

# CITY of BRANSON



# WATER Quality Report 2012

## Utilities Mission Statement

The Utilities Department is committed in providing professional customer service to those visiting the area and those who make this community home. We will consistently provide safe public drinking water for our visitors and citizens. Our wastewater collection and treatment systems will be operated to produce the highest quality effluent possible in order to protect our lakes and streams for the enjoyment of future generations.



## Community Participation

Your input on water quality is always welcomed. The City Council meets every 2nd and 4th Tuesday of the month at 7:00p.m. in the Council Chambers at City Hall, located at 110 W Maddux Street #210. Please feel free to participate in these meetings.

**Errol Cordell**

*Water Treatment Operations Supervisor*

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## Why are there contaminants in my 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 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 stormwater 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 stormwater runoff, and residential uses.
- D. 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 stormwater 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 regulations which limit 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.

## Is our water system meeting other rules that govern our operations?

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned the identification number MO5010096 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are included in this report. Any violations of state requirements or standards will be further explained in this report.

## How might I become actively involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at [417-337-5296](tel:417-337-5296) to inquire about scheduled meetings or contact persons.

## Do I need to take any special precautions?

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/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 (800-426-4791).

## 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. The City of Branson 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>.

## What Is The Source Of My Drinking Water?



The sources of drinking water (both tap and bottled water) include rivers, 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.

The City of Branson has two Surface Water Treatment Plants and six Ground Water Wells. 94% of the treated water that serves the city of Branson comes from the treatment plants which pump water from Lake Taneycomo. The city treated 1.264 billion gallons of water in the year 2012. During peak summer months the average water treated per day is 4.910 million gallons and in the winter it is 2.240 million gallons.

## Source Water Assessment

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well or surface water intake and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at <http://maproom.missouri.edu/swipmaps/pwssid.htm>. To access the maps for your water system you will need the following State-assigned identification code: **MO5010096**

The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

# WATER QUALITY RESULTS FOR 2012

REGULATED CONTAMINANTS	COLLECTION DATE	HIGHEST VALUE	RANGE (LOW-HIGH)	UNIT	MCL	MCLG	TYPICAL SOURCE
BARIUM	3/28/2012	0.0318	0.0312-0.0318	PPM	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	3/28/2012	0.94	0.84-0.94	PPM	4	4	Natural deposits; Water additive which promotes strong teeth
NITRATE-NITRITE	8/8/2012	0.71	0-0.71	PPM	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
DISINFECTION BYPRODUCTS	MONITORING PERIOD	RAA	RANGE (LOW-HIGH)	UNIT	MCL	MCLG	TYPICAL SOURCE
(HAA5)	2012	28	15.1-38.8	PPB	60	0	Byproduct of drinking water disinfection
TTHM	2012	43	24.6-56.8	PPB	80	0	Byproduct of drinking water disinfection
TOC	COLLECTION DATE	HIGHEST VALUE	RANGE	UNIT	TT	TYPICAL SOURCE	
CARBON, TOTAL	9/18/2012	2.12	1.05-2.12	MG/L	0	Naturally present in the environment	
LEAD AND COPPER	DATE	90TH PERCENTILE	RANGE (LOW-HIGH)	UNIT	AL	Sites Over AL	TYPICAL SOURCE
COPPER	2010-2012	0.159	0.0146-0.294	PPM	1.3	0	Corrosion of household plumbing systems
LEAD	2010-2012	5.77	1.35-6.51	PPB	15	0	Corrosion of household plumbing systems
RADIONUCLIDES	COLLECTION DATE	HIGHEST VALUE	RANGE	UNIT	MCL	MCLG	TYPICAL SOURCE
COMBINED RADIUM (-226 & -228)	4/3/2012	1.7	1.1 - 1.7	pCi/l	5	0	Erosion of natural deposits
GROSS ALPHA PARTICLE ACTIVITY	7/3/2012	10.9	4.8 - 10.9	pCi/l			Erosion of natural deposits

TURBIDITY					
PERCENTAGE OF SAMPLES IN COMPLIANCE WITH STANDARD	MONTHS OCCURRED	VIOLATION	HIGHEST SINGLE MEASUREMENT	Month Occurred	Sources
100	12	NO	.27 NTU	September	Soil Runoff

MICROBIOLOGICAL	RESULT	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2012				

VIOLATIONS AND HEALTH EFFECTS INFORMATION		
During the 2012 calendar year, we had the below noted violation(s) of drinking water regulations.		
COMPLIANCE PERIOD	ANALYTE	Type
No Violations Occurred in the Calendar Year of 2012		

### Definitions:

**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.

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

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

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

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

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

### Abbreviations:

**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.

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

**ppm:** parts per million or milligrams per liter. n/a: not applicable.

**NTU:** Nephelometric Turbidity Unit, used to measure cloudiness in drinking 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.

# Why FIXING LEAKS around your home is IMPORTANT



Water conservation measures are an important first step in protecting and conserving our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill.

A single conservation measure that can have the biggest impact is to fix all leaks. Even the smallest leak can have a big effect on your water usage. Here are some leak facts that may surprise you:

- A 1/8 inch hole in a metal pipe, at 40 psi, leaks 2,500 gallons of water in 24 hours.
- A leak the size of a pinhead can waste 360,000 gallons per year, enough to fill 12,000 bathtubs to the overflow mark.
- A leaking toilet can use 90,000 gallons of water in 30 days.
- A dripping faucet or hose bib can lose up to 180 gallons a month or 2,160 gallons per year.
- About one in every 20 pools has a leak.
- About one in every 318 homes or buildings has a leak.
- Collecting water for gardening from the faucet waiting for hot water saves about 250 gallons of water a month.
- Using a broom instead of a hose to clean a sidewalk saves 150 gallons of water.