



2016 Water Quality Report

This report details the drinking water quality for the City of Grand Blanc for the 2016 calendar year. This information is a snapshot of the quality of the water that we provided to you last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. **You will likely also receive a mass mailing from the Genesee County Drain Commission. It does not apply to you.**

Your water came from 3 groundwater wells, each over 300 feet deep. The State of Michigan has performed an assessment of our source water to determine its' susceptibility, or the relative potential for contamination. The susceptibility rating is based on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. Of the three wells, two were rated as having moderately low susceptibility and one was rated as having very high susceptibility. We at the City dispute the high rating due to the treatment process in place and the methodology used to derive this rating.

There are no significant sources of contamination in our water supply.

As stated above, the City of Grand Blanc water supply comes from groundwater wells. We do not have any connection to the surface water-derived drinking water in the City of Flint. Additionally, there are no known lead service lines in the City and there has never been a lead or copper sample that exceeded the action levels of the Safe Drinking Water Act. In this report, you can see the results of our lead/copper testing that was conducted during the summer of 2016.

- **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 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. 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. 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 are naturally occurring or may 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 USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes 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 2016 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, 2016. The State allows monitoring 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 of 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):** means 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):** means 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.
- **N/A:** Not applicable **ND:** not detectable at 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 radioactivity).
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Your Water	Range	Sample Year	Violation Yes / No	Typical Source of Contaminant
Arsenic* (ppb)	10	0	2	2 to 3	2016	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	4	4	0.29	0.16 to 0.29	2016	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	N/A	10.1	N/A	2016	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	1	N/A	2016	No	Byproduct of drinking water disinfection
Regulated Contaminant	MRDL	MRDLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Chlorine* (ppm)	4	4	0.5	0.5 to 0.6	Daily	No	Water additive used to control microbes
Radioactive Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Alpha emitters (pCi/L)	15	0	2.99	1.07 to 2.99	2014	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.9	0.25 to 0.9	2014	No	Erosion of natural deposits
Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level		Sample Date	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)**	15	0	3		2016	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)	1300	1300	60		2016	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

*Arsenic and Chlorine was calculated using the running annual average.

**90 percent of the samples collected were at or below the level reported for our water above.

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. The City of Grand Blanc 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>.

Special Monitoring and Unregulated Contaminant ***	Your Water	Range	Sample Date	Typical Source of Contaminant
Sodium (ppm)	46	34 to 57	2016	Erosion of natural deposits
Chloride (ppm)	54	32 to 75	2016	Erosion of natural deposits
Hardness as CaCO ₃ (ppm)	116	110 to 121	2016	Erosion of natural deposits
Sulfate	6	ND to 12	2016	Erosion of natural deposits

***Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

The City of Grand Blanc is committed to providing a high quality, safe, and reliable water supply. The State of Michigan and the USEPA require water suppliers to test water on a regular basis to ensure its safety. In addition to meeting all the monitoring and reporting requirements, we test our water daily to ensure safety and optimum treatment. We will update this report annually and keep you informed of any problems that may occur throughout the year, as they happen. Additional copies of this report are available at City Hall and on the web at www.cityofgrandblanc.com. We invite public participation in decisions that affect drinking water quality. City Council meetings are held on the second Wednesday of each month at 7:00 P.M. at City Hall. For more information about your water, or the contents of this report, contact Matt Wurtz, Director of Public Works, at 810-694-5420 or dpwdirector@cityofgrandblanc.com. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

