

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

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 risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791. 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 in some cases, radioactive material, and can pick up substances resulting from the presence of animals or 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 stormwater runoff, 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 agricultural, urban stormwater runoff, and residential uses.
- \* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, can also come from gas stations, urban stormwater 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulates established limits of contaminants in bottled water that must provide the same protection for public health.

**Safe Drinking Water Hotline 1 (800) 426 - 4791**

## How your water is produced Operator determines the raw water source



## Membrane Filtration



## Disinfection



**2016**

## WATER QUALITY REPORT MONROE WATER TREATMENT FACILITY ID NO GA2970001

Monroe's Water Treatment Department welcomes you to our Water Quality Report for 2015. This report contains key information on the quality of distributed water in 2015. The water produced from the microfiltration plant meets or exceeds all EPA and EPD regulations.

The raw water sources for Monroe's water system are John T. Briscoe Reservoir, Alcovy River and for emergency use Jack's Creek. Multiple sources allow operators to choose their best option for treatment.

A Source Water Assessment Plan (SWAP) identifies the watershed that contributes to the drinking water, potential sources of contamination and how susceptible your water is to any possible contamination.



For information about this assessment, requests may be made to the City of Monroe Attn: Rodney Middlebrooks, \*POB 725\* Monroe, Georgia 30655. Or you may choose to attend city council meetings held the second Tuesday of each month at City Hall located at 215 North Broad

Certified operators, skilled in water treatment, produce water using proven treatment processes. These processes are coagulation, flocculation, sedimentation, and microfiltration. Disinfection assures the water is safe for consumption. Analysis are performed about every three hours. In a year, over 15,000 tests are performed to give our customers the best quality water from source to tap.

The microfiltration plant, the first in Georgia, is unique in that it can remove impurities 0.2 microns or above. By forcing water through a cellulite filter, impurities that could be harmful are removed. To give a perspective on micron size, the eye of a needle is about 1,230 microns and a typical cell in your body is about 10 microns.

The filtered water is sent to clearwells after pH adjustment and disinfection. Water pumped to distribution is monitored for all required parameters to assure that the best quality water is available to our customers.

## 2015 Detected Contaminants

### Turbidity

Substance	Units	MCL	MCLG	Maximum	Detected Range	Violation (Yes/No)	Source of Contaminant
Turbidity	NTU	TT	N/A	0.12	0.02-0.12	No	Soil Runoff

### Microbiological

Substance	MCL	MCLG	% of Positive Samples	Violation (Yes/No)	Source of Contaminant
(A) Total Coliform Bacteria	Less than 5% of monthly samples can test positive for Total Coliforms	0.0	3.1%	No	Naturally Occuring

### Disinfection & Disinfection By-Products

Substance	Units	MCL	MCLG	Maximum	Detected Range	Violation (Yes/No)	Source of Contaminant
Total Trihalomethanes	ppb	80	0	RAA 29	17.2-49.5	No	Treatment process by-product
Total Halocetic Acids	ppb	60	0	RAA 29	20.7-56.2	No	Treatment process by-product
Chlorine	ppm	4.00	4.00	2.42	0.84-2.42	No	Water additive used to control microbes
Chlorine Dioxide	ppm	0.80	0.80	0.47	0.00 - 0.47	No	Water additive used to control microbes
Chlorite	ppm	1.00	1.00	0.78	0.00 - 0.78	No	Treatment process by-product
Total Organic Carbon	ppm	TT	N/A	1.70	1.20-1.70	No	Naturally Occuring

### Inorganic Contaminants

Substance	Units	MCL	MCLG	Maximum	Detected Range	Violation (Yes/No)	Sources of Contaminant
(B) Fluoride	ppm	4.00	4.00	0.91	0.57-0.91	No	Erosion of natural deposits, water additive which promotes strong teeth
Nitrate	ppm	10.00	10.00	0	0.00-0.00	No	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Substance	Units	Action Level	MCLG	90th Percentile	Number of Samples above Action Level	Violation (Yes/No)	Sources of Contaminant
(C) *Copper	ppb	1300	0	150	0	No	Corrosion of household plumbing system, erosion of natural deposits
(C) *Lead	ppb	15	0	2.5	0	No	Corrosion of household plumbing system, erosion of natural deposits

\*Lead & Copper results are from 2014. The next round of analysis for the City of Monroe is scheduled for 2017.

#### Concerning Lead

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 City of Monroe 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 have 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 Hot-line at 1 (800) 426 - 4791** or <http://www.epa.gov/safewater/lead>

## GLOSSARY

**MG: Million Gallons**

**MGD: Million Gallons per Day**

**Maximum Contaminant Level (MCL):** The 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 available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The highest level of a contaminant that is allowed in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Running Annual Average (RAA):** The arithmetic average of the four most recent quarterly results.

**Treatment Technique (TT):** A required process intended to reduce the level of contaminants in drinking water.

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

**Turbidity:** A measure of the cloudiness of water. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

**ppm or mg/L:** Parts per million or milligrams per liter. One part per million is the equivalent of one minute in 2 years or one penny in 10 thousand dollars.

**ppb or µg/L:** Parts per billion or micrograms per liter. One part per billion is the equivalent of one minute in 2000 years or one penny in 10 million dollars.

**N/A:** Not Applicable

### Special Footnotes

- (A) 32 samples are tested each month. No more than 1 sample may be positive for total coliform bacteria.
- (B) Fluoride is added in treatment to bring the natural level to the EPA's recommended range of 0.78 to 1.2 ppm
- (C) Water from the treatment plant does not contain Lead & Copper, however, under EPA test protocol, water is tested at the tap. Tap tests show that where a consumer may have lead pipes or lead-soldered pipes, the water is not corrosive therefore, the amount of lead or copper absorbed by the water is limited to safe levels.

**Membrane Module Replacement**



**Modules Ready for Replacement**

