



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

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

October 27, 2017

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

Report #2017-15909

Enclosed please find your analytical report.

Sincerely,

Tammy Duran
Environmental Chemists, Inc.

Sample: 1024689 17-38431 Collected: 10/12/17 Analyzed: 10/25/17 Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	[6.86]	ppt		1	5.1	16		J
perfluorohexanoic acid (PFHxA)	41.5	ppt		1	0.81	2.6		BD
perfluoro-2-propoxypropionic acid (GenX)	26.2	ppt		1	0.56	1.8		
perfluorohexanoic acid (PFHxA)	37.4	ppt		1	0.38	1.2		
perfluorooctanoic acid (PFHxS)	7.5	ppt		1	1.1	3.4		
perfluorooctanoic acid (PFOA)	21.8	ppt		1	0.81	2.6		
perfluorononanoic acid (PFNA)	6.18	ppt		1	0.70	2.2		
perfluorooctanesulfonic acid (PFOS)	16	ppt		1	1.9	6.1		
perfluorodecanoic acid (PFDA)	3.63	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 (PFTriDA)	ND	ppt		1	0.76	2.4		
perfluorotetradecanoic acid (PFTA)	ND	ppt		1	0.81	2.6		
C13-PFHxA (SURR)	74.593%							S
C13-PFDA (SURR)	81.712%							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.

BD = Compound was detected in the laboratory method blank.

perfluorohexanoic acid (PFHxA) detected at .87 ppt.

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

ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis

Customer: Environmental Chemists NLS Project: 289199

Project Description: GenX and Other PFCs

Project Title: Template: 537PPT2GENX Printed: 10/26/2017 15:33

Sample: 1024690_17_38432 Collected: 10/12/17 Analyzed: 10/25/17 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	NID	ppt		1	5.1	16		
perfluorohexanoic acid (PFHxA)	35.8	ppt		1	0.81	2.6		BD
perfluoro-2-propoxypropionic acid (GenX)	25.9	ppt		1	0.56	1.8		
perfluoroheptanoic acid (PFHpA)	30.2	ppt		1	0.38	1.2		
perfluorohexanesulfonic acid (PFHxS)	5.18	ppt		1	1.1	3.4		
perfluorooctanoic acid (PFOA)	17	ppt		1	0.81	2.6		
perfluorononanoic acid (PFNA)	3.97	ppt		1	0.70	2.2		
perfluorooctanesulfonic acid (PFOS)	9.19	ppt		1	1.9	6.1		
perfluorodecanoic acid (PFDA)	[2.12]	ppt		1	0.89	2.8		J
perfluoroundecanoic acid (PFUnA)	NID	ppt		1	0.89	2.8		
perfluorododecanoic acid (PFDoA)	NID	ppt		1	0.96	3.1		
perfluorotridecanoic acid (PFTiDA)	NID	ppt		1	0.76	2.4		
perfluorotetradecanoic acid (PFTA)	NID	ppt		1	0.81	2.6		
C13-PFHxA (SURR)	72.8%							S
C13-PFDA (SURR)	79.738%							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.

BD = Compound was detected in the laboratory method blank.

perfluorohexanoic acid (PFHxA) detected at: 87 ppt.

COLLECTION AND CHAIN OF CUSTODY

CLIENT: Brunswick County PLSD
 ADDRESS: PO Box 249
 Behavior, NC 28422
 PROJECT NAME: Gen X Compounds
 CONTACT NAME: Glenn Walker
 REPORT TO: Glenn Walker
 COPY TO:
 REPORT NO: 17-15909
 PO NO:
 PHONE/FAX: 910-371-3490
 email: glenn.walker@brunswickcountync.gov

Sampled By: Bruce Bowers
 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	SONE	NAOH	PH		OTHER
1D1217-501	10-12-17	0920	25	RW	C	G		38431								EPA 537 + Gen X
1D1217-E01	10-12-17	0935		FIN	C	G		38432								
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										
					C	P										
					G	G										

Transfer: Relinquished By: [Signature] Date/Time: 10/12/17
 Accepted: [Signature] Received By: [Signature] Date: 10/12/17
 Rejected: [Signature]
 Resample Requested: [Signature] Date: 10/12/17 Time: 5330
 Delivered By: [Signature] Comments: TURNAROUND: