



**ANNUAL DRINKING WATER QUALITY REPORT
WYNSTONE WATER COMPANY**

IL0970080

For the Period of January 1 to December 31, 2021

The following report is mandated by the Illinois Environmental Protection Agency and its contents may not apply in its entirety to Wynstone. This report is intended to educate you with important information as it pertains to drinking water in general and what efforts are being made by the Wynstone Water Company to provide safe drinking water to you.

If you have any questions concerning this report or your water system, please contact Jason Fowler P.E., Sheaffer & Roland, Inc. (630) 208-9898. We want all customers and water users to be informed about their water quality. If you would like to learn more or voice your thoughts feel free to make an appointment to attend our regularly scheduled Board meetings. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and groundwater 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.

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 USEPA's Safe Drinking Water Hotline at (800) 426-4791.

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 storm water 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 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 can, also, come from gas stations, urban storm water 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in the drinking water is primarily from materials and components associated with service lines and home plumbing. Wynstone Water Company is responsible for providing high quality drinking water, but we 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>.

The Wynstone Water Company uses ground water provided by four wells drilled into the St. Peter and the Ironton Galesville aquifers. An aquifer is a geological formation that contains water. All four wells are located within the Wynstone service area.

Well # 3 is a St. Peter well and produces 170 gpm.
Well # 4 is a St. Peter and Ironton Galesville well and produces 820 gpm.
Well # 5 is a St. Peter and Ironton Galesville well and produces 850 gpm.
Well # 6 is an Ironton Galesville well and produces 850 gpm.

The wells pump to the water treatment plant and are blended together. All of the water from the wells is treated by the Ion Exchange System to remove the radium and barium before it is delivered to the community.

SOURCE WATER ASSESSMENT

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, one potential secondary source, which is Wynstone's sewage lagoons are located within the survey area of Wynstone Water Company's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated one site with ongoing remediations which may be of concern. According to the operator, the underground tanks have been permanently removed and the project was completed in April of 1998.

The Illinois EPA has determined that the Wynstone Water Company Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells.

Furthermore, in anticipation of the USEPA's Ground Water Rule, the Illinois EPA has determined that the Wynstone Water Company Community Water Supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this groundwater supply. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for the Wynstone Water Company's wells. Minimum protection zones are regulated by the Illinois EPA.

Due to favorable monitoring history, aquifer characteristics, and inventory of potential sources of contamination, our water supply was issued a vulnerability waiver renewal. No monitoring of VOCs and SOCs is required between January 1, 2020 and December 31, 2022.

2021 REGULATED CONTAMINANTS DETECTED

Lead and Copper

Date Sampled: 2021

Definitions:

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Lead & Copper	MCLG	Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Units	Violation	Likely Source of Contamination
Copper	1.3	1.3	0.19	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	0	15	6.0	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

Water Quality Test Results

DEFINITIONS

The following tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level (MCL):	<i>The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.</i>
Maximum Contaminant Level Goal (MCLG):	<i>The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.</i>
ppm:	<i>milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.</i>
ppb:	<i>micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.</i>
na:	<i>not applicable.</i>
Avg:	<i>Regulatory compliance with some MCLs are based on running annual average of monthly samples.</i>
Treatment Technique (TT):	<i>A required process intended to reduce the level of a contaminant in drinking water.</i>
Maximum Residual Disinfectant Level (MRDL):	<i>The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.</i>
Maximum Residual Disinfectant Level Goal (MRDLG):	<i>The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.</i>
Mrem/Year:	<i>Millirems per year - a measure of radiation absorbed by the body</i>
pCi/L	<i>picocuries per liter - a measure of radioactivity</i>

The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate is more than one year old.

Regulated Contaminants								
Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Chlorine	2021	1.3	0.69 - 1.3	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
TThm [Total Trihalomethanes]	2021	6	5.59 - 5.59	No goal for the total	80	ppb	No	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	2021	0.72	0.72 – 0.72	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021	0.879	0.879 – 0.879	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2021	0.045	0.045 -0.045		1.0	ppm	No	Erosion of natural deposits.
Manganese	2021	1.3	1.3 – 1.3	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Sodium	2021	19	19 - 19			ppm	No	Erosion from naturally occurring deposits: Used in water softener regeneration.
Zinc	2021	0.0091	0.0091-0.0091	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Combined Radium 226/228	2021	4	3.98 – 3.98	0	5	pCi/L	No	Erosion of natural deposits.
Gross Alpha excluding Radon and Uranium	2021	3	2.89 – 2.89	0	15	pCi/L	No	Erosion of natural deposits

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Iron This contaminant is not currently regulated by the USEPA. However, the state has set an MCL for this contaminant to supplies serving a population of 1,000 or more.

Sodium A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulation, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.