

## 2006 DRINKING WATER QUALITY REPORT

### **ANNUAL DRINKING WATER QUALITY REPORT MAY 1, 2007 CITY OF WEST BRANCH**

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you on a daily basis. 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 to protect our water resources. We are committed to ensuring the quality of your water.

The City of West Branch obtains its water from the Silurian aquifer and the Jordan aquifer. The Silurian aquifer and Jordan aquifer are determined to be slightly susceptible to contamination because of characteristics of the aquifer and overlying materials limit the rate at which contaminants can move through the aquifers. The City wells will be somewhat susceptible to activities such as gas stations, industrial sites, and municipal wastewater discharge. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from the West Branch Waterworks Department at 319-643-2828 or 319-643-5888.

The City of West Branch is supplied by four wells, that draw water from depths ranging from 428 to 446 feet deep and one deep well that draws water from a depth of 1575. The water supply is then filtered and disinfected to further insure the safety and quality of your public water supply.

To further ensure you about our commitment to excellent drinking water for our residents and future residents our City had a Wellhead Protection plan drafted in the early to mid 1990's and are in the process of updating this program which will be completed by Iowa Rural Water Association. If you wish to obtain a copy of this plan please feel free to visit our City offices.

This report is intended to show our water quality and what it means to our City. If you have any questions about our water system or this report please feel free to contact Brian Brennan, Public Works Director at (319) 643-2828 or (319) 643-5888. We greatly value all our customers and want them to be up to date and informed on the quality of the water that we deliver. If you are interested and would like to learn more please attend any of our regularly scheduled meetings. These meetings are held on the first and third Monday of each month at 6:30 PM in the City Offices.

The City of West Branch is continually monitoring our wells and drinking water for any contaminants in accordance with State and Federal laws. This table shows the results of our monitoring for the period of January 1st, 2002 thru December 31st, 2006. Please remember all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of contaminants. It is especially important to remember that the presence of these contaminants do not necessarily pose a health risk. In this table you will find many

## 2006 DRINKING WATER QUALITY REPORT

terms and abbreviations you might not understand or be familiar with. Below we've provided a table to help you better understand these terms and abbreviations:

\***ACTION LEVEL(AL)**- the concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

\***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(MG/L)**- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

\***MAXIMUM CONTAMINANT LEVEL**- the "maximum allowed" (MCL) is the highest level of a contaminant that is allowable 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(MRDL)**- The highest level of a disinfectant allowed in drinking water. There is convincing evidence that an addition of a disinfectant is necessary for control of microbial contaminants.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG)**- The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

\***RUNNING ANNUAL AVERAGE- (RAA.)**

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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 effects of that specific contaminant.

Some people may be more vulnerable to contaminants in drinking water than the general public. 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 advise 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).

West Branch Mayor Sandy Hatfield was quoted as saying,"We produced the first President born west of the Mississippi River with our drinking water so it must be good. We've also produced two PGA golfers, a University of Iowa All-American and an NFL Pro Bowler. It Must Be The Water!!"

There are several contaminants that may be present in source water before treatment that are either man made or occur naturally:

2006 DRINKING WATER QUALITY REPORT

**\*MICROBIAL CONTAMINANTS**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**\*INORGANIC CONTAMINANTS**, such as salts and metals, can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.

**\*PESTICIDES AND HERBICIDES**, may come from a variety of sources such as agriculture and residential uses.

**\*RADIOACTIVE CONTAMINANTS**, are naturally occurring.

**\*ORGANIC CHEMICAL CONTAMINANTS**, including synthetic and volatile chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

The attached table lists all the drinking water contaminants that we detected during this reporting period. However, some of the data, though representative of the water quality, is more than one year old. The reason for this is that the state only requires 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. The detection of these contaminants in the water does not necessarily indicate that the water poses a health risk.

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements.

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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

**The City of West Branch will NOT mail this notice to individuals. Anyone requesting a copy of the 2007 CCR (Consumer Confidence Report) can pick one up at the City Offices during normal business hours M-F 8:00 a.m. till 4:00 p.m. or call 319-643-5888 and one can be mailed to you. The CCR will be made available after May1, 2007.**

**TEST RESULTS**

Contaminant      Violation      Level Detected      Unit of Measurement      MCLG      MCL      Likely Source of Contamination

**Inorganic Contaminants**

*Copper	N	1.1 Tested 2005	ppm	1.3	AL=1.3	Corrosion of household plumbing systems
** Lead	N	7 Tested 2005	ppb	0	AL=15	Corrosion of household plumbing systems
Nitrate (as Nitrogen)	N	0 Tested 2006	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

## 2006 DRINKING WATER QUALITY REPORT

Barium	N	.56 Tested 2004	ppm	2	2	Discharge of drilling waste, Discharge from metal refiners; Erosion of natural deposits
Fluoride	N	1.0 Tested 2004	ppm	4	4	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories

### Volatile Organic Contaminates

Total Trihalomethanes (TTHM)	N	62 Tested 2006	ppb	N/A	AL=80	Byproduct of drinking water disinfection
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### Synthetic Organic Contaminants including Pesticides and Herbicides

Di (2-ethylhexyl (phthalate)	N	.001 Tested 2006	N/A	N/A	N/A	Runoff from herbicide used on row crops
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### Other

Sodium	N	20 Tested 2005	ppm	N/A	N/A	Erosion of natural deposits; added to water during treatment process
Total Haloacetic Acids (HAA5)	N	14 Tested 2006	Ppb	N/A	AL=60	Byproduct of drinking water disinfection

*** Chloramines	N	RAA = 1.53 2006  .62-2.99 2006 Levels of Detection	ppm	*** MRDL= 4	*** MRDLG = 4	Water additive used to control microbes
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**NOTE: The EPA requires monitoring of over 80 water contaminants. Those listed above are the only contaminants detected in your drinking water.**

\*NOTE: Range of Detection: Copper ND-0.99

\*\*NOTE: Range of Detection: Lead ND-31

\*\*\*NOTE: RAA = Running Annual Average

\*\*\*NOTE: MRDL = Maximum Residual Disinfectant Level

\*\*\*NOTE: MRDLG = Maximum Residual Disinfectant Level Goal