envirochem (SM)
ANALYTICAL & CONSULTING CHEMISTS

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January 31, 2018

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

Report #2017-00517

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: 293361**

Project Description: GenX / EPA 537

Project Title: **Template: 537PPTGENX** **Printed: 01/29/2018 15:41**

Sample: 1037409 01302 Collected: 01/11/18 Analyzed: 01/25/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	6.6	21		
perfluorohexanoic acid (PFHxA)	24.5	ppt	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	32.1	ppt	1	0.73	2.3		
perfluoroheptanoic acid (PFHpA)	26.6	ppt	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[6.45]	ppt	1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	10.5	ppt	1	1.2	3.9		
perfluorononanoic acid (PFNA)	[2.09]	ppt	1	1.5	4.9		J
perfluorooctanesulfonic acid (PFOS)	10.9	ppt	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	[1.57]	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 (PFTrDA)	ND	ppt	1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	2.8	8.9		
C13-PFHxA (SURR)	84.879%						S
C13-PFDA (SURR)	84.024%						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.

Sample: 1037410 01303 Collected: 01/11/18 Analyzed: 01/25/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	6.6	21		
perfluorohexanoic acid (PFHxA)	24.1	ppt	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	29.1	ppt	1	0.73	2.3		
perfluoroheptanoic acid (PFHpA)	24.8	ppt	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[6.05]	ppt	1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	8.71	ppt	1	1.2	3.9		
perfluorononanoic acid (PFNA)	[1.88]	ppt	1	1.5	4.9		J
perfluorooctanesulfonic acid (PFOS)	10.2	ppt	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	[1.33]	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 (PFTrDA)	ND	ppt	1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	2.8	8.9		
C13-PFHxA (SURR)	90.055%						S
C13-PFDA (SURR)	89.437%						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.

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

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COLLECTION AND CHAIN OF CUSTODY

CLIENT: Brunswick County PUD	PROJECT NAME: Gen X + Compounds	REPORT NO:	18-00517
ADDRESS: PO Box 249	CONTACT NAME: Glenn Walker	PO NO:	
Bolivia, NC 28422	REPORT TO: Glenn Walker	PHONE/FAX:	910-371-3490
	COPY TO:	email:	glenn.walker@brunswickcountync.gov

Sampled By: Billy Benton

SAMPLE TYPE: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge, Other:

Sample Identification	Collection Date	Collection Time	Collection Temp	Sample Type	Composite or Grab	Container (P or G)	Chlorine mg/L	LAB ID NUMBER	NONE	HCL	H2SO4	HNO3	NAOH	THIO	OTHER	ANALYSIS REQUESTED
011118-S01	1-11-18	12:55	7.9°c	RAW	C	(P)										
					(G)	G		1302								EPA 537 + GenX
011118-E01	1-11-18	1300		DW	C	(P)										
					(G)	G		1303								|
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										

Transfer	Relinquished By:	Date/Time	Received By:	Date/Time
1.	Billy Benton (signature)	1-11-18		
2.				

Temperature when Received: ________ Accepted: ________ Rejected: ________ Resample Requested: ________

Delivered By: ________ Received By: (signature)

Comments: ________ Date: 1-11-18 Time: 245p

TURNAROUND: ________