

## LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call the City of Fountain Water Department at (719) 322-2072

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## **STATE CERTIFICATION LIST**

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN00035	New Jersey*	IN598
Colorado Radiochemistry	IN00035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon (Primary AB)*	4074
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-18-12
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA014	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

\*NELAP/TNI Recognized Accreditation Bodies

Revision date: 03/14/2019



## **Laboratory Report**

Client: City of Fountain Report: 483616

Attn: Jasson Palmer Priority: Standard Written

116 South Main Status: Final

Fountain, CO 80817 PWS ID: CO0121275

	Sample Information											
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time							
4610367	Well 3 E1	537.1	04/16/20 13:00	Client	04/17/20 09:45							
4610368	Well 3 E2	537.1	04/16/20 13:02	Client	04/17/20 09:45							
4610369	Well 3 E4	537.1	04/16/20 13:04	Client	04/17/20 09:45							
4610370	Well 3 W4	537.1	04/16/20 13:06	Client	04/17/20 09:45							
4610371	Well 3 Raw	537.1	04/16/20 13:08	Client	04/17/20 09:45							
4610372	Aga S1	537.1	04/16/20 13:15	Client	04/17/20 09:45							
4610373	Aga S2	537.1	04/16/20 13:17	Client	04/17/20 09:45							
4610374	Aga S3	537.1	04/16/20 13:19	Client	04/17/20 09:45							
4610375	AGA N4	537.1	04/16/20 13:21	Client	04/17/20 09:45							
4610376	Aga Raw	537.1	04/16/20 16:43	Client	04/17/20 09:45							

### **Report Summary**

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

Note: This report may not be reproduced, except in full, without written approval from EEA.

Kelly Blackburn ASM

05/01/2020

Date

Authorized Signature

Client Name:

City of Fountain

Report #: 483616

Title

Sampling Point: Well 3 E1 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/29/20 23:34	4610367			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/29/20 23:34	4610367			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/29/20 23:34	4610367			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/29/20 23:34	4610367			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/29/20 23:34	4610367			
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/29/20 23:34	4610367			

Sampling Point: Well 3 E2 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:00	4610368			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:00	4610368			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:00	4610368			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:00	4610368			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:00	4610368			
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:00	4610368			

Sampling Point: Well 3 E4 PWS ID: CO0121275

	EEA Methods										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:13	4610369		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:13	4610369		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:13	4610369		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:13	4610369		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:13	4610369		
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:13	4610369		

Sampling Point: Well 3 W4 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	2.6	ng/L	04/29/20 07:20	04/30/20 00:26	4610370			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	2.2	ng/L	04/29/20 07:20	04/30/20 00:26	4610370			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	6.2	ng/L	04/29/20 07:20	04/30/20 00:26	4610370			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:26	4610370			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	5.3	ng/L	04/29/20 07:20	04/30/20 00:26	4610370			
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:26	4610370			

Sampling Point: Well 3 Raw PWS ID: CO0121275

	EEA Methods										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	16	ng/L	04/29/20 07:20	04/30/20 00:39	4610371		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	28	ng/L	04/29/20 07:20	04/30/20 00:39	4610371		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	19	ng/L	04/29/20 07:20	04/30/20 00:39	4610371		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	7.1	ng/L	04/29/20 07:20	04/30/20 00:39	4610371		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	41	ng/L	04/29/20 07:20	04/30/20 00:39	4610371		
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:39	4610371		

Sampling Point: Aga S1 PWS ID: CO0121275

	EEA Methods										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:52	4610372		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:52	4610372		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:52	4610372		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:52	4610372		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:52	4610372		
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 00:52	4610372		

Sampling Point: Aga S2 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:05	4610373			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:05	4610373			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:05	4610373			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:05	4610373			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:05	4610373			
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:05	4610373			

Sampling Point: Aga S3 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:18	4610374			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:18	4610374			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:18	4610374			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:18	4610374			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:18	4610374			
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:18	4610374			

Sampling Point: AGA N4 PWS ID: CO0121275

	EEA Methods										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:31	4610375		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:31	4610375		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:31	4610375		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:31	4610375		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:31	4610375		
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:20	04/30/20 01:31	4610375		

Sampling Point: Aga Raw PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
335-67-1	Perfluorooctanoic acid (PFOA)	537.1		2.0	26	ng/L	04/29/20 07:50	04/30/20 09:13	4610376			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537.1		2.0	28	ng/L	04/29/20 07:50	04/30/20 09:13	4610376			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537.1		2.0	36	ng/L	04/29/20 07:50	04/30/20 09:13	4610376			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537.1		2.0	8.4	ng/L	04/29/20 07:50	04/30/20 09:13	4610376			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537.1		2.0	46	ng/L	04/29/20 07:50	04/30/20 09:13	4610376			
375-95-1	Perfluorononanoic acid (PFNA)	537.1		2.0	< 2.0	ng/L	04/29/20 07:50	04/30/20 09:13	4610376			

<sup>†</sup> EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL		
Symbol:	*	۸	!		

#### **Lab Definitions**

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

**Internal Standards (IS)** - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

**Laboratory Duplicate (LD)** - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

**Laboratory Method Blank (LMB)** / **Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

If applicable, the calculation of the matrix spike (MS) or matrix spike duplicate (MSD) percent recovery is as follows: (MS or MSD value - Sample value) \* 100 / spike target / dilution factor = **Recovery** %

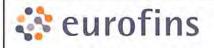
Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

**Surrogate Standard (SS) / Surrogate Analyte (SUR)** - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



# **Eaton Analytical**



Shaded area	for EEA use	only			C	HAIN OF	CUST	ODY RECO	RD		Page		of		-
REPORT TO:				SAMPLER (Signature)				PWS ID # STATE (sample origin)		PROJECT NAME PO#		O#			
(7/9) 322 2073 BILL TO:			Joen Ren			10	013175 Coloredo		Weekly PFC					I.	
		COMPLIANCE MONITORING Yes No			POPULATION SERVED		SOURCE WATER	Pre			RS		ME		
116 Simin 3+ Foundain LO Sof17					27	7,000				CONTAINERS	CODE	TURNAROUND TIME			
LAB Number COLLECTION			SAMPLING SITE			TEST NAME			SAMPLE REMARKS CHLORIN			OF CO	MATRIX	ATRIX (	
1 46 0367 4-16-2020 /00 ×			Well 3 El			054			1	YES NO		#		_	
368	4-16-2020		×			PFC				×	9	Dr	30		
2/.0	416-3030		X				PFL				×	2	DU	SV	
3 370	4-16 3030		×	well3 EY			PFC				×	2	00	SV	
	4-16-3030											×	2	00	30
5 71	4-16 2030			Vell3 RAV			PFC				X	2	DV	30	
7 373	4-11-2020			Aga 31			PFL				λ	7	00	30	
8 374	4-11-2020		1	8. 47			PFL				×	2	DV	SU	
9 1 375	4-16-3030	-	2	1. 1.4			PFC						5	Du	SU
376	4-16-2020		X	Aga NY Aga RAW			PFC					×	2	DV	3
11		100		15-16-			110				^	0	110		
12															
13															
4															
PELINOLIISHED RV:/Signatur	2)	DATE	TIME	PECEIVED BV:/Signa	aturo	DATE	TIME								
Josep Mar 4162020 130						TIME	LAB COMMENTS	UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT							
						LAB COMMENTS									
		RECEIVED BY:(Signature) DATE			AM PM										
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			AM PN	4			AM PM								
		TIME		RATORY BY:	DATE	TIME	COMPITIONS UPON	POPINE CO. L.			-			-	
			1			0 0020	MA	CONDITIONS UPON F	The state of the s	1,4					
			AM PN	1 KD	4-	17-2020	AM PM	lced: W	et Blue Ambient _	°C Upon	Receipt _		N/A		
MATRIX CODES		TURN-ARC		ME (TAT) - SURCHARG	ES		17.00 1 (10.00								_
DW-DRINKING WATER RW-REAGENT WATER				5 working days) 0%		IV* = Immediat	e Verbal: (3 w	orking days) 100%							
GW-GROUND WATER EW-EXPOSURE WATER  RV* = Rush Verbal: (5 workin  RW* = Rush Written; (5 workin					e Written: (3 working days) 125%			Samples received unannounced with less than 48 hours holding time remaining may							
SW-SURFACE WATER		- Rusii W	niten, (5 wo	iking days) 73%		STAT* = Less	D. D. M. Mark	CALL		be subject to additional					
PW-POOL WATER  WW-WASTE WATER  * Please call, expedited		d service not available for all testing			475			06-LO-F0435 Issue 7.0 Effective Date: 2018-10-11							
									eemed material alterations	00-LO-F0435 ISSUE	.u Effe	crive Date	2018	-10-11	