envirochem (SM)
ANALYTICAL & CONSULTING CHEMISTS

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

info@environmentalchemists.com

July 20, 2018

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

Report #2018-09961
Collected – June 21, 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: 302829

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

Project Title: Template: 537PPT2GENX Printed: 07/18/2018 15:43

Sample: 1065298 25055 Collected: 06/21/18 Analyzed: 07/12/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	[3.86]	ppt		1	3.6	11		J
perfluorohexanoic acid (PFHxA)	12	ppt		1	0.83	2.6		
perfluoro-2-propoxypropanoic acid (GenX)	24.3	ppt		1	0.62	2.0		
perfluoroheptanoic acid (PFHpA)	10.8	ppt		1	0.45	1.4		
perfluorohexanesulfonic acid (PFHxS)	6.67	ppt		1	1.3	4.1		
perfluorooctanoic acid (PFOA)	7.82	ppt		1	0.70	2.2		
perfluorononanoic acid (PFNA)	[1.9]	ppt		1	1.3	4.1		J
perfluorooctanesulfonic acid (PFOS)	14.7	ppt		1	1.5	4.7		
perfluorodecanoic acid (PFDA)	[1.44]	ppt		1	1.2	3.8		J
perfluoroundecanoic acid (PFUnA)	ND	ppt		1	1.2	3.7		
perfluorododecanoic acid (PFDoA)	ND	ppt		1	0.95	3.0		
perfluorotridecanoic acid (PFTrDA)	ND	ppt		1	0.97	3.1		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	0.88	2.8		
C13-PFHxA (SURR)	84.523%			1				S
C13-PFDA (SURR)	86.114%			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.

Sample: 1065299 25056 Collected: 06/21/18 Analyzed: 07/12/18 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	[3.66]	ppt		1	3.6	11		J
perfluorohexanoic acid (PFHxA)	12.9	ppt		1	0.83	2.6		
perfluoro-2-propoxypropanoic acid (GenX)	19.7	ppt		1	0.62	2.0		
perfluoroheptanoic acid (PFHpA)	11.1	ppt		1	0.45	1.4		
perfluorohexanesulfonic acid (PFHxS)	4.79	ppt		1	1.3	4.1		
perfluorooctanoic acid (PFOA)	7.4	ppt		1	0.70	2.2		
perfluorononanoic acid (PFNA)	[1.68]	ppt		1	1.3	4.1		J
perfluorooctanesulfonic acid (PFOS)	11	ppt		1	1.5	4.7		
perfluorodecanoic acid (PFDA)	[1.41]	ppt		1	1.2	3.8		J
perfluoroundecanoic acid (PFUnA)	ND	ppt		1	1.2	3.7		
perfluorododecanoic acid (PFDoA)	ND	ppt		1	0.95	3.0		
perfluorotridecanoic acid (PFTrDA)	ND	ppt		1	0.97	3.1		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	0.88	2.8		
C13-PFHxA (SURR)	79.83%			1				S
C13-PFDA (SURR)	81.845%			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.

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

6602 Windmill Way Wilmington, NC 28405
OFFICE: 910-392-0223 FAX 910-392-4424
info@environmentalchemists.com

COLLECTION AND CHAIN OF CUSTODY

18-09961

CLIENT: Brunswick County Water	PROJECT NAME:	REPORT NO:
ADDRESS: P.O. Box 249	CONTACT NAME: Glenn Walker	PO NO: ~~18-025055~~
Bolivia, N.C. 28422	REPORT TO: Same	PHONE/FAX:
	COPY TO:	email: glenn.walker@brunswickcounty.gov

Sampled By: Thad 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	Zn acetate	OTHER ANALYSIS REQUESTED
062118-S01	6/21/18	11:09 AM	27.2	RAW	C	(P)		25055								EPA 537 + GENX
					(G)	G										
062118-E01	6/21/18	11:00 AM	27.2	DW	C	(P)		25056								
					(G)	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
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					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			
2.				

Temperature when Received: 3.6° Accepted: ✓ Rejected: Resample Requested:
Delivered By: Billy Benton Received By: [signature] Date: 6-21-18 Time: 1:10p.
Comments: TURNAROUND: