

ANALYTICAL REPORT

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Laboratory Job ID: 280-162205-1
Client Project/Site: Gadsden PFAS Sampling

For:
Gadsden Water Works
515 Albert Rains Blvd
Gadsden, Alabama 35901

Attn: Mike Lankford



Authorized for release by:
5/25/2022 2:40:33 PM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Case Narrative

Client: Gadsden Water Works
Project/Site: Gadsden PFAS Sampling

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Narrative

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CASE NARRATIVE

Client: Gadsden Water Works

Project: Gadsden PFAS Sampling

Report Number: 280-162205-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/11/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.9 C.

The sample ID on the container label of sample volume received for GADSDEN (RW) (280-162205-1) did not match the chain of custody. The container labels list a sample ID of GADSDEN RW while the chain of custody lists a sample ID of GADSDEN (RW). The laboratory logged the sample ID per the chain of custody. The client was notified on 5/12/2022.

The sample ID on the container label of sample volume received for GADSDEN (FW) (280-162205-2) did not match the chain of custody. The container labels list a sample ID of GADSDEN FW while the chain of custody lists a sample ID of GADSDEN (FW). The laboratory logged the sample ID per the chain of custody. The client was notified on 5/12/2022.

The sample collection time was not recorded on any of the sample containers received. The collection time for all containers was logged per the information recorded on the chain of custody. The client was notified on 5/12/2022.

All samples were logged for the client's DMR list of PFAS target analytes minus PFOSA per client instructions received prior to sample submittal.

PERFLUORINATED HYDROCARBONS (PFAS) MOD

Samples GADSDEN (RW) (280-162205-1), GADSDEN (FW) (280-162205-2), GWWSB: VESSEL #1 (GAC) (280-162205-3), GWWSB: VESSEL #3 (GAC) (280-162205-4), GWWSB: VESSEL #5 (GAC) (280-162205-5) and GWWSB: VESSEL #7 (GAC) (280-162205-6) were analyzed for Perfluorinated Hydrocarbons (PFAS) MOD in accordance with 537 MOD. The samples were prepared on 05/18/2022 and analyzed on 05/20/2022.

The following samples in preparation batch 320-588474 were observed to have a thin layer of sediment present in the bottom of the bottle prior to extraction. GADSDEN (RW) (280-162205-1)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Gadsden Water Works
 Project/Site: Gadsden PFAS Sampling

Job ID: 280-162205-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Client Sample ID: GADSDEN (RW)

Date Collected: 05/09/22 20:25

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	13		4.6	2.2	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorodecanoic acid (PFDA)	3.4		1.8	0.29	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorododecanoic acid (PFDoA)	0.51	U	1.8	0.51	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluoroheptanoic acid (PFHpA)	9.8		1.8	0.23	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorohexanoic acid (PFHxA)	26		1.8	0.54	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorononanoic acid (PFNA)	2.7		1.8	0.25	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorooctanoic acid (PFOA)	25		1.8	0.78	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorooctane sulfonate (PFOS)	42		1.8	0.50	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluoropentanoic acid (PFPA)	40		1.8	0.45	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorotetradecanoic acid (PFTeA)	0.67	U	1.8	0.67	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorotridecanoic acid (PFTriA)	1.2	U	1.8	1.2	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluoroundecanoic acid (PFUnA)	1.0	U	1.8	1.0	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorobutanesulfonic acid (PFBS)	92		1.8	0.18	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorodecanesulfonic acid (PFDS)	0.30	U	1.8	0.30	ng/L		05/18/22 05:13	05/20/22 22:57	1
Perfluorohexanesulfonic acid (PFHxS)	3.8		1.8	0.53	ng/L		05/18/22 05:13	05/20/22 22:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	104		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C5 PFPeA	124		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C2 PFHxA	102		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C4 PFHpA	101		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C4 PFOA	108		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C5 PFNA	114		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C2 PFDA	111		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C2 PFUnA	104		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C2 PFDoA	98		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C2 PFTeDA	74		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C3 PFBS	105		25 - 150				05/18/22 05:13	05/20/22 22:57	1
18O2 PFHxS	98		25 - 150				05/18/22 05:13	05/20/22 22:57	1
13C4 PFOS	96		25 - 150				05/18/22 05:13	05/20/22 22:57	1

Client Sample ID: GADSDEN (FW)

Date Collected: 05/10/22 11:00

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	16		4.7	2.2	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorodecanoic acid (PFDA)	2.2		1.9	0.29	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorododecanoic acid (PFDoA)	0.51	U	1.9	0.51	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluoroheptanoic acid (PFHpA)	8.1		1.9	0.23	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorohexanoic acid (PFHxA)	26		1.9	0.54	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorononanoic acid (PFNA)	1.8	J	1.9	0.25	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorooctanoic acid (PFOA)	21		1.9	0.79	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorooctane sulfonate (PFOS)	26		1.9	0.50	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluoropentanoic acid (PFPA)	45		1.9	0.46	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorotetradecanoic acid (PFTeA)	0.68	U	1.9	0.68	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorotridecanoic acid (PFTriA)	1.2	U	1.9	1.2	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluoroundecanoic acid (PFUnA)	1.0	U	1.9	1.0	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorobutanesulfonic acid (PFBS)	84		1.9	0.19	ng/L		05/18/22 05:13	05/20/22 23:07	1

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Client Sample Results

Client: Gadsden Water Works
 Project/Site: Gadsden PFAS Sampling

Job ID: 280-162205-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Client Sample ID: GADSDEN (FW)

Date Collected: 05/10/22 11:00

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	0.30	U	1.9	0.30	ng/L		05/18/22 05:13	05/20/22 23:07	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		1.9	0.53	ng/L		05/18/22 05:13	05/20/22 23:07	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	99		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C5 PFPeA	123		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C2 PFHxA	102		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C4 PFHpA	100		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C4 PFOA	101		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C5 PFNA	108		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C2 PFDA	104		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C2 PFUnA	103		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C2 PFDoA	97		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C2 PFTeDA	94		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C3 PFBS	106		25 - 150				05/18/22 05:13	05/20/22 23:07	1
18O2 PFHxS	97		25 - 150				05/18/22 05:13	05/20/22 23:07	1
13C4 PFOS	93		25 - 150				05/18/22 05:13	05/20/22 23:07	1

Client Sample ID: GWWSB: VESSEL #1 (GAC)

Date Collected: 05/10/22 11:20

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	14		4.6	2.2	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorodecanoic acid (PFDA)	3.1		1.8	0.28	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorododecanoic acid (PFDoA)	0.50	U	1.8	0.50	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluoroheptanoic acid (PFHpA)	12		1.8	0.23	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorohexanoic acid (PFHxA)	30		1.8	0.53	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorononanoic acid (PFNA)	3.0		1.8	0.25	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorooctanoic acid (PFOA)	32		1.8	0.77	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorooctane sulfonate (PFOS)	38		1.8	0.49	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluoropentanoic acid (PFPA)	45		1.8	0.45	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorotetradecanoic acid (PFTeA)	0.67	U	1.8	0.67	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorotridecanoic acid (PFTriA)	1.2	U	1.8	1.2	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluoroundecanoic acid (PFUnA)	1.0	U	1.8	1.0	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorobutanesulfonic acid (PFBS)	120		1.8	0.18	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorodecanesulfonic acid (PFDS)	0.29	U	1.8	0.29	ng/L		05/18/22 05:13	05/20/22 23:17	1
Perfluorohexanesulfonic acid (PFHxS)	4.3		1.8	0.52	ng/L		05/18/22 05:13	05/20/22 23:17	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	105		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C5 PFPeA	130		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C2 PFHxA	103		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C4 PFHpA	104		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C4 PFOA	104		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C5 PFNA	109		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C2 PFDA	106		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C2 PFUnA	110		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C2 PFDoA	101		25 - 150				05/18/22 05:13	05/20/22 23:17	1
13C2 PFTeDA	96		25 - 150				05/18/22 05:13	05/20/22 23:17	1

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Client Sample Results

Client: Gadsden Water Works
Project/Site: Gadsden PFAS Sampling

Job ID: 280-162205-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Client Sample ID: GWWSB: VESSEL #1 (GAC)

Date Collected: 05/10/22 11:20

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-3

Matrix: Water

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 PFBS	106		25 - 150	05/18/22 05:13	05/20/22 23:17	1
18O2 PFHxS	95		25 - 150	05/18/22 05:13	05/20/22 23:17	1
13C4 PFOS	93		25 - 150	05/18/22 05:13	05/20/22 23:17	1

Client Sample ID: GWWSB: VESSEL #3 (GAC)

Date Collected: 05/10/22 11:30

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-4

Matrix: Water

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluorobutanoic acid (PFBA)	15		4.7	2.2	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorodecanoic acid (PFDA)	2.8		1.9	0.29	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorododecanoic acid (PFDoA)	0.51	U	1.9	0.51	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluoroheptanoic acid (PFHpA)	11		1.9	0.23	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorohexanoic acid (PFHxA)	31		1.9	0.54	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorononanoic acid (PFNA)	2.8		1.9	0.25	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorooctanoic acid (PFOA)	30		1.9	0.79	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorooctane sulfonate (PFOS)	36		1.9	0.50	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluoropentanoic acid (PFPA)	45		1.9	0.46	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorotetradecanoic acid (PFTeA)	0.68	U	1.9	0.68	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorotridecanoic acid (PFTriA)	1.2	U	1.9	1.2	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluoroundecanoic acid (PFUnA)	1.0	U	1.9	1.0	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorobutanesulfonic acid (PFBS)	120		1.9	0.19	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorodecanesulfonic acid (PFDS)	0.30	U	1.9	0.30	ng/L		05/18/22 05:13	05/20/22 23:28	1
Perfluorohexanesulfonic acid (PFHxS)	3.9		1.9	0.53	ng/L		05/18/22 05:13	05/20/22 23:28	1

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	105		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C5 PFPeA	127		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C2 PFHxA	101		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C4 PFHpA	104		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C4 PFOA	105		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C5 PFNA	112		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C2 PFDA	113		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C2 PFUnA	112		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C2 PFDoA	103		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C2 PFTeDA	101		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C3 PFBS	110		25 - 150	05/18/22 05:13	05/20/22 23:28	1
18O2 PFHxS	100		25 - 150	05/18/22 05:13	05/20/22 23:28	1
13C4 PFOS	98		25 - 150	05/18/22 05:13	05/20/22 23:28	1

Client Sample ID: GWWSB: VESSEL #5 (GAC)

Date Collected: 05/10/22 11:40

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-5

Matrix: Water

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluorobutanoic acid (PFBA)	19		4.6	2.2	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorodecanoic acid (PFDA)	1.1	J	1.8	0.28	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorododecanoic acid (PFDoA)	0.50	U	1.8	0.50	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluoroheptanoic acid (PFHpA)	5.7		1.8	0.23	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorohexanoic acid (PFHxA)	24		1.8	0.53	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorononanoic acid (PFNA)	0.86	J	1.8	0.25	ng/L		05/18/22 05:13	05/20/22 23:38	1

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Client Sample Results

Client: Gadsden Water Works
Project/Site: Gadsden PFAS Sampling

Job ID: 280-162205-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Client Sample ID: GWWSB: VESSEL #5 (GAC)

Date Collected: 05/10/22 11:40

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	11		1.8	0.77	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorooctane sulfonate (PFOS)	13		1.8	0.49	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluoropentanoic acid (PFPA)	49		1.8	0.45	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorotetradecanoic acid (PFTeA)	0.67	U	1.8	0.67	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorotridecanoic acid (PFTriA)	1.2	U	1.8	1.2	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluoroundecanoic acid (PFUnA)	1.0	U	1.8	1.0	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorobutanesulfonic acid (PFBS)	75		1.8	0.18	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorodecanesulfonic acid (PFDS)	0.29	U	1.8	0.29	ng/L		05/18/22 05:13	05/20/22 23:38	1
Perfluorohexanesulfonic acid (PFHxS)	1.6	J	1.8	0.52	ng/L		05/18/22 05:13	05/20/22 23:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	106		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C5 PFPeA	127		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C2 PFHxA	100		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C4 PFHpA	103		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C4 PFOA	108		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C5 PFNA	109		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C2 PFDA	109		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C2 PFUnA	104		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C2 PFDaA	98		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C2 PFTeDA	101		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C3 PFBS	113		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹⁸ O2 PFHxS	101		25 - 150				05/18/22 05:13	05/20/22 23:38	1
¹³ C4 PFOS	101		25 - 150				05/18/22 05:13	05/20/22 23:38	1

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Client Sample ID: GWWSB: VESSEL #7 (GAC)

Date Collected: 05/10/22 11:50

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	21		4.9	2.3	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorodecanoic acid (PFDA)	0.51	J	1.9	0.30	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorododecanoic acid (PFDaA)	0.53	U	1.9	0.53	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluoroheptanoic acid (PFHpA)	6.8		1.9	0.24	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorohexanoic acid (PFHxA)	37		1.9	0.56	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorononanoic acid (PFNA)	0.26	U	1.9	0.26	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorooctanoic acid (PFOA)	6.4		1.9	0.82	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorooctane sulfonate (PFOS)	3.2		1.9	0.52	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluoropentanoic acid (PFPA)	63		1.9	0.48	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorotetradecanoic acid (PFTeA)	0.71	U	1.9	0.71	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorotridecanoic acid (PFTriA)	1.3	U	1.9	1.3	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluoroundecanoic acid (PFUnA)	1.1	U	1.9	1.1	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorobutanesulfonic acid (PFBS)	100		1.9	0.19	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorodecanesulfonic acid (PFDS)	0.31	U	1.9	0.31	ng/L		05/18/22 05:13	05/20/22 23:48	1
Perfluorohexanesulfonic acid (PFHxS)	0.70	J	1.9	0.55	ng/L		05/18/22 05:13	05/20/22 23:48	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	107		25 - 150				05/18/22 05:13	05/20/22 23:48	1
¹³ C5 PFPeA	122		25 - 150				05/18/22 05:13	05/20/22 23:48	1

Eurofins Denver

Client Sample Results

Client: Gadsden Water Works
 Project/Site: Gadsden PFAS Sampling

Job ID: 280-162205-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Client Sample ID: GWWSB: VESSEL #7 (GAC)

Date Collected: 05/10/22 11:50

Date Received: 05/11/22 09:45

Lab Sample ID: 280-162205-6

Matrix: Water

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFHxA	105		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C4 PFHpA	101		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C4 PFOA	107		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C5 PFNA	110		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C2 PFDA	108		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C2 PFUnA	113		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C2 PFDoA	106		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C2 PFTeDA	102		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C3 PFBS	114		25 - 150	05/18/22 05:13	05/20/22 23:48	1
18O2 PFHxS	102		25 - 150	05/18/22 05:13	05/20/22 23:48	1
13C4 PFOS	95		25 - 150	05/18/22 05:13	05/20/22 23:48	1

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Chain of Custody Record



Client Information Client Contact: Mike Lankford Company: Gadsden Water Works Address: 515 Albert Rains Blvd City: Gadsden State, Zip: AL, 35901 Phone: [] Email: mlankford@gadsdenwater.org Project Name: Gadsden PFC Sampling Site: []		Sampler: Sara, Betsy A Lab PII: Sara, Betsy A E-Mail: Betsy.Sara@Eurofins.com Carrier Tracking No(s): []		COC No: 280-98696-29755.1 Page: Page 1 of 1 Job #: []				
Due Date Requested: [] TAT Requested (days): [] PO #: [] WCI#: [] Project #: 28020646 "PFC Waters" SSQW#: []		Analysis Requested						
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastefill, B=biomass, A=air) Preservation Code: []		Field Filtered Sample (Yes or No) [] PFCs []		Total Number of Containers [] Special Instructions/Note: Turbo, 11				
GADSDEN (RW)	5/9/22	2025	G	W	N	X	2	
GADSDEN (FW)	5/10/22	1100	G	W	N	X	2	
GWWSB: VESSEL #1 (GAC)	5/10/22	1120	G	W			2	
GWWSB: VESSEL #3 (GAC)	5/10/22	1130	G	W			2	
GWWSB: VESSEL #5 (GAC)	5/10/22	1140	G	W			2	
GWWSB: VESSEL #7 (GAC)	5/10/22	1150	G	W			2	
TB								
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) []						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For [] Months		
Empty Kit Relinquished by: [] M. BROOKINS TO COOLER Date/Time: 5/10/22 1250 Date/Time: [] Date/Time: []						Method of Shipment: [] Date/Time: 5/10/22 0945 Date/Time: [] Date/Time: []		
Relinquished by: [] Relinquished by: [] Custody Seals Intact: Custody Seal No.: 1681461 Δ Yes A No						Received by: [] Received by: [] Received by: [] Cooler Temperature(s) °C and Other Remarks: 5.8 CF-01 Fe12		

Login Sample Receipt Checklist

Client: Gadsden Water Works

Job Number: 280-162205-1

Login Number: 162205

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ ($1/4''$).	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Login Sample Receipt Checklist

Client: Gadsden Water Works

Job Number: 280-162205-1

Login Number: 162205
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins Sacramento
List Creation: 05/13/22 04:59 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	Seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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