

ANNUAL DRINKING WATER QUALITY REPORT FOR 2017
HOUGHTON WATER DISTRICT
7244 Chamberlain Street
FEDERAL ID. # NY0200320
P.O. Box 596
Caneadea, NY 14717

INTRODUCTION

To comply with State regulations, The Houghton Water District, annually issues a report describing the quality of your drinking water. We also under law have made available a copy of the Town of Hume and the Town of Belfast's Drinking Water Reports, as these two town's water supplies are connected to ours. These reports are available at the Caneadea Town Clerk's office during normal business hours.

The purpose of this report is to raise your understanding of drinking water and raise your awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking health standards. Last year we conducted several tests for contaminants. 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 the Water Department at 567 - 8410. If you would like a copy of our test results please contact the Town Clerk at 365 - 2928 or you can stop by the clerk's office in Caneadea during normal business hours. Please feel welcome to attend any regular town board meeting, which are held in the Caneadea Town Hall on the second Thursday of every month at 7:00 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 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 system serves a population of about 2000 people when college is in session through 350 service meters. Our backup water source is a drilled well (144 ft deep) which is located behind the Houghton Fire Department, and by the Houghton College maintenance building. Our main well is a set of drilled wells (300ft deep) which are located just north of Chamberlain St. on the west side of Rt. 19. Water is pumped to a reservoir on Hillside Drive and then pumped to two reservoirs on School Farm Road. These three reservoirs give the town a water storage supply of 950,000 gallons. This exceeds the town's daily demand and in the event of an emergency, would with limited usage, be a four day supply, we also have the ability to get water from the Hume and Belfast Water Districts in the event of an emergency that would keep the town supplied with water. The Town's water supply is treated by gas chlorination for control of bacteria and TCP 532 a blend of ortho - poly phosphate to help reduce corrosion and to control lead /copper that leaches from soldered pipe joints found within most homes. We also add Ferric Chloride to help aid the filtration system for removal of arsenic.

The County has completed a Source Water Assessment for the Houghton Water District. This assessment may be viewed at the Caneadea Town Hall during normal business hours.

The susceptibility of the well to contamination is determined by reviewing:

1. Land use patterns
2. Specific activities and facilities that could potentially release contaminants in the assessment area.

Although the County's assessment has listed the susceptibility of the well to potential contaminants as a "medium - high", the sources of potential contamination are listed as "low".

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. The table

presented below depicts which compounds were tested for in your drinking water for the year of 2017. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. It should be noted that all drinking water, including bottled water, may 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 calling the EPA's Safe Drinking Water Hotline (800 - 426 - 4791) or the Allegany County Health Department at (585 - 268 - 9251).

TABLE OF CONTAMINANTS TESTED IN 2017

These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes and synthetic compounds.

THERE WERE NO POSITIVE BACTERIOLOGICAL RESULTS TAKEN BY THE TOWN IN 2017.

THE FOLLOWING TEST SAMPLES WERE REQUIRED TO BE TAKEN THIS YEAR:

CONTAMINANT	VIOLATION YES / NO	LEVEL DETECTED	UNIT OF MEASURE	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
ARSENIC 1/12/2017	NO	0.009	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 2/13/2017	NO	0.0096	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 3/13/17	NO	0.0053	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 4/11/17	NO	0.0058	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 5/2/2017	NO	0.0075	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 6/14/2017	NO	0.012	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 7/12/2017	NO	0.0053	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 8/9/2017	NO	0.007	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 9/12/2017	NO	0.010	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 10/02/2017	NO	0.0096	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 11/13/2017	NO	0.0059	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 12/11/2017	NO	0.0082	MG/L	N/A	0.010	NATURALLY PRESENT IN THE ENVIRONMENT
SODIUM 2/15/2017	NO	35.8	MG/L	N/A	NONE	9 NATURAL DEPOSITS
CHLOROMETHANE 8/9/2017 11/8/2017	NO	0.0011 0.0013	MG/L	0.005	0.005	BY-PRODUCT OF DRINKING WATER CHLORINATION
HAA5'S 8/9/2017	NO	0.0088	MG/L	0.06	0.06	BY-PRODUCT OF DRINKING WATER CHLORINATION
TTHM'S 8/9/2017	NO	0.0521	MG/L	0.08	0.08	BY-PRODUCT OF DRINKING WATER CHLORINATION
GROSS ALPHA 7/11/2013	NO	3.95	pCi/L		15	NATURAL GROUND DEPOSIT

GROSS ALPHA 10/10/2013	NO	2.17	pCi/L		15	NATURAL GROUND DEPOSIT
RADIUM 226 & 228 (COMBINED)7/11/2013	NO	1.28	PCi/L		5	NATURAL GROUND DEPOSITS
RADIUM 226 & 228 (COMBINED) 10/10/2013	NO	1.96	pCi/L		5	NATURAL GROUND DEPOSITS
LEAD AND COPPER * 7/13/2016	NO	0.0019(Lead) 0.673(Copper)	MG/L		15 1.3	LEACHING OF HOUSEHOLD PLUMBING NATURAL DEPOSITS
BARIUM 4/7/2016	NO	0.0410	MCG/L	2.0	2.0	DISCHARGE FROM METAL REFINERIES EROSION OF NATURAL DEPOSITS
FLOURIDE 4/7/2016	NO	0.2	MG/L	2.2	2.2	EROSION OF NATURAL DEPOSITS WATER ADDITIVE

*The level presented represents the 90th percentile of the 10 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 lead and copper values detected at your water system. In this case ten samples were collected at your water system and the 90th percentile value was the second highest value. The action levels for lead and copper was not exceeded at any of the sites tested.

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected, however, these contaminants were detected below current federal drinking water requirements. Although arsenic was detected below the MCL, it was detected between 0.0053 to 0.012 from 12 samples, which is greater than one-half of the MCL. Therefore, we are required to present the following information on arsenic in drinking water:

“NYS and EPA have promulgated a drinking water arsenic standard of 10 parts per billion. While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic’s possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.”

Last year a clerical error was made and the wrong Lead and Copper information was reported on the Table. The true data showed that the Lead and Copper levels to be below the Action Levels, so there was no potential health hazards.

DEFINITIONS:

To help you understand the test results we offer the following terms and abbreviations;

Non- detects (ND) - laboratory analysis indicates that the constituent is not present

Parts per milliom (ppm) or milligrams per liter (mg/l) - one part per million

Milligrams per liter(Mg/l): Corresponds to one part of liquid in one million parts of liquid(parts per million – ppm)

Micrograms per liter (mcg/l) - one part per billion

Maximum contaminant level (mcl) - the highest level of contaminant that is allowed in drinking water.

Maximum contaminant level goal (MCLG) - The level of a contaminant in drinking water below which there is no know or expected risk to health. MCLG’s 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.

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

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, 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. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

MCL's are set at very stringent levels. To understand the possible health effects described for many of the 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. However the New York State Systems Supervisor Program, State Sanitary Code Part 5, recommends that people on severely restricted sodium diets should not drink water containing more than (20) MG/L of sodium. 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)