



Environmental Chemists, Inc.

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ANALYTICAL & CONSULTING CHEMISTS

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November 10, 2018

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

Report #2018-16251
Collected – October 4, 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: 310303

Project Description: PFCs by EPA 537 w/GenX

Project Title: Template: 537PTGENX Printed: 10/29/2018 16:40

Sample: 1087550 41068 Collected: 10/04/18 Analyzed: 10/24/18 Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	1	6.6	21		
perfluorohexanoic acid (PFHxA)	10.8	ppt	1	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	4.84	ppt	1	1	0.73	2.3		
perfluorohexanoic acid (PFHpA)	9.76	ppt	1	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[3.57]	ppt	1	1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	8.42	ppt	1	1	1.2	3.9		
perfluorononanoic acid (PFNA)	[1.76]	ppt	1	1	1.5	4.9		J
perfluorooctanesulfonic acid (PFOS)	12.8	ppt	1	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	[1.34]	ppt	1	1	0.90	2.7		J
perfluoroundecanoic acid (PFUnA)	ND	ppt	1	1	1.0	3.0		
perfluorododecanoic acid (PFDoA)	ND	ppt	1	1	1.9	6.1		
perfluorotridecanoic acid (PFTriDA)	ND	ppt	1	1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	1	2.8	8.9		
C13-PFHxA (SURR)	60.322%			1				SR S
C13-PFDA (SURR)	82.719%			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: 1087549 41069 Collected: 10/04/18 Analyzed: 10/24/18 - Analyses: 13

ANALYTE NAME	RESULT	UNITS	MWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	1	6.6	21		
perfluorohexanoic acid (PFHXA)	10.5	ppt	1	1	1.3	4.0		
perfluoro-2-propoxypropionic acid (GenX)	5.71	ppt	1	1	0.73	2.3		
perfluoroheptanoic acid (PFHpA)	8.48	ppt	1	1	0.80	2.6		J
perfluorohexanesulfonic acid (PFHxS)	[3.37]	ppt	1	1	2.8	8.8		
perfluorooctanoic acid (PFOA)	6.44	ppt	1	1	1.2	3.9		
perfluorononanoic acid (PFNA)	ND	ppt	1	1	1.5	4.9		
perfluorooctanesulfonic acid (PFOS)	10.8	ppt	1	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	[0.94]	ppt	1	1	0.90	2.7		J
perfluoroundecanoic acid (PFUnA)	ND	ppt	1	1	1.0	3.0		
perfluorododecanoic acid (PFDoA)	ND	ppt	1	1	1.9	6.1		
perfluorotridecanoic acid (PFTriDA)	ND	ppt	1	1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	1	2.8	8.9		S
C13-PFHXA (SURR)	74.345%			1				S
C13-PFDA (SURR)	63.51%			1				SRS

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-PFDA recovered below QC limits.



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

COLLECTION AND CHAIN OF CUSTODY

CLIENT: Braunswick County Water PROJECT NAME: _____ REPORT NO: 18-16251

ADDRESS: P.O. Box 249 CONTACT NAME: GLENN WALKER PO NO: _____

BOLIVIA, N.C. 28422 REPORT TO: SAME PHONE/FAX: _____

Sampled By: Billy Beaton COPY TO: _____ email: glenn.walker@braunswickcounty.gov

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
100418-501	10-4-18	1035 AM	25.5 °C	RAW	(G)	G		41068								EPA 537 + GENX
100418-EO1	10-4-18	1035 AM	25.5 °C	OW	(G)	G		41069								
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