



2018 WATER QUALITY REPORT • City of Albion • WSSN: 0100, Calhoun County



In compliance with the Michigan Safe Drinking Water Act, City of Albion, Michigan is providing its customers with its annual Water Quality Report. This report covers the drinking water quality for the City of Albion, for the calendar year 2018. This information is a snapshot of the quality of the water that we provided to you in 2018. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State standards. For more information about your water, or the contents of this report contact Kent Phillips @ 517-629-5535.

WHAT IS THE SOURCE OF MY WATER? Your water comes from two main groundwater wells and three back-up wells, each well over 250 feet deep, drawing water from the Marshall-Sandstone formation. The State performed an assessment of our source water in 2003 to determine the susceptibility, or the relative potential of contamination. The susceptibility rating is on a seven tiered scale from “very low to very high” based primarily on geologic sensitivity, water chemistry and contaminant services. The susceptibility of our services are ; Starr 1 (high); Star 2 (high); Clark 1 (moderate); Clark 2 (moderate); Clark 3 (moderate). Significant potential sources are transportation routes, industry and underground tanks. We are making efforts to protect our sources through the Wellhead Protection Program.

SOURCE WATER ASSESSMENT: A Source Water Assessment Plan (SWAP) is now available at our office. The plan is an assessment of the delineated area around our listed sources, through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply’s susceptibility to contamination by the identified potential sources. For additional information on the Source Water Assessment contact Kent Phillips, Acting Director of Public Services at (517) 629-7200.

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 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 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/CDC 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. 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 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 and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. It can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OUR OPERATIONS? The State and EPA require us to test our water on a regular basis to ensure its safety. We are committed to providing you with safe, reliable, and healthy water. We are pleased to provide you with this information to keep you fully informed about your water. We will be updating this report annually, and will also keep you informed of any problems that may occur throughout the year, as they happen. The City of Albion’s council meetings are the 1st and the 3rd Monday of each month beginning at 7 p.m. at City Hall, 112 W. Cass St. Albion, Michigan.

The Water Quality Data Table lists all the drinking water contaminants that we detected during the 2018 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 – December 31, 2018. The State allows us to monitor for certain contaminants less than one 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 is 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.
- **Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Maximum Residual Disinfectant Level (MRDL):** 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.
- **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.
- **NA:** Not applicable **ND:** Not detectable to testing limit
- **ppb:** Parts per billion or micrograms per liter **ppm:** Parts per million or milligrams per liter **pCi/l:** Picocuries per liter (a measure of radiation)

Water Quality Data Tables

Note: The presence of those contaminants in the water does not necessarily indicate that the water poses a health risk.

Inorganic Contaminants	Unit	MCL	MCLG	Level Detected	Range Detected	Sample Date	Violation	Typical source of contaminant
Barium	ppm	2	2	0.11	NA	2011	No	Erosion of natural deposits
Chloride	ppm	NA	NA	92	NA	8/9/18	No	Erosion of natural deposits
Arsenic	ppb	10	0	4	NA	2016	No	Erosion of natural deposits
Fluoride	ppm	4	4	.55	NA	9/17/18	No	Erosion of natural deposits
Sodium	ppm	NA	NA	22	NA	9/17/18	No	Erosion of natural deposits
Sulfate	ppm	NA	NA	31	NA	9/17/18	No	Erosion of natural deposits
Hardness	ppm	NA	NA	331	NA	9/17/18	NO	Erosion of natural deposits
Nitrate	ppm	10	10	1.5	1.5	9/17/18	NO	Erosion of natural deposits
Nitrite	ppm	1	1	ND	ND	9/17/18	NO	Erosion of natural deposits
Disinfection Byproducts	Unit	MCL	MCLG	RAA	Range Detected	Sample Date	Violation	Typical source of contaminant
Total Trihalomethanes (TTHM’S)	ppb	80	NA	15.9	15.9	9/17/18	No	Byproduct of Chlorination
Haloacetic acids(HAA5)	ppb	60	NA	1	1	9/17/18	No	Byproduct of Chlorination
Disinfection Residual	Unit	MRDL	MDRLG	Annual Average	Range Detected	Sample Date	Violation	Typical source of contaminant
Chlorine	ppm	4.0	4	0.50	.33 - .70	1/1/18 - 12/31/18	No	Added to disinfect water
Lead & Copper	Unit	MCLG	Action Level	90% samples ≤ this level	# Samples Exceeding AL Range of Sample Results	Sample Date	Exceeds	Typical source of contaminant
Lead	ppb	0	15	1 ppb	1 0 ppb – 761 ppb	9/14/18-9/21/18	Yes	Corrosion of home plumbing
Copper	ppb	1300	1300	1.4 ppm	3 0 ppb – 5.9 ppm	9/14/18-9/21/18	Yes	Corrosion of home plumbing

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. Sylvan 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 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>.

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

PFAS: The Department of Environmental, Great Lakes and Energy (EGLE) has begun a statewide initiative to test drinking water from all schools that use well water and community water supplies. The test is looking for a group of manmade chemicals called per and polyfluoroalkyl substances (PFAS). EGLE is taking this precautionary step of testing these drinking water sources to determine if public health actions are needed.

It is not uncommon to find low levels of PFAS in drinking water supplies, as PFAS can be found in fire-fighting foams, stain repellants, nonstick cookware, waterproof clothing, food wrappers, and many other household products. They do not break down in the environment and move easily into water.

The EPA set a LHA level for two PFAS in drinking water, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). The LHA level is 70 parts per trillion (ppt equal to 70 mg/l) for PFOA and PFOS combined, or individually if only one percent. The EPA has not set health advisory levels for other PFAS compounds. The state of Michigan is using 70 ppt for decision making purposes.

The City of Albion system was tested by AECOM, EGLE contractor. The test results can be found on the Michigan PFAS Action Response Team website, www.michigan.gov/pfasresponse. The results show that of the PFOA and PFOS tested, 0 parts per trillion were found in the water. The level is below the U.S. Environmental Protection Agency's (EPA) lifetime health advisory (LHA).

The City of Albion is committed to providing our customers with quality drinking water. As your water supplier, we are working with EGLE to maintain the quality of your water.

For health questions, contact the Michigan Department of Health and Human Services (MDHHS) at 1-800-648-6942 or visit one of the websites below.

- State of Michigan PFAS Action Response Team (MPART) website serving as the main resource for public information on PFAS contamination in Michigan. www.michigan.gov/pfasresponse
- Agency for Toxic Substances and Disease Registry (ASTDR) website including health information, exposure, and links to additional resources. www.atsdr.cdc.gov/pfas
- United States Environmental Protection Agency (US EPA) website including basic information, U.S. EPA actions, and links to informational resources. www.epa.gov/pfas