

**THE WATER WE DRINK
CRESCO WATER DEPARTMENT**

We are pleased to present to you this year's Annual Quality Report. This report is designed to inform you about the quality water and service we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The City of Cresco water supply obtains its water from the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The City of Cresco wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from the City of Cresco at (563) 547-3101. We have two wells that are 1120 feet deep.

This water supply obtains water from one or more groundwater aquifers. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying materials and human activity. Susceptibility to contamination generally increases with shallow aquifers, increasing permeability of the aquifer and overlying material, nearby development or agricultural activity, and abandoned or poorly maintained wells. A detailed evaluation of your water source was completed by the Iowa Department of Natural Resources, and is available from this water supply.

Aquifer Name	Susceptibility
Cambrian-Ordovician	Insignificant

We are pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Drew Zahasky at 563-547-3101. We want our valued customers to be informed about their water utility.

The Cresco Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1 to December 31, 2017 or last known testing date. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Below you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- Non-Detects (ND)-laboratory analysis indicates that the constituent is not present.
- Parts per million (ppm) or Milligram per liter (mg/l)-one part per million corresponds to one minute in two years or a single penny in \$10,000.00
- Parts per billion (ppb) or Micrograms per liter-one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.00.
- Picocuries per liter (pCi/L)-picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Action Level-the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level-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. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- Maximum Contaminant Level Goal-The "Goal" (MCLG) is 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.
- SGL-Single Sample Result
- LRAA-Locational Running Annual Average
- RAA-Running Annual Average

Finished Water Tap #3				Sample			
Contaminant (units)	MCL (action level)	MCLG (goal)	Type	Range	Value	Date	Violation?
Alpha Emitters (pCi/L)	15	0	SGL		1.6	4/9/12	No
Typical source:	Erosion of natural deposits						
Radium-226	N/A	N/A			1.0	4/3/18	No
Typical source:	N/A						
Combined Radium (pCi/L)	5	0	SGL		1.0	4/3/18	No
Typical source:	Erosion of natural deposits						
Fluoride (ppm)	4	4	SGL	0.54 to 0.78	0.74	4/4/17	No
Typical source:	Water additive that promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories						
Sodium (ppm)	N/A	N/A	SGL		2.4	4/18/16	No
Typical source:	Erosion of natural deposits; added to water during treatment.						
Toluene (ppm)	1	1			<0.0005	4/3/18	No

Finished Water Tap #4				Sample			
Contaminant (units)	MCL (action level)	MCLG (goal)	Type	Range	Value	Date	Violation?
Alpha Emitters (pCi/L)	15	0	SGL		2.1	4/9/12	No
Typical source:	Erosion of natural deposits						
Radium-226	N/A	N/A			0.8	4/3/18	No
Typical source:	N/A						
Combined Radium (pCi/L)	5	0	SGL		<1	4/3/18	No
Typical source:	Erosion of natural deposits						
Fluoride (ppm)	4	4	SGL	0.36-.062	0.36	5/2/17	No
Typical source:	Water additive that promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories						
Sodium (ppm)	N/A	N/A	SGL		3.6	4/18/16	No
Typical source:	Erosion of natural deposits; added to water during treatment.						
Toluene (ppm)	1	1			<0.0005	7/7/14	No
Typical source:	Discharge from petroleum factories						

Distribution System			Sample			
Contaminant (units)	MCL (action level)	MCLG (goal)	Type	Value	Date	Violation?
Total trihalomethanes (ppb)	0.08	N/A	LRAA	.00024	8/1/17	No
Typical source:	By-products of drinking water disinfection					

DISTRIBUTION SYSTEM

CHLORINE (ppm)
Routine sample 12-31-2017

MCL	MCLG	Compliance	Range	Value
4.0	4.0	RAA	0.7	0.38 – 0.9

Source: Water additive used to control microbes

NITRATE [AS N] (ppm)

MCL/AL: 10 MCLG: 10

Sample 4-3-2018 <1.0 Well #4

Sample 7-5-2016 <1.0 Well #3

Typical source of contaminant: Runoff from fertilizer used; leaching from septic tanks; erosion of natural deposits. Nitrate in drinking water above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

FLOURIDE – Average for well #3 and well #4 is 0.7 mg/L.

LEAD & COPPER REPORT 7/28/15			Compliance			Samples	
Contaminant (units)	MCL (action level)	MCLG (goal)	Type	Value	Range	Total	Exceed
Lead (ppm)	15	0	90 th	2.00	ND – 3	20	1
Typical source:	Corrosion of household plumbing systems; Erosion of natural deposits 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 Cresco Waterworks is responsible for providing high quality drinking water, but cannot control the variety of material 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 of 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 .						
Copper (ppm)	1.3	1.3	90 th	0.41	ND – 0.5	20	0
Typical source:	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives						

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 Cresco Waterworks is responsible for providing high quality drinking water, but cannot control the variety of material 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 of 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>.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include 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 materials and can pick up substances resulting from the presence of animal and human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agriculture 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 discharge, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff and residential uses.

- Organic chemical contaminants include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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 for infections. These people should seek advice about drinking water from their health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions (563-547-3101).

“We at the Cresco Water Department work around the clock to provide top quality water to every tap,” said Drew Zahasky. “We ask that all our customers help us to protect our water sources, which are the heart of our community, our way of life and our children’s future”

This report will not be mailed to our customers but a copy may be obtained at City Hall, 130 North Park Place, Cresco, IA, Monday thru Friday from 8:00 a.m. to 4:30 p.m. A copy may be viewed on local TV channel 3 or City website at www.cityofcresco.com

Rev. 5/30/2018