



Environmental Chemists, Inc.

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ANALYTICAL & CONSULTING CHEMISTS

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October 19, 2017

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

Report #2017-15503

Enclosed please find your analytical report.

Sincerely,

Tammy Duran
Environmental Chemists, Inc.

| ANALYTE NAME | RESULT | UNITS | WWB | DIL | LOD | LOQ | MCL | Note |
|--|---------|-------|-----|-----|------|-----|-----|------|
| perfluorobutanesulfonic acid (PFBS) | ND | ppt | 1 | 1 | 6.6 | 21 | | |
| perfluorohexanoic acid (PFHxA) | 31.6 | ppt | 1 | 1 | 1.3 | 4.0 | | |
| perfluoro-2-propoxypropanoic acid (GenX) | 30.1 | ppt | 1 | 1 | 0.73 | 2.3 | | |
| perfluorheptanoic acid (PFHpA) | 28.4 | ppt | 1 | 1 | 0.80 | 2.6 | | |
| perfluorohexanesulfonic acid (PFHxS) | [5.45] | ppt | 1 | 1 | 2.8 | 8.8 | | J |
| perfluorooctanoic acid (PFOA) | 15.3 | ppt | 1 | 1 | 1.2 | 3.9 | | |
| perfluorononanoic acid (PFNA) | [3.41] | ppt | 1 | 1 | 1.5 | 4.9 | | J |
| perfluorooctanesulfonic acid (PFOS) | 11.1 | ppt | 1 | 1 | 1.7 | 5.3 | | |
| perfluorodecanoic acid (PFDA) | [2.03] | ppt | 1 | 1 | 0.90 | 2.7 | | J |
| perfluoroundecanoic acid (PFUnA) | ND | ppt | 1 | 1 | 1.0 | 3.0 | | |
| perfluorododecanoic acid (PFDoA) | ND | ppt | 1 | 1 | 1.9 | 6.1 | | |
| perfluorotridecanoic acid (PFTriDA) | ND | ppt | 1 | 1 | 3.2 | 10 | | |
| perfluorotetradecanoic acid (PFTA) | ND | ppt | 1 | 1 | 2.8 | 8.9 | | |
| C13-PFHxA (SURR) | 75.04% | | | | | | | S |
| C13-PFDA (SURR) | 84.684% | | | | | | | 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.

ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis
 Customer: Environmental Chemists NLS Project: 288648
 Project Description: GenX and Other PFCs by EPA537
 Project Title: Template: 537PPTGENX Printed: 10/18/2017 13:44
 Sample: 1022998 37378 Collected: 10/05/17 Analyzed: 10/13/17 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) | 30.7 | ppt | 1 | 1 | 1.3 | 4.0 | | |
| perfluoro-2-propoxypropanoic acid (GenX) | 25.9 | ppt | 1 | 1 | 0.73 | 2.3 | | |
| perfluorheptanoic acid (PFHpA) | 30.1 | ppt | 1 | 1 | 0.80 | 2.6 | | |
| perfluorohexanesulfonic acid (PFHxS) | [6.06] | ppt | 1 | 1 | 2.8 | 8.8 | | J |
| perfluorooctanoic acid (PFOA) | 16.4 | ppt | 1 | 1 | 1.2 | 3.9 | | |
| perfluorononanoic acid (PFNA) | [3.56] | ppt | 1 | 1 | 1.5 | 4.9 | | J |
| perfluorooctanesulfonic acid (PFOS) | 12.5 | ppt | 1 | 1 | 1.7 | 5.3 | | |
| perfluorodecanoic acid (PFDA) | [2.17] | ppt | 1 | 1 | 0.90 | 2.7 | | J |
| perfluoroundecanoic acid (PFUnA) | ND | ppt | 1 | 1 | 1.0 | 3.0 | | |
| perfluorododecanoic acid (PFDoA) | ND | ppt | 1 | 1 | 1.9 | 6.1 | | |
| perfluorotridecanoic acid (PFTriDA) | ND | ppt | 1 | 1 | 3.2 | 10 | | |
| perfluorotetradecanoic acid (PFTA) | ND | ppt | 1 | 1 | 2.8 | 8.9 | | |
| C13-PFHxA (SURR) | 74.064% | | | | | | | S |
| C13-PFDA (SURR) | 75.213% | | | | | | | 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.

CLIENT: Brunswick County PWD PROJECT NAME: Gen X Compounds REPORT NO:

ADDRESS: PO Box 249 CONTACT NAME: Glenn Walker PO NO:

Belvia, NC 28422 REPORT TO: Glenn Walker PHONE/FAX: 910-371-3490

Sampled By: Bill Beard COPY TO: email: glenn.walker@brunswickcounty.nc.gov

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 | THO | | OTHER |
| 10517 - E01 | 10/5/17 | 1025 AM | 24.8°C | C | (P) | G | | 37377 | | | | | | | | E01 537 + Gen X |
| 10517 - S01 | 10/5/17 | 1025 AM | 24.8°C | C | (P) | G | | 37378 | | | | | | | | / |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |
| | | | | C | (P) | G | | | | | | | | | | |

Temperature when Received: 10 Accepted: Resample Requested:

Delivered By: Received By: G. K. Green Date: 10/5/17 Time: 1540

Comments: TURNAROUND: