

**2016 Annual Drinking  
Water Quality Report**  
**Lawrence Water Utility**  
**June, 2017**



The Town of Lawrence is pleased to present to you this year's Annual Water Quality Report. The report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. In August 2007, the Town began receiving Lake Michigan water from Manitowoc via the Central Brown County Water Authority pipe line to our meter station. We are still required to monitor the water quality of our well under an agreement with the DNR, even though it will be only used for emergency purposes.

This report shows our water quality and what it means. We want our valued customers to be informed about their water utility. If you have any questions about this report, the water utility, or wish to obtain a copy of the source water assessment, please contact our office at the Lawrence Town Hall, 2400 Shady Court or call 920-336-9131. If you want to learn more, or if you have questions, the Town of Lawrence Town Board meets on the second and fourth Monday at 6:30 PM at the Town Hall located at 2400 Shady Court, De Pere, WI. At the meeting, there is an agenda item where the general public can ask questions or speak on any subject matter. You may also log onto the Town of Lawrence website at [www.townoflawrence.org](http://www.townoflawrence.org).

The Lawrence Water Utility routinely monitors for potential contaminants in your drinking water according to Federal and State laws. This report shows the results of our monitoring for the period of January 1 to December 31, 2016. It is our ultimate goal and objective to provide to our residents the safest high quality water possible.

**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**

The Emergency Well was not activated in 201.

Source ID	Source	Depth (in feet)	Status
1	Groundwater	765	Emergency Use Only
2 and 3	Purchased Surface Water From PWS ID 43603648 Manitowoc Waterworks through PWS ID 43602878 Central Brown Co. Water Authority		Active

**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.



**DISTRIBUTION SYSTEMS RESULTS**

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	Violation	Typical Source of Contaminant
HAA5 (ppb)	DBP-1	60	60	13	11	No	By-product of drinking water chlorination
TTHM (ppb)	DBP-1	80	0	21.1	16.8	No	By-product of drinking water chlorination
HAA5 (ppb)	DBP-2	60	60	14	10	No	By-product of drinking water chlorination
TTHM (ppb)	DBP-2	80	0	22	16.8	No	By-product of drinking water chlorination
HAA5 (ppb)	DBP-3	60	60	16	11	No	By-product of drinking water chlorination
TTHM (ppb)	DBP-3	80	0	26.2	20.1	No	By-product of drinking water chlorination
HAA5 (ppb)	DBP-4	60	60	17	12	No	By-product of drinking water chlorination
TTHM (ppb)	DBP-4	80	0	28.6	20.9	No	By-product of drinking water chlorination

**Inorganic Contaminants**

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Violation	Typical Source of Contaminant
TTHM (ppb)	IDSESM3	80	0	44.3	44.3	No	By-product of drinking water chlorination
HAA5 (ppb)	IDSESM8	60	60	46	46	No	By-product of drinking water chlorination

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	.6656	0 of 10 results were above the action level.	09/09/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	14.80	1 of 10 results were above the action level.	09/09/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits

### Additional Health Information

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. Town of Lawrence 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](http://www.epa.gov/safewater/lead).

### Contaminant Health Effects

**Lead:** Infants and children who drink water containing lead in excess of the action level 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.

### Purchased Water Results

Our water system purchases water MANITOWOC WATERWORKS through CENTRAL BROWN COUNTY WATER AUTHORITY. In addition to the detected contaminants listed above, these are the results from CENTRAL BROWN COUNTY WATER AUTHORITY.

## DETECTED CONTAMINANTS

### Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
ANTIMONY TOTAL (ppb)	6	6	0.20	0.20	05/07/2014	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC (ppb)	10	n/a	1	1	05/07/2014	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	0.020	0.020	05/07/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CYANIDE (ppb)	200	200	10	10	05/07/2014	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
FLUORIDE (ppm)	4	4	0.7	0.7	06/09/2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)	100		0.91	0.91	05/07/2014	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	0.37	0.37		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

### Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
RADIUM, (226 + 228) (pCi/l)	5	0	1.5	1.5	05/07/2014	No	Erosion of natural deposits

Contacte por favor a Hispano Servicios en (920) 465-9491 si ayuda es necesitada a traducir esta carta.

## 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 2015)
BROMODICHLORMETHANE (ppb)	3.7	3.7	
CHLOROFORM (ppb)	2.5	2.5	
SODIUM (ppm)	6.8	6.8	
DIBROMODICHLORMETHANE (PPB)	2.5	2.5	
SULFATE (ppm)	22	22	05/29/2014
CHROMIUM (ppb)	0.2	0.2	2014 -2015 UCMR Monitoring
CHROMIUM-6 (ppb)	0.2	0.2	2014 -2015 UCMR Monitoring
STRONTIUM (ppb)	120	110-120	2014 -2015 UCMR Monitoring
VANADIUM (ppb)	0.3	0.2 -0.3	2014 -2015 UCMR Monitoring

### Turbidity Monitoring

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated water is monitored for turbidity to confirm that the filtered water is less than 0.1 NTU/0.3NTU. Turbidity is a measure of the cloudiness of water. We monitor for it because it is a good indicator of effectiveness of our filtration system. During the year, the highest entry point turbidity measurement was 0.06 NTU.

### Definitions of Terms

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.
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.
MRDLG	Maximum residual disinfectant 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.
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)

Yog haistias koj tsis totaub daim ntawv no thiab xav tau kev pab txhais, thov hu rau Koomhaum Hmoob ntawm (920) 437-4550.