



# WATER QUALITY REPORT

# 2014

In accordance with Federal Environmental Protection Agency Regulations, the City of Bartlett Water Utility has prepared this report to inform its customers about the quality of the drinking water we supply to your homes. In order to provide the safest and most dependable water supply available we employ certified water plant operators who receive annual training to keep current with the newest technology and regulations and they are on call twenty-four hours a day - every day.

## FREQUENTLY ASKED QUESTIONS ABOUT BARTLETT WATER

**YES.**

Our water is tested daily, 365 days a year and not only meets but also exceeds all Federal and State standards. Some tests are required to be performed annually while other tests are conducted on a three to five year basis. As you'll see in the chart, we detected only a few contaminants, and found all those contaminants at safe levels.

Residents of Shelby County Tennessee and the customers of the Bartlett Water System enjoy drinking water that is among the purest in the world. This water is the ultimate recycled product, beginning as raindrops that fell years ago and slowly filtered through layers of sand and gravel. Your water, which is ground water, comes from wells drilled into the Memphis Sands aquifer (water bearing zone). Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the water supplies serving water in this water system. The SWAP Report assesses the susceptibility of public water supplies to potential contamination. Water sources have been rated as reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source.

The Bartlett Water System sources are rated as slightly to moderately susceptible to potential contamination. An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at [www.tennessee.gov/environment/dws/dwassess.shtml](http://www.tennessee.gov/environment/dws/dwassess.shtml) or you may contact the Water System or TDEC at 1-888-891-TDEC to obtain copies of specific assessments. A wellhead protection plan is available for your review by contacting Greg Engstrand, Water Treatment Division Manager of Bartlett Water System Monday through Friday at (901) 385-6499. Drinking water, including bottled water, may reasonably be expected to contain at least

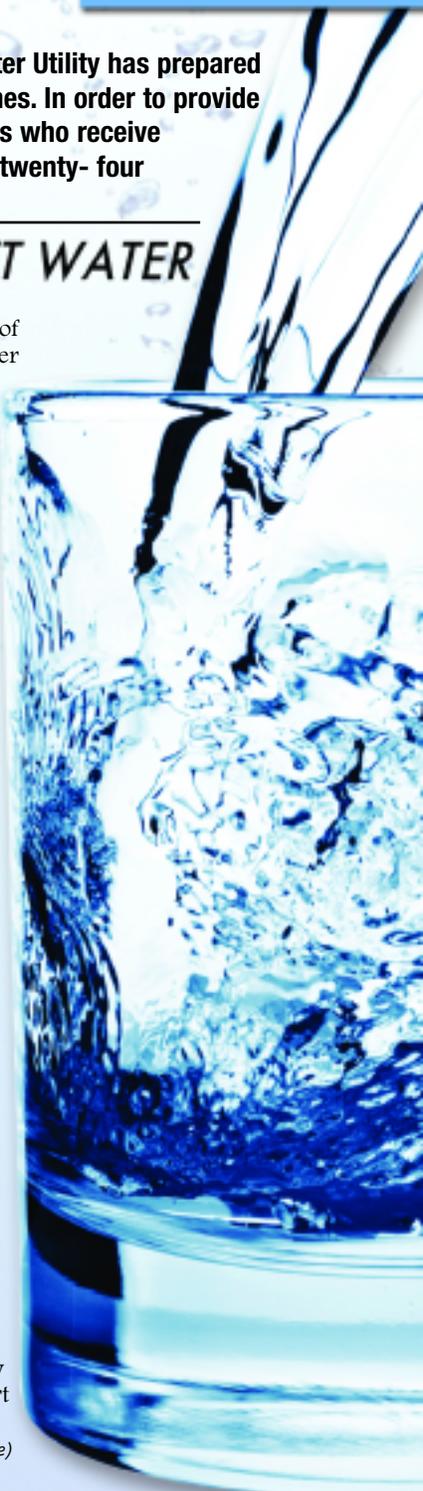
small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Bartlett's water comes from deep 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 from human activity.

- 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 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 agriculture, urban storm water runoff, 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.

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities to (901) 385-6499.

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City of Bartlett  
6400 Stage Road  
Bartlett, TN 38134

(Continued from other side)



The Mayor and Board of Aldermen meet every 2nd and 4th Tuesday of the

month. Please feel free to participate in these meetings or contact Greg Engstrand, Water Treatment Division Manager of Bartlett Water at (901) 385-6499 or visit [www.cityofbartlett.org](http://www.cityofbartlett.org).

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe 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 which must provide the same protection for public health. We have always met all of these requirements. We want you to know that we will pay special attention to all the rules.

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 microbial contaminants are available from the Safe Drinking Water Hotline at (800-426-4791).

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 Bartlett Water System 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>

Iron: Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or "rusty" water at your tap.

## 2014 Water Quality Data

Contaminant	Violation	Level Found	Range	Sample Date	MCLG	MCL	Typical source of contaminant
Total Coliform Bacteria	No	0%	0	2014 60/Month	0	5%	Naturally present in the environment
Copper	No	90 th% 0.51 - ppm	N/A	2012 Triennial	1.3	1.3 ppm	Corrosion of household plumbing systems. Erosion of natural deposits; Leaching from wood preservatives
Lead	No	90 th% 0.5 - ppb	N/A	2012 Triennial	0	15 ppb	Corrosion of household plumbing systems. Erosion of natural deposits; Leaching from wood preservatives
TTHM Total Trihalomethanes	No	9.49 ppb	1.0 - 29.9 ppb	2014 Feb - Aug	N/A	80 ppb	By product of drinking water chlorination/ Running Annual Avg.
HAA5 Total Haloacetic Acids	No	2.52 ppb	<1.0 - 4.7 6.0 ppb	2014 Feb - Aug	N/A	60 ppb	By product of drinking water chlorination/ Running Annual Avg.
Nitrate	No	<0.1 - 0.13 ppm	N/A	2014 Annual	10 ppm	10 ppm	Run-off from fertilizer, erosion of natural deposits
Sodium	No	9 ppm	N/A	2014	N/A	N/A	N/A
Chlorine	No	1.3 ppm		2014 Daily	MRDLG 4 ppm	MRDL 4 ppm	Additive to destroy microbes
Fluoride	No	0.64 ppm	0.5 - 1.0 ppm	2014 Daily	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth; Discharge from fertilizers & aluminum factories
Hardness (Calcium Carbonate)	No	43.3 ppm	33-52 ppm	2014	N/A	N/A	Caused by compounds of calcium & magnesium (<60 ppm considered soft)

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. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. The aesthetic limit to iron is 0.3ppm. During the most recent round of lead and copper sampling, none of the household samples contained concentrations exceeding the action level.

\*NOTE: Out of 30 sites sampled, 0 sites exceeded the lead action level MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL: Maximum Contaminant Level, or the highest level of contaminant that is allowed in drinking water.

MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL: Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water.

MRDLG: Maximum Residual Disinfectant Level Goal, or the level of drinking water disinfectant below which there are no known or expected risk to health.

### Abbreviations:

ppb: Parts per billion or micrograms per liter  
ppm: Parts per million or milligrams per liter  
n/a: Not applicable

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

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

ND: Non-Detects-laboratory analysis indicates the contaminant is not present.  
Chlorine Residual

### Chlorine Residual

Federal and state drinking water regulations require detectable disinfectant (chlorine) residuals throughout the water distribution system. Bartlett's water averages 0.9 to 1.3 parts per million of chlorine in order to ensure the proper residuals. This is done to prevent the possibility of waterborne disease. Proposed regulations suggest a maximum of four parts per million.