

2016 WATER QUALITY REPORT FOR Hiawatha Water Department

This year's Water Quality Report is designed to inform you about our water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. Our water comes from 5 deep wells ranging from 350 feet to 530 feet. We adjust the fluoride in our water; we add poly-orthophosphate for corrosion control; we disinfect with chlorine to ensure the safety and quality of our water; and we have an iron removal plant to help reduce iron in our water. The hardness of Hiawatha's water ranges anywhere from 14 to 20 grains per hardness (gph).

This report contains important information regarding the water quality in our water system. The source of our water is groundwater which is drawn from the Silurian aquifer(s). Our water quality testing shows the following results:

CONTAMINANT	MCL – (MCLG)	COMPLIANCE		DATE	VIOLATION	SOURCE
		Type	Value & (Range)			
Barium (ppm)	2 (2)	SGL	0.13	01/08/2013	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Lead (ppb)	AL=15 (0)	90 th	2.00 (ND – 8)	2014	NO	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90 th	0.9 (0.03 - 1.1)	2014	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	0.78 (0.57 – 1.04)	MONTHLY	NO	Water additive used to control microbes
E. coli	(N/A)	RTCR	1 sample(s) positive	10/31/216	NO	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause shortterm effects, such a diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.
Total Coliform Bacteria	TT (TT)	RTCR	1 sample(s) positive	10/31/2016	NO	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water.
Fluoride (ppm)	4 (4)	RAA	0.22 (ND-0.610)	06/30/2016	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Gross Alpha, inc (pCi/L)	15 (0)	SGL	1.9	07/14/2015	NO	Erosion of natural deposits
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	12.00 (12 - 12)	09/30/2016	NO	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	6.00	09/30/2014	NO	By-products of drinking water disinfection
Nitrate [as N] (ppm)	10 (10)	SGL	4.2	2016	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	1.5	02/01/2012	NO	Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	23	02/01/2016	NO	Erosion of natural deposits; Added to water during treatment process

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations. The information in this report is from data collected January 2012 to December 2016.

DEFINITIONS

- Maximum Contaminant Level (MCL) – 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.
- Maximum Contaminant Level Goal (MCLG) -- 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- LRAA – Locational Running Annual Average
- IDSE – Initial Distribution System Evaluation
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (MRDLG) - 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.
- 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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units
- TCR – Total Coliform Rule

GENERAL INFORMATION

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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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. 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).

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. The Hiawatha Water Department 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

SOURCE WATER ASSESSMENT INFORMATION

The Hiawatha Water Department's water supply obtains its water from the dolomite and limestone of the Silurian aquifer. The Silurian aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Silurian-Devonian wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the IDNR, and is available from the Hiawatha Water Department at 101 Emmons St., 319-393-5556 opt. #4. The City has also adopted a Wellhead Protection Ordinance and a Geothermal Ordinance. Both ordinances can be viewed on our website, www.hiawatha-iowa.com or a copy can be obtained at the Water Department.

CONTACT INFORMATION

For questions regarding this information, please contact Marty Recker, Water Superintendent at 319-393-5556 opt. #4 or email mrecker@hiawatha-iowa.com.

Decisions regarding the water system are made at the Water Board of Trustees meetings held on the third Tuesday of each month at 5:30pm in the City Hall, 101 Emmons Street. The meetings are open to the public.

Hiawatha Water Department is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact the Water Department at 319-393-5556 opt. #4 or the local Police Department non-emergency number at 319-393-1212. We appreciate your assistance in protecting the water system.