



City of Bonner Springs Consumer Confidence Report – 2013 Covering Calendar Year – 2012

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 Monday of each month at 7:30 P.M. at City Hall.** For more information, please contact, RICK SALLER at 913-667-3514.

Is my Water Safe to Drink?

Absolutely! Your water is treated to remove several contaminants and a disinfectant is added to protect you against microbial contaminants. 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>

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

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).

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.

Bonner Springs sources of drinking water

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 Spring 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 913-667-3514.

Contaminants that may be present in sources 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.

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.

Our water system is required to test a minimum of 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.

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 buildup 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.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2012 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, 2012. 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 that is 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

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.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

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.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.



Testing Results for: City of Bonner Springs

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2012				

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	6/19/2012	0.36	0.36	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	7/25/2012	1.6	0.25 - 1.6	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	2/22/2012	0.63	0.63	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
TTHM	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	2009 - 2011	1.5	0.098 - 1.7	ppm	1.3	4	Corrosion of household plumbing
LEAD	2009 - 2011	2.8	1 - 8.6	ppb	15	0	Corrosion of household plumbing

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. Your water system 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 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 2012 calendar year, we had no violation(s) of drinking water regulations.

Testing Results for: Water Supplied by Kansas City Board of Public Utilities

Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2012 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Your Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ATRAZINE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.27	0.092 - 0.27	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.13	0.13	ppm	2	2	Discharge from metal refineries
CHROMIUM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	1.2	1.2	ppb	100	100	Discharge from steel and pulp mills
CYANIDE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	16	16	ppb	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
FLUORIDE	10/17/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.83	0.68 - 0.83	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.
LASSO	7/30/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.057	0.057	ppb	2	0	Runoff from herbicide used on row crops
NITRATE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.71	0.71	ppm	10	10	Runoff from fertilizer use
NITRATE-NITRITE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.71	0.71	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Secondary Contaminants	Collection Date	Water System	Your Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, BICARBONATE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	240	240	MG/L	
ALKALINITY, CaCO3 STABILITY	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	190	190	MG/L	
ALKALINITY, TOTAL	1/12/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	260	160 - 260	MG/L	300
CALCIUM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	70	70	MG/L	200
CARBON, DISSOLVED ORGANIC (DOC)	4/13/2010	KANSAS CITY BOARD OF PUBLIC UTILITIES	5.8	0.47 - 5.8	MG/L	
CARBON, TOTAL	3/9/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	5.8	0.0028 - 5.8	ppm	
CHLORIDE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	27	27	MG/L	250
CONDUCTIVITY @ 25 C UMHO/CM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	770	770	UMHO/CM	1500
HARDNESS, TOTAL (AS CaCO3)	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	280	280	MG/L	400
MAGNESIUM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	25	25	MG/L	150
ORTHOPHOSPHATE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.22	0.22	MG/L	
PH	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	8.4	8.4	PH	8.5
POTASSIUM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	6.5	6.5	MG/L	100
SILICA	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	13	13	MG/L	50
SODIUM	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	55	55	MG/L	100
SULFATE	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	170	170	MG/L	250
SUVA (SPECIFIC ULTRAVIOLET ABSORBANCE)	5/11/2010	KANSAS CITY BOARD OF PUBLIC UTILITIES	3.6	1.8 - 3.6	UNITS	
TDS	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	500	500	MG/L	500
UV ABSORBANCE @254 NM	5/11/2010	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.16	0.038 - 0.16	CM-1	

During the 2012 calendar year, the water systems that we purchase water from had no violation(s) of drinking water regulations.

Additional Required Health Effects Language:

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.

Please Note: Because of sampling schedules, results may be older than 1 year.