailed analysis for Seep D will be discussed in the subsequent O&M Report #4. The resulting figures for influent water level elevation and occurrences of bypass flow at Seeps A-C is provided in Figures 3A-C, respectively. As shown, bypass flow in May was extremely limited, with three brief instances at Seep A from rain events on May 7, May 13, and May 18; Seep C did not bypass during these same rain events.

Bypass flow in June at Seeps A and C was caused by several notable rain events (approximately 8.94 inches of rain fell in this month, almost double the historical June average). In contrast, the Seep B FTC captured nearly all of the June wet weather flow.

4.2 Performance Monitoring Analytical Results

Analytical results for the composite performance monitoring samples are provided in Table 3 and summarized below. Laboratory analytical results are compiled in Appendix B. A total of 12 composite samples from Seeps A, B, and C were submitted for analytical results. No samples were collected during the reporting period for Seep D.

Analytical Result – Performance Monitoring	**Seep A**	**Seep B**	**Seep C**
Average Influent Total Table 3+ PFAS, 17 compounds (ng/L)	190,000	143,000	83,000
Average Effluent Total Table 3+ PFAS, 17 compounds (ng/L)	94.5	12	120
Average Removal Efficiency (%)	96.5	>99.9	99.9

It is noted that in May, the Seep A removal efficiencies ranged from 92-95%, which exceeds the requirements, but is less than typically observed. Removal efficiency at Seep A in June was nearly 100%. This is attributed to the development of preferential flow pathways discussed in Section 2.4 that led to a filter bed changeout on May 28.

4.3 System Effectiveness

System effectiveness, defined by the percentage removal of the combined concentrations of the three indicator parameters (HFPO-DA, PFMOAA and PMPA), is determined on a monthly average basis for the system using volume weighted concentrations of the influent and effluent samples. Volume weighted concentrations were developed in the event that either the influent and effluent autosamplers have different compositing durations or that the two composite sampling periods in the month have different durations (e.g. 14 days and 10 days). Both circumstances could arise due to a potential equipment malfunction or severe weather event. Weighting by volume provides a representative assessment of mass present in both the influent and effluent over time; samples corresponding to greater flow volumes will have a proportionately higher weight. System effectiveness is calculated using the equation presented in Section 4.3 of the O&M Report #1. The system effectiveness results discussed here pertain to the Seeps A, B, and C based on the limited analytical results for these Seeps. Seep D was not sampled during this reporting period.

Based on the system flowrate data (Section 4.1.1) and the performance monitoring composite sample data of the three indicator compounds (Section 4.2), the overall system effectiveness for Seeps A-C was calculated to be 98.7%. The system effectiveness for the individual Seeps is presented below:

System effectiveness	**Seep A**	**Seep B**	**Seep C**	**Seep D**	**Overall Average**
%	96.3	99.9	99.9	N/A*	98.7

** Seep D samples were not collected during the reporting period. Performance and wet weather monitoring will begin in July 2021 and will be included in the O&M Report #4.*

The estimates of system effectiveness are different from the Table 3+ removal efficiency described in Section 4.2 because the calculations involve adjusting for the differences between 24-hour composite samples and 14-day composition samples.

4.4 Wet Weather Sampling Results

Wet weather monitoring samples (May 8 and June 3) were collected at Seeps A and C during the reporting period (Table 2), and their analytical results are shown in Table 4 and summarized below. Laboratory analytical results are compiled in Appendix B. No wet weather monitoring samples were collected at Seeps B and D during this reporting period. As noted in Paragraph 2(a)(iii) in the CO Addendum, these results are not to be used to determine compliance under Paragraph 2(a)(vi).

Analytical Result – Wet Weather Monitoring	**Seep A**	**Seep C**
Average Influent Total Table 3+ PFAS, 17 compounds (ng/L)	160,000	122,000
Average Effluent Total Table 3+ PFAS, 17 compounds (ng/L)	725	199
Average Removal Efficiency (%)	99.5	99.8

4.5 River Elevation and Precipitation

The Cape Fear River was monitored using the existing USGS weather monitoring station at the W.O. Huske Dam (gage 02105500), as described in Section 3.2.

Three key river elevations, in reference to the FTC at Seeps A, B, C, and D were monitored for their effect on system performance:

(i) When the river rises above the top of the GAC, head differentials throughout the FTC are reduced and flow through the system is hindered.

(ii) When the river rises above the invert of the Bypass Spillway, the influent and effluent water elevation are equal and flow through the system ceases.

(iii) When the river rises above the top of the FTC walls, maintenance is required to repair any damages from flooding.

A statistical summary of the Cape Fear River elevation relative to these key elevations is provided in Table 5. The Cape Fear River did not rise above the elevation level of any key features (GAC, wall, spillway, discharge pipe) of any FTCs during the reporting period. The changes in elevation of the Cape Fear River since startup of the Seep C FTC are shown in Figure 1.

4.6 Water Quality

The water quality measurements collected during reporting period are provided in Table 6 and described below:

- **DO:** No significant differences were observed in the fluctuations of DO between influent and effluent locations. In Seeps A-C, DO decreased on a median basis by only 0.6 mg/L from influent to effluent. In Seep D, which was only measured once in this reporting period (from six days of operation), the DO level increased by 0.5 mg/L. The minimum average effluent DO across all four FTCs was 5.5 mg/L, indicating aerobic conditions are maintained during the process. The FTC systems do not use biological activity to treat influent water, therefore, DO is not expected to decrease or increase significantly over the system's residence time.
- **Temperature:** Across all four Seeps, the median temperature of the influent was equal to the median temperature of the effluent during this reporting period. Due to the relatively short residence time in the FTC, temperature is not expected to change significantly throughout the FTC.
- **Specific Conductance:** Similar to the above parameters, there appeared to be only a minor effect on conductivity. The FTC is expected to have little effect on the anion/cation content of the seep baseflow.
- **pH:** From the IC to the ESB, the pH of treated water increased during all monitoring events for all four Seeps. The increase in median pH from the IC to the ESB across the Seeps was between 0.7 and 1.4 Standard Units. This effect was anticipated and is likely a result of the inflow's contact with the concrete walls of the FTC and the GAC in the filter beds.
- **Turbidity and TSS:** The average turbidity values of the influent water at Seeps A, B, C, and D ranged from 15.7 to 65.8 NTU. This influent turbidity is less than previous reports and reflects both the reduced precipitation in May and June as compared to Winter 2020/2021, and improved sediment reduction processes via the turbidity curtains and rip rap aprons in front of the FTCs. The FTCs significantly decreased the turbidity of the influent water. The decrease in turbidity across all four Seeps was at least 67%. The TSS was observed to be 0.0 mg/L for all influent and effluent monitoring locations.

4.7 GAC Usage

On May 28, 27,000 lbs of GAC was replaced in FB2 of Seep A. On June 30, 9,000 lbs of GAC was replaced in FB1 of Seep C. No GAC was replaced at Seep B or D during the reporting period.

5. SUMMARY

The following summarizes the FTC's performance after the completion of the latest reporting period (May 1 through June 30, 2021):

- Generally, the conclusions reached from the previous months of operation, as documented in previous O&M Reports, have not changed. Flow data from Seeps A, B and C indicate the systems are capable of treating more than the design basis flow rate under favorable hydraulic conditions. Wet weather flow is frequently captured, in some cases fully captured, and treated equally to dry weather flows when captured.
- Performance monitoring results indicate the PFAS removal efficiency of captured baseflow at Seeps A-C ranges from 96.5 to >99.99%. To date, the A-C FTCs have prevented approximately 62.4 lbs of PFAS from being discharged to the Cape Fear River. PFAS removal calculations for Seep D will be evaluated in O&M Report #4 when performance monitoring samples are collected.

The next reporting period (July 1 through August 31, 2021) will be detailed in O&M Report #4 Report, to be submitted no later than September 30, 2021. Additionally, the overall scope of O&M activities will continue to be evaluated, and a modification may potentially be proposed after six months of operation at all four systems, as permitted under Paragraph 2(a)(iv).

6. REFERENCES

AECOM, 2018. Poly and Perfluoroalkyl Substance Quality Assurance Project Plan. August 2018.

Geosyntec, 2020. Interim Seep Remediation System Plan. Chemours Fayetteville Works. 31 August 2020.

Geosyntec, 2021a. Interim Seep Remediation Operation and Maintenance Report #1. Chemours Fayetteville Works. 31 March 2020.

Geosyntec, 2021b. Interim Seep Remediation Operation and Maintenance Report #2. Chemours Fayetteville Works. 31 May 2020.

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TABLES

Table 1a
Summary of Operations and Maintenance Activities - Seep A
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	Days Since Startup	Bypass Spillway Flow?	Sampling Performed			Operational Mode				Transducers Downloaded	Maintenance Activities Completed	Notes
			Breakthrough Monitoring	Performance Monitoring	Wet Weather Monitoring	Arrival		Departure				
						FB1	FB2	FB1	FB2			
05/03/2021	5	No				Lead	Lag	Lead	Lag	X	N/A	
05/06/2021	8	No				Lead	Lag	Lead	Lag		FB1 intakes shut off for four hours to dewater the filter bed for maintenance. FB2 lead bed for four hours.	ISCO missed aliquots due to tubing curling out of water level in the influent and effluent. Added weights to intake ports.
05/07/2021	9	No				Lead	Lag	Lead	Lag		Filter sacks removed from FB1 due to storm surge.	Stormwater, 24-hour composite started.
05/10/2021	12	Yes			X	Lead	Lag	Closed	Lead		N/A	Upon departure, FB2 as lead processor, FB1 draining through GAC Filter. Very fine silt and reddish brown algae deposited on filter bed.
05/11/2021	13	No	X			Closed	Lead	Lead	Lag		Filter fabric replaced in FB1. 10 micron sacks attached to FB1 input ports.	
05/17/2021	19	Yes		X		Lead	Lag	Closed	Lead	X	FB1 removed from processing for maintenance on 5/18.	ISCO 14-day composite ended. New 14-day composite started. Influent Aliquots 2-4 and 6-8 no liquid detected. Effluent aliquots 5-9 no liquid detected.
05/18/2021	20	No	X			Closed	Lead	Lead	Lag		Replaced FB1 fabric and skimmed GAC off top of bed and containerized (2 barrels created). Replaced filter sacs with 5 micron filter bags on inlets of FB1.	Approximately 28 hours of FB2 as sole processor. No parameters taken for breakthrough samples.
05/21/2021	23	No	X			Lead	Closed	Lead	Closed		Effluent stilling basin power washed and flushed of accumulated GAC (approximately 3/4 cubic yard deposit of GAC in ESB).	FB1 flow discharge shut off from 0920 to 1300. ESB drained from 1100 to 1300. FB2 remains offline since 5/20 at 4:45 (pm? am?)
05/25/2021	27	No	X			Lead	Closed	Lead	Closed	X	Dewatering of midpoint to allow FB2 to drain.	FB2 changeout is planned for 5/26/21.
06/01/2021	34	No	X	X		Lead	Lag	Lead	Lag	X	N/A	Error "No liquid detected" on Effluent stilling basin ISCO on 5/21/21 due to maintenance conducted on 5/21/21 and dewatering Effluent Stilling basin. Missed one aliquot.
06/03/2021	36	Yes			X	Lead	Lag	Lead	Lag		N/A	4.0 inches of rain in 24 hours.
06/04/2021	37	Yes				Lead	Lag	Lead	Lag		N/A	High water from storm surface flow is preventing hand pull weir gate placement.
06/07/2021	40	Yes				Lead	Lag	Closed	Lead		Dewatering of FB1 through the GAC. Vacuumed the Effluent Stilling Basin. Observed some GAC in the basin when FB2 was turned to lead bed. Removed the minimal amount of GAC from the ESB.	
06/09/2021	42	Yes	X			Closed	Lead	Lead	Lag	X	FB-1 fabric was pulled on 6/8/21. GAC was skimmed and remaining GAC was hard raked and leveled. New Fabric was placed over GAC.	
06/10/2021	43	Yes				Lead	Lag	Lead	Lag		Flushed filter bed with water from the midpoint basin. Used a power washer and a hard brush to break the layer of silt and algae up off the filter fabric. Used a transfer pump to send the turbid water to a dewatering station upstream of the FTC.	
06/11/2021	44	Yes				Lead	Lag	Lead	Lag		N/A	Post storm maintenance scheduled after storm water recedes.
06/14/2021	47	Yes		X		Lead	Lag	Parallel	Parallel		Lowered weir height by 7 inches and switched flow direction to both beds in parallel.	14 day composite ended - no water detected in several aliquots. Will collect tomorrow.
06/15/2021	48	Yes				Parallel	Parallel	Parallel	Parallel	X	N/A	Noticed that storm from 6/12 that storm surge went over top of flow through cell. Restarted 14 day composite sample program. No liquid detected, 56-54, 51-50, 12-6.
06/16/2021	49	Yes				Parallel	Parallel	Lead	Lag		Removed fabric from FB1 and FB2. Skimmed one inch of GAC from surface and containerized. Hard raked GAC. Placed new fabric on surface of GAC.	
06/18/2021	51	No				Lead	Lag	Lead	Lag		Flush, hard scrub, and vacuumed FB1.	
06/21/2021	54	Yes				Lead	Lag	Lead	Lag	X	N/A	Bypass is wet weather related. System is handling stormwater overflow.
06/22/2021	55	Not Recorded	X			Lead	Lag	Lead	Lag		N/A	
06/23/2021	56	Yes				Lead	Lag	Lead	Lag		Hard scrub, flush of FB1.	
06/28/2021	61	Yes				Lead	Lag	Parallel	Parallel	X	Fresh sand filter in place, FB1 dewatered for maintenance, fabric exchange, and skim.	Tarps on lead bed and inlet filter. Compaction zone in FB1 appears to be approx 10 inches.
06/29/2021	62	No	X			Lead	Lag	Lead	Lag		N/A	
06/30/2021	63	No		X		Lead	Lag	Lead	Lag		N/A	

Table 1b
Summary of Operations and Maintenance Activities - Seep B
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	Days Since Startup	Bypass Spillway Flow?	Sampling Performed			Operational Mode				Transducers Downloaded	Maintenance Activities Completed	Notes
			Breakthrough Monitoring	Performance Monitoring	Wet Weather Monitoring	Arrival		Departure				
						FB1	FB2	FB1	FB2			
06/08/2021	0	No				Lead	Lag	Lead	Lag		N/A	Seep B System startup.
06/11/2021	3	No				Lead	Lag	Lead	Lag		N/A	Started 24 hour performance sampling.
06/14/2021	6	No		X		Lead	Lag	Lead	Lag		Adjusted Weir 3 down 6 inches to allow stormwater backlog to process.	Minimum freeboard available (~2 inches).
06/15/2021	7	No	X	X		Lead	Lag	Lead	Lag	X	N/A	Breakthrough grab sample.
06/17/2021	9	No				Lead	Lag	Lead	Lag		N/A	
06/18/2021	10	No				Lead	Lag	Lead	Lag		Filter fabric exchange and skim GAC on FB1.	
06/21/2021	13	No				Lead	Lag	Lead	Lag	X	N/A	7/8" rain on 6/20
06/24/2021	16	No		X		Lead	Lag	Lead	Lag		More tarps placed over FB1.	
06/28/2021	20	No				Lead	Lag	Lead	Closed	X	Fresh sand inlet installed on 6/25/21. Draining FB2. FB1 in solo lead.	Maintenance scheduled.

Table 1c
Summary of Operations and Maintenance Activities - Seep C
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	Days Since Startup	Bypass Spillway Flow?	Sampling Performed			Operational Mode				Transducers Downloaded	Maintenance Activities Completed	Notes
			Breakthrough Monitoring	Performance Monitoring	Wet Weather Monitoring	Arrival		Departure				
						FB1	FB2	FB1	FB2			
05/03/2021	139	No				Lead	Lag	Lead	Lag	X	N/A	
05/06/2021	142	No				Lead	Lag	Lead	Lag		Preventative maintenance, change out silt sacs on FB1 intakes, vacuum inlet sand layer. Vacuum FB1 fabric.	
05/07/2021	143	No				Lead	Lag	Lead	Lag		Scrubbed FB1 and FB2 fabric.	Changed ISCO from 14-day composite to a 24-hour composite.
05/10/2021	146	No		X	X	Lead	Lag	Lead	Lag	X	N/A	
05/11/2021	147	Not Recorded	X			Lead	Lag	Lead	Lag		N/A	
05/17/2021	153	No		X		Lead	Lag	Closed	Lead	X	FB1 scrubbed and flushed. Remaining water allowed to drain through GAC.	ISCO 24 hour composite collected and 14 day composite started.
05/19/2021	155	No				Closed	Lead	Lead	Lag		Replaced FB1 fabric and skimmed and containerized GAC.	
05/25/2021	161	No	X			Lead	Lag	Lead	Lag	X	N/A	
06/01/2021	168	No	X	X		Lead	Lag	Lead	Lag	X	N/A	Aliquots 2000 5/17/21 - 0800 5/19/21 no liquid detected.
06/03/2021	170	Yes			X	Lead	Lag	Lead	Lag		N/A	Unable to close hand weir due to high water.
06/04/2021	171	Yes				Lead	Lag	Lead	Lag		N/A	High water preventing hand weir closure.
06/07/2021	174	Yes				Lead	Lag	Closed	Lead		Begin dewatering FB1 through the GAC.	
06/09/2021	176	Yes	X			Closed	Lead	Lead	Lag	X	Removed clogged filter fabric from FB1 and skimmed ~1 inch GAC layer and hard raked the remaining GAC in FB1.	FB2 ~ 36 hours in lead.
06/11/2021	178	Yes				Lead	Lag	Lead	Lag		N/A	High storm water levels from ~.1.0-inch overnight rain.
06/14/2021	181	Yes				Closed	Lead	Closed	Lead		Weir 3 dropped 6 inches. FB1 left to drain into midpoint and FB2 set as lead.	High stormwater level in seep is preventing manipulation of Weir 1.
06/15/2021	182	Yes	X	X		Closed	Lead	Lead	Lag	X	Hard scrub and flush discharge FB1 and hard scrub FB2. System stopped bypassing from stormwater surge. System returned to FB1 lead and FB2 lag at 16:30.	FB1 clogged and not flowing into midbasin. New performance sample running for 14 days.
06/17/2021	184	No				Lead	Lag	Lead	Lag		Filter fabric replacement and skimmed GAC at FB1 and FB2.	
06/21/2021	188	Yes				Lead	Lag	Lead	Lag	X	Stormwater still being processed at this time. FB1 will likely need to be skimmed or removed from surface due to absorption rate and compaction of carbon.	
06/28/2021	195	No				Closed	Lead	Closed	Lead	X	N/A	Carbon changeout on FB1 scheduled for 6/30/2021.
06/29/2021	196	No	X	X		Closed	Lead	Closed	Lead		N/A	Carbon changeout on FB1 scheduled for 6/30/2021.
06/30/2021	197	No				Changeout	Lead	Lag	Lead		FB1 GAC changeout. FB2 hard scrub with flush. Inlet stilling basin flush.	

Table 1d
Summary of Operations and Maintenance Activities - Seep D
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	Days Since Startup	Bypass Spillway Flow?	Sampling Performed			Operational Mode				Transducers Downloaded	Maintenance Activities Completed	Notes
						Arrival		Departure				
			Breakthrough Monitoring	Performance Monitoring	Wet Weather Monitoring	FB1	FB2	FB1	FB2			
06/24/2021	0	No				Lead	Lag	Lead	Lag		N/A	Seep D System startup.
06/29/2021	6	No	X			Lead	Lag	Lead	Lag		N/A	

Table 2a
Sampling Summary - Seep A
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Performance Monitoring Composite Samples

Sample ID	Composite Period	Sample Date
SEEP-A-INFLUENT-336-051721 SEEP-A-EFFLUENT-336-051721	May 3 - 17, 2021	May 17, 2021
SEEP-A-INFLUENT-336-053121 SEEP-A-EFFLUENT-336-053121	May 17 - 31, 2021	May 31, 2021
SEEP-A-INFLUENT-336-061421 SEEP-A-EFFLUENT-336-061421	May 31 - June 14, 2021	June 14, 2021
SEEP-A-INFLUENT-336-062921 SEEP-A-EFFLUENT-336-062921	June 15 - June 29, 2021	June 29, 2021

Wet Weather Composite Samples

Sample ID	Sample Date	Sample Time	Cumulative Rainfall (inches)
SEEP-A-INFLUENT-RAIN-24-050821 SEEP-A-EFFLUENT-RAIN-24-050821	May 8, 2021	7:30	0.07
SEEP-A-INFLUENT-RAIN-24-060321 SEEP-A-EFFLUENT-RAIN-24-060321	June 3, 2021	16:30	4.02

Notes

1 Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"
2 Precipitation data obtained from the USGS gauge #02105500 at the Wilm O Huske Lock and Dam

Table 2b
Sampling Summary - Seep B
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Performance Monitoring Composite Samples

Sample ID	Composite Period	Sample Date
SEEP-B-INFLUENT-24-061221 SEEP-B-EFFLUENT-24-061221	June 11 - 12, 2021	June 12, 2021
SEEP-B-INFLUENT-24-061521 SEEP-B-EFFLUENT-24-061521	June 14 - 15, 2021	June 15, 2021
SEEP-B-INFLUENT-24-062421 SEEP-B-EFFLUENT-24-062421	June 23 - 24, 2021	June 24, 2021

Notes

1 Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"
2 Precipitation data obtained from the USGS gauge #02105500 at the Wilm O Huske Lock and Dam
3 No wet weather samples were collected in June, as there was no qualifying rain event to trigger sample collection after system startup.
4 24-hour composite samples were collected rather than 14-day composite samples due to equipment malfunctions.

Table 2c
Sampling Summary - Seep C
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Performance Monitoring Composite Samples

Sample ID	Composite Period	Sample Date
SEEP-C-INFLUENT-24-051021 SEEP-C-EFFLUENT-24-051021	May 9 - 10, 2021	May 10, 2021
SEEP-C-INFLUENT-24-051621 SEEP-C-EFFLUENT-24-051621	May 15 - 16, 2021	May 16, 2021
SEEP-C-INFLUENT-336-053121 SEEP-C-EFFLUENT-336-053121	May 17 - 31, 2021	May 31, 2021
SEEP-C-INFLUENT-336-061421 SEEP-C-EFFLUENT-336-061421	May 31 - June 14, 2021	June 14, 2021
SEEP-C-INFLUENT-336-062921 SEEP-C-EFFLUENT-336-062921	June 15 - June 29, 2021	June 29, 2021

Wet Weather Composite Samples

Sample ID	Sample Date	Sample Time	Cumulative Rainfall (inches)
SEEP-C-INFLUENT-RAIN-24-050821 SEEP-C-EFFLUENT-RAIN-24-050821	May 8, 2021	7:30	0.07
SEEP-C-INFLUENT-RAIN-24-060321 SEEP-C-EFFLUENT-RAIN-24-060321	June 3, 2021	16:30	4.02

Notes

1 Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"
2 Precipitation data obtained from the USGS gauge #02105500 at the Wilm O Huske Lock and Dam
3 24-hour composite samples were collected rather than 14-day composite samples due to equipment malfunctions.

Table 3a
Summary of Performance Monitoring Analytical Results - Seep A
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-A-INFLUENT-336-051721** Sample Date: 17-May-21	**SEEP-A-EFFLUENT-336-051721** Sample Date: 17-May-21	**Percent Removal**	**SEEP-A-INFLUENT-336-053121** Sample Date: 31-May-21	**SEEP-A-EFFLUENT-336-053121** Sample Date: 31-May-21	**Percent Removal**	**SEEP-A-INFLUENT-336-061421** Sample Date: 14-Jun-21	**SEEP-A-EFFLUENT-336-061421** Sample Date: 14-Jun-21	**Percent Removal**
Hfpo Dimer Acid	**23,000**	**2,100**	90.9%	**32,000**	**1,900**	94.1%	**22,000**	**11**	100.0%
PFMOAA	**81,000**	**6,500**	92.0%	**91,000**	**5,300**	94.2%	**68,000**	**74**	99.9%
PFO2HxA	**37,000**	**2,900**	92.2%	**41,000**	**2,200**	94.6%	**36,000**	**19**	99.9%
PFO3OA	**13,000**	**1,100**	91.5%	**15,000**	**750 J**	95.0%	**14,000**	**8**	99.9%
PFO4DA	**8,400**	**650**	100.0%	**7,400**	**460 J**	93.8%	**7,300**	**5**	99.9%
PFO5DA	**5,300**	**400**	100.0%	**5,700**	**310 J**	94.6%	**4,100**	**3.6**	99.9%
PMPA	**21,000**	**1,600**	92.4%	**23,000**	**1,100 B**	95.2%	**19,000**	**41**	99.8%
PEPA	**10,000**	**770**	100.0%	**9,400**	**560**	94.0%	**10,000**	<20	100.0%
PS Acid	**2,600**	**250**	100.0%	**3,500**	**140 J**	96.0%	**4,500**	<2.0	100.0%
Hydro-PS Acid	**1,600**	**130**	100.0%	**2,100**	**100 J**	95.2%	**1,400**	<2.0	100.0%
R-PSDA	**2,500**	**200**	92.0%	**3,200**	**150 J**	95.3%	**2,200**	<2.0	100.0%
Hydrolyzed PSDA	**21,000**	**1,800**	100.0%	**38,000**	**1,400**	96.3%	**18,000**	**15**	99.9%
R-PSDCA	**55**	**3.9**	100.0%	**74**	**3.6 J**	95.1%	**45**	<2.0	100.0%
NVHOS, Acid Form	**1,000**	**88**	100.0%	**1,300**	**66 J**	94.9%	**950**	<2.0	100.0%
EVE Acid	**480**	**45**	100.0%	**620**	**20 J**	96.8%	**1,000**	<2.0	100.0%
Hydro-EVE Acid	**1,700**	**140**	100.0%	**1,900**	**100 J**	94.7%	**1,500**	<2.0	100.0%
R-EVE	**1,400**	**110**	100.0%	**1,600**	**84 J**	94.8%	**1,100**	<2.0	100.0%
PES	<6.7	<2.0	100.0%	<6.7	<2.0	100.0%	<3.4	<2.0	100.0%
PFECA B	<27	<5.3	100.0%	<27	<2.7	100.0%	<13	<2.0	100.0%
PFECA-G	<48	<9.6	100.0%	<48	<4.8	100.0%	<24	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**210,000**	**17,000**	**91.9%**	**230,000**	**13,000**	**94.3%**	**190,000**	**160**	**99.9%**
Total Table 3+ (20 Compounds) [1]	**230,000**	**19,000**	**91.7%**	**280,000**	**15,000**	**94.6%**	**210,000**	**180**	**99.9%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 3a
Summary of Performance Monitoring Analytical Results - Seep A
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-A-INFLUENT-336-062921** Sample Date: 29-Jun-21	**SEEP-A-EFFLUENT-336-062921** Sample Date: 29-Jun-21	**Percent Removal**
Hfpo Dimer Acid	**26,000**	**3.2**	100.0%
PFMOAA	**63,000**	**21**	100.0%
PFO2HxA	**35,000**	**5.2**	100.0%
PFO3OA	**13,000**	<2.0	100.0%
PFO4DA	**7,000**	<2.0	100.0%
PFO5DA	**5,700**	<2.0	100.0%
PMPA	**23,000**	<10	100.0%
PEPA	**6,900**	<20	100.0%
PS Acid	**5,100**	<2.0	100.0%
Hydro-PS Acid	**1,400**	<2.0	100.0%
R-PSDA	**2,400**	<2.0	100.0%
Hydrolyzed PSDA	**26,000**	<2.0	100.0%
R-PSDCA	**55**	<2.0	100.0%
NVHOS, Acid Form	**1,000**	<2.0	100.0%
EVE Acid	**890**	<2.0	100.0%
Hydro-EVE Acid	**1,600**	<2.0	100.0%
R-EVE	**1,200**	<2.0	100.0%
PES	<6.7	<2.0	100.0%
PFECA B	<27	<2.0	100.0%
PFECA-G	<48	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**190,000**	**29**	**100.0%**
Total Table 3+ (20 Compounds) [1]	**220,000**	**29**	**100.0%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 3b
Summary of Performance Monitoring Analytical Results - Seep B
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-B-INFLUENT-24-061221** Sample Date: 12-Jun-21	**SEEP-B-EFFLUENT-24-061221** Sample Date: 12-Jun-21	**Percent Removal**	**SEEP-B-INFLUENT-24-061521** Sample Date: 15-Jun-21	**SEEP-B-EFFLUENT-24-061521** Sample Date: 15-Jun-21	**Percent Removal**	**SEEP-B-INFLUENT-24-062421** Sample Date: 24-Jun-21	**SEEP-B-EFFLUENT-24-062421** Sample Date: 24-Jun-21	**Percent Removal**
Hfpo Dimer Acid	**22,000**	<2.0	100.0%	**30,000**	<2.0	100.0%	**35,000**	<2.0	100.0%
PFMOAA	**26,000**	<2.0	100.0%	**33,000**	<2.0	100.0%	**52,000**	<2.0	100.0%
PFO2HxA	**13,000**	<2.0	100.0%	**14,000**	<2.0	100.0%	**20,000**	<2.0	100.0%
PFO3OA	**4,000**	<2.0	100.0%	**3,700**	<2.0	100.0%	**5,200**	<2.0	100.0%
PFO4DA	**1,100**	<2.0	100.0%	**1,300**	<2.0	100.0%	**1,400**	<2.0	100.0%
PFO5DA	**260**	<2.0	100.0%	**510**	<2.0	100.0%	**480**	<2.0	100.0%
PMPA	**23,000**	<10	100.0%	**31,000**	**18**	99.9%	**40,000**	**18**	100.0%
PEPA	**16,000**	<20	100.0%	**13,000**	<20	100.0%	**17,000**	<20	100.0%
PS Acid	**2,000**	<2.0	100.0%	**2,500**	<2.0	100.0%	**2,300**	<2.0	100.0%
Hydro-PS Acid	**800**	<2.0	100.0%	**810**	<2.0	100.0%	**990**	<2.0	100.0%
R-PSDA	**2,200**	<2.0	100.0%	**3,100**	<2.0	100.0%	**4,100**	<2.0	100.0%
Hydrolyzed PSDA	**10,000**	<2.0	100.0%	**20,000**	<2.0	100.0%	**28,000**	<2.0	100.0%
R-PSDCA	**45**	<2.0	100.0%	**59**	<2.0	100.0%	**64**	<2.0	100.0%
NVHOS, Acid Form	**1,300**	<2.0	100.0%	**1,600**	<2.0	100.0%	**2,100**	<2.0	100.0%
EVE Acid	**2,800**	<2.0	100.0%	**3,500**	<2.0	100.0%	**3,300**	<2.0	100.0%
Hydro-EVE Acid	**1,400**	<2.0	100.0%	**1,800**	<2.0	100.0%	**2,100**	<2.0	100.0%
R-EVE	**1,900**	<2.0	100.0%	**2,500**	<2.0	100.0%	**3,400**	<2.0	100.0%
PES	<3.4	<2.0	100.0%	<6.7	<2.0	100.0%	<6.7	<2.0	100.0%
PFECA B	<13	<2.0	100.0%	<27	<2.0	100.0%	<27	<2.0	100.0%
PFECA-G	<24	<2.0	100.0%	<48	<2.0	100.0%	<48	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**110,000**	**ND**	**100.0%**	**140,000**	**18**	**100.0%**	**180,000**	**18**	**100.0%**
Total Table 3+ (20 Compounds) [1]	**130,000**	**ND**	**100.00%**	**160,000**	**18**	**99.99%**	**220,000**	**18**	**99.99%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 3c
Summary of Performance Monitoring Analytical Results - Seep C
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-C-INFLUENT-24-051021** Sample Date: 10-May-21	**SEEP-C-EFFLUENT-24-051021** Sample Date: 10-May-21	**Percent Removal**	**SEEP-C-INFLUENT-24-051621** Sample Date: 16-May-21	**SEEP-C-EFFLUENT-24-051621** Sample Date: 16-May-21	**Percent Removal**	**SEEP-C-INFLUENT-336-053121** Sample Date: 31-May-21	**SEEP-C-EFFLUENT-336-053121** Sample Date: 31-May-21	**Percent Removal**
Hfpo Dimer Acid	**18,000**	<2.0	100.0%	**19,000 J**	**2.9**	100.0%	**24,000**	**2.3**	100.0%
PFMOAA	**81,000**	**47**	99.9%	**65,000 J**	**52 J**	99.9%	**67,000**	**9.9**	100.0%
PFO2HxA	**25,000**	**2.8**	100.0%	**22,000 J**	**4.7 J**	100.0%	**23,000**	**3.5**	100.0%
PFO3OA	**7,900**	<2.0	100.0%	**7,400 J**	<2.0 UJ	100.0%	**7,400**	<2.0	100.0%
PFO4DA	**2,600**	<2.0	100.0%	**3,000 J**	<2.0 UJ	99.9%	**2,400**	<2.0	100.0%
PFO5DA	<78	<2.0	100.0%	**86 J**	<2.0 UJ	100.0%	<78	<2.0	100.0%
PMPA	**9,900**	<10	100.0%	**8,800 J**	**18 J**	99.8%	**9,800**	**16 B**	99.8%
PEPA	**3,400**	<20	100.0%	**3,700 J**	<20 UJ	100.0%	**3,200**	<20	100.0%
PS Acid	<20	<2.0	100.0%	<9.8 UJ	<2.0 UJ	100.0%	<20	<2.0	100.0%
Hydro-PS Acid	**440**	<2.0	100.0%	**410 J**	<2.0 UJ	100.0%	**440**	<2.0	100.0%
R-PSDA	**740**	<2.0	100.0%	**840 J**	<2.0 UJ	100.0%	**870**	<2.0	100.0%
Hydrolyzed PSDA	**990**	<2.0	100.0%	**750 J**	<2.0 UJ	100.0%	**1,100**	<2.0	100.0%
R-PSDCA	<17	<2.0	100.0%	**16 J**	<2.0 UJ	100.0%	<17	<2.0	100.0%
NVHOS, Acid Form	**790**	<2.0	100.0%	**670 J**	<2.0 UJ	100.0%	**690**	<2.0	100.0%
EVE Acid	<17	<2.0	100.0%	<8.7 UJ	<2.0 UJ	100.0%	<17	<2.0	100.0%
Hydro-EVE Acid	**1,100**	<2.0	100.0%	**1,200 J**	<2.0 UJ	100.0%	**1,200**	<2.0	100.0%
R-EVE	**690**	<2.0	100.0%	**760 J**	<2.0 UJ	100.0%	**880**	<2.0	100.0%
PES	<6.7	<2.0	100.0%	<3.4 UJ	<2.0 UJ	100.0%	<6.7	<2.0	100.0%
PFECA B	<27	<2.0	100.0%	<13 UJ	<2.0 UJ	100.0%	<27	<2.0	100.0%
PFECA-G	<48	<2.0	100.0%	<24 UJ	<2.0 UJ	100.0%	<48	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**150,000**	**50**	**100.0%**	**130,000**	**78**	**99.9%**	**140,000**	**32**	**100.0%**
Total Table 3+ (20 Compounds) [1]	**150,000**	**50**	**100.0%**	**130,000**	**78**	**99.9%**	**140,000**	**32**	**100.0%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 3c
Summary of Performance Monitoring Analytical Results - Seep C
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-C-INFLUENT-336-061421** Sample Date: 14-Jun-21	**SEEP-C-EFFLUENT-336-06142021** Sample Date: 14-Jun-21	**Percent Removal**	**SEEP-C-INFLUENT-336-062921** Sample Date: 29-Jun-21	**SEEP-C-EFFLUENT-336-062921** Sample Date: 29-Jun-21	**Percent Removal**
Hfpo Dimer Acid	**12,000**	**12**	99.9%	**15,000**	**7.3**	100.0%
PFMOAA	**34,000**	**93**	99.7%	**41,000**	**60**	99.9%
PFO2HxA	**12,000**	**14**	99.9%	**17,000**	**13**	99.9%
PFO3OA	**4,200**	**3.7**	99.9%	**5,200**	**2.5**	100.0%
PFO4DA	**1,300**	<2.0	100.0%	**2,100**	<2.0	100.0%
PFO5DA	<78	<2.0	100.0%	**120**	<2.0	100.0%
PMPA	**5,400**	**22**	99.6%	**9,200**	**22**	99.8%
PEPA	**1,900**	<20	100.0%	**2,200**	<20	100.0%
PS Acid	<20	<2.0	100.0%	<20	<2.0	100.0%
Hydro-PS Acid	**270**	<2.0	100.0%	**340**	<2.0	100.0%
R-PSDA	**540**	<2.0	100.0%	**640**	<2.0	100.0%
Hydrolyzed PSDA	**510**	<2.0	100.0%	**620**	<2.0	100.0%
R-PSDCA	<17	<2.0	100.0%	<17	<2.0	100.0%
NVHOS, Acid Form	**380**	<2.0	100.0%	**570**	<2.0	100.0%
EVE Acid	<17	<2.0	100.0%	<17	<2.0	100.0%
Hydro-EVE Acid	**670**	<2.0	100.0%	**950**	<2.0	100.0%
R-EVE	**440**	<2.0	100.0%	**580**	<2.0	100.0%
PES	<6.7	<2.0	100.0%	<6.7	<2.0	100.0%
PFECA B	<27	<2.0	100.0%	<27	<2.0	100.0%
PFECA-G	<48	<2.0	100.0%	<48	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**72,000**	**140**	**99.8%**	**94,000**	**100**	**99.9%**
Total Table 3+ (20 Compounds) [1]	**74,000**	**140**	**99.8%**	**96,000**	**100**	**99.9%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 4a
Summary of Wet Weather Analytical Results - Seep A
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-A-INFLUENT-RAIN-24-050821** Sample Date: 08-May-21	**SEEP-A-EFFLUENT-RAIN-24-050821** Sample Date: 08-May-21	**Percent Removal**	**SEEP-A-INFLUENT-RAIN-24-060321** Sample Date: 03-Jun-21	**SEEP-A-EFFLUENT-RAIN-24-060321** Sample Date: 03-Jun-21	**Percent Removal**
Hfpo Dimer Acid	**23,000 J**	**180 J**	99.2%	**18,000**	**10**	99.9%
PFMOAA	**71,000 J**	**520 J**	99.3%	**54,000**	**94**	99.8%
PFO2HxA	**31,000 J**	**250 J**	99.2%	**24,000**	**18**	99.9%
PFO3OA	**11,000 J**	**90 J**	99.2%	**8,800**	**6.1**	99.9%
PFO4DA	**5,000 J**	**43 J**	99.1%	**4,500**	**4.2**	99.9%
PFO5DA	**4,000 J**	**22 J**	99.5%	**3,000**	**2.2**	99.9%
PMPA	**19,000 J**	**140 J**	99.3%	**13,000**	**16 B**	99.9%
PEPA	**7,600 J**	**59 J**	99.2%	**6,600**	<20	100.0%
PS Acid	**1,800 J**	**15 J**	99.2%	**2,400**	<2.0	100.0%
Hydro-PS Acid	**1,300 J**	**8.6 J**	99.3%	**1,000**	<2.0	100.0%
R-PSDA	**1,900 J**	**24 J**	98.7%	**1,800**	<2.0	100.0%
Hydrolyzed PSDA	**19,000 J**	**150 J**	99.2%	**16,000**	**10**	99.9%
R-PSDCA	**42 J**	<2.0 UJ	100.0%	**33**	<2.0	100.0%
NVHOS, Acid Form	**870 J**	**6.9 J**	99.2%	**890**	<2.0	100.0%
EVE Acid	**530 J**	**4.3 J**	99.2%	**710**	<2.0	100.0%
Hydro-EVE Acid	**1,100 J**	**8.4 J**	99.2%	**1,100**	<2.0	100.0%
R-EVE	**980 J**	**10 J**	99.0%	**840**	<2.0	100.0%
PES	<6.7 UJ	<2.0 UJ	100.0%	<6.7	<2.0	100.0%
PFECA B	<27 UJ	<2.0 UJ	100.0%	<27	<2.0	100.0%
PFECA-G	<48 UJ	<2.0 UJ	100.0%	<48	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**180,000**	**1,300**	**99.3%**	**140,000**	**150**	**99.9%**
Total Table 3+ (20 Compounds) [1]	**200,000**	**1,500**	**99.3%**	**160,000**	**160**	**99.9%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 4c
Summary of Wet Weather Analytical Results - Seep C
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Table 3+ SOP (ng/L)	**SEEP-C-INFLUENT-RAIN-24-050821** Sample Date: 08-May-21	**SEEP-C-EFFLUENT-RAIN-24-050821** Sample Date: 08-May-21	**Percent Removal**	**SEEP-C-INFLUENT-RAIN-24-060321** Sample Date: 03-Jun-21	**SEEP-C-EFFLUENT-RAIN-24-060321** Sample Date: 03-Jun-21	**Percent Removal**
Hfpo Dimer Acid	**20,000 J**	**3.2 J**	100.0%	**11,000**	**48**	99.6%
PFMOAA	**87,000 J**	**41 J**	100.0%	**43,000**	**180**	99.6%
PFO2HxA	**27,000 J**	**3.9 J**	100.0%	**15,000**	**61**	99.6%
PFO3OA	**8,900 J**	<2.0 UJ	100.0%	**5,000**	**19**	99.6%
PFO4DA	**2,500 J**	<2.0 UJ	100.0%	**1,700**	**6.7**	99.6%
PFO5DA	<78 UJ	<2.0 UJ	100.0%	<39	<2.0	100.0%
PMPA	**11,000 J**	<10 UJ	100.0%	**4,800 B**	**28 B**	99.4%
PEPA	**3,600 J**	<20 UJ	100.0%	**2,300**	<20	100.0%
PS Acid	<20 UJ	<2.0 UJ	100.0%	<9.8	<2.0	100.0%
Hydro-PS Acid	**410 J**	<2.0 UJ	100.0%	**270**	<2.0	100.0%
R-PSDA	**790 J**	<2.0 UJ	100.0%	**410**	<2.0	100.0%
Hydrolyzed PSDA	**1,000 J**	<2.0 UJ	100.0%	**400**	**2**	99.5%
R-PSDCA	<17 UJ	<2.0 UJ	100.0%	**10**	<2.0	100.0%
NVHOS, Acid Form	**840 J**	<2.0 UJ	100.0%	**400**	**3.4**	99.2%
EVE Acid	<17 UJ	<2.0 UJ	100.0%	<8.7	<2.0	100.0%
Hydro-EVE Acid	**1,100 J**	<2.0 UJ	100.0%	**790**	**3.3**	99.6%
R-EVE	**730 J**	<2.0 UJ	100.0%	**390**	<2.0	100.0%
PES	<6.7 UJ	<2.0 UJ	100.0%	<3.4	<2.0	100.0%
PFECA B	<27 UJ	<2.0 UJ	100.0%	<13	<2.0	100.0%
PFECA-G	<48 UJ	<2.0 UJ	100.0%	<24	<2.0	100.0%
Total Table 3+ (17 Compounds) [1,2]	**160,000**	**48**	**100.0%**	**84,000**	**350**	**99.6%**
Total Table 3+ (20 Compounds) [1]	**160,000**	**48**	**100.0%**	**85,000**	**350**	**99.6%**

Notes:
1 - The total Table 3+ sum is rounded to two significant figures.
2 - The three Table 3+ compounds that are not included in the list of 17, but are included in the list of 20, are R-PSDA, R-EVE, and Hydrolyzed PSDA.
Bold - Analyte detected above associated reporting limit
EPA - Environmental Protection Agency

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
B - Analyte detected in the blank and sample.
UJ – Analyte not detected. Reporting limit may not be accurate or precise.
< - Analyte not detected above associated reporting limit.
Sample Identification Label Key: "Seep - [A, B, C, or D] - [Sample Location Inside FTC] - [# of Aliquots in Composite Sample] - [MMDDYY]"

Table 5
Cape Fear River Elevation and Local Precipitation Statistics
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, NC

Seep	# of Days of Operation on Record	# of Days in Reporting Period	River Above Wall Elevation		River Above Spillway Elevation		River Above GAC Elevation		River Above Discharge Pipe	
			Percent of Reporting Period	Number of Days	Percent of Reporting Period	Number of Days	Percent of Reporting Period	Number of Days	Percent of Reporting Period	Number of Days
C	197	61	0%	0.0	0%	0.0	0%	0.0	0%	0.0
A	64	61	0%	0.0	0%	0.0	0%	0.0	0%	0.0
B *	23	23	0%	0.0	0%	0.0	0%	0.0	0%	0.0
D *	7	7	0%	0.0	0%	0.0	0%	0.0	0%	0.0
Historical Annual Average (2007-2020)			1.7%		2.2%		3.7%		9.6%	

Precipitation (inches)	
Current Reporting Period (May - Jun 2021) **	9.34
Current Reporting Period Historical Average (May - Jun 2004-2020)	8.50
2021 Year-to-Date	24.29
Historical Year-to-Date Average (2004-2020)	19.33
Historical Annual Average (2004-2020)	43.44

Notes

1 River elevation and precipitation data from USGS Huske Lock and Dam site 02105500.

* Statistics for Seep B and D have been calculated based on design elevations and will be updated pending results of as-built survey.

** The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Table 6a
Water Quality Data - Seep A
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	DO (mg/L)			pH (SU)			Specific Conductance (uS/cm)			Temperature (°C)			Turbidity (NTU)			TSS (mg/L)		
	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference
5/8/2021	NM	7.2	-	4.3	5.9	36%	NM	99	-	NM	26	-	NM	0.39	-	0	0	0%
5/11/2021	6.8	7.0	3%	3.8	4.7	23%	170	128	-24%	19	19	-2%	10.39	5.37	-48%	0	0	0%
5/17/2021	8.3	8.3	0%	4.2	5.8	39%	157	104	-34%	19	19	-3%	22.77	2.34	-90%	0	0	0%
5/21/2021	4.7	2.3	-52%	3.9	6.1	54%	187	164	-12%	19	19	2%	2.96	4.05	37%	0	0	0%
5/25/2021	5.8	3.9	-33%	4.0	4.8	20%	164	125	-24%	21	22	2%	NM	NM	-	0	0	0%
5/31/2021	7.7	7.9	3%	3.7	5.2	41%	171	119	-30%	23	23	3%	5.74	1.59	-72%	0	0	0%
6/1/2021	5.5	3.3	-40%	4.1	6.7	65%	158	119	-24%	21	20	-6%	1.44	0.75	-48%	0	0	0%
6/3/2021	7.1	5.4	-25%	4.5	5.6	27%	70	71	2%	23	23	-1%	432.69	1.98	-100%	0	0	0%
6/14/2021	6.8	7.0	3%	4.2	6.4	54%	155	140	-9%	31	31	-1%	2.33	2.70	16%	0	0	0%
6/22/2021	4.7	5.0	6%	4.4	5.0	13%	110	130	18%	23	23	-2%	59.41	0.16	-100%	0	0	0%
6/29/2021	4.6	3.0	-35%	4.5	5.5	22%	133	143	7%	25	24	-3%	20.21	3.20	-84%	0	0	0%
6/30/2021	6.9	7.3	6%	4.2	4.7	12%	171	13	-92%	25	23	-9%	6.86	0.20	-97%	0	0	0%
Average	*6.3*	*5.6*	*-10%*	*4.1*	*5.5*	*34%*	*149.4*	*112.9*	*-24%*	*23*	*23*	*-1%*	*56.5*	*2.1*	*-96%*	*0.0*	*0.0*	*0%*
Median	*6.8*	*6.2*	*-9%*	*4.2*	*5.6*	*34%*	*157.6*	*122.0*	*-23%*	*23*	*23*	*0%*	*8.6*	*2.0*	*-77%*	*0.0*	*0.0*	*0%*

Notes:

DO	dissolved oxygen
mg/L	milligram per liter
SU	standard units
NTU	neophelometric turbidity units
uS/cm	microSiemens per centimeter
TSS	total suspended solids
NM	Not Measured

Table 6b
Water Quality Data - Seep B
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	DO (mg/L)			pH (SU)			Specific Conductance (uS/cm)			Temperature (°C)			Turbidity (NTU)			TSS (mg/L)		
	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference
6/12/2021	6.98	7.01	0%	6.74	7.61	13%	67.36	91.14	35%	24	22	-6%	EC	EC	-	0	0	0%
6/15/2021	4.6	6.5	41%	7.6	8.1	6%	238	167	-30%	26	26	1%	30.42	8.95	-71%	0	0	0%
6/24/2021	6.7	6.6	-1%	4.5	6.2	38%	120	87	-27%	24	24	0%	1.00	0.54	-46%	0	0	0%
Average	*6.1*	*6.7*	*10%*	*6.3*	*7.3*	*16%*	*141.6*	*115.2*	*-19%*	*25*	*24*	*-2%*	*15.7*	*4.7*	*-70%*	*0.0*	*0.0*	*0%*
Median	*6.7*	*6.6*	*-1%*	*6.7*	*7.6*	*13%*	*119.9*	*91.1*	*-24%*	*24*	*24*	*0%*	*15.7*	*4.7*	*-70%*	*0.0*	*0.0*	*0%*

Notes:

DO	dissolved oxygen
mg/L	milligram per liter
SU	standard units
NTU	neophelometric turbidity units
uS/cm	microSiemens per centimeter
TSS	total suspended solids
NM	Not Measured
EC	Error Code

Table 6c
Water Quality Data - Seep C
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

Date	DO (mg/L)			pH (SU)			Specific Conductance (uS/cm)			Temperature (°C)			Turbidity (NTU)			TSS (mg/L)		
	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference
5/8/2021	7.1	7.1	0%	6.6	6.7	2%	92	89	-4%	27	28	3%	3.97	0.00	-100%	0	0	0%
5/10/2021	6.6	5.3	-20%	6.4	6.8	5%	98	98	0%	26	25	-2%	42.49	0.00	-100%	0	0	0%
5/11/2021	7.8	6.2	-20%	5.6	6.7	20%	91	115	27%	21	21	0%	85.09	3.08	-96%	0	0	0%
5/16/2021	7.1	7.1	1%	6.1	6.2	1%	85	99	17%	25	25	-1%	14.94	0.80	-95%	0	0	0%
5/25/2021	4.4	3.8	-15%	5.3	6.8	28%	81	103	27%	24	24	3%	4.39	4.66	6%	0	0	0%
5/31/2021	7.6	7.6	1%	5.2	5.8	12%	87	95	10%	27	27	0%	12.88	2.71	-79%	0	0	0%
6/1/2021	5.0	4.3	-14%	5.2	5.3	3%	84	93	11%	23	22	-3%	5.38	0.84	-84%	0	0	0%
6/3/2021	6.8	6.0	-13%	5.8	5.7	-2%	54	66	22%	24	24	1%	271.73	1.97	-99%	0	0	0%
6/14/2021	6.5	6.3	-2%	6.6	6.8	2%	90	153	70%	33	33	-1%	52.63	1.19	-98%	0	0	0%
6/29/2021	6.3	6.6	4%	6.8	6.8	0%	94	83	-12%	29	30	3%	1.48	0.12	-92%	0	0	0%
Average	*7.0*	*5.5*	*-21%*	*6.2*	*7.1*	*14%*	*99.1*	*206.3*	*108%*	*19*	*19*	*0%*	*65.8*	*21.4*	*-67%*	*0.0*	*0.0*	*0%*
Median	*7.1*	*6.1*	*-14%*	*6.1*	*6.8*	*11%*	*89.6*	*99.4*	*11%*	*20*	*20*	*0%*	*32.8*	*1.2*	*-96%*	*0.0*	*0.0*	*0%*

Notes:

DO	dissolved oxygen
mg/L	milligram per liter
SU	standard units
NTU	neophelometric turbidity units
uS/cm	microSiemens per centimeter
TSS	total suspended solids
NM	Not Measured

Table 6d
Water Quality Data - Seep D
Reporting Period 3 (May - June 2021)
Chemours Fayetteville Works
Fayetteville, North Carolina

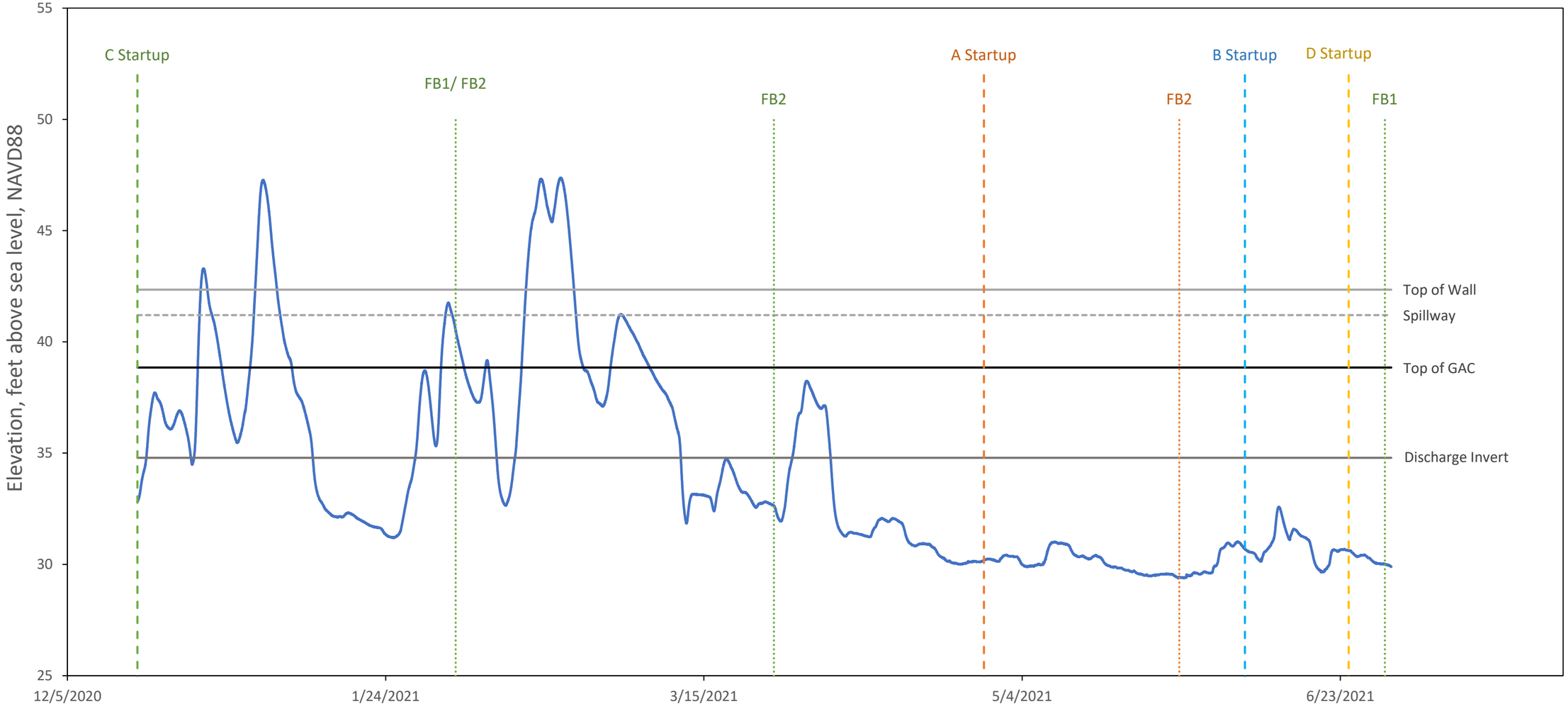
Date	DO (mg/L)			pH (SU)			Specific Conductance (uS/cm)			Temperature (°C)			Turbidity (NTU)			TSS (mg/L)		
	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference	Influent	Effluent	Percent Difference
6/29/2021	3.9	4.4	13%	4.1	6.3	55%	160	147	-8%	23	24	6%	47.28	3.46	-93%	0	0	0%
Average	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Median	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

DO	dissolved oxygen
mg/L	milligram per liter
SU	standard units
NTU	neophelometric turbidity units
uS/cm	microSiemens per centimeter
TSS	total suspended solids
NM	Not Measured

FIGURES

River Elevation During Flow Through Cell Operation (12/16/2020 through 06/30/2021)



Legend

- River
- GAC Changeout, Seep C
- GAC Changeout, Seep A
- Seep A Feature
- Seep C Feature
- Seep B Feature
- Seep D Feature

Notes:
As-built survey information for Seep C from RMA Surveying October 2020.
River elevation from USGS Huske Lock and Dam site 02105500, converted to NAVD88.
For clarity of presentation, Figure 1 shows Seep C elevations only.
FB1/FB2 = Filter Bed 1/Filter Bed 2
GAC = Granular Activated Carbon

River Level & FTC As-Built Elevations

Chemours Fayetteville Works
Fayetteville, North Carolina

Geosyntec consultants

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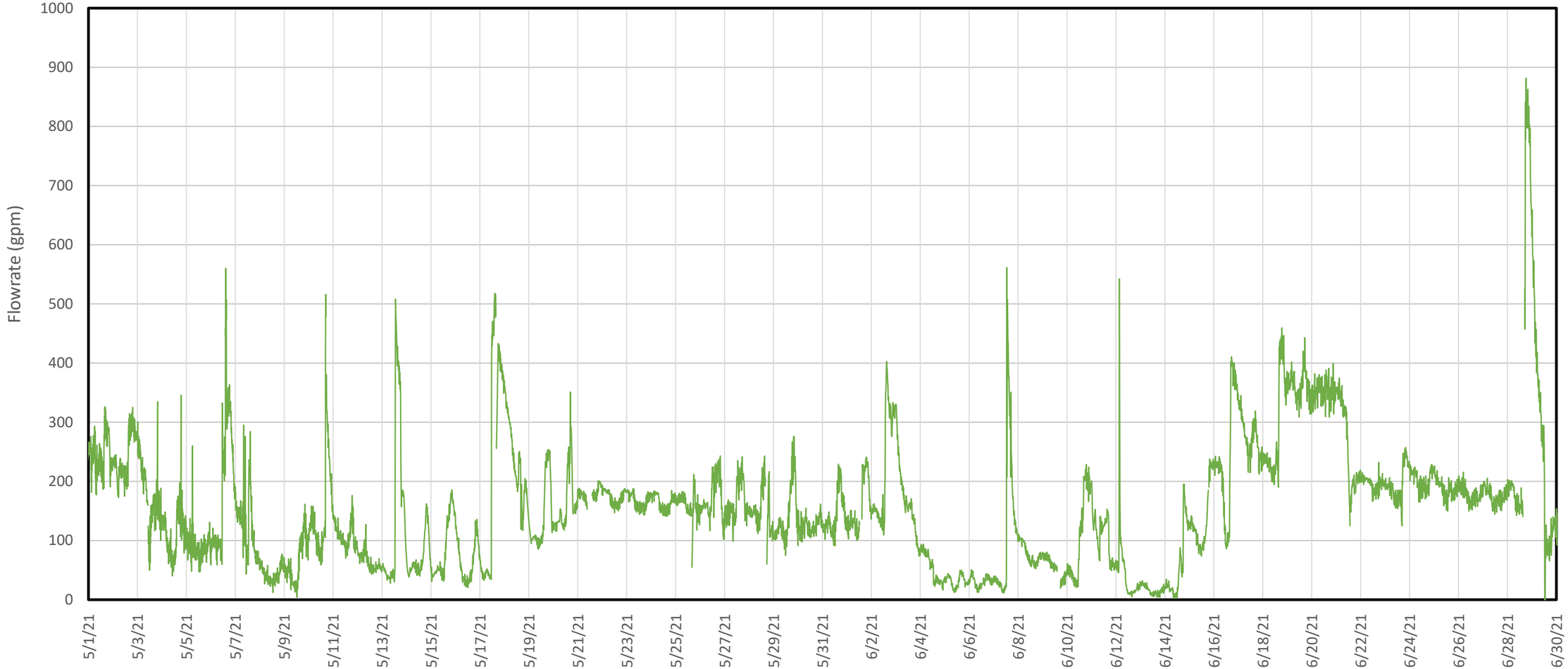
Figure 1



Legend

Measureable Discharge Flowrate

Flowrate Statistics (gpm)

	(05/01 - 06/30)	Since Startup
Median Q	140	150
95th percentile Q	347	341
Max Q	882	882

Notes:

Figure 2A depicts the measurable discharge flowrate calculated using the Discharge Basin transducer data (solid green).

Measured Discharge Flowrate - Seep A

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Fayetteville, North Carolina

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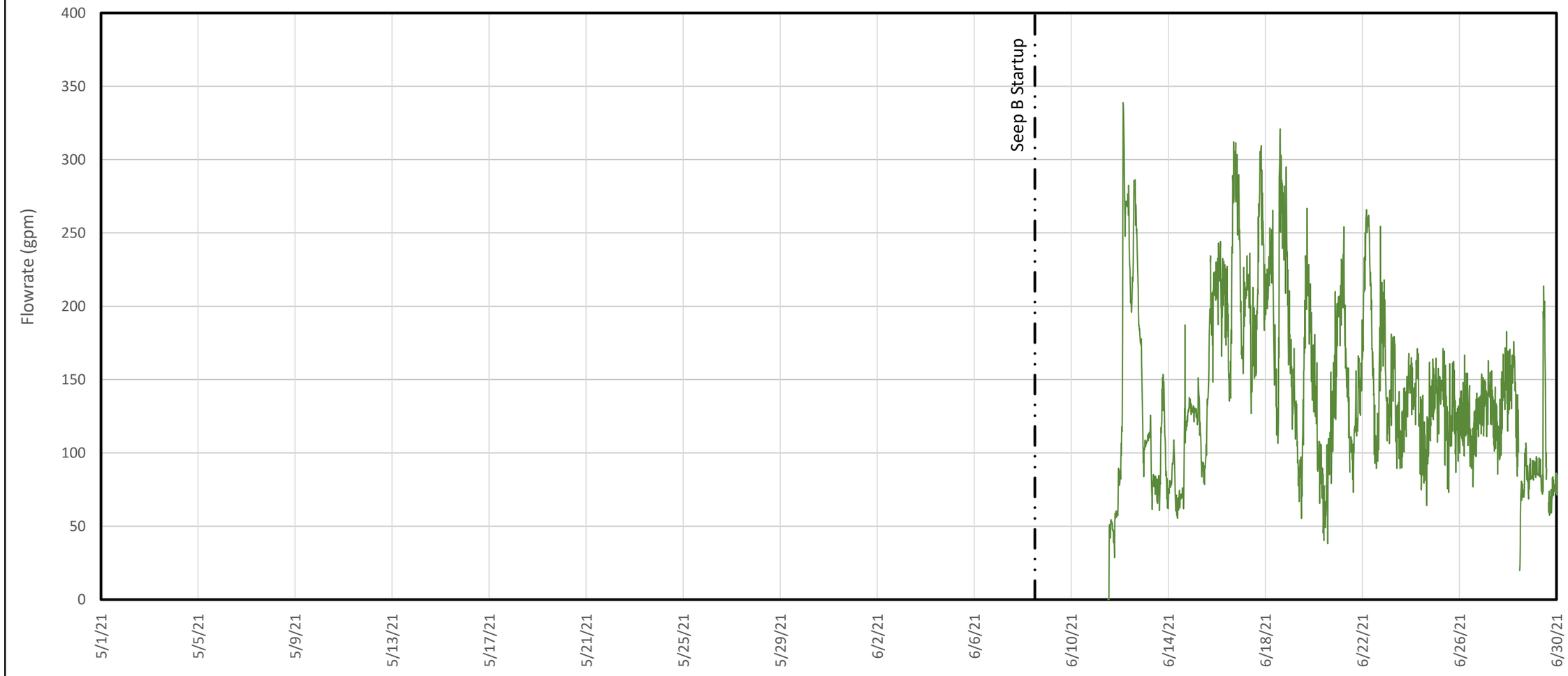
Figure 2A



Legend

Measureable Discharge Flowrate

Flowrate Statistics (gpm)

	(06/08 - 06/30)	Since Startup
Median Q	131	131
95th percentile Q	262	262
Max Q	339	339

Notes:

Figure 2B depicts the measurable discharge flowrate calculated using the Discharge Basin transducer data (solid green).

Measured Discharge Flowrate - Seep B

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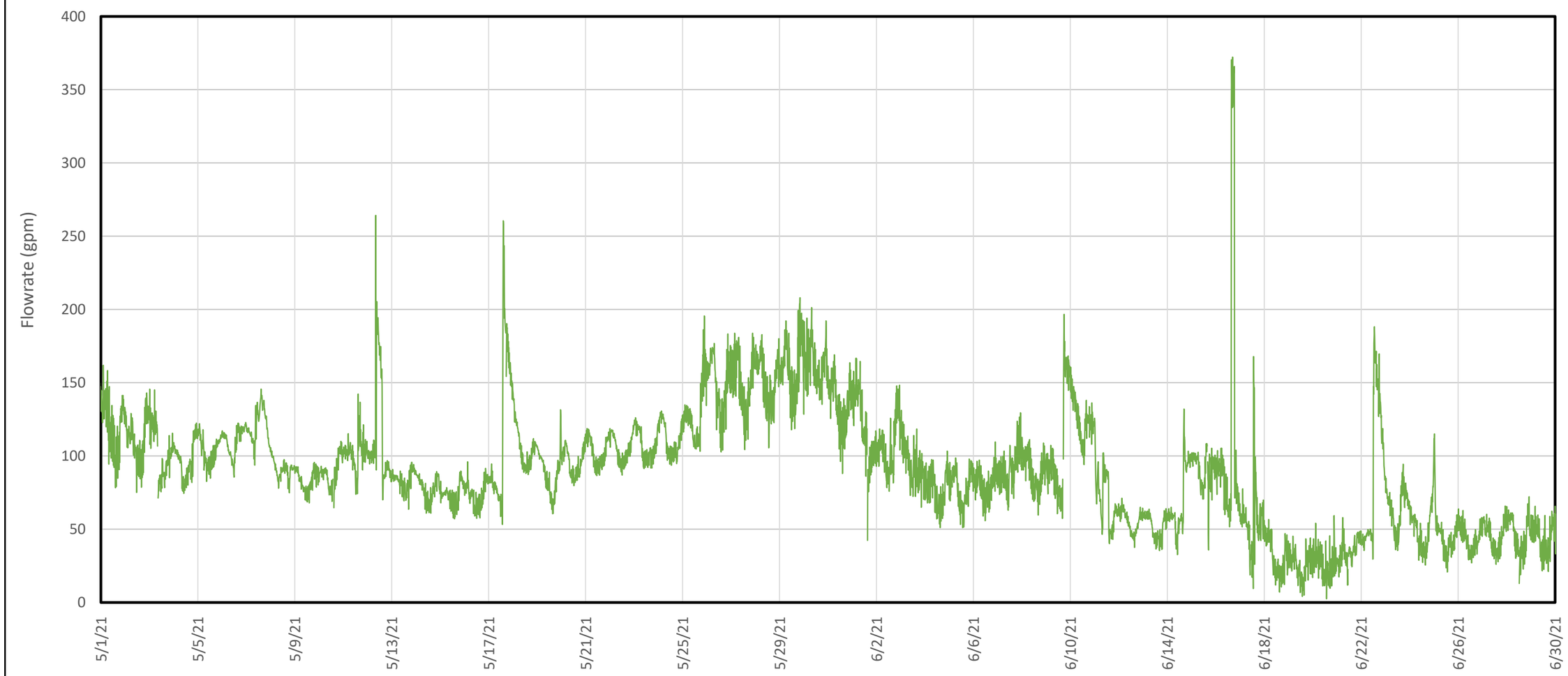
Figure 2B



Legend

Measureable Discharge Flowrate

Flowrate Statistics (gpm)

	(05/01 - 06/30)	Since Startup
Median Q	90	98
95th percentile Q	161	165
Max Q	372	372

Notes:

Figure 2C depicts the measurable discharge flowrate calculated using the Discharge Basin transducer data (solid green).

Measured and Imputed Discharge Flowrate - Seep C

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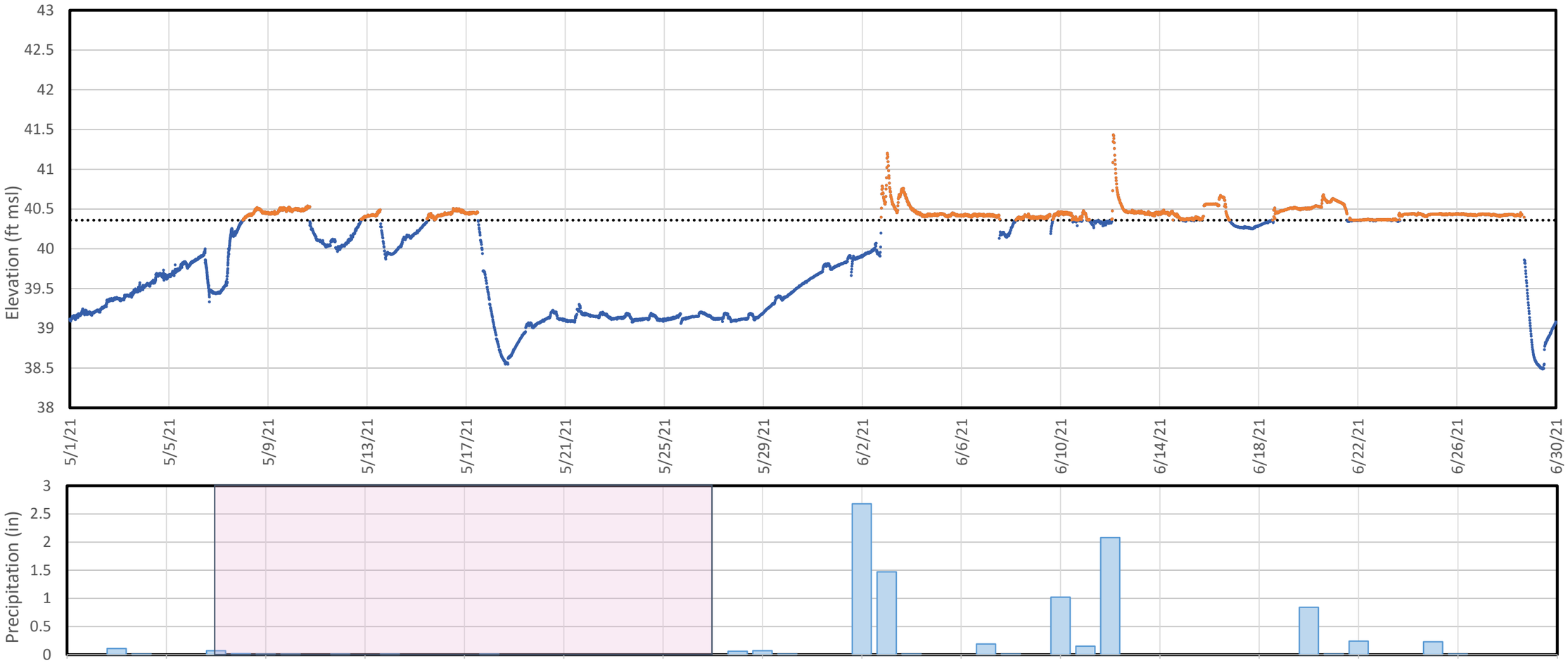
Figure 2C



Legend

- Influent Chamber/Impoundment Water Elevation
- Impoundment Water Elevation Above Bypass Spillway
- Bypass Spillway Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

This figure depicts the influent transducer data that was collected during the reporting period (blue line). Instances of impoundment bypass flow are shown in orange.
Precipitation data obtained from USGS gauge# 02105500 at the Wilm O Huske Lock and Dam.
The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Influent Water Elevation and Bypass Flow - Seep A

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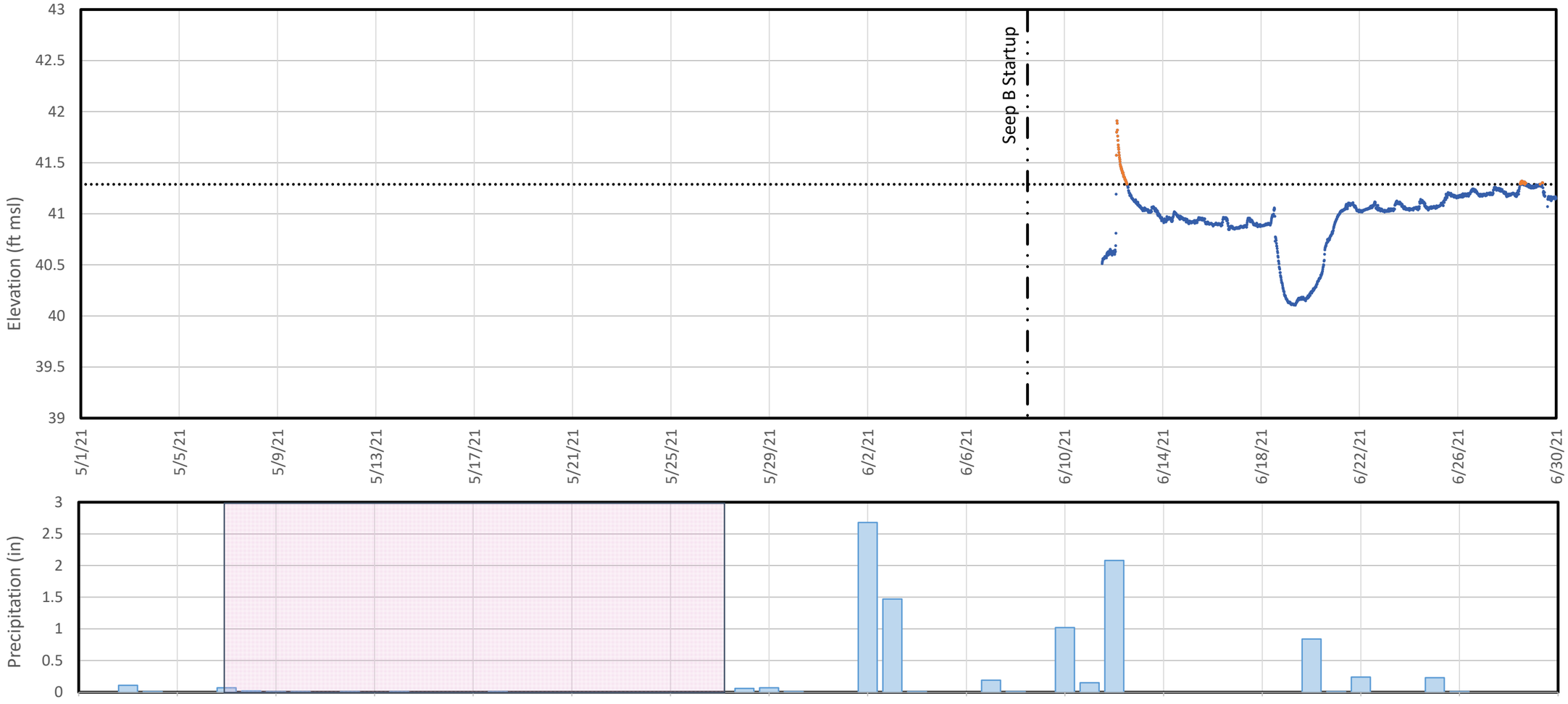
Figure 3A



Legend

- Influent Chamber/Impoundment Water Elevation
- Impoundment Water Elevation Above Bypass Spillway
- Bypass Spillway Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

Figure 3B shows the influent transducer data that was collected during the reporting period (blue line). Instances of impoundment bypass flow are shown in orange.
Precipitation data obtained from USGS gauge# 02105500 at the Wilm O Huske Lock and Dam.
The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Influent Water Elevation and Bypass Flow - Seep B

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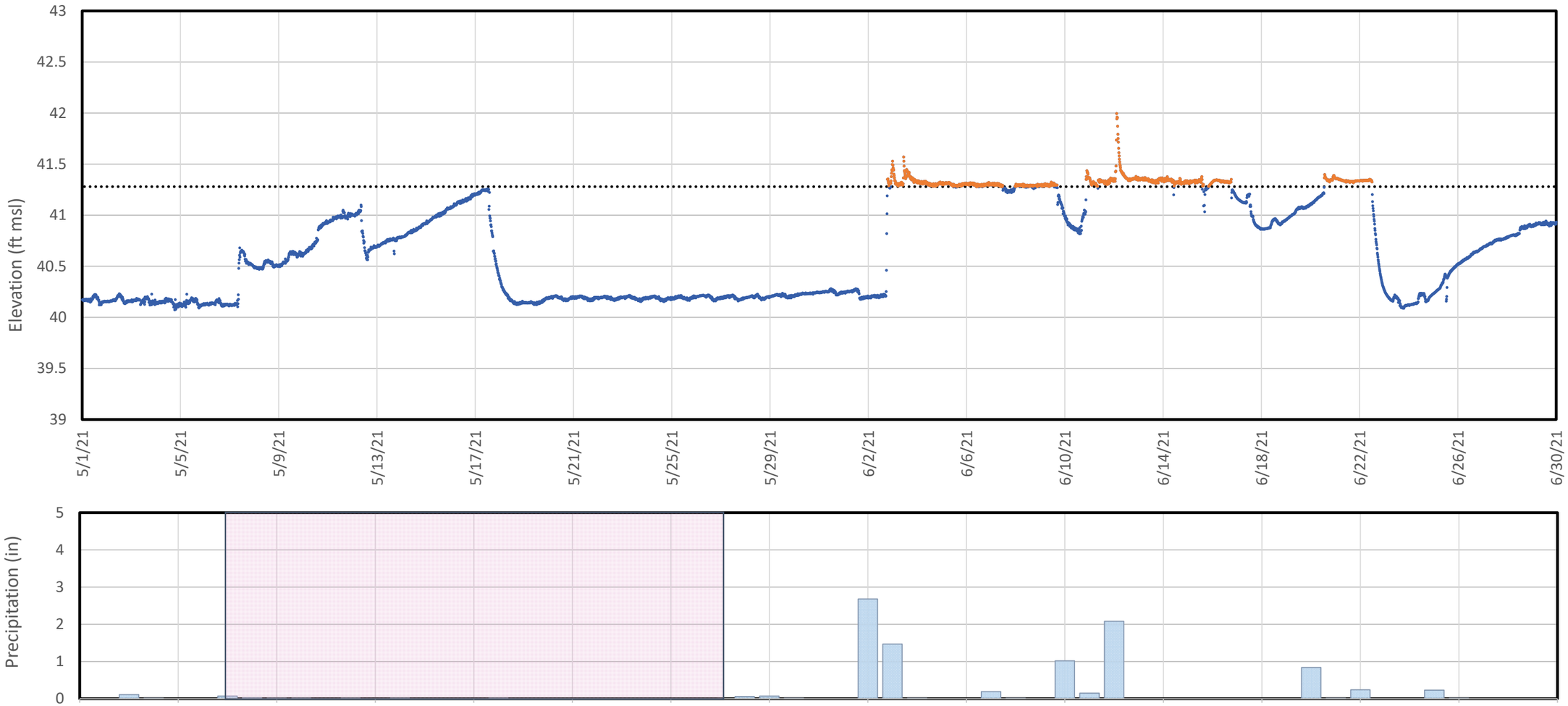
Figure 3B



Legend

- Influent Chamber/Impoundment Water Elevation
- Impoundment Water Elevation Above Bypass Spillway
- Bypass Spillway Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

Figure 3C shows the influent transducer data that was collected during the reporting period (blue line). Instances of impoundment bypass flow are shown in orange.
Precipitation data obtained from USGS gauge# 02105500 at the Wilm O Huske Lock and Dam.
The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Influent Water Elevation and Bypass Flow - Seep C

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Fayetteville, North Carolina

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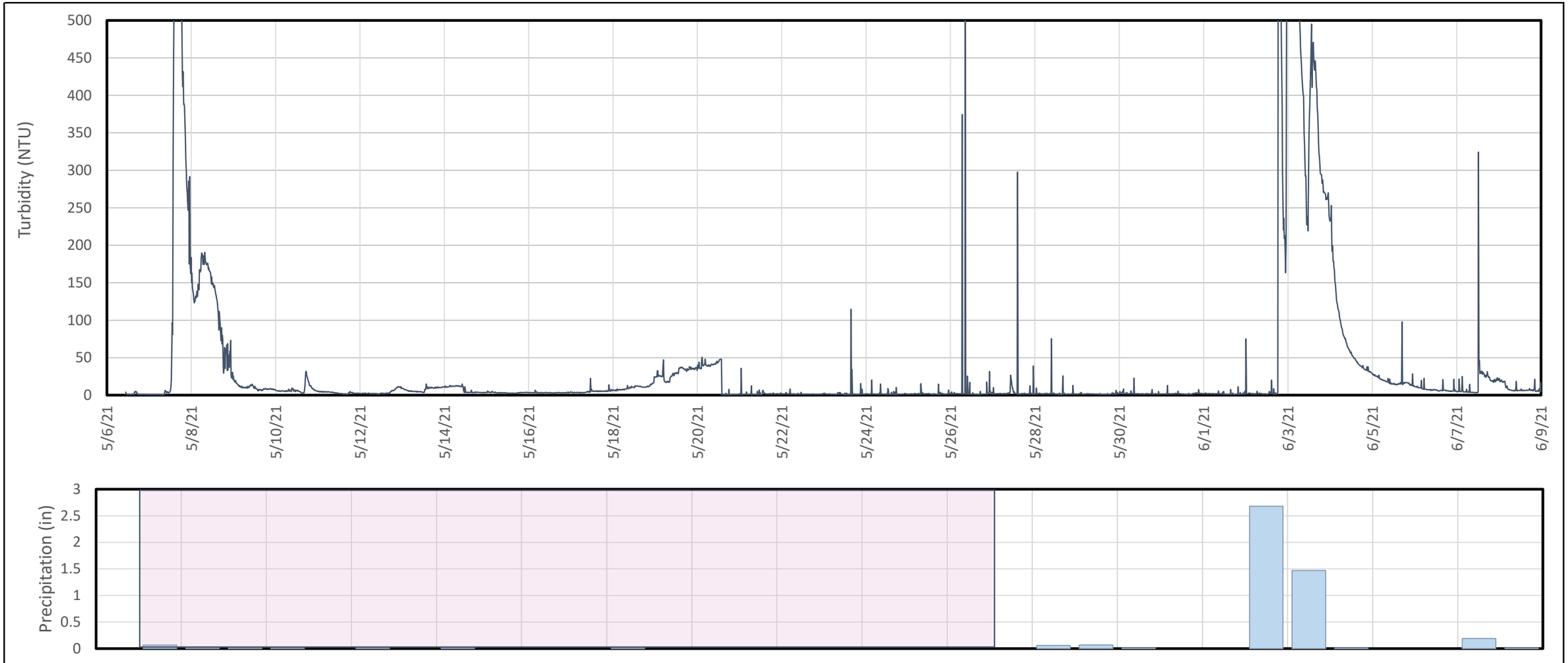
Figure 3C



Legend

Turbidity

Precipitation (daily totals)

Precipitation Data Gap

Notes

NTU - Nephelometric Turbidity Unit

Turbidity data logged with a AquaTROLL Turbidiy Sensor placed in the Influent Stilling Basin.

The peak values recorded by the turbidity sensor (over 1,000 NTU) may be biased high, as the sensors can become clogged during high sediment-loading events. The interpretation of the turbidity data in the report is largely derived on the timing of the readings (i.e., baseline dry weather turbidity is very low and spikes after rain events). For clarity, the y-axis above is limited to 500 NTU.

Seep A Turbidity Logging and Precipitation (May - June 2021)

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Figure 4

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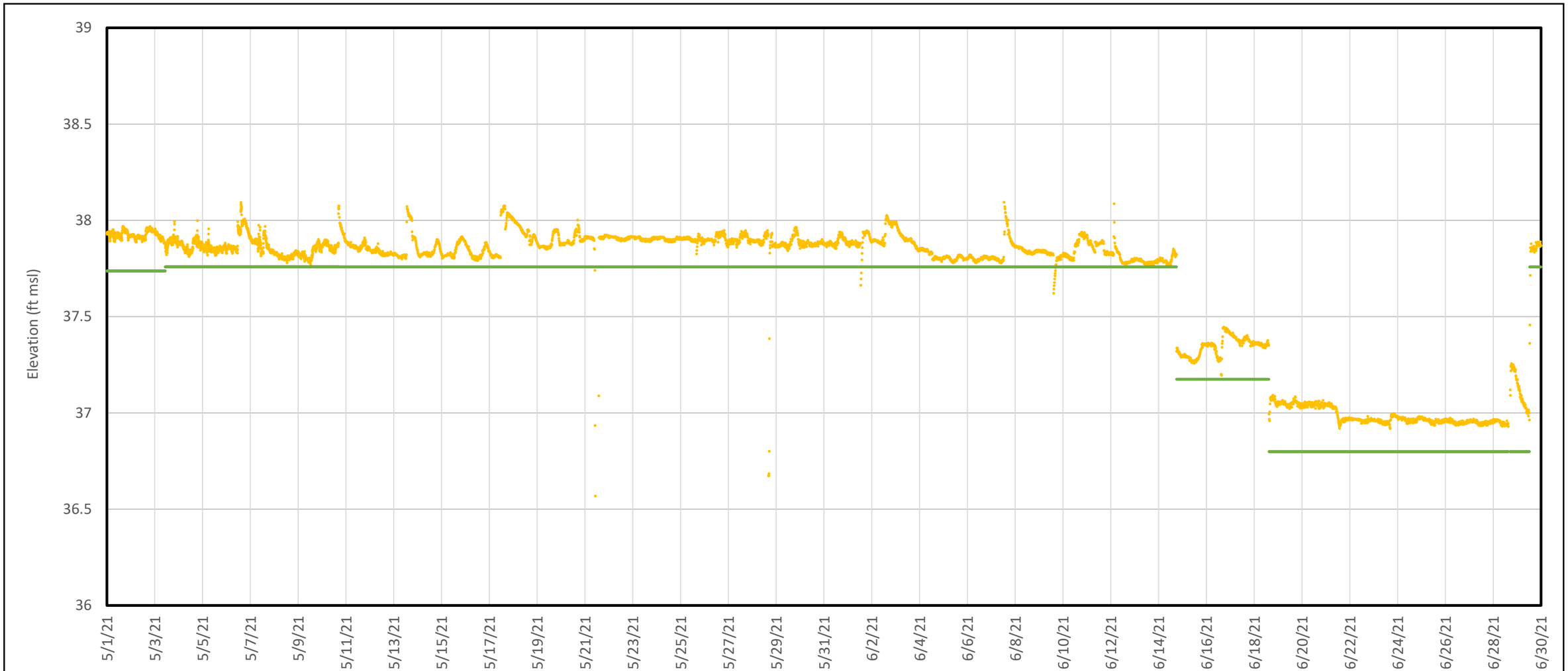
APPENDIX A
Transducer Data Reduction



Legend

- Discharge Basin Elevation
- Weir 3 Elevation

Note:

Figure A1-A shows the discharge basin transducer data that was collected during the reporting period.

Discharge Basin Water Elevation - Seep A

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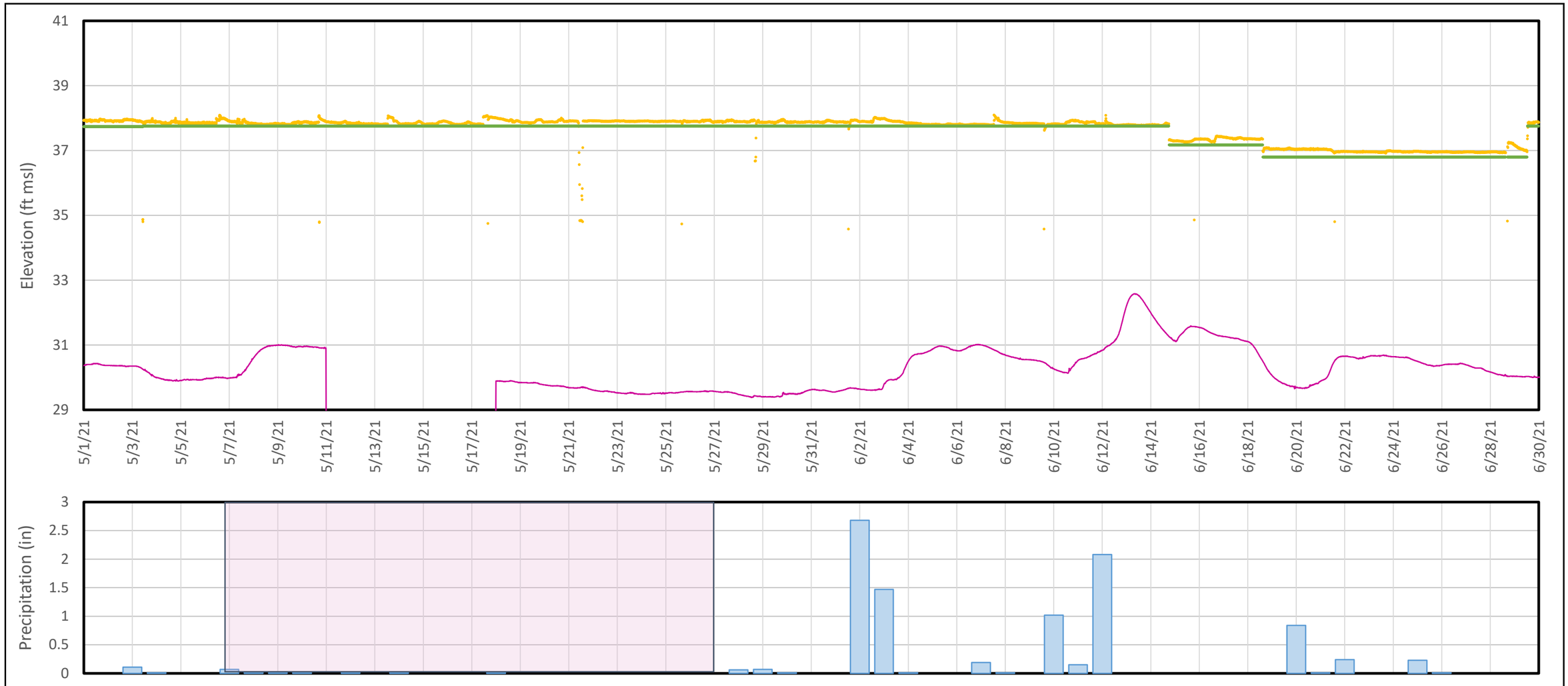
Figure A1-A



Legend

- Discharge Basin Water Elevation
- River Stage
- Weir 3 Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

As water can flow through the flow-through cell both as a result of wet weather inflow and elevated river levels from flooding, Figure A2-A compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.

Discharge Basin transducer data that was affected by river flooding is excluded from the dataset, to evaluate only effluent flow measurements that are from the flow-through cell.

The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Discharge Basin Water Elevation and External Forcings - Seep A

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Fayetteville, North Carolina

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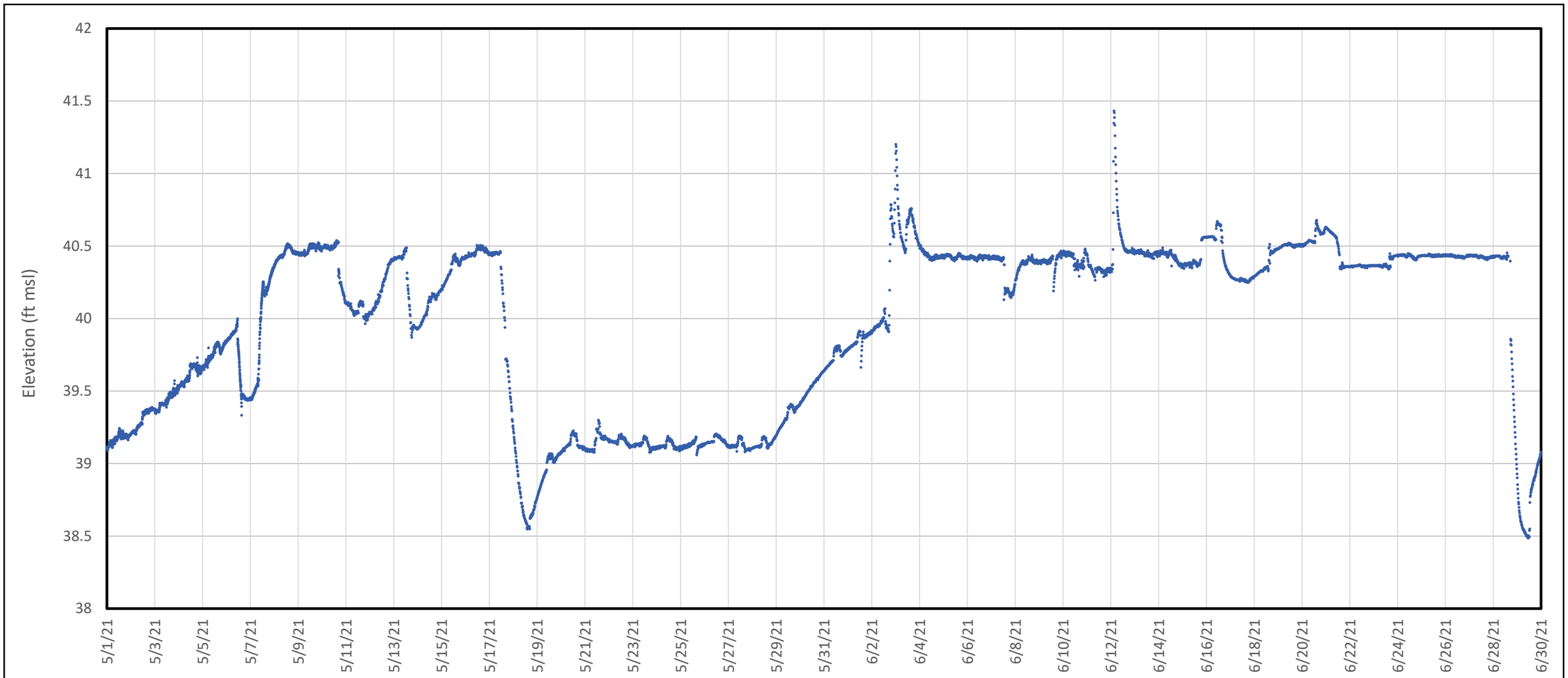
Figure A2-A



Legend

Influent Chamber/Impoundment Elevation

Note:

Figure A3-A shows the influent transducer data that was collected during the reporting period.

Inlet Chamber Water Elevation - Seep A

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Fayetteville, North Carolina

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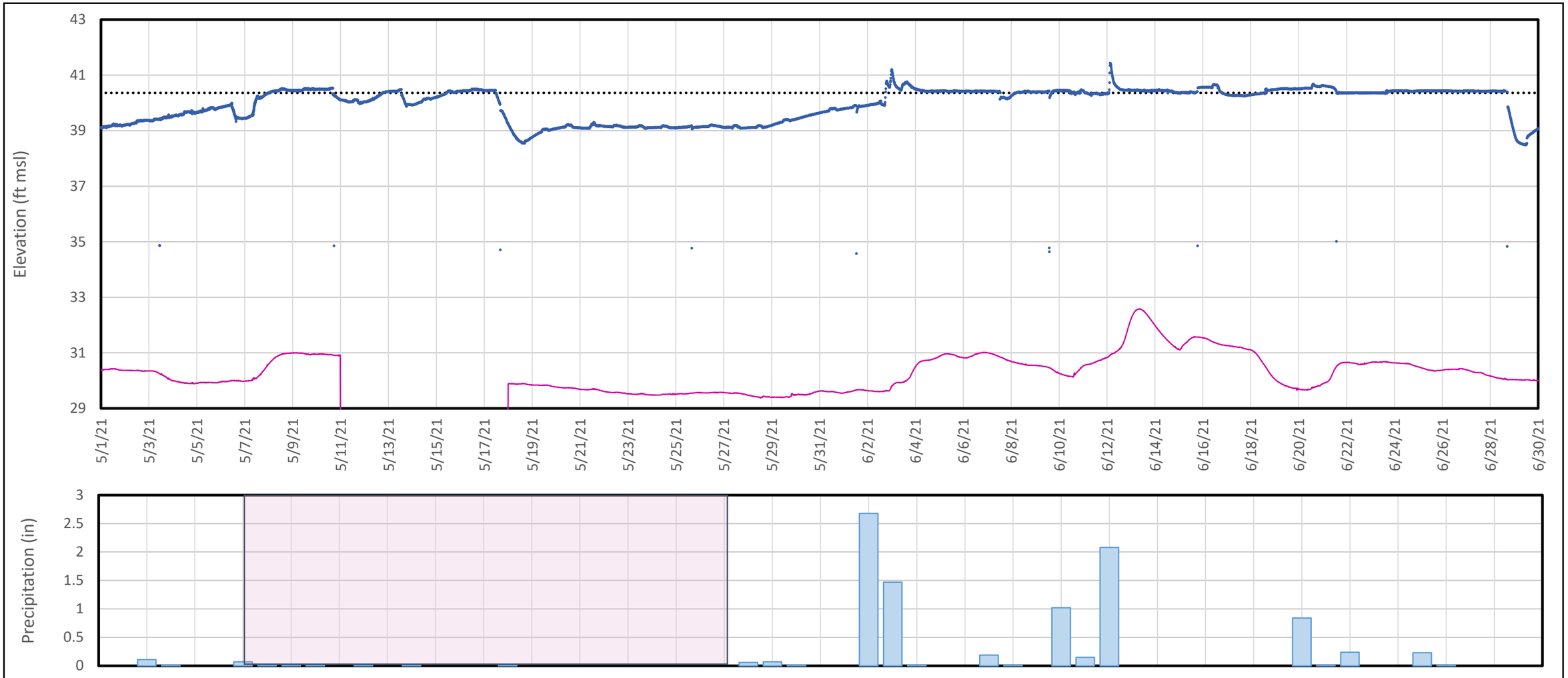
Figure A3-A



Legend

- Inlet Chamber Water Elevation
- River Stage
- Bypass Spillway Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

As water can flow through the Bypass Spillway both as a result of wet weather inflow and elevated river levels from flooding, Figure A4-A compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.
The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Inlet Chamber Water Elevation and External Forcings - Seep A

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Fayetteville, North Carolina

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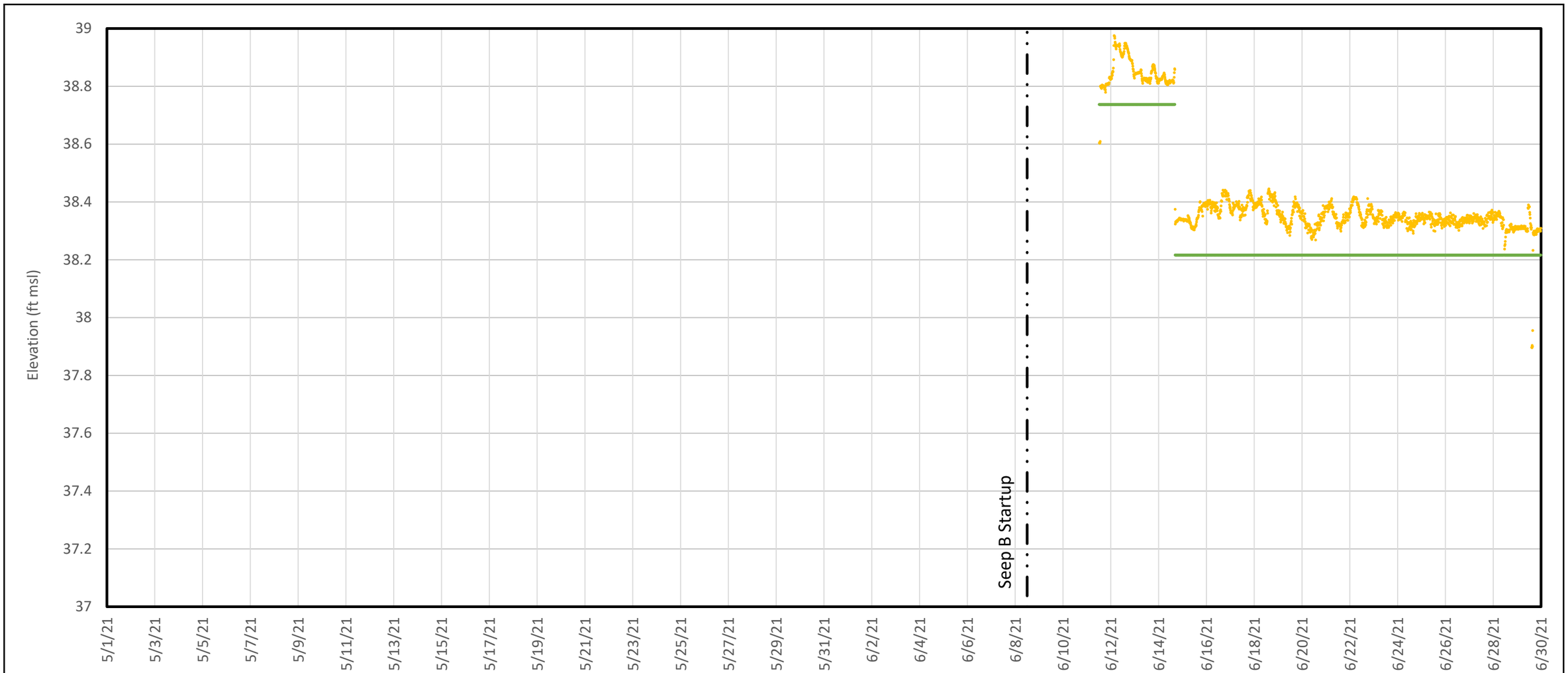
Figure A4-A



Legend

- Discharge Basin Elevation
- Weir 3 Elevation

Note:

Figure A1-B shows the discharge basin transducer data that was collected during the reporting period.

Discharge Basin Water Elevation - Seep B

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Fayetteville, North Carolina

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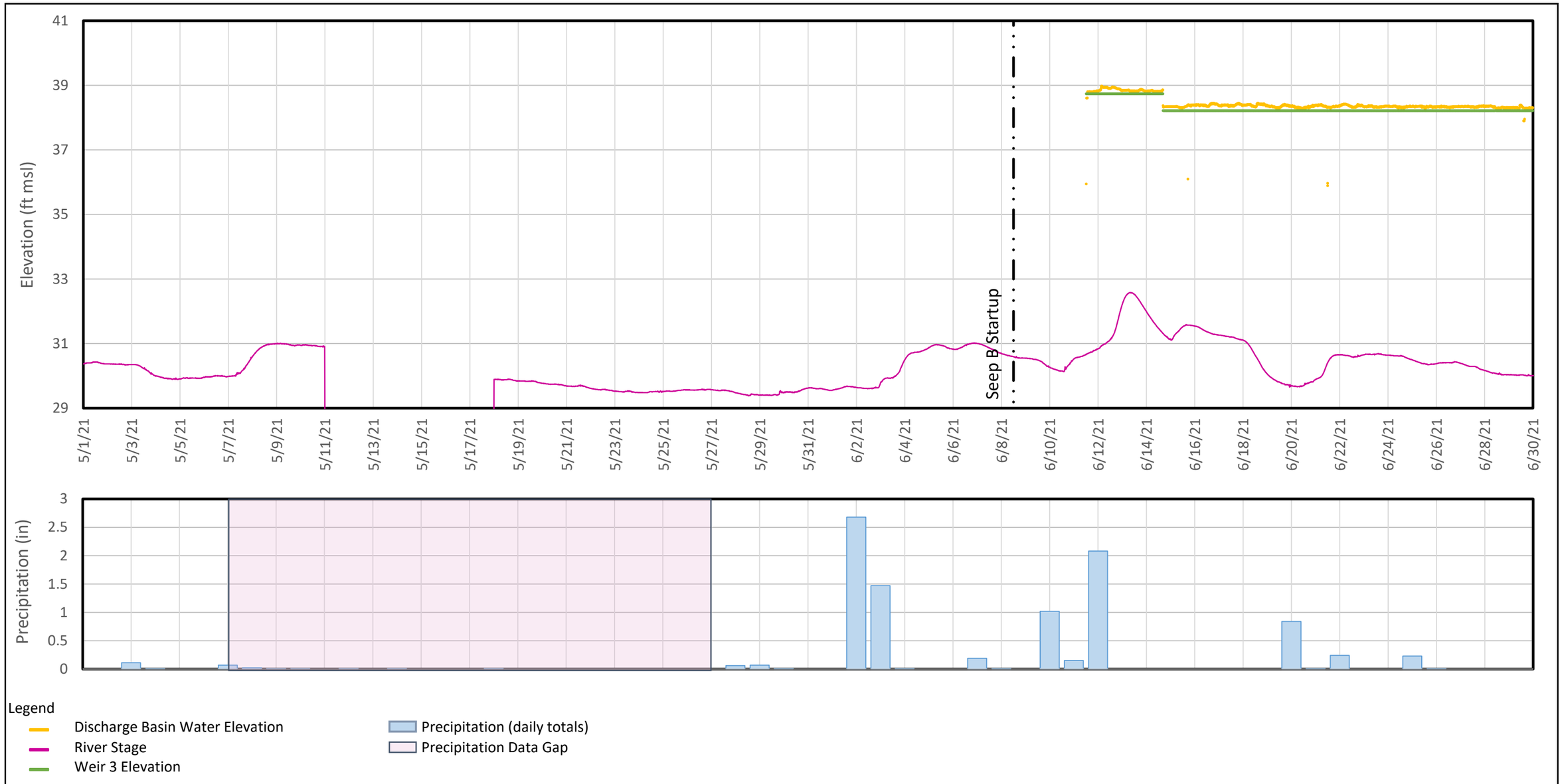
Figure A1-B



Legend

- Discharge Basin Water Elevation
- River Stage
- Weir 3 Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

As water can flow through the flow-through cell both as a result of wet weather inflow and elevated river levels from flooding, Figure A2-B compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.

Discharge Basin transducer data that was affected by river flooding is excluded from the dataset, to evaluate only effluent flow measurements that are from the flow-through cell.

The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Discharge Basin Water Elevation and External Forcings - Seep B

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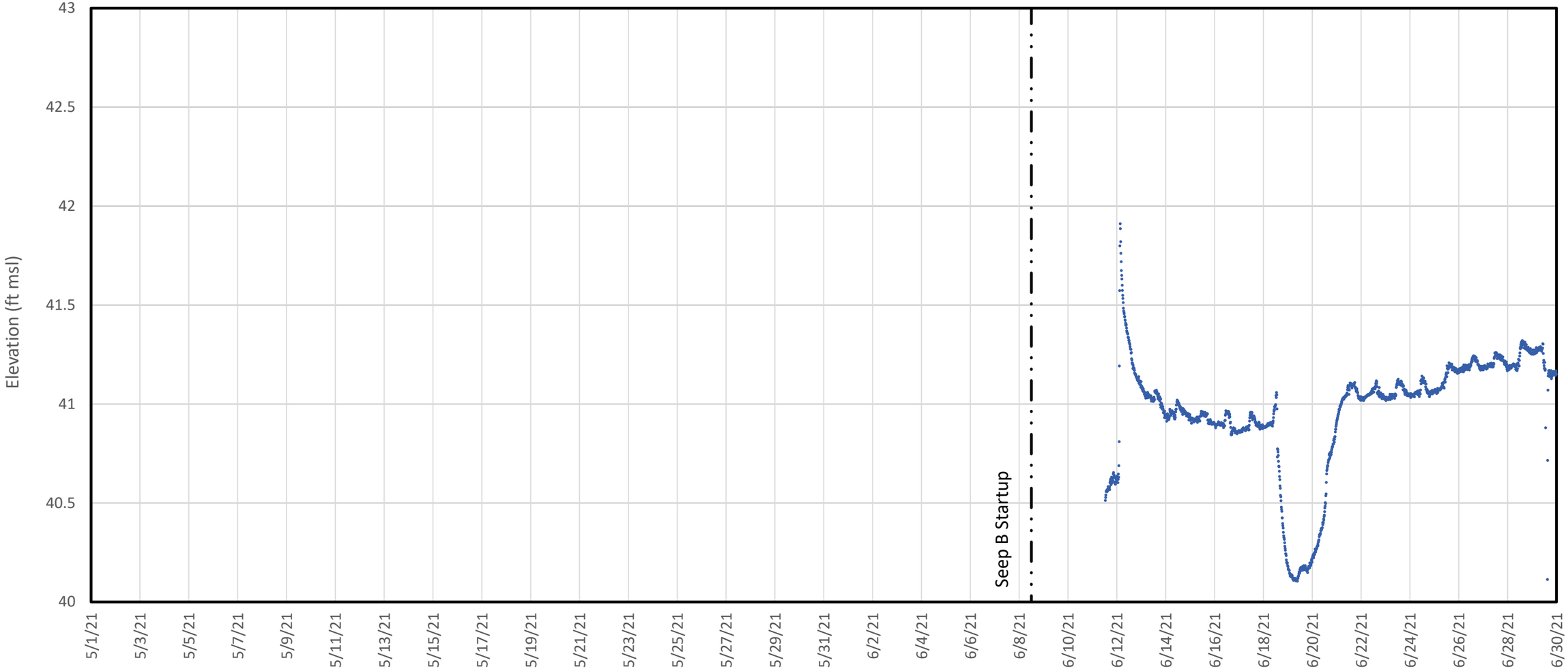
Figure A2-B



Legend

Influent Chamber/Impoundment Elevation

Note:

Figure A3-B shows the influent transducer data that was collected during the reporting period.

Inlet Chamber Water Elevation - Seep B

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Fayetteville, North Carolina

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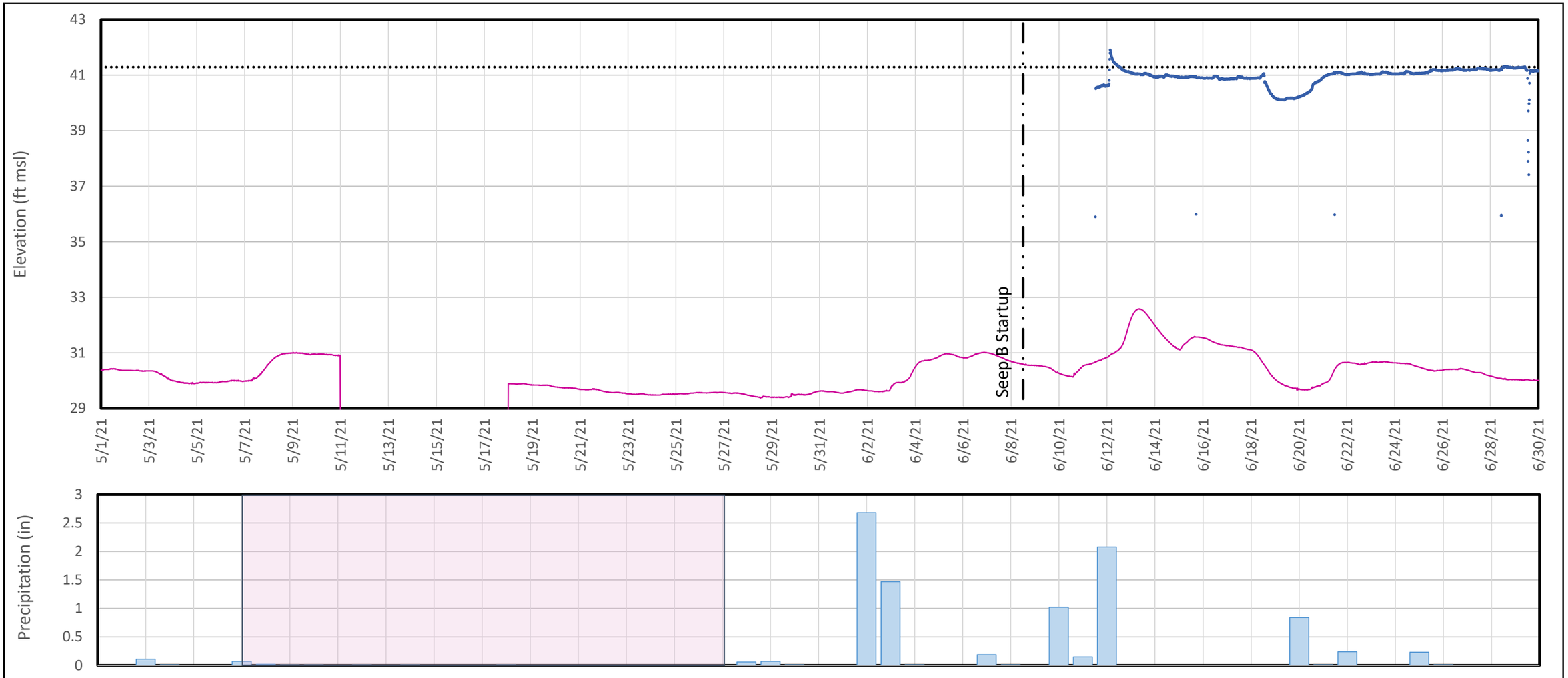
Figure A3-B



Legend

- Inlet Chamber Water Elevation
- River Stage
- Bypass Spillway Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

As water can flow through the Bypass Spillway both as a result of wet weather inflow and elevated river levels from flooding, Figure A4-B compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.
The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Inlet Chamber Water Elevation and External Forcings - Seep B

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Fayetteville, North Carolina

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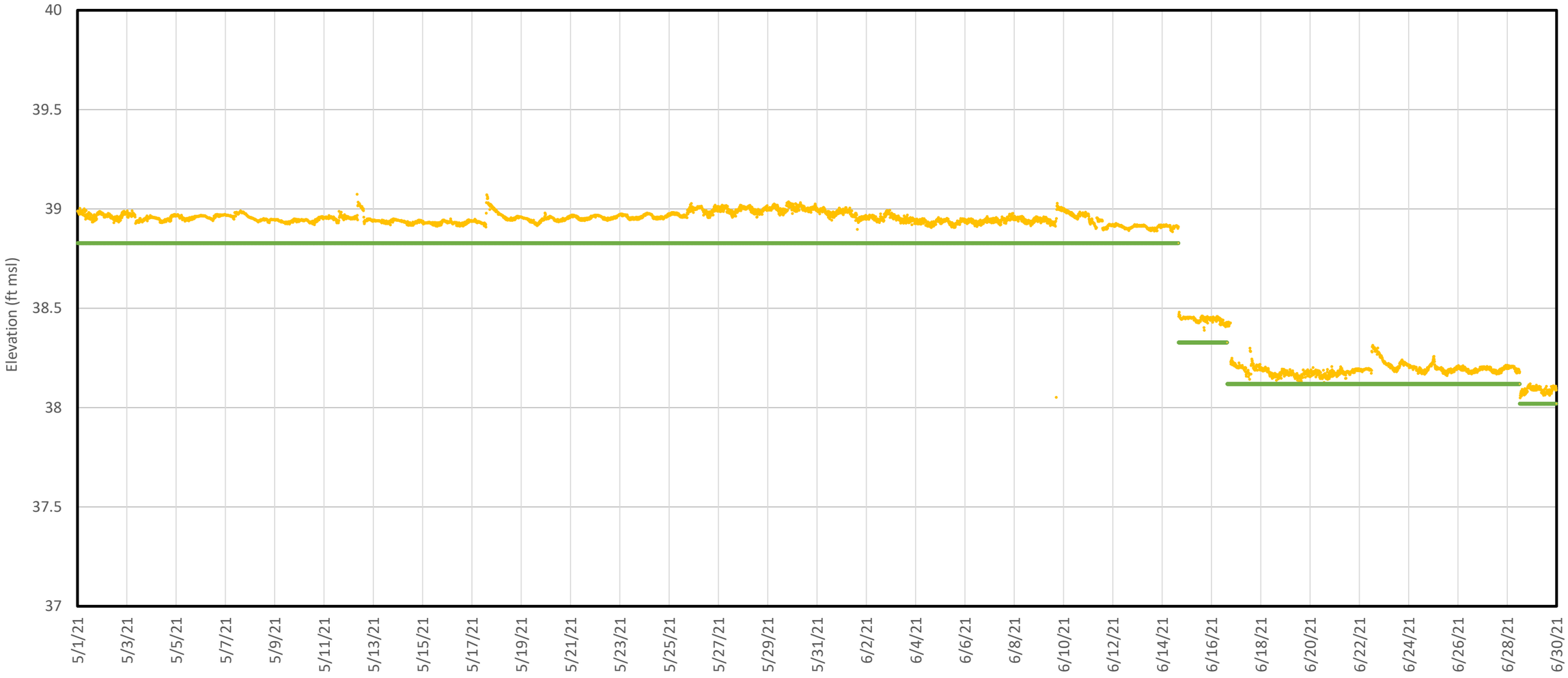
Figure A4-B



Legend

- Discharge Basin Elevation
- Weir 3 Elevation

Note:

Figure A1-C shows the discharge basin transducer data that was collected during the reporting period.

Discharge Basin Water Elevation - Seep C

Chemours Fayetteville Works
Fayetteville, North Carolina

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NC License No.: C 3500 and C 295

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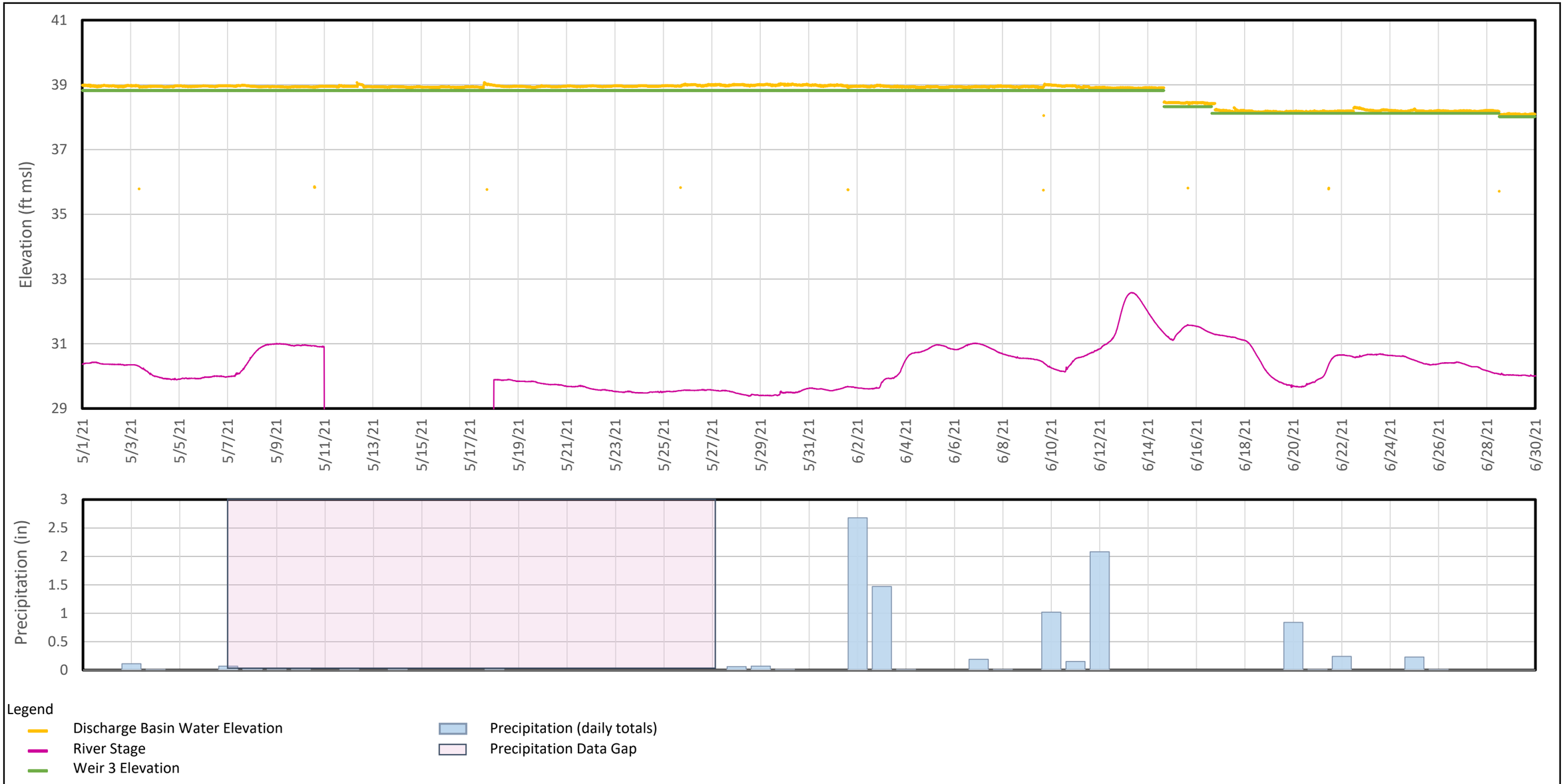
Figure A1-C



Legend

- Discharge Basin Water Elevation
- River Stage
- Weir 3 Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

As water can flow through the flow-through cell both as a result of wet weather inflow and elevated river levels from flooding, Figure A2-C compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.

Discharge Basin transducer data that was affected by river flooding is excluded from the dataset, to evaluate only effluent flow measurements that are from the flow-through cell.

The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Discharge Basin Water Elevation and External Forcings - Seep C

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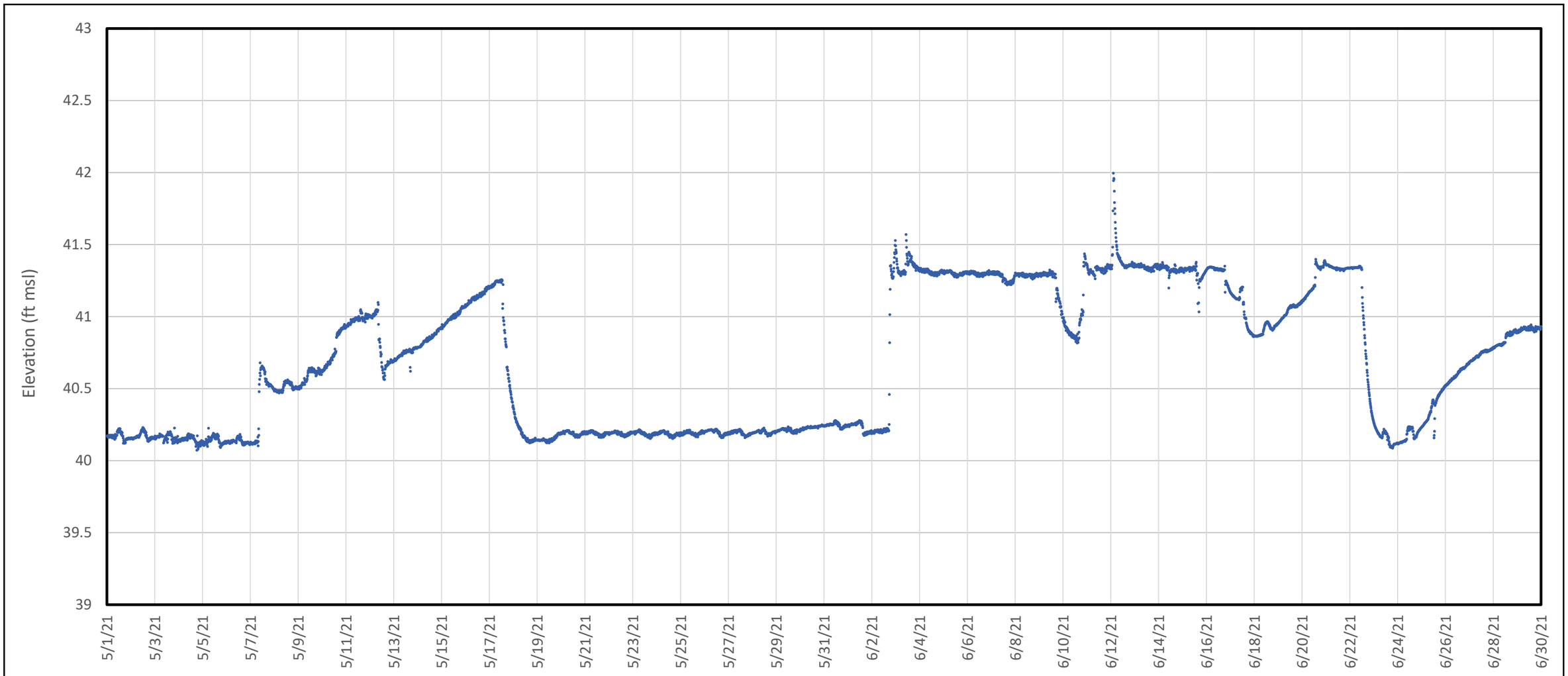
Figure A2-C



Legend

Influent Chamber/Impoundment Elevation

Note:

Figure A3-C shows the influent transducer data that was collected during the reporting period.

Inlet Chamber Water Elevation - Seep C

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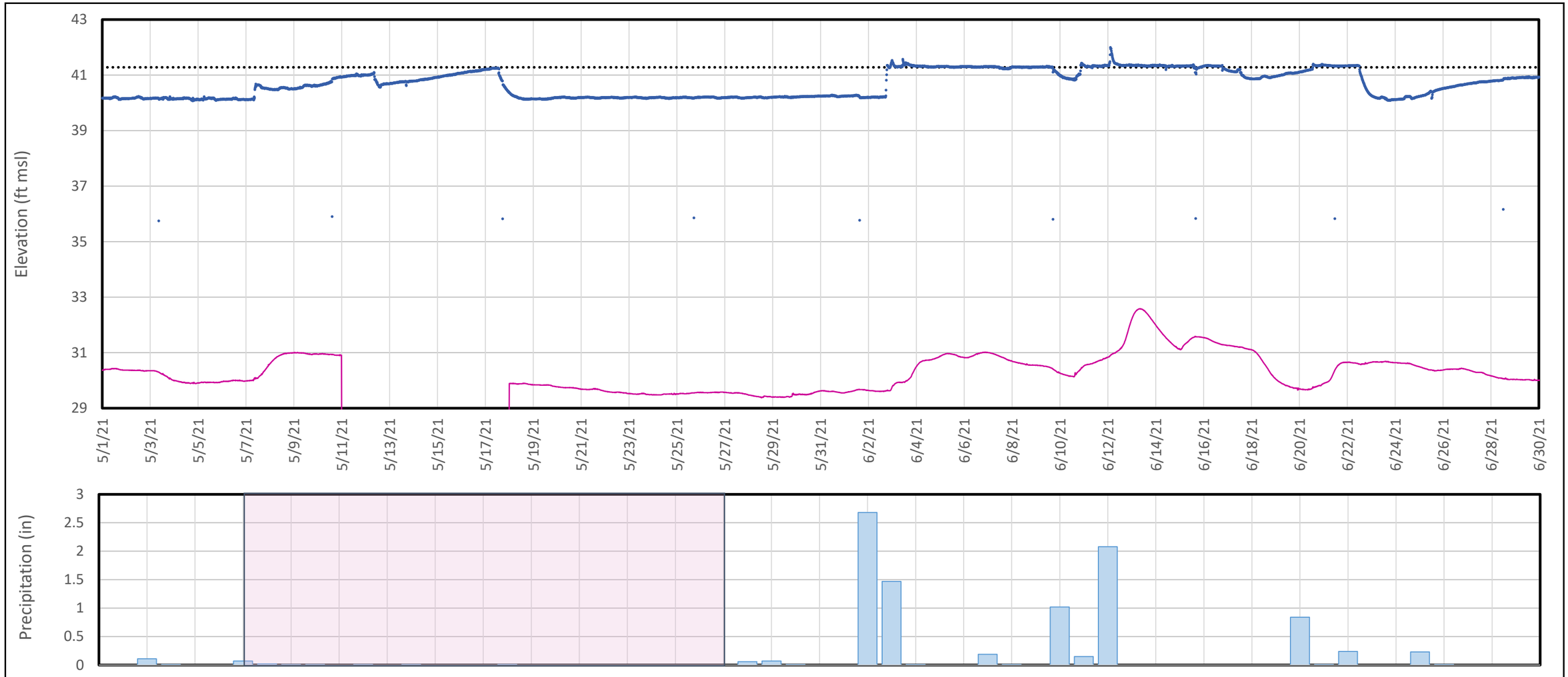
Figure A3-C



Legend

- Inlet Chamber Water Elevation
- River Stage
- Bypass Spillway Elevation
- Precipitation (daily totals)
- Precipitation Data Gap

Notes:

As water can flow through the Bypass Spillway both as a result of wet weather inflow and elevated river levels from flooding, Figure A4-C compares the available transducer data to precipitation and river stage elevation data available from the USGS Huske Lock and Dam.
The precipitation data downloaded from USGS for the site 02105500 had missing rainfall information from May 7 through May 27. Actual rainfall received during May is expected to be higher than the reported precipitation.

Inlet Chamber Water Elevation and External Forcings - Seep C

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Figure A4-C

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APPENDIX B
Laboratory Analytical Data Review Narrative
(Full lab reports to be uploaded to OneDrive and EQuIS)

ADQM Data Review

Site: Chemours Fayetteville

Project: Seep Flow Through Cell Sampling 2021 (select lots)

Project Reviewer: Michael Aucoin

Sample Summary

Field Sample ID	Lab Sample ID	Sample Matrix	Filtered	Sample Date	Sample Time	Sample Purpose
SEEP-C-Effluent-24-051021	320-73697-1	Other liquid	N	05/10/2021	14:15	FS
SEEP-C-Influent-24-051021	320-73697-2	Other liquid	N	05/10/2021	14:15	FS
SEEP-C-Influent-Rain-24-050821	320-73697-3	Other liquid	N	05/08/2021	07:30	FS
SEEP-C-Effluent-Rain-24-050821	320-73697-4	Other liquid	N	05/08/2021	07:30	FS
SEEP-A-Influent-Rain-24-050821	320-73697-5	Other liquid	N	05/08/2021	07:30	FS
SEEP-A-Effluent-Rain-24-050821	320-73697-6	Other liquid	N	05/08/2021	07:30	FS
SEEP-C-Effluent-24-051621	320-73968-1	Other liquid	N	05/16/2021	11:00	FS
SEEP-C-Influent-24-051621	320-73968-2	Other liquid	N	05/16/2021	11:00	FS
SEEP-A-Influent-336-051721	320-73968-3	Other liquid	N	05/17/2021	17:00	FS
SEEP-A-Effluent-336-051721	320-73968-4	Other liquid	N	05/17/2021	17:00	FS
SEEP-C-effluent-24-051621-D	320-73968-5	Other liquid	N	05/16/2021	11:00	DUP
Seep-FBLK-051721	320-73968-6	Blank Water	N	05/17/2021	11:00	FB
SEEP-A-Effluent-336-053121	320-74508-1	Other liquid	N	05/31/2021	05:00	FS
SEEP-A-Influent-336-053121	320-74508-2	Other liquid	N	05/31/2021	05:00	FS
SEEP-C-Influent-336-053121	320-74508-3	Other liquid	N	05/31/2021	20:00	FS
SEEP-C-effluent-336-053121	320-74508-4	Other liquid	N	05/31/2021	20:00	FS
SEEP-A-Effluent-	320-74508-5	Other liquid	N	05/31/2021	05:00	DUP

336-053121-D						
Seep-FBLK-060121	320-74508-6	Blank Water	N	06/01/2021	10:00	FB
SEEP-C-Effluent-Rain-24-060321	320-74607-1	Other liquid	N	06/03/2021	16:30	FS
SEEP-C-Influent-Rain-24-060321	320-74607-2	Other liquid	N	06/03/2021	16:30	FS
SEEP-A-Effluent-Rain-24-060321	320-74607-3	Other liquid	N	06/03/2021	16:30	FS
SEEP-A-Influent-Rain-24-060321	320-74607-4	Other liquid	N	06/03/2021	16:30	FS
SEEP-EBLK-060321	320-74607-5	Blank Water	N	06/03/2021	17:00	EB
SEEP-C-INFLUENT-336-061421	320-75081-1	Other liquid	N	06/14/2021	08:00	FS
SEEP-C-EFFLUENT-336-061421	320-75081-2	Other liquid	N	06/14/2021	08:00	FS
SEEP-C-EFFLUENT-336-061421-D	320-75081-3	Other liquid	N	06/14/2021	08:00	DUP
SEEP-FBLK-061621	320-75081-4	Blank Water	N	06/16/2021	12:30	FB
SEEP-A-INFLUENT-336-061421	320-75082-1	Other liquid	N	06/14/2021	05:00	FS
SEEP-A-EFFLUENT-336-061421	320-75082-2	Other liquid	N	06/14/2021	05:00	FS
SEEP-B-INFLUENT-24-061221	320-75082-3	Other liquid	N	06/12/2021	13:00	FS
SEEP-B-EFFLUENT-24-061221	320-75082-4	Other liquid	N	06/12/2021	13:00	FS
SEEP-B-INFLUENT-24-061521	320-75451-1	Other liquid	N	06/15/2021	13:00	FS
SEEP-B-EFFLUENT-24-061521	320-75451-2	Other liquid	N	06/15/2021	13:00	FS
SEEP-B-INFLUENT-24-062421	320-75451-3	Other liquid	N	06/24/2021	12:15	FS

SEEP-B-EFFLUENT-24-062421	320-75451-4	Other liquid	N	06/24/2021	12:15	FS
SEEP-A-INFLUENT-336-062921	320-75723-1	Other liquid	N	06/29/2021	13:00	FS
SEEP-A-EFFLUENT-336-062921	320-75723-2	Other liquid	N	06/29/2021	13:00	FS
SEEP-C-INFLUENT-336-062921	320-75723-3	Other liquid	N	06/29/2021	09:00	FS
SEEP-C-EFFLUENT-336-062921	320-75723-4	Other liquid	N	06/29/2021	09:00	FS

* FS=Field Sample
DUP=Field Duplicate
FB=Field Blank
EB=Equipment Blank
TB=Trip Blank

Analytical Protocol

Laboratory	Method	Parameters
TAL – Sacramento	Cl. Spec. Table 3 Compound SOP	20 compounds incl HFPO-DA

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		
E	Were QA/QC criteria met by the laboratory (method blanks, LCSs/LCSDs, MSs/MSDs, PDSs, SDs, duplicates/replicates, surrogates, total/dissolved differences/RPDs, sample results within calibration range)?		X	X		
F	Were field/equipment/trip blanks (if collected) detected at levels not requiring sample data qualification?		X	X		
G	Were all data usable and not R qualified?	X				
ER#	**Description:**					
Other QA/QC Items to Note:						

* See DVM Narrative Report, Lab Report, or ER # for further details as indicated.

The electronic data submitted for this project was reviewed via the Data Verification Module (DVM) process. Overall, the data is 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 is evaluated against the following data usability checks:

- Field and laboratory blank contamination
- US EPA hold time criteria
- Missing Quality Control (QC) samples
- Matrix spike (MS)/matrix spike duplicate (MSD) recoveries and the relative percent differences (RPDs) between these spikes
- Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) recoveries and the RPD between these spikes
- Surrogate spike recoveries for organic analyses
- Difference/RPD between field duplicate sample pairs
- RPD between laboratory replicates for inorganic analyses
- Difference/percent difference between total and dissolved sample pairs

There are two qualifier fields in EIM:

Lab Qualifier is the qualifier assigned by the lab 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 lab qualifiers. As they are lab 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 lab 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 has 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:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason Contamination detected in equipment blank(s). Sample result does not differ significantly from the analyte concentration detected in the associated equipment blank(s).

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-A-Effluent-Rain-24-060321	06/03/2021	320-74607-3	PMPA	0.016	UG/L	PQL		0.010	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-060321	06/03/2021	320-74607-1	PMPA	0.028	UG/L	PQL		0.010	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-060321	06/03/2021	320-74607-2	PMPA	4.8	UG/L	PQL		0.31	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason Contamination detected in Field Blank(s). Sample result does not differ significantly from the analyte concentration detected in the associated field blank(s).

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PMPA	1.1	UG/L	PQL		0.062	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PMPA	1.1	UG/L	PQL		0.062	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PMPA	1.3	UG/L	PQL		0.062	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-336-053121	05/31/2021	320-74508-4	PMPA	0.016	UG/L	PQL		0.010	B	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	EVE Acid	0.0087	UG/L	PQL		0.0087	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFECA B	0.013	UG/L	PQL		0.013	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PS Acid	0.0098	UG/L	PQL		0.0098	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFECA-G	0.024	UG/L	PQL		0.024	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PES	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PMPA	0.010	UG/L	PQL		0.010	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	Hfpo Dimer Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	R-PSDCA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PEPA	0.020	UG/L	PQL		0.020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PFO2HxA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
Seep-FBLK-051721	05/17/2021	320-73968-6	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PFMOAA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	NVHOS, Acid Form	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
Seep-FBLK-051721	05/17/2021	320-73968-6	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	R-PSDCA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PES	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PES	0.0067	UG/L	PQL		0.0067	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFECA B	0.027	UG/L	PQL		0.027	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	R-PSDCA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PEPA	0.020	UG/L	PQL		0.020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFECA-G	0.048	UG/L	PQL		0.048	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PES	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PMPA	0.010	UG/L	PQL		0.010	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	NVHOS, Acid Form	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PES	0.0067	UG/L	PQL		0.0067	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFECA B	0.027	UG/L	PQL		0.027	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	R-PSDCA	0.017	UG/L	PQL		0.017	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PS Acid	0.020	UG/L	PQL		0.020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	R-PSDCA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	R-PSDCA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PEPA	0.020	UG/L	PQL		0.020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PEPA	0.020	UG/L	PQL		0.020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	EVE Acid	0.017	UG/L	PQL		0.017	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFECA-G	0.048	UG/L	PQL		0.048	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PES	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PES	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	NVHOS, Acid Form	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	NVHOS, Acid Form	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFECA B	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	R-PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	Hydrolyzed PSDA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	R-PSDCA	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	R-EVE	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PEPA	0.020	UG/L	PQL		0.020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PS Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFO5DA	0.078	ug/L	PQL		0.078	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PES	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFO3OA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFO4DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFO5DA	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	Hydro-PS Acid	0.0020	ug/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	Hydro-EVE Acid	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	NVHOS, Acid Form	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFECA-G	0.0020	UG/L	PQL		0.0020	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PES	0.0034	UG/L	PQL		0.0034	UJ	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason High relative percent difference (RPD) observed between field duplicate and parent sample. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	R-PSDA	0.15	UG/L	PQL		0.0071	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	R-PSDA	0.14	UG/L	PQL		0.0071	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	R-PSDCA	0.0036	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	R-PSDCA	0.0033	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	R-EVE	0.084	UG/L	PQL		0.0072	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	R-EVE	0.082	UG/L	PQL		0.0072	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PS Acid	0.14	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PS Acid	0.14	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PFO3OA	0.75	ug/L	PQL		0.0039	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PFO3OA	0.72	ug/L	PQL		0.0039	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PFO4DA	0.46	ug/L	PQL		0.0059	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PFO4DA	0.43	ug/L	PQL		0.0059	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PFO5DA	0.31	ug/L	PQL		0.0078	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	PFO5DA	0.30	ug/L	PQL		0.0078	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	EVE Acid	0.020	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	EVE Acid	0.019	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	Hydro-PS Acid	0.10	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason High relative percent difference (RPD) observed between field duplicate and parent sample. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	Hydro-PS Acid	0.098	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	Hydro-EVE Acid	0.10	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	Hydro-EVE Acid	0.092	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	NVHOS, Acid Form	0.066	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121	05/31/2021	320-74508-1	NVHOS, Acid Form	0.064	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PES	0.21	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PFECA B	0.19	UG/L	PQL		0.0027	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	R-PSDA	0.34	UG/L	PQL		0.0071	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	R-PSDCA	0.23	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	R-EVE	0.29	UG/L	PQL		0.0072	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PS Acid	0.34	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PFO3OA	0.98	ug/L	PQL		0.0039	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PFO4DA	0.67	ug/L	PQL		0.0059	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PFO5DA	0.50	ug/L	PQL		0.0078	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	EVE Acid	0.23	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	Hydro-PS Acid	0.32	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	Hydro-EVE Acid	0.32	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason High relative percent difference (RPD) observed between field duplicate and parent sample. The reported result may be imprecise.

Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	NVHOS, Acid Form	0.26	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-336-053121-D	05/31/2021	320-74508-5	PFECA-G	0.23	UG/L	PQL		0.0048	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PMPA	8.8	UG/L	PQL		0.31	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	Hfpo Dimer Acid	19	UG/L	PQL		0.041	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFMOAA	0.052	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PMPA	0.016	UG/L	PQL		0.010	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	Hfpo Dimer Acid	0.0027	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFMOAA	87	ug/L	PQL		0.080	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-effluent-24-051621-D	05/16/2021	320-73968-5	PFO2HxA	0.0044	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	Hfpo Dimer Acid (trial)	0.0028	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFMOAA	0.052	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFMOAA	0.050	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PMPA	0.018	UG/L	PQL		0.010	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PMPA	0.018	UG/L	PQL		0.010	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	Hydro-PS Acid	0.41	ug/L	PQL		0.0061	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	Hydro-EVE Acid	1.1	UG/L	PQL		0.014	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	NVHOS, Acid Form	0.84	UG/L	PQL		0.015	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO2HxA	0.0047	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-24-051621	05/16/2021	320-73968-1	PFO2HxA	0.0045	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFO2HxA	27	ug/L	PQL		0.027	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFO3OA	8.9	ug/L	PQL		0.039	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PFO4DA	2.5	ug/L	PQL		0.059	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	R-EVE	0.73	UG/L	PQL		0.072	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PEPA	3.6	UG/L	PQL		0.020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	R-PSDA	0.79	UG/L	PQL		0.071	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	Hydrolyzed PSDA	1.0	UG/L	PQL		0.038	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	PMPA	11	UG/L	PQL		0.62	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-Rain-24-050821	05/08/2021	320-73697-3	Hfpo Dimer Acid	20	UG/L	PQL		0.081	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFMOAA	0.041	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	Hfpo Dimer Acid	0.0032	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Effluent-Rain-24-050821	05/08/2021	320-73697-4	PFO2HxA	0.0039	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	R-PSDA	1.9	UG/L	PQL		0.071	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	Hydrolyzed PSDA	19	UG/L	PQL		0.038	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	R-PSDCA	0.042	UG/L	PQL		0.017	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	R-EVE	0.98	UG/L	PQL		0.072	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PEPA	7.6	UG/L	PQL		0.020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

Validation Reason The analysis 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
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PS Acid	1.8	UG/L	PQL		0.020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFO2HxA	31	ug/L	PQL		0.027	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFO3OA	11	ug/L	PQL		0.039	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFO4DA	5.0	ug/L	PQL		0.059	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFO5DA	4.0	ug/L	PQL		0.078	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PFMOAA	71	ug/L	PQL		0.080	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	EVE Acid	0.53	UG/L	PQL		0.017	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	Hydro-PS Acid	1.3	ug/L	PQL		0.0061	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	Hydro-EVE Acid	1.1	UG/L	PQL		0.014	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	NVHOS, Acid Form	0.87	UG/L	PQL		0.015	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	PMPA	19	UG/L	PQL		0.62	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Influent-Rain-24-050821	05/08/2021	320-73697-5	Hfpo Dimer Acid	23	UG/L	PQL		0.081	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	R-PSDA	0.024	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	Hydrolyzed PSDA	0.15	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PMPA	0.14	UG/L	PQL		0.010	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	Hfpo Dimer Acid	0.18	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	R-EVE	0.010	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

Site: Fayetteville **Sampling Program:** Seep Flow Through Cell Sampling 2021 **Validation Options:** LABSTATS

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Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PEPA	0.059	UG/L	PQL		0.020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PS Acid	0.015	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFO2HxA	0.25	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFO3OA	0.090	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFO4DA	0.043	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFO5DA	0.022	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	PFMOAA	0.52	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	EVE Acid	0.0043	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	Hydro-PS Acid	0.0086	ug/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	Hydro-EVE Acid	0.0084	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-A-Effluent-Rain-24-050821	05/08/2021	320-73697-6	NVHOS, Acid Form	0.0069	UG/L	PQL		0.0020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFO2HxA	22	ug/L	PQL		0.013	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFO3OA	7.4	ug/L	PQL		0.020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFO4DA	3.0	ug/L	PQL		0.030	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFO5DA	0.086	ug/L	PQL		0.039	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PFMOAA	65	ug/L	PQL		0.040	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	R-PSDA	0.84	UG/L	PQL		0.035	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep

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Field Sample ID	Date Sampled	Lab Sample ID	Analyte	Result	Units	Type	MDL	PQL	Validation Qualifier	Analytical Method	Pre-prep	Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	Hydrolyzed PSDA	0.75	UG/L	PQL		0.019	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	R-PSDCA	0.016	UG/L	PQL		0.0087	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	R-EVE	0.76	UG/L	PQL		0.036	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	PEPA	3.7	UG/L	PQL		0.020	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	Hydro-PS Acid	0.41	ug/L	PQL		0.0031	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	Hydro-EVE Acid	1.2	UG/L	PQL		0.0072	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep
SEEP-C-Influent-24-051621	05/16/2021	320-73968-2	NVHOS, Acid Form	0.67	UG/L	PQL		0.0073	J	Cl. Spec. Table 3 Compound SOP		PFAS_DI_Prep