

2016 CONSUMER CONFIDENCE REPORT DATA
MARINETTE WATERWORKS, PWS ID: 43803958

WATER SYSTEM INFORMATION

If you would like to know more about the information contained in this report, please contact **Neil Motto, Operator in Charge at (715) 548-1987.**

The Marinette Water Utility is pleased to provide you with the **Annual Water Quality Report for 2016.** We hope this report will help keep you informed about the quality water and services we deliver to you every day. You can expect to receive a similar report prior to June 30th each year. If you have any suggestions as to how we can make these reports more understandable, or if you have any ideas for information you would like to see included, please let me know.

OPPORTUNITY FOR INPUT ON DECISIONS AFFECTING YOUR WATER QUALITY

We want our valued customers to be informed about their water utility, and involved in decisions concerning their water supply. If you want to learn more please attend any of our regularly scheduled meetings. They are held on the third Monday of each month, at 1905 Hall Avenue, room 214. Meeting notices and agendas are posted online on the City of Marinette's Website www.marinette.wi.us and in the Marinette/Menominee Eagle Herald. They can also be found at City Hall and the Water Utility Office. Tours of the Wastewater and Water Utilities are available for groups or individuals. Please contact us at (715) 732-5180 to arrange a tour.

HEALTH 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 poses a health risk. More information about contaminants and 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 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

SOURCE(S) OF WATER

Source ID	Source	Depth (in feet)	Waterbody Name	Status
1, 2, 3	Surface Water		LAKE MICHIGAN	Active

To obtain a summary of the source water assessment please contact, **Neil Motto at (715) 548-1987**.

EDUCATIONAL INFORMATION

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 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, urban stormwater runoff and residential uses.
- 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.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

DEFINITIONS

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
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.
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)

DETECTED CONTAMINANTS

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

DISINFECTION BYPRODUCTS

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
HAA5 (ppb)	D-24	60	60	31	24 - 45		No	By-product of drinking water chlorination
THM (ppb)	D-24	80	0	75.6	62.0 - 100.6		No	By-product of drinking water chlorination

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
HAA5 (ppb)	D-64	60	60	33	23 - 48		No	By-product of drinking water chlorination
TTHM (ppb)	D-64	80	0	62.6	48.8 - 81.2		No	By-product of drinking water chlorination
HAA5 (ppb)	D-65	60	60	28	20 - 46		No	By-product of drinking water chlorination
TTHM (ppb)	D-65	80	0	57.5	37.0 - 78.5		No	By-product of drinking water chlorination
HAA5 (ppb)	D-66	60	60	32	18 - 64		No	By-product of drinking water chlorination
THM (ppb)	D-66	80	0	54.0	26.0 - 75.4		No	By-product of drinking water chlorination

INORGANIC CONTAMINANTS

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
ANTIMONY TOTAL (ppb)		6	6	0.1	0.1	4/2/2014	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC (ppb)		10	n/a	1	1	4/2/2014	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.020	0.020	4/2/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
CYANIDE (ppb)		200	200	9	9	4/2/2014	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
FLUORIDE (ppm)		4	4	0.7	0.7	4/2/2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		0.7400	0.7400	4/2/2014	No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (NO3-N) (ppm)		10	10	0.23	0.23		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	9.60	9.60		No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.2300	0 of 30 results were above the action level.	8/14/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	1.10	0 of 30 results were above the action level.	8/15/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits

RADIOACTIVE CONTAMINANTS

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
RADIUM, (226 + 228) (pCi/l)		5	0	1.4	1.4	4/2/2014	No	Erosion of natural deposits

UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

Contaminant (units)	Level Found	Range	Sample Date (if prior to 2016)
SULFATE (ppm)	22.00	22.00	4/2/2014
BROMOCHLOROMETHANE (ppb)	0.46	0.46	8/13/2014
CHLORATE (ppb)	479.144	223.388 -479.144	2013 UCMR3 MONITORING
CHROMIUM-6 (ppb)	0.189	0.118 – 0.189	2013 UCMR3 MONITORING
MOLYBDENUM (ppb)	1.0241	1.0241	2013 UCMR3 MONITORING
STRONTIUM (ppb)	123.41	98.214 – 123.41	2013 UCMR3 MONITORING
VANADIUM	0.272	0.213 - 0.272	2013 UCMR3 MONITORING
CHROMIUM, TOTAL (ppb)	0.247	0.202 – 0.247	2013 UCMR3 MONITORING

ADDITIONAL HEALTH INFORMATION

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.

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. Marinette Waterworks 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 www.epa.gov/safewater/lead.

INFORMATION ON MONITORING FOR CRYPTOSPORIDIUM

During a 2-year period, we are required to collect data to determine whether our treatment is adequate to prevent cryptosporidium from entering your drinking water. Last year cryptosporidium was detected 1 time(s) in the **untreated** water.

HEALTH INFORMATION

Cryptosporidium is a microbial parasite naturally found in surface water throughout the world. If ingested, it can cause intense gastrointestinal distress in otherwise healthy people.

OTHER COMPLIANCE

TURBIDITY MONITORING

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm that the filtered water is less than 0.1 NTU. Turbidity is a measure of the cloudiness of water. We monitor for it because it is a good indicator of the effectiveness of our filtration system. During the year, the highest single entry point turbidity measurement was 0.08 NTU.