

ANNUAL DRINKING WATER QUALITY REPORT

(January through December 2016)

Jackson's Gap Water Authority • 567 Jackson's Gap Way

Jackson's Gap, AL 36861 • Telephone: 256-825-8385

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (USEPA) and the Alabama Department of Environmental Management (ADEM) drinking water health standards. Your local water officials vigilantly safeguard its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standards. We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality 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 purchase water from the Adams Water Filtration Plant, which is surface water from Lake Martin. The water goes through a process of coagulation, flocculation, sedimentation and filtration with chlorine added to the final product as a disinfection and the required residual is maintained to protect your drinking water from any possible outside contaminants.

The Jackson's Gap Water Authority routinely completes a water storage facility inspection plan, and utilizes a Bacteriological Monitoring Plan and a Cross Connection Policy in place to insure good safe drinking water for our customers. Alexander City Water Department has completed a Source Water Assessment Plan, which is available at their office for review. This report provides information about potential sources of contamination and is set up to help protect our source.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the 4th Wednesday of the month at the Conference Room that is located at 548 Jackson's Gap Way and begin at 4:00 p.m.

The members of the Board of Directors are:

Roger Pritchard, Chairman William Burns Leonard McKevey

Important Drinking Water Definitions:

Action Level (AL) – The concentration of a contaminant that triggers treatment or other requirements that a water system shall follow.

Maximum Contaminant Level (MCL) – 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 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 (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.

Maximum Residual Disinfectant Level Goal (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.

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

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.

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 (µg/L) – 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 (ng/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 (pg/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.

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

Threshold Odor Number (T.O.N.) – The greatest dilution of a sample with odor-free water that still yields a just-detectable odor.

Variance & Exemptions – ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Explanation of reasons for variance/exemptions

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

The Jackson's Gap Water Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the data presented in the following tables show the results of our monitoring period of January 1st to December 31st, 2016.

Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological								
Total Coliform Bacteria	< 5%	ND	Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Turbidity	TT	0.25	Organic Chemicals			Ethylbenzene(ppb)	700	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Ethylene dibromide(ppb)	50	ND
Radioisotopes								
Beta photon emitters (mrem/yr)	4	ND	Alachlor(ppb)	2	ND	Glyphosate(ppb)	700	ND
Alpha emitters (pCi/l)	15	ND	Atrazine(ppb)	3	ND	Halooctic Acids(ppb)	60	34.40
Combined radium (pCi/l)	5	ND	Benzene(ppb)	5	ND	Heptachlor(epoxide)(ppt)	400	ND
Uranium(pCi/l)	30	ND	Carbofuran(ppb)	40	ND	Heptachlor epoxide(ppb)	200	ND
Inorganic								
Antimony (ppb)	6	ND	Carbon Tetrachloride(ppb)	5	ND	Hexachlorocyclopentadiene(ppb)	50	ND
Arsenic (ppb)	10	ND	Chlordane(ppb)	2	ND	Lindane(ppb)	200	ND
Asbestos (MFL)	7	ND	Chlorobenzene(ppb)	100	ND	Methoxychlor(ppb)	40	ND
Barium (ppm)	2	ND	trans-1,2-Dichloroethene(ppb)	70	ND	Onams (Vidate)(ppb)	200	ND
Beryllium (ppb)	4	ND	Dialopon(ppb)	200	ND	Pentachlorophenol(ppb)	1	ND
Bromine (ppb)	10	ND	Dibromochloropropane(ppb)	200	ND	PCBs(ppb)	500	ND
Cadmium (ppb)	5	ND	0-Dichlorobenzene(ppb)	600	ND	Smaltine(ppb)	4	ND
Chloramines(ppm)	4	ND	p-Dichlorobenzene(ppb)	75	ND	Styrene(ppb)	100	ND
Chlorine (ppm)	4	1.80	1,2-Dichloroethane(ppb)	5	ND	Tetrachloroethylene(ppb)	5	ND
Chlorine dioxide(ppb)	800	ND	Cis-1,2-Dichloroethylene(ppb)	70	ND	Toluene(ppm)	1	ND
Chromium (ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	Trihalometanes (THM)	80	56.50
Chromanium (ppb)	100	ND	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	0.12	1,2-Dichloropropane(ppb)	5	ND	2,4,5-TP (Silvex)(ppb)	50	ND
Cyanide (ppb)	200	ND	Di(2-ethylhexyl)phthalate(ppb)	400	ND	1,2,4-Trichlorobenzene(ppb)	70	ND
Fluoride (ppm)	4	ND	Di(2-ethylhexyl)phthalate(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	ND	Dioxin(2,3,7,8-TCDD)(ppq)	7	ND	1,1,2-Trichloroethane(ppb)	5	ND
Mercury (ppb)	2	ND	Diquat(ppb)	30	ND	Trichloroethylene(ppb)	5	ND
Nitrate (ppm)	10	ND	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endrin(ppb)	100	ND	Xylenes(ppm)	10	ND
Total Nitrate & Nitrite	10	ND		2	ND			

Table of Secondary and Unregulated Contaminants

Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
Secondary								
Aluminum	0.2	ND	Foaming Agents	0.5	ND	Silver	7	ND
Chloride	250	ND	Iron	0.3	ND	Sulfate	70	1.68
Color (PCU)	15	ND	Magnesium	75	ND	Total Dissolved Solids	500	72
Copper	1	ND	Odor (T.O.N.)	5	ND	Zinc	5	ND
Special								
Calcium	N/A	ND	pH (SU)	N/A	6.2	Temperature (°C)	N/A	ND
Carbon Dioxide	N/A	ND	Sodium	N/A	13.70	Total Alkalinity	N/A	ND
Manganese	0.05	ND	Specific Conductance (umhos)	<500	ND	Total Hardness (as CaCO3)	N/A	9.61

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
Unregulated								
1,1-Dichloropropene	N/A	ND	Bromobenzene	N/A	ND	Hexachlorobutadiene	N/A	ND
1,1,2,2-Tetrachloroethane	N/A	ND	Bromo-chloromethane	N/A	ND	Isopropylbenzene	N/A	ND
1,1-Dichloroethane	N/A	ND	Bromo-dichloromethane	N/A	1.28	M-Dichlorobenzene	N/A	ND
1,2,3-Trichlorobenzene	N/A	ND	Bromofom	N/A	ND	Methomyl	N/A	ND
1,2,3-Trichloropropane	N/A	ND	Bromomethane	N/A	ND	Metolachlor	N/A	ND
1,2,4-Trimethylbenzene	N/A	ND	Butachlor	N/A	ND	Metribuzin	N/A	ND
1,2,4-Trichlorobenzene	N/A	ND	Carbaryl	N/A	ND	MTBE	N/A	ND
1,3-Dichloropropane	N/A	ND	Chloroethane	N/A	ND	N-Butylbenzene	N/A	ND
1,3-Dichloropropene	N/A	ND	Chloro-dibromomethane	N/A	0.48	Naphthalene	N/A	ND
1,3,5-Trimethylbenzene	N/A	ND	Chlorofom	N/A	1.62	N-Propylbenzene	N/A	ND
2,2-Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3,3-Diisobutylcarboturan	N/A	ND	Dibromo-chloromethane	N/A	ND	P-Chlorotoluene	N/A	ND
Aldicarb	N/A	ND	Dibromomethane	N/A	ND	P-Isopropyltoluene	N/A	ND
Aldicarb Sulfone	N/A	ND	Dichloro-difluoromethane	N/A	ND	Propachlor	N/A	ND
Aldicarb Sulfonide	N/A	ND	Dieldrin	N/A	ND	Sec-Butylbenzene	N/A	ND
Aldrin	N/A	ND	Fluorotrichloromethan	N/A	ND	Tert-Butylbenzene	N/A	ND

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

The table below lists all of the drinking water contaminants that we detected.

Table of Detected Drinking Water Contaminants								
CONTAMINANT	MCLG	MCL	Range	Amount Detected	Likely Source of Contamination			
Bacteriological Contaminants January - December 2016								
Turbidity	0	TT	0.25	NTU	Soil runoff			
Radioisotopes January - December 2016								
Alpha	0	15	1.30	pCi/L	Erosion of natural deposits			
Inorganic Contaminants January - December 2016								
Chlorine	MRDLG 4	MRDL 4	1.00 - 1.80	1.80	Water additive used to control microbes			
Copper	1.3	10 Sites AL=1.3	0	0.12	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
Organic Contaminants January - December 2016								
Halooctic Acids (HAA5)	0	60	6.06 - 34.40	34.40	By-product of drinking water chlorination			
Total Organic Carbon (TOC)	N/A	TT	1.11 - 3.07	3.07	Naturally present in the environment			
Total trihalometanes (THM)	0	80	14.50 - 56.50	56.50	By-product of drinking water chlorination			
Secondary Contaminants January - December 2016								
Sulfate	N/A	250	ND - 1.68	1.68	Naturally occurring in the environment			
Special Contaminants January - December 2016								
pH	N/A	N/A	ND - 6.62	6.62	Naturally occurring in the environment or as a result of treatment with water additives			
Sodium	N/A	N/A	ND - 13.70	13.70	Naturally occurring in the environment			
Hardness (as CaCO3)	N/A	N/A	ND - 9.61	9.61	Naturally occurring in the environment or as a result of treatment with water additives			
Unregulated Contaminants January - December 2016								
Bromodichloromethane	N/A	N/A	ND - 2.55	1.28	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination			
Chlorodibromomethane	N/A	N/A	ND - 0.95	0.48	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination			
Chloroform	N/A	N/A	ND - 3.23	1.62	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination			

General Information

Lead in Drinking Water: "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. The Jackson's Gap Water Authority 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 sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activities.

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. 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 contaminants have been detected. The EPA has determined that your water IS SAFE at these levels. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers. EPA (Environmental Protection Agency)/CDC (Center of Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline. All Drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

We at the Jackson's Gap Water Authority work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

For more information, contact:
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