

Annual Drinking Water Quality Report

June 2012

The City is pleased to provide you with this year's Annual Drinking Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is to provide to you a safe and dependable supply of drinking water. Our water source is an aquifer, or underground body of water, accessed by two City wells.

SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include river, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring materials and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- ❖ **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.
- ❖ **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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that provide the same protection for public health.

We are pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Tom Youatt at (989) 345-0500. This years report will not be mailed to customers but copies are available at City Hall. Additionally, if you want to learn more, please attend any regularly scheduled City Council meeting. They are held on the first and third Mondays of each month at 6:00 p.m.

The City of West Branch routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st, 2011 to December 31, 2011. 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 have provided the following definitions:

Action Level – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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.

Maximum Residual Disinfectant Level Goal or 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 or 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.

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Fluoride	N	.4	ppm	4		Erosion of natural deposits; water additive which promotes strong teeth.
Arsenic	N	.003	ppb	0		Naturally occurring (1)
Barium	N	.10	ppm	2		Naturally occurring
Chlorine Residual	N	Average = .4 Range = .2 to .6	ppm	MRDLG = 4	MRDL = 4	Water additive to control microbes

Copper and lead levels were required to be monitored between July 1 and December 30, 2011. During this time twenty samples were required to be collected. All of the twenty samples collected met the acceptable limits.

Copper 90th percentile = 80 ppb, action level of 1300 ppb, none of our twenty sites exceeded action level, testing done in 2010.

Lead 90th percentile = 2 ppb, action level of 15 ppb, none of our twenty sites exceeded action level, testing done in 2011.

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 City of West Branch 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>.

We are further required to report to you that testing revealed the presence of the following:

Sodium 8 ppm

We are not aware of health risks associated with these elements; however, those with dietary concerns may wish to consult with their physician.

As you can see by the table above, our system had no violations. 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.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring and 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.

The State of Michigan has completed a source water assessment report (SWAR) for our water system. Included in the SWAR is susceptibility ranking for our wells. The ranking is based on several factors, including well location, construction, water quality, and land use. Based on the report, our wells have a high susceptibility to contamination; however, we routinely test for a large number of contaminants that have never been detected in the water system. If you would like to review a copy of the complete report, contact Tom Youatt at (989) 345-0500.

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 microbiological contaminants are available from Safe Drinking Water Hotline (800-426-4791).