



Environmental Chemists, Inc.

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ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

December 1, 2018

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

Report #2018-17977
Collected – November 1, 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:** 311677
Project Description: PFCs by EPA 537 w/GenX
Project Title: Template: 537PPTGENX **Printed:** 11/30/2018 17:36

Sample: 1092155_45403 Collected: 11/01/18 Analyzed: 11/22/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt		1	6.6	21		
perfluorohexanoic acid (PFHxA)	8.85	ppt		1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	3.7	ppt		1	0.73	2.3		
perfluorohexanesulfonic acid (PFHxS)	9.27	ppt		1	0.80	2.6		
perfluorooctanoic acid (PFOA)	ND	ppt		1	2.8	8.8		
perfluorononanoic acid (PFNA)	6.63	ppt		1	1.2	3.9		
perfluorooctanesulfonic acid (PFOS)	ND	ppt		1	1.5	4.9		
perfluorodecanoic acid (PFDA)	10.1	ppt		1	1.7	5.3		
perfluoroundecanoic acid (PFUdA)	10.961	ppt		1	0.90	2.7		J
perfluorododecanoic acid (PFDoA)	ND	ppt		1	1.0	3.0		
perfluorotridecanoic acid (PFTDA)	ND	ppt		1	1.9	6.1		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	3.2	10		
C13-PFHxA (SURR)	57.729%			1	2.8	8.9		SRS
C13-PFDA (SURR)	82.62%			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.

Sample: 1092156_45404 Collected: 11/01/18 Analyzed: 11/21/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt		1	6.6	21		
perfluorohexanoic acid (PFHxA)	10.3	ppt		1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	3.69	ppt		1	0.73	2.3		
perfluorohexanesulfonic acid (PFHxS)	12	ppt		1	0.80	2.6		
perfluorooctanoic acid (PFOA)	[2.89]	ppt		1	2.8	8.8		J
perfluorononanoic acid (PFNA)	7.2	ppt		1	1.2	3.9		
perfluorooctanesulfonic acid (PFOS)	ND	ppt		1	1.5	4.9		
perfluorodecanoic acid (PFDA)	9.32	ppt		1	1.7	5.3		
perfluoroundecanoic acid (PFUdA)	[1.04]	ppt		1	0.90	2.7		J
perfluorododecanoic acid (PFDoA)	ND	ppt		1	1.0	3.0		
perfluorotridecanoic acid (PFTDA)	ND	ppt		1	1.9	6.1		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	3.2	10		
C13-PFHxA (SURR)	60.386%			1	2.8	8.9		SRS
C13-PFDA (SURR)	89.2%			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.



Analytical & Consulting Chemists

ENVIRONMENTAL CHEMISTS, INC

NCDEMR: DWQ CERTIFICATION # 94 NCDHHS: DLS CERTIFICATION # 37729

6602 Windmill Way Wilmington, NC 28405
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Info@environmentalchemists.com

COLLECTION AND CHAIN OF CUSTODY

CLIENT: <u>Barnswick County Water</u>	PROJECT NAME:	REPORT NO: <u>18-17977</u>
ADDRESS: <u>P.O. Box 249</u>	CONTACT NAME: <u>GLENN WALKER</u>	PO NO:
<u>BOLIVIA, N.C. 28422</u>	REPORT TO: <u>SAME</u>	PHONE/FAX:
	COPY TO:	email: <u>glenn.walker@barnswickcounty.gov</u>

Sampled By: Billie 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	
110118-SO1	11-1-18	0930	15.5°	RAW	C	P		45403							EPA 537 + GENX
110118-E01	11-1-18	0930	15.5°	DW	C	G		45404							/
					C	P									
					G	G									
					C	P									
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Temperature when Received: _____ Accepted: _____ Rejected: _____ Resample Requested: _____

Delivered By: _____ Received By: Shawna Turner Date: 11/1/18 Time: 4:19

Comments: _____ TURNAROUND: _____

Transfer Relinquished By: Billie Benton Date/Time: 11-1-18 Received By: _____ Date/Time: _____