

January 30, 2020

#### 4LSASD-LSB

#### **MEMORANDUM**

SUBJECT:	FINAL Analytical Report
	Project: 20-0169, GAEPD Summerville PFAS Screening
FROM:	Diana Burdette
	OCS Analyst
THRU:	Jason Collum, Chief
	LSB Organic Chemistry Section
TO:	Nathan Barlet

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at 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 LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB 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:

Semi Volatile	Organics	(SVOA)
PFAS		

ASBPROC-800PFAS (Water)



#### Sample Disposal Policy

Due to limited space for long term sample storage, LSB'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.



### SAMPLES INCLUDED IN THIS REPORT

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
Goodwin Hill Field Blank	E200403-01	Field Blank	1/23/20 13:10	1/24/20 7:15
Lowe Springs Field Blank	E200403-02	Field Blank	1/23/20 12:20	1/24/20 7:15
Summerville WTP Field Blank	E200403-03	Field Blank	1/23/20 11:30	1/24/20 7:15
Trip Blank	E200403-04	Trip Blank - Water	1/23/20 10:50	1/24/20 7:15
Goodwin Hill Tank	E200403-05	Potable Water	1/23/20 13:05	1/24/20 7:15
Lowe Spring Raw	E200403-06	Municipal Water Supply	1/23/20 12:00	1/24/20 7:15
Lowe Springs Finished	E200403-07	Potable Water	1/23/20 12:10	1/24/20 7:15
Raccoon Creek	E200403-08	Municipal Water Supply	1/23/20 11:00	1/24/20 7:15
Raccoon Creek Dup	E200403-09	Municipal Water Supply	1/23/20 11:05	1/24/20 7:15
Raccoon Creek Finished	E200403-10	Potable Water	1/23/20 11:25	1/24/20 7:15



### **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.
- OM-1 Matrix 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 (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.



### **Semi Volatile Organics**

Sample ID Station ID	nple ID: <u>Goodwin Hill Field Blank</u> Lab ID: <u>E200403-01</u> Ation ID: Matrix: Field Blank						
Date Coll CAS Number	ected: 1/23/20 13:10 <i>Analyte</i>	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
375-85-9	PFHpA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
307-24-4	PFHxA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
58259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	AS ASBPROC-800PF AS
335-67-1	PFOA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	AS ASBPROC-800PF AS
1763-23-1	PFOS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF
2706-90-3	PFPeA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	AS ASBPROC-800PF AS



## **Semi Volatile Organics**

Sample II Station II	D: <u>Goodwin Hill Field Blank</u> D:	Lab ID: <u>E2004</u> Matrix: Field Bla					
	lected: 1/23/20 13:10						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:04	ASBPROC-800PF AS



### **Semi Volatile Organics**

Sample ID Station ID	:: <u>Lowe Springs Field Blank</u> ::	Lab ID: <u>E20040</u> Matrix: Field Bla					
Date Coll CAS Number	ected: 1/23/20 12:20 <i>Analyte</i>	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
375-85-9	PFHpA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
307-24-4	PFHxA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
335-67-1	PFOA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
1763-23-1	PFOS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
2706-90-3	PFPeA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS



## **Semi Volatile Organics**

Sample II Station II	D: <u>Lowe Springs Field Blank</u> D:	Lab ID: <u>E2004</u> Matrix: Field Bla					
Date Col	lected: 1/23/20 12:20						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:26	ASBPROC-800PF AS



### **Semi Volatile Organics**

Station ID		Lab ID: <u>E2004(</u> Matrix: Field Bla					
Date Coll CAS Number	ected: 1/23/20 11:30 <i>Analyte</i>	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
375-85-9	PFHpA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
307-24-4	PFHxA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
335-67-1	PFOA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
1763-23-1	PFOS	18 U	ng/L	18	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF
2706-90-3	PFPeA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	AS ASBPROC-800PF AS



## **Semi Volatile Organics**

Sample II Station II	D: <u>Summerville WTP Field Blank</u> D:	Lab ID: <u>E2004</u> Matrix: Field Bla					
	lected: 1/23/20 11:30			_	_	_	
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 0:48	ASBPROC-800PF AS



### **Semi Volatile Organics**

Station ID	: <u>Trip Blank</u> : ected: 1/23/20 10:50		E200403-04 Trip Blank - Water				
CAS Number	Analyte	Results Quali	fiers Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
375-22-4	PFBA	40 <b>U</b>	ng/L	40	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
375-85-9	PFHpA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
307-24-4	PFHxA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
335-67-1	PFOA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
1763-23-1	PFOS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
2706-90-3	PFPeA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS



## **Semi Volatile Organics**

Sample II Station II	D: <u>Trip Blank</u> D:	Lab ID: Matrix:	E200403-04 Trip Blank - Water				
	lected: 1/23/20 10:50						
CAS Number	Analyte	Results Qualij	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:10	ASBPROC-800PF AS



### **Semi Volatile Organics**

Sample ID Station ID	: <u>Goodwin Hill Tank</u> : <u>GWHT</u>		Lab ID: <u>E200403-05</u> Matrix: Potable Water				
Date Coll CAS Number	ected: 1/23/20 13:05 <i>Analyte</i>	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
375-22-4	PFBA	89	ng/L	40	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
375-73-5	PFBS	18	ng/L	18	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
375-85-9	PFHpA	32	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
307-24-4	PFHxA	320	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
335-67-1	PFOA	47	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
1763-23-1	PFOS	45	ng/L	18	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
2706-90-3	PFPeA	640	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS



## **Semi Volatile Organics**

Station II		Lab ID: Matrix:	E200403-05 Potable Water				
Date Col CAS Number	lected: 1/23/20 13:05 <i>Analyte</i>	Results Quali	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:32	ASBPROC-800PF AS



### **Semi Volatile Organics**

Sample ID Station ID	: <u>Lowe Spring Raw</u> : <u>LSWTP</u>		Lab ID: <u>E200403-06</u> Matrix: Municipal Water Supply				
Date Coll	ected: 1/23/20 12:00						
Number	Analyte	Results Qualifi	iers Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
375-73-5	PFBS	17 U	ng/L	17	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
375-85-9	PFHpA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
307-24-4	PFHxA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
335-67-1	PFOA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
1763-23-1	PFOS	18 U	ng/L	18	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
2706-90-3	PFPeA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS



### **Semi Volatile Organics**

Station II	D: <u>Lowe Spring Raw</u> D: <u>LSWTP</u> lected: 1/23/20 12:00	Lab ID: Matrix:	E200403-06 Municipal Water Supp	ly			
CAS Number	Analyte	Results Qualij	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 1:54	ASBPROC-800PF AS



### **Semi Volatile Organics**

Sample ID Station ID	: <u>Lowe Springs Finished</u> : <u>LSWTP</u>		Lab ID: <u>E200403-07</u> Matrix: Potable Water				
Date Coll CAS Number	ected: 1/23/20 12:10 <i>Analyte</i>	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
754-91-6	FOSA	20 U, J, QM-1	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
375-85-9	PFHpA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
307-24-4	PFHxA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
58259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
335-67-1	PFOA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
1763-23-1	PFOS	18 U	ng/L	18	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
2706-90-3	PFPeA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS



## **Semi Volatile Organics**

•	D: <u>Lowe Springs Finished</u> D: <u>LSWTP</u>	Lab ID: Matrix	E200403-07 : Potable Water				
	lected: 1/23/20 12:10						
CAS Number	Analyte	Results Quali	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:16	ASBPROC-800PF AS



### **Semi Volatile Organics**

Station ID:	: <u>Raccoon Creek</u> : <u>SWTP</u> ected: 1/23/20 11:00		E200403-08 Municipal Water Sup	ply			
CAS Number	Analyte	Results Quali	fiers Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
375-22-4	PFBA	80	ng/L	40	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
375-85-9	PFHpA	32	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
307-24-4	PFHxA	350	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
335-67-1	PFOA	48	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF
1763-23-1	PFOS	47	ng/L	18	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
2706-90-3	PFPeA	670	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS



## **Semi Volatile Organics**

Sample ID: <u>Raccoon Creek</u> Station ID: <u>SWTP</u>		Lab ID: Matrix:	<u>E200403-08</u> Municipal Water Supp	bly			
Date Col	lected: 1/23/20 11:00						
CAS Number	Analyte	Results Qualij	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 2:38	ASBPROC-800PF AS



### **Semi Volatile Organics**

Sample ID: <u>Raccoon Creek Dup</u> Station ID: <u>SWTP</u>		WTP Matrix: Municipal Water Supply					
Date Coll CAS Number	ected: 1/23/20 11:05 <i>Analyte</i>	Results Qualifi	ers Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
375-22-4	PFBA	89	ng/L	40	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
375-73-5	PFBS	18 <b>U</b>	ng/L	18	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
375-85-9	PFHpA	33	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
307-24-4	PFHxA	340	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	AS ASBPROC-800PF
335-67-1	PFOA	47	ng/L	20	1/29/20 11:39	1/30/20 3:00	AS ASBPROC-800PF
1763-23-1	PFOS	41	ng/L	18	1/29/20 11:39	1/30/20 3:00	AS ASBPROC-800PF
2706-90-3	PFPeA	660	ng/L	20	1/29/20 11:39	1/30/20 3:00	AS ASBPROC-800PF AS



### **Semi Volatile Organics**

Station II	D: <u>Raccoon Creek Dup</u> D: <u>SWTP</u> lected: 1/23/20 11:05	Lab ID: Matrix:	E200403-09 Municipal Water Supp	ly			
CAS Number	Analyte	Results Qualij	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:00	ASBPROC-800PF AS



### **Semi Volatile Organics**

Sample ID Station ID	: <u>Raccoon Creek Finished</u> : <u>SWTP</u>	Lab ID: <u>E20040</u> Matrix: Potable W					
Date Coll	ected: 1/23/20 11:25	Results Qualifiers	Units	MRL	Prenarad	Analyzed	Mathod
	лпшун	Results Qualifiers	Chus	mil	Trepureu	Апшузеи	memou
757124-72-4	4:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
27619-97-2	6:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
39108-34-4	8:2FTS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
754-91-6	FOSA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
13252-13-6	HFPO-DA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
375-22-4	PFBA	86	ng/L	40	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
375-73-5	PFBS	18 U	ng/L	18	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
335-76-2	PFDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF
307-55-1	PFDoA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF AS
335-77-3	PFDS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF
375-85-9	PFHpA	32	ng/L	20	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF
375-92-8	PFHpS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF AS
307-24-4	PFHxA	340	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF
355-46-4	PFHxS	18 U	ng/L	18	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF
375-95-1	PFNA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF
68259-12-1	PFNS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF
335-67-1	PFOA	49	ng/L	20	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF
1763-23-1	PFOS	49	ng/L	18	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF
2706-90-3	PFPeA	660	ng/L	20	1/29/20 11:39	1/30/20 3:22	AS ASBPROC-800PF AS



## **Semi Volatile Organics**

Sample ID: <u>Raccoon Creek Finished</u> Station ID: <u>SWTP</u>			<u>E200403-10</u> Potable Water				
	lected: 1/23/20 11:25						
CAS Number	Analyte	Results Qualifi	ers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	19 U	ng/L	19	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
72629-94-8	PFTrDA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS
2058-94-8	PFUdA	20 U	ng/L	20	1/29/20 11:39	1/30/20 3:22	ASBPROC-800PF AS



### Semi Volatile Organics (SVOA) - Quality Control

### US-EPA, Region 4, LSASD

	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared &	Analyzed:	01/29/20				
U	19	ng/L							τ
U	19	"							τ
U	19	"							τ
U	20	"							τ
U	20	"							τ
U	20	"							τ
U	40	"							τ
U	18	"							τ
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U	18	"							τ
U	20	"							τ
U	19	"							U
U	20	"							U
U	20	"							U
-	U U U U U U U U U U U U U U U U U U U	U       19         U       20         U       20         U       20         U       20         U       20         U       40         U       40         U       18         U       20         U       19         U       20         U       18         U       20         U       19         U       20         U       19         U       20         U       18         U       20         U       18         U       20         U       19         U       20         U       19         U       20         U       19         U       20         U       19         U	U19"U19"U20"U20"U20"U40"U40"U20"U20"U20"U20"U20"U20"U19"U20"U18"U20"U19"U20"U18"U20"U19"U20"U19"U20"U19"U20"U19"U20" </td <td><math display="block">\begin{array}{cccccccccccccccccccccccccccccccccccc</math></td> <td><math display="block">\begin{array}{cccccccccccccccccccccccccccccccccccc</math></td> <td>U19"U19"U20"U20"U20"U40"U20"U20"U20"U20"U19"U20"U19"U20"U19"U20"U18"U20"U19"U20"U18"U20"U19"U20"U18"U20"U18"U20"U19"U20"U19"U20"U19"U20"U19"U20"U20"U19"U20"U20"U19"U20"U20"U20"U20"U20"U20"U20"U20"U20"U20"<td>U       19       <math>ng/L</math>         U       19       "         U       19       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       20       "         U       19       "         U       20       "         U       20       "         U       19<!--</td--><td>U       19       <math>ng/L</math>         U       19       "         U       19       "         U       20       "         U       40       "         U       40       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       19       "         U       19       "         U       20       "         U       20       "         U       20<!--</td--><td><math display="block">\begin{array}{cccccccccccccccccccccccccccccccccccc</math></td></td></td></td>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	U19"U19"U20"U20"U20"U40"U20"U20"U20"U20"U19"U20"U19"U20"U19"U20"U18"U20"U19"U20"U18"U20"U19"U20"U18"U20"U18"U20"U19"U20"U19"U20"U19"U20"U19"U20"U20"U19"U20"U20"U19"U20"U20"U20"U20"U20"U20"U20"U20"U20"U20" <td>U       19       <math>ng/L</math>         U       19       "         U       19       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       20       "         U       19       "         U       20       "         U       20       "         U       19<!--</td--><td>U       19       <math>ng/L</math>         U       19       "         U       19       "         U       20       "         U       40       "         U       40       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       19       "         U       19       "         U       20       "         U       20       "         U       20<!--</td--><td><math display="block">\begin{array}{cccccccccccccccccccccccccccccccccccc</math></td></td></td>	U       19 $ng/L$ U       19       "         U       19       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       20       "         U       19       "         U       20       "         U       20       "         U       19 </td <td>U       19       <math>ng/L</math>         U       19       "         U       19       "         U       20       "         U       40       "         U       40       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       19       "         U       19       "         U       20       "         U       20       "         U       20<!--</td--><td><math display="block">\begin{array}{cccccccccccccccccccccccccccccccccccc</math></td></td>	U       19 $ng/L$ U       19       "         U       19       "         U       20       "         U       40       "         U       40       "         U       20       "         U       19       "         U       20       "         U       19       "         U       20       "         U       18       "         U       20       "         U       18       "         U       19       "         U       19       "         U       20       "         U       20       "         U       20 </td <td><math display="block">\begin{array}{cccccccccccccccccccccccccccccccccccc</math></td>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

LCS (2001044-BS1)	Prepared & Analyzed: 01/29/20								
ASBPROC-800PFAS									
4:2FTS	297	19	ng/L	374.00	79.3	67.1-125			
6:2FTS	306	19	"	380.00	80.6	49.2-134			
8:2FTS	331	19	"	384.00	86.1	56.4-136			
FOSA	322	20	"	400.00	80.5	57.7-148			
HFPO-DA	396	20	"	400.00	98.9	51.1-127			
N-MeFOSAA	321	20	"	400.00	80.3	43.2-178			
PFBA	311	40	"	400.00	77.8	67.9-118			
PFBS	279	18	"	354.00	78.7	68.2-118			
PFDA	324	20	"	400.00	81.1	47.4-162			
PFDoA	301	20	"	400.00	75.3	56.5-155			
PFDS	311	19	"	386.00	80.6	35.1-168			
PFHpA	326	20	"	400.00	81.4	72.8-116			
PFHpS	307	19	"	380.00	80.7	59.7-130			



#### Semi Volatile Organics (SVOA) - Quality Control US-EPA, Region 4, LSASD

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2001044 - S PFC										
LCS (2001044-BS1)				Prepared &	Analyzed:	01/29/20				
PFHxA	328	20	ng/L	400.00		81.9	62.6-127			
PFHxS	299	18	"	364.80		81.9	69.5-117			
PFNA	327	20	"	400.00		81.7	64.1-128.4			
PFNS	287	19	"	384.00		74.7	63.3-126			
PFOA	323	20	"	400.00		80.8	66.7-122			
PFOS	298	18	"	370.20		80.5	70.4-122			
PFPeA	324	20	"	400.00		80.9	72-115			
PFPeS	309	19	"	376.00		82.3	69-117			
PFTrDA	276	20	"	400.00		69.0	32.2-215			
PFUdA	329	20	"	400.00		82.3	65.8-142			
Matrix Spike (2001044-MS1)	Sour	·ce: E200403-	07	Prepared: 0	1/29/20 A	nalvzed: ()	1/30/20			
ASBPROC-800PFAS	5001	CC. E200405-	07	Trepared. 0	1127120 A	naryzeu. o	1/30/20			
4:2FTS	247	18	ng/L	302.10	U	81.8	70-133			
6:2FTS	238	19	"	306.95	U	77.7	58-143			
8:2FTS	246	19	"	310.18	U	79.2	66-126			
FOSA	166	20	"	323.10	U	51.4	61-138			QM-
HFPO-DA	333	20	"	323.10	U	103	45-129			<b>Z</b>
N-MeFOSAA	266	20	"	323.10	U	82.2	47-169			
PFBA	241	39	"	323.10	U	74.7	60-141			
PFBS	212	17	"	285.95	U	74.1	62-135			
PFDA	267	20	"	323.10	U	82.6	53-156			
PFDoA	226	20	"	323.10	U	70.0	30-172			
PFDS	206	19	"	311.79	U	66.1	44-151			
PFHpA	272	20	"	323.10	U	84.1	75-122			
PFHpS	257	19	"	306.95	U	83.7	66-132			
PFHxA	271	20	"	323.10	U	83.9	64-138			
PFHxS	254	18	"	294.67	U	86.3	72-124			
PFNA	265	20	"	323.10	U	82.1	72-129			
PFNS	219	19	"	310.18	U	70.6	61-126			
PFOA	268	20	"	323.10	U	83.1	74-127			
PFOS	252	18		299.03	U	84.1	68-132			
PFPeA	264	20		323.10	U	81.6	75-122			
PFPeS	255	19		303.72	U	83.9	72-122			
PFTrDA	201	20	"	323.10	U	62.2	10-193			
PFUdA	252	20	"	323.10	U	78.1	44-164			



PFUdA

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 20-0169 Project: 20-0169, GAEPD Summerville PFAS Screening - Reported by Diana Burdette

# Semi Volatile Organics (SVOA) - Quality Control

#### **US-EPA**, Region 4, LSASD Spike %REC RPD Reporting Source %REC Analyte Result Limit Units Level Result Limits RPD Limit Notes Batch 2001044 - S PFC Matrix Spike Dup (2001044-MSD1) Source: E200403-07 Prepared: 01/29/20 Analyzed: 01/30/20 **ASBPROC-800PFAS** 4:2FTS 240 19 ng/L 285.50 U 84.1 70-133 2.87 34 6:2FTS 268 19 .. 290.08 U 92.3 58-143 11.6 45 8:2FTS 291 19 293.13 U 99.2 66-126 16.8 56 .. 305.34 U 39 FOSA 194 20 63.5 61-138 15.5 HFPO-DA 328 20 .. 305.34 U 107 45-129 1.37 57 .. 20 305.34 U 47-169 N-MeFOSAA 265 86.7 0.384 65 .. 37 PFBA 230 40 305.34 U 75.3 60-141 4.84 .. PFBS 204 18 270.23 U 75.7 62-135 3.51 32 PFDA 278 20 .. 305.34 U 91.2 53-156 4.21 57 PFDoA 245 20 305.34 U 80.4 30-172 8.09 56 PFDS 231 19 ... 294.66 U 78.5 44-151 11.6 66 PFHpA 273 20 .. 305.34 U 89.6 75-122 0.650 26 .. U PFHpS 260 19 290.08 89.6 66-132 1.17 28 PFHxA 265 20 .. 305.34 U 86.7 64-138 2.37 42 PFHxS 250 18 278.47 U 89.6 72-124 1.90 32 PFNA 279 20 .. 305.34 U 91.3 72-129 5.05 31 U PFNS 230 19 293.13 78.6 61-126 5.02 35 .. PFOA 268 20 305.34 U 87.7 74-127 0.220 32 PFOS 259 18 .. 282.60 U 91.7 68-132 2.99 37 .. PFPeA 265 20 305.34 U 86.8 75-122 0.454 27 258 19 .. 287.02 U 72-122 29 PFPeS 89.7 1.12 .. 20 305.34 U 79.9 10-193 19.3 PFTrDA 244 106

MRL Verification (2001044-PS1)				Prepared & Anal	yzed: 01/29/20		
ASBPROC-800PFAS							
4:2FTS	17.0	19	ng/L	18.700	91.0	47.1-145	MRL-2,
							Q-2, J
6:2FTS	22.5	19	"	19.000	119	29.2-154	MRL-2
8:2FTS	20.3	19	"	19.200	106	36.4-156	MRL-2
FOSA	13.8	20	"	20.000	68.9	37.7-168	MRL-2,
							Q-2, J
HFPO-DA	14.6	20	"	20.000	73.2	31.3-147	MRL-2,
							Q-2, J
N-MeFOSAA	11.7	20	"	20.000	58.4	23.2-198	MRL-2,
							Q-2, J
PFBS	16.6	18	"	17.700	93.5	48.2-138	MRL-2,
							Q-2, J
PFDA	19.7	20	"	20.000	98.3	27.4-182	MRL-2,
							Q-2, J

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269

U

88.2

44-164

6.49

48

305.34



# Semi Volatile Organics (SVOA) - Quality Control

		US-EPA,	Region	i 4, LSAS	D					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001044 - S PFC										
MRL Verification (2001044-PS1)				Prepared &	Analyzed:	01/29/20				
PFDoA	18.9	20	ng/L	20.000		94.6	36.5-175			MRL-2,
PFDS	20.4	19		19.300		105	15.1-188			Q-2, J MRL-2
PFHpA	19.5	19 20		20.000		97.6	52.8-136			MRL-2,
ггпрА	19.5	20		20.000		97.0	52.8-150			Q-2, J
PFHpS	18.5	19	"	19.000		97.4	39.7-150			MRL-2,
										Q-2, J
PFHxA	16.8	20	"	20.000		83.9	42.6-147			MRL-2, Q-2, J
PFHxS	15.7	18	"	18.240		86.1	49.5-138			Q-2, J MRL-2,
										Q-2, J
PFNA	18.0	20	"	20.000		89.8	44.1-148			MRL-2,
PFNS	15.1	19		19.200		78.8	43.3-146			Q-2, J MRL-2,
rrins	15.1	19		19.200		/0.0	45.5-140			Q-2, J
PFOA	18.9	20	"	20.000		94.7	46.7-142			MRL-2,
										Q-2, J
PFOS	20.6	18	"	18.510		111	50.4-142			MRL-2
PFPeA	19.3	20	"	20.000		96.5	52-135			MRL-2, Q-2, J
PFPeS	18.2	19	"	18.800		97.0	49-137			Q-2, J MRL-2,
							.,,			Q-2, J
PFTrDA	19.3	20	"	20.000		96.7	12.2-235			MRL-2,
	21.2	20		20.000		100	45.9.1(2			Q-2, J
PFUdA	21.2	20		20.000		106	45.8-162			MRL-2
MRL Verification (2001044-PS2)				Prepared &	Analyzed:	01/29/20				
ASBPROC-800PFAS										
PFBA	34.3	40	ng/L	40.000		85.7	47.9-138			MRL-2, Q-2, J

### US-EPA, Region 4, LSASD



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 20-0169 Project: 20-0169, GAEPD Summerville PFAS Screening - Reported by Diana Burdette

#### 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.
QM-1	Matrix Spike Recovery less than method control limits