

Annual Drinking Water Quality Report

PELHAM WATER WORKS

We are very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

Pelham Water Works serves you with water from two different sources; five wells that draw from the Copper Ridge Dolomite and Longview Limestone Aquifers and purchased water from Shelby County Water Services whose sources are the Talladega/Shelby Water Treatment Plant (TSWTP) and the Shelby South Water Treatment Plant (SWTP). The water treated at these facilities comes from the Coosa River/Lay Lake. We treat our well water by adding chlorine at each well before distribution and treatment of the water purchase from Shelby County Water Services is typical of surface water plants which

includes flocculation, sedimentation, filtration and the addition of copper sulfate, potassium permanganate, hydrogen peroxide, powdered activated carbon, chlorine dioxide, alum-based coagulant, ferric-based coagulant, calcium carbonate, granular activated carbon, chlorine for disinfection and fluoride for dental health.

Pelham Water Works has completed its Source Water Assessment Program as required by the Alabama Department of Environmental Management and a copy is available for viewing at the water works office.

If you have any questions about this report or concerning your water utility, please contact the City of Pelham's Public Works Director, Mr. Eddy Jowers at Pelham Water Works, 205-620-6413. We want our valued customers to be informed about their water utility. If you want to attend any of our regularly scheduled City Council Meetings, they are on the 1st and 3rd Monday of each month. Mayor Gary W. Waters is the Superintendent of the Water Works and the City Council members serve as the Water Board.

The Council Members include Rick Hayes, Ron Scott, Beth McMillan, Maurice Mercer and Mildred Lanier.

Pelham Water Works routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st of 2017, unless otherwise noted. Certain contaminants are monitored less frequently than annually. The data presented is from the most recent testing done in accordance with applicable regulations. However, if the data is more than five years old it is not a requirement to be included.

Based on a study conducted by ADEM with the approval of EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for any of these contaminants was not required

DEFINITIONS

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND)
laboratory analysis indicates that the constituent is not present.

Not Tested (NT)
no testing was required during this monitoring period.

Parts per million (ppm) or Milligrams per liter (mg/l)
one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter
one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l)
One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l)
One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L)
Picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr)
Measure of radiation absorbed by the body.

Million Fibers per Liter (MFL)
Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU)
Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT)
A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL)
The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)
The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level Goal or MRDLG
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level or MRDL
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

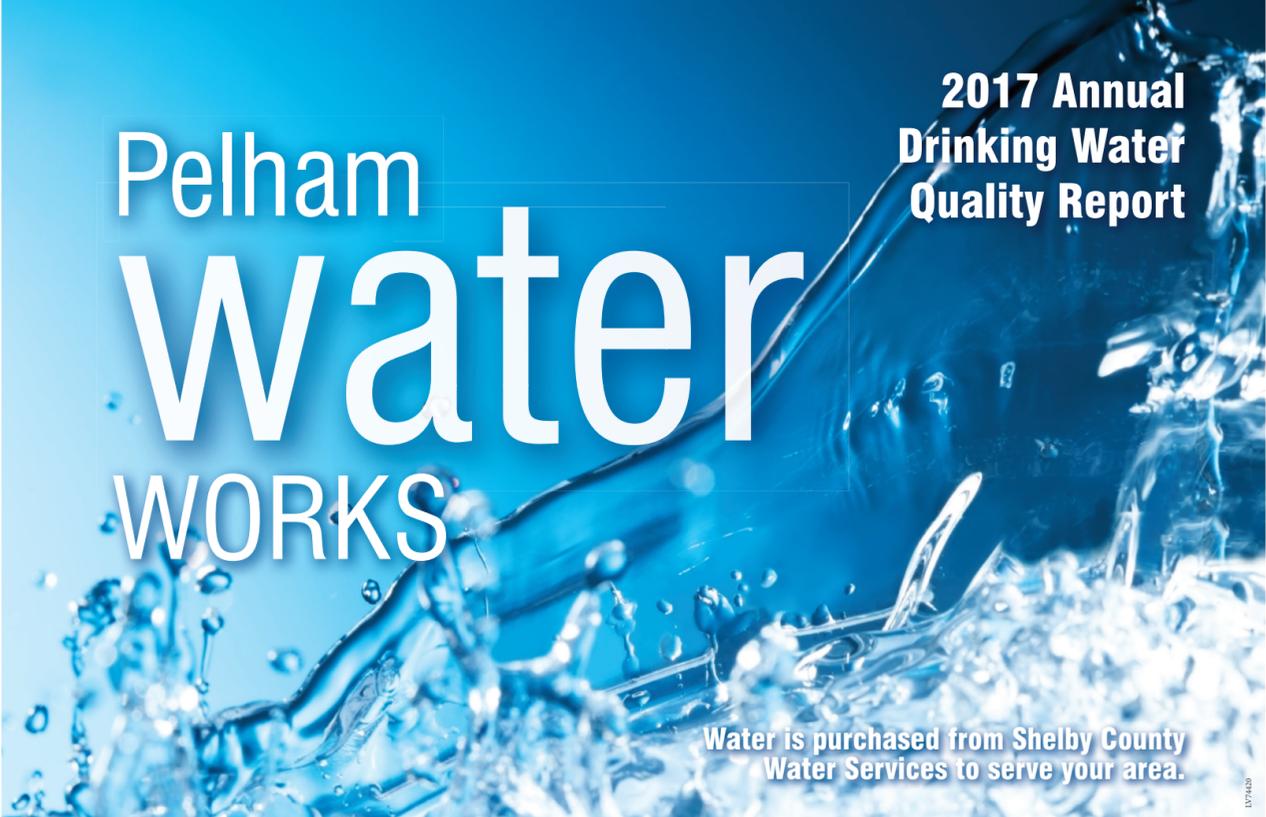
RAA
Running annual average.

LRAA
Locational running annual average.

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- BACTERIOLOGICAL CONTAMINANTS:**
- (1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
- (2) Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
- (3) Fecal Indicators. Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
- (4) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
- RADIOLOGICAL CONTAMINANTS:**
- (5) Beta/photon emitters. Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
- (6) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
- (7) Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
- INORGANIC CONTAMINANTS:**
- (8) Antimony. Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
- (9) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
- (10) Asbestos. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
- (11) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
- (12) Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
- (13) Bromate. Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
- (14) Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
- (15) Chloramines. Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRLs are often below current "health" MRDL could experience stomach discomfort.
- (16) Chlorine. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
- (17) Chlorine dioxide. Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
- (18) Chlorite. Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
- (19) Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
- (20) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
- (21) Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
- (22) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
- (23) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
- (24) Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
- (25) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
- (26) Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
- (27) Total Nitrate and Nitrite. Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
- (28) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
- (29) Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
- ORGANIC CONTAMINANTS:**
- (30) Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
- (31) Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
- (32) Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
- (33) Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
- (34) Benzo(a)pyrene [PAH]. Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
- (35) Carbofuran. Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
- (36) Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
- (37) Chlordane. Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
- (38) Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
- (39) 2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
- (40) Dalapon. Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
- (41) Dibromochloropropane (DBCP). Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
- (42) p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
- (43) p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
- (44) 1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
- (45) 1,1-Dichloroethylene. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
- (46) cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
- (47) trans-1,2-Dichloroethylene. Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
- (48) Dichloromethane. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
- (49) 1,2-Dichloropropane. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years could experience liver problems.
- (50) Di (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.
- (51) Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
- (52) Dioxob. Some people who drink water containing dioxob well in excess of the MCL over many years could experience reproductive difficulties.
- (53) Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
- (54) Diquat. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
- (55) Endothal. Some people who drink water containing endothal in excess of the MCL over many years could experience problems with their stomach or intestines.
- (56) Endrin. Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
- (57) Epichlorohydrin. Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.



Secondary Drinking Water Standards

Secondary Drinking Water Standards regulate constituents that cause offensive taste, odor, color, corrosivity, foaming and staining. The concentration limit is called the Secondary Maximum Contaminant Level (SMCL). Secondary Standards are not enforceable. Public water systems are not required to test for or remove secondary contaminants. Secondary Standards are guidelines used to provide communities with the best quality water possible.

Contaminant	Level Detected			Noticeable Effects Above SMCL
	City System	Unit Measurement	SMCL	
Color, APHA	<10.		15 color units	Visible tint
Foaming Agents (Surfactants)	<0.02	ppm	0.5	Frothy, cloudy; bitter taste; odor
Iron	<0.05	ppm	0.3	Rusty color; sediment; metallic taste; reddish or orange staining
Magnesium	12.3-13.9	ppm		Black to brown color; black staining; bitter metallic taste
pH	6.81-7.18		6.5-8.5 SU	Low pH: bitter metallic taste; corrosion High pH: slippery feel; soda taste; deposits
Silver	<1.001	ppm	0.1	Skin discoloration; graying of the white part of the eye
Zinc	<0.03	ppm	5	Metallic taste

Other Contaminants Monitored

Contaminant	Level Detected
	City System
Alkalinity, Total	146-171 mg/L
Calcium	33.7-39.5 mg/L
Carbon Dioxide	9-11 mg/L
Hardness as mg eq CaCO3/L	135-153 mg/L
Langelier Saturation Index	-0.572-1.03 L.I.
Nickel	<0.001 mg/L
Specific Conductance	237-194 umhos

TEST RESULTS 2017 unless noted

		Level Detected				Unit Measurement	MCLG	MCL	Likely Source of Contamination
Contaminant	Violations Y/N	City System	Taladega/Shelby WTP	Shelby South WTP					
BACTERIOLOGICAL									
1	Total Coliform Bacteria	N	ND	2	ND	Presence or Absence	MCLG=0 MCL-presence of coliform bacteria in <5% of monthly samples, or if a routine sample and a follow up repeat sample are total coliform positive and one is also fecal coliform or E. coli positive	Naturally present in the environment	
2	Fecal coliform and E.coli	N	ND	ND	ND	Presence or Absence		Human and animal fecal waste	
3	Fecal Indicators (enterococci or coliphage)	N	ND	ND	ND	Presence or Absence	None	TT	Human and animal fecal waste
4	Turbidity	N	0.06-0.19	0.64	0.28	NTU	n/a	TT	Soil runoff
RADIOLOGICAL									
5	Beta/Photon emitters	N	ND in 2004	ND 2008	ND in 2012	mrem/yr	0	4	Decay of natural and man-made deposits
6	Alpha emitters	N	ND	0.8 +/- 0.6	ND	pCi/L	0	15	Erosion of natural deposits
7	Combined radium-226/228	N	<0.6-1.4 in 2011	0.5 +/- 0.4	ND	pCi/L	0	5	Erosion of natural deposits
INORGANIC CHEMICALS									
8	Antimony	N	NT	ND	ND	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
9	Arsenic	N	NT	ND	ND	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
10	Asbestos	N	ND in 2006	NT	NT	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
11	Barium	N	0.016-0.027 in 2015	ND	ND	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
12	Beryllium	N	NT	ND	ND	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
13	Bromate	N	NT	NT	NT	ppb	0	10	By-product of drinking water chlorination
14	Cadmium	N	NT	ND	ND	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
15	Chloramines	N	NT	NT	NT	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
16	Chlorine	N	1.24-1.71	2.45	2.68	ppm	MRDLG=4	MRDL=4	Water Additive used to control microbes
17	Chlorine Dioxide	N	NT	700	NT	ppb	MRDLG=800	MRDL=800	Water additive used to control microbes
18	Chlorite	N	NT	970	NT	ppb	800 ppb	1 ppm	By-product of drinking water chlorination
19	Chromium	N	NT	ND	ND	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
20	Copper	N	.04-.22 in 2016	ND	ND	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
21	Cyanide	N	ND	ND	ND	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
22	Fluoride	N	ND	0.85	1.17	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
23	Lead	N	<1-10 in 2016	ND	ND	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
24	Mercury (inorganic)	N	ND	ND	ND	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
25	Nitrate (as Nitrogen)	N	0.62-1.20	0.44	0.34	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
26	Nitrite (as Nitrogen)	N	ND	ND	ND	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
27	Total Nitrate and Nitrite	N	0.62-1.20	0.44	0.34	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
28	Selenium	N	NT	ND	ND	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
29	Thallium	N	NT	ND	ND	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
ORGANIC CHEMICALS									
30	Acrylamide	N	ND in 2006	ND	ND	ppb	0	TT	Added to water during sewage/wastewater treatment
31	Alachlor	N	ND	ND	ND	ppb	0	2	Runoff from herbicide used on row crops
32	Atrazine	N	ND	ND	ND	ppb	3	3	Runoff from herbicide used on row crops
33	Benzene	N	ND	ND	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
34	Benzo(a)pyrene (PAH)	N	ND	ND	ND	ppt	0	200	Leaching from linings of water storage tanks and distribution lines
35	Carbofuran	N	ND	ND	ND	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
36	Carbon tetrachloride	N	ND	ND	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
37	Chlordane	N	ND	ND	ND	ppb	0	2	Residue of banned pesticide
38	Chlorobenzene or Monochlorobenzene (MCB)	N	ND	ND	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
39	2,4-D	N	ND	ND	ND	ppb	70	70	Runoff from herbicide used on row crops
40	Dalapon	N	ND	ND	ND	ppb	200	200	Runoff from herbicide used on rights of way
41	Dibromochloropropane	N	ND	ND	ND	ppt	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
42	o-Dichlorobenzene	N	ND	ND	ND	ppb	600	600	Discharge from industrial chemical factories
43	p-Dichlorobenzene	N	ND	ND	ND	ppb	75	75	Discharge from industrial chemical factories
44	1,2 - Dichloroethane	N	ND	ND	ND	ppb	0	5	Discharge from industrial chemical factories
45	1,1 - Dichloroethylene	N	ND	ND	ND	ppb	7	7	Discharge from industrial chemical factories
46	cis-1,2-Dichloroethylene	N	ND	ND	ND	ppb	70	70	Discharge from industrial chemical factories
47	trans - 1,2 -Dichloroethylene	N	ND	ND	ND	ppb	100	100	Discharge from industrial chemical factories
48	Dichloromethane or Methylene Chloride (DCM)	N	ND	ND	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
49	1,2-Dichloropropane	N	ND	ND	ND	ppb	0	5	Discharge from industrial chemical factories

50	Di(2-ethylhexyl) adipate	N	ND	ND	ND	ppb	400	400	Discharge from chemical factories
51	Di(2-ethylhexyl) phthalate	N	ND	ND	ND	ppb	0	6	Discharge from rubber and chemical factories
52	Dinoseb	N	ND	ND	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
53	Dioxin [2,3,7,8-TCDD]	N	ND in 2006	ND	ND	ppq	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
54	Diquat	N	ND	ND	ND	ppb	20	20	Runoff from herbicide use
55	Endothal	N	ND	ND	ND	ppb	100	100	Runoff from herbicide use
56	Endrin	N	ND	ND	ND	ppb	2	2	Residue of banned insecticide
57	Epichlorohydrin	N	ND in 2006	ND	ND	ppb	0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
58	Ethylbenzene	N	ND	ND	ND	ppb	700	700	Discharge from petroleum refineries
59	Ethylene dibromide	N	ND	ND	ND	ppt	0	50	Discharge from petroleum refineries
60	Glyphosate	N	ND	ND	ND	ppb	700	700	Runoff from herbicide use
61	HAA5 (Haloacetic Acids) (LRAA)	N	8-31	16.90	4.82	ppb	0	60	By-product of drinking water chlorination
62	Heptachlor	N	ND	ND	ND	ppt	0	400	Residue of banned pesticide
63	Heptachlor epoxide	N	ND	ND	ND	ppt	0	200	Breakdown of heptachlor
64	Hexachlorobenzene	N	ND	ND	ND	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
65	Hexachlorocyclopentadiene	N	ND	ND	ND	ppb	50	50	Discharge from chemical factories
66	Lindane	N	ND	ND	ND	ppt	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
67	Methoxychlor	N	ND	ND	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
68	Oxamyl [Vydate]	N	ND	ND	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
69	Pentachlorophenol	N	ND	ND	ND	ppb	0	1	Discharge from wood preserving factories
70	Picloram	N	ND	ND	ND	ppb	500	500	Herbicide runoff
71	PCBs [Polychlorinated biphenyls]	N	ND	ND	ND	ppt	0	500	Runoff from landfills; discharge of waste chemicals
72	Simazine	N	ND	ND	ND	ppb	4	4	Herbicide runoff
73	Styrene	N	ND	ND	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
74	Tetrachloroethylene	N	ND	ND	ND	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
75	Toluene	N	ND	ND	ND	ppm	1	1	Discharge from petroleum factories
76	Total Organic Carbon (TOC)	N	0.3-0.5 in 2015	2.30	1.20	ppm	n/a	TT	Naturally present in the environment
77	TTHM (Total trihalomethanes) (LRAA)	N	26-76	25.80	13.7	ppb	0	80	By-product of drinking water chlorination
78	Toxaphene	N	ND	ND	ND	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
79	2,4,5-TP (Silvex)	N	ND	N/D	N/D	ppb	50	50	Residue of banned herbicide
80	1,2,4-Trichlorobenzene	N	ND	ND	ND	ppb	70	70	Discharge from textile-finishing factories
81	1,1,1-Trichloroethane	N	ND	ND	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
82	1,1,2-Trichloroethane	N	ND	ND	ND	ppb	3	5	Discharge from industrial chemical factories
83	Trichloroethylene	N	ND	ND	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
84	Vinyl Chloride	N	ND	ND	ND	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
85	Xylenes	N	ND	ND	ND	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

Unregulated Contaminants Table

CONTAMINANT	Average	Range	CONTAMINANT	Average	Range
1,1 - Dichloropropene	ND	0.000 - 0.000	Chloroform	0.0007	0.000 - 0.000
1,1,1,2-Tetrachloroethane	ND	0.000 - 0.000	Chloromethane	ND	0.000 - 0.000
1,1,2,2-Tetrachloroethane	ND	0.000 - 0.000	Dibromochloromethane	ND	0.000 - 0.000
1,1-Dichloroethane	ND	0.000 - 0.000	Dibromomethane	ND	0.000 - 0.000
1,2,3 - Trichlorobenzene	ND	0.000 - 0.000	Dicamba	ND	0.000 - 0.000
1,2,3 - Trichloropropane	ND	0.000 - 0.000	Dichlorodifluoromethane	ND	0.000 - 0.000
1,2,4 - Trimethylbenzene	ND	0.000 - 0.000	Dieldrin	ND	0.000 - 0.000
1,3 - Dichloropropane	ND	0.000 - 0.000	Hexachlorobutadiene	ND	0.000 - 0.000
1,3 - Dichloropropene	ND	0.000 - 0.000	p-Isopropylbenzene	ND	0.000 - 0.000
1,3,5 - Trimethylbenzene	ND	0.000 - 0.000	M-Dichlorobenzene	ND	0.000 - 0.000
2,2 - Dichloropropane	ND	0.000 - 0.000	Methomyl	ND	0.000 - 0.000
3-Hydroxycarbofuran	ND	0.000 - 0.000	MTBE	ND	0.000 - 0.000
Aldicarb	ND	0.000 - 0.000	Metolachlor	ND	0.000 - 0.000
Aldicarb Sulfone	ND	0.000 - 0.000	Metribuzin	ND	0.000 - 0.000
Aldicarb Sulfoxide	ND	0.000 - 0.000	N - Butylbenzene	ND	0.000 - 0.000
Aldrin	ND	0.000 - 0.000	Naphthalene	ND	0.000 - 0.000
Bromobenzene	ND	0.000 - 0.000	N-Propylbenzene	ND	0.000 - 0.000
Bromochloromethane	ND	0.000 - 0.000	O-Chlorotoluene	ND	0.000 - 0.000
Bromodichloromethane	ND	0.000 - 0.000	P-Chlorotoluene	ND	0.000 - 0.000
Bromoform	ND	0.000 - 0.000	P-Isopropyltoluene	ND	0.000 - 0.000
Bromomethane	ND	0.000 - 0.000	Propachlor	ND	0.000 - 0.000
Butachlor	ND	0.000 - 0.000	Sec - Butylbenzene	ND	0.000 - 0.000
Carbaryl	ND	0.000 - 0.000	Tert - Butylbenzene	ND	0.000 - 0.000
Chloroethane	ND	0.000 - 0.000	Trichlorofluoromethane	ND	0.000 - 0.000

Table of Detected Contaminants in 2017

		Level Detected				Unit Measurement	MCLG	MCL	Likely Source of Contamination
Contaminant	Violation Y/N	City System	Taladega/Shelby WTP	Shelby South WTP					
BACTERIOLOGICAL									
Total Coliform Bacteria	N	ND	2	ND	Presence or Absence	MCLG=0	Presence of coliform bacteria in <5% of monthly samples,		Naturally present in the environment
Turbidity	N	.60-.19	0.64	0.28	NTU	n/a	TT		Soil runoff
Alpha emitters	N	ND	0.8 +/- 0.6	ND	pCi/L	0	15		Erosion of natural deposits
Combined radium-226/228	N	<0.6-1.4 in 2011	0.5 +/- 0.4	ND in 2012	pCi/L	0	5		Erosion of natural deposits
Chlorine	N	1.24-1.71	2.45	2.68	ppm	MRDLG=4	MRDL=4		Water Additive used to control microbes
Chlorine Dioxide	N	NT	700	NT	ppb	800	800		Water additive used to control microbes
Chlorite	N	NT	970	NT	ppb	MRDLG=800	MRDL= 1000		Water additive used to control microbes
Chloroform	N	0.0007	ND	ND					By-product of drinking water chlorination
Fluoride	N	NT	0.85	1.17	ppm	4	4		Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	0.62-1.20	0.440	0.340	ppm	10	10		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate and Nitrite	N	0.62-1.20	0.440	0.340	ppm	10	10		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TOC (Total Organic Carbon)	N	ND	2.30	1.20	ppm	N/A	TT		Naturally present in the environment
HAA5 (Haloacetic acids) (LRAA)	N	8-31	16.90	4.82	ppb	0	60		By-product of drinking water chlorination
TTHM (Total trihalomethanes) (LRAA)	N	26-76	25.80	13.7	ppb	0	80		By-product of drinking water chlorination
SECONDARY CONTAMINANTS									
Chloride	N	2.44-4.80	11.4	8.61	ppm		250		Salty Taste
Magnesium	N	12.3-13.9	5.61	4.98	ppm				Black to brown color; black staining; bitter metallic taste
pH	N	6.81-7.18	6.57-7.60	6.50-7.31					Low pH: bitter metallic taste; corrosion High pH: slippery feel, soda taste; deposits
Sodium	N	1.93-2.42 mg/L	8.92	5.31	ppm				
Sulfate	N	2.53-4.27	38.6	29.7	ppm		250		Salty taste
Total Dissolved Solids	N	180-258	112	104	ppm		500		Hardness; deposits; colored water; staining; salty taste

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have