

**NC Division of Water Resources  
Water Sciences Section**

April 1, 2019

**Memorandum**

**To:** Linda Culpepper – Water Resources Director

**CC:** Jim Gregson,

**From:** Taryn Davis

**Through:** Eric Morris

**Subject:** Identification of Select Emerging Compounds in B. Everett Jordan Reservoir, Haw River Arm Watershed, and New Hope Creek Arm Watershed.

**Purpose:** The objective of this reconnaissance study is to provide the NC Division of Water Resources information on per- and polyfluoroalkyl substances (PFAS); 1,4-dioxane; and bromide in Jordan Lake and the surrounding watershed. Specifically, this includes collection, testing, and analysis of water samples taken from Jordan Lake and selected tributaries to identify levels of the aforementioned emerging compounds.

**Identification of Select Emerging Compounds in B. Everett  
Jordan Reservoir, Haw River Arm Watershed, and New Hope  
Creek Arm Watershed**

Cape Fear River Basin

HUC: 03030002

*North Carolina Department of Environmental Quality  
Division of Water Resources  
Water Sciences Section  
Intensive Survey Unit  
**April 2019***

# Division of Water Resources

## Identification of Select Emerging Compounds in B. Everett Jordan Reservoir, Haw River Arm Watershed, and New Hope Creek Arm Watershed.

Cape Fear River Basin

HUC: 03030002

### Introduction

At the request of the North Carolina Division of Water Resources (DWR or Division), the Intensive Survey Branch (ISB) conducted a special study to characterize the presence and concentrations of select emerging compounds (EC) in B. Everett Jordan Reservoir and its immediate watershed. From January to June 2018, staff from the Division collected samples for 1,4-dioxane, bromide, and 23 different per- and polyfluoroalkyl substances (PFAS) at six in-lake locations and seven river/stream locations. Analytical results indicated the presence of 1,4-dioxane and at least one PFAS compound in the Haw River arm during every sampling event, with some evidence of backflow to other portions of the reservoir. Minimal levels of target analytes were observed in the New Hope Creek arm.

### Background

B. Everett Jordan Reservoir (Jordan Lake) is a multipurpose reservoir constructed in Chatham County and filled in the late 1980s. Major tributaries to the lake include the Haw River, New Hope Creek, and Morgan Creek. Constructed by U.S. Army Corps of Engineers (USACE) for flood control, this lake is used extensively for primary and secondary recreational activities, and as a water supply for several municipalities. Ninety percent of the annual inflow to the lake comes from the Haw River<sup>1</sup>. Land uses in the watershed include the cities of Durham, Chapel Hill, Greensboro, Burlington and others, as well as significant forested and agricultural lands. Ten major waste water treatment plants (WWTP), defined as those discharging over one million gallons per day (MGD), and 26 minor WWTPs, as well as five permitted industrial facilities discharge their effluent upstream. Jordan Lake is currently listed as an impaired water body<sup>3</sup>. As a reservoir recently built and managed by the USACE, the shoreline is undeveloped and forested.

Media reports indicating the presence of PFAS in Jordan Lake began to appear in December 2017, following work conducted by researchers at Duke University. These reports, as well as a general heightened awareness of these substances due to recent downstream discharges of “GenX” into the Cape Fear River, prompted the Division to investigate the presence and distribution of these chemicals in Jordan Lake, a major source of drinking water for residents of the Triangle area. Allocations for drinking water withdrawals from Jordan Lake currently total 63 MGD<sup>9</sup>. It is important to note that all analytical data presented in this document reflect levels of target analytes detected in untreated surface waters, as opposed to finished drinking water.

The synthetic industrial organic compound 1,4-dioxane is completely miscible in water. It is persistent in the environment and is difficult to remove through standard water and wastewater

treatment processes<sup>11</sup>. It is used as an industrial solvent and is formed as a byproduct of some industrial processes. The compound has been characterized as “likely to be carcinogenic to humans” and is identified in the Third Unregulated Contaminant Monitoring Rule (UCMR) as a potential compound of concern in public drinking water by the United States Environmental Protection Agency (USEPA)<sup>10</sup>. The 1,4-dioxane NC Protective Value for Surface Waters Fresh Water, Water Supply (Class WS I-IV) is 0.35 µg/L<sup>6</sup>. Please note that North Carolina protective values are health-based guidelines, not regulatory limits, and may be based on limited toxicological information.

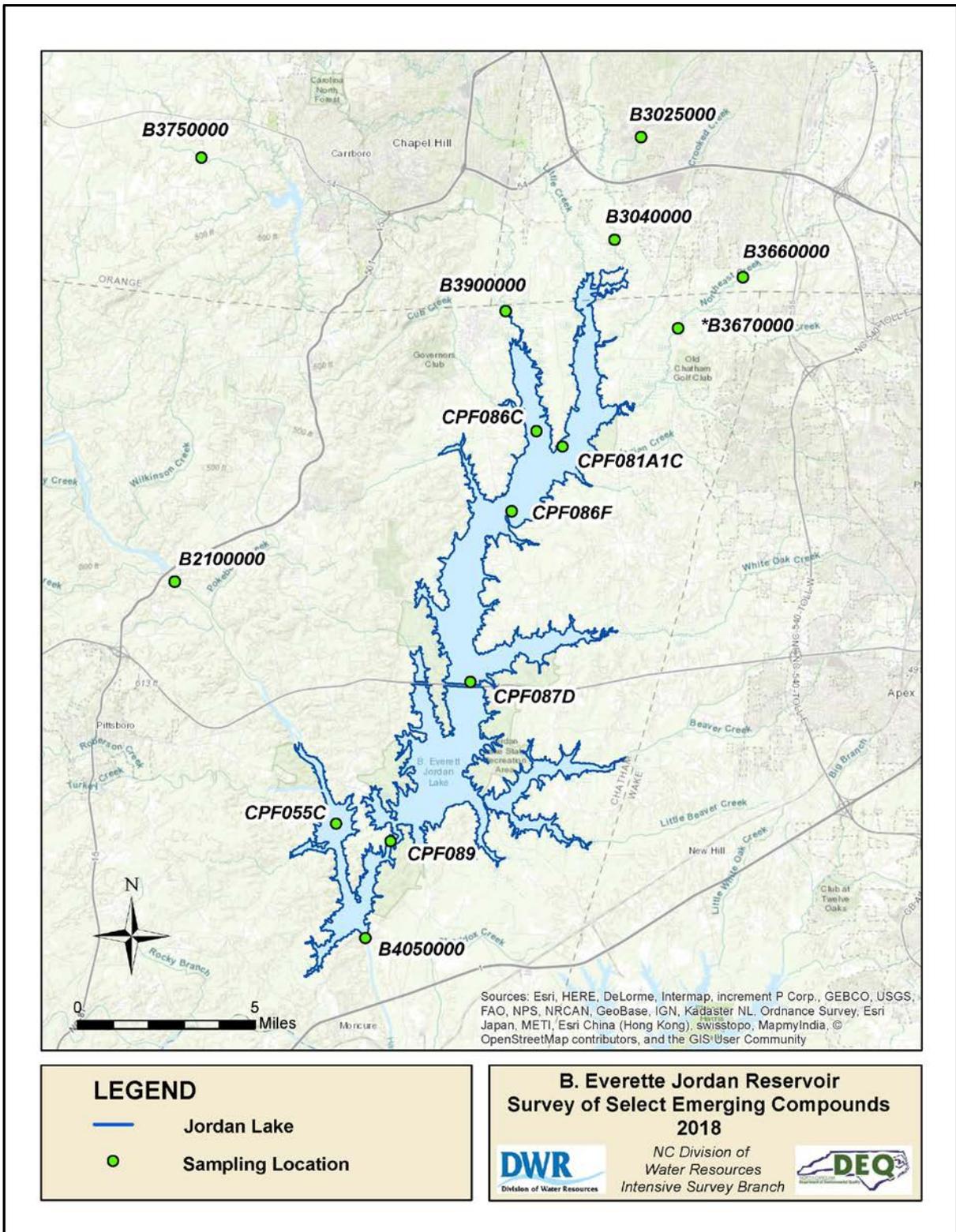
PFAS are man-made fluorinated organic compounds that are used in various consumer products including non-stick cookware, water-repellent clothing, stain resistant fabrics, cosmetics, food packaging materials, and fire-retardant foams. Although 23 PFAS compounds were the focus of this study, thousands of PFAS compounds exist. Of these compounds, PFOA and PFOS have been the most extensively produced and studied. The USEPA has stated that exposure to PFAS can lead to adverse health effects in humans<sup>12</sup>. Though many companies have significantly decreased or ceased use of PFOA and PFOS in manufacturing, other PFAS compounds are currently being used as replacements. The USEPA established health advisory level for PFOA, PFOS, or combined PFOA and PFOS, is 70 ppt (ng/L)<sup>7</sup> in finished drinking water. Health Advisory levels identify the concentration of a compound in drinking water at which adverse health effects in the most sensitive populations are not anticipated to occur over specific exposure durations. A health advisory value is not a legally enforceable federal standard and is subject to change as additional information becomes available. The 23 PFAS compounds selected for this study are abbreviated throughout this document for better readability, but are identified more fully in Appendix 1.

Bromide (Br<sup>-</sup>) has no current established health advisory levels or guidelines due to its high human toxicity threshold and ecotoxicity observed only at high concentrations. Thus, the discharge of bromide has been left largely unregulated. While naturally occurring bromide poses low risk to humans, man-made brominated organic compounds can exhibit ecotoxicity when ingested. Incidental production of brominated organic compounds can occur in treating drinking water and persist in the finished water<sup>8</sup>. These brominated disinfection by-products (DBP) form when source waters contain bromide and are disinfected with chemical oxidants (e.g., chlorine, ozone). The Br-DBPs of concern are the bromine containing trihalomethanes (THMs) resulting from chlorine disinfection: bromodichloromethane (CHCl<sub>2</sub>Br), dibromochloromethane (CHClBr<sub>2</sub>), and bromoform (CHBr<sub>3</sub>). These compounds are formed when hypochlorous (HClO) acid oxidizes the bromide ions present in water to form hypobromous acid (HBrO), which subsequently reacts with organic material to form the Br-THMs.

Bromide, PFAS and 1,4-dioxane were selected as compounds of interest for this study in response to the rising interest in the public health effects of consumption of these compounds in drinking water sources such as Jordan Lake. Table 1 lists the monitoring stations and their corresponding geographic coordinates. Figure 1 provides a map of the Jordan Lake monitoring stations.

<b>Station ID</b>	<b>Station Description</b>	<b>Latitude</b>	<b>Longitude</b>
CPF086C	JORDAN LAKE AT MOUTH OF MORGAN CRK NR FARRINGTON	35.82151	-78.9974
CPF081A1C	JORDAN LAKE AT MOUTH OF NEW HOPE CREEK	35.81622	-78.9868
CPF086F	JORDAN LAKE NEAR FARRINGTON NC	35.79494	-79.0076
CPF087D	JORDAN LAKE AT MOUTH OF WHITE OAK CREEK NR SEAFORTH	35.73840	-79.0243
CPF055C	JORDAN LAKE ABOVE STINKING CREEK NR PITTSBORO NC	35.69131	-79.0791
CPF089	JORDAN LAKE NEAR MERRY OAKS	35.68550	-79.05696
B4050000	HAW RIV BELOW JORDAN DAM NR MONCURE	35.65342	-79.06728
B2100000	HAW RIV AT SR 1713 NR BYNUM	35.77165	-79.14497
B3900000	MORGAN CRK AT SR 1726 NR FARRINGTON	35.86115	-79.01000
B3040000	NEW HOPE CRK AT SR 1107 NR BLANDS	35.88474	-78.96563
B3660000	NORTHEAST CRK AT SR 1100 NR NELSON	35.87243	-78.91322
B3025000	THIRD FORK CRK AT NC 54 NR DURHAM	35.91867	-78.9548
B3750000	PHILS CRK NR CALVANDER	35.91190	-79.13406

**Table 1.** Station ID, description, and coordinates of sampled sites.



**Figure 1.** Jordan Lake EC monitoring locations. \*B3670000 (Northeast Creek at SR 1731) was sampled once in January 2018 in lieu of B3660000.

## Methods

The selected sites (Figure 1) are located within Jordan Lake and its watershed to provide water quality data in areas of Jordan Lake that receive inflow from surface waters with permitted municipal NPDES facilities that have discharges greater than one million gallons per day. The sites were selected to aid in providing information concerning the selected emerging compounds in Jordan Lake and its watershed areas and their relation to drinking water treatment plant intakes. Five existing and one new in-lake monitoring stations as well as six existing and one new Ambient Monitoring System (AMS) watershed sites were sampled as part of this study. One location, site B3750000, is not downstream from any permitted dischargers and served as a control for this study. Initial pre-screening site visits conducted in January 2018 comprised of CPF055C, CPF087D, B3900000, B3040000, B2100000, and B3670000. Site B3670000 was sampled as a substitute for B3660000 in January due to site inaccessibility. The remaining sites were added in February. All sites were then sampled once per month through June 2018.

Physical parameters were collected at the surface (0.15 m) using an In-Situ SmarTROLL multiparameter hydrosonde. Chemical parameters were collected as grab samples at a depth of 0.15 meters. Samples were collected in accordance with ISB's *Standard Operating Procedures Manual: Physical and Chemical Monitoring v2.1, Dec. 2013*<sup>4</sup> and *Ambient Lakes Quality Assurance Project Plan v2.0, March 2014*<sup>5</sup>. Due to the unique characteristics of PFAS and their relative novelty to sampling protocols, sampling methodology was drawn from various draft sources with additional guidance from USEPA Science and Ecosystem Support Division (SESD). Bromide and 1,4-dioxane samples were analyzed by the DWR Central Chemistry Laboratory in Raleigh, NC. PFAS samples were analyzed by EPA's SESD in Athens, GA. Appropriate QA/QC samples were collected during each sampling event including trip blanks, duplicates, matrix spikes and matrix spike duplicates, and equipment blanks. All samples were maintained under chain of custody from the time of collection to the time of analysis. PFAS-free field clothing, equipment, and personal care products (e.g. sunscreen) were utilized wherever practical to avoid cross-contamination of water samples. Chemical and physical parameters collected are shown in Table 2.

Physical Parameters	Chemical Parameters (ng/L unless otherwise noted)		
Temperature (°C)	4:2FTS	PFDA	PFNS
pH (s.u.)	6:2FTS	PFDoA	PFOA
Dissolved Oxygen (mg/L)	8:2FTS	PFDS	PFOS
Conductivity (µS/cm)	FOSA	PFHpA	PFPeA
Secchi Depth (m)	HFPO-DA	PFHpS	PFPeS
	N-MeFOSAA	PFHxA	PFTTrDA
	PFBA	PFHxS	PFUdA
	PFBS	PFNA	1,4-Dioxane (µg/L)
			Bromide (mg/L)

**Table 2.** Summary of physical and chemical parameters collected. See Appendix I for a detailed list of PFAS chemical parameters.

## Results

### Physical Results

Physical water quality conditions remained within North Carolina 15A NCAC 02B Water Quality Standards for Surface Waters<sup>6</sup> standards throughout the duration of the study, except for one instance of elevated pH at site B2100000 with a value of 9.2 on 1/3/2018. Secchi depth was not measured at the in-lake site CPF089, nor the seven AMS watershed sites. See Table 3 for complete list of ranges of values for each physical parameter for all monitored sites.

Parameter/Site	CPF086C	CPF081A1C	CPF086F	CPF087D	CPF055C	CPF089	B4050000	B2100000	B3900000	B3040000	B3660000	B3025000	B3750000
Temp. (°C)	10.2-27.4	10-27.1	4.2-27.3	4.4-27.5	4.8-28.6	10.5-27.9	7.1-21.0	1.3-25.4	5.4-22.4	5.7-22.0	8.0-22.3	7.1-21.1	7.5-20.8
pH (s.u.)	7.2-8.8	7.1-8.5	7.3-8.5	7.5-8.4	7.6-8.2	7.9-8.5	7.0-7.4	<b>7.4-9.2</b>	7.1-7.3	7.0-7.2	7.2-7.4	7.1-7.2	7.1-7.4
D.O. (mg/L)	5.2-13.5	5.2-12.4	6.2-13.1	6.8-12.2	7.4-11.5	7.3-13.1	7.7-12.5	8.1-17.1	6.8-11.8	6.3-11.3	5.5-10.1	4.9-10.3	7.8-13.1
Conductivity (µS/cm)	175-270	171-254	171-261	182-219	157-198	181-214	155-318	123-401	216-672	158-483	240-591	166-387	81-184
Secchi Depth (m)	0.2-0.7	0.2-0.7	0.2-0.8	0.6-0.9	0.3-1.0	--	--	--	--	--	--	--	--

**Table 3.** Physical parameter ranges. Values in bold exceed NC State Surface Water Standards (>9.0 s.u. pH); -- :Secchi depth not measured.

### Chemical Results

Laboratory analysis for bromide was conducted by DWR at the Central Laboratory in Raleigh. No returned values above the practical quantitation limit (PQL) of 0.4 µg/L were reported at any site throughout the duration of the study. NCDWR defines the PQL as the lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Analysis for 1,4-dioxane was also conducted by DWR at the Central Laboratory in Raleigh. Positive returns for 1,4-dioxane occurred at 5 of the 13 sites; in some cases at concentrations several times the NC Protective Value for Surface Water of 0.35 µg/L. As noted earlier, NC Protective Values may be based on limited toxicological information and are offered as guidelines only. All detections were observed on the lower Haw River arm of the lake, with some evidence of contaminant backflow towards the New Hope arm. Positive results were also returned for the outfall site below the Jordan Lake dam. Detected concentrations of 1,4-dioxane at site are listed below in Table 4.

PFAS analysis was conducted by USEPA's Science and Ecosystem Support Division in Athens, GA. Of the 23 PFAS compounds selected for this study, the following seven compounds were found at or above the minimum reporting limit (MRL) on at least one occasion: PFBA, PFHpA, PFHxA, PFHxS, PFOA, PFOS, and PFPeA. One or more of these compounds were detected at sites B210000, B3040000, B3660000, B4050000, CPF055C, CPF087D, and CPF089. These results demonstrate a clear bias for the Haw River segment of the lake, with additional detections of

PFBA observed in the upper drainages of New Hope and Morgan Creeks. These detections, while unique to the upper reaches on the eastern arms of Jordan Lake in terms of this study, dilute to nondetectable concentrations upon entering the reservoir. Values of detected compounds and the associated detection dates for sites with compounds above the MRL are listed in Table 4. USEPA defines the MRL as the analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample specific and accounts for preparation weights and volumes, and dilutions. MRL values for PFAS analytes ranged from 37-310 ng/L during the course of this study.

Station ID/ Analyte	B210000	B3040000	B3660000 *B3670000	B4050000	CPF055C	CPF087D	CPF089
PFBA (ng/L)	1/3/18 54 6/13/18 83	6/13/18 40	1/3/18* 55 2/21/18 48 4/11/18 42 5/9/18 160 6/13/18 41		1/3/18 59	6/13/18 42	
PFHpA (ng/L)	1/3/18 100 2/21/18 62 3/22/18 46 5/9/18 53 6/13/18 280			4/11/18 52	1/3/18 210 2/21/18 130 4/11/18 86 5/9/18 57 6/13/18 42		2/21/18 50 3/22/18 55 4/11/18 43
PFHxA (ng/L)	1/3/18 170 2/21/18 79 5/9/18 98 6/13/18 350			2/21/18 42 3/22/18 48 4/11/18 67	1/3/18 260 2/21/18 100 3/22/18 38 4/11/18 78 5/9/18 66 6/13/18 56		3/22/18 82 5/9/18 57
PFHxS (ng/L)	1/3/18 71				1/3/18 56		
PFOA (ng/L)	1/3/18 90 5/9/18 43 6/13/18 46				1/3/18 62		
PFOS (ng/L)	1/3/18 590				1/3/18 94 2/21/18 41 6/13/18 46		2/21/18 98
PFPeA (ng/L)	1/3/18 130 2/21/18 65 5/9/18 71 6/13/18 260		1/3/18* 45 5/9/18 45 6/3/18 49	4/11/18 42	1/3/18 150 2/21/18 56 4/11/18 52 5/9/18 50 6/13/18 59		2/21/18 45 3/22/18 56 5/9/18 47
1,4-Dioxane (ug/L)	2/21/18 3.0 4/11/18 1.2 5/9/18 35 6/13/18 6.5			2/21/18 6.6 3/22/18 5.4 4/11/18 2.5 5/9/18 1.9 6/13/18 2.3	2/21/18 1.8 3/22/18 5.5 4/11/18 2.1 5/9/18 2.9 6/13/18 11	2/21/18 1.7 3/22/18 1.8 4/11/18 1.6	2/21/18 6.4 3/22/18 5.7 4/11/18 3.9 5/9/18 1.8 6/13/18 1.6

**Table 4.** Values of detected compounds and detection date for sites with values above PQLs.

## Summary

Evaluation of physical and chemical results from this study suggest that while there are elevated levels of target analytes at some sites, additional long-term monitoring would need to be conducted to evaluate persistence of these compounds and their associated effects on Jordan Lake as a drinking water source. Sites B2100000 and CPF055C, respectively the Haw River and the most upstream site in the Haw River arm of Jordan Lake, exhibited the widest variety and highest relative concentrations of target analytes, as well as the greatest frequency of compounds detected above established USEPA drinking water health advisories. For comparison, raw water analytical results for the Cary/Apex Water Treatment Facility reported PFBA concentrations ranging from 16-20 ng/L, while DEQ results indicated only one detection of 42 ng/L at site CPF087D; the study site most closely associated with the intake location<sup>13</sup>. While several other analytes were detected in the raw water samples analyzed by the Town of Cary's contract laboratory, this is likely a result of the lab establishing a lower reporting limit which ranged from 2.0-5.0 ng/L. All detected 1,4-dioxane values were above the NC Protective Values for Surface Waters Fresh Water, Water Supply (Class WS I-V) of 0.35 µg/L; most notably, CPF055C of 11 µg/L on 6/13/2018 and B210000 of 35 µg/L on 5/9/2018. Precipitation events were not specifically targeted during this study, and no relationship between storm flows and presence or concentration of target analytes was evaluated. As noted earlier, all analytical data presented in this document reflect levels of target analytes detected in untreated surface waters, and do not represent contaminant concentrations in finished drinking water sourced from Jordan Lake.

For further questions regarding this or other studies, please contact Eric Morris, Intensive Survey Branch Supervisor, directly at (919) 743-8496 or [eric.morris@ncdenr.gov](mailto:eric.morris@ncdenr.gov).

## References

- <sup>1</sup>Intensive Survey Unit. 2014. Lake & Reservoir Assessments Cape Fear River Basin. <https://files.nc.gov/ncdeq/Water%20Quality/Environmental%20Sciences/Reports/CapeFearRLakesAssess2013.pdf>
- <sup>2</sup>Intensive Survey Unit. 2016. Study Plan for the Ongoing Assessment of Water Quality in Jordan Lake. <https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/intensive-survey-branch/falls-jordan-lakes-monitoring>
- <sup>3</sup>NCDEQ. 2016. North Carolina Integrated Report All Assessed Waters (Impaired Waters List). [https://files.nc.gov/ncdeq/Water%20Quality/Planning/TMDL/303d/2016/NC\\_2016\\_IR\\_Final.pdf](https://files.nc.gov/ncdeq/Water%20Quality/Planning/TMDL/303d/2016/NC_2016_IR_Final.pdf)
- <sup>4</sup>DWR-WSS. 2013. *Intensive Survey Branch Standard Operating Procedures Manual: Physical and Chemical Monitoring*. Raleigh: State of North Carolina. <https://files.nc.gov/ncdeq/Water%20Quality/Environmental%20Sciences/ISU/ISB%20SOP%20Version2.1%20%20FINAL.pdf>
- <sup>5</sup>NCDEQ. 2014. *Ambient Lakes Monitoring Program (ALMP) Quality Assurance Project Plan v2.0*. <https://files.nc.gov/ncdeq/Water%20Quality/Environmental%20Sciences/ISU/2014LakesAll.pdf>
- <sup>6</sup>NCDWR. 2017. *NC Surface Water Quality Standards Table*. <https://deq.nc.gov/about/divisions/water-resources/planning/classification-standards/surface-water-standards#TriennialReviewInfo>
- <sup>7</sup>USEPA. 2016. *Fact Sheet: PFOA & PFOS Drinking Water Health Advisories*. <https://www.epa.gov/ground-water-and-drinking-water/supporting-documents-drinking-water-health-advisories-pfoa-and-pfos>
- <sup>8</sup>Good, K.D., VanBriesen, J.M. 2017. *Potential Drinking Water Effects of Bromide Discharges from Coal-Fired Electric Power Plants*. <https://www3.epa.gov/region1/npdes/merrimackstation/pdfs/Comments2RevisedDraftPermit/VanBriesenReport.pdf>
- <sup>9</sup>NCDWR. 2002. *Jordan Lake Water Supply Allocation*. <https://deq.nc.gov/about/divisions/water-resources/planning/basin-planning/map-page/cape-fear-river-basin-landing/jordan-lake-water-supply-allocation/jordan-lake-water-supply-allocation-current-allocations>
- <sup>10</sup>USEPA. 2012. *The Third Unregulated Contaminant Monitoring Rule*. [https://www.epa.gov/sites/production/files/2015-10/documents/ucmr3\\_factsheet\\_general.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/ucmr3_factsheet_general.pdf)
- <sup>11</sup>USEPA. 2017. *Technical Fact Sheet – 1,4-Dioxane*. [https://www.epa.gov/sites/production/files/2014-03/documents/ffro\\_factsheet\\_contaminant\\_14-dioxane\\_january2014\\_final.pdf](https://www.epa.gov/sites/production/files/2014-03/documents/ffro_factsheet_contaminant_14-dioxane_january2014_final.pdf)
- <sup>12</sup>USEPA. 2018. *Basic Information on PFAS*. <https://www.epa.gov/pfas/basic-information-pfas#health>
- <sup>13</sup>Town of Cary. 2018. *Emerging Contaminants*. <https://www.townofcary.org/services-publications/water-sewer-stormwater/water/water-treatment/emerging-contaminants>

Appendix I – List of PFAS Compounds

<b>CASRN</b>	<b>Abbreviation</b>	<b>Chemical Name</b>
72629-94-8	PFTrDA	Perfluoro-n-tridecanoic acid
307-55-1	PFDoA	Perfluoro-n-dodecanoic acid
2058-94-8	PFUdA	Perfluoro-n-undecanoic acid
335-76-2	PFDA	Perfluoro-n-decanoic acid
375-95-1	PFNA	Perfluoro-n-nonanoic acid
335-67-1	PFOA	Perfluoro-n-octanoic acid
375-85-9	PFHpA	Perfluoro-n-heptanoic acid
307-24-4	PFHxA	Perfluoro-n-hexanoic acid
2706-90-3	PFPeA	Perfluoro-n-pentanoic acid
375-22-4	PFBA	Perfluoro-n-butanoic acid
335-77-3	PFDS	Perfluoro-n-decanesulfonate
68259-12-1	PFNS	Perfluoro-n-nonanesulfonate
1763-23-1	PFOS	Perfluoro-n-octanesulfonate
375-92-8	PFHpS	Perfluoro-n-heptanesulfonate
355-46-4	PFHxS	Perfluoro-n-hexanesulfonate
2706-91-4	PFPeS	Perfluoro-n-pentansulfonate
375-73-5	PFBS	Perfluoro-n-butanefulfonate
754-91-6	FOSA	Perfluoro-n-octanesulfonamide
39108-34-4	8:2 FTS	8:2 Fluorotelomer sulfonate
27619-97-2	6:2 FTS	6:2 Fluorotelomer sulfonate
757124-72-4	4:2 FTS	4:2 Fluorotelomer sulfonate
2355-31-9	N-MeFOSAA	N-methylperfluoro-1-octanesulfonamidoacetic acid
13252-13-6	HFPO-DA <sup>1</sup>	Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)
<sup>1</sup> The anion of the ammonium salt known as "GenX"		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700  
 D.A.R.T. Id: 18-0033  
 Project: 18-0145, Chemours - Reported by Diana Burdette

**February 15, 2018**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
 Project: 18-0145, Chemours  
 Drinking Water

**FROM:** Diana Burdette  
 OCS Analyst

**THRU:** Floyd Wellborn, Chief  
 ASB Organic Chemistry Section

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Semi Volatile Organics (SVOA)**

PFAS

ASB 100S (Water)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

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**Sample Disposal Policy**

Due to limited space for long term sample storage, ASB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**SAMPLES INCLUDED IN THIS REPORT**

**Project: 18-0145, Chemours**

<b>Sample ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
Chemours Outfall 002	E180205-01	Water	1/5/18 11:10	1/12/18 10:30
Chemours Outfall 002	E180205-02	Water	1/8/18 13:54	1/12/18 10:30
Chemours Raw Water Intake	E180205-03	Water	1/8/18 13:13	1/12/18 10:30
Filtered Water @ Chemours Power House	E180205-04	Water	1/8/18 13:34	1/12/18 10:30
Trip Blank	E180205-05	Trip Blank - Water	1/11/18 00:00	1/12/18 10:30
Field Blank	E180205-06	Field Blank	1/3/18 10:35	1/12/18 10:30
CPF055C	E180205-07	Water	1/3/18 11:20	1/12/18 10:30
CPF087G	E180205-08	Water	1/3/18 10:50	1/12/18 10:30
B3900000	E180205-09	Water	1/3/18 12:40	1/12/18 10:30
B3040000	E180205-10	Water	1/3/18 13:00	1/12/18 10:30
B3670000	E180205-11	Water	1/3/18 13:10	1/12/18 10:30
B2100000	E180205-12	Water	1/3/18 13:45	1/12/18 10:30



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 4 Science and Ecosystem Support Division  
980 College Station Road, Athens, Georgia 30605-2700  
D.A.R.T. Id: 18-0033  
Project: 18-0145, Chemours - Reported by Diana Burdette

## DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimate.
Q-2	Result greater than MDL but less than MRL.
QC-1	Analyte concentration low in continuing calibration verification standard
QC-5	Calibration check standard less than method control limits.
QL-1	Laboratory Control Spike Recovery less than method control limits

## ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service  Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ( <a href="http://www.epa.gov/srs">www.epa.gov/srs</a> ), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

### ACCREDITATIONS:

ISO	ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.  Refer to the certificate and scope of accreditation AT-1644 at: <a href="http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd">http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd</a>
NR	The EPA Region 4 Laboratory has not requested accreditation for this test.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

**Sample ID: Chemours Outfall 002**

**Lab ID: E180205-01**

**Station ID: 002**

**Matrix: Water**

**Date Collected: 1/5/18 11:10**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
27619-97-2	6:2FTS	110	U	ng/L	110	1/30/18 8:12	2/07/18 2:32	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
13252-13-6	HFPO-DA	130		ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
2355-31-9	N-MeFOSAA	110	U	ng/L	110	1/30/18 8:12	2/07/18 2:32	ASB 100S
375-22-4	PFBA	27	J, Q-2	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
335-76-2	PFDA	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
307-55-1	PFDoA	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
335-77-3	PFDS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
375-85-9	PFHpA	71		ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
375-92-8	PFHpS	38	U, J, QL-1	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
307-24-4	PFHxA	98		ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
335-67-1	PFOA	29	J, Q-2	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
1763-23-1	PFOS	23	J, Q-2	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
2706-93-3	PFPeA	68		ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
72629-94-8	PFTTrDA	38	U, J, QC-1, QC-5	ng/L	38	1/30/18 8:12	2/07/18 2:32	ASB 100S
2058-94-8	PFUdA	77	U	ng/L	77	1/30/18 8:12	2/07/18 2:32	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

**Sample ID: Chemours Outfall 002**

**Lab ID: E180205-02**

**Station ID: 002**

**Matrix: Water**

**Date Collected: 1/8/18 13:54**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 2:55	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
13252-13-6	HFPO-DA	140		ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 2:55	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
335-77-3	PFDS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
375-85-9	PFHpA	48		ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
375-92-8	PFHpS	39	U, J, QL-1	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
307-24-4	PFHxA	91		ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
335-67-1	PFOA	30	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
2706-93-3	PFPeA	58		ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-5	ng/L	39	1/30/18 8:12	2/07/18 2:55	ASB 100S
2058-94-8	PFUdA	78	U	ng/L	78	1/30/18 8:12	2/07/18 2:55	ASB 100S



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Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

Sample ID: Chemours Raw Water Intake

Lab ID: E180205-03

Station ID: 014

Matrix: Water

Date Collected: 1/8/18 13:13

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 3:17	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
13252-13-6	HFPO-DA	35	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 3:17	ASB 100S
375-22-4	PFBA	27	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
335-77-3	PFDS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
375-85-9	PFHpA	43		ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
375-92-8	PFHpS	39	U, J, QL-1	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
307-24-4	PFHxA	69		ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
1763-23-1	PFOS	23	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
2706-93-3	PFPeA	49		ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-5	ng/L	39	1/30/18 8:12	2/07/18 3:17	ASB 100S
2058-94-8	PFUdA	78	U	ng/L	78	1/30/18 8:12	2/07/18 3:17	ASB 100S



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 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

**Sample ID: Filtered Water @ Chemours Power House**

**Lab ID: E180205-04**

**Station ID: 020**

**Matrix: Water**

**Date Collected: 1/8/18 13:34**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 3:40	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
13252-13-6	HFPO-DA	100		ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 3:40	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
335-77-3	PFDS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
375-85-9	PFHpA	39		ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
375-92-8	PFHpS	39	U, J, QL-1	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
307-24-4	PFHxA	53		ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
335-67-1	PFOA	27	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
2706-93-3	PFPeA	45		ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-5	ng/L	39	1/30/18 8:12	2/07/18 3:40	ASB 100S
2058-94-8	PFUdA	79	U	ng/L	79	1/30/18 8:12	2/07/18 3:40	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

Sample ID: Trip Blank

Lab ID: E180205-05

Station ID:

Matrix: Trip Blank - Water

Date Collected: 1/11/18 0:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 1:25	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 1:25	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
335-77-3	PFDS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
375-92-8	PFHpS	40	U, J, QL-1	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
72629-94-8	PFTTrDA	40	U, J, QC-1, QC-5	ng/L	40	1/30/18 8:12	2/07/18 1:25	ASB 100S
2058-94-8	PFUdA	80	U	ng/L	80	1/30/18 8:12	2/07/18 1:25	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0145, Chemours

Sample ID: Field Blank

Lab ID: E180205-06

Station ID:

Matrix: Field Blank

Date Collected: 1/3/18 10:35

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 4:02	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 4:02	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
335-77-3	PFDS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
375-92-8	PFHpS	39	U, J, QL-1	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-5	ng/L	39	1/30/18 8:12	2/07/18 4:02	ASB 100S
2058-94-8	PFUdA	78	U	ng/L	78	1/30/18 8:12	2/07/18 4:02	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

Sample ID: CPF055C

Lab ID: E180205-07

Station ID: CPF055C

Matrix: Water

Date Collected: 1/3/18 11:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 4:24	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 4:24	ASB 100S
375-22-4	PFBA	59		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
335-76-2	PFDA	20	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
335-77-3	PFDS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
375-85-9	PFHpA	210		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
375-92-8	PFHpS	40	U, J, QL-1	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
307-24-4	PFHxA	260		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
355-46-4	PFHxS	56		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
375-95-1	PFNA	17	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
335-67-1	PFOA	62		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
1763-23-1	PFOS	94		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
2706-93-3	PFPeA	150		ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
2706-91-4	PFPeS	9.5	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
72629-94-8	PFTTrDA	40	U, J, QC-1, QC-5	ng/L	40	1/30/18 8:12	2/07/18 4:24	ASB 100S
2058-94-8	PFUdA	80	U	ng/L	80	1/30/18 8:12	2/07/18 4:24	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
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D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

**Sample ID: CPF087G**

**Lab ID: E180205-08**

**Station ID: CPF087G**

**Matrix: Water**

**Date Collected: 1/3/18 10:50**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 4:47	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 4:47	ASB 100S
375-22-4	PFBA	26	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
335-77-3	PFDS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
375-85-9	PFHpA	26	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
375-92-8	PFHpS	40	U, J, QL-1	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
1763-23-1	PFOS	32	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
2706-93-3	PFPeA	26	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
72629-94-8	PFTTrDA	40	U, J, QC-1, QC-5	ng/L	40	1/30/18 8:12	2/07/18 4:47	ASB 100S
2058-94-8	PFUdA	79	U	ng/L	79	1/30/18 8:12	2/07/18 4:47	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
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D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

**Sample ID: B3900000**

**Lab ID: E180205-09**

**Station ID: B3900000**

**Matrix: Water**

**Date Collected: 1/3/18 12:40**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 5:09	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 5:09	ASB 100S
375-22-4	PFBA	18	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
335-77-3	PFDS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
375-92-8	PFHpS	40	U, J, QL-1	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
2706-93-3	PFPeA	22	J, Q-2	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
72629-94-8	PFTTrDA	40	U, J, QC-1, QC-5	ng/L	40	1/30/18 8:12	2/07/18 5:09	ASB 100S
2058-94-8	PFUdA	81	U	ng/L	81	1/30/18 8:12	2/07/18 5:09	ASB 100S



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Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0145, Chemours

Sample ID: B3040000

Lab ID: E180205-10

Station ID: B3040000

Matrix: Water

Date Collected: 1/3/18 13:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 5:32	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 5:32	ASB 100S
375-22-4	PFBA	19	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
335-77-3	PFDS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
375-92-8	PFHpS	39	U, J, QL-1	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
307-24-4	PFHxA	31	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
335-67-1	PFOA	31	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
2706-93-3	PFPeA	37	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-5	ng/L	39	1/30/18 8:12	2/07/18 5:32	ASB 100S
2058-94-8	PFUdA	78	U	ng/L	78	1/30/18 8:12	2/07/18 5:32	ASB 100S



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 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0145, Chemours**

Sample ID: B3670000

Lab ID: E180205-11

Station ID: B3670000

Matrix: Water

Date Collected: 1/3/18 13:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 5:54	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 5:54	ASB 100S
375-22-4	PFBA	55		ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
335-77-3	PFDS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
375-92-8	PFHpS	39	U, J, QL-1	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
335-67-1	PFOA	28	J, Q-2	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
2706-93-3	PFPeA	45		ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-5	ng/L	39	1/30/18 8:12	2/07/18 5:54	ASB 100S
2058-94-8	PFUdA	78	U	ng/L	78	1/30/18 8:12	2/07/18 5:54	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0145, Chemours - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0145, Chemours

Sample ID: **B2100000**

Lab ID: **E180205-12**

Station ID: **B2100000**

Matrix: Water

Date Collected: 1/3/18 13:45

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
27619-97-2	6:2FTS	120	U	ng/L	120	1/30/18 8:12	2/07/18 6:17	ASB 100S
39108-34-4	8:2FTS	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
2355-31-9	N-MeFOSAA	120	U	ng/L	120	1/30/18 8:12	2/07/18 6:17	ASB 100S
375-22-4	PFBA	54		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
335-76-2	PFDA	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
307-55-1	PFDoA	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
335-77-3	PFDS	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
375-85-9	PFHpA	100		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
375-92-8	PFHpS	26	J, Q-2, QL-1	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
307-24-4	PFHxA	170		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
355-46-4	PFHxS	71		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
375-95-1	PFNA	16	J, Q-2	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
335-67-1	PFOA	90		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
1763-23-1	PFOS	590		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
2706-93-3	PFPeA	130		ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
2706-91-4	PFPeS	15	J, Q-2	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
72629-94-8	PFTTrDA	41	U, J, QC-1, QC-5	ng/L	41	1/30/18 8:12	2/07/18 6:17	ASB 100S
2058-94-8	PFUdA	83	U	ng/L	83	1/30/18 8:12	2/07/18 6:17	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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 980 College Station Road, Athens, Georgia 30605-2700  
 D.A.R.T. Id: 18-0033  
 Project: 18-0145, Chemours - Reported by Diana Burdette

**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1801026 - S PFC**

**Blank (1801026-BLK1)**

Prepared: 01/30/18 Analyzed: 02/06/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	120	"							U
8:2FTS	U	40	"							QS-3, U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	120	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	40	"							U
PFDS	U	40	"							U
PFHpA	U	40	"							U
PFHpS	U	40	"							QL-1, U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	40	"							QC-1, QC-5, U
PFUdA	U	80	"							QS-3, U

**Blank (1801026-BLK2)**

Prepared: 01/30/18 Analyzed: 02/07/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	120	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	120	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	40	"							U
PFDS	U	40	"							U
PFHpA	U	40	"							U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1801026 - S PFC**

<b>Blank (1801026-BLK2)</b>		Prepared: 01/30/18 Analyzed: 02/07/18								
PFHpS	U	40	ng/L							QL-1, U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	40	"							QC-1, QC-5, U
PFUdA	U	80	"							U

**LCS (1801026-BS1)**

<b>ASB 100S</b>		Prepared: 01/30/18 Analyzed: 02/07/18								
4:2FTS	323	40	ng/L	371.77		86.9	70-130			
6:2FTS	346	120	"	377.73		91.5	70-130			
8:2FTS	276	40	"	381.71		72.3	70-130			
FOSA	389	40	"	397.61		97.7	70-130			
HFPO-DA	296	40	"	397.61		74.5	70-130			
N-MeFOSAA	482	120	"	397.61		121	70-130			
PFBA	333	40	"	397.61		83.8	70-130			
PFBS	312	40	"	351.89		88.6	70-130			
PFDA	355	40	"	397.61		89.4	70-130			
PFDoA	344	40	"	397.61		86.5	70-130			
PFDS	384	40	"	383.70		100	70-130			
PFHpA	344	40	"	397.61		86.5	70-130			
PFHpS	257	40	"	377.73		68.1	70-130			QL-1
PFHxA	359	40	"	397.61		90.4	70-130			
PFHxS	310	40	"	362.62		85.5	70-130			
PFNA	325	40	"	397.61		81.7	70-130			
PFNS	314	40	"	381.71		82.4	70-130			
PFOA	351	40	"	397.61		88.3	70-130			
PFOS	305	40	"	367.99		82.9	70-130			
PFPeA	335	40	"	397.61		84.3	70-130			
PFPeS	317	40	"	373.76		84.7	70-130			
PFTTrDA	465	40	"	397.61		117	70-130			QC-1, QC-5
PFUdA	362	80	"	397.61		91.0	70-130			



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1801026 - S PFC**

**MRL Verification (1801026-PS1)**

Prepared: 01/30/18 Analyzed: 02/07/18

**ASB 100S**

4:2FTS	24.2	40	ng/L	37.177		65.2	50-150			MRL-2, Q-2
6:2FTS	31.3	120	"	37.773		83.0	50-150			MRL-2, Q-2
8:2FTS	32.8	40	"	38.171		85.9	50-150			MRL-2, Q-2
FOSA	28.6	40	"	39.761		72.0	50-150			MRL-2, Q-2
HFPO-DA	46.8	40	"	39.761		118	50-150			MRL-2
N-MeFOSAA	62.6	120	"	39.761		158	50-150			MRL-2, Q-2, QR-2
PFBA	52.7	40	"	39.761		132	50-150			MRL-2
PFBS	24.9	40	"	35.189		70.7	50-150			MRL-2, Q-2
PFDA	32.2	40	"	39.761		81.0	50-150			MRL-2, Q-2
PFDoA	50.7	40	"	39.761		128	50-150			MRL-2
PFDS	36.9	40	"	38.370		96.2	50-150			MRL-2, Q-2
PFHpA	33.9	40	"	39.761		85.3	50-150			MRL-2, Q-2
PFHpS	27.7	40	"	37.773		73.3	50-150			MRL-2, Q-2
PFHxA	53.0	40	"	39.761		133	50-150			MRL-2
PFHxS	44.5	40	"	36.262		123	50-150			MRL-2
PFNA	44.9	40	"	39.761		113	50-150			MRL-2
PFNS	35.6	40	"	38.171		93.4	50-150			MRL-2, Q-2
PFOA	51.7	40	"	39.761		130	50-150			MRL-2
PFOS	41.6	40	"	36.799		113	50-150			MRL-2
PFPeA	36.4	40	"	39.761		91.4	50-150			MRL-2, Q-2
PFPeS	32.6	40	"	37.376		87.3	50-150			MRL-2, Q-2
PFTTrDA	46.4	40	"	39.761		117	50-150			MRL-2, QC-1, QC-5
PFUdA	64.8	80	"	39.761		163	50-150			MRL-2, Q-2, QR-2



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**Notes and Definitions for QC Samples**

U	The analyte was not detected at or above the reporting limit.
MRL-2	MRL verification for Non-Potable Water matrix
Q-2	Result greater than MDL but less than MRL.
QC-1	Analyte concentration low in continuing calibration verification standard
QC-5	Calibration check standard less than method control limits.
QL-1	Laboratory Control Spike Recovery less than method control limits
QR-2	MRL verification recovery greater than upper control limits.
QS-3	Surrogate recovery is lower than established control limits.



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 Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

**March 28, 2018**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
 Project: 18-0252, Jordan Lake PFAS  
 Drinking Water

**FROM:** Diana Burdette  
 OCS Analyst

**THRU:** Floyd Wellborn, Chief  
 ASB Organic Chemistry Section

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Semi Volatile Organics (SVOA)**

PFAS

ASB 100S (Water)



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### **Sample Disposal Policy**

Due to limited space for long term sample storage, ASB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).



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**SAMPLES INCLUDED IN THIS REPORT**

**Project: 18-0252, Jordan Lake PFAS**

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
THIRD FORK CRK @ NC54 NR DURHAM	E180803-01	Water	2/21/18 09:05	2/23/18 10:47
NORTHEAST CRK @ SR1100 NR NELSON	E180803-02	Water	2/21/18 09:45	2/23/18 10:47
NEW HOPE CRK @ SR 1107 NR BLANDS	E180803-03	Water	2/21/18 10:25	2/23/18 10:47
NEW HOPE CRK @ SR 1107 NR BLANDS	E180803-04	Water	2/21/18 10:25	2/23/18 10:47
MORGAN CRK @ SR 1726 NR FARRINGTON	E180803-05	Water	2/21/18 11:05	2/23/18 10:47
PNILS CRK NR CAVANDER	E180803-06	Water	2/21/18 11:50	2/23/18 10:47
HAW RIV @ SR 1713 NR BYNUM	E180803-07	Water	2/21/18 12:35	2/23/18 10:47
HAW RIV BELOW JORDAN DAM NR MOUTH	E180803-08	Water	2/21/18 13:40	2/23/18 10:47
TRIP BLANK - TRUCK CREW	E180803-09	Trip Blank - Water	2/22/18 11:00	2/23/18 10:47
JORDAN LAKE @ MOUTH NEW HOPE CRK	E180803-10	Water	2/21/18 10:00	2/23/18 10:47
JORDAN LAKE @ MOUTH OF MORGAN CRK	E180803-11	Water	2/21/18 10:35	2/23/18 10:47
JORDAN LAKE NR FARRINGTON NC	E180803-12	Water	2/21/18 11:30	2/23/18 10:47
JORDAN LAKE NR FARRINGTON NC MS	E180803-13	Water	2/21/18 11:30	2/23/18 10:47
JORDAN LAKE @ MOUTH OF WHITE OAK	E180803-14	Water	2/21/18 12:05	2/23/18 10:47
JORDAN LAKE @ NARROWS NR BONSAI	E180803-15	Water	2/21/18 12:50	2/23/18 10:47
JORDAN LAKE ABOVE STINKING CRK	E180803-16	Water	2/21/18 13:10	2/23/18 10:47
JORDAN LAKE ABOVE STINKING CRK	E180803-17	Water	2/21/18 13:10	2/23/18 10:47
TRIP BLANK - BOAT CREW	E180803-18	Water	2/22/18 11:00	2/23/18 10:47
EQUIPMENT BLANK ON HDPE BOTTLE	E180803-19	Equipment Rinse Blank	2/22/18 10:00	2/23/18 10:47
DI WATER BLANK - CAL LAB 4401	E180803-20	Organic Free Water Blank	2/22/18 10:05	2/23/18 10:47



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Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
CR	Confirmation criteria not met.
J	The identification of the analyte is acceptable; the reported value is an estimate.
Q-2	Result greater than MDL but less than MRL.
QC-1	Analyte concentration low in continuing calibration verification standard
QC-5	Calibration check standard less than method control limits.
QM-3	Matrix Spike Precision outside method control limits
QR-1	MRL verification recovery less than lower control limits.

### ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service  Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ( <a href="http://www.epa.gov/srs">www.epa.gov/srs</a> ), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

#### ACCREDITATIONS:

ISO	ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.  Refer to the certificate and scope of accreditation AT-1644 at: <a href="http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd">http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd</a>
NR	The EPA Region 4 Laboratory has not requested accreditation for this test.



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## Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: THIRD FORK CRK @ NC54 NR DURHAM Lab ID: E180803-01

Station ID: B3025000 Matrix: Water

Date Collected: 2/21/18 9:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
27619-97-2	6:2FTS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
2355-31-9	N-MeFOSAA	78	U	ng/L	78	3/12/18 11:29	3/21/18 13:33	ASB 100S
375-22-4	PFBA	31	J, Q-2	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 13:33	ASB 100S
335-77-3	PFDS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S
72629-94-8	PFTTrDA	78	U, J, QC-1, QC-5	ng/L	78	3/12/18 11:29	3/21/18 13:33	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	3/12/18 11:29	3/21/18 13:33	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: NORTHEAST CRK @ SR1100 NR NELSON Lab ID: E180803-02

Station ID: B3660000

Matrix: Water

Date Collected: 2/21/18 9:45

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	3/12/18 11:29	3/21/18 13:56	ASB 100S
375-22-4	PFBA	48		ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 13:56	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
2706-93-3	PFPeA	23	J, Q-2	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S
72629-94-8	PFTTrDA	79	U, J, QC-1, QC-5	ng/L	79	3/12/18 11:29	3/21/18 13:56	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 13:56	ASB 100S



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## Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: NEW HOPE CRK @ SR 1107 NR BLANDS Lab ID: E180803-03

Station ID: B3040000 Matrix: Water

Date Collected: 2/21/18 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
2355-31-9	N-MeFOSAA	81	U	ng/L	81	3/12/18 11:29	3/21/18 14:18	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 14:18	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S
72629-94-8	PFTTrDA	81	U, J, QC-1, QC-5	ng/L	81	3/12/18 11:29	3/21/18 14:18	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:18	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region 4 Science and Ecosystem Support Division  
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 D.A.R.T. Id: 18-0033  
 Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: NEW HOPE CRK @ SR 1107 NR BLANDS D Lab ID: E180803-04

Station ID: B3040000 DUP

Matrix: Water

Date Collected: 2/21/18 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	3/12/18 11:29	3/21/18 14:41	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 14:41	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
2706-93-3	PFPeA	20	J, Q-2	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S
72629-94-8	PFTTrDA	79	U, J, QC-5, QC-1	ng/L	79	3/12/18 11:29	3/21/18 14:41	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 14:41	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: MORGAN CRK @ SR 1726 NR FARRINGTO Lab ID: E180803-05

Station ID: B3900000

Matrix: Water

Date Collected: 2/21/18 11:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
27619-97-2	6:2FTS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	3/12/18 11:29	3/21/18 15:03	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 15:03	ASB 100S
335-77-3	PFDS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S
72629-94-8	PFTTrDA	79	U, J, QC-1, QC-5	ng/L	79	3/12/18 11:29	3/21/18 15:03	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:03	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: PNILS CRK NR CAVANDER

Lab ID: E180803-06

Station ID: B3750000

Matrix: Water

Date Collected: 2/21/18 11:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
27619-97-2	6:2FTS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	3/12/18 11:29	3/21/18 15:25	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 15:25	ASB 100S
335-77-3	PFDS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S
72629-94-8	PFTTrDA	79	U, J, QC-1, QC-5	ng/L	79	3/12/18 11:29	3/21/18 15:25	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:25	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: HAW RIV @ SR 1713 NR BYNUM

Lab ID: E180803-07

Station ID: B2100000

Matrix: Water

Date Collected: 2/21/18 12:35

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
27619-97-2	6:2FTS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
2355-31-9	N-MeFOSAA	78	U	ng/L	78	3/12/18 11:29	3/21/18 15:48	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 15:48	ASB 100S
335-77-3	PFDS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
375-85-9	PFHpA	62		ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
307-24-4	PFHxA	79		ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
335-67-1	PFOA	28	J, Q-2	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
1763-23-1	PFOS	23	J, Q-2	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
2706-93-3	PFPeA	65		ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S
72629-94-8	PFTTrDA	78	U, J, QC-1, QC-5	ng/L	78	3/12/18 11:29	3/21/18 15:48	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	3/12/18 11:29	3/21/18 15:48	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: HAW RIV BELOW JORDAN DAM NR MON Lab ID: E180803-08

Station ID: B4050000

Matrix: Water

Date Collected: 2/21/18 13:40

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
2355-31-9	N-MeFOSAA	81	U	ng/L	81	3/12/18 11:29	3/21/18 16:10	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 16:10	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
375-85-9	PFHpA	29	J, Q-2	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
307-24-4	PFHxA	42		ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
1763-23-1	PFOS	25	J, Q-2	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S
72629-94-8	PFTTrDA	81	U, J, QC-1, QC-5	ng/L	81	3/12/18 11:29	3/21/18 16:10	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:10	ASB 100S



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## Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: TRIP BLANK - TRUCK CREW

Lab ID: E180803-09

Station ID: TB TRUCK

Matrix: Trip Blank - Water

Date Collected: 2/22/18 11:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	3/12/18 11:29	3/21/18 16:33	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 16:33	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S
72629-94-8	PFTTrDA	80	U, J, QC-1, QC-5	ng/L	80	3/12/18 11:29	3/21/18 16:33	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:33	ASB 100S



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## Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE @ MOUTH NEW HOPE CR Lab ID: E180803-10

Station ID: CPF081AIC

Matrix: Water

Date Collected: 2/21/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
2355-31-9	N-MeFOSAA	81	U	ng/L	81	3/12/18 11:29	3/21/18 16:55	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 16:55	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S
72629-94-8	PFTTrDA	81	U, J, QC-1, QC-5	ng/L	81	3/12/18 11:29	3/21/18 16:55	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 16:55	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700  
 D.A.R.T. Id: 18-0033  
 Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE @ MOUTH OF MORGAN C Lab ID: E180803-11

Station ID: CPF086C

Matrix: Water

Date Collected: 2/21/18 10:35

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
27619-97-2	6:2FTS	38	U, J, QR-1	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
13252-13-6	HFPO-DA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
2355-31-9	N-MeFOSAA	76	U	ng/L	76	3/12/18 11:29	3/21/18 17:18	ASB 100S
375-22-4	PFBA	20	J, Q-2	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
335-76-2	PFDA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
307-55-1	PFDoA	150	U	ng/L	150	3/12/18 11:29	3/21/18 17:18	ASB 100S
335-77-3	PFDS	38	U, J, QR-1	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
375-85-9	PFHpA	13	J, Q-2	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
375-92-8	PFHpS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
307-24-4	PFHxA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
335-67-1	PFOA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
1763-23-1	PFOS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
2706-93-3	PFPeA	24	J, Q-2	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S
72629-94-8	PFTTrDA	76	U, J, QC-1, QC-5	ng/L	76	3/12/18 11:29	3/21/18 17:18	ASB 100S
2058-94-8	PFUdA	38	U	ng/L	38	3/12/18 11:29	3/21/18 17:18	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE NR FARRINGTON NC

Lab ID: E180803-12

Station ID: CPF086F

Matrix: Water

Date Collected: 2/21/18 11:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	3/12/18 11:29	3/21/18 17:40	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 17:40	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S
72629-94-8	PFTTrDA	79	U, J, QC-1, QC-5	ng/L	79	3/12/18 11:29	3/21/18 17:40	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 17:40	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE NR FARRINGTON NC MS/ Lab ID: E180803-13

Station ID: CPF086F MS/MSD

Matrix: Water

Date Collected: 2/21/18 11:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
39108-34-4	8:2FTS	40	U, J, QM-3	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
754-91-6	FOSA	40	U, J, QM-3	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
13252-13-6	HFPO-DA	40	U, J, QM-3	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
2355-31-9	N-MeFOSAA	80	U, J, QM-3	ng/L	80	3/12/18 11:29	3/21/18 18:03	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
335-76-2	PFDA	40	U, J, QM-3	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 18:03	ASB 100S
335-77-3	PFDS	40	U, J, QM-3, QR-1	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
375-85-9	PFHpA	15	J, Q-2	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
68259-12-1	PFNS	40	U, J, QM-3	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S
72629-94-8	PFTrDA	80	U, J, QC-1, QC-5	ng/L	80	3/12/18 11:29	3/21/18 18:03	ASB 100S
2058-94-8	PFUdA	40	U, J, QM-3	ng/L	40	3/12/18 11:29	3/21/18 18:03	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE @ MOUTH OF WHITE OAI Lab ID: E180803-14

Station ID: CPF087D

Matrix: Water

Date Collected: 2/21/18 12:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
27619-97-2	6:2FTS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
2355-31-9	N-MeFOSAA	78	U	ng/L	78	3/12/18 11:29	3/21/18 18:25	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 18:25	ASB 100S
335-77-3	PFDS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
375-85-9	PFHpA	35	J, Q-2	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
307-24-4	PFHxA	69	J, CR	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
2706-93-3	PFPeA	37	J, Q-2	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S
72629-94-8	PFTTrDA	78	U, J, QC-1, QC-5	ng/L	78	3/12/18 11:29	3/21/18 18:25	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	3/12/18 11:29	3/21/18 18:25	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE @ NARROWS NR BONSALE Lab ID: E180803-15

Station ID: CPF089

Matrix: Water

Date Collected: 2/21/18 12:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
27619-97-2	6:2FTS	41	U, J, QR-1	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
39108-34-4	8:2FTS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
2355-31-9	N-MeFOSAA	82	U	ng/L	82	3/12/18 11:29	3/21/18 18:48	ASB 100S
375-22-4	PFBA	17	J, Q-2	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
335-76-2	PFDA	31	J, Q-2	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 18:48	ASB 100S
335-77-3	PFDS	41	U, J, QR-1	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
375-85-9	PFHpA	50		ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
375-92-8	PFHpS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
307-24-4	PFHxA	53	J, CR	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
1763-23-1	PFOS	98		ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
2706-93-3	PFPeA	45		ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S
72629-94-8	PFTTrDA	82	U, J, QC-1, QC-5	ng/L	82	3/12/18 11:29	3/21/18 18:48	ASB 100S
2058-94-8	PFUdA	41	U	ng/L	41	3/12/18 11:29	3/21/18 18:48	ASB 100S



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### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE ABOVE STINKING CRK Lab ID: E180803-16

Station ID: CPF055C Matrix: Water

Date Collected: 2/21/18 13:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	3/12/18 11:29	3/21/18 19:10	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 19:10	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
375-85-9	PFHpA	130		ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
307-24-4	PFHxA	100		ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
1763-23-1	PFOS	41		ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
2706-93-3	PFPeA	56		ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S
72629-94-8	PFTTrDA	80	U, J, QC-1, QC-5	ng/L	80	3/12/18 11:29	3/21/18 19:10	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:10	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: JORDAN LAKE ABOVE STINKING CRK D1 Lab ID: E180803-17

Station ID: CPF055C - DUP

Matrix: Water

Date Collected: 2/21/18 13:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
27619-97-2	6:2FTS	42	U, J, QR-1	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
39108-34-4	8:2FTS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
754-91-6	FOSA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
13252-13-6	HFPO-DA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
2355-31-9	N-MeFOSAA	84	U	ng/L	84	3/12/18 11:29	3/21/18 19:33	ASB 100S
375-22-4	PFBA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
375-73-5	PFBS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
335-76-2	PFDA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
307-55-1	PFDoA	170	U	ng/L	170	3/12/18 11:29	3/21/18 19:33	ASB 100S
335-77-3	PFDS	42	U, J, QR-1	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
375-85-9	PFHpA	120		ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
375-92-8	PFHpS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
307-24-4	PFHxA	97		ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
355-46-4	PFHxS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
375-95-1	PFNA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
68259-12-1	PFNS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
335-67-1	PFOA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
1763-23-1	PFOS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
2706-93-3	PFPeA	45		ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
2706-91-4	PFPeS	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S
72629-94-8	PFTTrDA	84	U, J, QC-1, QC-5	ng/L	84	3/12/18 11:29	3/21/18 19:33	ASB 100S
2058-94-8	PFUdA	42	U	ng/L	42	3/12/18 11:29	3/21/18 19:33	ASB 100S



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 Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

## Semi Volatile Organics

**Project: 18-0252, Jordan Lake PFAS**

**Sample ID: TRIP BLANK - BOAT CREW**

**Lab ID: E180803-18**

**Station ID: TB - BOAT**

**Matrix: Water**

**Date Collected: 2/22/18 11:00**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
27619-97-2	6:2FTS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	3/12/18 11:29	3/21/18 19:55	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 19:55	ASB 100S
335-77-3	PFDS	40	U, J, QR-1	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S
72629-94-8	PFTTrDA	80	U, J, QC-1, QC-5	ng/L	80	3/12/18 11:29	3/21/18 19:55	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	3/12/18 11:29	3/21/18 19:55	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: EQUIPMENT BLANK ON HDPE BOTTLE Lab ID: E180803-19

Station ID: EB

Matrix: Equipment Rinse Blank

Date Collected: 2/22/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
27619-97-2	6:2FTS	37	U, J, QR-1	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
39108-34-4	8:2FTS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
754-91-6	FOSA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
13252-13-6	HFPO-DA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
2355-31-9	N-MeFOSAA	75	U	ng/L	75	3/12/18 11:29	3/21/18 20:18	ASB 100S
375-22-4	PFBA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
375-73-5	PFBS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
335-76-2	PFDA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
307-55-1	PFDoA	150	U	ng/L	150	3/12/18 11:29	3/21/18 20:18	ASB 100S
335-77-3	PFDS	37	U, J, QR-1	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
375-85-9	PFHpA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
375-92-8	PFHpS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
307-24-4	PFHxA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
355-46-4	PFHxS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
375-95-1	PFNA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
68259-12-1	PFNS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
335-67-1	PFOA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
1763-23-1	PFOS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
2706-93-3	PFPeA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
2706-91-4	PFPeS	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S
72629-94-8	PFTTrDA	75	U, J, QC-1, QC-5	ng/L	75	3/12/18 11:29	3/21/18 20:18	ASB 100S
2058-94-8	PFUdA	37	U	ng/L	37	3/12/18 11:29	3/21/18 20:18	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0252, Jordan Lake PFAS

Sample ID: DI WATER BLANK - CAL LAB 4401

Lab ID: E180803-20

Station ID: DIB

Matrix: Organic Free Water Blank

Date Collected: 2/22/18 10:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
27619-97-2	6:2FTS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
2355-31-9	N-MeFOSAA	78	U	ng/L	78	3/12/18 11:29	3/21/18 20:40	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
307-55-1	PFDoA	160	U	ng/L	160	3/12/18 11:29	3/21/18 20:40	ASB 100S
335-77-3	PFDS	39	U, J, QR-1	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S
72629-94-8	PFTTrDA	78	U, J, QC-1, QC-5	ng/L	78	3/12/18 11:29	3/21/18 20:40	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	3/12/18 11:29	3/21/18 20:40	ASB 100S



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 Project: 18-0252, Jordan Lake PFAS - Reported by Diana Burdette

**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1803028 - S PFC**

**Blank (1803028-BLK1)**

Prepared: 03/20/18 Analyzed: 03/21/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	40	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	80	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	160	"							U
PFDS	U	40	"							U
PFHpA	U	40	"							U
PFHpS	U	40	"							U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	80	"							QC-1, QC-5, U
PFUdA	U	40	"							U

**Blank (1803028-BLK2)**

Prepared: 03/20/18 Analyzed: 03/21/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	40	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	80	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	160	"							U
PFDS	U	40	"							U
PFHpA	U	40	"							U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1803028 - S PFC**

<b>Blank (1803028-BLK2)</b>	Prepared: 03/20/18 Analyzed: 03/21/18									
PFHpS	U	40	ng/L							U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	80	"							QC-1, QC-5, U
PFUdA	U	40	"							U

**LCS (1803028-BS1)**

<b>ASB 100S</b>	Prepared: 03/20/18 Analyzed: 03/21/18									
4:2FTS	341	40	ng/L	373.25		91.2	70-130			
6:2FTS	335	40	"	379.24		88.2	70-130			
8:2FTS	348	40	"	383.23		90.8	70-130			
FOSA	425	40	"	399.20		106	70-130			
HFPO-DA	328	40	"	399.20		82.1	70-130			
N-MeFOSAA	399	80	"	399.20		100	70-130			
PFBA	374	40	"	399.20		93.7	70-130			
PFBS	312	40	"	353.29		88.5	70-130			
PFDA	410	40	"	399.20		103	70-130			
PFDoA	433	160	"	399.20		108	70-130			
PFDS	339	40	"	385.23		88.0	70-130			
PFHpA	366	40	"	399.20		91.8	70-130			
PFHpS	370	40	"	379.24		97.6	70-130			
PFHxA	398	40	"	399.20		99.8	70-130			
PFHxS	348	40	"	364.07		95.7	70-130			
PFNA	381	40	"	399.20		95.4	70-130			
PFNS	358	40	"	383.23		93.3	70-130			
PFOA	386	40	"	399.20		96.6	70-130			
PFOS	363	40	"	369.46		98.2	70-130			
PFPeA	376	40	"	399.20		94.2	70-130			
PFPeS	368	40	"	375.25		98.2	70-130			
PFTTrDA	567	80	"	399.20		142	70-130			QC-1, QC-5, QL-2
PFUdA	434	40	"	399.20		109	70-130			



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1803028 - S PFC**

**Matrix Spike (1803028-MS1)**

**Source: E180803-13**

Prepared: 03/12/18 Analyzed: 03/21/18

**ASB 100S**

4:2FTS	357	39	ng/L	347.58	U	103	70-130			
6:2FTS	382	39	"	353.16	U	108	70-130			
8:2FTS	313	39	"	356.88	U	87.7	70-130			QM-3
FOSA	382	39	"	371.75	U	103	70-130			QM-3
HFPO-DA	392	39	"	371.75	U	105	70-130			QM-3
N-MeFOSAA	424	77	"	371.75	U	114	70-130			QM-3
PFBA	371	39	"	371.75	U	99.9	70-130			
PFBS	323	39	"	329.00	U	98.1	70-130			
PFDA	364	39	"	371.75	U	98.0	70-130			QM-3
PFDoA	372	150	"	371.75	U	100	70-130			
PFDS	389	39	"	358.74	U	108	70-130			QM-3
PFHpA	381	39	"	371.75	15.4	98.3	70-130			
PFHpS	348	39	"	353.16	U	98.5	70-130			
PFHxA	381	39	"	371.75	U	102	70-130			
PFHxS	334	39	"	339.03	U	98.5	70-130			
PFNA	378	39	"	371.75	U	102	70-130			
PFNS	306	39	"	356.88	U	85.8	70-130			QM-3
PFOA	384	39	"	371.75	U	103	70-130			
PFOS	344	39	"	344.05	U	100	70-130			
PFPeA	366	39	"	371.75	U	98.3	70-130			
PFPeS	330	39	"	349.44	U	94.6	70-130			
PFTTrDA	336	77	"	371.75	U	90.5	70-130			QC-1, QC-5
PFUdA	349	39	"	371.75	U	93.9	70-130			QM-3

**Matrix Spike Dup (1803028-MSD1)**

**Source: E180803-13**

Prepared: 03/12/18 Analyzed: 03/21/18

**ASB 100S**

4:2FTS	410	40	ng/L	374.00	U	110	70-130	13.6	20	
6:2FTS	390	40	"	380.00	U	103	70-130	2.24	20	
8:2FTS	406	40	"	384.00	U	106	70-130	25.9	20	QM-3
FOSA	482	40	"	400.00	U	121	70-130	23.3	20	QM-3
HFPO-DA	319	40	"	400.00	U	79.9	70-130	20.3	20	QM-3
N-MeFOSAA	580	80	"	400.00	U	145	70-130	31.0	20	QM-2, QM-3
PFBA	437	40	"	400.00	U	109	70-130	16.2	20	
PFBS	381	40	"	354.00	U	108	70-130	16.6	20	
PFDA	493	40	"	400.00	U	123	70-130	30.0	20	QM-3
PFDoA	421	160	"	400.00	U	105	70-130	12.2	20	
PFDS	495	40	"	386.00	U	128	70-130	24.1	20	QM-3



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1803028 - S PFC**

Matrix Spike Dup (1803028-MSD1)	Source: E180803-13			Prepared: 03/12/18		Analyzed: 03/21/18				
PFHpA	417	40	ng/L	400.00	15.4	100	70-130	8.95	20	
PFHpS	411	40	"	380.00	U	108	70-130	16.7	20	
PFHxA	453	40	"	400.00	U	113	70-130	17.4	20	
PFHxS	383	40	"	364.80	U	105	70-130	13.8	20	
PFNA	428	40	"	400.00	U	107	70-130	12.5	20	
PFNS	397	40	"	384.00	U	103	70-130	25.8	20	QM-3
PFOA	451	40	"	400.00	U	113	70-130	16.2	20	
PFOS	406	40	"	370.20	U	110	70-130	16.5	20	
PFPeA	431	40	"	400.00	U	108	70-130	16.5	20	
PFPeS	384	40	"	376.00	U	102	70-130	15.0	20	
PFTrDA	376	80	"	400.00	U	94.0	70-130	11.1	20	QC-1, QC-5
PFUdA	471	40	"	400.00	U	118	70-130	29.7	20	QM-3

**MRL Verification (1803028-PS1)**

Prepared: 03/20/18 Analyzed: 03/21/18

**ASB 100S**

4:2FTS	29.1	40	ng/L	37.251		78.1	50-150			MRL-2, Q-2
6:2FTS	3.84	40	"	37.849		10.1	50-150			MRL-2, Q-2, QR-1
8:2FTS	41.6	40	"	38.247		109	50-150			MRL-2
FOSA	51.6	40	"	39.841		130	50-150			MRL-2
HFPO-DA	21.6	40	"	39.841		54.2	50-150			MRL-2, Q-2
N-MeFOSAA	57.5	80	"	39.841		144	50-150			MRL-2, Q-2
PFBA	35.0	40	"	39.841		87.9	50-150			MRL-2, Q-2
PFBS	33.2	40	"	35.259		94.0	50-150			MRL-2, Q-2
PFDA	40.0	40	"	39.841		100	50-150			MRL-2
PFDoA	77.9	160	"	39.841		195	50-150			MRL-2, Q-2, QR-2
PFDS	15.9	40	"	38.446		41.4	50-150			MRL-2, Q-2, QR-1, U
PFHpA	30.5	40	"	39.841		76.6	50-150			MRL-2, Q-2
PFHpS	34.6	40	"	37.849		91.5	50-150			MRL-2, Q-2
PFHxA	24.1	40	"	39.841		60.6	50-150			MRL-2, Q-2



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1803028 - S PFC**

**MRL Verification (1803028-PS1)**

Prepared: 03/20/18 Analyzed: 03/21/18

PFHxS	33.3	40	ng/L	36.335		91.7	50-150			MRL-2, Q-2
PFNA	36.9	40	"	39.841		92.6	50-150			MRL-2, Q-2
PFNS	38.8	40	"	38.247		101	50-150			MRL-2, Q-2
PFOA	30.5	40	"	39.841		76.5	50-150			MRL-2, Q-2
PFOS	29.2	40	"	36.873		79.2	50-150			MRL-2, Q-2
PFPeA	29.8	40	"	39.841		74.8	50-150			MRL-2, Q-2
PFPeS	27.7	40	"	37.450		74.0	50-150			MRL-2, Q-2
PFTTrDA	78.8	80	"	39.841		198	50-150			MRL-2, Q-2, QC-1, QC-5, QR-2
PFUDA	48.5	40	"	39.841		122	50-150			MRL-2



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### Notes and Definitions for QC Samples

U	The analyte was not detected at or above the reporting limit.
MRL-2	MRL verification for Non-Potable Water matrix
Q-2	Result greater than MDL but less than MRL.
QC-1	Analyte concentration low in continuing calibration verification standard
QC-5	Calibration check standard less than method control limits.
QL-2	Laboratory Control Spike Recovery greater than method control limits
QM-2	Matrix Spike Recovery greater than method control limits
QM-3	Matrix Spike Precision outside method control limits
QR-1	MRL verification recovery less than lower control limits.
QR-2	MRL verification recovery greater than upper control limits.



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**May 1, 2018**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
Project: 18-0301, Jordan Lake PFAS  
Drinking Water

**FROM:** Diana Burdette  
OCS Analyst

**THRU:** Floyd Wellborn, Chief  
ASB Organic Chemistry Section

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Semi Volatile Organics (SVOA)**

PFAS

ASB 100S (Water)



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### **Sample Disposal Policy**

Due to limited space for long term sample storage, ASB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).



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**SAMPLES INCLUDED IN THIS REPORT**

**Project: 18-0301, Jordan Lake PFAS**

<b>Sample ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
B3025000	E181301-01	Water	3/22/18 08:50	3/27/18 11:00
B3660000	E181301-02	Water	3/22/18 09:30	3/27/18 11:00
B3040000	E181301-03	Water	3/22/18 10:00	3/27/18 11:00
B3900000	E181301-04	Water	3/22/18 10:25	3/27/18 11:00
B3750000	E181301-05	Water	3/22/18 11:15	3/27/18 11:00
B2100000	E181301-06	Water	3/22/18 12:00	3/27/18 11:00
B2100000 DUP	E181301-07	Water	3/22/18 12:05	3/27/18 11:00
B4050000	E181301-08	Water	3/22/18 13:10	3/27/18 11:00
CPF086C	E181301-09	Water	3/22/18 09:15	3/27/18 11:00
CPF081A1C	E181301-10	Water	3/22/18 10:00	3/27/18 11:00
CPF086F	E181301-11	Water	3/22/18 10:30	3/27/18 11:00
CPF089	E181301-12	Water	3/22/18 12:15	3/27/18 11:00
CPF055C	E181301-13	Water	3/22/18 12:30	3/27/18 11:00
TB	E181301-14	Trip Blank - Water	3/22/18 08:30	3/27/18 11:00
Trip Blank	E181301-15	Trip Blank - Water	3/22/18 07:30	3/27/18 11:00



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## DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimate.
Q-2	Result greater than MDL but less than MRL.
QC-1	Analyte concentration low in continuing calibration verification standard
QC-3	Analyte calibration criteria not met
QC-5	Calibration check standard less than method control limits.
QR-1	MRL verification recovery less than lower control limits.
QS-3	Surrogate recovery is lower than established control limits.

## ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service  Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ( <a href="http://www.epa.gov/srs">www.epa.gov/srs</a> ), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

### ACCREDITATIONS:

ISO	ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.  Refer to the certificate and scope of accreditation AT-1644 at: <a href="http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd">http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd</a>
NR	The EPA Region 4 Laboratory has not requested accreditation for this test.



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B3025000

Lab ID: E181301-01

Station ID: B3025000

Matrix: Water

Date Collected: 3/22/18 8:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
27619-97-2	6:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
2355-31-9	N-MeFOSAA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
335-77-3	PFDS	40	U, J, QC-5, QR-1	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
72629-94-8	PFTrDA	40	U, J, QC-1, QC-3, QC-5	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:19	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B3660000

Lab ID: E181301-02

Station ID: B3660000

Matrix: Water

Date Collected: 3/22/18 9:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
27619-97-2	6:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
2355-31-9	N-MeFOSAA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
375-22-4	PFBA	29	J, Q-2	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
335-77-3	PFDS	40	U, J, QC-5, QR-1	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
72629-94-8	PFTrDA	40	U, J, QC-1, QC-3, QC-5	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	4/02/18 17:35	4/10/18 15:42	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B3040000

Lab ID: E181301-03

Station ID: B3040000

Matrix: Water

Date Collected: 3/22/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
27619-97-2	6:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
2355-31-9	N-MeFOSAA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
335-77-3	PFDS	40	U, J, QC-5, QR-1	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
72629-94-8	PFTrDA	40	U, J, QC-1, QC-3, QC-5	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:04	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0301, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B390000

Lab ID: E181301-04

Station ID: B390000

Matrix: Water

Date Collected: 3/22/18 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
27619-97-2	6:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
2355-31-9	N-MeFOSAA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
335-77-3	PFDS	40	U, J, QC-5, QR-1	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
72629-94-8	PFTrDA	40	U, J, QC-1, QC-3, QC-5	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:26	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B3750000

Lab ID: E181301-05

Station ID: B3750000

Matrix: Water

Date Collected: 3/22/18 11:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
27619-97-2	6:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
2355-31-9	N-MeFOSAA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
335-77-3	PFDS	40	U, J, QC-5, QR-1	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
72629-94-8	PFTrDA	40	U, J, QC-1, QC-3, QC-5	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	4/02/18 17:35	4/10/18 16:49	ASB 100S



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## Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: **B2100000**

Lab ID: **E181301-06**

Station ID: **B2100000**

Matrix: Water

Date Collected: 3/22/18 12:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
27619-97-2	6:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
2355-31-9	N-MeFOSAA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
335-77-3	PFDS	40	U, J, QC-5, QR-1	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
375-85-9	PFHpA	46		ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
2706-93-3	PFPeA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
72629-94-8	PFTrDA	40	U, J, QC-1, QC-3, QC-5	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	4/02/18 17:35	4/10/18 17:11	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B2100000 DUP

Lab ID: E181301-07

Station ID: B2100000 DUP

Matrix: Water

Date Collected: 3/22/18 12:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
27619-97-2	6:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
2355-31-9	N-MeFOSAA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
335-77-3	PFDS	39	U, J, QC-5, QR-1	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
375-85-9	PFHpA	43		ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
1763-23-1	PFOS	20	J, Q-2	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
72629-94-8	PFTrDA	39	U, J, QC-1, QC-3, QC-5	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:34	ASB 100S



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## Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: B4050000

Lab ID: E181301-08

Station ID: B4050000

Matrix: Water

Date Collected: 3/22/18 13:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
27619-97-2	6:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
2355-31-9	N-MeFOSAA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
335-77-3	PFDS	39	U, J, QC-5, QR-1	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
375-85-9	PFHpA	38	J, Q-2	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
307-24-4	PFHxA	48		ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
1763-23-1	PFOS	29	J, Q-2	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
2706-93-3	PFPeA	31	J, Q-2	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
72629-94-8	PFTrDA	39	U, J, QC-1, QC-3, QC-5	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	4/02/18 17:35	4/10/18 17:56	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: CPF086C

Lab ID: E181301-09

Station ID: CPF086C

Matrix: Water

Date Collected: 3/22/18 9:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
27619-97-2	6:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
13252-13-6	HFPO-DA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
2355-31-9	N-MeFOSAA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
375-22-4	PFBA	22	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
335-76-2	PFDA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
307-55-1	PFDoA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
335-77-3	PFDS	38	U, J, QC-5, QR-1	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
375-85-9	PFHpA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
375-92-8	PFHpS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
307-24-4	PFHxA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
335-67-1	PFOA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
1763-23-1	PFOS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
2706-93-3	PFPeA	18	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
72629-94-8	PFTrDA	38	U, J, QC-1, QC-3, QC-5	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S
2058-94-8	PFUdA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:19	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0301, Jordan Lake PFAS - Reported by Diana Burdette

**Semi Volatile Organics**

**Project: 18-0301, Jordan Lake PFAS**

Sample ID: CPF081A1C

Lab ID: E181301-10

Station ID: CPF081A1C

Matrix: Water

Date Collected: 3/22/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
27619-97-2	6:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
13252-13-6	HFPO-DA	16	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
2355-31-9	N-MeFOSAA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
375-22-4	PFBA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
335-76-2	PFDA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
307-55-1	PFDoA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
335-77-3	PFDS	38	U, J, QC-5, QR-1	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
375-85-9	PFHpA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
375-92-8	PFHpS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
307-24-4	PFHxA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
335-67-1	PFOA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
1763-23-1	PFOS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
2706-93-3	PFPeA	17	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
72629-94-8	PFTrDA	38	U, J, QC-5, QC-1, QC-3	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S
2058-94-8	PFUdA	38	U	ng/L	38	4/02/18 17:35	4/10/18 18:41	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region 4 Science and Ecosystem Support Division  
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 D.A.R.T. Id: 18-0033  
 Project: 18-0301, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: CPF086F

Lab ID: E181301-11

Station ID: CPF086F

Matrix: Water

Date Collected: 3/22/18 10:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
27619-97-2	6:2FTS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
39108-34-4	8:2FTS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
754-91-6	FOSA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
13252-13-6	HFPO-DA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
2355-31-9	N-MeFOSAA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
375-22-4	PFBA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
375-73-5	PFBS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
335-76-2	PFDA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
307-55-1	PFDoA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
335-77-3	PFDS	37	U, J, QC-5, QR-1	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
375-85-9	PFHpA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
375-92-8	PFHpS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
307-24-4	PFHxA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
355-46-4	PFHxS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
375-95-1	PFNA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
68259-12-1	PFNS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
335-67-1	PFOA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
1763-23-1	PFOS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
2706-93-3	PFPeA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
2706-91-4	PFPeS	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
72629-94-8	PFTrDA	37	U, J, QC-1, QC-3, QC-5	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S
2058-94-8	PFUdA	37	U	ng/L	37	4/02/18 17:35	4/10/18 19:04	ASB 100S



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**Semi Volatile Organics**

**Project: 18-0301, Jordan Lake PFAS**

Sample ID: CPF089

Lab ID: E181301-12

Station ID: CPF089

Matrix: Water

Date Collected: 3/22/18 12:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
27619-97-2	6:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
2355-31-9	N-MeFOSAA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
375-22-4	PFBA	28	J, Q-2	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
307-55-1	PFDoA	39	U, J, QS-3	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
335-77-3	PFDS	39	U, J, QC-5, QR-1	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
375-85-9	PFHpA	55		ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
307-24-4	PFHxA	82		ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
1763-23-1	PFOS	26	J, Q-2	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
2706-93-3	PFPeA	56		ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
72629-94-8	PFTTrDA	39	U, J, QC-1, QC-3, QC-5, QS-3	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	4/02/18 17:35	4/10/18 19:26	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: CPF055C

Lab ID: E181301-13

Station ID: CPF055C

Matrix: Water

Date Collected: 3/22/18 12:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
27619-97-2	6:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
13252-13-6	HFPO-DA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
2355-31-9	N-MeFOSAA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
375-22-4	PFBA	19	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
335-76-2	PFDA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
307-55-1	PFDoA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
335-77-3	PFDS	38	U, J, QC-5, QR-1	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
375-85-9	PFHpA	33	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
375-92-8	PFHpS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
307-24-4	PFHxA	38		ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
335-67-1	PFOA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
1763-23-1	PFOS	33	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
2706-93-3	PFPeA	22	J, Q-2	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
72629-94-8	PFTrDA	38	U, J, QC-1, QC-3, QC-5	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S
2058-94-8	PFUdA	38	U	ng/L	38	4/02/18 17:35	4/10/18 19:49	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: TB

Lab ID: E181301-14

Station ID:

Matrix: Trip Blank - Water

Date Collected: 3/22/18 8:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
27619-97-2	6:2FTS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
39108-34-4	8:2FTS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
754-91-6	FOSA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
13252-13-6	HFPO-DA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
2355-31-9	N-MeFOSAA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
375-22-4	PFBA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
375-73-5	PFBS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
335-76-2	PFDA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
307-55-1	PFDoA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
335-77-3	PFDS	37	U, J, QC-5, QR-1	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
375-85-9	PFHpA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
375-92-8	PFHpS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
307-24-4	PFHxA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
355-46-4	PFHxS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
375-95-1	PFNA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
68259-12-1	PFNS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
335-67-1	PFOA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
1763-23-1	PFOS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
2706-93-3	PFPeA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
2706-91-4	PFPeS	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
72629-94-8	PFTrDA	37	U, J, QC-1, QC-3, QC-5	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S
2058-94-8	PFUdA	37	U	ng/L	37	4/02/18 17:35	4/10/18 20:11	ASB 100S



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### Semi Volatile Organics

Project: 18-0301, Jordan Lake PFAS

Sample ID: Trip Blank

Lab ID: E181301-15

Station ID:

Matrix: Trip Blank - Water

Date Collected: 3/22/18 7:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
27619-97-2	6:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
2355-31-9	N-MeFOSAA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
335-77-3	PFDS	39	U, J, QC-5, QR-1	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
2706-93-3	PFPeA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
72629-94-8	PFTrDA	39	U, J, QC-5, QC-1, QC-3	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	4/02/18 17:35	4/10/18 20:34	ASB 100S



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1804006 - S PFC**

**Blank (1804006-BLK1)**

Prepared: 04/02/18 Analyzed: 04/10/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	40	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	40	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	40	"							U
PFDS	U	40	"							QC-5, QR-1, U
PFHpA	U	40	"							U
PFHpS	U	40	"							U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	40	"							QC-1, QC-3, QC-5, U
PFUdA	U	40	"							U

**Blank (1804006-BLK2)**

Prepared: 04/02/18 Analyzed: 04/10/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	40	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	40	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	40	"							U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1804006 - S PFC**

<b>Blank (1804006-BLK2)</b>		Prepared: 04/02/18 Analyzed: 04/10/18								
PFDS	U	40	ng/L							QC-5, QR-1, U
PFHpA	U	40	"							U
PFHpS	U	40	"							U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	40	"							QC-1, QC-3, QC-5, U
PFUdA	U	40	"							U

**LCS (1804006-BS1)**

Prepared: 04/02/18 Analyzed: 04/10/18

**ASB 100S**

4:2FTS	361	40	ng/L	371.77		97.1	70-130			
6:2FTS	326	40	"	377.73		86.2	70-130			
8:2FTS	352	40	"	381.71		92.1	70-130			
FOSA	403	40	"	397.61		101	70-130			
HFPO-DA	304	40	"	397.61		76.5	70-130			
N-MeFOSAA	400	40	"	397.61		101	70-130			
PFBA	346	40	"	397.61		87.0	70-130			
PFBS	310	40	"	351.89		88.1	70-130			
PFDA	403	40	"	397.61		101	70-130			
PFDoA	470	40	"	397.61		118	70-130			
PFDS	412	40	"	383.70		107	70-130			QC-5
PFHpA	373	40	"	397.61		93.7	70-130			
PFHpS	335	40	"	377.73		88.6	70-130			
PFHxA	396	40	"	397.61		99.7	70-130			
PFHxS	324	40	"	362.62		89.3	70-130			
PFNA	375	40	"	397.61		94.4	70-130			
PFNS	352	40	"	381.71		92.3	70-130			
PFOA	374	40	"	397.61		94.0	70-130			
PFOS	340	40	"	367.99		92.5	70-130			
PFPeA	364	40	"	397.61		91.6	70-130			
PFPeS	331	40	"	373.76		88.5	70-130			



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1804006 - S PFC**

<b>LCS (1804006-BS1)</b>		Prepared: 04/02/18 Analyzed: 04/10/18								
PFTTrDA	393	40	ng/L	397.61		98.9	70-130			QC-1, QC-3, QC-5
PFUdA	384	40	"	397.61		96.5	70-130			

**LCS Dup (1804006-BS1)** Prepared: 04/02/18 Analyzed: 04/10/18

<b>ASB 100S</b>										
4:2FTS	375	40	ng/L	372.51		101	70-130	3.82	30	
6:2FTS	346	40	"	378.49		91.5	70-130	6.06	30	
8:2FTS	391	40	"	382.47		102	70-130	10.5	30	
FOSA	446	40	"	398.41		112	70-130	10.1	30	
HFPO-DA	410	40	"	398.41		103	70-130	29.6	30	
N-MeFOSAA	542	40	"	398.41		136	70-130	30.1	30	QL-2
PFBA	406	40	"	398.41		102	70-130	15.9	30	
PFBS	346	40	"	352.59		98.1	70-130	11.0	30	
PFDA	430	40	"	398.41		108	70-130	6.44	30	
PFDoA	434	40	"	398.41		109	70-130	7.88	30	
PFDS	411	40	"	384.46		107	70-130	0.281	30	QC-5
PFHpA	409	40	"	398.41		103	70-130	9.39	30	
PFHpS	392	40	"	378.49		104	70-130	15.8	30	
PFHxA	392	40	"	398.41		98.3	70-130	1.15	30	
PFHxS	373	40	"	363.35		103	70-130	14.1	30	
PFNA	422	40	"	398.41		106	70-130	11.6	30	
PFNS	397	40	"	382.47		104	70-130	12.1	30	
PFOA	410	40	"	398.41		103	70-130	9.27	30	
PFOS	371	40	"	368.73		101	70-130	8.56	30	
PFPeA	393	40	"	398.41		98.7	70-130	7.73	30	
PFPeS	383	40	"	374.50		102	70-130	14.6	30	
PFTTrDA	391	40	"	398.41		98.1	70-130	0.657	30	QC-1, QC-3, QC-5
PFUdA	442	40	"	398.41		111	70-130	14.1	30	



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1804006 - S PFC**

**MRL Verification (1804006-PS1)**

Prepared: 04/02/18 Analyzed: 04/10/18

**ASB 100S**

4:2FTS	25.8	40	ng/L	37.177		69.4	50-150			J, MRL-2, Q-2
6:2FTS	27.1	40	"	37.773		71.7	50-150			J, MRL-2, Q-2
8:2FTS	33.7	40	"	38.171		88.3	50-150			J, MRL-2, Q-2
FOSA	44.0	40	"	39.761		111	50-150			Q-2, J, MRL-2
HFPO-DA	38.3	40	"	39.761		96.4	50-150			J, MRL-2, Q-2
N-MeFOSAA	60.4	40	"	39.761		152	50-150			MRL-2, QR-2
PFBA	27.9	40	"	39.761		70.1	50-150			J, MRL-2, Q-2
PFBS	29.8	40	"	35.189		84.6	50-150			J, MRL-2, Q-2
PFDA	45.3	40	"	39.761		114	50-150			MRL-2
PFDoA	49.1	40	"	39.761		123	50-150			MRL-2
PFDS	18.7	40	"	38.370		48.8	50-150			J, MRL-2, Q-2, QC-5, QR-1
PFHpA	30.8	40	"	39.761		77.6	50-150			J, MRL-2, Q-2
PFHpS	27.8	40	"	37.773		73.6	50-150			J, MRL-2, Q-2
PFHxA	34.0	40	"	39.761		85.5	50-150			J, MRL-2, Q-2
PFHxS	22.4	40	"	36.262		61.9	50-150			J, MRL-2, Q-2
PFNA	26.8	40	"	39.761		67.4	50-150			J, MRL-2, Q-2
PFNS	36.1	40	"	38.171		94.7	50-150			J, MRL-2, Q-2



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1804006 - S PFC**

**MRL Verification (1804006-PS1)**

Prepared: 04/02/18 Analyzed: 04/10/18

PFOA	31.2	40	ng/L	39.761		78.4	50-150			J, MRL-2, Q-2
PFOS	31.0	40	"	36.799		84.4	50-150			J, MRL-2, Q-2
PFPeA	31.4	40	"	39.761		79.0	50-150			Q-2, J, MRL-2
PFPeS	28.2	40	"	37.376		75.5	50-150			J, MRL-2, Q-2
PFTeDA	106	160	"	39.761		267	50-150			J, MRL-2, Q-2, QC-5
PFTTrDA	65.7	40	"	39.761		165	50-150			MRL-2, QC-1, QR-2
PFUdA	31.9	40	"	39.761		80.1	50-150			J, MRL-2, Q-2



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**Notes and Definitions for QC Samples**

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- MRL-2 MRL verification for Non-Potable Water matrix
- Q-2 Result greater than MDL but less than MRL.
- QC-1 Analyte concentration low in continuing calibration verification standard
- QC-3 Analyte calibration criteria not met
- QC-5 Calibration check standard less than method control limits.
- QL-2 Laboratory Control Spike Recovery greater than method control limits
- QR-1 MRL verification recovery less than lower control limits.
- QR-2 MRL verification recovery greater than upper control limits.



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**May 22, 2018**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
Project: 18-0349, Jordan Lake PFAS  
Drinking Water

**FROM:** Diana Burdette  
OCS Analyst

**THRU:** Floyd Wellborn, Chief  
ASB Organic Chemistry Section

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Semi Volatile Organics (SVOA)**

PFAS

ASB 100S (Water)



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### **Sample Disposal Policy**

Due to limited space for long term sample storage, ASB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

**SAMPLES INCLUDED IN THIS REPORT**

**Project: 18-0349, Jordan Lake PFAS**

<b>Sample ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
CPF087D	E181601-01	Water	4/11/18 09:15	4/17/18 10:15
CPF086F	E181601-02	Water	4/11/18 10:00	4/17/18 10:15
CPF 081A1C	E181601-03	Water	4/11/18 10:20	4/17/18 10:15
CPF086C	E181601-04	Water	4/11/18 11:05	4/17/18 10:15
CPF 089	E181601-05	Water	4/11/18 11:50	4/17/18 10:15
CPF055C	E181601-06	Water	4/11/18 12:10	4/17/18 10:15
CPF055C DUP	E181601-07	Water	4/11/18 12:10	4/17/18 10:15
Trip Blank (963)	E181601-08	Trip Blank - Water	4/11/18 14:30	4/17/18 10:15
B3025000	E181601-09	Water	4/11/18 08:45	4/17/18 10:15
B3660000	E181601-10	Water	4/11/18 09:25	4/17/18 10:15
B3040000	E181601-11	Water	4/11/18 09:55	4/17/18 10:15
B3900000	E181601-12	Water	4/11/18 10:30	4/17/18 10:15
B3750000	E181601-13	Water	4/11/18 11:10	4/17/18 10:15
B2100000	E181601-14	Water	4/11/18 12:00	4/17/18 10:15
B2100000 DUP	E181601-15	Water	4/11/18 12:03	4/17/18 10:15
B4050000	E181601-16	Water	4/11/18 13:05	4/17/18 10:15
Trip Blank (962)	E181601-17	Trip Blank - Water	4/11/18 07:50	4/17/18 10:15



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## DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimate.
Q-2	Result greater than MDL but less than MRL.
QC-5	Calibration check standard less than method control limits.
QM-1	Matrix Spike Recovery less than method control limits
QM-3	Matrix Spike Precision outside method control limits
QS-3	Surrogate recovery is lower than established control limits.

## ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ([www.epa.gov/srs](http://www.epa.gov/srs)), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

### ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at:  
<http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd>

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



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### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF087D

Lab ID: E181601-01

Station ID: JORDAN LAKE @ MOUTH OF WHITE OAI Matrix: Water

Date Collected: 4/11/18 9:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 20:27	ASB 100S
39108-34-4	8:2FTS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
2355-31-9	N-MeFOSAA	160	U, J, QS-3	ng/L	160	5/03/18 16:22	5/04/18 20:27	ASB 100S
375-22-4	PFBA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 20:27	ASB 100S
307-55-1	PFDoA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
335-77-3	PFDS	82	U, J, QC-5	ng/L	82	5/03/18 16:22	5/04/18 20:27	ASB 100S
375-85-9	PFHpA	33	J, Q-2	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
375-92-8	PFHpS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
307-24-4	PFHxA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
1763-23-1	PFOS	19	J, Q-2	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
2706-90-3	PFPeA	35	J, Q-2	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S
72629-94-8	PFTTrDA	82	U	ng/L	82	5/03/18 16:22	5/04/18 20:27	ASB 100S
2058-94-8	PFUdA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:27	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF086F

Lab ID: E181601-02

Station ID: JORDAN LAKE NEAR FARRINGTON NC

Matrix: Water

Date Collected: 4/11/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 20:49	ASB 100S
39108-34-4	8:2FTS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/04/18 20:49	ASB 100S
375-22-4	PFBA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 20:49	ASB 100S
307-55-1	PFDoA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
335-77-3	PFDS	82	U, J, QC-5	ng/L	82	5/03/18 16:22	5/04/18 20:49	ASB 100S
375-85-9	PFHpA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
375-92-8	PFHpS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
307-24-4	PFHxA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
1763-23-1	PFOS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
2706-90-3	PFPeA	19	J, Q-2	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S
72629-94-8	PFTTrDA	82	U	ng/L	82	5/03/18 16:22	5/04/18 20:49	ASB 100S
2058-94-8	PFUdA	41	U	ng/L	41	5/03/18 16:22	5/04/18 20:49	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF 081A1C

Lab ID: E181601-03

Station ID: JORDAN LAKE @ MOUTH OF NEW HOPE

Matrix: Water

Date Collected: 4/11/18 10:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
27619-97-2	6:2FTS	150	U, J, QM-3	ng/L	150	5/03/18 16:22	5/04/18 21:12	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
13252-13-6	HFPO-DA	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
2355-31-9	N-MeFOSAA	150	U	ng/L	150	5/03/18 16:22	5/04/18 21:12	ASB 100S
375-22-4	PFBA	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
375-73-5	PFBS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
335-76-2	PFDA	150	U	ng/L	150	5/03/18 16:22	5/04/18 21:12	ASB 100S
307-55-1	PFDoA	39	U, J, QM-1	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
335-77-3	PFDS	77	U, J, QC-5, QM-1	ng/L	77	5/03/18 16:22	5/04/18 21:12	ASB 100S
375-85-9	PFHpA	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
375-92-8	PFHpS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
307-24-4	PFHxA	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
355-46-4	PFHxS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
375-95-1	PFNA	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
68259-12-1	PFNS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
335-67-1	PFOA	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
1763-23-1	PFOS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
2706-90-3	PFPeA	19	J, Q-2, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
2706-91-4	PFPeS	39	U, J, QM-3	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S
72629-94-8	PFTTrDA	77	U, J, QM-1, QM-3	ng/L	77	5/03/18 16:22	5/04/18 21:12	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	5/03/18 16:22	5/04/18 21:12	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF086C

Lab ID: E181601-04

Station ID: JORDAN LAKE @ MOUTH OF MORGAN C Matrix: Water

Date Collected: 4/11/18 11:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
27619-97-2	6:2FTS	150	U	ng/L	150	5/03/18 16:22	5/04/18 21:34	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
13252-13-6	HFPO-DA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
2355-31-9	N-MeFOSAA	150	U	ng/L	150	5/03/18 16:22	5/04/18 21:34	ASB 100S
375-22-4	PFBA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
335-76-2	PFDA	150	U	ng/L	150	5/03/18 16:22	5/04/18 21:34	ASB 100S
307-55-1	PFDoA	38	U, J, QS-3	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
335-77-3	PFDS	76	U, J, QC-5	ng/L	76	5/03/18 16:22	5/04/18 21:34	ASB 100S
375-85-9	PFHpA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
375-92-8	PFHpS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
307-24-4	PFHxA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
335-67-1	PFOA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
1763-23-1	PFOS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
2706-90-3	PFPeA	20	J, Q-2	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S
72629-94-8	PFTTrDA	76	U	ng/L	76	5/03/18 16:22	5/04/18 21:34	ASB 100S
2058-94-8	PFUdA	38	U	ng/L	38	5/03/18 16:22	5/04/18 21:34	ASB 100S



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 Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF 089

Lab ID: E181601-05

Station ID: JORDAN LAKE NEAR MERRY OAKS

Matrix: Water

Date Collected: 4/11/18 11:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 21:57	ASB 100S
39108-34-4	8:2FTS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/04/18 21:57	ASB 100S
375-22-4	PFBA	24	J, Q-2	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 21:57	ASB 100S
307-55-1	PFDoA	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
335-77-3	PFDS	82	U, J, QC-5	ng/L	82	5/03/18 16:22	5/04/18 21:57	ASB 100S
375-85-9	PFHpA	43		ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
375-92-8	PFHpS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
307-24-4	PFHxA	57		ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
1763-23-1	PFOS	18	J, Q-2	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
2706-90-3	PFPeA	47		ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S
72629-94-8	PFTTrDA	82	U	ng/L	82	5/03/18 16:22	5/04/18 21:57	ASB 100S
2058-94-8	PFUdA	41	U	ng/L	41	5/03/18 16:22	5/04/18 21:57	ASB 100S



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 Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF055C

Lab ID: E181601-06

Station ID: JORDAN LAKE ABOVE STINKING CREEK

Matrix: Water

Date Collected: 4/11/18 12:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
27619-97-2	6:2FTS	150	U	ng/L	150	5/03/18 16:22	5/04/18 22:19	ASB 100S
39108-34-4	8:2FTS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
13252-13-6	HFPO-DA	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
2355-31-9	N-MeFOSAA	150	U	ng/L	150	5/03/18 16:22	5/04/18 22:19	ASB 100S
375-22-4	PFBA	22	J, Q-2	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
335-76-2	PFDA	150	U	ng/L	150	5/03/18 16:22	5/04/18 22:19	ASB 100S
307-55-1	PFDoA	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
335-77-3	PFDS	76	U, J, QC-5	ng/L	76	5/03/18 16:22	5/04/18 22:19	ASB 100S
375-85-9	PFHpA	80		ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
375-92-8	PFHpS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
307-24-4	PFHxA	78		ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
335-67-1	PFOA	26	J, Q-2	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
1763-23-1	PFOS	24	J, Q-2	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
2706-90-3	PFPeA	52		ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S
72629-94-8	PFTTrDA	76	U	ng/L	76	5/03/18 16:22	5/04/18 22:19	ASB 100S
2058-94-8	PFUdA	38	U	ng/L	38	5/03/18 16:22	5/04/18 22:19	ASB 100S



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 Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: CPF055C DUP

Lab ID: E181601-07

Station ID: JORDAN LAKE ABOVE STINKING CREEK

Matrix: Water

Date Collected: 4/11/18 12:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 22:42	ASB 100S
39108-34-4	8:2FTS	39	U, J, QS-3	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/04/18 22:42	ASB 100S
375-22-4	PFBA	18	J, Q-2	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 22:42	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
335-77-3	PFDS	78	U, J, QC-5	ng/L	78	5/03/18 16:22	5/04/18 22:42	ASB 100S
375-85-9	PFHpA	86		ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
307-24-4	PFHxA	84		ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
335-67-1	PFOA	28	J, Q-2	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
1763-23-1	PFOS	24	J, Q-2	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
2706-90-3	PFPeA	64		ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S
72629-94-8	PFTTrDA	78	U	ng/L	78	5/03/18 16:22	5/04/18 22:42	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	5/03/18 16:22	5/04/18 22:42	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: Trip Blank (963)

Lab ID: E181601-08

Station ID:

Matrix: Trip Blank - Water

Date Collected: 4/11/18 14:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:04	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
2355-31-9	N-MeFOSAA	160	U, J, QS-3	ng/L	160	5/03/18 16:22	5/04/18 23:04	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:04	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
335-77-3	PFDS	80	U, J, QC-5	ng/L	80	5/03/18 16:22	5/04/18 23:04	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S
72629-94-8	PFTTrDA	80	U	ng/L	80	5/03/18 16:22	5/04/18 23:04	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:04	ASB 100S



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D.A.R.T. Id: 18-0033

Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B3025000

Lab ID: E181601-09

Station ID: THIRD FORK CRK AT NC54

Matrix: Water

Date Collected: 4/11/18 8:45

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:26	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:26	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:26	ASB 100S
307-55-1	PFDoA	40	U, J, QS-3	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
335-77-3	PFDS	81	U, J, QC-5	ng/L	81	5/03/18 16:22	5/04/18 23:26	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S
72629-94-8	PFTTrDA	81	U	ng/L	81	5/03/18 16:22	5/04/18 23:26	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:26	ASB 100S



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 Project: 18-0349, Jordan Lake PFAS - Reported by Diana Burdette

## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B3660000

Lab ID: E181601-10

Station ID: NORTHEAST CRK AT SR1100

Matrix: Water

Date Collected: 4/11/18 9:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:49	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:49	ASB 100S
375-22-4	PFBA	42		ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/04/18 23:49	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
335-77-3	PFDS	80	U, J, QC-5	ng/L	80	5/03/18 16:22	5/04/18 23:49	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
2706-90-3	PFPeA	34	J, Q-2	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S
72629-94-8	PFTTrDA	80	U	ng/L	80	5/03/18 16:22	5/04/18 23:49	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/04/18 23:49	ASB 100S



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### Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B3040000

Lab ID: E181601-11

Station ID: NEW HOPE CRK AT SR 1107

Matrix: Water

Date Collected: 4/11/18 9:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:11	ASB 100S
39108-34-4	8:2FTS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:11	ASB 100S
375-22-4	PFBA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:11	ASB 100S
307-55-1	PFDoA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
335-77-3	PFDS	81	U, J, QC-5	ng/L	81	5/03/18 16:22	5/05/18 0:11	ASB 100S
375-85-9	PFHpA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
375-92-8	PFHpS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
307-24-4	PFHxA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
1763-23-1	PFOS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
2706-90-3	PFPeA	19	J, Q-2	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S
72629-94-8	PFTTrDA	81	U	ng/L	81	5/03/18 16:22	5/05/18 0:11	ASB 100S
2058-94-8	PFUdA	41	U	ng/L	41	5/03/18 16:22	5/05/18 0:11	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B3900000

Lab ID: E181601-12

Station ID: MORGAN CRK AT SR1726

Matrix: Water

Date Collected: 4/11/18 10:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:34	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:34	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:34	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
335-77-3	PFDS	80	U, J, QC-5	ng/L	80	5/03/18 16:22	5/05/18 0:34	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S
72629-94-8	PFTTrDA	80	U	ng/L	80	5/03/18 16:22	5/05/18 0:34	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:34	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B3750000

Lab ID: E181601-13

Station ID: PHILS CRK

Matrix: Water

Date Collected: 4/11/18 11:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:56	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:56	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 0:56	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
335-77-3	PFDS	80	U, J, QC-5	ng/L	80	5/03/18 16:22	5/05/18 0:56	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S
72629-94-8	PFTTrDA	80	U	ng/L	80	5/03/18 16:22	5/05/18 0:56	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/05/18 0:56	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B2100000

Lab ID: E181601-14

Station ID: HAW RIV AT SR 1713

Matrix: Water

Date Collected: 4/11/18 12:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 1:19	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 1:19	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 1:19	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
335-77-3	PFDS	78	U, J, QC-5	ng/L	78	5/03/18 16:22	5/05/18 1:19	ASB 100S
375-85-9	PFHpA	15	J, Q-2	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
1763-23-1	PFOS	17	J, Q-2	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
2706-90-3	PFPeA	25	J, Q-2	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S
72629-94-8	PFTTrDA	78	U	ng/L	78	5/03/18 16:22	5/05/18 1:19	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:19	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B2100000 DUP

Lab ID: E181601-15

Station ID: HAW RIV AT SR 1713

Matrix: Water

Date Collected: 4/11/18 12:03

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 1:41	ASB 100S
39108-34-4	8:2FTS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 1:41	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 1:41	ASB 100S
307-55-1	PFDoA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
335-77-3	PFDS	78	U, J, QC-5	ng/L	78	5/03/18 16:22	5/05/18 1:41	ASB 100S
375-85-9	PFHpA	13		ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
375-92-8	PFHpS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
307-24-4	PFHxA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
2706-90-3	PFPeA	20	J, Q-2	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S
72629-94-8	PFTTrDA	78	U	ng/L	78	5/03/18 16:22	5/05/18 1:41	ASB 100S
2058-94-8	PFUdA	39	U	ng/L	39	5/03/18 16:22	5/05/18 1:41	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: B4050000

Lab ID: E181601-16

Station ID: HAW RIV BELOW JORDAN DAM

Matrix: Water

Date Collected: 4/11/18 13:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 2:04	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 2:04	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 2:04	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
335-77-3	PFDS	81	U, J, QC-5	ng/L	81	5/03/18 16:22	5/05/18 2:04	ASB 100S
375-85-9	PFHpA	52		ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
307-24-4	PFHxA	67		ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
2706-90-3	PFPeA	42		ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S
72629-94-8	PFTTrDA	81	U	ng/L	81	5/03/18 16:22	5/05/18 2:04	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:04	ASB 100S



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## Semi Volatile Organics

Project: 18-0349, Jordan Lake PFAS

Sample ID: Trip Blank (962)

Lab ID: E181601-17

Station ID:

Matrix: Trip Blank - Water

Date Collected: 4/11/18 7:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
27619-97-2	6:2FTS	160	U	ng/L	160	5/03/18 16:22	5/05/18 2:26	ASB 100S
39108-34-4	8:2FTS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
2355-31-9	N-MeFOSAA	160	U	ng/L	160	5/03/18 16:22	5/05/18 2:26	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
335-76-2	PFDA	160	U	ng/L	160	5/03/18 16:22	5/05/18 2:26	ASB 100S
307-55-1	PFDoA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
335-77-3	PFDS	80	U, J, QC-5	ng/L	80	5/03/18 16:22	5/05/18 2:26	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
375-92-8	PFHpS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
307-24-4	PFHxA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S
72629-94-8	PFTTrDA	80	U	ng/L	80	5/03/18 16:22	5/05/18 2:26	ASB 100S
2058-94-8	PFUdA	40	U	ng/L	40	5/03/18 16:22	5/05/18 2:26	ASB 100S



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1805016 - S PFC**

**Blank (1805016-BLK1)**

Prepared & Analyzed: 05/04/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	160	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	160	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	80	"							QC-5, U
PFHpA	U	40	"							U
PFHpS	U	40	"							U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	80	"							U
PFUdA	U	40	"							U

**Blank (1805016-BLK2)**

Prepared & Analyzed: 05/04/18

**ASB 100S**

4:2FTS	U	40	ng/L							U
6:2FTS	U	160	"							U
8:2FTS	U	40	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	160	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	80	"							QC-5, U
PFHpA	U	40	"							U
PFHpS	U	40	"							U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1805016 - S PFC**

Blank (1805016-BLK2)	Prepared & Analyzed: 05/04/18									
PFHxA	U	40	ng/L							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	80	"							U
PFUdA	U	40	"							U

**LCS (1805016-BS1)**

ASB 100S	Prepared & Analyzed: 05/04/18									
4:2FTS	370	40	ng/L	372.51		99.4	70-130			
6:2FTS	302	160	"	378.49		79.7	70-130			
8:2FTS	387	40	"	382.47		101	70-130			
FOSA	392	40	"	398.41		98.4	70-130			
HFPO-DA	280	40	"	398.41		70.2	70-130			
N-MeFOSAA	384	160	"	398.41		96.3	70-130			
PFBA	365	40	"	398.41		91.6	70-130			
PFBS	295	40	"	352.59		83.7	70-130			
PFDA	287	160	"	398.41		72.1	70-130			
PFDoA	419	40	"	398.41		105	70-130			
PFDS	412	80	"	384.46		107	70-130			QC-5
PFHpA	365	40	"	398.41		91.5	70-130			
PFHpS	329	40	"	378.49		86.8	70-130			
PFHxA	388	40	"	398.41		97.5	70-130			
PFHxS	329	40	"	363.35		90.4	70-130			
PFNA	360	40	"	398.41		90.3	70-130			
PFNS	349	40	"	382.47		91.3	70-130			
PFOA	361	40	"	398.41		90.7	70-130			
PFOS	341	40	"	368.73		92.4	70-130			
PFPeA	351	40	"	398.41		88.1	70-130			
PFPeS	332	40	"	374.50		88.6	70-130			
PFTTeDA	425	80	"	398.41		107	70-130			QC-1, QC-5
PFTTrDA	411	80	"	398.41		103	70-130			
PFUdA	445	40	"	398.41		112	70-130			



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1805016 - S PFC**

**Matrix Spike (1805016-MS1)**

**Source: E181601-03**

Prepared: 05/03/18 Analyzed: 05/05/18

**ASB 100S**

4:2FTS	306	39	ng/L	303.57	U	101	70-130			
6:2FTS	251	160	"	308.44	U	81.4	70-130			
8:2FTS	295	39	"	311.69	U	94.5	70-130			
FOSA	310	39	"	324.68	U	95.4	70-130			
HFPO-DA	248	39	"	324.68	U	76.4	70-130			
N-MeFOSAA	511	160	"	324.68	U	157	70-130			QM-2
PFBA	295	39	"	324.68	U	91.0	70-130			
PFBS	283	39	"	287.34	U	98.6	70-130			
PFDA	395	160	"	324.68	U	122	70-130			
PFDoA	361	39	"	324.68	U	111	70-130			
PFDS	287	79	"	313.31	U	91.6	70-130			QC-5
PFHpA	324	39	"	324.68	U	99.7	70-130			
PFHpS	255	39	"	308.44	U	82.7	70-130			
PFHxA	300	39	"	324.68	U	92.5	70-130			
PFHxS	281	39	"	296.10	U	95.0	70-130			
PFNA	300	39	"	324.68	U	92.4	70-130			
PFNS	282	39	"	311.69	U	90.6	70-130			
PFOA	328	39	"	324.68	U	101	70-130			
PFOS	273	39	"	300.49	U	90.9	70-130			
PFPeA	309	39	"	324.68	18.6	89.6	70-130			
PFPeS	292	39	"	305.19	U	95.6	70-130			
PFTeDA	278	79	"	324.68	U	85.7	70-130			QC-1, QC-5
PFTrDA	303	79	"	324.68	U	93.4	70-130			
PFUdA	299	39	"	324.68	U	92.2	70-130			

**Matrix Spike Dup (1805016-MSD1)**

**Source: E181601-03**

Prepared: 05/03/18 Analyzed: 05/05/18

**ASB 100S**

4:2FTS	400	39	ng/L	351.50	U	114	70-130	26.7	20	QM-3
6:2FTS	361	160	"	357.14	U	101	70-130	35.9	20	QM-3
8:2FTS	323	39	"	360.90	U	89.6	70-130	9.31	20	
FOSA	376	39	"	375.94	U	100	70-130	19.4	20	
HFPO-DA	431	39	"	375.94	U	115	70-130	53.9	20	QM-3
N-MeFOSAA	423	160	"	375.94	U	112	70-130	18.9	20	
PFBA	424	39	"	375.94	U	113	70-130	35.7	20	QM-3
PFBS	373	39	"	332.71	U	112	70-130	27.2	20	QM-3
PFDA	442	160	"	375.94	U	118	70-130	11.2	20	
PFDoA	257	39	"	375.94	U	68.3	70-130	33.9	20	QM-1



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1805016 - S PFC**

Matrix Spike Dup (1805016-MSD1)	Source: E181601-03			Prepared: 05/03/18 Analyzed: 05/05/18						
PFDS	216	78	ng/L	362.78	U	59.6	70-130	28.2	20	QC-5, QM-1
PFHpA	400	39	"	375.94	U	106	70-130	21.0	20	QM-3
PFHpS	334	39	"	357.14	U	93.4	70-130	26.7	20	QM-3
PFHxA	430	39	"	375.94	U	114	70-130	35.6	20	QM-3
PFHxS	392	39	"	342.86	U	114	70-130	32.9	20	QM-3
PFNA	401	39	"	375.94	U	107	70-130	29.0	20	QM-3
PFNS	351	39	"	360.90	U	97.2	70-130	21.6	20	QM-3
PFOA	411	39	"	375.94	U	109	70-130	22.5	20	QM-3
PFOS	358	39	"	347.93	U	103	70-130	26.8	20	QM-3
PFPeA	415	39	"	375.94	18.6	105	70-130	29.2	20	QM-3
PFPeS	374	39	"	353.38	U	106	70-130	24.7	20	QM-3
PFTeDA	103	78	"	375.94	U	27.4	70-130	92.0	20	QC-1, QC-5, QM-1, QM-3
PFTrDA	127	78	"	375.94	U	33.7	70-130	82.0	20	QM-1, QM-3
PFUdA	291	39	"	375.94	U	77.5	70-130	2.80	20	

**MRL Verification (1805016-PS1)**

Prepared & Analyzed: 05/04/18

**ASB 100S**

4:2FTS	21.7	40	ng/L	37.400		58.0	50-150			J, MRL-2, Q-2
8:2FTS	50.8	40	"	38.400		132	50-150			MRL-2
FOSA	27.6	40	"	40.000		68.9	50-150			J, MRL-2, Q-2
HFPO-DA	37.2	40	"	40.000		92.9	50-150			J, MRL-2, Q-2
N-MeFOSAA	64.3	160	"	40.000		161	50-150			J, MRL-2, Q-2
PFBA	37.4	40	"	40.000		93.6	50-150			J, MRL-2, Q-2
PFBS	33.1	40	"	35.400		93.6	50-150			J, MRL-2, Q-2
PFDoA	48.4	40	"	40.000		121	50-150			MRL-2
PFDS	57.0	80	"	38.600		148	50-150			MRL-2, QC-5



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1805016 - S PFC**

**MRL Verification (1805016-PS1)**

Prepared & Analyzed: 05/04/18

PFHpA	38.2	40	ng/L	40.000		95.4	50-150			J, MRL-2,
PFHpS	22.6	40	"	38.000		59.4	50-150			Q-2, J, MRL-2,
PFHxA	29.0	40	"	40.000		72.6	50-150			Q-2, J, MRL-2,
PFHxS	38.3	40	"	36.480		105	50-150			Q-2, J, MRL-2,
PFNA	43.1	40	"	40.000		108	50-150			Q-2, MRL-2
PFNS	38.9	40	"	38.400		101	50-150			J, MRL-2, Q-2
PFOA	37.0	40	"	40.000		92.5	50-150			J, MRL-2, Q-2
PFOS	35.3	40	"	37.020		95.4	50-150			J, MRL-2, Q-2
PFPeA	39.7	40	"	40.000		99.3	50-150			Q-2, J, MRL-2
PFPeS	36.2	40	"	37.600		96.2	50-150			J, MRL-2, Q-2
PFTrDA	23.4	80	"	40.000		58.5	50-150			J, MRL-2, Q-2
PFUDA	37.1	40	"	40.000		92.6	50-150			J, MRL-2, Q-2

**MRL Verification (1805016-PS2)**

Prepared & Analyzed: 05/04/18

**ASB 100S**

6:2FTS	112	160	ng/L	151.70		73.9	50-150			MRL-2
N-MeFOSAA	242	160	"	159.68		152	50-150			MRL-2, QR-2
PFDA	238	160	"	159.68		149	50-150			MRL-2



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**Notes and Definitions for QC Samples**

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- MRL-2 MRL verification for Non-Potable Water matrix
- Q-2 Result greater than MDL but less than MRL.
- QC-1 Analyte concentration low in continuing calibration verification standard
- QC-5 Calibration check standard less than method control limits.
- QM-1 Matrix Spike Recovery less than method control limits
- QM-2 Matrix Spike Recovery greater than method control limits
- QM-3 Matrix Spike Precision outside method control limits
- QR-2 MRL verification recovery greater than upper control limits.



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 Project: 18-0408, Jordan Lake PFAS - Reported by Floyd Wellborn

**June 19, 2018**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
 Project: 18-0408, Jordan Lake PFAS  
 Drinking Water

**FROM:** Floyd Wellborn  
 ASB Organic Chemistry Section Chief

**THRU:** Danny France, Chief  
 Analytical Support Branch

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Semi Volatile Organics (SVOA)**

PFAS

ASB 100S (Water)



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### **Sample Disposal Policy**

Due to limited space for long term sample storage, ASB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 18-0033

Project: 18-0408, Jordan Lake PFAS - Reported by Floyd Wellborn

**SAMPLES INCLUDED IN THIS REPORT**

**Project: 18-0408, Jordan Lake PFAS**

<b>Sample ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
CPF081A1C	E182002-01	Water	5/9/18 09:15	5/15/18 10:55
CPF086C	E182002-02	Water	5/9/18 09:50	5/15/18 10:55
CPF086F	E182002-03	Water	5/9/18 10:10	5/15/18 10:55
CPF087D	E182002-04	Water	5/9/18 11:00	5/15/18 10:55
CPF089	E182002-05	Water	5/9/18 11:50	5/15/18 10:55
CPF055C	E182002-06	Water	5/9/18 13:15	5/15/18 10:55
Trip Blank - B	E182002-07	Trip Blank - Water	5/9/18 15:00	5/15/18 10:55
B3025000	E182002-08	Water	5/9/18 08:45	5/15/18 10:55
B3660000	E182002-09	Water	5/9/18 09:20	5/15/18 10:55
B3040000	E182002-10	Water	5/9/18 09:55	5/15/18 10:55
B3900000	E182002-11	Water	5/9/18 10:25	5/15/18 10:55
B3750000	E182002-12	Water	5/9/18 11:05	5/15/18 10:55
B210000	E182002-13	Water	5/9/18 11:55	5/15/18 10:55
B210000 DUP	E182002-14	Water	5/9/18 12:00	5/15/18 10:55
B4050000	E182002-15	Water	5/9/18 13:10	5/15/18 10:55
Trip Blank - T	E182002-16	Trip Blank - Water	5/9/18 07:45	5/15/18 10:55



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### DATA QUALIFIER DEFINITIONS

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- Q-2 Result greater than MDL but less than MRL.
- QC-3 Analyte calibration criteria not met
- QL-3 Laboratory Control Spike Precision outside method control limits
- OS-3 Surrogate recovery is lower than established control limits.

### ACRONYMS AND ABBREVIATIONS

- CAS Chemical Abstracts Service  

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ([www.epa.gov/srs](http://www.epa.gov/srs)), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
- MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
- MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
- TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

#### ACCREDITATIONS:

- ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.  

Refer to the certificate and scope of accreditation AT-1644 at:  
<http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd>
- NR The EPA Region 4 Laboratory has not requested accreditation for this test.



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: CPF081A1C

Lab ID: E182002-01

Station ID: CPF081A1C

Matrix: Water

Date Collected: 5/9/18 9:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	80	U	ng/L	80	6/06/18 11:59	6/13/18 1:03	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 1:03	ASB 100S
39108-34-4	8:2FTS	80	U, J, QC-3, QS-3	ng/L	80	6/06/18 11:59	6/13/18 1:03	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/13/18 21:48	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	6/06/18 11:59	6/13/18 1:03	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
307-55-1	PFDoA	80	U	ng/L	80	6/06/18 11:59	6/13/18 1:03	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/13/18 21:48	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
307-24-4	PFHxA	80	U	ng/L	80	6/06/18 11:59	6/13/18 1:03	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:03	ASB 100S
72629-94-8	PFTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 1:03	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 1:03	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: CPF086C

Lab ID: E182002-02

Station ID: CPF086C

Matrix: Water

Date Collected: 5/9/18 9:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	82	U	ng/L	82	6/06/18 11:59	6/13/18 1:26	ASB 100S
27619-97-2	6:2FTS	310	U	ng/L	310	6/06/18 11:59	6/13/18 1:26	ASB 100S
39108-34-4	8:2FTS	82	U, J, QC-3, QS-3	ng/L	82	6/06/18 11:59	6/13/18 1:26	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	6/06/18 11:59	6/13/18 22:11	ASB 100S
2355-31-9	N-MeFOSAA	82	U	ng/L	82	6/06/18 11:59	6/13/18 1:26	ASB 100S
375-22-4	PFBA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
335-76-2	PFDA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
307-55-1	PFDoA	82	U	ng/L	82	6/06/18 11:59	6/13/18 1:26	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/13/18 22:11	ASB 100S
375-85-9	PFHpA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
375-92-8	PFHpS	41	U, J, QL-3	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
307-24-4	PFHxA	82	U	ng/L	82	6/06/18 11:59	6/13/18 1:26	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
1763-23-1	PFOS	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
2706-90-3	PFPeA	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	6/06/18 11:59	6/13/18 1:26	ASB 100S
72629-94-8	PFTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 1:26	ASB 100S
2058-94-8	PFUdA	310	U	ng/L	310	6/06/18 11:59	6/13/18 1:26	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: CPF086F

Lab ID: E182002-03

Station ID: CPF086F

Matrix: Water

Date Collected: 5/9/18 10:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	79	U	ng/L	79	6/06/18 11:59	6/13/18 1:48	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 1:48	ASB 100S
39108-34-4	8:2FTS	79	U, J, QC-3	ng/L	79	6/06/18 11:59	6/13/18 1:48	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/13/18 22:33	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	6/06/18 11:59	6/13/18 1:48	ASB 100S
375-22-4	PFBA	19	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
307-55-1	PFDoA	79	U	ng/L	79	6/06/18 11:59	6/13/18 1:48	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/13/18 22:33	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
307-24-4	PFHxA	79	U	ng/L	79	6/06/18 11:59	6/13/18 1:48	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 1:48	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 1:48	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 1:48	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: CPF087D

Lab ID: E182002-04

Station ID: CPF087D

Matrix: Water

Date Collected: 5/9/18 11:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:11	ASB 100S
27619-97-2	6:2FTS	290	U	ng/L	290	6/06/18 11:59	6/13/18 2:11	ASB 100S
39108-34-4	8:2FTS	77	U, J, QC-3	ng/L	77	6/06/18 11:59	6/13/18 2:11	ASB 100S
754-91-6	FOSA	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
13252-13-6	HFPO-DA	38	U	ng/L	38	6/06/18 11:59	6/13/18 22:56	ASB 100S
2355-31-9	N-MeFOSAA	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:11	ASB 100S
375-22-4	PFBA	23	J, Q-2	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
375-73-5	PFBS	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
335-76-2	PFDA	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
307-55-1	PFDoA	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:11	ASB 100S
335-77-3	PFDS	150	U, J, QC-3	ng/L	150	6/06/18 11:59	6/13/18 22:56	ASB 100S
375-85-9	PFHpA	28	J, Q-2	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
375-92-8	PFHpS	38	U, J, QL-3	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
307-24-4	PFHxA	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:11	ASB 100S
355-46-4	PFHxS	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
375-95-1	PFNA	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
68259-12-1	PFNS	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
335-67-1	PFOA	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
1763-23-1	PFOS	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
2706-90-3	PFPeA	21	J, Q-2	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
2706-91-4	PFPeS	38	U	ng/L	38	6/06/18 11:59	6/13/18 2:11	ASB 100S
72629-94-8	PFTTrDA	150	U	ng/L	150	6/06/18 11:59	6/13/18 2:11	ASB 100S
2058-94-8	PFUdA	290	U	ng/L	290	6/06/18 11:59	6/13/18 2:11	ASB 100S



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## Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: CPF089

Lab ID: E182002-05

Station ID: CPF089

Matrix: Water

Date Collected: 5/9/18 11:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:33	ASB 100S
27619-97-2	6:2FTS	290	U	ng/L	290	6/06/18 11:59	6/13/18 2:33	ASB 100S
39108-34-4	8:2FTS	77	U, J, QC-3, QS-3	ng/L	77	6/06/18 11:59	6/13/18 2:33	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	6/06/18 11:59	6/13/18 23:18	ASB 100S
2355-31-9	N-MeFOSAA	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:33	ASB 100S
375-22-4	PFBA	25	J, Q-2	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
307-55-1	PFDoA	77	U	ng/L	77	6/06/18 11:59	6/13/18 2:33	ASB 100S
335-77-3	PFDS	150	U, J, QC-3	ng/L	150	6/06/18 11:59	6/13/18 23:18	ASB 100S
375-85-9	PFHpA	26	J, Q-2	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
375-92-8	PFHpS	39	U, J, QL-3	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
307-24-4	PFHxA	35	J, Q-2	ng/L	77	6/06/18 11:59	6/13/18 2:33	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
335-67-1	PFOA	32	J, Q-2	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
2706-90-3	PFPeA	32	J, Q-2	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	6/06/18 11:59	6/13/18 2:33	ASB 100S
72629-94-8	PFTTrDA	150	U	ng/L	150	6/06/18 11:59	6/13/18 2:33	ASB 100S
2058-94-8	PFUdA	290	U	ng/L	290	6/06/18 11:59	6/13/18 2:33	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: CPF055C

Lab ID: E182002-06

Station ID: CPF055C

Matrix: Water

Date Collected: 5/9/18 13:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	79	U	ng/L	79	6/06/18 11:59	6/13/18 2:56	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 2:56	ASB 100S
39108-34-4	8:2FTS	79	U, J, QC-3	ng/L	79	6/06/18 11:59	6/13/18 2:56	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/13/18 23:41	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	6/06/18 11:59	6/13/18 2:56	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
307-55-1	PFDoA	79	U	ng/L	79	6/06/18 11:59	6/13/18 2:56	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/13/18 23:41	ASB 100S
375-85-9	PFHpA	57		ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
307-24-4	PFHxA	66		ng/L	79	6/06/18 11:59	6/13/18 2:56	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
335-67-1	PFOA	32	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
1763-23-1	PFOS	27	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
2706-90-3	PFPeA	50		ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 2:56	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 2:56	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 2:56	ASB 100S



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 18-0033

Project: 18-0408, Jordan Lake PFAS - Reported by Floyd Wellborn

**Semi Volatile Organics**

**Project: 18-0408, Jordan Lake PFAS**

Sample ID: Trip Blank - B

Lab ID: E182002-07

Station ID:

Matrix: Trip Blank - Water

Date Collected: 5/9/18 15:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	80	U	ng/L	80	6/06/18 11:59	6/13/18 3:18	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 3:18	ASB 100S
39108-34-4	8:2FTS	80	U, J, QC-3	ng/L	80	6/06/18 11:59	6/13/18 3:18	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/14/18 0:03	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	6/06/18 11:59	6/13/18 3:18	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
307-55-1	PFDoA	80	U	ng/L	80	6/06/18 11:59	6/13/18 3:18	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 0:03	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
307-24-4	PFHxA	80	U	ng/L	80	6/06/18 11:59	6/13/18 3:18	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
375-95-1	PFNA	40	U, J, QS-3	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 3:18	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 3:18	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 3:18	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B3025000

Lab ID: E182002-08

Station ID: B3025000

Matrix: Water

Date Collected: 5/9/18 8:45

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	78	U	ng/L	78	6/06/18 11:59	6/13/18 3:41	ASB 100S
27619-97-2	6:2FTS	290	U	ng/L	290	6/06/18 11:59	6/13/18 3:41	ASB 100S
39108-34-4	8:2FTS	78	U, J, QC-3	ng/L	78	6/06/18 11:59	6/13/18 3:41	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	6/06/18 11:59	6/14/18 0:25	ASB 100S
2355-31-9	N-MeFOSAA	78	U	ng/L	78	6/06/18 11:59	6/13/18 3:41	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
307-55-1	PFDoA	78	U	ng/L	78	6/06/18 11:59	6/13/18 3:41	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 0:25	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
375-92-8	PFHpS	39	U, J, QL-3	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
307-24-4	PFHxA	78	U	ng/L	78	6/06/18 11:59	6/13/18 3:41	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
1763-23-1	PFOS	26	J, Q-2	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
2706-90-3	PFPeA	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	6/06/18 11:59	6/13/18 3:41	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 3:41	ASB 100S
2058-94-8	PFUdA	290	U	ng/L	290	6/06/18 11:59	6/13/18 3:41	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B3660000

Lab ID: E182002-09

Station ID: B3660000

Matrix: Water

Date Collected: 5/9/18 9:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	80	U	ng/L	80	6/06/18 11:59	6/13/18 4:03	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 4:03	ASB 100S
39108-34-4	8:2FTS	80	U, J, QC-3	ng/L	80	6/06/18 11:59	6/13/18 4:03	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/14/18 0:48	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	6/06/18 11:59	6/13/18 4:03	ASB 100S
375-22-4	PFBA	160		ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
307-55-1	PFDoA	80	U	ng/L	80	6/06/18 11:59	6/13/18 4:03	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 0:48	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
307-24-4	PFHxA	80	U	ng/L	80	6/06/18 11:59	6/13/18 4:03	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
2706-90-3	PFPeA	45		ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 4:03	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 4:03	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 4:03	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B3040000

Lab ID: E182002-10

Station ID: B3040000

Matrix: Water

Date Collected: 5/9/18 9:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:25	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 4:25	ASB 100S
39108-34-4	8:2FTS	81	U, J, QC-3	ng/L	81	6/06/18 11:59	6/13/18 4:25	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	6/06/18 11:59	6/14/18 1:10	ASB 100S
2355-31-9	N-MeFOSAA	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:25	ASB 100S
375-22-4	PFBA	17	J, Q-2	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
335-76-2	PFDA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
307-55-1	PFDoA	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:25	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 1:10	ASB 100S
375-85-9	PFHpA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
375-92-8	PFHpS	41	U, J, QL-3	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
307-24-4	PFHxA	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:25	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
1763-23-1	PFOS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
2706-90-3	PFPeA	26	J, Q-2	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:25	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 4:25	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 4:25	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B3900000

Lab ID: E182002-11

Station ID: B3900000

Matrix: Water

Date Collected: 5/9/18 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:48	ASB 100S
27619-97-2	6:2FTS	310	U	ng/L	310	6/06/18 11:59	6/13/18 4:48	ASB 100S
39108-34-4	8:2FTS	81	U, J, QC-3	ng/L	81	6/06/18 11:59	6/13/18 4:48	ASB 100S
754-91-6	FOSA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
13252-13-6	HFPO-DA	41	U	ng/L	41	6/06/18 11:59	6/14/18 1:33	ASB 100S
2355-31-9	N-MeFOSAA	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:48	ASB 100S
375-22-4	PFBA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
375-73-5	PFBS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
335-76-2	PFDA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
307-55-1	PFDoA	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:48	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 1:33	ASB 100S
375-85-9	PFHpA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
375-92-8	PFHpS	41	U, J, QL-3	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
307-24-4	PFHxA	81	U	ng/L	81	6/06/18 11:59	6/13/18 4:48	ASB 100S
355-46-4	PFHxS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
375-95-1	PFNA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
68259-12-1	PFNS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
335-67-1	PFOA	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
1763-23-1	PFOS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
2706-90-3	PFPeA	21	J, Q-2	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
2706-91-4	PFPeS	41	U	ng/L	41	6/06/18 11:59	6/13/18 4:48	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 4:48	ASB 100S
2058-94-8	PFUdA	310	U	ng/L	310	6/06/18 11:59	6/13/18 4:48	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B3750000

Lab ID: E182002-12

Station ID: B3750000

Matrix: Water

Date Collected: 5/9/18 11:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	78	U	ng/L	78	6/06/18 11:59	6/13/18 5:10	ASB 100S
27619-97-2	6:2FTS	290	U	ng/L	290	6/06/18 11:59	6/13/18 5:10	ASB 100S
39108-34-4	8:2FTS	78	U, J, QC-3	ng/L	78	6/06/18 11:59	6/13/18 5:10	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	6/06/18 11:59	6/14/18 1:55	ASB 100S
2355-31-9	N-MeFOSAA	78	U	ng/L	78	6/06/18 11:59	6/13/18 5:10	ASB 100S
375-22-4	PFBA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
307-55-1	PFDoA	78	U	ng/L	78	6/06/18 11:59	6/13/18 5:10	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 1:55	ASB 100S
375-85-9	PFHpA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
375-92-8	PFHpS	39	U, J, QL-3	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
307-24-4	PFHxA	78	U	ng/L	78	6/06/18 11:59	6/13/18 5:10	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
335-67-1	PFOA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
2706-90-3	PFPeA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:10	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 5:10	ASB 100S
2058-94-8	PFUdA	290	U	ng/L	290	6/06/18 11:59	6/13/18 5:10	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: **B210000**

Lab ID: **E182002-13**

Station ID: **B210000**

Matrix: Water

Date Collected: 5/9/18 11:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	79	U	ng/L	79	6/06/18 11:59	6/13/18 5:33	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 5:33	ASB 100S
39108-34-4	8:2FTS	79	U, J, QC-3	ng/L	79	6/06/18 11:59	6/13/18 5:33	ASB 100S
754-91-6	FOSA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
13252-13-6	HFPO-DA	39	U	ng/L	39	6/06/18 11:59	6/14/18 2:18	ASB 100S
2355-31-9	N-MeFOSAA	79	U	ng/L	79	6/06/18 11:59	6/13/18 5:33	ASB 100S
375-22-4	PFBA	34	J, Q-2	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
375-73-5	PFBS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
335-76-2	PFDA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
307-55-1	PFDoA	79	U	ng/L	79	6/06/18 11:59	6/13/18 5:33	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 2:18	ASB 100S
375-85-9	PFHpA	53		ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
375-92-8	PFHpS	39	U, J, QL-3	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
307-24-4	PFHxA	98		ng/L	79	6/06/18 11:59	6/13/18 5:33	ASB 100S
355-46-4	PFHxS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
375-95-1	PFNA	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
68259-12-1	PFNS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
335-67-1	PFOA	43		ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
1763-23-1	PFOS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
2706-90-3	PFPeA	71		ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
2706-91-4	PFPeS	39	U	ng/L	39	6/06/18 11:59	6/13/18 5:33	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 5:33	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 5:33	ASB 100S



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 Project: 18-0408, Jordan Lake PFAS - Reported by Floyd Wellborn

### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B210000 DUP

Lab ID: E182002-14

Station ID: B210000 DUP

Matrix: Water

Date Collected: 5/9/18 12:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	80	U	ng/L	80	6/06/18 11:59	6/13/18 5:55	ASB 100S
27619-97-2	6:2FTS	300	U, J, QS-3	ng/L	300	6/06/18 11:59	6/13/18 5:55	ASB 100S
39108-34-4	8:2FTS	80	U, J, QC-3	ng/L	80	6/06/18 11:59	6/13/18 5:55	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/14/18 2:40	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	6/06/18 11:59	6/13/18 5:55	ASB 100S
375-22-4	PFBA	36	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
307-55-1	PFDoA	80	U	ng/L	80	6/06/18 11:59	6/13/18 5:55	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 2:40	ASB 100S
375-85-9	PFHpA	38	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
307-24-4	PFHxA	110		ng/L	80	6/06/18 11:59	6/13/18 5:55	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
335-67-1	PFOA	41		ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
2706-90-3	PFPeA	74		ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 5:55	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 5:55	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 5:55	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: B4050000

Lab ID: E182002-15

Station ID: B4050000

Matrix: Water

Date Collected: 5/9/18 13:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:18	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 6:18	ASB 100S
39108-34-4	8:2FTS	80	U, J, QC-3	ng/L	80	6/06/18 11:59	6/13/18 6:18	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/14/18 3:03	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:18	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
307-55-1	PFDoA	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:18	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 3:03	ASB 100S
375-85-9	PFHpA	24	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
307-24-4	PFHxA	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:18	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
335-67-1	PFOA	32	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
2706-90-3	PFPeA	30	J, Q-2	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:18	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 6:18	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 6:18	ASB 100S



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### Semi Volatile Organics

Project: 18-0408, Jordan Lake PFAS

Sample ID: Trip Blank - T

Lab ID: E182002-16

Station ID:

Matrix: Trip Blank - Water

Date Collected: 5/9/18 7:45

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:40	ASB 100S
27619-97-2	6:2FTS	300	U	ng/L	300	6/06/18 11:59	6/13/18 6:40	ASB 100S
39108-34-4	8:2FTS	80	U, J, QC-3	ng/L	80	6/06/18 11:59	6/13/18 6:40	ASB 100S
754-91-6	FOSA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
13252-13-6	HFPO-DA	40	U	ng/L	40	6/06/18 11:59	6/14/18 3:25	ASB 100S
2355-31-9	N-MeFOSAA	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:40	ASB 100S
375-22-4	PFBA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
375-73-5	PFBS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
335-76-2	PFDA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
307-55-1	PFDoA	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:40	ASB 100S
335-77-3	PFDS	160	U, J, QC-3	ng/L	160	6/06/18 11:59	6/14/18 3:25	ASB 100S
375-85-9	PFHpA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
375-92-8	PFHpS	40	U, J, QL-3	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
307-24-4	PFHxA	80	U	ng/L	80	6/06/18 11:59	6/13/18 6:40	ASB 100S
355-46-4	PFHxS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
375-95-1	PFNA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
68259-12-1	PFNS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
335-67-1	PFOA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
1763-23-1	PFOS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
2706-90-3	PFPeA	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
2706-91-4	PFPeS	40	U	ng/L	40	6/06/18 11:59	6/13/18 6:40	ASB 100S
72629-94-8	PFTTrDA	160	U	ng/L	160	6/06/18 11:59	6/13/18 6:40	ASB 100S
2058-94-8	PFUdA	300	U	ng/L	300	6/06/18 11:59	6/13/18 6:40	ASB 100S



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1806007 - S PFC**

**Blank (1806007-BLK1)**

Prepared & Analyzed: 06/12/18

**ASB 100S**

4:2FTS	U	80	ng/L							U
6:2FTS	U	300	"							QS-3, U
8:2FTS	U	80	"							QC-3, U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	80	"							QS-3, U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	80	"							U
PFDS	U	160	"							QC-3, U
PFHpA	U	40	"							U
PFHpS	U	40	"							QL-3, U
PFHxA	U	80	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	160	"							U
PFUdA	U	300	"							U

**Blank (1806007-BLK2)**

Prepared & Analyzed: 06/12/18

**ASB 100S**

4:2FTS	U	80	ng/L							U
6:2FTS	U	300	"							U
8:2FTS	U	80	"							QC-3, U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	80	"							QS-3, U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	40	"							U
PFDoA	U	80	"							U
PFDS	U	160	"							QC-3, U
PFHpA	U	40	"							U
PFHpS	U	40	"							QL-3, U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1806007 - S PFC**

<b>Blank (1806007-BLK2)</b>	Prepared & Analyzed: 06/12/18									
PFHxA	U	80	ng/L							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	160	"							U
PFUdA	U	300	"							U

**LCS (1806007-BS1)**

<b>ASB 100S</b>	Prepared & Analyzed: 06/12/18									
4:2FTS	356	80	ng/L	374.00		95.2	70-130			
6:2FTS	271	300	"	380.00		71.3	70-130			J, Q-2
8:2FTS	361	80	"	384.00		94.0	70-130			QC-3
FOSA	467	40	"	400.00		117	70-130			
HFPO-DA	448	40	"	400.00		112	70-130			
N-MeFOSAA	516	80	"	400.00		129	70-130			
PFBA	379	40	"	400.00		94.7	70-130			
PFBS	290	40	"	354.00		81.8	70-130			
PFDA	461	40	"	400.00		115	70-130			
PFDoA	495	80	"	400.00		124	70-130			
PFDS	360	160	"	386.00		93.2	70-130			QC-3
PFHpA	399	40	"	400.00		99.7	70-130			
PFHpS	273	40	"	380.00		72.0	70-130			QL-3
PFHxA	412	80	"	400.00		103	70-130			
PFHxS	329	40	"	364.80		90.2	70-130			
PFNA	334	40	"	400.00		83.4	70-130			
PFNS	480	40	"	384.00		125	70-130			
PFOA	374	40	"	400.00		93.4	70-130			
PFOS	405	40	"	370.20		109	70-130			
PFPeA	377	40	"	400.00		94.2	70-130			
PFPeS	356	40	"	376.00		94.6	70-130			
PFTTrDA	541	160	"	400.00		135	70-130			QL-2, QC-2
PFUdA	470	300	"	400.00		117	70-130			



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1806007 - S PFC**

**LCS Dup (1806007-BSD1)**

Prepared & Analyzed: 06/12/18

**ASB 100S**

4:2FTS	372	80	ng/L	374.00		99.5	70-130	4.46	30	
6:2FTS	274	300	"	380.00		72.2	70-130	1.21	30	J, Q-2
8:2FTS	284	80	"	384.00		73.9	70-130	23.9	30	QC-3
FOSA	509	40	"	400.00		127	70-130	8.75	30	
HFPO-DA	376	40	"	400.00		94.1	70-130	17.4	30	
N-MeFOSAA	441	80	"	400.00		110	70-130	15.7	30	
PFBA	399	40	"	400.00		99.6	70-130	5.11	30	
PFBS	330	40	"	354.00		93.2	70-130	13.1	30	
PFDA	418	40	"	400.00		104	70-130	9.88	30	
PFD <sub>o</sub> A	510	80	"	400.00		128	70-130	3.10	30	
PFDS	394	160	"	386.00		102	70-130	9.14	30	QC-3
PFHpA	409	40	"	400.00		102	70-130	2.41	30	
PFHpS	374	40	"	380.00		98.4	70-130	31.0	30	QL-3
PFHxA	385	80	"	400.00		96.4	70-130	6.64	30	
PFHxS	349	40	"	364.80		95.6	70-130	5.87	30	
PFNA	354	40	"	400.00		88.6	70-130	5.97	30	
PFNS	379	40	"	384.00		98.7	70-130	23.5	30	
PFOA	355	40	"	400.00		88.8	70-130	5.03	30	
PFOS	362	40	"	370.20		97.8	70-130	11.1	30	
PFPeA	397	40	"	400.00		99.4	70-130	5.36	30	
PFPeS	363	40	"	376.00		96.6	70-130	2.15	30	
PFT <sub>o</sub> DA	519	160	"	400.00		130	70-130	4.23	30	QC-2
PFU <sub>o</sub> A	375	300	"	400.00		93.8	70-130	22.3	30	

**Duplicate (1806007-DUP1)**

Source: E182002-01

Prepared: 06/06/18 Analyzed: 06/13/18

**ASB 100S**

4:2FTS	U	78	ng/L		U				200	U
6:2FTS	U	290	"		U				200	U
8:2FTS	U	78	"		U				200	J, QC-3, U
FOSA	U	39	"		U				200	J, QS-3, U
HFPO-DA	U	39	"		U				200	U
N-MeFOSAA	U	78	"		U				200	U
PFBA	U	39	"		U				200	U
PFBS	U	39	"		U				200	U
PFDA	U	39	"		U				200	U
PFD <sub>o</sub> A	U	78	"		U				200	U
PFDS	U	160	"		U				200	J, QC-3, U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1806007 - S PFC**

Duplicate (1806007-DUP1)	Source: E182002-01			Prepared: 06/06/18 Analyzed: 06/13/18						
PFHpA	U	39	ng/L		U			200		U
PFHpS	U	39	"		U			200		J, QL-3, U
PFHxA	U	78	"		U			200		U
PFHxS	U	39	"		U			200		U
PFNA	U	39	"		U			200		U
PFNS	U	39	"		U			200		U
PFOA	U	39	"		U			200		U
PFOS	U	39	"		U			200		U
PFPeA	U	39	"		U			200		U
PFPeS	U	39	"		U			200		U
PFTrDA	U	160	"		U			200		U
PFUdA	U	290	"		U			200		U

**MRL Verification (1806007-PS1)**

Prepared: 06/12/18 Analyzed: 06/13/18

**ASB 100S**

FOSA	24.4	40	ng/L	39.920		61.2	50-150			J, Q-2, MRL-2
HFPO-DA	23.8	40	"	39.920		59.7	50-150			J, Q-2, MRL-2
N-MeFOSAA	34.0	80	"	39.920		85.3	50-150			J, MRL-2, Q-2
PFBA	54.2	40	"	39.920		136	50-150			MRL-2
PFBS	37.7	40	"	35.329		107	50-150			J, MRL-2, Q-2
PFDA	53.5	40	"	39.920		134	50-150			MRL-2
PFDoA	48.6	80	"	39.920		122	50-150			J, Q-2, MRL-2
PFHpA	44.0	40	"	39.920		110	50-150			MRL-2
PFHpS	39.8	40	"	37.924		105	50-150			J, Q-2, MRL-2
PFHxS	39.8	40	"	36.407		109	50-150			J, Q-2, MRL-2
PFNA	58.7	40	"	39.920		147	50-150			MRL-2
PFNS	45.4	40	"	38.323		119	50-150			MRL-2
PFOA	57.4	40	"	39.920		144	50-150			MRL-2
PFOS	38.7	40	"	36.946		105	50-150			J, Q-2, MRL-2
PFPeA	34.5	40	"	39.920		86.4	50-150			J, MRL-2, Q-2



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1806007 - S PFC**

**MRL Verification (1806007-PS1)**

Prepared: 06/12/18 Analyzed: 06/13/18

PFPeS	32.3	40	ng/L	37.525		86.0	50-150			J, Q-2, MRL-2
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**MRL Verification (1806007-PS2)**

Prepared: 06/12/18 Analyzed: 06/13/18

**ASB 100S**

4:2FTS	150	80	ng/L	149.30		101	50-150			MRL-2
6:2FTS	83.1	300	"	151.70		54.8	50-150			MRL-2, J, Q-2
8:2FTS	114	80	"	153.29		74.5	50-150			MRL-2, QC-3
FOSA	185	40	"	159.68		116	50-150			MRL-2
PFDS	187	160	"	154.09		121	50-150			MRL-2, QC-3
PFHxA	203	80	"	159.68		127	50-150			MRL-2
PFTtDA	299	160	"	159.68		187	50-150			MRL-2, QR-2, QC-2
PFUDA	273	300	"	159.68		171	50-150			J, MRL-2, QR-2, Q-2



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**Notes and Definitions for QC Samples**

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- MRL-2 MRL verification for Non-Potable Water matrix
- Q-2 Result greater than MDL but less than MRL.
- QC-2 Analyte concentration high in continuing calibration verification standard
- QC-3 Analyte calibration criteria not met
- QL-2 Laboratory Control Spike Recovery greater than method control limits
- QL-3 Laboratory Control Spike Precision outside method control limits
- QR-2 MRL verification recovery greater than upper control limits.
- QS-3 Surrogate recovery is lower than established control limits.



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 Project: 18-0437, Jordan Lake PFAS - Reported by Diana Burdette

**July 25, 2018**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
 Project: 18-0437, Jordan Lake PFAS  
 Drinking Water

**FROM:** Diana Burdette  
 OCS Analyst

**THRU:** Floyd Wellborn, Chief  
 ASB Organic Chemistry Section

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Semi Volatile Organics (SVOA)**

PFAS

ASBPROC-800 PFAS (Water)



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### **Sample Disposal Policy**

Due to limited space for long term sample storage, ASB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).



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**SAMPLES INCLUDED IN THIS REPORT**

**Project: 18-0437, Jordan Lake PFAS**

<b>Sample ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
B3025000 Third Fork Crk @ NC54	E182415-01	Water	6/13/18 08:55	6/14/18 11:05
B3660000 NE Crk @ SR 1100	E182415-02	Water	6/13/18 09:30	6/14/18 11:05
B3040000 New Hope Crk @ SR 1107	E182415-03	Water	6/13/18 10:00	6/14/18 11:05
B3900000 Morgan Crk @ SR 1726	E182415-04	Water	6/13/18 10:25	6/14/18 11:05
B3750000 Phils Creek	E182415-05	Water	6/13/18 11:00	6/14/18 11:05
B2100000 Haw Riv @ SR 1713	E182415-06	Water	6/13/18 11:55	6/14/18 11:05
B2100000 DUP	E182415-07	Water	6/13/18 12:00	6/14/18 11:05
B4050000 Haw Riv Below Jordan Dam	E182415-08	Water	6/13/18 13:00	6/14/18 11:05
Trip Blank	E182415-09	Trip Blank - Water	6/13/18 08:00	6/14/18 11:05
Trip Blank 2	E182415-10	Trip Blank - Water	6/13/18 07:25	6/14/18 11:05
CPF086C - Jordan Lake at Mouth of Morgan Crk	E182415-11	Water	6/13/18 10:00	6/14/18 11:05
CPF081A1C - Jordan Lake at Mouth of New Hope Crk	E182415-12	Water	6/13/18 09:20	6/14/18 11:05
CPF086F - Jordan Lake near Farrington, NC	E182415-13	Water	6/13/18 11:00	6/14/18 11:05
CPF087D - Jordan Lake at Mouth of White Oak Crk	E182415-14	Water	6/13/18 11:55	6/14/18 11:05
CPF055C - Jordan Lake above Stinking Creek	E182415-15	Water	6/13/18 14:10	6/14/18 11:05
CPF089 - Jordan Lake near Merry Oaks - MS/	E182415-16	Water	6/13/18 12:55	6/14/18 11:05



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**DATA QUALIFIER DEFINITIONS**

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- Q-2 Result greater than MDL but less than MRL.
- QM-3 Matrix Spike Precision outside method control limits
- QS-3 Surrogate recovery is lower than established control limits.
- QS-5 Surrogate recovery is higher than established control limits

**ACRONYMS AND ABBREVIATIONS**

- CAS Chemical Abstracts Service  

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ([www.epa.gov/srs](http://www.epa.gov/srs)), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
- MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
- MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
- TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

**ACCREDITATIONS:**

- ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.  

Refer to the certificate and scope of accreditation AT-1644 at:  
<http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd>
- NR The EPA Region 4 Laboratory has not requested accreditation for this test.



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Project: 18-0437, Jordan Lake PFAS - Reported by Diana Burdette

### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B3025000 Third Fork Crk @ NC54

Lab ID: E182415-01

Station ID: B3025000

Matrix: Water

Date Collected: 6/13/18 8:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
27619-97-2	6:2FTS	80	U	ng/L	80	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
39108-34-4	8:2FTS	80	U	ng/L	80	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	80	U	ng/L	80	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
375-22-4	PFBA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
1763-23-1	PFOS	23	J, Q-2	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
2706-90-3	PFPeA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B3025000 Third Fork Crk @ NC54

Lab ID: E182415-01

Station ID: B3025000

Matrix: Water

Date Collected: 6/13/18 8:55

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/11/18 23:53	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B3660000 NE Crk @ SR 1100

Lab ID: E182415-02

Station ID: B3660000

Matrix: Water

Date Collected: 6/13/18 9:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
27619-97-2	6:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
39108-34-4	8:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	79	U	ng/L	79	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
375-22-4	PFBA	41		ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
1763-23-1	PFOS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
2706-90-3	PFPeA	49		ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: B3660000 NE Crk @ SR 1100**

**Lab ID: E182415-02**

**Station ID: B3660000**

**Matrix: Water**

**Date Collected: 6/13/18 9:30**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:13	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B3040000 New Hope Crk @ SR 1107

Lab ID: E182415-03

Station ID: B3040000

Matrix: Water

Date Collected: 6/13/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
27619-97-2	6:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
39108-34-4	8:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	80	U	ng/L	80	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
375-22-4	PFBA	40		ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
1763-23-1	PFOS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
2706-90-3	PFPeA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS



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## Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B3040000 New Hope Crk @ SR 1107

Lab ID: E182415-03

Station ID: B3040000

Matrix: Water

Date Collected: 6/13/18 10:00

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 0:33	ASBPROC-800 PFAS



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**Semi Volatile Organics**

**Project: 18-0437, Jordan Lake PFAS**

Sample ID: B3900000 Morgan Crk @ SR 1726

Lab ID: E182415-04

Station ID: B3900000

Matrix: Water

Date Collected: 6/13/18 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
27619-97-2	6:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
39108-34-4	8:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
754-91-6	FOSA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	79	U	ng/L	79	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
375-22-4	PFBA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
375-73-5	PFBS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
307-55-1	PFDoA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
335-77-3	PFDS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
375-85-9	PFHpA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
375-92-8	PFHpS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
307-24-4	PFHxA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
355-46-4	PFHxS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
375-95-1	PFNA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
68259-12-1	PFNS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
335-67-1	PFOA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
1763-23-1	PFOS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
2706-90-3	PFPeA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: B3900000 Morgan Crk @ SR 1726**

**Lab ID: E182415-04**

**Station ID: B3900000**

**Matrix: Water**

**Date Collected: 6/13/18 10:25**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS
2058-94-8	PFUdA	39	U	ng/L	39	7/03/18 15:38	7/12/18 0:53	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B3750000 Phils Creek

Lab ID: E182415-05

Station ID: B3750000

Matrix: Water

Date Collected: 6/13/18 11:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
27619-97-2	6:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
39108-34-4	8:2FTS	79	U, J, QS-3	ng/L	79	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	79	U	ng/L	79	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
375-22-4	PFBA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
1763-23-1	PFOS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
2706-90-3	PFPeA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS



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### Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: B3750000 Phils Creek**

**Lab ID: E182415-05**

**Station ID: B3750000**

**Matrix: Water**

**Date Collected: 6/13/18 11:00**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:14	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: **B2100000 Haw Riv @ SR 1713**

Lab ID: **E182415-06**

Station ID: **B2100000**

Matrix: Water

Date Collected: 6/13/18 11:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
27619-97-2	6:2FTS	81	U	ng/L	81	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
39108-34-4	8:2FTS	81	U, J, QS-3	ng/L	81	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	81	U	ng/L	81	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
375-22-4	PFBA	83		ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
375-85-9	PFHpA	280		ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
307-24-4	PFHxA	350		ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
335-67-1	PFOA	46		ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
1763-23-1	PFOS	39	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
2706-90-3	PFPeA	260		ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: B2100000 Haw Riv @ SR 1713**

**Lab ID: E182415-06**

**Station ID: B2100000**

**Matrix: Water**

**Date Collected: 6/13/18 11:55**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:34	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: **B2100000 DUP**

Lab ID: **E182415-07**

Station ID: **B2100000**

Matrix: Water

Date Collected: 6/13/18 12:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
27619-97-2	6:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
39108-34-4	8:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	80	U	ng/L	80	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
375-22-4	PFBA	100		ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
375-85-9	PFHpA	260		ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
307-24-4	PFHxA	330		ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
335-67-1	PFOA	56		ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
1763-23-1	PFOS	40		ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
2706-90-3	PFPeA	290		ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: B2100000 DUP**

**Lab ID: E182415-07**

**Station ID: B2100000**

**Matrix: Water**

**Date Collected: 6/13/18 12:00**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 1:54	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: B4050000 Haw Riv Below Jordan Dam

Lab ID: E182415-08

Station ID: B4050000

Matrix: Water

Date Collected: 6/13/18 13:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
27619-97-2	6:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
39108-34-4	8:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	79	U	ng/L	79	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
375-22-4	PFBA	32	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
375-85-9	PFHpA	28	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
307-24-4	PFHxA	35	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
1763-23-1	PFOS	30	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
2706-90-3	PFPeA	38	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: B4050000 Haw Riv Below Jordan Dam**

**Lab ID: E182415-08**

**Station ID: B4050000**

**Matrix: Water**

**Date Collected: 6/13/18 13:00**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:15	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: Trip Blank

Lab ID: E182415-09

Station ID:

Matrix: Trip Blank - Water

Date Collected: 6/13/18 8:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
27619-97-2	6:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
39108-34-4	8:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	80	U	ng/L	80	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
375-22-4	PFBA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
1763-23-1	PFOS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
2706-90-3	PFPeA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID:** Trip Blank

**Lab ID:** E182415-09

**Station ID:**

**Matrix:** Trip Blank - Water

**Date Collected:** 6/13/18 8:00

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 2:35	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: Trip Blank 2**

**Lab ID: E182415-10**

**Station ID:**

**Matrix: Trip Blank - Water**

**Date Collected: 6/13/18 7:25**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
27619-97-2	6:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
39108-34-4	8:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
754-91-6	FOSA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	79	U	ng/L	79	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
375-22-4	PFBA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
375-73-5	PFBS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
307-55-1	PFDoA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
335-77-3	PFDS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
375-85-9	PFHpA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
375-92-8	PFHpS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
307-24-4	PFHxA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
355-46-4	PFHxS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
375-95-1	PFNA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
68259-12-1	PFNS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
335-67-1	PFOA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
1763-23-1	PFOS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
2706-90-3	PFPeA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID:** Trip Blank 2

**Lab ID:** E182415-10

**Station ID:**

**Matrix:** Trip Blank - Water

**Date Collected:** 6/13/18 7:25

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS
2058-94-8	PFUdA	39	U	ng/L	39	7/03/18 15:38	7/12/18 2:55	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: CPF086C - Jordan Lake at Mouth of Morgan Lab ID: E182415-11

Station ID: CPF086C

Matrix: Water

Date Collected: 6/13/18 10:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
27619-97-2	6:2FTS	81	U	ng/L	81	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
39108-34-4	8:2FTS	81	U	ng/L	81	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	81	U, J, QS-3	ng/L	81	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
375-22-4	PFBA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
1763-23-1	PFOS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
2706-90-3	PFPeA	18	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS



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## Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: CPF086C - Jordan Lake at Mouth of Morgan Lab ID: E182415-11

Station ID: CPF086C

Matrix: Water

Date Collected: 6/13/18 10:00

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:15	ASBPROC-800 PFAS



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**Semi Volatile Organics**

**Project: 18-0437, Jordan Lake PFAS**

Sample ID: CPF081A1C - Jordan Lake at Mouth of New F Lab ID: E182415-12

Station ID: CPF081A1C

Matrix: Water

Date Collected: 6/13/18 9:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
27619-97-2	6:2FTS	76	U	ng/L	76	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
39108-34-4	8:2FTS	76	U	ng/L	76	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
754-91-6	FOSA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	76	U	ng/L	76	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
375-22-4	PFBA	24	J, Q-2	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
375-73-5	PFBS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
335-76-2	PFDA	150	U	ng/L	150	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
307-55-1	PFDoA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
335-77-3	PFDS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
375-85-9	PFHpA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
375-92-8	PFHpS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
307-24-4	PFHxA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
355-46-4	PFHxS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
375-95-1	PFNA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
68259-12-1	PFNS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
335-67-1	PFOA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
1763-23-1	PFOS	19	J, Q-2	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
2706-90-3	PFPeA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: CPF081A1C - Jordan Lake at Mouth of New F Lab ID: E182415-12**

**Station ID: CPF081A1C**

**Matrix: Water**

**Date Collected: 6/13/18 9:20**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS
2058-94-8	PFUdA	38	U	ng/L	38	7/03/18 15:38	7/12/18 3:36	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: CPF086F - Jordan Lake near Farrington, NC Lab ID: E182415-13**

**Station ID: CPF086F Matrix: Water**

**Date Collected: 6/13/18 11:00**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
27619-97-2	6:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
39108-34-4	8:2FTS	79	U	ng/L	79	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	79	U	ng/L	79	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
375-22-4	PFBA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
375-85-9	PFHpA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
1763-23-1	PFOS	21	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
2706-90-3	PFPeA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: CPF086F - Jordan Lake near Farrington, NC Lab ID: E182415-13

Station ID: CPF086F Matrix: Water

Date Collected: 6/13/18 11:00

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 3:56	ASBPROC-800 PFAS



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### Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: CPF087D - Jordan Lake at Mouth of White Oc Lab ID: E182415-14

Station ID: CPF087D

Matrix: Water

Date Collected: 6/13/18 11:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
27619-97-2	6:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
39108-34-4	8:2FTS	80	U	ng/L	80	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
754-91-6	FOSA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	80	U	ng/L	80	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
375-22-4	PFBA	42		ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
375-73-5	PFBS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
307-55-1	PFDoA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
335-77-3	PFDS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
375-85-9	PFHpA	20	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
375-92-8	PFHpS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
307-24-4	PFHxA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
355-46-4	PFHxS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
375-95-1	PFNA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
68259-12-1	PFNS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
335-67-1	PFOA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
1763-23-1	PFOS	18	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
2706-90-3	PFPeA	23	J, Q-2	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: CPF087D - Jordan Lake at Mouth of White Oc Lab ID: E182415-14**

**Station ID: CPF087D**

**Matrix: Water**

**Date Collected: 6/13/18 11:55**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS
2058-94-8	PFUdA	40	U	ng/L	40	7/03/18 15:38	7/12/18 4:16	ASBPROC-800 PFAS



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### Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: CPF055C - Jordan Lake above Stinking Creek Lab ID: E182415-15**

**Station ID: CPF055C**

**Matrix: Water**

**Date Collected: 6/13/18 14:10**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
757124-72-4	4:2FTS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
27619-97-2	6:2FTS	82	U	ng/L	82	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
39108-34-4	8:2FTS	82	U	ng/L	82	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
754-91-6	FOSA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	82	U	ng/L	82	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
375-22-4	PFBA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
375-73-5	PFBS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
307-55-1	PFDoA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
335-77-3	PFDS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
375-85-9	PFHpA	42		ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
375-92-8	PFHpS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
307-24-4	PFHxA	56		ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
355-46-4	PFHxS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
375-95-1	PFNA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
68259-12-1	PFNS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
335-67-1	PFOA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
1763-23-1	PFOS	46		ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
2706-90-3	PFPeA	59		ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS



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## Semi Volatile Organics

**Project: 18-0437, Jordan Lake PFAS**

**Sample ID: CPF055C - Jordan Lake above Stinking Creek Lab ID: E182415-15**

**Station ID: CPF055C**

**Matrix: Water**

**Date Collected: 6/13/18 14:10**

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS
2058-94-8	PFUdA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:37	ASBPROC-800 PFAS



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**Semi Volatile Organics**

**Project: 18-0437, Jordan Lake PFAS**

Sample ID: CPF089 - Jordan Lake near Merry Oaks - MS Lab ID: E182415-16

Station ID: CPF089

Matrix: Water

Date Collected: 6/13/18 12:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
27619-97-2	6:2FTS	82	U	ng/L	82	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
39108-34-4	8:2FTS	82	U	ng/L	82	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
754-91-6	FOSA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
13252-13-6	HFPO-DA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
2355-31-9	N-MeFOSAA	82	U, J, QM-3	ng/L	82	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
375-22-4	PFBA	24	J, Q-2, QM-3	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
375-73-5	PFBS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
335-76-2	PFDA	160	U	ng/L	160	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
307-55-1	PFDoA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
335-77-3	PFDS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
375-85-9	PFHpA	23	J, Q-2	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
375-92-8	PFHpS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
307-24-4	PFHxA	35	J, Q-2	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
355-46-4	PFHxS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
375-95-1	PFNA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
68259-12-1	PFNS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
335-67-1	PFOA	26	J, Q-2	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
1763-23-1	PFOS	25	J, Q-2, QM-3	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
2706-90-3	PFPeA	40	J, Q-2	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS



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## Semi Volatile Organics

Project: 18-0437, Jordan Lake PFAS

Sample ID: CPF089 - Jordan Lake near Merry Oaks - MS Lab ID: E182415-16

Station ID: CPF089

Matrix: Water

Date Collected: 6/13/18 12:55

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
2706-91-4	PFPeS	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
72629-94-8	PFTTrDA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS
2058-94-8	PFUdA	41	U	ng/L	41	7/03/18 15:38	7/12/18 4:57	ASBPROC-800 PFAS



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1807023 - S PFC**

**Blank (1807023-BLK1)**

Prepared & Analyzed: 07/11/18

**ASBPROC-800 PFAS**

4:2FTS	U	40	ng/L							U
6:2FTS	U	80	"							U
8:2FTS	U	80	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	80	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	40	"							U
PFHpA	U	40	"							U
PFHpS	U	40	"							U
PFHxA	U	40	"							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	40	"							U
PFUdA	U	40	"							U

**Blank (1807023-BLK2)**

Prepared & Analyzed: 07/11/18

**ASBPROC-800 PFAS**

4:2FTS	U	40	ng/L							U
6:2FTS	U	80	"							U
8:2FTS	U	80	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	80	"							U
PFBA	U	40	"							U
PFBS	U	40	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	40	"							U
PFHpA	U	40	"							U
PFHpS	U	40	"							U



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1807023 - S PFC**

<b>Blank (1807023-BLK2)</b>				Prepared & Analyzed: 07/11/18						
PFHxA	U	40	ng/L							U
PFHxS	U	40	"							U
PFNA	U	40	"							U
PFNS	U	40	"							U
PFOA	U	40	"							U
PFOS	U	40	"							U
PFPeA	U	40	"							U
PFPeS	U	40	"							U
PFTTrDA	U	40	"							U
PFUdA	U	40	"							U

**LCS (1807023-BS1)**

<b>ASBPROC-800 PFAS</b>				Prepared & Analyzed: 07/11/18						
4:2FTS	367	40	ng/L	374.00		98.1	70-130			
6:2FTS	360	80	"	380.00		94.6	70-130			
8:2FTS	374	80	"	384.00		97.4	70-130			
FOSA	371	40	"	400.00		92.8	70-130			
HFPO-DA	411	40	"	400.00		103	70-130			
N-MeFOSAA	409	80	"	400.00		102	70-130			
PFBA	367	40	"	400.00		91.8	70-130			
PFBS	381	40	"	354.00		108	70-130			
PFDA	441	160	"	400.00		110	70-130			
PFDoA	416	40	"	400.00		104	70-130			
PFDS	369	40	"	386.00		95.5	70-130			
PFHpA	389	40	"	400.00		97.2	70-130			
PFHpS	345	40	"	380.00		90.9	70-130			
PFHxA	416	40	"	400.00		104	70-130			
PFHxS	328	40	"	364.80		90.0	70-130			
PFNA	389	40	"	400.00		97.3	70-130			
PFNS	332	40	"	384.00		86.5	70-130			
PFOA	408	40	"	400.00		102	70-130			
PFOS	345	40	"	370.20		93.1	70-130			
PFPeA	391	40	"	400.00		97.7	70-130			
PFPeS	336	40	"	376.00		89.3	70-130			
PFTTrDA	551	40	"	400.00		138	70-130			QL-2
PFUdA	407	40	"	400.00		102	70-130			



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1807023 - S PFC**

**Matrix Spike (1807023-MS1)**

**Source: E182415-16**

Prepared: 07/11/18 Analyzed: 07/12/18

**ASBPROC-800 PFAS**

4:2FTS	400	41	ng/L	396.19	U	101	70-130			
6:2FTS	339	82	"	402.54	U	84.1	70-130			
8:2FTS	439	82	"	406.78	U	108	70-130			
FOSA	459	41	"	423.73	U	108	70-130			
HFPO-DA	404	41	"	423.73	U	95.4	70-130			
N-MeFOSAA	531	82	"	423.73	U	125	70-130			QM-3
PFBA	478	41	"	423.73	23.5	107	70-130			QM-3
PFBS	384	41	"	375.00	U	102	70-130			
PFDA	505	160	"	423.73	U	119	70-130			
PFDoA	479	41	"	423.73	U	113	70-130			
PFDS	432	41	"	408.90	U	106	70-130			
PFHpA	452	41	"	423.73	22.9	101	70-130			
PFHpS	381	41	"	402.54	U	94.6	70-130			
PFHxA	462	41	"	423.73	35.4	101	70-130			
PFHxS	396	41	"	386.44	U	102	70-130			
PFNA	419	41	"	423.73	U	98.8	70-130			
PFNS	398	41	"	406.78	U	97.9	70-130			
PFOA	402	41	"	423.73	U	94.8	70-130			
PFOS	431	41	"	392.16	24.8	104	70-130			QM-3
PFPeA	451	41	"	423.73	40.3	97.0	70-130			
PFPeS	383	41	"	398.31	U	96.1	70-130			
PFTrDA	659	41	"	423.73	U	155	70-130			QM-2
PFUdA	519	41	"	423.73	U	123	70-130			

**Matrix Spike Dup (1807023-MSD1)**

**Source: E182415-16**

Prepared: 07/11/18 Analyzed: 07/12/18

**ASBPROC-800 PFAS**

4:2FTS	356	41	ng/L	388.77	U	91.5	70-130	11.8	20	
6:2FTS	285	82	"	395.01	U	72.2	70-130	17.2	20	
8:2FTS	398	82	"	399.17	U	99.7	70-130	9.85	20	
FOSA	416	41	"	415.80	U	100	70-130	9.65	20	
HFPO-DA	391	41	"	415.80	U	94.1	70-130	3.28	20	
N-MeFOSAA	432	82	"	415.80	U	104	70-130	20.6	20	QM-3
PFBA	364	41	"	415.80	23.5	81.8	70-130	27.2	20	QM-3
PFBS	385	41	"	367.98	U	105	70-130	0.356	20	
PFDA	509	160	"	415.80	U	122	70-130	0.733	20	
PFDoA	464	41	"	415.80	U	112	70-130	3.13	20	
PFDS	399	41	"	401.25	U	99.5	70-130	7.93	20	
PFHpA	409	41	"	415.80	22.9	92.8	70-130	10.1	20	
PFHpS	351	41	"	395.01	U	88.8	70-130	8.17	20	



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**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1807023 - S PFC**

Matrix Spike Dup (1807023-MSD1)	Source: E182415-16			Prepared: 07/11/18 Analyzed: 07/12/18						
PFHxA	462	41	ng/L	415.80	35.4	103	70-130	0.0350	20	
PFHxS	368	41	"	379.21	U	97.0	70-130	7.33	20	
PFNA	413	41	"	415.80	U	99.3	70-130	1.39	20	
PFNS	393	41	"	399.17	U	98.5	70-130	1.30	20	
PFOA	396	41	"	415.80	26.4	88.8	70-130	1.50	20	
PFOS	349	41	"	384.82	24.8	84.2	70-130	21.0	20	QM-3
PFPeA	439	41	"	415.80	40.3	95.9	70-130	2.71	20	
PFPeS	337	41	"	390.85	U	86.1	70-130	12.8	20	
PFTTrDA	599	41	"	415.80	U	144	70-130	9.40	20	QM-2
PFUdA	441	41	"	415.80	U	106	70-130	16.3	20	

**MRL Verification (1807023-PS1)**

Prepared: 07/11/18 Analyzed: 07/17/18

**ASBPROC-800 PFAS**

4:2FTS	45.5	40	ng/L	37.400		122	50-150			MRL-2
FOSA	39.2	40	"	40.000		98.0	50-150			Q-2, MRL-2, J
HFPO-DA	37.6	40	"	40.000		94.1	50-150			Q-2, MRL-2, J
PFBA	59.1	40	"	40.000		148	50-150			MRL-2
PFBS	41.2	40	"	35.400		116	50-150			MRL-2
PFDoA	50.5	40	"	40.000		126	50-150			MRL-2
PFDS	40.1	40	"	38.600		104	50-150			MRL-2
PFHpA	43.6	40	"	40.000		109	50-150			MRL-2
PFHpS	37.9	40	"	38.000		99.7	50-150			Q-2, MRL-2, J
PFHxA	55.9	40	"	40.000		140	50-150			MRL-2
PFHxS	23.6	40	"	36.480		64.7	50-150			Q-2, MRL-2, J
PFNA	37.2	40	"	40.000		93.1	50-150			Q-2, MRL-2, J
PFNS	40.6	40	"	38.400		106	50-150			MRL-2
PFOA	45.2	40	"	40.000		113	50-150			MRL-2
PFOS	31.4	40	"	37.020		85.0	50-150			Q-2, MRL-2, J
PFPeA	39.5	40	"	40.000		98.8	50-150			Q-2, MRL-2, J
PFPeS	35.5	40	"	37.600		94.4	50-150			Q-2, MRL-2, J
PFTTrDA	43.8	40	"	40.000		110	50-150			MRL-2
PFUdA	56.7	40	"	40.000		142	50-150			MRL-2



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 Project: 18-0437, Jordan Lake PFAS - Reported by Diana Burdette

**Semi Volatile Organics (SVOA) - Quality Control**  
**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1807023 - S PFC**

**MRL Verification (1807023-PS2)**

Prepared: 07/11/18 Analyzed: 07/17/18

**ASBPROC-800 PFAS**

6:2FTS	158	80	ng/L	152.00		104	50-150			MRL-2
8:2FTS	192	80	"	153.60		125	50-150			MRL-2
N-MeFOSAA	151	80	"	160.00		94.3	50-150			MRL-2
PFDA	182	160	"	160.00		114	50-150			MRL-2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division  
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**Notes and Definitions for QC Samples**

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- MRL-2 MRL verification for Non-Potable Water matrix
- Q-2 Result greater than MDL but less than MRL.
- QL-2 Laboratory Control Spike Recovery greater than method control limits
- QM-2 Matrix Spike Recovery greater than method control limits
- QM-3 Matrix Spike Precision outside method control limits