2016 Water Quality Report
City of Bartlesville

This report contains important information regarding the quality of drinking water the City provided to our customers during the 2016 calendar year. Included are details about the origin of the City's water, what it contains, and how it compares with United States Environmental Protection Agency and Oklahoma Department of Environmental Quality standards.

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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, 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 healthcare providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Your water is safe!

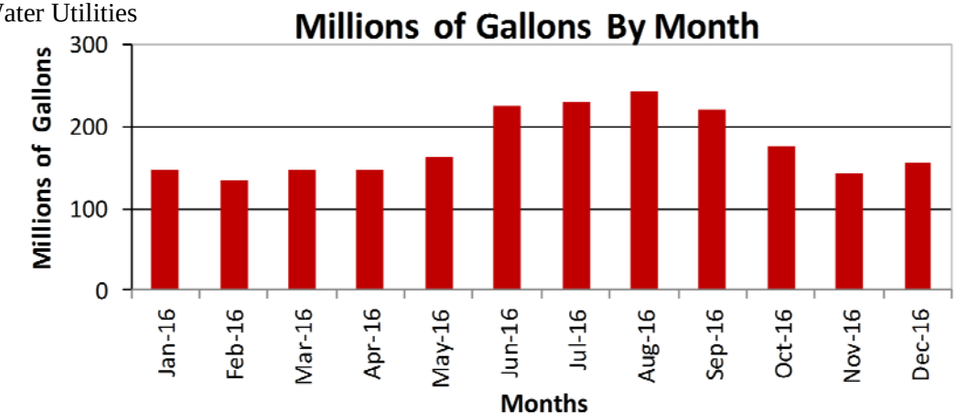
The table on the following side lists all drinking water contaminants detected in the City of Bartlesville's water during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table originated from testing completed between Jan. 1, 2016, and Dec. 31, 2016. The Oklahoma Department of Environmental Quality permits the City to monitor for certain contaminants less frequently than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of our water quality, but some test results may be more than a year old.

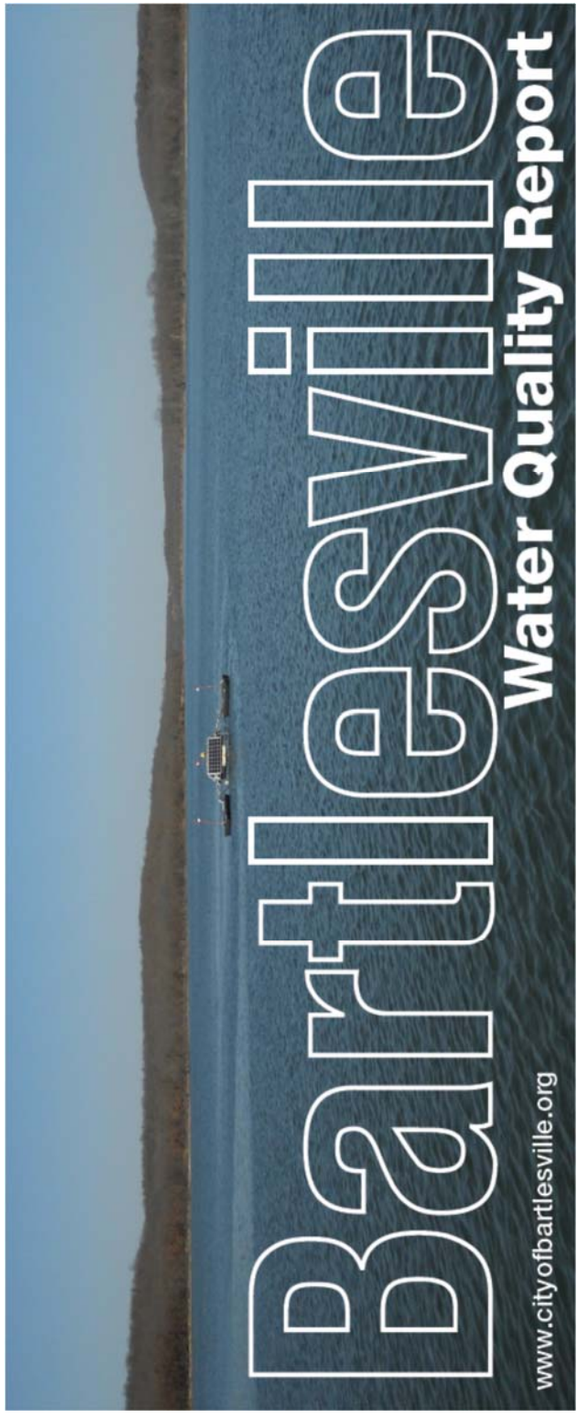
The City of Bartlesville utilizes three water sources, Lake Hulah, Lake Hudson and the Caney River. During 2016, customers used an average of 5.83 million gallons of water per day. The Water Treatment Plant is located at 235 Hudson Lake Road, Bartlesville, OK 74003. If you have questions about this report, you may contact Terry Lauritsen at 918-338-4116. You may also learn more by attending any of our regularly scheduled City Council meetings, held on the first Monday of each month. Meetings are also called as needed. Meetings begin at 7 p.m. in the Council Room of the City Center, located at 401 S. Johnstone Ave.

Best regards,

Terry Lauritsen
Director, Water Utilities

Water Production 2016





The sources of drinking water (both tap 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 can become contaminated from naturally occurring minerals and in some cases, radioactive material, or may pick up substances from the presence of animals or human activity.

Contaminants that may be present in source water include:

Microbial, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic, 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 sources such as agriculture and residential uses.

Radioactive, which are naturally occurring or be the result of oil and gas production and mining activities.

Organic chemical, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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. 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.eqa.gov/safewater/lead

TEST RESULTS

LEAD AND COPPER

Contaminant	Date Sampled	Range Detected	90th Percentile	Violation	MCLG	Action Level (AL)	# Sites Over AL	Likely Source of Contamination
Copper	2015	BPQL - 0.236 ppm	0.122 ppm	No	1.3 ppm	1.3 ppm	0	Erosion of natural deposits: Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2015	BPQL - 0.0071 ppb	0	No	0.015 ppb	0.015 ppb	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

BPQL - Below Practical Quantification Limits. **ppm** - Parts per million or Milligrams per liter (mg/L) or one ounce in 7,350 gallons of water. **ppb** - Parts per billion or Micrograms per liter (ug/L) or one ounce in 7,350,000 gallons of water. **90th Percentile** - The value for which 90% of the results are less than. **MCLG** - Maximum Contaminant Level Goal. The MCLG is the level of a contaminant in drinking water below which there is no know or expected risk to health. MCLGs allow for a margin of safety. **Action Level** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Contaminant	Date Sampled	Highest Level Detected	Range of Levels Detected	Violation	MCLG	MCL	Likely Source of Contamination
Chlorine	2016	3 ppm	3 - 3 ppm	No	MRDLG = 4 ppm	MRDL = 4 ppm	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2016	24 ppb	9.93 - 26 ppb	No	No goal for the total	60 ppb	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	37 ppb	19.9 - 44.4 ppb	No	No goal for the total	80 ppb	By-product of drinking water disinfection.

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

INORGANIC CONTAMINANTS

Contaminant	Date Sampled	Highest Level Detected	Range of Levels Detected	Violation	MCLG	MCL	Likely Source of Contamination
Barium	03/27/2013	0.0481 ppm	0.0481 - 0.0481 ppm	No	2 ppm	2 ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2016	1.06 ppm	0 - 1.06 ppm	No	4 ppm	4 ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2016	0.14 ppm	0.14 - 0.14 ppm	No	10 ppm	10 ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

RADIOACTIVE CONTAMINANTS

Contaminant	Date Sampled	Highest Level Detected	Range of Levels Detected	Violation	MCLG	MCL	Likely Source of Contamination
Beta/photon emitters	08/24/2011	3.384 mrem/yr	3.384 - 3.384 mrem/yr	No	0	4 ppm	Decay of natural and man-made deposits.

mrem/yr - Millirembs per year. Measure of radiation absorbed by the body.