## City of Brundidge, Alabama The Water We Drink

## January 1, <u>2019</u>– December 31, 2019

We're pleased to present this Annual Quality Water Report. This report is required by the Congress of the United States through the *Safe Water Drinking Act* and is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is wells, one located at the corner of College Street and Railroad Avenue and the other located on Elm Street. The College Street Well was first operational in 1948 and is approximately 750 feet deep. The Elm Street Well was put into service in 1969 and is approximately 660 feet deep. A new 400 gallon per minute water well was authorized by the City Council in 2001 and is now available on Sara G. Lott Blvd. Each well draws water from the Ripley Formation, an aquifer very common in our area.

Your water system is operated pursuant to the rules and regulations of the United States Environmental Protection Agency and the Alabama Department of Environmental Management (ADEM). The Mayor and City Council set the policies for operation and the City Manager is responsible for insuring the policies are carried out. Mr. Kenneth Marler is certified and licensed by ADEM to operate the system and serves as the superintendent. The City employs one other certified operator.

If you have questions about this report concerning your water utility, please contact Britt Thomas, City Manager, at the City Hall via one of the following means:

 Postal Service
 P. O. Box 638 36010-0638

 Phone
 334/735-2385

 Fax
 334/735-5180

 Email
 citymanager@troycable.net

If you want to learn more, please attend any of our regularly scheduled meetings of the city council. The meetings are held the 1<sup>st</sup> and 3<sup>rd</sup> Tuesdays of each month at the City Hall (Bass House) at 6:00 o'clock p.m.

The City of Brundidge Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2019. 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.

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.

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.

*Variances & Exemptions (V&E)* - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

Maximum Contaminant Level - (mandatory language) 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 - (mandatory language) 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.

			2018 TES	Γ RESULTS		
Contaminant	Violatio n Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contamina	ants					
1. Total Coliform Bacteria	N	ND		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
2. Fecal coliform and E.coli	N	ND		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
			Radioactive (	Contamina	nts	
4. Beta/photon emitters	N	ND	mrem/yr	0	4	Decay of natural and man-made
						deposits
5. Alpha emitters	N	ND	pCi/1	0	15	Erosion of natural deposits
6. Combined radium	N	ND	pCi/1	0	5	Erosion of natural deposits
	•		Inorganic Co	ontaminan	ts	
7. Antimony	N	ND	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
8. Arsenic	N	<.010	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
9. Asbestos	N	ND	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
10. Barium	N	<.05	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
11. Beryllium	N	<.001	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	N	<.001	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
13. Chromium	N	<.05	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	<.05	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	<.01	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	1.29	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

17. Lead	N	<.005	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
18. Mercury (inorganic)	N	<.001	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff
						from landfills; runoff from cropland
19. Nitrate (as Nitrogen)	N	.22	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
20. Nitrite (as Nitrogen)	N	.22	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium	N	<.010	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
22. Thallium	N	<.001	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and
	Synthe	tic Organic	Contaminants in	cluding Pestic	cides and Her	drug factories bicides
20.045		1	1 ,	=0	=-	
23. 2,4-D	N	ND	ppb	70	70	Runoff from herbicide used on row crops
24. 2,4,5-TP (Silvex)	N	ND	ppb	50	50	Residue of banned herbicide
25. Acrylamide	N	ND		0	TT	Added to water during sewage/wastewater treatment
26. Alachlor	N	ND	ppb	0	2	Runoff from herbicide used on row crops
27. Atrazine	N	ND	ppb	3	3	Runoff from herbicide used on row crops
28. Benzo(a)pyrene (PAH)	N	ND	nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
29. Carbofuran	N	ND	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
30. Chlordane	N	ND	ppb	0	2	Residue of banned termiticide
31. Dalapon	N	ND	ppb	200	200	Runoff from herbicide used on rights of way
32. Di(2-ethylhexyl) adipate	N	ND	ppb	400	400	Discharge from chemical factories
33. Di(2-ethylhexyl) phthalate	N	ND	ppb	0	6	Discharge from rubber and chemical factories
34. Dibromochloropropane	N	ND	nanograms/1	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
35. Dinoseb	N	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
36. Diquat	N	ND	ppb	20	20	Runoff from herbicide use
37. Dioxin [2,3,7,8-TCDD]	N	ND	picograms/l	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
38. Endothall	N	ND	ppb	100	100	Runoff from herbicide use
39. Endrin	N	ND	ppb	2	2	Residue of banned insecticide
40. Epichlorohydrin	N	ND		0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
41. Ethylene dibromide	N	ND	nanograms/1	0	50	Discharge from petroleum refineries
42. Glyphosate	N	ND	ppb	700	700	Runoff from herbicide use
43. Heptachlor	N	ND	nanograms/1	0	400	Residue of banned termiticide
44. Heptachlor epoxide	N	ND	nanograms/1	0	200	Breakdown of heptachlor

45. Hexachlorobenzene	N	ND	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
46. Hexachlorocyclo- pentadiene	N	ND	ppb	50	50	Discharge from chemical factories
47. Lindane	N	ND	nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
48. Methoxychlor	N	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
49. Oxamyl [Vydate]	N	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
50. PCBs [Polychlorinated biphenyls]	N	ND	nanograms/1	0	500	Runoff from landfills; discharge of waste chemicals
51. Pentachlorophenol	N	ND	ppb	0	1	Discharge from wood preserving factories
52. Picloram	N	ND	ppb	500	500	Herbicide runoff
53. Simazine	N	ND	ppb	4	4	Herbicide runoff
54. Toxaphene	N	ND	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
		l	Volatile Organi	c Contamin	ants	
55. Benzene	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
56. Carbon tetrachloride	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
57. Chlorobenzene	N	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
58. o-Dichlorobenzene	N	ND	ppb	600	600	Discharge from industrial chemical factories
59. p-Dichlorobenzene	N	ND	ppb	75	75	Discharge from industrial chemical factories
60. 1,2 - Dichloroethane	N	ND	ppb	0	5	Discharge from industrial chemical factories
61. 1,1 - Dichloroethylene	N	ND	ppb	7	7	Discharge from industrial chemical factories
62. cis-1,2-ichloroethylene	N	ND	ppb	70	70	Discharge from industrial chemical factories
63. trans - 1,2 - Dichloroethylene	N	ND	ppb	100	100	Discharge from industrial chemical factories
64. Dichloromethane	N	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
65. 1,2-Dichloropropane	N	ND	ppb	0	5	Discharge from industrial chemical factories
66. Ethylbenzene	N	ND	ppb	700	700	Discharge from petroleum refineries
67. Styrene	N	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
68. Tetrachloroethylene	N	ND	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
69. 1,2,4 -Trichlorobenzene	N	ND	ppb	70	70	Discharge from textile-finishing factories
70. 1,1,1 - Trichloroethane	N	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
71. 1,1,2 -Trichloroethane	N	ND	ppb	3	5	Discharge from industrial chemical factories
72. Trichloroethylene	N	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
73. TTHM [Total trihalomethanes]	N	17.7	ppb	0	100	By-product of drinking water chlorination
74. Toluene	N	ND	ppm	1	1	Discharge from petroleum factories
75. Vinyl Chloride	N	ND	ppb	0	2	Leaching from PVC piping; discharge from plastics factories

76. Xylenes	N	ND	ppm	10	10	Discharge from petroleum factories;
						discharge from chemical factories

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The Brundidge Water Departmen incurred a Monitoring Violation in 2019. The Department did not collect VOC samples for the July-September 2019 period. Since that time, the Department has collected the required samples for each quarter, to ensure the safety of the drinking water.