

## 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

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



## **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: 461537

Attn: Jasson Palmer Priority: Standard Written

116 South Main Status: Final

Fountain, CO 80817 PWS ID: CO0121275

	Sampl	e Information			
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4384264	Well 3 W2	537	08/09/19 15:00	Client	08/13/19 10:15
4384265	Well 3 W3	537	08/09/19 15:02	Client	08/13/19 10:15
4384266	Well 3 E1	537	08/09/19 15:04	Client	08/13/19 10:15
4384267	Well 3 E4	537	08/09/19 15:06	Client	08/13/19 10:15
4384268	Well 3 Raw	537	08/09/19 15:08	Client	08/13/19 10:15
4384269	Aga N2	537	08/09/19 15:20	Client	08/13/19 10:15
4384270	Aga N3	537	08/09/19 15:22	Client	08/13/19 10:15
4384271	Aga S1	537	08/09/19 15:24	Client	08/13/19 10:15
4384272	Aga S4	537	08/09/19 15:26	Client	08/13/19 10:15
4384273	Aga Raw	537	08/09/19 15:28	Client	08/13/19 10:15

### **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

08/19/2019

Date

Authorized Signature

Client Name:

City of Fountain

Report #: 461537

Title

Sampling Point: Well 3 W2 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	14	ng/L	08/16/19 06:50	08/17/19 15:35	4384264			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	4.8	ng/L	08/16/19 06:50	08/17/19 15:35	4384264			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	19	ng/L	08/16/19 06:50	08/17/19 15:35	4384264			
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 15:35	4384264			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	14	ng/L	08/16/19 06:50	08/17/19 15:35	4384264			
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	11	ng/L	08/16/19 06:50	08/17/19 15:35	4384264			

Sampling Point: Well 3 W3 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	5.9	ng/L	08/16/19 06:50	08/17/19 16:01	4384265			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:01	4384265			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	4.2	ng/L	08/16/19 06:50	08/17/19 16:01	4384265			
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:01	4384265			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:01	4384265			
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	3.1	ng/L	08/16/19 06:50	08/17/19 16:01	4384265			

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#		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:14	4384266		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:14	4384266		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:14	4384266		
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:14	4384266		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:14	4384266		
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:14	4384266		

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#			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:27	4384267			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:27	4384267			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:27	4384267			
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:27	4384267			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:27	4384267			
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:27	4384267			

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#		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	22	ng/L	08/16/19 06:50	08/17/19 16:40	4384268		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	7.5	ng/L	08/16/19 06:50	08/17/19 16:40	4384268		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	38	ng/L	08/16/19 06:50	08/17/19 16:40	4384268		
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:40	4384268		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	35	ng/L	08/16/19 06:50	08/17/19 16:40	4384268		
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	19	ng/L	08/16/19 06:50	08/17/19 16:40	4384268		

Sampling Point: Aga N2 PWS ID: CO0121275

	EEA Methods										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	18	ng/L	08/16/19 06:50	08/17/19 16:53	4384269		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	4.0	ng/L	08/16/19 06:50	08/17/19 16:53	4384269		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	10	ng/L	08/16/19 06:50	08/17/19 16:53	4384269		
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 16:53	4384269		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	3.5	ng/L	08/16/19 06:50	08/17/19 16:53	4384269		
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	7.8	ng/L	08/16/19 06:50	08/17/19 16:53	4384269		

Sampling Point: Aga N3 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	11	ng/L	08/16/19 06:50	08/17/19 17:06	4384270			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:06	4384270			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	3.2	ng/L	08/16/19 06:50	08/17/19 17:06	4384270			
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:06	4384270			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:06	4384270			
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	2.7	ng/L	08/16/19 06:50	08/17/19 17:06	4384270			

Sampling Point: Aga S1 PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:19	4384271			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:19	4384271			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:19	4384271			
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:19	4384271			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:19	4384271			
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:19	4384271			

Sampling Point: Aga S4 PWS ID: CO0121275

	EEA Methods										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:32	4384272		
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:32	4384272		
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:32	4384272		
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:32	4384272		
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:32	4384272		
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:32	4384272		

Sampling Point: Aga Raw PWS ID: CO0121275

	EEA Methods											
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#			
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537		2.0	31	ng/L	08/16/19 06:50	08/17/19 17:45	4384273			
375-85-9	Perfluoroheptanoic acid (PFHpA)	537		2.0	8.9	ng/L	08/16/19 06:50	08/17/19 17:45	4384273			
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537		2.0	44	ng/L	08/16/19 06:50	08/17/19 17:45	4384273			
375-95-1	Perfluorononanoic acid (PFNA)	537		2.0	< 2.0	ng/L	08/16/19 06:50	08/17/19 17:45	4384273			
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537		2.0	30	ng/L	08/16/19 06:50	08/17/19 17:45	4384273			
335-67-1	Perfluorooctanoic acid (PFOA)	537		2.0	25	ng/L	08/16/19 06:50	08/17/19 17:45	4384273			

<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.

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**



Order # 27/6/63 Batch # 44/537

www.EurofinsUS.com/Eaton					C	HAIN OF	CUST	ODY RECO	PD		Page	-	of	1	
Shaded area for EEA use only					IIAIN OI	0001	ODT KECO			1 age		OI .		5	
REPORT TO:	,			SAMPLER (Signature	1			PWS ID#	STATE (sample origin)	PROJECT NAME	P	D#			
Justin Moore	1-20-	72		been to	wolw		CO 8	5121275	(0	weekly					
BILL TO: C 1 1 C 5 C 1		0	Yes	No		ULATION SERVED	SOURCE WATER	Samples			S		ME		
CITY of ravitairs						well, 3	700 4.105			Ä	in in	L O			
116 5 Main St	Fant	an.Co	80817	MONITORING	12	X	1	5,000	Aga				CONTAINERS	CODE	TURNAROUND TIME
LAB Number COLLECTION  DATE TIME AM PM			SAMPLING SITE			TEST NAME		0111015 05111511	CHLORINATED YES NO			MATRIX	NAR		
			SAMI LING SITE		SAMPLE REMARKS			# OF			MAT	I E			
N 4384 264	8-9-19	3:00	X	well 3	W2			PFC			720	X	7	DW	_
2 265	8-9-19	3:02	X	Well 3	W3			PFC				X	2	DW	
3 266	4-9-19	3'04	X	Well 3	FI		-	PFC				×	2	ON	-
4 267	8-9-19	3:06	X	well 3	F 4			PEC				×	7	DW	SW
5 248	8-9-19	3.08	×	1410-11 3	RAW			PFC				×	2	DN	
6 269	9-9-19	3:20	X	Aga	1/2			PO				X	2	-	
7 270	9-9-19	3' 7-2	X	4	1/3			FC				×	1	02	
8 371	8-9-19	3.24	X	Agen	51			FC				X	2		-
9 272	8-9-19	3:26		1400	54		P	EC.				X	2	OW	
10 / 2/3	8-9-19	3:28	V		2AW		PI	FC				Y	1	00	-
11	1 , 1	1.60	^	1900	~1		1						-	Die	7
12		7													
13															
14															
RELINQUISHED BY:(Signature		DATE	TIME	RECEIVED BY:(Signa	ature)	DATE	TIME		ES THE RIGHT TO RETURN UN	USED PORTIONS OF NON-A	QUEOUS S	AMPLES TO	CLIENT		
John Unto		8-12-19	3:30				- 1	LAB COMMENTS							
DELINOLIICI ED DV/O:+	,		AM PM	DEOEMED DV (O:		DATE	AM PM								
RELINQUISHED BY:(Signature	)	DATE	TIME	RECEIVED BY:(Signa	ature)	DATE	TIME								
RELINQUISHED BY:(Signature	Λ.	DATE	AM PM	RECEIVED FOR LABO	DATODY BY-	DATE	AM PM			-					
TELITODICE DI .(Olgilature	,	DATE	TIME	A A	KATOKT BT.	DATE	INIL	CONDITIONS UPON RI	ECEIPT (check one):	28					
				MMast	75	113/1	1010	Iced. We	t/Blue Ambient	°C Upon F	Receipt _	_	N/A		
MATRIX CODES:		TURN-ARC	AM PM	(TAT) - SURCHARG	FS	1/1/	AM PM								
DW-DRINKING WATER RW-REAGENT WATER GW-GROUND WATER EW-EXPOSURE WATER RW* = Rush Verbal: (5 working				IV* = Immediat	e Verbal: (3 w	orking days) 100%									
						Written: (3 working days) 125%			Samples received unannounced with less						
					d, Holiday CALL			than 48 hours holding time remaining may be subject to additional charges.							
SW-SURFACE WATER PW-POOL WATER						STAT* = Less	than 48 hours	CALL		be subject to auditional	charges.				
WW-WASTE WATER Please call, 6		, expedite	d service not available	for all testing					06-LO-F0435 Issue 7	.0 Effe	ctive Date	: 2018-	10-11		