City of Grant
Water Quality Report for 2018

The City of Grant is pleased to present to you the 2018 Water Quality Report. This report is based on data received through the year 2018 and is designed to inform water users about the quality of water and services that we deliver to you each and every day. In addition, details are included as to the water's origin, what it contains, and how it compares to the Environmental Protection Agency (EPA) and State of Michigan standards. The City of Grant's number one priority is to provide city residents with a safe, dependable supply of drinking water. The City is committed to providing quality water and information pertaining to it, realizing that informed water users are vital to increasing the quality of life for area residents.

Some people may be more vulnerable to contaminants in drinking water than others. Drinking water, including bottled water, may contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate a health risk. Immuno-compromised persons, such as individuals with cancer undergoing chemotherapy, individuals with HIV/AIDS or other immune system disorders, some elderly and infants, or individuals who have undergone organ transplants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Further information about contaminants and potential health risks as well as guidelines from the EPA/CDC (Center for Disease Control) on appropriate means to lessen the risk of infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Drinking water originates from many different sources, including rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground it dissolves naturally occurring minerals, including at times, radioactive materials, and can pick up substances, which are a result of animal or human activity. This process may cause water to become contaminated with microbes, inorganic and organic chemicals, pesticides and herbicides, and radioactive contaminants. The following are definitions of key terms that will help you understand the contaminant data.

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 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 storm water runoff, and septic systems.

In 2003 the Michigan Department of Environmental Quality conducted a source water assessment for the City of Grant and determined the City's three wells possess a low susceptibility for contamination. The City of Grant's water comes from three municipal wells sunk to depths of 307 feet. The underground source of water is called the Pleistocene Glacial Drift Aquifer. As water is pumped from the aquifer, chlorine is added to ensure that the water is disinfected and to protect from microbial contaminants. The wells consist of two 10-inch production wells capable of producing 400 gallons of water per minute (gpm) each, and a 6-inch backup well, which will supply 150 gpm. The wells are powered by electricity, with a 300-kilowatt diesel fueled generator for electrical backup. They are located in Grant Township on City owned property, with the surrounding land and its access restricted to avoid activity that could lead to contamination of the water supply. The City of Grant's wellhead protection program is in place to help reduce this risk.

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 Grant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting in your lines 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 is available from the Safe Drinking Water Hotline at 800-426-4791 or at http://www.epa.gov/safewater/lead.

In order to ensure that tap water is safe to drink, federal and state agencies prescribe regulations that limit the amount of certain contaminants present in water provided by public water systems. City employees monitor well usage in hours, total gallons of water pumped, pounds of chlorine used, free chlorine, and total chlorine. Once a month two water samples are collected and lab tested for coliform bacteria. While coliform bacteria are not in themselves harmful, they can be an indicator of the presence of potently harmful organisms. Twice a year employees flush all main water lines to ensure clean water and each year samples from the water system are collected to test for drinking water contaminants.

During August 2018 the city did not meet its' requirement to monitor for disinfection byproducts and the water quality during this time cannot be verified. However, this violation does not provide a threat to your supply's water. We missed taking this sample and completed it on December 5, 2018 instead of August, as required. We are making every effort to ensure this does not happen again. Samples taken since then have shown to be within limits and at this time there is nothing you need to do. This is not an emergency. You do not need to boil water or use an alternate source of water.
Although this is not an emergency, you as customers, have a right to understand what happened and what was done to correct the situation. Please share this information with all the other people who drink this water, especially those who may not read this notice.
If you desire more information you may contact any or all of the resources listed at the conclusion of this report.

On the final page of this report there is a table that identifies the contaminants and their concentrations that were detected in our water. The presence of these contaminants does not indicate a health risk. The data present in the table is from testing performed from January 1 through December 31, 2018.

To aid in understanding the table the following list of terms and abbreviations are supplied for your convenience.

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 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 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 the of disinfectants to control microbial contaminants.

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

RAA = Running Annual Average

pCi/L = Picocuries per Liter: Measure of the radioactivity in water.

ppm = Parts per Million: One dollar out of a million dollars equals 1 ppm.

ppb = Parts per Billion: One cent out of 10 million dollars equals 1 ppb.

This report is a snapshot of the quality of water that was supplied to City of Grant water customers last year. The city encourages your participation and invites you to attend city council meetings. Council meetings are held on the third Monday of each month at 7:00 p.m. in the City Office Building located at 280 S. Maple Street.

If you have any questions or concerns about the water quality, water system, or this report, please contact Mr. Justin Salisbury or Mr. Sierra Brown at 834-7462 between the hours of 7:00 a.m. and 3:30 p.m. Copies of this report will not be mailed to individual households. However, copies of this report, Source Water Assessment and Well Head Protection Program are available at the Grant Municipal Offices, located at 280 S. Maple Street, during regular business hours. Office hours are 9:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m., Monday through Thursday and closed Friday.

Thank You, City of Grant residents, for your continued support.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable conalguien que lo entienda bien.

City of Grant Water Quality Data 2018

Table of Contaminants

Regulated Contaminants	MCL	MCLG	Grants Water	Range min-max	Sample Date	Violation Yes/No	Typical Source of Contaminant
Barium (ppm)	2	2	0.061		6/14/2013	NO	Erosion of natural deposits; Discharge from metal refineries and Drilling Wastes
Fluoride (ppm)	4	4	0.206		3/13/2018	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Arsenic (ppb)	10	0		<.004 - .0089	1/24/2018	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Halo acetic Acids (ppb)	60	n/a	7.99		12/12/2018	NO	Byproduct of drinking water disinfection
	MRDL	**MRDLG**	**RAA**				
Chlorine (ppm)	4	4	0.16	0.00-1.34		NO	Water additive used to control microbes
Unregulated Contaminants	**MCL**	**MCLG**	**Grants Water**		**Sample Date**	**Violation Yes/No**	
Sodium (ppm)	n/a	n/a	11		3/15/2018	NO	Erosion of natural deposits
Iron	n/a	n/a	0.532		3/15/2018	NO	Erosion of natural deposits

Contaminant Subject to AL	Action Level	MCLG	90th Percentile		Sample Date	Number of Samples Above AL	
Lead (ppb)	AL=15	0	0.0	0 - 3.0	8/23/2016	0	Erosion of natural deposits; Corrosion of household plumbing systems;
Copper (ppm)	AL=1.3	1.3	0.423	0 - 0.581	8/18/2016	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household
Microbial Contaminants	**MCL**			**MCLG**	**Number Detected**	**Violation Yes/No**	**Typical Source of Contaminant**
Total Coliform Bacteria				0	0	NO	Naturally present in the environment
Volatile Organic Contaminants	**MCL**	**MCLG**	**Grants Water**	**Range min-max**	**Sample Date**	**Violation Yes/No**	**Typical Source of Contaminant**
Total Trihalo-methanes (ppb)	80	n/a	16.9		12/12/2018	NO	By-product of drinking water chlorination