



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

July 12, 2017

Brunswick Regional Water & Sewer
Post Office Box 2230
Leland, NC 28451
Attn: Bob Walker

Enclosed please find you analytical reports.

Sincerely,

A handwritten signature in cursive script that reads "Tammy Duran".

Tammy Duran

Environmental Chemists, Inc.

ANALYTICAL REPORT

NORTHERN LAKE SERVICE, INC.
 Analytical Laboratory and Environmental Services
 400 North Lake Avenue - Crandon, WI 54520
 Ph: (715)-478-2777 Fax: (715)-478-3060

Client: Environmental Chemists
 Attn: Ray Porter
 6602 Windmill Way
 Wilmington, NC 28405

WDNR Laboratory ID No. 721026460
 WDATCP Laboratory Certification No. 105-330
 EPA Laboratory ID No. WI000034
 Printed: 07/11/17 Page 1 of 1
 NLS Project: 282232
 NLS Customer: 96259
 Fax: 910 392 4424 Phone: 910 392 0223

Project: PFCs with GenX 17-21641

17-21641 NLS ID: 1001510

COC: 192202c:1 Matrix: DW

Collected: 06/27/17 12:00 Received: 06/30/17

Parameter

Solid Phase Extraction by EPA Method 537
 GenX and PFCs by EPA 537

17-21641-FB NLS ID: 1001511

COC: 192202c:1 Matrix: FB

Collected: 06/27/17 12:00 Received: 06/30/17

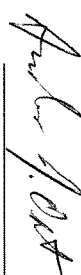
Parameter

Solid Phase Extraction by EPA Method 537
 GenX and PFCs by EPA 537

Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
yes					07/04/17	EPA 537	721026460
see attached					07/05/17	EPA 537	721026460
yes					07/06/17	EPA 537	721026460
see attached					07/07/17	EPA 537	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.
 ND = Not Detected (< LOD) LOD = Limit of Detection NA = Not Applicable
 DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 LOQ = Limit of Quantitation 1000 ug/L = 1 mg/L
 MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
 R. T. Krueger
 President

ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis
Customer: Environmental Chemists NLS Project: 282232
Project Description: PFCs with GenX
Project Title: 17-21641
Template: 537PPTGENX Printed: 07/11/2017 13:06

Sample: 1001510 17-21641-1 Collected: 06/27/17 Analyzed: 07/05/17 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	1	6.6	21		
perfluorohexanoic acid (PFHxA)	5.82	ppt	1	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	66.5	ppt	1	1	0.73	2.3		
perfluorohexanoic acid (PFHxA)	4.01	ppt	1	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	[3.11]	ppt	1	1	2.8	8.8		J
perfluorooctanoic acid (PFOA)	4.34	ppt	1	1	1.2	3.9		
perfluorooctanoic acid (PFNA)	ND	ppt	1	1	1.5	4.9		
perfluorooctanesulfonic acid (PFOS)	5.55	ppt	1	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	ND	ppt	1	1	0.90	2.7		
perfluoroundecanoic acid (PFUnA)	ND	ppt	1	1	1.0	3.0		
perfluorododecanoic acid (PFDDA)	ND	ppt	1	1	1.9	6.1		
perfluorotridecanoic acid (PFTDA)	ND	ppt	1	1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	1	2.8	8.9		
C13-PFHxA (SURR)	72.912%							S
C13-PFDA (SURR)	88.722%							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: 1001511 17-21641-FB Collected: 06/27/17 Analyzed: 07/07/17 - Analytes: 13

ANALYTE NAME	RESULT	UNITS	WWB	DIL	LOD	LOQ	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	1	1	6.6	21		
perfluorohexanoic acid (PFHxA)	ND	ppt	1	1	1.3	4.0		
perfluoro-2-propoxypropanoic acid (GenX)	ND	ppt	1	1	0.73	2.3		
perfluorohexanoic acid (PFHxA)	ND	ppt	1	1	0.80	2.6		
perfluorohexanesulfonic acid (PFHxS)	ND	ppt	1	1	2.8	8.8		
perfluorooctanoic acid (PFOA)	ND	ppt	1	1	1.2	3.9		
perfluorooctanoic acid (PFNA)	ND	ppt	1	1	1.5	4.9		
perfluorooctanesulfonic acid (PFOS)	ND	ppt	1	1	1.7	5.3		
perfluorodecanoic acid (PFDA)	ND	ppt	1	1	0.90	2.7		
perfluoroundecanoic acid (PFUnA)	ND	ppt	1	1	1.0	3.0		
perfluorododecanoic acid (PFDDA)	ND	ppt	1	1	1.9	6.1		
perfluorotridecanoic acid (PFTDA)	ND	ppt	1	1	3.2	10		
perfluorotetradecanoic acid (PFTA)	ND	ppt	1	1	2.8	8.9		
C13-PFHxA (SURR)	103.569%							S
C13-PFDA (SURR)	116.942%							S

NOTES APPLICABLE TO THIS ANALYSIS:

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.



Analytical & Consulting Chemists

ENVIRONMENTAL CHEMISTS, INC

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

CLIENT: H2GO	PROJECT NAME:	REPORT NO:
ADDRESS: PO Box 2230	CONTACT NAME: Bob Walker	PO NO:
Leleod NC 28451	REPORT TO: Bob Walker	PHONE/FAX: 910-371-9949/910-371-6444
	COPY TO: Bob Walker	email: bwalker@h2goonline.com

Sampled By: _____ 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	HNO3	NAOH	THIO		Zn acetate
001	6/27/17	12:04		G	C	P										EPA 537 include GenX
					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. Scott Lewis	Scott Lewis	6/27/17 12:04		
2.				

Temperature when Received: 4.1°C Accepted: Rejected: Resample Requested: _____
 Delivered By: Shawna Received By: Ryan Date: 6/27/17 Time: 12:55
 Comments: _____ TURNAROUND: _____