



Consumer Confidence Report – 2012 Covering Calendar Year – 2011

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are made continually to improve their water systems. **To learn more about your drinking water, please attend any of the regularly scheduled meetings, which are held the 2nd & 4th Tuesday of each month at 7:00 P.M. at City Hall.** For more information, please contact, RICK SAILLER at 913-667-3514.

Sources of drinking water

The sources of drinking water (both tap water and bottled water) included 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Our drinking water comes from 5 Ground Water Wells located in an alluvial aquifer 75-80 feet deep, just north of the Kansas River. The well water is filtered naturally within this aquifer then is chemically treated and filtered again at the Bonner Springs Utilities (BSU) Water Treatment Plant. The water is treated to remove contaminants such as iron and manganese and a disinfectant (chlorine) is added to protect you against microbial contaminants. Some of our drinking water is supplied from Kansas City Board of Public Utilities (BPU) through a Consecutive Connection (CC). The water we purchase from BPU is drawn from the Missouri River watershed. This water is collected and filtered through horizontal collector wells in an aquifer located below the Missouri River. BPU filters and treats this water similar to Bonner Springs including the disinfection process. BSU and BPU perform multiple daily tests of the treated water to insure that your water is safe to drink.

To find out more about your drinking water sources and the chemicals used to treat the water, please contact our office at the number provided above.

Is my Water Safe to Drink?

Absolutely! Your water is monitored every day using different sampling sites throughout the city. The State requires routine sampling for microbiological contamination sent to a State certified laboratory for analysis. Water treatment operators are certified and licensed through the Kansas Department of Health; they must renew their license every three years by attending additional training seminars and classes.

Our water system is required to obtain 8 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer under going 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).

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 (800-426-4791).

Why is my water discolored?

On occasions, you may notice a slight color with your water; this is due to the iron and manganese that is not completely removed through the filtering process. These minerals settle out over time within the distribution system waterlines. If there is a high demand flow that occurs, such as a waterline break or a fire, this build up of sediments will tend to discolor the water for a short period of time. This discoloration is not a cause of concern from a health standpoint. The Utilities Department performs periodic flushing of our waterlines to remove these sediments to reduce the possibility of discolored water at unexpected times. The Department notifies you when we are performing routine flushing to avoid any problems or concerns.

Federal Regulations

The Safe Drinking Water Act (SDWA) required states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the assessment, please contact us or view on-line at: <http://www.kdheks.gov/nps/swap/SWreports.html>

In order to ensure that tap water is safe to drink, EPA prescribes regulation, which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. For additional information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791)

Contaminates found in water.

Contaminants that may be present in source water before we treat it include:
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.
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.
Pesticides and herbicides, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.
Radioactive contaminants, which can be naturally occurring or the result of mining activity.
Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.



Water Quality Data

The following tables list all of the drinking water contaminants that were detected during the 2010 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2010. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water provided to you is SAFE!**



Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Treatment Technique (TT): a required process intended to reduce levels of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): 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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l) **Parts per Billion (ppb)** or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Testing Results for: City of Bonner Springs

| Microbiological | Result | MCL | MCLG | Typical Source |
|-----------------|--|---|------|--------------------------------------|
| COLIFORM (TCR) | In the month of July, 1 sample(s) returned as positive | MCL: Systems that Collect Less Than 40 Samples per Month - No more than 1 positive monthly sample | 0 | Naturally present in the environment |

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

| Regulated Contaminants | Collection Date | Your Highest Value | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|------------------------|-----------------|--------------------|------------------|------|-----|------|---|
| ARSENIC | 1/19/2011 | 2 | 2 | ppb | 10 | 0 | Erosion of natural deposits |
| ATRAZINE | 6/22/2011 | 0.93 | 0.93 | ppb | 3 | 3 | Runoff from herbicide used on row crops |
| BARIUM | 1/19/2011 | 0.14 | 0.14 | ppm | 2 | 2 | Discharge from metal refineries |
| CHROMIUM | 1/19/2011 | 1.7 | 1.7 | ppb | 100 | 100 | Discharge from steel and pulp mills |
| FLUORIDE | 1/12/2011 | 0.49 | 0.23 - 0.49 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth |
| NITRATE | 2/16/2011 | 1 | 0.8 - 1 | ppm | 10 | 10 | Runoff from fertilizer use |
| SELENIUM | 1/19/2011 | 3.3 | 3.3 | ppb | 50 | 50 | Erosion of natural deposits |

| Disinfection Byproducts | Monitoring Period | Your Highest RAA | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|-------------------------------|-------------------|------------------|------------------|------|-----|------|---|
| TOTAL HALOACETIC ACIDS (HAA5) | 2011 - 2013 | 22 | 22 | ppb | 60 | 0 | By-product of drinking water disinfection |
| TOTAL TRIHALOMETHANES (TTHMs) | 2011 - 2013 | 42 | 42 | ppb | 80 | 0 | By-product of drinking water chlorination |

| Lead and Copper | Monitoring Period | 90 th Percentile | Range (low/high) | Unit | AL | Sites Over AL | Typical Source |
|-----------------|-------------------|-----------------------------|------------------|------|-----|---------------|---------------------------------|
| COPPER, FREE | 2011 - 2013 | 1.6 | 0.098 - 1.7 | ppm | 1.3 | 4 | Corrosion of household plumbing |
| LEAD | 2011 - 2013 | 2.8 | 1 - 8.6 | ppb | 15 | 0 | Corrosion of household plumbing |

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. Information is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

| Secondary Contaminants | Collection Date | Your Highest Value | Range (low/high) | Unit | SMCL |
|------------------------------|-----------------|--------------------|------------------|---------|------|
| ALKALINITY, TOTAL | 1/19/2011 | 204 | 204 | MG/L | 300 |
| CALCIUM | 1/19/2011 | 110 | 110 | MG/L | 200 |
| CHLORIDE | 1/19/2011 | 91 | 91 | MG/L | 250 |
| CONDUCTIVITY @ 25 C UMHOS/CM | 1/19/2011 | 940 | 940 | UMHO/CM | 1500 |
| CORROSIVITY | 2/6/2008 | 0.086 | 0.086 | LANG | 0 |
| HARDNESS, TOTAL (AS CAC03) | 1/19/2011 | 350 | 350 | MG/L | 400 |
| MAGNESIUM | 1/19/2011 | 19 | 19 | MG/L | 150 |
| MANGANESE | 1/19/2011 | 0.0027 | 0.0027 | MG/L | 0.05 |
| METOLACHLOR | 6/22/2011 | 0.42 | 0.42 | ppb | |
| NICKEL | 1/19/2011 | 0.0011 | 0.0011 | MG/L | 0.1 |
| PH | 1/19/2011 | 7.1 | 7.1 | PH | 8.5 |
| PHOSPHORUS, TOTAL | 1/19/2011 | 0.66 | 0.66 | MG/L | 5 |
| POTASSIUM | 1/19/2011 | 6.3 | 6.3 | MG/L | 100 |
| SILICA | 1/19/2011 | 14 | 14 | MG/L | 50 |
| SODIUM | 1/19/2011 | 59 | 59 | MG/L | 100 |
| SULFATE | 1/19/2011 | 140 | 140 | MG/L | 250 |
| TDS | 1/19/2011 | 570 | 570 | MG/L | 500 |
| ZINC | 1/19/2011 | 0.57 | 0.57 | MG/L | 5 |

During the 2011 calendar year, we had no violation(s) of drinking water regulations.

In certain areas of the City, some or all of your drinking water is supplied from the Board of Public Utilities (BPU) Water System. The table below lists all of the drinking water contaminants, which were detected during the 2010 calendar year from the BPU water system.

| Regulated Contaminants | Collection Date | Water System | Your Highest Value | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|------------------------|-----------------|---------------------------------------|--------------------|------------------|------|-----|------|---|
| ATRAZINE | 7/26/2011 | Kansas City Board of Public Utilities | 0.18 | 0.057 - 0.18 | ppb | 3 | 3 | Runoff from herbicide used on row crops |
| BARIUM | 5/4/2011 | Kansas City Board of Public Utilities | 0.16 | 0.16 | ppm | 2 | 2 | Discharge from metal refineries |
| FLUORIDE | 7/26/2011 | Kansas City Board of Public Utilities | 0.85 | 0.72 - 0.85 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth |
| NITRATE | 5/4/2011 | Kansas City Board of Public Utilities | 1.2 | 1.2 | ppm | 10 | 10 | Runoff from fertilizer use |

Testing Results for: Board of Public Utilities

| Secondary Contaminants | Collection Date | Water System | Your Highest Value | Range (low/high) | Unit | SMCL |
|--|-----------------|---------------------------------------|--------------------|------------------|---------|------|
| ALKALINITY, BICARBONATE | 5/4/2011 | Kansas City Board of Public Utilities | 240 | 240 | MG/L | |
| ALKALINITY, CACO3 STABILITY | 5/4/2011 | Kansas City Board of Public Utilities | 190 | 190 | MG/L | |
| ALKALINITY, TOTAL | 1/13/2010 | Kansas City Board of Public Utilities | 260 | 180 - 260 | MG/L | 300 |
| CALCIUM | 5/4/2011 | Kansas City Board of Public Utilities | 85 | 85 | MG/L | 200 |
| CARBON, DISSOLVED ORGANIC (DOC) | 6/9/2010 | Kansas City Board of Public Utilities | 2.5 | 2 - 2.5 | MG/L | |
| CHLORIDE | 5/4/2011 | Kansas City Board of Public Utilities | 27 | 27 | MG/L | 250 |
| CONDUCTIVITY @ 25 C UMHOS/CM | 5/4/2011 | Kansas City Board of Public Utilities | 740 | 740 | UMHO/CM | 1500 |
| HARDNESS, TOTAL (AS CAC03) | 5/4/2011 | Kansas City Board of Public Utilities | 330 | 330 | MG/L | 400 |
| MAGNESIUM | 5/4/2011 | Kansas City Board of Public Utilities | 28 | 28 | MG/L | 150 |
| METOLACHLOR | 7/26/2011 | Kansas City Board of Public Utilities | 0.066 | 0.066 | ppb | |
| ORTHOPHOSPHATE | 5/4/2011 | Kansas City Board of Public Utilities | 0.28 | 0.28 | MG/L | |
| PH | 5/19/2010 | Kansas City Board of Public Utilities | 7.9 | 7.9 | PH | 8.5 |
| PHOSPHORUS, TOTAL | 4/25/2007 | Kansas City Board of Public Utilities | 0.22 | 0.22 | MG/L | 5 |
| POTASSIUM | 5/4/2011 | Kansas City Board of Public Utilities | 6.6 | 6.6 | MG/L | 100 |
| SILICA | 5/4/2011 | Kansas City Board of Public Utilities | 15 | 15 | MG/L | 50 |
| SODIUM | 5/4/2011 | Kansas City Board of Public Utilities | 47 | 47 | MG/L | 100 |
| SULFATE | 5/4/2011 | Kansas City Board of Public Utilities | 190 | 190 | MG/L | 250 |
| SUVA (SPECIFIC ULTRAVIOLET ABSORBANCE) | 5/11/2010 | Kansas City Board of Public Utilities | 2.2 | 1.9 - 2.2 | L/MG-M | |
| TDS | 5/4/2011 | Kansas City Board of Public Utilities | 540 | 540 | MG/L | 500 |
| UV ABSORBANCE @254 NM | 5/11/2010 | Kansas City Board of Public Utilities | 0.055 | 0.038 - 0.055 | CM-1 | |

During the 2011 calendar year, the water systems that we purchase water from had no violation(s) of drinking water regulations.

YOUR RIGHT TO KNOW

THE U.S. CONGRESS PASSED THE SAFE DRINKING WATER ACT IN 1974, AND REAUTHORIZED IT IN 1986 AND 1996. THE EPA AND STATES DEVELOP AND ENFORCE DRINKING WATER REGULATIONS TO PROTECT PUBLIC HEALTH. **CITY OF BONNER SPRINGS DRINKING WATER MEETS OR SURPASSES THESE STANDARDS.**

Landlords, businesses and schools are encouraged to share this report with non-billed users at their locations. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline, 1-800-426-4791.

