envirochem (SM)

ANALYTICAL & CONSULTING CHEMISTS

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November 10, 2017

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

Report #2017-16671

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: 289918**

Project Description: GenX Samples

Project Title: **Template: 537PPTGENX** **Printed: 11/10/2017 10:07**

Sample: 1027502 40357 Collected: 10/26/17 Analyzed: 11/09/17 - Analytes: 13

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	6.6	21		
perfluorohexanoic acid (PFHxA)	31.4	ppt	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	39.5	ppt	1	0.73	2.3		
perfluoroheptanoic acid (PFHpA)	27.6	ppt	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[7.34]	ppt	1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	13.6	ppt	1	1.2	3.9		
perfluorononanoic acid (PFNA)	[3.37]	ppt	1	1.5	4.9		J
perfluorooctanesulfonic acid (PFOS)	12	ppt	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	[2.55]	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)	104.093%						S
C13-PFDA (SURR)	88.394%						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: 1027503 40358 Collected: 10/26/17 Analyzed: 11/09/17 - Analytes: 13

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	6.6	21		
perfluorohexanoic acid (PFHxA)	29.5	ppt	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	38.4	ppt	1	0.73	2.3		
perfluoroheptanoic acid (PFHpA)	20.7	ppt	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[3.72]	ppt	1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	8.31	ppt	1	1.2	3.9		
perfluorononanoic acid (PFNA)	[1.74]	ppt	1	1.5	4.9		J
perfluorooctanesulfonic acid (PFOS)	[4.96]	ppt	1	1.7	5.3		J
perfluorodecanoic acid (PFDA)	[1.1]	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)	119.844%						S
C13-PFDA (SURR)	100.634%						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.

ENVIRONMENTAL CHEMISTS, INC
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COLLECTION AND CHAIN OF CUSTODY

CLIENT:	Brunswick County PUD	**PROJECT NAME:**	GenX + Compounds	**REPORT NO:**	17-166671
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: Thaddeus Hill

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	Preservation: NONE	HCL	H2SO4	HNO3	NAOH	THIO	OTHER	ANALYSIS REQUESTED
102617-S01	10-26-17		22	Raw	C	P		40357								EPA 537 + GenX
					G	G										
102617-E01	10-26-17			DW	C	P		40358								
					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										
					C	P										
					G	G										

Transfer	Relinquished By:	Date/Time	Received By:	Date/Time
1.				
2.				

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

Delivered By: [signature] **Received By:** R. Kornegay **Date:** 10/27/17 **Time:** 1100

Comments: ________ **TURNAROUND:**