

Annual Drinking Water Quality Report for 2022
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 Tyler Post (Area Manager) at 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. Well #1 has a depth of 143 feet and is currently in service and is located about 30 ft to the east of the water treatment plant building which is located at 10 Main Street next to the library. Well #2, the second well with a depth of 125 feet is for emergency conditions due to high iron content, an iron filtration system is being designed to bring this well back on-line. This well is located approximately 100 ft to the northwest of the water treatment plant building. The raw well 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 914-864-7332.

Table of Detected Contaminants								
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	# of sites tested / # of sites exceeded AL	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Copper **	No	2020	0.309 (Range = 0.0434 – 0.327)	5 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.
Lead *	No	2020	6.14 (Range = ND – 6.71)	5 sites tested / 0 site exceeded	ug/L	n/a	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits.

Footnotes:

* The level presented represents the 90th percentile of the 5 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. The 90th percentile value was the 4th and 5th highest sample averaged together which equaled 0.309 mg/l. The action level for copper was not exceeded at any of the sites tested.

** The level presented represents the 90th percentile of the 5 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 90th percentile is equal to or greater than 90% of the lead values detected at your water. The action level for lead was not exceeded at any of the sites tested.

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. *Keeler Field* is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact *VRI Environmental Services for Keeler Field 845-677-3839*. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

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
Chloride	No	2022	135	mg/L	n/a	250	Naturally occurring or indicative of road salt contamination.
Sodium	No	2022	15.2	mg/L	n/a	See Health Effects ***	Naturally occurring; Road salt; Water softeners;
Sulfate	No	2022	17.1	mg/L	n/a	250	Naturally occurring.
Nitrate	No	2022	3.37	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Color	No	2022	10.0	Pt-Co	n/a	15	Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant byproducts such as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.

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
Odor	No	2022	1.00	TON	n/a	3	Organic or inorganic pollutants originating from municipal and industrial waste discharge; natural sources.
Nickel	No	2022	0.00315	mg/L	n/a	n/a	
Barium	No	2022	0.0673	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Footnotes:

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

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
Total Trihalomethanes	No	2022	6.56 * (Range = 3.73 – 9.38)	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.
Haloacetic Acids	No	2022	1.30 * (Range = 1.20 – 1.39)	ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.

Footnotes:

* This is the average and range from two sample locations.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Max)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Beta particle and photon activity from man-made radionuclides	No	2018	2.01	pCi/L	0	50 ****	Decay of natural deposits and man-made emissions.
Uranium	No	2018	1.25	ug/L	0	30	Erosion of natural deposits.
Combined radium - 226 and 228	No	2018	0.592	pCi/L	0	5	Erosion of natural deposits.
Gross Alpha activity (including radium 226 but excluding radon and uranium)	No	2018	1.58	pCi/L	0	15	Erosion of natural deposits.

Footnotes:

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

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Perfluorooctanoic Acid (PFOA) Well 1	No	2022	7.32 (Range = 6.4 – 8.0)	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane Sulfonic Acid (PFOS) Well 1	No	2022	3.57 (Range = 3.34 - 3.8)	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.
1,4 Dioxane Well 1	No	2022	0.064 (Range = 0.063 - 0.065)	ug/L	n/a	1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perfluorooctanoic Acid (PFOA) Well 2	No	2022	4.33 (Range = 3.99 - 4.8)	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane Sulfonic Acid (PFOS) Well 2	No	2022	2.34 (Range = 2.17 - 2.5)	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.

Table of Unregulated Detected Contaminants				
Contaminant	Date of Sample	Level Detected (Max) (Range)	Unit Measurement	Likely Source of Contamination
Perfluorobutanesulfonic Acid (PFBS)	2022	2.41 (Range = 2.1 - 2.71)	ng/L	Released into the environment from widespread use in commercial and industrial applications.
Well 1		1.31 (Range = 1.12 – 1.5)		
Well 2	2022	4.47 (Range = 4.2 – 4.80)	ng/L	Released into the environment from widespread use in commercial and industrial applications.
Well 1		1.05 (Range = 0.697 - 1.4)		
Well 2	2022	2.45 (Range = 2.1 – 2.75)	ng/L	Released into the environment from widespread use in commercial and industrial applications.
Well 1		0.658		
Well 2	2022	2.26 (Range = 2.0 – 2.49)	ng/L	Released into the environment from widespread use in commercial and industrial applications.
Well 1		1.4 (Range = 1.0 – 1.08)		
Well 2	2022	2.26 (Range = 2.0 – 2.49)	ng/L	Released into the environment from widespread use in commercial and industrial applications.
Well 1		1.4 (Range = 1.0 – 1.08)		
Well 2	2022	2.26 (Range = 2.0 – 2.49)	ng/L	Released into the environment from widespread use in commercial and industrial applications.
Well 1		1.4 (Range = 1.0 – 1.08)		

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.

Nanograms per liter (ng/L) – Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion – ppt).

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.

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. *Keeler Field* is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact *VRI Environmental Services for Keeler Field 845-677-3839*. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2022, 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. 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 VRI Environmental Services at 845-677-3839 if you have any questions.