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City of Belton  
P.O. Box 230  
Belton, MO 64012

*Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.*

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MO4542

# ANNUAL WATER QUALITY REPORT

Water testing performed in 2006

Proudly Presented By:

CITY OF BELTON



PWS ID#: 1010061

## What Makes Water Hard?

If substantial amounts of calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult. Conversely, water containing little calcium or magnesium is called soft water.

## Where Does My Water Come From?

The City of Belton water customers are fortunate because they enjoy an abundant water supply from the Kansas City Water Plant (Missouri). The Kansas City Water Plant draws and treats water from the Missouri River and two deep-well aquifers. In order to obtain a copy of Kansas City's Source Water Assessment, please contact Monte Johnson, Superintendent of Water, Belton City Hall, 506 Main Street, P.O. Box 230, Belton, Missouri 64012, or call (816) 322-1885.

## What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders and on pets' water bowls is caused by the growth of the bacterium *Serratia marcescens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above-mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive. The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help to eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence.

*Serratia* will not survive in chlorinated drinking water.

## Water Conservation Tips

Water conservation measures are an important first step in protecting 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. Here are a few suggestions:

- You can conserve outdoors as well:*
- Water the lawn and garden in the early morning or evening.
  - Use mulch around plants and shrubs.
  - Repair leaks in faucets and hoses.
  - Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
  - Wash only full loads of laundry.
  - Do not use the toilet for trash disposal.
  - Take shorter showers.
- Conservation measures you can use inside your home include:*
- Fix leaking faucets, pipes, toilets, etc.
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  - Use mulch around plants and shrubs.
  - Repair leaks in faucets and hoses.
  - Water the lawn and garden in the early morning or evening.
  - Use mulch around plants and shrubs.
  - Repair leaks in faucets and hoses.
  - Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
  - Wash only full loads of laundry.
  - Do not use the toilet for trash disposal.
  - Take shorter showers.
- Information on other ways that you can help conserve water can be found at [www.epa.gov/safewater/publicoutreach/index.html](http://www.epa.gov/safewater/publicoutreach/index.html)

## Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January 1, 2006 through December 31, 2006. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best-quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information about this report, or for any questions relating to your drinking water, please call Monte Johnson, Superintendent of Water, at (816) 322-1885.

## Community Participation

The Board of Aldermen meets the second and fourth Tuesday of each month at the Belton City Hall Annex, 520 Main Street, at 7:00 p.m. All meetings are open to the public; however, if you have any concerns about your water and wish to participate, you must call the city clerk the Thursday before the scheduled meeting you wish to attend and have your name added to the Board of Aldermen agenda.

## Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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.

## Information on the Internet

The U.S. EPA Office of Water ([www.epa.gov/waterhome](http://www.epa.gov/waterhome)) and the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Missouri Department of Natural Resources has a Web site ([www.dnr.mo.gov/](http://www.dnr.mo.gov/)) and the Mid American Regional Council (MARC) has a Web site ([www.marco.org/environment/water](http://www.marco.org/environment/water)) that provide complete and current information on water issues in Missouri, including valuable information about our watershed.

## Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES				City of Belton		Kansas City		VIOLATION	TYPICAL SOURCE
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Chloramines (ppm)	2006	[4]	[4]	NA	NA	2.27	1.81-2.64	No	Water additive used to control microbes
Fluoride (ppm)	2006	4	4	NA	NA	0.72	0.33-1.16	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2006	60	NA	6.6	ND-37.4	10.2	6.45-15.6	No	By-product of drinking water disinfection
Nitrate (ppm)	2006	10	10	NA	NA	1.30	ND-4.44	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2006	80	NA	5.66	4.80-6.12	5.46	ND-13.6	No	By-product of drinking water disinfection
Turbidity (NTU)	2006	TT	NA	NA	NA	0.48	0.01-0.48	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 30 homes throughout Belton

SUBSTANCE (UNITS)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppb)	2004	1,300	1,300	18.6	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2004	15	0	8.93	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

## UNREGULATED SUBSTANCES (KANSAS CITY RESULTS)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chloroform (ppb)	2006	5.03	ND-12.5	By-product of drinking water disinfection

### Is It Safe to Drink Water From a Garden Hose?

Substances used in vinyl garden hoses to keep them flexible can get into the water as it passes through the hose. These chemicals are not good for you nor are they good for your pets. Allow the water to run for a short time in order to flush the hose before drinking or filling your pets' drinking containers. There are hoses made with food-grade plastic that will not contaminate the water. Check your local hardware store for this type of hose.



## Table Definitions

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

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**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.

**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 of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

## New Arsenic Regulation

Arsenic contamination of drinking water sources may result from either natural or human activities. Volcanic activity, erosion of rocks and minerals, and forest fires are natural sources that can release arsenic into the environment. Although about 90% of the arsenic used by industry is for wood preservative purposes, it is also used in paints, drugs, dyes, soaps, metals, and semiconductors. Agricultural applications, mining, and smelting also contribute to arsenic releases. Arsenic is usually found in the environment combined with other elements such as oxygen, chlorine, and sulfur (inorganic arsenic) or combined with carbon and hydrogen (organic arsenic). Organic forms are usually less harmful than inorganic forms.

Low levels of arsenic are naturally present in water--about two parts arsenic per billion parts of water (ppb). Thus, you normally take in small amounts of arsenic in the water you drink. Some areas of the country have unusually high natural levels of arsenic in rock, which can lead to unusually high levels of arsenic in water.

In January 2001, the U.S. EPA lowered the arsenic Maximum Contaminant Level (MCL) from 50 ppb to 10 ppb in response to new and compelling research linking high arsenic levels in drinking water with certain forms of cancer. All water utilities were required to implement this new MCL in January 2006.

The removal of arsenic from drinking water is a costly procedure but well worth the expenditure considering the health benefits. For a more complete discussion visit the U.S. EPA's arsenic Web site at [www.epa.gov/safewater/arsenic.html](http://www.epa.gov/safewater/arsenic.html).

## Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested 120 samples (ten samples every month) for coliform bacteria. In that time, none of the samples came back positive for the bacteria. Federal regulations now require that public water that tests positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. Our tests indicate no fecal coliform is present in our water.

## Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water 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 dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

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

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.