

Annual Drinking Water Quality Report for 2018
Town of Thompson
Adelaar Water District/Village of Monticello
Public Water Supply ID# NY5230211

INTRODUCTION

To comply with State regulations, Adelaar Water District/Village of Monticello, 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 Michael Messenger, Town of Thompson Superintendent of Water & Sewer at (845)794-5280. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the first & third Tuesdays of each month at the Thompson Town Hall, 4052 Route 42, Monticello.

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 Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water is purchased from the Village of Monticello. The Villages source are Kiamesha Lake and three wells which are located off Park Avenue. The water from Kiamesha Lake goes through a coagulation process, filtration disinfection, pH adjustment and corrosion control treatment. The treated water enters the distribution system and fills the two water tanks located in the village. The water is pumped from the wells, uses sodium hypochlorite as a disinfectant, into the two water tanks.

In 2018, The Village produced 430,326,873 gallons of water.

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, total trihalomethanes, haloacetic acids. The Village routinely tests for total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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 Sullivan County District Office of the Health Department at (845) 794-2045.

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds.

Turbidity is a measure of the cloudiness of the water. It is a good indicator of the effectiveness of the Villages filtration system. Their highest single turbidity measurement (0.29 NTU) for the year occurred on 2/16/2018. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Turbidity monitors located at each filter continuously monitor turbidity during plant operations. Turbidity in excess of 5 NTU is just noticeable to the average person. Finished water turbidity from the lake is on average 0.13 NTU (nephelometric turbidity units) with a maximum of 0.30 NTU. Average raw water from the lake is 2.92 NTU.

Village of Monticello Results

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Lead	No	6/21/16	90 th % = 0.21 Range: ND – 6.6	ug/l	15	AL	Corrosion of household plumbing systems.
Copper	No	6/21/16	90 th % = 0.2 Range: ND – 0.330	mg/l	1.3	AL	Corrosion of household plumbing systems.
Primary Inorganic							
Barium Plant Wells	4/11/18 2/8/17	No No	0.44 0.66	Mg/l mg/l	2.0 2.0	2.0 2.0	Discharge from drilling wastes, metal refineries, erosion of natural deposits
Chromium Plant Wells	4/11/18 2/8/17	No No	7.0 7.0	Ug/l Ug/l	100 100	100 100	Discharge from steel and pulp mills, erosion of natural deposits
Fluoride Plant Well	4/11/18 2/8/17	No No	0.52 0.50	Mg/l Mg/l	1.0 1.0	2.2 2.2	Erosion of natural deposits, water additive which promotes strong teeth
Nickel Plant Wells	4/11/18 2/8/17	No No	0.71 .085	Mg/l Ug/l	N/a N/a	N/a N/a	Natural Deposits
Selenium Plant Wells	4/11/18 2/8/17	No No	.002 .002	Mg/l Mg/l		0.05 mg/L	

Secondary Inorganic							
Nitrate Plant Wells	7/25/18 7/25/18	No No	<.05 1.37	Mg/l Mg/l	10.0 10.0	10.0 10.0	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Radiological Contaminants							
Gross Alpha Excl Radon & Uranium Well Plant	3/9/16 3/9/16	No No	4.75 2.85	PCI/L PCI/L	15	PCI/L	Naturally occurring
Gross Alpha, Incl Radon & Uranium Well Plant Combined Uranium Well Plant	3/9/16 3/9/16 3/9/16 3/9/16	No No No No	4.93 +/-2.43 2.99 +/-1.47 0.265 +/-0.011 0.213 +/-0.007	PCI/L ug/l	30	PCI/L UG/L	Naturally occurring Naturally occurring
Combined Radium (-226 & -228) Well Plant	3/9/16 3/9/16	No No	1.719 1.620	PCI/L	5	PCI/L	Naturally occurring
Radium-226 Well Plant	3/9/16 3/9/16	No No	0.954 +/-0.54 0.775 +/-0.327	PCI/L			Naturally occurring
Radium - 228	3/9/16	No	0.765 +/-0.399 0.845 +/-0.413	PCI/L			Naturally occurring
Gross Beta Particle Activity	3/9/16	No	4.58 +/-1.25 2.37 +/-1.08	PCI/L			Naturally occurring
Disinfection By Products							
Total Plant Trihalomethanes 1 st Sampling Site 2 nd Sampling Site	Quarterly	No	39.7 Range (28-60) (25-59)	ug/l ug/l	Na Na	80.0 80.0	Are formed when chlorine is added to water and reacts with certain types and amounts of natural organic material
Total Haloacetic Plant Acids 1 st Sampling Site 2 nd Sampling Site	Quarterly	No	20.9 Range (13-25) (15.6-27)	ug/l ug/l	NA NA	60.0 60.0	Are formed when chlorine is added to water and reacts with certain types and amounts of natural organic material

Adelaar Water District Results

Total Plant Trihalomethanes 1 st Sampling Site 2 nd Sampling Site 3 rd Sampling Site	Quarterly	No	Range (5.5-15) (20-41) (20-91)	ug/l ug/l ug/l	NA NA NA	80.0 80.0 80.0	Are formed when chlorine is added to water and reacts with certain types and amounts of natural organic material
Total Haloacetic Plant Acids 1 st Sampling Site 2 nd Sampling Site 3 rd Sampling Site	Quarterly	No	Range (7.3-42) (24-60) (8.5-36)	ug/l ug/l ug/l	NA NA NA	60.0 60.0 60.0	Are formed when chlorine is added to water and reacts with certain types and amounts of natural organic material

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is a very effective in preventing cavities when present in drinking water at an optimal dose of 0.7 mg/l (parts per million). The average fluoride for the plant is 0.65 and for the wells was 0.67. The State has not set an optimal range as of yet.

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 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 sub surface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source of water, it does not mean that the water delivered to consumers is, or will be, contaminated. The purpose of source water assessments is to provide resource managers with additional information for protecting source water in the future.

As mentioned previously in this report, our drinking water is derived from 3 wells. The table below demonstrates the contaminants to which each well is susceptible and the reasons why.

Well Name	Enteric Bacteria	Enteric viruses	Halogenated Solvents	Herbicides & pesticides	Metals	Nitrates	Petroleum Products	Protozoa	Other Industrial Organics	Reasons
Well #2	MH	NR	MH	MH	MH	MH	MH	MH	MH	2,4
Well #1	Mh	NR	MH	MH	MH	MH	MH	MH	MH	2,4
Well #3	MH	H	MH	MH	MH	MH	MH	MH	MH	2,4

Susceptibility Ratings:

H – High

MH – Medium High

L - Low

NR – No Rating (not susceptible)

Reasons:

1. The well draws from an unknown aquifer of an unknown hydraulic conductivity
2. The well draws 100 gallons per minutes from an unknown aquifer
3. 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.
4. The well has a high sensitivity rating.
5. Significant chemical contamination has been document
6. The close proximity of a significant fertilizer user

7. The close proximity of an unregulated facility using hazardous substances

Please note that this report only details the possibility for contamination. Our water is tested regularly to ensure that the finished water coming into your home meets New York State drinking water standards. County and state health department will use this information to direct future source water protection activities. These may include water quality monitoring, a resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area can be obtained by contacting us.

Definitions:

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.

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.

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.

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

Level 1 Assessment: A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

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 New York State requirements. It should be noted that the action level for lead was exceeded in one of the samples collected. 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 be higher than at other homes in the community as a result of materials used in your home's plumbing. Cold Spring Water District is responsible for providing high quality drinking water, but cannot 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 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>.

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 at 5.8 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 costs 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.”

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2018, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

Korean

이 보고서는 식수에 관한 중요한 정보를 담고 있습니다. 그것을 번역하거나, 그것을 이해하는 사람과 이야기하십시오.

Chinese

本报告包含有关饮用水的重要信息。跟某人翻译或理解它。

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 firefighting 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.

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 questions.