

**LOWNDES COUNTY
WATER AUTHORITY**
PWSID AL0001512
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Hayneville, Alabama 36040
Phone 334-548-6235



We are pleased to present to you this year's Annual Water Quality Report, which contains water quality monitoring results from last calendar year. This report is designed to inform you about the quality water and services we deliver to you every day. We are pleased to report that our drinking water meets federal (EPA) and state (ADEM) requirements.

Water Sources	3 wells producing from the Gordo aquifer
Water Treatment	Chlorination for disinfection
Storage Capacity	Four storage tanks, capacity 1,350,000 gallons
# of Customers	Approximately 1245
	Bertram Pickney, Chairperson
Board of Directors	Peggie Johnson, Vice Chairperson
	Kamelah S. White, Director

Source Water Assessment

Lowndes County Water Authority has developed a Source Water Assessment plan that will assist in protecting our water sources. This plan provides additional information such as potential sources of contamination. The Source Water Assessment includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. A copy of the report is available in our office for review during normal business hours.

We routinely complete a water storage facility inspection plan, utilize a Bacteriological Monitoring Plan, and a Cross Connection Policy is in place to insure good safe drinking water for our customers. Chlorine is added to the water as a disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants.

Please help us make this effort worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints and waste oil.

Questions

If you have any questions about this report or concerning your water utility, please contact Wesley Bess at 334-382-4281. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our water board meetings. They are held at 6:00 P.M. at the Lowndes County Water Authority Office. Please check with our water office for the meeting dates. More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

Monitoring Schedule and Results

We routinely monitor your drinking water for contaminants according to Federal and State laws. The Alabama Department of Environment Management (ADEM) allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituents Monitored	Date Monitored
Inorganic Contaminants	2019
Lead/Copper	2017
Microbiological Contaminants	current
Nitrates	2019
Radioactive Contaminants	2019
Synthetic Organic Contaminants (including pesticides)	2018
Volatile Organic Contaminants	2018
Disinfection By-products	2019

We have learned through our monitoring and testing that some constituents have been detected. We are pleased to report that our drinking water meets federal and state requirements.

TABLE OF DETECTED DRINKING WATER CONTAMINANTS						
Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Alpha emitters	NO	2.03	PCI/l	0	15	Erosion of natural deposits
Copper	NO	0.077 * 0 >AL	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
TTHM [Total trihalomethanes]	NO	4.50-8.90	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	ND-1.30	ppb	0	60	By-product of drinking water chlorination
Secondary Contaminants						
Chloride	NO	2.77-36.4	ppm	n/a	250	Naturally occurring in the environment or from runoff
Hardness	NO	ND-8.02	ppm	n/a		Naturally occurring in the environment or as a result of treatment with water additives
pH	NO	8.09-8.31	S.U.	n/a	n/a	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	NO	4.72-8.10	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO	33.3-64.4	ppm	n/a	250	Naturally occurring in the environment or from runoff
Total Dissolved Solids	NO	76.0-192	ppm	n/a	500	Naturally occurring in the environment or from runoff

* Figure shown is 90th percentile and number of sites above the Action Level (AL) = 0

Management require testing. These contaminants were not detected in your sample. Detected Drinking Water Contaminants table elsewhere in this report.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
Bacteriological Contaminants					
Total Coliform Bacteria	<5%	present/absent	trans-1,2-Dichloroethylene	100	ppb
Fecal Coliform and E. coli	0	present/absent	Dichloromethane	5	ppb
Turbidity	TT	NTU	1,2-Dichloropropane	5	ppb
Cryptosporidium	TT	Calc.organisms/l	Di (2-ethylhexyl)adipate	400	ppb
Radiological Contaminants					
Beta/photon emitters	4	mrem/yr	Di (2-ethylhexyl)phthalate	6	ppb
Alpha emitters	15	pCi/l	Dinoseb	7	ppb
Combined radium	5	pCi/l	Dioxin [2,3,7,8-TCDD]	30	ppg
Uranium	30	pCi/l	Diquat	20	ppb
Inorganic Chemicals					
Antimony	6	ppb	Endothall	100	ppb
Arsenic	10	ppb	Endrin	2	ppb
Asbestos	7	MFL	Epichlorohydrin	TT	TT
Barium	2	ppm	Ethylbenzene	700	ppb
Beryllium	4	ppb	Ethylene dibromide	50	ppt
Cadmium	5	ppb	Glyphosate	700	ppb
Chromium	100	ppb	Heptachlor	400	ppt
Copper	AL=1.3	ppm	Heptachlor epoxide	200	ppt
Cyanide	200	ppb	Hexachlorobenzene	1	ppb
Fluoride	4	ppm	Hexachlorocyclopentadiene	50	ppb
Lead	AL=15	ppb	Lindane	200	ppt
Mercury	2	ppb	Methoxychlor	40	ppb
Nitrate	10	ppm	Oxamyl [Vydate]	200	ppb
Nitrite	1	ppm	Polychlorinated biphenyls	0.5	ppb
Selenium	.05	ppm	Pentachlorophenol	1	ppb
Thallium	.002	ppm	Picloram	500	ppb
Organic Contaminants					
2,4-D	70	ppb	Simazine	4	ppb
Acrylamide	TT	TT	Styrene	100	ppb
Alachlor	2	ppb	Tetrachloroethylene	5	ppb
Benzene	5	ppb	Toluene	1	ppm
Benzo(a)pyrene [PAHs]	200	ppt	Toxaphene	3	ppb
Carbofuran	40	ppb	2,4,5-TP(Silvex)	50	ppb
Carbon tetrachloride	5	ppb	1,2,4-Trichlorobenzene	.07	ppm
Chlordane	2	ppb	1,1,1-Trichloroethane	200	ppb
Chlorobenzene	100	ppb	1,1,2-Trichloroethane	5	ppb
Dalapon	200	ppb	Trichloroethylene	5	ppb
Dibromochloropropane	200	ppt	Vinyl Chloride	2	ppb
1,2-Dichlorobenzene	1000	ppb	Xylenes	10	ppm
1,4-Dichlorobenzene (para)	75	ppb	Disinfectants & Disinfection Byproducts		
o-Dichlorobenzene	600	ppb	Chlorine	4	ppm
1,2-Dichloroethane	5	ppb	Chlorine Dioxide	800	ppb
1,1-Dichloroethylene	7	ppb	Chloramines	4	ppm
cis-1,2-Dichloroethylene	70	ppb	Bromate	10	ppb
LIST OF UNREGULATED CONTAMINANTS					
1,1 - Dichloropropene	Aldicarb	Chloroform	Metolachlor		
1,1,1,2-Tetrachloroethane	Aldicarb Sulfone	Chloromethane	Metribuzin		
1,1,2,2-Tetrachloroethane	Aldicarb Sulfoxide	Dibromochloromethane	N - Butylbenzene		
1,1-Dichloroethane	Aldrin	Dibromomethane	Naphthalene		
1,2,3 - Trichlorobenzene	Bromobenzene	Dicamba	N-Propylbenzene		
1,2,3 - Trichloropropane	Bromochloromethane	Dichlorodifluoromethane	O-Chlorotoluene		
1,2,4 - Trimethylbenzene	Bromodichloromethane	Dieldrin	P-Chlorotoluene		
1,3 - Dichloropropane	Bromoform	Hexachlorobutadiene	P-Isopropyltoluene		
1,3 - Dichloropropene	Bromomethane	Isopropylbenzene	Propachlor		
1,3,5 - Trimethylbenzene	Butachlor	M-Dichlorobenzene	Sec - Butylbenzene		
2,2 - Dichloropropane	Carbaryl	Methomyl	Tert - Butylbenzene		
3-Hydroxycarbofuran	Chloroethane	MTBE	Trichlorofluoromethane		
LIST OF SECONDARY CONTAMINANTS					
Alkalinity, Total (as CA, Co ₃)	Copper	Magnesium	Silver		
Aluminum	Corrosivity	Manganese	Sodium		
Calcium, as Ca	Foaming agents (MBAS)	Odor	Sulfate		
Chloride	Hardness	Nickel	Total Dissolved Solids		
Color	Iron	pH	Zinc		

General Information

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 water poses a health risk. Maximum Contaminant Levels (MCLs – defined in the List of Definitions in this report) 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.

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 activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water run-off, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

Information about Lead

Lead in drinking water is rarely found in source water but is primarily from materials and components associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is more likely to cause leaching of lead from plumbing materials. 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. These recommended actions are very important to the health of your family. Lead levels in your drinking water are likely to be higher if:

- Your home or water system has lead pipes, or
- Your home has faucets or fittings made of brass which contains some lead, or
- Your home has copper pipes with lead solder and you have naturally soft water, and
- Water often sits in the pipes for several hours.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing

DEFINITIONS

Action Level: the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Coliform Absent (ca): laboratory analysis indicates that the contaminant is not present.

Detected contaminant: any regulated or unregulated contaminant detected at or above its method detection limit (or reportable limit)

Disinfection byproducts (DBPs): formed when disinfectants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water.

Distribution System Evaluation (DSE): a one-time study conducted by water systems to identify distribution system locations with high concentrations of THMs and HAAs.

Locational Running Annual Average (LRAA) – yearly average of all the DPB results at each specific sampling site

Maximum Contaminant Level (MCL): 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: 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): highest level of a disinfectant allowed in drinking water

Micrograms per liter (ug/L): equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.

Microsiemens per centimeter (µs/cm): unit of measurement for Specific Conductance.

Milligrams per liter (mg/L): equivalent to parts per million

Millirems per year (mrem/yr): a measure of radiation absorbed by the body.

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

90th Percentile: The values reported for lead and copper represent the 90th percentile. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

Not Detected (ND): laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

NR (Not Reported): laboratory analysis, usually Secondary Contaminants, not reported by water system. EPA recommends that secondary standards be reported but does not require systems to comply.

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

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

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

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

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

Running Annual Average (RAA): yearly average of all the DPB results at each specific sampling site in the distribution system. The RAA, along with a range, is reported in the Table of Detected Contaminants.

Standard Units (S.U.): pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas.

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

Unregulated Contaminants: contaminants for which the EPA has not established MCLs.

Variations & Exemptions (V&E): State or EPA permission not to