

CITY OF ADRIAN

Water Quality Report

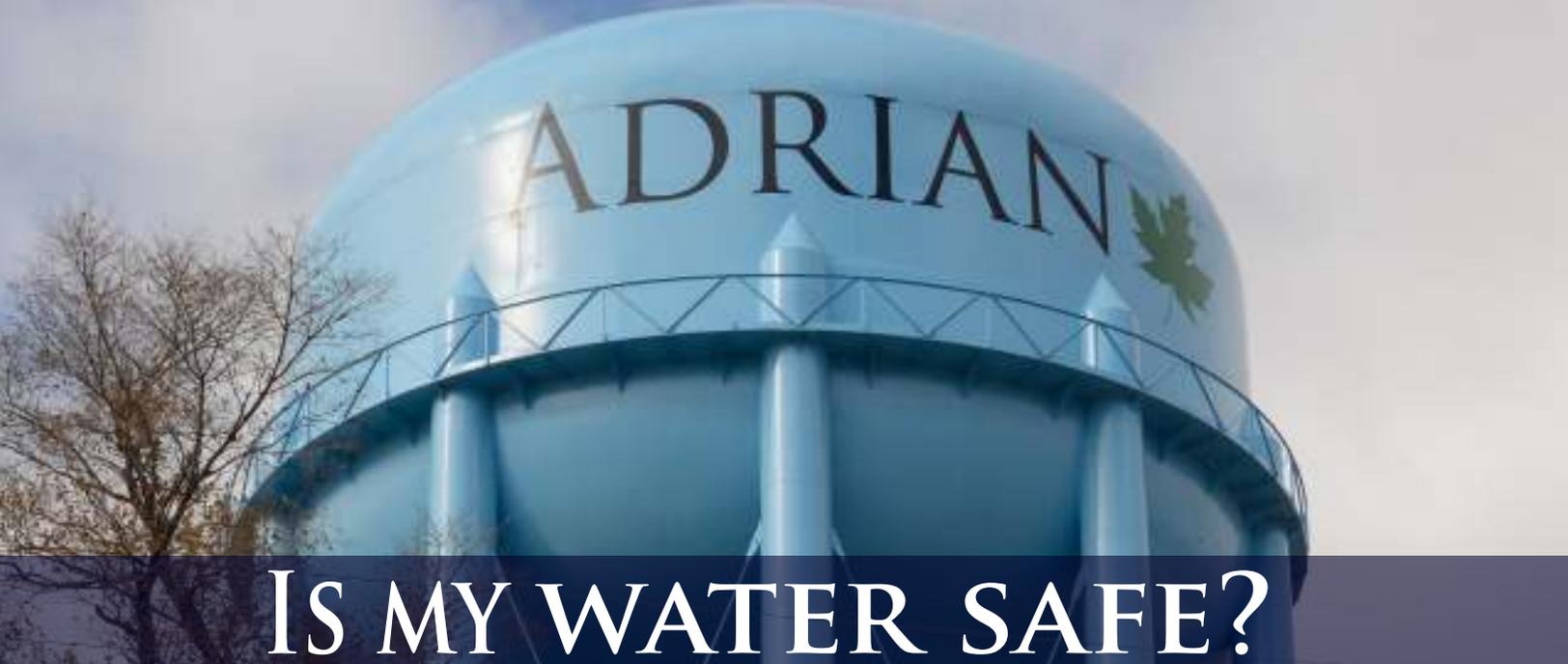
Annual Water Testing Performed in 2013



PRESENTED BY
CITY OF ADRIAN

FOR MORE INFORMATION ABOUT THE WATER QUALITY REPORT PLEASE CONTACT:
TRITCHIE@ADRIANMI.GOV; WWW.ADRIANCITY.COM; 517-246-4828

FOR EMERGENCY WATER SITUATIONS CALL (517)264-4820



IS MY WATER SAFE?

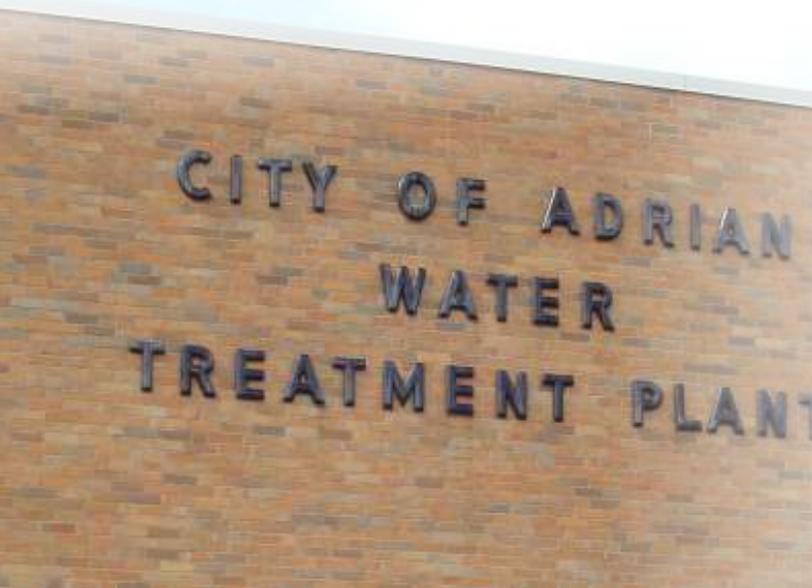
The City of Adrian Utilities Departments is once again proud to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). Federal regulation passed as part of the 1996 Safe Drinking Water Act Amendments, requiring that all community water systems provide their customers with an annual report.

This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report details testing completed during the 2013 calendar year. We are pleased to inform you that our drinking water met and surpassed every Federal and State requirements in 2013.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you. We are committed to providing you with information because informed customers are our best allies.

OUR WATER TREATMENT PROCESS

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger floc from smaller floc) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of chlorine is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.



CITY OF ADRIAN

Shane A. Horn City Administrator/ Utilities Director
Tim Ritchie Water Plant Superintendent

CITY COMMISSION

Jim Berryman Mayor
Julie Berryman Adams Commissioner
John Dudas Commissioner
Thomas Faulhaber Commissioner
Jerry Gallatin Commissioner
Andrew Munson Commissioner
Jeffrey Rising Commissioner

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- 💧 Take short showers -a 5 minute shower uses 4 to 5 gallons of water versus 50 gallons for a bath.
- 💧 Shut off water while brushing teeth, washing your hair or while shaving and save up to 500 gallons a month.
- 💧 Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- 💧 Run your clothes washer & dishwasher only when they're full and save up to 1,000 gallons a month.
- 💧 Water plants only when necessary.
- 💧 Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak.
- 💧 Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it & during the cooler parts of the day to reduce evaporation.
- 💧 Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill.
- 💧 Visit www.epa.gov/watersense for more information.

WHERE DOES MY WATER COME FROM?

The City of Adrian uses a blend of surface water from Lake Adrian and ground water from the Westside Well Field as its main sources of drinking water. Wolf Creek is fed by a 65-square-mile watershed. Lake Adrian covers 86 acres and contains up to 300 million gallons of water. The City also has a ground water supply from the Westside Well Field and a well on Maple Avenue that is capable of producing approximately 3.2 million gallons of water per day. The well supply is blended with the surface water to improve our source water quality.

The City of Adrian Water Plant was constructed in 1944 and provides roughly 1.5 billion gallons of clean drinking water every year. The plant is staffed 24 hours a day, seven days a week by a dedicated crew that is committed to their profession.

SOURCE WATER ASSESSMENT & ITS AVAILABILITY

The Michigan Department of Environmental Quality has performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from “very low” to “high”, based primarily on geologic sensitivity, water chemistry and contamination sources. The susceptibility of our source has been rated as “high”.

Significant sources of contamination include listed potential contamination sources, plus urban and agricultural runoff from the River Raisin watershed above Adrian. We are making efforts to protect our source water by controlling access, performing routine sample analysis and making frequent patrols on and around the watershed.

If you would like to know more about this report, please contact Tim Ritchie at (517) 264-4828. To report any suspicious activity around Lake Adrian or at any of our elevated tanks, please call the local police or the number above.

QUESTIONS? FOR MORE INFORMATION PLEASE CONTACT:
815 BENT OAK AVE., ADRIAN, MI 49221
TRITCHIE@ADRIANMI.GOV; WWW.ADRIANCITY.COM; 517-246-4828

FOR EMERGENCY SITUATIONS CALL (517)264-4820.

SPANISH (ESPAÑOL)

ESTE INFORME CONTIENE INFORMACION MUY IMPORTANTE SOBRE LA CALIDAD DE SU AGUA POTABLE. POR FAVOR LEA ESTE INFORME O COMUNIQUESE CON ALGUIEN QUE PUEDA TRADUCIR LA INFORMACION.

SAMPLING RESULTS

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. *The tables show only those contaminants that were detected in the water.*

The state requires us to monitor for certain substances less often than once per year because the concentration of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

CONTAMINANTS	MCLG or [MRDLG]	MCL,TT, or [MRDL]	YOUR WATER	RANGE LOW HIGH	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
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Disinfectants & Disinfectant By-Products

(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)

Chlorine (as Cl ₂) (ppm)	4	4	2.2	1.4	2.2	2013	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	11	4.1	11	2013	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	52	23	52	2013	No	By-product of drinking water disinfection
Total Organic Carbon (% Removal)	NA	TT	31% removal (25% required)	6%	52%	2013 quarterly	No	Naturally present in the environment

Inorganic Contaminants

Arsenic (ppb)	0	10	1.3	1.3	1.3	2011	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	4	4	0.87	0.33	0.87	2013	No	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate [measured as Nitrogen] (ppm)	10	10	1.7	0.12	1.7	2013	No	Runoff from fertilizer use; Leaching from septic tanks, sewage
Sodium (optional) (ppm)		MPL	32	26	32	2013	No	Erosion of natural deposits

Microbiological Contaminants

Turbidity (NTU)	0	TT=1NTU	0.12NTU	0.05	0.12	2013	No	Soil runoff
		TT=% of samples <0.3 NTU	100%					

100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.12. Any measurement in excess of 1 is a violation unless otherwise approved by the state

CONTAMINANTS	MCLG	AL	YOUR WATER	SAMPLE DATE	# SAMPLES EXCEEDING AL	EXCEEDS AL	TYPICAL SOURCE
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Inorganic Contaminants

Lead - action level at consumer taps (ppb)	0	15	0	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3	1.3	0.021	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNIT DESCRIPTIONS

ppm- parts per million, or milligrams per liter (mg/L)

ppb- parts per billion, or micrograms per liter (µg/L)

NTU- Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

NA- not applicable

ND- not detected

NR- monitoring not required, but recommended

IMPORTANT DRINKING WATER DEFINITIONS

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.

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.

TT- Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

AL- Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Variances and Exemptions- Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

MRDLG- Maximum residual disinfection 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.

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.

MNR- Monitored Not Regulated

MPL- State Assigned Maximum Permissible Level



ADDITIONAL MONITORING

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

NAME	REPORTED LEVEL	RANGE	
		LOW	HIGH
chromium (total chromium) (ppb)	0.3	0.3	0.3
molybdenum (ppb)	14	14	14
strontium (ppb)	480	480	480
vanadium (ppb)	1.3	1.3	1.3
chromium-6 (hexavalent chromium) (ppb)	0.29	0.29	0.29
chlorate (ppb)	300	300	300
chlorodifluoromethane (HCFC-22) (ppb)	0.29	0.29	0.29

SUBSTANCES THAT COULD BE IN OUR WATER

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

INORGANIC CONTAMINANTS, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

PESTICIDES & HERBICIDES, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses;

ORGANIC CHEMICAL CONTAMINANTS, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

RADIOACTIVE CONTAMINANTS, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 system 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

ADDITIONAL INFORMATION FOR 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 City of Adrian Water Plant 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>.



STAY CONNECTED!

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Questions?

Contact (517) 264-4828

For Emergency Situations call (517)264-4820



GET INVOLVED!

The Adrian City Commission meets at 7 p.m. on the first and third Mondays of each month. The meetings are held at the City Commission Chambers at 159 E.Maumee Street. Please come and participate and voice any concerns you may have about your drinking water.

For further information, check out the City of Adrian's website at www.adriancity.com