

# 2016 WATER QUALITY REPORT FOR City of Carter Lake Iowa

This report contains important information regarding the water quality in our water system. The source of our water is surface water. Our surface water is drawn from Missouri River.” Purchased from Metropolitan Utilities District  
Our water quality testing shows the following results:

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb)LRAA	NA	60	28.0	24-30		2016	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb) LRAA	NA	80	49	38-68		2016	No	By-product of drinking water disinfection
Chlorine (as Cl2) (ppm) RAA	4	4	2.1	1.7	2.4	2016	No	Water additive used to control microbes
Total Organic Carbon	N/A	TT	2.79	2.4	3.2	2016	No	Naturally present in the Environment
<b>Inorganic Contaminants</b>								
Arsenic (ppb)	0	10	5.07	<2	5.07	1/1/2012-12/31/2015	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Antimony, Total (ppb)	6	6	0.983	<0.5	<0.5	1/1/2013-12/31/2016	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.18	0.04	0.18	1/1/2014-12/31/2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	16.5	<0.2	16.5	1/1/14-12/31/16	No	Discharge from steel and pulp mills; Erosion of natural deposits
Chromium VI	N/A	N/A	1.40	0.13	1.40	2014	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	.97	0.20	.97	2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Nitrate-Nitrite (ppm)	10	10	5.35	0.25	5.35	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	50	50	7.33	3.70	7.33	1/1/14-12/31/16	No	Erosion of natural deposits
Sodium (optional) (ppm)	NA	500	105	30	109	2016	No	Element of the alkali metal group found in nature, soil and rocks.
<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	0.3	.25 ntu	NA	.25	2016	No	Soil runoff
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L)	0	15	7.20	<1.2	7.20	1/1/2012-12/31/2016	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	2.1	0.3	2.1	1/1/2012-12/31/2016	No	Erosion of natural deposits
<b>Synthetic organic contaminants including pesticides and herbicides</b>								
<b><u>Contaminants</u></b>	<b><u>MCLG</u></b>	<b><u>AL</u></b>	<b><u>Your Water</u></b>	<b><u>Sample Date</u></b>	<b><u># Samples Exceeding AL</u></b>	<b><u>Exceeds AL</u></b>	<b><u>Typical Source</u></b>	
<b>Inorganic Contaminants</b>								
Copper - action level at consumer taps (ppm)	1.3	1.3	.03 (ND-	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	15	ND	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

## 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
- 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.
- RAA –Running Annual Average
- 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.

## 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).

### Crypto tests

MUD tested source and treated water at their three water plants for *Cryptosporidium* (Crypto) every month in 2016. The Missouri River (Raw water) had an average of 0.006 cysts per liter. We did not find crypto in any other raw or treated water sample.

Analysis was conducted by M.U.D. Crypto, a protozoan parasite and one-celled animal, is too small to be seen without a microscope. It's common in surface waters (lakes and rivers), especially when these waters contain sewage or animal waste. Crypto must be ingested to cause infection. Symptoms include diarrhea, nausea and abdominal cramps. Most healthy individuals can overcome the infection within a few weeks.

We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Crypto may be spread through means other than drinking water.

### Health Notes

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 ([www.epa.gov/safewater](http://www.epa.gov/safewater)).

## ADDITIONAL HEALTH INFORMATION

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. City of Carter Lake 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

The city of Carter Lake water supply purchases its water from the Metropolitan Utilities District. MUD serves more than 180,500 customers an average of 96 million gallons of water per day. Sources of water include the Missouri and Platte rivers and several groundwater peak-shaving wells in the Dakota sandstone aquifer.

The Florence Plant in north Omaha treats Missouri river water defined by the U.S. Environmental Protection Agency as surface water.

The Platte Plant south of Omaha treats Platte river water from wells, defined as ground water. The Platte South Water Plant treats groundwater under the direct influence of surface water. Water from the three treatment plants is blended in the distribution system.

The Nebraska Department of Environmental Quality completed a source water assessment of our water supply in 2003. A condensed report is posted on Mud's web site at [www.mudomaha.com](http://www.mudomaha.com) or phone at 402-554-7774. The assessment includes a map of the sources of water, an inventory of potential contaminant sources and a determination of the vulnerability of the system to contamination.

**OTHER INFORMATION**

Turbidity is an Indicator of treatment filter performance and is regulated as a treatment technique.

The City of Carter lake water district tests the water distribution system daily for chlorine, monthly for bacteria, and at required times

For lead, Copper , Total trihalomethanes and Haloacetic Acids. The City of Carter Lake is not required to mail copies of this Consumer Confidence Report (CCR) you will get the CCR information Via the Daily Nonpareil news paper and the City of Carter Lake Web Site [www.cityofcarterlake.com](http://www.cityofcarterlake.com)

You can also pick up a copy at city hall.

**CONTACT INFORMATION**

For questions regarding this information, please contact Ron Rothmeyer at 712-347-5952 during the following hours 7:00 am to 3:30 pm Monday thru Friday.

Decisions regarding the water system are made at the City Council meetings held on the Third Monday of the month at 7:00 p.m. at City Hall and are open to the public.