

2017 QUALITY WATER REPORT – CITY OF CARSON CITY – JUNE 2018

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services 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. Our water source is ground water drawn from glacial material at our two municipal wells.

I'm pleased to report that our drinking water is safe and meets or exceeds Federal and State requirements.

If you have any questions about this report or concerning your water utility, please contact Mr. Dan Curtis at 989-584-3515. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Tuesday of the month at City Hall, 123 E. Main Street.

The City of Carson City routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring the period of January 1st to December 31st, 2017. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking 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.

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

Non-Detected (nd) – laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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 MCLs as feasible using the best available treatment technology.

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. MCLG's allow for a margin of safety.

The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old. The table below represents the most current testing information available.

<u>Contaminant</u>	<u>Violation</u>	<u>Level</u>	<u>Unit of</u>	<u>Average</u>	TEST RESULTS		<u>Likely Source of Contamination</u>
					<u>MCLG</u>	<u>MCL</u>	
INORGANIC CONTAMINANTS							
10, Barium	No	0.21	ppm		2	2	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
16, Fluoride	No	0.73	ppm		4	4	Erosion of natural deposits; water additive which promotes which promotes strong teeth; discharge from fertilizer and aluminum factories.

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where these contaminants occur and whether it needs to regulate those contaminants.

UNREGULATED CONTAMINANTS

Contaminant	Average of level detected	Range of level detected	Unit of measure
Sodium	25	5	mg/L

LEAD & COPPER DISTRIBUTION MONITORING RESULTS

Contaminant	Date Tested	Number Sites Tested	90 Percentile	# of Sites Over Action Level	Action Level Units of Measurement	Likely Source of contamination
Lead	7/19	10	0ppb	0	15 ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Copper	7/19	10	180ppb	0	1300ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Information about lead: 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 material and components associated with service lines and home plumbing. The City of Carson City 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 on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

TOTAL TRIHALOMETHANES (THMM) AND HALOACETIC ACIDS (HAAS)

Name	Test Level	MCL Limit	Rpt Limit	Violation	Likely Source of Contamination
THMM	.0023 mg/L	.080 mg/L	.0005 mg/L	No	By-Product of drinking water disinfection
HAAS	.002 mg/L	.06 mg/L	.001 mg/L	No	By-Product of drinking water disinfection

What does this mean? As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPS has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural 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 discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses, radioactive contaminants which are naturally occurring or be the result of oil and gas production and mining activities.
- Organic Chemical Contaminants, including 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. 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 that 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.

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. Lead:

- Lead in drinking water is rarely the sole cause of lead poisoning but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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 all of 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 transplant, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. 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 microbiological contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

Please call our office if you have questions. We at the City of Carson City work around the clock to provide top quality water to every tap.

We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

This publication is the only public notification of the Carson City Quality Water Report. It was not mailed or hand delivered to the customers. Copies of this report are available at City Hall, 123 E. Main Street, Carson City, Michigan 48811.

The source water assessment completed on March 2, 2015 on well #5 was moderately low. Well #6 was completed on March 2, 2015 and rated low. Official reports are on file at the DPW Office.