

we need all our customers and the general public to assist in reporting any suspicious activities around our facilities to us immediately. We will promptly investigate any reported activity.

### Contaminants in Drinking Water

As you can see in the tables, our system has provided high quality water service to you throughout the previous year. We're proud that your drinking water complies with 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 complies at the levels indicated in the following tables. The sources of drinking water (both tap water and bottled water) include rivers, lakes, ponds, reservoirs, springs, and wells. All sources are subject to potential contamination by constituents that are naturally occurring or man-made. 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. These substances can be microbes, organic or inorganic chemicals, pesticides, herbicides, or radioactive materials. 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) or EPA's website address [www.epa.gov/safewater](http://www.epa.gov/safewater).

### Sources of Water

Mulga Water & Gas operates the water system under a Water Supply permit issued by the Alabama Department of Environmental Management and purchases its water from The Birmingham Water Works Board which provides treated surface water from four plants whose sources are in the Cahaba Basin (Lake Purdy, Inland Lake, Little Cahaba River, Big Cahaba River) and in the Black Warrior Basin (Sipsey Fork & Mulberry Fork of the Warrior River and Inland Lake / Blackburn Fork). It is considered to be among the best water treatment facilities in the state. The Birmingham Water Works Board in conjunction with the Alabama Geological Service and the Alabama Department of Environmental Management has conducted an extensive source water assessment that identifies potential contaminant sites and associated risks. Anyone wishing to view this

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1	9	5

The Mulga Water & Gas Department is pleased to present our 2024 Annual Water Quality Report. The information in this report shows the monitoring results through December 31, 2023. The Mulga Water & Gas Department and our water supplier routinely tests for constituents in your drinking water according to Federal and State laws. We want our valued customers to be informed about our excellent water system. If you have any questions or would like additional information concerning water quality, please contact any customer service representative at (205) 787-4521. You may also attend any of our open meetings normally held on the first and third Tuesday of each month at 6:30 PM at the Mulga Town Hall located at 505 Mulga Road, Mulga, AL 35118. Meeting dates and times are posted on our website at [townofmulga.com](http://townofmulga.com) and on our Town Board inside the Town Hall. The Board welcomes public input and comments during its meeting. For questions, please call 205.781.0645. Town Officials are Mayor - W. Keith Varner, Town Clerk -Tabitha Galloway, and our council members are elected by district (1) Jeremy Davis, (2) Chandra Gage, (3) Lisa Armstrong, (4) Leland Taylor and (5) Rachel Davis. In case of EMERGENCY after normal office hours Monday through Friday or on weekends and holidays, call the Water & Gas Office at (205) 787-4521, your call will be forwarded to the employee on call. If no answer, it goes to a voice mail system and your call will be returned as soon as possible. We have taken steps to improve our security, but



Town of Mulga Water & Gas Department  
2024 Consumer Confidence Report For 2023  
2024 Annual Water Quality Report For 2023



report can contact Birmingham Water Works Board at (205) 244-4381.

### Health Information

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 (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 by calling (1-800-426-4791) or visiting EPA's website address [www.epa.gov/safewater](http://www.epa.gov/safewater). For further information, contact the Jefferson County Health Department at 205-933-9110. The Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM) requires the disinfection of drinking water. However, these disinfectants can react with naturally occurring organic and inorganic matter present in the water to form chemicals called Disinfection By-products (DBPS). EPA/ADEM has determined that a number of DBPS are a health concern at certain levels of exposure. Some people who drink water containing DBPS such as trihalomethanes and haloacetic acids in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Action has been taken to reduce the amounts of disinfectants being added to the treated water and treatment techniques have been implemented to reduce the concentrations of disinfectant byproducts within the drinking water distribution system. Questions concerning the DBPS may be directed to the Birmingham Water Works Board at (205) 244-4000. 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) or EPA's website address [www.epa.gov/safewater](http://www.epa.gov/safewater). Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin has been issued. Thus, monitoring for these contaminants was not required. We are committed to providing our community with clean, safe and reliable drinking water for each of our customers.

### Raw Water Sources for Water Treatment Plants

#### Black Warrior Basin

- Sipsey Fork
  - Mulberry Fork
  - Inland Lake / Blackburn Fork
- #### Cahaba Basin
- Big Cahaba River
  - Little Cahaba River
  - Lake Purdy

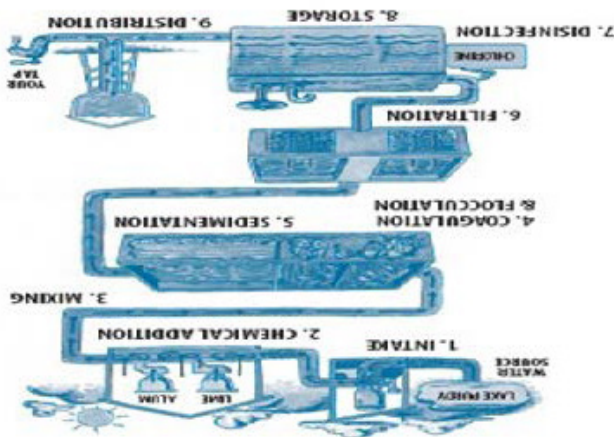
### The following information is provided by Birmingham Water Works relating to their system operation and regulatory reporting requirements:

- The BWWB uses acrylamide based polymers in its solids handling operations.
- 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 Birmingham Water Works Board (BWWB) and Mulga Water & Gas Department is responsible for providing high quality drinking water but cannot control the variety of materials used in household plumbing systems. 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 TWO 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 at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.
- 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.

### Lead and Copper

The most recent testing for lead and copper compliance within the distribution system was from August 2022.

- Natural Gas smells like rotten eggs, and it is non-toxic, but flammable.
- To detect a natural gas leak outside, look for dead vegetation, listen for hissing and blowing sounds, smell the odorant, which smells like rotten eggs.
- IN THE EVENT OF A NATURAL GAS LEAK-leave the area immediately and call Mulga Water and Gas at 205-787-4521.
- Make sure your natural gas appliances are free of dust and debris.
- If you have a natural gas heater, look to make sure that there is enough clearance between the heater and curtains, furniture, or anything that would keep the heater from working properly.



The Water Treatment Process

Remember to CALL 811 BEFORE YOU DIG! In order to comply with Federal Order number RP1162 we are sending this notice to all individuals in our coverage area.

- When you light your appliance, make sure that it has a good burning pilot light with a sharp blue flame.
- If you think you smell natural gas call Mulga Water & Gas at 205-787-4521.
- Free line location services are provided by calling Alabama 811 prior to the start of any excavation project - no matter how large or how small - especially if you are using any type of mechanized equipment. If you are unsure whether you need to notify Alabama 811 prior to starting your job, it is always best to contact 811 - it is FREE and it's the Law.

### Natural Gas Safety

The Birmingham Water Works voluntarily monitors for the organisms Cryptosporidium and Giardia quarterly at their raw water sites. or at <http://www.epa.gov/safewater/lead>. This testing was done in accordance with applicable regulations. The 90th percentile lead sample was <0.01mg/L. No lead samples exceeded the action level. The 90th percentile copper sample was 0.016 mg/L. No copper samples exceeded the action level. at Distribution System Evaluation Sites (DSE). 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 Mulga Water & Gas Department 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 it 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



## Plain Language Definitions

In the following tables you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms we've provided the following definitions:

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

**Contaminant** – Any substance other than water i.e. dissolved minerals, purifying and dental health promotion additives.

**Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Maximum Contaminant Level Goal (MCLG)** - The “Goal” (MCLG) is the level of a contaminant in drinking water which there is no known or expected risk to health. MCLG’s allow for a margin of safety. **Maximum Contaminant Level (MCL)** - Highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology. To understand the possible health effects described for many regulated constituents, a person would have to drink two 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.

**Maximum Residual Disinfectant Level Goal (MRDLG)**-The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of the use of disinfection to control microbial contaminants.

**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.

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

**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.

**Running Annual Average (RAA)** – A compliance period where an average of four consecutive quarterly samples are used.

**Total Trihalomethanes (TTHM)** – By-product of drinking water chlorination  
**Total Haloacetic Acids (HAA5)** - By-product of drinking water chlorination  
**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in water.  
**TOC** – Total Organic Carbon

**Turbidity (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 and Exemptions** –ADEM and EPA permission not to meet an MCL or a treatment technique under certain conditions.

The following tables of laboratory test data were provided by our water supplier, the Birmingham Water Works Board. This data was collected from their water treatment plants and their water distribution system.

2023 Chemical Analysis											
Standard List Of Primary Drinking Water Contaminants for CCR											
Primary Drinking Water Standards - Limits are set based on public health effects.			Distribution System Microbiological Substance (Regulated)								
Bacteriological			Bacteriological								
Parameters	MCL	TT	The highest percentage of bacteria in the distribution system for one month was 0.54% (2 out of 370 samples).								
Total Coliform Bacteria		TT	All locations that tested total coliform - positive were tested for <i>E. coli</i> . <i>E. coli</i> was not detected in any of these samples. All locations that tested total coliform - positive were resampled and all resamples were negative.								
<i>E. coli</i>			Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .								
Inorganic Chemicals and Radiologicals			Regulated Organic Chemicals			Regulated Organic Chemicals			Regulated Organic Chemicals		
Parameters (mg/L)	MCL	Highest	Parameters (µg/L)	MCL	Highest	Parameters (µg/L)	MCL	Highest	Parameters (µg/L)	MCL	Highest
Arsenic	0.06	ND	1,1-Dichloroethylene	7	ND	Dichlorobenzene	5	ND	PCB, 1254	0.5	ND
Asenic	0.01	ND	1,1,1-Trichloroethane	200	ND	Diboseb	7	ND	PCB, 1260	0.5	ND
Barium	2	0.020	1,1,2-Trichloroethane	5	ND	Diquat	20	ND	p-Dichlorobenzene	75	ND
Beryllium	0.004	ND	1,2-Dichloroethane	5	ND	Endosulfan	100	ND	Pentachlorophenol	1	ND
Cadmium	0.005	ND	1,2-Dichloropropane	5	ND	Ethin	2	ND	Picloram	500	ND
Chlorine	MRL = 4	2.96	1,2,4-Trichlorobenzene	70	ND	Ethylbenzene	700	ND	Simazine	4	ND
Chromium	0.1	ND	2,4,5-TP (Silvex)	50	ND	Ethylene Dibromide (EDB)	0.05	ND	Styrene	100	ND
Copper	AL = 1.3	0.009	2,4-D	70	ND	Glyphosate	700	ND	Tetrachloroethylene	5	ND
Oxanile	0.2	ND	Atrachlor	2	ND	Heptachlor	0.4	ND	Toluene	1000	ND
Fluoride	4	0.82	Atrazene	3	ND	Heptachlor Epoxide	0.2	ND	Total Haloacetic Acids	60	37.0
Gross Alpha (GCI/L)	15	ND	Benzene	5	ND	Hexachlorobenzene	1	ND	Total Trihalomethanes	80	37.7
Lead	AL = 0.015	ND	Benzoflupirene	0.2	ND	Hexachlorocyclopentadiene	50	ND	Toxaphene	3	ND
Mercury	0.002	ND	Carbofuran	40	ND	Lindane	0.2	ND	trans-1,2-Dichloroethylene	100	ND
Nitrate as N	10	0.46	Carbon Tetrachloride	5	ND	Methoxychlor	40	ND	Trichloroethylene	5	ND
Nitrite as N	1	ND	Chlordane	2	ND	o-Dichlorobenzene	200	ND	Vinyl Chloride	2	ND
Radium 226 (GCI/L)	5	0.2	Chlorobenzene	100	ND	Oxamyl (Vydate)	600	ND	Xylenes	10,000	ND
Radium 228 (GCI/L)	5	ND	cis-1,2-Dichloroethylene	70	ND	PCB, 1016	0.5	ND	TOC Step Removal for Filter Plants		
Selenium	0.05	ND	Dalapon	200	ND	PCB, 1221	0.5	ND	Total Organic Carbon (TOC)	TT	2
Thallium	0.002	ND	Di(2-Ethylhexyl)adipate	400	ND	PCB, 1232	0.5	ND	System Wide Stage 2 Sites	RAA	31.9
Total Nitrate/Nitrite	10	0.46	Di(2-Ethylhexyl)phthalate	6	ND	PCB, 1242	0.5	ND	Total Haloacetic Acids	60	31.9
Turbidity (NTU)	0.3 (TT)	0.17	Dibromochloropropane	0.2	ND	PCB, 1248	0.5	ND	Total Trihalomethanes	80	38.0

2023 Chemical Analysis										
Detected Regulated Drinking Water Contaminants for CCR										
Bacteriological										
Parameters	MCLG	MCL	The highest percentage of bacteria in the distribution system for one month was 0.54% (2 out of 370 samples).							
Total Coliform Bacteria	N/A	TT	All locations that tested total coliform - positive were tested for <i>E. coli</i> . <i>E. coli</i> was not detected in any of these samples. All locations that tested total coliform - positive were resampled and all coliform-positive repeat sample for <i>E. coli</i> .							
<i>E. coli</i>	0		All locations that tested total coliform - positive were tested for <i>E. coli</i> . <i>E. coli</i> was not detected in any of these samples. All locations that tested total coliform - positive were resampled and all coliform-positive repeat sample for <i>E. coli</i> .							
Inorganic Chemicals and Radiological			Major Sources in Drinking Water							
Parameters (mg/L)	MCLG	MCL	Highest	Range	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits					
Barium	2	2	0.020	0.011 - 0.020	Water additive used to control microbes					
Chlorine	MRDLG = 4	MRDL = 4	2.96	0.42 - 2.96	Corrosion of household plumbing systems, erosion of natural deposits					
Copper	1.3	AL = 1.3	0.009	ND - 0.009	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories					
Fluoride	4	4	0.82	ND - 0.82	Runoff from fertilizer, leaching from septic tanks and sewage, erosion of natural deposits					
Nitrate as N	10	10	0.46	ND - 0.46	Erosion of natural deposits					
Radium 226 (GCI/L)	0	5	0.2	ND - 0.2	Runoff from fertilizer, leaching from septic tanks and sewage, erosion of natural deposits					
Total Nitrate/Nitrite	10	10	0.46	ND - 0.46	Soil runoff					
Turbidity (NTU)	N/A	0.3 (TT)	0.17	0.01 - 0.17						
Regulated Organic Chemicals			Major Sources in Drinking Water							
Parameters (µg/L)	MCLG	MCL	Highest	Range	By-product of drinking water chlorination					
Total Haloacetic Acids	N/A	60	37.0	9.95 - 37.0	By-product of drinking water chlorination					
Total Trihalomethanes	N/A	80	37.7	9.67 - 37.7	By-product of drinking water chlorination					
Running Annual Average (RAA) for System Wide Stage 2 Sites			Major Sources in Drinking Water							
Parameters (µg/L)	MCLG	MCL	RAA	Range	By-product of drinking water chlorination <th colspan="5"></th>					
Total Haloacetic Acids	N/A	System-wide RAA: 60 µg/L	31.9	15.0 - 46.9	By-product of drinking water chlorination					
Total Trihalomethanes	N/A	System-wide RAA: 80 µg/L	38.0	19.0 - 75.7	By-product of drinking water chlorination					
TOC Step Removal for Filter Plants			Major Sources in Drinking Water							
TOC Percent Removal	MCLG	MCL	Highest	Range	Naturally present in the environment					
Total Organic Carbon (TOC)	N/A	TT	2	1 - 2						

2023 Chemical Analysis									
Secondary Drinking Water Standards									
Limits are set based on cosmetic or aesthetic effects.									
Parameters (mg/L)	MCL	Highest	Range	By-product of drinking water treatment					
Aluminum	0.055	0.011	- 0.055						
Cadmium	Monitored	53.5	12.6 - 53.5						
Chloride	250	374	7.75						
Copper	1	0.009	ND - 0.009						
Larger Saturation Index (LSI)	Non-corrosive	-0.084	-1.24 to -0.084						
Magnesium	Monitored	8.77	2.69 - 8.77						
Manganese	0.05	ND	0.002						
pH (SU)	6.5 - 8.5	8.50	7.65 - 8.50						
Potassium	Monitored	1.74	1.16 - 1.74						
Sodium	Monitored	138	11.7						
Sulfate	250	376	112 - 376						
Total Dissolved Solids (TDS)	500	70.2	19.4 - 70.2						
Temperature (°F)	Monitored	248	22.5 - 248						
Total Alkalinity	Monitored	96	22 - 96						
Total Hardness	Monitored	154	42 - 154						
Unregulated Organic Contaminants Detected			Discharge from nickel smelting/refining and steelworks industries						
Parameters (µg/L)	MCL	Highest	Range	MCLG					
Bromochloroethane	Monitored	6.60	2.75 - 6.60	0					
Chloroform	Monitored	31.1	6.44 - 31.1	70					
Dibromoacetic acid	Monitored	4.19	ND - 4.19	NA					
Dichloroacetic acid	Monitored	1.08	ND - 1.08	60					
Dichloroethane	Monitored	20.8	7.13 - 20.8	0					
Monochloroacetic acid	Monitored	1.65	ND - 1.65	NA					
Monochloroacetic acid	Monitored	2.36	ND - 2.36	70					
Perfluorobutanesulfonic acid	NA	0.0054	0.0023 - 0.0054	NA					
Perfluorohexanesulfonic acid	NA	0.0019	ND - 0.0019	NA					
Perfluorooctanesulfonic acid	NA	0.0044	ND - 0.0044	NA					
Perfluorodecane sulfonic acid	NA	0.0039	0.0022 - 0.0039	NA					
Perfluorooctanoic acid	NA	0.0027	ND - 0.0027	NA					
Trichloroacetic acid	Monitored	14.8	2.82 - 14.8	20					

2023 Chemical Analysis									
Stage 2 Sites									
Sites	Monochloroacetic Acid (µg/L)	Monobromochloroacetic Acid (µg/L)	Dichloroacetic Acid (µg/L)	Trichloroacetic Acid (µg/L)	Bromochloroacetic Acid (µg/L)	Dibromochloroacetic Acid (µg/L)	Bromochloroacetic Acid (µg/L)	Total Haloacetic Acids (HAA5) (µg/L)	Total Haloacetic Acids (HAA5) (µg/L)
4502 Birmingham Rd	1.67	<1.00-1.67	<1.00	18.3	8.64-18.3	13.7	9.0-13.7	<1.00	33.4
5301 Walnut Dr.	1.82	<1.00-1.82	<1.00	15.5	12.0-15.5	19.8	9.0-19.8	<1.00	31.0
4502 Birmingham Rd	42.2	17.6-42.2	6.20	1.06	<1.00-1.06	<1.00	<1.00	48.4	21.6-48.4
5301 Walnut Dr.	65.4	17.5-65.4	6.98	1.00	<1.00-1.00	<1.00	<1.00	72.4	21.7-72.4

## 2023 Chemical Analysis

The table below provides laboratory test data from the Mulga Water & Gas water distribution system.