

**Annual Drinking Water Quality Report for 2019**  
**Keeler Field Water System**  
**11 Main Street South Salem, New York**  
**(Public Water Supply ID# 5906656)**

## **INTRODUCTION**

To comply with State regulations, Keeler Field Water, 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.

If you have any questions about this report or concerning your drinking water, please contact VRI Environmental Services at (845) 677-3839. We want you to be informed about your drinking water.

## **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 approximately 100 people with approximately 13 service connections. Our water source is two ground water wells. Only one well is currently in service. The second well is for emergency conditions due to high iron content, an iron filtration system is being designed to bring this well back on-line. The water is disinfected with sodium hypochlorite which feeds a contact/storage tank followed by a pneumatic tank then to the distribution system.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state 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. While nitrates (and other inorganic contaminants) were detected in our water 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from two drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) to the wells and the associated industrial and low intensity residential activity in the assessment area, such as fertilizing lawns. In addition, the wells draw from unconfined aquifers of unknown hydraulic conductivity and the overlying soils

are not known to provide adequate protection for potential contamination. Please note that, while the source water assessment rates our wells as being susceptible to microbials, our water is disinfected to ensure that the finished water delivered to you meets New York State's drinking water standards for microbial contamination.

A copy of the assessment, including the map of the assessment area, can be obtained by contacting us, as noted below.

### 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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, synthetic organic compounds, and radiologicals. 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 Westchester County Health Department at (914) 8135000.

Table of Detected Contaminants								
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	# of sites tested / # of sites exceeded AL	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Gross Beta Well 1 & 2	No	5/10/2016	2.88  (Range = 2.59 – 3.16)		pCi/L	0	50****	Decay of natural deposits and man-made emissions
Radium 228 Well 1 & 2	No	5/10/2016	1.15  (Range = 0.978 – 1.33)		pCi/L	0	5	Erosion of natural deposits
Uranium Well 1 & 2	No	5/10/2016	1.37  (Range = 1.36 – 1.37)		ug/L	0	30	Erosion of natural deposits

Lead *	No	9/7/2017	2.48 2.47 4.59 1.63 3.85 4.27 31.1 ND ND ND  4.59  (Range = ND – 31.1)	10 sites tested / 1 site exceeded	ug/L	n/a	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits
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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	# of sites tested / # of sites exceeded AL	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Copper **	No	9/7/2017	0.151 0.163 0.0931 0.0983 0.106 0.258 0.296 0.0594 0.326 0.272  0.296  (Range = 0.0594 – 0.326)	10 sites tested / 0 sites exceeded	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives;
Chloride	No	6/1/2016	132		mg/L	n/a	250	Naturally occurring or indicative of road salt contamination
Sodium	No	6/1/2016	13.6		mg/L	n/a	See Health Effects ****	Naturally occurring; Road salt; Water softeners;
Sulfate	No	6/1/2016	16.1		mg/L	n/a	250	Naturally occurring

Total Trihalomethanes Town Hall Bath	No	8/16/2018	2.12		ug/L	n/a	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Total Trihalomethanes 25 Lakeshore	No	8/16/2018	5.89		ug/L	n/a	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	# of sites tested / # of sites exceeded AL	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Haloacetic Acids 25 Lakeshore	No	8/16/2018	1.07		ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.
Nitrate	No	10/17/2018	3.15		mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Odor	No	6/1/2016	1		TON	n/a	3	Organic or inorganic pollutants originating from municipal and industrial waste

								discharge; natural sources
Nickel	No	6/1/2016	0.00284		mg/L	n/a	n/a	
Barium	No	6/1/2016	0.0684		mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Hardness	No	10/24/2016	310		mg/L	n/a	n/a	
Calcium	No	10/24/2016	193		mg/L	n/a	n/a	
Alkalinity	No	10/24/2016	156		mg/L	n/a	n/a	
Turbidity	No	10/24/2016	1.46		NTU	n/a	5	Soil runoff
<b>Contaminant</b>	<b>Violation Yes/No</b>	<b>Date of Sample</b>	<b>Level Detected (Avg/Max) (Range)</b>	<b># of sites tested / # of sites exceeded AL</b>	<b>Unit Measurement</b>	<b>MCLG</b>	<b>Regulatory Limit (MCL, TT or AL)</b>	<b>Likely Source of Contamination</b>
Manganese Well 1 Raw	No	10/24/2016	16.4		ug/L	n/a	300	Naturally occurring; Indicative of landfill contamination
Iron Well 1 Raw	No	10/24/2016	252		ug/L	n/a	300	Naturally occurring
Calcium Well 1 Raw	No	10/24/2016	195		mg/L	n/a	n/a	
Hardness Well 1 Raw	No	10/24/2016	313		mg/L	n/a	n/a	
Alkalinity Well 1 Raw	No	10/24/2016	153		mg/L	n/a	n/a	

Turbidity Well 1 Raw	No	10/24/2016	2.02		NTU	n/a	5	Soil Runoff
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#### Footnotes:

\* 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 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 at your water system. In September 2017, while 5 samples are the required number, 10 samples were collected at the request of the Town to assure that the presence of copper was below the MCL for the PWS. The 90 percentile value was the 9 highest sample which equaled 0.296

mg/l. Please note that the 90 percentile value is going off the 10 sites tested not the 5 sites that are required by the WCHD. The action level for copper was not exceeded at any of the sites tested.

\*\* The level presented represents the 90<sup>th</sup> percentile of the 10 sites tested. A percentile is a value on 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 lead values detected at your water system. In September 2017, while 5 samples are the required number, 10 samples were collected at the request of the Town to assure that the presence of lead was below the MCL for the PWS. The 90<sup>th</sup> percentile value was the 9<sup>th</sup> highest sample which equaled 4.59 ppb. Please note that the 90<sup>th</sup> percentile value is going off the 10 sites tested not the 5 sites that are required by the WCHD. The action level for lead was exceeded at one of the sites tested.

\*\*\* Water containing more then 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more then 270 mg/l should not be used for drinking by people on moderately restricted sodium diets.

\*\*\*\* The State considers 50 pCi/L to be the level of concern for beta particles.

#### Definitions:

**Non - Detects (ND)** - Laboratory analysis indicates that the constituent is not present.

**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).

**Action Level (AL)** - The concentrations 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. MCL's are set as close to the MCLG's 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. 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

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

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

#### 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. We are required to present 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 higher than at other homes in the community as a result of materials used in your home's plumbing. Keeler Field Water is responsible for providing high quality drinking

water, but can not 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 the 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2018, our system had a monitoring violation for Disinfection By-Product samples collected outside of approved time frame on the Sampling Plan; however, the sample results did not exceed any of the MCL limits.

### **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. 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 up 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.

### **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. 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 any questions.