

CITY OF HUDSON

2016

ANNUAL WATER QUALITY REPORT

The City of Hudson strives to produce the best quality drinking water possible. The purpose of this report is to provide you with information about your drinking water. The report explains to you where your water comes from and the treatment it receives before it reaches your tap. The report also lists all of the contaminants detected in your water and an explanation of any violation's in the past year.

Your drinking water comes from four 8-inch wells that are approximately 70 feet deep. The water from each well is pumped to the iron removal plant. The water goes through a filtering process, which removes any soluble iron and manganese that may be present. Filtering also removes undesirable gases and odors before leaving the plant, water is disinfected and pumped into the distribution system and the water towers.

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 the contaminants and potential health affects can be obtained by calling the EPA's Safe drinking Water Hotline at 1-800-426-4791
Hudson's water supply comes from groundwater. As water travels through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animal or human activity.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 providers. EPA/CDC guidelines on appropriate means to lessen the risk of the infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

Contaminants that may be present in source water.

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock and wildlife.
- Inorganic contaminants, such as salts and metals, which can be natural or may result from storm run off, wastewater discharges, oil and gas production and farming.
- Organic chemicals, including synthetic and volatile organic chemicals, which are byproducts of industrial and petroleum products, and can also originate from gas stations, storm run off and septic systems.
- Radioactive substances, which can be naturally occurring or be the results of oil and gas production and mining activity.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water run off and residential usage.

In order to ensure that the tap water is safe, the U.S. Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems.

If you would like more information about your water Please contact Brad Wilson or Phil Goodlock at the Hudson Water Department at 448-6101. The Hudson City council meets on the first & third Tuesday of each Month. Please feel free to come and participate.

WATER QUALITY DATA

Each year, the City is required to sample the drinking water for various contaminants. The table below lists all contaminants that were detected in 2016. The state allows us to monitor for certain contaminants less than annually because the concentrations of these contaminants are not expected to change frequently. The most recent results of these tests are also included in the table.

Terms and abbreviations:

- **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 possible 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 health risks.
- **Maximum Residual Disinfectant level (MRDL):** Means the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectants is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** Means 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.
- **Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **N/A:** Not applicable
- **ppb:** Parts per billion or micrograms per liter
- **ppm:** Parts per million or milligrams per liter

Contaminant	MCL	MCLG	Hudson Water	Range of Detections	Sample Date	Violations	Typical Sources of Contaminant
Unregulated Contaminants							
Sodium ¹	N/A	N/A	45 ppm	N/A	6/21/16	NO	Naturally present in the groundwater.
Chloride	N/A	4ppm	57 ppm	N/A	6/21/16	NO	Naturally present in the groundwater.
Sulfate	N/A	10ppm	49 ppm	N/A	6/21/16	NO	Naturally present in the groundwater.
Iron	N/A	0.5ppm	0.0 ppm	N/A	6/21/16	NO	Naturally present in the groundwater.
Hardness	N/A	20ppm	328 ppm	N/A	6/21/16	NO	Naturally present in the groundwater.
Inorganic Contaminants							
Fluoride	4 ppm	4 ppm	0.77ppm	N/A	6/21/16	NO	Erosion of natural deposits.
Arsenic	10 ppb	N/A	0.000ppm	N/A	7/18/12	NO	Naturally present in groundwater
Barium	2 ppm	2 ppm	0.18 ppm	N/A	11/17/ 09	NO	Naturally present in groundwater
Nickel	100 ppm	100 ppm	0.00 ppm	N/A	11/17/ 09	NO	Naturally present in groundwater
Lead & Copper Monitoring Results				90th percentile			
Copper ²	AL= 1300 ppb	1300 ppb	1140 ppb ³		8/26/16	NO	Corrosion of household plumbing systems.
Lead	AL= 15ppb	0 ppb	11 ppb		8/26/16	NO	Corrosion of household plumbing systems.

1. 1 of the 10 Homes tested were above the Action level in this case.

Contaminant	MCL	MCLG	Hudson water	Range of Detections	Sample Date	Violations	Typical Sources of Contaminant
Disinfection Byproduct Monitoring							
Total Trihalomethanes	80 ppm	N/A	.0151	N/A	6/24/16	NO	Byproduct of disinfection
Total Haloacetic Acids	60 ppm	N/A	.001	N/A	6/24/16	NO	Byproduct of disinfection
Radioactive Contaminants							
Combined Radium 226/228	5	0	1.136	N/A	7/30/14	NO	Decay of natural and man-made deposits.
Gross Alpha	15	0	2.04	N/A	7/30/14	NO	Decay of natural and man-made deposits.
Chlorine Monitoring							
Chlorine residual	MRDL 4ppm	MRDLG 4ppm	Hudson water highest running annual average. 0.24 ppm	Hudson water range detected. 0.04 ppm to 0.35 ppm	NO		Water additive used to control microbial

- 1- Sodium is an unregulated contaminant and thus there is no MCL associated with it. Unregulated contaminant monitoring helps the EPA to determine whether there is a need to regulate that contaminant.
- 2- Lead and Copper results list the number of samples that exceeded the action level, rather than the range detected, in this case 10 homes were tested for lead and copper and one was above the action level.
- 3- A solution of phosphate is being added to the water to reduce the risk of copper getting into your drinking water.

LEAD REPORT

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 HUDSON** 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

Community ground water supplies that do not have an approved Wellhead Protection Program completed are assessed using a numerical scoring procedure, which provided a Source Water Assessment Score (SWAS) for each public water well. The SWAS is composed of four parts.

- ❖ Geology
- ❖ Well Construction
- ❖ Chemistry
- ❖ Source Isolation

The City of Hudson's susceptibility determination rating is (moderate). For more information contact Brad Wilson at 448-6101.

WELLHEAD PROTECTION PROGRAM

The City Of Hudson's Wellhead Protection Program is Complete. With the Wellhead Protection Area Delineation complete the following areas need to be completed.

- Identify roles and duties.
- Identification of potential sources of contamination.
- Establishment of management approaches for Wellhead Protection area.
- Development of a contingency plan of emergencies.
- Incorporation of new wells into a Wellhead Protection Program.
- Provide and encourage public participation.

The City Of Hudson will be forming a Wellhead Protection Committee at a future City Council Meeting.

**Copies of the Water Quality Report are available at the
Hudson City Office, 121 N. Church St.**

This report will NOT be mailed to Hudson water customers.