



# Environmental Chemists, Inc.

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ANALYTICAL & CONSULTING CHEMISTS

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January 8, 2019

Brunswick County Public Utilities  
Post Office Box 249  
Bolivia, NC 28422  
Attn: Glenn Walker

Report #2018-20651  
Collected – December 13, 2018

Enclosed please find your analytical report.

Sincerely,

Tammy Duran  
Environmental Chemists, Inc.

**ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis**

Customer: Environmental Chemists      NLS Project: 313957

Project Description: PFCs by EPA 537 w/GenX

Project Title:      Template: 537PPTGENX      Printed: 01/07/2019 21:21

Sample: 1098894 #52076      Collected: 12/13/18      Analyzed: 01/03/19 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt		1	6.6	21	
perfluorohexanoic acid (PFHxA)	4.39	ppt		1	1.3	4.0	
perfluoro-2-propoxypropanoic acid (GenX)	2.4	ppt		1	0.73	2.3	
perfluorooheptanoic acid (PFHpA)	4.52	ppt		1	0.80	2.6	
perfluorohexanesulfonic acid (PFHxS)	[2.82]	ppt		1	2.8	8.8	J
perfluorooctanoic acid (PFOA)	4.04	ppt		1	1.2	3.9	
perfluorononanoic acid (PFNA)	ND	ppt		1	1.5	4.9	
perfluorooctanesulfonic acid (PFOS)	8.58	ppt		1	1.7	5.3	
perfluorodecanoic acid (PFDA)	ND	ppt		1	0.90	2.7	
perfluoroundecanoic acid (PFUnA)	ND	ppt		1	1.0	3.0	
perfluorododecanoic acid (PFDoA)	ND	ppt		1	1.9	6.1	
perfluorotridecanoic acid (PFTiDA)	ND	ppt		1	3.2	10	
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	2.8	8.9	
C13-PFHxA (SURR)	55.582%			1			SRS
C13-PFDA (SURR)	76.237%			1			S

**NOTES APPLICABLE TO THIS ANALYSIS:**

J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.

S = This compound is a surrogate used to evaluate the quality control of a method.

SR = Surrogate recovery was outside QC limits.

C13-PFHxA recovered below QC limits.

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt		1	6.6	21	
perfluorohexanoic acid (PFHxA)	6.88	ppt		1	1.3	4.0	
perfluoro-2-propoxypropanoic acid (GenX)	2.55	ppt		1	0.73	2.3	
perfluorooheptanoic acid (PFHpA)	6.52	ppt		1	0.80	2.6	
perfluorohexanesulfonic acid (PFHxS)	ND	ppt		1	2.8	8.8	
perfluorooctanoic acid (PFOA)	5.85	ppt		1	1.2	3.9	
perfluorononanoic acid (PFNA)	ND	ppt		1	1.5	4.9	
perfluorooctanesulfonic acid (PFOS)	10.1	ppt		1	1.7	5.3	
perfluorodecanoic acid (PFDA)	ND	ppt		1	0.90	2.7	
perfluoroundecanoic acid (PFUnA)	ND	ppt		1	1.0	3.0	
perfluorododecanoic acid (PFDoA)	ND	ppt		1	1.9	6.1	
perfluorotridecanoic acid (PFTiDA)	ND	ppt		1	3.2	10	
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	2.8	8.9	
C13-PFHxA (SURR)	59.574%			1			SRS
C13-PFDA (SURR)	81.544%			1			S

**NOTES APPLICABLE TO THIS ANALYSIS:**

S = This compound is a surrogate used to evaluate the quality control of a method.

SR = Surrogate recovery was outside QC limits.

C13-PFHxA recovered below QC limits.

Sample: 1098895 #52077      Collected: 12/13/18      Analyzed: 01/03/19 - Analytes: 13

**COLLECTION AND CHAIN OF CUSTODY**

Client: Brunswick County Water  
 ADDRESS: P.O. Box 249  
Bolivia, N.C. 28422

PROJECT NAME: \_\_\_\_\_  
 CONTACT NAME: Glenn Walker  
 REPORT TO: same  
 COPY TO: \_\_\_\_\_

REPORT NO: 18-20651  
 PO NO: \_\_\_\_\_  
 PHONE/FAX: \_\_\_\_\_  
 email: glenn.walker@brunswickcountync.gov

Sampled By: Bruy Benton SAMPLE TYPE: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge, Other: \_\_\_\_\_

Sample Identification	Collection			Sample Type	Composite or Grab	Container (P or G)	Chlorine mg/L	LAB ID NUMBER	PRESERVATION						ANALYSIS REQUESTED	
	Date	Time	Temp						NONE	HCL	H2SO4	HNO3	NAOH	THIO		OTHER
12-13-18-501	12-13-18	0950	18.5	Rain	C	P		52076								EPA 537 + GENX
12-13-18-E01	12-13-18	0950	18.5	DW	C	P		52077								
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										

Transfer Relinquished By: Bruy Benton Date/Time: 12-13-18  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Temperature when Received: 40 Accepted:  Rejected:   
 Delivered By: Bruy Benton Received By: [Signature]  
 Comments: \_\_\_\_\_ Resample Requested: \_\_\_\_\_  
 Date: 12-13-18 Time: 2009  
 TURNAROUND: \_\_\_\_\_