The City of White Cloud
2015 Water Quality Report

What is the purpose of this report?

White Cloud Public Works Department is proud to present to you our Water Quality Report for 2015. It is important to us that you know that your tap water is safe to drink. The City developed this report to provide you with valuable information about your drinking water. Last year, as in past years, your **water met and exceeds all U.S. Environmental Protection Agency (EPA) and MDEQ state drinking water health standards.**

Where does my water come from?

The City of White Cloud pumps drinking water from three different locations. The primary location is well number 1 and it is located near the Mill Pond just off State St. Well #1 is 96 feet deep. The second location is well number 2. Well #2 is located in the same general area as Well #1 and is 97 feet deep. Well #1 was cleaned and inspected on October 29th, 2015. The third and final location is well number 4; this is the newest well on the system. It is located near the northeast corner of the airport just off M-37 and is 200 feet deep. The drinking water is stored in two different locations. The first location is a 100,000 gallon elevated tank at the east end of Newell St. The second tank is located on Pine hill St. East of North St location and this is a 200,000-gallon tank, which was constructed in 2000.

Source water assessment and its availability

The Department of Environmental Quality performed an assessment of our source water in 2014 to determine the susceptibility or the relative potential of contamination. The Susceptibility rating is on a six-tiered scale from "very low" to "high" based primarily on geologic sensitivity, water chemistry and contamination sources. The well susceptibility of our source is "moderately high" for well number 1, "moderate" for well number 2, and "low" for well number 4. A copy of the full report can be obtained by contacting the City of White Cloud at 12 N. Charles St. or by calling 231-689-1194.

Additional Monitoring

As part of an on-going evaluation program, the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

How can you get involved?

If you have any questions or comments, please feel free to attend any City Council meeting. They are held on the first and third Mondays of every month at 7:00 pm at the White Cloud City Hall, located at 12 N Charles St., White Cloud, MI.

Other Information

The City has completed several small water main projects in an effort to improve both water flow and water quality.

What is meant by "contaminants" in your drinking water?

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 poses a health risk. More information about contaminants and potential health effects can be obtained by calling Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals 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, urban storm water runoff, and residential uses.
- ***Organic chemical contaminants***, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, which can come from gas stations, urban storm water runoff, and septic systems.
- ***Radioactive contaminants***, which are naturally occurring or the result of oil and gas production and mining activities.

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

Water Quality Data Table

The table lists all of the drinking water contaminants that we detected during the 2015 calendar year. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented on the following table is from testing done in the 2015 calendar year. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Substance (units)	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range of Detection	Sample Date	Violation Yes/No	Major Sources of Contaminants if Present In Drinking Water
Inorganic Contaminants							
Arsenic (ppb)	0	<.005	ND	0.005 - 0.005	2015	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	4.0	4.0	0.22	0.10 -0.47	2015	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Nitrate [measured as Nitrogen] (ppm)	10	10	<0.10	<0.04 –<0.10	2015	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)		1	<0.10	<0.10 - <0.10	2015	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)			8.95	4.27 – 7.83	2015	No	Erosion of natural deposits; Leaching

Substance (units)	Action Level (AL)	90% of Samples Were Less than This Level	Ave	Max	Mini-mum	Sample Dates	No. of Samples Above AL	Typical Source
Copper - action level at consumer taps (ppm)	1.3	247	.02	.014	.004	2015	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead - action level at consumer taps (ppb)	.015	0	.003	.0040	.003	2015	0	Corrosion of household plumbing systems; Erosion of natural deposits
Trihalomethanes (TTHM) and Haloacetic Acids (RAA)	0.08	0	<.0005	<.0005	<.0005	2012	0	By-produce of drinking water disinfection

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 City of White Cloud is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been setting 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 at 1-800-426-4791 or at http://water.epa.gov/drink/info/lead/index.cfm

Additional Contaminants

In an effort to insure the safest water possible, the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants, only the ones listed below were found in your water.

Contaminants	State MCL	Your Water	Violation	Explanation and Comment
Iron	NA	0.7 mg/l	No	Corrosion of household plumbing systems
Chloride	NA	14.83 mg/l	No	
Hardness	NA	171.66 mg/l	No	

Additional Monitoring

As part of an on-going evaluation program, the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

Name	Reported Level	Range Low	Range High
Sulfate (ppm)	16.53	ND	20.8

Unit Descriptions

Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions

Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

Gary Zatalokin, DPW Supervisor
12 N. Charles St. P.O. Box 607
White Cloud, MI 49349
231-689-1194

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the City of White Cloud

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During November 2015 we did not complete all monitoring or testing for E coli from the City's water wells and therefore cannot be sure of the quality of our drinking water during that time.

What should I do? There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time.

The table below lists the contaminant(s) we did not properly test for during November 2015 how often we are supposed to sample for this contaminant and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we collected follow-up samples.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	Date additional samples were taken
E. Coli Bacteria	1 E. coli sample per routine positive total coliform sample	0	11/03/2015 to 11/05/2015	11/16/2015

What happened? What is being done? During November 2015 the City collected two routine samples for total coliform bacteria. One of these samples showed the presence of total coliform bacteria. Follow-up samplings are taken anytime a routine samples shows the presence of bacteria to confirm the presence of bacteria. Follow-up sampling showed no bacteria present, however testing for E. coli bacteria is also required to take place within 24 of learning of the positive sample. This sampling was completed, and all testing did not show E. coli in the water. However, the sampling was not done within 24 hours which resulted in a violation. There is nothing you need to do at this time, but as our customers you are entitled to know of the violation. Had bacteria been found in any of the follow-up sampling we would have notified our customers immediately.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of White Cloud.