# Annual Drinking Water Quality Report for 2021 Adelaar Water District/Village of Monticello Water Department Monticello, New York 12701 Public Water Supply ID#5203337

## **Spanish**

Este informe contiene informacion muy importante may importante sobre su aqua beber. Traduzcala o hable con alguien que lo entienda bien.

## **INTRODUCTION**

To comply with State regulations, the Village of Monticello Water Department 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 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 call our office at (845) 794-6810. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. The meetings are held the 1<sup>st</sup> and 3<sup>rd</sup> Wednesday of the month.

## 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.

The 2 water sources are Kiamesha Lake and 3 wells located at the end of Park Avenue. During 2021, our system did not experience any restriction of our water sources. 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 2 water tanks we have located in the village. The water from the wells goes through the same process except it does not have a coagulation process.

# **FACTS AND FIGURES**

The total gallons pumped from the lake was 436,347,050 and 51,453,000 from the wells. The Water Department is allowed to take a maximum of 2,000,000 from the lake and 300,000 gallons from the wells per day. The average last year was 1,192,205 from the lake and 140,581 from the wells. 224,098,122 gallons of water was sold to customers last year at the rate of \$4.75 per 100 cubic feet through 2,124 metered accounts. The other 263,701,928 gallons was used to backwash filters in the treatment process, flush hydrants, water main breaks, fighting fires, municipal building usage and existing leaks in the system.

In 2021, the Village completed the lead and copper monitoring required under their reduced schedule of a minimum of 20 distribution system (residential) sampling sites every 3 years. The 90<sup>th</sup> percentile was the 18 highest results of the 20 samples collected in ascending order.

All elevated levels found in area homes are isolated incidents. In each case the results were indicative of an interior plumbing issue rather than a reflection of the source 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 other than at other homes in the community as a result of materials used in your home's plumbing.

The Village of Monticello 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.

## 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 tribalomethanes, haloacetic acids, 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. 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 indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by call the EPA's Safe Water Hotline (800-426-4791) or the Monticello Health Department at 794-2045.

Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement (0.38 NTU) for the year occurred on 9/23/2020. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3NTU. 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 0.14 NTU (nephelometric turbidity units) with a maximum of 0.30NTU. Average raw water from the lake is 3.17 NTU.

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 Organic (TOC's)			(Range)	ment					
Total Organic Carbon Raw Water Finished Water	NO NO	Monthly Monthly	3.9-8.3 1.9-3.3	mg/l	n/a	TT	Naturally present in the environment		
Synthetic Organic Cont	Synthetic Organic Contaminants including Pesticides and Herbicides								
Perfluorooctanoic Acid (PFOA) Well #1 Well #2 Well #3 Plant	NO NO NO NO	Quarterly (1st 3)	2.2 (<2-2.5) (<2-2.7) (3.2-3.6)	ng/l	n/a	MCL=10	Released into the environment from widespread use in commercial and industrial applications.		
Perfluorooctane Sulfonic acid (PFOA) Well #1 Well #2 Well #3 Plant	NO NO NO	Quarterly (1st 3)	(<2-2.1) (<2-2.1) (<2-2.7) (2.0-3.3)	ng/l	n/a	MCL=10	Released into the environment from widespread use in commercial and industrial applications.		
1,4 Dioxane Well #1 Well #2 Well #3 Plant	NO NO NO	8/11/2020	<0.070 <0.070 <0.070 0.12	ug/l	n/a	MCL=1	Runoff from herbicide used on rights of way.		

Inorganics <sup>11</sup>							
Antimony							Discharge from petroleum refineries; fire
Plant	NO	5/19/2022	< 0.40	ug/l <sup>13</sup>	6	MCL=6	retardants; ceramics; electronics; solder.
Wells	NO	5/19/2022	< 0.40	481			
Arsenic							Erosion of natural deposits; Runoff from
Plant	NO	4/20/2021	<3.0	ug/l	10 14	MCL=10	orchards; Runoff from glass and electronics
Wells	NO	4/20/2021	<3.0	ug i	10	WICE-10	production wastes.
Barium		+					Discharge of drilling wastes; Discharge from
Plant	NO	4/20/2021	0.0404				metal refineries; Erosion of natural deposits
Wells	NO NO	4/20/2021	0.437	ma/l	2	MCL=2	metal fermeries, Erosion of natural deposits
Lake Treatment	NO NO	4/20/2021	0.0404	mg/l	2	MCL-2	
Well Entry	NO	4/20/2021	0.437				
	NO	4/20/2021	0.437				Discharge from metal refineries and coil-
Beryllium Plant	NO						burning factories; Discharge from electrical,
Wells	NO NO	4/11/2018		ug/l	4	MCL=4	
Wells	NO	4/11/2018					aerospace, and defense industries.
G 1 :		1					
Cadmium	NIC	5/10/2020	.1.0				Corrosion of galvanized pipes; Erosion of
Plant	NO	5/19/2020	<1.0	ug/l	5	MCL=5	natural deposits; Dishcarge from metal
Wells	NO	5/19/2020	<1.0				refineries; Runoff from waste batteries and
		1					paints.
Chromium		1					Discharge from steel and pulp mills; Erosion
Plant	NO	4/20/2021	<2.0				of natural deposits.
Wells	NO	4/20/2021	<2.0	ug/l	100	MCL=100	
Lake Treatment	NO	4/11/2018	7.0				
Well Entry	NO	2/08/2017	7.0				
Cyanide(as free							Discharge from steel/metal.
Cyanide)				110/1	200	MCL=200	
Plant	NO	4/23/2019	<.001	ug/l	200	WICL-200	
Wells	NO	2/08/2017	.005				
Fluoride							Erosion of natural deposits; Water additive
Plant	NO	Monthly	.66 Avg				that promotes strong teeth; Dishcarge from
Wells	NO	Monthly	.59 Avg	mg/l	n/a <sup>1</sup>	MCL=2.2	fertilizer and aluminum factories.
Lake Treatment	NO	4/11/2018	0.52				
Well Entry	NO	2/08/2017	0.50				
Mercury							Erosion of natural deposits; Discharge from
Plant	NO	4/23/2019	< 0.2	ug/l	2	MCL=2	refineries and factories; Runoff from
Wells	NO	2/08/2017	0.2				landfills; Runoff from cropland.
Selenium							Discharge from petroleum and metal
Plant	NO	4/20/2021	< 5.0				refineries; Erosion of natural deposits;
Wells	NO	4/11/2018	2.0	ug/l	50	MCL=50	Discharge from mines.
Lake Entry	NO	4/20/2021	2.0	ug/1	30	WICE-30	
Well Entry	NO	4/20/2021	2.0				
Thallium							Leaching from oreprocessing sites;
Plant	NO	5/19/2021	< 0.30				Dishcarge from electronics, glass, and drug
Well	NO	5/19/2021	<0.30	ug/l	0.5	MCL=2	factories.
Well	NO	3/19/2021	<0.50				factories.
Inorganics - Nitrate and	d Nitrite						
Nitrate							Runoff from fertilizer use; Leaching from
Plant	NO	4/20/2021	.223	mg/L	10	MCL=10	septic tanks, sewage; Erosion of natural
Well	NO	4/20/2021	<.05	mg/L	10	IVICL-10	deposits.
D. P. 41 G		<u> </u>			<u> </u>	1	1
Radioactive Contamina	nts	1	1	I	1	1	T
Gross alpha activity							
(including radium-226							
but excluding radon and				Pci/L	0	MCL=15	Erosion of natural deposits.
uranium)	270	2/0/2015	4.55	1	-		
Well	NO	3/9/2016	4.75				
Plant	NO	3/9/2016	2.85				
Uranium							
Well	NO	3/9/2016	0.265+/-0.011	ug/L	0	MCL=30	Erosion of natural deposits.
Plant	NO	3/9/2016	0.213+/-0.007				1
					l		

Comined Radium -226 & 228 Well Plant	NO NO	3/9/2016 3/9/2016	1.719 1.620	Pci/L	0	MCL=50	Erosion of natural deposits.
Beta praticle and photon activity from manmade radionuclides Well Plant	NO NO	3/9/2016 3/9/2016	4.58+/-1.25 2.37+/-1.08	Pci/L	0	MCL=50	Decay of matural deposits and man-made emissions
Disinfection Byproduct	S						
Total Trihalomethanes (TTHMs- Chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	NO	Overtonly	40.37 Avg	по/І	n/a¹	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
1 <sup>st</sup> Sampling Site 2 <sup>nd</sup> Sampling Site	NO	Quarterly	RANGE (22.1-65.3) (16.8-75.50)	ug/L	n/a	WCL=80	
Haloacetic Acids (monodi-, and trichloroacetic acid, and mono- and dibromoacetic acid)  1 <sup>st</sup> Sampling Site 2 <sup>nd</sup> Sampling Site	NO	Quarterly	15.21 Avg  RANGE (9.9-21.2) (31.0-75.5)	ug/L	n/a <sup>1</sup>	MCL=60	By-product of drinking water disinfection needed to kill harmful organisms.
Adelaar Water District							
Disinfection Byproduct	s	1	ı	1	ı	1	
Total Trihalomethanes (TTHMs- Chloroform, bromodichloromethane, dibromochloromethane, and bromoform) 1st Sampling Site	NO	Quarterly	Average 42.25 Range (33-58)	ug/L	n/a¹	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Haloacetic Acids (monodi-, and trichloroacetic acid, and mono- and dibromoacetic acid)  1st Sampling Site	NO	Quarterly	Average 24 Range (15-34)	ug/L	n/a¹	MCL=60	By-product of drinking water disinfection needed to kill harmful organisms.

<u>Maximum Contaminant Level (MCL)</u> The highest level of a contaminant that is allowed in drinking water. <u>Maximum Contaminant Level Goal (MCLG)</u>: The level of a contaminant in drinking water below which there is no known or system must follow.

Non Defects (ND) Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/1): Corresponds to one part of liquid in one million parts of liquid (parts per million-ppm)

Micrograms per liter (mg/1): Corresponds to one part of liquid in one million parts of liquid (parts per billion-ppl)

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water.

Information on Fluoride Addition

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/1(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 reason why

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

# **Susceptibility Ratings:**

H - High

MH - Medium High

L - Low

NR - No Rating (not susceptible)

#### Reasons:

- 1. The well draws from an unknown aguifer 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.

## 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 sever water use restrictions to 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 a 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 can 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.

## **SYSTEM IMPROVEMENTS**

- 1. System wide leak detection
- 2. Treated Kiamesha Lake

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. In 2012, the federal guidelines for lead and copper have changed over most of the meters.

## **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. If you have any concerns with vandalism or suspicious behavior around any Village of Monticello facility, please call 794-6810 or the Village Police at 794-4422.

This report contains important information about your dr	inking water. Translate it, or speak with someone who understands it.
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 아래의 보고는 귀하께서 드시는 식수에 대한 중요한 정보가 포함되어 있습니다. 번역한 자시한지 아니면 이 보고를 읽고 이러하지는 뿐라 양분하지기를 바랍니다.	Chinese 這份教告念有非常重要有例您喝的水。 內資料 清找程得這份教告的人翻译 或解釋稅為能