2024 Water Quality Report for the Village of Middleville

Water Supply Serial Number: 4360

This report covers the drinking water quality for the Village of Middleville for the 2024 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2024. 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.

Your water comes from 4 groundwater wells, each over 78ft deep. Two of which are located near the water storage tower on the west side of town. A third well is located off Irving Rd. near the Village limits. Production well # 6 on Irving Road and production well # 3 on the west side are built to a depth of 78 feet and utilize unconfined sand and gravel aquifers. Production well # 4 on the west side is built to a depth of 352 feet and utilizes the Marshall Sandstone aquifer. Well # 5 is located to the west of Bryanwood Estates Development near the Thornapple River. This well is built to a depth of 197 feet.

There are no significant sources of contamination included in our water supply. We are making efforts to protect our sources by testing all our drinking water sources and distribution system along with implementing our well head protection program.

If you would like to know more about this report, please contact: Alec Belson, Village of Middleville, 100 E. Main St., Middleville, MI 49333. He can also be reached at 269-795-3385, or belsona@villageofmiddleville.org. More information about this report can also be found at www.villageofmiddleville.org.

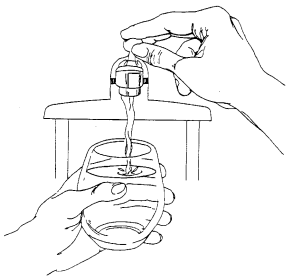
Contaminants and their presence in water: Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential 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.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 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 through December 31, 2024. 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.
- 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)
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

1Monitoring Data for Regulated Contaminants

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Nitrate (ppm)	10	10	4.49	0-13.3	2024	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	.16	0-0.39	2024	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium[1] (ppm)	N/A	N/A	29.33	5.05-28.1	2024	NO	Erosion of natural deposits
TTHM Total Trihalomethanes (ppb)	80	N/A	0.0156	0.00081-0.156	2024	NO	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	0.00202	0-.00202	2024	NO	Byproduct of drinking water disinfection
Chlorine[2] (ppm)	4	4	.62	0.03-1.18	2024	NO	Water additive used to control microbes
Alpha emitters (pCi/L)	15	0	.77	0-0.77	2021	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.12	.387-.735	2023	NO	Erosion of natural deposits
Total Coliform	TT	N/A	N/A	N/A			Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note[3]	0	0	N/A	2024	NO	Human and animal fecal waste
Fecal Indicator – E. coli at the source (positive samples)	TT	N/A	0	N/A	2024	NO	Human and animal fecal waste

[1] Sodium is not a regulated contaminant.

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

[3] *E. coli* MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is *E. coli*-positive, or (2) the supply fails to take all required repeat samples following *E. coli*-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for *E. coli*.

Per- and polyfluoroalkyl substances (PFAS)							
Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	N/D	N/D	2024	NO	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	4.1	0-4.1	2024	NO	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	N/D	N/D	2024	NO	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	N/D	N/D	2024	NO	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	N/D	N/D	2024	NO	Discharge and waste from industrial facilities; breakdown of precursor compounds
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	N/D	N/D	2024	NO	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	N/D	N/D	2024	NO	Discharge and waste from industrial facilities; stain-resistant treatments
Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water[4]	Range of Results	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	3	0-8	2023	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.1	0-0.2	2023	0	Corrosion of household plumbing systems; Erosion of natural deposits

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

Our water supply has 72 lead service lines and no service lines of unknown material out of a total of 1299 service lines. If you would like to know more about this report, please contact: Alec Belson, The Village of Middleville, 100 E. Main St., Middleville, MI 49333. He can also be reached at 269-795-3385 or belsona@villageofmiddleville.org. This report is also available at www.villageofmiddleville.org.

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) 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 2024.

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 the Village of Middleville main office located at 100 E. Main St., Middleville, MI 49333. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. The Village of Middleville Council's regular meetings are held on the second and fourth Tuesday of each month at 7:00pm at Village Hall. For more information about your water, or the contents of this report, contact Alec Belson at 269-795-3385 or at www.villageofmiddleville.org. For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater.