### Annual Drinking Water Quality Report for 2007

Heritage Springs Water Works, Incorporated Town of Milton, New York (Public Water Supply ID#NY4522501)

### **INTRODUCTION**

To comply with State regulations, Heritage Springs Water Works will be annually issuing 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. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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. A copy of this Annual Report is also available on our web page at <u>www.heritage-springs.com</u>.

If you have any questions about this report or concerning your drinking water, please do not hesitate to contact our office at (518) 371-7942 during regular business hours. We can also be reached by email at: <u>heritagesprings@edpllp.com</u>, or by writing: HSWW, 900 Route 146, Clifton Park, NY 12065. In the event of an emergency, please call (518) 467-8610.

#### 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Our water sources are groundwater wells; groundwater is withdrawn from seven drilled wells in three different locations. The depth of the wells varies from 58 to 250 feet. We have water sources and water treatment plants (WTP's) that all feed into a common distribution system. The WTP's are known as Deer Run (DR), Milton Oaks (MO) and Kayaderorsseras Estates (KE). At the Deer Run source, water is pumped from three wells into a large concrete storage tank; the water is disinfected with sodium hypochlorite as it is transferred to the storage tank. The water is then drawn from the storage tank by pumps that transfer it into the pressurized distribution system.

At the Milton Oaks source, water is pumped, under system pressure, from two wells through a 3,000 gallon contact tank that is connected directly to the distribution system. As with Deer Run, the water is disinfected with sodium hypochlorite as it is pumped through the tank.

Our third water source, Kayaderosseras Estates, is similar to Milton Oaks in that water is pumped from one of two wells, under system pressure, through a 3,020 gallon contact tank connected to the distribution system. As with the other sources, the water is disinfected with sodium hypochlorite as it is pumped into the contact tank. Due to elevated concentrations of iron, the Kayaderosseras Estates water must be treated prior to the addition of the sodium hypochlorite to prevent a reaction (oxidation) that creates an orange precipitate, leading to discolored water. The permitted treatment technique (TT) is called sequestration, which is the addition of a polyphosphate chemical that prevents oxidation of the iron. The chemical used for sequestration is MCT 506, manufactured by

Mid-South Chemical, an NSF approved product for use in drinking water.

The New York State Department of Health completed a source water assessment for the Heritage Springs supplies based on available information. 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 well supplies. The susceptibility rating is an estimate of the potential for contamination of a given water source; it does not mean that the water delivered to consumers is, or will become contaminated. A list of the contaminants detected, if any, are listed in the section entitled "Are there contaminants in our drinking water?". The source water assessments provide resource managers with information for protecting source waters into the future.

The source water assessment has rated our water source as having an elevated susceptibility to nitrate and herbicide/pesticide contamination. This rating is due primarily to the residential land use and associated activities in the assessment area. Public notification is required if regulated contaminants are ever found in our water.

The State Health Department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and educational programs. A copy of the assessment can be obtained by contacting us as noted in the "Introduction" section of this document.

# FACTS AND FIGURES

Our water system currently serves approximately 2,100 people (based on census data) through 750 service connections. Our service territory includes several residential subdivisions, apartment buildings, a mobile home park, municipal facilities, and businesses.

The residential subdivisions we serve: Deer Run, Coachman Estates, Milton Heights, Milton Oaks, Geyser Gate, Kayaderosseras Estates, Creek View Court, and Oak Hill. Other residential facilities served are: three senior citizen apartment buildings, the Saratoga West mobile home park, and the Knollwood Hollow senior condominiums. Non-residential facilities served include the Milton Senior's Community Center, the Town of Milton Town Hall and Highway Garage, Burgess Kimball Park, Geyser Gate pavilion, Milton Eagles Fire House, and several businesses on Rowland Street and Geyser Road.

The total water produced in 2007 was 60.8 million gallons. The daily average of water treated and pumped into the distribution system was 0.164 million gallons per day. Our highest single day was 0.325 million gallons.

### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform bacteria, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. 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 drinking 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 New York State Department of Health, Glens Falls Regional Office at (518) 793-3893.

HERITAGE SPRINGS WATER WORKS - TABLE OF DETECTED CONTAMINANTS							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminan							
Barium	No	5/9/05	130 @ DR 300 @MO 90 @ KE	ug/l	2000	MCL=2000	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.
Calcium	No	11/1/01	124 @ KE	mg/l	n/a	n/a	Erosion of natural deposits.
Chloride	No	2/8/02	27 @ KE	mg/l	n/a	MCL=250	Naturally occurring; indicative of road salt contamination; disinfection by-product.
Cyanide	No	5/9/05	22 @ KE	ug/l	300	MCL=200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Copper	No	8/25/06	0.11 <sup>2</sup> (0.030 to 0.125)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride	No	5/9/05	200 @MO 100 @ KE	ug/l	n/a	MCL=2,200	Erosion of natural deposits.
Iron	No	3/27/07	1.06 @ KE	mg/l	n/a	MCL=0.3 <sup>1</sup>	Naturally occurring.
Lead	No	8/25/06	$1^3$ (ND to 4)	ug/l	15	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.
Manganese	No	5/9/06	0.25 @ KE	mg/l	n/a	MCL=0.31	Naturally occurring; indicative of landfill contamination.
Magnesium	No	11/1/01	16 @ KE	mg/l	n/a	n/a	Erosion of natural deposits.
Nitrate (as Nitrogen)	No	5/15/07	0.117 @ DR <7 @ MO <7 @ KE	mg/l	n/a	MCL=10	Runoff from fertilizer use: leaching from septic tanks; sewage; erosion of natural deposits.
Sodium	No	2/8/02	13 @ KE	mg/l	n/a	None	Erosion of natural deposits.
Sulfate	No	2/8/02	14 @ KE	mg/l	n/a	MCL=250	Erosion of natural deposits.
Physical Characteristic	cs:						
Alkalinity, Total (as CaCO <sub>3</sub> )	No	11/1/01	140 @ KE	mg/l	n/a	n/a	Erosion of natural deposits.
Hardness, Total	No	11/1/01	140 @ KE	mg/l	n/a	n/a	Erosion of natural deposits.
Color	No	2/8/02	10 @ KE	cpu's	n/a	MCL=15	The presence of metals such as copper, iron, manganese; decaying leaves, plants, and soil organic matter; organic chemicals.
Disinfection By- produ	icts:	•	•	•		•	
Thrihalomethanes (THM's)	No	9/5/07	2.9 @ Birkshire Dr	ug/l	n/a	MCL=80	By-product of drinking water disinfection at treatment plants using hypochlorite solutions.
Haloacetic Acids (HAA5s)	No	9/5/07	<3.0 @ Birkshire Dr	ug/l	n/a	MCL=60	By-product of drinking water disinfection at treatment plants using hypochlorite solutions.
Radiological Contamir	ants:		-		•		
Gross Alpha	No	2005-4 Quarters	1.95 <sup>4</sup> @ M (1.7 to 2.1		0	MCL=15	Erosion of natural deposits.
	No	Quarters 2/8/02	0.0(+/-1.9) @		0	WICL-13	Erosion of natural deposits.
	No	2005-4	0.53 <sup>4</sup> @ M				
Radium 226		Quarters	(0.16 to 1.2	2) pCi/l	0	MCL=5	Erosion of natural deposits.
	No	2/8/02	0.3 @ KE				
Radium 228	No	2005-4 Quarters	$0.40^4 @ M$ (0.0 to 0.9	) pCi/l	0	MCL=5	Erosion of natural deposits.
	No	2/8/02	0.0(+/-0.4) @	₽ KE			

#### Notes:

1 - Total [combined] concentration of both iron and manganese should not exceed 0.5 mg/l without TT.

2 – The level presented represents the 90<sup>th</sup> 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected. Ten samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value of 0.11 mg/l at 108 Goldfinch Drive (the highest value was 0.125 mg/l at 236 Meadowlark Drive). The action level for copper was not exceeded at any of the sites tested.

3 - The level presented represents the 90<sup>th</sup> percentile of the 10 sites tested. The 90<sup>th</sup> percentile value 1 mcg/l (ppb) at 108 Goldfinch Drive (the highest value was 4 mcg/l at 106 Deer Run Drive). The action level for lead was not exceeded at any of the sites tested.

4 – This level represents the annual quarterly average calculated from data collected.

### **Definitions:**

**<u>DR</u>**: Deer Run water source (#01), production well No.'s 1, 2, 3.

**MO:** Milton Oaks water source (#02), production wells No.'s 1 and 2.

**KE:** Kayaderosserass Estates water source (#03), production well No. 1.

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

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Micrograms per liter (ug/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

<u>Milligrams per liter (mg/l)</u>: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm). <u>NELAP:</u> National Environmental Laboratory Approval Program.

**Picocuries per liter** (pCi/L): A measure of the radioactivity in water

<u>Treatment Technique (TT)</u>: A required process intended to reduce the level of a contaminant in drinking water.

**<u>USEPA</u>**: United States Environmental Protection Agency.

**WTP:** Water treatment plant.

# WHAT DOES THIS INFORMATION MEAN?

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 the level allowed by the State.

### IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATION?

During 2007, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

# **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. Immunocompromised 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).

### 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 fire fighting 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. Please call our office at (518) 371-7942 if you have questions.