

# 2011 WATER QUALITY REPORT FOR City of Wheatland

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 and Cambrian Jordan Sandstone aquifer(s).

Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Lead (ppb)	0	AL=15	3	6-1-2008 to 9-30-2010	0 to 3	No	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (ppm)	MRDLG =4.0	MRDL=4.0	0.783	RAA	.4 to 1.2	No	Water additive used to control microbes
Copper (ppm)	1.3	AL=1.3	0.246	6-1-2008 to 9-30-2010	0.0218-0.320	No	Corrosion of household plumbing systems; Erosion of natural deposits
Total Coliform Bacteria	0	Presence of coliform bacteria in >5% of monthly samples	0	Monthly	NA	No	Naturally present in the environment
Nitrate [as N] (ppm)	10	10	1.4	1-1-2010 to 12-31-2010	1.4 to 1.4	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	N/A	N/A	191	6-08	NA	No	Erosion of natural deposits; Added to water during treatment process
Barium (ppm)	2	2	0.145	9-06	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.6	9-06	NA	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Combined radium (pCi/L)	0	5	1.2	7-08	NA	No	Erosion of natural deposits
Xylenes (ppm)	10	10	0.00166	RAA	ND-0.00166	No	Discharges from petroleum factories; Discharge from chemical factories
TTHM (ppb) [Total trihalomethanes]	N/A	80	82	RAA	58-111	Yes	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	23.40	RAA	11-43	No	By-products of drinking water disinfection
TTHM (ppb) [Total trihalomethanes] IDSE Report	N/A	80	54	2010	52.40-54	No	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb) IDSE Report	N/A	60	14.80	2010	14.30-14.80	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 Wheatland 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>.

## CONTAMINANT VIOLATIONS

TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

## OTHER VIOLATIONS

In December 2010, we failed to monitor for nitrite. Adverse health effects, if any, are not known. Monitoring procedures have been corrected to avoid future violations.

## SOURCE WATER ASSESSMENT INFORMATION

The City of Wheatland water supply obtains its water from the Silurian and Cambrian Jordan Sandstone aquifer. The Silurian and Cambrian Jordan Sandstone aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The wells will be somewhat susceptible to activities such as not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the IDNR, and is available from Matt Cavey at 563-374-1289.

## OTHER INFORMATION

Our water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact us 563-374-1289 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

## CONTACT INFORMATION

For questions regarding this information, please contact Matt Cavey at 563-374-1289 during the following hours: 7:30a.m.-3:30p.m.

Decisions regarding the water system are made at the City Council meetings held on 2<sup>nd</sup> Monday at 6:30 p.m. at City Hall and are open to the public.