SAFE DRINKING WATER ACT

The Safe Drinking Water Act requires all Public Water systems to issue an annual report to its customers telling them what substances and how much of each are in their water.

We invite the public to call with any questions they might have about this report.

City Hall is Open Monday through Friday, 8:00 a.m to 5:00 p.m. 231-536-3381

City Administrator: Thomas Cannon
DPW Superintendent: Troy Thomas
Water Treatment Operator: David Fierstien

WE ARE PLEASED TO REPORT THAT OUR DRINKING WATER IS SAFE AND MEETS FEDERAL AND STATE REQUIREMENTS.

THIS REPORT SHOWS HOW OUR WATER SUPPLY IS KEPT SAFE AND WILL PROVIDE YOU WITH OUR MONITORING INFORMATION AND TESTING RESULTS.

WE WANT OUR VALUED CUSTOMERS TO BE INFORMED ABOUT THEIR WATER UTILITY AND ENCOURAGE ANY QUESTIONS ABOUT THIS REPORT.

QUALITY ON TAP........

We are very pleased to provide you with this year’s Quality on Tap Water Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

In its effort to supply you with the safest possible product, the City of East Jordan chlorinates the water supply against potential contamination from viruses and bacteria. The level of this additive is monitored daily to ensure proper dosages are being added. Iron is an abundant and widespread constituent of rocks and soil in Northern Michigan. At sufficient concentrations, iron can adversely affect the taste of water and beverages and can leave rust-colored stains on laundry, plumbing fixtures and porcelain.

Our water source is groundwater that is drawn from two different aquifers by three wells located in various parts of our City. The susceptibility of our wells ranges from moderately low to moderate.
MONITORING INFORMATION

The City of East Jordan routinely monitors for contaminants in your drinking water according to Federal and State laws. The tables on the following pages show results of our monitoring for the period of January 1st to December 31st, 2018 unless otherwise noted.

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).

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:

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, urban storm water runoff and residential uses.

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.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Explanation of Test Results

As you can see by the following tables, our system had no violations in 2018. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The E.P.A. has determined that your water is safe at these levels.

Water Quality Data

The tables below list all of 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 these tables is from testing done January 1st through December 31st, 2018. 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 of the data is representative of the water quality, but some are more than one year old.
Terms and Abbreviations

- **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 the 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.
- **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.

TOTAL COLIFORM RULE

The Total Coliform Rule requires water systems to meet a stricter limit for Coliform bacteria. Coliform bacteria are usually harmless, but its presence in water can be an indication of disease-causing bacteria. When Coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we monitor our system monthly taking samples from different locations in the distribution system.

<table>
<thead>
<tr>
<th>Microbial Contaminants</th>
<th>MCL</th>
<th>MCLG</th>
<th>Positive Samples</th>
<th>Violation Yes/No</th>
<th>Typical Source of Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>No</td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>Routine and Repeat samples are total coliform positive, and one is also fecal or E. Coli positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliform and E. Coli</td>
<td></td>
<td>0</td>
<td>0</td>
<td>No</td>
<td>Human and Animal fecal waste</td>
</tr>
</tbody>
</table>

2018 Running Annual Average of Free Chlorine in the Water Distribution System

MRDLG = 4.0 ppm
MCL = 4.0ppm

Annual average 0.2ppm
### Samples Collected in the Distribution System:

<table>
<thead>
<tr>
<th>Contaminants Subject to an Action Level</th>
<th>Action Level, MCL, or MRDL</th>
<th>Our Water</th>
<th>Sample Date’s</th>
<th>Number of Samples Above AL</th>
<th>Typical Source of Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb)*</td>
<td>AL = 15</td>
<td>ND-10ppb 90th percentile 4ppb</td>
<td>9/7-14/2018</td>
<td>0</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
<tr>
<td>Copper (ppm)*</td>
<td>AL = 1.3</td>
<td>0.03-0.76ppm 90th Percentile 0.2ppm</td>
<td>9/7-14/2018</td>
<td>0</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives</td>
</tr>
<tr>
<td>Total Trihalomethanes (ppb)</td>
<td>MCL = 80</td>
<td>2.3 Total</td>
<td>8/8/2018</td>
<td>0</td>
<td>Disinfection byproduct</td>
</tr>
<tr>
<td>Haloacetic Acids (ppb)</td>
<td>MCL = 60</td>
<td>Not Detected</td>
<td>8/8/2018</td>
<td>0</td>
<td>Disinfection byproducts</td>
</tr>
</tbody>
</table>

### Samples Collected at the Well House:

<table>
<thead>
<tr>
<th>Regulated Contaminants</th>
<th>MCL</th>
<th>MCLG</th>
<th>Our Water</th>
<th>Sample Date</th>
<th>Violation</th>
<th>Typical Source of Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flouride (ppm)</td>
<td>4</td>
<td>4</td>
<td>Range: 0.63-0.77</td>
<td>7/25/2018</td>
<td>No</td>
<td>Erosion of Natural Deposits; Added for health benefits</td>
</tr>
<tr>
<td>Radioactive Contaminants</td>
<td>MCL</td>
<td>MCLG</td>
<td>Our Water</td>
<td>Sample Date</td>
<td>Violation</td>
<td>Typical Source of Contaminants</td>
</tr>
<tr>
<td>Alpha Emitters pCi/L</td>
<td>15</td>
<td>0</td>
<td>ND</td>
<td>9/29/2015</td>
<td>No</td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td>Combined Radium 226/228 (pCi/L)</td>
<td>5</td>
<td>0</td>
<td>0.51 –1.78</td>
<td>9/29/2015</td>
<td>No</td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td>Other Contaminants</td>
<td>MCL</td>
<td>MCLG</td>
<td>Our Water</td>
<td>Sample Date</td>
<td>Violation</td>
<td>Typical Source of Contaminants</td>
</tr>
<tr>
<td>Nitrate ppm</td>
<td>10</td>
<td>ND– 1.03</td>
<td>7/25/2018</td>
<td>No</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
<td></td>
</tr>
<tr>
<td>Sodium ppm</td>
<td>7-30</td>
<td>7/25/2018</td>
<td>No</td>
<td>Erosion of natural deposit or storm runoff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*90% of the samples collected were at or below the level reported for our water
In Summary.............

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Please call our office if you have questions.

Consumer Confidence Report (CCR) News
(Even if Lead is not detected....)

“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 East Jordan 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 at 1-800-426-4791 or at www.water.epa.gov/drink/info/lead.”

PFAS
Per-and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body—meaning they don’t break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

Studies indicate that PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in laboratory animals. The most consistent findings from human epidemiology studies are increased cholesterol levels among exposed populations, with more limited findings related to infant birth weights, effects on the immune system, cancer (for PFOA), and thyroid hormone disruption (for PFOS).

In 2018, water samples were taken from each of the City’s municipal wells, and PFAS chemicals were NOT DETECTED in East Jordan. For more information on PFAS, please visit this EPA website:
https://www.epa.gov/pfas/basic-information-pfas