

**CITY OF BRANSON**  
**2011 ANNUAL WATER QUALITY REPORT**  
**(Consumer Confidence Report)**

MO5010096

*We are pleased to present to you this year's Annual Water Quality Report. This report is intended to provide you with important information about your drinking water and the efforts made to make sure it is safe. This report is not being mailed to each individual water service customer, however, if you would like a copy please call the Consumer Confidence Hotline at 417-243-2740, or visit our website at bransonmo.gov and click on Utilities. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect your water resources. We are committed to ensuring the quality of your water.*

**Attencion!**

Este informe contiene informacion muy importante. Traduscalo o prequentele a alguien que lo entienda bien.  
[Translated: This report contains very important information. Translate or ask someone who understands this very well.]

**What is the source of my water?**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and ground water 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 pickup substances resulting from the presence of animals or from human activity.

**Our water comes from the following sources:**

<u>Source Name</u>	<u>Type</u>
Well #5	Ground Water
Crosby Well	Ground Water
Well #7	Ground Water
Well #9	Ground Water
Well #10	Ground Water
Well #11	Ground Water
Lake Taneycomo Intake 1	Surface Water
Lake Taneycomo Intake 2	Surface Water

**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 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 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 an identification number MO5010096 for the purpose of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report.

### ***How might I become actively involved?***

*If you would like to observe the decision making process that affects drinking water quality or if you have any further questions about your drinking water report, please call us at the City of Branson, **Consumer Confidence Hotline (417-243-2740)** to inquire about scheduled public meetings or contact persons.*

### ***Do I need to take special precautions?***

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 healthcare 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).

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## ***WATER ANALYSIS REPORT***

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***As shown by the tables below, our water system had no MCL, monitoring, or treatment technique violations during the report period of January 1<sup>st</sup> through December 31<sup>st</sup> 2011. The water you are drinking meets and exceeds all Federal and State requirements. We have found through our monitoring and testing that some contaminants were detected, however all detected results are well within SAFE limits set by the Environmental Protection Agency.***

### ***Definitions:***

MCLG: Maximum Contaminant Level Goal, or the level of 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 a contaminant that is allowed in drinking water. The 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.

90<sup>th</sup> 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 Detections: shows the lowest and highest levels found during the test period, if only one sample was taken, then this number equals the Level Found.

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

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

### ***Abbreviations:***

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.

MFL: Million Fibers per liter, used to measure asbestos concentrations.

nd: Not detectable at testing limits.

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.

### Regulated Contaminants

<b>DISINFECTION BY-PRODUCTS</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>RAA</b>	<b>Range</b>	<b>Monitoring Period</b>
Total Haloacetic Acids (HAA5) Sources: By-product of drinking water disinfection	ppb	60	0	28.00	19.2 – 51.3	2011
Total Trihalomethanes Sources: By-product of drinking water chlorination	ppb	80	0	40.00	23.3 – 69.6	2011
<b>CARBON (TOC)</b>	<b>Unit</b>	<b>MCL</b>		<b>Highest Value</b>	<b>Range</b>	<b>Collection Date</b>
Carbon, Total Organic (TOC) Sources: Naturally present in the environment	ppm			3.29	1.17 – 3.29	5/25/2011
<b>RADIONUCLIDES</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Value</b>	<b>Range</b>	<b>Collection Date</b>
Gross Alpha Particle Activity, Sources: Erosion of natural deposits	pCi/l			8.1	6.7 – 8.1	4/6/2011
Radium, Combined (226, 228) Sources: Erosion of natural deposits	pCi/l	5		1.5	1.4 – 1.5	4/6/2011
Radium – 226	pCi/l	5	0	1.5	1.4 – 1.5	4/6/2011
<b>INORGANIC</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Value</b>	<b>Range</b>	<b>Collection Date</b>
Barium Sources: Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits	ppm	2	2	0.0334	0.0148 – 0.0334	3/22/2011
Chromium Sources: Discharge from steel and pulp mills	ppb	100	100	3.71	0 – 3.71	3/22/2011
Fluoride Sources: Natural deposits; Water additive which promotes strong teeth	ppm	4	4	1.53	0.06 – 1.53	3/22/2011
Nitrate + Nitrite (as N) Sources: Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	ppm	10	10	0.83	0.00 – 0.83	8/08/2011
Toluene Sources: Discharge from petroleum factories.	ppm	1	1	0.00052	0-0.00052	3/22/2011
Copper	Typical Source: Corrosion of household plumbing systems					
	Units	Action Level	90 <sup>th</sup> Percentile	Sites exceeding AL	Range	2008-2010
	ppm	1.3	0.179	0	0.0261 – 0.199	
Lead	Typical Sources: Corrosion of household plumbing systems					
	Units	Action Level	90 <sup>th</sup> Percentile	Sites exceeding AL	Range	2008-2010
	ppb	15	5.52	0	1.25 - 8.34	
Microbiological COLIFORM, TOTAL (TCR)	Result		MCL		MCLG	Typical Source
	In the month of June, 1 sample(s) returned as positive.		Systems that collect Less Than 40 Samples per Month – No more than 1 positive monthly sample		0	Naturally present in the environment

Turbidity is a measure of cloudiness in water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

Percentage of samples in compliance with Std.	Month occurred	Violation	Highest single measurement for the year	Month Occurred	Sources
100	12	NO	.285	Dec.	Soil Runoff

### **Violations and Health Effects Information**

During the 2011 calendar year, we had the below noted violation(s) of drinking water regulations.

No Violations Occurred in the Calendar Year of 2011

**OPTIONAL MONITORING (Not required by EPA)**

	<i>Highest Value</i>	<i>Range</i>	<i>Unit</i>	<i>Collection Date</i>	<i>MCL</i>	<i>MCLG</i>
<b>ALKALINITY, CaCO3 STABILITY</b>	351	120-351	MG/L	3/22/2011		
<b>ALKALINITY, TOTAL</b>	118	86-118	MG/L	4/19/2011		
<b>ALUMINUM</b>	0.0537	0.0-0.0537	MG/L	3/22/2011	0.05	
<b>BROMOCHLOROACETIC ACID</b>	2.75	2.75	UG/L	8/12/2008		
<b>BROMODICHLOROACETIC ACID</b>	2.27	2.27	UG/L	8/12/2008		
<b>CALCIUM</b>	69.9	37.5-69.9	MG/L	3/22/2011		
<b>CHLORIDE</b>	11.2	2.33-11.2	MG/L	3/08/2010	250	
<b>HARDNESS, CARBONATE</b>	338	120-338	MG/L	3/22/2011		
<b>IRON</b>	0.205	0.00316-0.205	MG/L	3/22/2011	0.3	
<b>MAGNESIUM</b>	39.8	6.27-39.8	MG/L	3/22/2011		
<b>MANGANESE</b>	0.00262	0.0-0.00262	MG/L	3/22/2011	0.05	
<b>NICKEL</b>	0.00274	0.0-0.00274	MG/L	3/22/2011	0.1	0.1
<b>PH</b>	7.65	7.17-7.65	PH	3/22/2011	8.5	
<b>POTASSIUM</b>	2.02	0.98-2.02	MG/L	3/22/2011		
<b>SODIUM</b>	4.25	0.87-4.25	MG/L	3/22/2011	20	
<b>SULFATE</b>	13.2	5.9-13.2	MG/L	3/22/2011	250	
<b>SOLIDS, TOTAL DISSOLVED (TDS)</b>	360	144-360	MG/L	3/22/2011	500	
<b>XYLENE, META AND PARA</b>	1.01	0.0-1.01	UG/L	3/22/2011		
<b>ZINC</b>	0.119	0.00121-0.119	MG/L	3/22/2011	5	

**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 plumbing. 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>.*

**The reported results are based on all required monitoring throughout the entire water system. If you have questions about the water in your area please call us at 417-273-2740.**