



Water Test Kit Pro Results Report

To: Stephen C Brown and Sonya Lunder

Date: February 11, 2023

Thanks for testing your water with us! This report is for Kit Nos. 2547, 2548, 2550 and 2551 sampled with unfiltered water from Fountain CO. PFAS detects are highlighted in yellow.

Kit# 2547 (Fountain - Unfiltered). We found 10 PFAS in water sample #2547, with a total concentration of 73.7 ppt. The other 45 PFAS tested for measured non-detect.

Kit# 2548 (Fountain - Unfiltered). We found 11 PFAS in water sample #2548, with a total concentration of 75.1 ppt. The other 44 PFAS tested for measured non-detect.

WTK_ID	WTK_PFAS_2547	WTK_PFAS_2548
Name	Stephen C Brown and Sonya Lunder	Stephen C Brown and Sonya Lunder
Sampling Location	Fountain, CO 80817 20560 Via Duran Pt	Fountain, CO 80817 10835 Via Vaquaro Pt
Filtered/Unfiltered	Unfiltered	Unfiltered
Sampling Date	2/1/23	2/1/23
Order ID	P-142049288	P-142049288
PFBA	4.1	4.4
PFPeA	4	4.4
PFHxA	5.6	5.5
PFHpA	2.2	2.5
PFOA	6.1	7.5
PFNA	< 1 ng/L	< 1 ng/L
PFDA	< 1 ng/L	< 1 ng/L
HFPO-DA (GenX)	< 2 ng/L	< 2 ng/L
PFBS	11.3	11.5
PFHxS	18.7	19.8
PFOS	11.6	11.7
Total PFAS (11 Compounds)	67.3	67.3
Additional PFAS		
FBSA	1.6	1.9
PFPrS	< 1 ng/L	< 1 ng/L
PFPeS	4.8	4.9
PFECHS	< 1 ng/L	1
Total PFAS (All Detected)	73.7	75.1

Values are in part per trillion (ppt). Limit of quantification is 1.0 ppt for all PFAS, other than GenX which is 2.0 ppt.

Our Lab Method



When the WTK is received by the lab, Cyclopure analytical chemists perform standard solid-phase extraction (SPE) to recover PFAS compounds collected in the DEXSORB extraction disc. The eluted PFAS sample is subsequently analyzed on a HPLC-MS/MS.



Cyclopure analytical chemists use isotope dilution methods to measure a total of 55 PFAS on HPLC-HRMS/MS, including all PFAS listed under EPA Methods 533, 537 and 1633 draft.

Colorado PFAS Regulations

Colorado regulates five PFAS, with Maximum Contaminant Levels set at 70 ppt for PFOA, PFOS, and PFNA combined; 700 ppt for PFHxS; and 400,000 ppt for PFBS.

Kit# 2550 (Fountain - Unfiltered). We found 11 PFAS in water sample #2550, with a total concentration of 72.2 ppt. The other 44 PFAS tested for measured non-detect.

Kit# 2551 (Fountain - Unfiltered). We found 12 PFAS in water sample #2551, with a total concentration of 80.5 ppt. The other 43 PFAS tested for measured non-detect.

WTK_ID	WTK_PFA5_2550	WTK_PFA5_2551
Name	Stephen C Brown and Sonya Lunder	Stephen C Brown and Sonya Lunder
Sampling Location	Fountain, CO 80817 20745 Camino Reposado Pt	Fountain, CO 80817 10031 Avenida Hermosa Vw
Filtered/Unfiltered	Unfiltered	Unfiltered
Sampling Date	2/1/23	2/1/23
Order ID	P-142049288	P-142049288
PFBA	2.1	2.1
PFPeA	3.9	4.3
PFHxA	5.4	6.4
PFHpA	2	2.5
PFOA	6.5	7.7
PFNA	< 1 ng/L	< 1 ng/L
PFDA	< 1 ng/L	< 1 ng/L
HFPO-DA (GenX)	< 2 ng/L	< 2 ng/L
PFBS	11.8	13.3
PFHxS	21.2	22.4
PFOS	10.8	12.5
Total PFAS (11 Compounds)	63.7	71.2
Additional PFAS		
FBSA	2.2	1.8
PFPrS	< 1 ng/L	1
PFPeS	5.3	5.5
PFECHS	1	1
Total PFAS (All Detected)	72.2	80.5

Values are in part per trillion (ppt). Limit of quantification is 1.0 ppt for all PFAS, other than GenX which is 2.0 ppt.

Our Lab Method



When the WTK is received by the lab, Cyclopure analytical chemists perform standard solid-phase extraction (SPE) to recover PFAS compounds collected in the DEXSORB extraction disc. The eluted PFAS sample is subsequently analyzed on a HPLC-MS/MS.



Cyclopure analytical chemists use isotope dilution methods to measure a total of 55 PFAS on HPLC-HRMS/MS, including all PFAS listed under EPA Methods 533, 537 and 1633 draft.

Colorado PFAS Regulations

Colorado regulates five PFAS, with [Maximum Contaminant Levels](#) set at 70 ppt for PFOA, PFOS, and PFNA combined; 700 ppt for PFHxS; and 400,000 ppt for PFBS.

PFAS in Wigwam Drinking water

Harmful Per- and Poly-fluoroalkyl Substances or “PFAS” have been measured in drinking water, rivers and wells near more than 300 military bases in the United States. Unfortunately this is a known problem in Fountain, Security and Widefield. Now new tests measure these chemicals in Wigwam water at levels that could also be dangerous to our health.

In February 2023, we collected samples of water from 4 homes in the Villa Casita sub-division, all getting water from Wigwam Water Company. The concentrations of PFAS ranged from 70 to 91 parts per trillion in the homes. Concentrations of the two most toxic chemicals, PFOS and PFOA were between 17 and 20 parts per trillion. For perspective, EPA recently announced that the “safe” amount of these chemicals was almost 1000-times lower than the amount measured. EPA is expected to announce new legal limits for PFOS and PFOA shortly. Some states have set their own limits on PFAS chemicals that would require immediate legal action.

PFAS levels in 4 Wigwam Homes, measurements are parts per trillion

	Total PFAS	PFOS+PFOA	PFHxS
20560 Via Duran Pt	70	18	19
10635 Via Vaquero Pt	75	19	20
20745 Camino Reposado Pt	91	17	21
10031 Avenida Hermosa Vw	81	20	22

PFAS chemicals can be detected in most people’s blood and internal organs in the United States and can be linked to a variety of health problems including kidney and testicular cancer, immune system damage, and high cholesterol. PFAS can damage internal organs, including the liver, kidney, pancreas and thyroid. PFAS exposures during pregnancy and childhood may permanently impair healthy development.

Fortunately there is federal and state funding available to help water systems with PFAS problems. In Colorado this includes money for emergency measures like home filters, support to help investigate and build expensive treatment systems.

**For more information contact Liz Rosenbaum, Fountain Valley Clean Water Coalition
719-661-5108 2LizRosenbaum@gmail.com Facebook: www.facebook.com/FVCWC**

Appendix.

PFAS detected by Cyclopure analytical methods.

Compound	Abbreviation	CAS#	EPA 1633
Perfluorobutanoic Acid	PFBA	375-22-4	Y
Perfluoropentanoic Acid	PFPeA	2706-90-3	Y
Perfluorohexanoic Acid	PFHxA	307-24-4	Y
Perfluoroheptanoic Acid	PFHpA	375-85-9	Y
Perfluorooctanoic Acid	PFOA	335-67-1	Y
Perfluorononanoic Acid	PFNA	375-95-1	Y
Perfluorodecanoic Acid	PFDA	335-76-2	Y
Perfluoroundecanoic Acid	PFUnA	2058-94-8	Y
Perfluorododecanoic Acid	PFDoA	307-55-1	Y
Perfluorotridecanoic Acid	PFTTrDA	72629-94-8	Y
Perfluorotetradecanoic Acid	PFTeA	376-06-7	Y
Perfluoropropane Sulfonic Acid	PFPrS	423-41-6	
Perfluorobutane Sulfonic Acid	PFBS	375-73-5	Y
Perfluoropentane Sulfonic Acid	PFPeS	2706-91-4	Y
Perfluorohexane Sulfonic Acid	PFHxS	355-46-4	Y
Perfluoroheptane Sulfonic Acid	PFHpS	375-92-8	Y
Perfluorooctane Sulfonic Acid	PFOS	1763-23-1	Y
Perfluorononane Sulfonic Acid	PFNS	474511-07-4	Y
Perfluorodecane Sulfonic Acid	PFDS	335-77-3	Y
Perfluorododecane Sulfonic Acid	PFDoS	79780-39-5	Y
4:2 Fluorotelomer Sulfonate	4:2 FTS	414911-30-1	Y
6:2 Fluorotelomer Sulfonate	6:2 FTS	425670-75-3	Y
8:2 Fluorotelomer Sulfonate	8:2 FTS	481071-78-7	Y
10:2 Fluorotelomer Sulfonate	10:2 FTS	120226-60-0	
Perfluorobutane Sulfonamide	FBSA	30334-69-1	
N-Methylperfluorobutanesulfonamide	MeFBSA	68298-12-4	
Perfluorohexane Sulfonamide	FHxSA	41997-13-1	
Perfluorooctane Sulfonamide	PFOSA	754-91-6	Y
Perfluorodecane Sulfonamide	FDSA	N/A	
N-Ethylperfluorooctane-1-Sulfonamide	NEtFOSA	4151-50-2	Y
N-Methylperfluorooctane-1-Sulfonamide	NMeFOSA	31506-32-8	Y
Perfluorooctane Sulfonamido Acetic Acid	FOSAA	2806-24-8	
N-Ethyl Perfluorooctane Sulfonamido Acetic Acid	NEtFOSAA	2991-50-6	Y
N-Methyl Perfluorooctane Sulfonamido Acetic Acid	NMeFOSAA	2355-31-9	Y
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7	Y
N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2	Y
Hexafluoropropylene Oxide Dimer Acid	HFPO-DA	13252-13-6	Y
4,8-Dioxa-3H-Perfluorononanoate	ADONA	919005-14-4	Y
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1	Y
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5	Y
Perfluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6	Y
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1	Y
11-Chloroeicosafluoro-3-Oxanonane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9	Y
Perfluoro(2-ethoxyethane) Sulfonic acid	PFEESA	113507-82-7	Y
Perfluoro-4-ethylcyclohexane Sulfonic Acid	PFECHS	646-83-3	
8-Chloroperfluoro-1-Octanesulfonic Acid	8Cl-PFOS	777011-38-8	
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5	Y
2h,2h,3h,3h-Perfluorooctanoic Acid	5:3FTCA	914637-49-3	Y
3-Perfluoroheptyl propanoic acid	7:3FTCA	812-70-4	Y
2H-Perfluoro-2-dodecenoic acid	FDUEA	70887-94-4	
2H-perfluoro-2-decenoic acid	FOUEA	70887-84-2	
Bis(perfluorohexyl)phosphinic acid	6:6PFPI	40143-77-9	
(Heptadecafluorooctyl) (tridecafluorohexyl) Phosphinic Acid	6:8PFPI	610800-34-5	
Bis(perfluorooctyl)phosphinic acid	8:8PFPI	40143-79-1	
N-(3-dimethylaminopropan-1-yl) perfluoro-1-hexanesulfonamide	N-AP-FHxSA	50598-28-2	

Useful Online Resources about PFAS in Colorado etc

Videos / Movies:

Dark Waters: PG13 about the PFOS in West Virginia and how this discovery led to a known global contamination

The Devil We Know: Documentary about the history of PFAS being created in labs by DuPont and tested on employees

CDPHE: Colorado Department of Public Health and Environment <https://cdphe.colorado.gov/>

MAPPING PROJECT IN COLORADO: <https://cdphe.colorado.gov/pfas-mapping>

PFAS results in CDPHE: <https://cdphe.colorado.gov/search?search=pfas>

Here you can find all the studies we have been working on since 2016 and how the testing has expanded out.

CO-SCOPE STUDY <https://www.co-scope.org/>

Study on Community Outcomes from PFAS Exposure

Conducted by the Colorado School of Public Health, ATSDR and CDC

Study has been extended to Sept 2023 ~ call and see if you qualify for this study, we need you

ATSDR: Agency for Toxic Substances and Disease Registry

The action arm of the CDC / Center for Disease Control

<https://www.atsdr.cdc.gov/pfas/activities/assessments.html>

EPA: Environmental Protection Agency: <https://www.epa.gov/pfas>

They are announcing lower MCL (Maximum contaminate levels) sometime March 2023

What does this mean in simpler terms in relation to where we live in Southern El Paso County?

PFAS = over 6,000 lab created chemicals

PFOA = Teflon / nonstick chemicals

PFOS = Scotchgard / water repellent

PFHxS = AFFF Aqueous Film Forming Foam / Toxic Fire Fighting Foam (Contains PFOA and PFOS)

This is what poisoned the water in Southern El Paso County

This is NOT the foam used to put out forest fires, AFFF puts out fuel fires

PFAS pretends to be a protein in our cells. Our cells search for a protein to make it complete. The cells are filtered through our kidneys, if it is a complete cell with a "protein" then it gets kicked back into our bodies to be used more / again. This is also called bioaccumulation. Our organs are trying to process cells with proteins and can't process a cell with PFAS. This causes illnesses. It doesn't happen to all of us, but enough of us to make this a deadly poisoning exposure.

When these chemicals are in products they are "helpful". The problem is when these chemicals get into areas we consume things like water and food. The danger zones are places making the PFAS chemicals, companies adding the chemicals to products (clothes and fast-food wrappers), places where the foam has gotten into water supplies, and smaller amounts in consumer goods we inhale or digest particles.

THERE IS A GRANT AVAILABLE TO ASSIST US/ Wigwam Water: Due March 31st through the CDPHE

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Fountain Valley Clean Water Coalition's fight since 2016: www.Facebook.com/FVCWC