Annual Drinking Water Quality Report for 2016
Carrollton-Limestone Town Water District
640 Main Street, Limestone, NY 14753
(Public Water Supply ID#NY0400342)

INTRODUCTION

To comply with State and Federal regulations, the Town of Carrollton will be issuing a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water resources. During 2015 we did detect a problem with copper in our distribution system. In response, we hired an engineering firm to complete a study and evaluate our options for correcting this situation, and in December 2016 we installed polyphosphate treatment to inhibit the corrosion of private plumbing systems within the customers' homes. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact **Rick Dixon at (716) 378-0930**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the second Tuesday of every month at 4:00 pm.

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is groundwater wells: groundwater drawn from two 70-foot deep drilled wells which are located on Church Street. The water is pumped from the wells into a 250,000 gallon storage tank. The water is disinfected with chlorine as it is transferred to the storage tank. Our system serves approximately 459 people through 146 service connections.

In 2003, the NYS DOH completed a source water assessment for our water system, based on available information. Possible and actual threats to the drinking waters sources were evaluated. The source water assessment includes susceptibility ratings based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential contamination of the source water. It does not mean that the water delivered to consumers is, or will become contaminated. See section "ARE THERE CONTAMINANTS IN OUR DRINKING WATER?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As was mentioned before, our water is derived from two wells. The source water assessment has rated the combined susceptibility to contamination for these wells as; high from enteric bacteria, enteric viruses, cations, anions (salts, sulfate), nitrates, other industrial organics, petroleum products and protozoa; and medium-high from halogenated solvents, herbicides/pesticides and metals. These ratings for the wells are due to their proximity to oil and gas wells, pasture lands and permitted discharge facilities (industrial/ commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government). While the assessment rates our sources as being susceptible to enteric bacteria, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards.

A copy of this assessment, including a map of the assessment area, is available for viewing at the town hall.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: coliform bacteria, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. We also monitor the chlorine level daily. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled water, might be reasonably 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 visiting the EPA website (http://www.epa.gov/your-drinking-water) or by calling the EPA's Safe Drinking Water Hotline (800-426-4791), or the Cattaraugus County Health Department at 716-701-3386.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectant							
Chlorine Residual	No	2016	Avg. = .21 (.04 - .31)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
Inorganic Contaminants							
Barium	No	1/20/15	22	ug/l	2.000	MCL = 2.000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper [1]	No	6/15/16 12/6/16	1.34 (<0.02 – 2.11) 1.45 (0.086 – 1.55)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead [2]	No	6/15/16 12/6/16	3.8 (<1.0 - 4) 2.8 (<1.0 – 6)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits
Disinfection By-Products							
Haloacetic Acids	No	8/13/15	0.62	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	8/13/15	3	ug/l	N/A	MCL = 80	By-product of drinking water disinfection needed to kill harmful organisms. TTHms are formed when source water contains large amounts of organic matter.

Notes:

1 – The level presented represents the 90th percentile of the sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected from your water system in June and December and the 90th percentile value was 1.34 mg/l and 1.45 mg/l, respectively. The action level for copper was exceeded at 2 of the sites tested in June and December.

2 – The 90th percentile level for lead was 3.8 ug/l in June and 2.8 ug/l in December. None of the sites exceeded the action level.

Definitions:

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

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.
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 disinfectants to control microbial contamination.
Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Picocuries per liter (pCi/L): A measure of the radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, a potential problem with copper was detected in a couple of customers' homes. In 2015, our system exceeded the action level of 1.3 mg/l for copper. Consequently, we hired an engineer to review our system, evaluate the water chemistry, and provide us options to correct the situation. The engineering study was brought to the board on May 17, 2016 and it was voted to add additional treatment (polyphosphate) to the water to prevent any future leaching of copper from home plumbing systems. The additional treatment was installed in December 2016, which resolved the concerns. We were also required to monitor for copper in both monitoring periods of 2016 (January 1 – June 30 and July 1 – December 31).

We are required to provide you with the following information. 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.

Also, we are required to provide the following information on lead in drinking water. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Town of Carrollton is responsible for providing high quality drinking water, but cannot control the variety of materials used in private home 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 home's plumbing, 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791), or at http://www.cdc.gov/parasites/water.html.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.