Crystal Clear

This is the twenty first of continuing annual reports from the City of Athens Utilities Water Department to our customers on the drinking water we provide for your use. It covers year 2018. In summary, your water is clean, crystal clear and pathogen free. We think the taste is excellent and hope that you agree; but, we'd like to hear from you if otherwise.

The sources of drinking water (both tap water and bottled water) include rainfall, rivers, lakes, streams, springs and wells. As water travels over the surface of the land or through the ground it dissolves naturally occurring minerals and radioactive material. Water can also pick up substances resulting from the presence of animals or from human activities. This report addresses all of the sampling and analyses done during calendar year 2018 to ascertain the presence or absence of contaminants within the drinking water delivered to your tap. Most of the substances we are required to test for are never found. The few regulated substances actually found in your drinking water and others we routinely test for are all well below the limits that have been established by EPA or ADEM. Based on a study by ADEM, with the approval of EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for those two contaminants is not required because there is no identified likelihood that they would ever exist in Athens water.

Personal Invitation

After reading this report, if you have any questions or concerns about your drinking water, please feel free to contact Brian Daniel, Water Treatment Plant Superintendent at 256-233-8773 or Frank Eskridge, Water Department Manager at 256-232-1440, or the City of Athens Utilities, Post Office Box 1089, Athens, AL 35612.

The Athens Water Department is a division of The City of Athens Utilities. Athens Utilities is owned by the City of Athens and governance is provided by the City Council which meets the second and fourth Monday evenings of each month at 5:30 P.M. in the Athens City Hall located at 200 Hobbs Street West.

Water Source and Treatment

The water treated and distributed by The City of Athens Utilities is drawn from Elk River at a point across from the old TVA fish hatchery just downstream from the Easterferry Road Bridge. This water comes from the Cumberland Plateau area of Tennessee where there are two TVA lakes (Tims Ford and Woods) that guarantee a minimum flow in the river. Although there are treated wastewater discharges in Elk River from several towns and small cities (e.g., Tullahoma, Winchester, Fayetteville and Pulaski) in Tennessee, there are no heavy industrial discharges in the watershed and most of the water is runoff from forest and farm lands. Additionally, there is very little row cropping in the Elk River watershed; so, the heavy amounts of herbicide and pesticide that are common along the Tennessee River valley are not found. Because of these watershed characteristics, few of the regulated contaminants are normally found in the water of Elk River.

TVA has completed a detailed Source Water Survey covering all of the areas along Elk River upstream from our raw water intake. No areas of immediate problem or concern were identified. This study was approved by ADEM and published in 2002.

The Athens Water Treatment Plant is located northwest of the City on Section Line Road about midway between Alabama Highway 99 and Easterferry Road. Water treatment at this plant includes chemical coagulation, settling, multi-media filtration and disinfection. The disinfectant is chlorine. It is added to the filtered water which then circulates through large contact chambers to ensure a complete pathogen kill before any water is pumped to customers. Prior to the chlorine contact chambers, we also add fluoride to help combat tooth decay and lime or caustic soda to raise the pH. The pH level helps reduce the corrosivity of water and also enhances its taste.

Filtration

Filtration is the primary treatment barrier used to ensure clean, safe drinking water. Turbidity is the basic measure of filtration effectiveness. Turbidity is the degree of light reflection and refraction caused by suspended and colloidal (cloudiness) particles and natural coloration in water. Turbidity measures everything from very

muddy water down to the smallest microscopic particles. Raw, untreated water from Elk River has turbidity ranging from 4.0-10.0 at the lowest and up to 600.0 at the highest during heavy rainfall events. Turbidity over 50.0 is visibly dirty water. Filtered water turbidity is currently regulated at a maximum of 0.300. The Alabama Department of Environmental Management (ADEM) currently recommends that filtered water turbidity be no greater than 0.200 - - this is ultra clean.

At the Athens Water Treatment Plant there are six large anthracite/sand filters. Each has a continuously recording effluent turbidity monitor. **During 2018, the highest turbidity recorded at anytime on any of the filters was 0.128 ntu. 99.8% of the water produced during the year had turbidity less than 0.100. Of the filtered water produced for the year, 61.9% had turbidity less than 0.050. 100% of the water produced was below turbidity limits. This is crystal clear water and continues the long standing tradition of Athens Water.**

Pathogens and Disinfection

Pathogens are disease causing organisms, i.e., bacteria, viruses, and parasitic cysts. The two cysts of primary concern are Giardia and Cryptosporidium (Crypto). These derive from wild and domestic animal wastes that wash into the water during rainstorms. Cyst removal is generally accomplished by ultra clean filtration such as provided to your drinking water. The ultimate control of bacterial and viral pathogens is chlorine disinfection. Disinfection is fully accomplished when a free, chlorine residual is achieved and can be maintained in the treated water.

Athens water is treated with chlorine until a free residual of at least 1.0 is achieved before any water is released to customers. Additionally, forty samples are collected each month from around the distribution system to be tested for bacteria and free chlorine residual. The bacterial test is for total coliform bacteria which are naturally present in our environment and are generally associated with man and animals. Their presence is indicative of a possible problem with pathogens. The absence of coliform bacteria indicates perfect disinfection of the water.

During 2018, out of 483 samples, there was 1 sample that indicated the presence of coliform bacteria. As a community water system, if a positive total coliform sample is found, repeat samples are collected within 24 hours after notification of the positive results. Three (3) repeat samples were collected; one (1) at the original positive site, one (1) within five connections upstream and one (1) within five connections downstream. All three (3) repeat samples were tested and showed NO coliform bacteria present. Also, a chlorine residual is performed on each sample with the lowest recorded chlorine residual being 0.20 mg/L. This meets EPA's maximum contaminant level goal (MCLG) of zero bacteria in any sample. The currently acceptable MCL is bacteria present in none of the monthly samples. The current regulation for microbiological monitoring requirements can be found in ADEM's (Alabama Department of Environmental Management) Division 7 regulations **(335-7-2-.07).** All available data indicate that Athens water fully meets all standards for bacterial and viral pathogens.

WATER QUALITY MEASUREMENT - 2018: SUBSTANCES MEASURED

Contaminant*	MCL	Amount Detected	Contaminant*	MCL	Amount Detected
Bacteriological			Volatile Organics		
Total Coliform Bacteria	<5%	0	1,1,1-Trichloroethane (ppb)	200	<0.005
Radiological			1,1,2-Trichloroethane (ppb)	5	<0.005
			1,1-Dichloroethene (ppb)	7	<0.005
Alpha, Gross (pCi/l)	15	0.4+/-0.5	1,2,4-Trichlorobenzene (ppb)	70	<0.005
Radium-228 (pCi/l)	5	0.0+/-0.6	1,2-Dichloroethane (ppb)	5	<0.005
			1,2-Dichloropropane (ppb)	5	<0.005
Inorganic			Benzene (ppb)	5	<0.005
Aluminum, as Al (ppm)	0.2	<0.05	Carbon Tetrachloride (ppb)	5	<0.005
Antimony, as Sb (ppb)	6	<5	Cis-1,2-Dichloroethene (ppb)	70	<0.005
Arsenic, as As (ppb)	10	<5	Ethylbenzene (ppb)	700	<0.005
Barium, as Ba (ppm)	2	<0.050	Methylene Chloride (ppb)	5	<0.005
Beryllium, as Be (ppb)	4	<1	Chlorobenzene (ppb)	100	<0.005
Cadmium, as CD (ppb)	5	<1	1,2-Dichlorobenzene (ppb)	600	<0.005
Calcium, as Ca (ppm)	N/A	32.4	1,4-Dichlorobenzene (ppb)	75	<0.005
Carbon Dioxide	N/A	2.7	Styrene (ppb)	100	<0.005
Chloride, as Cl (ppm)	250	12.2	Trichloroethene (ppb)	5	<0.005
Chromium, as Cr (ppb)	100	<50	Tetrachloroethene (ppb)	5	<0.005
Copper, as Cu (ppm)	1	<0.05	Toluene (ppb)	1000	<0.005
Cyanide, Total (ppb)	200	<10	trans-1,2-Dichloroethene (ppb)	100	<0.005
Fluoride, as F (ppm)	4	<0.25	Vinyl Chloride (ppb)	2	<0.005
Iron, as Fe (ppm)	0.3	<0.05	Xylenes (ppm)	10	<0.005
Lead, as Pb (ppb)	15	<5	Unregulated Contaminants (ppb)		
Magnesium, as Mg (ppm)	N/A	3.53	3-Hydroxycarbofuran	N/A	<0.02
Mangsnese, as Mn (ppm)	0.05	<0.010	Aldicarb	N/A	<0.02
MBAS (ppm)	0.5	<0.05	Aldicarb Sulfone	N/A	<0.02
Mercury, as Hg (ppb)	N/A	<1	Aldicarb Sulfoxide	N/A	<0.02
Nickel, as Ni (ppm)	0.1	<0.05	Aldrin	N/A	<0.001
Nitrogen, Nitrate, as NO3-N (ppm)	10	0.78	Butachlor	N/A	<0.01
Nitrogen, Nitrite, as NO2-N (ppm)	1	<0.1	Carbaryl	N/A	<0.02
Selenium, as Se (ppb)	50	<10	Dicamba	N/A	<0.002
Silver, as Ag (ppm)	0.1	<0.05	Dieldrin	N/A	<0.001
Sodium, as Na (ppm)	N/A	1.16	Methomyl	N/A	<0.02
Sulfate, as SO4 (ppm)	500	5.74	Metolachlor	N/A	<0.01
Thallium, as Tl (ppb)	2	<1	Metribuzin	N/A	<0.002
Zinc, as Zn (ppm)	5	<0.05	Propachlor	N/A	<0.002
			1,1-Dichloropropene	N/A	<0.50
			1,1,1,2-Tetrachloroethane	N/A	<0.50
			1,1,2,2-Tetrachloroethane	N/A	<0.50
			1,1-Dichloroethane	N/A	<0.50
Synthetic Organics (Pesticides & Herbicides)			1,2,3-Trichlorobenzene	N/A	<0.50
2,4,5-TP (Silvex) (ppb)	50	<0.1	1,2,3-Trichloropropane	N/A	<0.50
2,4-D (ppb)	70	<1.0	1,2,4-Trimethylbenzene	N/A	<0.50
Alachlor (ppb)	2	<1.0	1,3-Dichloropropane	N/A	<0.50
Atrazine (ppb)	3	<1.0	1,3-Dichloropropene	N/A	<0.50
Benzo(a)pyrene (ppb)	0.2	<0.1	1,3,5-Trimethylbenzene	N/A	<0.50
Carbofuran (ppb)	40	<20	2,2-Dichloropropane	N/A	<0.50
Chlordane (ppb)	2	<1.0	Bromobenzene	N/A	<0.50
Dalapon (ppb)	200	<2.0	Bromochloromethane	N/A	<0.50
1,2-Dibromo-3-chloropropane (ppt)	200	<10.0	Bromodichloromethane	N/A	1.32
bis-(2-Ethylhexyl)adipate (ppb)	400	<2.0	Bromoform	N/A	<0.50
Bis-(2-ethylhexyl)phthlates (ppb)	6	<2.0	Bromomethane	N/A	<0.50
Dinoseb (ppb)	7	<2.0	Chloroethane	N/A	<0.50
Diquat (ppb)	20	<10.0	Chloroform	N/A	5.72
1,2-Dibromoethane (ppt)	50	<10.0	Chloromethane	N/A	<0.50
Endothall (ppb)	100	<50	Dibromochloromethane	N/A	<0.50
Endrin (ppb)	2	<0.2	Dibromomethane	N/A	<0.50
Glyphosate (ppb)	700	<250.0	Dichlorodifluoromethane	N/A	<0.50
Heptachlor (ppt)	400	<100.0	Hexachlorobutadiene	N/A	<0.50
Heptachlor epoxide (ppt)	200	<100.0	Isopropylbenzene	N/A	<0.50
Hexachlorobenzene (ppb)	1	<0.5	1,3-Dichlorobenzene	N/A	<0.50
Hexachlorocyclopentadiene (ppb)	50	<10.0	Methyl tert-butyl ether	N/A	<2.00
gamma-BHC (ppt)	200	<100.0	n-Butylbenzene	N/A	<0.50
Methoxychlor (ppb)	40	<2.0	Naphthalene	N/A	<0.50
Oxamyl (ppb)	200	<20.0	n-Propylbenzene	N/A	<0.50
Total Polychlorinated Biphenyls (ppt)	500	<250.0	2-Chlorotoluene	N/A	<0.50
Pentachlorophenol (ppb)	1	<0.1	4-Chlorotoluene	N/A	<0.50
Picloram (ppb)	500	<2.0	4-Isopropyltoluene	N/A	<0.50
Simazine (ppb)	4	<2.0	sec-Butylbenzene	N/A	<0.50
Toxaphene (ppb)	3	<1.0	tert-Butylbenzene	N/A	<0.50
			Trichlorofluoromethane	N/A	<0.50

Action Level (AL) - The concentration of a contaminant that triggers treatment or other requirement a water system shall follow.
Quarterly samples being conducted to insure no additional treatment to remove it is needed
N/A=MCL not yet established; but, monitoring required by EPA. ug/l= micrograms per liter TT= Treatment Technique
ppm = parts per million ppb = parts per billion ppt = parts per trillion ppq = parts per quadrillion
MCLG = Maximum Contaminant Level Goal MFL = million fibers per liter
mg/l = milligrams per liter or parts per million mrem/year =millirems per year (a measure of radiation absorbed by the body)
pCi/l = picocuries per liter (a measure of radioactivity)

Radiological Contamination

Athens Water is required to test for Gross Alpha emitters and Radium-228. These come from the erosion of natural mineral deposits. Sampling in 2012 showed Gross Alpha emitters levels to be 0.4+/-0.5 pCi/L and Radium-228 levels to be 0.0+/-0.6 pCi/L. This means that there really may not be any significant radiological activity in our water; but, if there is, it is well below the Gross Alpha MCL of 15 pCi/L and the Radium-228 MCL of 5 pCi/L. Per ADEM Division 7 Regulations **(335-7-2-.08(4)(b)1)** Athens Water is required to sample for Alpha emitters

and Radium 228 every nine years with the next sample to be taken in 2021.

Taste and Usability

Athens Water also routinely measures several other parameters that pertain to the taste and usability of our product. These are pH, alkalinity, hardness and total dissolved solids. We strive to maintain pH of 7.5 or higher. Actual field sampling indicates fluctuations throughout the system from 7.5 to 7.9. The alkalinity is usually between 50 and 80, which is a fairly sweet tasting water. The hardness will range from 120 to 145, which is a moderately hard water. ADEM requires total dissolved solids below 500 mg/L. Our's range from 100 to 200.

Lead and Copper

Lead and copper are metals that have been of concern in drinking water for many years because of their chronic toxicity, especially for young children. In areas of active mining, these metals are often found at high concentrations in surface water. That is not the case in Limestone County. These metals in drinking water here derive from corrosion of lead and copper piping. Lead solder has been banned for several years and we have vigorously pursued the removal of all lead piping from our system. Copper piping, however, is fairly common in homes and Athens Water has in the past used copper for some service lines.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Athens Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The corrosion of copper and lead is effectively controlled by maintaining water pH at 7.5 to 7.7, which we consistently do. This pH level also controls the corrosion of iron and steel piping and the growth of sludge/corrosion filled lines will eventually be resolved by maintaining the proper pH level in our water.

Routine monitoring of the water in our distribution system has shown no significant levels of either lead or copper; however, we are also required to investigate and report the impacts of water on household plumbing and the resultant levels of lead and copper in the water our customers actually consume from their tap. ADEM, along with EPA, requires sampling for lead and copper every three years. The required monitoring from consumer taps during 2016 showed a lead concentration of <0.005 mg/L to 0.013 mg/L; the MCL is 0.015 mg/L. The required monitoring from consumer taps during 2016 showed copper concentration from <0.005 mg/L to 0.176 mg/L; the MCL is 1.3 mg/L. The next required monitoring will be in 2019.

Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)

TTHM's and HAA5's result from the reaction of chlorine with organic compounds during disinfection. These two groups of organic compounds are generally referred to as disinfection by-products. Some of the specific compounds have been linked to cancer while others have been associated with birth defects. The health concern is long term, continuous exposure at levels above the MCL.

The regulatory control for TTHM's and HAA5's is an MCL standard of 80 for TTHM's and 60 for HAA5's. Compliance with the regulations is determined by the Operational Evaluation Level (OEL). The OEL calculation is made from the sum of the two previous quarter's results

WATER QUALITY MEASUREMENT - 2018: SUBSTANCES DETECTED

Contaminant*	MCLG	MCL	Amount Detected	Likely Source of Contamination
Aluminum (ppm)	N/A	0.2	<0.050	Naturally occurring; also, an element of water treatment chemical.
Barium	2	2	<0.05	Discharge of drilling wastes; discharge from metals refineries; erosion of natural deposits.
Bromodichloromethane	N/A	N/A	1.32 µg/L	By-product of drinking water chlorination for disinfection.
Calcium (ppm)	N/A	N/A	32.4	Naturally occurring; also, an element of water treatment chemical.
Chloride (ppm)	N/A	250	12.2	Naturally occurring; also, an element of water treatment chemical.
Chloroform	N/A	N/A	5.72	By-product of drinking water chlorination for disinfection.
Copper (ppm)	AL=1.3	1.3	<0.050	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride	4	4	<0.25	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizers and aluminum factories.
Magnesium	N/A	N/A	3.53	Naturally occurring in limestone based soils.
Nitrate	10	10	0.78	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	N/A	N/A	1.16	Naturally occurring; also, an element of water treatment chemical.
Sulfate (ppm)	N/A	500	5.74	Naturally occurring; also, an element of water treatment chemical.
Zinc (ppm)	N/A	5	<0.05	Naturally occurring in limestone based soils.

Location	TTHM OEL = 80		HAA5 OEL = 60	
	Range	Average	Range	Average
Piney Chapel	23.7 - 68.4	45.1	27.6 - 64.9	42.4
Long Cove Rd	31.6 - 69.9	47.2	30.5 - 55.8	39.4
Nuclear Plant Road	26.8 - 80.2	47.8	27.6 - 39.3	33.5
MacBeth St	26.0 - 69.5	44.5	27.9 - 49.4	37.0
Treatment Plant	11.4 - 30.5	19.9	12.9 - 49.1	22.8
MM - Tillman Mill	11.8 - 39.4	22.4	14.3 - 55.8	25.2
Total System	11.4 - 80.2	37.8	12.9 - 64.9	33.4

* Contaminant - a substance in water which at high enough levels is known to pose a health risk to humans.

Operational Evaluational Level - Levels are checked every Quarter with the OEL determined by the following calculation: $\frac{\text{(sum of the two previous Quarters results)+(twice the current Quarters results)}}{4}$

Compliance with regulations is determined by the OEL.

plus twice the current quarter's results, divided by 4. Our objective is to have no sampling at any time or location, exceed 50 for TTHM's and 40 for HAA5's. Data for the year are listed at the bottom of the preceding page.

Unregulated Contaminant Monitoring

In September 2013 and March 2014 the Environmental Protection Agency (EPA) required states to perform sampling for select chemicals/compounds. This sampling was done to ascertain current levels of these components in water supplies over the entire United States in an effort to determine if future regulatory limits may need to be instituted. This program was the third round of such testing and was titled Unregulated Contaminant Monitoring 3 (UCMR3). Athens Water, as well as other potable water suppliers in North Alabama, participated in this testing. Listed below are the contaminants for which we tested and the results found in our source water.

WATER QUALITY MEASUREMENT – 2017 UCMR3 RESULTS

Contaminant	September 2013 Amount Detected*	March 2014 Amount Detected*
Chlorate	< 20 µg/L	< 20 µg/L
chromium-6	0.07 µg/L	0.06 µg/L
1,1-dichloroethane	<0.03 µg/L	<0.03 µg/L
1,2,3-trichloropropane	<0.03 µg/L	<0.03 µg/L
1,3-butadiene	<0.1 µg/L	<0.1 µg/L
bromochloromethane (Halon 1011)	<0.06 µg/L	<0.06 µg/L
bromomethane	<0.2 µg/L	<0.2 µg/L
chlorodifluoromethane (HCFC-22)	<0.08 µg/L	<0.08 µg/L
chloromethane	<0.2 µg/L	<0.2 µg/L
1,4-dioxane	<0.07 µg/L	<0.07 µg/L
chromium (total)	<0.2 µg/L	<0.2 µg/L
cobalt	<1 µg/L	<1 µg/L
molybdenum	<1 µg/L	<1 µg/L
strontium	110 µg/L	95 µg/L
vanadium	0.9 µg/L	<0.2 µg/L
Perfluoronated Compounds		
perfluorobutane sulfonic acid (PFBS)	<0.09 µg/L	<0.09 µg/L
perfluoroheptanoic acid (PFHpA)	<0.01 µg/L	<0.01 µg/L
perfluorohexane sulfonic acid ((PFHxS)	<0.03 µg/L	<0.03 µg/L
perfluorononanoic acid (PFNA)	<0.02 µg/L	<0.02 µg/L
perfluorooctanoic acid (PFOA)	<0.02 µg/L	<0.02 µg/L
perfluorooctane sulfonic acid (PFOS)	<0.04 µg/L	<0.04 µg/L

* items listed as "<x.xx" means there was not a measurable amount with the current technology

CRITICAL ALERT

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromized persons – such as persons undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants - can be particularly at risk from infection, especially that caused by Cryptosporidium. These people should seek advice about drinking water from their doctors.

Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infections, especially by Cryptosporidium, and other information about safe drinking water are available from EPA's Safe Drinking Water Hotline at 800-426-4791.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

The result of this UCMR3 sampling resulted in EPA establishing a Health Advisory level for PFOS and PFOA compounds. Athens Water source water sampling results were below these limits and therefore no additional treatment to remove these compounds was required. Based on the current Health Advisory level established by EPA for these compounds, our source water, once treated and filtered as it has been for many years, creates a very safe crystal clear drinking water.

The newest round of testing, UCMR4, began in May 2018 and continues thru February 2019. This round of UCMR testing has not been completed yet. Listed below are the partial results received to date for the contaminants tested.

WATER QUALITY MEASUREMENT – 2018 UCMR4 PARTIAL RESULTS

Contaminant	May 2018 Amount Detected*	August 2018 Amount Detected*	November 2018 Amount Detected**	February 2019 Amount Detected**
Metals				
Germanium (µg/L)	<0.300	<0.300	<0.300	
Manganese (µg/L)	7.8	2.1	7.74	
Pesticides				
alpha-Hexachlorocyclohexane (µg/L)	<0.01000	<0.0100	<0.0100	
Chlorpyrifos (µg/L)	<0.03000	<0.0300	<0.0300	
Dimethipin (µg/L)	<0.200	<0.200	<0.200	
Ethoprop (µg/L)	<0.0500	<0.0300	<0.0300	
Oxyfluorfen (µg/L)	<0.0500	<0.0500	<0.0500	
Profenofos (µg/L)	<0.300	<0.300	<0.300	
Tebuconazole (µg/L)	<0.200	<0.200	<0.200	
total Permethrin (cis- & trans-) (µg/L)	<0.0400	<0.0400	<0.0400	
Tribufos (µg/L)	<0.0700	<0.0700	<0.0700	
Semivolatile Chemicals (sVOC)				
Butylated hydroxyanisole (µg/L)	<0.0300	<0.0300		
o-Toluidine (µg/L)	<0.00700	<0.00700		
Quinoline (µg/L)	<0.0200	<0.0200		
Alcohols				
1-Butanol (µg/L)	<2.00	<2.00	<2.00	
2-Methoxyethanol (µg/L)	<0.400	<0.400	<0.400	
2-Propen-1-o1 (µg/L)	<0.500	<0.500	<0.500	
Indicators				
Total Organic Carbon (TOC) (µg/L)	1550	2200	5910	
Bromide (µg/L)	24.9	27.8	<20.0	

Haloacetic Acids (HAA) - May 2018	Piney Chapel	Long Cove Rd	Nuclear Plant Rd	MacBeth St
Bromochloroacetic acid (µg/L)	3.08	2.39	2.30	2.76
Bromodichloroacetic acid (µg/L)	2.49	1.96	1.87	2.03
Chlorodibromoacetic acid (µg/L)	<0.300	<0.300	<0.300	<0.300
Dibromoacetic acid (µg/L)	0.312	<0.300	<0.300	<0.300
Dichloroacetic acid (µg/L)	24.6	16.4	16.5	20.5
Monobromoacetic acid (µg/L)	<0.300	<0.300	<0.300	<0.300
Monochloroacetic acid (µg/L)	<2.00	2.24	2.07	<2.00
Tribromoacetic acid (µg/L)	<2.00	<2.00	<2.00	<2.00
Trichloroacetic acid (µg/L)	22.1	13.2	13.3	16.6
Haloacetic Acids (HAA) - August 2018	**Piney Chapel**	**Long Cove Rd**	**Nuclear Plant Rd**	**MacBeth St**
Bromochloroacetic acid (µg/L)	5.18	2.46	2.46	4.71
Bromodichloroacetic acid (µg/L)	4.5	2.75	4.5	4.96
Chlorodibromoacetic acid (µg/L)	0.371	<0.300	0.337	0.455
Dibromoacetic acid (µg/L)	0.0315	<0.300	<0.300	0.322
Dichloroacetic acid (µg/L)	28.6	32.1	15.9	23.2
Monobromoacetic acid (µg/L)	<0.300	<0.300	<0.300	<0.300
Monochloroacetic acid (µg/L)	2.71	3.35	<2.00	2.33
Tribromoacetic acid (µg/L)	<2.00	<2.00	<2.00	<2.00
Trichloroacetic acid (µg/L)	34.8	43.8	38.8	29.3
Haloacetic Acids (HAA) - November 2018	**Piney Chapel**	**Long Cove Rd**	**Nuclear Plant Rd**	**MacBeth St**
Bromochloroacetic acid (µg/L)	2.71	3.41	2.94	2.83
Bromodichloroacetic acid (µg/L)	2.84	3.39	3.01	2.82
Chlorodibromoacetic acid (µg/L)	<0.300	0.334	<0.300	<0.300
Dibromoacetic acid (µg/L)	<0.300	<0.300	<0.300	<0.300
Dichloroacetic acid (µg/L)	14.5	18.4	16.8	15.5
Monobromoacetic acid (µg/L)	<0.300	<0.300	<0.300	<0.300
Monochloroacetic acid (µg/L)	<2.00	<2.00	<2.00	<2.00
Tribromoacetic acid (µg/L)	<2.00	<2.00	<2.00	<2.00
Trichloroacetic acid (µg/L)	15.1	18.0	16.3	15.5

Cyanotoxins		
Anatoxin-a (µg/L)	<0.0300	Samples were taken every two weeks beginning May 2018 through August 2018 for a total of 8 samples. Every sample resulted in a less than measurable amount.
Cylindrospermopsin (µg/L)	<0.0900	
Total Microcystins & Nodularins (µg/L)	<0.300	

* items listed as "<x.xx" means there was not a measurable amount with the current technology

*Samples have been with only partial results to date (January 2019)

**This set of samples are scheuled for February 2019

Future rounds of Unregulated Contaminant Monitoring will occur. During these future rounds, EPA will be choosing different chemicals/compounds for which to sample. Results of these future rounds will be posted in this Consumer Confidence Report.