

2017 WATER QUALITY REPORT FOR GRINNELL WATER DEPARTMENT

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	0-12	07/12/2017	No	By-products of drinking water chlorination
Lead (ppb)	AL=15 (0)	90th	4.90 (ND - 11)	2016	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.343 (0.0321 - 0.473)	2016	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.94 (1.28-2.64)	12/31/2017	No	Water additive used to control microbes
01 - WLS 5-9 @ PLT AFTER TREATMENT						
Gross Alpha, inc (pCi/L)	15 (0)	SGL	1.4	02/03/2016	No	Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	1.44	02/06/2016	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.0045	04/10/2013	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	203	04/19/2017	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	0.9	04/19/2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

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
- 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

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. GRINNELL 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 or at <http://www.epa.gov/safewater/lead>.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains its water from the sandstone and dolomite of the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to have low susceptibility to contamination because the characteristics of the aquifer and overlying materials provide natural protection from contaminants at the land surface. The Cambrian-Ordovician wells will have low susceptibility 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 Iowa Department of Natural Resources, and is available from the Water Operator at 641-236-2635.

OTHER INFORMATION

Our water utility 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 us at 641-236-2600 or the local police/sheriff department 641-623-5679. We appreciate your assistance in protecting the water system.

OTHER INFORMATION

The City's water system takes part in the Unregulated Contaminants Monitoring Rule (UCMR3) with the results listed below.

Analyte Name	Collection Date	Reported Value ¹ (µg/L) ²
17-alpha-ethynylestradiol	12/08/2014	<0.0009
17-beta-estradiol	12/08/2014	<0.0004
4-androstene-3,17-dione	12/08/2014	<0.0003
equilin	12/08/2014	<0.004
estriol	12/08/2014	<0.0008
estrone	12/08/2014	<0.002
testosterone	12/08/2014	<0.0001

¹Results less than the minimum reporting level (MRL) is displayed with a less than sign (<) and the MRL. Reported values equal to or greater than the MRL are displayed with and EPA could not obtain valid data for this contaminant during the scheduled sampling event.

²A detection of a UCMR3 analyte above the MRL does not represent cause for concern, in itself. The implications of the detection should be judged considering health effects information, which is often still under development or being refined for unregulated contaminants. For more information on occurrence data consult "UCMR 3 Data Considerations, Definitions, Reference Concentration and Summary PDF" at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm#ucmr2013>.

CONTACT INFORMATION

For questions regarding this information, please contact Jan Anderson at 641-236-2600 during the hours of 8:00 am until 12 noon, and 1:00 pm until 4:00 pm. Decisions regarding the water system are made at the City of Grinnell Council meetings held on the first and third Mondays of each month in the Council Chambers at City Hall 520 4th Avenue, Grinnell, Iowa. Meetings are held at 7:00 p.m. and are open to the public.

This report will not be mailed to water customers of the City of Grinnell's Water Department. Copies of the report will be available upon request at the City Offices located at 520 4th Avenue, Grinnell, Iowa 50112 or by calling 641-236-2600. A copy will also be available on the City of Grinnell website <http://www.grinnelliowa.gov/index.aspx?nid=240>