



Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax
710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

September 4, 2018

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

Report #2018-12498
Collected – August 2, 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: 306264
 Project Description: PFCs by EPA 537 (w/GenX)
 Project Title: Template: 537PPTGENX Printed: 08/30/2018 12:01

Sample: 1075379_31419 Collected: 08/02/18 Analyzed: 08/28/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt		1	6.6	21		
perfluorohexanoic acid (PFHxA)	8.73	ppt		1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	10.9	ppt		1	0.73	2.3		
perfluorohexanoic acid (PFHxA)	9.58	ppt		1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[2.97]	ppt		1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	4.95	ppt		1	1.2	3.9		
perfluorononanoic acid (PFNA)	ND	ppt		1	1.5	4.9		
perfluorooctanesulfonic acid (PFOS)	8.64	ppt		1	1.7	5.3		
perfluorododecanoic acid (PFDA)	[1.5]	ppt		1	0.90	2.7		J
perfluoroundecanoic acid (PFUnA)	ND	ppt		1	1.0	3.0		
perfluorododecanoic acid (PFDoA)	ND	ppt		1	1.9	6.1		
perfluorotridecanoic acid (PFTDA)	ND	ppt		1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	2.8	8.9		
C13-PFHxA (SURR)	52.349%			1				SR S
C13-PFDA (SURR)	87.357%			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: 1075380_31420 Collected: 08/02/18 Analyzed: 08/28/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt		1	6.6	21		
perfluorohexanoic acid (PFHxA)	7.0	ppt		1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	7.0	ppt		1	0.73	2.3		
perfluorohexanoic acid (PFHxA)	7.46	ppt		1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[2.89]	ppt		1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	4.51	ppt		1	1.2	3.9		
perfluorononanoic acid (PFNA)	ND	ppt		1	1.5	4.9		
perfluorooctanesulfonic acid (PFOS)	8.65	ppt		1	1.7	5.3		
perfluorododecanoic acid (PFDA)	[1.62]	ppt		1	0.90	2.7		J
perfluoroundecanoic acid (PFUnA)	ND	ppt		1	1.0	3.0		
perfluorododecanoic acid (PFDoA)	ND	ppt		1	1.9	6.1		
perfluorotridecanoic acid (PFTDA)	ND	ppt		1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	2.8	8.9		
C13-PFHxA (SURR)	55.063%			1				SR S
C13-PFDA (SURR)	100.087%			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.

The PFOA branch isotope peak is included in the PFOA calculation per EPA directive. GenX analysis performed by Modified EPA Method 537.



Analytical & Consulting Chemists

ENVIRONMENTAL CHEMISTS, INC

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

0804 WILMINGTON WAY WILMINGTON, NC 28405
OFFICE: 910-392-0223 FAX 910-392-4424
Info@environmentalchemists.com

COLLECTION AND CHAIN OF CUSTODY

CLIENT: <u>Braunswick County Darter</u>	PROJECT NAME:	REPORT NO: <u>18-12498</u>
ADDRESS: <u>P.O. Box 249</u>	CONTACT NAME: <u>GLEN WALKER</u>	PO NO:
<u>BOLIVIA, N.C. 28422</u>	REPORT TO: <u>SAME</u>	PHONE/FAX:
	COPY TO:	email: <u>glenn.walker@braunswickcounty.gov</u>

Sampled By: BILLY 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		Zn acetate	
080218-S01	8-2-18	0935	28.7	RAW	C	(P)		3419								EPA 537 + GENX	
080218-E01	8-2-18	0935		DW	(G)	G		3420									
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											

Transfer	Relinquished By: <u>Billy Benton</u>	Date/Time: <u>8-2-18</u>	Received By:	Date/Time:
1.				
2.				

Temperature when Received: 41 Accepted: Rejected:

Delivered By: Billy Benton Received By: [Signature] Resample Requested: _____

Comments: _____ Date: 8-2-18 Time: 12:00

TURNAROUND: _____