



## Rolla Municipal Utilities 2016 Annual Water Quality Report

This document contains the most recent testing results, complies with the regulations, and is intended as an informative summary of the contaminants found in Rolla's drinking water. Governmental agencies are continually monitoring drinking water in an effort to assure public health, and the Maximum Contaminants Levels (MCL) are set to correspond with safe consumption levels. As of this date, Rolla has monitored for many more contaminants than are depicted in this document, and to avoid confusion, contaminants not found are not listed. All monitoring is done by the Department of Natural Resources or laboratories certified by the government for that particular methodology. The Missouri Department of Natural Resources has completed a Source Water Assessment Plan for Rolla, which you may access by calling (573) 751-5331.

*Este informe contiene informacion muy importante. Tradúscalo o preguntale a alguien que lo entienda bien.*

**P**roviding our customers with this report is just one of the many requirements the federal and state governments place on all community water systems and as always, we're eager to comply.

Your drinking water is provided by eighteen (18) wells reaching deep into the Ozark aquifer. In an effort to maintain adequate fire protection and provide fresh water to Rolla, the wells are run and rotated based on demand. At each well, Rolla's water is fluoridated for healthy teeth and bones, and chlorinated to maintain bacteriological integrity throughout the system. These chemicals are carefully monitored on a daily basis.

Additional information about your water, water system and your utility may be obtained by contacting:

**Rolla Municipal Utilities**  
**102 West 9th Street**  
**Rolla, Missouri 65401**  
**(573) 364-1572**  
**[www.rollamunicipalutilities.org](http://www.rollamunicipalutilities.org)**

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 Environmental Protection Agency's Safe Drinking Water hotline (800-426-4791).

Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. 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.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- E. 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, the Department of Natural Resources prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## Special Lead and Copper Notice

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. **Rolla** 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 (800-426-4791) or at <http://water.epa.gov/drink/info/lead/index.cfm>.

## Information

The sources of drinking water (both tap and bottled water) include river, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

## Water Softener Information

Rolla's water contains approximately 16.1 grains/gal, or 276 mg/l hardness as CaCO<sub>3</sub>.

## \*\* NOTICE \*\*

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants, are available by calling the EPA's Safe Drinking Water Hotline at (800-426-4791).

# Contaminants Report

## Definitions:

**Population:** 19559. This is the equivalent residential population served including non-bill paying customers.

**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. MCLGs allow for a margin of safety.

**MCL:** Maximum Contaminant Level, or the 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.

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

**90th percentile:** For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.

**Level Found:** Is the average of all test results for a particular contaminant.

**Range of Results:** Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found.

**RAA:** Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

**LRAA:** Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters.

**TTHM:** Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

**HAA5:** Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di-bromoacetic acid) as a group.

**Cryptosporidium:** A microscopic parasite that can be found in surface waters.

## Abbreviations:

**ppb:** parts per billion or micrograms per liter.

**ppm:** parts per million or milligrams per liter.

**nd:** not detectable at testing limits.

**µg/l:** microgram per liter of water-equal to 1ppb.

**EPA:** Environmental Protection Agency.

**mg/l:** Milligrams per Liter, Corresponds to approximately one drop in ten gallons of water.

**pCi/l:** Picocuries per Liter, a measure of radioactivity in water.

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

**2016—REGULATED CONTAMINANTS—2016**

<b>LEAD AND COPPER</b>		<b>90th Percentile</b>	<b>Range</b>	<b>Unit</b>	<b>AL</b>	<b>Sites Over AL</b>	<b>Typical Source</b>	
Copper ('13 - '15)		0.172	0.016 - 0.395	ppm	1.3	0	Corrosion of household plumbing systems	
Lead ('13 - '15)		4.5	1.1 - 20.6	ppb	15	1	Corrosion of household plumbing systems	
<b>CONTAMINANTS</b>		<b>Highest Value</b>	<b>Range</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source</b>	
Arsenic ('12)		1.31	0 - 1.31	ppb	10	0	Erosion of natural deposits	
Barium ('12)		0.203	0.0679 - 0.203	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Fluoride ('12)		1.08	0 - 1.08	ppm	4	4	Natural Deposits; Water additive to promote strong teeth	
<b>Unregulated Contaminant Monitoring Rule (UCMR)</b>			<b>Collection Date</b>	<b>Highest Value</b>	<b>Range</b>	<b>Unit</b>		
Chromium, Hex			11/12/2013	0.053	0 - 0.053	UG/L		
Strontium			10/28/2013	54	44.4 - 54	UG/L		
<b>Disinfection Byproducts</b>	<b>Sample Point</b>	<b>Monitoring Period</b>	<b>Highest LTRA</b>	<b>Range</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source</b>
(HAA5)	DBPDUAL-01	2016	0	0 - 0	ppb	60	0	Byproduct of drinking water disinfection
(HAA5)	DBPDUAL-04	2016	0	0 - 0	ppb	60	0	Byproduct of drinking water disinfection
TTHM	DBPDUAL-01	2016	4	3.89- 3.89	ppb	80	0	Byproduct of drinking water disinfection
TTHM	DBPDUAL-04	2016	12	125 - 125	ppb	80	0	Byproduct of drinking water disinfection
<b>RADIONUCLIDES</b>		<b>Collection Date</b>	<b>Highest Value</b>	<b>Range</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source</b>
Gross Alpha Particle Activity		6/01/2016	4.6	3.4 - 4.6	pCi/l			Erosion of natural deposits
<b>MICROBIOLOGICAL - No detected results were found in the calendar year 2016.</b>								
<b>VIOLATIONS AND EXCEEDANCES - There were no violations or exceedances found in the calendar year of 2016.</b>								

The table lists all of the drinking water contaminants that RMU detected during the calendar year of this report, unless otherwise noted. The presence of contaminants in the water does not necessarily indicate that water poses health risks. The State has reduced monitoring frequency to less often than once per year for some contaminants because the concentrations are unlikely to vary from year to year. Some of our data, though representative, may be more than one (1) year old.

As a service to all our customers, this report can be viewed on our website at [www.rollamunicipalutilities.org/wp-content/uploads/2017/06/CCR\\_16.pdf](http://www.rollamunicipalutilities.org/wp-content/uploads/2017/06/CCR_16.pdf) or at [www.dnr.mo.gov/ccr/MO3010700.pdf](http://www.dnr.mo.gov/ccr/MO3010700.pdf)