

# CITY OF BLUE GRASS - WATER QUALITY REPORT – 2016

The following report is designed to inform the consumer about water quality and services delivered to you in 2016. We are proud to inform you that your drinking water has met or exceeded all water quality standards, and you can rely on your water utility to provide a safe and dependable supply of drinking water.

## **Local Information about Drinking Water Issues:**

If you have any questions about this report or your water utility please contact QC Analytical Service at 563-289-3373.

## **General information on Lead in drinking water**

If present, elevated levels of lead can cause serious health, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Blue Grass 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 it 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://www.epa.gov/safewater/lead>.

## **Source Water Assessment**

The source of your drinking water consists of three independent wells that are at a depth of 400 feet each. The wells draw water from the Silurian-Devonian aquifer. This aquifer was determined to have insignificant susceptibility to contamination because of the characteristics of the aquifer and overlying materials limit the rate at which contaminants can move through the aquifer. Susceptibility to contamination generally increases with shallower aquifers. The public wells will be somewhat susceptible to activities such as gas stations, industrial sites and wastewater discharges. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available from QC Analytical Services at 563-289-3373.

## **Drinking Water Violations & Testing Data:**

Your system received no violations in 2016.

The City of Blue Grass water system is routinely monitored for contaminants according to State & Federal Laws. The table on the back page is a list of all of the results of test analysis conducted in 2016. Some of the test data was obtained prior to 2016 and is considered representative of current water quality as certain contaminants are not expected to vary significantly from year to year.

## **Information from the USEPA on Sources of All Drinking Water**

All 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. 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 health care providers.

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

## 2016 Water Quality Report for Blue Grass (PWS #8215021)

Contaminant	Highest Level	Range	Date Sampled	MCLG	MCL	Violation	Source of Contamination
Gross Alpha (pCi/L)	7.3		6/2014	0	15	NO	Erosion of natural deposits
Combined Radium (pCi/L)	1.0		6/2011	0	5	NO	Erosion of natural deposits
Radium-226 (pCi/L)	1		6/2005	n/a	n/a	NO	Erosion of natural deposits
Radium-228 (pCi/L)	1.4		6/2005	n/a	n/a	NO	Erosion of natural deposits
Barium (ppm)	0.26		3/2012	2	2	NO	Discharge of drilling waste, metal refineries and erosion of natural deposits.
Chlorine (ppm) (RAA)	0.7 (Total)	0.5-0.8 Value = 0.7	2016	4	4	NO	Water treatments additive to control microbes.
Fluoride (ppm)	0.312		3/2012	4	4	NO	Water Treatment Additive, erosion of natural deposits, discharge of fertilizer and aluminum factories.
Nitrates as N (ppm)	0.2		2016	10	10	NO	Runoff from fertilizer usage, leaching from septic tanks, sewage; erosion of natural deposits.
Total Trihalomethanes TTHM (ppb)	19.00		7/26/16	N/A	80	NO	Chlorination by-product
Total Haloacetic Acids HAA5 (ppb)	6.00		7/26/16	N/A	60	NO	Chlorination by-product
Copper (ppm) (90 <sup>th</sup> Percentile)	0.11	0.01-0.24 Value = 0.11	9/2014	1.3	AL=1.3	NO	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (90 <sup>th</sup> Percentile)	48	0.0 -48 Value = 1.5	9/2014	0	AL=15	NO 1 sample exceeded AL	Corrosion of household plumbing systems; Erosion of natural deposits.
Sodium (ppm)	36.0		3/2015	N/A	N/A	NO	Erosion of natural deposits, water softener additive for treatment.

### Definitions:

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **mg / l:** milligrams per liter or parts per million (**ppm**) - or one ounce in 7,350 gallons of water.
- **ug / l:** micrograms per liter or parts per billion (**ppb**) - or one ounce in 7,350,000 gallons of water.
- **Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water.
- **Maximum Residual Disinfectant Level (MRDLG):** The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.
- **RAA:** Running Annual Average of chlorine samples taken with bacteriological sampling

There is no MCL for sodium. Monitoring is required to provide information to consumers due to dietary precautions. If you are on a sodium restricted diet, you should consult a physician about this level of sodium in the water.

**More information about drinking water contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791**