

City of Grangeville Water Consumer Confidence Report

May 5, 2016

The Grangeville Water Department is very pleased to provide you with this year's Annual Water Quality Report. We continue to keep you, our customers, informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe, affordable, and dependable supply of drinking water. Our water source is five deep wells located within and around the city limits of Grangeville. The City Council adopted a Wellhead Protection Ordinance that identifies areas around each well that are sensitive to contamination. A copy of Ordinance #635 containing more information about the wellhead protection areas can be obtained at City Hall. We are pleased to report that after testing for the required constituents in 2015 our drinking water is safe and meets all Federal and State requirements.

If you have any questions about this report or concerning your water system, please contact the Grangeville Public Works Director, Jeff McFrederick at 983-1380. We want our valued customers to be informed about their water system. If you want to learn more, please attend any of our regularly scheduled City Council meetings held on the first and third Mondays of each month at 7:30 PM in the Council Chambers of City Hall.

The City of Grangeville routinely monitors for contaminants in your drinking water according to Federal and State laws. The table at right shows the results of our monitoring, primarily for the period of January 1st to December 31, 2015 and within the past five years. 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 reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants 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:

Not Applicable (N/A) – no test was performed for this constituent.

Non-Detects (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

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.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Action Level (AL) - 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.

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.

Radioactive Contaminants:

(1, 2) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Microbiological Contaminants:

One sample from a tap in the High Zone showed Total Coliform present, in May of 2015. All follow up samples within the next two days, at that location and upstream, downstream, and throughout the system and also the wells, all showed ABSENT when tested at the lab. There have not been any samples that have had a Present since that single one. It is unknown why it showed present but since all follow up samples were good, it is assumed that it was something that happened during the drawing of the sample.

Inorganic Contaminants:

(3) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(4) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(5) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(6) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(7) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

(8) Selenium. Selenium is an essential nutrient. However, people who drink water containing selenium well in excess of the MCL over many years could experience hair or fingernail losses, or problems with their kidneys, liver, nervous system, or circulation.

(9) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

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 EPA 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 man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply. All five wells were tested in 2015 with two, "No Detects" and the other three, far below the Maximum Contaminant level.

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 materials and components associated with service lines and home plumbing. The utility named above is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

TEST RESULTS (2015)						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	Y	present				Naturally present in the environment
Radioactive Contaminants						
1. Radium 226 ('10)	N	.344	PCI/L	0	5.0	Erosion of natural deposits
2. Radium 238 ('10)	N	.09-.645	PCI/L	0	5.0	Erosion of natural deposits
3. Combined Radium (-226 & -228)	N	0.09-0.757	PCI/L	0	5.0	Erosion of natural deposits
4. Gross Alpha including Radon & U	N	0.881	PCI/L	0	15.0	Erosion of natural deposits
Inorganic Contaminants						
1. Copper ('10)	N	0.067	ppm	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2. Fluoride ('10)	N	0.37-0.63	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
3. Lead ('10)	N	0.002	ppm	0	0.015	Corrosion of household plumbing systems, erosion of natural deposits
4. Nitrate ('12) (as Nitrogen)	N	1.11 ND 1.66 2.04 ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
5. Barium ('10)	N	0.01-0.3	ppm	2.0	2	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits.
6. Chromium	N	0.00195	ppm	0.05	0.05	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
7. Arsenic ('10)	N	0.001	ppm	0.01	0.01	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production water
8. Nitrite (a form of Nitrogen)	N	ND	ppm	0	1	Decomposing plants and organic materials; leaching from septic tanks, sewage;
9. Fluoride ('10)	N	0.37-0.63	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Disinfectant Byproducts						
10. TTHM	Y	3.10	ppm	0	80	Byproduct of disinfection
11. HAA5	N	0	ppm	0	60	Byproduct of disinfection

Note: Some of the results shown above are previous year's results since we did not test for those particular constituents in 2015. Federal law mandates that until another round of testing is required, the most recent results must be reported.

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 drinking 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>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this past year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. No projects were constructed in the water department this past year. The Department has completed the installation of radios on all our meters. To date we are very pleased with the results of the project. Please direct any questions or comments about the water department to Jeff McFrederick, the Public Works Director.

As stated at the beginning of this report the City Water Department is pleased to provide our customers with our Annual Drinking Water Quality Report in order to keep you informed about the services and product we are providing. Please call our office at City Hall if you have questions, copies of this report are available in the entrance foyer at City Hall during our regular business hours (8:00 AM – 5:00 PM) or the Staff will be happy to provide you a copy of the report.

"The City of Grangeville Water Department works around the clock to provide top quality water to every tap," said Mayor Walker. "We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future."