

Town of Hume Water Department  
20 N. Genesee St.  
PO Box 302  
Fillmore, NY 14735-0302  
585-567-8082

Fed ID #0200318

## **WATER QUALITY REPORT 2007**

To comply with State and Federal regulations, the Town of Hume Water Department will annually issue a report 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 sources. This report provides an overview of last year's water quality. Included are details about where your water comes from and what it contains.

If you have any questions about this report or concerning your drinking water, please contact Dana Potter, Superintendent of Water and Sewer, at 585-567-8082. We want you to be informed about your drinking water. If you want to learn more, you might attend any regularly scheduled Town Board meeting. The monthly meeting is at the Town of Hume Museum, 10842 Claybed Road in the hamlet of Hume, NY on the 2nd Wednesday of each month at 7:00 PM.

### **WHAT IS OUR WATER SOURCE?**

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals 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 EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department and FDA's regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Hume Water District #1 is served by a well located in the Fillmore Park. The well is 126 feet deep with a 12" casing. It is capable of producing 240 gallons of water per minute. The treatment of this water consists of the application of sodium hypochloride as a disinfectant to control bacteria, and phosphate to treat the iron content in the water.

### **SYSTEM IMPROVEMENTS**

All system upgrades that effect the production and transmission of water have been completed. The improvements included new main lines, new water storage tanks, installation of meters and pressure regulators, abandonment of the old spring-fed system, installation of hydrants, upgrades to the water plant, construction of two chlorinating stations, and interconnection with the Houghton system for backup.

Part of the Project involved formation of a new Water District from the former Hume and Village Districts. Water District #1 serves approximately 700 people with 321 service accounts. In the year 2007, we pumped about 21,690,369 gallons of water. This makes the daily average nearly 59431 gallons. (This includes leaks in the system.)

### **REGULAR SYSTEM MAINTENANCE**

Town employees flush all hydrants within the system twice a year. Both water tanks on Mills Mills Road are cleaned annually.

### **AWQR SUMMARY**

The New York State Department of Health has completed a Source Water Assessment for this water system, based on available information. Possible and actual threats to the source of drinking water for this system were evaluated. The Source Water Assessment includes a susceptibility rating 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 for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. Please refer to the section in the Annual Water Quality Report (AWQR) entitled "Are There Contaminants In Our Drinking Water?" for a list of the contaminants for which the water has been tested and the test results. The source water assessments provide managers with additional information for protecting source waters into the future.

The water for this system comes from one (1) drilled well. The Source Water Assessment has rated the well as having high susceptibility to contamination from enteric bacteria and nitrates. This is due primarily to the close proximity of the well to a New

York State Department of Environmental Conservation (DEC) permitted facility that discharges wastewater into the environment. The fact that the well draws water from an unconfined aquifer also contributes to the high susceptibility ratings.

Please note that while the Source Water Assessment rated the well as having a high susceptibility to bacteria, the water is disinfected before it is delivered to your home to ensure the finished water meets New York State drinking water standards for bacterial contamination.

#### ARE THERE CONTAMINANTS IN OUR WATER?

New York State regulations require that we routinely test your drinking water for numerous contaminants including total coliform, inorganic compounds, nitrate, nitrite, lead, copper, volatile organic compounds, total trihalomethanes, radiological, and synthetic organic compounds. 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 drinking water, might be reasonably expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

**There were no positive bacteriological results taken by the Town in 2007.**

#### DEFINITIONS:

1. 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.
2. 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.
3. Action Level (AL). The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
4. Treatment Technique (TT). A required process intended to reduce the level of a contaminant in drinking water.
5. Non-Detects (ND). Laboratory analysis indicates that the constituent is not present.
6. Milligrams per liter (MG/L). Corresponds to one part of liquid in one million parts of liquid (parts per million -- ppm).
7. Undetected (U). Laboratory analysis indicates that the constituent is not present.
8. Micrograms Per Liter (UG/L). Corresponds to one part of liquid in one billion parts of liquid (parts per billion – ppb).

**Town of Hume Table of Detected Contaminants**

Contaminant	Violation yes/no	Date of Sample	Level Detected	Unit of Measure	MCLG	Regulatory Limit	Likely Source of Contamination
SODIUM	NO	06/06/07	61.4	MG/L	N/A	N/A	Natural ground deposit.
NITRATE	NO	06/06/07	U	MG/L	10	10	Runoff from fertilizer; natural deposit.
IRON	NO	06/06/07	0.137	MG/L	0.3	0.3	Natural ground deposit
Trihalo-methanes	YES	08/31/07	110	UG/L	0	80	Organic content in water and chlorine
	NO	12/18/07	29	UG/L	0	80	
Haloacetic Acids 5	NO	08/31/07	0.0228	MG/L	0	60	Organic content in water and chlorine

	NO	12/27/07	0.0089	MG/L	0	60	
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The trihalomethane sample (08/31/07) was slightly above the limit. We are required to sample quarterly in 2008. The results of the first quarter (12/18/07) (listed on chart) were under the limits. Lead and copper samples were taken from five dwellings; all were under the limit.

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 (585-268-9250.)

**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 advise 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.)

It is imperative that **people on sodium restricted diets** not drink this water without consulting their physician. The detected amount of 61.4 ppm of sodium is considered a high content.

**FOR YOUR INFORMATION FILES:**

- Ø Billing & Account Information: 585-567-2666
- Ø Water & Sewer Department: 585-567-8082
- Ø Web site: [www.humetown.org](http://www.humetown.org)
- Ø **Emergency Service: 585-307-7522 or 585-307-7523  
or 585-567-8712 or 585-567-8793**
- Ø Email: [humetown@rochester.rr.com](mailto:humetown@rochester.rr.com) or [danapotter69@hotmail.com](mailto:danapotter69@hotmail.com)
- Ø The Hume Town Board meets on the 2nd Wednesday of each month at 7:00 PM at the Town Museum, 10842 Claybed Rd., Hume, NY. The meetings are open to the public.

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ANNUAL DRINKING WATER QUALITY REPORT FOR 2007  
HOUGHTON WATER DISTRICT  
9748 - B STATE ROUTE 19  
FEDERAL ID. # 0200320

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 included a copy of the Town of Hume's Water District report, as the two towns, water supplies are connected. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking health standards with the exception of arsenic. This report show's that our system DID violate the new maximum contaminant level set by the State. The Town's water violated the maximum contaminant level due to the State Health Department lowering the current level for arsenic from 0.050mg/l to 0.010mg/l in 2006. The town has been working on a project to construct a new treatment plant to conform with the new regulation set by the State Health Department. Last year we conducted tests for ( 161 ) 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 ( 866 ) 365 - 2928 or 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 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 system serves a population of about 2000 people when college is in session through 250 service meters. Our water source ( station # 2 ) is a drilled well ( 144 ft deep ) which is located behind the Houghton Fire Department, and by the Houghton College maintenance building. 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 three day supply, we also have the ability to get water from the Hume Water District in the event of an emergency that would keep the town supplied with water. The Town's water supply from Station #2 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.

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 2007. 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 2007**

**THERE WERE NO POSITIVE BACTERIOLOGICAL RESULTS TAKEN BY THE TOWN IN 2007.**

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
MERCURY 6/20/07	NO	< 0.2	UG/L	2	2	EROSION OF NATURAL DEPOSITS DISCHARGE FROM REFINERIES, FACTORIES, LANDFILLS
FLUORIDE 6/20/07	NO	0.1	MG/L	2.2	2.2	EROSION OF NATURAL DEPOSITS WATER ADDITIVE
CYANIDE 6/20/07	NO	< 0.006	MG/L	0.2	0.2	DISCHARGE FROM STEEL/METAL FACTORIES
XPEST -PCB 6/20/07	NO	OK ( 30 TESTS )	UG/L	0	.5	RUNOFF FROM LANDFILLS

NITROGEN / PHOSPHOROUS PESTICIDES 6/20/07	NO	OK ( 21 TESTS )	UG/L		2-700	RUNOFF FROM HERBICIDE USED ON ROW CROPS
HERBICIDES 6/20/07	NO	OK ( 9 TESTS )	UG/L		2-700	RUNOFF FROM HERBICIDE USED ON ROW CROPS
CARBAMATES 6/20/07	NO	OK ( 10TESTS )	UG/L		40-200	LEACHING OF SOIL FUMIGANT USED ON RICE AND ALFALFA
MICRO 6/20/07 EXTRACTABLES	NO	OK ( 2 TESTS )	UG/L			
VOLATILE ORGANICS 6/20/07	NO	OK (59 TESTS )	UG/L		2-100	DISCHARGE FROM INDUSTRIAL CHEMICAL FACTORIES BY-PRODUCT OF DRINKING WATER CHLORINATION
VOLATILE ORGANICS (CHLOROMETHANE)	YES	6.3	UG/L		5.0	BY-PRODUCT OF DRINKING WATER CHLORINATION
KETONES 6/20/07	NO	OK ( 3 TESTS )	UG/L			
ICP - 116/20/07	NO	OK ( 3 TESTS )	UG/L		1-200	EROSION OF NATURAL DEPOSITS DISCHARGE FROM FACTORIES
ICP - MS 6/20/07	YES ARSENIC	OK ( 6 TESTS )	UG/L		1-200	EROSION OF NATURAL DEPOSITS DISCHARGE FROM FACTORIES
POC'S 6/20/07	NO	OK ( 5 TESTS )	UG/L		2-100	DISCHARGE FROM INDUSTRIAL CHEMICAL FACTORIES BY-PRODUCT OF DRINKING WATER CHLORINATION
HALOACETIC ACIDS	NO	OK ( 5 TESTS )	UG/L		0.005	DISCHARGE FROM INDUSTRIAL CHEMICAL FACTORIES
THM'S 9/13/07		OK ( 5TESTS )	UG/L		100	
						BY-PRODUCT OF DRINKING WATER CHLORINATION
ARSENIC 1/03/07	NO	0.0065	MG/L		0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 3/14/07	YES	0.012	MG/L		0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 8/20/07	NO	0.001	MG/L		0.010	NATURALLY PRESENT IN THE ENVIRONMENT
ARSENIC 11/12/07	YES	0.029	MG/L		0.010	NATURALLY PRESENT IN THE ENVIRONMENT
SODIUM 2/14/08	NO	30.1	MG/L		NONE	9 NATURAL DEPOSITS
NITRATE AS N 2/14/08	YES ( TIME )	<0.05	MG/L		10.0	

						9 NATURAL DEPOSITS
LEAD COPPER 10/13/07	NO	OK 10 SITES	MG/L		15 1.3	LEACHING OF HOUSEHOLD PLUMBING NATURAL DEPOSITS

We have learned through our monitoring and testing that some contaminants have been detected. As you can see the Houghton Water District had a violation for total arsenic & chloromethane in 2007 based on the test results. The EPA has determined that your water is safe at these levels. The State has given all public water systems a grace period to comply with the new arsenic standard. The Houghton Water District had a violation for not taking a Nitrate sample within the correct time frame for the year 2007.

#### 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

Micrograms per liter ( ug/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.

#### 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.

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/CDA guidelines on appropriate means to lessen the risk of infection by Crytosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline. ( 800 - 426 - 4791 )