# 2010 WATER QUALITY REPORT FOR

## **West Branch**

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the Silurian aquifer and Cambrian Jordan Sandstone(s). This report is designed to inform you about the quality of water we provide to you on a daily basis. Our goal is to provide you with the safest and most dependable supply of drinking water we can. We have made significant improvements in our water system in the past few years, including a new 1575 foot deep Jordan well, upgrades to our water treatment plant, and a new water tower south of Interstate 80. These improvements, along with continual monitoring and upkeep of supply lines, help to maintain our water system and to meet the quality standards we are held to by regulations and your expectations.

Our water quality testing shows the following results for the monitoring period of January 2005 through December 2010. Some of the data represented is more than one year old. The reason for this is that regulations only require 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.

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Lead (ppb)	0	AL=15	90 <sup>th</sup> percentile 5	July 2008	0-43	No	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (ppm)	MRDLG =4.0	MRDL=4.0	1.2	RAA	.45-2.12	No	Water additive used to control microbes
Copper (ppm)	1.3	AL=1.3	90 <sup>th</sup> Percentile 1.01	July 2008	.08-1.4	No	Corrosion of household plumbing systems; Erosion of natural deposits
TTHM (ppb) [Total trihalomethanes]	N/A	80	62	July 7, 2010	N/A	No	By-products of drinking water disinfection
Alpha emitters (pCi/L)	0	15	2.8	1/2007	N/A	No	Erosion of natural deposits
Combined radium (pCi/L)	0	5	1.2	1/2007	N/A	No	Erosion of natural deposits
Nitrate [as N] (ppm)	10	10	1.3	1/1/2010- 12/31/2010	1.3-1.3	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	N/A	N/A	97	7/6/2010	N/A	No	Erosion of natural deposits; Added to water during treatment process
IDSE HAA5 (ppb) Total Haloacetic Acids	N/A	60	0	1/1/2010- 12/31/2010	0	No	By-products of drinking water disinfection
IDSE TTHM (ppb) (Total trihalomethanes)	N/A	80	25	1/1/2010- 12/31/2010	24-25	No	By-products of drinking water chlorination
Di (2- ethylhexyl)phthal ate (ppb)	0	6	.80	1/22/2009	N/A	No	Discharge from rubber and chemical factories
Haloacetic Acids (HAA5) (ppb)	N/A	60	11	7/7/2010	N/A	No	By-products of drinking water disinfection

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

#### **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
  - RAA Running Annual Average
  - IDSE Initial Distribution System Evaluation
- 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.
- 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).

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). 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 West Branch Water Department 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.

#### ADDITIONAL HEALTH INFORMATION

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

The City of West Branch monitors nitrate levels very closely and has never exceeded 2ppm for any test.

### SOURCE WATER ASSESSMENT INFORMATION

The City of West Branch water supply obtains its water from the Silurian aquifer and Cambrian Jordan Sandstone. The Silurian aquifer and Cambrian Jordan Sandstone was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials limit the rate at which contaminants can move through the aquifer. The wells will somewhat susceptible to activities such as dry cleaners, gas stations, industrial sites, and municipal wastewater dischargers. A detailed evaluation of your source water was completed by the IDNR, and is available from The West Branch City Office at 319-643-5888 and available online at www.westbranchiowa.org.

### **CONTACT INFORMATION**

This report will NOT be mailed to individual customers. Anyone requesting a copy may obtain one at the City Offices, 110 N. Poplar Street during normal business hours M-F 8:00 a.m.-4:00 p.m., online at www.westbranchiowa.org or by calling 319-643-5888. Decisions regarding the water system are made at the City Council meetings held on the first and third Monday of each month at 7 p.m. from April to October and 6:30 p.m. from November to March at the West Branch Council Chambers, 110 N. Poplar Street and are open to the public.