

# Water Quality Report for VILLAGE OF CASSOPOLIS

This report covers the drinking water quality for the Village of Cassopolis for the 2005 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2005. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

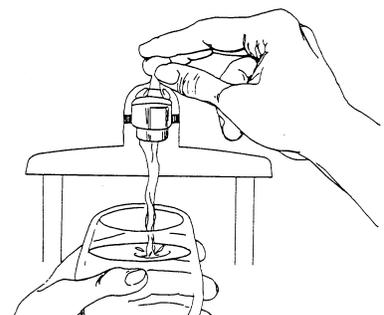
Your water comes from two (2) groundwater wells, which are currently in use. The current wells were installed in 1998 and were tested for water quality by the MDEQ. Unfortunately this testing did not require a test for Manganese. We have since discovered that the two wells at the Cass County Medical site do contain a small amount of Manganese and are now adding Phosphate to control the staining and odor problems caused by the Manganese. A source water assessment has been done and the report is available upon request, the susceptibility determination is moderately low.

If you would like to know more about the report, please contact Ronald Bass at the Village Hall at 117 S. Broadway Suite 100 Cassopolis or phone at 269-445-8098

- **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 **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. 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).

- **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 are 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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 2005 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 – December 31, 2005. 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 of 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.
- **Maximum Residual Disinfectant Level (MRDL):** means 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.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** means 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.
- **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:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Arsenic* (ppb)	10	0	2 ppm		FEBRUARY 2006	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	1.0 ppm			NO	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.6 ppm			NO	Additive/Geology
Nitrate	10 ppm	10 ppm	1.5 ppm			NO	Run off from fertilizer use, leaching septic tanks, erosion of natural deposits.
Chlorine (ppm)	mrcl 4	mrdlg 4	.24 ppm	.2 to .3		NO	Water additive used to control microbes
Radioactive Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Combined radium (pCi/L)	5	0	1.3	N/A		NO	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant ***			Your Water	Range	Sample Date	Typical Source of Contaminant	
Sodium (ppm)			N/A	0 to 8		Erosion of natural deposits	
Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level		Sample Date	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	3 ppb		AUGUST 2003	NONE	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	70 ppb		AUGUST 2003	NONE	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

\* These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is no MCLG.

\*\* EPA considers 50 pCi/l to be the level of concern for beta particles.

\*\*\*Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Fecal coliforms and E. coli are bacteria whose presence indicated that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, the elderly, and people with severely compromised immune systems.

Coliform are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Monitoring and Reporting Pequirements: The State and EPA require us to test our water an a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2005. We will update this report annually and keep you informed of any problems that may occur throught the year, as they happen. Copies are available at the Village Hall at 117 So. Broadway Suite 100 Cassopolis MI 49031. This report will not be sent to you.

We invite the public participation in decisions that affect drinking water quality. Village council meeting are open to the public and are held on the second Monday of each month at 7:00 p.m. at the Village Hall 117 So. Broadway Suite 100 Cassopolis, MI 49031 For more information about you drinking water, Visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).