envirochem (SM)

ANALYTICAL & CONSULTING CHEMISTS

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June 4, 2018

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

Report #2018-07451
Collected – May 10, 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: 299906

Project Description: PFCs by EPA 537 (w/GenX)

Project Title: Template: 537PPT2GENX Printed: 06/04/2018 09:50

Sample: 1056639 18580 Collected: 05/10/18 Analyzed: 05/26/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	5.1	16		
perfluorohexanoic acid (PFHxA)	22.9	ppt	1	0.81	2.6		
perfluoro-2-propoxypropanoic acid (GenX)	9.56	ppt	1	0.56	1.8		
perfluoroheptanoic acid (PFHpA)	19.2	ppt	1	0.38	1.2		
perfluorohexanesulfonic acid (PFHxS)	5.13	ppt	1	1.1	3.4		
perfluorooctanoic acid (PFOA)	14.4	ppt	1	0.81	2.6		
perfluorononanoic acid (PFNA)	2.39	ppt	1	0.70	2.2		
perfluorooctanesulfonic acid (PFOS)	15.7	ppt	1	1.9	6.1		
perfluorodecanoic acid (PFDA)	3.04	ppt	1	0.89	2.8		
perfluoroundecanoic acid (PFUnA)	ND	ppt	1	0.89	2.8		
perfluorododecanoic acid (PFDoA)	ND	ppt	1	0.96	3.1		
perfluorotridecanoic acid (PFTrDA)	ND	ppt	1	0.76	2.4		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	0.81	2.6		
C13-PFHxA (SURR)	80.43%		1				S
C13-PFDA (SURR)	84.461%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1056641 18581 Collected: 05/10/18 Analyzed: 05/26/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	5.1	16		
perfluorohexanoic acid (PFHxA)	19.1	ppt	1	0.81	2.6		
perfluoro-2-propoxypropanoic acid (GenX)	8.83	ppt	1	0.56	1.8		
perfluoroheptanoic acid (PFHpA)	15.4	ppt	1	0.38	1.2		
perfluorohexanesulfonic acid (PFHxS)	4.16	ppt	1	1.1	3.4		
perfluorooctanoic acid (PFOA)	10.8	ppt	1	0.81	2.6		
perfluorononanoic acid (PFNA)	[1.93]	ppt	1	0.70	2.2		J
perfluorooctanesulfonic acid (PFOS)	13	ppt	1	1.9	6.1		
perfluorodecanoic acid (PFDA)	[2.64]	ppt	1	0.89	2.8		J
perfluoroundecanoic acid (PFUnA)	ND	ppt	1	0.89	2.8		
perfluorododecanoic acid (PFDoA)	ND	ppt	1	0.96	3.1		
perfluorotridecanoic acid (PFTrDA)	ND	ppt	1	0.76	2.4		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	0.81	2.6		
C13-PFHxA (SURR)	78.984%		1				S
C13-PFDA (SURR)	85.563%		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.

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

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

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COLLECTION AND CHAIN OF CUSTODY

CLIENT: BRUNSWICK COUNTY WATER	PROJECT NAME:	REPORT NO: 2018 - 07951
ADDRESS: P.O. BOX 249	CONTACT NAME: GLENN WALKER	PO NO:
BOLIVIA, N.C. 28422	REPORT TO: SAME	PHONE/FAX:
	COPY TO:	email: glenn.walker@brunswickcounty.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	Preservation: NONE	HCL	H2SO4	HNO3	NAOH	THIO	Zn acetate	OTHER / ANALYSIS REQUESTED
051018-S01				RAW	C	(P)		18580								EPA 537 + GENX
	5/10/18	0940	21.3°C		(G)	G										
051018-E01				DW	C	(P)		18581								
	5/10/18	0940	21.3°C		(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.	BILLY BENTON	5/10/18		
2.				

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

Delivered By: BILLY BENTON Received By: [illegible] Date: 5/10/18 Time: 1408

Comments: ________ TURNAROUND: ________