

2020 Water Quality Report for the Village of Ubly

This report covers the drinking water quality for The Village of Ubly for the 2020 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2020. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from #6 and #7 groundwater wells.. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of #6 are moderately low. We are constantly making efforts to protect our water. Wells #6 and #7 are the production wells for the Village. These wells draw water from the Marshall Sandstone and upper 75' of the Coldwater Shale geology.

If you would like to know more about this report, please contact: Matthew Harris at 810-648-4641.

Contaminants and their presence in 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 the U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

Vulnerability of sub-populations: 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 systems 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. U.S. EPA/Center for Disease Control 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).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, 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 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 stormwater 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 can be naturally occurring or be the result of oil and gas production and mining activities.
- **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 stormwater runoff, and septic systems.

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

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2020 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2020. The State allows 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. All the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- **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.
- **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.
- **N/A:** Not applicable
- **ND:** not detectable at testing limit
- **ppb:** parts per billion or micrograms per liter
- **ppm:** parts per million or milligrams per liter
- **pCi/l:** picocuries per liter (a measure of radioactivity).
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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Information about 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 Village of Ubyly 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 have a lead service line it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. 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>.

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Contaminants	Susceptible Vulnerable SubPopulation	Level of Concern
Fecal Coliform/E. Coli	Infants, young children, and people with severely compromised immune systems	Confirmed presence (any confirmed detect)
Copper	People with Wilson's Disease	1.3 mg/l (ppm)
Fluoride	Children	4.0 mg/l (ppm)
Lead	Infants and children	15.0 mg/l (ppm)
Nitrate	Infants below the age of 6 months.	10.0 mg/l (ppm)
Nitrite	Infants below the age of 6 months	1.0 mg/l (ppm)

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2020.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at the Village Hall, Ubyly Post Office, Sleeper Public Library and viewed on our website: www.ublymi.com.

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Regulated Chemicals						
2. Barium Most recent analysis performed 2019	N	400*	ppb	2	2ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
3. Copper 90 th Percentile Most recent analysis 6/3/2020	N	.5	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
4. Fluoride Most recent analysis 3/9/2020	N	460*	ppb	4	4ppm	Erosion of natural deposits; water additive which promotes strong teeth
5. Lead 90 th Percentile Most recent analysis 6/3/2020	N	2	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Radioactive Contaminants						
7. Alpha Emitters Most recent 2016	N	6	PCi/L	0	15	Erosion of Natural Deposits
8. Radium (combined 226/228) Most recent 2013	N	ND	PCi/L	0	5	Erosion of natural Deposits
Un-Regulated Chemicals						
10. Chloride Most recent 3/9//2020	N	17	ppm	MRDLG = 4	MRDL = 4	Natural occurring element in water supply.
11. Sodium Most recent 3/9/2020	N	20	ppm			Natural occurring element in water supply.

12. Iron Most recent 3/9/2020	N	560*	ppb			Natural occurring in water supply
13. Hardness as CaCO3 Most recent 3/9/2020	N	246	ppm			Natural Occuring

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
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Stage 2 Disinfectant By-Products Total Trihalomethanes and Haloacetic Acid 5

14. TTHM (Total Trihalomethanes) Most Recent 8/10/200	N	6.6	ppb	N/A	80ppm	By-product of drinking water disinfection
15. HAA5 (Total Haloacetic Acid) Most Recent 8/10/2020	N	2	ppb	N/A	60ppm	By-product of drinking water disinfection
Chlorine (ppm)	N	.2-.5	ppm	4	4ppm	Water additive used to control microbes

*To convert to the same units from ppb to ppm divide by 1,000

Note: Bacteriological samples taken each month have come back from the Lab as negative (absent) samples, showing there is a zero (0) reported reading. Bacteriological samples, not a health threat in itself; are used to indicate whether other potentially harmful bacteria may be present and none were.

Note: You will notice that some samples were not taken for some of the contaminants in 2020. This is because those samples are required to be done once every three years or more, depending on the schedule given to us by the Michigan Department of Environment Great Lakes and Energy (EGLE).