



City of Bonner Springs



Consumer Confidence Report – 2015 Covering Calendar Year – 2014

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 SAILLER at 913-667-3514.

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 Springs including the disinfection process. BSU and BPU perform multiple daily tests of the treated water to ensure 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.

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.

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.

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.

WATER QUALITY IS MONITORED CONTINUOUSLY – 24/7

We use several on-line analyzers to monitor water quality 24 hours-a-day, 7 days a week. The analyzer data is monitored by our computer control system which alerts our operators if the data is outside of a desired range. Our system will even shut down treatment operations if the data is extremely different than our allowable range. We monitor pH, chlorine and turbidity (clarity).



Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2014 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, 2014. 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.

The City of Bonner Springs was selected by the Environmental Protection Agency (EPA) to participate in the Unregulated Contaminant Rule 3. The Rule is mandated to the EPA through US Congress to provide the EPA Administrator with data to support decisions concerning whether or not to regulate additional contaminants. This was the "third" round of testing for unregulated contaminants, but the first time that the City of Bonner Springs was selected to perform the monitoring. We selected four (4) sampling sites, one being the Water Treatment Plant, based on criteria from the EPA. The monitoring involved 10 contaminants or contaminant groups. The results for the monitoring are included within this report, after the routine monitoring results. The testing and results were handled by a laboratory selected by the EPA. Please be aware that the testing results do not indicate a public health risk; that assessment is being done by the EPA and will be handled through the normal regulatory process. For more information: <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm>



City of Bonner Springs



Testing Results for: CITY OF BONNER SPRINGS UTILITIES DEPARTMENT

Regulated Contaminants	Collection Date	Your Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	4/16/2014	3.8	3.8	ppb	10	0	Erosion of natural deposits
ATRAZINE	6/25/2014	2.5	2.5	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	4/16/2014	0.19	0.19	ppm	2	2	Discharge from metal refineries
FLUORIDE	4/16/2014	0.3	0.16 - 0.3	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	4/16/2014	0.31	0.31	ppm	10	10	Runoff from fertilizer use
SELENIUM	4/16/2014	2	2	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)	2014	20	11 - 26	ppb	60	0	By-product of drinking water disinfection
TTHM	2014	30	22.686 - 33	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	2012 - 2014	1	0.087 - 1.3	ppm	1.3	0	Corrosion of household plumbing
LEAD	2012 - 2014	6.6	1 - 130	ppb	15	1	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>.

Additional Required Health Effects Language:

Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761).

Secondary Contaminants	Collection Date	Your Value	Highest	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	4/16/2014	210		210	MG/L	300
CALCIUM	4/16/2014	140		140	MG/L	200
CHLORIDE	4/16/2014	120		120	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	4/16/2014	1200		1200	UMHO/CM	1500
CORROSIVITY	4/16/2014	0.16		0.16	LANG	0
HARDNESS, TOTAL (AS CaCO3)	4/16/2014	470		470	MG/L	400
IRON	4/16/2014	0.013		0.013	MG/L	0.3
MAGNESIUM	4/16/2014	28		28	MG/L	150
MANGANESE	4/16/2014	0.024		0.024	MG/L	0.05
METOLACHLOR	6/25/2014	0.41		0.41	ppb	
NICKEL	4/16/2014	0.0024		0.0024	MG/L	0.1
PH	4/16/2014	7.3		7.3	PH	8.5
PHOSPHORUS, TOTAL	4/16/2014	0.81		0.81	MG/L	5
POTASSIUM	4/16/2014	8.5		8.5	MG/L	100
SILICA	4/16/2014	19		19	MG/L	50
SODIUM	4/16/2014	79		79	MG/L	100
SULFATE	4/16/2014	240		240	MG/L	250
TDS	4/16/2014	760		760	MG/L	500
ZINC	4/16/2014	0.85		0.85	MG/L	5

During the 2014 calendar year, we had no violation(s) of drinking water regulations.

Some or all of our drinking water is supplied from **Board of Public Utilities (BPU), Kansas City**. The table below lists all of the drinking water contaminants, which were detected during the 2014 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	8/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.23	0.073 - 0.23	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.14	0.14	ppm	2	2	Discharge from metal refineries
FLUORIDE	11/11/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.74	0.66 - 0.74	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.
SELENIUM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	5	5	ppb	50	50	Erosion of natural deposits
SIMAZINE	8/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.05	0.05	ppb	4	4	Herbicide runoff

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

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, STABILITY CACO3	5/15/2013	KANSAS CITY BOARD OF PUBLIC UTILITIES	190	190	MG/L	
ALKALINITY, TOTAL	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	160	160	MG/L	300
BICARBONATE AS HCO3	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	200	200	MG/L	
CALCIUM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	77	77	MG/L	200
CARBON, DISSOLVED ORGANIC (DOC)	6/9/2010	KANSAS CITY BOARD OF PUBLIC UTILITIES	2.5	2 - 2.5	MG/L	
CHLORIDE	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	30	30	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	860	860	UMHO/CM	1500
HARDNESS, TOTAL (AS CACO3)	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	300	300	MG/L	400
MAGNESIUM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	27	27	MG/L	150
METHYL ETHYL KETONE	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	19	19	UG/L	
METOLACHLOR	8/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.19	0.19	ppb	
ORTHOPHOSPHATE	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	0.16	0.16	MG/L	
PH	5/23/2012	KANSAS CITY BOARD OF PUBLIC UTILITIES	8.4	8.4	PH	8.5
POTASSIUM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	6.9	6.9	MG/L	100
SILICA	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	17	17	MG/L	50
SODIUM	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	72	72	MG/L	100
SULFATE	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	200	200	MG/L	250
SUVA (SPECIFIC ULTRAVIOLET ABSORBANCE)	5/11/2010	KANSAS CITY BOARD OF PUBLIC UTILITIES	2.2	1.9 - 2.2	UNITS	
TDS	5/13/2014	KANSAS CITY BOARD OF PUBLIC UTILITIES	560	560	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 2014 calendar year, the water systems that we purchase water from had no violation(s) of drinking water regulations.

UNREGULATED CONTAMINANT MONITORING REGULATION (3) TESTING RESULTS

The City of Bonner Springs Utilities Department was selected to monitor for unregulated contaminants in 2013. Testing was conducted for 26 separate contaminants, of which, six (6) were detected in the samples we took. We took twelve (12) sets of samples throughout 2013 from four (4) monitoring locations. Samples included water from our treatment facility and areas served with water we purchased from BPU. The following data is the testing results from the six (6) contaminants that were detected in the water. All results are reported in parts-per-billion (ppm) also referred to as micrograms per liters (ug/L). The results for samples taken in 2013 were tabulated in 2014; therefore these results were not included in the 2014 Consumer Confidence Report pertaining to 2013.

Analyte (Contaminant)	Average Concentration	Maximum Concentration	Use or Environmental Source
Chromium	0.237	0.255	See Chromium -6 for source information – Total Chromium includes all valence states
Chromium-6	0.127	0.214	Naturally-occurring element; used in making of steel and other alloys. Chromium-6 is specifically used in chrome plating, dyes and pigments, leather tanning and wood preservation.
Chlorate	187.509	230.615	Used in the production of chlorine dioxide*
Manganese	4.611	13.582	Naturally-occurring element found in water groundwater sources.
Molybdenum	3.267	4.373	Natural-occurring element found in ores and present in plants, animals and bacteria.
Strontium	584.639	838.133	Natural-occurring element ; historically used in faceplate glass of older tube-style televisions
Vanadium	0.427	0.634	Naturally-occurring elemental metal; used as vanadium pentoxide – a chemical catalyst.

* BPU used chlorine dioxide as a disinfectant for their water supply. Bonner Springs does not.