

# 2014 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:

| Contaminants  | MCLG<br>or<br>MRDLG | MCL,<br>TT, or<br>MRDL | Your<br>Water | Range |      | Sample<br>Date | Violation | Typical Source                            |
|---|---------------------|------------------------|---------------|-------|------|----------------|-----------|---|
|   |                     |                        |               | Low   | High |                |           |   |
| Disinfectants & Disinfectant By-Products  |                     |                        |               |       |      |                |           |   |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) |                     |                        |               |       |      |                |           |   |
| Haloacetic Acids<br>(HAA5) (ppb) RAA  | NA                  | 60                     | 15.00         | SGL   |      | 12/17/14       | No        | By-product of drinking water chlorination |
| TTHMs [Total<br>Trihalomethanes]<br>(ppb) RAA   | NA                  | 80                     | 34.00         | SGL   |      | 12/17/14       | No        | By-product of drinking water disinfection |
| Chlorine (as Cl <sub>2</sub> )<br>(ppm) RAA   | 4                   | 4                      | 2.2           | 1.9   | 2.5  | 2014           | No        | Water additive used to control microbes   |
| Total Organic Carbon  | N/A                 | TT                     | 2.82          | 2.50  | 3.00 | 2014           | No        | Naturally present in the Environment      |

#### Inorganic Contaminants

|                |     |     |      |      |      |                       |    |  |
|----------------|-----|-----|------|------|------|-----------------------|----|--|
| Arsenic (ppb)  | 0   | 10  | 4.15 | <2   | 4.15 | 1/1/2012-<br>12/31/13 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| Barium (ppm)   | 2   | 2   | 0.18 | 0.03 | 0.18 | 1/1/13-12/<br>31/14   | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits             |
| Chromium (ppb) | 100 | 100 | 16.5 | <0.2 | 16.5 | 1/1/12-12/<br>31/13   | 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   | .92  | 0.75 | .92  | 2014 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Nitrate-Nitrite (ppm)   | 10 | 10  | 3.70 | 0.29 | 3.70 | 2014 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits                               |
| Selenium                | 50 | 50  | 7.33 | < 5  | 7.33 | 2014 | No | Erosion of natural deposits   |
| Sodium (optional) (ppm) | NA | 500 | 101  | 35   | 101  | 2014 | No | Element of the alkali metal group found in nature, soil and rocks.  |

#### Microbiological Contaminants

|                 |    |     |         |    |     |      |    |             |
|-----------------|----|-----|---------|----|-----|------|----|-------------|
| Turbidity (NTU) | NA | 0.3 | .26 ntu | NA | .26 | 2014 | No | Soil runoff |
|-----------------|----|-----|---------|----|-----|------|----|-------------|

#### Radioactive Contaminants

|                                   |   |    |      |      |      |      |    |                             |
|-----------------------------------|---|----|------|------|------|------|----|-----------------------------|
| Alpha emitters (pCi/L)            | 0 | 15 | 7.20 | <1.2 | 7.20 | 2014 | No | Erosion of natural deposits |
| Radium (combined 226/228) (pCi/L) | 0 | 5  | 3.1  | <1.0 | 3.1  | 2014 | No | Erosion of natural deposits |

#### Synthetic organic contaminants including pesticides and herbicides

|  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|

| <u>Contaminants</u> | <u>MCLG</u> | <u>AL</u> | <u>Your Water</u> | <u>Sample Date</u> | <u># Samples Exceeding AL</u> | <u>Exceeds AL</u> | <u>Typical Source</u> |
|---------------------|-------------|-----------|-------------------|--------------------|-------------------------------|-------------------|-----------------------|
|---------------------|-------------|-----------|-------------------|--------------------|-------------------------------|-------------------|-----------------------|

#### Inorganic Contaminants

|  |     |     |               |      |   |    |  |
|--|-----|-----|---------------|------|---|----|--|
| Copper - action level at consumer taps (ppm) | 1.3 | 1.3 | .03 (ND-0.05) | 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 2014. The Missouri River(Raw water) had an average of 0.32 cysts per liter. We did not find crypto in any 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 surfacewaters (lakes and rivers), especially when these waters containsewage or animal waste.Crypto must be ingested to cause infection. Symptomsinclude 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 180500 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 or you can email Tim Parker at [Tlparker6@msn.com](mailto:Tlparker6@msn.com)

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.