Leoni Township Water System
2020 Water Quality Report

This report covers the drinking water quality for Leoni Township for the 2020 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2020. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

General Information

Leoni Township is committed to providing our customers with quality drinking water on tap. Leoni Township water meets state and federal standards for both appearance and safety. This annual "Consumer Confidence Report" required by the Safe Drinking Water Act informs you where your water comes from and what tests show about the quality of the water you are drinking. If you have any questions, concerns, or would like copies of this report of the Source Water Assessment, please contact Township Hall at (517) 936-2295. A copy of the report is also available on the Leoni Township website at http://www.leonitownship.com/document/forms.php#revize_document_center_rz528. This report will not be mailed but is available at the Township office. We invite public participation in decisions that affect drinking water quality. The Leoni Township Board meets at 6:00 p.m. on the 2nd Tuesday of each month at the Leoni Township Hall. Please feel free to attend the meeting, or call (517) 936-2300 for meeting agenda information.

Leoni Township Water Source

Leoni Township's water supply comes from the Marshall Sandstone Formation Aquifer via two different well fields located in Leoni Township. The water from each well is pumped to a one-million-gallon storage tank. Leoni Township passed a resolution to participate in the Jackson County Wellhead Protection Program to help protect our drinking water sources well into the future. The State of Michigan performed an assessment of Leoni Township's source water to determine the susceptibility or the relative potential of contamination. The susceptibility ratings are on a seven-tiered scale from "very low" to "high" based primarily on geological sensitivity, water chemistry, and possible contaminate sources. The susceptibility of our ground water wells is moderately high.

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 U.S. 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. U.S. EPA/Center for Disease Control 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 comes from 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 and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **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, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Monitoring and Reporting to the Michigan Department of Environment, Great Lakes, and Energy (EGLE,) (formerly Michigan Department of Environmental Quality (MDEQ)) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2020. 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 Leoni Township Hall. This report will not be sent to you.

For more information about your water, or the contents of this report, contact the Leoni Township DPW at 517.522.8445. For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater/lead.

Service Lines

Leoni Township has zero (0) known lead service lines and 625 service lines of unknown material out of a total of 674 service lines. We are currently working on a Distribution System Materials Inventory (DSMI) to identify the service line materials, so these numbers will change on future Water Quality Reports as more information becomes available.

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. Leoni Township 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 have a lead service line it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. 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.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2020 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, 2020 through December 31, 2020. 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 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): 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): 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppm: parts per million or milligrams per liter
- ppb: parts per billion or micrograms per liter
- ppt: parts per trillion or nanograms per liter
- pCi/l: picocuries per liter (a measure of radioactivity)

INORGANIC CONTAMINANTS – PLANT TAP							
Regulated Contaminant	**MCL, TT, or MRDL**	**MCLG or MRDLG**	**Level Detected**	**Range**	**Year Sampled**	**Violation Yes/No**	**Typical Source of Contaminant**
Arsenic (ppb)	10	0	4.0	2.0 – 4.0	2020	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	4	4	0.36	0.27-0.36	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Hardness[1] (ppm)	N/A	N/A	245	231-245	2020	No	Erosion of natural deposits
Sodium[1] (ppm)	N/A	N/A	35	14-35	2020	No	Erosion of natural deposits
DISINFECTANTS AND DISINFECTION BY-PRODUCTS – DISTRIBUTION SYSTEM							
TTHM Total Trihalomethanes (ppb)	80	N/A	23.8	23.8	2020	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	ND	ND	2020	No	Byproduct of drinking water disinfection
Chlorine[2] (ppm)	4	4	0.31	0.17-0.37	2020	No	Water additive used to control microbes
LEAD AND COPPER – DISTRIBUTION SYSTEM							
Inorganic Contaminant Subject to Action Levels (AL)	**Action Level**	**MCLG**	**Your Water[3]**	**Range of Results**	**Year Sampled**	**Number of Samples Above AL**	**Typical Source of Contaminant**
Lead (ppb)	15	0	2.0	0 – 10.0	2019	No	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.14	0 – 0.15	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits

[1] Sodium and Hardness are not regulated contaminants.

[2] The chlorine "Level Detected" was calculated using a running annual average.

[3] Ninety (90) percent of the samples collected were at or below the level reported for our water.