

# 2008 Water Quality Report for Village of Byron

This report covers the drinking water quality for Village of Byron for the 2008 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2008. 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 [2] groundwater wells, each over 168' in depth. 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 our source is "moderately high" but only accounts for 18.3% of 2416 communities evaluated.

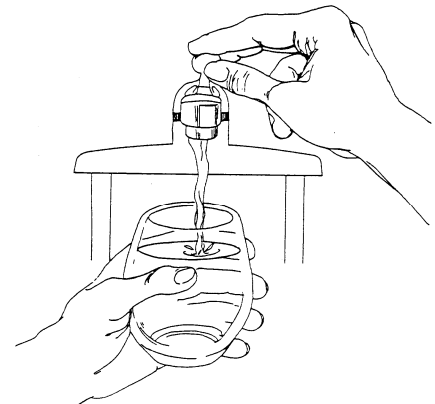
[There are no] Significant sources of contamination include in our water supply. We are making efforts to protect our sources by complying with all government regulations to provide safe drinking water for you.

If you would like to know more about the report please contact Michael Granger @ 810-266-6160 or stop by the office located @ 121 S. Saginaw St. The report can also be view on-line @ [www.byron.org](http://www.byron.org)

- **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 come's ground [rock] 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:
  - T **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
  - T **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.
  - T **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
  - T **Radioactive contaminants**, which are naturally occurring or be the result of oil and gas production and mining activities.
  - T **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.

## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2008 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, 2008. 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.

*Water Supplier: Fill out the table with **only detected** contaminants. **Delete** rows that don't apply. Add rows if needed. See more instructions next page.*

Regulated Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Arsenic (ppb)	10	0	0.006		Quarterly	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Sodium	N/A	N/A	53		7/02/08	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Sulfate	N/A	N/A	39		7/02/08	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.83		7/02/08	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	N/A	0.0038		7/03/08	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	0.003		7/03/08	No	Byproduct of drinking water disinfection
Chlorine (ppm)	<b>MRDL</b>	<b>MRDLG</b>	0.8		Weekly	No	Water additive used to control microbes
	4	4					
Chloride	N/A	N/A	68		7/02/08	No	Water additive used to control microbes

Radioactive Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
							Decay of natural and man-made deposits
							Erosion of natural deposits
Combined radium (pCi/L)	5.0		1.75		Quarterly	No	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant **			Your Water	Range	Sample Date	Typical Source of Contaminant	
Sodium (ppm)						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	0.00		9/13/06	None	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.48		9/13/06	None	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

\* 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.

**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. Village of Byron 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>.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5% of monthly samples positive)	0	0	No	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	No	Human and animal fecal waste

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer:

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 system, and may have an increased risk of getting cancer.

Some people who drink water containing haloacetic acids in excess of EPA's standard over many years may have an increased risk of getting cancer.

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2008.

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 121 N. Saginaw St. or can be viewed on-line @ [www.byron.org](http://www.byron.org)  
This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. Council meetings are held on the second Monday of every month @ 7:30 pm @ 146 S. Saginaw St. For more information about your water, or the contents of this report, contact Michael Granger @ 810-266-6160. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).